CITY OF MIDLAND, TEXAS
AGENDA FOR CITY COUNCIL MEETING
January 24, 2023 - 10:00 AM
300 North Loraine
Midland, Texas
Council Chamber - City Hall

A quorum of the City Council intends to be physically present at the aforementioned location.

The City Council may discuss, consider, and take action on any item listed on this agenda.

OPENING ITEMS

1. Invocation – Pastor Bob Pase, Grace Lutheran Church

2. Pledge of Allegiance

PRESENTATIONS

3. Presentation of special events, organizations, individuals, or periods of time including, but not limited to:

    3a. Presentation of Proclamation for “School of World Missions Foundation Day”

CONSENT AGENDA

4. MOTION APPROVING THE FOLLOWING MINUTES:

    4a. REGULAR SESSION OF JANUARY 9, 2023

    4b. BRIEFING SESSION OF JANUARY 10, 2023

    4c. REGULAR SESSION OF JANUARY 10, 2023

5. 2023-008 – RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH MARTINEZ ARCHITECTS, LP, FOR ARCHITECTURAL, DESIGN AND ENGINEERING SERVICES FOR THE CENTRAL FIRE STATION WELLNESS CENTER AND POLICE DEPARTMENT RENOVATIONS FOR A COST OF $168,000.00 AND TRANSFERRING AND APPROPRIATING FUNDS (DISTRICT: NONE) (GENERAL SERVICES)

6. 2023-009 – RESOLUTION AWARDING A CONTRACT FOR THE IDLEWILDE DRIVE STORM DRAIN IMPROVEMENTS PROJECT TO BOLER EQUIPMENT SERVICE, INC.,

OF MIDLAND, TEXAS, AT A TOTAL COST OF $1,932,184.00; APPROVING $193,218.40 FOR CONTINGENCIES; APPROVING $50,000.00 FOR PROJECT-RELATED EXPENSES; TRANSFERRING AND APPROPRIATING FUNDS; AND AUTHORIZING PAYMENT (DISTRICT 4) (GENERAL SERVICES)

7. 004-2023 – MOTION TO AUTHORIZE THE CITY MANAGER OR THE CITY MANAGER'S DESIGNEE TO ADVERTISE A REQUEST FOR PROPOSALS FOR EXECUTIVE SEARCH FOR CITY MANAGER SERVICES ASSOCIATED WITH THE RECRUITMENT AND SELECTION OF A QUALIFIED INDIVIDUAL FOR THE POSITION OF CITY MANAGER AND TO NEGOTIATE AN AGREEMENT FOR SAID SERVICES; PROVIDED, HOWEVER, THAT SAID AGREEMENT SHALL NOT BECOME EFFECTIVE UNTIL APPROVED BY THE CITY COUNCIL (DISTRICT: NONE) (GENERAL SERVICES)

8. 2023-010 – RESOLUTION AWARDING A CONTRACT FOR THE GARFIELD STREET UTILITY BOND PROJECT TO ENTRENCH, INC., FOR AN AMOUNT OF $5,810,010.00; APPROVING $581,001.00 FOR CONTINGENCIES; APPROVING $50,000.00 FOR PROJECT RELATED EXPENSES; AND TRANSFERRING AND APPROPRIATING FUNDS (DISTRICT 3) (GENERAL SERVICES)

9. 2023-011 – RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH RANDAL SCOTT ARCHITECTS, INC., FOR DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR THE MIDLAND PUBLIC SAFETY TRAINING FACILITIES PHASE 1 IMPROVEMENTS PROJECT FOR A COST OF $2,500,000.00; AND TRANSFERRING AND APPROPRIATING FUNDS (DISTRICT: NONE) (GENERAL SERVICES)

10. 005-2023 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (23-495-003) WITH TARGA DELAWARE LLC, REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTION 2, BLOCK C-24, AND SECTIONS 22 AND 25, BLOCK C-23, PSL WINKLER COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)

11. 006-2023 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (23-495-004) WITH TARGA NORTHERN DELAWARE LLC, REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTION 27, BLOCK 74, ABSTRACT 1380, PUBLIC SCHOOL LAND SURVEY, WINKLER COUNTY TEXAS (DISTRICT: NONE) (UTILITIES)

SECOND READINGS

12. 10362 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOTS 1A AND 5, BLOCK 1, ROLLING GREEN ACRES ADDITION, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A TRANSITION DISTRICT TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A TRANSITION DISTRICT (GENERALLY LOCATED ON THE NORTH SIDE OF EAST HIGHWAY 80, APPROXIMATELY 250 FEET WEST OF TODD DRIVE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND

ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES) (FIRST READING HELD JANUARY 10, 2023)

13. 10363 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 5,792-SQUARE FOOT PORTION OF THE WEST 90 FEET OF LOTS 10, 11 AND 12, BLOCK 61, ORIGINAL TOWN ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF WEST WALL STREET AND SOUTH CARRIZO STREET), WHICH IS PRESENTLY ZONED CB, CENTRAL BUSINESS DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A BAR FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 3) (DEVELOPMENT SERVICES) (FIRST READING HELD JANUARY 10, 2023)

14. 10364 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 8, BLOCK 30, GREENWOOD ADDITION, THIRD, FOURTH, AND FIFTH SECTIONS, CITY AND COUNTY OF MIDLAND, TEXAS, FROM MF-22, MULTIPLE-FAMILY DWELLING DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED ON THE EAST SIDE OF SOUTH CLAY STREET, APPROXIMATELY 90 FEET NORTH OF EAST PENNSYLVANIA AVENUE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES) (FIRST READING HELD JANUARY 10, 2023)

15. 10365 – AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOT 12, BLOCK 21, MOODY ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF NORTH MADISON STREET AND EAST ILLINOIS AVENUE), BY PERMITTING A REDUCED MINIMUM LOT WIDTH IN THE EVENT THAT THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND IS AMENDED TO REZONE THE PROPERTY FROM MF-22, MULTIPLE-FAMILY DWELLING DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES) (FIRST READING HELD JANUARY 10, 2023)

16. 10366 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 1,763-SQUARE FOOT PORTION OF LOT 6A, BLOCK 62, BELMONT ADDITION, SECTION 23, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE NORTH

SIDE OF EAST INTERSTATE 20, APPROXIMATELY 478 FEET WEST OF SOUTH TERRELL STREET), WHICH IS PRESENTLY ZONED BP, I-20 BUSINESS PARK DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A RESTAURANT FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES) (FIRST READING HELD JANUARY 10, 2023)

17. 10367 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 37.65-ACRE TRACT OF LAND OUT OF SECTION 48, BLOCK 40, T-1-S, T&P RR CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT, OFFICE CENTER, RECREATION CENTER, AND SHOPPING CENTER TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT, OFFICE CENTER, RECREATION CENTER, AND SHOPPING CENTER (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF THOMASON DRIVE AND SOUTH LOOP 250 WEST); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 4) (DEVELOPMENT SERVICES) (FIRST READING HELD JANUARY 10, 2023)

18. 10368 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR LOT 1, BLOCK 1, CAMELOT ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE WEST SIDE OF ELKINS ROAD, APPROXIMATELY 6,200 FEET NORTH OF EAST STATE HIGHWAY 80), WHICH IS PRESENTLY ZONED O-1, OFFICE DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A SPECIAL EVENTS CENTER FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 4) (DEVELOPMENT SERVICES) (FIRST READING HELD JANUARY 10, 2023)

19. 10369 – AN ORDINANCE VACATING AND ABANDONING A 0.034-ACRE PORTION OF ALLEY RIGHT-OF-WAY LOCATED ADJACENT TO LOTS 2, 3 AND 4, BLOCK 1, RICHARDSON-ABILENE STREET ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE EAST SIDE OF NORTH MAIN STREET, APPROXIMATELY 120 FEET SOUTH OF BUTLER AVENUE); ADOPTING THE APPRAISAL BY THE CITY MANAGER OF $2,956.00; RETAINING A NONEXCLUSIVE UTILITY EASEMENT; AND ORDERING RECORDATION BY THE CITY SECRETARY (DISTRICT 2) (DEVELOPMENT SERVICES) (FIRST READING HELD JANUARY 10,

2023)

20. 10370 – AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR A 1.00-ACRE TRACT OF LAND OUT OF THE SOUTHEAST QUARTER OF SECTION 7, BLOCK X, H.P. HILLIARD SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF TANFORAN AVENUE AND ORIOLE DRIVE), BY PERMITTING A REDUCED MINIMUM LOT AREA; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 4) (DEVELOPMENT SERVICES) (FIRST READING HELD JANUARY 10, 2023)

PUBLIC HEARINGS

The City Council will hold public hearings on the following items:

21. 10371 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOTS 5 THROUGH 8, THE SOUTH 38 FEET OF LOT 9, AND A 0.067-ACRE PORTION OF ALLEY RIGHT-OF-WAY, BLOCK 17, KELVIEW HEIGHTS ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS, FROM LR, LOCAL RETAIL DISTRICT TO RR, REGIONAL RETAIL DISTRICT (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF LOMA DRIVE AND SCHARBAUER DRIVE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 3) (DEVELOPMENT SERVICES)

22. 10372 – AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOT 1, BLOCK 4, BERKSHIRE PLACE, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF SINCLAIR AVENUE AND NORTH N STREET), BY PERMITTING A REDUCED MINIMUM SIDE YARD SETBACK ON THE EAST SIDE OF THE LOT; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 3) (DEVELOPMENT SERVICES)

MISCELLANEOUS

23. 2023-012 – RESOLUTION AUTHORIZING THE EXECUTION OF A DEVELOPMENT AGREEMENT AND LEASE AGREEMENT WITH THE PERMIAN BASIN QUALITY OF PLACE CONSERVANCY FOR THE DESIGN, CONSTRUCTION, MAINTENANCE, AND OPERATION OF CERTAIN IMPROVEMENTS TO HOGAN PARK (DISTRICT 2) (COMMUNITY SERVICES)

24. MOTION MAKING APPOINTMENTS TO VARIOUS BOARDS AND COMMISSIONS (CITY SECRETARY'S OFFICE)

PUBLIC COMMENT

25. Receive public comments where individuals may address the City Council on City related issues and projects not on the present agenda. Any deliberation of or decision by the City Council regarding the item being discussed shall be limited to a motion to place the item on the agenda for a subsequent meeting. (Please limit comments to three minutes or less.)

EXECUTIVE SESSION

26. Pursuant to Texas Government Code § 551.101, the City Council will hold an Executive Session, which is closed to the public, to discuss the following matters as permitted under the following sections of the Texas Government Code:

a. Section 551.074, Personnel Matters

a.1. Deliberate the appointment of members to the Midland Development Corporation board of directors.

a.2. Deliberate the appointment, employment, evaluation, or duties of the City Manager.

b. Section 551.072, Deliberation Regarding Real Property

b.1. Discuss the purchase, exchange, lease or value of real property.

c. Section 551.071, Consultation with Attorney

c.1. Discuss a matter in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with Chapter 551 of the Texas Government Code.

Respectfully Submitted,

Robert Patrick
City Manager

MEETING ASSISTANCE INFORMATION: The Midland City Hall and Council Chamber are wheelchair accessible. If you need special assistance to participate in this meeting, please contact the City Secretary's Office at (432) 685-7430. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

MIDLAND CITY COUNCIL
MINUTES
January 9, 2023

The City Council convened in regular session at the Bush Convention Center, Midland, Texas, at 10:00 a.m., January 09, 2023.

Council Members present:	Dan Corrales, Robin Poole, Lori Blong, Patrick Payton, Scott Dufford, Jack Ladd, John Norman
Council Members absent:	None
Council Members Elect present:	Amy Stretcher Burkes

The meeting was called to order at 10:00 a.m.

MISCELLANEOUS

1. CONDUCT SWEARING-IN CEREMONY AND ALL ANCILLARY MATTERS RELATED THERETO FOR THE NEWLY-ELECTED CITY COUNCIL MEMBERS

   Mayor Payton welcomed all in attendance. The invocation was led by Micha Dunn of Midland Bible Church. The Midland Police Department Honor Guard presented the colors followed by the Pledge of Allegiance to the Flag. Remarks were made by Mayor Payton to the Council, City staff and the Citizens of Midland thanking them for the opportunity to serve as Mayor. Judge David Lindemood administered the Oath of Office to Jack Ladd; Council Member District 3. Retired Justice Keith Stretcher administered the Oath of Office to Amy Stretcher Burkes; Council Member District 4. Retired Judge Mitzi Purvis administered the Oath of Office to Lori Blong; Mayor. Mayor Blong presented Mayor Payton with a clock and made closing remarks.

All the business at hand having been completed, the meeting adjourned at 10:45 a.m.

PASSED AND APPROVED January 24, 2023.

_____
Lori Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

DRAFT

MIDLAND CITY COUNCIL
BRIEFING SESSION
MINUTES
January 10, 2023

The City Council convened in briefing session in the Council Chamber, City Hall, Midland, Texas, at 9:45 AM, January 10, 2023.

Council Members present:	Amy Stretcher Burkes, Dan Corrales, Robin Poole, Lori Blong, Scott Dufford, Jack Ladd, John Norman
Council Members absent:	None
Staff members present:	City Attorney John Ohnemiller, City Manager Robert Patrick, Deputy City Manager Morris Williams Jr, Assistant City Manager Tina Jauz

The meeting was called to order at 9:46 a.m.

The following matter(s), and any matter listed on the agenda for this meeting, may be discussed by the City Council:

1. Receive a presentation from the Fire Chief and Chief of Police regarding the Midland Public Safety Training Facility

   Fire Chief Chuck Blumenaur and Police Chief Seth Herman presented a briefing of the Fire/PD Training Facility and the different phases of construction such as: Executive Summary, Joint-Use Facilities, Fire Training Facilities, Police Training Facilities, Program of Requirements, Existing Sites & Analysis, Title Survey & Topography and the Master Plan: Phasing & Cost.

All the business at hand having been completed, the meeting adjourned at 9:57 a.m.

PASSED AND APPROVED January 24, 2023.

_____
Lori Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

DRAFT

MIDLAND CITY COUNCIL
MINUTES
January 10, 2023

The City Council convened in regular session in the Council Chamber, City Hall, Midland, Texas, at 10:00 a.m., January 10, 2023.

Council Members present:	Amy Stretcher Burkes, Dan Corrales, Robin Poole, Lori Blong, Scott Dufford, Jack Ladd, John Norman
Council Members absent:	None
Staff members present:	City Manager Robert Patrick, City Attorney John Ohnemiller, Deputy City Manager Morris Williams Jr, Assistant City Manager Tina Jauz

The meeting was called to order at 10:00 a.m.

OPENING ITEMS

1. Invocation – Pastor Anthony Paredes, Homeline Baptist Church

2. Pledge of Allegiance

PRESENTATIONS

3. Presentation of special events, organizations, individuals, or periods of time including, but not limited to:

   3a. Presentation of the 2022 Christmas Parade Awards

   Awards were presented for the 2022 Christmas Parade winners as follows:
   Judges' Creativity went to FC Traffic Control
   Best Lighted Band went to San Jacinto Band
   Best lighted Float went to Unlimited Carpets
   Third Place Overall went to BSA Scouts Troop 719
   Second Place Overall went to McCoys Building Supply
   First Place Overall went to Zumba Fitness

   The Salvation Army was honored in the efforts to help make the Christmas Tree Lighting a success. They generously provided free hot chocolate for the past two

Christmas Tree Lighting events.

3b. Presentation of Proclamation for “Crime Stoppers Month”

CONSENT AGENDA

4. MOTION APPROVING THE FOLLOWING MINUTES:

4a. REGULAR SESSION OF DECEMBER 13, 2022

10. 2023-006 – RESOLUTION APPROVING THE ISSUANCE OF PERMITS TO PIONEER NATURAL RESOURCES USA, INC. (“OPERATOR”) TO DRILL 10 OIL AND GAS WELLS LOCATED IN SECTION 17, BLOCK 38, T-1-S, T&P RR CO. SURVEY, CITY OF MIDLAND, MIDLAND COUNTY, TEXAS (GENERALLY LOCATED BETWEEN 375 FEET AND 376 FEET SOUTH OF ARAPAHOE ROAD AND BETWEEN 1,040 FEET AND 1,220 FEET EAST OF TODD DRIVE EXTENSION); AND PROVIDING THAT SAID PERMITS DO NOT REQUIRE A NEW ROAD REPAIR AGREEMENT BUT SHALL BE CONSOLIDATED UNDER AN EXISTING ROAD REPAIR AGREEMENT (DISTRICT 1) (DEVELOPMENT SERVICES)

11. 2023-007 – RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE, ON BEHALF OF THE CITY OF MIDLAND, A SUBSURFACE USE AGREEMENT GRANTING TO PIONEER NATURAL RESOURCES USA, INC. (“OPERATOR”) A SUBSURFACE EASEMENT LOCATED ON A CITY-OWNED TRACT OF LAND DESCRIBED AS THE SOUTH 150 FEET OF THE SOUTHWEST QUARTER OF SECTION 20, BLOCK 37, T-3-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS, FOR THE PURPOSE OF DRILLING, COMPLETING, PRODUCING, TRANSPORTING PRODUCTION THROUGH, PLUGGING AND ABANDONING WELLBORES UNDER, ACROSS AND THROUGH SAID TRACT OF LAND TO BENEFIT OIL AND GAS PRODUCTION FROM WELLS DRILLED OR TO BE DRILLED BY OPERATOR, ITS SUCCESSORS OR ASSIGNS ON LANDS LOCATED IN SECTIONS 29 AND 32, BLOCK 33, T-3-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (DEVELOPMENT SERVICES)

12. 001-2023 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (23-329-002) BETWEEN THE CITY OF MIDLAND AND GRAND PRIX PIPELINE LLC REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTIONS 4, 9, AND 16, BLOCK 37, T-3-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)

Dan Corrales moved to approve Consent Agenda items 4-12, excluding item(s) 5, 6, 7, 8, 9; seconded by John Norman.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

The following item(s) were pulled from consent agenda and considered individually.

5. 2023-001 – RESOLUTION AWARDING A CONTRACT FOR THE WEST WADLEY AVENUE EXTENSION PROJECT TO JONES BROS. DIRT & PAVING CONTRACTORS, INC. OF ODESSA, TEXAS, AT A TOTAL COST OF $6,702,090.50; APPROVING $670,209.05 FOR CONTINGENCIES; APPROVING $50,000.00 FOR PROJECT-RELATED COSTS; TRANSFERRING AND APPROPRIATING FUNDS; AND AUTHORIZING PAYMENT (DISTRICT 4) (GENERAL SERVICES)

   Engineering Services Director Jose Ortiz gave a brief overview of the item reporting the Wadley project will be extended from where it currently is near Stonegate Church to the west of State Highway 158. Mr. Ortiz also gave an overview of the construction timeline of the project.

   Amy Stretcher Burkes moved to approve Resolution No. 2023-001; seconded by Robin Poole.

   The motion passed by the following vote:
   AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
   NAY: None
   ABSTAIN: None
   ABSENT: None

6. 2023-002 – RESOLUTION AUTHORIZING THE PURCHASE OF AMMUNITION OF ASSORTED TYPES AND IN ASSORTED QUANTITIES FOR THE MIDLAND POLICE DEPARTMENT FROM THE RESPECTIVE LOW BIDDERS, GT DISTRIBUTORS, INC., AND BLACK HILLS AMMUNITION, AT A TOTAL COST OF $269,550.60 (DISTRICT: NONE) (GENERAL SERVICES)

   Police Chief Seth Herman gave a brief overview of the item noting the ammo from the lower bidder can create a danger to the public due to over-penetration of the round.

   Dan Corrales moved to approve Resolution No. 2023-002; seconded by John Norman.

   The motion passed by the following vote:
   AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
   NAY: None
   ABSTAIN: None
   ABSENT: None

7. 2023-003 – RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH ENPROTEC / HIBBS & TODD, INC., FOR THE WATER PURIFICATION PLANT SOLIDS HANDLING IMPROVEMENTS PROJECT FOR THE UTILITIES DEPARTMENT FOR AN AMOUNT OF $577,000.00; APPROVING $57,700.00 FOR CONTINGENCIES; AND TRANSFERRING AND APPROPRIATING FUNDS (DISTRICT: NONE) (GENERAL SERVICES)

   Utilities Director Carl Craigo gave a brief overview of the item noting this will get rid of the drying beds and cake the dirt which will alleviate the current issues.

Mr. Craigo also reported on what will help in the event there is another issue with the water plant like the one last week. He explained what happened to make them shut the water plant down and how they plan to mitigate the possibility of it happening in the future.

Council Member Corrales and Mayor Blong thanked Mr. Craigo for how he handled the water crisis last week. Mr. Craigo attributed the thanks to the Utitlities department.

Dan Corrales moved to approve Resolution No. 2023-003; seconded by John Norman.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

8. 2023-004 – RESOLUTION APPROVING A CONTRACT WITH MUSCO CORPORATION DBA MUSCO SPORTS LIGHTING, LLC, THROUGH BUYBOARD, FOR THE PURCHASE AND INSTALLATION OF LED FIELD LIGHTING AT ASTOUND FOOTBALL STADIUM FOR A TOTAL COST OF $719,765.00; APPROVING $30,000.00 FOR PROJECT RELATED COSTS; AND APPROPRIATING FUNDS FOR SAID CONTRACT (DISTRICT 4) (GENERAL SERVICES)

Community Services Director Cristina Burns gave a brief overview of the item noting they are retrofitting their existing lighting to LED lighting which makes it more efficient to power on and off.

General Services Director Regina Stephenson reported on the different purchasing cooperatives the City of Midland works with and explained how the process works.

Ms. Burns reported the cost savings will be around $38,000 over a ten-year period. Musco also provides a twenty-five year warranty and are willing to come out if problems occur.

Ms. Burns added that most of the fixtures will remain and only bulbs will need to be replaced.

Amy Stretcher Burkes moved to approve Resolution No. 2023-004; seconded by Robin Poole.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

9. 2023-005 – RESOLUTION APPROVING A CONTRACT WITH HOHENBERGER, INC., DBA CSI: LUBBOCK, THROUGH BUYBOARD, FOR THE PURCHASE AND INSTALLATION OF ACCESS CONTROL AND CAMERA SYSTEMS AT THE ASTOUND STADIUM, BEAL PARK, AND THE ARMORY FOR A TOTAL COST OF $169,658.62; AND

APPROPRIATING AND TRANSFERRING FUNDS (DISTRICT: ALL) (GENERAL SERVICES)

Council Member Norman requested information regarding locations.

Chief Information Officer Jennifer Frescaz reported that camera systems are typically placed at entrances, exits and where high dollar equipment will be stored.

Community Services Director Cristina Burns reported that currently, Beal Park is the only one being looked at due to a lot of vandalism at that location. Ms. Burns also reported that cameras will also be located by the baseball complex, Beal Ranch House and some at the concession stand area just to name a few.

John Norman moved to approve Resolution No. 2023-005; seconded by Dan Corrales.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

SECOND READINGS

13. 10359 – AN ORDINANCE OF THE CITY OF MIDLAND, TEXAS, DESIGNATING A 29.782-ACRE TRACT OF LAND OUT OF SECTION 35, BLOCK 40, T-1-S, T&P RR CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF STATE HIGHWAY 191 AND STATE HIGHWAY 158) AS TAX ABATEMENT REINVESTMENT ZONE NUMBER 2023-01 FOR COMMERCIAL AND INDUSTRIAL TAX ABATEMENT AS AUTHORIZED BY CHAPTER 312 OF THE TEXAS TAX CODE; ESTABLISHING THE BOUNDARIES THEREOF AND OTHER MATTERS RELATING THERETO; DECLARING FINDINGS OF FACT; AND PROVIDING A SAVINGS AND SEVERABILITY CLAUSE (DISTRICT 4) (CITY MANAGER) (FIRST READING DECEMBER 13, 2022)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10359.

Jack Ladd moved to approve the second and final reading of Ordinance No. 10359; seconded by Robin Poole.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

14. 10360 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITHOUT TERM FOR LOT 1A, BLOCK 14, CRESTGATE ADDITION, SECTION 39, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE

INTERSECTION OF FIELDER STREET AND WEST LOOP 250 NORTH), WHICH IS PRESENTLY ZONED O-1, OFFICE DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR A VETERINARIAN CLINIC; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 1) (DEVELOPMENT SERVICES) (FIRST READING DECEMBER 13, 2022)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10360.

Dan Corrales moved to approve the second and final reading of Ordinance No. 10360; seconded by Scott Dufford.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

15. 10361 – AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOT 21, BLOCK 22, CRESTGATE ADDITION, SECTION 36, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH MIDLAND AND BLUEBIRD LANE), BY PERMITTING AN INCREASED MAXIMUM HEIGHT OF AN ACCESSORY BUILDING; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 1) (DEVELOPMENT SERVICES) (FIRST READING DECEMBER 13, 2022)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10361.

Robin Poole moved to approve the second and final reading of Ordinance No. 10361; seconded by Jack Ladd.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

PUBLIC HEARINGS

The City Council will hold public hearings on the following items:

16. 10362 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOTS 1A AND 5, BLOCK 1, ROLLING GREEN ACRES ADDITION, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A TRANSITION DISTRICT TO AN

AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A TRANSITION DISTRICT (GENERALLY LOCATED ON THE NORTH SIDE OF EAST HIGHWAY 80, APPROXIMATELY 250 FEET WEST OF TODD DRIVE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10362.

Development Services Director Chuck Harrington gave a brief overview of the item noting the original PD did not include this use so they would like to amend the PD to include the go cart track and maintenance building.

Development Services Director Chuck Harrington introduced Rolandrea Russell as the new Development Services Assistant Director.

Mayor Blong opened the public hearing at 10:34 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

John Norman moved to approve the first of two readings of Ordinance No. 10362; seconded by Scott Dufford.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

17. 002-2023 – THE PROPOSED GRANTING OF AN OIL AND GAS WELL PERMIT TO MCM OPERATING, LLC (“OPERATOR”) FOR THE DRILLING OF THE OIL AND GAS WELL MB-7H; SAID WELL BEING GENERALLY LOCATED 485 FEET SOUTH OF MOCKINGBIRD LANE AND 1,550 FEET EAST OF HOLIDAY HILL ROAD; PUBLIC HEARING ONLY (DISTRICT 4) (DEVELOPMENT SERVICES)

Mayor Blong recused herself on item # 17 and left the dais.

Oil & Gas Compliance Officer Ron Jenkins gave a brief overview of the item noting this request is a well from MCM Energy who had a well expire and they are getting a new application for the expired well.

Mayor Pro Tem John Norman opened the public hearing at 10:37 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

Chris Hamiliton, Fort Worth, agent for the applicant, reported there are no changes to the well pad or location but they did upgrade the sound study and added additional sound protection. Mr. Hamiliton described several additional upgrades they are doing for this well site.

There being no one else wishing to speak, the public hearing was closed at 10:39 a.m.

This was a public hearing only. No action taken.

18. 10363 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 5,792-SQUARE FOOT PORTION OF THE WEST 90 FEET OF LOTS 10, 11 AND 12, BLOCK 61, ORIGINAL TOWN ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF WEST WALL STREET AND SOUTH CARRIZO STREET), WHICH IS PRESENTLY ZONED CB, CENTRAL BUSINESS DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A BAR FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 3) (DEVELOPMENT SERVICES)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10363.

Mayor Blong opened the public hearing at 10:40 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

Jack Ladd moved to approve the first of two readings of Ordinance No. 10363; seconded by John Norman.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

19. 10364 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 8, BLOCK 30, GREENWOOD ADDITION, THIRD, FOURTH, AND FIFTH SECTIONS, CITY AND COUNTY OF MIDLAND, TEXAS, FROM MF-22, MULTIPLE-FAMILY DWELLING DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED ON THE EAST SIDE OF SOUTH CLAY STREET, APPROXIMATELY 90 FEET NORTH OF EAST PENNSYLVANIA AVENUE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10364.

Mayor Blong opened the public hearing at 10:41 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

John Norman moved to approve the first of two readings of Ordinance No. 10364;

seconded by Jack Ladd.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

20. 10365 – AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOT 12, BLOCK 21, MOODY ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF NORTH MADISON STREET AND EAST ILLINOIS AVENUE), BY PERMITTING A REDUCED MINIMUM LOT WIDTH IN THE EVENT THAT THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND IS AMENDED TO REZONE THE PROPERTY FROM MF-22, MULTIPLE-FAMILY DWELLING DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10365.

Mayor Blong opened the public hearing at 10:42 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

Jack Ladd moved to approve the first of two readings of Ordinance No. 10365; seconded by John Norman.

The motion passed by the following vote:
AYE: Stretcher Burkes, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: Corrales

21. 10366 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 1,763-SQUARE FOOT PORTION OF LOT 6A, BLOCK 62, BELMONT ADDITION, SECTION 23, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE NORTH SIDE OF EAST INTERSTATE 20, APPROXIMATELY 478 FEET WEST OF SOUTH TERRELL STREET), WHICH IS PRESENTLY ZONED BP, I-20 BUSINESS PARK DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A RESTAURANT FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10366.

Council Member Poole inquired if hours were set to serve alcohol can they be changed in the future if they decide they would like to stay open later.

City Attorney John Ohnemiller reported they could close earlier but they cannot stay open later to serve alcohol. If they want to extend their hours, they would need to reapply.

Mayor Blong opened the public hearing at 10:44 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

Jack Ladd moved to approve the first of two readings of Ordinance No. 10366; seconded by Dan Corrales.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

22. 10367 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 37.65-ACRE TRACT OF LAND OUT OF SECTION 48, BLOCK 40, T-1-S, T&P RR CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT, OFFICE CENTER, RECREATION CENTER, AND SHOPPING CENTER TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT, OFFICE CENTER, RECREATION CENTER, AND SHOPPING CENTER (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF THOMASON DRIVE AND SOUTH LOOP 250 WEST); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 4) (DEVELOPMENT SERVICES)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10367.

Eric West, Parkhill, gave an overview of the project noting they would like to change the current PD to include a flexible mixed-use development entertainment and entertainment retail.

Mayor Blong opened the public hearing at 10:56 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

Dan Corrales moved to approve the first of two readings of Ordinance No. 10367 with the amendment to change the Ordinance, Subsection J, Committee from “one or more members of City Council” to “two or more members of City Council”; seconded by John Norman.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None
ABSTAIN: None
ABSENT: None

23. 10368 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR LOT 1, BLOCK 1, CAMELOT ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE WEST SIDE OF ELKINS ROAD, APPROXIMATELY 6,200 FEET NORTH OF EAST STATE HIGHWAY 80), WHICH IS PRESENTLY ZONED O-1, OFFICE DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A SPECIAL EVENTS CENTER FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 4) (DEVELOPMENT SERVICES)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10368.

Development Services Director Chuck Harrington gave a brief overview of the item noting this project is a conversion to a special event center. They would now like to be able to serve alcohol.

When asked about the status of changes requested by Council so that items such as this no longer need Council approval, Mr. Harrington reported that the Ordinance has been created and sent to Legal for review.

Mayor Blong opened the public hearing at 11:03 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

Jack Ladd moved to approve the first of two readings of Ordinance No. 10368; seconded by Scott Dufford.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

24. 10369 – AN ORDINANCE VACATING AND ABANDONING A 0.034-ACRE PORTION OF ALLEY RIGHT-OF-WAY LOCATED ADJACENT TO LOTS 2, 3 AND 4, BLOCK 1, RICHARDSON-ABILENE STREET ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE EAST SIDE OF NORTH MAIN STREET, APPROXIMATELY 120 FEET SOUTH OF BUTLER AVENUE); ADOPTING THE APPRAISAL BY THE CITY MANAGER OF $2,956.00; RETAINING A NONEXCLUSIVE UTILITY EASEMENT; AND ORDERING RECORDATION BY THE CITY SECRETARY (DISTRICT 2) (DEVELOPMENT SERVICES)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10369.

Development Services Director Chuck Harrington gave a brief overview of the item noting whenever something like this is vacated it goes to the adjoining property owners and is split down the middle. In this case, it is the same owner on both sides. His intent is to slow the traffic down in his area.

Mayor Blong opened the public hearing at 11:07 a.m.

Aaron Patino, 927 N. Baird St., reported on his intent to eliminate the flow of traffic. His alley goes between his two homes and is not behind the home. He has no plans to do any construction.

There being no one else wishing to speak, the public hearing was closed at 11:09 a.m.

Dan Corrales moved to approve the first of two readings of Ordinance No. 10369; seconded by Jack Ladd.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

25. 10370 – AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR A 1.00-ACRE TRACT OF LAND OUT OF THE SOUTHEAST QUARTER OF SECTION 7, BLOCK X, H.P. HILLIARD SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF TANFORAN AVENUE AND ORIOLE DRIVE), BY PERMITTING A REDUCED MINIMUM LOT AREA; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 4) (DEVELOPMENT SERVICES)

Deputy City Secretary Jan Hamilton read the caption of Ordinance No. 10370.

Development Services Director Chuck Harrington gave a brief overview of the item noting that when this whole area was annexed it was annexed as AE. The applicant would like to plat his property but can not because the property is one acre and AE requires a minimum of two acres. Staff has changed their process of automatically making all new annexed property AE which will avoid this situation in the future.

Mayor Blong opened the public hearing at 11:13 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

Robin Poole moved to approve the first of two readings of Ordinance No. 10370; seconded by Jack Ladd.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

MISCELLANEOUS

26. 003-2023 – MOTION AUTHORIZING THE ENGINEERING SERVICES DEPARTMENT TO MANAGE THE DESIGN OF A TRAFFIC SIGNAL FOR THE INTERSECTION OF MOCKINGBIRD LANE AND MAGELLAN STREET; AND APPROPRIATING AND TRANSFERRING THE SUM OF $150,000.00 FROM THE GENERAL FUND TO A PROJECT ACCOUNT FOR SAID PURPOSE (DISTRICT 1) (ENGINEERING SERVICES)

Engineering Services Director Jose Ortiz reported that staff went out to evaluate the area to see what could be done to make it safer and gave a brief history of how the traffic increased there over time.

Traffic Manager Gabe McClellen reported on their interim safety plans for the area such as installing street lights and radar feedback signs.

The request today is to design the light, which will take about six months and another six months to construct.

Steveanna Gonzales, 1322 Pavilion Parkway, reported her daughter died crossing the street at this intersection. Ms. Gonzales is in favor of a light going up.

Mayor Blong gave condolences to Ms. Gonzales and her family.

Mary Lujan, 3705 Roosevelt, voiced concerns about the intersection and suggested a four-way stop be put in or a warning sign. Ms. Lujan is in favor of this item.

Consuelo Duff, 4708 Pleasant Drive, voiced concerns about the intersection and suggested a camera be put in place at least until a light gets put up.

Lucy Sisniega, 5408 Crowley Blouvard, is in support of this item and voiced her concerns.

Scott Dufford moved to approve Motion No. 003-2023; seconded by Dan Corrales.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

27. MOTION APPOINTING A MAYOR PRO TEMPORE (DISTRICT: NONE) (CITY SECRETARY'S OFFICE)

Jack Ladd moved to appoint John Norman as Mayor Pro Tem; seconded by Dan Corrales.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

28. MOTION MAKING APPOINTMENTS TO VARIOUS BOARDS AND COMMISSIONS (CITY SECRETARY'S OFFICE)

Scott Dufford moved to defer the appointment of Midland Development Corporation Board members to the next meeting; seconded by Dan Corrales.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

Dan Corrales moved to appoint Ross Schumann to the Zoning Board of Adjustments and Airport Zoning Board of Adjustments; seconded by Amy Stretcher Burkes.

The motion passed by the following vote:
AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman
NAY: None
ABSTAIN: None
ABSENT: None

PUBLIC COMMENT

29. Receive public comments where individuals may address the City Council on City related issues and projects not on the present agenda. Any deliberation of or decision by the City Council regarding the item being discussed shall be limited to a motion to place the item on the agenda for a subsequent meeting. (Please limit comments to three minutes or less.)

Lucy Sisniega, 5408 Crowley Blouvard, spoke on behalf of applicants for Boards and Commissions and asked that the Council review the applications and provide the applicants with guidance regarding how the process is conducted.

Dean Maltsberger, 2904 Sand Hill Circle, spoke in support of the Fire/PD Training Center. Mr. Maltsberger also reported that Hogan park has many stickers and moles and is not being maintained.

EXECUTIVE SESSION

30. Pursuant to Texas Government Code § 551.101, the City Council will hold an Executive Session, which is closed to the public, to discuss the following matters as permitted under the following sections of the Texas Government Code:

Mayor Blong recessed the meeting to go to Executive Session at 11:32 a.m.

a. Section 551.072, Deliberation Regarding Real Property

a.1. Discuss the purchase, exchange, lease or value of real property

b. Section 551.074, Personnel Matters

b.1. Deliberate the appointment, employment, evaluation, reassignment, duties or discipline of the City Manager

All the business at hand having been completed, the meeting adjourned at 1:59 p.m.

PASSED AND APPROVED January 24, 2023.

_____

Lori Blong, Mayor

ATTEST:

_____

Amy M. Turner, City Secretary

City Council Meeting

Item Number: 5

Meeting Date: January 24, 2023

To: City Council / City Manager

From: Erika Martinez, Manager, Purchasing

Subject: **RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH MARTINEZ ARCHITECTS, LP, FOR ARCHITECTURAL, DESIGN AND ENGINEERING SERVICES FOR THE CENTRAL FIRE STATION WELLNESS CENTER AND POLICE DEPARTMENT RENOVATIONS FOR A COST OF $168,000.00 AND TRANSFERRING AND APPROPRIATING FUNDS (DISTRICT: NONE) (GENERAL SERVICES)**

Purpose:

Resolution awarding a professional services agreement with Martinez Architects, LP for architectural, design, and engineering services for the Central Fire Station Wellness Center & Police Department Renovations for the General Services Department for a cost of $168,000.00; and appropriating funds therefore.

Recommended City Council Action:

Approve

Fiscal Impact:

Funding is available in the FY2023 General Operating Fund budget and will be transferred and appropriated to a project for the said purposes.

Discussion:

The City Manager approved the issuance of the request for qualifications and advertisement for the Central Fire Station Wellness Center & Police Department Renovations. One hundred eighty-six (186) requests for qualifications were issued. We received three (3) statements of qualifications. Please see the attached memo from Charles Blumenauer, Fire Chief, and Seth Herman, Police Chief, for further information.

Therefore, please consider a resolution awarding a professional services agreement to Martinez Architects, LP of Kingwood, Texas for architectural, design, and engineering services for the Central Fire Station Wellness Center & Police Department Renovations for the General Services Department for a cost of $168,000.00.

Tina Gaug

City Manager's Office

RESOLUTION NO. _____

RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH MARTINEZ ARCHITECTS, LP, FOR ARCHITECTURAL, DESIGN AND ENGINEERING SERVICES FOR THE CENTRAL FIRE STATION WELLNESS CENTER AND POLICE DEPARTMENT RENOVATIONS FOR A COST OF $168,000.00 AND TRANSFERRING AND APPROPRIATING FUNDS

WHEREAS, the City Manager approved the issuance of a request for qualifications and advertisement for the Central Fire Station Wellness Center and Police Department renovations; and

WHEREAS, three (3) statements of qualifications were received, with the most qualified submittal belonging to Martinez Architects, LP, for a total cost of $168,000.00; and

WHEREAS, the City Council finds that Martinez Architects, LP, is qualified to perform said professional services; and

WHEREAS, the City Council finds that the professional fees proposed by Martinez Architects, LP are consistent with and not higher than the recommended practices and fees published by the applicable professional associations and do not exceed any maximum provided by law; and

WHEREAS, the City Council finds that Martinez Architects, LP, provides professional services for a fair and reasonable price; and

WHEREAS, the City Council finds it to be in the public interest to execute a professional services agreement with Martinez Architects, LP, as the most highly qualified provider of said professional services based on demonstrated competence, knowledge, and qualifications and on the reasonableness of the proposed fee for the services;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the City Manager and City Secretary are hereby authorized and directed to execute and attest, respectively, on behalf of the City of Midland, a professional services agreement with Martinez Architects, LP, for said professional services.

A copy of said agreement is attached hereto as Exhibit "1" and incorporated herein for all purposes.

SECTION TWO. That funds are available in the FY2023 General Operating Fund budget and will be transferred and appropriated to a project for said purposes.

SECTION THREE. That the City Comptroller is hereby authorized and directed to pay Martinez Architects, LP, from funds available in a project for said purpose upon receipt of proper invoices or statements approved by the City Manager.

On motion of Council member _____, seconded by Council member _____, the above and foregoing resolution was adopted by the City Council of the City of Midland at a regular meeting on the _____ day of _____, A.D., 2023, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Regina Stephenson, General Services Director

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

City of Midland

Midland Police Department

Interoffice Memorandum

Date: **January 12, 2023**

To: **Erika Munoz, Purchasing Manager**

From: **Seth Herman, Chief of Police**

Subject: **Supporting Memorandum, Police Headquarters**

As occurs with any structure occupied on a 24-hour a day basis over an extended period, the Midland Police Department / Computer Information Systems building has fallen into disrepair and is in desperate need of upgrading. Requested renovations are projected to accommodate both aesthetics and functionality, with and emphasis on avoiding catastrophic failures leading to greater costs in the future associated with the construction of a new building. Requested alterations and repairs include the following:

- The grounds surrounding the building and within the courtyard are unsightly and fail to present the professional appearance required of a government facility.
- Wear and tear throughout the facility's interior demands new flooring, wall patching, ceiling tile replacement and various other repairs for both functionality and aesthetics.
- The volume of investigations has necessitated the addition of two interview rooms within the Investigative Services Bureau, complete with audio and video recording systems.
- Both the men's and women's locker rooms need demolition and rebuilding due to aging pipes and hardware.
- Such maintenance is not relegated exclusively to those areas utilized by police personnel but are also required within the Computer Information Systems Division area – alterations including the installation of flooring / resurfacing of the server room.
- In addition, the basement / parking garage "office" occupied by CISD's radio technician needs upgrades from its status that is more closely described as a cinderblock supply closet than a workspace.

MIDLAND Fire Department

Interoffice Memorandum

Date: **01/11/2023**

To: **Regina Stephenson**

From: **Fire Chief Charles Blumenauer**

Subject: **Central Wellness Center**

Fitness is a priority for all firefighters as our job requires us to be in excellent shape. Secondarily, cancer prevention is also another high priority for the department. Currently, firefighters work out in the apparatus bay at the Central fire station. This not only puts them out in the elements but also exposes them to residual vehicle exhaust.

The new wellness center will enclose the courtyard at Central fire and create a climate-controlled environment that will also remove the exposure to the carcinogens of the bay. This upgrade to the Central fire station is just the latest step in upgrading this facility to extend its useful life.

Charles Blumenauer, Fire Chief

PROFESSIONAL SERVICES AGREEMENT
23001085

THIS AGREEMENT is made and effective the 25 day of January 2023, by and between the CITY OF MIDLAND, TEXAS ("*CITY*"), a home-rule municipal corporation, and Martinez Architects, LP ("*COMPANY*"). CITY and COMPANY are at times individually referred to as a "*Party*" and collectively referred to as the "*Parties*."

ARTICLE I. PURPOSE

The purpose of this Agreement is to state the terms and conditions under which COMPANY shall perform architectural, design, and engineering services for Central Fire Station and Police Department Renovations services (the "*Services*") for CITY. The Services are more specifically set forth in **Exhibit A**, which is attached hereto and incorporated herein for all purposes.

ARTICLE II. SERVICES TO BE PERFORMED

COMPANY shall provide the Services in a manner consistent with the same level of skill and care as other professionals that perform similar services for similar projects in approximately the same region and at approximately the same point in time. COMPANY represents that any employee who performs the Services shall be fully qualified and competent to perform the Services.

ARTICLE III. FINANCIAL CONSIDERATIONS

CITY agrees to pay COMPANY an amount not to exceed $168,000.00 for the performance of the Services. CITY agrees to pay COMPANY according to the schedule set forth in **Exhibit A** upon presentation of a monthly invoice. The monthly invoice shall set forth all service fees for the month and those expenses described in **Exhibit A** that COMPANY incurs during the previous month for which COMPANY receives advanced written approval from the City Manager. All additional and/or reimbursable expenses must be approved by the City Manager prior to incurring such expenses.

Within thirty (30) days of the date COMPANY's invoice is received by CITY, CITY shall pay the full amount of such invoice; provided, however, that if CITY objects to any portion of an invoice, CITY shall notify COMPANY of CITY's objection and the grounds therefor within

fifteen (15) days of the date of receipt of the invoice, and the Parties shall immediately make every effort to settle the disputed portion of the invoice. Notwithstanding the foregoing, CITY shall pay every portion of the invoice that is not in dispute within the 30-day period for payment.

ARTICLE IV. TERM

The term of this Agreement shall be from January 25, 2023 until January 24, 2025, unless the Services are completed sooner or the Agreement is terminated as provided below.

ARTICLE V. TERMINATION AT WILL

CITY may terminate this Agreement at will, for any or no reason, upon giving COMPANY at least one hundred eighty (180) days' written notice. The Parties understand and agree that it is in CITY'S sole and absolute discretion to cancel this Agreement during the term set forth in Article IV without penalty to CITY. COMPANY has no expectation and has received no guarantees that this Agreement will not be terminated during the Agreement's term. The Parties have bargained for the flexibility of terminating this Agreement upon tender of the requisite notice at any time during this Agreement's term. All work and services under the Agreement shall be suspended upon termination of the Agreement becoming effective.

ARTICLE VI. ASSIGNMENT

COMPANY shall not, either directly or indirectly, assign all or any part of this Agreement, or any interest, right or privilege herein, without obtaining CITY's prior written consent. The issue of whether to grant such consent shall be in the sole and absolute discretion of CITY.

ARTICLE VII. OWNERSHIP AND CONFIDENTIALITY OF DOCUMENTS AND OTHER WORK PRODUCT

All reports, information and other data ("*Instruments of Service*") given to, prepared or assembled by COMPANY under this Agreement, and any other related document or item shall become the sole and exclusive property of CITY. The Instruments of Service shall be promptly delivered, without restriction, to CITY and such other persons or entities as CITY may designate; provided, however, that COMPANY may make copies of the Instruments of Service for its files.

ARTICLE VIII. INDEPENDENT CONTRACTOR

COMPANY shall perform the Services as an independent contractor and not as an officer,

agent, servant or employee of CITY. COMPANY shall have exclusive control of and the exclusive right to control the details of the Services and all persons performing the same. COMPANY shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors. The Parties acknowledge and agree that the doctrine of *respondeat superior* shall not apply as between CITY and COMPANY, its officers, agents, employees, contractors and subcontractors. Nothing in this Agreement shall be construed as creating a partnership or joint enterprise between CITY and COMPANY. No person performing the Services shall be considered an officer, agent, servant or employee of CITY. Further, it is specifically understood and agreed that nothing in this Agreement is intended nor shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control" that would give rise to vicarious liability. COMPANY is an independent contractor under this Agreement and shall assume all rights, obligations, and liabilities applicable to it as an independent contractor. CITY does not have the power to direct the order in which the services are performed. CITY shall not have the right to control the means, methods or details of COMPANY'S work. COMPANY shall assume exclusive responsibility for performing the Services, and is entirely free to perorm the Services in its own way.

ARTICLE IX. INSURANCE

During the term of this Agreement, COMPANY shall maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):

-Personal Injury:	$1,000,000.00 per person
	$1,000,000.00 per occurrence
-Property Damage:	$500,000.00 per occurrence
Business Automobile Liability:	$250,000.00 combined single limit -
	Personal Injury and Property Damage
Workers' Compensation:	Statutory limits
Employers' Liability:	$500,000.00 per accident or occurrence

The Commercial General Liability policy shall be on a per project aggregate, including completed operations, and shall be on a claims-occurred basis. This policy shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Business Automobile Liability policy shall cover any vehicle for bodily injury and property damage, including owned vehicles, hired and non-city vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of $250,000.00 covering any vehicle used for the execution of the Services. This policy shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Workers' Compensation policy shall inure to the benefit of employees injured during the course and scope of their employment by COMPANY pursuant to this Agreement. The Workers' Compensation policy shall waive all rights of subrogation in favor of CITY.

All insurance policies required by this Agreement shall (i) provide for a waiver of subrogation in favor of CITY, and (ii) name CITY as an additional insured on a claims-occurred basis (except for the Workers' Compensation policy). Prior to any reduction or termination of the insurance policies referenced herein, COMPANY shall ensure that its insurance provider submits written notice to CITY no later than thirty (30) days prior to the reduction or termination of such coverage.

COMPANY shall contractually require all contractors, subcontractors, and sub-subcontractors that perform the Services to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts specified herein. All contractors, subcontractors, and sub-subcontractors shall obtain insurance policies that provide blanket waivers of subrogation in favor of the City of Midland and that name the City of Midland as an additional insured on a claims-occurred basis (except Workers' Compensation).

Prior to the execution of the Agreement, COMPANY shall provide one or more certificates of insurance specifically stating that requirements of this Article have been met, which shall be subject to the approval of CITY. CITY shall not be required to provide any insurance pursuant to this Agreement.

By executing this Agreement, COMPANY certifies that the certificate of insurance provided pursuant to this Article complies with the requirements of Chapter 1811 of the Texas Insurance Code. COMPANY shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law and this Agreement is the sole and exclusive responsibility of COMPANY.

Notwithstanding any contrary provision contained herein, the City Manager, in his/her sole and absolute discretion, modify the insurance requirements contained in this Article.

ARTICLE X. ATTORNEY FEES

BY EXECUTING THIS AGREEMENT, COMPANY AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST CITY, REGARDING THE AWARD OF ATTORNEY FEES, WHICH ARE IN ANY WAY RELATED TO THIS AGREEMENT OR THE CONSTRUCTION, INTERPRETATION, OR BREACH OF THIS AGREEMENT. COMPANY SPECIFICALLY AGREES THAT IF COMPANY BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS AGREEMENT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS AGREEMENT (INCLUDING, BUT NOT LIMITED TO, ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED) OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE), COMPANY AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY FEES TO WHICH COMPANY MIGHT OTHERWISE BE ENTITLED.

COMPANY AGREES THAT THIS IS A VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY-EXISTING KNOWN RIGHT. COMPANY ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS AGREEMENT. COMPANY FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN CITY AND COMPANY. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF GOVERNMENTAL IMMUNITY.

COMPANY IS RELYING ON ITS OWN JUDGMENT AND HAD THE OPPORTUNITY TO DISCUSS THIS AGREEMENT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION. THE PROVISIONS OF THIS ARTICLE SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

ARTICLE XI. GOVERNMENTAL IMMUNITY

By executing this Agreement, CITY is not waiving its right of governmental immunity. CITY is retaining its immunity from suit. CITY is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY.**

ARTICLE XII. NO THIRD-PARTY BENEFICIARY

CITY's approval of this Agreement does not create a third-party beneficiary. There is no third-party beneficiary to this Agreement. No person or entity who is not a party to this Agreement shall have any third-party beneficiary or other rights hereunder.

ARTICLE XIII. RELEASE

NOTWITHSTANDING ANY CONTRARY PROVISION CONTAINED HEREIN, COMPANY HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES CITY AND ITS AGENTS, COUNCIL MEMBERS, EMPLOYEES, AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES, OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH COMPANY HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF AGREEMENT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR CITY'S NEGLIGENCE. THE PROVISIONS OF THIS ARTICLE SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

ARTICLE XIV. GENERAL PROVISIONS

A. Waiver. No waiver by CITY of a breach of any covenant, condition, or restriction of this Agreement shall be construed or held to be a waiver of any succeeding or preceding breach of the same or any other covenant, condition, or restriction contained in this Agreement.

B. Governing Law and Venue. The laws of the State of Texas shall govern, construe and enforce all rights and duties of the Parties, including, but not limited to, tort claims and any contractual claims or disputes arising from or relating in any way to the subject matter of this Agreement, without regard to conflict of laws and rules that would direct application of the laws of another jurisdiction. All performance and payment made pursuant to this Agreement shall be deemed to have occurred in Midland County, Texas. The obligations and undertakings of the

Parties shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claim, suit, or other action arising from or connected in any way to this Agreement shall be in Midland County, Texas.

C. Notice. Any notice or demand made regarding this Agreement shall be made in writing and delivered, either in person or by certified or registered mail, at the addresses provided below. Notice by mail shall be complete upon deposit of the paper, postage prepaid, in a post office or official depository under the care and custody of the United States Postal Service.

If to CITY: City Manager's Office
P.O. Box 1152
Midland, Texas 79702

If to COMPANY: Martinez Architects, LP
900 Rockmead, Suite 250
Kingwood, TX 77339

The parties hereto may change the above-designated addresses by giving notice pursuant to the terms of this Section.

D. Severability. If one or more of the provisions contained in this Agreement are held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and this Agreement shall be construed as if the invalid, illegal, or unenforceable provision were never contained herein.

E. Use of Language. Words in the singular shall be held to include the plural, unless the context otherwise requires.

F. Amendments, Modifications, Alterations. No amendment, modification, or alteration of this Agreement shall be binding unless such is evidenced in writing, dated subsequent to the date of this Agreement, and duly executed by the Parties.

G. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed as original, and all of which shall constitute one and the same instrument.

H. Federal Wage Requirements. If applicable, the Davis-Bacon Act, 29 CFR 5.5, and any related acts or regulations are hereby incorporated by reference and made a part of this Agreement, and all terms and requirements under said statutes and regulations are made terms and conditions of this Agreement, to which the Parties have agreed to be bound.

I. Notice of Alleged Breach; Statutory Prerequisites. As a condition precedent to filing suit

for alleged damages incurred by an alleged breach of an express or implied provision of this Agreement, COMPANY or its legal representative shall give the City Manager, or any other reasonable official of CITY, written notice (consisting of one (1) original and seven (7) copies of such notice attached to a copy of this Agreement) of such duly-verified damages within one hundred fifty (150) days after the same has been sustained. The discovery rule does not apply to the giving of such notice. The notice shall include when, where, and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which COMPANY will settle, the physical and mailing addresses of COMPANY at the time and date the claim was presented, the physical and mailing addresses of COMPANY for the six (6) months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom COMPANY relies to establish its claim. COMPANY's failure to so notify the City Manager within the time and manner provided herein shall exonerate, excuse and except CITY from any liability whatsoever. CITY is under no obligation to provide notice to COMPANY that COMPANY'S notice is insufficient. CITY reserves the right to request additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after COMPANY's receipt of such notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any contrary provision contained herein, COMPANY's failure to comply with the requirements herein shall perpetually bar COMPANY's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless of whether CITY has actual or constructive notice or knowledge of said claim or alleged damages. COMPANY agrees that the requirements of this entire Agreement are reasonable.

J. Prompt Pay Act. The Parties agree that Texas Government Code, Chapter 2251, Payment for Goods and Services does not waive the CITY's governmental immunity.

K. Compliance. COMPANY shall comply with Texas Government Code § 2252.908, *et seq.*, as amended, and Texas Local Government Code § 176.006, *et seq.*, as amended.

L. Anti-Boycott Statutes. To the extent that Tex. Gov't Code §§ 2271.002 and 2274.002 apply to this Agreement, COMPANY hereby verifies that:

- COMPANY does not boycott Israel and will not boycott Israel during the term of

this Agreement;

- COMPANY does not boycott energy companies and will not boycott energy companies during the term of this Agreement; and
- COMPANY does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of this Agreement against any firearm entity or firearm trade association.

If Tex. Gov't Code § 2270.002 does not apply to this Agreement, such verification is not required, and COMPANY shall be deemed to have not made such verification.

M. Records Retention and Production of Information. To the extent that this Agreement is a contract described by Tex. Gov't Code § 552.371, COMPANY shall: (i) preserve all contracting information related to the Agreement as provided by the records retention requirements applicable to CITY for the duration of the contract; (ii) promptly provide to CITY any contracting information related to the Agreement that is in the custody or possession of COMPANY on request of CITY; and (iii) on completion of the Agreement, either (a) provide at no cost to CITY all contracting information related to the Agreement that is in the custody or possession of COMPANY, or (b) preserve the contracting information related to the Agreement as provided by the records retention requirements applicable to CITY.

N. Public Information. To the extent that this Agreement is a contract described by Tex. Gov't Code § 552.371, COMPANY agrees as follows in accordance with Tex. Gov't Code § 552.372(b): The requirements of Subchapter J, Chapter 552, Government Code, may apply to this contract, and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

O. Conflict of Terms. If a conflict of terms or language exists between: (i) any of the provisions of this Agreement; and (ii) any of the provisions contained in any exhibit(s) attached to this Agreement, precedence shall be given to the provisions of this Agreement. For the avoidance of any doubt, the provisions contained in this Agreement shall supersede any and all conflicting provisions contained in any exhibit(s) attached hereto. Furthermore, the Parties acknowledge and agree that any provision contained in an exhibit(s) attached to this Agreement that imposes an additional express or implied obligation on CITY is hereby made void and of no force or effect. CITY's sole and exclusive obligations under this Agreement are contained in the provisions of this

Agreement that precede the signature page(s), which evidences the Parties' execution and acceptance hereof.

P. Iron or Steel Products Statute. Company agrees that all iron or steel products produced through a manufacturing process and used in the project that is the subject of this Agreement shall be produced in the United States in accordance with Government Code § 2252.202, *et seq*., as amended.

Q. Interpretation. By executing this Agreement, the Parties acknowledge and agree that this Agreement shall not be interpreted or construed against any Party solely because such Party or its legal counsel drafted this Agreement. The Parties have read, understood, and approve of the language and terms set forth herein.

[Signature Page(s) Follows]

EXECUTED IN DUPLICATE the day and year first above mentioned.

THE CITY OF MIDLAND, TEXAS

_____
Robert Patrick, City Manager

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO FORM ONLY:

_____
John Ohnemiller, City Attorney

COMPANY:

By: _____

Name:_____

Title: _____

STATE OF _____§
§
COUNTY OF _____§

BEFORE ME, the undersigned authority, on this ____ day of _____, 20____ personally appeared, _____, an officer of Martinez Architects, LP, known to me to be the person and official whose name is subscribed to the forgoing instrument, and acknowledged to me that he executed the same as the act and deed of said corporation, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the __day of _____, 20____.

_____
Notary Public, State of Texas

EXHIBIT A

January 10, 2023

Erika Munoz Martinez
Purchasing Manager
City of Midland
300 N. Loraine
Midland, Texas 79702

RE: Proposal for Architectural and Design Services
Midland Fire Department Wellness Addition & Police Department Renovations

Ms. Martinez:

Thank you for the opportunity to assist in the development and designing of the Central Fire Station Wellness addition and Police Department renovation project. Professional Architectural and Design Services are outlined in this supplement to the City of Midland Professional Services Agreement.

Section 1: Project Description

1.01: Project Description

- Addition to Midland Central Fire Station for Wellness Center - 1500 W Wall St, Midland, TX 79701
- Renovations to Midland Police Department - 601 N Loraine St, Midland, TX 79701
- Refer to detailed description of project listed in Request for Qualifications (attached to this Exhibit)

Martinez Architects shall provide professional Architectural and Engineering services for the project phases of Programming, Schematic Design, Construction Documents, Bid-Phase Assistance, and Construction Administration for the project scope identified.

1.02: Project Budget

Owner-provided Construction Budget: Not disclosed.

Add Escalation Factor to Owner-provided budget at 1.5% increase each month from date of this agreement. Budget increase due to escalation only shall not increase the fee for architectural/engineering design services. Any increase in design fees will be as a result of change in scope only. Refer to 1.05 Design Fees.

1.03: Anticipated Project Design Schedule:

Major Milestones:

- Geotechnical Evaluation and Surveying (as needed) conducted concurrent to programming and schematic design phases.
- Design Meetings
  - Bi-weekly meetings with Owner through Construction Documents
- Programming
  - One (1) week
- Schematic Design

- Three (3) Weeks
- Owner Review & Cost Estimating– One (1) Week

- Construction Documents
  - 50% Construction Documents – Four (4) Weeks
  - Owner Review and Cost Estimating – Two (2) Weeks
  - 90% Construction Documents – Four (4) Weeks
  - Issue for Permitting
  - Owner Review and Cost Estimating – Two (2) Weeks
  - 100% Construction Documents – Two (2) Weeks
  - Issue for Competitive Sealed Proposals
- Construction Commencement
  - Upon Contract approval of General Contractor

1.04: Scope of Work:

Our fee proposal is inclusive of full Architectural and Engineering Services necessary from preliminary design phase to construction administration services during construction. Within the scope of work, we will provide the following services:

- Limited Site Surveying as needed
- Coordination and Review of the following Owner-Provided Scope (as needed):
  - Geotechnical Survey and Report
  - Phase I Environmental Report
  - Construction Materials Testing
  - Commissioning Reports
- Programming
  - Coordination of Demolition and Construction concurrent with operating Fire and Police Department functions in existing facilities.
  - Site evaluation including preliminary layout of building program, access, landscaping, hardscape improvements, as applicable to scope.
  - Conceptually evaluate and program and spatial relationships to create conceptual floor plan layouts, assessment of space requirements to accommodate Owner operations.
  - Programming meeting shall be coordinated with Owner; one (1) meeting to be included in Basic Services.
  - Evaluate Owner's budget in relation to identified Program and Scope of Work.
- Schematic Design
  - Upon agreement of Programming and Owner's Budget, Architect shall proceed with Schematic Designs. Plans shall include the following deliverables for each project site:
    - Site Plan
      - building layout
      - landscape and hardscape concept design
    - Floor Plans
    - Three-Dimensional Model (fire station)

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- Preliminary cost estimate
- Preliminary Schedule
- Coordination meetings shall be held with Owner as listed in 1.03.

– Construction Documents

- Project Meetings
  - Owner/Architect to coordinate meetings for Design Review
  - Provide regular updates and progress of construction document completion
  - Update the anticipated schedule
- Landscaping and Irrigation
  - Provide Landscape Plan specifying the treatment of all exterior landscaping areas within the limits of the property boundary. Calculations conforming to the requirements of the authority having jurisdiction.
  - Design Irrigation Plan and layout of pvc pipes, irrigation heads, controllers, and accessories for a fully operational system. System shall be designed to conserve water and limit operational and maintenance costs. Coordinate with existing systems as required.
- Topographical Survey
  - As required, Design Team shall provide surveying services for the use of engineering and permitting.
- Civil Construction Plans
  - It is not anticipated that civil engineering construction plans will be required for the anticipated scope of work.
- Storm Water Prevention Plan
  - It is not anticipated that SWPP plans will be required for the anticipated scope of work.
- Building Structure
  - Design Team shall provide site plan, floor plan, elevations, building section, wall sections, interior elevations, schedules, and details.
  - Structural Plans to be provided by a licensed engineer and shall include foundation plans and details, structural components to support all components of building including collateral and lateral loads, dead loads, etc.
  - Prepare and issue final signed and sealed construction plans for permitting by Structural Engineer licensed by the State of Texas to Authorities having Jurisdiction.
- Building Systems
  - Design of systems within the facilities including Mechanical, Electrical, and Plumbing systems. Systems shall be coordinated and compatible with existing systems incorporated into city facilities.
  - Prepare and issue final signed and sealed construction plans for permitting by Engineer licensed by the State of Texas to Authorities having Jurisdiction.

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- Permitting
  - Coordinate ADA review and inspection of the facility with the State of Texas.
  - Coordinate all permitting submission(s) as required with the Authority having Jurisdiction
    - All Permitting Fees, if required, shall be reimbursed by the Owner.
- Cost Estimating at the following intervals:
  - 100% Schematic Design
  - 50% Construction Documents
  - 90% Construction Documents
  - Provide Owner with plans and project documents in pdf format

- Bidding
  - Coordinate with the Owner solicitation for Request for Proposal
  - Competitive Sealed Proposal delivery method
  - Update the anticipated construction schedule
- Construction Administration
  - Architect attendance at all OAC meetings
  - Site Observation visits and accompanying Field Reports (at each visit by each discipline listed):
    - Architect: Every 2 weeks
    - Structural Engineer: (2) total
    - Civil Engineer: (2) total
    - Landscape Architect: (2) total
    - M/E/P/T Engineer: (3) total

- Potential Supplemental Services
  - Site Topographic Surveying to supplement existing available information, as needed.

1.05: Design Fees:

Base Fee: Fee will be invoiced for a lump sum not to exceed $119,500.

Supplemental Services: Should the city not provide any of the following services outside of this contract, Martinez Architects can sub-contract to provide the following, at the listed estimated rates:

• Geotechnical Survey and Report	$6,000.00 (fire station site only)
• Phase I Environmental Report	$1,500.00 (fire station site only)
• Construction Materials Testing	$10,000.00
• Commissioning:	$6,000.00
• Potential Total Supplemental Services Estimate:	$23,500.00

Reimbursable Expenses:

EXHIBIT A

Reimbursable expenses to not exceed $5,000 and will be billed at cost with no mark-up, and shall be allowed to include:

- Permitting Fees (if applicable), TDL&R registration and inspection fees.
- Physical models, mock ups, professional photography, and presentation materials requested by the Owner.
- Project websites required for use by owner.
- FedEx, couriers, print-shop reproduction, and other printing costs associated with project presentation
- Postage, handling, and delivery.
- Authorized Out-of-town Travel expenses

Additional Services Fees:

- Additional Owner-requested Site Observations / Site Meetings: $1,000 per visit per discipline.
- Additional work outside the base scope of services: per hourly rate listed below, or as negotiated for a lump sum fee. Such negotiations shall depend on scope of change, number of design disciplines affected by changes, and in which phase of project the change occurs. Before Construction Documents, typically no add services fee will apply for changes other than significant (25%) scope changes. During Construction Documents, typically no add services fee will apply for changes of less than 5% of total scope. After 100% Construction Documents, add services fees will typically apply for all design changes other than very minor changes and any changes resulting from inadequate or incorrect construction documents.
- Estimated Additional Services Fees for purpose of Owner Contingency Fund planning: $20,000.00

Hourly Rates:

Principal	$250/hr.
Project Manager	$200/hr.
Project Architect/Engineer	$175/hr.
Technical Personnel	$100/hr.
Clerical	$75/hr.

Summary Anticipated Fee Totals:

- **Basic Services** **$119,500.00**
- Reimbursable Expenses Estimate $5,000.00 (OPTIONAL SERVICE)
- Supplemental Services Estimate $23,500.00 (OPTIONAL SERVICE)
- Additional Services Estimate $20,000.00 (OPTIONAL SERVICE)
- Total Potential Fees $168,000.00
- Note: Recommended Owner Contingency Allowance is assumed to be $43,500.00 (based on Supplemental + Additional Services estimates)

Invoicing:

Our fees shall be invoiced monthly by progress installments at various completed stages throughout the project as noted below:

Programming	05%
Schematic Design	15%

EXHIBIT A

Construction Documents	40%
Permitting / Bidding	05%
Construction Administration	35%

Ms. Martinez – we appreciate the opportunity to work with you, and we look forward to a successful project.

Sincerely,

Justin Myers, AIA
Partner, Martinez Architects

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Project Description from RFQ

Additional Notes

Central Fire Station Wellness Center

The Wellness Center for the Central Fire Station shall be constructed in the courtyard area facing Wall Street. The current brick courtyard wall will require demolition. The Wellness Center shall be approximately 1,400 square feet and will be an addition to the current Central Fire Station building.

Police Department Renovations

The Police Department building renovations may include but are not limited to:

1. Renovation of the Courtyard
2. Landscaping
3. Demolition and replacement of stairs at the east entrance.
4. Installation of approximately 7,000 SF of luxury vinyl plank flooring in multiple areas.
5. Provide demolition of raised access flooring, installation of a door, carpet, paint and installation of a rubber surface access ramp into the server room on the 1st Floor.
6. Remove the shower, replace 2 sinks and add eye wash station, install new LED lighting, tint 8 windows and add water to the fume hood in the 2nd Floor Lab.
7. Repair and finish as needed the ceiling around the skylight.
8. Demolish and rebuild the Men's Locker Room which shall include 5 showers, 3 water closets, 3 urinals, counter with 3 sinks, tile finishes, new suspended ceiling and new LED lighting.
9. Demolish and rebuild the Women's Locker Room, provide plumbing, 3 showers, 2 water closets, counter with 3 sinks, tile finishes, new suspended ceiling and new LED lighting.
10. Provide new closet wall, new shelving, break room shelf/millwork and repairs in the 1st Floor AA office.
11. Provide patching and paint for the stairwell. This includes painting the stairwell walls from the ground floor to the 4th floor.
12. Provide buildout of 2 interview rooms on the 3rd floor. This includes 2 new doors and frames and HVAC and lighting modifications as required.
13. Provide new CMU Wall in the Garage. This work shall include new lights, door/frame and new wall mount AC.

City Council Meeting

Item Number: 6

Meeting Date: January 24, 2023

To: City Council / City Manager

From: Erika Martinez, Manager, Purchasing

Subject: **RESOLUTION AWARDING A CONTRACT FOR THE IDLEWILDE DRIVE STORM DRAIN IMPROVEMENTS PROJECT TO BOLER EQUIPMENT SERVICE, INC., OF MIDLAND, TEXAS, AT A TOTAL COST OF $1,932,184.00; APPROVING $193,218.40 FOR CONTINGENCIES; APPROVING $50,000.00 FOR PROJECT-RELATED EXPENSES; TRANSFERRING AND APPROPRIATING FUNDS; AND AUTHORIZING PAYMENT (DISTRICT 4) (GENERAL SERVICES)**

Purpose:

Resolution awarding the execution of a contract for the Idlewilde Drive Storm Drain Improvements Project to Boler Equipment Service, Inc. for the Engineering Services Department for the amount of $1,932,184.00; approving $193,218.40 for contingencies; approving $50,000.00 for project related expenses; for a total cost of $2,175,402.40; and transferring and appropriating funds; and authorizing payment.

Recommended City Council Action:

Approve

Fiscal Impact:

Funding is available in the Drainage Fund and will be transferred and appropriated to a project for the said purposes.

Discussion:

The City Manager approved plans and specifications and authorized advertisement for bids for the Idlewilde Drive Storm Drain Improvements Project for the Engineering Services Department. The bid request was sent to seventy-six (76) companies. We received two bids, one bid was unresponsive. Staff recommends awarding a contract to Boler Equipment Service, Inc. The

project timeline is projected at 120 calendar days. Please see the attached memo from Jose Ortiz, Engineering Services Director, for more information.

Therefore, please consider a resolution awarding a contract for the Idlewilde Drive Storm Drain Improvements Project for the Engineering Services Department to Boler Equipment Service, Inc, of Midland, Texas for the amount of $1,932,184.00; approving $193,218.40 for contingencies; approving $50,000.00 for project related expenses; for a total cost of $2,175,402.40; and transferring and appropriating funds; and authorizing payment.

Tina Daugherty

City Manager's Office

RESOLUTION NO. _____

RESOLUTION AWARDING A CONTRACT FOR THE IDLEWILDE DRIVE STORM DRAIN IMPROVEMENTS PROJECT TO BOLER EQUIPMENT SERVICE, INC., OF MIDLAND, TEXAS, AT A TOTAL COST OF $1,932,184.00; APPROVING $193,218.40 FOR CONTINGENCIES; APPROVING $50,000.00 FOR PROJECT-RELATED EXPENSES; TRANSFERRING AND APPROPRIATING FUNDS; AND AUTHORIZING PAYMENT

WHEREAS, the City Manager approved the plans and specifications and advertised for competitive bids for the Idlewilde Drive Storm Drain Improvements Project (the "Project"); and

WHEREAS, Bid No. 23001562 was opened on January 11, 2023, with the lowest responsible bidder being Boler Equipment Service, Inc., of Midland, Texas ("Contractor"), having submitted a bid of $1,932,184.00 as shown on the bid tabulation attached hereto as Exhibit "A" and incorporated herein for all legal purposes; and

WHEREAS, the total cost of the work to be completed, according to the previously advertised plans and specifications and the unit prices in Exhibit "A", shall not exceed $1,932,184.00; and

WHEREAS, the City Council finds it to be in the public interest to execute a contract with Contractor for said Project;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Mayor and City Secretary are hereby authorized and directed to execute and attest, respectively, on behalf of the City of Midland, a contract with Contractor for said Project at a total cost of $1,932,184.00, said contract being on file in the office of the City Secretary, referenced by the date and number of this resolution.

SECTION TWO. That the City Manager is hereby authorized and directed to execute, on behalf of the City of Midland, change orders to said contract if (1) each change order involves a decrease or an increase of $50,000.00 or less and (2) the change orders, in

total, do not increase the original contract price by more than 10 percent ($193,218.40).

SECTION THREE. That the sum of $2,175,402.40 shall be transferred and appropriated from the Drainage Fund to a project account for said Project. The sum of $193,218.40 is approved for contract contingencies, and the sum of $50,000.00 is approved for Project-related expenses.

SECTION FOUR. That the City Comptroller is hereby authorized and directed to pay Contractor pursuant to the terms of said contract and change orders executed in accordance with this resolution in an amount not to exceed $2,125,402.40 from funds available in said project account upon receipt of proper invoices or statements approved by the City Manager.

On motion of Council member _____, seconded by Council member _____, the above and foregoing resolution was adopted by the City Council of the City of Midland at a regular meeting on the _____ day of _____, A.D., 2023, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Regina Stephenson, General Services Director

_____
Jose Ortiz, Engineering Services Director

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

EXHIBIT "A"

D21-05 Idlewilde Drive Storm Drain Improvements

City of Midland - Engineering Services; January 11, 2023

BID TAB					Boler Equipment Service, Inc.	
Bid Item	Pay Note	Description	Quantity	Units	Unit Price	Actual Bid Total
1	M1	Mobilization	1	LS	$143,000.00	$143,000.00
2	M2	Erosion/Sediment Control	1	LS	$23,120.00	$23,120.00
3	M3	Traffic Control	1	LS	$40,000.00	$40,000.00
4	M4	Job Site Safety	1	LS	$15,000.00	$15,000.00
5	M5	Water Meter & Meter Box Installation	1	LS	$5,000.00	$5,000.00
6	M6	Material Mark-up	-	%	20%	
7	M7	Labor Mark-up (Regular Work Hours)	-	%	20%	
8	M8	Equipment Rental Mark-up (Non-Standard Equipment Only)	-	%	20%	
					Subtotal	**$226,120.00**
1	D1	Removal & Disposal of Existing Unclassified Asphalt	769	SY	$10.00	$7,690.00
2	D2	Removal & Disposal of Existing Concrete Curb & Gutter	60	LF	$60.00	$3,600.00
3	D3	Removal & Disposal of Existing Concrete Sidewalk & Ramps	5	SY	$1,000.00	$5,000.00
4	D4	Basin Excavation	24,944	CY	$15.00	$374,160.00
					Subtotal	**$390,450.00**
1	SD1	24" HDPE Dual Wall, Storm Drain	85	LF	$262.00	$22,270.00
2	SD1	36" HDPE Dual Wall, Storm Drain	529	LF	$300.00	$158,700.00
3	SD1	48" HDPE Dual Wall, Storm Drain	838	LF	$376.00	$315,088.00
4	SD2	5'x5'x5' Concrete Junction Box w/ 48" Fiberglass Manhole Riser	1	EA	$22,990.00	$22,990.00
5	SD2	6'x6'x6' Concrete Junction Box w/ 48" Fiberglass Manhole Riser	2	EA	$24,815.00	$49,630.00
6	SD2	6'x6'x7.83' Concrete Junction Box	1	EA	$27,663.00	$27,663.00
7	SD3	60" Fiberglass Manhole & Cover	2	EA	$12,840.00	$25,680.00
8	SD4	Reinforced Concrete Headwall	1	EA	$80,000.00	$80,000.00
9	SD5	12'x5'x5.7' Reinforced Concrete Curb Inlet	1	EA	$13,148.00	$13,148.00
10	SD5	18'x5'x10' Reinforced Concrete Curb Inlet	1	EA	$19,022.00	$19,022.00
11	SD5	12'x5'x7.4' Reinforced Concrete Curb Inlet	1	EA	$13,314.00	$13,314.00
12	SD5	12'x5'x5.5' Reinforced Concrete Curb Inlet	1	EA	$13,148.00	$13,148.00
13	SD5	5'x5'x5' Reinforced Concrete Curb Inlet	1	EA	$10,675.00	$10,675.00
14	SD6	Concrete Drainage Flume	307	SY	$195.00	$59,865.00
15	SD7	Connect to Existing Storm Drain	1	EA	$5,000.00	$5,000.00
16	SD8	Open Trenching of Storm Drain	1452	LF	$50.00	$72,600.00
17	SD9	Concrete Fiber Reinforced Pilot Swale	406	LF	$135.00	$54,810.00
18	SD10	Rock Rip Rap	1,113	SY	$108.00	$120,204.00
					Subtotal	**$1,083,807.00**
1	P1	Subgrade Preparation (Depth ≤ 8")	769	SY	$15.00	$11,535.00
2	P2	Flexible Base (Type A, Grade 4)	769	SY	$23.00	$17,687.00
3	P3	Type A Concrete Curb & Gutter	60	LF	$60.00	$3,600.00
4	P4	6.5" Concrete Sidewalk Repair	5	SY	$240.00	$1,200.00
5	P5	2" Type D HMAC Asphalt Pavement Repair (PG70-22)	85	TON	$175.00	$14,875.00
6	P6	Bituminous Prime Coat (MC-30, 0.20 Gal / SY)	154	GAL	$15.00	$2,310.00
7	P7	Flowable Fill / 2-Sack Backfill	1204	SY	$150.00	$180,600.00
					Subtotal	**$231,807.00**
					Base Bid Total =	**$1,932,184.00**

INTEROFFICE MEMORANDUM

TO: Erika Martinez; City of Midland, Purchasing Manager

FROM: Jose E. Ortiz, P.E.; City of Midland, Director – Engineering Services

SUBJECT: Idlewilde Drive Storm Drain Improvements ♦ Engr. Project No. D21-05 ♦ Bid Tabulation ♦ Funding #_____

DATE: January 24, 2023

Erika,

Engineering staff has reviewed the bid tabulation for the Idlewilde Drive Storm Drain Improvements project. Boler Equipment Service, Inc. of Midland, Texas, is the apparent successful low bidder. Staff recommends awarding the Idlewilde Drive Storm Drain Improvements project to Boler Equipment Service, Inc.

Boler Equipment Service, Inc. has an established history with the City of Midland of performing work of similar scale and scope to the Idlewilde Drive Storm Drain Improvements project. Furthermore, the unit prices appear to be in line with current pricing trends.

Funding is available for this project.

To cover the base bid amount, a 10% contingency to cover additional changes that may occur during construction, and an additional fee to facilitate the contract (i.e. TDLR inspections, project administration, material testing services, etc.), the total amount made available for the project would be **$2,175,402.40**.

The agreement specifies a construction period of 120 calendar days beginning within 15 calendar days of a written notice to proceed for construction.

Jose E. Ortiz, P.E.
Director – Engineering Services

Cc: Bobby Wojciechowski
Madison Brasuell
Regina Stephenson

D21-05 Idlewilde Drive Storm Drain Improvements

City of Midland - Engineering Services; January 11, 2023

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4	P4	6.5" Concrete Sidewalk Repair	5	SY	$240.00	$1,200.00
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					Base Bid Total =	**$1,932,184.00**

SPECIFICATIONS

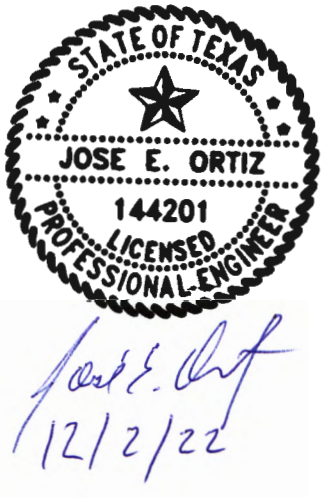
Project Name: Idlewilde Drive Storm Drain Improvements
Project Number: D21-05

MAYOR
Patrick Payton

COUNCIL MEMBERS

District 1	Scott Dufford	District 3	Jack Ladd
District 2	John Norman	District 4	Lori Blong
At-Large	Dan Corrales	At Large	Robin Poole

CITY ENGINEER
Jose E. Ortiz, P.E.



Prepared by City of Midland, Texas
Engineering Services Division

December 2022

NOTICE TO BIDDERS

ATTENTION: All bidders who choose to mail bid packets must address them to one of the addresses below:

USPS Mailing Address:		***Physical Address for mail carriers other than USPS:***
City of Midland, Texas		**City of Midland, Texas**
Attn: City Secretary's Office	**OR**	**Attn: City Secretary's Office**
P O Box 1152		**300 North Loraine St, Suite 330**
Midland, TX 79702		**Midland, TX 79701**

If bid packets are delivered in person then bidders must drop the bid packets off at the first-floor front desk of City Hall before the bid opening deadline.

Sealed proposals, addressed to the Mayor and City Council of the City of Midland, Texas, for the furnishing of materials and labor together with other miscellaneous and appurtenant work will be received at the office of the City Secretary, City Hall, Midland, Texas, until 2:00 p.m. on the 21st day of December 2022, and publicly opened and read aloud at that time.

Delivery of Submittals

Bid packets must be received in the City Secretary's Office no later than December 21, 2022 at 2:00 p.m. Bidders are responsible for the means of timely delivering the bid packet. Delays due to any instrumentality used to transmit the bid packet (e.g., delay occasioned by a bidder, City's internal mailing system, etc.) are the sole responsibility of the bidder. **Late bid packets will not be accepted under any circumstances.**

ATTENTION: The public bid opening will be in the City Council Meeting Chambers.

The Proposed Work provides for the furnishing of materials and labor for Idlewilde Storm Drain Improvements together with other miscellaneous and appurtenant work.

ATTENTION: A NON-MANDATORY PRE-BID MEETING will be held at 3:00 p.m. on Wednesday December 14th, 2022 in the basement conference room of City Hall, 300 N. Loraine Street, Midland, Texas. Bidders may attend the meeting in person.

ATTENTION: All questions submitted before or after the Non-Mandatory Pre-Bid Meeting must be submitted via email to the following email address:

bwojciechowski@midlandtexas.gov

The deadline for submitting additional questions after the Non-Mandatory Pre-Bid Meeting is Noon on Friday, December 16, 2022. Questions submitted before the Noon deadline will be included in the Addendum that will go out that same day along with all discussion items, questions, answers, and any new information resulting from the Non-Mandatory Pre-Bid Meeting. Questions submitted after the Noon deadline will not receive any additional information and will instead only be directed to the information already provided.

Bids will be received on a unit price basis.

No Bid may be withdrawn within a period of 60 days after the date fixed for opening Bids.

“FAX” or telephone bids or modifications will not be accepted.

Bid Envelopes shall be plainly marked "Proposal for City of Midland”.

ATTENTION: Information for bidders, proposal forms, specifications, and plans may be obtained by emailing purchasing@midlandtexas.gov.

A bid bond or proposal guaranty is to accompany the bid, thereby guaranteeing the good faith of the bidder and that the bidder will enter into the written contract. The guaranty is to amount to five percent (5%) of the total bid and must be in the form of cash or certified check, issued by a bank satisfactory to the City of Midland, or bid bond. If in the form of cash or certified check, it is expressly understood and agreed that the City of Midland is given the right to retain such as liquidated damages if such bidder withdraws its bid anytime after such bid is opened and before official rejection of such bid, or if successful in securing the awarded thereof, such bidder fails to enter into the contract and furnish satisfactory performance and payment bonds. If a bid bond is submitted, it shall be executed on forms contained in these contract documents by a corporate surety authorized to do business in the State of Texas and acceptable to the City of Midland.

WAIVER OF ATTORNEY FEES

BY SUBMITTING A BID, BIDDER AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE OWNER, REGARDING THE AWARD OF ATTORNEY’S FEES, WHICH ARE IN ANY WAY RELATED TO THE CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE CONTRACT. THE BIDDER SPECIFICALLY AGREES THAT IF THE BIDDER BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS CONTRACT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS CONTRACT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET. SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, THE BIDDER AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY’S FEES TO WHICH BIDDER MIGHT OTHERWISE BE ENTITLED.

BIDDER AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING KNOWN RIGHT. THE BIDDER ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THE CONTRACT. THE BIDDER FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE OWNER AND THE BIDDER. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF SOVEREIGN IMMUNITY.

THE BIDDER AND OWNER ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION.

WAIVER

BIDDER’S WAIVER:

BY SUBMITTING A BID, THE BIDDER AGREES TO WAIVE AND DOES HEREBY VOLUNTARILY AND INTENTIONALLY WAIVE, ABANDON AND RELINQUISH ANY CLAIM THE BIDDER HAS OR MAY HAVE IN THE FUTURE AGAINST THE CITY OF MIDLAND, TEXAS, AND THE CITY’S EMPLOYEES, AGENTS AND OFFICERS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE FOLLOWING:

1. **THE ADMINISTRATION, EVALUATION OR RECOMMENDATION OF ANY BID;**

2. **WAIVER OR DELETION OF ANY OF THE REQUIREMENTS UNDER THE BID DOCUMENTS OR THE CONTRACT DOCUMENTS;**

3. **ACCEPTANCE OR REJECTION OF ANY BIDS; OR**

4. **AWARD OF THE CONTRACT**

BY SUBMITTING A BID, THE BIDDER ACKNOWLEDGES THAT THE BIDDER UNDERSTANDS ALL OF THE TERMS OF THE BIDDING DOCUMENTS AND CONSENTS TO THE BIDDING PROCESS AND THE POSSIBILITY OF A NEGATIVE ASSESSMENT. BY SUBMITTING A BID, THE BIDDER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE BIDDER AND THE CITY OF MIDLAND, TEXAS. THE BIDDER AGREES THAT THIS IS THE INTENTIONAL RELINQUISHMENT OF A PRESENTLY EXISTING KNOWN RIGHT. BY SIGNING THE REQUEST FOR BID AND/OR BELOW, YOUR COMPANY AGREES TO THE ABOVE WAIVER(S).

City of Midland

Amy Turner
City Secretary

Form Revised December 2022

INSTRUCTION AND INFORMATION FOR BIDDERS

1. LOCATION AND EXTENT OF WORK

The work and construction contemplated to be accomplished under this Contract is located in the City of Midland, Texas, and consists of municipal public works projects as set forth in the proposal.

The location and details for the construction and related work are shown upon a set of drawings dated November 29, 2022 and numbered from C100 (1) through C305 (18) inclusive. These drawings and plans, together with the specifications, form a part of the Contract. Where figures are shown on the drawings, they shall take precedence over scaled distances and dimensions.

2. TIME AND PLACE OF RECEIVING BIDS

All bids shall be sealed, addressed to the Mayor and City Council of the City of Midland, Texas, and will be received by the City Secretary in her office at City Hall, 300 N. Loraine Street, Midland, Texas, mailing address is P.O. Box 1152, Midland, Texas 79702, until time stated on the Advertisement for Bids.

3. PREPARATION OF BID FORM

Bids shall be submitted only on the forms provided therefore in the Contract Documents, and must not be submitted in letter form or in any other form. They shall be filled out in ink in both script and figures. The Proposal form provided in the Contract Documents sets forth in detail the various items and approximate quantities thereof contained in the Project. Bids submitted in any other form will be considered irregular and will be returned to the Bidder without receiving consideration by the Owner.

All bids must be submitted in sealed envelopes bearing on the outside the name of the Bidder, his address, and the name of the Project for which the bid is submitted. It is the sole responsibility of the Bidder to see that his bid is received in proper time. Any bid received after the scheduled closing time for receipt of bids will be returned to the Bidder unopened.

The bid must be signed in the name of the Bidder and must bear the signature in longhand of the persons duly authorized to sign the bid.

Changes in or additions to the bid form, recapitulations of the work bid upon, alternative proposals, or any other modification of the bid form which is not specifically called for in the Contract Documents may result in the Owner's rejection of the bid as not being responsive to the invitation. No oral or telephonic modification of any bid submitted will be considered and a telegraphic modification may be considered only if the postmark evidences that a confirmation of the telegram duly signed by the Bidder was placed in the mail prior to the opening of bids.

The bid submitted must not contain any erasures, interlineations or other corrections unless each such correction is suitably authenticated by affixing in the margin immediately opposite the correction the surnames of the person or persons signing the bid.

4. EXAMINATION OF SITE, DRAWINGS, ETC

Each Bidder is requested to visit the site of the proposed work and fully acquaint himself with the conditions relating to the construction and labor so that he may fully understand the facilities, difficulties and restrictions attending the execution of the work under the Contract. Bidders shall thoroughly examine and be familiar with the Plans and the Specifications. The failure or omission of any Bidder to receive or examine any form, instrument, addendum or other document or to visit the site and acquaint himself with conditions there existing shall in no way relieve any Bidder from obligations with respect to his bid or to the Contract. The submission of a bid shall be taken as prima-facie evidence of compliance with this section.

5. WITHDRAWAL OF BIDS

Any Bidder may withdraw his bid, either personally, by written request, or by telegraphic request confirmed in the manner specified above, at any time prior to the scheduled closing time for receipt of bids.

6. AGREEMENT AND BONDS

The successful Bidder will be required to furnish a Performance Bond, and a Payment Bond, in an amount equal to one hundred percent (100%) of the total Contract price, such bond to be executed in five (5) original counterparts by a Corporate Surety authorized to do business in the State of Texas, and acceptable to the City of Midland. All Bonds must be executed on forms contained in these Contract Documents. The form of Agreement which the successful Bidder, and Contractor will be required to execute is also included herewith. The form of Agreement and the form of the Bonds should be carefully examined by the Bidder.

7. INTERPRETATION OF PLANS AND DOCUMENTS

If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part of the Plans, Specifications, or other Contract Documents or finds discrepancies in, or omissions from the Plans or Specifications, he may submit to the Owner written request for an interpretation or correction thereof. The person submitting the request will be responsible for its prompt delivery. Any interpretation or correction of the Contract Documents will be made only by Addendum duly issued and a copy of such addendum will be mailed or delivered to each person receiving a set of such Contract Documents. The Owner will not be responsible for any other explanations or interpretations of the Contract Documents. No oral interpretations of any provision in the Contract Documents will be made to any Bidder.

8. BIDDERS INTERESTED IN MORE THAN ONE BID

No person, firm or corporation shall be allowed to make, or file more than one bid for the same work unless alternate bids are specifically called for. A person, firm or corporation that has submitted a sub-proposal to a Bidder, or that has quoted prices of materials to a Bidder is not thereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or making a prime proposal.

9. AWARD OF CONTRACT

The Owner reserves the right to reject any or all bids submitted and not make an award. The Owner also reserves the privilege of accepting any item as a separate contract or the combination of items of a contract. The Owner and Bidder agree that, if the Contract is awarded, that it will be awarded to either the lowest responsible bidder/proposer, or to the bidder/proposer who provides goods or services at the best value for the

City of Midland. In determining the best value for the City of Midland, the City of Midland may consider the criteria enumerated in Section 252.043 of the Texas Local Government Code. Further, the Owner reserves all rights granted by Section 271.027 of the Texas Local Government Code. The Owner reserves the right to award the bid to the lowest responsible bidder.

10. OPENING OF BIDS

Bidders are invited to be present at the opening of the Proposals. All Proposals shall be made and received with the understanding that the Bidder accepts the terms and conditions contained in the Contract Documents.

11. COMPARISON OF BIDS

All bids will be compared on the basis of the Proposal.

12. BID GUARANTY

A Certified Check, Bank Money Order, issued by a bank satisfactory to the Owner, or a Bidder's Bond on the form provided and approved by the City Attorney, in the amount of five percent (5%) of the largest possible lump sum bid submitted, payable without recourse to the Owner, must accompany the Bidder's Proposal, as a guaranty that the Bidder will enter into a Contract and execute the required Performance Bond and Guaranty in the forms provided within fifteen (15) days after notice of award of Contract to him. Bids or Proposals without the required Bid Guaranty will not be considered. All Proposals shall remain in effect for a period of thirty (30) days after date of bid opening.

13. CONTRACT DOCUMENTS

The complete Contract Documents may include the following: (1) Notice to Bidders, (2) Instructions and Information for Bidders, (3) Proposal, (4) Experience Record, (5) Bid Bond, (6) Contract Agreement, (7) Performance Bond, (8) Payment Bond, (9) Insurance Certificate, (10) General Conditions, (11) Special Conditions, (12) Detailed Specifications all of which are bound together, and/or (13) Certificate of Payment. The Contract Documents shall also include Drawings or Detailed Plans for the proposed work. A complete set of the Contract Documents and the detailed plans are on file in the Office of the City Secretary.

14. TIME ELEMENT

The work to be done under this Contract shall be commenced within fifteen (15) days from the date of the notice from the City to the Contractor to commence work. The Contractor shall commence performance of the Contract on the date stated in the City's notice to the Contractor to proceed and shall complete the performance of the Contract without delay.

15. PAYMENTS

Payments to the Contractor will be based upon the prices stated in the proposal and upon basis of the work performed as determined by the Engineer. The Engineer's determination shall be considered as final unless changes are authorized by the City in writing which shall affect the work. Upon issuance of the Certificate of Completion, the Engineer shall proceed to take final measurements and prepare a final statement of the value of all work performed and materials furnished under the terms of the agreement and shall certify same to the Owner who shall pay to the Contractor on or after the 30th day, and before the 35th day, after the date of the

Certificate of Completion, the balance due the Contractor under the terms of this agreement, provided he has fully performed his contractual obligations under the terms of this Contract, and said payment shall become due in any event upon said performance by the Contractor. Notwithstanding any provision of these Contract documents to the contrary, it is expressly understood and agreed by the parties hereto that neither the Certificate of Acceptance, nor the final or any other payment hereunder, nor any partial or total occupancy or possession of the project by the Owner, shall relieve the Contractor of his responsibility for completion of the entire project in a good workmanlike manner and in full compliance with the plans and specifications and the fulfillment of any warranties which may be required in the Contract documents.

Revised December 2022

NOTICE TO BIDDERS

IF THIS PURCHASE REQUIRES A CONTRACT, THE ATTACHED **CONTRACT AND INSURANCE REQUIREMENTS ARE NON-NEGOTIABLE**. MODIFICATIONS BY BIDDER/CONTRACTOR OF ANY MATERIAL TERM(S) TO THE CONTRACT DOCUMENTS WILL BE DEEMED A NON-RESPONSIVE BID. NON-RESPONSIVE BIDS WILL BE REJECTED. BIDDER/CONTRACTOR MUST BE WILLING TO SIGN THE CONTRACT AS IS AND WITHOUT MODIFICATIONS, PROVIDE PROPERLY EXECUTED BONDS (IF APPLICABLE) AND PROVIDE INSURANCE SPECIFICALLY AS REQUIRED WITHIN THE CONTRACT DOCUMENTS **WITHIN 21 DAYS** OF THE DATE OF THE TRANSMITTAL LETTER.

IF THE SELECTED BIDDER/CONTRACTOR CANNOT MEET THE ABOVE REQUIREMENTS, THEN **THE CITY RESERVES THE RIGHT TO AWARD THIS PURCHASE TO ANOTHER BIDDER**.

IMPORTANT NOTICE – IF THE CONTRACT DOCUMENTS REQUIRE WORKER'S COMPENSATION INSURANCE, BIDDER/CONTRACTOR MUST CARRY WORKER'S COMPENSATION INSURANCE TO BE ELIGIBLE FOR THIS CONTRACT. IF YOU CANNOT PROVIDE WORKER'S COMPENSATION INSURANCE AS REQUIRED BY STATE OF TEXAS STATUTE, WE RESPECTFULLY REQUEST THAT YOU "NO BID" THIS WORK.

COMPLIANCE: Company agrees that it shall comply with Texas Government Code Section 2252.908, *et seq.*, as amended. Company agrees that it shall comply with Texas Local Government Code Section 176.006, *et seq.*, as amended. For further instructions on how to comply with Texas Government Code Section 2252.908 and Texas Local Government Code Section 176.006,

please go to https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm and https://www.ethics.state.tx.us/filinginfo/conflict_forms.htm.

ANY VENDOR WHO FAILS TO COMPLY WITH THE TERMS OF THE AWARD **MAY BE DECLARED AN IRRESPONSIBLE VENDOR**. BIDS SUBMITTED BY SAID VENDOR SHALL NOT BE CONSIDERED AGAIN FOR A MINIMUM PERIOD OF SIX MONTHS AS DETERMINED BY THE CITY MANAGER.

IMPORTANT NOTICE

Conflict Of Interest Reporting Requirements

Compliance with LOCAL GOVERNMENT CODE TITLE 5. MATTERS AFFECTING PUBLIC OFFICERS AND EMPLOYEES SUBTITLE C. MATTERS AFFECTING PUBLIC OFFICERS AND EMPLOYEES OF MORE THAN ONE TYPE OF LOCAL GOVERNMENT CHAPTER 176. DISCLOSURE OF CERTAIN RELATIONSHIPS WITH LOCAL GOVERNMENT OFFICERS; PROVIDING PUBLIC ACCESS TO CERTAIN INFORMATION.

Form CIQ: This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session. This questionnaire shall be filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a). By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code. A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

Bidders are responsible for filing Conflict of Interest form "CIQ" in accordance with the above referenced statute. Failure to do so is a class C Misdemeanor. Contracts or Purchase Orders awarded to a vendor that has violated this law is subject to termination at such time that the violation is discovered with no recourse to the City of Midland. The bidder will be subsequently removed from the bidders list for a minimum of one year.

When there is no known conflict of interest as defined by the statute, it is not necessary to file/submit the Form CIQ. The form must be submitted if a conflict is subsequently discovered.

By submitting a response to this request, vendor represents that it complies with the requirements of Chapter 176 of the Texas Local Government Code.

For a current list of the local government officers go to: http://www.midlandtexas.gov/

Upon completion of the form, sign and submit with bid or mail to:

City of Midland
Attn: City Secretary
PO Box 1152
Midland, Texas 79702

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

Boler Equipment Service, Inc.

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information is being disclosed.**

N/A - No Relationship

Name of Officer

4 **Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

5 **Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

N/A - No Relationship

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

Signature of vendor doing business with the governmental entity

1.11.2023

Date

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

(A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;

(B) a transaction conducted at a price and subject to terms available to the public; or

(C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

***

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than $100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

Form provided by Texas Ethics Commission www.ethics.state.tx.us Revised 11/30/2015

Consideration of Location of Bidder's Principal Place of Business
For Bids of $50,000 up to $100,000 for Services and $500,000 for Commodities
Affidavit of Eligibility

Pursuant to Texas Local Government Code 271.9051, in purchasing real property, personal property that is not affixed to real property, or services, if the City receives one or more bids from a bidder whose principal place of business is in the City of Midland and whose bid is within five percent (5%) of the lowest bid price received by the City from a bidder who is not a resident of the City of Midland, the City may enter into a contract with:

(1) the lowest bidder; or

(2) the bidder whose principal place of business is in the City of Midland if the City Council determines, in writing, that the local bidder offers the City the best combination of contract price and additional economic development opportunities for the City of Midland created by the contract award, including the employment of residents of the City of Midland and increased tax revenues to the City of Midland.

In order to receive consideration, bidders must submit this affidavit to:

Erika Martinez
Purchasing Manager
City of Midland
300 N. Loraine St.,
PO BOX 1152
Midland, TX 79702-1152

Complete all areas below. Incomplete affidavits may be rejected.

Local Business Name: Boler Equipment Service, Inc.

Local Address (must be within the City limits): 4611 Sinclair Ave

1. Is the above address the principal place of business for the business named above? [X] Yes [ ] No
2. How many residents of the City of Midland are employed at the above business location? 9
3. Year your business was established in the City of Midland: 1987
4. If you collect sales tax for ANY class of customer, provide the following Reseller information:

   Reseller Permit Number: 17524445826

   Company Name and Address (as it appears on permit):

   Boler Equipment Service, Inc.

   4611 Sinclair Ave

   Midland, TX 79707

5. Does your business have more than one office in the State of Texas? [ ] Yes [X] No
   If Yes, identify the office location considered as the point-of sale for the purpose of sales tax calculation:

6. Was the local business required to pay business and/or real property tax for the most recent tax year?

   [X] Yes [ ] No

   If Yes, did the local business pay any of this tax to the City of Midland? [X] Yes [ ] No

Under penalty of perjury, the undersigned states that the foregoing statements are true and correct. It is further acknowledged that any person, firm, corporation or entity intentionally submitting false information to the City in an attempt to qualify for eligibility shall be prohibited from bidding on City of Midland products and services for a period of one (1) year.

Authorized Signature: Greg Boler Date: 1.11.2023

Printed Name and Title: Greg Boler - Vice President

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 1/11/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Jessica Ervin-Battles
ERVIN INSURANCE AGENCY 3100 North A Street Bldg D Midland, TX 79705 License #:	PHONE (A/C, No, Ext): (432) 682-3717 FAX (A/C, No): (432) 682-3002 E-MAIL ADDRESS: jessica@ervinins.com
INSURED Boler Equipment Service PO Box 80428 Midland, TX 79708	INSURER(S) AFFORDING COVERAGE / NAIC # INSURER A : Mid-Continent Casualty 23418 INSURER B : Liberty Mutual Insurance Company 23043 INSURER C : Texas Mutual Insurance Company 22945 INSURER D : INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:	Y	Y	04GL1082761	7/13/2022	7/13/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 0 $ 1,000,000 $ 5,000,000 $ 5,000,000
B	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] OWNED AUTOS ONLY [X] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY	Y	Y	BAS60891370	3/2/2022	3/2/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	[X] UMBRELLA LIAB [X] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [X] RETENTION $ 10,000	Y	Y	04XS225207	7/13/2022	7/13/2023	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [N] If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	0001118970	7/13/2022	7/13/2023	[X] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
A	Inland Marine-Rented Equipment			04CIM27944	7/13/2022	7/13/2023		$200,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Install New Gas Pumps, Tanks, Piping and Canopies. Installation of Underground Utilities. The City of Midland is listed as an Additional Insured, on a claims occurred basis, on all policies listed above. The Insured and Insuror hereby waive all rights of subrogation with respect to claims against the City of Midland, its agents, employees and officers, on all policies of insurance captioned above.

CERTIFICATE HOLDER

City of Midland
PO Box 1152
Midland, TX 79702
432-686-1609(F)

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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TECHNICAL SPECIFICATIONS

FOR: Idlewilde Drive Storm Drain Improvements

All construction for this project must conform to the City of Midland "STANDARD SPECIFICATIONS" issued by the Engineering Services Department which are herein made a part of these specifications by reference.

The bidder/contractor is to pay particular attention to the following items in the "STANDARD SPECIFICATIONS" for this project.

1) Preparation of Right of Way
2) Excavation, Embankment and Preparation of Subgrade
3) Concrete Curb and Gutter, Sidewalks, Driveways, Valley Gutters, Center Drains and Rip Rap
4) Concrete Structures
5) Flexible Base, Caliche
6) Bituminous Prime
7) Bituminous Tack
8) Hot Mix Asphaltic Concrete
9) Double Course Asphalt Surface Treatment
10) Preparation of Asphaltic Concrete Surface for Overlay or Seal Coat
11) Seal Coat
12) Asphalt –Rubber Seal Coat
13) Polymer Modified Slurry
14) PVC Pipe Casings
15) Water Line Specifications
16) Gravity Flow Sewers for Waste Water and Storm Water

The "STANDARD SPECIFICATIONS" are available from the Department of Engineering Services, City Hall, 300 North Loraine Street, Suite 510, Midland, Texas.

GENERAL CONDITIONS AND PROVISIONS

1. DEFINITIONS

The following terms as used in this contract shall be defined and interpreted as follows:

(a) "Contract" or "This Contract" or "Agreement": The particular Contract executed by the Contractor and the Owner of which these general conditions are integral parts.

(b) "Contractor": The person, firm or corporation to whom this Contract is awarded by the Owner and who is a party thereto.

(c) "Owner", "City", or pronouns instead: The entity that is a party to this Contract, contracting under the official name of the City of Midland, Texas or the City Council of the City of Midland.

(d) The words "as directed", "as required", "as permitted", "acceptable to", "satisfactory", and the words of like import, shall mean that the direction, requirement or permission of the Engineer is intended.

(e) "Engineer": The word "Engineer" used in these specifications or in this Contract means the duly authorized representative or agent of the Owner supervising the performance of the Contract and representing the Owner in his Contractual relations and negotiations with the Contractor during the period of construction. The Engineer will be represented by assistants and inspectors authorized to act for him. On all questions concerning the acceptability of material or equipment, the classifications of material, the execution of the work, conflicting interest of Contractors performing related work and the determination of costs, the decision of the Engineer shall be final, but shall not relieve the Contractor of his responsibility for completion of the entire work in a good and workmanlike manner and in full compliance with the plans and specifications.

Inspectors are required to see that all the provisions of the Contract specifications are faithfully adhered to. Any inspector may, if authorized by the Engineer, stop the work entirely if there is not sufficient quantity of suitable and approved material on the ground to carry it on properly, or for any other good and sufficient cause. Any work done in the absence of an inspector may be ordered opened up for thorough examination, and must be rebuilt or replaced at the Contractors sole expense if found to be deficient or not in accordance with the plans and specifications. But no approval by an inspector shall be construed as an acceptance of defective or improper work or material, which must be rebuilt or properly replaced whenever discovered. Inspectors have not the power to give orders or directions under any possible circumstances, except as herein defined and provided, and on authority of the Engineer

(f) "Subcontractor": Any person, firm or corporation other than an employee of the contractor, supplying, for and under agreement either with the Contractor or any subcontractor of the Contractor, labor or material, or both, at the site of the project in connection with this Contract.

(g) "Project": The structure or improvement to be constructed in whole or in part through the performance of this Contract.

(h) "Work on the Project": Such work as is performed or ordinarily would be performed at the site of the project.

(i) "Surety": Any firm or corporation executing a Surety Bond or Bonds payable to the Owner securing the performance of the Contract either in whole or in part.

(j) Whenever certain articles are specifically mentioned, by brand name or name of the manufacturer, such materials shall be taken as standard and guide for quality, operation, capacity, etc. The term "or equal" shall mean that articles of equal characteristics as required, but of different brand or manufacturer, may be substituted and accepted, subject in all instances to the approval of the Engineer.

(k) "Special Provisions", "Special Conditions", "Project Specific Specification" or "Job Specific Specifications" are included as amendment of and/or additions to the General Conditions and/or Standard Specifications for the particular project in which they are included and will take precedence over the General Conditions and Standard Specifications only in so far as the amendments and/or additions. All other provisions in the General Conditions and/or Standard Specifications will not be affected.

(l) "Drawings" "Contract Drawings", "Plans" "Detail Drawings" "Detail Sheets" or "Plans and Details" refers to the set of drawings which show the details for the construction and related work anticipated on this project and upon which bids are being solicited.

2. CONFLICT OF PROVISIONS

Unless it is specifically provided otherwise, any provision in any other part of this Contract which may be in conflict or inconsistent with any provision in the General Conditions and Provisions shall be void to the extent only of such conflict or inconsistency.

3. DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR

The Contractor shall have charge of and shall be responsible for the entire work under this Contract until its completion and acceptance by the city. A competent superintendent, foreman or other representative, invested with sufficient authority to conduct the work properly, shall be maintained on the work at all times.

It is expressly agreed and understood that no decision of the Engineer or any certificate issued nor payment made to the Contractor nor partial or entire use or occupancy of the work by the Owner, shall be an acceptance of any work or materials not in accordance with this Contract, nor constitute a waiver of the Contractor's responsibility to perform the entire work in a good and workmanlike manner and in accordance with the plans and specifications.

4. TIME ELEMENT

The work shall be commenced and finished within the time set out in the Form of Contract.

The time of completion of this Contract is an essential element and consideration. Since, therefore, time is of the essence thereof, and in the event of delay in the completion of the entire work required hereunder beyond the period prescribed, or beyond the period for which time may be extended by authority of the Owner for good cause shown, the Owner shall be paid damages for such delay. Inasmuch as the amount of such damages is difficult to ascertain, it is hereby stipulated and agreed that such damages shall be liquidated and the Owner shall be paid damages at the rate as set forth in the Special Provisions, said damages to be paid to the Owner for each and every day that the Contractor be in default in completing the entire work required under this Contract. The Owner shall have the right to deduct such amounts from any monies due, or which may become due, under

this Contract. In the event that no amount for such damages is shown in the Special Provisions of these specifications, it is agreed that the amount of damages shall be Five Hundred dollars ($500.00) per day.

If during the progress of the work weather conditions, or other circumstances beyond the control of the Contractor should prevail to the extent that the work cannot be prosecuted and completed within the time specified in the Contract, the Contractor shall file with the Engineer within one week of the occurrence of such delay a request for a credit on the time of completion. Unless the Contractor files such request, the liquidated damages specified above will be enforced.

5. PAYMENT TO CONTRACTOR

ESTIMATED QUANTITIES:

This Contract, including the specifications, plans and estimate, is intended to show clearly all work to be done and material to be furnished hereunder. Where the estimated quantities are shown for the various classes of work to be done and material to be furnished under this Contract, they are approximate and are to be used only as a basis for estimating the probable cost of the work and for comparing the proposals offered for the work. It is understood and agreed that the actual amount of work to be done and material to be furnished under this Contract may differ somewhat from these estimates, and that where the basis for payment under this Contract is the unit price method, payment shall be for the actual amount of such work done and the material furnished.

Where payment is based on the unit price method, the Contractor agrees that he will make no claim for damages, anticipated profits or otherwise on account of any differences which may be found between the quantities of work actually done, the material actually furnished under this Contract and the estimated quantities contemplated and contained in the proposal provided, however, that in case the actual quantity of any major item should become as much as twenty percent (20%) more than, or twenty percent (20%) less than the estimated or contemplated quantity for such items, then either party of this agreement, upon demand, shall be entitled to a revised consideration upon the portion of the work above or below twenty percent (20%) of the estimated quantity.

A "Major Item" shall be construed to be any individual item incurred in the proposal that has a total cost equal to or greater than five percent (5%) of the total Contract cost, computed on the basis of the proposal quantities and the Contract unit price.

Any revised consideration is to be determined by agreement between the parties, otherwise by the terms of this Contract, as provided under "Extra Work".

PAYMENT; RETAINAGE:

On or before the 1st day of each month the Contractor shall prepare an itemized statement showing the total value of the work completed by the Contractor up to and including the 25th day of the preceding month; said statement shall also include the value of all sound materials delivered on the site of the work that are to be fabricated into the work. NO ESTIMATE WILL BE MADE ON UNCOMPLETED PORTIONS OF THE WORK.

After all work is completed by Contractor, including all Change Orders altering the original scope and amount of the contract are completed, and the City has inspected and approved that the work is completed and in compliance with the contract and all subsequent Change Orders, the City may thereafter issue payment to Contractor in the amount of the contract and all Change Orders. The City shall be the final judge of when the

work is completed by Contractor. The City, in its sole discretion, shall determine if the work under the contract and under any Change Orders has been done to the City's requirements.

The City may make periodic payments to Contractor; provided, however, such periodic payments may only be made pursuant to this section, and only after all work and all Change Orders are completed by Contractor and approved by the City. The approval shall be in the City's sole discretion. Requests for progress payments may be made to the extent of the materials and labor completed at the end of each month. Upon approval by the City or the City's representative, the request and invoice shall be forwarded for payment less 5% retainage. The total of these payments shall not exceed 95% of the total contract amount.

FINAL COMPLETION AND ACCEPTANCE:

Within ten (10) days after the Contractor has given the Engineer written notice that the work has been completed, or substantially completed, the Engineer and the Owner shall inspect the work and within said time, if the work be found to be completed or substantially completed in accordance with the Contract documents, the Engineer shall issue to the Owner and the Contractor his Certificate of Completion.

FINAL PAYMENT:

Upon the issuance of the Certificate of Completion, the Engineer shall proceed to make final measurements and prepare final statement of the value of all work performed and materials furnished under the terms of the Contract and shall certify same to the Owner, who shall pay to the Contractor the balance due the Contractor under the terms of this Contract, provided he has fully performed his obligations under the terms of this Contract. Notwithstanding any provision of these Contract Documents to the contrary, it is expressly understood and agreed by the parties hereto that neither the certificate of acceptance, nor the final or any other payment hereunder, nor any partial or total occupancy or possession of the project by the Owner, shall relieve the Contractor of his responsibility for completion of the entire project in a good and workmanlike manner and a full compliance with the plans and specifications and the fulfillment of any warranties which may be required in the Contract Documents.

6. OWNER'S RIGHT TO WITHHOLD CERTAIN AMOUNTS AND MAKE APPLICATION THEREOF

In addition to the amount which the Owner may otherwise retain under the Contract, the Owner may withhold a sufficient amount or amounts of any payment or payment otherwise due to the Contractor, as in this judgment may be necessary to cover:

(a) Payments which may be past due and payable for just claims against the Contractor or any subcontractor for labor or materials furnished for the performance of this Contract.

(b) For defective work not remedied.

(c) For failure of the Contractor to make proper payments to his subcontractors.

7. CERTIFICATE OF PAYMENT

Contractor shall, prior to issuance of final payment pursuant to the terms herein stated, provide proof satisfactory to the owner that all debts, bills and expenses incurred by the Contractor, his agents, employees or subcontractors employed by him, for labor, wages, materials and other purposes, in the furtherance of this

project, have been paid and satisfied in full. Satisfactory proof shall consist of an executed Certificate of Payment.

8. EXTRA, ADDITIONAL OR OMITTED WORK PAYMENT

The Owner, upon proper action by its governing body, may require changes in this Contract, or additions to, or deductions from the work to be performed or the materials to be furnished pursuant to this Contract. No employee, agent or representative of the Owner, with the exception of the governing body authorized to award this Contract, has any power to approve any change in this Contract and it is the responsibility of the Contractor before proceeding with any change to satisfy himself that the change has been properly authorized on behalf of the Owner. No charge for any extra work or other change in the Contract will be allowed unless the extra work or change has been authorized in writing by the Owner, or its duly authorized representative, and the price therefore is stated in such written authority.

Adjustments, if any, in the amounts to be paid the Contractor where such adjustments are made by reason of additions to or deductions from the quantities of units or items bid upon in the proposal schedules, shall be paid for in accordance with the provisions of the Specifications, at the unit and/or lump sum prices bid in such proposal schedules.

Adjustments, if any, in the amounts to be paid the Contractor where such adjustments are made by reason of additions of items not appearing in the proposal schedules, or addition of work of such a nature that unit and/or lumps sum prices contained in the proposal schedules cannot reasonably or equitably be applied to provide proper payment therefore, the payment to the Contractor for such work shall be determined by one or more of the following methods:

(a) By an acceptable lump sum proposal from the Contractor.

(b) By unit prices contained in the Contractor's proposal and incorporated in the Contract or fixed by subsequent agreement between the Owner and the Contractor.

(c) By a cost method pursuant to which the Contractor shall be paid the costs of the change or addition. He shall be required to keep and present in such form as the Owner may direct, a correct account of the cost of the change or addition, together with all vouchers therefore. The cost may include an allowance for overhead and profit not to exceed fifteen percent (15%) of the net cost.

In computing the cost, there shall be considered reasonable and proper net expenditures for labor, materials, power tools and equipment, pro rata charges for foremen, deductions for social security, old age and unemployment benefits and workmen's compensation insurance and surety bond premium. In computing cost of machinery and equipment involved in additional work, the amount to be paid shall be not more than one hundred percent (100%) of the latest schedule of "Equipment Ownership Expense" adopted by Associated General Contractors of America. No overhead and profit shall be allowed on the deductions for Social Security, old age and unemployment benefits. All other expenditures shall be treated as overhead costs.

No extra work shall be performed or change made unless in pursuance of a written order from the Owner stating that the extra work or change is authorized and no claim for an addition to the Contract sum shall be valid unless so ordered; provided, however, that nothing in this Article shall excuse the Contractor from proceeding with the prosecution of the work so changed.

The Contractor shall, when required by the Owner, furnish an itemized breakdown of the quantities and prices used in computing the value of any change, addition or deduction that might be ordered.

If the Contractor should claim that any instruction, request, drawing, specification, action, condition, omission, default, or other situation obligated or may obligate the Owner to pay additional compensation to the Contract, or constitutes a waiver of any provision in the Contract, he shall notify the Owner in writing of such claim within ten (10) days from the date he has actual or constructive notice of the factual basis supporting the claim. The Contractor's failure to notify the Owner within such ten (10) days period shall be deemed a waiver and relinquishment of any such claim against the Owner. The procedure for consideration of such claims shall be as stated in this Article.

9. ASSIGNMENT OF CONTRACT

The Contractor shall not assign this Contract or any part thereof, nor any monies due or to become due thereunder without the prior written consent of the Owner. No assignment of this Contract shall be valid unless it shall contain a provision that the funds to be paid to the assignee under the assignment are subject to a prior lien for services rendered or material supplied for performance of the work called for under this Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

10. SUBCONTRACTORS

Specialty subcontractors may be utilized for the performance of such parts of the work under this Contract as, under normal practices, are performed by Specialty subcontractors, unless the Owner determines that the Contractor has heretofore customarily performed such specialty work with his own organization and is equipped to do so, or unless the Owner determines that performance of the specialty work by Specialty subcontractors will result in increased costs or inordinate delays.

The Contractor shall not subcontract any work to be performed or any materials to be furnished in the performance of this Contract without the prior written consent of the Owner. If the Contractor shall subcontract any part of this Contract, the Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractor and of the persons either directly or indirectly employed by the subcontractor as he is for the acts and omissions of persons directly employed by himself. Nothing contained in this Contract shall create any Contractual relations between any subcontractor and the Owner. The Contractor shall ensure that the sub contractor has the insurance coverage required by this contract.

The Owner's consent to or approval of any subcontract under this Contract shall not in any way relieve the Contractor of his obligations under this Contract and no such consent or approval shall be deemed to waive any provisions of this Contract.

11. SUSPENSION OF WORK

Pending settlement of disputes on any point of controversy, the Engineer may suspend action on all or any part of the work. The Contractor shall not be entitled to any claim for loss or damage by reason of such, nor shall he be entitled to extension of time, although such extension of time may be granted by the Engineer if he deems it in the interest of the work.

12. RIGHT OF OWNER TO TERMINATE CONTRACT

If, in the opinion of the Engineer, the Contractor shall be improperly performing the work under this Contract, or shall neglect or refuse to take out or rebuild such work as shall have been rejected by the Engineer as being defective or unsuitable, or if, any time, the Engineer shall be of the opinion that the work is unnecessarily delayed and will not be finished within the prescribed time, or if the Contractor shall abandon the work, or shall neglect or refuse to comply with the instructions of the Engineer relative thereto, or shall fail in any manner to comply with the Specifications or Stipulations herein contained, the Engineer shall notify the Contractor to that effect in writing, and if the Contractor shall not within five (5) days thereafter take such measures as will, in the judgment of the Engineer, insure the satisfactory performance or construction of the work, the City may annul and cancel the Contract, in which event it shall notify the Contractor to discontinue all work under this Contract, and the Contractor shall immediately respect such notice and stop work and cease to have any rights to the possession of the ground and shall forfeit his Contract. Such annulment shall not entitle the Contractor to any claim for damages on account thereof, nor shall it affect the right of the City of Midland to recover damages on account of such failure. The City Council may thereupon advertise and re-let a new Contract for the uncompleted work without further ordinance, in the same manner as was followed in the letting of this Contract, and any excess of cost arising there from over and above what would have resulted from the prices set forth in this Contract will be charged against the Contractor and his surety or sureties hereto, who shall be liable therefore.

13. RIGHT OF CONTRACTOR TO TERMINATE CONTRACT

If the work should be stopped under an order of any court or other public authority for a period of three (3) months, through no act or fault of the Contractor or of anyone employed by him, or if the City should fail to make payment to the Contractor within thirty (30) days after such payment is due, as set out in the Contract, then the Contractor may, upon seven (7) days written notice to the City and the Engineer, stop work or terminate his Contract and recover from the City payment for all work executed and for any loss sustained upon any plant or materials and reasonable profit and damages.

14. INCIDENTAL WORK

Any and all minor details of the work not specifically mentioned in the Specifications but obviously necessary for the proper completion of the work, such as the proper connection of new work to old, shall be considered as incidental to and a part of and included with the work for which the prices are named in the Contract Documents. The Contractor will not be entitled to any extra or additional compensation therefore, unless specifically stated otherwise.

15. PERMITS – COMPLIANCE WITH LAW

The Contractor shall, at his expense, obtain all permits and licenses necessary for the performance of this Contract, and give all necessary notices, pay all fees required by law, and comply with all laws, ordinances, rules and regulations governing the Contractor's performance of the Contract.

Portions of this contract qualify for exemption pursuant to the provisions of the Texas Limited Sales, Excise and Use Tax Act. The Contractor shall obtain a sales tax exemption certificate from the City. All labor performed on the project and all materials incorporated into the project qualify for such tax exemption. However, equipment and parts for equipment purchased to be used on the project, but are not incorporated into the project; do not qualify for said tax exemption. Contractor shall issue a resale certificate in lieu of paying such sales tax for all

materials incorporated into the project. Further Contractor shall separate the charges for materials incorporated into the project from the charges for labor.

16. INSPECTION BY OWNER

The Owner and its representatives shall at all times have access to all parts of the work and to the shops wherein the work is in preparation for the purpose of inspection, and the Contractor shall at all times maintain proper facilities and provide safe access for such inspection.

The Owner shall have the right to reject materials and workmanship which are defective, or to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the premises without charge to the Owner. If the Contractor does not correct such rejected work within a reasonable time, fixed by written notice, the Owner may correct same and charge the expense to the Contractor. No inspector shall have the power to waive the obligation resting upon the Contractor to furnish good material or do work as herein prescribed, and any failure or omission of any inspector or the Engineer to condemn any defective material or work shall not release the Contractor from the obligation to at once tear out, remove and properly rebuild the same at any time upon discovery of the defect and upon receipt of notice of the Engineer to do so.

Should it be considered necessary or advisable by the Owner at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out any portion thereof, the Contractor shall on request promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any respect due to the fault of the Contractor or his subcontractor, he shall defray all the expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the additional cost of labor and materials necessarily involved in such examination and replacement, plus fifteen percent (15%) for overhead and profit, shall be allowed the Contractor.

Where the Specifications require work to be specifically tested or approved, it shall not be tested or covered up without timely notice to the Owner of its readiness for inspection and without the approval or consent thereto by the Owner. Should any such work be covered up without such notice, approval or consent, it must, if required by the Owner, be uncovered for examination at the Contractor's expense.

17. PATENTS

The Contractor shall hold and save the Owner and its officers, agents, servants, and employees harmless from liability of any nature or kind, including all costs and legal expenses, for or on account of, any patented or unpatented invention, process, article or appliance, manufactured for or used in the performance of the Contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract.

18. MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts of neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement or arbitration, if such other Contractor or subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other Contracts that have been or may be awarded by the Owner in the prosecution of the project to the end that the Contractor may perform this Contract in the light of such other Contract, if any.

Nothing herein contained shall be interpreted as granting the Contractor exclusive occupancy of the site of the project. The Contractor shall not cause any unnecessary hindrance or delay to any other Contractor working on the project. If the performance of any Contract for the project is likely to be interfered with by the simultaneous execution of some other Contract or Contracts, the Owner shall decide which Contractor shall cease work temporarily and which shall continue, or whether the work under the Contracts can be coordinated so that the Contractors may proceed simultaneously. The Owner shall not be responsible for any damages suffered or extra costs incurred by the Contractor, resulting directly or indirectly from the award or performance or attempted performance of any other Contract or Contracts on the project, or caused by any decision or omission of the Owner respective to the order of precedence in the performance of Contracts.

19. NOTICE AND SERVICE THEREOF

Any notice from one party to another under the Contract shall be in writing and shall be dated and signed by the party giving such notice or by duly authorized representative of such party. Any such notice shall not be effective for any purpose whatsoever unless served in the following manner; namely, if the notice is given to the Owner, (a) by personal delivery thereof to the individual duly authorized to direct and supervise the project of the Owner, or (b) by depositing the same in the United States Mail, enclosed in a sealed envelope, addressed to the City of Midland, 300 North Loraine Street, Midland, Texas, 79701, postage prepaid and certified; or if the notice is given to the contractor (a) by personal delivery thereof to the project superintendent or other person authorized to act for the contractor, or (b) by depositing the same in the United States Mail, enclosed in a sealed envelope, addressed to the Contractor at his regular place of business or at such other address as may have been established for the conduct of the work under this Contract, postage prepaid and certified; or (c) if the notice is given to the Surety or any other person by personal delivery to such Surety or other person, or by depositing the same in the United States Mail, enclosed in a sealed envelope addressed to such Surety or other person, at the address of such surety or other person last communicated by him to the party giving the notice, postage prepaid and certified.

20. QUALITY OF MATERIALS AND WORKMANSHIP

It is the intention of this Contract to have only first class materials and the best workmanship throughout, and the methods and appliances adopted by the Contractor must be such as will secure a satisfactory quality of work and will enable him to complete the work in the time agreed upon. If at any time such methods and appliances appear inadequate, the Engineer may order the Contractor to improve their character or increase their efficiency, and the Contractor must conform to such order; but the failure of the Engineer to order such improvement of methods or increase of efficiency will not relieve the Contractor from his obligations to perform good work or finish it in the time agreed upon. The Contractor shall submit samples or specimens of any and all materials proposed to be used in the work when required to do so by the Engineer. All materials must be of specified quality and fully equal to approved samples. All work must be done and completed in a thorough and workmanlike manner. All materials furnished and all work done must be satisfactory to the Engineer and will be subject to rigid inspection, and if not in accordance with the Specifications in the opinion of the Engineer, shall be made to conform thereto.

It is understood that except as otherwise specifically stated in the Contract, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence of temporary

construction of every nature, and all other services and facilities required for the completion of the Contract within the specified time.

21. SPECIAL METHODS

The Engineer may consent to special methods for carrying out the work in difficult cases, but the Contractor will not be relieved of responsibility for the result. The Contractor shall be responsible for the result of all work performed by him whether directed by the Engineer or not.

22. REMOVAL OR REPLACEMENT OF WORK DONE WITHOUT LINES OR GRADES

Any work done without lines or grades given by the Engineer or under his direction or without the supervision of an inspector, may be ordered removed and replaced by the Engineer at the Contractor's expense.

23. COVERING WORK

No work shall be covered until it has been examined and approved by the Engineer.

24. UNFAVORABLE WEATHER

During unfavorable weather and other adverse conditions, only such portions of the work may be done which will not be damaged thereby, unless by special means or precautions approved by the Engineer.

25. ALL WORK SUBJECT TO FINAL INSPECTION

Failure to neglect on the part of the Engineer or his inspectors to condemn or reject bad or inferior work or materials shall not be construed to imply his acceptance of such work or materials if it becomes evident at any time prior to the final acceptance of the work and the release of the Contractor.

26. PUBLIC CONVENIENCE

When materials for construction are brought on the work site they shall be neatly piled so as to cause as little obstruction to travel as possible, and so that they may be conveniently inspected.

No material or other obstruction shall be placed within five (5) feet of fire hydrants, which must at all times be readily accessible to the fire department, nor shall any material be piled within two (2) feet of any trees.

The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault or negligence in connection with the prosecution of the Contract and shall be responsible for the proper care and protection of all materials delivered and work performed until completion, and final acceptance by the Owner.

The Contractor shall provide such heat, covering and enclosures as are necessary to protect all work and materials against damage by weather conditions.

The Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavement, utilities, adjoining property, and structures, and avoid damage thereto, and he shall at his own expense completely repair any damage thereto caused by his operations.

If required by the Engineer, the Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations, and other parts of all existing structures adjacent and adjoining the site of the Project, which are in any way affected by the excavations or other operations connected with the completion of the work under this Contract. Whenever any notice is required to be given by the Owner or the Contractor to any adjoining or adjacent landowner or other party before commencement of any work under this Contract, such notice shall be given by the Contractor. The Contractor shall indemnify the Owner and save it harmless from any damages on account of settlement or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the Owner may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

During the progress of the work the convenience of the public and of the residents along streets must be provided as far as practicable. Convenient access to driveways, houses and buildings along streets must be maintained whenever possible.

Temporary approaches and crossings of streets and sidewalks must be provided and kept in good condition whenever practicable.

The Contractor shall provide and maintain such fences, barriers, "Street Closed" signs, red lights and watchmen as may be necessary to prevent avoidable accidents to residents and to the public.

The Contractor alone shall be held responsible for all injuries to persons, and for all damages to property of the City or others, caused by or resulting from the negligence of himself, his employees or agents during the progress of or connected with the prosecution of the work, whether within the limits of the work or elsewhere. He must restore all injured public or private property to a condition as good as it was when he entered upon the work, purchasing new materials to replace all that which is injured or destroyed during the course of the work.

In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization from the Owner is authorized to act at his discretion to prevent such threatened loss or injury and he shall so act.

27. TRAFFIC CONTROL

It is the policy of the City of Midland to keep at least two travel lanes open to traffic at all times and where possible to have three travel lanes between 7:30 a.m. and 9:00 a.m. and 4 p.m. and 6 p.m. (Two (2) lanes in the direction of peak travel).

At least 48 hours before beginning work the contractor shall present a traffic control and/or barricade plan prepared as per the approved Barricading Standards to the Traffic Engineering Division for review and approval. When approved and barricades are in place, they shall be inspected by the Traffic Engineering Division prior to beginning work.

Traffic control signs, such as stop signs, yield signs, etc., are placed in various intersections for the safety and protection of the traveling public. The contractor shall not move, alter or damage said signs for any reason. If said signs must be removed for construction purposes, contractor shall notify the City of Midland, Traffic Division Operations Superintendent at least 48 hours (not including weekends) before construction activities are scheduled to begin. All construction barricading, warning signs, and other construction traffic control devices shall be in place and shall be in accordance with the Texas Manual on Uniform Traffic Control Devices and approved Barricading Standards included in plans before traffic signs can be removed. The contractor shall notify the Traffic Division Operations Superintendent at least 72 hours (not including weekends) before

scheduled removal of construction barricades, warning signs, and traffic control devices. But in all cases the contractor shall not remove said barricades, warning signs, and traffic control devices until the City of Midland's Traffic Department has replaced stop signs, yield signs, etc., in their proper location. The Contractor shall notify Traffic Engineering Division at least 24 hours in advance of any Traffic Signal modification due to construction (i.e. eliminating left turn phases). Notice shall also be given to the Traffic Engineering Division at least 24 hours prior to removing barricades at signalized intersections.

28. PROTECTION OF NEW WORK

All new work shall be carefully protected by the Contractor, and any work injured from any cause before the completion of the whole project must be rebuilt by the Contractor at his own expense.

29. MONUMENTS OR STAKES

The Contractor must carefully protect from disturbance or injury all monuments, stakes and bench marks, of City County, State or Federal Government and shall not excavate nearer than five (5) feet to any of them without the permission of the Engineer, or until they have been removed, witnessed or otherwise disposed of by the Engineer.

30. USE OF COMPLETED PORTIONS

The City shall have the right to take possession of and use any completed or partially completed portions of the work notwithstanding the time for completing the entire work on such portions may not have expired; but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of, or delays the work, the Contractor shall be entitled to such extra compensation or extension of time, or both as the Engineer may determine.

The Owner, in taking possession of completed portions, shall agree to accept the decision of the Engineer on matters relating to responsibility for damages that may occur to any portions of the work during the period of possession preceding acceptance and final payment.

31. USE OF PREMISES

The Contractor shall confine his apparatus, storage of materials and construction operations to such limits as may be directed by the Owner, and shall not unreasonably encumber the premises with his materials.

The Contractor shall enforce any instructions of the Owner regarding advertising, fires, danger signals, barricades and smoking, and shall require all persons employed on the work to comply with all building, post or institutional regulations while on the premises.

32. SAFETY RESTRICTIONS

The following procedures will be followed regarding the subject item on this contract:

A warning sign painted yellow with black letters that are legible at twelve feet shall be placed inside and outside vehicles such as cranes, cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment or similar apparatus. The warning sign shall read as follows:

"WARNING - UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES."

Equipment that may be operated within ten feet of high voltage lines shall have an insulating cage type of guard about the boom or arm, except back hoes or dippers, and insulator links on the lift hook connections.

When necessary to work within six feet of high voltage electric lines, notification shall be given to the power company who will erect temporary mechanical barriers, de – energize the line, or raise or lower the line. The notifying department

The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

No person shall work within six feet of high voltage line without precautions having been taken and protection provided as outlined in Paragraph (3) above.

33. INSURANCE REQUIREMENTS AND WORKERS COMPENSATION

INSURANCE REQUIREMENTS

Contractor shall at all times during the term of this Contract maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):	
— Personal Injury:	$1,000,000.00 per person
	$1,000,000.00 per occurrence
— Property Damage:	$500,000.00 per occurrence
Business Automobile Liability:	$250,000.00 combined single limit -
	Personal Injury and Property Damage
Workers' Compensation:	Statutory limits
Employers' Liability:	$500,000.00 per accident or occurrence

The Commercial General Liability shall be on a per project aggregate, including completed operations, and shall be on an occurrence basis. This insurance shall name the City as an additional insured and waive subrogation in favor of the City.

The Business Automobile Liability insurance provided by Contractor shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-city vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of $250,000.00 covering any vehicle used for the execution of the

work that is the subject of this Contract. This insurance shall name the City as an additional insured and waive subrogation in favor of the City.

The Workers' Compensation coverage provided by Contractor shall inure to the benefit of employees injured during the course and scope of their employment by Contractor pursuant to this Contract. The Workers' Compensation shall waive all rights of subrogation in favor of the City.

All insurance required pursuant to this Contract shall provide for a waiver of subrogation in favor of the City. All insurance required pursuant to this Contract, except for Workers' Compensation Insurance, shall name the City as an additional insured on a claims occurred basis. City shall be provided the notice by Contractor's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage.

Contractor shall contractually require all contractors, subcontractors, and sub-subcontractors that work on any portion of the work that is the subject of this Contract to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts specified herein. All contractors, subcontractors, and sub-subcontractors shall obtain insurance policies that provide blanket waivers of subrogation in favor of the City of Midland and policies that name the City of Midland as an additional insured on a claims occurred basis (except workers' compensation).

The parties agree that, prior to the execution of the Contract, Contractor shall provide one or more certificates of insurance specifically stating that these requirements have been met and subject to the approval of the City. The City shall not be required to provide any insurance whatsoever pursuant to this Contract.

The Contractor certifies that the certificate of insurance provided as required herein complies with the requirements of Senate Bill 425, passed during the 82nd regular session of the Texas Legislature, and effective January 1, 2012. The Contractor shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of the Contractor.

34. INDEMNIFICATION

INDEMNITY: THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND THE OWNER AND ALL OF THE OWNER'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, LOSSES, PROPERTY DAMAGE AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF THE CONTRACTOR, THEIR AGENTS OR EMPLOYEES, OR ANY SUBCONTRACTOR, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS

CONTRACT, AND CONTRACTOR WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST THE OWNER OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES.

THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND THE OWNER AND ALL OF THE OWNER'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, ACCIDENTAL DEATH, PROPERTY DAMAGE, LOSSES, AND EXPENSES OF ANY CHARACTER WHATSOEVER INCLUDING ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF THE OWNER, THE OWNER'S OFFICERS, AGENTS AND EMPLOYEES, WHETHER SUCH NEGLIGENT ACT WAS THE SOLE PROXIMATE CAUSE OF THE INJURY OR DAMAGE OR A PROXIMATE CAUSE JOINTLY AND CONCURRENTLY WITH THE CONTRACTOR OR THE CONTRACTOR'S EMPLOYEES, AGENTS OR SUBCONTRACTORS NEGLIGENCE IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS CONTRACT, AND CONTRACTOR WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST THE OWNER OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES.

THE CONTRACTOR AGREES THAT HE WILL INDEMNIFY AND SAVE THE OWNER HARMLESS FROM ALL CLAIMS GROWING OUT OF ANY DEMANDS OF SUBCONTRACTORS, LABORERS, WORKMEN, MECHANICS, MATERIALMEN, AND FURNISHERS OF MACHINERY AND PARTS THEREOF, EQUIPMENT, POWER TOOLS, ALL SUPPLIES, INCLUDING COMMISSARY INCURRED IN THE FURTHERANCE OF THE PERFORMANCE OF THIS CONTRACT. WHEN OWNER SO DESIRES, THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE THAT ALL OBLIGATIONS OF THE NATURE HEREINABOVE DESIGNATED HAVE BEEN PAID, DISCHARGED OR WAIVED. THE CONTRACTOR, ITS SURETIES AND INSURANCE CARRIERS SHALL DEFEND, INDEMNIFY AND SAVE HARMLESS THE OWNER AND ALL OF ITS OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, OR CLAIMS OF ANY CHARACTER WHATSOEVER, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ARISING FROM ANY ACT OF THE CONTRACTOR OR ANY SUBCONTRACTOR, THEIR AGENTS OR EMPLOYEES, IN THE EXECUTION AND SUPERVISION OF THIS CONTRACT, AND WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST THE OWNER OR ANY OF ITS OFFICERS, AGENTS, OR EMPLOYEES INCLUDING ATTORNEY'S FEES.

35. RELEASE

NOTWITHSTANDING ANY OTHER PROVISION, CONTRACTOR HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES OWNER, OWNER'S EMPLOYEES AND OFFICERS, FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH CONTRACTOR HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKING CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS OR OWNER'S NEGLIGENCE.

36. INDEPENDENT CONTRACTOR

It is expressly understood and agreed that Contractor shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant or employee of the Owner; that Contractor shall have exclusive control of and the exclusive right to control the details of the services and work performed hereunder, and all persons performing the same; and shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors; that the doctrine of respondent superior shall not apply as between Owner and Contractor, its officers, agents, employees, contractors and subcontractors; and

that nothing herein shall be construed as creating a partnership or joint enterprise between Owner and Contractor. No person performing any of the work and services described hereunder by Contractor shall be considered an officer, agent, servant or employee of the Owner. Further, it is specifically understood and agreed that nothing in this Contract is intended or shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control" which would give rise to vicarious liability. Contractor shall be an independent contractor under this Contract and shall assume all of the rights, obligations and liabilities, applicable to it as such independent contractor hereunder. The Owner does not have the power to direct the order in which the work is done. The Owner shall not have the right to control the means, methods or details of the Contractor's work. Contractor shall assume exclusive responsibility for the work. Contractor is entirely free to do the work in its own way.

37. QUALIFICATIONS FOR EMPLOYMENT

Preference shall be given to qualified local residents in the employment of laborers and mechanics for work on the Project under this Contract. No person under the age of sixteen (16) years shall be employed on the project under this Contract. No person whose age or physical condition is such as to make his employment dangerous to his health or safety or to the health or safety of others shall be employed on the Project under this Contract: Provided, that this shall not operate against the employment of physically handicapped persons, otherwise employable, where such persons may be safely assigned to work which they can ably perform. No person currently serving sentence in a penal or correctional institution and no inmate of an institution for mentally defective shall be employed on the project under this contract.

38. PAYROLLS OF CONTRACTOR AND SUBCONTRACTORS

The Contractor and each of his subcontractors shall prepare payrolls for the workers on the Project. Not later than the seventh (7th) day following the payment of wages, the Contractor shall transmit to the Owner, if requested, a certified legible copy and two confirmed copies of such payroll.

Such copies of payrolls shall be accompanied by substantial proof that all bills for services rendered and materials supplied have been duly paid and by such other data as the Owner may require.

39. POSTING WAGE RATES

The Contractor shall post at appropriate conspicuous points at the site of the Project a schedule showing the wage rates for the various classes of laborers and mechanics to be engaged in work on the Project under this Contract and all deductions, if any, required by law to be made from unpaid wages actually earned by the laborers and mechanics so engaged.

40. PAYMENT OF EMPLOYEES

The Contractor shall post at appropriate conspicuous points at the site of the Project a schedule showing the wage rates for the various classes of laborers and mechanics to be engaged in work on the Project under this Contract and all deductions, if any, required by law to be made from unpaid wages actually earned by the laborers and mechanics so engaged.

41. WAGE UNDERPAYMENT AND ADJUSTMENTS

The Contractor agrees that, in case of underpayment of wages to any worker on the project under this Contract by the Contractor or any subcontractor, the Owner shall withhold from the Contractor out of payments due, an amount sufficient to pay such worker the difference between the wages required to be paid under this Contract and the wages actually paid such worker for the total number of hours worked and that the Owner may disburse such amount so withheld by it for and on account of the Contractor to the employee to whom such amount is due. The Contractor further agrees that the amounts to be withheld pursuant to this Article may be in addition to other amounts that may be retained by the Owner pursuant to other provisions of this Contract.

42. COMPUTATION OF WAGES ON 8 – HOUR DAY

The wages of each laborer and mechanic engaged in work on the project under this Contract shall be computed on a basis of eight (8) hours per day, eight (8) hours continuous employment except for lunch periods, constituting a day's work.

Legal holiday work shall be paid for at the regular governing per diem wage rates.

Work in excess of 40 hours per week shall be paid for at 1 ½ times the basic rate of pay.

43. OVERTIME WORK AND WORK ON SUNDAYS AND LEGAL HOLIDAYS

The Contractor will not be permitted to work on Sundays or legal holidays except in an emergency and then only upon written permission of the Engineer.

Any work necessary to be performed after regular working hours and when permitted on Sundays or legal holidays, shall be performed without additional expense to the Owner.

No work on any Contract item will be permitted before daylight or later than one hour after sundown.

44. CONTRACT SECURITY

The Contractor shall furnish a performance bond and payment bond in an amount equal to one hundred percent (l00%) of the amount of the Contract as security for the faithful performance of the Contract, including the payment of all persons performing labor on the project and furnishing of materials in connection with this Contract. All Bonds must be executed in five (5) original counterparts by a corporate surety authorized to do business in the State of Texas. Bonds executed by individuals or any other than recognized and authorized corporate surety companies will not be acceptable.

45. DELAYS

The Contractor shall receive no compensation for delays or hindrances to the work, except when, in the judgment of the Engineer, direct or unavoidable extra cost to the Contractor is caused by such hindrances or delays. When such extra compensation is claimed, a written statement thereof shall be presented by the Contractor, as provided in Paragraph 18 hereof. Such claim, if found correct, will be approved, and the decision of the Engineer whether extra cost has been incurred and the amount thereof, shall be final. If delays are caused by specific orders to stop work, given by the Engineer, or by the performance of extra work, or by unforeseen causes beyond the control of the Contractor, or by the failure of the Owner to provide materials or necessary instructions for carrying on the work, or to provide the necessary right-of-way or site for installation,

then delay will entitle the Contractor to an equivalent extension of time. Application for extension of time must be approved by the Owner and, shall not release the Sureties from their obligations, which shall remain in full force until the discharge of the Contract.

LATE COMPLETION; LIQUIDATED DAMAGES:

It is hereby understood and mutually agreed, by and between Contractor and the City, that the date of beginning and the time for completion as specified in the contract of the work to be done hereunder are ESSENTIAL CONDITIONS of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the "Notice to Proceed." Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between Contractor and the City, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

In the event Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the City, then Contractor and Contractor's surety, if any, shall be liable for and does hereby agree, as a part consideration for the awarding of this contract, to pay to the City $500.00, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that Contractor shall be in default after the time stipulated in the contract for completing the work. Further, the City shall have the right to cancel this contract for such delay. In the event the City cancels this contract pursuant to the terms of this section, the City shall pay to Contractor only those monies deemed appropriate by the City, in its sole discretion, to compensate Contractor for any work actually performed, less any liquidated damages Contractor owes the City.

The said amount is fixed and agreed upon by and between Contractor and the City because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the City would in such event sustain, and said amount is agreed to be the amount of damages which the City would sustain and said amount shall be retained from time to time by the City from current periodical estimates.

It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract. Provided, that Contractor shall not be charged with liquidated damages or any excess cost when the City determines, in its sole discretion, that Contractor is without fault and Contractor's reasons for the time extension are acceptable to the City. Provided, further, that Contractor shall not be charged with liquidated damages of any excess cost when the delay in completion of the work is due:

a. To any preference, priority or allocation order duly issued by the Government;

b. To unforeseeable cause beyond the control and without the fault or negligence of Contractor, including, but not restricted to, acts of God, or of the public enemy, acts of the City, acts of another contractor in the performance of a contract with the City, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather; and

c. To any delays of subcontractors or suppliers occasioned by any of the causes specified in subsections (a) and (b) of this article.

Provided, further, that Contractor shall, within ten (10) calendar days from the beginning of such delay, unless the City shall, in its sole discretion grant a further period of time prior to the date of final settlement of the contract, notify the City, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify Contractor within a reasonable time of its decision in the matter.

CONTRACTOR AGREES THAT THE PAYMENT OF SUCH LIQUIDATED DAMAGES MAY BE RECOVERED BY THE CITY FROM RETAINAGE HELD BY THE CITY. NOTWITHSTANDING ANY OTHER PROVISION HEREOF, CONTRACTOR HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES CITY, CITY'S EMPLOYEES AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES, OR CAUSES OF ACTION OF ANY KIND WHATSOEVER ARISING FROM THE CITY WITHHOLDING PAYMENT FROM CONTRACTOR AS LIQUIDATED DAMAGES FOR CONTRACTOR'S FAILURE TO COMPLETE THE WORK WITHIN THE TIME SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR CITY'S NEGLIGENCE.

CONTRACTOR SHALL RECEIVE NO FINANCIAL COMPENSATION FOR DELAY OR HINDRANCE TO THE WORK. IN NO EVENT SHALL THE CITY BE LIABLE TO CONTRACTOR OR ANY SUBCONTRACTOR OR SUPPLIER, ANY OTHER PERSON OR ANY SURETY FOR OR ANY EMPLOYEE OR AGENT OF ANY OF THEM, FOR ANY DAMAGES ARISING OUT OF OR ASSOCIATED WITH ANY DELAY OR HINDRANCE TO THE WORK, REGARDLESS OF THE SOURCE OF THE DELAY OR HINDRANCE, INCLUDING EVENTS OF FORCE MAJEURE, AND EVEN IF SUCH DELAY OR HINDRANCE RESULTS FROM, ARISES OUT OF OR IS DUE, IN WHOLE OR IN PART, TO THE NEGLIGENCE OF THE CITY. CONTRACTOR'S SOLE REMEDY IN ANY SUCH CASE SHALL BE AN EXTENSION OF TIME.

46. ERRORS AND OMISSIONS

The Contractor will not be permitted to take advantage of any error or omission in these specifications. Suitable instructions will be given by the Engineer when such error or omission is discovered.

47. SPECIFICATIONS AND DRAWINGS

The Contractor shall keep on the work a copy of the Specifications and Drawings, and shall at all times give the Engineer access thereto. Any drawings or plans listed in the detailed specifications shall be regarded as part thereof and of the Contract. Anything mentioned in these specifications and not mentioned or shown in the drawings, or shown in the drawings and not mentioned in these specifications, shall be done as though shown or mentioned in both. The Engineer will furnish from time to time, such detailed drawings, plans, profiles and information as he may consider necessary for the Contractor's guidance.

In the event of any discrepancy between the plans and these specifications, the decisions of the Engineer will be decisive thereon. The written dimensions on the plans are to be taken as correct, but the Contractor is required to check carefully all dimensions before beginning work thereon. Should any errors or omissions be discovered, the Engineer's attention shall be called to the same, and the proper corrections made. All notes on the plans shall be carefully observed by the Contractor and are a part of the Contract.

48. CONSTRUCTION STAKING

The Engineer will furnish a complete set of plans and profiles and set control stakes at fifty foot (50') intervals along the entire length of the project and at such control points he deems necessary for proper execution of the work. The Contractor will thereafter be required to lay out the work accurately and furnish at his own expense, all lines, levels, and dimensions necessary to the proper and correct execution of the entire work and be responsible for any errors resulting from his own work.

The Contractor shall give the Engineer at least 36 hours notice in writing before requiring stakes to be set on any new portion of the work, and he shall state clearly in such notice the exact locality or localities where such stakes are needed for immediate use.

The Contractor must satisfy himself, before commencing work, as to the meaning or correctness of all stakes or marks, and no claim will be entertained by the Owner for or on account of any alleged inaccuracies, or for the alterations subsequently rendered necessary on account of such alleged inaccuracies unless the Contractor notifies the Engineer thereof in writing before commencing to work thereon.

The Contractor will at all times conduct the work in such a manner as to prevent damage to construction stakes set by the Engineer. When construction stakes are damaged to such extent that they must be reset, as a result of carelessness or negligence on the part of the Contractor or his workmen, the costs thereof shall be kept by the Engineer and shall be deducted from the moneys due or to become due the Contractor under the terms of his contract.

Benchmark and survey stakes shall be preserved by the Contractor, and in case of their destruction or removal by him or his employees, they will be replaced by the Engineer at the Contractor's expense.

49. SANITATION

The Contractor shall provide suitable drinking water receptacles or containers equipped with dust-tight covers and spigots or faucets. A supply of sanitary paper drinking cups shall be kept on hand for general use near the drinking water containers. The use of common drinking cups or tin cups will not be permitted.

The Contractor shall furnish "Porta-Johns" or other approved sanitary facilities for use by all workers on the Project. Such facilities shall be placed and kept in close proximity of the site where work is being performed. Such facilities shall be properly serviced and maintained.

The Engineer may establish such other sanitary rules and regulations as may seem necessary and desirable to the safe prosecution of the work, such rules and regulations to apply to all forces employed under this Contract, and if, the Contractor fails to observe and enforce these rules, the Engineer may enforce them at the expense of the Contractor.

50. WATER FOR CONSTRUCTION

The Contractor may obtain all water necessary for construction purposes from the Municipal Waterworks System at the regular customer service rate, but the Contractor must make all necessary arrangements with the Director of Utilities for necessary connections and meters. The Contractor must make his own provisions and provide such equipment as is necessary for conveying water from point of service to point of use. No extra compensation will be allowed and the Contractor shall anticipate the expense connected herewith and absorb said expense in the prices bid for the various bid items.

51. SEQUENCE AND SPEED OF WORK

The Engineer shall direct the order and sequence of the work. If at any time before the commencement or during the progress of the work, the materials and appliances used appear to the Engineer as insufficient and improper for securing the quality of work required or the required rate of progress, he may order the Contractor to increase their efficiency or to improve their character and the Contractor shall conform to such order. The

failure of the Engineer to demand any increase of such efficiency or improvement shall not release the Contractor from his obligations to secure the quality of work or the rate of progress specified.

52. INSPECTION AND TESTING OF MATERIAL

The sampling and testing of materials used or proposed to be used in the construction of this project will be made by the Engineer, his designated representative or certified testing laboratory personnel in accordance with methods prescribed by the American Society of Testing Materials and/or the American Association of State Highway Officials, with subsequent approved revisions made prior to the date of the Proposal. The selection of the method of test shall be designated by the Engineer. The Contractor shall bear the cost of all tests required before a material or a method is approved for use on the job, unless the Owner specifically agrees to bear the cost of these tests.

All tests required by the Owner after materials and/or methods have been approved and after they have been incorporated or used in the job will be paid for by the Owner, except if the Owner's tests reveal non-conformance with the specifications, subsequent tests on that part of the work required to determine if the replaced or reworked material meets the specifications, will be paid for by the Contractor. The City will pay only one time for any required testing.

The following is a summary of test required for the approval of materials or methods:

Material	**Test**
Subgrade	Maximum density, optimum moisture
Caliche Base:	Maximum density, optimum moisture, hardness, gradation, liquid limit, plasticity index, Texas Triaxial Classification
Aggregates for hot-mix:	Gradation, unit weight, abrasion, soundness, liquid limit, plasticity index, density
Asphalt, emulsions and tars:	Certified plant test and certificates of compliance with each shipment
Hot- Mix asphaltic concrete:	Design mix, swell test, stripping test
Portland cement concrete pavement:	Design mix with test cylinders

Any materials shipped by the Contractor from the factory prior to having satisfactorily passed such testing and inspection by the Owner’s representative or prior to the receipt of notice from said representative that such testing and inspection will not be required, shall not be incorporated in the work.

The Owner may, at its discretion, approve materials and/or methods for use on this project without testing when they are from sources previously tested and approved for City of Midland projects.

53. CONSTRUCTION SCHEDULE

It shall be the responsibility of the Contractor to furnish the Construction Engineer prior to construction a schedule out – lining the anticipated time each phase of construction will begin and be completed, including sufficient time being allowed for clean – up.

54. PROFILES AND ELEVATIONS

Profiles and elevations of the ground are shown on the plans hereto attached. These profiles and elevations are believed to be reasonably correct, but are not guaranteed to be absolutely so, and are represented only as an approximation. Elevations are referred to datum given by the Engineer.

55. CLEANUP

During the progress of the work, the Contractor shall maintain the work area in a reasonably clean and safe condition. Dirt, debris, excess excavation and other objectionable materials shall be removed from the site and disposed of on a daily basis.

After completion of all the work contemplated to be done in accordance with the detailed plans and these specifications, the premises and area along the entire line of the work shall be thoroughly cleaned up and all remaining structural materials, excess or surplus excavation and debris of any nature shall be removed and disposed of in a satisfactory manner and as directed by the Engineer. The site of all work shall appear neat and finished. All portions of the project when completed shall be ready for use or occupancy.

No compensation or payment shall be made for any cleanup work. The price for such cleanup work shall be absorbed in the items covered in the proposal.

56. GUARANTEE

The contractor shall and hereby does guarantee: (1) all work performed by him directly and all work performed by his subcontractors; (2) that all material specified; and (3) that any defect due to improper workmanship or material discovered and made known to him within one year (1) f the date of final acceptance of the improvements shall be repaired, replaced, corrected or otherwise made good by him without additional expense to the Owner. The Contractor shall, in case of work performed by his subcontractors and where guarantees are required, secure guarantees from said subcontractors and deliver copies of same to the Engineer upon completion of the work.

57. WAIVER OF ATTORNEY FEES:

BY EXECUTING THIS CONTRACT, CONTRACTOR AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE OWNER, REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THE CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE CONTRACT. THE CONTRACTOR SPECIFICALLY AGREES THAT IF THE CONTRACTOR BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS CONTRACT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS CONTRACT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET. SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, THE CONTRACTOR AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH CONTRACTOR MIGHT OTHERWISE BE ENTITLED.

CONTRACTOR AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING KNOWN RIGHT. THE CONTRACTOR ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THE CONTRACT. THE CONTRACTOR FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN

THE OWNER AND THE CONTRACTOR. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF SOVEREIGN IMMUNITY.

THE CONTRACTOR AND OWNER ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION.

58. GOVERNING LAW AND VENUE

This Contract shall be governed by the laws of the State of Texas. All performance and payment made pursuant to this Contract shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this Contract or the performance of this Contract shall be in Midland County, Texas. The obligations and undertakings of each of the parties to this Contract shall be deemed to have occurred in Midland County, Texas. This Contract shall be governed by, interpreted, enforced and construed under the law of the State of Texas. The laws of the State of Texas shall govern, construe and enforce all the rights and duties of the parties, including but not limited to tort claims and any and all contractual claims or disputes, arising from or relating in any way that would direct application of the laws of another jurisdiction.

59. SOVEREIGN IMMUNITY

By executing this Contract, the City is not waiving its right of sovereign immunity. The City is retaining its immunity from suit. The City is not granting consent to be sued by legislative resolution or action.

THERE IS NO WAIVER OF SOVEREIGN IMMUNITY.

60. NO THIRD – PARTY BENEFICIARY

The City's approval of this contract does not create a third party beneficiary. There is no third party beneficiary to this contract. No person or entity who is not a party to this contract shall have any third party beneficiary or other rights hereunder.

61. NOTICE OF ALLEGED BREACH; STATUTORY PREREQUISITES

As a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this agreement, Contractor or his legal representative, shall give the City Manager or any other reasonable official of the City, notice in writing (consisting of one original and seven copies of notice attached to a copy of this agreement) of such damages, duly verified, within one hundred and twenty (120) days after the same has been sustained. The discovery rule does not apply to the giving of this notice. The notice shall include when, where and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which the Contractor will settle, the physical and mailing addresses of Contractor at the time and date the claim was presented and the physical and mailing addresses of Contractor for the six months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom the Contractor relies to establish its claim; and a failure to so notify the City Manager within the time and manner provided herein shall exonerate, excuse and except the City from any liability whatsoever. The City is under no obligation to provide notice to Contractor that Contractor's notice is insufficient. City reserves the right to request additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after receipt of notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any other provision, Contractor's failure to comply with the requirements herein shall perpetually bar Contractor's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless if City has actual or constructive notice or knowledge of said claim or alleged damages. Contractor agrees that the requirements of this entire Agreement are reasonable.

62. ASSIGNMENT

Contractor shall not, either directly or indirectly, assign all or any part of this contract or any interest, right or privilege herein, without the prior written consent of the owner. The issue on whether or not to grant consent to an assignment is in the sole discretion of the owner.

63. FEDERAL WAGE REQUIREMENTS

If applicable, the Davis-Bacon Act, 29 CFR 5.5, and any related acts or regulations are hereby incorporated by reference and made a part of this Contract, and all terms and requirements under said laws, by such incorporation, are made terms and requirements of this Contract, to which the parties to this Contract have agreed to be bound.

64. PROMPT PAY ACT

The owner and contractor agree that Texas Government Code, Chapter 2251, Payment for Goods and Services (the "Prompt Pay Act") does not waive governmental immunity.

65. OTHER FEDERAL REQUIREMENTS

Company agrees that all iron or steel products produced through a manufacturing process and used in the project that is the subject of this Contract shall be produced in the United States in accordance with Government Code § 2252.202, et seq., as amended.

Updated July 2021

SPECIAL PROVISIONS

ATTENTION: All Bidders are directed to pay special attention to the NOTICE TO BIDDERS section of the bid packet. Bidders have sole responsibility for complying with the current bid process requirements. Bidders also have sole responsibility for verifying that any bid submitted is completed correctly and includes all of the required documentation, including addendums.

1. SCOPE OF WORK:

Included in this Project will be **Idlewilde Drive Storm Drain Improvements** to be performed as outlined in the Plans and Specifications, which are necessary to satisfactorily complete the work.

The project will include the removal, replacement, and installation of existing paving, sidewalk, and storm drain infrastructure and appurtenances including all necessary mobilization, material storage and protection, saw-cutting, pavement removal, sidewalk removal, excavation, trenching, utility installation, embedment, backfill, pavement placement and repair, sidewalk placement and repair, erosion control, traffic control, and job site safety. Coordination with City of Midland staff and organizations such as OSHA, franchise utilities, etc. as needed, One Call (Texas 811) notifications for pending work and notifications to adjacent property owners as directed by City of Midland staff may be required in order to satisfactorily complete the work as outlined in the Construction Drawings and Specifications.

The Owner reserves the right to abandon, without obligation to the Contractor, any part of the project, or the entire project, at any time before the Contractor begins any construction work authorized by the Owner.

Standard Specifications for Construction of the City of Midland will govern all construction, except as modified by these Special Provisions.

2. ORDER OF PRECEDENCE:

The Special Provisions take precedence over the General Conditions in this bid packet anywhere these two sections are not in agreement.

The Special Provisions take precedence over the City of Midland Specifications in this bid packet anywhere these two sections are not in agreement.

The Contractor is to bid the quantities in the Proposal section of the bid packet even if there is a discrepancy between the Proposal quantities and those noted or measured in the construction drawing set.

In the Proposal the long-hand dollar amount written in the Description column for each bid item will take precedence over the numerical dollar amount listed in the Unit Price column if there is a discrepancy between the two.

In the construction drawing set any written or noted dimension takes precedence over dimensions measured based on the drawing scale unless otherwise directed by the Engineer.

Any changes or revisions made as part of an Addendum for this project take precedence over the original bid packet and construction drawing set where the documents are in conflict.

3. EXAMINATION OF SITE:

Prospective bidders are to make a careful examination of the entire site of the project and are to make such explorations as may be necessary to determine the subsoil and/or water conditions to be encountered; improvements and obstructions which may be encountered; methods of providing ingress-egress to private as well as public property; methods of handling traffic during construction and maintenance of the entire project as well as any section thereof, protection of all existing structures both above and below ground; and how the plans fit the proposed project and especially if any discrepancies exist.

4. PAYMENT:

Payment and retainage (five percent, 5%) shall be per the General Conditions.

Payment will be made for material installed, not for material delivery.

5. SAFETY REQUIREMENTS:

It is the responsibility of the Contractor to follow and comply at all times with Occupational Safety and Health Administration (OSHA) and all other applicable safety regulations and requirements throughout the course of the project's work. The City of Midland reserves the right to require additional safety measures on the project site at any time if they are needed in the opinion of the Engineer for the safety of the work crews or public.

6. SAFETY RESTRICTIONS – WORK NEAR HIGH VOLTAGE LINES:

The following procedure will be followed regarding the subject item on this contract:

1) A warning sign painted yellow with black letters that are legible at twelve feet shall be placed inside and outside vehicles such as cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment or similar apparatus. The warning sign shall read as follows:

   "**WARNING – UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES"**

2) Equipment that may be operated within ten feet of high voltage lines shall have an insulation cage-type of guard about the boom or arm, except back hoes or dippers, and insulator links on the lift hook connections.

3) When necessary to work within six feet of high voltage electric lines, notification shall be given to the power company of who will erect temporary mechanical barriers, de-energize the line, or raise or lower the line. The notifying department shall maintain an accurate log of all such calls to the Power Company, and shall record action taken in each case.

4) The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

5) No person shall work within six feet of a high voltage line without protection having been taken as outlined in Paragraph (3).

7. TRAFFIC CONTROL:

All proposed traffic control shall be approved by the City where applicable. All traffic control plans must be submitted to and approved by the Construction Manager no less than two (2) business days prior to starting the construction work. Traffic control for each phase of work must be approved prior to starting that work.

Generic traffic control plans or typical details may be submitted for shoulder work on any class of roadway, or for work on local or collector streets that does not require the closure of any travel lanes (i.e., all lanes are open to traffic on striped roadways, or adequate width remains available for two-way traffic on unstriped roadways). Once a generic traffic control plan or typical detail for a certain type of setup has been approved one time, the Contractor shall only be responsible for notifying the Construction Manager of the location, type of setup, and dates on which they intend to utilize the pre-approved traffic control for the duration of the contract. No additional plan submittals will be required in these cases, except that the City reserves the right to suspend this exception at its discretion. For any work not fitting the above exception, or in the event that the exception is suspended by the City, a site-specific traffic control plan will be required for each work location and time period.

1. All temporary traffic control shall be in general conformance with the *Texas Manual on Uniform Traffic Control Devices* (TMUTCD) (latest edition as adopted by the Texas Department of Transportation), except as specifically directed by the City Engineer or City Traffic Engineer.
2. All temporary traffic control shall be designed, installed, and maintained by competent and qualified personnel with adequate experience in traffic control.
3. All temporary traffic control involving multiple lane closures or traffic shifts, full closures of collector or arterial streets, traffic control extending through a railroad crossing, or any setup reasonably determined by the City to be “complex”, shall be implemented only by a contractor with specific experience and expertise in the field of traffic control (i.e., a qualified “barricade company”).
4. A Traffic Control Plan (TCP) shall be submitted to the Engineering Services Department, Construction Manager, in advance of any work in the right-of-way that impacts traffic. No work shall occur until an approved TCP has been returned to the Contractor.
5. A copy of the approved TCP shall be kept in the possession of the person responsible for supervising the traffic control at all times while working in the right-of-way. The approved TCP shall be presented to City staff or law enforcement upon demand at any time.
6. Depending on site conditions and the nature of the work, temporary traffic control may be approved by the City for either of the following:
    a. All Times – All traffic control, including closures, may remain in place 24 hours per day until expiration of the approved TCP.
    b. Off-Peak Only – Lane or road closures are NOT permitted from 6:00-9:00 AM and 4:00-7:00 PM on weekdays (Monday through Friday). Other traffic control not related to lane or road closures may remain in place 24 hours per day until expiration of the approved TCP.
7. The contractor setting the temporary traffic control shall be responsible for the maintenance and upkeep of all signs, barricades, and other devices, at all times.
    a. All temporary traffic control setups shall be maintained at least one time per day, including weekends and holidays.
    b. More frequent maintenance shall be performed as needed, with particular emphasis to following up after severe weather events or during times of high winds.
    c. Maintenance shall include:

i. Verifying and correcting the location and orientation of all signs, barricades, and other devices;
ii. Keeping signs and reflective areas of barricades and other devices clean and free of dirt buildup so as to maintain appropriate visibility and legibility; and
iii. Ensuring the proper location, orientation, and operation of arrow boards or message boards, if present.

8. Arrow boards shall be required for lane closures under the following conditions:
    a. On roadways with a posted speed limit of 55 MPH or greater, for closures lasting more than one (1) hour;
    b. On roadways with a posted speed limit of 45 MPH or greater, for closures lasting more than four (4) hours;
    c. On any roadway if lanes will remain open to traffic travelling in the same direction on both sides of a closed lane during any overnight hours (from 7:00 PM to 6:00 AM); and

At other times as shown on the approved TCP, or as otherwise directed by the City.

8. DETOURS:

The Contractor is to prosecute his work in such a manner as to create a minimum of interruption to traffic and pedestrian facilities and to the flow of vehicular and pedestrian traffic within the project area.

9. PROPERTY AND RIGHT-OF-WAY ACCESS:

Access to adjacent properties must be maintained at all times unless otherwise directed by the Engineer. If the contractor will not be working in an area for a period of one week or more, special care is to be taken to address any unsafe conditions such as excavated areas or obstructions outside the worked area that could be tripping hazards, etc. Contractor must notify affected properties no less than two (2) business days prior to any planned access interruptions.

Contractor must coordinate with the City of Midland regarding any planned access interruptions for public Right-of-Way, or to restore any public infrastructure damaged during construction activities.

10. PROPERTY AND RIGHT-OF-WAY SERVICE:

Service to adjacent properties must be maintained at all times unless otherwise directed by the Engineer. Such services include water, wastewater, fiber, cable, electric, and gas. Contractor must notify affected properties no less than two (2) business days prior to any planned service interruption.

Contractor must coordinate with the City of Midland regarding any planned service interruptions for public water or wastewater, or to restore any public infrastructure damaged during construction activities.

Contractor must coordinate with private service providers for any necessary service interruptions to their infrastructure or to restore service to their infrastructure in the event that a private service is disrupted, damaged, etc. during construction.

11. CONSTRUCTION SCHEDULE:

It is the responsibility of the Contractor to furnish the Construction Engineer, prior to construction, with a schedule outlining the anticipated time each phase of construction will begin and be completed, including sufficient time being allowed for clean-up.

12. CONSTRUCTION STAKING:

It is the responsibility of the Contractor to provide the project construction staking at fifty foot (50') intervals along the entire length of the project as well as at such control points as the Contractor deems necessary for proper execution of the work. Construction staking is to include grading and cuts as well as horizontal alignments and construction control points. Cut sheets are to be provided to the Engineer by the Contractor for review and approval.

13. SURVEY:

The Contractor is to provide GPS survey shots for all meters replaced to the City of Midland with each completed work order submittal. Survey data is to be shot in Texas Central Zone with 1983 NAD at 1.0' accuracy or better. Survey data is to be provided in Excel csv. file format with all rounding functions turned off.

14. CONSTRUCTION MATERIALS:

The Contractor is to only provide new materials for permanent installation in any and all parts of this project, and all such materials must comply with the General Conditions, the Bid Packet Specifications, and all applicable City of Midland Standards and Specifications.

For this project, the Standard Specification is hereby amended to read:

> Qualifications of Material Sources – Contractor is only to use pavement mixtures that have a proven record of acceptance by the City of Midland, or another Texas municipality, or have a proven record of meeting similar standards for state highway projects.

Concrete is only to be placed when the ambient temperature is between 40 degrees and 95 degrees Fahrenheit and the ambient temperature in the shade is higher than 40 degrees Fahrenheit or is 40 degrees Fahrenheit and rising.

All concrete pavement joints are to be sealed with Texas Department of Transportation (TxDOT) DMS-6310 SL-2 sealant, an American Society for Testing and Materials (ASTM) D 1190 Hot-Applied Single Component Joint Sealant, or a City of Midland approved equal. This will not apply to curb or sidewalk joints.

No construction materials are to be placed or installed during rain events unless they are necessary to resolve an emergency situation or to facilitate the project site erosion control measures.

15. EROSION CONTROL:

Erosion control is the responsibility of the Contractor and erosion control measures are to be implemented so as to prevent sediment erosion from wind, rain, and other elements from the project site. Should the Owner feel that supplementary erosion control measures are required in addition to those implemented by the Contractor then the Contractor will include additional erosion control measures within reason to the Owner's satisfaction and/or TCEQ requirements.

Reasonable erosion control measures include but are not limited to: construction entrance(s), concrete washout(s), perimeter silt fence or fiber wattle, rock rip-rap dams for concentrated runoff control, gutter and inlet protection measures such as sand bags, and stabilization of the construction area surfaces when construction work is not actively occurring by means of vegetative cover or seeded erosion control blankets.

Supplemental erosion control measures are ancillary to the project and not paid as a separate item, unless otherwise noted in the Proposal or Pay Notes.

Site cleanup work is to be done for this project as soon as possible as per the General Conditions and will be ancillary to the project and not paid as a separate item, unless otherwise noted in the Proposal or Pay Notes. Site cleanup is to take place throughout the project's construction as needed to maintain a clean and professional looking work area. No more than three calendar days are to elapse after completion of construction before the final roadway and right-of-way cleanup has been completed to the satisfaction of the Engineer.

16. WASTE MATERIAL:

Excess material from excavation and other construction or demolition activity will become the property of the Contractor. Excess excavation will be disposed of at locations secured by the Contractor and if necessary, approved by the Engineer. No material is to be placed on private property or City property without the approval of the Engineer and the property owner. Removal of excess material, excavation, and waste material are ancillary to the project and not paid as a separate item, unless otherwise noted in the Proposal or Pay Notes.

Excess concrete material must be washed out in a concrete washout within the project's job site area, or else any and all other concrete material washout must occur away from the job site area in the Contractor's or concrete Supplier's own operation yards or properties. Under no circumstances are concrete trucks allowed to washout in any job site excavations, channels, public right-of-way, or on private property.

Existing fire hydrants and existing water meters indicated for removal as part of the project are to be returned to the City of Midland by the Contractor and remain City property. These are ancillary to the project and will not be paid as separate items.

17. TESTING:

It is the Contractor's responsibility to perform all required testing for any and all materials and workmanship performed or installed as part of the project's work. The cost of all such testing is to be borne solely by the Contractor unless required by the Engineer for work or materials that had previously been tested and approved and had not experienced any change in condition since that time as a result of the Contractor's work or actions; or unless additional testing outside of the project scope is performed at the request of the Engineer.

Required testing includes:

Concrete Pavement – A Slump Test is required for every cylinder set (3 test cylinders) taken, and no less than 1 cylinder set per day is to be taken for testing when concrete is placed. Test results are to be given to the engineer upon completion of each test, with 1 cylinder set taken for:

A. Every 50 cubic yards of concrete placed for concrete pavement between street intersections.

B. Every 50 cubic yards of concrete placed for concrete pavement at a street intersection.

C. Every 2 sets of fillets and valley gutters at street approaches. (1 set = 2 fillets and 1 valley gutter)

D. Every 4 alley approaches or driveway approaches.

E. There will be no testing for curb, ramps, and sidewalks.

Concrete Pavement For Trench Repair – A Slump Test is required only if directed by the Engineer for pavement patches that are equal to or greater than 50 cubic yards (roughly equal to an 8' wide by 340' long by 6" thick pavement section). The slump test is to be performed once for every cylinder set (3 cylinders) taken, and no less than 1 cylinder set per day is to be taken for testing when concrete is placed. Test results are to be given to the engineer upon completion of each test. There will be no testing for curb, ramps, and sidewalks.

Asphalt Hot-Mix Pavement For Trench Repair – A Nuclear Gauge Density Test is required only if directed by the Engineer for pavement patches that are equal to or greater than 620 square yards (roughly equal to an 8' wide by 700' long pavement section). The laboratory density limits will be a minimum limit of 96%, a maximum limit of 98%, and an optimum limit of 97%. The acceptable field density limit will be a minimum limit of 93%, a maximum limit of 98%, and an optimum limit of 95%. Test results are to be given to the Engineer upon completion of each test.

Water Pipes & Fittings – Perform Pressure Testing and Bacterial Testing (Bac T)/Chlorination testing for all water mains and fire hydrants.

- Pressure Test – Perform test as described in the City of Midland Water Line Specifications, PART 10, Hydrostatic Tests, with the sole difference being that a continuous pressure of 180 pounds per square inch (psi) must be maintained over a continuous period of not less than four (4) hours rather than eight (8) hours. The acceptable field pressure limit will be a minimum 180 psi and a maximum 185 psi. A 2-3 psi drop in the measured pipe pressure during the first two (2) hour period will be acceptable to account for the compression of air within the pipe so long as the minimum and maximum allowed field pressure limits are not exceeded. There can be no variation in the measured pipe pressure during the last two (2) hours of the pressure test.

- Bac T/Chlorination Testing – Perform disinfection and test as described in the City of Midland Water Line Specifications, Part 9, Disinfection Of Pipe Lines.

Wastewater Gravity Pipes/Manholes – Perform air testing, mandrel testing, hydrostatic testing, and closed circuit televising (CCTV) for all wastewater mains and manholes.

- Air Test – Perform test as described in the City of Midland Gravity Flow Pipe Sewers And Fittings For Wastewater And Storm Water, Part 3.14, Testing Gravity Mains And Manholes.

- Mandrel Test – A successful mandrel pull is required for all wastewater pipes installed.

- Hydrostatic Testing – Perform test as described in the City of Midland Gravity Flow Pipe Sewers And Fittings For Wastewater And Stormwater Specifications, Part 3.14, Hydrostatic Testing.

- Closed Circuit Televising (CCTV) – Provide CCTV video of the wastewater mains for the full length of the wastewater system installed, including through all wastewater structures. CCTV video is not required for wastewater laterals unless directed by the Engineer.

Force Mains & Fittings (Wastewater & Storm Drain) – Perform pressure testing for all wastewater and storm drain force mains.

- Pressure Test – Perform test as described in the City of Midland Water Line Specifications, PART 10, Hydrostatic Tests, with the sole difference being that a continuous pressure of 180 pounds per square inch (psi) must be maintained over a continuous period of not less than four (4) hours rather than eight (8) hours. The acceptable field pressure limit will be a minimum 180 psi and a maximum 185 psi. A 2-3 psi drop in the measured pipe pressure during the first two (2) hour period will be acceptable to account for the compression of air within the pipe so long as the minimum and maximum allowed field pressure limits are not exceeded. There can be no variation in the measured pipe pressure during the last two (2) hours of the pressure test.

Storm Drain Pipes & Structures – Perform as-built survey and closed circuit televising (CCTV) for all storm drain pipes and structures.

- As-Built Survey of Storm Drain Pipes & Culverts – Provide as-built survey shots at fifty-foot (50') intervals along the storm drain pipe or culvert at the top of the pipe or culvert installed.

- As-Built Survey of Storm Drain Structures – Provide as-built survey shots at the inverts of all storm drain structures that are installed to verify the storm drain grades, including all manholes, junction boxes, and inlets.

- Closed Circuit Televising (CCTV) – Provide CCTV video of the storm drain for the full length of the storm drain system installed, including through all storm drain structures. CCTV video is not required for storm drain laterals unless directed by the Engineer.

18. COMPLIANCE:

The said Contractor further agrees to comply with all applicable provisions of the laws and building and construction codes of the City of Midland and the State of Texas, and with any regulations for the protection of workers which may be promulgated by the Government, and will protect such work with all necessary lights, barriers, safeguards, and warnings as provided for in said specifications and the Ordinance regulations.

19. PERSONNEL:

It is the Contractor's responsibility to have a supervising representative of the Contractor on the construction site any time that construction work is taking place. The Contractor's representative must be on the Contractor's direct payroll. Sub-contractors or paid consultants will not satisfy this requirement.

It is also the Contractor's responsibility to provide the City with a reliable contact for issue escalation coordination. Such contacts would include the Contractor's site foreman, the Contractor's construction project manager, etc.

20. INTENT OF THE PROPOSAL:

The intent of the proposal is to determine the lowest responsible bidder based on the total of the quantities and unit prices. Once the lowest responsible bidder is selected, the project will be awarded based on the terms and requirements of the contract outlined in the bid packet and construction drawings.

21. CONTRACT DEADLINE:

The deadline for substantial completion of this project is _120__ calendar days total starting from the Notice to Proceed date.

Extensions of the project deadline may be requested by the Contractor for documented excepting conditions such as weather days, delays due to conflicts with existing franchise lines, etc. which are reasonably beyond the Contractor's control. Any and all deadline extensions must be submitted by the Contractor in writing to Engineer for review, and the approval or denial of the request rests solely with the Engineer.

Unless specifically granted in writing by the Engineer, there will be no suspension of project time between phases of construction.

22. WARRANTY PERIOD:

There is a one (1) year calendar warranty period on this project for all work performed or materials installed effective immediately upon acceptance of the improvements by the Owner. The warranty period will be based on the acceptance date of the project as a whole, and not any individual phases of the project.

23. BID PACKET COMPLETION ITEMS OF NOTE:

Bidders must be willing to sign the Contract as is if a bid is submitted. Revisions, alterations, deletions, additions, or any other changes of any kind by the bidder to the bid packet or other bid documents (such as the construction drawing set, addendums, etc.) will result in the bid submittal being deemed 'Non-Responsive' and the bid will not be accepted.

Bidders are reminded to make sure that the Conflict of Interest forms are completed if applicable before submitting a bid.

All bid items in the Proposal section must be completed for a bid submittal to be considered complete. Any bid item left blank, only partially completed, or that the bidder indicates they chose to not provide a bid for will be considered incomplete, and the entire bid submittal will also be deemed incomplete, the bid submittal will be deemed 'Non-Responsive', and the bid will not be accepted. Bidders bear sole responsibility for making sure that the Proposal is complete and in accordance with the instructions provided to bidders in the bid packet.

All acknowledgement forms for all addendums that are issued during the bid process for this project must be filled out and be included with any bid submittal for that bid submittal to be considered complete. Any bid submittal lacking these completed addendum acknowledgement forms will be deemed 'Non-Responsive' and the bid will not be accepted. Bidders bear sole responsibility for making sure that they have obtained all addendums issued prior to submitting their bid.

Bidders must provide documentation as part of the bid packet submittal proving that they possess active licenses that are equivalent to or a higher class than a Water Operator D license and also equivalent to or a higher class than either a Wastewater D license or a Class 1 Collections license, and the Contractor must maintain both of these active licenses for the entirety of the project. Any bid submittal that does not include this required documentation for both licenses will be rejected as a non-responsive bid. If a Contractor allows either or both of the required licenses to lapse at any time during the course of the project then all work under this project will be halted and the City of Midland will have sole discretion to either allow the Contractor to renew both of their active licenses before resuming work or to end the project immediately.

PROPOSAL

TO: Honorable Mayor and City Council
City of Midland
Midland, Texas

Gentlemen: The undersigned bidder, having examined the drawings, specifications and contract documents, the location of the proposed work, and being fully advised as to the extent and character of the work, proposes to furnish all material, equipment, and to perform all labor and work necessary for the completion of the construction of the work described by and in accordance with the attached drawings, specifications, and contract, for the following prices, to wit:

Project Name: Idlewilde Drive Storm Drain Improvements

Project Number: D21-05

Base Bid: Miscellaneous Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	1 LS	Mobilization, furnished, installed, complete and in place, for the sum of: One Hundred Forty Three Thousand dollars and no cents per month. (Pay Note M1)	$ 143,000.00	$ 143,000.00
2)	1 LS	Erosion/Sediment Control, furnished, installed, complete and in place, for the sum of: Twenty Three Thousand One Hundred Twenty dollars and no cents per month. (Pay Note M2)	$ 23,120.00	$ 23,120.00
3)	1 LS	Traffic Control, furnished, installed, complete and in place, for the sum of: Forty Thousand dollars and no cents per month. (Pay Note M3)	$ 40,000.00	$ 40,000.00
4)	1 LS	Job Site Safety, furnished, installed, complete and in place, for the sum of: Fifteen Thousand dollars and no cents per month. (Pay Note M4)	$ 15,000.00	$ 15,000.00

Base Bid: Miscellaneous Items				
Item No.	Quantity	Description	Unit Price	Total Amount
5)	1 EA	Water Meter & Meter Box Installation (Existing Service Lateral) , furnished, installed, complete and in place, for the sum of: Five Thousand dollars and no cents per each. (Pay Note M5)	$ 5,000.00	$ 5,000.00
6)	N/A	Material Mark-up, complete and in place, for the sum of: Twenty percent. (Pay Note M6)	% 20	$ N/A
7)	N/A	Labor Mark-up (Regular Work Hours), complete and in place, for the sum of: Twenty percent. (Pay Note M7)	% 20	$ N/A
8)	N/A	Equipment Rental Mark-up (Non-Standard Equipment Only), complete and in place, for the sum of: Twenty percent. (Pay Note M8)	% 20	$ N/A
Total Miscellaneous Items 1-8		$ 226,120.00		

Base Bid: Demolition Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	769 SY	Removal & Dispose of Existing Unclassified Pavement, complete and in place, for the sum of: Ten dollars and no cents per square yard. (Pay Note D1)	$ 10.00	$ 7,690.00
2)	60 LF	Removal & Dispose of Existing Concrete Curb & Gutter, complete and in place, for the sum of: Sixty dollars and no cents per linear foot. (Pay Note D2)	$ 60.00	$ 3,600.00
3)	5 SY	Removal & Disposal of Existing Concrete Sidewalk & Ramps, complete and in place, for the sum of: One Thousand dollars and no cents per square yard. (Pay Note D3)	$ 1,000.00	$ 5,000.00
4)	24,944 CY	Basin Excavation, complete and in place, for the sum of: Fifteen dollars and no cents per cubic yard. (Pay Note D4)	$ 15.00	$ 374,160.00
Total Demolition Items 1-4				$ 390,450.00

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	85 LF	24" HDPE Dual Wall, Storm Drain, furnished, installed, complete and in place, for the sum of: Two Hundred Sixty Two dollars and no cents per linear foot. (Pay Note SD1)	$ 262.00	$ 22,270.00
2)	529 LF	36" HDPE Dual Wall, Storm Drain, furnished, installed, complete and in place, for the sum of: Three Hundred dollars and no cents per linear foot. (Pay Note SD1)	$ 300.00	$ 158,700.00
3)	838 LF	48" HDPE Dual Wall, Storm Drain, furnished, installed, complete and in place, for the sum of: Three hundred Seventy Six dollars and no cents per linear foot. (Pay Note SD1)	$ 376.00	$ 315,088.00
4)	1 EA	5'x5'x5' Concrete Junction Box w/ 48" Fiberglass Manhole Riser, furnished, installed, complete and in place, for the sum of: Twenty Two Thousand nine Hundred Ninety dollars and no cents per each. (Pay Note SD2)	$ 22,990.00	$ 22,990.00
5)	2 EA	6'x6'x6' Concrete Junction Box w/ 48" Fiberglass Manhole Riser, furnished, installed, complete and in place, for the sum of: Twenty Four Thousand Eight Hundred Fifteen dollars and no cents per each. (Pay Note SD2)	$ 24,815.00	$ 49,630.00
6)	1 EA	6'x6'x7.83' Concrete Junction Box, furnished, installed, complete and in place, for the sum of: Twenty Seven Thousand Six Hundred Sixty Three dollars and no cents per each. (Pay Note SD2)	$ 27,663.00	$ 27,663.00
7)	2 EA	60" Fiberglass Manhole & Cover, furnished, installed, complete and in place, for the sum of: Twelve Thousand Eight Hundred Forty dollars and no cents per each. (Pay Note SD3)	$ 12,840.00	$ 25,680.00

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
8)	1 EA	Reinforced Concrete Headwall, furnished, installed, complete and in place, for the sum of: Eighty Thousand dollars and no cents per each. (Pay Note SD4)	$ 80,000.00	$ 80,000.00
9)	1 EA	12'x5'x5.7' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: Thirteen Thousand One Hundred Forty Eight dollars and no cents per each. (Pay Note SD5)	$ 13,148.00	$ 13,148.00
10)	1 EA	18'x5'x10' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: Nineteen Thousand Twenty Two dollars and no cents per each. (Pay Note SD5)	$ 19,022.00	$ 19,022.00
11)	1 EA	12'x5'x7.4' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: Thirteen Thousand Three Hundred Fourteen dollars and no cents per each. (Pay Note SD5)	$ 13,314.00	$ 13,314.00
12)	1 EA	12'x5'x5.5' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: Thirteen Thousand One hundred Forty Eight dollars and no cents per each. (Pay Note SD5)	$ 13,148.00	$ 13,148.00
13)	1 EA	5'x5'x5' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: Ten Thousand Six hundred Seventy Five dollars and no cents per each. (Pay Note SD5)	$ 10,675.00	$ 10,675.00
14)	307 SY	Concrete Drainage Flume, furnished, installed, complete and in place, for the sum of: One Hundred Ninety Five dollars and No cents per square yard. (Pay Note SD6)	$ 195.00	$ 59,865.00
15)	1 EA	Connect to Existing Storm Drain, furnished, installed, complete and in place, for the sum of: Five Thousand dollars and no cents per each. (Pay Note SD7)	$ 5,000.00	$ 5,000.00

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
16)	1452 LF	Open Trenching of Storm Drain, furnished, installed, complete and in place, for the sum of: Fifty dollars and no cents per linear foot. (Pay Note SD8)	$ 50.00	$ 72,600.00
17)	406 LF	Concrete Fiber Reinforced Pilot Swale, furnished, installed, complete and in place, for the sum of: One Hundred Thirty Five dollars and no cents per linear foot. (Pay Note SD9)	$ 135.00	$ 54,810.00
18)	1,113 SY	Rock Rip Rap, furnished, installed, complete and in place, for the sum of: One Hundred Eight dollars and no cents per linear foot. (Pay Note SD10)	$ 108.00	$ 120,204.00
Total Storm Drain Items 1-18		$ 1,083,807.00		

Base Bid: Paving Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	769 SY	Subgrade Preparation, furnished, installed, complete and in place, for the sum of: Fifteen dollars and no cents per square yard. (Pay Note P1)	$ 15.00	$ 11,535.00
2)	769 SY	Flexible Base (Type A, Grade A), furnished, installed, complete and in place, for the sum of: Twenty Three dollars and no cents per square yard. (Pay Note P2)	$ 23.00	$ 17,687.00
3)	60 LF	Type A Concrete Curb & Gutter Repair, furnished, installed, complete and in place, for the sum of: Sixty dollars and no cents per linear foot. (Pay Note P3)	$ 60.00	$ 3,600.00
4)	5 SY	6" Concrete Sidewalk Repair, furnished, installed, complete and in place, for the sum of: Two Hundred Forty dollars and no cents per square yard. (Pay Note P4)	$ 240.00	$ 1,200.00
5)	85 TON	2" Type D HMAC Asphalt Pavement Repair (PG70-22), furnished, installed, complete and in place, for the sum of: One Hundred Seventy Five dollars and no cents per ton. (Pay Note P5)	$ 175.00	$ 14,875.00
6)	154 GAL	Bituminous Prime Coat (MC-30, 0.20 Gal / SY), furnished, installed, complete and in place, for the sum of: Fifteen dollars and no cents per gallon. (Pay Note P6)	$ 15.00	$ 2,310.00
7)	1204 SY	Flowable Fill / 2-Sack Backfill, furnished, installed, complete and in place, for the sum of: One Hundred Fifty dollars and no cents per square yard. (Pay Note P7)	$ 150.00	$ 180,600.00

Base Bid: Paving Items				
Item No.	Quantity	Description	Unit Price	Total Amount
Total Paving Items 1-7		$ 231,807.00		

Bid Price For:	
1. Miscellaneous Items	$ 226,120.00
2. Demolition Items	$ 390,450.00
3. Storm Drain Items	$ 1,083,807.00
4. Paving Items	$ 231,807.00
Total Price	$ 1,932,184.00

In addition to providing the individual prices for the items above, Contract shall write the total bid amount in the sum of

One Million Nine Hundred Thirty Two Thousand One Hundred Eighty Four dollars

and No cents total.

The undersigned bidder hereby declares that he has visited the site of the work and has carefully examined the contract documents pertaining to the work covered by the above bid. The selected contractor will receive written notice to proceed.

Bidder agrees to substantially complete all work within 120 calendar days after receipt of notice to proceed.

PUBLIC INFORMATION

To the extent that Bidder is submitting a bid for a contract described by Section 552.371 of the Texas Government Code, Bidder agrees as follows in accordance with Section 552.372(b) of the Texas Government Code: The requirements of Subchapter J, Chapter 552, Government Code, may apply to this bid, and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

Enclosed herewith in this proposal is a cashier's check, cash or bid bond on a form approved by the City Attorney, for

Ninety Six Thousand Six Hundred Nine dollars

and Twenty cents total. ($ 96,609.20)

which it is agreed shall be collected and retained by the owner as liquidated damages in the event this proposal is accepted by the Owner within thirty days (30) after the date advertised for the reception of bids and the undersigned fails to execute the contract and required bonds with the owner, under the conditions thereof, within (15) days after the date said proposal is accepted; otherwise said check or bond shall be returned to the undersigned on demand.

Boler Equipment Service, Inc.

Name of Contractor

Submitted By	Greg Boler - Vice President Print Name and Title
4611 Sinclair Ave Mailing Address	
Midland	TX 79707
City	State Zip

PAY NOTES

Idlewilde Drive Storm Drain Improvements

Bid Item		Pay Quantity Note
Miscellaneous Items		
1	Mobilization	M1
2	Erosion/Sediment Control	M2
3	Traffic Control	M3
4	Job Site Safety	M4
5	Water Meter & Meter Box Installation (Existing Service Lateral)	M5
6	Material Mark-up	M6
7	Labor Mark-up (Regular Work Hours)	M7
8	Equipment Rental Mark-up (Non-Standard Equipment Only)	M8
Demolition Items		
1	Removal & Disposal of Existing Unclassified Pavement	D1
2	Removal & Disposal of Existing Concrete Curb & Gutter	D2
3	Removal & Disposal of Existing Concrete Sidewalk & Ramps	D3
4	Basin Excavation	D4
Storm Drain Items		
1	24" ASTM F2619, HDPE, Storm Drain	SD1
2	36" ASTM F2619, HDPE, Storm Drain	SD1
3	48" ASTM F2619, HDPE, Storm Drain	SD1
4	5'x5'x5' Reinforced Concrete Junction Box w/ 48" Fiberglass Manhole Riser	SD2
5	6'x6'x6' Reinforced Concrete Junction Box w/ 48" Fiberglass Manhole Riser	SD2
6	6'x6'x7.83' Reinforced Concrete Junction Box	SD2
7	60" Fiberglass Manhole & Cover	SD3
8	Reinforced Concrete Headwall	SD4
9	12'x5'x5.7' Reinforced Concrete Curb Inlet	SD5
10	18'x5'x10' Reinforced Concrete Curb Inlet	SD5
11	12'x5'x7.4' Reinforced Concrete Curb Inlet	SD5
12	12'x5'x5.5' Reinforced Concrete Curb Inlet	SD5
13	5'x5'x5' Reinforced Concrete Curb Inlet	SD5
14	Concrete Drainage Flume	SD6
15	Connect to Existing Storm Drain	SD7
16	Open Trenching of Storm Drain	SD8
17	2' Concrete Fiber Reinforced Pilot Swale	SD9
18	8" Rock Rip-Rap	SD10
Paving Items		
1	Subgrade Preparation	P1
2	8" Flexible Base (Type A, Grade A)	P2
3	Type A Concrete Curb & Gutter Repair	P3
4	6" Concrete Sidewalk Repair	P4
5	2" Type D HMAC Asphalt Pavement Repair (PG70-22)	P5
6	Bituminous Prime Coat (MC-30, 0.10 Gal / SY)	P6
7	Flowable Fill / 2-Sack Backfill	P7

PAY QUANTITY NOTES

M1 Includes the necessary equipment, labor, materials, and incidentals for Mobilization per the construction drawings and TxDOT Standard Specifications Item 500 'Mobilization'. Mobilization shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M2 Includes the necessary equipment, labor, materials, and incidentals to implement Erosion/Sediment Control per the construction drawings and TxDOT Standard Specifications Item 506 'Temporary Erosion, Sedimentation, and Environmental Controls'. Erosion/Sediment Control shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M3 Includes the necessary equipment, labor, materials, and incidentals to implement Traffic Control per the construction drawings and TxDOT Standard Specifications Item 502 'Barricades, Signs, and Traffic Handling.' Traffic Control shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M4 Includes the necessary equipment, labor, materials, and incidentals to implement Job Site Safety and to provide a safe work environment for the project work area (including all personal protection equipment, trench safety, etc.) per the construction drawings and in compliance with all applicable Federal, State, and Local requirements or regulations including those of OSHA and the City of Midland. JOB SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. Job Site Safety shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M5 Includes the necessary equipment, labor, materials, and incidentals to set a new Water Meter and Meter Box for an existing water service lateral per the construction drawings and City of Midland standards and specifications, including all appurtenances. The new water meter will be provided by the City of Midland. Measurement and payment to be per each water meter and meter box set.

M6 Includes the Material Mark-up for materials and material sizes (pipe, valve, manhole, etc.) required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of the material in question plus the set percent increase established by this bid item. The Contractor must provide a copy of the invoice for the material cost from the supplier to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any material. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

M7 Includes the Labor Mark-up (Regular Work Hours) for labor required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of labor in question plus the set percent increase established by this bid item. The Contractor must provide a typical hourly pay rate for work crews prior to the percent increase along with the number of workers on the crew and the number of hours worked by the crew for the project in question to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any labor. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

M8 Includes the Equipment Rental Mark-up (non-standard equipment only) required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of the equipment rental in question plus the set percent increase established by this bid item. The Contractor must provide a copy of the invoice for the rented equipment from the equipment supplier to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any rented equipment. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

D1 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Unclassified Pavement per the construction drawings and City of Midland standards and specifications including all saw-cutting and appurtenances. Depths given are approximate and pavement material is to be removed in its entirety. No additional compensation will be made for increased pavement depth removal. Saw-cut pavement edges are to be full pavement depth, cleanly cut, and clearly defined edges free of breaks. Measurement and payment to be made per square yard of unclassified pavement removed.

D2 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Concrete Curb & Gutter per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per linear foot.

D3 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Concrete Sidewalk & Ramps per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per square yard.

D4 Includes the necessary equipment, labor, materials, and incidentals for Basin Excavation per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per cubic yard.

SD1 Includes the necessary equipment, labor, materials, and incidentals for the installation of Storm Drains per the construction drawings and City of Midland standards and specifications, including all embedment, detector wire, tracer tape, necessary testing, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures and appurtenances.

SD2 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Reinforced Concrete Junction Box per the construction drawings and City of Midland standards and specifications, including all embedment, base, securing of junction box to fiberglass manhole riser, forms, reinforcement, placement, necessary testing, and appurtenances. Measurement and payment to be made per each junction box installed.

SD3 Includes the necessary equipment, labor, materials, and incidentals for the installation of Fiberglass Manhole & Cover per the construction drawings and City of Midland standards and specifications, to the depth shown on the construction drawings and including all embedment, base, necessary testing, concrete collars, and appurtenances. Measurement and payment to be made per each manhole installed.

SD4 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Reinforced Concrete Headwall per the construction drawings and City of Midland standards and specifications, including all forms, reinforcement, placement, sealing, finishing, and appurtenances. Measurement and payment to be made per each concrete headwall installed.

SD5 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Reinforced Concrete Curb Inlet per the construction drawings and City of Midland standards and specifications, including all embedment, base, forms, reinforcement, placement, sealing, finishing, necessary testing, and appurtenances. Measurement and payment to be made per each curb inlet installed.

SD6 Includes the necessary equipment, labor, materials, and incidentals for the installation of Concrete Drainage Flume per the construction drawings and City of Midland standards and specifications, including all excavation, embedment, backfill, and appurtenances. Measurement and payment to be made per square yard of drainage flume installed.

SD7 Includes the necessary equipment, labor, materials, and incidentals to Connect to Existing Storm Drain per the construction drawings and City of Midland standards and specifications, including all coring, grouting, sealing, repairs, and appurtenances. Measurement and payment to be made per each connection made.

SD8 Includes the necessary equipment, labor, materials, and incidentals for Open Trenching of Storm Drain per the construction drawings and City of Midland standards and specifications, including all unclassified excavation, backfill not including flowable fill backfill, providing trench safety and protection for workers to install pipe, structures, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures, fittings, and appurtenances.

SD9 Includes the necessary equipment, labor, materials, and incidentals for the installation of Concrete Fiber Reinforced Pilot Swale per the construction drawings and City of Midland standards and specifications, including all excavation, embedment, backfill, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface of swale installed.

SD10 Includes the necessary equipment, labor, materials, and incidentals for the installation of Rock Rip Rap per the construction drawings and City of Midland standards and specifications, including all excavation, embedment, backfill, and appurtenances. Measurement and payment to be made per square yard of rip rap installed.

P1 Includes the necessary equipment, labor, materials, and incidentals for Subgrade Preparation per the construction drawings and City of Midland standards and specifications, including all proof-rolling, sub-grade reworking, scarifying, compaction, and appurtenances. Measurement and payment to be made per square yard measured along the ground surface.

P2 Includes the necessary equipment, labor, materials, and incidentals for placement of Flexible Base compacted to 95% Density, ASTM D1557, per the construction drawings and City of Midland standards and specifications including all placement, compaction, and appurtenances. Measurement and payment to be made per square yard measured along the ground surface.

P3 Includes the necessary equipment, labor, materials, and incidentals for Concrete Curb & Gutter Repair per the construction drawings and City of Midland standards and specifications including all forming, placement, jointing, fiber reinforcement, finishing, and appurtenances. Measurement and payment to be made per linear foot measured along the back-of-curb.

P4 Includes the necessary equipment, labor, materials, and incidentals for Concrete Sidewalk Repair per the construction drawings and City of Midland standards and specifications, including all forming, placement, jointing, fiber reinforcement, finishing, and appurtenances. Measurement and payment to be made per square yard.

P5 Includes the necessary equipment, labor, materials, and incidentals for the installation of Type "D" HMAC Asphalt Pavement Repair (220 LBS / SY at 2" thick, PG 70-22) per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per ton.

P6 Includes the necessary equipment, labor, materials, and incidentals for application of Bituminous Prime Coat (MC-30, 0.20 GAL / SY) per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per gallon of material applied at the designated rate.

P7 Includes the necessary equipment, labor, materials, and incidentals for installation of Flowable Fill / 2-Sack Backfill (Portland Cement 2 Sack = 188 LBS/CY) per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per square yard measured along the ground surface.

BID BOND

THE STATE OF TEXAS §

COUNTY OF MIDLAND §

SURETY NO RCB0021050

KNOW ALL MEN BY THESE PRESENTS, THAT Boler Equipment Service, Inc. (Hereinafter called the Principal), as Principal, and RLI Insurance Company (Hereinafter called the Surety, as Surety, are held and firmly bound unto the City of Midland, Texas a home rule municipal corporation of Midland County, Texas, (hereinafter called the Obligee), in the amount of Five Percent of The Greatest Amount Bid Dollars ($ 5%GAB) for the payment whereof the said Principal and surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a Bid or Proposal to enter into a certain written contract for the construction of Idlewilde Drive Storm Drain Improvements.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully, enter into such written Contract, then this obligation shall be void; otherwise to remain in full force and effect.

IT IS EXPRESSLY UNDERSTOOD AND AGREE that if said Principal should withdraw its Bid anytime after such Bid is opened and before official rejection to such Bid or, if successful in securing the award thereof, said Principal should fail to enter into the Contract and furnish satisfactory Performance Bond and Payment Bond, the Obligee, in either of such events, shall be entitled and is hereby given the right to collect the full amount of this Bid Bond as liquidated damage.

PROVIDED, further that if any legal action be filed upon this Bond venue shall lie in Midland County, Texas.

IN WITNESS WHEREOF, the said Principal and surety do sign and seal this instrument, this 11th day of January, 2023.

Principal

By Greg Boler

Address 4611 Sinclair Ave.

Midland, TX 79707

Surety

By Jessica Ervin-Battles, Attorney In Fact

Address 3100 N. A Street Bldg. D

Midland, TX 79705

APPROVED AS TO FORM:

City Attorney

RLI INSURANCE COMPANY CORPORATE SEAL ILLINOIS

NOTE: Attach Power of Attorney

Form Revised December 2022

POWER OF ATTORNEY

RLI Insurance Company
Contractors Bonding and Insurance Company

9025 N. Lindbergh Dr. Peoria, IL 61615
Phone: 800-645-2402

Know All Men by These Presents:

That this Power of Attorney is not valid or in effect unless attached to the bond which it authorizes executed, but may be detached by the approving officer if desired.

That **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, each an Illinois corporation, (separately and together, the "Company") do hereby make, constitute and appoint:

Deborah Ervin, Beverly Richardson, Jessica Ervin-Battles, jointly or severally

in the City of Midland, State of Texas its true and lawful Agent(s) and Attorney(s) in Fact, with full power and authority hereby conferred, to sign, execute, acknowledge and deliver for and on its behalf as Surety, in general, any and all bonds and undertakings in an amount not to exceed **Twenty Five Million** Dollars (**$25,000,000.00**) for any single obligation.

The acknowledgment and execution of such bond by the said Attorney in Fact shall be as binding upon the Company as if such bond had been executed and acknowledged by the regularly elected officers of the Company.

RLI Insurance Company and/or **Contractors Bonding and Insurance Company**, as applicable, have each further certified that the following is a true and exact copy of a Resolution adopted by the Board of Directors of each such corporation, and is now in force, to-wit:

> "All bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or Agents who shall have authority to issue bonds, policies or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."

IN WITNESS WHEREOF, the **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, as applicable, have caused these presents to be executed by its respective Vice President with its corporate seal affixed this 3rd day of April, 2020.

CONTRACTORS BONDING AND INSURANCE COMPANY CORPORATE SEAL ILLINOIS

RLI INSURANCE COMPANY CORPORATE SEAL ILLINOIS

RLI Insurance Company
Contractors Bonding and Insurance Company

By: B. W. D.
Barton W. Davis — Vice President

State of Illinois
County of Peoria } SS

On this 3rd day of April, 2020, before me, a Notary Public, personally appeared Barton W. Davis, who being by me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of the **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company** and acknowledged said instrument to be the voluntary act and deed of said corporation.

By: Jacqueline M. Bockler
Jacqueline M. Bockler — Notary Public

OFFICIAL SEAL
JACQUELINE M BOCKLER
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES JAN 14 2022

CERTIFICATE

I, the undersigned officer of **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable; and furthermore, that the Resolution of the Company as set forth in the Power of Attorney, is now in force. In testimony whereof, I have hereunto set my hand and the seal of the **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company** this 11 day of January, 2023.

RLI Insurance Company
Contractors Bonding and Insurance Company

By: Jeffrey D Fick
Jeffrey D Fick — Corporate Secretary

4259160020212

A0058D19

CONTRACT

THE STATE OF TEXAS §

COUNTY OF MIDLAND §

THIS CONTRACT, made and entered into this 25th day of January , 2023, by and between the City of Midland of the County of Midland and State of Texas, acting through its Mayor thereunto duly authorized so to do, Party of the First Part, hereinafter termed OWNER, and

Boler Equipment Service, Inc. of the City Midland ,

County of Midland , State of Texas , Party of the Second Part, herein-after termed CONTRACTOR.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Party of the first Part (OWNER), and under the conditions expressed in the bond bearing even date herewith, the said Party of the Second Part (CONTRACTOR), hereby agrees with the said Party of the First Part (OWNER) to commence and complete the construction of certain improvements described as follows: Idlewilde Drive Storm Drain Improvements together with appurtenances and incidentals.

Conditions of the Contract and at his (or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendent, labor, insurance and other accessories and services necessary to complete the said construction in accordance with the conditions and prices stated in the Proposal attached hereto, and in accordance with the Notice to the Contractors, General and Special Conditions of Agreement, Plans and other drawings and printed or written explanatory matter thereof, and the Specifications and addenda therefore as prepared by Engineering and Transportation Department of the City of Midland, Texas, herein entitled the ENGINEER, together with the CONTRACTOR'S written Proposal, the General Conditions of the Contract, and the Performance and Payment Bonds hereto attached; all of which are made a part hereof and collectively evidence and constitute the entire Contract.

The CONTRACTOR hereby agrees to commence work within fifteen (15) calendar days after the written notice to do so and to substantially complete the same within 120 calendar days after receipt of notice to proceed, subject to such extensions of time as are provided by the General and Special Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds the price or prices shown in the proposal, which forms a part of this Contract, such payments to be subject to the General and Special Conditions of the Contract.

The SUM TOTAL of this Contract shall be: 1,932,184 Dollars and 00 Cents.

INSURANCE

Contractor shall at all times during the term of this Contract maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):	
— Personal Injury:	$1,000,000.00 per person
	$1,000,000.00 per occurrence
— Property Damage:	$500,000.00 per occurrence
Business Automobile Liability:	$250,000.00 combined single limit - Personal Injury and Property Damage
Workers' Compensation:	Statutory limits
Employers' Liability:	$500,000.00 per accident or occurrence

The Commercial General Liability shall be on a per project aggregate, including completed operations, and shall be on an occurrence basis. This insurance shall name the City as an additional insured and waive subrogation in favor of the City.

The Business Automobile Liability insurance provided by Contractor shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-city vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of $250,000.00 covering any vehicle used for the execution of the work that is the subject of this Contract. The insurance shall name the City as an additional insured and waive subrogation in favor of the City.

The Workers' Compensation coverage provided by Contractor shall inure to the benefit of employees injured during the course and scope of their employment by Contractor pursuant to this Contract. The Workers' Compensation shall waive all rights of subrogation in favor of the City.

All insurance required pursuant to this Contract shall provide for a waiver of subrogation in favor of the City. All insurance required pursuant to this Contract, except for Workers' Compensation Insurance, shall name the City as an additional insured on a claims occurred basis. City shall be provided the notice by Contractor's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage.

Contractor shall contractually require all contractors, subcontractors, and sub-subcontractors that work on any portion of the work that is the subject of this Contract to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts specified herein. All contractors, subcontractors, and sub-subcontractors shall obtain insurance policies that provide blanket waivers of subrogation in favor of the City of Midland and policies that name the City of Midland as an additional insured on a claims occurred basis (except workers' compensation).

The parties agree that, prior to the execution of the Contract, Contractor shall provide one or more certificates of insurance specifically stating that these requirements have been met and subject to the approval of the City. The City shall not be required to provide any insurance whatsoever pursuant to this Contract.

The Contractor certifies that the certificate of insurance provided as required herein complies with the requirements of Senate Bill 425, passed during the 82nd regular session of the Texas Legislature, and effective January 1, 2012. The Contractor shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of the Contractor.

WAIVER OF ATTORNEY FEES

WAIVER OF ATTORNEY FEES: BY EXECUTING THIS CONTRACT, CONTRACTOR AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE OWNER, REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THE CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE CONTRACT. THE CONTRACTOR SPECIFICALLY AGREES THAT IF THE CONTRACTOR BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS CONTRACT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS CONTRACT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION

37.001, ET. SEQ., AS AMEDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, THE CONTRACTOR AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH CONTRACTOR MIGHT OTHERWISE BE ENTITLED.

CONTRACTOR AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING KNOWN RIGHT. THE CONTRACTOR ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THE CONTRACT. THE CONTRACTOR FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE OWNER AND THE CONTRACTOR. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF SOVEREIGN IMMUNITY.

THE CONTRACTOR AND OWNER ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION.

SOVEREIGN IMMUNITY

By executing this Contract, the City is not waiving its right of sovereign immunity. The City is retaining its immunity from suit. The City is not granting consent to be sued by legislative resolution or action.

THERE IS NO WAIVER OF SOVEREIGN IMMUNITY.

GOVERNING LAW AND VENUE

This Contract shall be governed by the laws of the State of Texas. All performance and payment made pursuant to this Contract shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this Contract or the performance of this Contract shall be in Midland County, Texas. The obligations and undertakings of each of the parties to this Contract shall be deemed to have occurred in Midland County, Texas.

COMPLIANCE – Contractor agrees that it shall comply with Texas Government Code Section 2252.908, *et seq.*, as amended. Contractor agrees that it shall comply with Texas Local Government Code Section 176.006, *et seq.*, as amended.

VERIFICATION

To the extent that Sections 2271.002 and 2274.002 of the Texas Government Code (collectively, the "Anti-Boycott Statutes") apply to this Contract, Contractor hereby verifies:

- that Contractor does not boycott Israel and will not boycott Israel during the term of this Contract;
- that Contractor does not boycott energy companies and will not boycott energy companies during the term of this Contract; and
- that Contractor does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of this Contract, against a firearm entity or firearm trade association.

To the extent that the Anti-Boycott Statutes do not apply to this Contract, such verification is not required, and Contractor shall be deemed to have not made such verification.

RECORDS RETENTION AND PRODUCTION OF INFORMATION

To the extent that this Contract, is a contract described by Section 552.371 of the Texas Government Code, Contractor shall (1) preserve all contracting information related to the Contract as provided by the records retention requirements applicable to the City of Midland for the duration of the contract, (2) promptly provide to the City of Midland any contracting information related to the Contract that is in the custody or possession of Contractor on request of the City of Midland, and (3) on completion of the Contract, either (i) provide at no cost to the City of Midland all contracting information related to the Contract that is in the custody or possession of Contractor, or (ii) preserve the contracting information related to the Contract as provided by the records retention requirements applicable to the City of Midland.

PUBLIC INFORMATION

To the extent that this Contract is a contract described by Section 552.371 of the Texas Government Code, Contractor agrees as follows in accordance with Section 552.372(b) of the Texas Government Code: The requirements of Subchapter J, Chapter 552, Government Code, may apply to this contract, and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

IN WITNESS WHEREOF, the parties to these presents have executed this Agreement in the year and day first above written.

Parties of the First Part (Owner)

By: _____
Lori Blong, Mayor

ATTEST:

_____
Amy Turner, City Secretary

APPROVED ONLY AS TO FORM:

By: _____
John Ohnemiller, City Attorney

By: _____
Party of the Second Part (CONTRACTOR)

By: _____
Title

THE STATE OF _____ §

COUNTY OF _____ §

BEFORE ME, the undersigned authority, on this _____ day of _____, 20__ personally appeared _____, an officer of Boler Equipment Service, Inc., known to me to be the person and official whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same as an act and deed of said corporation, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 20_____

_____
Notary Public

Form Revised January 2023

PERFORMANCE BOND

THE STATE OF TEXAS §

COUNTY OF MIDLAND § SURETY NO _____

KNOW ALL MEN BY THESE PRESENTS, THAT _____ (Hereinafter called the Principal[s]), as Principal(s), and _____ (Hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Midland, Texas a home rule municipal corporation of Midland County, Texas, (hereinafter called the Obligee), in the amount of _____ DOLLARS ($ _____) for the payment whereof the said Principal and surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____day of _____ , 20___ , for the furnishing of materials and equipment to perform all labor and work necessary for the construction of _____Idlewilde Drive Storm Drain Improvements_____ , specifically including in the scope of this work and bond, the additional maintenance guaranty provisions set forth in the contract conditions, which contract is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein, as well as the Principal's primary obligation to perform according to plans and specifications.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform the work in accordance with the plans, specifications, instructions to bidder, general and special conditions and other contract documents, including any addendum thereto, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED further that if any legal action be filed upon this Bond venue shall lie in Midland County, State of Texas.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications or drawings accompanying the same, or any assignment of the contract as may be provided for in the instructions to bidders, shall in anywise affect its obligation on this Bond, and it does waive notice of any such change, extension of time, alteration or addition to the terms of the contract, assignment thereof, or the work to be performed thereunder.

IN WITNESS WHEREOF, the said Principal and surety do sign and seal this instrument, this _____ day of _____ , 20___.

_____	_____
Principal	Surety
By _____	By _____
Address _____	Address _____
_____	_____
_____	_____

APPROVED AS TO FORM:

_____

City Attorney

NOTE: Attach Power of Attorney

PAYMENT BOND

THE STATE OF TEXAS §

COUNTY OF MIDLAND § SURETY NO _____

KNOW ALL MEN BY THESE PRESENTS, THAT _____ of the City of _____ of the County of _____ and State of Texas as Principal, and _____, as Surety, are held and firmly bound unto the City of Midland, Texas, as Obligee, in the amount of _____ DOLLARS ($ _____) for the payment whereof the said Principal and Surety bind themselves, their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____ day of _____, 20__, for the furnishing of materials, equipment to perform all labor and work necessary for Idlewilde Drive Storm Drain Improvements, hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, the condition of the obligation is that if the said Principal shall pay all claimants supplying labor and material to him or a subcontractor in the prosecution of the work provided for in said contract, then this obligation shall be null and void; otherwise, it is to remain in full force and effect.

Surety, for value received, stipulates and agrees that no change, extension of time alteration or addition to the terms of the contract, or to the work performed there under, or the plans, specifications of drawings accompanying the same, or any assignment of the contract as may be provided for in the instructions to bidders, shall in anywise affect its obligation on this Bond, and it does waive notice of any such change, extension of

time, alteration or addition to the terms of the contract, assignment thereof, or to the work to be performed there under.

IN WITNESS WHEREOF the said Principal and Surety have signed and sealed this instrument, this _____ day of _____ , 20___ .

_____	_____
Principal	Surety
By _____	By _____
Address _____	Address _____
_____	_____
_____	_____

APPROVED AS TO FORM:

_____

City Attorney

NOTE: Attach Power of Attorney

CERTIFICATE OF PAYMENT

THE STATE OF TEXAS §

COUNTY OF MIDLAND §

_____Idlewilde Drive Storm Drain Improvements_____

The undersigned states that all debts, bills, and expenses that were incurred by the undersigned, his agents, or subcontractors employed by him, for labor, wages, materials and other purposes furnished for the above project have been paid and satisfied in full.

The undersigned, as general contractor for the above described project agrees to indemnify, hold harmless and defend the City, its officers, agents, and employees, from and against all claims and suits for damages, expenses, including court costs and attorney fees, arising out of or resulting from the undersigned contractor, his agents or subcontractors employed by him for expenses, warranties for items furnished, or labor performed and for any party that has supplied materials in connection with the repair or construction of the above referenced premises.

The undersigned contractor agrees to waive any and all claims it may have against the City, associated with, resulting from or arising out of the work performed at the above premises.

Further, the undersigned states that all labor performed by the undersigned, his agents, and subcontractors employed by him, has been completed in the usual and customary workmanlike manner and all work performed is accompanied with the usual and appropriate warranties for such work or repair, absent any disclaimer previously approved by the City of Midland.

I, the undersigned, release and relinquish unto the City of Midland, and their assigns the above described lien upon the above referenced property and hereby certify that all debts, bills, and expenses incurred by the undersigned, his agents, or subcontractors employed by him in connection with work done at the above

premises have been fully paid, in exchange for payment in full to be made by the City of Midland for the performance on the above described premises.

WITNESS MY HAND on this _____ day of _____, 20_____.

_____
Signature

_____
Typed or Printed Name

_____
Title

_____
Name of Company

SUBSCRIBED AND SWORN to before me on the _____ day of _____, 20_____.

_____
Notary Public, State of Texas

_____
Typed or printed name

_____
My Commission expires:

Form Revised December 2022

City of Midland Specifications

PREPARATION OF RIGHT OF WAY

1. GENERAL

Includes the preparation of right-of-way for construction by clearing, grubbing, removing and disposing of all obstructions and objectionable material from the right-of-way and designated easements, which is not specifically provided for on the plans.

Obstructions and objectionable material refer to all objects or material that do not meet the quality of standards for the courses of pavement to be constructed or which protrude into the excavation for slopes.

Measurement and Payment - Measurement and payment will be at the units and prices for the applicable bid item in the proposal.

When no specific bid items are included in the bid proposal for work specified under this section this work shall be considered as incidental to other items of work and the cost shall be included in the bid for these items. No separate payment will be made.

2. CONSTRUCTION METHODS

Removal - Obstructions and objectionable material to be removed by blading, plowing, bulldozing, or other methods approved in writing by the Engineer. The use of explosives will not be permitted. Solid objects must be removed to a depth of at least one (1) foot below the finished slope or subgrade elevation. Hollow objects must be removed entirely.

Disposal - Material to be removed from the right-of-way becomes the property of the Contractor. If disposal areas are available, they will be indicated on the plans.

Preservation of Trees and Shrubs - Trees and shrubs to be preserved in the right of way are shown on the plans and must be protected from injury during construction.

Removal of Concrete - Cut concrete at the right-of-way line straight and vertical by sawing or other approved methods prior to the removal of concrete in the right-of-way.

EXCAVATION, EMBANKMENT AND PREPARATION OF SUBGRADE 1
1. GENERAL 2
2. CONSTRUCTION METHODS 2

EXCAVATION, EMBANKMENT AND PREPARATION OF SUBGRADE

1. GENERAL

Includes the excavation, embankment and preparation of subgrade determined by the lines, grades and sections shown on the plans and in accordance with the provisions of the specifications.

Excavation - Includes excavation to planned grade, disposal of the material, removal of unsuitable subgrade material and borrow material when required in the construction. All excavation to be classified as common.

Embankment - Consists of excavated or borrow materials placed and compacted in horizontal layers in accordance with the specifications.

Subgrade - The upper eight inches (8") of embankment or the upper eight inches (8") below the roadway excavation finished grade. The subgrade shall extend from six inches (6") back of curb to six inches (6") back of curb where curb and gutter is to be constructed.

Measurement and Payment - Measurement and payment to be at the units and prices for the applicable bid items in the proposal.

2. CONSTRUCTION METHODS

Excavation - Made at the location and to the lines and grades shown on the plans in areas previously prepared in accordance with provisions of Section 2A. Dispose of excess material not required in the embankment and material that is unsuitable for subgrade. Excavation tolerance to be plus or minus 1/10 foot from the plan grade.

The area between the curb and property line shall be excavated or filled, whichever is necessary, to curb height at back of curb and finished to a straight even surface to the property line. The minimum elevation at the property line shall be the elevation of the top of the curb. The maximum elevation at the property line shall be equal to a rise of 1/4 inch per foot from the back of the curb to the property line.

During the excavation of this project, it will be required that all parkways be excavated and shaped at the same time the roadway is excavated. Excess excavation will be disposed of at locations approved by the Engineer.

Embankment shall be constructed at the locations and to the lines and grades shown on the plans in areas previously prepared in accordance with Section 2A of these specifications. Top eight inches (8") of natural ground to be compacted

to embankment density requirements. Embankment shall be constructed from suitable material obtained from the excavation or borrow free of roots, rocks in excess of three inches (3"), debris and other objectionable material. Excavation deficiencies shall be supplemented from a borrow source approved by the Engineer. Embankment shall be constructed in uniform horizontal layers not to exceed eight inches (8") of loose depth and compact with suitable equipment to a minimum of ninety percent (90%) AASHTO T180. The materials shall be processed by aeration or watering to bring the material to the approximate optimum moisture. Dry layers will not be permitted. Soft spots that develop in the embankment shall be removed and replaced with suitable material. No payment will be made for removal of soft spots. Tolerance for embankment grading shall be one-half foot (1/2) plus or minus the plan grade.

Preparation of Subgrade - Eight inches (8") of the upper portion of the embankment or excavation shall be shaped and compacted to a minimum density of 95 percent (95%) AASHTO T180 and finished within a tolerance of one-half inch (1/2") in ten feet (10'). The finished subgrade shall be protected and maintained in a satisfactory condition until covered by succeeding construction.

Compaction Tests - Field density tests will be made by the Owner or by a laboratory selected by the Owner. The Contractor shall notify the Engineer when compaction has been achieved. The Contractor shall allow 24 hours for scheduling of test. Prior to the taking of subgrade density test, the entire subgrade will be tested by proof-rolling using a pneumatic roller weighing not less than 50,000 lbs. gross with tire pressure being not less than 110 psi. Any soft spots, pumping, or other evidence of weakness shall be remedied before density tests are made. Proof rolling shall be in the presence of the Engineer or his duly authorized representative.

The City will pay the cost of initial density tests made on the subgrade. If the subgrade fails to meet the density requirements on the first test, the contractor will be required to have subsequent density tests made by the commercial lab selected by owner. The cost of all subsequent density tests will be born by the contractor.

08/07

CONCRETE CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS,

VALLEY GUTTERS, CENTER DRAINS AND RIP RAP

1. GENERAL

Includes the construction of concrete curb and gutter, sidewalks, driveways, valley gutters, center drains and rip rap in accordance with lines, grades and the sections shown on the plans and constructed in full compliance with provisions of the specifications.

A proven performance record by the Texas Highway Department shall be supplied by material producers for all materials supplied by them.

2. MATERIALS

Concrete - All concrete other than rip rap shall be Class "A" concrete in accordance with Texas Highway Department specifications Item No. 421. Concrete for rip rap shall be the class as shown on the plans and detail drawings. When no concrete class is shown the plans concrete for rip rap shall be Class "B" concrete.

Concrete batch designs shall be furnished for each project and shall include all classes of concrete proposed for use on the project.

Reinforcing Steel - Reinforcing steel shall be deformed bars or wire mesh fabric conforming to the requirements of "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" Item No. 440 and shall be of the sizes and grades as shown on the plans.

The contractor, at his option, may use fiber reinforcing in lieu of the wire mesh for all concrete slab on grade. When fiber reinforcing is used, it shall be "Fiber Mesh" or "Caprolan RC" or approved equal. The material and rate of application shall be approved by the Engineer prior to its use.

Expansion Joints - Bituminous pre-molded joint filler shall be composed of top grade fiber, treated by special impregnation system with water repellent bituminous materials. It shall be a non-extruding type, resilient, expanding on release of compression, preventing open joint crevices. The pre-molded joint filler shall be of such character, that it will not be deformed by handling during hot weather, nor shall it become brittle in cold weather. It shall be free from visible external defects such as holes, ragged or untrue edges, breaks, cracks or tears. It may be covered on both sides with paper to facilitate handling.

The joint filler shall be accurately cut to the dimensions and shapes required. It shall be of the thickness required by the plans, or as specified elsewhere.

3. CONSTRUCTION METHODS

GENERAL

No concrete shall be placed when, in the Engineers opinion, weather or other conditions would be detrimental to the structure placed. No concrete shall be placed on grade when the ground temperature is 35^{o} F or lower. Concrete may be placed when the ground temperature is rising from 35^{o} F. Concrete placed in cold weather shall be protected from freezing for 72 hours after being placed.

CURB AND GUTTER

EXCAVATION AND SUBGRADE - Excavation for curb, gutter, and combined curb and gutter shall be done with the subgrade excavation for the street. Street subgrade shall extend from six inches (6") back of curb to (6") back of curb and shall be compacted for a full width to a minimum of 95% AASHTO T180-61. Where subgrade is more than three inches (3") below bottom of curb, fill shall be compacted caliche base constructed from six inches (6") back of curb to six inches (6") back of curb as specified for base course.

Whenever subgrade or base is dry or dusty, it shall be thoroughly moistened, not made muddy, before the concrete is placed.

Forms - Forms shall be of steel, of a type to be approved by the Engineer, except that curves may be formed with wood sections built up or laminated, upon prior approval by the Engineer.

The forms shall be attached securely to stakes, shall be set true to line and grade, and braced sufficiently to remain true during the placing and tamping of the concrete. Forms shall be thoroughly cleaned and oiled before each use.

Curves - All changes in direction of the curbs shall be by means of true circular curves of the radii as shown on the plans.

Expansion Joints - Expansion joints shall be placed between curb and gutter sections at the tangent points of all curves, at each side of the inlet boxes, drives, alleyways, and at intervals of not more than forty feet (40') in straight runs. The expansion material shall be pre-molded three-fourths inch (3/4") in thickness, and shall conform to the requirements of expansion material as specified herein. It shall be cut to the full size and shape or the cross section of the curb and gutter, less one-half inch (1/2") from the finished surface thereof. The edges of sections against the joint shall be finished with an edging tool and the joint raked clean of concrete.

Finishing - There shall be provided on the job a metal screed or mule designed to give proper shape to the curb and gutter. It shall be bent to the exact shape of the finished curb and gutter and the forward edge turned up slightly to prevent disturbing the mortar. It shall be designed to ride on the forms and when properly manipulated shall leave the curb and gutter in its proper shaped condition. An "S" trowel shall be used to finish the surface and minor imperfections shall be corrected with a mason's trowel. Care shall be taken to finish

the gutter flow line to a true, uniform grade. All edges shall be finished with an edging tool, and joints marked with a jointer. Joint marks shall coincide with actual joints and shall be straight and true.

Curing - The completed curb and gutter, shall be cured in accordance with the requirements of the item "Membrane Curing", Texas Highway Department Item 531.

DRIVEWAYS AND ALLEY RETURNS

Driveways and alley returns shall be constructed of Class "A" concrete to the lines and grades as shown on the plans and detail sheets. All driveways and alley returns shall be reinforced as shown on the detail drawings.

Excavation and Subgrade - Excavation shall be accomplished in the same manner as for streets and curbs. The subgrade for all driveways and alley returns shall be compacted to 95% modified proctor density for 8 inches depth.

Driveways for single family residences and property used for two family residential purposes (duplexes) may be placed on the compacted subgrade. All other driveways shall be considered as commercial driveways and shall be constructed on 6 inches compacted flexible base.

Flexible Base - Commercial driveways and alley returns shall be constructed on 6 inches of flexible base conforming to Section 2-C- Flexible Base, Caliche.

Forms - Forms shall be constructed of steel or, when approved by the engineer, wood conforming to the requirements for curb and gutter forms.

Expansion Joints - Expansion joints shall be placed at the ends of abutting curb and gutter at the end of radii for all driveways and alley returns. In addition, expansion joints shall be placed at the ends of abutting sidewalk sections and at any point where the driveway or alley return abuts another concrete structure. Expansion joint material shall be pre-molded three fourths inch (3/4") in thickness, cut to the shape and dimensions required and shall extend the full depth of the concrete.

Finishing - Shaping and finishing of driveways and alley returns shall be accomplished by using a screed to shape the driveway or alley return to the lines and grade required. Finishing shall be accomplished by use of wooden floats and stiff bristled brushes or brooms. The last finish shall be by brushing or brooming in
A direction transverse to the direction of traffic.

During the entire finishing process care shall be taken to maintain the true gutter invert in line with the street curb and gutter.

Curing - Finished driveways and alley returns shall be cured in accordance with the requirements "membrane curing" "Texas Department of Highways and Public Transportation, 1982 Standard Specifications for Highways, Streets and Bridges", Item Number 531.

CONCRETE VALLEY GUTTERS, CENTER DRAINS AND DRAINWAYS

Concrete slab type street drainage structures with or without curbs, shall be constructed of Class "A" concrete to the lines and grades as shown on the plans and detail sheets or as may be established in the field by the engineer.

Subgrade excavation preparation and compaction and flexible base shall be the same as specified for street construction. All drainage structures within the roadway shall be constructed on a flexible caliche base so that the thickness of the concrete slab plus base is equal to the thickness of the hot mix asphaltic concrete surface plus base.

Forms - Forms shall be as specified for curb and gutter.

Reinforcing - All slab type drainage structures shall be reinforced as shown on the plans and detail drawings. Care shall be taken to maintain all reinforcing in good condition and at its proper location within the slab.

Expansion Joints - Expansion joint material shall be as specified for curb and gutter and for driveways and alley returns.

Expansion joints for valley gutter shall be placed at the ends of radii and at the juncture between the fillet and the cross valley as shown on the detail sheet.

For center drains, expansion joints shall be placed at the ends of widened or transition sections and at each end of a section containing a manhole or other structure and at intervals of sixty feet (60') measured along the center line of the drain.

Additional expansion joints shall be placed where drainage slabs abut backs of curbs, sidewalks and at contact points with other concrete structures.

Contraction Joints - Contraction joints shall be spaced at 15' intervals along the center line of center drains. These contraction joints shall be saw cut 3/8" wide minimum and 1/4 the depth of the slab using an approved concrete saw.

Saw cut contraction joints shall be made after the concrete has set sufficiently to prevent excessive raveling during sawing and shall be completed before the concrete is 48 hours old.

Finishing - Finishing shall be the same as for alley returns and driveways with the last finishing operation for structures subject to vehicular traffic being by broom or stiff brush in a direction transverse to the direction of traffic.

Curing - Curing shall be the same as for curb and gutter and driveways and alley returns.

SIDEWALKS

Sidewalks shall be constructed of Class A" concrete to the lines and grades as shown on the plans and detail drawings or as may be established in the field by the engineer. Sidewalks shall be constructed parallel to the back of the curb and on a grade parallel to

the top of curb grade. The minimum thickness for any sidewalk is 4 inches. The minimum width of any sidewalk is 4 feet.

Excavation and Subgrade - Excavation for sidewalk shall be made with street excavation where applicable. Care shall be exercised in excavating for sidewalks. Any over excavation or any fill required for sidewalk must be brought to grade in lifts not to exceed two inches (2") and thoroughly tamped. Subgrade for sidewalks shall be compacted to at least the density of the adjacent soil or to 85% modified proctor whichever is greater.

When a sidewalk is to be constructed on an embankment the fill must extend at least 3 feet beyond the edge of the sidewalk.

If the subgrade is dry or dusty it must be thoroughly moistened but not made muddy before concrete is placed.

Forms - Forms for sidewalks may be either steel or wood. Forms must be in good shape and true to line and grade. If nominal 2" x 4" lumber is used the subgrade must be finished one half inch (1/2") below the bottom of the form to provide the required 4 inch thickness.

Expansion Joints - Expansion joint material shall be pre-molded conforming to these specifications and shall be one half inch (1/2") thick. The expansion joint shall extend the full depth of the sidewalk.

Expansion joints shall be placed at points where the sidewalk contacts the back of curb, at all junctures between sidewalks all directions, and at all points where the sidewalk abuts a driveway, alley return or other concrete structure including fence foundations.

Transverse expansion joints shall be constructed in the sidewalk at intervals not exceeding twenty eight feet (28') as measured along the centerline of the walk except for sidewalks that are constructed wider than four feet (4') in which case expansion joints may be placed at intervals that are multiples of the width but not exceeding thirty feet (30').

Contraction Joints - Contraction joints consisting of trowel cuts one and one half inches (1-1/2") deep shall be spaced at four foot (4') intervals along the sidewalk. Contraction joints shall be edged using an edging tool with a 1/4 inch or 3/8 inch radius.

For sidewalks wider than four feet (4') contraction joints may be placed at intervals equal to the width of the walk up to but not exceeding ten feet (10').

Finishing - Sidewalks shall be "struck off" with a screed to provide an even surface and float finished using a wooden float.

The final finish on the sidewalk shall be accomplished by brooming or brushing using a stiff bristled brush or broom with the final strokes being in the transverse direction.

Curing - Curing shall be as specified for curb and gutter and driveways and alley returns.

CONCRETE RIP RAP

Concrete rip rap shall be constructed of concrete of the class and to the line and grades as shown on the plans.

Excavation and Subgrade - Care shall be taken not to over excavate for rip rap. The subgrade for rip rap shall be compacted to at least the density of the adjacent undisturbed soil or 85% modified proctor whichever is higher.

Forms - Forms, where required, may be either steel or wood. Forms must be in good condition and true to line and grade.

Expansion Joints - Expansion joints, where required, will meet the requirements of expansion joints materials as specified herein and will be placed as shown on the plans or directed by the engineer.

Finishing - Finishing shall be by screed and wooden float to produce true uniform surface.

Curing - Curing shall be as specified for other concrete herein.

Slope Paving - Slope paving may be required behind the curb or behind sidewalks where street paving requires deeper cuts in developed areas. Slope paving shall be constructed of Class "A" concrete and shall be constructed to the lines and grades as shown on the plans or as established in the field. Slope pavement shall be four inches (4") thick and shall be constructed in accord with the specifications for sidewalks.

When no slope grade is given on the plans the slope gradient shall be l:l.

Unless listed separately on the bid proposal, slope pavement shall be measured and paid for as sidewalk.

4. BACKFILL AND CLEANUP

GENERAL

Backfill and clean up are an integral part of the various items covered by this specification and must be completed for each item before that item will be considered for payment.

CONCRETE STRUCTURES WITHIN THE PAVED AREA OF STREETS

Backfill and clean up for concrete structures within the paved areas of streets, alleys, etc. shall receive special attention to assure the integrity of the street pavement.

Structures constructed in previously paved areas shall have sufficient surface removed along with base and subgrade where necessary to set full face forms for the concrete. As soon as the forms are removed all loose material shall be removed from the form trench and the trench filled to the base level with Portland cement stabilized backfill material

consisting of two (2) sacks Portland cement to one (l) cubic yard of caliche base material or one (l) cubic yard "blow sand". When the cement stabilized backfill has cured the pavement edge shall be saw cut to provide true and straight lines and the pavement restored to its original or revised grade using Hot mix asphaltic concrete conforming to the requirements of Section 2-F of these specifications.

For structures constructed on previously prepared subgrade or base course, clean up and backfill shall be considered complete when the subgrade or base course has been made ready to receive the next course.

When a structure is constructed on a finished base course and it is necessary to remove base material to set forms, backfill and cleanup shall be as described for previously paved areas and shall be considered complete when the base course is made ready to receive the surface course or courses.

BACKFILL BEHIND CURBS AND ALONG SIDEWALKS

Backfill behind curbs and along sidewalks that is to be grassed shall be made using good top soil. Top soil shall be free of caliche, rocks, clods, lumps, debris and other objectionable material. This backfill shall be compacted to at least the density of undisturbed adjacent soil but not less than 85% modified proctor.

Backfill behind curbs and along sidewalks that is to receive paving shall be constructed to conform to the base and subgrade of the adjacent paving and shall be compacted to 95% modified proctor. Or the contractor may elect to backfill to the top of the base with two (2) sack cement stabilized backfill.

In undeveloped areas and in areas where no sidewalks exist the contractor shall slope from the back of the curb to a maximum height of 1/4 inch per foot rise from the top of the curb to the property line on a straight line grade. The minimum elevation at the property lines shall be top of curb elevation.

In deeper cut areas slope paving may be required. When slope paving is required it shall be constructed to the lines and grades shown on the plans. Backfill and shaping beyond the slope paving shall be in accord with the applicable portions of this specification.

08/07

CONCRETE CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS **1**

VALLEY GUTTERS, CENTER DRAINS AND RIP RAP **1**

1. GENERAL 1
2. MATERIALS 1
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GENERAL *2*
CURB AND GUTTER *2*
DRIVEWAYS AND ALLEY RETURNS *3*
CONCRETE VALLEY GUTTERS, CENTER DRAINS AND DRAINWAYS *4*
SIDEWALKS *4*
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4. BACKFILL AND CLEANUP 6

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Updated 3/06

CONCRETE STRUCTURES

1. GENERAL

This specification covers concrete structures including but not limited to junction boxes, culverts, head walls, cast in place manholes, valve vaults, meter vaults and retaining walls.

2. MATERIALS

CONCRETE

Concrete for cast in place manholes, junction boxes, storm sewer inlet boxes, valve vaults and direct traffic culvert and bridge decks shall be a modified class "C" concrete using a minimum of 6 sacks cement per cubic yard with a maximum water content of 5 gallons per sack of cement and producing a concrete with 4000 psi 28 day compressive strength.

Concrete for other structures shall be class "A" as specified in "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" item number 421. Concrete for riprap shall be class "B".

Reinforcing steel shall conform to the requirements of item number 440 or "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" and shall be of the sizes and grades as shown on the plans.

3. CONSTRUCTION

Construction of concrete structures shall be in accordance with the provisions of item 420 "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges".

FLEXIBLE BASE, CALICHE 1
1. GENERAL 2
2. MATERIALS 2
3. CONSTRUCTION 3
4. TESTING 3

FLEXIBLE BASE, CALICHE

1. GENERAL

This item consists of the construction of a caliche flexible base course to the lines, grades and thickness shown on the plans and in accordance with the provisions of the specifications.

Qualification of Material Source - There will be no designated material sources, but the source proposed by the Contractor must be approved by the Engineer. The contractor shall furnish evidence of capability to crush and screen the material with suitable equipment.

Measurement and Payment - Measurement and payment to be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Material from the approved source shall meet the following requirements when tested in accordance with the referenced testing standards:

Gradation - Tested by ASTM C 136-67 to meet the following gradation limits:

Sieve Size	Percent Passing
1-3/4"	100.0
7/8"	65-90
3/8"	50-70
No. 4	30-60
No. 40	15-35

Liquid Limit and Plasticity Index **-** Tested by ASTM D423-66 and D 424-59.

Liquid Limit - 30.0 Maximum
Plasticity Index - 10.0 Maximum
Triaxial Classification - Tested by Texas Highway Department Method TEX 117-E, Part II - minimum class 3.0.

Source Quality Control - The contractor shall exercise caution in the operation of the material source to prevent the inclusion of inferior materials.

3. CONSTRUCTION

A. The subgrade shall be finished true to the lines and grades as shown on the plans or as established by the Engineer and finished within specified tolerances and properly maintained to prevent drying and/or loosening of the surface.

No base material may be dumped on any subgrade until it has been tested and approved by the Engineer.

B. Flexible caliche base material shall be placed in uniform courses and processed to provide a uniformly mixed base course of the proper moisture content for compaction. The processing and compaction procedure used shall provide a uniform base course compacted to ninety-five percent (95%) modified proctor density (YACHT T180) minimum. The minimum thickness of any one compacted course shall be three inches (3"). The maximum thickness of any one compacted course shall be eight inches (8").

Any soft or segregated spots that appear in the base shall be removed, replaced or reprocessed and recompacted prior to final finishing of the base. The finished base shall conform to the lines and grades as shown on the plans or established by the Engineer. Finished tolerances shall not exceed one half inch (1/2") in ten feet (10').

The finished base shall be primed as soon after finishing as practical and shall be protected until the hot mix asphaltic concrete surface is applied. In no case will prime be applied until the finished base has been approved by the Engineer.

4. TESTING

A. All test for approval of the source shall be performed by a commercial lab selected by the owner and shall be paid for by the contractor.

B. Gradation and soil constants tests (ASTM C-136, D423 and D424) and THD Triaxial Test (THD TEX117-E Part II) will be performed for source approval. Should the appearance, workability or other visual checks indicate a possible change in the material being furnished, the Engineer may require the contractor to retest the material for source approval.

C. Field quality control test will consist of the finish tolerance test and density test.

The finish tolerance test will be performed by the contractor at his expense using a 10' rolling straight edge. This test shall be performed at the direction of the Engineer or his representative. When required, the test shall consist of checking one path in each lane with the rolling straight edge.

Density test will be made by the City or a commercial laboratory chosen by the City using Troxler 3411-B nuclear density gauges or approved equal at the minimum rate of one test for each 1000 square yards of base. In no case shall less than three tests be run on any one area processed as a unit. The City will bear the cost of the first test or set of tests only. If the base fails the first test the contractor, at his own expense, will be required to have all subsequent tests performed by the commercial laboratory chosen by the city.

8/07

BITUMINOUS PRIME

1. GENERAL

This item consists of the application of a bituminous prime coat to the finished caliche base in accordance with the provisions of the Specifications.

Qualification of Material Source - Material shall be supplied by a producer with a proven performance record of acceptance by the Texas Highway Department.

Measurement and Payment - Measurement and payment will be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Cut-back asphalt grade MC-30, Texas Highway Department Item 300.

Source Quality Control - Certificates of compliance to be furnished by the producer to the Engineer.

3. CONSTRUCTION METHODS

Condition of Base - The surface of the base shall be tightly compacted to the line and grade shown on the plans and within the tolerances of the specifications. The surface shall be clean and the base shall contain sufficient moisture to assure the proper penetration of the prime.

The prime shall be applied with an approved distributor to the surface of the base at a rate of between 0.15 and 0.40 gallon per square yard. The application rate shall be varied to meet field conditions and to obtain uniform coverage, and adequate penetration. Properly applied prime coat should penetrate from 3/8" to 1/2" into the base and should cure in approximately 72 hours with ambient temperatures at or near 70 degrees F. The prime shall be applied at a temperature within the range of temperatures recommended in Item 300 of Texas Highway Department Standard Specifications. The temperature shall be varied within this range to provide a viscosity that will assure even spreading and penetration of the base. Air Temperatures at the time of application shall be above 50'F.

BITUMINOUS TACK

1. GENERAL

This item consists of the application of a bituminous tack coat to the primed base or existing asphaltic concrete or Portland cement concrete pavement in accordance with the provisions of the specification.

Qualification of Material Source - Material shall be supplied by producer with a proven performance record of acceptance by the Texas Highway Department.

Measurement and Payment - Measurement and payment will be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Cut-back asphalt grade RC-250, Texas Highway Department Item 300.

3. CONSTRUCTION METHODS

Conditions of Surface - Prior to application of tack to the base course the prime must be completely penetrated into the base and the surface cleaned of foreign objects.

The tack shall be applied with an approved distributor at a rate of between 0.05 and 0.10 gallons per square yard. The temperature of application shall be within the range recommended by the Texas Highway Department in Item 300. The surface temperature to which tack is being applied shall be above 50 degrees F. at the time of application.

When the asphaltic concrete surface is being placed on primed caliche base, use of the tack coat may be waived by the Engineer if the contractor can show that adequate adhesion of the surface being placed to the base course is achieved without it.

Tack coat shall be placed on all asphaltic concrete or portland cement concrete surfaces on which an additional course of asphaltic concrete surfacing is to be placed. The tack coat shall be rolled with a pneumatic roller to assure even distribution over the entire surface and to achieve proper penetration into and adhesion to the surface being overlayed.

HOT MIX ASPHALTIC CONCRETE

I. GENERAL

Includes the construction of the hot mix asphaltic concrete surface in accordance with lines, grades and the sections shown on the plans and with the provisions of the specifications.

Qualification of Material Sources - Producers of oil asphaltic concrete mixture to have a proven record of acceptance by the Texas Highway Department.

Measurement and Payment - Measurement and payment to be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Oil Asphalt - Oil asphalt grade AC-l0 or AC-20, Texas Highway Department Item 300. When no asphalt grade is shown on the plans, and unless directed otherwise by the Engineer, asphalt for this project shall be grade AC-10.

Coarse Aggregate - Crushed stone or crushed gravel with a minimum of 75 percent of the aggregates having two or more crushed faces. Additional requirements:

(a) Los Angeles Abrasion: ASTM C l3l, Wear not to exceed 40.

(b) Decantation: Maximum 2.0 percent by weight

Fine Aggregates - Natural sand and screenings crushed from the same or similar material meeting the requirements of the course aggregates. Additional requirements.

(a) Plasticity Index: Maximum of 6.

(b) Sand Equivalents: Minimum of 50 for each individual fine aggregate.

Paving Mixtures - The paving mixture(s) shall be as shown on the plans and details. If no mixtures are shown on the plans surface or wearing courses up to l-3/4 inches thick shall be Type D, base courses up to 2 inches thick shall be Type C and base courses over 2 inches thick shall be Type B or Type A.

(a) Gradation: The master gradations for the paving mixtures are:

TYPE "A" (Coarse Graded Base Course):	Percent Aggregate by weight or volume
Passing 2" sieve	100
Passing l-3/4" sieve	95 to 100
Passing l-3/4" sieve, retained on 7/8" sieve	16 to 42
Passing 7/8" sieve, retained on 3/8" sieve	16 to 42
Passing 3/8" sieve, retained on No. 4 sieve	10 to 26
Passing No. 4 sieve, retained on No. l0 sieve	5 to 21
Total retained on No. l0 sieve	68 to 84
Passing No. l0 sieve, retained on No. 40 sieve	5 to 21
Passing No. 40 sieve, retained on No. 80 sieve	3 to 16
Passing No. 80 sieve, retained on No. 200 sieve	2 to 16
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 7 percent of the mixture by weight.

TYPE "B" (Fine graded Base or Leveling-up course)	Percent Aggregate by Weight or Volume
Passing l" sieve	100
Passing 78" sieve	95 to 100
Passing 7/8" sieve, retained on 3/8" sieve	21 to 53
Passing 3/8" sieve, retained on No. 4 sieve	11 to 42
Passing No. 4 sieve, retained on No. l0 sieve	5 to 26
Total retained on No. l0 sieve	58 to 74
Passing No. l0 sieve, retained on No. 40 sieve	6 to 32
Passing No. 40 sieve, retained on No. 80 sieve	4 to 21
Passing No. 80 sieve, retained on No. 200 sieve	3 to 21
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 7 percent of the mixture by weight.

Type "C" (Coarse Graded Surface Course):	Percent Aggregate by Weight or Volume
Passing 7/8" sieve	100
Passing 5/8" sieve	95 to 100
Passing 5/8" sieve, retained on 3/8" sieve	16 to 42
Passing No. 4 sieve, retained on No. l0 sieve	11 to 37
Total retained on No. l0 sieve	54 to 74
Passing No. l0 sieve, retained on No. 40 sieve	6 to 32
Passing No. 40 sieve, retained on No. 80 sieve	4 to 27
Passing No. 80 sieve, retained on No. 200 Sieve	3 to 27
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 7 percent of the mixture by weight.

TYPE "D" (Fine Graded Surface Course):	Percent Aggregate by Weight or Volume
Passing l/2" sieve	100
Passing 3/8" sieve	85 to 100
Passing 3/8" sieve, retained on 4" sieve	21 to 53
Passing No. 4 sieve, retained on No. l0 sieve	54 to 74
Total retained on No. l0 sieve	54 to 74
Passing No. l0 sieve, retained on No. 40 sieve	6 to 32
Passing No. 40 sieve, retained on No. 80 sieve	4 to 27
Passing No. 80 sieve, retained on No. 200 sieve	3 to 27
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 4 to 8 percent of the mixture by weight.

TYPE "F" (Fine Graded Surface Course):	Percent Aggregate by Weight or Volume
Passing 3/8" sieve	100
Passing No. 4 sieve	95 to 100
Passing No. 4 sieve, retained on No. l0 sieve	58 to 73
Passing No. l0 sieve, retained on No. 40 sieve	6 to 26
Passing No. 40 sieve, retained on No. 80 sieve	3 to 13
Passing No. 80 sieve, retained on No. 200 sieve	2 to 11
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 6.5 percent of the mixture by weight.

(b) Tolerances: Deviations from job mix formula limited to:

(l) Sizes larger than the l0 sieve- Plus or Minus 4 percent.

(2) No. l0 sieve and smaller - Plus or Minus 3 percent.

(3) The deviation from the job mix formula shall be further limited in that the total deviation from the job mix formula between any two adjacent aggregate grades shall not exceed the allowable deviation for either one.

(4) Asphalt - Plus or Minus 0.3 percent.

(c) Density - The mixture shall be designed to produce an acceptable mixture within tolerance, at or near optimum density. The mixture molded in the laboratory should have the following percent of maximum theoretical density:

Minimum	Maximum	Optimum
96	98	97

(d) Stability: Minimum of 35 Hveem

Source Quality Control - Paving mixture and plant tests to be performed by laboratory selected and paid by the Owner, except as noted.

Job Mix Formula - The contractor shall submit a job mix formula, prepared by laboratory chosen by the owner, at least l0 days in advance of laying operations to allow time for review by the engineer. Substitution of one or more materials will require a new job mix formula and must be approved by the engineer.

The design of job mix formula whether for original submittal or revisions shall be paid for by the contractor.

Plant Tests - Check of raw material uniformity, quality and flow, hot bin gradations, temperature of mixture, mixture tests for density, stability and percent asphalt and other necessary tests to be performed bythe laboratory selected by the owner for each day's production.

Oil Asphalt - Producer to furnish certificates of compliance to the Engineer.

3. CONSTRUCTION METHODS

A. GENERAL

Condition of Base - The surface of the base shall be tight and free of debris. The prime coat shall be uniformly distributed, well penetrated and completely cured prior to application of the tack coat. If the mixture will adhere to the surface of the base without the application of a tack coat, the tack coat can be eliminated. If the surface of the base is one half (l/2") inch or more lower than the proposed bottom of the asphaltic concrete it shall be corrected by placing and compacting a level up course of the asphaltic concrete before the mat is placed on it.

Stockpiling, Storage, Batching and Mixing - Shall meet the requirements of Item 340, "Texas Highway Department l982 Standard Specifications for Road and Bridge Construction.

Weather Limitations - Shall be the requirements of Item 340,"Texas Highway Department l982 Standard Specifications for Road and Bridge Construction." With the added provision that no asphaltic concrete shall be placed when the surface on which the mat is to be placed is below 50 degrees F.

Thickness - Shall be as shown on plans. Unless shown otherwise on the plans, the maximum compacted thickness of any one course of asphaltic concrete shall be two and one-half (2-l/2) times the maximum aggregate size of the mixture being placed. The minimum shall be one (l) inch or one and one fourth (1-1/4) times the maximum particle size which ever is greater.

B. PLACING

Placing of Asphaltic Concrete shall be accomplished using an approved self propelled spreading and finishing machine with a heated vibrating screed capable of producing a surface that will meet the requirements of the typical cross section and the surface test, and when the mixture is dumped directly into the finishing machine shall have adequate power to propel the delivery vehicles in a satisfactory manner. The finishing machine shall be equipped with a flexible spring and/or hydraulic type hitch sufficient in design and capacity to maintain contact between the rear wheels of the hauling equipment and the pusher rollers of the finishing machine while the mixture is being unloaded.

The use of any vehicle which requires dumping directly into the finishing machine and which the finishing machine cannot push or propel in such a manner as to obtain the desired lines and grades without resorting to hand finishing will not be allowed. Vehicles dumping directly or indirectly into the finishing machine shall be so designed and equipped that unloading into the finishing machine can be mechanically and/or automatically operated in such a manner that overloading the finishing machine being used cannot occur and the required lines and grades shall be obtained without resorting to hand finishing.

Automatic screed controls will be required and shall meet the requirements item, 528 "automatic screed controls for asphaltic concrete spreading and finishing machines "Texas Department of Highways and Public Transportation 1982 Specifications for Construction of Highways, Streets and Bridges".

The screed shall be ski controlled using a ski of not less than l8' in length. Curb shoe control will not be allowed.

The spreading and finishing machine shall be maintained in good working order and operated by competent trained personnel.

The Engineer may require the contractor to place a test strip to prove the capability of the machine and the competency of the operating personnel to produce a satisfactory finished surface.

In dips and on curved surfaces where the ski control cannot be used, the surface will be controlled using a l0' straight edge.

Fillet areas, turn outs and other areas not accessible to the spreading machine may be hand laid provided a satisfactory surface is produced.

C. COMPACTION AND FINISHING

Compaction Requirements - The asphaltic concrete surface shall be compacted so that the compacted mixture will contain not more than seven percent (7%) nor less than three percent (3%) air voids.

The surface of the pavement, after compaction, shall be smooth and true to the established line, grade and cross section, and when tested with a l0 foot rolling straightedge, except as provided herein, the maximum deviation shall not exceed l/8 inch in l0 feet, and any surface not meeting this requirement shall be corrected as directed by the engineer.

Raking and Leveling - Minor leveling may be accomplished using asphalt rakes prior to compacting the surface. The surface shall be leveled by loosening the surface of the asphaltic concrete using an asphalt rake then adding or removing material and smoothing the surface. Any large aggregate worked to the surface in this process shall be removed before compaction. The large aggregate shall not be spread over the new asphaltic concrete surface.

Edges and joints with compacted asphalt or concrete gutters shall be carefully squared and excess material removed before compaction. Care shall be taken to see that NO excess material laps over onto the surface of existing asphaltic concrete paving or concrete gutters. Large aggregate worked to the surface in this process shall be removed. It shall not be spread over the new asphaltic concrete surface.

Rolling - In general rolling shall conform to the requirements of item 340 of the Texas Department of Highways and Transportation 1982 Specifications for Construction of Highways, Streets an Bridges except as modified herein.

It shall be the responsibility of the contractor to have rolling equipment available on the job to properly compact the paving mixture in place as required without delay to the lay down operation. Rollers provided shall meet the qualifications for their type as follows:

PNEUMATIC TIRE ROLLERS: The rollers shall be acceptable medium pneumatic tire rollers conforming to the requirements of the item, "Rolling (pneumatic tire)", Type B, unless otherwise specified on plans.

TWO AXLE TANDEM ROLLER: This roller shall be an acceptable power driven tandem roller weighing not less than 8 tons.

THREE WHEEL ROLLER: This roller shall be an acceptable power driven three wheel roller weighing not less than l0 tons.

THREE AXLE TANDEM ROLLER: This roller shall be an acceptable power driven three axle roller weighing not less than l0 tons.

Vibrating rollers will not be used without prior written approval of the engineer. Written approval will be granted only upon demonstration by the contractor that the roller and operator can produce a satisfactory surface within the tolerances of these specifications. Only the operator or operators thus approved will be allowed to operate the vibrating roller on this project.

Areas not accessible to standard rollers shall be compacted using trench rollers, impact tampers, hand tamps or other approved means that will produce the density and surface required.

JOINTS- Shall be carefully rolled to provide compaction of the asphalt against the existing surface or face of the concrete gutter. Joints between concrete gutters and Hot Mix Asphaltic Concrete shall be placed so that the HMAC will be approximately l/2 inch higher than the concrete when compaction is completed. At transverse joints such as valley gutters and fillet areas where finishing asphalt paving 1/2 inch above the edge of concrete will adversely affect ride quality the asphalt shall be finished 1/4 inch above the edge of the concrete.

Transverse joints shall be rolled in the transverse direction with the first pass extending approximately six (6") inches onto the new asphalt each additional pass shall extend approximately twelve (12") inches further onto the new asphalt until the full width of the roller is on the new asphalt. Longitudinal rolling may begin then.

All transverse joints shall be checked with a l0" straight edge while the material is

still hot enough to roll. Any corrections shall be made by loosening the material using an asphalt rake and adding or removing material and recompacting the surface. The surface shall be rechecked and when the joint is acceptable the asphalt spreading machine may proceed with the pass.

Final or finish rolling shall be accomplished using a two axle tandem roller to remove roller marks. This rolling shall be accomplished after the surface has cooled sufficient to minimize further marking but before it is too cool to respond to rolling.

STRAIGHTEDGES AND TEMPLATES - The contractor shall provide acceptable l0 foot straightedge for surface testing. Satisfactory templates shall be provided as required by the Engineer.

4. FIELD QUALITY CONTROL

Test Lots - Field Quality Control Tests shall be made by lot with a lot being the amount of contiguous surface laid in one day. No lot shall exceed l0,000 S.Y. If a days laying exceeds l0,000 S.Y., that days laying shall be divided into two approximately equal lots. The same lot divisions shall be used for all Quality Control Tests. Each separate block or combination of contingeous (blocks) of paving shall be considered as a separate lot even though they may be placed in a single day and do not comprise l0,000 S.Y. of surface.

Surface Tests - Surface tolerance tests will be performed in both longitudinal and transverse directions. The test for longitudinal surface tolerance will be performed with a ten-foot rolling straightedge furnished by the contractor, and calibrated and used in accordance with the manufacturer's recommendation or other approved method.

The maximum allowable deviation in surface shall be 1/8 inch in 10 feet. Tests for longitudinal surface tolerance will be performed by the contractor, accompanied by the engineer within 24 hours of the completion of a lot. One path in each lane for the length of the entire lot will be tested. The location of the test path (Distance from centerline or pavement edge) will be determined by the engineer through the use of random numbers. Any deviations in the surface finish of a roadway wearing course which exceeds l/4 inch must be corrected. After corrections have been made, the entire lot must meet the l/8 inch surface tolerance.

Thin course "scab on" patching will NOT be permitted. Corrections may be made by planning, milling and patching or by removing and replacing affected surface area.

When milling and patching is used to correct surface defects the minimum depth of removal shall be l".

For milling and patching or surface removal the area removed or milled shall be sufficiently large to avoid the appearance of patching.

When planning is used to correct defects the thickness of the remaining paving shall meet the thickness requirements as shown on the plans.

Surface tolerance test will be performed on the last or wearing course only.

Asphaltic concrete pavement constructed under these specifications that does not meet the surface tolerance requirements and is allowed to remain in place will be paid for at a reduced rate determined by multiplying the price bid for the wearing surface course by a surface tolerance quality factor. This rate shall apply to the entire lot.

Lower courses will not be affected by this quality factor but will be paid for at the price bid or such price as it may be affected by other quality factors.

The surface tolerance quality factor will be determined according to the following schedule:

Linear % of pavement exceeding 1/8 inch surface tolerance	Surface tolerance quality factor
0.0 to 1.0	1.0
1.1 to 1.5	0.9
1.6 to 2.5	0.8
over 2.5	0.5

Roadway surface requirements will not be applied for paved drives, aprons, turnouts, and other irregular sections, however, asphaltic concrete shall be placed in such a manner as to provide a neat and uniform appearance and shall be compacted by methods satisfactory to the engineer.

The contractor may request permission to reconstruct a portion of the pavement when, in his opinion, the surface tolerance quality factor can be improved. Upon approval of the engineer, the contractor shall take sufficient tests to isolate the portion or portions of pavement to be pre- constructed and remove and reconstruct the pavement. All costs in connection with this reconstruction are to be born by the contractor. The minimum width of this reconstruction shall be l/2 the street width unless approved otherwise in writing by the engineer. The portions reconstructed shall be re-tested and the surface tolerance quality factor recomputed using the new information along with the test from the area within the portion of the lot not reconstructed.

When other quality factor reductions are provided for on the plans or in the specifications the effect shall be cumulative ie: QFl x QF2 x QF3 x ....x QFn x unit price.

No payment will be made for pavement with a combined quality factor of less than 0.5.

Thickness Test - Thickness test will be made by the engineer on each course of asphaltic concrete laid. Test specimens shall be made by a commercial laboratory selected by the owner. Test specimens shall be cores having a minimum nominal diameter of 6". These cores shall be made in the presence of the inspector at locations designated by the inspector using an approved power operated coring machine.

For thickness and compaction test, each lot shall be divided into approximately equal sublots corresponding in width to each pass of the lay down machine and containing up to but not exceeding 2,000 square yards each. If a lot contains less than 2,000 square yards the engineer may, at his option, divide the lot into two equal sublots, or, if the contractor has a record of satisfactory workmanship, the engineer may waive tests on said lots.

The engineer will locate one test spot for each l,000 S.Y. and/or fraction thereof in each sub-lot using random numbers. If a spot thus located falls within one foot of a longitudinal joint or lip of gutter or within two feet of an unsupported edge or within l5 feet of the beginning or ending edge of a pass, the engineer will relocate the spot using random numbers. The commercial laboratory chosen by the owner will remove the test specimen from each designated spot, mark the specimen and the adjacent pavement for future reference and perform the required tests. Test specimens shall be removed with special caliper type tongs having circular jaws of the diameter of the specimen being removed. These jaws shall grip at least 1/2 of the circumference of the specimen. Screw drivers or other type of prying instruments shall not be used to remove the specimens.

The thickness of a specimen shall be determined by averaging four (4) measurements made at ninety degree (90) intervals around the specimen. Any thickness less than design thickness shall be considered as deficient.

For hot mix asphaltic concrete pavement less than 2 inches thick the maximum allowable deficiency in any one test specimen is l/8 inch provided that no more than twenty five percent (25%) of the specimens tested show a deficiency. For pavement in excess of 2 inches in thickness the maximum allowable deficiency in any one specimen shall be l/8 inch plus l/l6 inch for each additional inch of thickness provided that no more than twenty five percent (25%) of the test specimens show a deficiency.

When a test specimen has a greater deficiency and less than (25%) of the test specimens show a deficiency the contractor shall, at his own expense, determine the extent of the deficiency and correct it by removing and replacing the surface. The minimum width for such correction will be the full width of the pass or passes of the lay down machine in which the deficiency occurs.

The minimum length of such correction shall be three times the width removed. When more than (25%) of the test specimens show a deficiency the surface may at

the engineers option be declared uniformly deficient and the contractor shall correct the deficiency by removing and reconstructing the surface or by constructing an overlay of not less than l inch thickness over the deficient area. The construction of an overlay will require milling at lip lines and dips.

The corrected surface shall meet all the requirements of these specifications.

Asphaltic concrete pavement constructed under these specifications that is less than design thickness, if allowed to remain in place, will be paid for at a reduced rate determined by multiplying the unit price bid in the bid proposal by a thickness quality factor. This rate shall apply to the entire lot in which the deficiency is found.

The thickness quality factor for hot mix asphaltic concrete pavement less than 2 inches in thickness shall be:

Thickness Deficiency	Quality Factor
Maximum l/8" for any one specimen with no more than 25% of the specimens showing a deficiency.	l.0
Pavement not meeting the 25% limitation with an average specimen deficiency up to l/8 inch.	0.75
Average specimen deficiency of l/8 inch to l/4 inch	.55
Average deficiency of more than l/4 inch	0.0

The thickness quality factor for hot mix asphaltic concrete more than 2 inches thick will be l.0 if the maximum deficiency for any one specimen is l/8 inch plus l/l6 inch for each additional inch of thickness over 2 inches and not more than twenty five percent (25%) of the test specimens in the lot are deficient. For thickness test that fall outside this area either by single specimen thickness deficiency or more than twenty five percent (25%) of the specimens showing deficiency the thickness quality factor shall be computed as follows:

$$\text{Thickness Quality Factor} = \frac{1}{\left(\frac{1}{\text{Thickness Ratio}}\right)^2}$$

The thickness ratio for a lot is the average specimen thickness for that lot, with no allowance for thickness in excess of design, divided by the design thickness. For determining the average specimen thickness, those specimens in excess of design thickness shall be considered at design thickness.

The minimum thickness quality factor for which payment will be allowed is .55. Any pavement with a thickness quality factor below .55 will be considered as having a thickness quality factor of 0. This shall apply only if the contractor requests, in writing, to have this paving remain in place and this request is approved in writing by the engineer.

When the deficient area is in a lower course of a multi-course paving structure the contractor may reduce or correct the deficiency by increasing the thickness of the subsequent course or courses as follows:

When subsequent course is	Maximum increase in course thickness
Type B	1/2"
Type C	3/8"
Type D	1/4"

When corrected in this manner the thickness quality factor shall be determined using the combined thickness of the corrected courses and shall apply to all unit prices applicable to this lot.

The contractor may request permission to reconstruct a portion of the pavement when, in his opinion, the thickness quality factor can be improved. Upon approval of the engineer, the contractor shall take sufficient tests to isolate the portion or portions of pavement to be reconstructed and remove and reconstruct the pavement. All cost in connection with this reconstruction are to be born by the contractor. The minimum width of this reconstruction shall be l/2 the street width unless approved otherwise in writing by the engineer. The portions reconstructed shall be retested and the thickness quality factor recomputed using the new information along with the test from the area within the portion of the lot not reconstructed.

When other quality factor reductions are provided for on the plans or in the specifications the effect shall be cumulative ie: QFl x QF2 x QF3 x....x QFn x unit price.

No payment will be made for pavement with a combined quality factor of less than 0.5.

Compaction Test: Compaction test will be made by the commercial laboratory chosen by the owner on the core samples removed from the paving for thickness testing.

The percent air voids will be calculated using maximum theoretical specific gravity of the mixture.

The contractor may attempt to correct deficiencies in compaction by additional pneumatic rolling upon written permission of the engineer. Requests for permission to conduct additional rolling shall be submitted, in writing, to the engineer no later than three days following notification of the deficiency by the commercial laboratory and the additional rolling shall be completed within ten (l0) days following said notification weather permitting.

In no case shall the additional rolling be delayed beyond thirty (30) days from the date the surface was laid. All cost for additional rolling and additional coring and testing of the re-rolled surface shall be born by the contractor.

Asphaltic concrete pavement not meeting this specification and that is allowed to remain in place shall be paid for at a reduced rate determined by multiplying the price bid in the bid proposal by a compaction quality factor determined according to the following schedule:

Percent air voids (average of all specimens for the lot)	Compaction Quality factor	
less than 3	0	
3.0 to 8.0	1.0	
8.1 to 9.0	0.9	
9.1 to 10.0	0.7	
10.1 to 11.0	0.5	and the engineer may require a chip seal to be applied at the contractor's expense
More than 11		0 and the engineer may require a chip seal to be applied at the contractor's expense.

NOTE: HMAC surfacing with between 11% and 15% air voids may, upon written request by the Contractor, be reviewed by the Engineer to determine if it may be left in place. The Engineer's review will consider the type of street and expected traffic conditions among other factors and a written determination will be issued. If the surface is allowed to remain in place, a chip seal will be required at the Contractor's expense. The quality factor for this paving will remain at 0.

The reduced rate shall apply to the entire lot.

The effect of compaction quality factors shall be cumulative and shall be applied as described for surface quality factors and thickness quality factors.

Cost for Field Quality Control - The surface tolerance test shall be made by the contractor at his expense.

The initial thickness and compaction test will be made at no cost to the contractor except for the cost of materials and labor to repair the holes left when cores are removed.

The cost of all thickness test to isolate a deficient area and the cost of retesting the corrected area shall be born by the contractor.

The cost of all retesting of compaction after additional rolling to correct compaction deficiencies shall be born by the contractor.

Areas reconstructed to remedy deficiencies shall meet all the requirements of these specifications and shall be tested in the same manner as original construction. The cost of all tests on reconstructed areas shall be born by the contractor.

5. ADDITIVES

Anti-stripping: An approved liquid anti-stripping agent shall be added to the asphalt used in the hot mix asphaltic concrete. The rate of application shall be in accordance with the manufacturer's recommendation. The minimum anti-stripping agent added shall be one-half (l/2) of l%.

The anti-stripping agent used shall have a proven record when used with similar aggregate and shall be approved by the engineer in writing prior to the date set for reception of bids.

DOUBLE COURSE ASPHALT SURFACE TREATMENT

1. SCOPE

The work to be done under this section consists of furnishing all labor, materials and equipment necessary to construct a Double Asphalt Surface Treatment on the prepared base course in accordance with the sections shown on the plans and as specified herein or as directed by the Engineer.

2. MATERIALS

2.1 Asphalt

The asphalt used shall be of the grade and type specified below. The material shall be homogeneous and free from water, shall not foam when heated to 347° F., and shall meet the following requirements.

Viscosity Grade AC-5
Texas Highway Department 1982 Specifications

Viscosity 140 F. Stokes	500 +/- 100	
	Min.	Max.
Viscosity 140 F. Stokes	1.4	--
Penetration 77° F. 100 g. 5 sec.	135	--
Flash Point C.O.C.F.	425	--
Solubility in trichlorethylene percent	99.0	--

Tests on residues from thin film oven test:

Viscosity 140 F. Stokes	--	1500
Ductility, 77° F. 5 cms per min. cms.	100	--

Spot Test – negative for all grades.

2.2 Aggregate

All aggregate shall be composed of sound and durable particles of crushed stone or crushed gravel. At least eighty-five percent (85%) of the particles of the aggregate retained on the No. 4 sieve shall have one or more crushed faces. Aggregate particles shall be free from organic matter, clay, loam, or pebbles coated therewith, and shall not contain more that (5%) of slate, shale, schist or soft particles of sandstone. The aggregates shall have a percent of wear of not more than thirty-five (35). (Los Angeles Abrasion Tests of Coarse Aggregate, AASHO Designation

T-96 as revised). Crushed limestone will not be acceptable for this project.

Double Asphalt Surface Treatment

No. 1 Aggregate –	Retained on ¾" Sieve -	0% by weight
(Texas Highway	Retained on 5/8" Sieve -	0 – 2% by weight
Department 1982	Retained on ½" Sieve -	20, 35% by weight
Grade 3)	Retained on 3/8" Sieve -	85 – 100% by weight
	Retained on ¼" Sieve	95 – 100% by weight
	Retained on No. 10 Sieve-	99-100% by weight

No. 2 Aggregate -	Retained on ½" Sieve -	0% by weight
(Texas Highway	Retained on 3/8" Sieve -	0 – 5% by weight
Department 1982	Retained on No. 4 Sieve -	40 – 85% by weight
Grade 5)	retained on No. 10 Sieve -	98 –100% by weight
	Retained on No. 20 Sieve-	99 100% by weight

3. CONSTRUCTION METHODS

3.1 Preparation of base

If the surface of the base course is not in proper condition for placement of surfacing, it shall first be brought true to the section and grade as established. The base shall be checked, and any deviation in excess of ¼-inch from grade or from true cross section shall be corrected by scarifying then adding or removing material, reshaping and re-compacting by sprinkling and rolling. No "scab" or "featheredge" patches will be permitted. After correction of any defects in the base, it shall be cleaned of dirt, dust, or other deleterious material by sweeping or other approved methods and primed.

The base course shall be primed with MC-30 Asphalt as directed by the Engineer. The asphalt used shall meet the 1982 Texas Highway Department Specifications Item 300.

The base course shall be checked at least 24 hours in advance of placing the surfacing and any defects shall be repaired and re-primed. Immediately prior to placing the surfacing, the base shall be cleaned of all dirt, dust, or other deleterious materials by sweeping with rotary and hand brooms or other approved methods.

Prime coats shall not be applied more than 7 days in advance of placing the surface course. Areas that have been primed longer than the time

specified above prior to placing the surface course shall be re-primed at the Contractor's expense.

3.2 Handling and Applying Asphalt

All storage tanks, piping, retorts, booster tanks, and distributors used in storing or handling asphalt shall be kept clean and in good operating condition at all times, and they shall be operated in such a manner that there will be no contamination of the asphalt with foreign material. Asphalt shall not be heated above 400° F. at any time, and when applied, it shall be at a temperature of not less than 300° F. and not more than 350° F. The Engineer will select the temperature of application, and the Contractor shall apply the asphalt at a temperature within 15° of the temperature selected. All asphalt material heated above 400° F. will be rejected. Re-circulating heating equipment shall be equipped with recording temperature gauges.

The prime coat shall not be applied when the air temperature is below 50° F. and falling or when in the opinion of the Engineer weather conditions are not suitable. Prime coat shall not be applied when the temperature of the surface on which it is to be applied is less than 40° F. The prime coat shall be applied at least 24 hours in advance of placing the surface course. Prime coat shall be applied with an approved distributor at a rate of 0.30 gallon per square yard, or as directed by the Engineer.

Double Asphalt Surface Treatment shall not be applied when the temperature of the surface on which it is to be placed is below 50° F. and is falling but may be applied when the air temperature is above 40° F. and rising. No asphalt shall be placed when general weather conditions, in the opinion of the engineer, are unsuitable. No double asphalt surface treatment shall be placed from September 30 to April 15.

Asphalt shall be applied on the clean surface by an approved type of self-propelled pressure distributor so operated as to distribute the material in the quantity specified, evenly and smoothly, under a pressure necessary for proper distribution. The Contractor shall provide necessary facilities for determining the temperature of the asphalt in all of the heating equipment and in the distributor, for determining the rate and pressure at which it is applied, and for securing uniformity at the junction of two distributor loads. The beginning and ending of each shot of asphalt shall start and stop on a strip of heavy craft paper of not less than thirty (30) inches in width.

In areas inaccessible to the distributor, asphalt shall be applied by means of a hose and spray nozzles attached to the distributor. Care shall be

taken during application of any asphalt to shield the curb and gutter from the asphalt spray; satisfactory means of handling this matter will be insisted upon.

3.3 Application of Aggregate

Immediately after making the first application of asphalt, the surface shall be covered with No. 1 aggregate. The aggregate shall be spread with an approved self-propelled continuous feet aggregate spreader box, or approved equal, at rates as specified below or as directed by the Engineer. If necessary to obtain uniform distribution of aggregates, hand brooming and hand spotting of aggregates will be required. After completion of placing the aggregates, all areas shall be bull-wheeled with a three- wheeled roller weighing not less than 8 tons followed immediately by two complete passes with an approved self propelled pneumatic roller.

The second application of asphalt shall then be made and the No. 2 aggregate shall be applied in the same manner as stated above for the No. 1 aggregate. The Contractor shall be responsible for the maintenance of the surface and the distribution of the excess aggregate until the work is accepted.

On the two successive days following completion of the work as specified above, all areas shall be rolled with at least four complete coverage's with a pneumatic roller. This rolling shall be done in the warm part of the day.

3.4 Rate of Application of Materials

The asphalt and aggregate shall be applied at the rates specified in the following schedule:

Double Asphalt Surface Treatment

Application	Aggregate Gal. Asphalt/Sq. Yd.	Aggregate Cu. Yd. To Sq. Yds.	Designation
First	0.30	1:70	No. 1
Second	0.40	1:110	No. 2

3.5 Cleanup

After completion of the asphalt surfacing, all debris resulting from the construction shall be cleaned up and removed from the site of the work to

an approved place of disposal. The ditches, shoulders and back slopes shall be bladed and graded to true grades and cross sections as shown on the plans. The entire premises of the work shall be left in a clean condition satisfactory to the Engineer, and all costs of cleanup shall be included in the contract unit prices for the items of work involved.

DOUBLE COURSE ASPHALT SURFACE TREATMENT 1
1. SCOPE 1
2. MATERIALS 1
2.1 Asphalt 1
Viscosity Grade AC-5 1
Texas Highway Department 1982 Specifications 1
Viscosity 140 F. Stokes 1.4 --..... 1
2.2 Aggregate 1
Double Asphalt Surface Treatment 2
3. CONSTRUCTION METHODS 2
3.1 Preparation of base 2
3.2 Handling and Applying Asphalt 3
3.3 Application of Aggregate 4
3.4 Rate of Application of Materials 4
Double Asphalt Surface Treatment 4
3.5 Cleanup 4

3/2006

PREPARATION OF ASPHALTIC CONCRETE SURFACE FOR OVERLAY OR SEAL COAT

1. GENERAL

This item includes patching, milling and incidentals to prepare the asphaltic concrete surface for tack coating and overlay or for application of a seal coat.

2. MATERIALS

a. Asphalt

Asphalt for hot mix asphaltic concrete shall be Grade ACl0 Texas Highway Department Item 300.

Asphaltic concrete shall be Type D or Type F Texas Highway Department Item 340 except when the overlay is the second phase of phased construction in which case the asphaltic concrete for full depth patching shall be the grade as shown on the plans.

b. Portland Cement Stabilized Base

Cement stabilized base shall conform to Texas Highway Department Item 274 and shall consist of caliche base materials described in Section 2-C of this specification. Stabilized using 2 sacks of Portland cement per cubic yard. Cement stabilized base may be blade mixed at or near the job site if the contractor can produce a uniformly mixed acceptable product by this method.

3. PATCHING

a. Patching Surface Raveling

Where, in the opinion of the engineer, surface raveling has caused sufficient loss of material to require patching, the contractor shall thoroughly clean the area to be patched by brooming, and/or compressed air nozzle. When the patched area is completely free of loose aggregate and other foreign matter the contractor shall lightly brush the area with emulsified asphalt type SS1 and apply Type F hot mix asphaltic concrete. The asphaltic concrete shall be raked using an asphalt rake and finished smooth a little higher than the existing surrounding surface and compacted using a steel wheel roller and/or a pneumatic roller. Rollers shall be sufficient size and weight to achieve

adequate compaction. Small areas may be compacted using vibrating plate compacters when approved by the Engineer.

b. Patching Deteriorated Surface

When, in the opinion of the engineer, the surface has deteriorated to a point where replacement is required the engineer shall mark the area to be removed and replaced. The contractor shall saw cut for the full depth of the asphaltic concrete and remove said pavement. The saw cut shall be rectangular in shape with the edges being parallel to and at 90` to the centerline of the street. The minimum width for any patch shall be one (l') foot. After the surface has been removed the base shall be carefully smoothed and all loose base material shall be removed. When needed the base shall be reprimed using a light shot of RC 250 or MC 30 asphalt. After the prime coat has penetrated the base material, the contractor shall apply tack coat to the sawed edges of the surface and place Type D asphaltic concrete to a sufficient depth above the existing surface to provide a compacted surface slightly higher than the adjacent surface. The patch shall be compacted to a density of 92% to 97% Rice density using steel wheel and or pneumatic rollers.

c. Patching Deteriorated Substructure

When the base and or subgrade have failed and are to be removed, the contractor shall remove the surface as specified for deteriorated surface patching. The weakened base shall be removed to a uniform depth to expose undamaged base or subgrade. The minimum depth of removal shall be six (6") inches. The base and subgrade thus removed shall be replaced with Portland cement stabilize base and compacted to 95% modified proctor density and finished at the level of the abutting base. The finished base shall be primed and the surface replaced as specified for patching deteriorated surface.

4. MILLING

Surface milling shall be accomplished using approved asphalt milling machines. The maximum depth of milling shall be one (l") inch.

Milling shall be as directed by the engineer to remove asphaltic concrete placed at valley gutters, gutters and at the ends of the first phase of phased construction for drainage and to remove the asphaltic concrete placed for a smooth connection between that phase and the existing paving. The Engineer may also direct milling to

remove ridges and ruts that have formed on the pavement surface.

The Contractor shall be responsible for controlling the milling operation so that only these areas which require milling are milled. No measurement or payment will be made for milling where only superficial surface marks are left and from which no material is removed. When milling is required to remove ridges and ruts the low areas between ridges and ruts will be considered as "milled surface" for payment.

If a smooth straight joint can not be made by milling the contractor may be required to saw cut a one (l") inch depth groove at the edge of the milled area and remove material between the saw cut and the milled area by hand. No separate payment will be made for this saw cut when required.

5. MEASUREMENT AND PAYMENT

a. Patching Surface Raveling

Measurement will be made of the actual square footage of surface area patched. Payment will be made at the price bid per square foot for patching surface raveling in the bid proposal.

b. Patching Deteriorated Surface

Measurement will be made of the square yards of street surface replaced.

Payment will be made for the actual number of square yards of street surface replaced at the price bid per square yard for patching deteriorated surface in the bid proposal.

c. Portland Cement Stabilized Base

Measurement will be made of the actual cubic yards of compacted cement stabilized base in place.

Payment will be made at the price per cubic yard bid for compacted in place Portland cement stabilized base in the bid proposal.

d. Saw Cutting

Measurement will be made of the actual length of full depth saw cut made as directed by the engineer. No measurement will be made of the sawing required to square up poor milling edges.

Payment will be made at the price per linear foot of full depth saw cutting for the actual number of feet of saw cut as measured above.

No payment will be made for saw cutting required to square up the edges left by improper, inadequate or poor quality milling.

e. Milling

Measurement will be made of the actual area milled. No measurement will be made of areas where milling leaves only superficial surface marks from which no material was removed.

Payment will be made for the actual number of square yards of surface milling as measured above at the unit price bid per square yard of surface milling in the bid proposal.

01/04

SEAL COAT

I. DESCRIPTION

This item shall consist of the application of liquid asphalt to the existing pavement surface followed by placement of cover aggregate and rolled to increase adhesion, together with other operations necessary to form a complete durable seal coat.

II. MATERIALS

A. Asphaltic Materials

The material shall be homogeneous, shall be free from water, shall not foam when heated to 347 degrees F and shall meet the following requirements:

		VISCOSITY GRADE	
TEST		AC-5 Min/Max	AC-10 Min/Max
Viscosity, 140 F stokes		500+100	1000+200
Viscosity, 275 stokes		1.4	1.9
Penetration, 77F, 100g, 5 sec.		135	85
Flash Point, C.O.C.F.		425	450
Solubility in trichlorethylene	%	99.0	99.0
Tests on residues from thin film oven test: Viscosity, 140 F stokes		1500	3000
Ductility, 77 F 5cms per min, cms		100	70
Spot Test		Negative for all grades	

B. Storage, Heating and Application Temperatures

Asphalt materials should be applied at the temperature which provides proper and uniform distribution and within practical limits avoiding higher temperatures than necessary. Satisfactory application usually should be obtained within the recommended ranges shown below. No material shall be heated above the following maximum temperatures:

Applications and Mixing

TYPE-GRADE	Recommended Range, F	Maximum Allowable, F	Heating and Storage Maximum, F
AC-5, 10	275-350	375	400

NOTE:Heating of asphalt materials (except emulsions) constitutes a fire hazard to various degrees. Proper precautions should be used in all cases and especially with RC cutbacks.

Warning to Contractors: Attention is called to the fact that asphaltic materials are very flammable. The utmost care shall be taken to prevent open flames from coming in contact with the asphaltic materials or the gases of same. The Contractor shall be responsible for damages from any fires or accidents which may result from heating the asphaltic materials.

C. Additives

1. Latex Additive: A minimum of two percent by weight latex additive (solids basis) shall be added to AC-5 asphalt when specified on the plans or in other specifications in the contract. The latex additive shall be governed by the following specifications:

The latex is to be an anionic emulsion of butadiene-styrene low-temperature copolymer in water, stabilized with fatty-acid soap so as to have good storage stability, and possessing the following properties:

Monomer ratio, B/S 70/30
Minimum solids content 67%
Solids content per gal @ 67% ..... 5.3 lbs
Coagulum on 80-mesh screen ..... 0.1% max

Type Anti-oxidant ..... staining
Mooney Viscosity of Polymer
(M/L4 @ 212 F) ....100 min
pH of Latex ..... 9.4 - 10.5
Surface Tension ..... 28-42 dynes/cm^2
Brookfield Viscosity
of Latex ..... 1200 ps max @ 67% solids

The finished latex-asphalt shall meet the following requirements:

Viscosity at 140 F, stokes ..... 1500 max
Ductility at 39.2F, 1cm per min, cm..... 100 min

2. Anti-stripping Agent. An approved liquid anti-stripping agent shall be added to the asphalt used on this project when called for on the plans or elsewhere in the specifications or bid proposal. The rate of application shall be in accordance with the manufacturers recommendations. The minimum anti-stripping agent added shall be one/half (1/2) of 1%. The anti-stripping agent shall be Permatac or approved equal.

D. Regular Aggregate

Regular aggregate shall be Type B Grade 4 or Grade 5 crushed gravel, or crushed stone as specified in Item 302 of the Texas State Department of Highways and Public Transportation (T.S.D.H.P.T.) 1982 Standard Specification for Construction of Highways, Streets, and Bridges with the following exceptions:

1. Limestone other than natural limestone rock asphalt will not be approved for use on this project.

2. Aggregate shall contain not more than 1% by weight of organic matter, clays, loam or pebbles coated therewith and shall contain not more than 5% by weight of any one of or combination of slate, shale, schist or soft particles of sandstone when tested in accordance with Test Method Tex-217-F.

3. Aggregate Gradation, expressed as a percentage of weight, shall be as follows:

Grade 4	Percent by Weight		
Retained on 5/8" sieve			0
Retained on 1/2" sieve	0	-	2
Retained on 3/8" sieve	5	-	35
Retained on No. 4 sieve	80	-	100
Retained on No. 10 sieve	98	-	100
Passing No. 200 sieve	0	-	0.5

Grade 5	Percent by Weight		
Retained on 1/2" sieve			0
Retained on 3/8" sieve	0	-	5
Retained on No. 4 sieve	40	-	85
Retained on No. 10 sieve	98	-	100
Retained on No. 20 sieve	99	-	100

When no aggregate grade is shown on the plans or called for elsewhere in the specifications or bid proposal, Grade 5 aggregate will be furnished.

4. The percent of wear, as determined by ASTM C-131, shall not exceed 25%.

5. The percent loss of the aggregate, as determined by ASTM C-88 using a magnesium sulfate solution and a four cycle test, shall not exceed 30%.

E. Precoated Aggregate

Precoated aggregate shall be Type PB Grade 4 or Grade 5 crushed gravel, or crushed stone as specified in Item 304 of the T.S.D.H.P.T. 1982 Standard Specification for Construction of Highways, Streets, and Bridges with the following exceptions:

1. Those exceptions listed in Paragraph II 2(B) above.

2. The precoated aggregate shall be coated with 1.0 to 2.0 per cent by weight of asphaltic cement of Grade AC-20.

F. Joint Paper

Paper used for starting and stopping asphalt application, as well as making fabricated paper discs to protect manhole covers and valve covers, shall be a non-absorbent, high grade 60# Kraft paper, 30" in width.

The contractor shall cover all manhole and valve box lids with paper discs, furnished by Contractor, immediately before application of asphalt and remove same immediately after application of rock.

G. Delivery Tickets

A legible copy of the delivery tickets for all materials to be used on this project shall be furnished to the City's representative at the time materials are delivered to the project stock pile and storage site.

III. CONSTRUCTION METHODS

A. Equipment

In general, all equipment used on this project shall be in good working order and in sufficient quantity to insure proper expedition of the seal operation.

1. Asphalt Handling Equipment

The asphalt distributor shall have been recently calibrated and the Engineer shall be furnished an accurate and satisfactory record of such calibration. The distributor shall be an approved type of self-propelled pressure distributor so operated as to distribute the material in the quantity specified, evenly and smoothly, under a pressure necessary for proper distribution. The Contractor shall provide all necessary facilities for determining the temperature of the asphaltic material in all of the heating equipment and in the distributor, for determining the rate at which asphalt is applied, and for securing uniformity at the junction of two distributor loads. All storage tanks, piping, retorts, booster tanks, and distributors used in storing or handling asphaltic material shall be kept clean and in good operating

condition at all times, and they shall be operated in such manner that there will be no contamination of the asphalt with foreign material. It shall be the responsibility of the Contractor to provide and maintain in good working order a recording thermometer at the storage heating unit at all times.

2. Drag Broom

A drag broom shall be required if the aggregate is not properly distributed. The drag broom shall be furnished at no additional cost to the City.

3. Pneumatic-tire Roller

Pneumatic-tire rollers shall be of the self-propelled type consisting of not less than 7 pneumatic-tired wheels, running on axles in such manner that the rear group of tires will not follow in the tracks of the forward group, and mounted on a rigid frame and provided with a loading platform or body suitable for ballast loading. The roller shall be not less that 10 tons in weight and carry not less than 50 pounds pressure in each tire.

4. Aggregate Spreader

Aggregate spreader shall be an approved self-propelled continuous feed aggregate spreader. The spreader shall be equipped with a disposable trash box for placing debris removed from spreader box scalping screen.

5. Miscellaneous Equipment

The Contractor shall have available for immediate use at no additional cost one rock blade and one drag broom if their use is required by the Engineer. These pieces of equipment shall not be pulled by rollers. In addition, the Contractor shall furnish one tail gate aggregate spreader and one dump truck, equipped to receive the tail gate spreader.

6. Truck Scale

A truck scale conforming to the requirements of item 520 of "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" shall be furnished by the Contractor at aggregate stockpile sites.

B. Surface Preparation

The City of Midland will sweep all streets to be sealed ahead of the Contractor. This sweeping by the City of Midland is not intended to be a final cleaning preparation for the application of asphalt but is intended as an aid to the Contractor.

Prior to placing the seal coat, loose dirt and other objectionable material shall be removed from the existing surface by the Contractor. The surface will be cleaned with rotary brooms. Hand brooms will be used in areas not accessible to the rotary broom. The Engineer shall approve all streets before application of any asphalt.

C. Application of Bituminous Material

Paper shall be spread on the surface for a sufficient distance back form the end of each application so that flow through sprays may be started and stopped on the paper, and so that all sprays will operate properly over the entire length being treated.

No asphaltic material shall be applied when the total of air temperature plus pavement surface temperature is less than 120" F.

No equipment or vehicular traffic shall be allowed to cross over joint paper in place, except the distributor.

Immediately following the application of asphaltic material, the Contractor shall remove all joint paper and load same on a designated vehicle. At the end of each day, all paper shall be disposed of at the City Landfill.

Following all preparation outlined above, the Contractor shall immediately apply asphaltic materials at the specified rates and temperatures designated by the Engineer.

If the Contractor employs only one distributor in the seal operation, he shall be required to seal all designated filets and street stubs in the seal area before moving to another section of the City. If two distributors are used, one distributor will be employed only to seal filets and street stubs.

The use of a second distributor to seal filets and street stubs shall require the following additional equipment; one dump truck equipped with tailgate spreader, and one self-propelled pneumatic roller. All rolling shall be deferred until aggregate is dry.

D. Application of Aggregate

Aggregate shall be immediately and uniformly applied and spread by an approved self-propelled continuous-feed aggregate -8- spreader, unless otherwise authorized by the Engineer. Aggregate shall be applied at the approximately rate directed by the Engineer.

Vehicles used to transport aggregate from stockpiled area to spreading machine shall be weighed and a weight ticket issued for each load. Weight tickets shall show truck identification No., tare weight of truck, gross weight, and net weight of aggregate. The weight ticket shall be delivered to the city's representative at the aggregate spreader.

E. Rolling

A minimum of three (3) rollers shall be employed by the Contractor. Rolling shall be controlled by the Engineer during the entire project. The speed of all rollers will be held to a maximum of 5 miles per hour during the rolling process. When surface moisture is present on aggregate, "Rolling shall be deferred until aggregate is dry.

F. Stockpiling

All aggregate stockpiles shall be placed on a paved surface or areas acceptable to the Engineer.

When dust from the aggregate creates a nuisance or when aggregate fails to adhere to the asphalt the Engineer may require the Contractor to "water down" the aggregate stock pile.

When, directed by the Engineer, or desired by the Contractor, aggregate stockpiles will be "watered down". When the "watered down" aggregate does not adhere to the asphalt properly the Engineer may direct that water for this purpose contain 5% EA10S emulsified asphalt and/or an approved wetting agent. The Engineer may direct the contractor to increase the amount of emulsified asphalt added to the water if, in his opinion, desired results are not being achieved. No separate payment shall be made for emulsified asphalt, water or wetting agent but the cost shall be considered as an incidental cost for furnishing satisfactory aggregate.

G. Cleanup

Clean up shall be maintained on a timely manner as the work progresses. All debris scattered on the sidewalks and driveways shall be swept up by the Contractor. Sweeping debris onto freshly sealed streets shall not be allowed.

City forces will remove excess aggregate from the street and gutters after the project is completed.

H. Maintenance

The Contractor will be required to maintain all sealed streets until final acceptance of the project by the Engineer. Maintenance shall consist of adding additional coverstone when required, rolling, pony blading, or drag brooming.

IV. MEASUREMENT

Asphaltic material shall be measured in gallons at the applied temperature at the point of application.

Aggregate shall be measured by the ton in vehicles as delivered to the aggregate spreader and applied on the street. Trucks will not be allowed to leave the construction area with a partial load. If it becomes necessary for a truck to leave the area because of mechanical failure or other reasons, a second weigh ticket for that truck will be required.

Rolling shall be measured by the hours of actual rolling for each roller.

V. PAYMENT

Payment shall be made as provided under "Measurement" at the unit price bid for "aggregate", "asphalt", and "rolling" and shall be full compensation for furnishing and incorporating the materials "Aggregate" and "Asphalt" (and additives where applicable) into a composite product; for delivering, stockpiling; for brooming, compaction, and rolling; for cleaning the existing surface; for cleaning excess bituminous material; cleaning gutters; for cleaning sidewalks and driveways; for cleaning stockpile sites; for all required maintenance; for pony blading; for drag brooming; for adding additional cover aggregate; for all labor, equipment, supervision, tools, overhead, profit, and any other incidentals necessary to complete the work required under the conditions of these plans and specifications to the satisfaction of the Engineer.

08/07

ASPHALT - RUBBER SEAL COAT

(Stress Absorbing Membrane)

1. SCOPE

This specification covers the material, equipment, and construction procedures for a Stress Absorbing Membrane (seal coat).

2. PREQUALIFICATION OF A NEW ASPHALT-RUBBER MATERIAL

Pre-qualification of a new asphalt-rubber material or applicator may be requested at any time. Pre-qualification will be based on three controlled field applications evaluated after three years' performance under traffic. New asphalt-rubber material that has been evaluated and pre-qualified by an agency recognized nationally may be pre-qualified by that agency upon disclosure of suitable evidence of successful performance. Notwithstanding other agency pre-qualification, the City reserves the right to withhold pre-qualification pending the performance evaluation of local controlled field applications.

3. MATERIALS

3.1 Asphalt

The grade of asphalt cement for the asphalt-rubber mixture shall be AC - 5 or AC - 10 which shall comply with the requirements of Item 300 "Asphalt, oils and emulsions" of Texas State Department of Highways and Public Transportation 1982 Standard Specification for Construction of Highways, Streets and Bridges. The grade selected shall be based on laboratory testing by the asphalt-rubber supplier, to insure compatibility with the granulated reclaimed rubber.

If indicated necessary by laboratory testing, an approved anti-stripping additive may be added to the asphalt cement up to 1.0 percent by weight of asphalt.

3.2 Granulated Reclaimed Rubber

The granulated reclaimed rubber used shall be produced primarily from the processing of automobile and truck tires. The rubber shall be produced by ambient temperature grinding processes only.

The gradation of the granulated reclaimed rubber when tested in accordance with ASTM C-136 and using a 50 gram +/- 1 gram sample, shall meet the

following requirements:

Sieve Sizes	Percent Passing
#8	100
#10	95 - 100
#16	40 - 60
#30	0 - 10
#50	0 - 5

The use of rubber from multiple sources is acceptable provided that the overall blend of rubber meets the gradation requirements.

The individual granulated rubber particles, irrespective of diameter, shall not be greater in length than 3/16 inch (5mm).

The granulated rubber shall have a specific gravity of 1.15 +/- 0.05 and shall be free of loose fabric, wire and other contaminants except that up to 4 percent (by weight of rubber) calcium carbonate or talc may be added to prevent rubber particles from sticking together. The rubber shall be sufficiently dry so as to be free flowing and not produce a foaming problem when blended with the hot asphalt cement.

The granulated reclaimed rubber shall be accepted by certification from the rubber supplier.

3.3 **Diluent**

The diluent shall have the following properties:

Flash Point	130^{o} F Minimum
Initial Boiling Point (ASTM D-86)	340^{o} F Minimum
Dry Point (ASTM D-86)	390^{o} - 415^{o} F
Total Saturates	85% Minimum

3.4 **Asphalt - Rubber**

The asphalt-rubber supplier shall furnish to the engineer a minimum of 10 days before the beginning of membrane placement, the asphalt-rubber mix formulation which shall contain the following information:

Asphalt Cement
Source of Asphalt Cement

Grade of Asphalt Cement
Percentage of Asphalt Cement by total weight of the asphalt-rubber mixture.

Granulated Reclaimed Rubber
Source of Granulated Rubber
Grade of Granulated Rubber
Percentage of Granulated Rubber by total weight of the asphalt-rubber mixture.

If granulated rubber from more than one source is utilized the above information will be required for each granulated rubber used.

Diluent
Source of Diluent
Grade of Diluent
Percentage of Diluent allowable by volume of the asphalt-rubber mixture.

3.5 **Cover Aggregate**

Aggregate shall be composed of a clean and durable crushed rock, crushed gravel or crushed slag conforming to Item 304 "Aggregate for Surface Treatments (pre-coated)" of Texas State Department of Highways and Public Transportation 1982 Standard Specification for Construction of Highways, Streets and Bridges, grade No. 3 or No. 4.

Proposed aggregate samples shall be submitted to the asphalt-rubber supplier a minimum of 21 days prior to application, to test for aggregate stripping characteristics. The results shall be submitted to the engineer. Anti-strip will be included as a contingency bid item.

4. **EQUIPMENT**

4.1 **General**

The equipment used by the contractor shall include a self propelled rotary power broom or mobile pickup broom for pavement cleaning and excess cover material removal.

4.2 **Asphalt-Rubber Equipment**

All equipment utilized in the production and application of the asphalt-rubber shall be so designed and accessible that the Engineer can readily determine

the percentage by weight for each material being incorporated into the mixture and shall be as described as follows:

4.2.1 An asphalt heating tank with a hot oil heat transfer system or retort heating system capable of heating asphalt cement to the necessary temperature for blending with the granulated rubber. This unit shall be capable of heating a minimum of 3,000 gallons of asphalt cement.

4.2.2 An asphalt-rubber mechanical blender with a two stage continuous mixing process capable of producing a homogenous mixture of asphalt cement and granulated rubber, at the mix design specified ratios, as directed by the engineer. This unit shall be equipped with a granulated rubber feed system capable of supplying the asphalt cement feed system, as not to interrupt the continuity of the blending process. A separate asphalt cement feed pump and finished product pump are required. This unit shall have both an asphalt cement totaling meter in gallons and a flow rate meter in gallons per minute.

4.2.3 A truck mounted self powered distributor truck equipped with a retort heating unit, and an internal mixing device capable of maintaining a uniform mixture of asphalt cement and granulated rubber. It shall be equipped with a full circulating spreader bar and a pumping system capable of applying asphalt-rubber material within +/- .05 gallons per square yard tolerance of the specified application rate and must give a uniform covering of the surface to be treated. The distributor shall have a boot board on the rear of the vehicle and a bootman shall accompany the distributor. The bootman shall ride in a position so that all spray bar tips are in full view and readily accessible for unplugging if a plugged tip should occur. The distributor shall also include a tachometer, pressure gauge, volume measuring device and a thermometer.

4.3 Cover Material Spreader

The cover material (chip) spreader shall be a self-propelled machine with an aggregate receiving hopper in the rear, belt conveyors to carry the aggregate to the front, and a spreading hopper equipped with a full-width distribution auger and spread roll. The spreader shall be in good mechanical condition and be capable of applying the cover material uniformly across the spread at the specified rate.

4.4 Rolling Equipment

A minimum of three operational self-propelled pneumatic-tired rollers shall be used for the required rolling of the cover material. The pneumatic tired rollers shall carry a minimum loading of 3,000 pounds on each wheel and a

minimum air pressure of 100 pounds per square inch in each tire.

4.5 **Hauling Equipment**

Trucks for hauling cover material shall be tailgate discharge and shall be equipped with a device to lock onto the hitch at the rear of the cover material spreader. Haul trucks shall also be compatible with the cover aggregate spreader so that the dump bed will not push down on the spreader when fully raised or have too short a bed which results in aggregate spillage while dumping into the receiving hopper.

5. **CONSTRUCTION**

5.1 **General**

Streets to receive the asphalt-rubber stress absorbing membrane or seal coat shall be prepared in accord with Section 2-C-1 "Preparation of Asphaltic Concrete Surface for Overlay or Seal Coat" of these specifications.

Immediately prior to the application of the asphalt-rubber membrane, the surface shall be thoroughly cleaned in order to insure adequate adhesion of the asphalt-rubber to the pavement.

Due to the handling characteristics of asphalt-rubber, when radii and other irregular areas are to be sealed it is recommended that this be done with an RS or CRS chip seal emulsion or paving grade asphalt cement.

5.2 **Asphalt-Rubber Mixing and Reaction**

The percentage of granulated rubber shall be 23 percent plus or minus 3 percent by weight of total asphalt-rubber mixture, the exact granulated rubber content shall be as determined by the mix design submitted by the asphalt-rubber supplier. During membrane placement the granulated rubber percentage shall not fluctuate more than 1 percent by weight of total asphalt-rubber mixture.

The temperature of the asphalt cement shall be between 350^{o} and 400^{o} F at the addition of the granulated rubber. The asphalt and rubber shall be combined and mixed together in the asphalt-rubber blending unit and reacted in the distributor for a period of time as required by the engineer which shall be based on laboratory testing by the asphalt-rubber supplier. The temperature of the asphalt-rubber mixture shall be above 350^{o} F during the reaction period.

After the reaction between asphalt cement and granulated rubber has occurred, the viscosity of the hot asphalt-rubber-mixture may be adjusted for spraying and/or better "wetting" of the cover material by the addition of a diluent. The diluent shall comply with the requirements of Section 3.3 and shall not exceed 7.5 percent by volume of the hot asphalt-rubber mixture.

When a job delay occurs after full reaction, the asphalt-rubber may be allowed to cool. The asphalt-rubber shall be reheated slowly just prior to application but not to a temperature exceeding 350° F. An additional quantity of diluent not exceeding 3 percent by volume of the hot asphalt-rubber mixture may be added after reheating.

5.3 Application of Asphalt-Rubber Material

Placement of the asphalt-rubber membrane shall be made only under the following conditions.

1. The pavement surface temperature shall be 45° F and rising.

2. The pavement surface is clean and absolutely dry.

3. The wind conditions are not excessive.

4. All construction equipment such as asphalt-rubber distributor, cover material spreader, haul trucks with cover material, and rollers are in position and ready to commence membrane placement operations.

5. Rain is not imminent.

The asphalt-rubber mixture shall be applied at a temperature of 300° to 350° F at a rate of between .55 and .65 gallons per square yard. Transverse joints shall be constructed by placing building paper across and over the end of the previous asphalt-rubber application. Once the spraying has progressed beyond the paper, the paper shall be removed immediately and disposed of as directed by the engineer. All longitudinal joints shall not exceed a four inch overlap.

5.4 Application of Cover Material

Cover material shall be applied immediately to the asphalt-rubber after spreading at a rate of 25 to 35 pounds per square yard.
At the time of application to the asphalt-rubber, cover material shall be

surface dry so as to gain proper adhesion to the asphalt-rubber material.

5.5 Rolling

At least three operational pneumatic-tired rollers complying with the requirements of Section 4.4 shall be provided to accomplish the required embedment of the cover material. At some project locations or where production rates dictate, fewer rollers may be utilized as directed by the engineer. At no time shall there be less than two operational pneumatic tired rollers on a project.

Sufficient rollers shall be used for the initial rolling to cover the width of the aggregate spread with one pass. The first pass shall be made immediately behind the cover material spreader, and if the spreading is stopped for an extended period, the cover material spreader shall be moved ahead or off the site so that all cover material may be immediately rolled. Four complete passes with rollers shall be made with all rolling completed within one hour after the application of the cover material.

5.6 Traffic Control

Except when it is necessary that hauling equipment must travel on the newly applied membrane, traffic of all types must be kept off the membrane until it has had time to set properly. The speed of all hauling equipment shall not exceed 15 miles per hour when traveling over a membrane which is not adequately set. The minimum traffic free period shall not be less than one hour.

5.7 Removing Loose Cover Material

Sweeping can begin a minimum of one hour after membrane placement.

5.8 Method of Measurement and Basis of Payment

5.8.1 Asphalt-Rubber

a) Measurement will be made of the actual number of gallons of Asphalt-Rubber including asphalt placed in accord with these specifications.

b) Payment will be made at the price bid per gallon of Asphalt-Rubber in the bid proposal and will be full compensation for furnishing all asphalt, rubber, extender and for all labor,

equipment and incidentals for placing the asphalt-rubber on the Street surface.

5.8.2 **Cover Aggregate**

a) Measurement will be made of the actual number of tons of pre-coated aggregate placed in accord with these specifications.

b) Payment will be made at the price bid per ton of pre-coated aggregate in the bid proposal and shall be full compensation for furnishing all pre-coated aggregate and for all labor and equipment including rollers and rolling for the complete surface in place.

5.8.3 **Rolling**

a) No measurement will be made of rolling but rolling shall be considered as incidental to placing of the cover aggregate.

b) No separate payment will be made for rolling. The cost of rolling shall be included in the price per ton of cover aggregate in the bid proposal.

5.8.4 **Anti strip agent**

a) Anti stripping agent, when used, shall be measured by the gallon.

b) Payment for anti stripping agent shall be made at the price per gallon of anti stripping agent bid in the bid proposal.

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POLYMER MODIFIED SLURRY SEAL (MICRO-SURFACE)

I. SCOPE

This specification covers the design, application, testing, quality control and measurement and payment for a complete in place "polymer modified micro surface" constructed on existing paved surfaces cleaned and prepared in accordance with the item 2-C-1 "PREPARATION OF ASPHALTIC CONCRETE SURFACE FOR OVERLAY OR SEAL".

2. DESCRIPTION

This specification covers all materials, equipment, construction and application procedures for rut filling and/or surfacing of existing paved surfaces. The micro-surfacing shall be a mixture of cationic polymer modified asphalt emulsion, mineral aggregate, mineral filler, water and other additives, properly proportioned, mixed and spread on the paved surface in accordance with this guideline and as directed by the Engineer.

3. MATERIALS

3.1 Emulsified Asphalt

(1.) The emulsified asphalt shall be a cationic emulsified type, designated as CSS-1P and shall comply with the following requirements.

	Min.	Max.
Viscosity, Saybolt Furol, 25 C (77 F), Sec.	**20**	**100**
Storage Stability test, one day, percent	**-**	**1**
Particle charge test		**Positive**
Sieve test, percent	**-**	**0.1**
Distillation:		**-** **-**
Oil distillate, by volume of emulsion, %	**-**	**0.5**
Residue, %		**62** **-**
Test on Residue from Distillation:		
Penetration, 77 F, 100 g, 5 seconds	**55**	**90**
Ductility, 77 F, 5 cm/min, cm	**70**	**-**
Solubility in trichloroethylene , %	**97**	**-**
Softening Point, R. & B., F	**135**	**-**
Viscosity, absolute 60 C (140 F), Poise		**8000** **-**

This standard distillation procedure shall be modified as follows: The temperature on the lower thermometer shall be brought slowly to 350 degrees plus or minus 10 degrees F and maintained at this point for 20 minutes. Complete the total distillation in 60 plus or minus 5 minutes from the first application of heat.

(2). The emulsion shall be modified with an approved Polymer. The distillation residue of the modified emulsion shall contain a minimum of three percent (3%) polymer solids by weight. The modified emulsion shall pass all applicable storage and settlement tests. The polymer material shall be milled into the emulsion or blended into the asphalt cement prior to the emulsification process. The cement-mixing test shall be waived for this emulsion.

(3). The polymer modified emulsified asphalt shall be so formulated that when the paving mixture is applied with the relative humidity at not more than 50% and the ambient temperature at least 75^{o} F, the paving mixture will sufficiently cure so that uniformly moving traffic can be allowed in approximately one hour. Locations such as driveways, Intersections and where sharp turning may take place or where vehicles may accelerate sharply, additional curing time may be required.

(4). The contractor shall notify the Engineer of the source of his asphaltic material prior to the design or production of the surfacing mixture and this source shall not be changed during the course of the project, except on written permission by the Engineer.

3.2 Mineral Aggregate

(1) Description. One Hundred percent (100%) of the mineral aggregate shall be crushed and shall be composed of clean, tough and durable particles of traprock, granite, sandstone or other approved aggregates. A sand equivalent of 65 or higher is required. The aggregate shall have a weight loss of not more than 12% when sodium sulfate is used or 18% when magnesium sulfate is used in accordance with Test Method Tex-411-A, using 5 cycles. The aggregate shall be one that has proven resistant to polishing in roadway surfacing.

(2.) Grades. When tested by Test Method Tex-200-F, Part I, the gradation requirements shall be as follows:

Grade 1 (Fine Graded Surface Course)	Percent Aggregate By Weight
Passing 3/8" sieve	100
Passing No. 4 sieve	98-100
Passing No. 8 sieve	75 -90
Passing No. 16 sieve	50- 75
Passing No. 30 sieve	30- 50
Passing No. 50 sieve	18- 35
Passing No. 200 sieve	5 -15

Grade 2 (Coarse Graded Surface Course)	Percent Aggregate By Weight
Passing 1/2" sieve	100
Passing 3/8" sieve	99-100
Passing No.4 sieve	86- 94
Passing No. 8 sieve	45- 65
Passing No. 16 sieve	25- 46
Passing No. 30 sieve	15 - 35
Passing No. 50 sieve	10 - 25
Passing No. 200 sieve	5- 15

(3.) Mineral Filler. Mineral filler shall be non-air entrained Portland cement that is free of lumps or foreign matter.

3.3 Water

The water shall be portable and shall be free of harmful soluble salts.

3.4 Other Additives

Additives supplied by the emulsion manufacturer may be added to the emulsion mix or to any of the component materials to provide control of the set time in the field.

4. LABORATORY EVALUATION

4.l General

Before work commences, the contractor shall submit a signed mix design covering the specific materials to be used on the project. This design shall be performed by the contractors or suppliers laboratory or by a qualified laboratory chosen by the owner. Once the materials are approved, no substitution will be permitted, unless first tested and approved by the laboratory preparing the mix design. The cost of mix design shall be born by the contractor.

4.2 Designing Job Mix

The qualified laboratory shall develop the job mix design and present certified test results for the contractor approval. Compatibility of the aggregate and modified CSS-1P shall be verified by the mix design. The mix design must be made using samples taken from the actual materials proposed for use in the project and in accordance with the procedures and requirements of Article 5.1 below.

5. PAVING MIXTURE

5.1 Mixture Design.

The mix shall be designed in accordance with Texas State Highway Department Bulletin C-14 and Test Method Tex-204-F, using Test Method Tex-227-F to supplement Test Method Tex-201-F and Tex-202-F to conform to the requirements herein. The above laboratory mixing and curing procedures may be modified as approved by the Engineer. The emulsified asphalt content will be selected by the Engineer to provide an optimum laboratory compacted density within the range of 94 to 97%. A minimum Hveem stability of 35 is required for placements exceeding a depth of twice the maximum aggregate size.

This is a mix design requirement, to be verified by testing of trial batch material prior to placement of project material. Hveem Stability testing will be performed by the selected laboratory. The Engineer will determine the frequency of job control density and stability testing. The Contractor shall furnish the mix design for the type of mixture specified together with applicable design worksheets and data. The Bulk Specified Gravity will be determined for each aggregate to be used in the design mixture. If the determined values vary by 0.300 or more, the mixture design will be by the Volumetric Method, Test Method Tex-204-F, Part II. To substantiate the design, trial mixtures will be produced and tested using all of the proposed project materials and equipment prior to any placement. The Engineer may waive trial mixtures if the same design has been proven to be in conformance with these requirements.

5.2 Composition of Mixture.

The Engineer shall approve the design mix and all micro-surfacing materials and methods prior to use and shall designate the proportions to be used within the following limits.

Residual Asphalt	**6 to 9 percent by weight of dry aggregate or 13.5 to 23 percent by volume of the aggregate**
Mineral Filler	**0.5% to 3.0% by dry weight of aggregate**
Modifier	**As required to provide the specified properties**
Water	**As required to provide proper consistency**

5.3 Type

The paving mixture shall consist of a uniform mixture of coarse aggregate, fine aggregate and asphaltic material. The mix may also contain mineral filler and/or additives when required.

The mixture shall be designed so that the mineral aggregate will produce a gradation, which conforms to the limitations for the master grading for the type specified herein. The gradation will be determined in accordance with Test Method Tex-200-F (Dry Sieve Analysis) and shall be based upon aggregate only. The amount of asphaltic material shall conform to the limitation for the type specified.

The aggregate grade shall be as shown on the plans. If no grade is shown on the plan grade 2 aggregate shall be used.

5.4 Tolerances

The aggregate portion of the paving mixture produced shall not vary from the design gradation by more than the tolerances that follow. The material passing the No. 200 sieve is further restricted to conform to the limitations for the master grading for the type specified. The asphaltic material portion of the paving mixture shall not vary from the design amount by more than the allowed tolerance and is also restricted to conform to the master limits. The method of test for determining the aggregate gradation and asphalt content of the mixture shall be Test Method Tex-210-F or other methods of proven accuracy.

	Percent by Weight or Volume as Applicable
Passing 3/8" sieve, retained on No. 4 sieve	**Plus or minus 5**

Passing No. 4 sieve, retained on No. 8 sieve	**Plus or minus 5**
Total retained on No. 8 sieve	**Plus or minus 5**
Passing No. 8 sieve, retained on No. 16 sieve	**Plus or minus 3**
Passing No. 16 sieve, retained on No. 30 sieve	**Plus or minus 3**
Passing No. 30 sieve, retained on No. 50 sieve	**Plus or minus 3**
Passing No. 50 sieve, retained on No. 200 sieve	**Plus or minus 3**
Passing No. 200 sieve	**Plus or minus 2**

Asphaltic Material Plus or minus 0.5 by wt. or l.2 by vol.

6. EQUIPMENT

6.1 General.

All equipment for the handling of all materials and mixing and placing of the mixture shall be maintained in good repair and operating condition and subject to the approval of the Engineer. Any equipment found to be defective and potentially affecting the quality of the paving mixture will be replaced or, at the option of the Contractor, satisfactorily repaired. It will be the contractor responsibility to prove to the Engineer that the repaired equipment is properly functional.

6.2 Mixing and Proportioning Equipment.

(1.) The material shall be mixed by a self-propelled micro-surfacing mixing machine which shall be a continuous flow mixing unit able to accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler, field control additive and water to a revolving multi-blade twin shafted mixer and discharge the mixed product on a continuous flow basis. The machine shall have sufficient storage capacity for aggregate, emulsified asphalt, mineral filler, field control additive and water to maintain an adequate supply to the proportioning controls. The machine shall be equipped with self-loading devices, which provide for the loading of all materials while continuing to lay micro surfacing.

The machine shall be equipped with opposite side driving stations to optimize longitudinal alignment. The machine shall be equipped to allow the mix operator to have full hydrostatic control of the forward and reverse speed during application of the micro-surfacing material.

The self-loading devices, opposite side driving stations and forward and reverse speed controls shall be original equipment manufacturer design.

(2). Individual volume or weight controls for proportioning each material to be added to the mix shall be provided. Each material control device shall be calibrated and properly marked.

(3) The aggregate feed to the mixer shall be equipped with a revolution counter or similar device so the amount of aggregate used may be determined at any time.

(4) The emulsion pump shall be a positive displacement type and shall be equipped with a revolution counter or similar device so that the amount of emulsion used may be determined at any time.

(5.) The mixing machine shall be equipped with a water pressure system and nozzle type spray bar to provide a water spray immediately ahead of and outside the spreader box.

(6.) The mixing machine shall be equipped with an approved fines feeder that shall provide a uniform, positive, accurately metered, predetermined amount of the specified mineral filler.

6.3 Spreading Equipment.

The paving mixture shall be spread uniformly by means of a mechanical type spreader box attached to the mixer, equipped with paddles, screws or augers to agitate and spread the materials throughout the box. A front seal shall be provided to insure no loss of the mixture at the road contact surface. The rear seal shall act as a final strike off and shall be adjustable and shall break in the middle so that the screed can be adjusted to fit the crown of the street including inverted crowns. The rear seal carrier shall be capable of being fitted with a rubber seal or a steel strike off bar.

The spreading equipment shall be readily adjustable in width so that laying widths can be changed without undue delay before starting each pass if necessary.

The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved to produce a free flow of material to the rear strike-off. The seam where two spreads join, shall be neat appearing and uniform.

7. STOCKPILING AND STORAGE.

7.1 Aggregate Storage.

If the mineral aggregates are stored or stockpiled, they shall be handled in such a manner as to prevent segregation, mixing of the various materials or sizes, and contamination with foreign materials. The grading of aggregates proposed for use and as supplied to the mixing plant shall be uniform. Suitable equipment of acceptable size shall be furnished by the Contractor to work the stockpiles and prevent segregation of the aggregates. The mineral aggregate shall be screened and weighed at the contractor stockpile prior to job site delivery. The Engineer shall approve screens and scales.

7.2 Storage and Heating of Asphaltic Materials.

The asphaltic material storage shall be ample to meet the requirements of the plant. Asphalt shall not be heated to a temperature in excess of that specified
in the Item "Asphalt's, Oils and Emulsions" Texas Highway Department 1982 Standard Specifications. All equipment used in the storage and handling of asphaltic material shall be kept in a clean condition at all times and shall be operated in such manner that there will be no contamination with foreign matter.

8. CONSTRUCTION METHODS

8.1 General

It shall be the responsibility of the Contractor to produce, transport, and place the specified paving mixture in accordance with these specifications and as approved by the Engineer.

8.2 Street Preparation

Prior to starting the micro-surfacing operation, streets designated to be surfaced shall be prepared in accordance with item 2-C-1 "Preparation of Asphaltic Concrete Surface for Overlay or Seal".

8.3 Weather Limitations.

The material shall be spread only when the atmospheric temperature is at least fifty (50 degrees) F and rising and the weather is not foggy or rainy. No material will be placed when the surface on which it is to be placed is below 50^{o} F.

8.4 Final Surface Preparation

Immediately before placing the micro-surface, the area to be sealed shall be thoroughly cleaned of all vegetation, loose aggregate and soil, and moistened. Water for prewetting the surface shall be applied immediately ahead of the spreader box by use of a pressure spray bar equipped with nozzles that produce a fine mist. The rate of application of water shall be sufficient to dampen the entire surface without any free flowing water ahead of the spreader box. The rate of the mist spray shall be adjusted from time to time during the placing operation to accommodate changes in temperature, surface texture, humidity and dryness of the pavement surface.

8.5 Placing the Mix

(1). The mixture shall be spread to fill cracks and minor surface irregularities and leave a uniform skid resistant application of aggregate and asphalt on the surface. The finished surface shall be neat in appearance without drag marks, excessive buildup or other detracting irregularities.

(2). The speed of operation of the surfacing equipment shall be controlled by the mixer operator at forward speeds between 85 and 225 feet per minute depending on conditions and appearance of the newly placed surface.

If transverse rippling occurs the speed of the equipment shall be reduced until the ripples disappear.

(3). The Engineer shall designate either rubber seal/screed or the steel strike off screed according to the Project requirements.

(4). The depth of mixture in the spreader box shall be carefully controlled to prevent transverse ridging and premature setup of material in the corners of the box and ahead of the screed. In general the depth of mixture in the box should be approximately to the mid point of the auger-agitator.

(5). Auxiliary equipment shall be kept in good working order and free of leaks. Any truck or transport used to bring materials on to the street being surfaced that develops leaks either of the material being transported or fuel and/or oil leaks will be removed from the job site and not allowed to return until it has been thoroughly repaired.

Scales and screens used at the contractors stockpile and storage site shall be kept in good working order.

(6). Spills of surfacing materials or fuel, oil or other detrimental substances on the street ahead of the surfacing operation shall be thoroughly removed before the surface is placed. This may required the operation to be shut down until the street has been cleaned.

(7). No excessive streaks shall be left in the finished surface. When such excessive streaking occurs, the operation shall be immediately stopped and corrective action is taken before resuming the operation.

8.6 Joints

(1). Longitudinal joints shall be placed on lane lines. On residential streets an eight-foot parking lane will be assumed with the centerline being the other lane line.

(2). All longitudinal and transverse joints shall be straight and neat in appearance without excessive build up or bare spots. Any irregularity shall be corrected immediately before the material has started to set up.

(3). The overlap at longitudinal joints shall not exceed 4 inches. When the overlapped pass is only partially set care shall be exercised to avoid skid marks. Any skid marks that occur shall be immediately corrected by removing any partially set material that has been displaced and placing fresh mix in the mark and shaping by use of Lutes, squeegees, hand drags, etc.

Overlapping of longitudinal joints shall not leave a visible build up. Any buildup shall be immediately removed by use of lutes, squeegees, hand drags, shovels or other approved means.

8.7 Mix Stability

The modified mixture shall posses sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading; it shall be free of excess water or emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

8.8 Hand Work

Areas that cannot be reached with the mixing machine shall be surfaced using hand squeegees to provide complete and uniform coverage. The area to be hand-worked shall be lightly dampened prior to mix placement. Care shall be exercised to leave no unsightly appearance from handwork. The same type finish as applied by the spreader box shall be required. Handwork shall be completed during the machine applying process.

8.9 Lines

Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide a good appearance.

8.10 Work Force

The contractor shall maintain a work force of adequate size to accomplish the work as specified herein, including the loading and transporting of materials to the job site, the placing of the micro surface, the monitoring of joints and surface and the correction of any deficiencies that occur.

If, at any time, the Engineer or his representative determines that the work force is not adequate to perform all the tasks required for the proper completion of the micro surfacing, work on the project will be halted until adequate personnel are provided and/or modifications in procedure are implemented that will assure proper placement of the surfacing material.

8.11 Scratch or Level up course

A scratch or level up course will be required on certain streets as shown on the plans and/or as directed by the Engineer. This course shall be the same material as the polymer modified surface course and will be placed in the same manner except the spreader shall be equipped with a steel strike off screed. This screed shall be set to run as close to the pavement surface as practical.

The appearance of this course is not as critical as the final surface so long as any marks or blemishes that occur are not of such magnitude that they will affect the appearance of the final course.

8.12 Correction of Deficiencies and Blemishes

After the laydown work is completed and before final acceptance by the

Engineer, spot application of micro- surfacing material may be required to correct any deficiencies such as streaks, scuff marks, tire tracks, gaps, etc. to improve the ride quality and overall appearance. The spot application shall be performed with a full width spreader box when required.

9. QUALITY CONTROL

9.1 Materials

The contractor will permit the Engineer and/or the Independent laboratory to take samples of the aggregate and asphalt emulsion used in the project at the Engineers discretion. Gradation and sand equivalent tests may be run on the aggregate and residual asphalt content tests on the emulsion. Test results will be compared to specifications. Tests will be run at the expense of the owner. The owner must notify the contractor immediately if any test fails to meet the specifications.

9.2 Polymer Modified Micro-Surfacing

Samples of the material may be taken directly from the mixing unit(s). Consistency and residual asphalt content tests may be made on the samples and compared to the specifications. Tests will be run at the expense of the owner. The owner must notify the contractor immediately if any test fails to meet specifications.
The Engineer may use the recorders and measuring facilities of the unit to determine application rates, asphalt emulsion content, mineral filler and additive.

9.3 Non-Compliance

If any two successive tests fail on the stockpile material, the job shall be stopped. It is the responsibility of the contractor, at his own expense, to prove to the Engineer that the conditions have been corrected. If any two successive tests on the mix from the same machine fail, the use of the machine shall be suspended. It will be the responsibility of the contractor, at his own expense, to prove to the Engineer that the problems have been corrected and that the
machine is working properly.

10. CLEAN UP

10.1 Protecting and Cleaning Manholes and Valves

Prior to beginning the sealing operation the contractor shall locate all manhole covers and valve boxes in the area to be sealed. Placing one or

more layers of heavy craft paper or other suitable material over them shall protect manhole covers and valve boxes. The protective covering shall be secured in place so that it does not move or tear during the sealing operation. The contractor shall remove the protective covering and any seal material placed over manhole covers and valve boxes as soon as the seal has set sufficiently to prevent damage to the adjoining seal in the process. The edges around manhole covers and valve boxes shall be neat and smooth and shall conform to the shape and size of the manhole cover or valve box.

10.2 Streets

Clean up along streets shall be accomplished as the work progresses and any excess material that is raked onto or otherwise placed on adjoining concrete curb and gutter, valley gutters or fillet areas or on adjacent asphalt or concrete paving shall be removed before it breaks or sets up.

Before a section of street is opened to traffic all clean up work shall be completed on that section.

11. MEASUREMENT AND PAYMENT

11.1 General

Payment will be made for these items listed in the bid proposal only. All work, materials, labor and appurtenance required to complete the project as shown on the plans or called for in the specifications but not listed in the bid proposal shall be considered as incidental and no separate payment will be made. The cost of these incidentals must be included in the price bid for the various items listed in the bid proposal.

11.2 Measurements

(1). Measurement will be made of the actual number of tons of each type or grade of the Composite Polymer Modified Slurry Seal (Micro-Surface) complete in place. For this specification a ton is considered 2000 lbs. and the composite slurry seal mixture is defined as the asphalt,
aggregate and additives.

All materials shall be weighed on certified public scales or the contractor shall place a set of standard truck scales at a site approved by the Engineer. Scales shall conform to the requirements of the item "Weighing and measuring equipment" Texas Highway Department 1982 Standard Specifications.

(2). Aggregate - The quantity of aggregate used in the accepted portions of the work shall be measured by net ticket weight of each individual load of
aggregate shipped to the project from the approved job site scale.

The weight of mineral additive used shall be calculated and included in the total aggregate weight.

(3). Polymer Modified Asphalt Emulsion. The quantity of polymer modified asphalt emulsion in the accepted portion of the work shall be measured by tons of material based on the accepted load tickets issued from the manufacturer. At the completion of the project any unused emulsion shall be weighed back and that quantity deducted from the accepted asphalt emulsion quantity delivered.

11.3 Payment

Payment will be made for the number of tons of micro surface measured at the applicable unit price bid per ton of micro surface in the bid proposal. This payment shall be full and complete compensation for the complete in place micro surface.

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P.V.C. PIPE CASINGS

1. SCOPE

   This item consists of furnishing and installing PVC pipe for casing for future water and electric lines at locations shown on the plans or as directed by the Engineer.

2. MATERIAL

   Pipe shall be ASTM D 1785 schedule 40 PVC pipe or ASTM D 2241 PVC SDR 32.5 pressure pipe. The ASTM designation and schedule or SDR shall be clearly marked on the outside of the pipe.

3. CONSTRUCTION

   Pipe shall be laid in straight alignment and grade in trenches as narrow as the diameter of the pipe can be laid. Pipe shall be placed after the sub grade is prepared but before base material is placed. Bedding under the pipe shall be a minimum of 2 inches in thickness and shall be carefully graded and leveled before pipe is placed. Joints shall be water tight. They may be solvent cement welded using approved materials, or may be made using a gasketed collars or push on gasketed bell and spigot. When collars are used care shall be exercised to assure that the collar is centered over the joint. All joints shall be made in accord with the manufacturer's recommendations. After pipe has been joined and inspected the pipe shall be encased in bedding/encasement material to a thickness of 3 inches above the pipe. Care shall be exercised to be sure the encasement material is worked in under the haunches of the pipe and compacted along the side of the pipe to assure adequate lateral support. The balance of the trench shall be back filled using cement stabilized backfill consisting of 2 sacks of Portland cement to 1 cubic yard of blow sand or crushed caliche mixed with sufficient water to form a stiff place able mixture that can be consolidated in the trench by rodding or vibrating. The back fill shall be "struck off" at the finished sub grade level using square point shovels or suitable screeds. The ends of the pipe shall be tightly plugged to prevent the entrance of water debris or other foreign material. These plugs shall be PVC or rubber stoppers designed to endure until the water lines and/ or electric lines are places.

4. MEASUREMENT AND PAYMENT

   Casing pipe shall be measured by the linear foot along the center of the pipe and shall be paid for at the unit price in the bid proposal.

WATER LINE SPECIFICATIONS

1. SCOPE OF WORK

The work covered by this section consists of all water pipe lines and piping, including valves, valve boxes, tapping sleeves, fire hydrants and other accessories, required to complete the project. The contractor shall furnish all materials, labor, superintendence, tools, equipment and incidentals necessary for the complete construction of this work in accordance with the drawings and these specifications.

2. PIPE AND MATERIAL

2.1 General

Pipe shall be polyvinyl chloride (PVC) AWWA C900, ductile iron AWWA C-151 or steel cylinder concrete pipe AWWA C-303.

2.2 Polyvinyl Chloride (PVC) Pipe

A. PVC pipe furnished for use on this project shall conform to the requirements of AWWA C900 Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. through 12 in., for water distribution pressure class 150, DR18. and shall be NSF approved for potable water supply.

B. The pipe furnished shall have an integral bell designed for joint assembly using elastomeric seals.

C. Markings for the pipe shall include all the requirements of AWWA C900 and the MSF approval stamp.

D. Elastomeric seals shall be furnished by the pipe manufacturer. Seals shall be manufactured to conform with the requirements of ASTM F4 77 and shall be specifically designed for use with the pipe furnished.

E. Lubricants intended for use with PVC pipe and seals (gaskets) shall be compatible with both PVC and the seal material. Lubricant shall not support growth of bacteria and shall not adversely affect the potable quality of the water that is to be transported.

F. Pipe laying lengths shall be 20'.

G. Service taps on PVC water lines shall be made using hinged type or double strap type saddles. Tapping saddles shall support the full circumference of the pipe and shall have a bearing area of sufficient width along the axis of the pipe to prevent distortion of the pipe when saddle is tightened.

No direct taps into the wall of PVC pipe will be permitted.

Seals for tapping saddles shall be recessed into the body of the saddle and shall be

a rubber - compound conforming to the requirements of ASTM F477.

Tapping saddles shall be SMITH-BLAIR Taper Seal Style 313 or DMD Dresser style 194 or approved equal.

H. Tapped connections for water mains and fire lines made on PVC water mains shall be accomplished using full bodied ductile iron tapping sleeves of a pressure rating equal to or greater than the pressure rating of the pipe specified.

I. Bedding for AWWA C900 PVC water pipe shall extend from a minimum depth of 4 inches below the outside of the water line to a minimum cover of 6 inches over the top outside of the water line.

J. AWWA C900 PVC water pipe shall be installed in accord with the applicable requirements for installing ductile iron pipe.

Care shall be taken to install each joint of PVC water pipe to, but not beyond the factory insertion mark on the pipe.

When a joint of PVC water pipe must be cut, the end of the pipe shall be carefully beveled to match the factory bevel on the uncut pipe. An insertion mark matching the factory insertion mark on the uncut pipe must be made before the pipe is inserted into the bell.

When PVC water pipe is to be inserted into a ductile iron fitting or valve, the factory bevel must be removed to form a square plain end pipe.

2.2 (a) Metallic Marking Tape (For PVC Water Pipe)

2.2(a).1 General

When non-metallic pipelines are to be installed, then the Contractor shall furnish and lay, above the pipeline, a continuous strip of metallic identification tape.

2.2 (a).2 Tape Material

The metallic identification tape shall be at least two inches (2”) in width and shall be of corrosive resistant metal of sufficient thickness to be stable and reflect electronic signals to electronic pipeline detector when buried to a dept of twenty-four (24”) below normal ground level.

The metallic tape shall be painted blue on one side and shall have 1-inch high letters painted continuously on the same side of the tape which read, “CAUTION: BURIED WATER LINE BELOW” or other words to this effect.

The marking tape shall be “Detectable Warning Tape”, as manufactured by the Omega Marking Company, or equal approved by the Engineer.

2.2(a).3 Construction Methods

The Contractor shall backfill over non-metallic pipelines to a depth which is less than twenty-four (24”) and not more than twelve inches (12) from the top of the cut of the ditch section in which the pipeline is laid. Contractor shall stop the backfilling material to a generally uniform level. All machine tamping, jetting and other compaction activities shall be accomplished up to this point of height in the backfilling the marking tape is placed in the trench.

The Contractor shall then lay the marking tape in the pipe trench and shall be held in position by the spot placement of backfill materials over it to keep it from sliding t the sides and/or from being blown about in the ditch by the wind. The tape shall be lid with the painted side, which shall also be the side with the identification lettering on it, in the “up” position. The tape shall be laid in the flat position and kept there until backfill is accomplished.

The Contractor shall then complete the backfilling operation in such a manner that the marking tape is not cut, crimped, ruptured or separated by the backfilling work.

2.2(a).4 Measurement and Payment

No separate pay item will be provided for furnish and placing the marking tape. This item shall be considered subsidiary to the non-metallic pipe being placed.

2.3 Ductile Iron Pipe

A. All ductile iron pipe used in the construction of water works improvements shall be Cement Lined and shall be manufactured in accordance with and shall meet the requirements of AWWA Specification C-l5l.

B. Pipe shall be cast in lengths of not less than l2 feet and shall be designed for a working pressure of l50 pounds per square inch. Thickness of ductile iron pipe shall be as shown on the plans and bid proposal or shall be computed in accordance with AWWA Specification C-l50, based on l50 pounds per square inch working pressure for 10 feet of cover and laying condition 2.

C. All ductile iron pipe shall have an exterior, bituminous coating and an inside cement-mortar lining in accordance with the requirements of AWWA Specification C-l04.

2.4 Polyethylene Plastic Tubing

Service lines shall be constructed with polyethylene plastic tubing as specified in ASTM D 2737 with a rating of l60 psi.

2.5 Ductile Iron Pipe Fittings

All fittings for ductile iron pipe and PVC pipe shall be ductile iron and shall be mechanical joint all connections except tees for fire hydrant leads unless shown otherwise on the plans. Tees for connecting fire hydrant leads shall be MJ- with a flange outlet.

All ductile iron fittings shall conform to AWWA Specification C-110, designed for a working pressure of 250 psi. All ductile iron fittings shall have an external coating and shall be cement lined in accordance with the specifications for coating and lining the pipe.

2.6 Pretensioned Concrete Cylinder Pipe

A. The contractor shall furnish and install all concrete cylinder pipe and fittings, including connections and appurtenances complete as shown on the plans and specified herein.

B. The contractor shall submit six (6) sets of full and complete shop drawings on the concrete cylinder pipe and fittings. All of the drawings and data shall be complete and shall include a complete description of the pipe offered, including cuts, tabulated layout and all pertinent engineering data required for a complete evaluation of the submittal. Submittal data shall be in such form and so presented that the Engineer may readily review the data.

C. Prior to delivery of the pipe to the project site, the manufacturer shall furnish an affidavit certifying that all pipe, fittings, and specials, and other products and materials furnished, comply with the applicable provisions of this specification.

D. The pipe manufacturer shall furnish a factory trained, job experienced field representative who shall visit the project periodically during the course of installation. He shall also be subject to call by the contractor and/or engineer to advise and assist with the solution of field problems.

During visits, the representative shall observe all phases of the project including location and condition of pipe strung ahead of the contractor, trench width, if applicable, bedding and backfill, assembly of pipe joints and protection of steel. If, in the opinion of the representative any phase of the installation is unsatisfactory, he shall so advise the contractor's superintendent and also advise the owner or engineer's representative on the job site.

E. All closure sections shall be the jack on type and "field welding" will not be permitted without the written permission of the engineer.

F. Pipe manufacturer will install all necessary taps for the contractor to disinfect and field hydrostatic test the pipe.

G. Pretensioned concrete cylinder pipe, fittings and specials shall be designed, fabricated and tested in accordance with the latest requirements of AWWA C-303, "Reinforced Concrete Pressure Pipe Steel Cylinder Type, Pretensioned, for Water and Other Liquids" with additional requirements or modifications as described herein.

H. Pretensioned concrete cylinder pressure pipe shall be designed for l50 psi, working pressure and manufactured in 32 foot nominal lengths in accordance with the provisions of AWWA Standard C-303.

I. Inspection and Testing

(1) The owner reserves the option to have an independent testing laboratory, at the owner's expense, inspect pipe and fittings at the pipe manufacturer's plant to ensure compliance with the applicable specifications. The owner's testing laboratory and Engineer shall have free access to those parts of the manufacturer's plant that are necessary to ensure compliance with the governing standard. The pipe manufacturer shall notify the owner, in writing, at least two weeks ahead of pipe fabrication as to start of fabrication and fabricating schedule so that the owner can advise the manufacturer as to owners' decision regarding tests to be performed by an independent testing laboratory. In event the owner elects to retain an independent testing laboratory to make material tests and weld test, it is the intent that the tests be limited to one spot testing of each category unless the tests do not show compliance with the standard. If these tests do not show compliance, the owner reserves the right to have the laboratory make additional tests and observations to ensure compliance of the finished product with the standard.

(2) In any event, the manufacturer shall perform the tests described in AWWA C 303, and furnish the owner with a copy of the test reports, if requested, at the expense of the pipe manufacturer. The pipe manufacturer shall furnish the owner with affidavit of compliance as outlined in the standard.

(3) All welds for water tightness in special pipe and fittings that have not been hydrostatically tested may be examined by use of visible dye penetrant system meeting requirement of ASTM El65; however, collar reinforcement and all other lap welds shall be tested by introducing air under l0 psi pressure between the collar and cylinder and checking for leaks around and through the welds with soap solution.

The area to receive the dye penetrant shall be cleaned free from contaminants that might interfere with the penetrant process. The temperature of the steel in the weld area shall be between 60 and l25 degrees F. when the penetrant is applied. Dwell time of six hours shall be allowed after application of the penetrant and developer before interpreting the results.

Defects that are found shall be repaired and the test repeated until all defects

are eliminated. Colored penetrant shall be removed before fittings are lined.

2.7 Casing Pipe

Casing pipe to be installed in bore or open cut may be limited service pipe, corrugated galvanized steel pipe or new straight seam or spiral welded steel pipe. Casing pipe shall be furnished in thickness or gage as shown on the plans.

Limited service pipe proposed for use on this project must be approved a minimum of four (4) working days prior to the time of opening bids and shall be in good condition and shall meet the same service requirements as the corrugated galvanized steel or welded steel pipe.

Welded steel casing pipe shall be coated inside and out using a coal tar epoxy or shall be bituminous coated in side and out by the hot dip method.

2.8 Bedding Materials

A. All water pipelines placed on this project shall be bedded with crushed stone bedding materials to the minimum as shown on the plans and in the Detail Drawings.

B. Granular material furnished for foundation, bedding, encasement, backfill, or other purposes as may be specified, shall consist of any natural or synthetic mineral aggregate such as, crushed gravel, crushed rock, crushed stone, or slag, and shall conform to the following specifications and/or gradation.

Note, all materials used for these purposes shall be crushed and shall have at least two broken faces. Pea gravel will NOT be allowed.

	Foundation	Bedding	Encasement	Backfill
ASTM c33 Grade #57	X			
ASTM C33 Grade #67	X			
ASTM C33 Grade #8		X	X	
THD 1982 ITEM 302 Type "D" Grade #4		X	X	
THD 1982 Item 302 Type "D" Grade #5			X	
Crusher Fines**			*X	X

* 100 percent of crusher fines that are to be used within 12 inches of the top of pipe must pass the 3/4" sieve.

** Approximate Gradation for Crusher Fines

Sieve Size	% Passing
2 inch	100
#4	35 - 100
#10	20 - 100
#40	5 - 35
#200	4 - 10

Crushed stone material proposed as an alternate for use on this project and not meeting the above specifications must be approved in writing at least 48 hours prior to the time scheduled for opening bids.

C. Granular materials provided for Foundation, Bedding, Encasement, or backfill use as required by the contract, either as part of the pipe item work unit or as a separate contract item, shall be classified as to use in accordance with the following:

MATERIAL USE DESIGNATION	ZONE DESIGNATION
Granular Foundation	Placed below the bottom of pipe grade as replacement for unsuitable or unstable soils, to achieve better foundation support.
Granular Bedding	Placed below the midpoint of the pipe prior to pipe installation, to facilitate proper shaping and achieve uniform pipe support. Also for Class B Bedding where specified.
Granular Encasement	Placed below an elevation one half (6") foot above the top of pipe, after pipe installation, for protection of the pipe and to assure proper filling of voids and thorough consolidation of backfill.
Granular Backfill	Placed below the surface base course, if any, as the second stage of backfill, to minimize trench settlement and provide support for surface improvements.

In each case above, unless otherwise indicated, the lower limits of any particular zone shall be the top surface of the next lower course as constructed. The upper limits of each zone are established to define variable needs for material gradation and compaction or void content, taking into consideration the sequence of construction and other conditions. The material use and zone designations described above shall only serve to fulfill the objectives and shall not be construed to restrict the use of any particular material in other zones where the gradation requirements are met.

3. **VALVES AND VALVE BOXES**

3.1 General

A. Valves 4" through l2" shall be resilient seated gate valves with non-rising stems and shall open by turning to the left (counter clock wise).

B. Valves l4" and larger shall be resilient seated butterfly valves and have operators suitable for direct burial and shall open by turning to the left (counter clock wise).

All valves except valves for use in fire hydrant leads shall have mechanical joint ends unless shown otherwise on the plans. Valves for use in fire hydrant leads shall be flange by mechanical joint.

C. All valves and fire hydrants shall be spray coated with a two component thermal setting epoxy to cover all interior wetted ferrous surfaces. Finished coating shall have a minimum thickness of 4 mils. The coating shall conform to the coating section of these specifications.

D. All valves for buried service shall be equipped with 2" square AWWA operating nuts.

3.2 Gate Valves

A. Gate valves shall be iron body, resilient **wedge gate** and shall be in compliance with AWWA Standard C-509-80 or latest revision thereof and shall have the following design features:

B. All valves shall have a working pressure of 200 psi and shall be bottle tight tested at this pressure from both directions. The gate body shall also be hydrostatically tested at 400 psi. Zero leakage will be required in all tests. The body, bonnet, and stuffing box shall be flange together with ASTM A-307 Grade B bolts and nuts to insure repairability.

C. Stems shall be machined from modified manganese bronze rod with an integral forged thrust collar machined to size.

D. Stem seals shall be dual "O" ring type.

E. Valve discs shall be rubber encapsulated or have disc seat rings molded of natural rubber, internally steel reinforced retained to the disc by self-locking type 304 stainless steel screws. Valve gates shall seat against a machined epoxy coated mating surface in the body of the valve.

F. All internal ferrous metal surfaces (machined or cast) shall be factory spray coated with a two component thermosetting epoxy to a nominal thickness of 4 mils and the exterior shall be coated with asphalt varnish as specified for coating of the pipe. (See Sec. 3.4 of these specifications for epoxy coating).

G. Valves shall be Mueller A-**2360** or Dresser-M&H **4067** or approved equal. Any alternate (approved equal) to these specifications **shall have completely interchangeable parts with either of the specified valves.**

3.3 Butterfly Valves

A. General - All butterfly valves shall be of the rubber seated tight-closing type. They shall meet or exceed AWWA Standard C-504, Class l50B. Both valve ends shall be mechanical-joint per AWWA Standard C-lll. Accessories (bolts, glands, and gaskets) shall be supplied by the valve manufacturer.

B. All valves must use full AWWA C-504 Class l50 B valve shaft diameter, and full Class l50 B underground service operator torque rating throughout entire travel, to provide capability for operation in emergency service.

C. Valve body shall be high strength cast iron ASTM A 126 Class B with l8-8 type 304 stainless steel body seat. Valve vane shall be high strength cast iron ASTM A 48 Class 40 or ASTM A 536, Grade 65-45-l2 ductile iron having rubber seat mechanically secured with an integral l8-8 stainless steel clamp ring and l8-8 stainless steel self locking screws.

D. Rubber seat shall be a full circle 360^{o} seat not penetrated by the valve shaft. Valve shall have permanently set two way thrust bearing. Packing shall be designed for permanent duty in underground service.

E. Valve operator shall be of the traveling nut type, sealed, gasketed and lubricated for underground service. It shall be capable of withstanding an overload input torque of 450 ft. lbs. at full open or closed position without damage to the valve or valve operator. It shall be designed to resist submergence in water to 25 ft. head pressure. Number of turns to operate valve shall be as listed below in order to closely resemble conventional distribution valve practices and to minimize water hammer:

Pipe and Valve Size	Turns to close	Pipe and Valve Size	Turns to Close
4" - 6"	16-1/2	14" - 16"	48"
8"	24	18" - 20"	72
10" - 12"	36	24"	90

F. Valves shall be capable of easy closure by one man using standard valve key, even under emergency line-break conditions as severe as those that would - cause a valve maximum opening torque requirement of as much as two times AWWA Class l50 B.

G. All valves shall be tested bottle-tight at rated working pressure by the manufacturer as follows:

l4" up. . . . . l50 psi

In addition a hydrostatic test with vane partially open shall be given to the assembled valve as follow:

l4" up. . . . . 300 psi

H. Valve shafts shall be l8-8 type 304 stainless steel. Shaft bearings shall be of the self lubricating sleeve type.

I. Valve discs or vanes for valves 30" and larger shall be the flow through (bridge or truss) type.

J. Butterfly valves shall be Dresser-M&H Model "450", "4500" or "l450" or Mueller line seal III or approved equal. Alternates (approved equal) to these specifications must be approved in writing 48 hours prior to time bids are received.

3.4 Coating

A. The coating shall be a two part thermosetting epoxy protective coating and shall function as a physical, chemical and electrical barrier between the base metal to which it is applied and the surroundings.

B. The coating shall be non-toxic and shall not impart taste to water. The coating must be formulated from materials deemed acceptable per the FOOD AND DRUG ADMINISTRATION DOCUMENT TITLE 2l of the FEDERAL REGULATIONS ON FOOD ADDITIVES SECTION l2l.25l4 entitled, RESINS AND POLYMERIC COATINGS.

C. The coating shall have a satin finish and shall be suitable for field over coating and touchup with same coating material without sanding or special surface preparation, or application of heat in excess of room temperature.

D. The coating shall have a successful record of performance in valves, pipe or other allied equipment for a minimum of two years.

E. The coating adhesion to the substrate shall exceed cohesion of the coating film as demonstrated by the following test:

(1) Prepare test panel and apply coating per manufacturer's recommendation.

(2) After sample has properly cured per manufacturer's recommendation, scribe an "X" using a sharp knife or scalpel through the coating to the metal substrate.

(3) Then with the point of the knife at the juncture of two scribes, attempt to lift off coating. Coating should not lift off substrate or between coats readily, but should break up leaving coating material on the substrate of this damaged area.

(4) No disbandment of the film shall be noted as tested above after immersion in tap water for l500 hours at l00`F.

F. A falling sand abrasion test using ASTM D968 shall produce an abrasion coefficient of 25-30 liters/mil. As an alternative, a Taber Abrader Test should find 3.5 - 3.7 milligrams coating loss per l00 cycles when using a CSF l0 Wheel (l000 gram weight).

3.5 Valve Boxes

All valves to be used in buried service shall be enclosed in cast iron valve boxes. Care shall be taken to place and maintain the 2" square operating nut in the center of the valve box. The valve box shall be two piece cast iron suitable for use with PVC pipe box risers. The 6 inch diameter cover shall be marked " Water". The PVC riser pipe shall be furnished in lengths as required (minimum pipe cover 42") PVC pipe for valve box riser may be ASTM C-900, ASTM D1785 schedule 40, ASTM D2241 pressure class 125 or ASTM D3034 DR 35. Valve boxes shall have a concrete ring 8" thick and having a radius equal to the radius of the valve box plus one foot (1') cast around them. Valve boxes placed in unpaved areas shall be set level with or slightly higher than the finished ground elevation. Valve boxes set in paved areas shall match the finished pavement surface.

3.6 Fire Hydrants

A. Fire hydrants shall conform to the requirements of AWWA C 502 dry barrel type. The fire hydrants shall be designed for a depth of bury of 4.5 feet, however the depth of bury may vary according to field conditions and extensions or shorter bury depth may be required.

B. The hydrants shall have a 5-l/4 inch valve opening, two 2-l/2 inch hose nozzles and one 4-l/2 inch pumper nozzle.

C. Hose threads shall be National Standard threads.

D. The hydrants shall be sized for 6-inch mains and shall have an inlet connection compatible with the type pipe used. All gaskets, nuts, bolts and other jointing materials shall be considered part of the fire hydrant installation.

E. Operating nut shall be standard l-l/2 inch pentagon opening counter-clockwise. The hydrant shall close with the pressure.

F. Hydrants shall be painted Federal Safety Yellow.

G. Fire hydrants shall have all interior wetted ferrous surfaces epoxy coated as required in the general and coating section of this item.

H. The hydrants shall have a minimum of two (2) drain holes located on opposite sides of the hydrant. The entire drainage channel must be made of non-corrosive material and sealed by acceptable resilient material (metal and/or leather seals are not acceptable).

I. The hydrants shall have a breakable safety flange and breakable stem coupling which breaks cleanly upon impact.

J. The hydrants shall be AWWA improved type hydrants and shall have self-oiling reservoirs.

K. Fire hydrants shall be the Mueller Centurion, the Dresser -M & H 929 Reliant, or The American Darling.

4. EXCAVATION, TRENCHING BEDDING AND BACKFILLING

4.l Trenching

A. The trench shall be excavated to the lines and grades as established by the engineer and as shown on the plans. The depth of cover for all main lines on which the grades and elevations are not shown on the plans, shall in general be Forty-two (42) inches. The amount of cover may vary over or under 42 inches as directed by the engineer but in no case will the amount of cover be less than thirty-six (36) inches. Depth of cover for service lines shall be as shown on the detail drawings.

B. Water lines constructed in proposed streets and service drives shall have the depth of cover measured from the finished grade. The contractor is hereby cautioned that proposed street finished grades are sometimes cut below the existing ground elevation.

C. The minimum width of the trench shall be the outside diameter of the pipe plus twelve (l2) inches for pipe diameter through l8", the outside diameter of the pipe plus eighteen (l8) inches for pipe diameters over l8". The trenching equipment shall be maintained on a sufficiently level road bed to provide substantially vertical trench walls. The maximum horizontal offset of the trench wall from bottom of trench to the top of the trench (under-cutting) shall be four (4) inches.

D. The trench shall be over excavated to an even grade to the depth of required bedding so that the bottom of the pipe will rest on a uniform thickness of bedding material on the bottom of trench throughout the entire length of the pipe. In order to obtain a true even grade, the bedding material shall be fine graded by hand. On lines that are to be laid to established grades batter boards shall be set at fifty foot intervals and the trench graded to the established grade.

E. Any part of the trench excavated below grade shall be corrected by filling with bedding material. The bedding material shall be thoroughly compacted.

E. If large rock, rock fragments or other unyielding materials are encountered in the bottom of the trench they shall be removed to a depth of six inches below grade, and the void filled with thoroughly compacted approved bedding material.

G. Bell holes of ample dimensions shall be dug at each joint to permit the jointing of pipe to be made properly and of sufficient depth to prevent the bell of the pipe from resting on undisturbed materials.

H. Wherever necessary to prevent caving, the trench shall be adequately braced and sheeted. Trench safety shall be in accordance with item l4 "Shoring and Sheeting of this specification.

I. Trench digging machinery may be used to make the trench excavations except in places where operation of same would cause damages to trees, buildings or other existing structures either above or below ground. In such instances hand trenching methods shall be employed.

J. All excavated material shall be stockpiled in a manner that will not endanger the work or existing structures and that will cause the least amount of obstructions to walks and driveways.

K. There will be no classification of the excavated materials and the term excavation shall include all materials encountered in excavating the trenches or structural excavations.

L. The contractor shall take all necessary precautions for protecting paved areas from being damaged by the trenching and backfilling equipment. Any damage done to any paved area, outside of the area set forth in the plans, as a result of the construction work shall be repaired by the contractor at his own expense.

M. Where the lines are located behind curbs, the contractor shall take special precautions to protect trees and shrubs. Care shall be exercised to cause as little damage to lawns as possible.

Where lines cross under curbs, gutters or curbs and gutters, tunneling will be required.

N. Blasting for excavation of solid rock will be permitted only after securing the

approval of the Director of Engineering and Transportation and the engineer and only when proper precautions are taken for protection of persons and property. The hours of blasting will be fixed by the engineer. Any damage caused by blasting shall be paid for by the contractor. The method or procedure relative to blasting shall conform to all state laws and local ordinances.

O. The contractor will be required to locate all known utility lines, including consumer service lines, far enough in advance of the trenching to make proper provisions for protecting the lines and to allow for any deviations that may be required from the established lines and grades.

P. The contractor shall not be allowed to disrupt the service on any utility lines except consumers service lines, which may be taken out of service for short periods of time, if the contractor obtains permission from the engineer and from the owner of the premises being served by the utility.

Q. The contractor shall immediately notify the proper utility company of any damage to utility lines, in order that service may be reestablished with the least possible delay. Repair of any damage to existing lines and the repair of consumer lines which are authorized to be cut or temporarily taken out of service shall be made by the contractor at his own expense, and as directed by an official representative of the utility company involved.

R. All utility lines shall be properly supported to prevent settlement or damage to the line both during and after construction.

S. Any permanent relocations of existing utility lines shall be done by the proper utility company without expense to the contractor.

4.2 Backfill General

A. All pipeline excavations shall be backfilled in a manner that will restore pre-existing conditions as the minimum requirement and fulfill all supplementary requirements indicated in the Plans and Specifications. The backfilling operations shall be started as soon as conditions will permit on each section of pipeline to provide continuity in subsequent operations and restore normal public service as soon as practicable on a section-by- section basis. All operations shall be pursued diligently, with proper and adequate equipment, to assure acceptable results.

B. Depositing of the backfill shall be done so the shock of falling material will not injure the structure. Grading over and around all parts of the work shall be done as directed by the Engineer.

C. Whenever soil types which are determined by the Inspector to be undesirable for backfill are excavated from the trench, such material shall be hauled away and deposited where directed by the Inspector at no additional compensation.

D. In the absence of special work item requirements the backfilling shall be accomplished with the use of suitable materials selected from the excavated

materials to the extent available and practical. Should the materials available from the trench section be unsuitable or insufficient, the required additional materials shall be furnished from outside sources at the Owners expense.

E. Suitable material shall be defined as a mineral soil reasonable free of foreign materials (rubbish, debris, etc.) frozen clumps, oversize stone, rock, concrete or bituminous chunks and other unsuitable materials, that may damage the pipe installation, prevent thorough compaction, or increase the risks of after settlement unnecessarily. Material selection shall be such as to make the best and fullest utilization of what is available, taking into consideration particular needs of different backfill zones. Material containing stone, rock, or chunks of any sort shall only be utilized where and to the extent there will be no detrimental effects.

F. Backfill materials shall be carefully placed in relatively uniform depth layers spread over the full width and length of the trench section in a manner and/or sequence that will provide simultaneous support on both sides of the pipeline. Each layer shall be compacted effectively, by approved mechanical of hand methods, until there is no further visual evidence of increased consolidation. Compaction of the in place layer shall be completed acceptably before placing material for a succeeding layer thereon. The manner of placement, layer thickness, compaction equipment, and procedure effectiveness shall be subject to approval of the Engineer. Water jetting or flooding shall NOT be used to compact trench backfill.

G. Within the pipe bedding and encasement zones described as that portion of the trench which is below an elevation one foot above the top of the pipe, the materials placed shall be limited in particular size to 3/4 inch maximum. For larger pipe in access of 18 inches in diameter the Engineer may allow particle sizes up to 2 inches maximum if it can be shown that the backfill can be satisfactorily compacted without leaving voids or damaging pipe or joints. Above these zones, the placement of material containing stones, boulders, chunks, etc. shall be governed by the layer thickness and compaction equipment capabilities.

H. Compaction of materials placed within the pipe bedding and encasement zones shall be accomplished with portable or hand equipment methods to achieve thorough consolidation under and around the pipe and avoid damage to the pipe. Above the pipe zone material, the use of heavy roller type compaction equipment shall be limited to safe pipe loading.

I. The maximum loose thickness of each backfill layer shall be l2 inches, except that l6 inches will be permitted for Granular Materials placed above an elevation one foot above the top of pipe, and with the provision that, by authority of the Engineer in consideration of the demonstrated capability of special type vibratory compactors, these maximums may be increased at his discretion. "Hydro tamps" or "vibra tamp: or other heavy vibrating equipment shall not be used until the backfill has reached a depth of four (4) feet above the top of the pipe.

J. All surplus or waste materials remaining after completion of the backfilling operations shall be disposed of in an acceptable manner within 24 hours after

completing the backfill work on each particular pipeline section. Disposal at any location within the project limits shall be as specified, or as approved by the Engineer; otherwise, disposal shall be accomplished outside the project limits at the Contractor's discretion. The backfilling and surplus or waste disposal operations shall be a part of the work required under the pipeline installation items, not as work that may be delayed until final cleanup.

K. Until final acceptance of the project, the Contractor shall assume full Responsibility and expense for all backfill settlement and shall refill and restore the work as directed to maintain an acceptable surface condition. All additional materials required shall be furnished without additional cost to the Owner.

4.3 Backfill Procedure above Pipe Zone, in Public Rights-of-way and other areas where settlement is important.

A. Backfill above the pipe zone shall be made using Portland cement stabilized backfill or crushed stone screening (crusher fines).

B. Backfill around structures such as manholes, junction boxes, transformer boxes and valve boxes shall be made using portland cement stabilized backfill material or crushed stone screening (crusher fines).

C. The minimum depth of stabilized backfill or crusher fines shall be twelve (12") inches.

When utilities are being constructed under existing paving, the stabilized backfill or crusher fines shall extend from top of the pipe zone to the top of the base course.

When utilities are being constructed under existing unpaved streets that are not scheduled for immediate pavement construction, the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the existing roadway surface.

When utilities are being constructed in new streets that are scheduled for immediate paving or in streets in a new subdivision for which a paving contract with the property developer has been approved the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the bottom edge of the eight (8") inches of subgrade, or, if the paving contractor has constructed a portion of the roadway prior to the construction of the utilities stabilized backfill shall extend to the top of the course the contractor has finished. In no case shall the backfill extend above the top of the base course.

If the final course of asphaltic concrete has been placed, the street or alley surface shall **NOT** be cut for utility installation.

In new streets where stabilized backfill is required only to the bottom of the subgrade course, the minimum depth of stabilized backfill may be reduced to six (6") inches in which case the maximum depth of the "pipe zone" shall be limited to six (6") inches above the top of the utility line or conduit.

D. Backfill Materials

(1) Portland cement stabilized backfill shall consist of caliche base material, blow sand or native soil stabilized by the addition of Portland cement. Crushed stone or concrete aggregate shall **NOT** be used.

The Contractor shall submit a mix design prepared by an approved Commercial Laboratory that will produce a minimum 7 day compressive strength of 150 psi. In no case shall the minimum cement content of the mix be less than 1 sack per cubic yard.

(2) Cement used in Portland cement stabilized backfill shall be Type I or Type II conforming to the requirements of ASTM Designation C150.

(3) Caliche used for Portland cement stabilized backfill shall be crushed material con-forming to Texas State Department of Highways and Transportation 1982Standard Specifications for Construction of Highways, Streets and Bridges Item 248 Type F, Grade 2.

(4) Blow sand used for Portland cement stabilized backfill shall be clean, free from organic matter, clay lumps, rock and other deleterious matter.

(5) Native soil used for Portland cement stabilized backfill shall be clean, free from clods and organic matter, and rock in excess of 2".

(6) Crushed stone screening (crusher fines) used for back fill shall be sharp grained particles of crushed stone conforming to the following gradation

Sieve Size	% Passing
2"	100
#4	35-100
#10	20-100
#40	5-35
#200	4-10

and may be the by product of crushing stone for other purposes or may be stone specifically crushed for use in backfill. Crusher fines not meeting these specifications may be approved for backfill upon demonstration that the desired results will be obtained.

E. Backfill Construction

(1) Portland cement stabilized caliche backfill or Portland cement stabilized native soil backfill may be constructed using either the "dry" method or the "wet" method.

(a) The dry method of stabilized backfill construction consists of dry mixing of the cement and caliche, sand or soil to produce a homogenous mixture then adding and mixing sufficient water for proper compaction and hydration of the cement. The water content of the mixture will be approximately one to two percent above the optimum moisture for soil compaction. The mixing may be accomplished by using batch mixers or on the job site by "blade Mixing" or other suitable method to produce the desired backfill material. The mixed material shall be placed in lifts of up to a maximum of 12 inches and compacted to ninety five (95%) modified proctor density by use of suitable compacting equipment.

(b) In the "wet" method of cement stabilized backfill construction, the materials shall be mixed in an approved concrete batching plant or mixer to the consistency of concrete and placed as concrete would be placed. The slump of the backfill material shall be such that all voids will be filled, approximately four (4") to six (6") inches. The backfill shall be consolidated by rodding or by the use of mechanical vibrators.

(c) The mix design used must be for the method of placement chosen.

(2) Portland cement stabilized blow sand backfill shall be mixed and placed by the "wet" method as described above.

(3) Crushed stone screening (crusher fines) shall be wetted uniformly throughout with sufficient moisture to assure proper compaction before being placed in the trench.

The moistened crushed stone screening (crusher fines) shall be placed in maximum lifts of twelve (12") inches and consolidated using vibratory type compaction equipment except when it has been demonstrated that the compaction equipment employed will adequately compact deeper lifts in which case the maximum depth of a lift shall be limited by the capabilities of the equipment used.

Tests to determine the compacted density of the backfill shall be ordered by the Engineer if in his opinion the compaction is not adequate. Test showing a minimum compacted density of 90% modified proctor will be deemed adequate compaction.

5. INSTALLATION OF DUCTILE IRON PIPE

5.1 Pipe Laying - General

A. All pipe and accessories shall be unloaded, handled, laid, jointed, tested for defects and for leakage and chlorinated in the manner herein specified.

B. The pipe, fittings, valves, and accessories shall be inspected upon delivery and during the progress of the work and any material found to be defective will be rejected by the engineer and the contractor shall remove such defective material from the site of the work.

C. The contractor shall be responsible for all material furnished by him and he shall replace at his own expense all such material that is found to be defective in manufacturer or has become damaged in handling after delivery.

D. All pipe, fittings, valves, and other accessories shall, unless otherwise directed, be unloaded at the point of delivery, hauled to and distributed at the site of the work by the contractor. Loading and unloading, of pipe and fittings shall be by hoisting or by sliding, or rolling on skidways in such a manner as to avoid shock or damage to the material. Under no circumstances shall pipe or fittings be dropped. Pipe handled on skidways must not be skidded or rolled against pipe already on the ground.

The pipe, fittings and accessories shall be placed along the site in such a manner as to be kept as free as possible from dirt, sand, mud, and other foreign matter.

E. All pipe shall be laid and maintained to the lines and grades shown on the plans
or as established on the ground by the engineer.

F. Wherever it is necessary to deflect pipe from a straight line either in a vertical or horizontal plane to avoid obstructions, to plumb valves and hydrants, or where vertical or horizontal curves are shown or permitted, the degree of deflection at each joint shall not exceed the maximum deflection recommended by the manufacturer of the particular kind of pipe being laid and the degree of deflection shall be approved by the engineer.

G. After the trench grade has been completed and all bell holes dug and the grade inspected, the pipes and accessories my be placed in the trench. All pipe, fittings, valves, and hydrants shall be carefully lowered into the trench piece by piece by means of derricks, ropes, or other suitable tools or equipment, in such a manner as to prevent damage to the material in any way. Under no circumstances shall pipe or accessories be dropped or dumped in the trench.

H. Before lowering into trench the pipe shall be again inspected for defects and the pipe while suspended shall be lightly hammered to detect cracks. Any defective, damaged or unsound pipe and materials shall be rejected.

I. All foreign matter or dirt shall be removed from the inside of the pipe and from all bells, spigots or parts of the pipe used in forming the joint, before the pipe is lowered into the trench, and it shall be kept clean by approved means during and after laying.

5.2 Laying and Jointing Ductile Iron Pipe

A. Unless otherwise directed, pipe shall be laid with bells facing in direction of laying; and for lines on appreciable slopes, bells shall, at the discretion of the engineer, face up grade. Cutting of pipe for inserting valves, fittings or closure pieces shall be done in a neat and workmanlike manner without damage to the pipe or the cement lining.

B. The jointing shall be completed for all pipe laid each day. No open joints will be left in the trench overnight. At times when pipe laying is not in progress, the open ends of pipe shall be closed by approved means. No trench water shall be permitted to enter the pipe.

C. No pipe shall be laid in water, or when the trench conditions or weather is unsuitable for such work, except by written permission of the engineer.

D. Rubber Gasket joints for cast iron or ductile iron pressure pipe and fittings shall conform to AWWA Standard C-lll.

E. Before laying the pipes, all lumps, blisters and excess coal tar coating shall be removed from the bell and spigot ends of each pipe; the outside of the spigot and the inside of the bell shall be wire brushed and wiped clean and dry. Pipe ends shall be kept clean until joints are made.

F. The pipe and fittings shall be properly aligned and free to move in any direction while bolting, and the bolts shall be gradually tightened at a uniform rate around the entire flange.

G. Flange joints where used shall be bolted with flange bolts of best quality mild steel and of the size and length required by AWWA C-ll5: Bolts and nuts shall be provided with standard hexagonal heads. Gasket rings shall be used and shall be made of best quality rubber composition sheet packing one-eighth (l/8) inch thick, of a brand and quality approved by the engineer.

H. Standard plugs shall be inserted into the bells of all dead end pipes, tees, or crosses and spigot ends shall be capped. Plugs or caps shall be jointed to the pipe or fittings in the same manner used in joining the pipe.

6. SPECIFICATIONS FOR INSTALLING PRETENSIONED CONCRETE CYLINDER PIPE

6.l General

The applicable portions of the specifications for installing ductile iron pipe shall apply except as amended or supplemented herein.

6.2 Pipe Laying

A. Pipe and fittings shall be handled with care at all times to avoid damage. They shall be lifted by hoists or slide or rolled on skid-ways in such manner as to avoid shock. Under no circumstances shall they be dropped. Pipe must not be skidded or rolled against other pipe or object.

B. Just before making the joint, the bell and spigot rings shall be thoroughly cleaned by wire-brushing until clean and dry. The gasket and the inside surface of the bell shall be lubricated with a light film or soft vegetable soap compound (flax soap) to facilitate telescoping the joint. The rubber gasket shall be stretched uniformly as it is placed in the spigot groove to insure a uniform volume of rubber around the circumference of the groove.

C. The joint shall be telescoped by pulling directly along the centerline of the pipe so that the spigot enters squarely into the bell. After the spigot has been telescoped into the bell, the bell end of the pipe being laid shall be moved in accordance with the plans to secure proper grade and alignment. After the joint is in place, a thin metal feeler gauge shall be used to check the position of the rubber gasket around the circumference of the joint.

D. The inside joint recess shall be filled immediately prior to placing the pipe together by buttering the bell end with mortar. After the joint is engaged, the joint mortar of pipe l8" in diameter and larger shall be finished off smooth by hand. The mortar in pipe smaller than l8" in diameter shall be smoothed and cleaned with a swab.

E. After the spigot has been telescoped into the bell, the joint checked and found satisfactory, a canvas wrapper shall be placed around the pipe, covering the joint. The canvas type wrapper shall be of the quality manufactured by the Mar-Mac Manufacturing Company or approved equal burlap type, and shall be hemmed at each edge to allow threading with a steel strap to securely fasten the wrapper around the pipe by means of a stretcher and sealer.

The wrapper shall have a minimum width of 7" and sufficient length to encircle the pipe leaving enough space between the ends at the top to allow the cement mortar to be poured. The entire joint shall be poured with cement mortar and rodded or agitated to eliminate voids and settlement. Prior to pouring the cement mortar the joint shall be thoroughly cleaned and saturated with clean water. Any joint showing shrinkage or excessive cracking shall be cleaned and remade. In hot weather,

additional measures may be required to obtain the best quality of joint, such as additional wet burlap, curing membrane, or immediate careful and well controlled backfilling of the joint with damp earth.

F. The mortar used at the exterior joint shall consist of one part Portland cement to 2-l/2 parts fine, sharp, clean sand and mixed with water to the consistency of thick cream. Mortar required at the joint shall not be placed in freezing weather unless adequately protected from freezing.

G. The joints for pipe to be installed in casing shall be made as for pipe laid in trench except that the outside portion of the joint shall be wrapped in a special polyurethane wrap impregnated with unhydrated cement manufactured for this purpose, prior to being jacked into the casing pipe. The wrap shall be "Flex-Protex" as manufactured by Mar-Mag Mfg. Corporation or approved equal. The interior of the joints shall be mortared after the pipe to be installed in casing has been jacked into place. The pipe shall not be moved after interior mortaring is completed. After the water line has been installed in the casing the ends of the casing shall be sealed using concrete or cement mortar.

H. Steel cylinder reinforced concrete pipe shall not be pressure tested until it has been in place a minimum of l4 days.

I. The contractor shall fill the steel cylinder reinforced concrete pipe under slight pressure and allow approximately 24 hours for water absorption by concrete lining before performing pressure test.

7. SETTING VALVES, VALVE BOXES, FIRE HYDRANTS AND FITTINGS

7.1 General

Valves and fittings shall be set at the locations shown on the plans or at locations as established by the engineer, and shall be set and jointed to the pipe in the manner heretofore specified for pipe installation. All valves buried in the ground shall have a cast iron valve box set over the valve and set to grade. All valves shall be set vertical, unless otherwise specified, and shall be thoroughly inspected and checked for operation before installation.

7.2 Valve Boxes

Cast Iron valve boxes shall be firmly supported and maintained centered and plumb over the wrench nut of the valve, with box cover flush with the surface of the ground or street paving.

Valve boxes shall be supported by a ring of concrete as shown on the plans and Detail Drawings. This ring shall be Class "A" concrete having a minimum thickness of six (6") inches and shall extend a minimum of twelve (12") inches in all directions from the outside diameter of the valve box and shall be supported on thoroughly compacted backfill.

7.3 Setting Fire Hydrants

A. Fire hydrants shall be located at points shown on the plans, the exact location of the hydrant to be established by the engineer. All hydrants shall be set plumb, to the grade as established by the engineer, and shall have their nozzles parallel with and/or at right angles to the curb, with the pumper nozzle facing the curb. The hydrants shall be supported in such a manner as not to cause a strain on the fire hydrant lead or branch.

The bowl of the hydrant shall be well braced against unexcavated earth at the end of the trench with concrete blocking. The concrete blocking shall be placed so as not to interfere with the hydrant drains and so that the joints or flanges are accessible.

B. Each hydrant shall be connected to the main with a six (6) inch ductile iron branch controlled by an independent six (6) inch gate valve. Each hydrant shall be set upon a stone or concrete slab not less than four (4) inches thick and not less than one square foot of surface area. Where solid rock exists in the bottom of the trench and same is excavated to the proper depth to form a foundation for the hydrant, the slab of stone or concrete may be omitted.

C. There shall be placed around the base of the hydrant not less than seven (7) cubic feet of sound broken stone or clean gravel, or other suitable material to provide reservoir capacity so that the hydrant will completely drain when closed. The gravel or broken stone shall reach from the bottom of the trench to at least six (6) inches above the waste opening in the hydrant. Each hydrant shall be operated by the contractor to prove to the inspector that the drain hole has not been plugged with concrete or other material.

8. **ANCHORAGE OF BENDS, TEES AND PLUGS, ETC.**

Reaction or thrust blocking shall be applied to all pipe lines at all tees, plugs, caps, valves, fire hydrants, and at bends deflecting ll-1/4 degrees or more. Concrete shall be used for blocking the pipe and fittings. Concrete for thrust block shall have a minimum compressive strength of 3,000 psi and shall conform to Texas Highway Department Class "A" concrete. Before thrust blocking is placed the element to be blocked shall be carefully wrapped in polyethylene sheeting having a minimum thickness of 3 mils. The blocking shall be placed between solid ground and the fitting to be anchored; the area of bearing on pipe and on the ground in each instance shall be that required by the engineer. The blocking shall be so placed that the pipe and fitting joints will be accessible for repair.

9. DISINFECTION OF PIPE LINES

The contractor shall furnish all labor, equipment, and materials necessary to the disinfecting of the new pipe lines which shall be disinfected before being placed in service. The lines shall be disinfected by the application of a chlorinating agent. The chlorinating agent may be a liquid chlorine, liquid chlorine gas water mixture, or a calcium hypochlorite solution, which shall be fed into the lines through a suitable solution feed device, or other methods approved by the engineer. The chlorinating agent shall be readily dissolvable and of a type that will rapidly mix with the water as it is loaded into the water line. Tablets or other solid form shall not be used unless they are dissolved before being placed into the line. The chlorinating agent shall be applied at or near the point from which the line is being filled, and through a corporation stop or other approved connection inserted in the horizontal axis of the newly laid pipe. The water being used to fill the line shall be controlled to flow into the section to be disinfected very slowly, and the rate of application of the chlorinating agent shall be in such proportion to the rate of water entering the pipe that the chlorine dose applied to the water entering the line shall be at least 50 parts per million. The treated water shall be retained in the pipe lines for a period of not less than twenty four (24) hours. At the end of the retention period all treated water shall be thoroughly flushed from the lines until the replacement water in the lines shall have a chlorine residual of not more than 0.2 parts per million. Where it is necessary to place the new lines in service in less than 24 hours, the concentration of chlorine may be increased to 300 ppm and the lines flushed and placed in service in 3 hours. Disinfecting procedures shall conform to AWWA C 60l.

l0. HYDROSTATIC TESTS

All pipe lines constructed under this contract before being accepted, shall be tested at l20% design pressure as described in the following paragraphs. This test shall apply to all newly laid pipe or any valved sections thereof.

The required test pressure (l80 pounds per square inch) shall be maintained over a continuous period of not less than eight (8) hours.

Each valved section of pipe shall be slowly filled with water, being certain that all air is expelled from the pipe by using hydrants, blow-offs or taps at points of highest elevation in the line. The specified pressure shall be applied by means of a pump and flow meter (gpm and amount) connected to the pipe in a manner satisfactory to the engineer. The contractor shall furnish all necessary equipment, materials and labor to satisfactorily make the hydrostatic tests.

After the line section to be tested has been brought to pressure, a visual inspection shall be made of all joints, fittings, valves, and appurtenance. Any leaks thus located shall be corrected before continuing with the test.

If the test indicates a leakage in excess of a rate equal to twenty-five (25) gallons per inch of nominal diameter of pipe line per mile per day (maximum 600 gallon per mile per day total leakage) the cause of such leaks shall be determined and corrected and the line retested until satisfactory results are obtained.

11. **REMOVING AND REPLACING PAVEMENT**

A. When it is necessary to cut existing paving to install utilities the paving shall be repaired as soon after the backfill is consolidated or the cement stabilized backfill has reached sufficient strength as practical. The repair shall be made using Texas Highway Department Type "D" Hot Mix Asphaltic Concrete and shall have a minimum thickness equal to the thickness of the existing surface.

B. Edges along the trenches and around pits shall be saw cut to remove damaged edges and/or surface. Saw cuts shall be straight and parallel to or at right angles to the street or alley center line in so far as practical. Meandering, zig-zag or notched saw lines will not be permitted. The saw cuts shall be such that a minimum of 6" of surface is removed beyond the edges of the trench.

C. The edges of the saw cut and surface of the backfill material shall be tack coated prior to the placing of hot mix asphaltic concrete. The tack coat shall be either RC-250 cut back asphalt or RS2h emulsified asphalt or approved equal. When emulsified asphalt is used for tack coat the asphaltic concrete shall not be placed until the break of the emulsion is complete and all free water has evaporated or has been removed.

D. After the tack coat is cured the hot mix asphaltic concrete shall be placed uniformly throughout the repair area. The edges of the repair shall be squared up and the hot mix asphaltic concrete thoroughly compacted. Any large aggregate that is separated from the mix during the leveling process shall be removed from the surface and disposed of off the project. Care shall be taken that none of the mix over laps the old paving. Any mix that has "scabbed" onto the paving shall be removed before the section is reopened to traffic.

Sufficient mix shall be placed so that the finished repair is from one eight (1/8") inch to one quarter (1/4") inch above the old paving surface to allow for further consolidation by traffic.

12. **TUNNELING UNDER UTILITY LINES, ETC**.

Where pipes, conduits or concrete curbs, gutters or other obstructions are encountered in the construction, the cost of tunneling under such obstructions shall be included as a part of the cost of the pipe line, or other pay items, complete in place.

13. **HIGHWAY CROSSING**

A. The City of Midland will obtain any required permits from the State Highway Department for installation of the water line along and across the highway right-of-way. It shall be the contractor's duty and responsibility to coordinate the time of making the crossing and the manner of handling traffic.

B. Installations of the casing pipe shall be accomplished by boring or open cut trench as indicated on the drawings and in accordance with the Texas Department of Transportation permit and requirements. Equipment used shall be of such size and capacity as to allow the placement of the casing to proceed in a safe and expeditions manner. Installation of the casing and the excavation and removal of the materials

within the casing shall proceed simultaneously.

The boring shall proceed from a pit provided for the boring equipment and workmen. Excavation and location of the pit shall be approved by the Engineer. Boring without the concurrent installation of the casing pipe will not be permitted. The use of water or other fluids in connection with the boring operation will be permitted only to the extent of lubricating cuttings. Jetting will not be permitted. Overcutting in excess of one inch shall be remedied by concrete pressure grouting the entire length of the installation. All joints for casing pipe installed in bore shall be welded. Care shall be taken to keep the casing pipe on the proper line and grade.

C. After the casing pipe has been installed and is accepted by the Engineer, the pipe shall be shoved through the casing. The pipe shall be pushed or pulled through the casing by exerting pressure on the barrel of the pipe and not on the bell, and shall be done in such a manner that the joint is always in compression during the shoving operation. Hardwood, or other suitable material skids shall be banded with stainless steel bands to each joint of pipe In accordance with the pipe manufacturers recommendation. The hardwood skids shall be of sufficient dimensions to allow the bell of the pipe to clear the casing pipe by at least one-half inch. The length of the skid shall be in accordance with the pipe manufacturers recommendations. A minimum of three bands shall be used to secure the skids to the pipe. The skids shall be such that the carrier pipe will be centered in the casing pipe. The design of skids and bonding techniques shall be submitted to the Engineer for approval prior to use.

In general waterline installation in the casing pipe shall conform to AWWA C 600-Section 6 requirements.

After completion of pipe installation in casing, the ends of the casing shall be sealed off by use of concrete grout. The minimum compressive strength of the grout shall be 2,000 psi in 28 days.

14. **SHORING & SHEETING**

14.1 Description

This item shall govern for the Trench Safety Systems required for the construction of all trench excavation to be utilized in the project and including all additional excavation and backfill necessitated by the safety system. A trench shall be defined as a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet. The depth is five feet or more.

Trench Safety Systems include but are not limited to sloping, sheeting, trench boxes or trench shields, sheet piling, cribbing, bracing, shoring, dewatering or diversion of water to provide adequate drainage.

l4.2 Construction Methods

Trench safety systems shall be accomplished in accordance with the detailed specifications set out in the provisions of Excavation, Trench, and Shoring, Federal Occupational Safety and Health Administration (OSHA) Standards, 29CFR, Part 1926, Subpart P, as amended, including Proposed Rules published in the Federal Register (Vol. 52, No. 72) on Tuesday, October 31, l989. The sections that are incorporated into these specifications by reference include Sections 1926-650 through 1926-652. Legislation that has been enacted by the Texas Legislature, being Tex. Rev. Civ. Stat. Ann. arts. 1015q, 2368a.6 (Vernon Supp. 1988) with regard to Trench Safety Systems, is hereby incorporated, by reference into these specifications.

A reproduction of the OSHA Publication 2226 is attached for the convenience of the Contractor. The City assumes no responsibility for the accuracy of the reproduction or that it reflects current law. The Contractor is responsible for obtaining a copy of this section of the Federal Register for his use.

If the contractor elects to use a trench protective system that, in the Proposed Rules, requires "Design by a qualified person or a qualified engineer," [For example see 1926.652(b) (3) and 1926.652(c) (4)], "a qualified person or qualified engineer" shall be a Professional Engineer registered in the State of Texas. The Contractor is responsible for obtaining boring and soil analysis as required for the planned design. The trench excavation is to be designed in conformance with OSHA standards and regulations.

14.3 Safety Program

The Contractor shall submit a safety program specifically for the construction of trench excavation. The trench safety program shall be in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

14.4 Inspection

The Contractor shall make daily inspections of the Trench Safety Systems to ensure that the systems meet OSHA requirements. Daily inspection is to be made by a "competent person" provided by the Contractor. If evidence of possible cave-ins, or slides, is apparent, all work in the trench shall cease until the necessary precautions have been taken by the Contractor to safeguard personnel entering the trench. It is the sole duty, responsibility and prerogative of the Contractor, not the owner or the Engineer, to determine the specific applicability of the designed trench safety systems to each field condition encountered on the project. The Contractor shall maintain a permanent record of daily inspections.

14.5. Safety Restrictions - work near high voltage lines

The following procedures will be followed regarding the subject item on this contract:

A. Warning signs painted yellow with black letters that are legible at twelve feet shall be placed inside and outside vehicles such as cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment or similar apparatus. The warning sign shall read as follows:

"WARNING - UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES."

B. All equipment except back hoes or dippers that may be operated within ten feet of high voltage lines shall have an insulating cage-type of guard about the boom or arm and insulator links on the lift hook connections.

C. When necessary to work within six feet of high voltage electric lines, notification shall be given the power company who will erect temporary mechanical barriers, de-energize the line, or raise or lower the line. The notifying department shall maintain an accurate log of all such calls to the Power Company, and shall record action taken in each case.

D. The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

l5. MEASUREMENT AND PAYMENT

l5.l General

The unit price or lump sum price bid on each item, as stated in the proposal, shall include furnishing all labor, superintendence, machinery, equipment, and materials necessary to complete the various items of work in accordance with the plans and specifications. Cost of work or materials shown on the plans and called for in the specifications and on which no separate payment is made shall be included in the bid price on the various pay items.

l5.2 Water Lines

A. Measurement

The length of pipe lines for the various sizes, classes and types to be paid for will be determined by measurement along the center lines of the pipe installed, measurement being made from the center of fitting to center of fitting or end of pipe, without any deduction for the length of intermediate fittings or valves including pipe installed in casing.

B. Payment

Furnishing and installing approved type pipe of the various sizes and classes shown on the plans or as required will be paid for at the unit price bid per linear foot for furnishing and installing the various sizes and classes of approved pipe complete in place. The unit price bid shall be complete compensation for furnishing and installing the pipe complete in place including all excavation, backfilling, testing and disinfection of lines and shall include any and all incidental work not otherwise included in the bid items or otherwise provided for in the specifications.

l5.3 Solid Rock Excavation

All excavation for pipe trenches shall be unclassified and no extra compensation will be made for solid rock excavation. The contractor is expected to make boring of his own and satisfy himself to the character of material which will be encountered.

l5.4 Gate Valves or Butterfly Valves

A. Measurement

Gate valves or butterfly valves will be counted in the field after installation by the size and type specified and actually installed.

B. Payment

The unit price bid for each type and size valve shall be complete compensation for furnishing and installing the valves, complete in place, including the furnishing and installation of cast iron valve boxes on all valves to the finished grade of the adjacent surface. All valves in paved areas shall be set to finish pavement grades

l5.5 Fire Hydrants

A. Measurement

Fire hydrants will be counted in the field after installation in accordance with the plans and specifications.

B. Payment

The unit price bid shall be complete compensation for furnishing and installing the fire hydrants, complete in place, each, including lead pipe the gravel drain, concrete blocking, extension or additional bury depth as required for a complete installation.

I5.6 Service Connections

A. Measurement

The number of service connections of the type and size specified to be paid for will be counted in the field after complete installation.

B. Payment

The unit price bid shall be complete compensation for furnishing and installing the service connections, complete in place, including the meter box and lid, service line, corporation stop, meter stop and incidentals required for a complete installation.

I5.7 Ductile Iron Fittings

A. Measurement

The weight of the various ductile iron fittings and specials were estimated by using the standard weights for cast iron fittings as established by the American Water Works Association or American Standard Association. Measurement of ductile iron fittings will be made by counting the actual number of fittings installed and multiplying the number of fittings by the catalog weights for those types of fittings actually installed. Allowance will be made for glands and bolts.

B. Payment

The ductile iron fittings or specials required in the construction of the various size pipe lines as shown on the plans or as required will be paid for at the unit price bid per ton for furnishing and installing the ductile iron fittings complete in place. The unit price shall also include all materials, excavation, backfilling, concrete blocking and other incidental work required for the complete installation.

I5.8 Steel Cylinder Concrete Pipe Fittings

A. Measurement

No separate measurement or count of fittings and specials for steel cylinder concrete pipe will be made.

B. Payment

No separate payment will be made for fittings or specials for steel cylinder concrete pipe used on this project, but the cost of same shall be included in the price bid per linear foot for the various classes and sizes of pipe in the bid proposal.

l5.9 Casing Pipe In Bored Hole Or Open Cut

A. Measurement

Measurement of the casing pipe, of the type and size specified, shall be made by the linear foot of casing installed complete in bored hole or installed complete in open cut.

B. Payment

The unit price bid per linear foot for casing in bored hole or for casing in open cut shall be complete compensation for furnishing and installing the casing, complete in place, including all pits, boring equipment, materials and labor required for a complete installation. Payment for carrier pipe installed in the casing will be made as stated under Waterlines above.

l5.l0 Paving Cut and Repair

A. Measurement

Measurement of paving cut and repair will be made by the square yard for replacing pavement of the type specified. The area of the pavement replaced shall be determined by actual measurements on the ground; however, measurement will be limited to areas within widths of cuts as shown on the plans unless additional widths are authorized by the engineer. Any pavement removed or damaged outside of the aforementioned limits shall be replaced as prescribed with these specifications, but will not be measured for payment.

B. Payment

The unit price bid, per square yard, shall be complete compensation for cutting and removing the pavement, and constructing the concrete base and surfacing of the type specified, all as specified herein and as shown on the plans.

15.ll Trench Safety Systems, Sheeting and Shoring

A. Measurement

Trench Safety Systems shall be measured by the linear foot along the centerline of trench including manholes and other line structures.

B. Payment

Payment for Trench Safety Systems, measured as prescribed above, shall be made at the unit price bid per linear foot of "Trench Safety Systems: Payment of all work prescribed under this item shall be full compensation for the Trench Safety Systems including all Engineering cost and any additional excavation and backfill required, for furnishing, placing, maintaining and removing all shoring, sheeting, or bracing; for dewatering or diversion of water; for all jacking and jack removal; and for all other labor, materials, tools, equipment and incidentals necessary to complete the work.

Revised 08/07

GRAVITY FLOW PIPE SEWERS AND FITTINGS
FOR WASTE WATER AND STORM WATER

PART I – GENERAL

1.01 SCOPE

A. The work covered by this specification shall include the furnishing of all material, labor and equipment to construct, complete in place, all Gravity sewers including jointing, gaskets, fittings, castings, mortar, concrete, the placing of sewer pipe, and the construction of manholes and other appurtenance, all in accordance with the details shown on the plans and these specifications for the drainage of sanitary and/or storm sewage.

B. Sanitary and storm sewer lines constructed under these specifications shall be straight in grade and alignment between manholes. Manholes shall be constructed at any change in grade and at any change in alignment. In general manholes are to be constructed at 300 feet intervals or less with the maximum distance between manholes being 350 feet when approved by the Engineer.

1.02 QUALITY ASSURANCE

A. The Contractor, at the Engineer's request, shall furnish a certificate from the manufacturer of the pipe and fittings that the manufacturer is fully competent and capable of manufacturing sewer pipe, fittings, and accessories of the type, size and grade proposed for use in this project that are of uniform texture and strength that will fully comply with these specifications and have so manufactured this class of pipe in sufficient quantities to be certain that it will meet all normal field conditions of usage. The manufacturer must have adequate equipment and quality control facilities to be sure that each extrusion casting or run of pipe is uniform in texture, dimensions, and strength.

B. All PVC, HDPE, or plastic resin based pipe and fittings shall be covered during storage to protect them from excessive heat and direct sunlight.

C. All pipe and accessories shall be stored above ground and fully supported so that they will not bend or deflect excessively under their own weight.

D. Pipe in any way damaged or deformed during storage shall not be incorporated into this project, but at the direction of the Engineer, shall be permanently removed from the job site and project area.

1.03 TYPE OF PIPE

A. Pipe for sanitary sewers 15 inches in diameter and less shall be PVC. Pipe for storm drains 15 inches in diameter and less may be corrugated steel pipe when called for on the plans and in the bid proposal. Pipe 18 inches in diameter and larger shall be of the type shown on the plans and bid proposal.

B. The contractor may be allowed to bid a choice of two or more of the pipe materials when pipe 18 inches in diameter and larger are proposed for use on a project. When such choice is allowed the permissible choices will be clearly stated on the plans and/or bid proposal and a blank space will be provided for the contractor to write in the type of pipe proposed for use on the project. When such blank spaces are provided, the contractor must choose one of the permitted pipe materials as specified in part 2 “Materials” of these specifications and write in the type of pipe bid. Failure to write in the type of pipe bid may be reason to disqualify the bid. One or more types of pipe 18 inches in diameter and larger may be excluded from consideration on any given project by notes on the plans and/or the bid proposal.

PART 2 – MATERIALS

2.01 POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS FOR SANITARY AND STORM SEWERS

A. GRAVITY SEWERS

(1) Pipe and fittings in nominal diameters from 4-inch through 15-inch shall be manufactured in accordance with ASTM D3034, “Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings” and pipe and fittings in diameter 18” through 36” shall be manufactured in accordance with ASTM F-679 or ASTM F-794, closed profile, subject to the modifications and limitations below.

B. MODIFICATIONS AND LIMITATIONS

(1) The concrete slab manhole tops shall be reinforced with number 4 steel reinforcing bars spaced at 12 inches on center each way. Additional diagonal bars shall be placed on 4 sides around the manway opening. The diagonal bars shall be number 4 rebar with a minimum length equal to the diameter of the manway opening plus 4 inches. The steel reinforcing mat shall be placed in the bottom of the slab with 1-1/2 inches protective covering.

(2) The term Dimension Ratio (DR) or standard dimension ratio (SDR) is the ratio of the average outside pipe diameter to the minimum wall thickness rounded to the nearest 0.5. The maximum DR for PVC sewer pipe shall be 35. PVC pipe sewers that will have less than 4 feet of cover shall be DR26.

(3) PVC pipe manufactured under ASTM F679 or F794 shall have a wall thickness that will meet or exceed the D.R. and stiffness specified herein. The minimum pipe stiffness for pipe having a DR of 26 shall be 115 psi. The minimum pipe stiffness for DR 35 pipe shall be 46 psi.

(4) Where DR 26 pipe is specified, all necessary fittings shall be the same as for SDR 35 PVC pipe.

(5) Minimum wall thickness for ASTM D-3034 PVC pipe shall be as follows:

Nominal Size (in.)	Min. Wall Thickness (in.)	
	DR 26	DR 35
4	0.162	0.120
6	0.241	0.180
8	0.323	0.240
10	0.404	0.300
12	0.481	0.360
15	0.588	0.437

The minimum wall thickness for PVC pipe meeting ASTM F-679 or F-794 requirements shall be the thickness as set forth in said ASTM specification that will meet or exceed the pipe stiffness and DR required.

(5) The identification markings as shown in Section 12 of ASTM 3034 shall note the specified DR of 26 where applicable.

(6) All pipe and fittings shall have the dimensions for inside diameter, outside diameter, etc. as shown in ASTM D3034 and/or ASTM F-679 except that the inside diameter DR 26 may be reduced by the added wall thickness.

(7) The pipe and fittings shall be homogeneous throughout and free from visible cracks, holes, foreign inclusions, or other injurious defects. The pipe shall be as uniform as commercially practical in color, opacity, density, and other physical properties.

(8) The Contractor shall provide wyes, tees, bends, adapters, and any other fittings called for in the specifications and/or shown on the plans or directed by the Engineer.

(9) The standard length of ASTM, D-3034 SDR 35 or SDR 26 PVC pipe under this specification shall be 20 feet with a minimum of 10 feet, except that all pipe used in service lines shall not exceed 10 feet in length unless otherwise approved by the Engineer. The standard laying length for ASTM F-679 PVC pipe shall be 13 feet. The Engineer must approve other laying lengths.

C. SEWER LATERALS AND CONNECTIONS

Pipe and fittings for service lines shall be the same material and thickness class as required for the main sewer. Schedule 40 PVC pipe may be used for 4" service lines when PVC pipe meeting requirements of ASTM 3034, SDR 35 is required.

D. JOINING SYSTEMS

(1) PIPE JOINTS

The pipe shall be joined with an integral bell, bell and spigot type rubber gasket joint. Each integral bell joint shall consist of a formed bell complete with a single rubber o-ring gasket. Gaskets shall be manufactured in accordance with ASTM F477 and shall be installed in accordance with the pipe manufacturer's instructions using all the necessary materials, lubricants and equipment recommended by the manufacturer.

For pipe 18" through 36" gaskets shall be factory installed and chemically bonded to the bell end of the pipe.

Lubricant shall be water soluble, non-toxic and have no deteriorating effects on gasket or pipe materials and shall not support the growth of bacteria. Lubricant shall be suitable for use at temperatures from 5^{o} to 120^{o} F (-15^{o} to 50^{o} C). Containers shall be labeled with the manufacturer's name and identified as PVC pipe joint lubricant. Each lubricant container shall have printed instructions for usage and joint assembly.

Field welded joints will not be allowed.

(2) FITTING JOINTS

All fittings shall utilize rubber gasket joints of the same type design and specifications as pipe joints.

(3) PIPE SPIGOT

The pipe spigot shall have a bevel and an insertion stop mark. The assembled joint shall be designed so the gasket shall be radially compressed to assure a positive water-tight seal for all installation conditions recommended by the manufacturer and under all combinations of production tolerances for the joint components. Each size joint shall be qualified to no leakage under various test conditions in conformance with ASTM Specification D-3212, "Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals."

E. INSPECTION AND TESTING

(1) INSPECTION REQUIREMENTS

Certification: as the basis of the acceptance of the material, the manufacturer will furnish a certificate of conformance to these specifications. The manufacturer will furnish other conformance certification in the form of affidavit of conformances, test results, and copies of test reports.

(2) PHYSICAL TEST REQUIREMENTS

For each 4,000 linear feet of pipe manufactured of each class and size of pipe, the following certified test data shall be required:

1. The basic dimensions shall be measured.
2. The allowable crush load (lbs/ft ^{2}) shall be calculated.
3. Impact resistance, fusion quality and ductility shall be tested.

F. MARKING AND DELIVERY

Each pipe shall be identified with the name of manufacturer, nominal size, cell classification, ASTM designation F794, Uni-Bell Plastic Pipe Association designation Uni-B-9, the pipe stiffness designation “PS-46 psi” and manufacturer’s date code.

1. MANHOLE CONNECTIONS

The Contractor shall provide smooth pieces of pipe for connecting sewer line into manholes. The Contractor shall be required to assist the manhole gasket supplier with the nominal outside diameter of these smooth pieces of pipe, as manufactured. There shall be only one plain end thickness for each diameter of pipe specified for the project.

2. DELIVERY

All pipe couplings and fittings shall be prepared for standard commercial shipment.

The pipe shall be inspected upon delivery to the job site for final acceptance. The contractor shall be responsible for all material furnished by him and he shall replace, at his own expense, all such material that is found to be defective in manufacture or which has become damaged in handling until final acceptance has been made. Pipe, which exhibits excessive ovalty or curvature, shall be rejected.

PVC pipe and fittings shall be covered during storage to protect them from excessive heat and direct sunlight.

All pipe and accessories shall be stored above ground and fully supported so as not to bend or deflect excessively under its own weight.

2.01(a) Metallic Marking Tape (For PVC Sewer Pipe)

2.01 (a).1 General

When non-metallic pipelines are to be installed, then the Contractor shall furnish and lay, above the pipeline, a continuous strip of metallic identification tape.

2.01 (a).2 Tape Material

The metallic identification tape shall be at least two inches (2”) in width and shall be of corrosive resistant metal of sufficient thickness to be stable and reflect electronic signals to electronic pipeline detector when buried to a dept of twenty-four (24”) below normal ground level.

The metallic tape shall be painted green on one side and shall have 1-inch high letters painted continuously on the same side of the tape which read, “CAUTION: BURIED SEWER LINE BELOW” or other words to this effect.

The marking tape shall be “Detectable Marking Tape”, as manufactured by the Omega Marking Company, or equal approved by the Engineer.

2.01(a).3 Construction Methods

The Contractor shall backfill over non-metallic pipelines to a depth which is less than twenty-four (24”) and not more than twelve inches (12) from the top of the cut of the ditch section in which the pipeline is laid. Contractor shall stop the backfilling material to a generally uniform level. All machine tamping, jetting and other compaction activities shall be accomplished up to this point of height in the backfilling the marking tape is placed in the trench.

The Contractor shall then lay the marking tape in the pipe trench and shall be held in position by the spot placement of backfill materials over it to keep it from sliding t the sides and/or from being blown about in the ditch by the wind. The tape shall be lid with the painted side, which shall also be the side with the identification lettering on it, in the “up” position. The tape shall be laid in the flat position and kept there until backfill is accomplished.

The Contractor shall then complete the backfilling operation in such a manner that the marking tape is not cut, crimped, ruptured or separated by the backfilling work.

2.01(a).4 Measurement and Payment

No separate pay item will be provided for furnish and placing the marking tape. This item shall be considered subsidiary to the non-metallic pipe being placed.

2.02 CORRUGATED STEEL PIPE (CSP) FOR STORM SEWERS AND CULVERTS ONLY

1. PIPE

A. STEEL SHEET STOCK

(1) Corrugated steel pipe shall be manufactured using galvanized steel sheet AASHTO M 218 or aluminized steel sheet AASHTO M 274.

(2) The lining for smooth lined corrugated steel pipe shall be polymer coated on both sides. The minimum thickness of the polymer coating shall be 10 mils.

B. PIPE DESIGNATION

(1) Pipe furnished shall be manufactured in accordance with AASHTO Specification M 36.

(2) Corrugated steel pipe shall be one or more of the following type as designated in AASHTO M 36.

Type I - Full circular cross section having helical corrugations.

Type IA - Full circular smooth lined pipe constructed of an outer shell having helical corrugations with a smooth sheet lining attached to the outer shell at helical lock seams.

Type IR - Full circular cross section with helical rib protruding outward.

Type II - Type I pipe formed into a pipe arch.

Type IIA - Type IA pipe formed into a pipe arch.

The type of pipe furnished on this project will be as shown on the plans and in the bid proposal.

When no type of pipe is called for on the plans or in the bid proposal helically corrugated circular single wall pipe (Type I or Type IR) shall be furnished.

C. MANUFACTURERS CERTIFICATION

(1) The pipe manufacturer will be required to certify the adequacy of the pipe furnished for the application and design life of the project.

(2) The design life for storm sewers constructed under this specification is 50 years.

(3) The pipe manufacturer will be required to run soil pH, soil resistivity and such other test as they deem necessary to design pipe thickness and protective coatings required to assure the adequacy of the pipe supplied.

D. CORRUGATION AND MINIMUM THICKNESS

(1) Thickness used in this specification refers to the bare steel thickness before coating is applied. The minimum thickness for any single wall corrugated steel pipe furnished under this specification is 16 gage.

(2) All corrugated steel pipe furnished under these specifications shall have helical corrugations.

(3) Circular corrugated steel pipe 48” in diameter and smaller shall have 2-2/3” x ½” corrugation and shall be a minimum of 16 gage in thickness.

Circular corrugated steel pipe larger than 48” in diameter may have either 2-2/3 x ½” or 3” x 1” corrugations. The minimum thickness for corrugated steel pipe larger than 48” in diameter and having 2-2/3 x ½” corrugation shall be as follows:

54” Diameter - 12 gage
60” Diameter - 10 gage
66” through 90” Diameter - 8 gage

The minimum thickness for circular corrugated steel pipe having 3” x 1” corrugation and diameters of 54” through 90” shall be 14 gage.

(4) For smooth lined corrugated steel pipe the minimum thickness for the lining shall be 20 gage and the minimum thickness for the outer shell shall be 18 gage.

The corrugations for the outer shell shall be 2-2/3” x ½” for pipe 48” diameter and smaller. Larger diameter pipe may use 3” x 1” corrugations in the outer shell. The sum of the thickness for the outer shell and the liner shall be a minimum of one thickness unit greater than the thickness that would be required for single wall pipe of the same diameter or span.

(5) Spiral rib steel pipe (Type IR) shall have outward projecting spiral corrugations of ¾” x 1” at 11-1/2” on center in accord with AASHTO specification M 36 or ¾” x ¾” at 7-1/2” on center as described in AASHTO specification M 196.

The minimum thickness for spiral rib pipe 48” in diameter and smaller shall be 16 gage.

The minimum thickness for spiral rib pipe 54” and 60” in diameter shall be 14 gage.

The minimum thickness for spiral rib pipe 66” and 72” in diameter shall be 12 gage.

The minimum thickness for spiral rib pipe larger than 72” in diameter shall be as shown on the plans.

(6) The corrugations and minimum thickness of corrugated steel pipe arch shall be in accord with the following table:

EQUIV. Dia. (in.)	2-2/3" x ½" Corrugations Span (in.)	Rise (in.)	Gage	3" x 1" Nominal Size Span (in.)	Rise (in.)	Gage
15"	17	13	14			
18"	21	15	14			
24"	28	20	14			
30"	35	24	14			
36"	42	29	14	40	31	16
42"	49	33	12	40	36	14
48"	57	38	10	53	41	12
54"	64	43	10	60	46	12
60"	71	47	8	66	51	12
66"	77	52	8	73	55	12
72"	83	57	8	81	59	12
78"				87	63	12
84"				95	67	12
90"				103	71	12

When 2-2/3" x ½" corrugations are called for on the plans and/or on the bid schedule the substitution of 3" x 1" corrugations will be allowed only upon the demonstration by the contractor that there is sufficient head room to accommodate the higher rise for arch pipe of this cross section.

E. END TREATMENT AND JOINING

(1) The ends of all corrugated steel pipe furnished for this project shall be rolled to provide circumferential corrugations for coupling. The end corrugations for all pipe 48" in diameter and less shall be 2-2/3 x ½". The end corrugations for single wall helically corrugated steel pipe or for smooth lined corrugated steel pipe 54" in diameter and larger shall be the same pitch as the pipe furnished and may be either 2-2/3" x ½" or 3" x 1". The end corrugations for spiral rib (Type IR) corrugated steel pipe shall be 2-2/3" x ½" or 3" x 1" for pipe 54" and larger in diameter.

(2) Coupling bands shall be made of the same material as the pipe and shall be not more than 3 nominal sheet thicknesses lighter than the pipe joined and in no case less than .052 inch.

Jointing devices for joining corrugated steel pipe shall have a gasket and shall produce a joint meeting the infiltration/exfiltration requirements of these specifications.

If it should be necessary to cut a joint of Helically corrugated pipe and join the unreformed end to another section of pipe or fitting extra width bands will be required and special care must be taken to insure a water tight connection.

Locking bands shall be corrugated and shall securely fit into at least one full annular corrugation. The corrugations on the locking band must match the corrugations on the pipe being joined.
The minimum width for locking bands is as follows:

for 2-2/3 x ½ inch corrugations	10-1/2 inches
3 x 1 inch corrugation	12 inches

For helical corrugations that have not been reformed the coupling bands must be at least 2 inches wider than the widths listed above.

Unless shown otherwise on the plans all bolts for coupling or locking bands shall be ½ inch in diameter. Bands 12 inches wide or less shall have a minimum of 2 bolts. Bands wider than 12 inches shall have a minimum of 3 bolts.

Bolts must be galvanized in accordance with AASHTO Designation M232 or ASTM A164 Type RS.

(3) Gaskets for corrugated steel pipe shall be closed cell expanded rubber and shall be formed into a continuous band. Gaskets may be either “O” ring or flat band as recommended by the pipe manufacturer. Flat band gaskets shall be a minimum of 7” wide and 3/8” thick. “O” ring gaskets shall be 13/16” diameter minimum for pipe 36” in diameter or less and 7/8” for pipe larger than 36” diameter and having ½” deep corrugations. “O” ring gaskets shall be a minimum of 1-3/8” diameter for pipe having 1” deep corrugations. When “O” ring gaskets are furnished, an additional flat gasket shall be furnished and placed between the overlapping ends of the coupling band. This flat gasket shall completely fill the gap between the “O” rings. All gasket materials shall be capable of producing a water tight joint that will meet the leakage requirements of these specifications.

2. CORRUGATED STEEL MANHOLE FITTINGS, AND CLEAN OUTS

A. FABRICATION

(1) Corrugated steel manholes and fittings shall be constructed of the same material and type of pipe furnished for the storm sewer line with the exception that manhole risers shall be helical corrugated single wall circular pipe when used with pipe arch sewers or smooth lined corrugated steel pipe. The thickness of the manhole riser shall be the same as would be required for the same type and diameter pipe if it were used for the storm sewer.

(2) Cleanouts for use on shallow storm sewer and inlet leads shall be manufactured from pipe meeting the requirements of these specifications. Cleanouts shall be constructed to the dimensions and in accord with the details shown on the plans.

B. CONNECTION TO MANHOLES AND CLEANOUTS

(1) Stub outs from manholes and cleanouts for connection to storm sewers and inlet leads shall have annular corrugations and shall be compatible with the type and size of pipe being connected. Stub outs provided for connection to PVC pipe storm sewers and inlet leads shall be sized so that the PVC pipe can be inserted into the stub leaving the least amount of annular space between the PVC pipe and the CSP practical. The PVC pipe shall be connected using an approved molded rubber or PVC sleeve connector clamped to both pipes with stainless steel straps.

The connector shall be a flexible coupling as manufactured by Fernco, 300 S. Dayton St., Davison, MI., or approved equal.

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C. LEAKAGE

Manholes, fittings and cleanouts shall meet the leakage requirements of these specifications.

D. SHOP DRAWINGS

The contractor shall submit shop drawings of all manholes, fittings and cleanouts for approval prior to their fabrication. A minimum of 5 sets of drawings for each manhole, each fitting and each cleanout shall be submitted.

E. CONCRETE SLAB TOPS

A reinforced concrete slab top shall be constructed for each manhole and cleanout. The slab shall extend to one foot (1') outside the riser section on all sides and shall have an eccentric 2' diameter opening for the manway located at the outside edge of the riser section. For manholes and cleanouts designated for standard manhole rings and covers the concrete top shall be 8 inches thick and shall be finished smooth to receive the manhole ring.

For manholes designated to receive pressure type manhole rings and covers the concrete slab top shall be a minimum of 12 inches thick and shall have L bolts imbedded in the concrete to fit the requirements of the manhole ring furnished. The slab shall be finished smooth to receive the manhole ring. The manhole ring shall be securely bolted to the slab and sealed using "Ram Nek" or an approved equal bitumastic sealer between the manhole ring and the concrete slab.

The concrete slab manhole tops shall be reinforced with number 4 steel reinforcing bars spaced at 12 inches on center each way. Additional diagonal bars shall be placed on 4 sides around the manway opening. The diagonal bars shall be number 4 rebar with a minimum length equal to the diameter of the manway opening plus 4 inches. The steel reinforcing mat shall be placed in the bottom of the slab with 1-1/2 inches protective covering.

F. PRESSURE MANHOLE RING AND COVER

(1) Pressure type manhole rings and covers shall be Western Iron Works No. 380-24P or approved equal. The manhole cover shall be sealed with an "O" ring gasket in a ring groove and shall be secured to the ring by six (6) 5/8-inch stainless steel bolts.

(2) The ring shall have six (6) 1-1/4 inch bolt holes in the flange for securing the ring to the concrete slab top on the manhole.

3. CORRUGATED STEEL PIPE SLOTTED DRAIN

(1) Corrugated steel pipe slotted drains shall be fabricated from full circle corrugated steel pipe conforming to these specifications.

(2) C.S.P. Slotted drains shall be of a type as manufactured by "Contech Construction Products, Inc.", "Texas Corrugators", "Caldwell Culvert Company" or approved equal.

(3) The upstream end of CSP slotted drains shall be equipped with a bend and a ring and cover of the some size as the pipe from which the slotted drain was fabricated to allow cleaning equipment to be inserted into the slotted drain. The ring and cover shall be Nenah Foundry Co. R-5901 open grate or R-5900 solid lid or approved equal. Unless shown otherwise on the plans the open grate shall be furnished.

(4) When slotted drain is to be connected to PVC leads, molded rubber or PVC flexible connector as specified for connections to manholes and cleanouts shall be furnished.

4. DAMAGED COATING

A. PROTECTION OF PIPE

(1) Pipe fittings and specials shall be handled and stored in a manner that will minimize damage to the coating.

(2) The fabrication process shall be designed to minimize the burning of coatings during welding.

(3) Pipe and/or fittings showing excessive abuse or damage will be rejected.

B. REPAIRING DAMAGE

(1) Pipe on which the metallic coating has been burned by welding or has been otherwise damaged in fabricating or handling, shall be repaired. The repair shall be done so that the completed pipe shall show careful finished workmanship in all particulars.

(2) The damaged area shall be cleaned to bright metal by blast cleaning, power disk sanding, or wire brushing. The cleaned area shall extend at least ½ inch into the undamaged section of the coating. The cleaned area shall be coated within 24 hours and before any rusting or soiling.

(3) Zinc-rich paint shall be applied to a dry film thickness of at least 0.005 inches over the damaged section and surrounding cleaned area. Zinc-rich paint shall be used for repair of damage to all types of metallic coating -zinc, aluminum, and aluminum-zinc alloy.

2.03 CAST-IN-PLACE CONCRETE SEWER PIPE (NON-REINFORCED) FOR STORM SEWERS ONLY

1. DESCRIPTION

This item shall cover machine cast-in-place monolithic non-reinforced concrete pipe, which shall consist of Portland cement concrete placed in a prepared trench at such locations and grades shown on the plans and intended to be used for the conveyance of storm water. Items and item numbers referred to in this specification are the items as given in the "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges."

2. MATERIALS

The cast-in-place pipe shall be constructed of Class "C" concrete. The concrete shall meet the requirements of Item 421, "Concrete for Structures," and Special Provision thereto, except as otherwise noted herein or on the plans. Type III Portland Cement shall be used.

The minimum compressive strength for concrete used in this item is 4000 psi. Backfilling operations may proceed when the concrete has reached 2000 psi compressive strength.

The coarse aggregate grading for pipe diameters 48 inches or less shall conform to that of Aggregate Grade No. 3, one inch (1") maximum size aggregate under Item 421. For pipe diameters over 48 inches, Coarse Aggregate No. 2, one and one third inch (1-1/3") maximum size aggregate shall be used.

No concrete having a slump in excess of 2" will be permitted for use in pipes with diameters of 48 inches and over. For pipes with diameters less than 48 inches, no concrete having a slump in excess of 3" will be permitted for use. At the option of the Contractor, sections of precast reinforced concrete pipe (D-load) may be substituted for cast-in-place concrete pipe. Pipe and installation shall conform to the requirements of Item 465, "Pipe Sewers." Backfill shall be in accordance with the requirements for other storm sewers in these specifications using crusher fines (chat).

3. PIPE MAKING EQUIPMENT

The pipe shall be constructed with equipment specially designed for constructing cast-in-place monolithic concrete pipe. The equipment shall be acceptable to the Engineer and the Contractor may be required to furnish evidence of successful operation in other work of the equipment he proposes to use. Equipment not suitable to produce the quality of work required for the pipeline will not be permitted to operate on the project.

4. DIMENSIONS AND TOLERANCES

The design shell thickness shall be as specified in Table 1.

TABLE I

Internal Diameter inches	Min. Shell Thickness inches
18	2
24	2-1/2
30	3
36	3-1/2
42	4
48	5
54	5-1/2
60	6
66	6-1/2
72	7
84	8
96	9
108	10
120	11

Variation in the internal diameter shall not exceed plus or minus 3 percent. The maximum allowable deviation form the true grade of the design invert of the pipe shall not exceed ½ inch either side of true grade. Where deviation from true grade occurs, true grade shall be re-established at a maximum departure of one-eighth inch per foot.

5. EXCAVATION AND BACKFILL

Excavation shall be in accordance with the requirement for other types of storm drains, except as modified herein. The trench shall be excavated in the lines and grades shown on the plans or as directed by the Engineer. The width of the trench shall be sufficient to accommodate travel of the pipe machine only. The bottom of the trench shall be shaped to the nominal outside circumference of the pipe. Excavation shall be performed from the outlet to the inlet. If the trench is over-excavated for the bottom 210 degrees of the pipe the excess area shall be filled with concrete. If rock is encountered, it will be removed at least 6 inches below the bottom of the pipe and the trench refilled with material sufficiently compacted to

allow operation of the machine and provide a smooth firm surface. The sidewall of the pipe shall be placed against undisturbed material.

Backfill material will be a crusher fine (chat) as described elsewhere in these Specifications. No backfill other than permitted for curing purposes shall be placed until the line has been inspected and approved by the Engineer. The trench may be completely backfilled after the pipe has been in place at least 24 hours and concrete strength requirements have been reached. Light traffic, axle load less than 6,000 pounds, may be routed over the pipe after backfill has been completed for twenty-four (24) hours. Unrestricted traffic may be permitted over the pipe after the backfill has been in place for forty-eight (48) hours.

All backfill material shall be mechanically compacted to 95% modified proctor or as directed by the Engineer.

6. CONSTRUCTION

All surfaces against which concrete are to be placed shall be free from standing water, mud, and debris. Absorptive surfaces against which concrete are to be placed shall be moistened thoroughly so that moisture will not be drawn from the freshly placed concrete.

The concrete shall be placed in one operation around the full circumference of the pipe by means of a traveling form. The forms shall be of sufficient strength to withstand vibrating or tamping the concrete and to permit workmen to walk on the forms without causing springing or bulging at any point.

As the traveling form moves forward, forms shall be placed inside the newly formed pipe to support a minimum of 230 degrees of the upper portion of the pipe.

The concrete shall be vibrated, rammed, tamped or worked with suitable appliances until the concrete has been consolidated to the maximum practicable density, free of rock pockets, and closes snugly against all surfaces or forms and provides a bond between the pipe shell and supporting earth.

When placing operations cease for any reason, the end of the pipe shall be left rough with a slope of approximately 45 degrees. The ends of the pipeline shall be covered with canvas or other suitable cover material to prevent excessive loss of moisture from the interior of the pipe already placed.

When starting pipe laying operation from a previously laid cast-in-place pipe or section of pre-cast pipe, a construction joint shall be made by excavating a “bell” completely around the end of the existing pipe and constructing a concrete collar to extend at least one foot either side of the joint with a minimum thickness equal to that of the wall of the pipe. The end of the existing pipe shall be clean and damp before continuing pipe making operations. Cleaning of the construction joint shall consist of removing all latency, loose or defective concrete, coatings, and any other deleterious materials.

All forms shall be clean and shall be placed at the trench side at the location of their proposed use for inspection by the Engineer. Forms, which are defective in any way, will not be used, and upon condemnation they shall be removed from the site of the work. The forms shall not vary more than ½ inch from the lower edge of a straightedge laid parallel to the centerline of the form, and shall be free of any holes larger than 5/8 inch in greatest dimension. The pipe machine shall be thoroughly clean and serviced prior to the placing of the concrete. Particular attention will be given to all parts of the machine with which concrete comes into contact.

Concrete chutes or trunks shall be provided to reach within 1 foot of the pipe machine hopper. The end of the chute or trunk shall discharge the concrete at the center of the hopper. Provisions shall be maintained to minimize segregation of the concrete mix in all phases of the operation.

Delays in placing shall be handled as follows or as otherwise directed. The concrete hopper on the pipe laying machine shall be kept ½ full at all times, provided, however, that when placing operations cease or are delayed for any reason for more than 20 minutes, the pipe machine shall be pulled forward until all the concrete is exhausted and until the top troweling skirt is clear of the concrete. If the pipe laying operation proceeds within one hour of the time of the last placement, no further steps need to be taken. However, if longer than one hour has elapsed, then a construction joint must be made as previously described. The end of the pipe shall be left rough and at the natural slope when the machine is moved forward.

All junctions of pipe shall be provided for at the time the cast-in-place pipe is placed.

Inside forms shall be removed from the pipe not sooner than 4 hours nor longer than 24 hours after placement of the concrete. Care shall be taken when removing forms to prevent damage to the pipe. The inside of the pipe shall be carefully inspected for imperfections in placement, and any required repairs or smoothing shall be made immediately to provide a uniform interior surface. No wash, mortar or concrete shall be applied to a surface not properly moistened or cleaned. Visible cracks shall be brushed with cement paste or chipped out and pointed up with cement mortar. Any cracks that appear to go through the shell shall be grooved and filled with mortar. All construction operations and methods for providing a watertight pipeline shall be the responsibility of the Contractor. Mortar shall consist of one part cement; two parts well graded sand passing 1/8-inch sieve. Wash shall consist of four parts cement, one part fire clay. The finished surface of the concrete pipe shall be substantially free of fractures, cracks and surface roughness.

7. CURING CONCRETE

Immediately after the concrete is placed the exposed surface of the concrete shall be cured by covering the top with a sheet of polyethylene film sealed with dirt along the edges. During the curing period following the placement of the concrete, the ends of the pipeline and all other openings into the pipeline shall be covered with canvas or other suitable material, except at locations where work is actually in progress. The inside surface of the pipeline shall not be cured.

8. MANHOLES AND BENDS

Manhole bases shall be hand formed on top of the pipe as soon as the pipe-placing machine has passed. Where required, the extra width for manholes shall be excavated ahead of the pipe placing operation. The base for the manhole shall be formed to receive a standard precast concrete barrel section and shall be shaped and smoothed so that the joint can be sealed water tight by use of “Ram Nek” or other approved joint sealing material.

Bends may be formed and cast in place or fabricated using precast reinforced concrete pipe (load D). Design and shop drawings shall be submitted to and approved by the Engineer before the bends are fabricated or cast.

9. MEASUREMENT

Measurement of manholes shall be as specified elsewhere in these specifications. Measurement of bends shall be as for other storm sewer pipe. The method of pipe measurement shall conform to that for other types of storm drainpipe in the section or storm drains in these specifications.

10. PAYMENT

Payment for cast-in-place non-reinforced pipe sewers, measured as prescribed above, will be made at the unit price bid per linear foot for the various sizes of “Pipe Sewers (Cast-in-Place)” complete in place. Payment for manholes shall be as specified elsewhere in these specifications.

Such payment shall be full compensation for furnishing all concrete materials, precast reinforced concrete pipe used in place of cast-in-place pipe, and for all other materials, tools, labor, equipment, and incidentals required to perform the applicable work prescribed herein.

When precast reinforced concrete pipe at the Contractor’s option is used in a line of cast-in-place pipe the additional excavation for the pipe will be subsidiary.

2.04 CENTRIFUGALLY CAST FIBERGLASS REINFORCED RESIN PIPE SEWERS

A. DIRECT BURY PIPES

1. GENERAL

All pipes, joints and fittings shall be manufactured in accordance with the requirements of the applicable standard given below except as noted herein:

Service	Standard
Non pressure Sanitary Sewer	ASTM D3262
Sewer Force Main and Effluent Lines	ASTM D3754

Pipes shall be centrifugally cast, fiberglass-reinforced polyester resin as manufactured by Hobas USA, Inc. or approved equal.

Minimum pipe stiffness when tested in accordance with ASTM D2412 shall be 46 psi.

2. MATERIALS

The manufacturer shall use only approved polyester resin systems for which he can provide a proven history of performance in these particular applications. The historical data shall have been acquired from a composite material of similar construction and composition as the proposed product.

The reinforcing glass fibers used to manufacture the components shall be of highest quality commercial grade of E-glass filaments with binder and sizing compatible with impregnating resins. Sand shall be minimum 98% silica with a maximum moisture content of 0.2%

3. DIMENSIONS

Pipe outside diameters shall be in accordance with AWWA Standard C151 and C950. For diameters larger than covered in those documents, OD's shall be as shown in Table 1.

TABLE I

*WP/s		0/46		50/46		100/46		150/46		200/46	
Nomin Pipe Sz. (in.)	Pipe OD (in.)	Min. wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt (lb/ ft.)
18	19.50	.42	20	.41	20	.40	19	.38	18	.37	18
20	21.60	.46	25	.45	24	.43	23	.42	22	.40	21
24	25.80	.54	35	.53	34	.51	33	.49	31	.47	30
30	32.00	.66	54	.65	53	.62	51	.60	49	.57	47
36	38.30	.78	77	.77	76	.74	73	.71	70	.68	67
42	44.50	.90	104	.88	101	.85	98	.82	94	.78	89
48	50.80	1.02	134	1.00	131	.96	126	.93	122	.88	115
54	57.10	1.14	169	1.12	166	1.08	160	1.04	155	.99	147
60	62.90	1.26	209	1.23	204	1.19	197	1.14	188	1.09	180
66	69.20	1.38	249	1.35	243	1.30	234	1.25	228		
72	75.40	1.50	298	1.47	292	1.41	280	1.36	270		
78	81.60	1.62	352	1.58	343	1.52	331	1.47	320		
84	88.00	1.74	409	1.70	399	1.64	385				
90	94.30	1.86	468	1.82	458	1.75	440				
96	100.6	1.98	531	1.94	520	1.87	501				

- **Maximum nominal working pressure in psi/pipe stiffness in psi**

Pipe shall be supplied in nominal lengths of 20 feet. Actual laying length shall be the nominal plus or minus 2 inches. At least 90% of the total footage of each size and class of pipe, excluding special order lengths, shall be furnished in nominal length sections.

4. **PRESSURE CLASS & TESTING FOR SEWER FORCE MAINS AND EFFLUENT LINES**

The pipe nominal pressure class (PN) shall be equal to or greater than the maximum sustained operating pressure of the line. The minimum pressure rating for non-pressure pipe shall be 15 psi.

The maximum transient (operating plus surge) pressure of the line shall not exceed the pipe nominal pressure class by more than 40%.

Pipe hoop tensile strength for pressure pipe shall be verified as specified in the applicable standard (D3754 or C950) or by random burst testing at the same sampling frequency. All pipes shall be capable of withstanding a test pressure of 2 times the maximum sustained operating pressure of the line without leaking or cracking. This performance shall be periodically verified at the factory for pressure pipe at least once per lot as defined in D3754, section 7.1.

A. JOINTS

Unless otherwise specified, the pipe shall be field connected with fiberglass sleeve couplings that utilize elastomeric sealing gaskets made of EPDM rubber compound as the sole means to maintain joint water tightness. The joints must meet the performance requirements of ASTM D4161.

B. FITTINGS

Flanges, elbows, reducers, tees, wyes, laterals and other fittings shall, when installed, be capable of withstanding all operating conditions. Acceptable configurations include contact molded or metered fiberglass or properly protected standard ductile iron.

Unbalanced thrust forces shall be restrained with thrust blocks or other approved suitable methods. Fiberglass tees, wyes, laterals, or other similar fittings shall be fully encased in reinforced concrete designed to withstand the pressure forces.

2.05 POLYETHYLENE SEWER PIPE

A. SCOPE

(1) This specification covers Polyethylene (PE) pipe with a corrugated outer wall and a smooth interior wall, for use with non-pressure sanitary sewer systems. The PVC fittings and joints are included in the specification.

B. MATERIAL AND MANUFACTURING

1. PIPE MATERIALS

The pipe shall be made from clean virgin Polyethylene compounds having a cell classification of 324420C as defined by ASTM D-3350.

2. FITTING MATERIALS

The fittings shall be made from clean virgin polyvinyl chloride (PVC) compounds having a cell classification of 12454B, 1245C or 13343C as defined by ASTM D-1784.

Pipe shall be manufactured by simultaneous extrusion of the corrugated and smooth walls with the smooth inner wall fused to the outer corrugated wall.

Fittings shall be molded or fabricated.

3. JOINING MATERIALS

a. Gaskets
b. Elastomeric gaskets shall meet the requirements of ASTM F-477.
c. Lubricants

The lubricants used for assembly shall have no detrimental effect on the gasket or the pipe, and shall be per published recommendations of the pipe manufacture.

4. MATERIAL CERTIFICATION

A manufacture's or an independent laboratory certification shall be furnished to the purchaser/engineer that the products were manufactured, sampled, tested, and inspected at the time of manufacture in accordance with this specification.

C. PIPE DIMENSIONS

Pipe dimensions shall meet the following requirements when tested in accordance with ASTM D-2122.

Nominal Size	Avg. O.D.	Avg. I.D.
4	4.790 (121.7)	4.00 (101.6)
6	6.930 (176.0)	6.00 (152.4)
8	9.145 (232.2)	8.00 (203.2)
10	11.405 (289.7)	10.00 (254.0)
12	14.450 (367.0)	12.00 (304.8)
15	17.530 (445.3)	15.00 (381.0)
18	21/150 (537.2)	18.00 (457.2)

D. INSTALLATION

1. Joint Tightness

Minimum joint performance shall show no leakage when tested in accordance with ASTM D-3212.

2. Supplier Assistance

A manufacturers representative of the above referenced pipe material shall be present at the beginning of the installation as required by the Design Engineer or Contractor and shall remain on site until released by the Design Engineer or Field Inspector/Engineer.

2.06 INLETS FOR STORM SEWERS

A. CURB TYPE INLETS

(1) Curb inlets shall be constructed at the locations and to the lines and grades or shown on the plans or as directed by the Engineer.

(2) Curb inlets shall be constructed of reinforced class “C” concrete in accordance with Section 1-B “Concrete Structures” and the plans and detail drawings.

(3) The curb section and the curb inlet shall conform to the curb and gutter section in which it is placed in so far as it is possible.

B. GRATE TYPE INLETS

(1) Grate inlets shall be constructed at the locations and the lines and grades as shown on the plans or as directed by the Engineer.

(2) Concrete boxes for grate inlets shall be constructed of reinforced Class “C” concrete in accordance with Section 1-B “concrete Structures” and the plans and detail drawings.

(3) Grates shall be constructed of ASTM A-48 gray iron having minimum tensile strength of 35,000 psi or ductile iron having a minimum tensile strength of 60,000 psi and a yield strength of 40,000 psi.

The size, style, shape, type, weight and class shall be as shown on the plans.

Grate frames shall be as manufactured for the grate by the grate fabricator. If more than one type or style or frame is available, the type and/or style shall be as indicated on the plans.

C. COMBINATION INLETS

(1) Combination curb and grate inlets shall be constructed at the locations and to the lines and grades as shown on the plans or as directed by the Engineer.

(2) Combination inlets shall be constructed in accordance with the applicable requirements for “Curb type inlets” and “Grate type inlets” above.

D. INLET LEADS

(1) Inlet leads may be PVC pipe or CSP as shown on the plans and called for in the bid proposal.

(2) Inlet leads shall be constructed in accordance with the specifications for type of material used and the plans and detail drawings.

(3) Where two or more leads are joined together to form a single lead to the storm sewer they shall be joined at a cleanout unless shown otherwise on the plans.

(4) Inlet leads shall be connected to the storm sewer at a manhole. The leads shall enter the manhole at a point that will match the .8 points of the two pipes as near as practical.

E. CLEANOUT FOR STORM SEWER INLET LEADS

Cleanouts at the juncture of inlet leads shall be constructed in accordance with the dimensions and requirements shown on the plans and detail drawings.

F. CORRUGATED STEEL SLOTTED DRAINS

(1) Corrugated steel slotted drains shall be as specified in section 2.02-3 of these specifications and shall be furnished in the lengths and diameters as shown on the drawings and in the bid proposal.

(2) Corrugated steel slotted drains are approved for nuisance water inlets only and are sized to allow for considerable clogging before they will cease to function in this capacity.

2.07 MANHOLES

1. GENERAL

A. **CONCRETE MANHOLES ARE NOT TO BE USED FOR SANITARY SEWERS AFTER DECEMBER 31, 2002. FIBERGLASS MANHOLES ARE TO BE USED FOR ALL SANITARY SEWERS**. Concrete manholes can be used for storm water sewers.

All manholes furnished for this project shall be precast unless noted otherwise on the plans and or bid proposal.

Precast manholes shall conform to the requirements of ASTM Specification C-478 with the modifications given in this article.

Concrete used for precast manholes shall have a minimum 28-day compressive strength of 4,000 psi and shall have a minimum cement content of 7 sacks per cubic yards.

All manhole sections shall be furnished with tongue and groove type joints suitable for sealing water tight with rubber or bituminous joint sealer or gaskets.

B. When cast in place components for manholes are called for on the plans the concrete used shall have a minimum 28 day compressive strength of 4,000 psi and a minimum cement content of 7 sacks per cubic yard and shall conform to the requirements of ASTM Specification C-478 with wall thickness as shown on the plans and detail drawings.

Aggregate for the concrete shall meet the sodium sulfate and magnesium sulfate test as required in ASTM Specification C-33.

C. Mortar for filling and shaping the inverts in precast manhole bases and for mortaring precast grade rings and cast iron rings and covers shall consist of one part Portland cement ASTM C150 Type 1 to 3 parts washed sand mixed with just enough water to make a workable mix.

D. Manholes for corrugated steel pipe may be precast concrete or corrugated steel as described in Article 2.02. The type and material shall be as shown on the plans and called for on the bid proposal.

2. PRECAST MANHOLES

A. Manhole base sections shall be cast with an integral floor and shall be constructed in accordance with the details shown on the plans.

B. Manhole riser sections shall be constructed in accordance with the plans and details and these specifications. When pipe openings are required in manhole riser sections they shall be of the same type and meet the same requirements as the pipe openings in the precast bases.

Manhole riser sections for each manhole shall be furnished in the proper combination of lengths to construct the manhole in conjunction with the other components to the finished grade shown on the plans.

C Eccentric cone sections shall be constructed in the same manner as other components except the top of the cone will have a flat surface to accommodate the manhole ring and cover or grade adjusting rings instead of a tongue or groove.

Generally openings will not be required in the wall of the cone section of the manhole.

D. Manhole grade rings shall comply with all the requirements for manhole riser sections except they shall be cast smooth both sides without tongues and/or grooves.

Manhole grade rings shall be sized to fit the smooth small end of the cone section and shall be cast in heights of 2", 4" or 6".

E. Joint seals for precast concrete manholes shall be a bitumastic sealer such as Ram-Nek or approved equal, a soft rubber sealer such as Butyl-Lok or approved equal or an approved "O" ring gasket or a combination of the above if required to achieve a water tight joint.

F. All water tight Storm Sewer Manholes constructed on this project shall have Neenah R-1755-C watertight manhole rings and covers or approved equal.

No separate payment will be made for the protective plastic manhole linings or for the water tight manhole rings and covers but the cost of these items shall be included in the price bid for water tight Storm Sewer Manholes.

In addition to the markings required by ASTM Specification C-478, all components of each manhole shall be, marked with location identifying information such as manhole number or line number and station value where manhole is to be installed. If the manhole has openings for installation of branch lines above the base section, each manhole section shall be clearly marked with the sequence of installation to assure the branch opening will be at the correct elevation.

3. FIBERGLASS MANHOLES

A. SCOPE

Fiberglass reinforced polyester manholes shall be manufactured from commercial grade polyester resin or other suitable polyester or vinyl resins, with fiberglass reinforcements and in accordance with the latest edition of ASTM D 3 753 (Standard Specification for Glass-Fiber Reinforced Polyester Manholes). Fiberglass manholes shall be used with fiberglass or plastic sewer pipe.

B. MATERIALS

1. **Resin:** The resins used shall be a commercial grade unsaturated polyester resin.

2. **Reinforcing Materials**: The reinforcing materials shall be commercial Grade "E" type glass in the form of mat, continuous roving, chopped roving, roving fabric, or a combination of the above, having a coupling agent that will provide a suitable bond with the resin and leave a resin rich surface.

3. **Surfacing Materials**: If reinforcing materials are used on the surface exposed to the contained substance, they shall be a commercial grade chemical-resistant glass organic surfacing mat having a coupling agent that will provide a suitable bond with the resin and leave a resin rich surface.

4. **Fillers and Additives**: Fillers, when used, shall be inert to the environment and wet well construction. Additives, such as thixotropic agents, catalysts, promoters, etc., may be added as required by the specific manufacturing process to be used. The resulting reinforced plastic material must meet the requirement of this specification.

C. FABRICATION

1. **Exterior Surface**: The exterior surface shall be relatively smooth with no sharp projections. Handwork finish is acceptable if enough resin is present to eliminate fiber show. The exterior surface shall be free of blisters larger than ½ inch in diameter, de-lamination and fiber show.

2. **Interior Surface**: The interior surface shall be resin rich with no exposed fibers. The surface shall be free of crazing, de-lamination, blisters larger than ½ inch in diameter, and wrinkles of 1/8 inch or greater in depth. Surface pits shall be permitted up to 6 per square foot if they are less than ¾ inch in diameter and less than 1/16 inch deep.

3. **Defects not permitted**:

Exposed fibers: glass fibers not wet out with resin.
Resin runs: runs of resin and sand on the surface
Dry areas: areas with glass not wet out with resin.
De-lamination: separation in the laminate.
Blisters: light colored areas larger than ½ inch in diameter.
Crazing: cracks caused by sharp objects
Pits or Voids: air pockets.
Wrinkles: smooth irregularities in the surface.
Sharp projection: fiber or resin projection necessitation gloves for handling.

D. PHYSICAL REQUIREMENTS

1. **Load Rating**: The complete manholes shall have a minimum dynamic-load rating of 16,000 ft-lbs. when tested in accordance with this standard. In order to establish this rating, the complete manhole shall not leak, crack, or suffer other damage when load

tested to 40,000 ft-lbs. and shall not deflect vertically downward more than ¼ inch at the point of load application when loaded to 24,000 lbs.

2. **Stiffness**: The manhole cylinder shall have a minimum pipe stiffness value as shown below when tested in accordance with A.S.T.M. 3753 8.5 (note 1)

Depth Ft.	F/dy.psi
3 – 6.5	0.75
7 – 12.5	1.26
13 – 20.5	2.01
21 – 25.5	3.02
26 – 35	5.24

3. **Soundness:** In order to determine soundness, apply an air or water pressure test to the manhole test sample. Test pressure shall not be less than 3 psig or greater than 5 psig. While holding at the established pressure, inspect the entire manhole for leaks. Any leakage through the laminate is cause for failure of the test. Refer to A.S.T.M. 3753 8.6.

4. **Chemical Resistance**: The fiberglass manhole and all related components shall be fabricated from corrosion proof material suitable for atmospheres containing hydrogen sulfide and dilute sulfuric acid as well as other gases associated with the wastewater collection.

5. **Physical Properties**:

	Hoop Direction	Axial Direction
a. Tensile Strength (pi)	18,000	5,000
b. Tensile Modulus (pi)	0.6×10^6	0.7×10^6
c. Flexural Strength (psi)	26,000	4,500
d. Flexural Modulus (psi)	1.4×10^6	0.7×10^6
e. Compressive (psi)	18,000	10,000

6. **Minimum Wall Thickness**: Shall be 0.48” nominal at all depths of the manholes.

E. TEST METHODS: All tests shall be performed as specified in A.S.T.M 3753 latest edition, section 8. Test method D-790 (see note 5) and test method D-695.

F. QUALITY CONTROL: Each completed manhole shall be examined for dimensional requirements, hardness, and workmanship. All required A.S.T.M 3753 testing shall be completed and records of all testing shall be kept and copies of test records shall be presented to customer upon formal written request within a reasonable time period.

G. CERTIFICATIONS: As a basis of acceptance the manufacturer shall provide a independent certification which consist of a copy of the manufacturer’s test report and accompanied by a copy of the test results that the manhole has been sampled, tested,

and inspected in accordance with the provisions of this specification and meets all requirements.

H. SHIPPING AND HANDLING: Do not drop or impact the fiberglass manhole. Fiberglass manhole may be lifted by inserting a 4" x 4" x 30" timber into the top of manhole with cable attached or by a sling or "choker" connection around center of manhole, lift as required. Use of chains or cables in contact with the manhole surface is prohibited.

I. CONCRETE:

1. **Fiberglass Bottom**: Manholes may have fiberglass bottoms that are a minimum of 6" below the OD of the pipe invert when concrete is used to form the invert. Manufactured fiberglass inverts and bench areas are allowed, or concrete may be used to form bench area and invert. Concrete is to be used on top of anti-flotation ring and around the reducer section as required for buoyancy.

2. **Concrete Bottom**: Lower manhole into wet concrete until it rests at the proper elevation, with a minimum of 4 inches of fiberglass manhole inserted into the wet concrete below flow line, then move manhole to plumb. The concrete shall extend a minimum of one foot from the outside wall of the manhole and a minimum of 6 inches above incoming lines. On the inside concrete shall form the bench and invert area and rise a minimum of 4 inches above incoming lines. If required by Engineer concrete may be used around reducer section for buoyancy control.

BACKFILL:

1. **Backfill Material**: Unless shown otherwise on drawings and approved by the Engineer, sand, crushed stone, or crushed gravel shall be used for backfill around the manhole for a minimum distance of one foot from the outside surface and extending from the bottom of the excavation to the top of the reducer section. Suitable material chosen from the excavation may be used for the remainder of the backfill. The material chosen shall be free of large lumps or clods, which will not readily break down under compaction. This material will be subject to approval by Engineer.

2. **Backfill Procedure**: Backfill shall be placed in layers of not more than 12 loose measure inches and mechanically tamped to 95% Modified Proctor Density, unless otherwise approved by Engineer. Backfill shall be placed in such a manner as to prevent any wedging action against the fiberglass manhole structure.

K. MARKING and IDENTIFICATION: Each manhole shall be marked on the inside and outside with the following information:

Manufacturer's name or trademark
Manufacturer's factory location
Manufacturer's serial number
Total length

4. MANHOLE RINGS AND COVERS

A. Manhole rings and covers furnished for this project shall be pattern No. 300-24 as produced by Western Iron Works, Inc., 21 E. 6th St., San Angelo, Texas 76903-5493 or Bass and Hays Foundry, Inc., 238 South Bagdad Rd., Grand Prairie, Texas 75050, or approved equal.

B. WATER TIGHT MANHOLE COVERS

(1) Water tight manhole rings and covers furnished for this project shall be number R-1755-C as manufactured by Neenah Foundry Company, P.O. Box 729, Neenah, Wisconsin 54957, or approved equal.

(2) When watertight replacement sanitary sewer manhole rings and covers are called for on the plans and in the bid proposal they shall be Neenah Foundry Co. No. R-1755-C or approved equal.

No separate payment will be made for adjusting to grade of the replacement watertight manhole rings and covers. The contractor shall schedule this work to coincide with other manhole and water valve adjustments and any costs that might be involved shall be included in the price bid for replacement water tight manhole rings and covers.

(3) Manhole vents shall be used in conjunction with watertight rings and covers spaced every third manhole or as indicated on the plans. Vents shall be constructed as indicated on City design and construction standards.

C. Pressure type manhole rings and covers may be required for certain storm sewer applications. When pressure type manhole rings and covers are called for on the plans and/or bid schedule they shall be Western Iron Works Pattern #380-24P or approved equal. The manhole cover shall be sealed with an “O” ring gasket in a ring groove and shall be secured to the ring by six (6) five-eighths inch (5/8”) stainless steel bolts. The ring shall have six (6) one and one quarter inch (1-1/4”) bolt holes in the flanges for securing the ring to the concrete slab top on the manhole.

D. All manhole covers except grate type shall have two blind pick holes or pick bar cast into them. The blind pick holes or pick bars shall be placed on opposite sides of the cover.

E. All manhole covers except grate type shall have cast into their tops in letters 2 inches high minimum one of the following:

CITY OF MIDLAND
SANITARY SEWER
OR
CITY OF MIDLAND
STORM DRAIN

which ever is applicable.

2.08 GRANULAR MATERIALS

A. GRANULAR MATERIAL GRADATION CLASSIFICATIONS:

Granular materials furnished for foundation, bedding, encasement, backfill, or other purposes as may be specified, shall consist of any natural or synthetic mineral aggregate such as sharp grained sand, crushed gravel, crushed rock, crushed stone, or slag, and shall conform to the following specifications and/or gradation.

Note all materials used for these purposes shall be crushed and shall have at least two broken faces. Pea gravel will NOT be allowed.

	Foundation	Bedding	Encasement	Backfill
ASTM C33 Grade #57	x			
ASTM C33 Grade #67	x			
ASTM C33 Grade #8		x	x	
THD 1982 Item 302 Type D Grade 4		x	x	
THD 1982 Item 302 Type D Grade 5			x	
Crusher fines**			*x	x

*100 percent of crusher fines that are to be used within 12 inches of the top of pipe must pass the ¾" sieve.

** Approximate Gradation for Crusher Fines.

Sieve Size	% Passing
2 inch	100
# 4	35 - 100
# 10	20 - 100
# 40	5 - 35
#200	4 - 10

Crushed stone material proposed as an alternate for use on this project and not meeting the above specifications must be approved in writing at least 48 hours prior to the time scheduled for opening bids.

B. GRANULAR MATERIAL USE DESIGNATIONS:

Granular materials provided for Foundation, Bedding, Encasement, or Backfill use as required by the contract, either as part of the pipe item work unit or as a separate contract item, shall be classified as to use in accordance with the following:

MATERIAL USE DESIGNATION	ZONE DESIGNATION
Granular Foundation	Placed below the bottom of pipe grade as replacement for unsuitable or unstable soils, to achieve better foundation support.
Granular Bedding	Placed below the midpoint of the pipe prior to pipe installation, to facilitate proper shaping and achieve uniform pipe support. Also for Class B bedding where specified.
Granular Encasement	Placed below an elevation one half foot (6") above the top of pipe, after pipe installation, for protection of the pipe and to assure proper filling of voids and thorough consolidation of backfill.

In each case above, unless otherwise indicated, the lower limits of any particular zone shall be the top surface of the next lower course as constructed. The upper limits of each zone are established to define variable needs for material gradation and compaction or void content, taking into consideration the sequence of construction and other conditions. The material use and zone designations described above shall only serve to fulfill the objectives and shall not be construed to restrict the use of any particular material in other zones where the gradation requirements are met.

PART 3 – EXECUTION

3.01 LOCATION OF WORK

A. The work will be located as shown on the plans.

B. It may be necessary for the Engineer to shift lines as reasonable amount to avoid an obstruction to the construction or to reduce right of way difficulties. The Contractor will not be allowed any additional compensation due to shift of lines. Additional compensation will be allowed only for lengthening of lines.

3.02 PROTECTION OF SURFACE STRUCTURES

A. All surface structures and features located outside the permissible excavation limits for underground installations, together with those within the construction areas which are indicated in the Plans as being saved, shall be properly protected against damage and shall not be disturbed or removed without approval by the Engineer.

B. Obstructions such as street signs, guard posts, mail boxes and other items of prefabricated construction may be temporarily removed during construction provided that essential service is maintained in a relocated setting as

approved by the Engineer and that non-essential items are properly stored for the duration of construction. Upon completion of the underground work, all such items shall be replaced in their proper setting. This removal, relocation and replacement shall be at the sole expense of the Contractor.

In the event of damage to any surface structures or improvements, either privately or publicly owned, in the absence of construction necessity, the Contractor will be required to replace or repair the damaged property to the satisfaction of the Engineer and without cost to the Owner.

3.03 INTERFERENCE OF UNDERGROUND STRUCTURES

A. When any underground structure interferes with the planned placement of the pipeline or appurtenances to such an extent that alterations in the work are necessary to eliminate the conflict or avoid endangering effects on either the existing or proposed facilities, the Contractor shall immediately notify the Engineer and the Owner of the affected structure. When any existing facilities are endangered by the Contractor's operations, he shall cease his operations at the site and take such precautions as may be necessary to protect the in place structures until a decision is made as to how the conflict will be resolved.

B. Without specific authorization from the Engineer, no essential utility service shall be disrupted, nor shall any change be made in either the existing structures or the planned installations to overcome the interference. Alterations in existing facilities will be allowed only to the extent that service will not be curtailed unavoidably and then only when the encroachment or relocation will satisfy all applicable regulations and conditions.

C. Wherever alterations are required as a result of unforeseen underground interference not due to any fault or negligence of the Contractor, the Engineer will issue a written order covering any additional or extra work involved and specifying the revised basis of payment, if any. Any alterations made strictly for the convenience of the Contractor shall be subject to prior approval and shall be at the Contractor's expense.

D. No extra compensation will be allowed for delays caused by the interference of underground structures.

3.04 SEPARATION BETWEEN SANITARY SEWERS AND WATER MAINS

A. Sanitary sewers and service lines shall be installed so that the separation between the sewer and water mains is not less than 9 feet in all directions. The 9 feet shall be measured between the nearest outside edges of the pipe.

B. When the required 9 foot minimum separation cannot be maintained and a sanitary sewer must be constructed parallel to a water main, the sanitary sewer shall be constructed of ductile iron or PVC pipe meeting AWWA specification or having NSF approval for potable water pipe, with a pressure rating of 100 psi for both the pipe and the joint. The sanitary sewer line shall

be installed in a separate trench and may be placed no closer than 2 feet vertically and 4 feet horizontally from the water main, with the separation being measured from the nearest outside walls of the pipes. The sanitary sewer shall be constructed lower than the water main.

C. When a sanitary sewer must cross a water main and the 9 feet required separation cannot be maintained, the sanitary sewer may be constructed with a minimum clear separation between the outside diameters of the two pipes of 6 inches if that part of the sanitary sewer within 9 feet of the water main is constructed of ductile iron pipe or PVC pipe meeting AWWA specifications, having a 150 psi pressure rating and equipped with pressure type joints. One length of the sewer pipe must be centered on the water main and where possible, the sanitary sewer should pass under the water line.

D. When the 9 foot required separation cannot be maintained and a sanitary sewer force main must be constructed parallel to a water main, the sanitary sewer force main shall be constructed of ductile iron or PVC pipe meeting AWWA specifications and having a pressure rating of 150 psi and equipped with pressure type joints. The force main must be constructed with a minimum vertical separation of 2 feet and a minimum horizontal separation of 4 feet measured between the outside diameters of the pipes. The force main must be constructed lower than water main.

Table I showing separation of water and sewer lines and construction materials allowed:

TABLE 1
SEPARATION OF WATER AND SEWER LINES

Condition	Location	Material		Separation (Min.)		Comments
		Water	Sewer	Vert.	Horiz.	
NEW WATER AND NEW SEWER SYSTEM						
New Water & New Sewer Gravity Sanitary Sewer Parallel to Water Main	Water above Sewer	Std.	CI DI PVC 150 PSI	2’	4’	Separate Trenches
Gravity Sanitary Sewer Crossing Water Main	Water above Sewer or Sewer above Water	Std	CI DI PVC. 150 PSI	6”	NA	Center one joint of sewer pipe on water main
Gravity Sewer Crossing Water Main	Water above Sewer	Std	ABS, Clay Conc. composite	2’	NA	Cement stabilize sand initial backfill zone each side of crossing. Center of sewer for 9 ft one joint of sewer pipe on water Main
NEW WATER AND EXISTING SANITARY SEWER						
New Water Parallel Existing Sewer	Water above Sewer	Std.	Clay, Conc. ABS CI DI PVC	2’	4’	If sewer shows no sign of leakage, then leave sewer alone. If Sewer shows signs of leakage, then repair or replace.
New Water Crossing Existing Sewer	Water above Sewer	Std	Clay, ABS Conc. composite	2”	NA	If sewer shows no sign of leakage, then leave sewer alone if sewer shows signs of leakage then repair or replace.
New Water Crossing Existing Sewer	Sewer above Water	Std	Clay, ABS Conc. composite	2’	NA	Replace existing sewer with one joint CI,DI,PVC-150 Centering over waterline
New Water Parallel to Existing Sewer	Sewer above Water	Std	Clay, ABS Conc. composite	2’	4’	Replace existing sewer with CI, DI, PVC – 150 PSI or Cement Stabilized sand back- fill initial Backfill none of sewer where parallel closer than 9 ft., or Encase the water in 150 PSI Pipe two nominal sizes larger.

EXISTING WATER AND NEW SANITARY SEWER						
New Sewer parallel Existing Water	Water above Sewer Or Sewer above Water	Std	CI DI PVC 150 PSI	2'	4'	Separate trenches
New Sewer crossing Existing Water	Water above Sewer or Sewer above water	Std	CI DI PVC 150 PSI	6"	NA	Center one joint of sewer pipe on water main.
New Sewer crossing Existing Water	Water Above Sewer	Std	Clay, ABS Conc. composite	2'	NA	Cement Stabilize sand initial backfill zone of sewer for 9 ft each side of crossing. Center one joint of sewer pipe on water main.

3.05 EXCAVATION

A. Excavation of every description and of whatever materials encountered shall be made to the alignment and depth shown on the plans or as directed by the Engineer. Excavation shall be made by open cut. Sides of trenches shall be kept as nearly vertical as possible and the trench shall be so braced, sheeted and drained that workmen may work safely and efficiently therein. The trenches shall be sufficiently straight between designated angle points to permit the pipe to be laid true to line in the approximate center of the trench.

B. The trench width may vary with and depend upon the depth of trench, the diameter of pipe to be laid and the nature of the material to be excavated; but in any case shall be of ample width to permit the pipe to be laid and jointed properly and the backfill to be placed and compacted properly. The minimum width of unsheeted trench shall be 18 inches. The maximum clear width of trench at the top of the pipe shall be not more than two (2) feet greater than the outside diameter of the pipe for pipes up to 33" diameter except by consent of the Engineer. Whenever, for any reason, the maximum trench width is exceeded, the Contractor shall provide, at his own expense, pipe of higher class and/or bedding adequate to sustain the increased soil load as calculated by the Engineer.

C. Trenches shall be undercut to provide for the class bedding specified and/or shown on the plans. Bell holes shall be excavated to insure the pipe resting for its entire length upon the bedding material. Where trenches are under-cut beyond the depth required for bedding the trench shall be brought to grade by using crushed aggregate as specified for foundation herein. The use of loose native soil will NOT be permitted for this purpose.

D. No pipe shall be laid in water. Where the ground water table is at or above trench bottom, the Contractor shall de-water the trench to permit the pipe to be laid on a solid foundation.

   Costs for de-watering by whatever method selected shall be considered incidental to the price bid per foot of pipe.

   The Contractor shall discharge pumps to the natural drainage channels, or if permitted, to other sewer or drains.

Where sewer pipelines are located in or across streambeds or drainage ditches, the Contractor shall divert the stream flow and de-water each section as the work progresses.

E. Temporary support, adequate protection and maintenance of all underground and surface utility structures, drains, sewers, and other obstructions encountered in the progress of the work shall be furnished by the Contractor at his own expense under the direction of the Engineer.

F. Whenever wet, soft or unstable soil, incapable of properly supporting the pipe, manholes or other structure is encountered in the trench, a further depth and/or width shall be excavated and refilled to trench bottom grade with gravel or other approved suitable material thoroughly compacted to assure a firm foundation for the pipe.

G. Rock, boulders and large stones shall be removed to provide a clearance of at least six (6) inches below the outside barrel of the pipes, valves, or fittings and to a clear width of six (6) inches on each side of all pipe and appurtenances for pipe 15 inches in diameter or less, and a clear width of nine (9) inches on each side of all pipe and appurtenances for pipe larger than 15 inches in diameter. Adequate clearance for properly joining pipe laid in rock trenches shall be provided at bell holes. The space between the rock at the bottom of the trench and the bottom of the pipe barrel shall be filled with compacted bedding material.

H. The Engineer shall be notified of any need for blasting to remove materials which cannot be broken up mechanically, and there shall be no blasting operations conducted until the Engineer's approval has been secured. Blasting operations will be allowed only when proper precautions are taken to protect life and property, and then shall be restricted as the Engineer directs. The Contractor shall assume full responsibility for any damage caused by blasting, regardless of the requirements for notification and approval. The Contractor shall secure any required permits for blasting and shall conduct blasting operations in conformance with all applicable State and local laws, regulations and ordinances.

I. In the event the Contractor desires to employ tunneling in locations other than as shown on the Plans in order to avoid replacement of sidewalks, etc., he shall do so only upon receipt of specific permission from the Engineer. Tunneling of this nature shall be considered incidental.

J. Excavated materials will be classified for reuse as being either suitable or unsuitable for backfill or other specified use.

3.06 SPECIAL SAFETY PROVISIONS

1. TRENCH SAFETY SYSTEMS

A. DESCRIPTION

This item shall govern for the Trench Safety Systems required for the construction of all trench excavation to be utilized in the project and including all additional excavation and backfill necessitated by the safety system. A trench shall be defined as a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet. The depth is five feet or more. Trench Safety Systems include but are not limited to sloping, sheeting, trench boxes or trench shields, sheet piling, cribbing, bracing, shoring, de-watering or diversion of water to provide adequate drainage.

B. CONSTRUCTION METHODS

Trench safety systems shall be accomplished in accordance with the detailed specifications set out in the provisions of Excavation, Trench, and Shoring, Federal Occupational Safety and Health Administration (OSHA) Standards, 29CFR, Part 1926, Subpart P, as amended, including Proposed Rules published in the Federal Register (Vol. 52, No. 72) on Tuesday, October 31, 1989. The sections that are incorporated into these specifications by reference include Sections 1926-650 through 1926-652. Legislation that has been enacted by the Texas Legislature, being Tex. Rev. Civ. Stat. Ann. Arts. 1015q, 2368a.6 (Vernon Supp. 1988) with regard to Trench Safety Systems, is hereby incorporated, by reference into these specifications.

A reproduction of the OSHA Publication 2226 is attached for the convenience of the Contractor. The City assumes no responsibility for the accuracy of the reproduction or that it reflects current law. The Contractor is responsible for obtaining a copy of this section of the Federal Register for his use.

If the contractor elects to use a trench protective system that, in the Proposed Rules, requires “Design by a qualified person or a qualified engineer,” [For example see 1926.652 (b) (3) and 1926.652 (c) (4)], a “qualified person or qualified engineer” shall be a Professional Engineer registered in the State of Texas. The Contractor is responsible for obtaining boring and soil analysis as required for the planned design. The trench excavation is to be designed in conformance with OSHA standards and regulations.

C. TRENCH SAFETY PROGRAM

The Contractor shall submit a safety program specifically for the construction of trench excavation. The trench safety program shall be in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

D. INSPECTION

The Contractor shall make daily inspections of the Trench Safety Systems to ensure that the systems meet OSHA requirements. Daily inspection is to be made by a "competent person" provided by the Contractor. If evidence of possible cave-ins, or slides, is apparent, all work in the trench shall cease until the necessary precautions have been taken by the Contractor to safeguard personnel entering the trench. It is the sole duty, responsibility and prerogative of the Contractor, not the owner or the Engineer, to determine the specific applicability of the designed trench safety systems to each field condition encountered on the project. The Contractor shall maintain a permanent record of daily inspections.

2. SAFETY RESTRICTIONS - work near high voltage lines

The following procedures will be followed regarding the subject item on this contract:

A. Warning signs painted yellow with black letters that are legible at twelve feet shall be placed inside and outside vehicles such as cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment or similar apparatus. The warning sign shall read as follows:

"WARNING - UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES."

B. All equipment except back hoes or dippers that may be operated within ten feet of high voltage lines shall have an insulating cage-type of guard about the boom or arm and insulator links on the lift hook connections.

C. When necessary to work within six feet of high voltage electric lines, notification shall be given the power company who will erect temporary mechanical barriers, de-energize the line, or raise or lower the line. The notifying department shall maintain an accurate log of all such calls to the Power Company, and shall record action taken in each case.

D. The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

3.07 PIPE LAYING

A. All gravity pipe shall be laid using approved grade boards, furnished and set by the Contractor at no additional cost to the Owner, according to the grade stakes established by the Engineer. The maximum spacing of grade boards shall be fifty (50) feet. No sewer shall be laid unless there is a minimum of three grade boards set to check the proper grade and alignment ahead. The Contractor shall provide and use a suitable grade rod to insure the proper grade of the pipe.

B. The Contractor may use the laser beam method of setting a line and grade for the sewer by using the laser beam coaxially through the center of the sewer being laid. The laser beam projector is to be rigidly mounted to its support platforms, with a two-point suspension, or equivalent, assuring that all ground and equipment vibrations are kept to an absolute minimum. The Contractor shall furnish all equipment including equipment necessary to control atmospheric conditions in the pipe to keep line and grade to acceptable standards of accuracy. Competent experienced people who have been properly trained to operate the equipment used must operate the laser beam system.

C. The Contractor shall stake check pegs at all manholes throughout the job. Check pegs midway between manholes and any other checkpoints deemed necessary to assure accuracy of the equipment shall be provided by the contractor.

D. Each piece of pipe and special fitting shall be carefully inspected before it is placed and no defective pipe shall be laid in the trench. Pipe laying shall proceed upgrade, starting at the lower end of the grade and with the bells uphill. No pipe shall be laid except in the presence of an inspector representing the Engineer. Any pipe laid except in the presence of an inspector representing the Engineer shall be subject, at the contractor's expense, to a television camera inspection and survey by the city. Trench bottoms found to be unsuitable for foundations after pipe laying operations have started shall be corrected and brought to exact line and grade with approved compacted granular material as specified for foundation in Item 2.07 A. of these specifications.

E. Pipe laying shall proceed up-grade with spigot or tongue ends pointing in the direction of flow. The spigot shall be centered in the bell, and pipe shoved into position, and brought into true alignment. It shall be secured there with bedding material carefully tamped under and on each side of it, excepting at bell holes. Care shall be taken to prevent dirt from entering the joint space.

F. Any defective or damaged pipe discovered after the line is laid or any gravity pipe, which has had its grade or joint, disturbed after laying shall be removed and replaced or relayed. The section of line in which such damaged or displaced section is discovered shall be retested after corrections are made.

G. Where excavation for buildings or other portions of the work have been carried below the line and grades of the pipe, thorough tamping of approved crushed stone backfill and the use of adequate bracing and blocking under the pipe will be required to insure against settling and shearing of the pipe. In areas where noted on plans, Portland cement stabilized material or concrete shall be used for backfill to provide adequate bracing for pipe and protection of structures.

H. All manhole connections for PVC or other Polymer based pipe shall be made using "A Lok Gaskets" or "Kor-N-Seal" boots or other approved water stop devices. Only Portland cement grout that expands upon curing or approved non-shrink grout will be incorporated into any manhole connection.

I. Connections to manholes for other types of pipe shall be in accord with the pipe manufacturers specifications and other applicable requirements of these specifications. The resulting joint shall meet the leakage test requirements of these specifications.

J. The exposed end of all pipes shall be fully protected with a stopper or bulkhead at the end of each day's work to prevent earth, debris, small animals, or other substances from entering the pipe. The interior of the sewer shall be carefully freed from all dirt, jointing compound, or superfluous material of every description as the work progresses.

3.08 CONNECTION AND ASSEMBLY OF JOINTS

1. JOINING PVC OR OTHER POLYMER BASED PIPE

A. The type of joint and the material to be used shall be as shown on the plans or specified herein. Factory cast compression joints shall be free of dirt and lubricated before inserting the barrel into the bell. After the spigot is centered in the bell, the pipe shall be shoved home solidly by using a wood block and bar. The Contractor shall keep the ends of the pipe closed to prevent dirt and other material from entering the pipe during placement. All joints must be water tight, and any leaks or defects discovered must be repaired immediately. Any pipe, which has been disturbed after being laid, must be taken up, the joint cleaned and properly relayed as directed by the Engineer.

Lubricant used shall be as recommended by the pipe manufacturer.

B. Field-cut pipe must be beveled for insertion into the gasketed bell or coupling. Bevels can be made with a hand or power tool. Bevels shall be made to pipe manufacturer's specifications. If pipe manufacturers specifications are not available the bevel may be made at 15 degrees to the longitudinal axis of the pipe through one half (l/2) the wall thickness.

C. After pipe has been cut and beveled, a new full insertion mark located as recommended by the pipe manufacture shall be made using a felt tip pen. The contractor may determine the location of the insertion mark by measuring the mark location on a factory marked joint of pipe if manufacturer's specifications are not available.

2. JOINTING CORRUGATED STEEL PIPE

A. Gaskets for corrugated steel pipe shall be "O" Ring or sleeve types. Sleeve gasket shall be carefully placed on one joint of pipe. When the pipe is aligned and brought end to end the gasket shall be carefully centered over the joint between the ends of the pipe. "O" ring gasket shall be installed in accordance with the manufacturer's recommendation.

B. When "O" ring gaskets are furnished a flat gasket shall be furnished and placed between the overlapping portions of the band. The gasket shall extend the full width of the band and shall be of sufficient depth to assure a watertight joint.

C. The coupling band shall be carefully centered over the joints and tightened to the pipe manufacturer specifications. Care shall be taken during the tightening process to assure a snug uniform fit for the entire circumference of the pipe.

3. PROTECTING AND COVERING JOINTS

A. The contractor shall keep the ends of the pipe closed during the time of construction to prevent the entry of dirt, debris, small animals and other foreign objects.

B. Joints shall not be covered until approved by Engineer or his representative. Connections, which are for future use, shall be properly capped.

3.09 CONNECTIONS TO EXISTING STRUCTURES

A. Where shown on the plans, the contractor shall connect the new sewer to existing manholes. If no stub out is present in the existing manhole for such connection, the contractor shall construct such connection by making a hole in the side of the existing manhole using a coring machine or other approved method and installing a “KOR N Seal” boot as manufactured by N.P.C. Systems, Inc. or other approved water tight manhole connector.

The contractor shall use caution in constructing the connection to the existing manhole. Damage to the manhole that, in the opinion of the Engineer, would impair the use and/or function of the manhole shall be just cause to require the contractor to reconstruct the manhole at contractor’s expense. Such damage shall include but not be limited to cracking of the manhole riser section, spalling around the connection significantly reducing manhole wall thickness or excessive oversize in the opening for the new connection requiring any filler other than the manhole connector and/or non-shrink grout specified.

The contractor shall make such changes in the invert of the manhole as may be necessary to provide a smooth flow of the water through the manhole. Any connection to existing structures required in the Plans shall be accomplished by the Contractor and shall be incidental item with no direct compensation being made unless listed as a pay item in the bid proposal.

B. If the work consists of the construction of a sewer that is to replace an existing sewer, all of the existing service lines shall be kept in operation and connected to the new line.

C. Connections shall be made to all existing sewer lines in the vicinity of the work by removing a section of the sewer for the existing line and inserting in the space a tee branch of proper size, or by the construction of a manhole, regulator chamber of other structure as shown on the Drawings.

D. Connections to building services shall be made in a neat and workman like manner. Clean out plugs shall be installed wherever feasible, by making the connections with a standard wye or tee-wye. When clean out plugs are installed they should be located as near the right of way line as practical.

3.10 BACKFILL OPERATIONS

1. GENERAL

A. All pipeline excavations shall be backfilled in a manner that will restore pre-existing conditions as the minimum requirement and fulfill all supplementary requirements indicated in the Plans and Specifications. The backfilling operations shall be started as soon as conditions will permit on each section of pipeline, so as to provide continuity in subsequent operations and restore normal public service as soon as practicable on a section-by-section basis. All operations shall be pursued diligently, with proper and adequate equipment, to assure acceptable results.

B. For this specification backfill is defined as any material placed in the trench above the bedding zone other than the pipe or conduit and appurtenance.

For flexible pipe the backfill between the bedding material and the crown of the pipe shall be crushed stone suitable for encasement as specified in article 2.07 of the specifications. When Portland cement stabilized backfill is used above the pipe zone; the crushed stone encasement shall extend to 1' above the crown of the pipe.

C. Depositing of the backfill shall be done so the shock of falling material will not injure the structure. Grading over and around all parts of the work shall be done as directed by the Engineer.

D. Whenever soil types which are determined by the Inspector to be undesirable for backfill are excavated from the trench, such material shall be hauled away and deposited at locations shown on the plans or as directed by the Engineer at no additional compensation.

E. Backfill materials placed in the pipe zone shall be carefully placed in relatively uniform depth layers spread over the full width and length of the trench section in a manner and/or sequence that will provide simultaneous support on both sides of the pipeline. Each layer shall be compacted effectively, by approved mechanical of hand methods, until there is no further visual evidence of increased consolidation. Above the pipe zone the backfill material shall be placed uniformly across and along the trench in depth suitable for the compaction method used and compacted to a minimum of the density specified for the material used and the trench location. Compaction of the in place layer shall be completed acceptably before placing material for a succeeding layer thereon.

The manner of placement, layer thickness, compaction equipment, and procedure effectiveness shall be subject to approval of the Engineer. Water jetting or flooding shall NOT be used to compact trench backfill.

F. Compaction of materials placed within the pipe bedding and encasement zones shall be accomplished with portable or hand equipment methods, so as to achieve thorough consolidation under and around the pipe and avoid damage to the pipe. Above the pipe zone, the use of heavy roller type compaction equipment shall be limited to safe pipe loading.

G. The maximum loose thickness of each backfill layer placed above the pipe zone shall be 12 inches, except that 16 inches will be permitted for Granular Materials placed above an elevation one foot above the top of pipe, and with the provision that, by authority of the Engineer and in consideration of the demonstrated capability of special type vibratory compactors, these maximums may be increased at his discretion. “Hydro tamps”, “vibra tamps” or other heavy compacting equipment shall not be used until the backfill has reached a depth of four (4) feet above the top of the pipe.

H. All surplus or waste materials remaining after completion of the backfilling operations shall be disposed of in an acceptable manner within 24 hours after completing the backfill work on each particular pipeline section. Disposal at any location within the project limits shall be as specified, or as approved by the Engineer; otherwise, disposal shall be accomplished outside the project limits at the Contractor’s discretion. The backfilling and surplus or waste disposal operations shall be a part of the work required under the pipeline installation items, not as work that may be delayed until final cleanup.

I. For the duration of the warranty period of the project, the Contractor shall assume full responsibility and expense for all backfill settlement and shall refill and restore the work as directed to maintain an acceptable surface condition. All additional materials required shall be furnished without additional cost to the Owner.

2. BACKFILL IN PUBLIC RIGHTS-OF-WAY AND OTHER AREAS WHERE SETTLEMENT IS CRITICAL

A. GENERAL REQUIREMENTS

(1). Backfill above the pipe zone in public rights-of-way and under paved parking lots, near structures or other utilities where settlement can cause damage shall be made using Portland cement stabilized backfill or crushed stone screenings (crusher fines).

The pipe zone is defined as that portion of the trench extending from the bottom of the trench to 12” above the crown of the pipe or conduit.

(2) Backfill around structures such as manholes, junction boxes, transformer boxes and valve boxes shall be made using Portland cement stabilized backfill material or crushed stone screening (crusher fines).

(3) The minimum depth of stabilized backfill or crusher fines shall be twelve (12”) inches.

When utilities are being constructed under existing paving, the stabilized backfill or crusher fines shall extend from top of the pipe zone to the top of the base course.
When utilities are being constructed under existing unpaved streets that are not scheduled for immediate pavement construction, the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the existing roadway surface.

When utilities are being constructed in streets that are scheduled for immediate paving, the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the bottom edge of the eight (8”) inches of subgrade, or, if the paving contractor has constructed a portion of the roadway prior to the construction of the utilities the backfill shall extend to the top of the course the contractor has finished, or the top of the base course, which ever is lower.

If the final course of asphaltic concrete has been placed, the street or alley surface shall not be cut for utility installation.

In streets where stabilized backfill is required only to the bottom of the subgrade course, the minimum depth of stabilized backfill may be reduced to six (6”) inches in which case the maximum depth of the “pipe zone” shall be limited to six (6”) inches above the top of the utility line or conduit.

B. BACKFILL MATERIALS

(1) Portland cement stabilized backfill shall consist of caliche base material, blow sand or native soil stabilized by the addition of Portland cement. Crushed stone or concrete aggregate shall NOT be used.

When Portland cement stabilized backfill is to be used, the contractor shall submit a mix design prepared by an approved commercial laboratory for approval before the trenching operation is begun. When native soil is to be used samples may be taken along the proposed route by boring or other approved means. Samples must be representative of the full trench depth.

The mix design shall be such that the minimum 7-day compressive strength is 150 psi when tested according to test method Tex 418-A.

The minimum cement content for Portland cement stabilized backfill shall be 1 sack per cubic yard.

Cement used in Portland cement stabilized backfill shall be Type I or Type II conforming to the requirements of ASTM Designation C150.

Caliche used for Portland cement stabilized backfill shall be crushed material conforming to Texas State Department of Highways and Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges Item 248 Type F, Grade 2.

Blow sand used for Portland cement stabilized backfill shall be clean, free from organic matter, clay lumps, rock and other deleterious matter.

Native soil used for Portland cement stabilized backfill shall be clean, free of clods and organic matter, and free of rock in excess of 2”.

(2) Crushed stone screening (crusher fines) used for back fill shall be sharp grained particles of crushed stone conforming to the requirements of Article 2.07 of these specifications.

(3) Trencher excavated rock material shall be screened so that the largest diameter material is less than 2". The screened rock material used for backfill shall have sufficient moisture added so that the backfill will bind with the fines. The rock material backfill shall be tamped or compacted in two (2) foot lifts. A sheeps foot roller shall not be used unless there is two (2) feet or more compacted backfill above the pipe bedding.

C. BACKFILL CONSTRUCTION

(1) Portland cement stabilized caliche backfill or Portland cement stabilized native soil backfill may be constructed using either the "dry" method or the "wet" method.

(a) The dry method of stabilized backfill construction consists of dry mixing of the cement and caliche or soil to produce a homogenous mixture then adding and mixing sufficient water for proper compaction and hydration of the cement. The water content of the mixture will be approximately one to two percent above the optimum moisture for soil compaction. The mixing may be accomplished by using batch mixers or on the job site by "blade mixing" or other suitable method to produce the desired backfill material. The mixed material shall be placed in lifts of up to a maximum of 12 inches and compacted to ninety-five (95%) modified proctor densities by use of suitable compacting equipment.

(b) In the "wet" method of cement stabilized backfill construction, the materials shall be mixed in an approved concrete batching plant or mixer to the consistency of concrete and placed as concrete would be placed. The slump of the backfill material shall be such that all voids will be filled, approximately four (4") to six (6") inches. The backfill shall be consolidated by rodding or by the use of mechanical vibrators.

Portland cement stabilized blow sand backfill shall be mixed and placed by the "wet" method as described above.

Crushed stone screening (crusher fines) shall be wetted uniformly throughout with sufficient moisture to assure proper compaction before being placed in the trench. The moistened crushed stone screening (crusher fines) shall be placed in maximum lifts of twelve inches and consolidated using vibratory type compaction equipment except when it has been demonstrated that the compaction equipment employed will adequately compact deeper lifts in which case the maximum depth of a lift shall be limited by the capabilities of the equipment used.

Tests to determine the compacted density of the backfill shall be ordered by the Engineer if in his opinion the compaction is not adequate. Test showing a minimum compacted density of 90%-modified proctor will be deemed adequate.

3. BACKFILL OUTSIDE OF PUBLIC RIGHTS-OF-WAY WHERE SETTLEMENT IS NOT CRITICAL

A. In areas outside of public rights-of-way and in the absence of special work item requirements the backfilling shall be accomplished with the use of suitable materials selected from the excavated materials to the extent available and practical. Should the materials available from the trench section be unsuitable or insufficient, the required additional materials shall be furnished from outside sources at the Owners expense.

B. Suitable material shall be defined as a mineral soil reasonably free of foreign materials (rubbish, debris, etc.) frozen clumps, oversize stone, rock, concrete or bituminous chunks and other unsuitable materials, that may damage the pipe installation, prevent thorough compaction, or increase the risks of after settlement unnecessarily. Material selection shall be such as to make the best and fullest utilization of what is available, taking into consideration particular needs of different backfill zones. Material containing stone, rock, or chunks of any sort shall only be utilized where and to the extent there will be no detrimental effects.

C. The backfill material placed in this area shall be compacted by suitable means to a minimum density equal to the density of the undisturbed surrounding soil. City Engineer MUST approve water flooding as a means of compaction.

4. TRENCH BACKFILL BEHIND CURB AND GUTTER

A. When utilities are placed behind the curb in paved streets and other landscaped areas the backfill shall be the same as elsewhere in the right-of-way or other applicable location except that in grassed areas and in flower beds the top six (6") inches of backfill shall be good quality top soil. When utilities are placed behind the curb in grassed or landscaped areas where no sidewalk is to be constructed and the edge of the trench is a minimum of 2 feet from the back of curb or where sidewalk is to be constructed and the minimum distance from both the back of curb and the edge of the sidewalk to the edge of the trench is 2 feet the contractor may elect to use suitable native soil for backfill. The native soil backfill shall be compacted to 95% modified proctor density to within 6" of the top of curb height. The top 6" of backfill shall be good topsoil and shall be compacted to the density of the adjacent soil.

B. Sidewalks shall be repaired by removing and replacing the complete section or sections that have been damaged. Strip patching through sidewalks will not be permitted.

The replacement sidewalk shall be of the same design and section as the walk removed and shall be of equal or better workmanship.

C. When utilities are placed in paved areas behind curbs the pavement shall be repaired as specified for street pavement.

D. Grassed areas and flowerbeds shall be restored as nearly as possible to the original condition. Care shall be taken to avoid damage to sprinkler systems.

Mail boxes and other appurtenance in the construction area. Any damage to said items shall be repaired immediately.

E. All repairs made behind the curb shall be to the satisfaction of the property owner responsible for their maintenance and/or to the satisfaction to the City Engineer.

3.11 INLET STRUCTURES AND LEADS AND CLEANOUTS FOR STORM SEWERS

A. Corrugated Galvanized Steel Slotted Drains for Nuisance water inlets only.

(1) Slotted drains shall be the sizes and lengths as shown on the plans and constructed at the locations as shown on the plans or at locations to be established on the job site.

(2) Slotted drains shall not be installed under asphalt pavement but shall have a section of concrete gutter constructed around it as shown on the detail drawings.

Slotted drains shall be protected from the entrance of debris, concrete or HMAC by closing the slot with one or two layers of heavy duct tape or similar material. In addition, the slot for slotted drain shall have a 2-½ inch or ¾ inch board attached to use as a guide for placing and edging the concrete.

Unless otherwise approved or directed by the Engineer the removal of tape and planking from the slotted drain should be accomplished as part of the final clean up.

B. Curb inlets, grate inlets and combination inlets

(1) General

Curb inlets, grate inlets and combination inlets may be pre-cast or cast-in-place at the contractor's option unless specifically shown otherwise on the plans and bid proposal.

(2) Pre-cast inlet boxes

(a) Construction and finish for pre-cast inlet boxes shall conform to details shown on the plans and all applicable requirements for pre-cast manholes.

(b) Tops for curb inlets and combination inlets may be cast in place or pre-cast. Extra care will be required in setting pre-cast tops to assure curb and gutter match.

(c) Pipe connections, bedding, setting and backfill for pre-cast inlets shall be in accord with the applicable requirements for pre-cast manholes article 3.12 of these specifications.

(3) Cast in place inlets

(a) Cast in place inlets shall be constructed of class "C" reinforced concrete as specified in item 1-B "Concrete for Structure" in these specifications.

(b) Forms for cast in place inlets shall be straight, clean and in good condition. Forms shall be properly cleaned and oiled before concrete is placed.

(c) Construction joints may be placed in cast in place inlets at locations shown on the plans. When construction joints are used, extra care will be required to assure that the joints are watertight.

(d) Cast in place inlets may be cast without outside forms if the soil conditions are such that true vertical walls can be cut and will stand during construction without sloughing or otherwise incorporation foreign materials into the concrete.

(e) When inlets are cast without outside forms, a plastic sheet lining may be required to prevent excessive loss of moisture from the concrete and/or to prevent incorporation of foreign material into the concrete.

A. Inlet Leads

(1) Inlet leads shall be constructed of corrugated steel pipe, PVC pipe or other material as called for on the plans and in the bid proposal.

(2) Construction of inlet leads shall be in accord with the applicable requirements for the type of pipe used.

(3) Junctions where two or more inlet leads are joined shall be made at clean outs or manholes.

B. Cleanouts

(1) Clean outs shall be constructed in accord with the plans and detail drawings.

(2) Construction and connections shall be in accord with the applicable specifications for construction of corrugated steel pipe manholes.

3.12 SANITARY SEWER SERVICES AND PLUGGED STUBS

A. Sanitary Sewer Services:

(1) On new sewer main construction all sewer laterals shall be constructed as part of the initial installation. Sewer wye fittings for sewer laterals in new construction shall be molded or fabricated with all gasketed connections. Four (4”) inch laterals shall be installed at all single-family residences and duplex. Laterals installed for apartment complexes, commercial and industrial areas shall be a minimum of six (6”) inches. Depth of laterals will be determined by depth of sewer main and applicable building codes. Laterals shall be installed using tee wyes or wyes and bends so that they will be at 90 degrees to the sewer main. Laterals shall extend to 3’ minimum beyond the property line of the served lot or tract. The contractor shall install sewer laterals according to the typical sewer lateral detail and the most current revisions of the Plumbing Code.

(2) Taps into existing lines shall use a gasketed fitting in conjunction with a full circle repair sleeve coupling, except that taps into existing ductile iron sewer may be made using the Genco Model DF sewer pipe saddle (The General Engineering Co., Frederic, MD Drawing No. R-3220-D dated 12/29/82) or approved equal.

(3) Cemented mitered connections without socket reinforcement shall not be permitted. The contractor will be permitted to use fittings, which are prefabricated, using pipe sections, molded saddles and PVC solvent cement, provided the solvent cement used in fabrication has cured for at least 24 hours prior to the installation. All solvent cement fittings shall e manufactured in the shop under controlled conditions.

(4) All caps and plugs shall be braced, staked, anchored, wired on or otherwise secured to the pipe to prevent leakage under maximum anticipated thrust from internal abnormal operating conditions or test pressures from water or air.

(5) It shall be the duty of the Contractor to keep a record of sewer service wye locations with respect to the nearest downstream manhole, but the Engineer will record ties on the end of all sewer services at the property line. When installing sewer services the Contractor shall, before backfilling, contact the Engineer or his representatives, and assist him in making ties to the end of the service in the open trench. At least two ties shall be made for each service, and if backfilling proceeds before such ties are made, the Contractor shall dig up the end of all such services, with no additional compensation, for the purpose of making ties. During backfilling the Contractor shall furnish and place a vertical steel post or 2 inch by 2 inch wooden stake set flush with finished ground surface, and extending down to the end of the sewer service, a nail shall be placed in the top of the stake to allow location of the service by metal finder.

(6) The main sewer service connection shall consist of installing an in-line wye section in the main sewer line at designated locations. Saddle wye installations will be permitted only when specifically called for. Orientation of service connection fittings shall be as shown in the standard drawings unless otherwise directed by the Engineer.

(7) Where the depth of cover over the main sewer invert is greater than 8 feet (or such other maximum as may be indicated), the service connection shall be extended outward then upward by use of bends to prevent excess loading on the sewer main in accordance with the details shown in the drawings.

(8) The Contractor shall provide the necessary wyes, tees and bends to bring the service to the proper place at the property line.

(9) Wherever service line connections to the main sewer are permitted or required to be made by the open cutout method in the absence of a built-in tee or wye fitting, the connection shall be made by using an approved type coring machine or by other approved methods producing a uniform, smooth circular cut-out as required for proper fit. The cutout discs shall be retrieved and shall not be allowed to remain within the main sewer pipe. The saddle tee shall be securely fastened to the main sewer pipe by means of epoxy resin or other approved adhesive. The entire connection fitting shall be encased in concrete to a minimum thickness of six inches and as may be shown in the standard drawings.

(10)Wherever service line connections to the main sewer are required to be made by means of built-in branch tee or wye fittings, the Contractor shall, in the absence of such fitting, remove a section of the main sewer pipe and replace it with the required branch tee wye or wye section connected by means of an approved sleeve coupling.

(11)Connections of service lines to the main sewer are required to be made by means of built-in branch tee or wye fittings, the Contractor shall, in the absence of such fitting, remove a section of the main sewer pipe and replace it with the required branch tee wye or wye section connected by means of an approved sleeve coupling.

(12)The end of all service connections shall be plugged with PVC plug and sealed with plastic joint material.

(13)Crushed stone bedding and backfill material, concrete encasement and protection, etc., for service line installation shall be the same as for the sewer lines.

(14)No service connections or laterals shall be covered until they have been inspected and located by the Engineer.

B. INSTALLATION OF PLUGGED STUBS ON SANITARY SEWERS

Plugged pipe stubs for future connections to manholes and sewerage structures shall be installed where shown on the Drawings or directed by the Engineer. The pipe stubs shall be installed in accordance with the specifications and details shown on the Drawings for connecting the type of pipe used to manholes.

3.13 MANHOLES

1. General

The manholes shall be constructed at the locations shown on the plans or as directed by the Engineer and in accordance with the details shown on the plans and as specified herein. After the excavation has been completed, the subgrade for the manhole base shall be graded and leveled. A crushed stone foundation having a minimum thickness of 6 inches shall then be placed on the subgrade. The crushed stone foundation shall be leveled and consolidated before the section of the manhole is placed. Pre-cast base sections shall sit in place level and plumb and to the lines and grade as shown on the plans. Cast in place bases shall be placed around the existing sewer line in accord with the plans and detail sheet. When pre-cast manhole bases are used, riser construction may proceed when the base is set on line and grade. When cast in place manhole bases are used, riser construction may proceed when the base has set sufficiently to support the weight of the riser.

Manholes shall be of the type and material shown on the plans and called for in the bid proposal and shall conform to these specifications.

All lift holes shall be filled with approved non shrink grout and bituminous material before final acceptance. Use of bituminous material or other flowable material alone to plug lift holes will not be permitted. Voids in the invert around the sewer pipe on the

inside wall of the manhole shall be grouted with cement rich grout, to conform to the rest of the wash, in accordance with the standard manhole details.

The backfill around the manhole shall be done in accordance with the details shown on the plans and trench backfill specifications.

The Contractor shall take whatever precautions necessary to protect the manholes that are under construction. At the end of the day or at such time as the Contractor deems necessary, all manholes not completed shall be covered, sealed, plugged, etc. to prevent the inflow of storm water or other objectionable material, and to prevent animals and humans from getting into the manhole.

2. PRE-CAST CONCRETE

A. Pre-cast tub bottom sections of manholes shall be set on a crushed stone foundation or bedding according to the details shown on the plans. Care shall be exercised to assure true alignment and grade for the pipe openings.

The invert of the manhole shall be constructed of cement rich grout and shall be formed to true lines; grades and curvature to assure smooth flow through the manhole. The invert shall have a steel trowel finish.

Joints for pre-cast concrete manhole riser sections shall be made Watertight by use of bitumastic or rubber sealers or “O” ring gaskets. Both sides of the tongue and groove joint shall be painted with a bitumastic primer before assembly.

The bitumastic or rubber sealer shall be clean and pliable and shall deform under the pressure of joint closure to assure a complete water tight seal. Care shall be exercised to assure proper alignment of the joint. The walls of the completed manhole shall be straight and vertical.

B. Pre-cast eccentric cone sections and precast slab manhole tops with eccentrically located manway shall be set with the manway adjacent to the up stream side of the manhole. The joints between the cone or slab top and the manhole riser shall be sealed in the same manner as the joints between the riser section. Care shall be taken in placing the cone and or slab tops to assure the manhole ring and cover can be set to match the finished paving.

C. Pre-cast grade rings will be used, when required, to bring the manhole ring and cover up to the finished grade. Grade rings may be set using cement rich grout or bitumastic seal and such as Ram-Nek or approved equal. When cement rich grout is used, care shall be taken that the space between the cone or slab top and the first grade ring and between the grade rings are completely filled without voids.

When bitumastic sealer is used the joints shall be constructed in the same manner as the joints between the riser sections.

When pre-cast manholes with PVC or other approved polymer lining are called for on the plans and bid proposal and are furnished under this contract they shall be constructed as other pre-cast concrete manholes.

In addition the joints in the lining shall be sealed by hot air welding, use of epoxy coating, or other approved means.

3. CAST IN PLACE MANHOLE BASES

A. Cast in place manhole bases shall be used only where shown on the plans or as directed by the Engineer and shall be constructed in accord with the details shown on the plans.

B. Special care shall be taken in casting the surfaces that will mate with the first risersection to assure a smooth even fit and a watertight joint.

C. The first riser section to be used with cast in place manhole bases shall be castwithout tongue or groove. The joint between the riser section and the cast in place base shall be sealed with a bitumastic or rubber sealant in the same manner as the joints in the pre-cast riser sections.

D. Care shall be taken in forming the invert of the manhole around existing sewers to assure adequate opening for the insertion of a “go – no go” mandrel or other testing equipment and cleaning tools.

4. MANHOLE RING AND COVER

A. The tops of the manhole frame and cover (ring) shall be built to the grade shown on the plans. The cast iron frame shall be firmly embedded in mortar.

B. When pressure type manhole rings and cover are specified on storm sewer manholes they shall be bolted to the concrete slab top using the “L” bolts cast into the slab for this purpose. The joint between the ring and the concrete slab top shall be made watertight using a bitumastic or rubber seal and conforming to the requirements of these specifications.

5. CORRUGATED STEEL MANHOLES

A. Corrugated steel manholes shall be constructed in accord with the details shown on the plans and in accord with the applicable requirements for the construction of corrugated steel pipe sewers.

B. Care shall be taken during the placing of backfill around corrugated steel pipe manholes to maintain the horizontal and vertical alignment of the manhole.

C. Since full contact of the flat top slab with the cement stabilized backfill is critical the backfill shall be finished smooth and to the proper grade. A thin layer of cement rich grout shall be placed on the cement stabilized backfill immediately prior to placing the concrete slab top. The grout shall be sufficient t fill all voids between the backfill and the slab and of a consistency to be forced into the voids under the weight of the slab.

3.14 TESTING GRAVITY SEWER MAINS AND MANHOLES

A. Upon completion of the sewer construction including all wyes and service laterals and before any house drains or services are connected, all sewers shall be cleaned and lamped. All runs of sewer between manholes shall be straight and true. Leakage tests shall be made to determine the amount of ground water infiltration into the sewers. Infiltration tests shall be made when groundwater level is 18 inches or more above the top of the outside of the pipe. Measurement will be taken by means of a weir placed in the lines. The maximum allowable rate of leakage shall be 25 gallons per inch diameter per mile of pipe per 24 hours, for any section of pipe with a maximum total leakage of 200 gallons per mile per 24 hours for sanitary sewers with the exception that the maximum leakage for storm drains shall be 200 gallons per inch of diameter per mile per 24 hours with a total maximum leakage of 6,000 gallons per mile per 24 hours.

When the groundwater is not at sufficient height for infiltration testing the Contractor shall use exfiltration to test the sewer lines.

B. In lieu of the infiltration or exfiltration tests the Contractor may perform air tests on the sewers.

C. If the infiltration, exfiltration, or air tests fail to meet requirements specified herein, the Engineer reserves the right to request television work to be done to locate leaks. The Contractor shall furnish all materials and equipment necessary to accomplish all infiltration, exfiltration, air or television testing.

The Contractor shall receive no additional compensation for this testing or inspection work or for repairs of corrective work required to be done to the sewers. The exfiltration tests shall be used in areas where no ground water is present.

D. Test Procedure Hydrostatic (Exfiltration)

(1) The test section shall be bulk headed and the pipe subject to a hydrostatic pressure produced by a head of water at a depth of three (3) feet above the invert of the sewer at the upper manhole under test. In areas where ground water exists, this head of water shall be three feet above the existing water table.

(2) This head of water shall be maintained for a period of one hour during which it is presumed that full absorption of the concrete manhole body has taken place and thereafter for a further period of one (1) hour for the actual test of leakage. Fiber glass manholes are exempt from the one hour absorption requirement. During this one (1) hour test period, the measured maximum allowable rate of exfiltration for any section of sewer shall be the same as allowed for the infiltration test.

E. TEST PROCEDURE AIR

(1) Where the Contractor elects to air test, he shall perform these tests with equipment similar to Air-Loc equipment manufactured by Cherne Industrial, Inc. Hopkins, Minnesota.

(2) The air test shall be made when the sewer is clean. The line shall be plugged at each manhole with pneumatic balls. Low pressure air shall be introduced into the plugged line until the internal air pressure reaches 4.0 psig greater than the average

back pressure of any ground water pressure that may submerge the pipe. At least two (2) minutes shall be allowed for the air temperature to stabilize before readings are taken and the timing started.

(3) When testing pipes 14 inches and less in diameter between consecutive manholes, the portion being tested shall pass if it does not lose air at a rate to cause the pressure to drop from 4.0 to 3.0 psig (greater than the average back pressure of any groundwater that may submerge the pipe) in less time than listed as calculated from Table 1.

When testing pipes greater than 15 inches in diameter between consecutive manholes the portion being tested shall pass if it does not lose air at a rate to cause the pressure to drop from 3.5 psig 3.0 psig (greater than the average back pressure of any groundwater that may submerge the pipe) in less time than that shown in or calculated from Table II.

TABLE I
Specification Time Required for a 1.0 PSIG Pressure Drop for Size and Length of Pipe indicated for Q = 0.0015

Specification Time for Length (L) Shown (min: sec)											
1	2	3	4 (xL)	100 ft.	150 ft.	200 ft.	250 ft.	300 ft.	350 ft.	400 ft.	450 ft.
4	3:46	597	.380	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	.854	5:40	5:40	5:40	5:40	5:40	5:40	5:42	5:42
8	7:34	298	1.520	7:34	7:34	7:34	7:34:	7:36	8:52	10:08	11:24
10	9:26	239	2.374	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48
12	11:20	199	3.418	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38
15	14:10	159	5.342	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04
18	17:00	133	7.692	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41
21	19:50	114	10.470	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31
24	22:40	99	13.674	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33
27	25:30	88	17.306	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48
30	28:20	80	21.366	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	31:10	72	25.852	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	34:00	66	30.768	51:17	75:55	102.34	128:12	153:50	179:29	205:07	230:46

1. Pipe Diameter (in.)
Minimum Time (min:sec)
Length for Minimum Time (ft.)
Time for Longer Length (sec)

NOTE: When using column 4 multiply the number in column 4 opposite the pipe diameter by the length of pipe of that diameter and sum the times for the various pipe size in the run being tested. Computations shall include lengths for service connection laterals.

Table II
Specification Time Required for 0.5 PSIG Pressure Drop for Size and Length of Pipe Indicated for Q + 0.0015

Specification Time for Length (L) Shown (min: sec)											
1	2	3	4 (xL)	100 ft.	150 ft.	200 ft.	250 ft.	300 ft.	350 ft.	400 ft.	450 ft.
4	1:53	597	.190	1:53	1:53	1:53	1:53	1:53	1:53	1:53	1:53
6	2:50	398	.427	2:50	2:50	2:50	2:50	2:50	2:50	2:51	3:12
8	3:47	298	.760	3:47	3:47	3:47	3:47	3:48	4:26	5:04	5:42
10	4:43	239	1.187	4:43	4:43	4:43	4:57	5:56	6:55	7;54	8:54
12	5:40	199	1.709	5:40	5:40	5:40	7:08	8:33	9:58	11:24	12:50
15	7:05	159	2.671	7:05	7:05	8:54	11:08	13:21	15:35	17:48	20:02
18	8:30	133	3.846	8:30	9:37	12:49	16:01	19:14	22:26	25:38	28:51
21	9:55	114	5.235	9:55	13:05	17:27	21:49	26:11	30:32	34:54	39:16
24	11:20	99	6.837	11:24	17:57	22:48	28:30	34:11	39:53	45:35	51:17
27	12:45	88	8.653	14:25	21:38	28:51	36:04	43:16	50:30	57:42	46:54

30 33 36	14:10 15:35 17:00	80 72 66	10.683 12.926 15:384	17:48 21:33 25:39	26:43 32:19 38:28	35:37 43:56 51:17	44:31 53:52 64:06	53:25 64:38 75:55	62:19 75:24 89:44	71:13 86:10 102:34	80:07 96:57 115:23

1 Pipe Diameter (in.)
2 Minimum Time (min:sec)
3 Length for Minimum Time (ft.)
4 Time for Longer Length (sec)

NOTE: When using column 4 multiply the number in column 4 opposite the pipe diameter by the length of pipe of that diameter and sum the times for the various pipe size in the run being tested. Computations shall include lengths for service connection laterals. All service plugs shall be secured in place to prevent displacement during testing operation.

F: DEFLECTION TEST

Deflection tests shall be performed on all flexible pipe, the tests shall be conducted after the backfill has been in place at least 30 days. No pipe shall exceed a deflection of 5 percent. The deflection tests shall be run using a Go-No-Go mandrel having a diameter equal to 95 percent of the inside diameter of the pipe. The tests shall be performed without mechanical pulling device, any pipe not meeting the deflection test shall be excavated and re-bedded at no cost to the owner.

The Contractor at no additional cost to the owner shall furnish the Go-No-GO Mandrel.

Upon completion of all tests, the Contractor shall provide personnel to remove each manhole cover in the presence of the Engineer's representative for inspection and depth measurement.

G. TESTING SANITARY SEWER MANHOLES

All sanitary sewer manholes shall be tested for water tightness by one of the following methods.

Manholes, except those in streets scheduled for immediate paving, shall be complete, having all adjusting rings and cover rings in place and shall be backfilled prior to testing.

Manholes in streets scheduled for immediate paving shall be complete as described above except those acceptance tests shall be made at the top of the cone section.

(1.) Vacuum Test

a. General

This item will govern the testing of all sanitary sewer manholes. All connections to manholes including drop connections shall be in place before testing.

b. Equipment

Equipment for vacuum testing manholes shall be:
MANHOLE VACUUM TESTER as manufactured by:

P.A. Glazier, Inc.
P.O. Box 1002
Worcester, MA. 01613

Or

THE CHERNE AIR-LOC MANHOLE TESTER as manufactured by:

Cherne Industries, Inc.
5700 Lincoln Dr.
Minneapolis, MN 55436-1695

Or approved equal.

c. Preparation for Testing

All connections to the manhole; except plugged stubs for future line extensions, shall be plugged using suitable pneumatic plugs. Line plugs shall be placed at a point outside of the manhole wall (approximately 8" to 10" into the sewer pipe). Drop connections shall be plugged at a point up stream from the drop.
All plugs, pipe connections and plugged stub outs shall be adequately braced to prevent them being drawn into the manhole when vacuum is applied.

d. Testing

The contractor shall set the test equipment in place and operate it in accord with the manufacturer instructions. A copy of these instructions shall be kept on the job site and shall be available to the inspector when tests are performed. When equipment is properly set up a vacuum of 10" of mercury (Hg) shall be drawn and the vacuum line valve closed. After the vacuum pump is shut off the hose shall be disconnected before the test is started.

Note: Vacuum must be at 10" Hg when test is started. The contractor may wish to draw up to 10.5" Hg vacuum and then bleed back to 10" Hg before starting the test. The test shall pass when the minimum time for the vacuum to drop from 10" Hg to 9" Hg is greater than the time shown in the following table:

TABLE 1: Minimum test times for various manhole diameters.

	DIAMETER		
Depth Feet	48"	60"	72"
8'	0:20	0:26	0:33
10'	0:25	0:33	0:41
12'	0:30	0:39	0:49
14'	0:35	0:46	0:57
16'	0:40	0:52	1:05
18'	0:45	0:59	1:13
20'	0:50	1:05	1:21
* ADD	0:05	0:06.5	0:08

Any manhole that fails the test shall be repaired and retested until it passes the test.

e. Contractors Optional Test

The contractor, at his option may wish to test manholes before they are backfilled to assure himself that the manhole is sound.
Manholes that fail the test prior to being backfilled may be repaired under vacuum by coating the area of the leak with a liquid quick setting grout allowing the grout to be drawn into the opening until the leak is stopped.

Manholes will not be accepted on the bases of this test.

f. Fiberglass Manholes

Fiberglass manholes may be tested in the same manner as concrete manholes except that all repairs to the fiberglass body of the manhole shall be made using materials furnished by the manufacturer. Repairs shall be made in accord with the manufacturer instructions.

g. No separate payment will be made for vacuum testing of manholes, but the cost shall be considered incidental to furnishing and construction of manholes as bid in the bid proposal.

2. HYDROSTATIC TESTING

a. General

This item shall govern the hydrostatic testing of manholes and may be used as an alternative to vacuum testing by the contractor.

All connections to manholes including drop connections shall be in place prior to testing manholes.

b. Testing

All connections to the manhole, except plugged stubs installed for future line extensions, shall be plugged upstream from the drop.

Plugs in pipe connections must be placed outside the manhole wall (approximately 8” to 10” into the pipe).

The manhole shall then be filled to the top of the cast iron ring (or top of the cone section for manholes in streets scheduled for immediate paving) and allowed to stand for a minimum of one hour to allow for absorption by the components of the manhole. The inspector may extend the absorption period if it appears that the manhole has not reached a stable state.

The manhole shall then be refilled to the top of the ring (or cone) and allowed to stand for up to 24 hours.

The manhole shall be checked at the end of 4 hours and will be deemed to have passed if no perceptible loss has occurred – if loss has occurred the manhole will be checked after the 24 hour period and will be considered to have passed if loss does not exceed the following schedule

Depth Ft.	Loss Inches
0 - 10’	.2
10 – 20’	.4
20 - 30’	.6

c. No separate payment will be made for Hydrostatic Testing of manholes but the cost shall be considered as incidental to furnishing and constructing manholes as bid in the bid proposal.

H. TELEVISING NEW SEWER LINES

It is the city’s intention to televise all new sanitary sewer lines for record purposes.

Immediately after the contractor completes all testing of sanitary sewer lines and manholes he shall leave all manholes accessible for televising and make allowances for the city’s camera crews working on the project site.

The contractor at his own expense before final acceptance must correct any defects discovered during the televising of sanitary sewers.

3.15 RESTORATION

A. Whenever any surface improvements such as pavement, curbing, pedestrian walks, fencing, or turf have been removed, damaged or otherwise disturbed by the Contractor’s operations, they shall be repaired or replaced to the Engineers satisfaction, to restore the improvement in kind and structure to the pre-existing condition. Each item of restoration work shall be done as soon as practicable after completion of installation and backfilling operations on each section of pipeline.

B. In absence of specific payment provisions, as separate Contract Items, the restoration work shall be compensated for as part of the work required under those Contract Items, which necessitated the destruction and replacement or repair, and there will be no separate payment therefor. If separate pay items are provided for restoration work, only that portion of the repair or reconstruction, which was necessitated by the contract, will be measured for payment. Any improvements removed or damaged unnecessarily shall be replaced or repaired at the Contractor’s expense.

C. Turf restoration shall be accomplished by sod replacement except where seeding is specifically allowed or required.

Caliche or gravel surfaced streets and driveway shall be restored to their original condition by salvaging and replacing the pre-existing caliche or gravel. If the Contractor does not salvage sufficient material during excavation operation, he will be required to furnish material to restore the surface to the depth of the original section. This caliche or gravel restoration shall be considered a part of excavation and backfill and no extra compensation will be made.

E. Bituminous and concrete surfaced streets and driveways will be restored to equal or better condition than existed prior to sewer construction. Measurement will be made of the actual quantities required to be replaced by the sewer construction and paid for at the price bid in the appropriate bid items in the proposal.

No measurement or payment will be made for work done outside the lines considered necessary for sewer construction. The Contractor will be required to replace damage outside these lines at his own expense.

F. Reconstruction of caliche base courses and concrete or bituminous surface courses shall be in substantial compliance with all applicable City of Midland Specifications pertaining to the item being restored.

3.16 CLEANUP

After completing each section of the sewer line, the Contractor shall remove all debris, construction materials, and equipment from the site of the work, grade and smooth over the surface on both sides of the line and leave the entire right-of-way in a clean, neat, and serviceable condition. No separate compensation shall be made for clean up.

3.17 PAYMENT

A. General

Payment in accordance with the following items, at the unit price bid for the work, shall constitute full and complete payment for the entire project including all incidental terms necessary for the complete and successful prosecution of the work in accordance with the intent of the plans and specifications.

Materials and work required to complete the project for which there is no bid item in the bid proposal shall be considered as incidental and the cost shall be included in the prices bid for the various items in the bid proposal.

Where payment is to be made on a unit price basis, it shall be made on the actual measured quantities as constructed in the work.

B. Sewer Pipe in Place

Unit prices bid shall cover furnishing and installation of pipe and jointing materials, including tests and all other necessary work and material to install the pipe complete in place at the depth specified. The unit of work shall be the lineal foot of the various types and sizes as shown in the proposal form. The pipe installation shall be measured

along the centerline of the sewer from center to center of manholes with no deduction in footage for manholes, wye branches, riser bases or other structure.

C. Foundation Corrections Materials

Payment for foundation correction materials shall be made at the unit price bid per cubic yard for material furnished and placed to pro vide adequate pipe base in unstable soil. The unit price shall include extra excavation below pipe grade, the material, placing and tamping.

Additional material required to backfill excess depth of excavation caused by neglect or error on the part of the Contractor or wet conditions, shall be furnished and placed at his own expense.

Removal of Street Surfacing

The Contractor shall receive no extra compensation for the removal of street surfacing including cutting of a straight edge.

E. Trench Safety Systems, Sheeting and Shoring

Measurement: Trench Safety Systems shall be measured by the linear foot of “Trench Safety Systems”: Payment for work prescribed under this item shall be full compensation for the Trench Safety Systems including any Engineering and/or consulting fees and any additional excavation and backfill required, for furnishing, placing, maintaining and removing all shoring, sheeting, or bracing; for de-watering or diversion of water; for all jacking and jack removal; and for all other labor, materials, tools, equipment and incidentals necessary to complete the work.

F. Manholes

Payment will be made for the various types of manholes at the unit prices bid for the various types of manholes 0 to 6’ deep which price shall include excavation, furnishing and installing all materials pumping where necessary, and backfilling and all incidentals for the complete manhole in place. Measurement for manholes over 6 feet in depth shall be made of the depth of manhole in excess of six (6) feet. Manholes will be measured from the invert to the top of the casting as set.

Payment will be made for the manhole depth in excess of 6 feet at the vertical foot price bid in the bid proposal for extra depth of manhole over 6 feet for each type of manhole furnished.

G. Drop Connections to Manholes

Payment shall be made for drop connections to manhole for each drop connection made as counted in the field at the price bid in the proposal.

Said payment shall be complete compensation for furnishing all materials and fittings and making all connections to the manhole including 2’ of vertical depth as measured from the invert of the incoming line to the invert of the manhole.

H. Drop Section for Manholes

Drop sections shall be paid for on a vertical footage basis as measured from the invert of the incoming line to the invert of the manhole less 2 feet and shall be paid for at the price bid per vertical foot for the various size drop connections in the bid proposal.

The price bid per vertical foot includes all fittings, granular material, if used and concrete and shall be full compensation for the complete in service drop connection.

I. Service Lines

Service lines will be measured from centerline of the sewer main to the plug end and paid for at the unit price bid per linear foot of each type of pipe as specified and as shown on the typical details.

J. Barricading and Traffic Control

The lump sum price bid in the bid proposal shall be full compensation for furnishing flag persons when required and all barricades, signs and other barricading and traffic control devices and for furnishing barricading plans and erecting and maintaining all such devices and signs as required for the duration of the period.

Updated
08/07

ADDENDUM #1

Project Number D21-05

TO ALL BIDDERS ON THE SUBJECT BID: Idlewilde Drive Storm Drain Improvements

ADDENDUM #01

DATE: December 16, 2022

1. Q/A and Clarification
2. Attachments
    a. 7.0 Proposal Util - Updated 12.16.2022
    b. 7.1 Pay Notes Util – Updated 12.16.2022
3. Non-Mandatory Pre-Bid Meeting Agenda
4. Non-Mandatory Pre-Bid Meeting Attendance

PLEASE RETURN THIS ADDENDUM WITH YOUR BID BY THE CLOSING DATE.

All other terms and conditions shall remain the same.

Boler Equipment Service, Inc.
Company Name

Bidder Authorized Signature

1.11.2023
Date

Greg Boler
Please Print Above Name

432.694.0660
Phone

Idlewilde Drive Storm Drain Improvements
Project Number D21-05

Q/A and Clarification

During the Pre-Bid Meeting, the following questions were raised by one or more bidders. Below is a list of the questions along with the answers and clarifications.

Clarification: All addendum acknowledgement forms must be included with the bid for the bid to be considered complete. Bidders have sole responsibility for making sure they have and acknowledge all addendums provided for this project bid.

Clarification: Contractor must include documentation with the bid submittal proving that they possess an active license equivalent to or a higher class than a Water Operator D license and also an active license equivalent to or a higher class than either a Wastewater D license or a Class 1 Collections license.

Clarification: Contractor is responsible for maintaining access to all adjacent properties at all times, barring those times when actual construction activity necessary to complete the work is taking place in front of driveway approaches or similar points of access. When such work is not occurring then access must be restored by means of traffic rated steel plates or other equivalent means until such time as the work is completed.

Clarification: The winning contractor must submit all TCEQ documentation etc., large or small site notice for linear projects. Please read all requirements in the Construction General Permit regarding linear projects and proper documentation. This is to be submitted to the City of Midland at least 2 days for small sites or 7 days for large site before ground is disturbed.

Questions and Answers

1. Can the date of bid openings be pushed back due to the upcoming holidays?
    A. The date of the bid opening has been changed from December 21, 2022 to January 11, 2023.
2. When does the City expect work to proceed?
    A. Due to supply chain issues, the project start date would depend on material delivery. A construction start date will be discussed with the winning contractor.
3. Does the scope of work just include excavating the detention basin?
    A. This project is a part of a secondary project that will address the aesthetics and landscaping of the detention basin.
4. Will the deadline for questions be pushed back since the bid opening date has been changed?
    A. No. The deadline to submit questions is Friday, December 16, 2022 at 12pm.
5. Is there a designated contractor staging area?
    A. There is City owned land on Sinclair Ave approximately 0.89 miles from the project site that the contractor can utilize for material and equipment staging. The contractor can use the right-of-way as an alternative contractor staging area.
6. Who will be the City inspector on this job?
    A. Luis Garcia will be the City inspector on this job.
7. What is the estimated budget for this project?
    A. The City of Midland will not release opinion of probable cost data to contractors during the bidding process.
8. Where does all the water ultimately drain from the basin?
    A. The water ultimately runs through the apartment complex to the north of the basin via storm drain and discharges into a retention basin east of Sagemont Dr. The retention basin feeds directly into Jal Draw.
9. What is the 2 weeks for payment clause?
    A. It is recommended that invoices state “Invoice Due Upon Receipt” or have a due date that is two (2) weeks after the date the invoice is submitted. This is to encourage our accountants to pay contractors quicker but does not guarantee payment in exactly 2 weeks.
10. Since the project is not an arterial project, can HDPE Dual Wall SD be used as called out on the plan sheets?
    A. The storm drain that is called out on the plan sheets is HDPE Dual Wall SD. The storm drain called out in the 7.0 Proposal and 7.1 Pay Notes is ASTM F2619 HDPE Storm. HDPE Dual wall is acceptable for this project. An updated proposal and pay notes will be issued with this addendum.
11. Is there a contingency plan if the underground powerlines are in the way? Will they be able to be moved in a timely manner?
    A. Oncor has informed us that there are no conflicts. The City does not perform any SUE work. Contractor is to exercise caution when excavating in these areas.
12. Can you confirm the number of manholes on this project? The quantity in the bid items is 8 but we can only find 6.
    A. There are 6 manholes in the project. An updated proposal will be issued with this addendum.
13. Is there a Geotech for this job?
    A. There is no geotechnical report for this job.

PROPOSAL

TO: Honorable Mayor and City Council
City of Midland
Midland, Texas

Gentlemen: The undersigned bidder, having examined the drawings, specifications and contract documents, the location of the proposed work, and being fully advised as to the extent and character of the work, proposes to furnish all material, equipment, and to perform all labor and work necessary for the completion of the construction of the work described by and in accordance with the attached drawings, specifications, and contract, for the following prices, to wit:

Project Name: Idlewilde Drive Storm Drain Improvements

Project Number: D21-05

Base Bid: Miscellaneous Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	1 LS	Mobilization, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per month. (Pay Note M1)	$_____	$_____
2)	1 LS	Erosion/Sediment Control, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per month. (Pay Note M2)	$_____	$_____
3)	1 LS	Traffic Control, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per month. (Pay Note M3)	$_____	$_____
4)	1 LS	Job Site Safety, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per month. (Pay Note M4)	$_____	$_____

Base Bid: Miscellaneous Items				
Item No.	Quantity	Description	Unit Price	Total Amount
5)	1 EA	Water Meter & Meter Box Installation (Existing Service Lateral) , furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note M5)	$_____	$_____
6)	N/A	Material Mark-up, complete and in place, for the sum of: _____percent. (Pay Note M6)	%_____	$_N/A_____
7)	N/A	Labor Mark-up (Regular Work Hours), complete and in place, for the sum of: _____percent. (Pay Note M7)	%_____	$_N/A_____
8)	N/A	Equipment Rental Mark-up (Non-Standard Equipment Only), complete and in place, for the sum of: _____percent. (Pay Note M8)	%_____	$_N/A_____
Total Miscellaneous Items 1-8		$_____		

Base Bid: Demolition Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	769 SY	Removal & Dispose of Existing Unclassified Pavement, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note D1)	$_____	$_____
2)	60 LF	Removal & Dispose of Existing Concrete Curb & Gutter, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note D2)	$_____	$_____
3)	5 SY	Removal & Disposal of Existing Concrete Sidewalk & Ramps, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note D3)	$_____	$_____
4)	24,944 CY	Basin Excavation, complete and in place, for the sum of: _____dollars and _____cents per cubic yard. (Pay Note D4)	$_____	$_____
Total Demolition Items 1-4		$_____		

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	85 LF	24" HDPE Dual Wall, Storm Drain, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note SD1)	$_____	$_____
2)	529 LF	36" HDPE Dual Wall, Storm Drain, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note SD1)	$_____	$_____
3)	838 LF	48" HDPE Dual Wall, Storm Drain, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note SD1)	$_____	$_____
4)	1 EA	5'x5'x5' Concrete Junction Box w/ 48" Fiberglass Manhole Riser, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD2)	$_____	$_____
5)	2 EA	6'x6'x6' Concrete Junction Box w/ 48" Fiberglass Manhole Riser, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD2)	$_____	$_____
6)	1 EA	6'x6'x7.83' Concrete Junction Box, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD2)	$_____	$_____
7)	2 EA	60" Fiberglass Manhole & Cover, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD3)	$_____	$_____

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
8)	1 EA	Reinforced Concrete Headwall, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD4)	$_____	$_____
9)	1 EA	12'x5'x5.7' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD5)	$_____	$_____
10)	1 EA	18'x5'x10' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD5)	$_____	$_____
11)	1 EA	12'x5'x7.4' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD5)	$_____	$_____
12)	1 EA	12'x5'x5.5' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD5)	$_____	$_____
13)	1 EA	5'x5'x5' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD5)	$_____	$_____
14)	307 SY	Concrete Drainage Flume, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note SD6)	$_____	$_____
15)	1 EA	Connect to Existing Storm Drain, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD7)	$_____	$_____

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
16)	1452 LF	Open Trenching of Storm Drain, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note SD8)	$_____	$_____
17)	406 LF	Concrete Fiber Reinforced Pilot Swale, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note SD9)	$_____	$_____
18)	1,113 SY	Rock Rip Rap, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note SD10)	$_____	$_____
Total Storm Drain Items 1-18		$_____		

Base Bid: Paving Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	769 SY	Subgrade Preparation, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note P1)	$_____	$_____
2)	769 SY	Flexible Base (Type A, Grade A), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note P2)	$_____	$_____
3)	60 LF	Type A Concrete Curb & Gutter Repair, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note P3)	$_____	$_____
4)	5 SY	6" Concrete Sidewalk Repair, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note P4)	$_____	$_____
5)	85 TON	2" Type D HMAC Asphalt Pavement Repair (PG70-22), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per ton. (Pay Note P5)	$_____	$_____
6)	154 GAL	Bituminous Prime Coat (MC-30, 0.20 Gal / SY), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per gallon. (Pay Note P6)	$_____	$_____
7)	1204 SY	Flowable Fill / 2-Sack Backfill, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note P7)	$_____	$_____

Base Bid: Paving Items				
Item No.	Quantity	Description	Unit Price	Total Amount
Total Paving Items 1-7		$_____		

Bid Price For:	
1. Miscellaneous Items	$_____
2. Demolition Items	$_____
3. Storm Drain Items	$_____
4. Paving Items	$_____
Total Price	$_____

In addition to providing the individual prices for the items above, Contract shall write the total bid amount in the sum of

_____dollars

and _____ cents total.

The undersigned bidder hereby declares that he has visited the site of the work and has carefully examined the contract documents pertaining to the work covered by the above bid. The selected contractor will receive written notice to proceed.

Bidder agrees to substantially complete all work within _120_ calendar days after receipt of notice to proceed.

PUBLIC INFORMATION

To the extent that Bidder is submitting a bid for a contract described by Section 552.371 of the Texas Government Code, Bidder agrees as follows in accordance with Section 552.372(b) of the Texas Government Code: The requirements of Subchapter J, Chapter 552, Government Code, may apply to this bid, and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

Enclosed herewith in this proposal is a cashier's check, cash or bid bond on a form approved by the City Attorney, for

_____dollars

and _____ cents total. ($_____)

which it is agreed shall be collected and retained by the owner as liquidated damages in the event this proposal is accepted by the Owner within thirty days (30) after the date advertised for the reception of bids and the undersigned fails to execute the contract and required bonds with the owner, under the conditions thereof, within (15) days after the date said proposal is accepted; otherwise said check or bond shall be returned to the undersigned on demand.

Name of Contractor

Submitted By	Print Name and Title	
Mailing Address		
City	State	Zip

PAY NOTES

Idlewilde Drive Storm Drain Improvements

Bid Item		Pay Quantity Note
Miscellaneous Items		
1	Mobilization	M1
2	Erosion/Sediment Control	M2
3	Traffic Control	M3
4	Job Site Safety	M4
5	Water Meter & Meter Box Installation (Existing Service Lateral)	M5
6	Material Mark-up	M6
7	Labor Mark-up (Regular Work Hours)	M7
8	Equipment Rental Mark-up (Non-Standard Equipment Only)	M8
Demolition Items		
1	Removal & Disposal of Existing Unclassified Pavement	D1
2	Removal & Disposal of Existing Concrete Curb & Gutter	D2
3	Removal & Disposal of Existing Concrete Sidewalk & Ramps	D3
4	Basin Excavation	D4
Storm Drain Items		
1	24" HDPE Dual Wall, Storm Drain	SD1
2	36" HDPE Dual Wall, Storm Drain	SD1
3	48" HDPE Dual Wall, Storm Drain	SD1
4	5'x5'x5' Reinforced Concrete Junction Box w/ 48" Fiberglass Manhole Riser	SD2
5	6'x6'x6' Reinforced Concrete Junction Box w/ 48" Fiberglass Manhole Riser	SD2
6	6'x6'x7.83' Reinforced Concrete Junction Box	SD2
7	60" Fiberglass Manhole & Cover	SD3
8	Reinforced Concrete Headwall	SD4
9	12'x5'x5.7' Reinforced Concrete Curb Inlet	SD5
10	18'x5'x10' Reinforced Concrete Curb Inlet	SD5
11	12'x5'x7.4' Reinforced Concrete Curb Inlet	SD5
12	12'x5'x5.5' Reinforced Concrete Curb Inlet	SD5
13	5'x5'x5' Reinforced Concrete Curb Inlet	SD5
14	Concrete Drainage Flume	SD6
15	Connect to Existing Storm Drain	SD7
16	Open Trenching of Storm Drain	SD8
17	2' Concrete Fiber Reinforced Pilot Swale	SD9
18	8" Rock Rip-Rap	SD10
Paving Items		
1	Subgrade Preparation	P1
2	8" Flexible Base (Type A, Grade A)	P2
3	Type A Concrete Curb & Gutter Repair	P3
4	6" Concrete Sidewalk Repair	P4
5	2" Type D HMAC Asphalt Pavement Repair (PG70-22)	P5
6	Bituminous Prime Coat (MC-30, 0.10 Gal / SY)	P6
7	Flowable Fill / 2-Sack Backfill	P7

PAY QUANTITY NOTES

M1 Includes the necessary equipment, labor, materials, and incidentals for Mobilization per the construction drawings and TxDOT Standard Specifications Item 500 'Mobilization'. Mobilization shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M2 Includes the necessary equipment, labor, materials, and incidentals to implement Erosion/Sediment Control per the construction drawings and TxDOT Standard Specifications Item 506 'Temporary Erosion, Sedimentation, and Environmental Controls'. Erosion/Sediment Control shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M3 Includes the necessary equipment, labor, materials, and incidentals to implement Traffic Control per the construction drawings and TxDOT Standard Specifications Item 502 'Barricades, Signs, and Traffic Handling.' Traffic Control shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M4 Includes the necessary equipment, labor, materials, and incidentals to implement Job Site Safety and to provide a safe work environment for the project work area (including all personal protection equipment, trench safety, etc.) per the construction drawings and in compliance with all applicable Federal, State, and Local requirements or regulations including those of OSHA and the City of Midland. JOB SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. Job Site Safety shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M5 Includes the necessary equipment, labor, materials, and incidentals to set a new Water Meter and Meter Box for an existing water service lateral per the construction drawings and City of Midland standards and specifications, including all appurtenances. The new water meter will be provided by the City of Midland. Measurement and payment to be per each water meter and meter box set.

M6 Includes the Material Mark-up for materials and material sizes (pipe, valve, manhole, etc.) required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of the material in question plus the set percent increase established by this bid item. The Contractor must provide a copy of the invoice for the material cost from the supplier to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any material. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

M7 Includes the Labor Mark-up (Regular Work Hours) for labor required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of labor in question plus the set percent increase established by this bid item. The Contractor must provide a typical hourly pay rate for work crews prior to the percent increase along with the number of workers on the crew and the number of hours worked by the crew for the project in question to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any labor. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

M8 Includes the Equipment Rental Mark-up (non-standard equipment only) required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of the equipment rental in question plus the set percent increase established by this bid item. The Contractor must provide a copy of the invoice for the rented equipment from the equipment supplier to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any rented equipment. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

D1 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Unclassified Pavement per the construction drawings and City of Midland standards and specifications including all saw-cutting and appurtenances. Depths given are approximate and pavement material is to be removed in its entirety. No additional compensation will be made for increased pavement depth removal. Saw-cut pavement edges are to be full pavement depth, cleanly cut, and clearly defined edges free of breaks. Measurement and payment to be made per square yard of unclassified pavement removed.

D2 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Concrete Curb & Gutter per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per linear foot.

D3 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Concrete Sidewalk & Ramps per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per square yard.

D4 Includes the necessary equipment, labor, materials, and incidentals for Basin Excavation per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per cubic yard.

SD1 Includes the necessary equipment, labor, materials, and incidentals for the installation of Storm Drains per the construction drawings and City of Midland standards and specifications, including all embedment, detector wire, tracer tape, necessary testing, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures and appurtenances.

SD2 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Reinforced Concrete Junction Box per the construction drawings and City of Midland standards and specifications, including all embedment, base, securing of junction box to fiberglass manhole riser, forms, reinforcement, placement, necessary testing, and appurtenances. Measurement and payment to be made per each junction box installed.

SD3 Includes the necessary equipment, labor, materials, and incidentals for the installation of Fiberglass Manhole & Cover per the construction drawings and City of Midland standards and specifications, to the depth shown on the construction drawings and including all embedment, base, necessary testing, concrete collars, and appurtenances. Measurement and payment to be made per each manhole installed.

SD4 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Reinforced Concrete Headwall per the construction drawings and City of Midland standards and specifications, including all forms, reinforcement, placement, sealing, finishing, and appurtenances. Measurement and payment to be made per each concrete headwall installed.

SD5 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Reinforced Concrete Curb Inlet per the construction drawings and City of Midland standards and specifications, including all embedment, base, forms, reinforcement, placement, sealing, finishing, necessary testing, and appurtenances. Measurement and payment to be made per each curb inlet installed.

SD6 Includes the necessary equipment, labor, materials, and incidentals for the installation of Concrete Drainage Flume per the construction drawings and City of Midland standards and specifications, including all excavation, embedment, backfill, and appurtenances. Measurement and payment to be made per square yard of drainage flume installed.

SD7 Includes the necessary equipment, labor, materials, and incidentals to Connect to Existing Storm Drain per the construction drawings and City of Midland standards and specifications, including all coring, grouting, sealing, repairs, and appurtenances. Measurement and payment to be made per each connection made.

SD8 Includes the necessary equipment, labor, materials, and incidentals for Open Trenching of Storm Drain per the construction drawings and City of Midland standards and specifications, including all unclassified excavation, backfill not including flowable fill backfill, providing trench safety and protection for workers to install pipe, structures, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures, fittings, and appurtenances.

SD9 Includes the necessary equipment, labor, materials, and incidentals for the installation of Concrete Fiber Reinforced Pilot Swale per the construction drawings and City of Midland standards and specifications, including all excavation, embedment, backfill, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface of swale installed.

SD10 Includes the necessary equipment, labor, materials, and incidentals for the installation of Rock Rip Rap per the construction drawings and City of Midland standards and specifications, including all excavation, embedment, backfill, and appurtenances. Measurement and payment to be made per square yard of rip rap installed.

P1 Includes the necessary equipment, labor, materials, and incidentals for Subgrade Preparation per the construction drawings and City of Midland standards and specifications, including all proof-rolling, sub-grade reworking, scarifying, compaction, and appurtenances. Measurement and payment to be made per square yard measured along the ground surface.

P2 Includes the necessary equipment, labor, materials, and incidentals for placement of Flexible Base compacted to 95% Density, ASTM D1557, per the construction drawings and City of Midland standards and specifications including all placement, compaction, and appurtenances. Measurement and payment to be made per square yard measured along the ground surface.

P3 Includes the necessary equipment, labor, materials, and incidentals for Concrete Curb & Gutter Repair per the construction drawings and City of Midland standards and specifications including all forming, placement, jointing, fiber reinforcement, finishing, and appurtenances. Measurement and payment to be made per linear foot measured along the back-of-curb.

P4 Includes the necessary equipment, labor, materials, and incidentals for Concrete Sidewalk Repair per the construction drawings and City of Midland standards and specifications, including all forming, placement, jointing, fiber reinforcement, finishing, and appurtenances. Measurement and payment to be made per square yard.

P5 Includes the necessary equipment, labor, materials, and incidentals for the installation of Type "D" HMAC Asphalt Pavement Repair (220 LBS / SY at 2" thick, PG 70-22) per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per ton.

P6 Includes the necessary equipment, labor, materials, and incidentals for application of Bituminous Prime Coat (MC-30, 0.20 GAL / SY) per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per gallon of material applied at the designated rate.

P7 Includes the necessary equipment, labor, materials, and incidentals for installation of Flowable Fill / 2-Sack Backfill (Portland Cement 2 Sack = 188 LBS/CY) per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per square yard measured along the ground surface.

Idlewilde Drive Storm Drain Improvments
Pre-Bid Meeting Agenda
Project No. D21-05
December 14, 2022

Discussion Items

1. Sign-In Sheet

2. Personnel Overview

   - Jose Ortiz – Director Engineering Services
   - Gabe McClelland – Senior Engineering Manager
   - Josh Ferguson – Assistant City Engineer
   - Bobby Wojciechowski – Capital Improvement Project Manager
   - Carl Craigo – Utilities Director
   - Rex Swearinger – Water & Wastewater Operations Superintendent, utility coordination
   - Taha Sakrani – Senior Traffic Engineer
   - Troy Clabaugh – Traffic Operations Superintendent
   - Jesse Trejo – Construction Manager, construction management & inspections
   - Madison Brasuell – Project Manager
   - Andy Navarro – Franchise Utility Coordinator
   - Michael Williams – Stormwater Manager
   - Natalie Burgard – Administrative Assistant, document processing & payments
   - Erika Martinez – Purchasing Manager, conduct bid process & bid opening

3. Project Overview and Scope
   - The project will include the removal, replacement, and installation of existing paving, sidewalk, and storm drain infrastructure and appurtenances including all necessary mobilization, material storage and protection, saw-cutting, pavement removal, sidewalk removal, excavation, trenching, utility installation, embedment, backfill, pavement placement and repair, sidewalk placement and repair, erosion control, traffic control, and job site safety. Coordination with City of Midland staff and organizations such as OSHA, franchise utilities, etc. as needed, One Call (Texas 811) notifications for pending work and notifications to adjacent property owners as directed by City of Midland staff may be required in order to satisfactorily complete the work as outlined in the Construction Drawings and Specifications.
4. Bid Process
   - Pre-Bid meeting attendance is non-mandatory to bid on this project.
   - ATTENTION: All questions submitted before or after the Non-Mandatory Pre-Bid Meeting must be submitted via email to the following email address:

     bwojciechowski@midlandtexas.gov

   - Purpose of bids is to establish unit prices.
   - Quantities listed in the Proposal are not indicative of or guarantees of the actual project.

- Addendum distributed by email the Friday afternoon following the Pre-Bid Meeting.
  - The deadline to ask or send questions for the addendum is this Friday, December 16th, 2022 at Noon.
  - Questions asked after the Noon deadline will be directed to the information already provided in the bid documents or included in the Addendum.
- ATTENTION: Bidders are to submit bids either by mail or in person. If bidders choose to mail their bid packets in, then they are to mail the bid packet to one of the addresses listed below:

  USPS Mailing Address:
  City of Midland, Texas
  Attn: City Secretary's Office
  P.O. Box 1152
  Midland, TX 79702

  – OR –

  Physical Address for mail carriers other than USPS:
  City of Midland, Texas
  Attn: City Secretary's Office
  300 North Loraine St., Suite 330
  Midland, TX 79701

  If bid packets are delivered in person then bidders must drop the bid packets off at the first-floor front desk of City Hall before the bid opening deadline.

- **Bid Opening is Wednesday, January 11, 2023 at 2:00 PM** in the City of Midland Council Chambers located on the 1st Floor of Midland's City Hall.
  - The Bid Opening will be open to the public, and bidders are free to attend in person.
  - No late bids will be accepted.
  - Bidders must be willing to sign the contract as is.
  - Bidders must complete the conflict of interest forms if applicable.
  - Bidders must fill out all bid items in the Proposal. If bid items are left blank then the bid will be considered non-responsive.
  - Bidders have sole responsibility for making sure they have and acknowledge all addendums provided. If all acknowledgement forms are not included with the bid packet submittal then the bid will be considered non-responsive.

5. Notice to Proceed
   - Date of Notice to Proceed to be determined at the Pre-Construction Meeting.
   - Pre-Construction Meeting date will be set after the program bid is awarded.
6. Payment
   - Payment will be as described in the Bid Packet's Special Provisions, 4. Payment.
   - Payment to be made after 100% work completion, with no other material delivery payments, partial payments, or payments for mobilization.
   - Work is considered 100% complete when the project Work Order is completed and signed by both the City Inspector and the Contractor.
   - Work Orders and invoices are to be itemized and match the bid items listed in the bid packet Proposal.
   - Recommended that invoices state "Invoice Due Upon Receipt", or have a due date that is two (2) weeks after the date the invoice is submitted.
7. Address Project Specifics
   - City Inspector must be notified of all work occurring and be able to perform inspections on any construction or installation that occurs.

- Typically work times are Monday – Friday from 8:00 AM – 5:00 PM. No work earlier than 7:00 AM or later than 8:00 PM without City permission unless for emergency conditions.
- Work is not to occur on Sundays or legal holidays unless required for emergency situations.
- Work is not to occur on Saturdays unless requested by Contractor in writing at least 48-hours in advance and approved by the City Engineer.
- Contractor will be responsible for coordinating with landowners in regard to fence removals, property access, etc.
- The requirement for the Water and Wastewater License is included for this bid. Please make sure you submit proof of an active license in the bid packet.
- The pay notes for project mobilization, job site safety, etc. are different from others in the past. This will be bid as a lump sum and paid on a prorated basis. Please prepare the bids accordingly.
- Bid opening has been moved from Wednesday, December 21, 2022 to Wednesday, January 11, 2023.

8. Any Additional Questions

Please direct all questions or comments following the Pre-Bid Meeting to **Bobby Wojciechowski** with the City of Midland.

Engineering Services

Bobby Wojciechowski
Phone: (432) 685-7519
Email: bwojciechowski@midlandtexas.gov

Madison Brasuell
Phone: (432) 685-7289
Email: mbrasuell@midlandtexas.gov

Pre-Bid Meeting Attendance

D21-05

Idlewilde Drive Storm Drain Improvements

Date: 12.14.2022 - 3:00 PM

PACKET

☑	Name *(Please Print)*	Company Name *(Please Print)*	Phone Number	Fax Number	Email
	Madison Brasuell	City of Midland	(432) 685-7289	-	mbrasuell@midlandtexas.gov
	Bobby Wojciechowski	City of Midland	(432) 685-7519	-	bwojciechowski@midlandtexas.gov
	Jose Tellez	MH Civil Constructos	806-367-6043	N/A	bid@mh-civil.com
	Arturo Tellez	MH Civil Construct.			
	Josh Ferguson	City of Midland	(432) 685-7290		jferguson@midlandtexas.gov
	Steve Strain	ONYX CONTRACTORS	432 561 8900		estimating@onyxcontractors.com
	Kylee McClendon	Boler	432-694-0660		Kylee@boler.net
	Greg Boler	Boler	432-694-0660		greg@boler.net
	Chris Adams	Boler			bids@boler.net
	John Darnell	ONYX	432-638-8437		
	Mirna Granados	City of Midland			
	Josh Weakland	City of Midland			

6.276

January 24, 2023

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Be it known that

CHRISTOPHER LANCE ADAMS

has fulfilled the requirements in accordance with the laws of the State of Texas for

CLASS D WATER OPERATOR

License Number: **WO0046458**
Issue Date: **08/24/2020**
Expiration Date: **08/24/2023**

Executive Director
Texas Commission on Environmental Quality

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Be it known that

CHRISTOPHER LANCE ADAMS

has fulfilled the requirements in accordance with the laws of the State of Texas for

CLASS D WASTEWATER TREATMENT OPERATOR

License Number: **WW0068129**
Issue Date: **08/27/2021**
Expiration Date: **08/27/2024**

Executive Director
Texas Commission on Environmental Quality

CITY OF MIDLAND, TEXAS

Plans for the Construction of

STORM DRAIN IMPROVEMENTS

For

IDLEWILDE DRIVE

PATRICK PAYTON
MAYOR

ROBERT PATRICK
CITY MANAGER

1 - SCOTT DUFFORD 2 - JOHN NORMAN
3 - JACK LADD 4 - LORI BLONG
AT LARGE - DAN CORRALES
AT LARGE - ROBIN POOLE
COUNCIL MEMBERS



VICINITY MAP
N.T.S.

INDEX OF SHEET	
SHEET NUMBER	SHEET TITLE
C100	COVER SHEET
C101	GENERAL NOTES
C102	QUANTITY SUMMARY
C110	EXISTING CONDITIONS / MASTER LAYOUT
C120	EROSION CONTROL PLAN
C121	EROSION CONTROL DETAILS AND NOTES
C122	EROSION CONTROL DETAILS
C130	DEMOLITION PLAN
C200	STORM DRAIN-1 P&P
C201	STORM DRAIN-1 P&P
C210	STORM DRAIN-2, 3, 4, and 5 P&P
C220	BASIN DESIGN
C300 - C305	UTILITY DETAILS

100% SUBMITTAL

JOSE E. ORTIZ
ENGINEERING SERVICES DIRECTOR

Andrew L. Mellen
PROJECT ENGINEER

CARL CRAIGO, P.E.
DIRECTOR OF UTILITIES

DATE 11/22/2022
PACKET

MIDLAND Engineering Services

APPROVED 11/29/2022

6,279
NOVEMBER 2021

811 Know what's below. Call before you dig.

January 24, 2023

MAVERICK
ENGINEERING / SURVEY / WATER RESOURCES
1909 West Wall Street, Suite "K"
Midland, Texas 79701
TEXAS ENGINEER FIRM #: F-15089
TEXAS SURVEY FIRM #: 10194514
Tel: (432) 262-0999 Fax: (432) 262-0989
www.Maverick-Eng.com

BY	APPR.	DATE

REVISIONS

DRAWN BY:	MJD
CHECKED BY:	ALH
APPROVED BY:	ALH
DATE:	04/12/2022
JOB:	210045

COVER SHEET

STORM DRAIN IMPROVEMENTS
IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
11/21/2022

SHEET C100 OF 18

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P:\2021\210045-CITY OF MIDLAND-STORM WATER DESIGN\IDLEWILDE DR\DRAWINGS\CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C100 COVER SHEET.DWG

GENERAL NOTES:

a. THIS DESIGN IS FOR PUBLIC DRAINAGE AND STABILIZATION IMPROVEMENTS AT IDLEWILDE DRIVE FROM JUST NORTH OF MANOR VILLAGE CIRCLE TO SOUTHWEST CORNER OF BASIN JUST NORTH OF RAINBOW ROAD.

b. ALL CONSTRUCTION IS TO COMPLY WITH CITY OF MIDLAND STANDARDS AND SPECIFICATIONS WHEREVER APPLICABLE. ALL OTHER STANDARDS AND REQUIREMENTS ARE TO COMPLY WITH ALL APPLICABLE FEDERAL, STATE REGULATIONS, REQUIREMENTS, AND STANDARDS. WHEREVER CITY OF MIDLAND STANDARDS AND FEDERAL OR STATE REQUIREMENTS DIFFER THE MORE RESTRICTIVE STANDARD, REQUIREMENT, OR REGULATION WILL GOVERN.

c. ALL BEARINGS, DIMENSIONS, AND COORDINATES SHOWN IN THIS CONSTRUCTION DRAWING SET ARE RELATED TO TEXAS STATE PLAN COORDINATE SYSTEM, TEXAS CENTRAL ZONE, NORTH AMERICAN DATUM 1983. ALL ELEVATIONS ARE RELATED TO NORTH AMERICAN VERTICAL DATUM 1988.

d. EXISTING UTILITIES, INFRASTRUCTURE, AND OTHER OBJECTS INDICATED IN THESE PLANS HAVE BEEN LOCATED USING CITY OF MIDLAND RECORDS, SITE INSPECTIONS, AND SPOT SURVEYS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THIS INFORMATION PRIOR TO CONSTRUCTION AND NOTIFYING ENGINEER OF ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND PROJECT DESIGN.

e. CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING FACILITIES THAT ARE ENCOUNTERED REGARDLESS OF WHETHER OR NOT THEY APPEAR IN THIS CONSTRUCTION DRAWING SET.

f. CONTRACTOR IS TO NOTIFY ALL AFFECTED PROPERTIES AT LEAST 48 HOURS IN ADVANCE OF ANY UNKNOWN OR PLANNED INTERRUPTION OF SERVICE OR ACCESS DUE TO ANY CONSTRUCTION ACTIVITY PERFORMED BY CONTRACTOR.

g. TRAFFIC CONTROL FOR THIS PROJECT WILL BE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR MUST SUBMIT TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH TMUTCD, TO CITY OF MIDLAND FOR REVIEW AND APPROVAL NO LESS THAN TWO (2) BUSINESS DAYS BEFORE CONTRACTOR BEGINS ANY CONSTRUCTION ACTIVITY.

h. ANY ISSUES, CONFLICTS, OR DISCREPANCIES ENCOUNTERED IN THE FIELD THAT CONFLICT WITH THIS CONSTRUCTION DRAWING SET ARE TO BE BROUGHT TO ENGINEER'S ATTENTION PRIOR TO MAKING ANY DESIGN CHANGES IN THE FIELD.

i. OSHA REQUIREMENTS AND ALL OTHER APPLICABLE FEDERAL, STATE, OR CITY OF MIDLAND REQUIREMENTS ARE TO BE FOLLOWED AND COMPLIED WITH AT ALL TIMES.

j. CONTRACTOR HAS SOLE RESPONSIBILITY FOR ALL SURVEY, STAKING, AND TESTING REQUIREMENTS AND MUST COMPLY WITH ALL SUCH REQUIREMENTS AS DESCRIBED IN PROJECT BID PACKET.

k. CONTRACTOR IS REMINDED THAT THIS PROJECT IS LOCATED IN AN URBAN ENVIRONMENT. TREES AND OVERHEAD LINES ARE COMMON, AND CONTRACTOR IS TO PROVIDE PROPER EQUIPMENT TO COMPLETE ALL REQUIRED WORK FOR THIS PROJECT IN AN URBAN ENVIRONMENT.

l. BUSH ELEMENTARY SCHOOL IS AN ACTIVE AREA FOR PEDESTRIANS, ESPECIALLY CHILDREN. THEREFOR CONTRACTOR IS DIRECTED TO TAKE PARTICULAR CARE WITH REGARDS TO CONSTRUCTION ACTIVITIES AND SITE SECURITY IN PROXIMITY TO BUSH ELEMENTARY SCHOOL, INCLUDING SUCH THINGS AS EQUIPMENT OPERATIONS, TRENCH PROTECTIONS, PEDESTRIAN BARRIERS, ETC.

m. THERE IS TO BE NO EQUIPMENT OR MATERIAL STORAGE WITHIN BUSH ELEMENTARY SCHOOL CAMPUS OR ON IDLEWILDE DRIVE NEXT TO SCHOOL CAMPUS UNLESS REQUIRED FOR ACTIVE CONSTRUCTION ACTIVITY. THERE IS TO BE NO EQUIPMENT OR MATERIAL STORAGE AT BOTTOM OF DRAINAGE BASIN SOUTHEAST OF IDLEWILDE DRIVE AND PRESTON DRIVE. EQUIPMENT AND MATERIAL STORAGE IS TO BE PLACED IN WORK ZONE IDENTIFIED AND APPROVED BY TRAFFIC CONTROL PLAN.

DEMOLITION NOTES:

A. CONTRACTOR IS TO NOTIFY ENGINEER OF ANY ADDITIONAL DEMOLITION THAT MAY BE NEEDED AND RECEIVE WRITTEN CONFIRMATION THAT SUCH DEMOLITION IS APPROVED PRIOR TO ANY ADDITIONAL DEMOLITION TAKING PLACE.

B. CONSTRUCTOR IS TO TAKE CARE NOT TO DAMAGE OR REMOVE ANY EXISTING INFRASTRUCTURE OR PROPERTY, PUBLIC OR PRIVATE, THAT IS NOT INDICATED BY THIS CONSTRUCTION DRAWING SET. ANY SUCH DAMAGE OR REMOVAL MUST BE REPLACED OR REPAIRED BY CONTRACTOR AT THEIR SOLE EXPENSE TO EQUAL OR BETTER CONDITION.

C. ALL SAW-CUTTING IS TO HAVE CLEAN AND STRAIGHT EDGES AND IS CONSIDERED INCIDENTAL TO ALL PAVEMENT REMOVAL.

CONSTRUCTION NOTES:

1. SEE SHEETS C110 FOR CONTROL POINTS.
2. INCLUDE CONCRETE COLLARDS AROUND ALL STORM DRAIN MANHOLE COVERS.
3. ALL CONCRETE FIBER REINFORCEMENT IS TO BE INSTALLED AT A RATE OF 3.0-LBS OF FIBER REINFORCEMENT PER EVERY 1.0-CY OF CONCRETE PLACED UNLESS OTHERWISE STATED IN CONSTRUCTION DRAWINGS.
4. ALL TRENCH PAVEMENT REPAIRS ARE TO INCLUDE 1.0' T-TOPPING ON EITHER SIDE OF TRENCH EXCAVATION.
5. ALL DIMENSIONS MEASURED TO CURB AND MEASURED TO BACK-OF-CURB.
6. ALL DIMENSIONS BETWEEN UTILITIES ARE MEASURED TO UTILITY CENTERLINE.
7. ALL NEW OR EXISTING VALVE, MANHOLE JUNCTION, INLET, AND METER COVERS MUST BE ADJUSTED TO FINISHED GRADE AND BE SET FLUSH WITH ADJACENT FINISHED SURFACE WHETHER FINISHED SURFACE IS PAVED OR UNPAVED.
8. CONCRETE COLLARS ARE TO BE PLACED AROUND ALL PUBLIC INFRASTRUCTURE UTILITY COVERS EXCEPT METER COVERS EVEN WHEN SUCH COVERS ARE LOCATED IN UNPAVED OR CONCRETE PAVED AREAS.
9. ALL CONCRETE PAVEMENT, FILLET, VALLEY GUTTER, APPROACH, AND COLLAR JOINTS ARE TO BE SEALED PER CITY STANDARDS.
10. CONTRACTOR IS TO MATCH DESIGN GRADES AND ELEVATIONS SHOWN ON THIS CONSTRUCTION DRAWING SET.
11. CONTRACTOR IS TO MATCH EXISTING GRADES AT ALL LOCATIONS INDICATED, INCLUDING FOR ALL GRADE DAYLIGHTING.
12. COORDINATE ALL SIGNAL POLE, SIGNAL CONDUIT, STRIPING, TRAFFIC SIGN, OR OTHER TRAFFIC INFRASTRUCTURE ISSUES WITH CITY TRAFFIC ENGINEER AND NOTIFY CITY INSPECTOR.
13. NOTIFY CITY INSPECTOR OF ALL FRANCHISE UTILITY OR PRIVATE INFRASTRUCTURE ISSUES AND COORDINATE WITH BOTH CITY AND FRANCHISE UTILITY OR PRIVATE INFRASTRUCTURE OWNER.

CITY OF MIDLAND APPROVED ENGINEERING 11/29/2022

APPROVAL TO CONSTRUCT CITY INFRASTRUCTURE

The issuance or granting of this APPROVAL shall not be construed to be an authorization for any violation of any of the provisions of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other applicable regulation or ordinance of the City of Midland jurisdiction. APPROVALS issued on the basis of plans and specifications purporting to permit work contrary to, violate or waive the provisions of of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other applicable regulation or ordinance of the City of Midland jurisdiction shall not be valid. The issuance of the APPROVAL, based on the construction drawings and other data submitted to the Engineering Services Department, shall not prevent the Engineering Services Department from requiring the correction of errors in the construction drawings and other data. The Director of Engineering Services is authorized to enforce any provision of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other law or ordinance or adopted policy of the City of Midland jurisdiction.

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ENGINEERING / SURVEY / WATER RESOURCES
1909 West Wall Street, Suite "K"
Midland, Texas 79701
TEXAS ENGINEER FIRM #: F-15089
TEXAS SURVEY FIRM #: 10194514
Tel: (432) 262-0999 Fax: (432) 262-0989
www.Maverick-Eng.com

Δ	REVISIONS	BY	APPR.	DATE

DRAWN BY: MJD
CHECKED BY: ALM
APPROVED BY: ALM
DATE: 04/12/2022
JOB: 210045

GENERAL NOTES

STORM DRAIN IMPROVEMENTS

IDLEVILDE DRIVE
CITY OF MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED PROFESSIONAL ENGINEER
11/29/2022

SHEET C101 OF 18

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SUMMARY OF DEMOLITION ITEMS		
	SAWCUT, REMOVAL & DISPOSAL OF EXISTING ASPHALT PAVEMENT	REMOVAL & DISPOSAL OF EXISTING CONCRETE CURB & GUTTER
UNIT	SY	LF
DEPTH	2" TYP.	–
RATE	–	–
SHEET C130	769	60
TOTALS:	769	60

SUMMARY OF PAVING ITEMS						
	SUBGRADE PREPARATION	2" TYPE D HMAC ASPHALT PAVEMENT SURFACE COURSE (PG70-22)	8" FLEXIBLE BASE (TYPE A, GRADE 4)	BITUMINOUS PRIME COAT (MC-30) or (AEP)	BITUMINOUS TACK COAT (MC-30)	TYPE A CONCRETE CURB & GUTTER
UNIT	SY	TON	SY	GAL	GAL	LF
DEPTH	8" TYP.	2"	8"	–	–	–
RATE	–	220 LBS/SY	–	0.20 GAL/SY	0.10 GAL/SY	–
SHEET C200	559	61	559	112	56	6
SHEET C201	153	17	153	31	15	24
SHEET C210	57	6	57	11	6	30
TOTALS:	769	85	769	154	77	60

SUMMARY OF UTILITY CONSTRUCTION ITEMS								
	24" STORM DRAIN	36" STORM DRAIN	48" STORM DRAIN	60" FIBERGLASS STORM DRAIN MANHOLE	5'x5'x5' CONCRETE JUNCTION BOX W/ 48" FIBERGLASS MANHOLE RISER	6'x6'x6' CONCRETE JUNCTION BOX W/ 48" FIBERGLASS MANHOLE RISER	6'x6'x7'-10" CONCRETE JUNCTION BOX	CAST IN PLACE CURB INLET (12'x5'x5.7')
UNIT	LF	LF	LF	EA	EA	EA	EA	LF
DEPTH	7 FT.	7 FT.	8 FT.	VARIES	5 FT	6 FT	7'-10"	5.7 FT
SHEET 200		481	437	2			1	
SHEET 201			401			2		
SHEET 210	85	48		1	2	1	1	1
SHEET 220								
TOTALS:	85	529	838	3	2	3	2	1

SUMMARY OF POND EXCAVATION ITEMS	
	BASIN EXCAVATION
UNIT	CY
DEPTH	6"
SHEET 220	24,944
TOTALS:	24,944

SUMMARY OF UTILITY CONSTRUCTION ITEMS								
	CAST IN PLACE CURB INLET (18'x5'x10')	CAST IN PLACE CURB INLET (12'x5'x7.4)	CAST IN PLACE CURB INLET (12'x5'x5.5')	CAST IN PLACE CURB INLET (5'x5'x5')	CONCRETE DRAINAGE FLUME	CONCRETE PAD	2' WIDE CONCRETE PILOT SWALE 3600 PSI, FIBER REINFORCED	RIP-RAP D(50)
UNIT	LF	LF	EA	EA	SY	SY	LF	SY
DEPTH	10 FT	7.4 FT	5.5 FT	5 FT	–	–	2"	8"
SHEET 200								
SHEET 201								
SHEET 210	1	1	1	1				
SHEET 220					307	23	406	1,113
TOTALS:	1	1	1	1	307	23	406	1,113



* FOR CONTRACTOR INFORMATION ONLY

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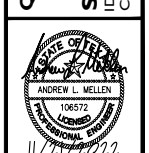
BY	APPR.	DATE

REVISIONS

DRAWN BY:	MJD
CHECKED BY:	ALM
APPROVED BY:	ALM
DATE:	04/12/2022
JOB:	210045

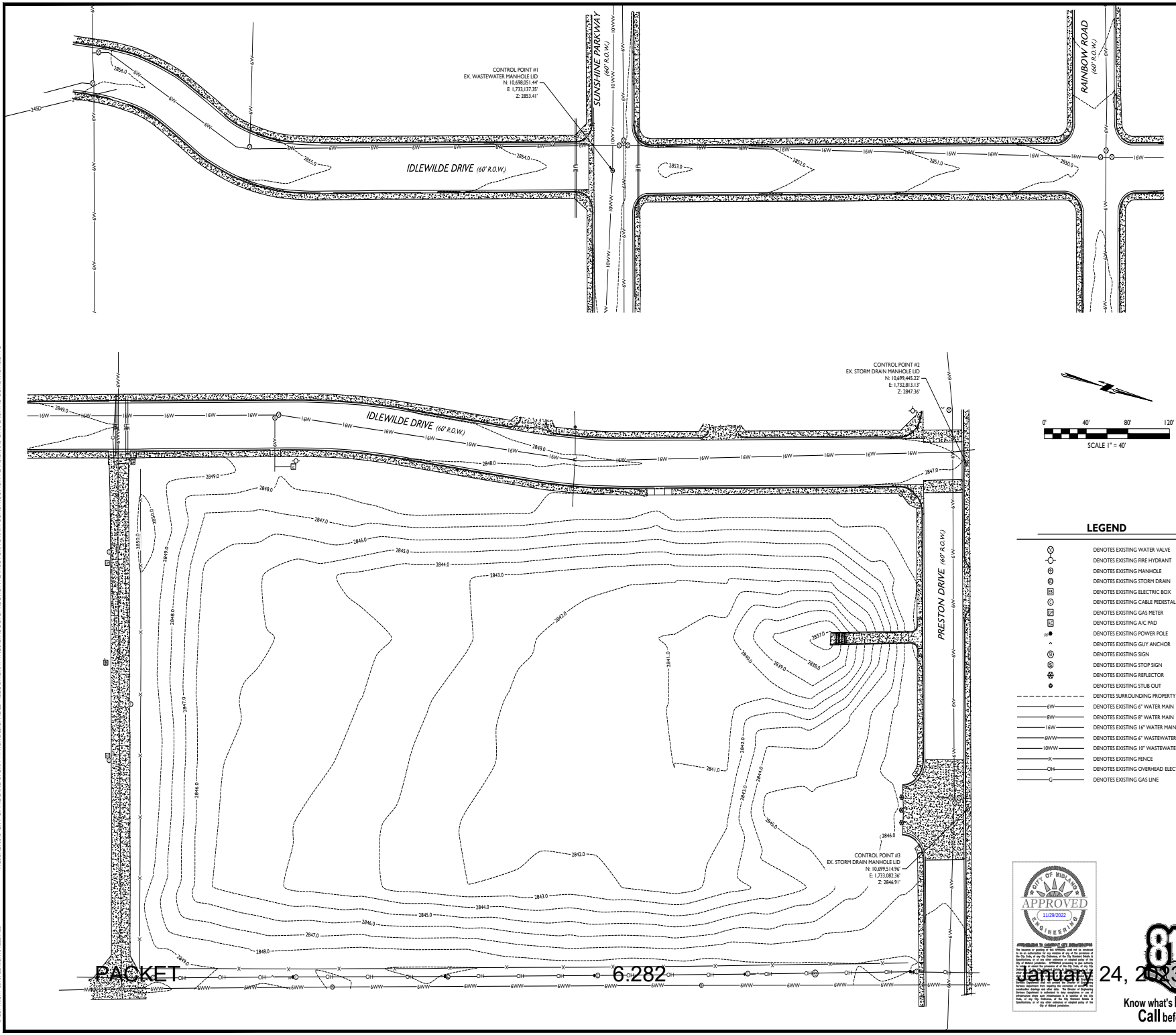
QUANTITY SUMMARY

STORM DRAIN IMPROVEMENTS
IDLEVILDE DRIVE
CITY OF MIDLAND, TEXAS



SHEET C102 OF 18

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LEGEND

- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING STORM DRAIN
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING CABLE PEDESTAL
- DENOTES EXISTING GAS METER
- DENOTES EXISTING A/C PAD
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING SIGN
- DENOTES EXISTING STOP SIGN
- DENOTES EXISTING REFLECTOR
- DENOTES EXISTING STUB OUT
- DENOTES SURROUNDING PROPERTY
- 6W — DENOTES EXISTING 6" WATER MAIN
- 8W — DENOTES EXISTING 8" WATER MAIN
- 16W — DENOTES EXISTING 16" WATER MAIN
- 6WW — DENOTES EXISTING 6" WASTEWATER
- 10WW — DENOTES EXISTING 10" WASTEWATER
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- G — DENOTES EXISTING GAS LINE

APPROVED 11/29/2022

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△	REVISIONS	BY	APPR.	DATE

DRAWN BY: MJD
CHECKED BY: ALM
APPROVED BY: ALM
DATE: 04/12/2022
JOB: 210045

EXISTING CONDITIONS

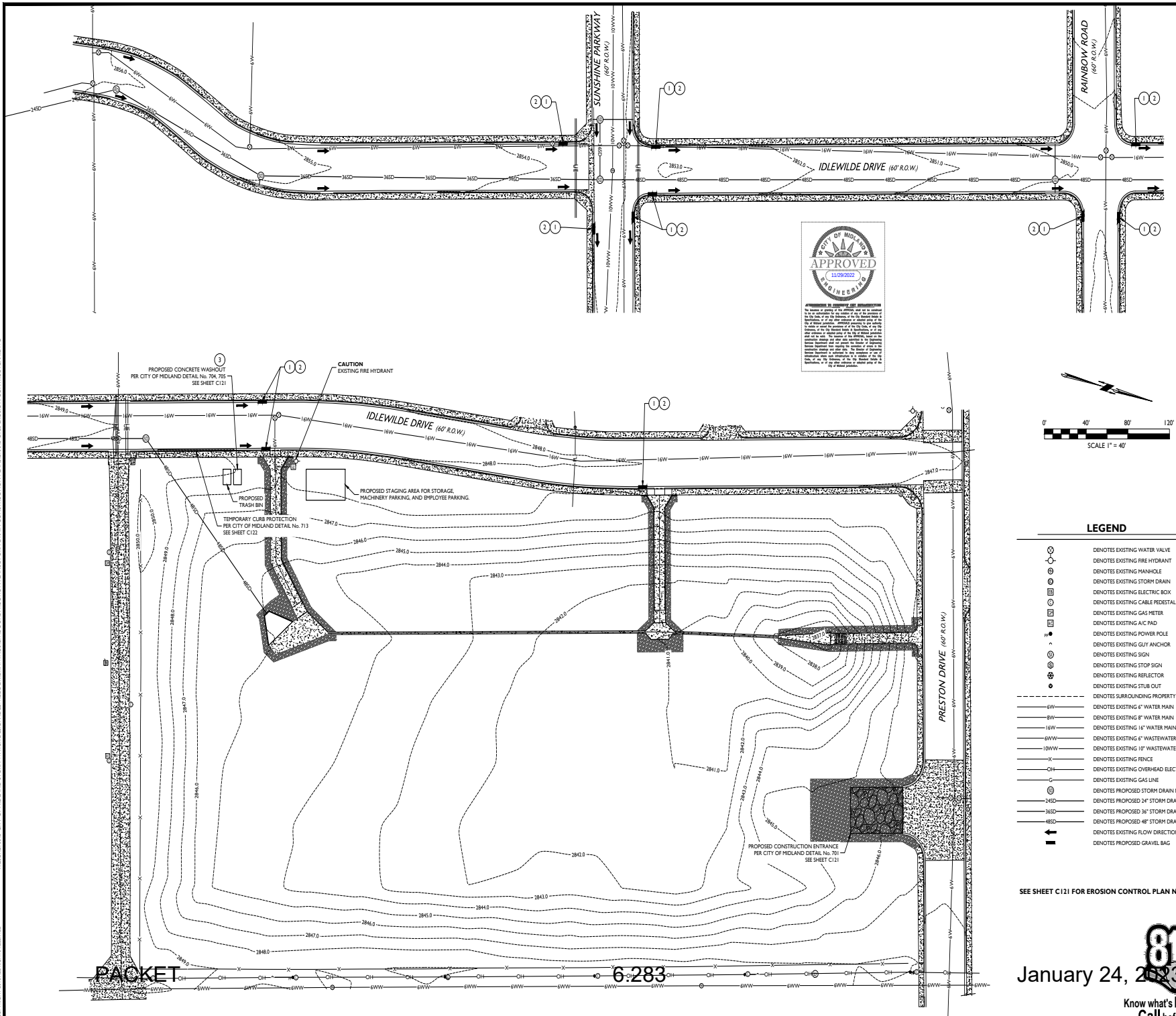
STORM DRAIN IMPROVEMENTS

IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
11/21/2022

SHEET C110 OF 18

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LEGEND

- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING STORM DRAIN
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING CABLE PEDESTAL
- DENOTES EXISTING GAS METER
- DENOTES EXISTING A/C PAD
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING SIGN
- DENOTES EXISTING STOP SIGN
- DENOTES EXISTING REFLECTOR
- DENOTES EXISTING STUB OUT
- DENOTES SURROUNDING PROPERTY
- 6W — DENOTES EXISTING 6" WATER MAIN
- 8W — DENOTES EXISTING 8" WATER MAIN
- 16W — DENOTES EXISTING 16" WATER MAIN
- 6WW — DENOTES EXISTING 6" WASTEWATER
- 10WW — DENOTES EXISTING 10" WASTEWATER
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- G — DENOTES EXISTING GAS LINE
- DENOTES PROPOSED STORM DRAIN MANHOLE
- 24SD — DENOTES PROPOSED 24" STORM DRAIN LINE
- 36SD — DENOTES PROPOSED 36" STORM DRAIN LINE
- 48SD — DENOTES PROPOSED 48" STORM DRAIN LINE
- DENOTES EXISTING FLOW DIRECTION ARROWS
- DENOTES PROPOSED GRAVEL BAG

SEE SHEET C121 FOR EROSION CONTROL PLAN NOTES

Know what's **below.** **Call** before you dig.

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www.Maverick-Eng.com

BY	APPR.	DATE

REVISIONS

DRAWN BY:	MJD
CHECKED BY:	ALH
APPROVED BY:	ALH
DATE:	04/12/2022
JOB:	210045

EROSION CONTROL PLAN AND MASTER STORM DRAIN LAYOUT

STORM DRAIN IMPROVEMENTS

IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
11/21/2022

SHEET C120 OF 18

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GENERAL NOTES:

1). IT IS THE INTENT OF THE INFORMATION PROVIDED ON THIS SHEET AND WITHIN THE SPECIFICATIONS TO BE USED AS THE GENERAL GUIDELINES OF THE STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT TO ESTABLISH A MINIMUM BASIS OF THE COMPLIANCE WITH TPDES REGULATIONS. THE CONTRACTOR SHALL FILE NOTICE OF INTENT (NOI) TO BE COVERED BY TDPES CONSTRUCTION GENERAL PERMIT, TXR 150000.

2). THE STORM WATER POLLUTION PREVENTION PLAN SHOULD ADDRESS THREE GOALS: TO DIVERT WATER FROM UPSLOPE AREAS AROUND DISTURBED AREAS OF THE SITE, TO LIMIT EXPOSURE OF DISTURBED AREAS TO THE SHORTEST DURATION POSSIBLE, AND TO REMOVE SEDIMENT FROM STORM WATER BEFORE IT LEAVES THE SITE.

3). THE CONTRACTOR SHALL MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE, UPON REQUEST, TO THE TCEQ.

4). THE CONTRACTOR MUST AMEND THE STORM WATER POLLUTION PREVENTION PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PLAN, OR WHEN THE EXISTING PLAN PROVES INEFFECTIVE. MODIFICATIONS INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. NO CHANGE TO EROSION CONTROL MEASURES SHOWN ON THESE PLANS AND SPECIFICATIONS SHALL BE MADE WITHOUT CONSENT OF OWNER AND ENGINEER.

5). STABILIZATION MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES. REPAIRS OF INADEQUACIES REVEALED BY THE INSPECTIONS MUST BE IMPLEMENTED WITHIN SEVEN CALENDAR DAYS FOLLOWING THE INSPECTION.

6). AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE MAINTAINED AND MADE PART OF THE PLAN.

7). ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST CERTIFY AS TO AN UNDERSTANDING OF THE NPDES CONSTRUCTION GENERAL PERMIT BEFORE CONDUCTING ANY ACTIVITY IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN.

8). THE CONTRACTOR SHALL ADOPT APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OILS, GREASE, PAINTS, GASOLINE, AND OTHER POLLUTANTS TO STORM WATER. APPROPRIATE PRACTICES CAN INCLUDE: DESIGNATING AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR, REGULAR COLLECTION OF WASTES, CONVENIENTLY LOCATED WASTE RECEPTACLES, AND DESIGNATING AND CONTROL EQUIPMENT WASHING.

9). THE CONTRACTOR SHALL AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS, AND SEQUENCE. MODIFICATIONS SHALL NOT COMPROMISE THE INTENT OF THE REQUIREMENTS OF THE LAW AND THIS PLAN. MODIFICATIONS SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER.

10). AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS.

11). THE CONTRACTOR SHALL DESIGNATE MATERIAL AND EQUIPMENT STORAGE AREAS MUTUALLY AGREED TO BY THE OWNER. THE STORAGE AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE AND THE SURFACE STABILIZED WITH A MINIMUM OF TWO INCHES OF CRUSHED ROCK OR GRAVEL. REINFORCED FILTER BARRIER SHALL BE INSTALLED AROUND THE STORAGE AREAS TO PREVENT ANY EROSION FROM LEAVING THE SITE.

12). CONTRACTOR TO COORDINATE WITH CITY OF MIDLAND AND PRIVATE LAND OWNER FOR THE STAGING AREA LOCATION AND DIMENSIONS. AFTER COMPLETION OF PROJECT CONTRACTOR TO RESTORE STAGING AREA TO ITS ORIGINAL OR BETTER CONDITIONS.

PERMANENT BMP CONSTRUCTION NOTES:

1. GRAVEL BAGS ARE TO BE INSTALLED AT THE NEAREST DOWNSTREAM INTERSECTION FROM ANY PROJECT CONSTRUCTION ACTIVITY.
2. PRIOR TO ANY ANTICIPATED RAIN EVENT, GRAVELS BAGS ARE TO BE INSTALLED AT THE NEAREST DOWNSTREAM INTERSECTION FROM ANY UNCOMPACTED, UNSTABILIZED TRENCHES. REMOVAL OF SEDIMENT FROM GUTTERS IS TO BE DONE AFTER EVERY RAIN EVENT, OR MORE OFTEN IF DEEMED NECESSARY BY CONTRACTOR, INSPECTOR, OR ENGINEER.
3. LOCATED CONCRETE WASHOUT WITHIN PROJECT AREA AND SHIFT AS NECESSARY FOR CONSTRUCTION ACTIVITY. ALL WASHOUT AND OTHER SPOILS ARE TO BE REMOVED FROM SITE. CONCRETE TRUCKS ARE NEVER TO WASHOUT INTO ON-SITE TRENCHES.

GRAVEL BAG INSTALLATION NOTES:

1. GRAVEL BURLAP BAGS SHALL BE PLACED ALONG CURB AND GUTTER AS SHOWN.
2. SUFFICIENT SPACE SHALL BE PROVIDED UPSLOPE FROM BAGS SO THAT PONDING CAN OCCUR.
3. BAGS SHALL BE PLACED FLAT SO THAT THE MAXIMUM POSSIBLE AREA IS IN CONTACT WITH THE GROUND.
4. BAGS SHALL BE REPLACED ONCE EVERY THREE MONTHS, OR MORE OFTEN IF DEEMED NECESSARY BY THE CONTRACTOR, INSPECTOR OF ENGINEER.
5. BAG INSPECTIONS FOR RIPS, TEARS, LEAKS, AND OTHER DAMAGE ARE TO BE CONDUCTED AFTER EVERY RAIN EVENT. THE RESULTS OF THESE INSPECTIONS ARE TO BE DOCUMENTED IN THE SWPPP INSPECTION REPORT.
6. BAG OPENINGS SHALL FACE UP SO THAT THEY ARE NOT IN CONTACT WITH THE GROUND.
7. BAGS SHALL BE FILLED TO 60 PERCENT MAXIMUM CAPACITY WITH 80 PERCENT OR MORE OF THE AGGREGATE BETWEEN THE No. 4 SIEVE AND 3 INCHES IN SIZE.
8. PLACEMENT OF GRAVEL BAGS SHOULD NOT BLOCK ADA WALKING PATHS.

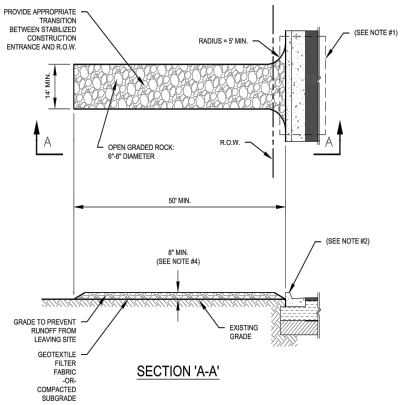
EROSION CONTROL NOTES:

A. INSTALL EROSION CONTROL MEASURES PRIOR TO BEGINNING ANY OTHER PROJECT CONSTRUCTION ACTIVITY.

B. CONTRACTOR IS TO PLACE AND MAINTAIN SANDBAG BMPS AT FIRST CURB OPENING DOWNSTREAM OF ACTIVE CONSTRUCTION AREA. WHEN CONSTRUCTION ACTIVITY OCCURS ON BOTH SIDES OF ROAD THEN CURB OPENINGS ON BOTH SIDES MUST HAVE SANDBAGS PLACED.

C. EROSION CONTROL MEASURES MUST BE MAINTAINED BY CONTRACTOR AT ALL TIMES. REPAIRS TO EXISTING EROSION CONTROL MEASURES MUST BE MADE BY CONTRACTOR IMMEDIATELY UPON DISCOVERING SUCH REPAIRS ARE NEEDED. EXISTING EROSION CONTROL MEASURES MUST BE INSPECTED BY CONTRACTOR IMMEDIATELY FOLLOWING ANY STORM EVENT.

D. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AT THE SOLE DISCRETION OF THE ENGINEER IF AT ANY TIME THE ENGINEER BELIEVES THE EXISTING EROSION CONTROL MEASURES ARE INSUFFICIENT FOR THE NEEDS OF THE PROJECT SITE.



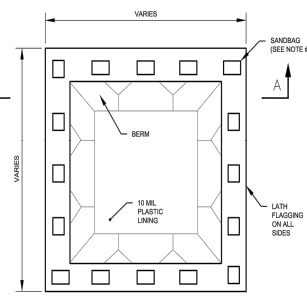
SECTION 'A-A'

NOTES:

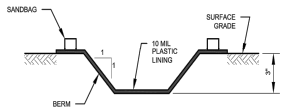
1. IF CURB DOES NOT EXIST OR IF EXISTING CURB IS REMOVED DURING CONSTRUCTION THEN STABILIZED CONSTRUCTION ENTRANCE IS TO EXTEND TO THE EDGE OF PAVEMENT.
2. IF CURB IS LEFT IN PLACE DURING CONSTRUCTION THEN INSTALL TEMPORARY CURB PROTECTION AS PER CITY DETAIL 713.
3. LENGTH SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS, BUT NOT LESS THAN FIFTY (50) FEET.
4. THICKNESS OF OPEN GRADED ROCK TO BE NO LESS THAN EIGHT (8) INCHES.
5. WIDTH SHALL BE NO LESS THAN FOURTEEN (14) FEET OR THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS, WHICHEVER IS WIDER.
6. STABILIZED CONSTRUCTION ENTRANCE TO BE REMOVED UPON COMPLETION OF CONSTRUCTION.
7. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS
8. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:

MIDLAND Engineering Services — STABILIZED CONSTRUCTION ENTRANCE OPTION 1 — 701



DEPRESSED WASHOUT



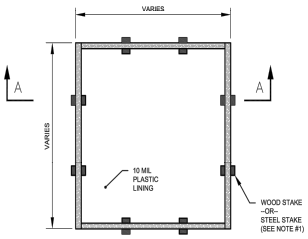
SECTION 'A-A'

NOTES:

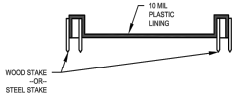
1. SECURE WASHOUT STRUCTURES AND LININGS WITH SANDBAGS OR TWO SECURELY FASTENED STAKES AROUND ENTIRE WASHOUT PERIMETER.
2. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
3. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:

MIDLAND Engineering Services — CONCRETE WASHOUT OPTION 1 — 704



ELEVATED WASHOUT



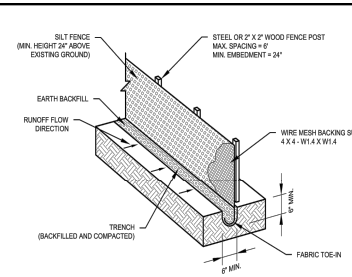
SECTION 'A-A'

NOTES:

1. THIS WASHOUT CONFIGURATION MAY NOT BE USED IN PAVED AREAS.
2. WOOD FRAME IS TO BE EQUAL TO OR BETTER THAN TWO-STACKED 2X12 ROUGH WOOD FRAME.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEERING.

DRAWN:	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:

MIDLAND Engineering Services — CONCRETE WASHOUT OPTION 2 — 705



NOTES:

1. THIS DETAIL IS TO BE USED FOR SHEET FLOW CONDITIONS ONLY. DO NOT USE SILT FENCE FOR POINT FLOW OR CONCENTRATED FLOW CONDITIONS.
2. INSTALL STEEL OR WOOD POSTS, WHICH SUPPORT THE SILT FENCE, WITH A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POSTS MUST BE EMBEDDED A MINIMUM OF ONE (1) FOOT.
3. TRENCH THE TOE OF THE SILT FENCE IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE THE FENCE CANNOT BE TRENCHED IN (E.G.PAVEMENT), WEIGHT DOWN FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
4. THE TRENCH MUST BE A MINIMUM OF SIX (6) INCHES DEEP AND SIX (6) INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
5. SECURELY FASTEN SILT FENCE TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS TO BE ATTACHED TO THE STEEL OR WOOD FENCE POST. INCLUDE A SIX (6) INCH DOUBLE OVERLAP, SECURELY FASTENED, WHERE ENDS OF FABRIC MEET.
6. REMOVE SILT FENCE WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. REMOVE ACCUMULATED SILT WHEN IT REACHES A DEPTH OF SIX (6) INCHES. DISPOSE OF THE SILT ONSITE IN AN APPROVED LOCATION AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
8. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
9. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:

MIDLAND Engineering Services — SILT FENCE — 706

CITY OF MIDLAND APPROVED 11/29/2022 ENGINEERING

APPROVAL IS CONDITIONAL ONLY AND SHALL NOT BE CONSTRUED TO BE AN AUTHORIZATION OF ANY VIOLATION OF ANY OF THE PROVISIONS OF THE City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction. APPROVAL OF PLANS SHALL NOT BE CONSTRUED TO VOID OR CANCEL THE PROVISIONS of of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION DRAWINGS, CONSTRUCTION DETAILS, CONSTRUCTION STAKING, CONSTRUCTION DRAWINGS AND OTHER DATA SUBMITTED TO THE ENGINEERING SERVICES DEPARTMENT SHALL NOT PREVENT THE DIRECTOR OF ENGINEERING SERVICES FROM REQUIRING CORRECTION OF ERRORS IN THE CONSTRUCTION DRAWINGS AND OTHER DATA. THE DIRECTOR OF ENGINEERING SERVICES DEPARTMENT IS AUTHORIZED TO GRANT EXCEPTIONS TO THE REQUIREMENTS OF THE CITY CODE, OF ANY CITY ORDINANCE, OF THE CITY STANDARD DETAILS & SPECIFICATIONS, OR OF ANY OTHER ORDINANCE OR ADOPTED POLICY OF THE CITY OF MIDLAND JURISDICTION.

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P:\2021\210045-CITY OF MIDLAND-STORM WATER DESIGN IDLEWILDE DRIVE\ANYWORKS\CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C121 EROSION CONTROL NOTES DET'ALS.DWG

PACKET 6.284 January 24, 2023

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REVISIONS	BY	APPR.	DATE
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DRAWN BY: MJD
CHECKED BY: ALH
APPROVED BY: ALH
DATE: 04/12/2022
JOB: 210045

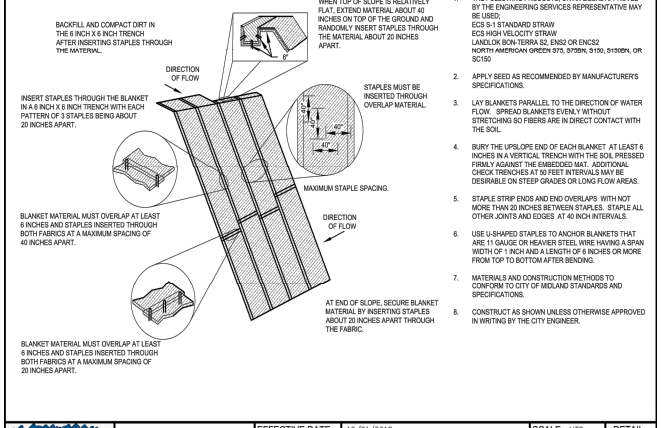
EROSION CONTROL NOTES AND DETAILS

STORM DRAIN IMPROVEMENTS

IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS

STATE OF TEXAS — ANDREW L. MELLEN — 106572 — LICENSED — PROFESSIONAL ENGINEER — 11/21/2022

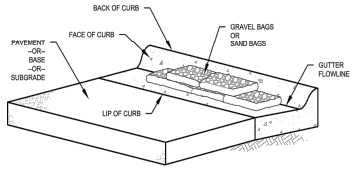
SHEET C121 OF 18



NOTES:

1. THE FOLLOWING PRODUCTS, OR AN EQUAL, APPROVED BY THE ENGINEERING SERVICES REPRESENTATIVE MAY BE USED;
   ECS S-1 STANDARD STRAW
   ECS HIGH VELOCITY STRAW
   LANDLOK BON-TERRA S2, ENS2 OR ENCS2
   NORTH AMERICAN GREEN S75, S75BN, S150, S150BN, OR SC150
2. APPLY SEED AS RECOMMENDED BY MANUFACTURER'S SPECIFICATIONS.
3. LAY BLANKETS PARALLEL TO THE DIRECTION OF WATER FLOW. SPREAD BLANKETS EVENLY WITHOUT STRETCHING SO FIBERS ARE IN DIRECT CONTACT WITH THE SOIL.
4. BURY THE UPSLOPE END OF EACH BLANKET AT LEAST 6 INCHES IN A VERTICAL TRENCH WITH THE SOIL PRESSED FIRMLY AGAINST THE EMBEDDED MAT. ADDITIONAL CHECK TRENCHES AT 50 FEET INTERVALS MAY BE DESIRABLE ON STEEP GRADES OR LONG FLOW AREAS.
5. STAPLE STRIP ENDS AND END OVERLAPS WITH NOT MORE THAN 20 INCHES BETWEEN STAPLES. STAPLE ALL OTHER JOINTS AND EDGES AT 40 INCH INTERVALS.
6. USE U-SHAPED STAPLES TO ANCHOR BLANKETS THAT ARE 11 GAUGE OR HEAVIER STEEL WIRE HAVING A SPAN WIDTH OF 1 INCH AND A LENGTH OF 6 INCHES OR MORE FROM TOP TO BOTTOM AFTER BENDING.
7. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
8. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

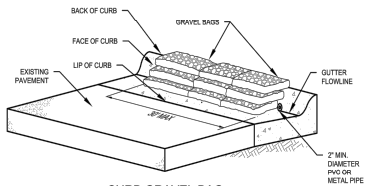
DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	EROSION CONTROL BLANKET AND VEGETATION		711
APPROVED: MCC			



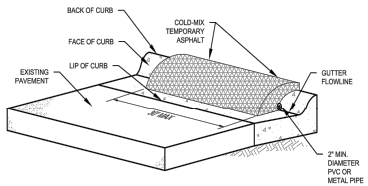
NOTES:

1. FILL BAGS TO 60% CAPACITY WITH EITHER CLEAN GRAVEL OR CLEAN SAND.
2. GRAVEL TO BE NO LESS THAN 1" DIAMETER OR GREATER THAN 2" DIAMETER.
3. PLACE BAGS WITH BAG OPENINGS SECURED AND FACE UP, AND SO THAT EACH BAG IS FLAT AND HAS THE GREATEST POSSIBLE SURFACE AREA CONTACT WITH THE CURB.
4. PLACE BAGS AGAINST THE FACE-OF-CURB AND DO NOT PLACE BAGS BEYOND THE LIP-OF-CURB.
5. DO NOT BLOCK ADA RAMPS OR WALKWAYS WITH BAGS.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:	
CURB GRAVEL OR SAND BAGS		712	



CURB GRAVEL BAG

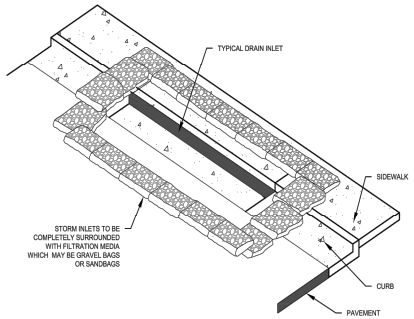


CURB COLD-MIX TEMPORARY ASPHALT

NOTES:

1. UTILIZE THIS DETAIL WHEN ACCESSING PROJECT SITE OVER EXISTING CURB ONLY IF NO USABLE CURB OPENING EXISTS.
2. FILL BAGS TO 60% CAPACITY WITH CLEAN GRAVEL NO LESS THAN 1" DIAMETER AND NO GREATER THAN 2" DIAMETER.
3. PLACE BAGS WITH BAG OPENINGS SECURED AND FACE UP, AND SO THAT EACH BAG IS FLAT AND HAS THE GREATEST POSSIBLE SURFACE AREA CONTACT WITH THE CURB.
4. PLACE BAGS AGAINST THE PIPE AND FACE-OF-CURB . DO NOT PLACE BAGS BEYOND THE LIP-OF-CURB.
5. DO NOT BLOCK ADA RAMPS OR WALKWAYS WITH BAGS.
6. DO NOT PLACE TEMPORARY ASPHALT BEYOND LIP-OF-CURB.
7. PIPE MUST EXTEND ACROSS FULL LENGTH OF TEMPORARY CURB PROTECTION AND BE COMPLETELY EXPOSED AT BOTH ENDS.
8. MINIMUM 4" THICK LAYER OF GRAVEL OR ASPHALT REQUIRED OVER ALL PARTS OF AFFECTED CURB.
9. MAXIMUM WIDTH OF CURB PROTECTION IS 30'.
10. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
11. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

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EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:	
TEMPORARY CURB PROTECTION		713	



GRAVEL BAGS OR SANDBAGS

NOTES:

1. FILL BAGS TO 60% CAPACITY WITH CLEAN GRAVEL OR CLEAN SAND.
2. PLACE BAGS WITH BAG OPENINGS SECURED AND FACE UP, AND SO THAT EACH BAG IS FLAT AND HAS THE GREATEST POSSIBLE SURFACE AREA CONTACT WITH THE SURFACE.
3. GRAVEL TO BE NO LESS THAN 1" DIAMETER OR GREATER THAN 2" DIAMETER.
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:	
CURB INLET PROTECTION		714	

CITY OF MIDLAND APPROVED 11/29/2022 ENGINEERING

ATTENTION TO CONTRACTOR AND SUBCONTRACTOR: The issuance or granting of this APPROVAL shall not be construed to be a permit for, or an approval of, any violation of any provision of the Code, or of any law, ordinance or rule of any department or subdivision of the City of Midland or subject policy of the City of Midland. The issuance of a permit based on plans, specifications and other data shall not prevent the Building Services Department from requiring the correction of errors in the plans, specifications and other data. The Building Services Department is authorized to stop construction or use of individual items and infrastructure in violation of the City Code, or of any law, ordinance or rule of any department or subdivision, or of any other ordinance or subject policy of the City of Midland jurisdiction.

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BY	APPR.	DATE

REVISIONS

DRAWN BY:	MJD
CHECKED BY:	ALH
APPROVED BY:	ALH
DATE:	04/12/2022
JOB:	210045

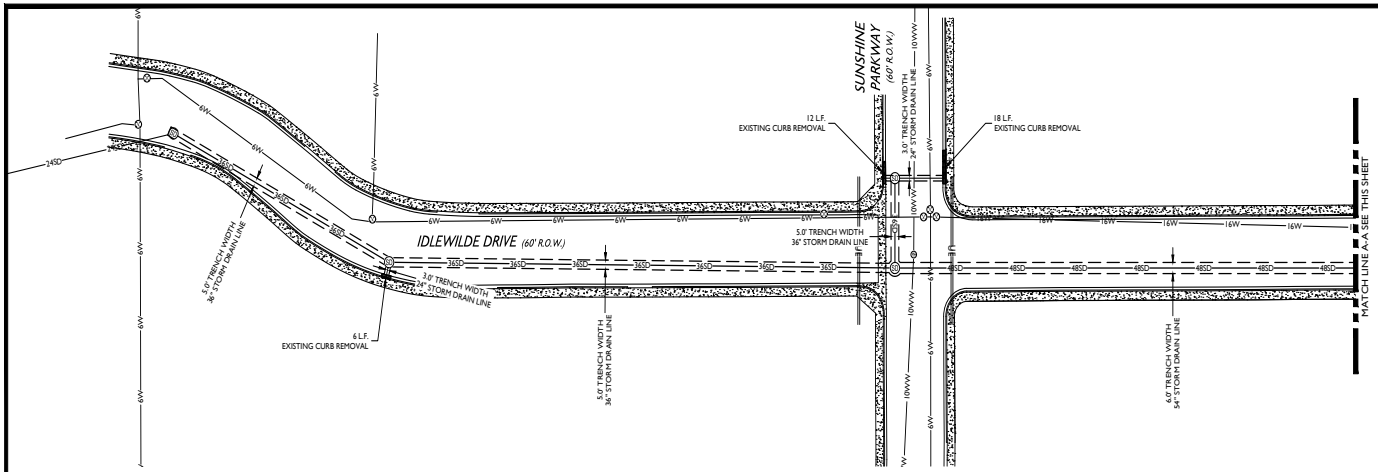
EROSION CONTROL DETAILS

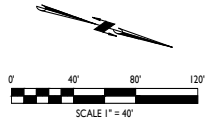
STORM DRAIN IMPROVEMENTS
IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS

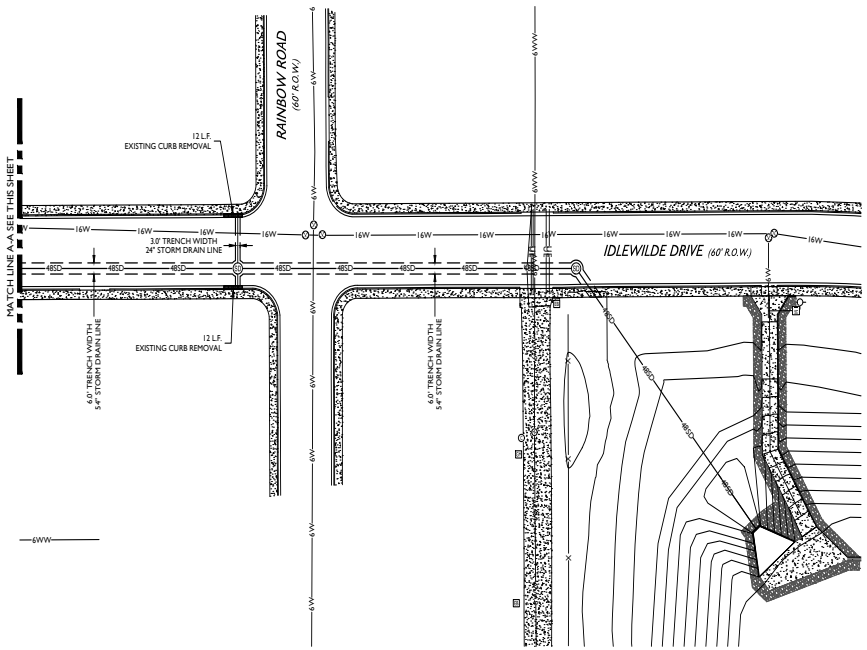
STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
11/21/2022

SHEET C122 OF 18

P:\2021\210045 - CITY OF MIDLAND-STORM WATER DESIGN IDLEWILDE DR\DRAWINGS\CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C122 EROSION CONTROL NOTES DET ALLS.DWG
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DEMOLITION GENERAL NOTES:

A. ALL DEMOLITION DIMENSIONS ARE APPROXIMATE BASED ON THE MOST RELIABLE DATA AVAILABLE. CONTRACTOR IS TO FIELD VERIFY ACTUAL DIMENSIONS AND NOTIFY ENGINEER OF QUANTITY INCREASES OR DISCREPANCIES.

B. ALL SAW-CUTS FOR PAVEMENT REMOVAL ARE TO BE CUT IN CLEAN, STRAIGHT LINES.

C. NO EXISTING INFRASTRUCTURE IS TO BE REMOVED THAT IS NOT NOTED FOR REMOVAL ON THIS SHEET WITHOUT WRITTEN CONFIRMATION FROM ENGINEER PRIOR TO SUCH REMOVAL TAKING PLACE. ANY EXISTING INFRASTRUCTURE DAMAGE OR REMOVED BY CONTRACTOR THAT IS NOT NOTED ON THIS SHEET MUST BE REPAIRED OR REPLACED TO EQUAL OR BETTER CONDITION AT CONTRACTOR'S SOLE EXPENSE.

D. NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES BEFORE REMOVING ANYTHING NOTED FOR REMOVAL.

E. TYPICAL TRENCH PAVEMENT REPAIR WIDTH IS ANTICIPATED TO BE:

3' FOR 24" STORM DRAIN LINE.
5' FOR 36" STORM DRAIN LINE.
6' FOR 48" STORM DRAIN LINE.
CONTRACTOR IS TO OBTAIN PERMISSION FROM ENGINEER PRIOR TO INCREASING TYPICAL TRENCH PAVEMENT REPAIR WIDTHS.

F. PAVEMENT REMOVAL AND REPLACEMENT WIDTH IS 2' WIDER THAN THE TRENCH EXCAVATION WIDTH DUE TO THE T-TOPPING TRENCH REPAIR REQUIREMENT. SEE CITY OF MIDLAND DETAIL No. 311 SHEET C300.

PAVING NOTES:

1. ALL NEW PAVEMENT AND CONCRETE ARE TO BE PLACED CLEANLY AND FLUSH WITH ALL ADJACENT, EXISTING PAVEMENT OR CONCRETE INCLUDING CURBS.
2. PRIOR TO PAVING ACTIVITIES, APPLY PRIME COAT UNIFORMLY ON TOP OF ALL PREPARED FLEXIBLE BASE COURSE SURFACES. ADDITIONALLY, APPLY PRIME COAT TO ALL JOINTS, INCLUDING COLD JOINTS WITH MATS PREVIOUSLY LAID, AND JOINTS WITH CONCRETE WHERE ASPHALT PAVEMENT WILL ABUT CONCRETE PAVEMENT INCLUDING AT LIP OF CURB.
3. BLOT AREAS SHOWING AN EXCESS OF PRIME COAT OR TACK COAT WITH SAND OR OTHER SIMILAR MATERIAL AND REMOVE BLOTTING MATERIAL BEFORE PAVING.
4. EXISTING STAND-UP CURBS ARE 7.0" CURBS THAN CURRENT 6.0" CITY STANDARD CURBS IN THIS AREA. MATCH EXISTING CURB HEIGHT THROUGHOUT.
5. ALL CONCRETE PAVEMENT JOINTS ARE TO BE SEALED IN COMPLIANCE WITH CITY OF MIDLAND STANDARDS. THIS REQUIREMENT DOES NOT APPLY TO PEDESTRIAN ACCESS RAMP, SIDEWALK, OR CURB JOINTS.
6. ALL PEDESTRIAN ACCESS RAMPS AND SIDEWALKS ARE TO BE INSTALLED IN COMPLIANCE WITH ALL APPLICABLE ADA REQUIREMENTS. ALL SIDEWALK IS TO BE INSTALLED FLUSH WITH ADJACENT TOP-OF-CURB WHEN LOCATED NEXT TO CURB. SIDEWALK NOT LOCATED NEXT TO CURB IS TO BE PLACED FLUSH WITH EXISTING GROUND SURFACE. ENGINEER IS TO BE NOTIFIED PRIOR TO INSTALLATION IF ANY SIDEWALK SLOPE EXCEEDS 5.0% SLOPE WHEN FOLLOWING EXISTING GROUND SURFACE, AND NO SIDEWALK IS TO HAVE CROSS-SLOPE GREATER THAN 2.0%.
7. PAVEMENT REPAIR AREA AND BOUNDARIES ARE IDENTICAL TO PAVEMENT REMOVAL BOUNDARIES.
8. ALL ASPHALT TRENCH REPAIRS ARE TO UTILIZE 2" TYPE "D" HMAC AS PER DETAIL 311 UNLESS OTHERWISE NOTED.
9. ALL CONCRETE TRENCH REPAIRS ARE TO UTILIZE 6" CLASS "C" CONCRETE AS PER DETAIL 312 UNLESS OTHERWISE NOTED.
10. PLACE CONCRETE PAVEMENT WITHIN 45 MINUTES OF BATCHING AND USE VIBRATORY EQUIPMENT TO CONSOLIDATE CONCRETE. DO NOT USE VIBRATORY EQUIPMENT TO DISTRIBUTE CONCRETE PAVEMENT. SEGREGATED CONCRETE IS SUBJECT TO REJECTION.
11. CURB JOINTS ARE TO BE SPACED NO CLOSER THAN 2.0' AND NO FURTHER THAN 10.0' APART.
12. CURB JOINTS ARE TO BE TOOL JOINTS EXCEPT FOR EACH END OF A NEW CURB SECTION, WHICH IS TO BE AN EXPANSION JOINT. PLACE EXPANSION JOINTS AT ALL JOINTS BETWEEN NEW AND EXISTING CURB-AND-GUTTER.
13. UTILIZE SAWCUT OR TOOL JOINTS IN SIDEWALK SPACED EVERY 5.0'.
14. ALL CONCRETE PAVEMENT AND SIDEWALK SURFACES ARE TO BE BROOM FINISHED.

LEGEND

	DENOTES EXISTING WATER VALVE
	DENOTES EXISTING FIRE HYDRANT
	DENOTES EXISTING MANHOLE
	DENOTES EXISTING STORM DRAIN
	DENOTES EXISTING ELECTRIC BOX
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CITY OF MIDLAND APPROVED 11/29/2022 ENGINEERING

APPROVED IS SUBJECT TO ACCEPTANCE CONDITIONS: The issuance or granting of this APPROVED shall not be construed to be or authorization for any violation of any of the provisions of the City Code, or any City Ordinance, of the City Standard Details or Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction.

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REVISIONS

DRAWN BY: MJD
CHECKED BY: ALM
APPROVED BY: ALM
DATE: 04/12/2022
JOB: 210045

DEMOLITION PLAN AND TRENCH PAVEMENT REPAIR PLAN

STORM DRAIN IMPROVEMENTS

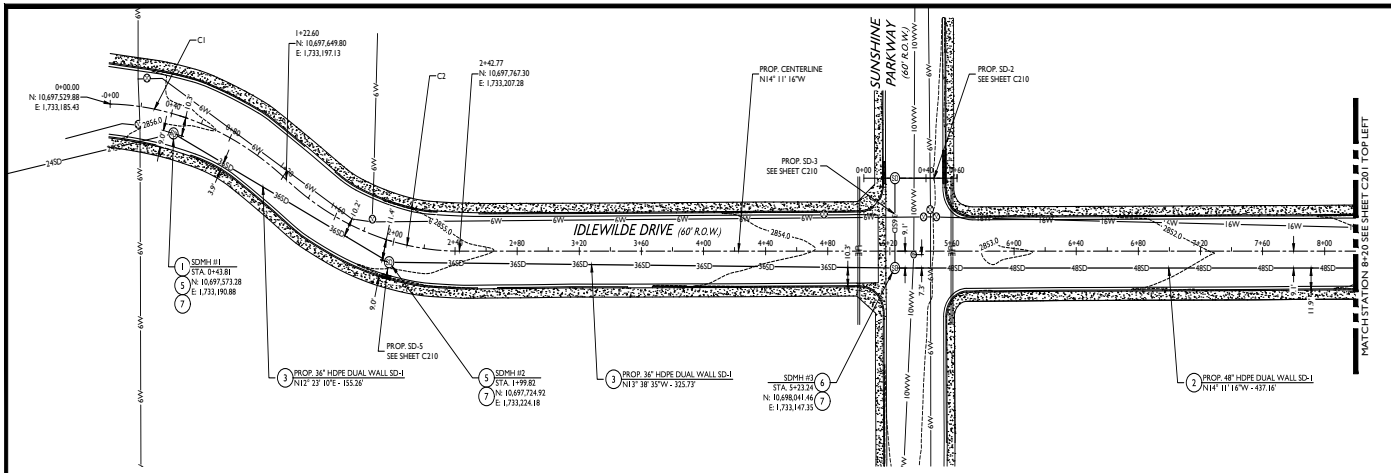
IDLEWILDE DRIVE
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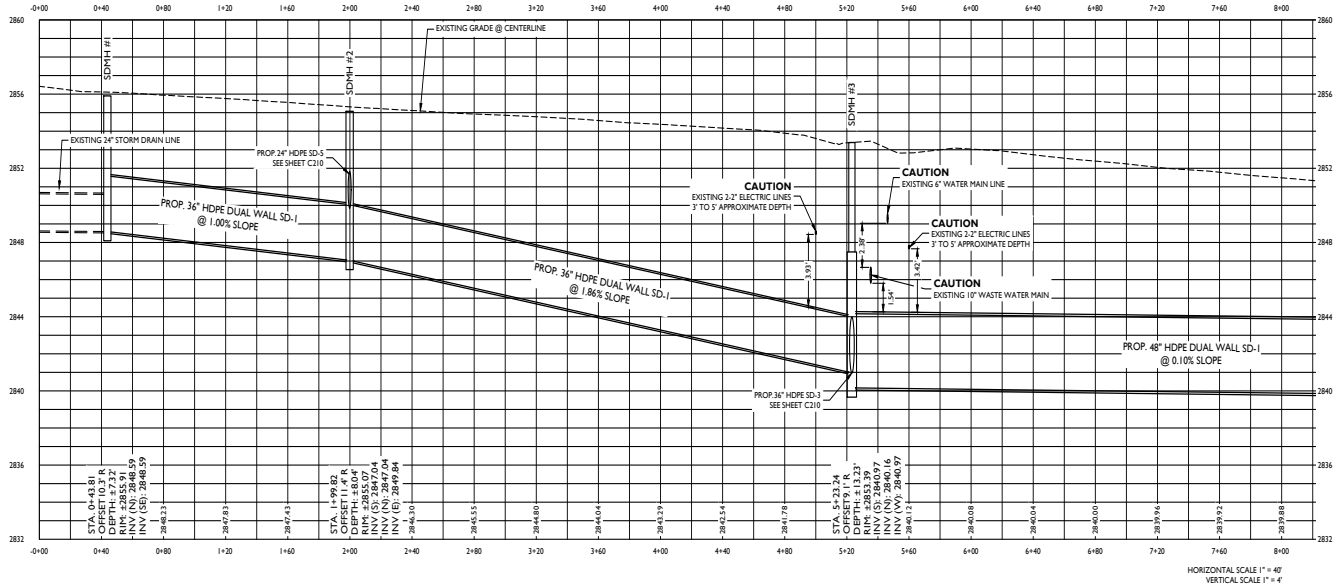
STATE OF TEXAS ANDREW L. MELLEN 106572 LICENSED PROFESSIONAL ENGINEER 11/21/2022

SHEET C130 OF 18

F:\2021\210045 CITY OF MIDLAND-STORM WATER DESIGN IDLEWILDE DRIVE AWW\05CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C130 DEMOLITION PLAN.DWG

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- ANY EXISTING GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

STORM DRAIN CONSTRUCTION NOTES:

TYP (1.) CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL 48" DIAMETER STORM DRAIN AS SHOWN. HDPE ADSTMIN-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
3. INSTALL 36" DIAMETER STORM DRAIN AS SHOWN. HDPE ADSTMIN-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
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5. INSTALL 60" FIBERGLASS MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C301. DETAIL No. 401 SEE SHEET C302.
6. INSTALL 6'x6'x7-10" CONCRETE JUNCTION BOX PER TxDOT DETAIL "PRECAST JUNCTION BOX PJB" SEE SHEET C303. INSTALL 48" FIBERGLASS MANHOLE RISER CENTERED AT THE MIDDLE OF THE BOX STRUCTURE. MANHOLE COVER PER CITY OF MIDLAND DETAIL No. 401 SEE SHEET C302.
7. CONTRACTOR TO ADJUST STORM DRAIN MANHOLE FRAME AND COVER TO FINAL GRADE PER CITY OF MIDLAND DETAIL No. 316 AND 318 SEE SHEET C301.
8. INSTALL CAST-IN-PLACE CURB INLET PER TxDOT DETAIL CCO SEE SHEET C304. CURB INLET DIMENSIONS PER PLAN.
9. CONSTRUCT CONCRETE HEADWALLS WITH FLARED WINGS FOR 0° SKEW PIPE CULVERTS PER DETAIL No. CH-FW-0 SEE SHEET C305.
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STORM DRAIN LAYOUT NOTES:

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B. ALL CONCRETE JUNCTION BOX WALLS ON SIDES WITH NO PIPE CONNECTION ARE TO BE FULL THICKNESS WALLS.

C. CONTRACTOR IS TO MATCH EXISTING GRADES AT ALL LOCATIONS INDICATED, INCLUDING FOR ALL GRADE DAYLIGHTING.

D. INSTALL TRACES TAPE AND TRACES WIRE ALONG ALL UNDERGROUND STORM DRAIN PIPE, BOX CULVERTS, ETC. IN COMPLIANCE WITH CITY DETAILS 310(A), 310(B), AND 321.

CURVE TABLE					
CURVE	ARC LENGTH	RADIUS	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	122.60'	190.00'	120.49'	S 05° 34' 29" W	36°58'20"
C2	120.16'	180.00'	117.94'	N 04° 56' 11" E	38°14'55"

CITY OF MIDLAND TEXAS APPROVED 11/29/2022 ENGINEERING
ACCEPTANCE OF CONSTRUCTION DOCUMENTS
The issuance or granting of the APPROVAL shall not be construed to be a permit for, or an approval of, any violation of any provision of the City Ordinances or of any other ordinance or related policy of the City of Midland. The APPROVAL of construction drawings and other data submitted to the Engineering Services Department shall not prevent the Director of Engineering Services Department from requiring the correction of errors in the construction drawings and other data. The Director of Engineering Services Department is authorized to stop construction or any of construction activities whenever a violation of this Code, or of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or related policy of the City of Midland jurisdiction.

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DRAFT
6.287
January 24, 2023

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BY	APPR.	DATE
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STORM DRAIN-I P&P

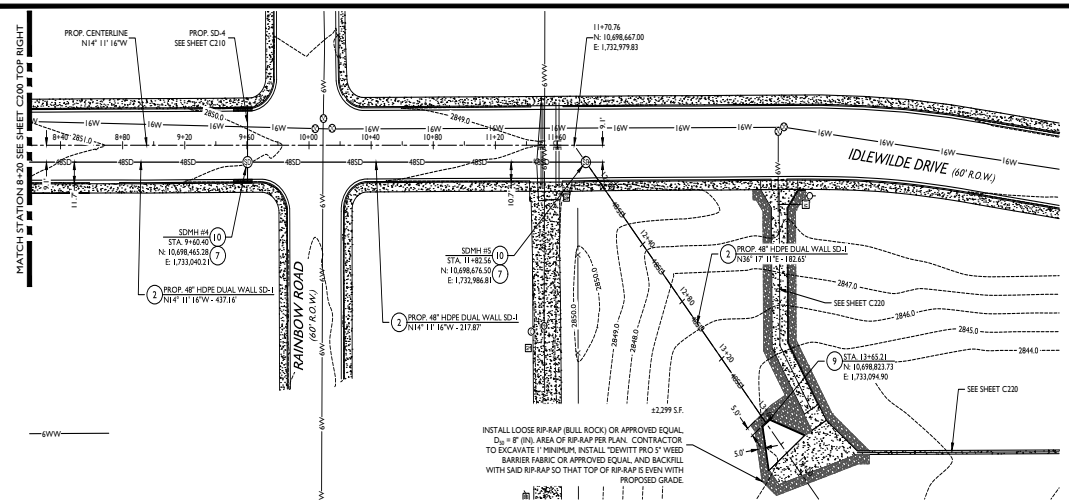
STORM DRAIN IMPROVEMENTS
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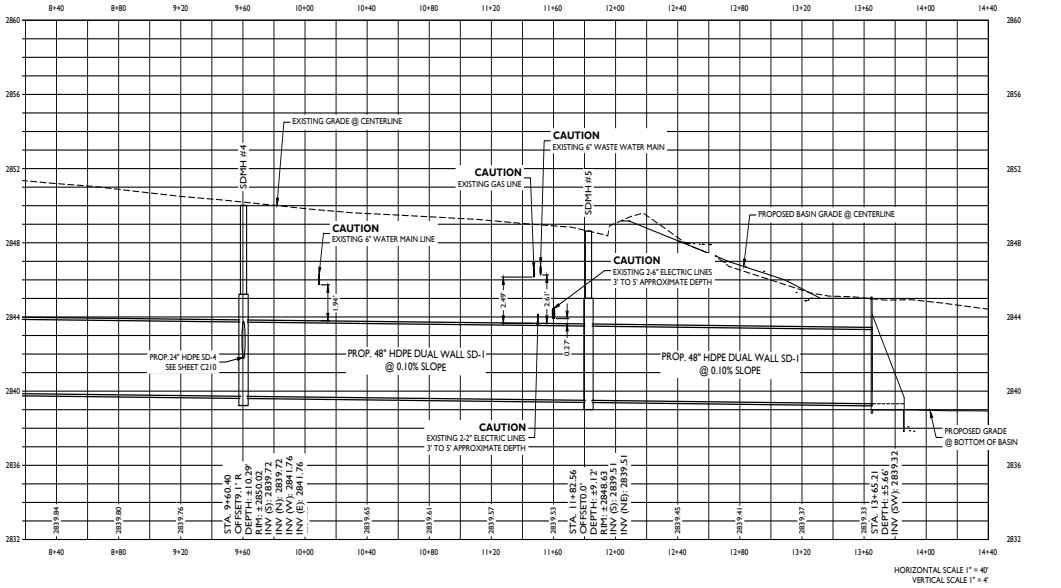
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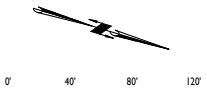
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P:\2021\210045 CITY OF MIDLAND\STORM WATER DESIGN\IDLEWILDE DRIVE\AWP\4DSC\CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C200 STORM DRAIN-I P&P.DWG







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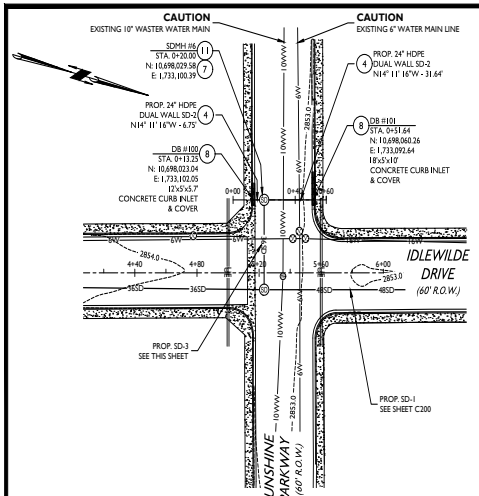
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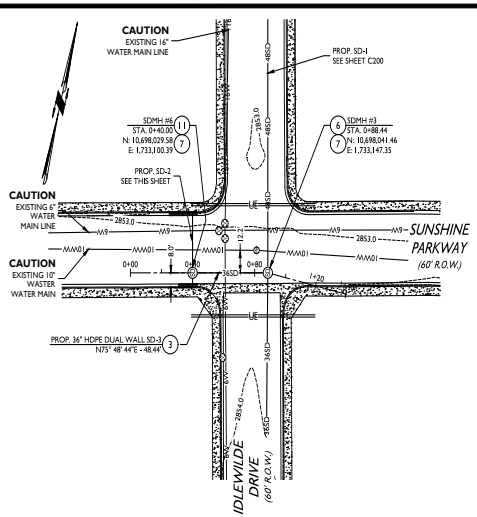
STATE OF TEXAS ANDREW L. MELLEN 106572 LICENSED PROFESSIONAL ENGINEER 11/21/2022

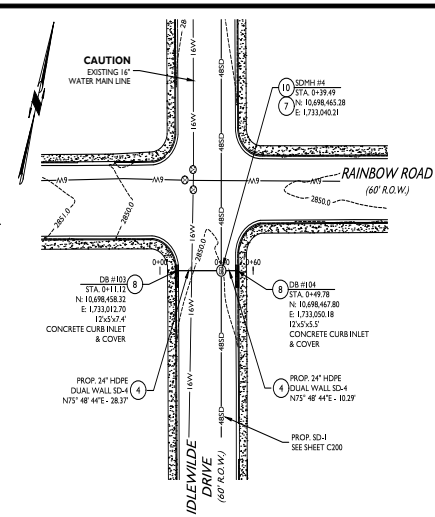
SHEET C201 OF 18

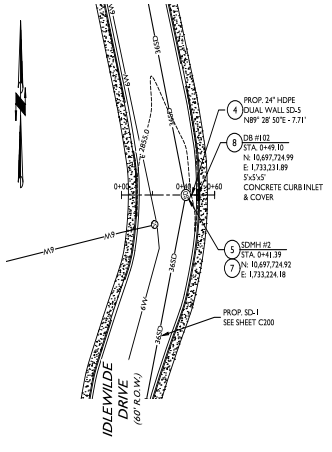
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F:\2021\210045 CITY OF MIDLAND-STORM WATER DESIGN IDLEWILDE DR\DRAWINGS\CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C201 STORM DRAIN-I P&P.DWG

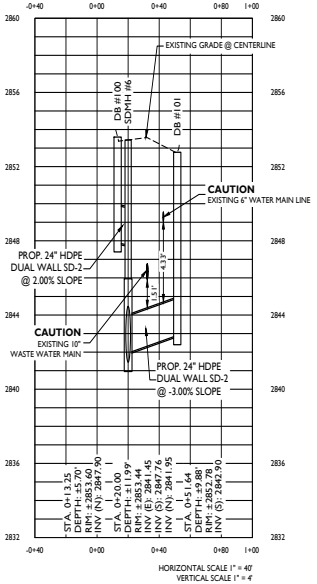
PACKET 6.288 January 24, 2023

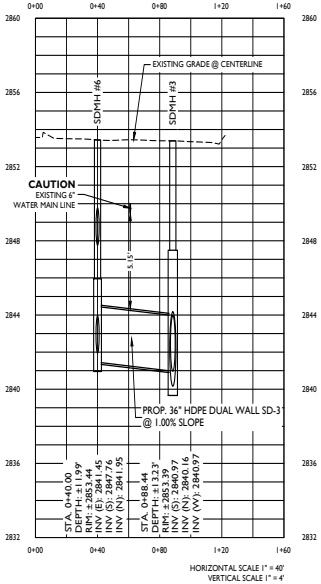


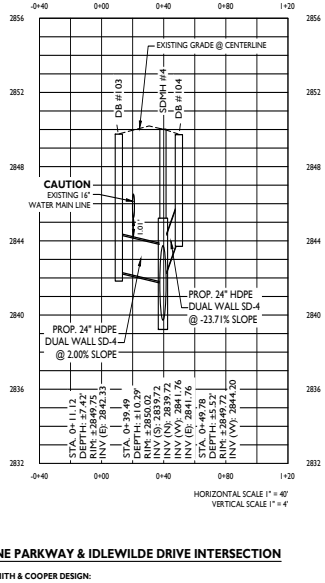


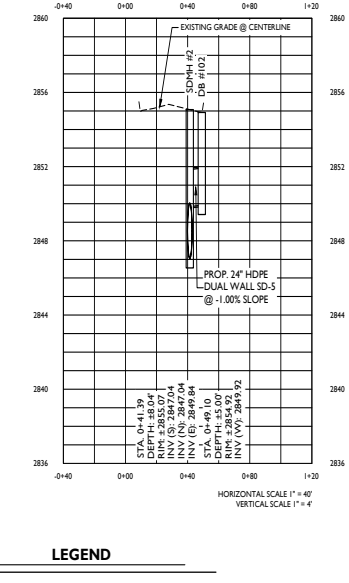












CITY OF MIDLAND
APPROVED
11/29/2022
ENGINEERING
APPROVAL IS CONDITIONAL UNTIL SUBMISSION
The issuance of granting of this APPROVAL shall not be construed to be a permit for, or an approval of, any violation of any section of the City Code of the City Ordinances, or the City Standard Details or Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction. APPROVAL presumes that no violations of any section of the City Code of the City Ordinances, or the City Standard Details or Specifications, or of any other ordinance or adopted policy of the City of Midland exists.
The Engineering Services Department and the Director of Engineering Services Department from requiring the correction of errors in the plans and/or specifications. The Engineering Services Department is authorized to stop completion or use of infrastructure where such infrastructure is in violation of the City Code of the City Ordinances, or the City Standard Details or Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAINLINE CROSSING A WATER MAIN/LINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- SANITARY SEWER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY EXISTING GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

STORM DRAIN CONSTRUCTION NOTES:

TYP. (1) CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL 48" DIAMETER STORM DRAIN AS SHOWN. HDPE ADSTMN-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
3. INSTALL 36" DIAMETER STORM DRAIN AS SHOWN. HDPE ADSTMN-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
4. INSTALL 24" DIAMETER STORM DRAIN AS SHOWN. HDPE ADSTMN-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
5. INSTALL 60" FIBERGLASS MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C301. DETAIL No. 401 SEE SHEET C302.
6. INSTALL 6'x6'x7'-10" CONCRETE JUNCTION BOX PER TxDOT DETAIL "PRECAST JUNCTION BOX PJB" SEE SHEET C303. INSTALL 48" FIBERGLASS MANHOLE RISER CENTERED AT THE MIDDLE OF THE BOX STRUCTURE. MANHOLE COVER PER CITY OF MIDLAND DETAIL No. 401 SEE SHEET C302.
7. CONTRACTOR TO ADJUST STORM DRAIN MANHOLE FRAME AND COVER TO FINAL GRADE PER CITY OF MIDLAND DETAIL No. 316 AND 318 SEE SHEET C301.
8. INSTALL CAST-IN-PLACE CURB INLET PER TxDOT DETAIL CCO SEE SHEET C304. CURB INLET DIMENSIONS PER PLAN.
9. CONSTRUCT CONCRETE HEADWALLS WITH FLARED WINGS FOR 0° SKEW PIPE CULVERTS PER DETAIL No. CH-FW-0 SEE SHEET C305.
10. INSTALL 6'x6'x6' CONCRETE JUNCTION BOX PER TxDOT DETAIL "PRECAST JUNCTION BOX PJB" SEE SHEET C303. INSTALL 48" FIBERGLASS MANHOLE RISER CENTERED AT THE MIDDLE OF THE BOX STRUCTURE. MANHOLE COVER PER CITY OF MIDLAND DETAIL No. 401 SEE SHEET C302.
11. INSTALL 5'x5'x5' CONCRETE JUNCTION BOX PER TxDOT DETAIL "PRECAST JUNCTION BOX PJB" SEE SHEET C303. INSTALL 48" FIBERGLASS MANHOLE RISER CENTERED AT THE MIDDLE OF THE BOX STRUCTURE. MANHOLE COVER PER CITY OF MIDLAND DETAIL No. 401 SEE SHEET C302.

SUNSHINE PARKWAY & IDLEWILDE DRIVE INTERSECTION

PARKHILL SMITH & COOPER DESIGN:

FLOW REQUIRED= 90 CFS

MAVERICK ENGINEERING DESIGN:

INLET CAPACITY= 80CFS

NUMBER OF DOUBLE INLETS= 5

MAVERICK ENGINEERING DESIGN @ SDMH #2:

INLET CAPACITY= 16CFS

NUMBER OF DOUBLE INLETS= 1

RAINBOW ROAD & IDLEWILDE DRIVE INTERSECTION

PARKHILL SMITH & COOPER DESIGN:

FLOW REQUIRED= 40 CFS

MAVERICK ENGINEERING DESIGN:

INLET CAPACITY= 64CFS

NUMBER OF DOUBLE INLETS= 4

STORM DRAIN LAYOUT NOTES:

A. ALL PROPOSED STORM DRAIN IMPROVEMENTS ARE TO CONNECT TO EXISTING STORM DRAIN SYSTEM REGARDLESS OF DIMENSIONS SHOWN.

B. ALL CONCRETE JUNCTION BOX WALLS ON SIDES WITH NO PIPE CONNECTION ARE TO BE FULL THICKNESS WALLS.

C. CONTRACTOR IS TO MATCH EXISTING GRADES AT ALL LOCATIONS INDICATED, INCLUDING FOR ALL GRADE DAYLIGHTING.

D. INSTALL TRACES TAPE AND TRACES WIRE ALONG ALL UNDERGROUND STORM DRAIN PIPE, BOX CULVERTS, ETC. IN COMPLIANCE WITH CITY DETAILS 310(A), 310(B), AND 321.

LEGEND

W	DENOTES EXISTING WATER VALVE
	DENOTES EXISTING FIRE HYDRANT
S	DENOTES EXISTING MANHOLE
D	DENOTES EXISTING STORM DRAIN
E	DENOTES EXISTING ELECTRIC BOX
C	DENOTES EXISTING CABLE PEDESTAL
G	DENOTES EXISTING GAS METER
AC	DENOTES EXISTING A/C PAD
#●	DENOTES EXISTING POWER POLE
^	DENOTES EXISTING GUY ANCHOR
	DENOTES EXISTING SIGN
	DENOTES EXISTING STOP SIGN
	DENOTES EXISTING REFLECTOR
	DENOTES EXISTING STUB OUT
	DENOTES SURROUNDING PROPERTY
6W	DENOTES EXISTING 6" WATER MAIN
8W	DENOTES EXISTING 8" WATER MAIN
16W	DENOTES EXISTING 16" WATER MAIN
6WW	DENOTES EXISTING 6" WASTEWATER
10WW	DENOTES EXISTING 10" WASTEWATER
X	DENOTES EXISTING FENCE
OH	DENOTES EXISTING OVERHEAD ELECTRIC LINE
G	DENOTES EXISTING GAS LINE
	DENOTES PROPOSED STORM DRAIN MANHOLE
24SD	DENOTES PROPOSED 24" STORM DRAIN LINE
36SD	DENOTES PROPOSED 36" STORM DRAIN LINE
48SD	DENOTES PROPOSED 48" STORM DRAIN LINE

0' 40' 80' 120'
SCALE 1" = 40'

Know what's **below.** **Call** before you dig.

MAVERICK
ENGINEERING / SURVEY / WATER RESOURCES
1909 West Wall Street, Suite "K"
Midland, Texas 79701
TEXAS ENGINEER FIRM #: F-15089
TEXAS SURVEY FIRM #: 10194514
Tel: (432) 262-0999 Fax: (432) 262-0989
www.Maverick-Eng.com

BY	APPR.	DATE

REVISIONS

DRAWN BY: MJD
CHECKED BY: ALM
APPROVED BY: ALM
DATE: 04/12/2022
JOB: 210045

STORM DRAIN-2, 3, AND 4 P&P

STORM DRAIN IMPROVEMENTS

IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS

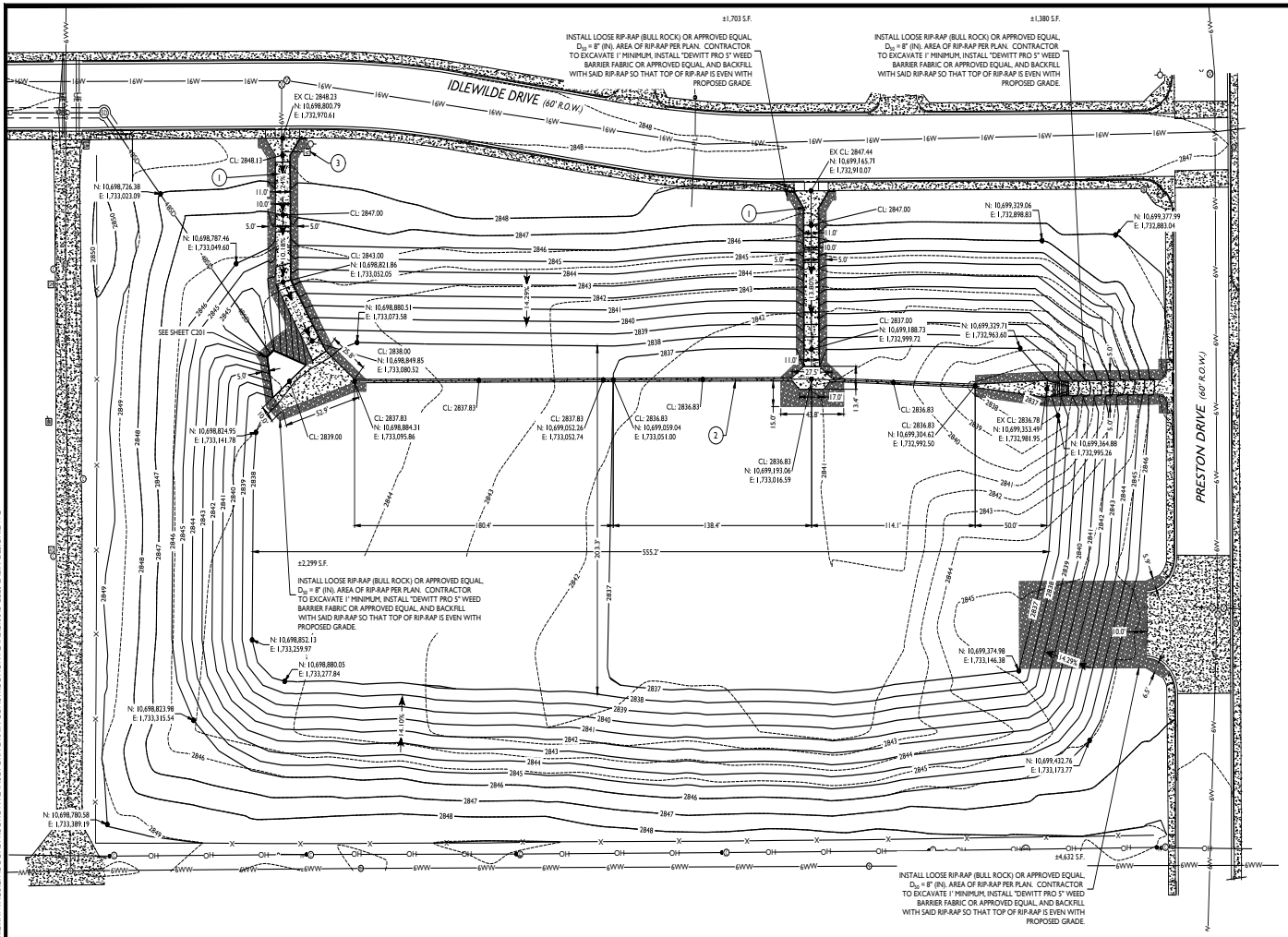
STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
11/21/2022

SHEET C210 OF 18

PACKET
6.289 January 24, 2023

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F:\2021\210045 CITY OF MIDLAND-STORM WATER DESIGN IDLEWILDE DR\DRAWINGS\CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C210 STORM DRAIN-2 3 4 S P&P.DWG



0' 40' 80' 120'

SCALE 1" = 40'

LEGEND

- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING STORM DRAIN
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING CABLE PEDESTAL
- DENOTES EXISTING GAS METER
- DENOTES EXISTING A/C PAD
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING SIGN
- DENOTES EXISTING STOP SIGN
- DENOTES EXISTING REFLECTOR
- DENOTES EXISTING STUB OUT
- DENOTES SURROUNDING PROPERTY
- 6W — DENOTES EXISTING 6" WATER MAIN
- 8W — DENOTES EXISTING 8" WATER MAIN
- 16W — DENOTES EXISTING 16" WATER MAIN
- 6WW — DENOTES EXISTING 6" WASTEWATER
- 10WW — DENOTES EXISTING 10" WASTEWATER
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- G — DENOTES EXISTING GAS LINE
- DENOTES PROPOSED STORM DRAIN MANHOLE
- 24SD — DENOTES PROPOSED 24" STORM DRAIN LINE
- 36SD — DENOTES PROPOSED 36" STORM DRAIN LINE
- 48SD — DENOTES PROPOSED 48" STORM DRAIN LINE

MAVERICK ENGINEERING BASIN DESIGN:

POND VOLUME= 34.31 ACRE-FT
TOP OF POND= 2846.5'

ELEVATION	AREA	VOLUME	
2836	10	0	
2837	59366	29688	
2838	114398	116570	
2839	124865	236201.5	
2840	135653	366460.5	
2841	146799	507686.5	
2842	158229	660200.5	
2843	169971	824300.5	
2844	182026	1000299	
2845	194422	1188523	
2846	207091	1389280	
2846.5	214502	1494678	34.31308 ACRE-FT

POND CUT VOLUME = 19,967 CY
6" TOP SOIL CUT VOLUME = 4,977 CY
TOTAL CUT VOLUME = 24,944CY

PARKHILL SMITH & COOPER BASIN DESIGN:

POND VOLUME= 34 ACRE-FT
TOP OF POND= 2846'

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
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- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- SANITARY SEWER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
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BASIN CONSTRUCTION NOTES:

TYP. (1) CONSTRUCT CONCRETE DRAINAGE FLUMES PER CITY OF MIDLAND DETAIL NO. 403 (A) & 403 (B) SEE SHEET C302.
2. CONSTRUCT 2' WIDE CONCRETE PILOT SWALE 3600 PSI, FIBER REINFORCED (3-LB/SY/CY), TxDOT CLASS "C" CONCRETE. SEAL ALL CONCRETE JOINTS PER CITY OF MIDLAND STANDARDS. SEE CITY OF MIDLAND VALLEY GUTTER DETAIL No. 218 (A) & 218 (B) SHEET C302.
3. INSTALL 2" IRRIGATION METER PER CITY OF MIDLAND DETAILS 604(A) & 604(B) ON SHEET C301.

CITY OF MIDLAND APPROVED 11/29/2022 ENGINEERING

APPROVED BY CITY ENGINEER FOR CONSTRUCTION

The issuance or granting of this APPROVAL shall not be construed to be an authorization for any violation of any of the provisions of the City Code, or any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction. APPROVAL presumes to give authority to violate or cancel the provisions of of the City Code, or any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction shall not be valid. The issuance of this APPROVAL based on the construction documents and other data shall not prevent the Engineering Services Department shall not prevent the Director of Engineering Services Department from requiring the correction of errors in the construction documents and other data. The Engineering Services Department is authorized to stop development of any or all construction where such construction is in violation of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction.

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Midland, Texas 79701
TEXAS ENGINEER FIRM #: F-15089
TEXAS SURVEY FIRM #: 10194514
Tel: (432) 262-0999 Fax: (432) 262-0989
www.Maverick-Eng.com

BY	APPR.	DATE

REVISIONS

DRAWN BY: MJD
CHECKED BY: ALM
APPROVED BY: ALM
DATE: 04/12/2022
JOB: 210045

BASIN DESIGN

STORM DRAIN IMPROVEMENTS

IDLEVILDE DRIVE
CITY OF MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
11/21/2022

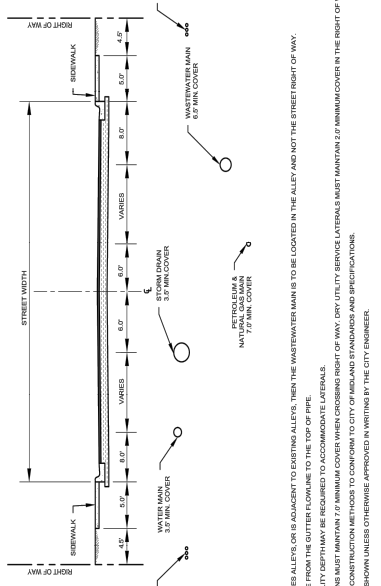
SHEET C220 OF 18

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P:\2021\210045 - CITY OF MIDLAND-STORM WATER DESIGN IDLEWILDE DRIVE\AWP\DESIGN\CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C220 BASIN DESIGN.DWG

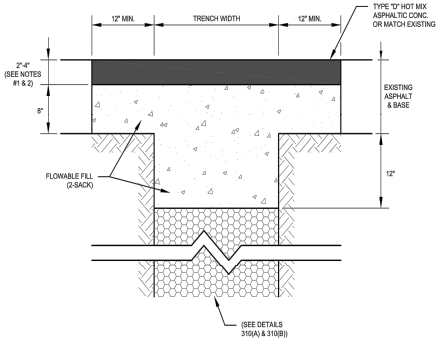


APPROVAL TO CONSTRUCT CITY INFRASTRUCTURE
The issuance or granting of this APPROVAL shall not be construed to be an authorization for any violation of any of the provisions of the Subdivision Ordinance, Standard Details and Standard Specifications, or of any other ordinance or related policy of the City of Midland jurisdiction. APPROVAL presuming to give authority to violate or cancel the provisions of the Subdivision Ordinance, of the City Standard Details & Specifications, or of any other ordinance or related policy of the City of Midland jurisdiction shall not be valid. The issuance of this APPROVAL based on the submittal of incorrect data shall not prevent the City Engineering Services Department from requiring the correction of errors in the construction drawings and other data. The Director of Engineering Services Department reserves the right to withdraw approval of any infrastructure where such infrastructure is in violation of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or related policy of the City of Midland jurisdiction.



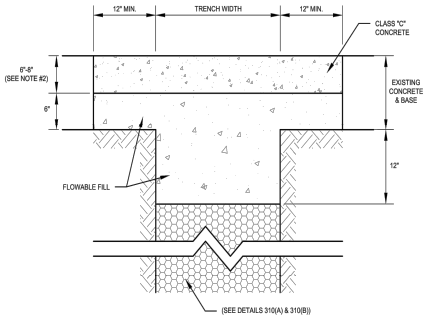
NOTES:
1. IF A SITE INCLUDES ALLEYS, OR IS ADJACENT TO EXISTING ALLEYS, THEN THE WASTEWATER MAIN IS TO BE LOCATED IN THE ALLEY AND NOT THE STREET RIGHT OF WAY.
2. ALL COVERS ARE FROM THE GUTTER FLOWLINE TO THE TOP OF PIPE.
3. ADDITIONAL UTILITY DEPTH MAY BE REQUIRED TO ACCOMMODATE LATERALS.
4. DRY UTILITY MAINS MUST MAINTAIN 7.0' MINIMUM COVER WHEN CROSSING RIGHT OF WAY. DRY UTILITY SERVICE LATERALS MUST MAINTAIN 2.0' MINIMUM COVER IN THE RIGHT OF WAY.
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM		SCALE: NTS	DETAIL: 304
CHECKED: JCF	EFFECTIVE DATE: 10/01/2018		
APPROVED: MCC	LOCAL STREET UTILITY MAIN SPACING		



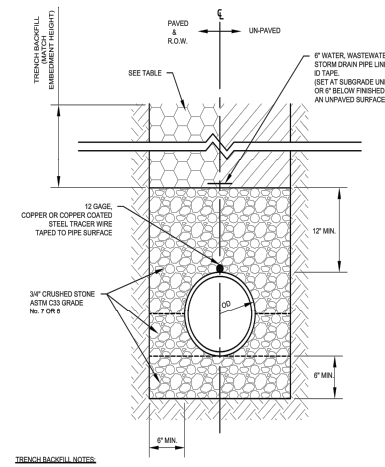
NOTES:
1. ASPHALT PAVEMENT THICKNESS TO BE A MINIMUM OF 2" OR MATCH THE EXISTING ASPHALT THICKNESS IF IT IS GREATER THAN 2" THICK.
2. PLACE ASPHALT PAVEMENT IN MAXIMUM 2" LIFTS, 95% MODIFIED COMPACTION.
3. PLACE ALL FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT) AS A SINGLE CONTINUOUS POUR.
4. EXTEND BOTH ASPHALT AND FLOWABLE FILL 12" BEYOND THE EDGE OF THE TRENCH ON BOTH SIDES.
5. SEE DETAILS 310(A) AND 310(B) REGARDING TRENCH BACKFILL REQUIREMENTS BENEATH THE FLOWABLE FILL.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 311	
MIDLAND Engineering Services	ASPHALT TRENCH PAVEMENT REPLACEMENT		



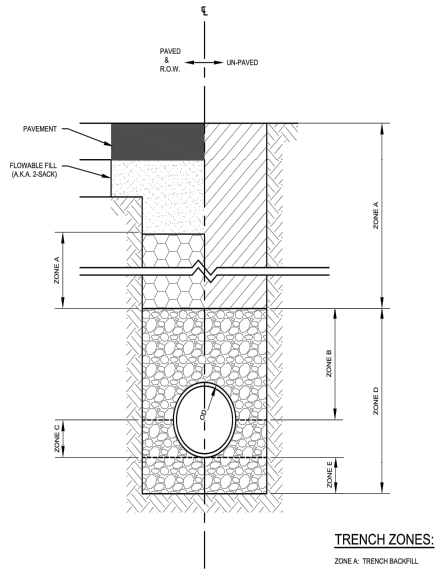
NOTES:
1. CONCRETE TO BE CITY OF MIDLAND CLASS "C" CONCRETE, 3600 PSI. USE FIBER REINFORCED CONCRETE PAVEMENT THROUGHOUT.
2. CONCRETE PAVEMENT THICKNESS TO BE A MINIMUM OF 6" OR MATCH THE EXISTING CONCRETE THICKNESS IF IT IS GREATER THAN 6" THICK. CONCRETE PAVEMENT THICKNESS TO BE MINIMUM 8" FOR ARTERIAL PAVEMENT.
3. PLACE ALL FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT) AS A SINGLE CONTINUOUS POUR.
4. EXTEND BOTH CONCRETE AND FLOWABLE FILL 12" BEYOND THE EDGE OF THE TRENCH ON BOTH SIDES.
5. SEE DETAILS 310(A) AND 310(B) REGARDING TRENCH BACKFILL REQUIREMENTS BENEATH THE FLOWABLE FILL.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 312	
MIDLAND Engineering Services	CONCRETE TRENCH PAVEMENT REPLACEMENT		



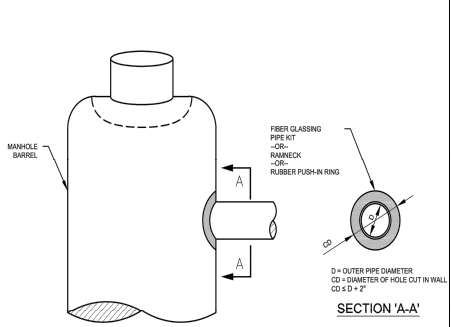
TRENCH BACKFILL NOTES:
1. APPLIES TO ALL PIPE TYPES. (DUCTILE IRON, PVC, ETC.)
2. UTILIZE SELECT FILL BACKFILL BENEATH ALL PAVED SURFACES. NATIVE MATERIAL BACKFILL CAN ONLY BE USER FOR UNPAVED TRENCH CONDITIONS IF BACKFILL MATERIAL IS ≤ 30LL AND ≤ 15 PI.
3. NATIVE MATERIAL TO BE EXISTING EXCAVATED SOIL FROM TRENCH WITH ALL MATERIAL BROKEN DOWN ≤ 2".
4. MOISTURE CONDITION ALL BACKFILL MATERIAL PRIOR TO PLACING IN TRENCH.
5. PLACE TRENCH BACKFILL MATERIAL IN MAXIMUM 12" LOOSE LIFTS AND COMPACT TO MAXIMUM 8" COMPACTED LIFTS.
6. REFER TO CITY DETAILS 311 AND 312 FOR TRENCH PAVEMENT REPLACEMENT REQUIREMENTS.
7. PLACE LAYERS B, C, AND E FOUND ON CITY DETAIL 310(B) AS SEPARATE LAYERS.
8. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
9. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 310(A)	
MIDLAND Engineering Services	TRENCHING AND BEDDING		



TRENCH ZONES:
ZONE A: TRENCH BACKFILL
ZONE B: PIPE BACKFILL
ZONE C: HAUNCHING
ZONE D: PIPE EMBEDMENT
ZONE E: BEDDING

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 310(B)	
MIDLAND Engineering Services	TRENCHING AND BEDDING		



NOTES:
1. THE DIAMETER OF THE CUTOUT IN THE MANHOLE BARREL IS TO BE NO MORE THAN 2.0" WIDER THAN THE OUTER WALL DIAMETER OF THE PENETRATING PIPE.
2. THE PENETRATING PIPE IS TO BE CENTERED IN THE MANHOLE BARREL CUTOUT.
3. PIPES PENETRATING MANHOLE MUST BE MINIMUM 6" DIAMETER, AND SERVICE LINES MUST BE CONSTRUCTED TO CITY WASTEWATER MAIN OR STORM DRAIN STANDARDS WITHIN PUBLIC RIGHT OF WAY OR EASEMENT.
4. FORM FLOW SURFACE AND MOUND CONCRETE AROUND PIPE PENETRATIONS, TO FORM A SEAL, IN ONE CONTINUOUS PLACEMENT OPERATION.
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 314	
MIDLAND Engineering Services	TYPICAL FIBERGLASS MANHOLE PIPE PENETRATION		

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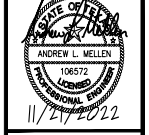
BY	APPR.	DATE

REVISIONS

DRAWN BY:	MJD
CHECKED BY:	ALH
APPROVED BY:	ALH
DATE:	04/12/2022
JOB:	210045

UTILITY DETAILS

STORM DRAIN IMPROVEMENTS
IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS



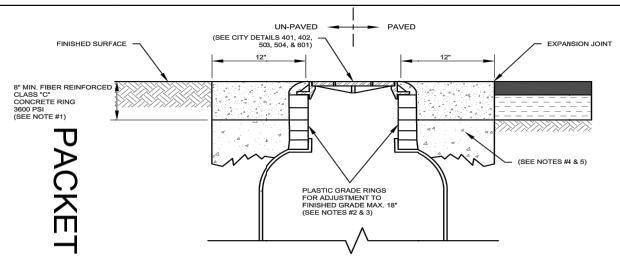
SHEET C300 OF 18

P:\2021\210045-CITY OF MIDLAND-STORM WATER DESIGN IDLEWILDE DR\DRAWINGS\CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C300 UTILITY DETAILS.DWG
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PACKET 6.291 January 24, 2023

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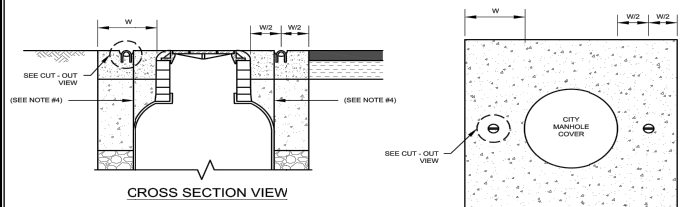
NEW MANHOLE RING & COVER ADJUSTMENT

NOTES:

1. INSTALL 12" MIN. FIBER REINFORCED CLASS "C" CONCRETE RING, 3600 PSI, WHEN MANHOLE IS LOCATED IN AN ARTERIAL R.O.W.
2. GRADE RINGS TO MEET ASTM STANDARD A48 AND TO BE 2", 4", OR 6" THICKNESS AS REQUIRED. INSTALL ASPHALT TAR IN THICK, UNIFORM COATING OVER ALL OUTER ADJUSTMENT RING SURFACES AND JOINTS.
3. ENGINEERING SERVICES REPRESENTATIVE AND UTILITY SERVICES REPRESENTATIVE MAY ALLOW GREATER ADJUSTMENT RING DEPTH TO ACCOMMODATE PAVING STRUCTURES.
4. REMOVE ALL MATERIAL EXCAVATED FROM SITE AND EXCAVATION.
5. FILL ANY OVER-EXCAVATION WITH FLOWABLE FILL 2-SACK (2-SACK = 188 LBS/CY, PORTLAND CEMENT).
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

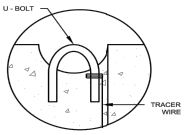
MIDLAND Engineering Services

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 318
CHECKED: JCF	NEW MANHOLE RING & COVER ADJUSTMENT		
APPROVED: MCC			



CROSS SECTION VIEW

PLAN VIEW



CUT - OUT VIEW

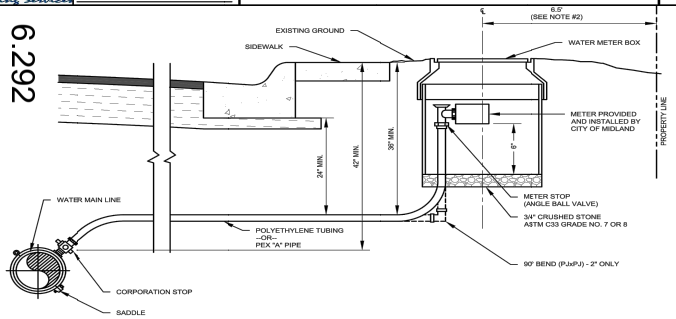
NOTES:

1. SEE OTHER CITY STANDARD DETAILS FOR INFORMATION REGUARDING MANHOLES, COVERS, CONCRETE RINGS, ETC.
2. U - BOLT IS TO BE GALVANIZED STEEL RATED FOR OUDOOR EXPOSURE, 1.0" DIAMETER.
3. U - BOLT IS TO BE SET FLUSH WITH FINISHED SURFACE OF CONCRETE RING. THERE IS TO BE A SMALL DEPRESSION IN THE CONCRETE SUFFICIENT TO ALLOW A CLAMP OR WIRE TO BE PLACED AROUND THE EXPOSED METAL.
4. TRACER WIRE PER DETAIL 310(A) TO BE TAPED TO SIDE OF MANHOLE AND WRAPPED SECURELY TO END OF U-BOLT WHEN INSTALLED. TRACER WIRE IS TO REMAIN ENTIRELY COVERED.
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 321
CHECKED: JCF	MANHOLE DETECTOR WIRE END		
APPROVED: MCC			

6.292



NOTES:

1. ALL WATER SERVICES TO BE 1" OR 2" DIAMETER.
2. THE DISTANCE FROM PROPERTY LINE SHOWN IS FOR 5' SIDEWALK AT THE PROPERTY LINE. WHEN 5' SIDEWALK IS PLACED AT THE BACK OF CURB, PLACE METER BOXES A MINIMUM OF 6.5' FROM THE BACK OF CURB.
3. TWO ADJACENT SERVICE LATERALS MAY BE PLACED IN THE SAME TRENCH. EACH TAP MUST BE SEPARATE AND HAVE BOTH A CORPORATION STOP AND A METER STOP. ("BULLHEAD TAPS ARE NOT PERMITTED".)
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 604(A)
CHECKED: JCF	1" AND 2" WATER METER AND SERVICE CONNECTION		
APPROVED: MCC			

MIDLAND Engineering Services

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 604(B)
CHECKED: JCF	1" AND 2" WATER METER AND SERVICE CONNECTION		
APPROVED: MCC			

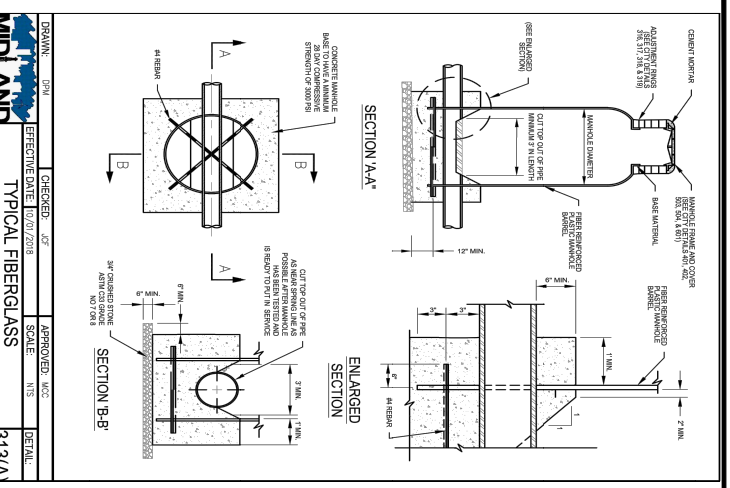
January 24, 2023

NOTES:

1. ALL COMPONENTS OF ANY WATER METER SERVICE LINE MUST COME FROM THE SAME BRAND WHEREVER POSSIBLE.
2. PLASTIC WRAP ALL SADDLES.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

APPROVED COMPONENT LIST

1" WATER METER SERVICE	2" WATER METER SERVICE
SADDLE OPTION 1: DUCTILE IRON W/DUAL BAND OC THREAD STEEL STRAP	SADDLE OPTION 1: DUCTILE IRON W/DUAL BAND OC THREAD STEEL STRAP
1. FORD FC22202 SADDLE 2. MUELLER DR2 S SERIES 3. A.Y. MCDONALD SERIES 3895 4. OR APPROVED EQUAL	1. FORD FC22202 SADDLE 2. MUELLER DR2 S SERIES 3. A.Y. MCDONALD SERIES 3895A 4. OR APPROVED EQUAL
SADDLE OPTION 2: BRASS W/DUAL BAND OC THREAD STEEL STRAP	SADDLE OPTION 2: BRASS W/DUAL BAND OC THREAD STEEL STRAP
1. FORD 202BS22 SADDLE 2. MUELLER DR2 S SERIES 3. A.Y. MCDONALD SERIES 3895 4. OR APPROVED EQUAL	1. FORD 202BS22 SADDLE 2. MUELLER DR2 S SERIES 3. A.Y. MCDONALD SERIES 3895A 4. OR APPROVED EQUAL
CORPORATION STOP	CORPORATION STOP
1. FORD FB1000-7-Q-NL 2. MUELLER B-25008N 3. A.Y. MCDONALD SERIES 74701B-22 4. OR APPROVED EQUAL	1. FORD FB1000-7-Q-NL 2. MUELLER B-25008N 3. A.Y. MCDONALD SERIES 74701B-22 4. OR APPROVED EQUAL
CURB STOP METER VALVE	CURB STOP METER VALVE
1. FORD BA43-444W-G-NL 2. MUELLER H-15400 3. A.Y. MCDONALD SERIES 74602B-221 4. OR APPROVED EQUAL	1. FORD BA43-777W-G-NL 2. MUELLER H-15403 3. A.Y. MCDONALD SERIES 74603B-222 4. OR APPROVED EQUAL
WATER METER BOX	WATER METER BOX
1. FORD VBH1730-12-NL OR VBH1730-12-NL-LOKDAY 2. OR APPROVED EQUAL	1. FORD VBH1730-12-NL OR VBH1730-12-NL-LOKDAY 2. OR APPROVED EQUAL
SERVICE LINE PIPE 1. ASTM D-2737 POLYETHYLENE TUBING 2. MUNCI PEX "A" PIPE 3. OR APPROVED EQUAL	SERVICE LINE PIPE 1. ASTM D-2737 POLYETHYLENE TUBING 2. MUNCI PEX "A" PIPE 3. OR APPROVED EQUAL



MIDLAND Engineering Services

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 313(A)
CHECKED: JCF	TYPICAL FIBERGLASS MANHOLE		
APPROVED: MCC			

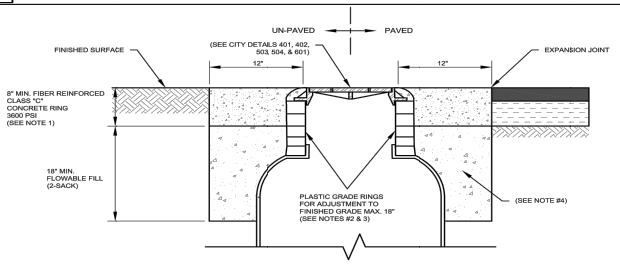
NOTES:

1. 48" DIAMETER MANHOLES TO BE USED FOR PIPE DIAMETERS OF 24" OR SMALLER ONLY.
2. INSTALL DROPS AND INTERSECTING PIPES ONLY WHEN CALLED FOR IN CONSTRUCTION DRAWINGS.
3. SET MANHOLE FRAME IN SEALANT PER CITY OF MIDLAND STANDARD SPECIFICATIONS.
4. NEW MANHOLE TO HAVE SEAMLESS AND CONTINUOUS NECK, SHOULDER, AND BARREL.
5. ALL CONCRETE TO BE CLASS "A" CONCRETE.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 313(B)
CHECKED: JCF	TYPICAL FIBERGLASS MANHOLE		
APPROVED: MCC			





NEW MANHOLE ADJUSTMENT

NOTES:

1. INSTALL 12" MIN. FIBER REINFORCED CLASS "C" CONCRETE RING,3600 PSI, WHEN MANHOLE IS LOCATED IN AN ARTERIAL R.O.W.
2. GRADE RINGS TO MEET ASTM STANDARD A48 AND TO BE 2", 4", OR 6" THICKNESS AS REQUIRED. INSTALL ASPHALT TAR IN THICK, UNIFORM COATING OVER ALL OUTER ADJUSTMENT RING SURFACES AND JOINTS.
3. ENGINEERING SERVICES REPRESENTATIVE AND UTILITY SERVICES REPRESENTATIVE MAY ALLOW GREATER ADJUSTMENT RING DEPTH TO ACCOMMODATE PAVING STRUCTURES.
4. REMOVE ALL MATERIAL EXCAVATED FROM SITE AND EXCAVATION, AND FILL TO FINISHED BASE ELEVATION WITH FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT).
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 316
CHECKED: JCF	NEW MANHOLE ADJUSTMENT		
APPROVED: MCC			

SHEET C301 OF 18

UTILITY DETAILS

STORM DRAIN IMPROVEMENTS

IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS

DRAWN BY: MJD
CHECKED BY: ALM
APPROVED BY: ALM
DATE: 04/12/2022
JOB: 210045

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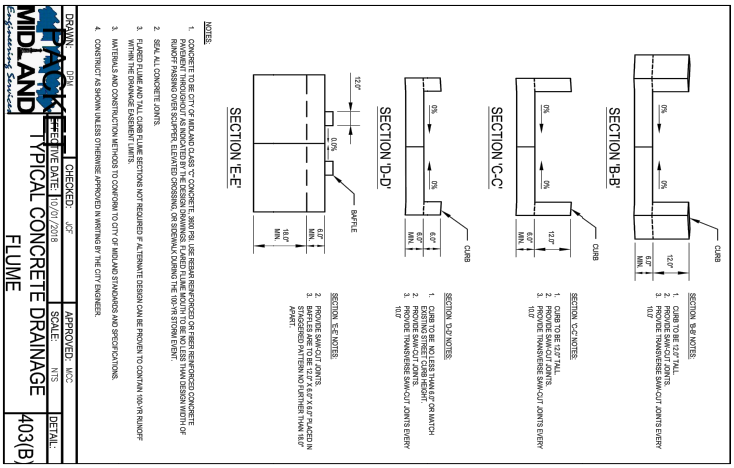


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F:\2021\210045-CITY OF MIDLAND-STORM WATER DESIGN IDLEWILDE DR\DRAWINGS\CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C302 UTILITY DETAILS.DWG

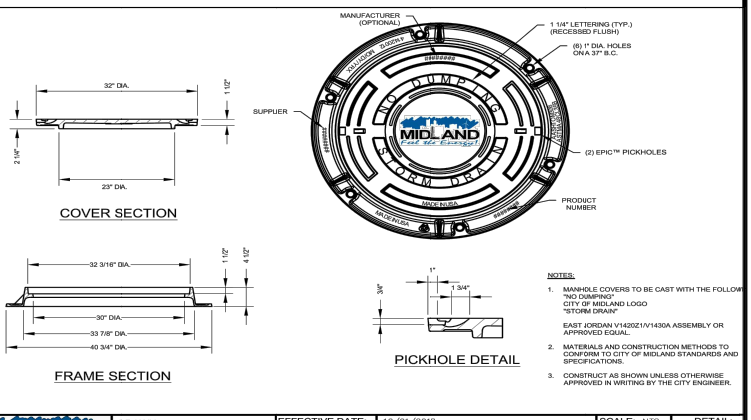




MIDLAND Engineering Services

DRAWN:	DPM
CHECKED:	JCF
APPROVED:	MCC
EFFECTIVE DATE:	10/01/2018
SCALE:	NTS
DETAIL:	403(B)

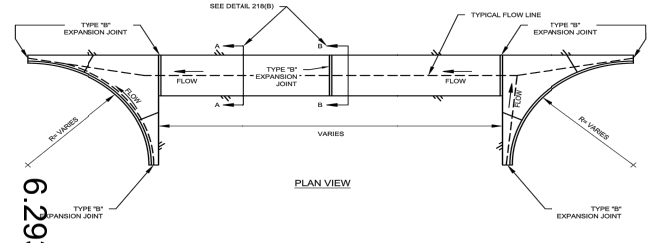
TYPICAL CONCRETE DRAINAGE FLUME



MIDLAND Engineering Services

DRAWN:	DPM
CHECKED:	JCF
APPROVED:	MCC
EFFECTIVE DATE:	10/01/2018
SCALE:	NTS
DETAIL:	401

TYPICAL STORM DRAIN COVER



6.293

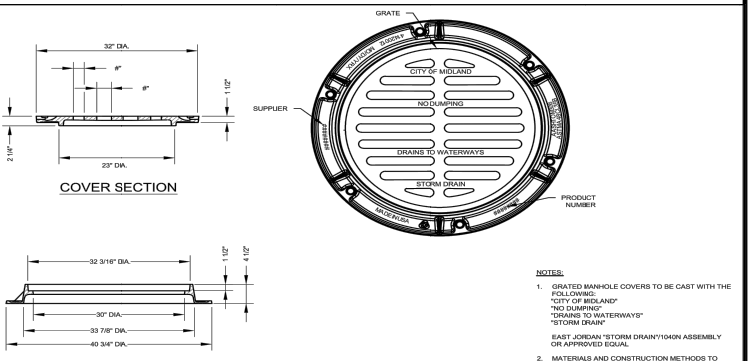
NOTES:

1. CONCRETE TO BE CITY OF MIDLAND CLASS "C", 3600 PSI. USE FIBER REINFORCED CONCRETE PAVEMENT THROUGHOUT.
2. CONCRETE FILLET AREA TO BE PLACED WITH INTEGRAL CURB.
3. SEAL ALL CONCRETE JOINTS.
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN:	DPM
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APPROVED:	MCC
EFFECTIVE DATE:	10/01/2018
SCALE:	NTS
DETAIL:	218(A)

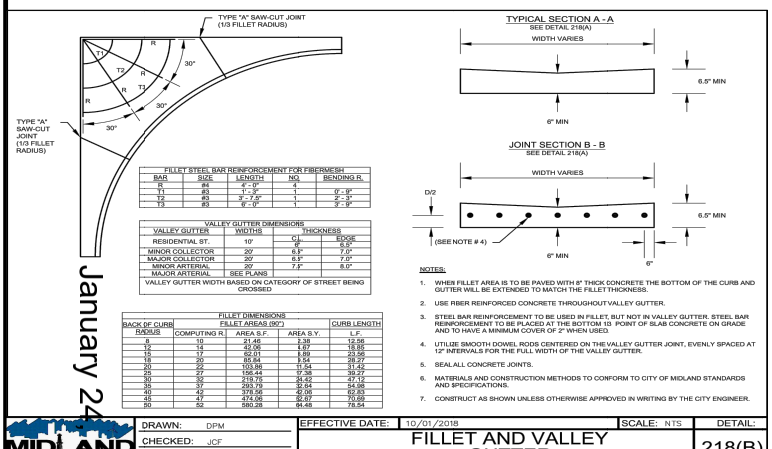
FILLET AND VALLEY GUTTER



MIDLAND Engineering Services

DRAWN:	DPM
CHECKED:	JCF
APPROVED:	MCC
EFFECTIVE DATE:	10/01/2018
SCALE:	NTS
DETAIL:	402

GRATED STORM DRAIN COVER



FILLET STEEL BAR REINFORCEMENT FOR FIBERMESH				
BAR	SIZE	LENGTH	NO.	BENDING R.
T1	#3	4' - 0"	1	0' - 9"
T2	#3	1' - 3"	1	0' - 9"
T3	#3	3' - 1.5"	1	2' - 3"
R	#3	6' - 0"	1	3' - 9"

VALLEY GUTTER DIMENSIONS			
VALLEY GUTTER	WIDTHS	THICKNESS	
RESIDENTIAL ST.	10'	CL	EDGE
MINOR COLLECTOR	20'	6.5"	6.5"
MAJOR COLLECTOR	20'	6.5"	7.0"
MINOR ARTERIAL	20'	6.5"	7.0"
MAJOR ARTERIAL	SEE PLANS	7.5"	8.0"
VALLEY GUTTER WIDTH BASED ON CATEGORY OF STREET BEING CROSSED			

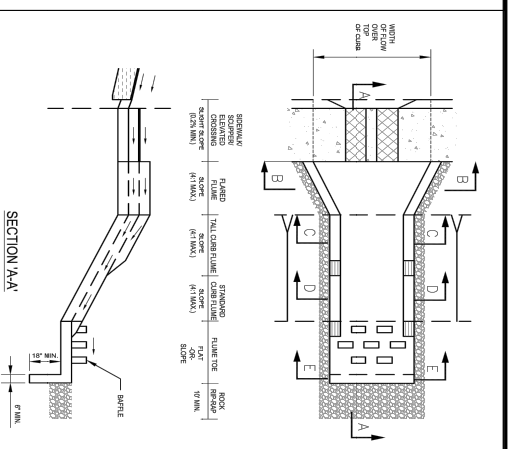
FILLET DIMENSIONS				
BACK OF CURB RADIUS	FILLET AREAS (90°) COMPUTING R.	AREA S.F.	AREA S.Y.	CURB LENGTH L.F.
8	10	21.46	2.38	12.56
12	14	40.06	4.45	18.85
15	17	57.01	6.33	23.55
18	20	85.83	1.54	28.27
20	22	103.88	11.54	31.42
25	27	156.44	17.38	39.27
30	32	219.75	24.42	47.12
35	37	293.79	32.64	54.98
40	42	378.56	42.06	62.83
45	47	474.06	52.67	70.69
50	52	580.28	64.48	78.54

January 24, 2023

MIDLAND Engineering Services

DRAWN:	DPM
CHECKED:	JCF
APPROVED:	MCC
EFFECTIVE DATE:	10/01/2018
SCALE:	NTS
DETAIL:	218(B)

FILLET AND VALLEY GUTTER



MIDLAND Engineering Services

DRAWN:	DPM
CHECKED:	JCF
APPROVED:	MCC
EFFECTIVE DATE:	10/01/2018
SCALE:	NTS
DETAIL:	403(A)

TYPICAL CONCRETE DRAINAGE FLUME

SHEET C302 OF 18

UTILITY DETAILS

STORM DRAIN IMPROVEMENTS
IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS



DRAWN BY:	MJD
CHECKED BY:	ALM
APPROVED BY:	ALM
DATE:	04/12/2022
JOB:	210045

Δ	REVISIONS	BY	APPR.	DATE

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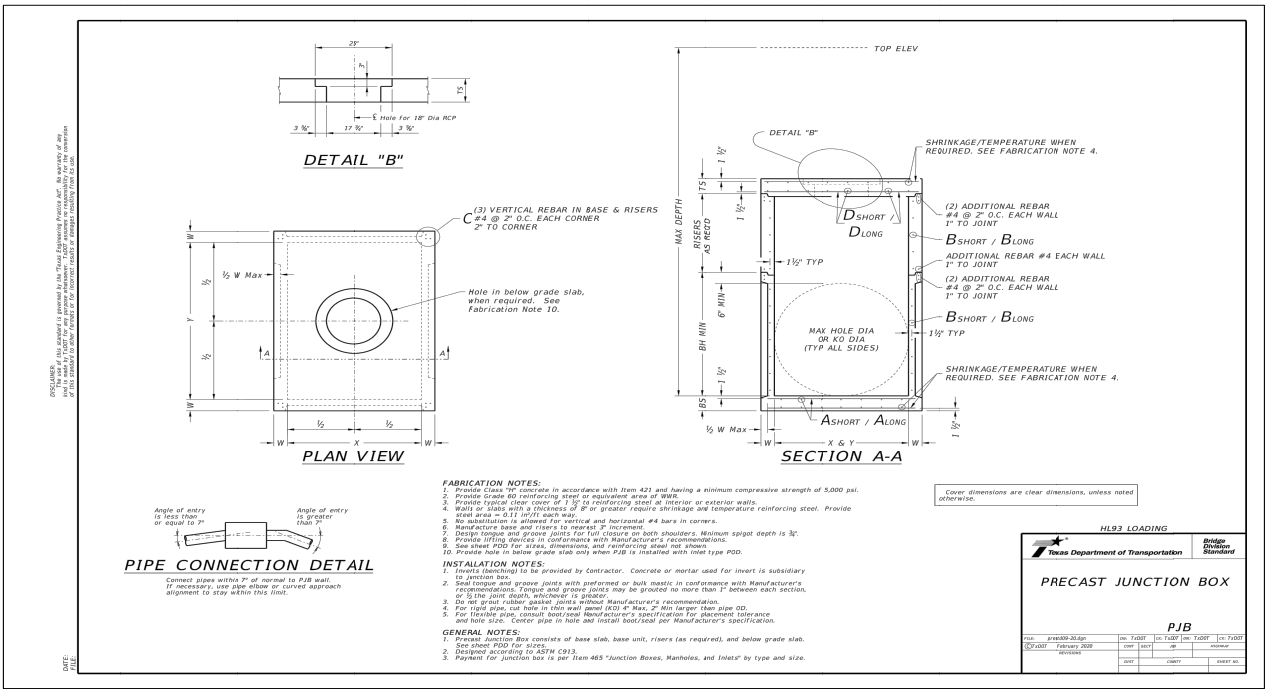
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PACKET

6.294

January 24, 2023



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DATE: 4/22

FABRICATION NOTES:
1. Provide Class "H" concrete in accordance with Item 421 and having a minimum compressive strength of 5,000 psi.
2. Provide Grade 60 reinforcing steel or equivalent area of WWR.
3. Provide typical clear cover of 1 ½" to reinforcing steel at interior or exterior walls.
4. Walls or slabs with a thickness of 8" or greater require shrinkage and temperature reinforcing steel. Provide steel area = 0.11 in²/ft each way.
5. No substitution is allowed for vertical and horizontal #4 bars in corners.
6. Manufacture base and risers to nearest 3" increment.
7. Provide lifting devices in conformance with Manufacturer's recommendations.
8. Provide lifting devices in conformance with Manufacturer's recommendations.
9. See sheet PDD for sizes, dimensions, and reinforcing steel not shown.
10. Provide hole in below grade slab only when PJB is installed with inlet type PDD.

Cover dimensions are clear dimensions, unless noted otherwise.

PIPE CONNECTION DETAIL

Connect pipes within 7° of normal to PJB wall. If necessary, use pipe elbow or curved approach alignment to stay within this limit.

INSTALLATION NOTES:
1. Inverts (benching) to be provided by Contractor. Concrete or mortar used for invert is subsidiary to junction box.
2. Seal tongue and groove joints with preformed or bulk mastic in conformance with Manufacturer's recommendations. Mortar joints may be grouted no more than 1" between each section, or ½ the joint depth, whichever is greater.
3. Do not grout rubber gasket joints without Manufacturer's recommendation.
4. For rigid pipe, cut hole in thin wall panel (KO) 4" Max, 2" Min larger than pipe OD.
5. For flexible pipe, consult boot/seal Manufacturer's specification for placement tolerance and hole size. Center pipe in hole and install boot/seal per Manufacturer's specification.

GENERAL NOTES:
1. Precast Junction Box consists of base slab, base unit, risers (as required), and below grade slab. See sheet PDD for sizes.
2. Designed according to ASTM C913.
3. Payment for junction box is per Item 465 "Junction Boxes, Manholes, and Inlets" by type and size.

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

PRECAST JUNCTION BOX

PJB

FILE:	preb09-20.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT	February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS					
		DIST	COUNTY		SHEET NO.

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DATE: 4/22

	Size	MAX DEPTH = 15 ft, to top of BASE SLAB										MAX DEPTH = 25 ft, to top of BASE SLAB										BH Height (See Fab Note 3)	Max HOLE DIA (See Fab Note 2)	Max KO DIA (See Fab Note 2)
		Base Slab			Base Unit or Riser Walls			Below Grade Slab (w/PJB) Reducing Slab (w/PB)				Base Slab			Base Unit or Riser Walls			Below Grade Slab (w/PJB) Reducing Slab (w/PB)						
		Short Span Reinf Steel Area	Long Span Reinf Steel Area	Thickness	Short Span Reinf Steel Area	Long Span Reinf Steel Area	Thickness	Reduced Riser Size	Short Span Reinf Steel Area	Long Span Reinf Steel Area	Thickness	Short Span Reinf Steel Area	Long Span Reinf Steel Area	Thickness	Short Span Reinf Steel Area	Long Span Reinf Steel Area	Thickness	Reduced Riser Size	Short Span Reinf Steel Area	Long Span Reinf Steel Area	Thickness			
	X x Y	Ashort	Along	BS	Bshort	Blong	W	RWS×RWL or ID	Dshort	Dlong	TS	Ashort	Along	BS	Bshort	Blong	W	RWS×RWL or ID	Dshort	Dlong	TS	BH MIN	HOLE DIA	KO DIA
	ft.	in²/ft	in²/ft	in.	in²/ft	in²/ft	in.	ft. **	in²/ft	in²/ft	in.	in²/ft	in²/ft	in.	in²/ft	in²/ft	in.	ft. **	in²/ft	in²/ft	in.	ft.	in.	in.
Precast Junction Box (PJB)	3x3	0.23	0.23	6	0.19	0.19	6	N/A	0.37	0.37	9	0.29	0.29	6	0.24	0.24	6	N/A	0.37	0.37	9	3.5	36	36
	4x4	0.29	0.29	6	0.24	0.24	6	N/A	0.41	0.41	9	0.47	0.41	6	0.38	0.38	6	N/A	0.41	0.41	9	4.5	48	48
	3x5	0.29	0.18	6	0.19	0.35	6	N/A	0.48	0.48	9	0.39	0.18	6	0.23	0.59	6	N/A	0.48	0.48	9	3.5	36/60	36/60
	4x5	0.36	0.18	6	0.22	0.34	6	N/A	0.42	0.42	9	0.53	0.26	6	0.39	0.59	6	N/A	0.42	0.42	9	4.5	48/60	48/60
	5x3	0.36	0.36	6	0.34	0.34	6	N/A	0.43	0.43	9	0.62	0.62	6	0.59	0.59	6	N/A	0.43	0.43	9	5.5	60	60
	5x6	0.27	0.27	9	0.34	0.45	6	N/A	0.48	0.48	9	0.47	0.45	9	0.38	0.54	8	N/A	0.48	0.48	9	5.5	60/72	60/72
	6x6	0.27	0.27	9	0.45	0.45	6	N/A	0.56	0.56	9	0.52	0.52	9	0.54	0.54	8	N/A	0.56	0.56	9	6.5	72	72
	8x8	0.46	0.46	9	0.51	0.51	8	N/A	0.45	0.45	12	0.87	0.81	9	0.59	0.59	10	N/A	0.45	0.45	12	8.5	96	72
Precast Base (PB)	3x3	0.23	0.23	6	0.19	0.19	6	N/A	N/A	N/A	N/A	0.29	0.29	6	0.24	0.24	6	N/A	N/A	N/A	N/A	3.5	36	36
	4x4	0.29	0.29	6	0.24	0.24	6	N/A	N/A	N/A	N/A	0.47	0.41	6	0.38	0.38	6	N/A	N/A	N/A	N/A	4.5	48	48
	3x5	0.29	0.18	6	0.19	0.35	6	3x3	0.30	0.34	9	0.39	0.18	6	0.23	0.59	6	3x3	0.40	0.40	9	3.5	36/60	36/60
	4x5	0.36	0.18	6	0.22	0.34	6	3x3	0.30	0.30	9	0.53	0.26	6	0.39	0.59	6	3x3	0.46	0.37	9	4.5	48/60	48/60
	4x5	0.36	0.18	6	0.22	0.34	6	4x4	0.30	0.30	9	0.53	0.26	6	0.39	0.59	6	4x4	0.39	0.39	9	4.5	48/60	48/60
	4x5	0.36	0.18	6	0.22	0.34	6	48"	0.39	0.39	9	0.53	0.26	6	0.39	0.59	6	48"	0.47	0.47	9	4.5	48/60	48/60
	4x5	0.36	0.18	6	0.22	0.34	6	3x5	0.33	0.40	9	0.53	0.26	6	0.39	0.59	6	3x5	0.48	0.48	9	4.5	48/60	48/60
	5x5	0.36	0.36	6	0.34	0.34	6	3x3	0.34	0.34	9	0.62	0.62	6	0.59	0.59	6	3x3	0.53	0.53	9	5.5	60	60
	5x5	0.36	0.36	6	0.34	0.34	6	4x4	0.36	0.36	9	0.62	0.62	6	0.59	0.59	6	4x4	0.64	0.64	9	5.5	60	60
	5x5	0.38	0.38	6	0.34	0.34	6	48"	0.36	0.36	9	0.62	0.62	6	0.59	0.59	6	48"	0.64	0.64	9	5.5	60	60
	5x5	0.36	0.36	6	0.34	0.34	6	3x5	0.34	0.40	9	0.62	0.62	6	0.59	0.59	6	3x5	0.53	0.53	9	5.5	60	60
	5x6	0.31	0.31	9	0.34	0.45	6	3x3	0.34	0.34	9	0.47	0.45	9	0.38	0.54	8	3x3	0.61	0.50	9	5.5	60/72	60/72
	5x6	0.27	0.27	9	0.34	0.45	6	4x4	0.36	0.45	9	0.47	0.45	9	0.38	0.54	8	4x4	0.74	0.57	9	5.5	60/72	60/72
	5x6	0.29	0.29	9	0.34	0.45	6	48"	0.36	0.45	9	0.47	0.45	9	0.38	0.54	8	48"	0.74	0.57	9	5.5	60/72	60/72
	5x6	0.29	0.29	9	0.34	0.45	6	3x5	0.45	0.45	9	0.47	0.45	9	0.38	0.54	8	3x5	0.61	0.61	9	5.5	60/72	60/72
	6x8	0.29	0.29	9	0.45	0.45	6	3x3	0.41	0.41	9	0.52	0.52	9	0.54	0.54	8	3x3	0.74	0.74	9	6.5	72	72
	6x6	0.27	0.27	9	0.45	0.45	6	4x4	0.45	0.45	9	0.52	0.52	9	0.54	0.54	8	4x4	0.87	0.87	9	6.5	72	72
	6x6	0.29	0.29	9	0.45	0.45	6	48"	0.45	0.45	9	0.52	0.52	9	0.54	0.54	8	48"	0.87	0.87	9	6.5	72	72
	6x6	0.29	0.29	9	0.45	0.45	6	3x5	0.45	0.45	9	0.52	0.52	9	0.54	0.54	8	3x5	0.87	0.87	9	6.5	72	72
	8x8	0.52	0.52	9	0.51	0.51	8	3x3	0.61	0.61	12	0.91	0.91	9	0.70	0.70	10	3x3	0.85	0.85	12	8.5	96	72
	8x8	0.52	0.52	9	0.51	0.51	8	4x4	0.70	0.70	12	0.87	0.81	9	0.70	0.70	10	4x4	1.01	1.01	12	8.5	96	72
	8x8	0.52	0.52	9	0.51	0.51	8	48"	0.70	0.70	12	0.87	0.81	9	0.70	0.70	10	48"	1.01	1.01	12	8.5	96	72
	8x8	0.52	0.52	9	0.51	0.51	8	3x5	0.70	0.85	12	0.87	0.81	9	0.70	0.70	10	3x5	1.01	1.01	12	8.5	96	72

** Unless otherwise indicated.

FABRICATION NOTES:
1. Maximum spacing of reinforcement is 8".
2. At manufacturer's option, provide cast or cored holes or thin wall panels (KO) to the maximum diameter shown for each. When no penetration is required, it is acceptable to provide a wall with no sectional reduction.

GENERAL NOTES:
1. Precast Junction Box consists of base slab, base unit, risers (as required), and below grade slab. See sheet PJB for details.
2. Precast Base consists of base slab, base unit, risers (as required), reducing slab (as required), and reduced risers (as required). See sheet PB for details.
3. Min Height shown is for stock base units. Use stock base units whenever practical. Smaller height base units can be used in special installation circumstances, when noted elsewhere in the plans. Absolute minimum height of base units is 2'-6".

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

DESIGN DATA FOR PRECAST BASE AND JUNCTION BOX

PDD

FILE:	preb10-20.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT	February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS					
		DIST	COUNTY		SHEET NO.

APPROVED
CITY OF MIDLAND
ENGINEERING
220252151

SHEET
C303
OF 18

11/21/2022

UTILITY DETAILS

STORM DRAIN IMPROVEMENTS
IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS

DRAWN BY:	MJD
CHECKED BY:	ALM
APPROVED BY:	ALM
DATE:	04/12/2022
JOB:	210045

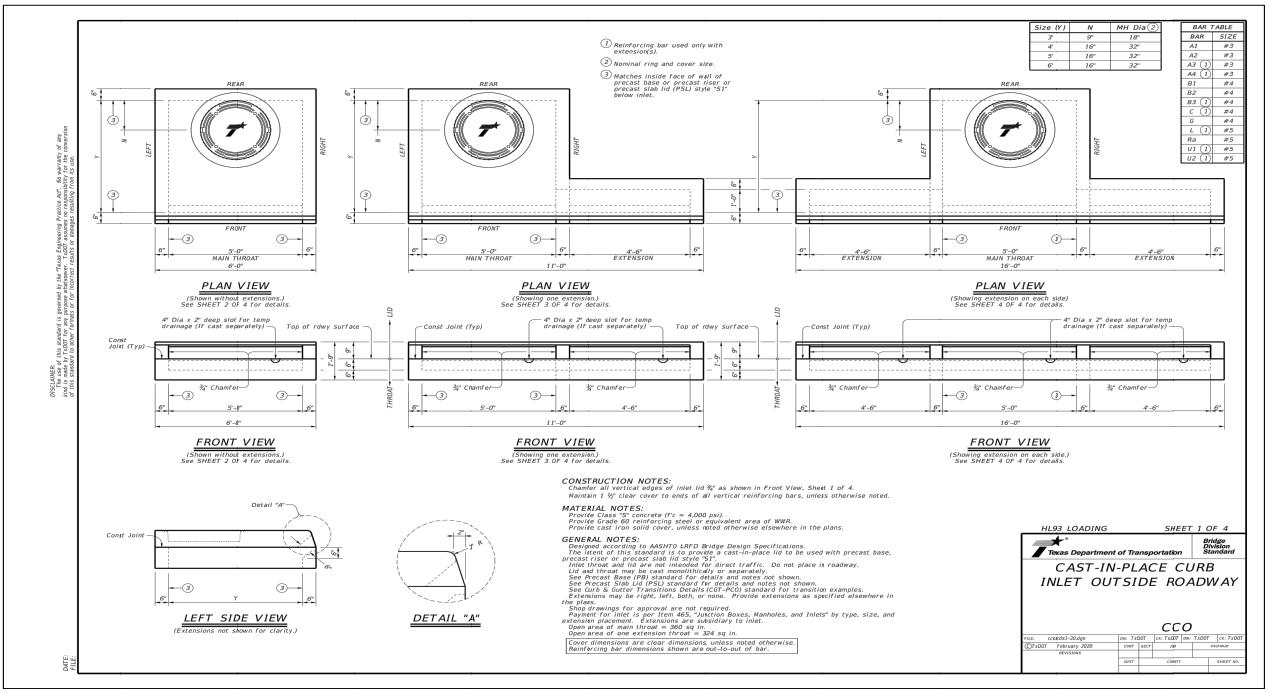
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PACKET

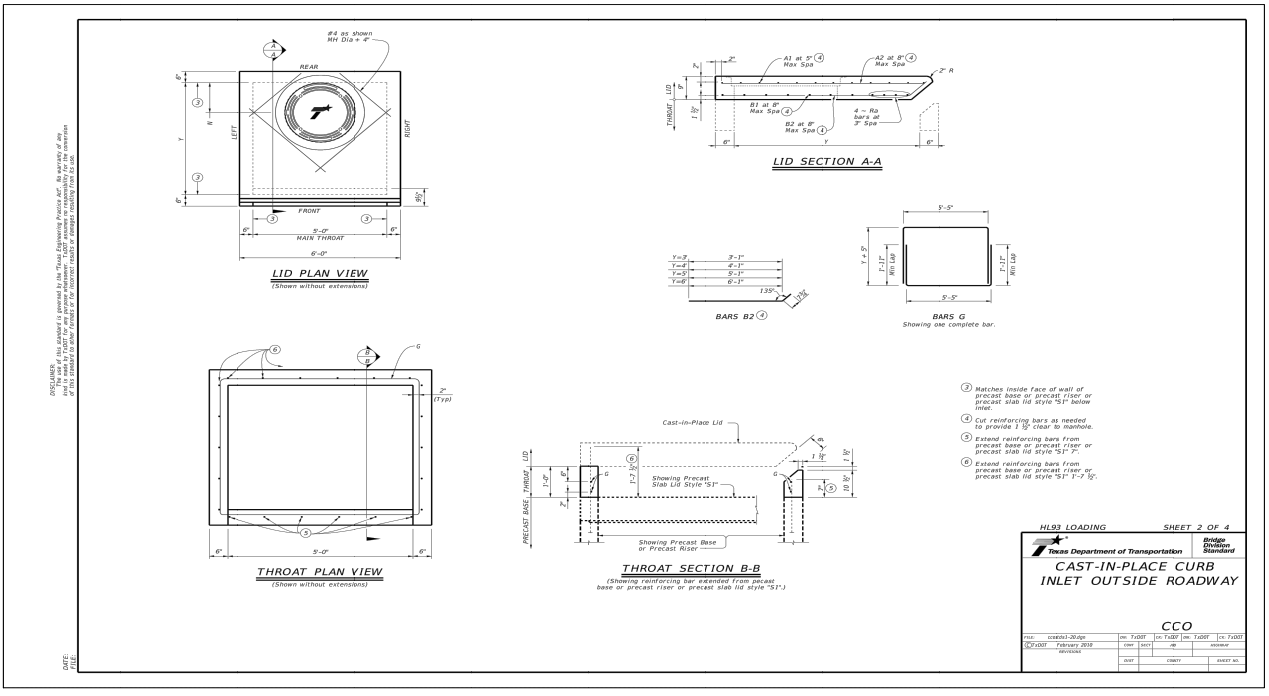
USE CITY STANDARD STORM COVER IN PLACE OF TxDOT COVER FOR CURB INLET



6.295

January 24, 2023

USE CITY STANDARD STORM COVER IN PLACE OF TxDOT COVER FOR CURB INLET





SHEET C304 OF 18



UTILITY DETAILS

STORM DRAIN IMPROVEMENTS

IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS

DRAWN BY:	MJD
CHECKED BY:	ALM
APPROVED BY:	ALM
DATE:	04/12/2022
JOB:	210045

Δ	REVISIONS	BY	APPR.	DATE

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F:\2021\210045-CITY OF MIDLAND-STORM WATER DESIGN IDLEWILDE DR\DRAWINGS\CIVIL CONSTRUCTION PLANS\STORM DRAIN CONSTRUCTION PLANS\210045 C305 UTILITY DETAILS.DWG

PACKET

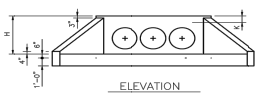
6.296

January 24, 2023

TABLE OF VARIABLE DIMENSIONS AND QUANTITIES FOR ONE HEADWALL (4)

SLOPE	DIA OF PIPE(D)	Values for one Pipe W	X	Y	L	Reinf (Lbs)	Conc (CY) (1)	Values to be added for each add'l Pipe X and W	Reinf (Lbs)	Conc (CY) (1)
2:1	12"	4'- 7 1/2"	2'- 8"	2'-10"	3'- 3 1/4"	84	0.6	1'- 9"	20	0.2
	15"	5'- 5 3/4"	2'- 9 1/2"	3'- 4"	3'-10 1/4"	99	0.7	2'- 2"	24	0.3
	18"	6'- 4 1/4"	3'- 1"	3'-10"	4'- 5"	120	0.9	2'- 8"	32	0.3
	21"	7'- 2 3/4"	3'- 4 1/2"	4'- 4"	5'- 0"	137	1.1	3'- 1"	43	0.4
	24"	8'- 2 1/2"	3'- 9 1/2"	4'-10"	5'- 7"	158	1.3	3'- 7"	50	0.5
	27"	9'- 1"	4'- 1"	5'- 4"	6'- 2"	173	1.5	3'-11"	56	0.6
	30"	9'-11 1/2"	4'- 4 1/2"	5'-10"	6'- 8 3/4"	197	1.7	4'- 4"	65	0.8
	33"	10'-10"	4'- 8"	6'- 4"	7'- 3 3/4"	216	2.0	4'- 8"	71	0.9
	36"	11'- 8 1/4"	4'-11 1/2"	6'-10"	7'-10 3/4"	241	2.2	5'- 1"	81	1.0
	42"	13'- 5 1/4"	5'- 6 1/2"	7'-10"	9'- 0 1/2"	280	2.8	5'-10"	97	1.3
	48"	15'- 9"	6'- 1 1/2"	9'- 4"	10'- 9 1/4"	350	3.8	6'- 7"	117	1.7
	54"	17'- 5 3/4"	6'- 8 1/2"	10'- 4"	11'-11 1/4"	415	4.5	7'- 6"	151	2.1
	60"	19'- 2 3/4"	7'- 3 1/2"	11'- 4"	13'- 1"	469	5.3	8'- 3"	174	2.5
	66"	20'-11 1/2"	7'-10 1/2"	12'- 4"	14'- 3"	530	6.2	8'- 9"	194	2.9
	72"	22'- 8 1/2"	8'- 5 1/2"	13'- 4"	15'- 4 3/4"	587	7.1	9'- 4"	213	3.3
3:1	12"	6'- 3"	2'- 6"	4'- 3"	4'-11"	114	0.8	1'- 9"	22	0.2
	15"	7'- 5"	2'- 9 1/2"	5'- 0"	5'- 9 1/4"	133	1.1	2'- 2"	28	0.3
	18"	8'- 6 3/4"	3'- 1"	5'- 9"	6'- 7 3/4"	166	1.3	2'- 8"	37	0.5
	21"	9'- 8 3/4"	3'- 4 1/2"	6'- 6"	7'- 6"	189	1.6	3'- 1"	48	0.6
	24"	11'- 0"	3'- 9 1/2"	7'- 3"	8'- 4 1/2"	221	2.0	3'- 7"	58	0.7
	27"	12'- 2"	4'- 1"	8'- 0"	9'- 2 3/4"	245	2.3	3'-11"	67	0.8
	30"	13'- 4"	4'- 4 1/2"	8'- 9"	10'- 1 1/4"	287	2.7	4'- 4"	77	1.0
	33"	14'- 5 3/4"	4'- 8"	9'- 6"	10'-11 3/4"	310	3.1	4'- 8"	84	1.2
	36"	15'- 7 3/4"	4'-11 1/2"	10'- 3"	11'-10"	343	3.5	5'- 1"	98	1.4
	42"	17'-11 1/2"	5'- 6 1/2"	11'- 9"	13'- 6 3/4"	424	4.5	5'-10"	119	1.7
	48"	21'- 1 3/4"	6'- 1 1/2"	14'- 0"	16'- 2"	527	6.1	6'- 7"	146	2.3
	54"	23'- 5 1/2"	6'- 8 1/2"	15'- 6"	17'-10 3/4"	618	7.3	7'- 6"	186	2.9
	60"	25'- 9 1/4"	7'- 3 1/2"	17'- 0"	19'- 7 1/2"	707	8.7	8'- 3"	219	3.4
	66"	28'- 1"	7'-10 1/2"	18'- 6"	21'- 4 1/4"	797	10.1	8'- 9"	242	3.9
	72"	30'- 4 3/4"	8'- 5 1/2"	20'- 0"	23'- 1 1/4"	910	11.7	9'- 4"	272	4.4
4:1	12"	7'-10 3/4"	2'- 8"	5'- 8"	6'- 6 1/2"	144	1.1	1'- 9"	24	0.3
	15"	9'- 4"	2'- 9 1/2"	6'- 8"	7'- 8 1/2"	177	1.5	2'- 2"	32	0.4
	18"	10'- 9 1/2"	3'- 1"	7'- 8"	8'-10 1/4"	217	1.9	2'- 8"	42	0.5
	21"	12'- 2 3/4"	3'- 4 1/2"	8'- 8"	10'- 0"	254	2.3	3'- 1"	57	0.7
	24"	13'- 9 1/2"	3'- 9 1/2"	9'- 8"	11'- 2"	295	2.8	3'- 7"	67	0.9
	27"	15'- 3"	4'- 1"	10'- 8"	12'- 3 3/4"	328	3.3	3'-11"	77	1.0
	30"	16'- 8 1/4"	4'- 4 1/2"	11'- 8"	13'- 5 3/4"	379	3.8	4'- 4"	89	1.3
	33"	18'- 1 3/4"	4'- 8"	12'- 8"	14'- 7 1/2"	417	4.5	4'- 8"	101	1.4
	36"	19'- 7"	4'-11 1/2"	13'- 8"	15'- 9 1/4"	464	5.1	5'- 1"	115	1.7
	42"	22'- 5 3/4"	5'- 6 1/2"	15'- 8"	18'- 1"	575	6.5	5'-10"	141	2.1
	48"	26'- 8 1/4"	6'- 1 1/2"	18'- 8"	21'- 8 3/4"	720	8.9	6'- 7"	175	2.8
	54"	29'- 5"	6'- 8 1/2"	20'- 8"	23'-10 1/4"	863	10.7	7'- 6"	226	3.6
	60"	32'- 3 3/4"	7'- 3 1/2"	22'- 8"	26'- 2"	984	12.7	8'- 3"	264	4.3
	66"	35'- 2 1/2"	7'-10 1/2"	24'- 8"	28'- 5 3/4"	1126	14.9	8'- 9"	300	4.9
	72"	38'- 1 1/4"	8'- 5 1/2"	26'- 8"	30'- 9 1/2"	1283	17.3	9'- 4"	334	5.6
6:1	12"	11'- 2"	2'- 6"	8'- 6"	9'- 9 3/4"	220	1.9	1'- 9"	28	0.4
	15"	13'- 2 1/4"	2'- 9 1/2"	10'- 0"	11'- 6 1/2"	264	2.5	2'- 2"	37	0.5
	18"	15'- 2 1/2"	3'- 1"	11'- 6"	13'- 3 1/4"	326	3.2	2'- 8"	50	0.7
	21"	17'- 2 3/4"	3'- 4 1/2"	13'- 0"	15'- 0 1/4"	381	3.9	3'- 1"	69	0.9
	24"	19'- 4 1/2"	3'- 9 1/2"	14'- 8"	16'- 9"	447	4.8	3'- 7"	80	1.2
	27"	21'- 4 3/4"	4'- 1"	16'- 0"	18'- 5 3/4"	506	5.7	3'-11"	98	1.4
	30"	23'- 5 1/4"	4'- 4 1/2"	17'- 0"	20'- 2 1/2"	587	6.7	4'- 4"	110	1.7
	33"	25'- 5 1/2"	4'- 8"	19'- 0"	21'-11 1/4"	667	7.8	4'- 8"	127	2.0
	36"	27'- 5 3/4"	4'-11 1/2"	20'- 6"	23'- 8"	727	9.0	5'- 1"	144	2.3
	42"	31'- 6 1/4"	5'- 6 1/2"	23'- 6"	27'- 1 1/2"	914	11.5	5'-10"	179	3.0
	48"	37'- 3 1/2"	6'- 1 1/2"	28'- 0"	32'- 4"	1181	15.9	6'- 7"	231	4.0
	54"	41'- 1 1/4"	6'- 8 1/2"	31'- 0"	35'- 9 1/2"	1412	19.2	7'- 6"	300	5.0
	60"	45'- 4 3/4"	7'- 3 1/2"	34'- 0"	39'- 3"	1619	22.9	8'- 3"	353	6.0

DISCLAIMER:
Use or reuse of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT shall not be responsible for incorrect results or damages resulting from its use.



ELEVATION
Showing dimensions

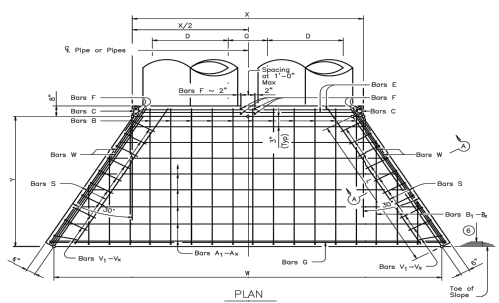
(1) Quantities shown are for concrete pipe and will increase slightly for metal pipe installations.
(2) For vehicle safety, curbs shall project no more than 3" above finished grade. Curb heights shall be reduced, if necessary, to meet these requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
(3) Provide a 1'-0" footing as shown where required to maintain 4" Min cover for pipes.
(4) Quantities shown are for one structure end only (one headwall).
(5) Min Length = 6" + 3" x $\left(\frac{12 \times H - 7}{12 \times L}\right)$
Max Length = 12 x H − 3" x $\left(\frac{12 \times H - 7}{12 \times L}\right)$ − 1"
(6) Lengths of wings based on SL:1 Slope along this line.

TABLE OF REINFORCING STEEL (4)

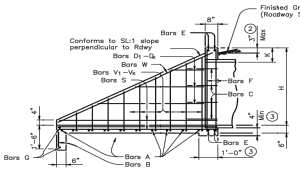
Bar	Size	Spa	No.
A	# 4	1'-0"	~
B	# 3	1'-6"	~
C	# 4	1'-0"	~
D	# 3	1'-0"	~
E	# 5	~	4
F	# 5	~	~
G	# 3	~	2
S	# 4	~	6
V	# 4	1'-0"	~
W	# 5	~	4

TABLE OF CONSTANT DIMENSIONS

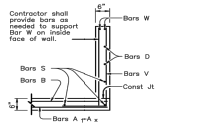
DIA OF PIPE(D)	G	K	H
12"	9"	1'- 0"	2'- 0"
15"	11"	1'- 0"	2'- 3"
18"	1'- 2"	1'- 0"	2'- 6"
21"	1'- 4"	1'- 0"	2'- 9"
24"	1'- 7"	1'- 0"	3'- 0"
27"	1'- 8"	1'- 0"	3'- 3"
30"	1'-10"	1'- 0"	3'- 6"
33"	1'-11"	1'- 0"	3'- 8"
36"	2'- 1"	1'- 0"	4'- 0"
42"	2'- 4"	1'- 0"	4'- 6"
48"	2'- 7"	1'- 3"	5'- 3"
54"	3'- 0"	1'- 3"	5'- 9"
60"	3'- 3"	1'- 3"	6'- 3"
66"	3'- 3"	1'- 3"	6'- 9"
72"	3'- 4"	1'- 3"	7'- 3"



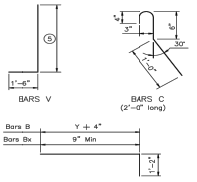
PLAN



TYPICAL WING ELEVATION



SECTION A—A



GENERAL NOTES:
Designed according to AASHTO LRFD Specifications.
Reinforcing steel shall be placed with the clear cover to the outside layer of bars 2" from the surface of the concrete.
All reinforcing steel shall be Grade 60.
All concrete shall be Class "C" and shall have a minimum compressive strength of 3600 psi.
No bridge rails of any type may be mounted directly to these culvert headwalls.

Texas Department of Transportation
Bridge Division

CONCRETE HEADWALLS WITH FLARED WINGS FOR 0° SKEW PIPE CULVERTS

CH—FW—0

FILE: chfw00se.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK:	GAF
© TxDOT February 2010	DISTRICT	FEDERAL AID PROJECT			SHEET
REVISIONS	COUNTY	CONTROL	SECT	JOB	HIGHWAY



SHEET C305 OF 18



UTILITY DETAILS

STORM DRAIN IMPROVEMENTS

IDLEWILDE DRIVE
CITY OF MIDLAND, TEXAS

DRAWN BY:	MJD
CHECKED BY:	ALM
APPROVED BY:	ALM
DATE:	04/12/2022
JOB:	210045

Δ	REVISIONS	BY	APPR.	DATE

MAVERICK
ENGINEERING / SURVEY / WATER RESOURCES
1909 West Wall Street, Suite "K"
Midland, Texas 79701
TEXAS ENGINEER FIRM #: F-15089
TEXAS SURVEY FIRM #: 10194514
Tel: (432) 262-0999 Fax: (432) 262-0989
www.Maverick-Eng.com

City Council Meeting

Item Number: 7

Meeting Date: January 24, 2023

To: City Council / City Manager

From: Erika Martinez, Manager, Purchasing

Subject: **Motion to authorize the City Manager or the City Manager's designee to advertise a request for proposals for executive search for City Manager services associated with the recruitment and selection of a qualified individual for the position of City Manager and to negotiate an agreement for said services; provided, however, that said agreement shall not become effective until approved by the City Council. (DISTRICT: NONE) (GENERAL SERVICES)**

Purpose:

Motion to authorize the City Manager or the City Manager's designee to advertise a request for proposals for executive search for City Manager services associated with the recruitment and selection of a qualified individual for the position of City Manager and to negotiate an agreement for said services; provided, however, that said agreement shall not become effective until approved by the City Council.

Recommended City Council Action:

Approve

Fiscal Impact:

Funding not required at this time.

Discussion:

Please consider approval of a motion authorizing advertisement of a request for proposals for executive search for City Manager services associated with the recruitment and selection of a qualified individual for the position of City Manager and to negotiate an agreement for said services.

Tina Daug

City Manager's Office

CITY OF MIDLAND
REQUEST FOR PROPOSALS
EXECUTIVE SEARCH FOR CITY MANAGER 2023

Objective: The City of Midland, Texas (the "*City*"), is seeking proposals from qualified firms to perform executive search services regarding the recruitment and selection of a qualified individual for the position of City Manager.

SECTION I.
Affirmative Action Policy Statement

It is the City's to provide the maximum practicable opportunity for increased participation by minority-owned and women-owned businesses in the process by which professional services are procured and offered by the City. The City will only consider firms that do not discriminate against any person because of race, creed, color, sex, marital status, age, national origin, protected class, or the presence of any sensory, mental or physical handicap unless based on bona fide occupational proposal. All firm materials and practices must avoid the sole use of male/female nouns and pronouns when the content refers to both genders and avoid any other discriminatory communications. Failure to comply with the Americans with Disabilities Act ("*ADA*") or other applicable law will be grounds for non-award or the cancellation of the awarded contract.

SECTION II.
Preparation and Submittal Instructions

Official submittal of a proposal shall consist of one (1) original and seven (7) copies of the proposal enclosed in a sealed envelope and sent to the City of Midland, City Secretary's Office, 300 N. Loraine Street, Suite 330, Midland, Texas 79701. **The deadline to submit a proposal is March 1st, 2023, by 2:00 P.M.** (the "*Deadline*"). The envelope shall show the notation "Executive Search for City Manager" in the lower right-hand corner. **Only sealed proposals will be accepted.**

Proposals must be received by the City Secretary's Office prior to the Deadline. The mere fact that a proposal was sent and/or post marked prior to the Deadline will not constitute a submission. A firm is solely responsible for ensuring that its proposal is delivered in accordance with this Section. Late proposals will not be considered.

The content of the submitted proposals will be kept confidential during the negotiation process. Except for trade secrets and confidential information (which must be identified by firms), all proposals will be open for public inspection after the contract is awarded. All proposals shall be subject to the applicable provisions of the Texas Public Information Act.

A firm may withdraw its proposal at any time prior to the Deadline. However, a firm may not withdraw or cancel its proposal for a period of thirty (30) days following the Deadline.

All costs directly or indirectly related to the preparation of a proposal or any oral presentation required by the City to supplement and/or clarify a proposal shall be the sole responsibility of the firm

that submitted said proposal.

Questions regarding this RFP or the processes described herein should be directed to Mark Widmann, Director of Administrative Services, P.O. Box 1152, Suite 120, Midland, Texas 79702, Phone Number: (432) 685-7247.

Other than as specified herein, firms must not contact the City staff or members of the Midland City Council during the proposal process and evaluation phase.

SECTION III.
Schedule

It is the City's goal to complete the recruitment of the City Manager by June 13, 2023. The City reserves the right to revise the schedule outlined below.

- January 25, 2023 – RFP Opens
- March 1, 2023 – Proposal Deadline
- March 6, 2023 – Evaluation of Proposals
- March 28, 2023 – Proposed Award of Contract

SECTION IV.
Proposals

Proposals must contain sufficient detail to convey the firm's knowledge, skills, experience, and ability to satisfy the requirements of this RFP. A proposal must contain the following information:

A. The firm's profile, general philosophy, history, target market, and approach to recruiting with an emphasis on public sector entities;

B. The size of the firm, number of individuals available to conduct high-level executive recruitment, staff to be assigned to this project and their relevant experience, including resumes for each individual assigned to this project;

C. A list of clients and executive level positions the firm has recruited over the last three (3) years, to include (i) the title recruited, (ii) a brief description of service, department, or company name, (iii) contact person and telephone number for the firm's clients to which the firm's services were provided, (iv) dates firm's services were rendered, (v) duration of firm's search, (vi) number of recruitments for each client, and (vii) measurable outcomes with an emphasis on city government experience;

D. A one-page description of the firm's method and approach for the services provided to clients listed pursuant to Section IV.C (preferably public sector);

E. A general description of methods and average length of time from initial contract to referral of successful candidates, including the expected role of the City;

F. List of additional public sector clients beyond the last three (3) years (entity, department and contact information only);

G. Comments from clients, retention rates or other information demonstrating client

satisfaction or other measures of success;

H. A complete list of references for similar projects with contact information;
I. Description of the specific approach and resources proposed for this project;
J. Description of the process to be used to by the firm to understand (i) the needs of the City regarding this RFP, and (ii) the potential challenges for recruitment in the West Texas area;
K. Description of the process to be used to identify candidates during initial screening;
L. Description of firm's database of potential candidates;
M. List of city managers or administrators successfully recruited by the firm to communities with a population of at least 100,000 over the past ten (10) years (list of cities, date of placement, manager/administrator's length of service after placement);
N. Criteria to be used to determine candidate suitability;
O. Expected information to be supplied by candidates during the screening process;
P. Information regarding whether the firm assists candidates in completing resumes;
Q. List of communities in which the firm actively recruiting; and
R. A description of the firm's most successful city manager or administrator placement and the firm's rational therefor.

The firm's provided information regarding this Section shall be easily identifiable (e.g., the firm shall identify such responses/answers as follows: *Section IV.A, RESPONSE: ...; Section IV.B, RESPONSE: ..., etc.)* Information that is not readily identifiable as described herein may be deemed a non-response or non-answer and evaluated accordingly.

SECTION V.
Cost Specifications

Proposals shall include the rates to be charged for performing the tasks necessary to accomplish the objectives of this RFP. The rates must itemize the types of expenses expected to be billed to the City. Individuals expected to work on the project should be identified by name, rate or cost basis, and expected use during the term of the contract. Rates must include all travel, overhead, any applicable taxes and per diem expenses to be billed to the City. Any other reimbursable travel expenses shall be in accordance with current City travel reimbursement rates. Please include the basis for adjustments to the value of the project in the event the scope of work varies from the proposed scope.

SECTION VI.
Firm Minimum Proposals

Firms to be considered must be licensed to do business in the State of Texas and have at least three (3) years' experience conducting executive recruitment. Each individual providing services under the contract on behalf of the firm should have at least the following minimum qualifications: (i) three (3) years' experience conducting recruitment; (ii) two (2) years' experience conducting executive-level recruitment; and (iii) working knowledge of the ADA and other applicable non-discrimination laws. Preference shall be given to firms with previous recruitment executive positions.

SECTION VII.
Evaluation and Selection Criteria

The City will consider the following criteria when evaluating the proposals.

A. Description of Work Process: Completeness and quality of the executive recruitment process proposed and applicability to public sector organizations – **Weight: 30%**
B. Evidence of Experience and Competence: Degree/quality of the firm's experience and each individual's past consulting work as it relates to this RFP – **Weight: 30%**
C. Demonstrated Results: Ability to timely respond clients as recruitment needs occur; client satisfaction and other success factors or measures – **Weight: 30%**
D. Cost: Evaluation of cost will be consistent with specific formats outlined in Section V – **Weight: 10%**

Experience with high-level public sector executive recruitment will be weighed most heavily. The City will conduct reference checks on top-scoring firms, the results will be used in the City's determination of the most advantageous proposal. The evaluation process is not specifically designed to award the contract to the firm with the lowest cost, but rather to the firm whose proposals best meet the requirements of this RFP. However, firms are encouraged to submit proposals that are consistent with the City's efforts to conserve public resources.

SECTION VIII.
Right of Rejection and Conflicts of Interest

The City reserves the right to: (i) accept or reject any and all proposals; (ii) waive any formal and technical requirement of this RFP; and (iii) accept the proposal considered to be in the best interest of the City. The City also reserves the right to reject the proposal of any firm that (i) previously failed to perform or timely complete a contractual obligation related to the type of services indicated in this RFP; or (ii) is not able to perform the type of services indicated in this RFP.

Firms that submit proposals must not be currently or previously employed by a candidate for the City Manager position; candidates for the City Manager position that are submitted by a firm may not have a current or previous financial interest in said firm. A firm that submits a candidate for consideration by the City must disclose to the City if the candidate and firm (or any of firm's previous or current agents or employees) previously had or currently have business dealings or personal interactions/relationships with each other and the nature of the same.

Any "conflict of interest" between candidates for the City Manager position and the selected firm shall be disclosed to the City. A "conflict of interest" shall be defined as: (i) any candidate who is related to agent of the firm; (ii) any candidate who has been or is employed by the firm or has/had a financial interest in the firm; (iii) any candidate who has or is doing business with the firm; or (iv) any candidate with which the firm has or had a personal relationship.

SECTION IX.
Protests

Only protests setting out an issue of fact concerning a matter of bias, discrimination, or conflict of interest, errors in tabulation, or non-compliance with procedures described herein or with City policy shall be considered; protests based on all other matters will not be considered. Any protest against the denial of contract award pursuant to this RFP must be received by the City within ten (10) business days following the date that the contract is awarded. Protests received thereafter will not be considered.

SECTION X.
Waiver and Release

WAIVER OF ATTORNEY FEES

BY SUBMITTING A PROPOSAL, THE FIRM AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE CITY REGARDING THE AWARD OF ATTORNEY'S FEES THAT ARE IN ANY WAY RELATED TO THIS RFP. SAID FIRM SPECIFICALLY AGREES THAT IF IT BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS RFP, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, THE FIRM AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH THE FIRM MIGHT OTHERWISE BE ENTITLED.

THE FIRM AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING KNOWN RIGHT. THE FIRM ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS RFP. THE FIRM FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE CITY AND THE FIRM. THIS WAIVER SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF THE CITY'S GOVERNMENTAL IMMUNITY.

RELEASE

NOTWITHSTANDING ANY OTHER PROVISION HEREOF, BY SUBMITTING A PROPOSAL, THE FIRM AGREES TO RELEASE, RELINQUISH, ACQUIT AND FOREVER DISCHARGE THE CITY AND ITS EMPLOYEES AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES OR CAUSES OF ACTION OF ANY KIND WHATSOEVER THAT THE FIRM HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, DUE PROCESS AND TAKINGS CLAUSES UNDER THE TEXAS AND UNITED STATES

CONSTITUTION, TORT CLAIMS OR THE GOVERNMENTAL ENTITIES' NEGLIGENCE.

The waiver of attorney's fees and release provisions contained herein include but are not limited to:

A. The administration, evaluation or recommendation of any proposal;
B. Waiver or deletion of any of the requirements of this RFP;
C. Acceptance or rejection of any proposal;
D. The selection of any proposal;
E. The City's right to waive, delete or amend (i) the terms and conditions of this RFP, and (ii) the requirements connected with this RFP; and
F. The City's right reject any and all proposals.

By executing and submitting a proposal, the firm hereby represents and warrants to the City that: (i) the firm has read and understands this RFP and the firm's proposal is made in accordance with the requirements of this RFP; (ii) the firm agrees to be bound by the terms and conditions of this RFP, which include the waiver and release provisions contained in Section X; and (iii) the firm acknowledges that it had the right and opportunity to consult with competent legal counsel regarding the above prior to submitting a proposal.

Contractor's Name

PROPOSAL

To: Purchasing Manager
City of Midland
Midland, Texas

Gentlemen: The undersigned bidder, having examined the request for proposal and being fully advised as to the extent and character of the work proposes to furnish all materials, equipment and to perform all labor and work necessary for the complete work described by and in accordance with the attached request for proposal and contract for the sum of:

Professional Services _____ DOLLARS

Travel & Expenses _____ DOLLARS

Other (Explain) _____ DOLLARS

Total Proposal _____ DOLLARS

NOTE: Bid and Proposal terms are interchangeable.

AWARD

If the Contract is awarded, it will be awarded to either the lowest responsible bidder, or to the bidder who provides goods or services at the best value for the City of Midland. In determining the best value for the City of Midland, the City of Midland may consider the criteria enumerated in Section 252.043 of the Texas Local Government Code.

Public Information. To the extent that Bidder is submitting a bid for a contract described by Section 552.371 of the Texas Government Code, Bidder agrees as follows in accordance with Section 552.372(b) of the Texas Government Code: The requirements of Subchapter J, Chapter 552, Government Code, may apply to this bid, and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

BID WAIVERS:

A. WAIVER OF ATTORNEY FEES: BY SIGNING THIS PROPOSAL, BIDDER AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE CITY, REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THE CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE CONTRACT. THE BIDDER SPECIFICALLY AGREES THAT IF THE BIDDER BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS CONTRACT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS CONTRACT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, THE BIDDER AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH BIDDER MIGHT OTHERWISE BE ENTITLED.

BIDDER AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING KNOWN RIGHT. THE BIDDER ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THE CONTRACT. THE BIDDER FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE CITY AND THE BIDDER.

THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF SOVEREIGN IMMUNITY.

THE BIDDER AND THE CITY ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION.

B. WAIVER: BY SUBMITTING A BID, THE BIDDER AGREES TO WAIVE AND DOES HEREBY VOLUNTARILY AND INTENTIONALLY WAIVE, ABANDON AND RELINQUISH ANY CLAIM THE BIDDER HAS OR MAY HAVE IN THE FUTURE AGAINST THE CITY OF MIDLAND, TEXAS, AND THE CITY'S EMPLOYEES, AGENTS AND OFFICERS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE FOLLOWING:

1. **THE ADMINISTRATION, EVALUATION OR RECOMMENDATION OF ANY BID;**
2. **WAIVER OR DELETION OF ANY OF THE REQUIREMENTS UNDER THE BID DOCUMENTS OR THE CONTRACT DOCUMENTS;**
3. **ACCEPTANCE OR REJECTION OF ANY BIDS; OR**
4. **AWARD OF THE CONTRACT.**

BY SUBMITTING A BID, THE BIDDER ACKNOWLEDGES THAT THE BIDDER UNDERSTANDS ALL OF THE TERMS OF THE BIDDING DOCUMENTS AND CONSENTS TO THE BIDDING PROCESS AND THE POSSIBILITY OF A NEGATIVE ASSESSMENT. BY SUBMITTING A BID, THE BIDDER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE BIDDER AND THE CITY OF MIDLAND, TEXAS. THE BIDDER AGREES THAT THIS IS THE INTENTIONAL RELINQUISHMENT OF A PRESENTLY EXISTING KNOWN RIGHT. BY SIGNING THE REQUEST FOR BID AND/OR BELOW, YOUR COMPANY AGREES TO THE ABOVE WAIVER(S).

C. Notice of Alleged Breach; Statutory Prerequisites: As a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this Contract, Bidder or his legal representative, shall give the City Manager, or any other reasonable official of the City, notice in writing (consisting of one original and seven copies of notice attached to a copy of this Contract) of such damages, duly verified, within one-hundred fifty (150) days after the same has been sustained. The discovery rule does not apply to the giving of this notice. The notice shall include when, where and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which the Bidder will settle, the physical and mailing addresses of Bidder at the time and date the claim was presented and the physical and mailing addresses of Bidder for the six months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom the Bidder relies to establish its claim; and a failure to so notify the City Manager within the time and manner provided herein shall exonerate, excuse and except the City from any liability whatsoever. The City is under no obligation to provide notice to Bidder that Bidder's notice is insufficient. The City reserves the right to request reasonable additional information regarding the claim.

Said additional information shall be supplied within thirty (30) days after receipt of notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any other provision, Bidder's failure to comply with the requirements herein shall perpetually bar Bidder's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless if the City has actual or constructive notice or knowledge of said claim or alleged damages. Bidder agrees that the requirements of this entire Contract are reasonable.

By Signing below, your company agrees to the above waiver(s). If this form is not signed and included with your bid documents your bid will be considered non-responsive and will be rejected.

GOVERNMENTAL IMMUNITY: By executing this agreement CITY is not waiving its right of governmental immunity. CITY is retaining its immunity from suit. CITY is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY**.

Bidder	Authorized Signature	Telephone
Address, City and State	Please Print above Name	Fax

Bidder's Enclosure Check List: (Bidder - Please review the following list and check to ensure that you have included the documents with your bid.)

☐ PROOF OF AUTOMOBILE, WORKER'S COMPENSATION AND GENERAL LIABILITY INSURANCE COVERAGE AS REQUIRED BY THE TERMS OF THE CONTRACT. (**Upon award and prior to execution of the contract The City of Midland will have to be added to the policy as an additional insured and a certificate issued reflecting that provision) including a waiver of subrogation as stated in the contract)**

PLEASE NOTE:

FAILURE TO INCLUDE ANY OF THE REQUIRED DOCUMENTS ON THE CHECK LIST, MAY CAUSE REJECTION OF YOUR BID.

***FAILURE TO PROVIDE LIABILITY OR WORKER'S COMPENSATION INSURANCE AND SUBSEQUENT CERTIFICATES; OR, PAYMENT AND/OR PERFORMANCE BONDS AS REQUIRED BY THE CONTRACT MAY CAUSE FORFEITURE OF YOUR BID BOND OR OTHER SURETY (I.E.- CASH OR CASHIERS CHECK).**

IMPORTANT NOTICE

Conflict Of Interest Reporting Requirements

Compliance with LOCAL GOVERNMENT CODE TITLE 5. MATTERS AFFECTING PUBLIC OFFICERS AND EMPLOYEES SUBTITLE C. MATTERS AFFECTING PUBLIC OFFICERS AND EMPLOYEES OF MORE THAN ONE TYPE OF LOCAL GOVERNMENT CHAPTER 176. DISCLOSURE OF CERTAIN RELATIONSHIPS WITH LOCAL GOVERNMENT OFFICERS; PROVIDING PUBLIC ACCESS TO CERTAIN INFORMATION.

Form CIQ: This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session. This questionnaire shall be filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a). By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code. A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

Bidders are responsible for filing Conflict of Interest form "CIQ" in accordance with the above referenced statute. Failure to do so is a class C Misdemeanor. Contracts or Purchase Orders awarded to a vendor that has violated this law is subject to termination at such time that the violation is discovered with no recourse to the City of Midland. The bidder will be subsequently removed from the bidders list for a minimum of one year.

When there is no known conflict of interest as defined by the statute, it is not necessary to file/submit the Form CIQ. The form must be submitted if a conflict is subsequently discovered.

By submitting a response to this request, vendor represents that it complies with the requirements of Chapter 176 of the Texas Local Government Code.

For a current list of the local government officers go to: http://www.midlandtexas.gov/

Upon completion of the form, sign and submit with bid or mail to:

City of Midland
Attn: City Secretary
PO Box 1152
Midland, Texas 79702

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information is being disclosed.**

_____

Name of Officer

4 **Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

5 **Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7 _____ _____

Signature of vendor doing business with the governmental entity Date

PACKET 7.13 January 24, 2023

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

(A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;

(B) a transaction conducted at a price and subject to terms available to the public; or

(C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

***

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than $100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

Form provided by Texas Ethics Commission www.ethics.state.tx.us Revised 1/1/2021

City Council Meeting

Item Number: 8

Meeting Date: January 24, 2023

To: City Council / City Manager

From: Erika Martinez, Manager, Purchasing

Subject: **RESOLUTION AWARDING A CONTRACT FOR THE GARFIELD STREET UTILITY BOND PROJECT TO ENTRENCH, INC., FOR AN AMOUNT OF $5,810,010.00; APPROVING $581,001.00 FOR CONTINGENCIES; APPROVING $50,000.00 FOR PROJECT RELATED EXPENSES; AND TRANSFERRING AND APPROPRIATING FUNDS (DISTRICT 3) (GENERAL SERVICES)**

Purpose:

Resolution awarding the execution of a contract for the Garfield Street Utility Bond Project to Entrench, Inc. for the Engineering Services Department for the amount of $5,810,010.00; approving $581,001.00 for contingencies; approving $50,000.00 for project related expenses; for a total cost of $6,441,011.00; and transferring and appropriating funds; and authorizing payment.

Recommended City Council Action:

Approve

Fiscal Impact:

Funding is available in the FY2023 General Operating Fund budget and will be transferred and appropriated to a project for the said purposes.

Discussion:

The City Manager approved plans and specifications and authorized advertisement for bids for the Garfield Street Utility Bond Project for the Engineering Services Department. The bid request was sent to one hundred nine (109) companies. We received two bids. Staff recommends awarding a contract to Entrench, Inc. The project timeline is projected at 365 calendar days. Please see the attached memo from Jose Ortiz, Engineering Services Director, for more

information.

Therefore, please consider a resolution awarding a contract for the Garfield Street Utility Bond Project for the Engineering Services Department to Entrench, Inc., of Hobbs, New Mexico for the amount of $5,810,010.00; approving $581,001.00 for contingencies; approving $50,000.00 for project related expenses; for a total cost of $6,441,011.00; and transferring and appropriating funds; and authorizing payment.

Tina Daugherty
City Manager's Office

RESOLUTION NO. _____

RESOLUTION AWARDING A CONTRACT FOR THE GARFIELD STREET UTILITY BOND PROJECT TO ENTRENCH, INC., FOR AN AMOUNT OF $5,810,010.00; APPROVING $581,001.00 FOR CONTINGENCIES; APPROVING $50,000.00 FOR PROJECT RELATED EXPENSES; AND TRANSFERRING AND APPROPRIATING FUNDS

WHEREAS, the City Manager approved plans and specifications and authorized the advertisement for bids for the Garfield Street Utility Bond Project; and

WHEREAS, bids were opened on January 11, 2023, with the lowest bid being submitted by Entrench, Inc., as shown on the bid tabulation attached hereto as Exhibit "A" and incorporated herein for all purposes; and

WHEREAS, the City Council finds the amount proposed by Entrench, Inc., to be fair and reasonable; and

WHEREAS, the City Council finds it to be in the public interest to award a contract to Entrench, Inc., for the Garfield Street Utility Bond Project; and

WHEREAS, the City Council finds it to be in the public interest to approve $581,001.00 for contingencies; and

WHEREAS, the City Council finds it to be in the public interest to approve $50,000.00 for project related expenses;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the City Manager and City Secretary are hereby authorized and directed to execute and attest, respectively, on behalf of the City of Midland, a contract with Entrench, Inc., for the Garfield Street Utility Bond Project for an amount of $5,810,010.00. Said contract to be kept on file in the office of the City Secretary, referenced by the date and number of this Resolution.

SECTION TWO. That the sum of $581,001.00 for contingencies is hereby approved for said contract.

SECTION THREE. That the sum of $50,000.00 for project related expenses is hereby approved for said contract.

SECTION FOUR. That funds are available in the FY2023 General Operating Fund operating budget and will be transferred and appropriated to a project for the said purposes.

SECTION FIVE. That the City Comptroller is hereby authorized and directed to pay Entrench, Inc., pursuant to the terms of said contract upon receipt of proper invoices or statements approved by the City Manager.

On motion of Council member _____, seconded by Council member _____, the above and foregoing resolution was adopted by the City Council of the City of Midland at a regular meeting on the _____ day of _____, A.D., 2023, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Regina Stephenson, General Services Director

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

INTEROFFICE MEMORANDUM

TO: Erika Martinez; City of Midland, Purchasing Manager

FROM: Jose E. Ortiz, P.E.; City of Midland, Director – Engineering Services

SUBJECT: Garfield Street Utility Bond Project – Break Out 02 ♦ Engr. Project No. BPU18-02 ♦ Bid Tabulation ♦ Funding #_____

DATE: January 24, 2023

Erika,

Engineering staff has reviewed the bid tabulation for the Garfield Street Utility Bond Project – Break Out 02. Entrench, Inc. of Hobbs, New Mexico, is the apparent successful low bidder. Staff recommends awarding the Garfield Street Utility Bond Project – Break Out 02 project to Entrench, Inc.

Entrench, Inc. has an established history with the City of Midland of performing work of similar scale and scope to the Garfield Street Utility Bond Project – Break Out 02 project. Furthermore, the unit prices appear to be in line with current pricing trends.

Funding is available for this project.

To cover the base bid amount, a 10% contingency to cover additional changes that may occur during construction, and an additional fee to facilitate the contract (i.e. TDLR inspections, project administration, material testing services, etc.), the total amount made available for the project would be **$6,441,011,00**.

The agreement specifies a construction period of 365 calendar days beginning within 15 calendar days of a written notice to proceed for construction.

Jose E. Ortiz, P.E.
Director – Engineering Services

Cc: Bobby Wojciechowski
Madison Brasuell
Regina Stephenson

Garfield Street Utility Bond Project- Break Out 02

City of Midland - Engineering Services: January 11, 2023

BID TAB					ENTRENCH, INC		TEC EXCAVATION, INC	
Bid Item	Pay Note	Description	Quantity	Units	Unit Price	Actual Bid Total	Unit Price	Actual Bid Total
1	M1	Mobilization	1	LS	$25,000.00	$25,000.00	$355,000.00	$355,000.00
2	M2	Bypass Pumping	1	LS	$15,000.00	$15,000.00	$275,000.00	$275,000.00
3	M3	Erosion/Sediment Control	1	LS	$22,000.00	$22,000.00	$62,000.00	$62,000.00
4	M4	Traffic Control	1	LS	$24,000.00	$24,000.00	$185,000.00	$185,000.00
5	M5	Job Site Safety	1	LS	$25,000.00	$25,000.00	$47,000.00	$47,000.00
6	P2	2" Ashalt Pavement Repair - COM Standard Detail 311	775	SY	$50.00	$38,750.00	$205.00	$158,875.00
7	P2	2" Ashalt Pavement Repair - COM Standard Detail C01	8720	SY	$55.00	$479,600.00	$170.00	$1,482,400.00
8	M6	Material Mark-up	N/A	%	15%		15%	
9	M7	Labor Mark-up	N/A	%	15%		15%	
10	M8	Equipment Mark-up	N/A	%	15%		15%	
					Subtotal	**$629,350.00**	**Subtotal**	**$2,565,275.00**
1	D1	Removal & Disposal of Existing Water Main	2770	LF	$15.00	$41,550.00	$20.00	$55,400.00
2	D1	Removal & Disposal of Existing Wastewater Main	2510	LF	$17.00	$42,670.00	$27.00	$67,770.00
3	D1	Removal & Disposal of Existing Storm Drain	390	LF	$25.00	$9,750.00	$70.00	$27,300.00
4	D2	Flowable Fill for Existing Pipes Abandoned in Place	260	SY	$130.00	$33,800.00	$205.00	$53,300.00
5	D3	Removal & Disposal of Existing Fire Hydrant Assembly	2	EA	$750.00	$1,500.00	$3,500.00	$7,000.00
6	D4	Removal & Disposal of Existing 48" Manhole, (0'-5' Deep)	13	EA	$1,500.00	$19,500.00	$5,100.00	$66,300.00
7	D5	Removal & Disposal of Existing 48" Manhole Additional Depth, (> 5' Deep)	90	VF	$250.00	$22,500.00	$340.00	$30,600.00
					Subtotal	**$171,270.00**	**Subtotal**	**$307,670.00**
1	W1	12" AWWA C-900 DR18, PVC, Water Main	3740	LF	$105.00	$392,700.00	$170.00	$635,800.00
2	W1	8" AWWA C-900 DR18, PVC, Water Main	160	LF	$70.00	$11,200.00	$130.00	$20,800.00
3	W1	6" AWWA C-900 DR18, PVC, Water Main	840	LF	$60.00	$50,400.00	$120.00	$100,800.00
4	W2	12" Gate Valve & Box (MJxMJ/FL)	14	EA	$6,200.00	$86,800.00	$4,800.00	$67,200.00
5	W2	8" Gate Valve & Box (MJxMJ/FL)	3	EA	$3,100.00	$9,300.00	$2,500.00	$7,500.00
6	W2	6" Gate Valve & Box (MJxMJ/FL)	23	EA	$2,230.00	$51,290.00	$1,900.00	$43,700.00
7	W3	Fire Hydrant Assembly & Riser	16	EA	$5,275.00	$84,400.00	$6,700.00	$107,200.00
8	W4	Ductile Iron Fittings	2.1	TON	$13,750.00	$28,875.00	$28,000.00	$58,800.00
9	W5	12"x1" Tapping Saddle	27	EA	$975.00	$26,325.00	$1,600.00	$43,200.00
10	W6	1" Water Service Lateral, Connection & Water Meter Installation	740	LF	$1,050.00	$777,000.00	$27.00	$19,980.00
11	W7	Open Trenching of Water Main	4700	LF	$20.00	$94,000.00	$20.00	$94,000.00
					Subtotal	**$1,612,290.00**	**Subtotal**	**$1,198,980.00**
1	WW1	18" SDR 26 ASTM D3034, PVC, Wastewater Main	20	LF	$205.00	$4,100.00	$380.00	$7,600.00
2	WW1	12" SDR 26 ASTM D3034, PVC, Wastewater Main	3380	LF	$105.00	$354,900.00	$270.00	$912,600.00
3	WW1	8" SDR 26 ASTM D3034, PVC, Wastewater Main	180	LF	$70.00	$12,600.00	$225.00	$40,500.00
4	WW1	6" SDR 26 ASTM D3034, PVC, Wastewater Main	80	LF	$50.00	$4,000.00	$215.00	$17,200.00
5	WW2	72" Fiberglass Manhole & Cover, (0'-5' Deep)	1	EA	$11,900.00	$11,900.00	$15,900.00	$15,900.00
6	WW2	48" Fiberglass Manhole & Cover, (0'-5' Deep)	10	EA	$6,900.00	$69,000.00	$8,200.00	$82,000.00
7	WW3	72" Fiberglass Manhole Additional Bury Depth, (> 5' Deep)	11	VF	$1,650.00	$18,150.00	$1,240.00	$13,640.00
8	WW3	48" Fiberglass Manhole Additional Bury Depth, (> 5' Deep)	80	VF	$750.00	$60,000.00	$670.00	$53,600.00
9	WW4	Open Trenching of Wastewater Main (0'-14' Deep)	2540	LF	$75.00	$190,500.00	$30.00	$76,200.00
10	WW4	Open Trenching of Wastewater Main (14'-16' Deep)	1120	LF	$95.00	$106,400.00	$42.00	$47,040.00
					Subtotal	**$831,550.00**	**Subtotal**	**$1,266,280.00**
1	SD1	6'x4' Reinforced Concrete Box Culvert, Storm Drain	190	LF	$590.00	$112,100.00	$1,105.00	$209,950.00
2	SD1	3'x3' Reinforced Concrete Box Culvert, Storm Drain	3840	LF	$345.00	$1,324,800.00	$540.00	$2,073,600.00
3	SD2	24" Reinforced Concrete Pipe (RCP) Storm Drain	240	LF	$220.00	$52,800.00	$295.00	$70,800.00
4	SD2	18" Reinforced Concrete Pipe (RCP) Storm Drain	40	LF	$190.00	$7,600.00	$270.00	$10,800.00
5	SD2	24" ASTM F2619 HDPE Storm Drain Force Main	1300	LF	$150.00	$195,000.00	$420.00	$546,000.00
6	SD3	8'x8' Reinforced Concrete Junction Box	3	EA	$21,300.00	$63,900.00	$8,500.00	$25,500.00
7	SD4	6'x6' Reinforced Concrete Junction Box	15	EA	$15,510.00	$232,650.00	$22,000.00	$330,000.00
8	SD5	48" Reinforced Concrete Manhole & Cover, (0'-5' Deep)	16	EA	$19,600.00	$313,600.00	$9,400.00	$150,400.00
9	SD6	48" Fiberglass Manhole & Cover, (0'-5' Deep)	5	EA	$8,400.00	$42,000.00	$8,100.00	$40,500.00
10	SD7	48" Fiberglass Manhole Additional Bury Depth, (> 5' Deep)	15	VF	$700.00	$10,500.00	$670.00	$10,050.00
11	SD8	10'x5' Reinforced Concrete Curb Inlet	4	EA	$14,400.00	$57,600.00	$10,200.00	$40,800.00
12	SD9	5'x2.5' Reinforced Concrete Curb Inlet	1	EA	$12,750.00	$12,750.00	$9,700.00	$9,700.00
13	SD10	Open Trenching of Storm Drain	5610	LF	$25.00	$140,250.00	$45.00	$252,450.00
					Subtotal	**$2,565,550.00**	**Subtotal**	**$3,770,550.00**
					Base Bid Total =	**$5,810,010.00**	**Base Bid Total =**	**$9,108,755.00**

SPECIFICATIONS

Project Name: Garfield Street Utility Bond Project – Break Out 02

Project Number: BPU18-02

MAYOR

Patrick Payton

COUNCIL MEMBERS

District 1	Scott Dufford	District 3	Jack Ladd
District 2	John Norman	District 4	Lori Blong
At-Large	Dan Corrales	At Large	Robin Poole

ENGINEERING SERVICES DIRECTOR

Jose E. Ortiz, P.E.



Prepared by City of Midland, Texas
Engineering Services Division

December 2022

NOTICE TO BIDDERS

ATTENTION: All bidders who choose to mail bid packets must address them to one of the addresses below:

USPS Mailing Address:		***Physical Address for mail carriers other than USPS:***
City of Midland, Texas		**City of Midland, Texas**
Attn: City Secretary's Office	**OR**	**Attn: City Secretary's Office**
P O Box 1152		**300 North Loraine St, Suite 330**
Midland, TX 79702		**Midland, TX 79701**

If bid packets are delivered in person then bidders must drop the bid packets off at the first-floor front desk of City Hall before the bid opening deadline.

Sealed proposals, addressed to the Mayor and City Council of the City of Midland, Texas, for the furnishing of materials and labor together with other miscellaneous and appurtenant work will be received at the office of the City Secretary, City Hall, Midland, Texas, until 2:00 p.m. on the 11th day of January, 2022, and publicly opened and read aloud at that time.

Delivery of Submittals

Bid packets must be received in the City Secretary's Office no later than January 11th, 2022 at 2:00 p.m. Bidders are responsible for the means of timely delivering the bid packet. Delays due to any instrumentality used to transmit the bid packet (e.g., delay occasioned by a bidder, City's internal mailing system, etc.) are the sole responsibility of the bidder. **Late bid packets will not be accepted under any circumstances.**

ATTENTION: The public bid opening will in the City Council Meeting Chambers

The Proposed Work provides for the furnishing of materials and labor for Garfield Street Utility Bond Project – Break Out 02 together with other miscellaneous and appurtenant work.

ATTENTION: A NON-MANDATORY PRE-BID MEETING will be held at 3:00 p.m. on Wednesday , January 4th, 2022 in the basement conference room of City Hall, 300 N. Loraine Street, Midland, Texas. Bidders may attend the meeting either in person.

ATTENTION: All questions submitted before or after the Non-Mandatory Pre-Bid Meeting must be submitted via email to the following email address:

bwojciechowski@midlandtexas.gov

The deadline for submitting additional questions after the Non-Mandatory Pre-Bid Meeting is Noon on Friday, January 6th, 2022. Questions submitted before the Noon deadline will be included in the Addendum that will go out that same day along with all discussion items, questions, answers, and any new information resulting from the Non-Mandatory Pre-Bid Meeting. Questions submitted after the Noon deadline will not receive any additional information and will instead only be directed to the information already provided.

Bids will be received on a unit price basis.

No Bid may be withdrawn within a period of 60 days after the date fixed for opening Bids.

“FAX” or telephone bids or modifications will not be accepted.

Bid Envelopes shall be plainly marked "Proposal for City of Midland”.

ATTENTION: Information for bidders, proposal forms, specifications, and plans may be obtained by emailing purchasing@midlandtexas.gov.

A bid bond or proposal guaranty is to accompany the bid, thereby guaranteeing the good faith of the bidder and that the bidder will enter into the written contract. The guaranty is to amount to five percent (5%) of the total bid and must be in the form of cash or certified check, issued by a bank satisfactory to the City of Midland, or bid bond. If in the form of cash or certified check, it is expressly understood and agreed that the City of Midland is given the right to retain such as liquidated damages if such bidder withdraws its bid anytime after such bid is opened and before official rejection of such bid, or if successful in securing the awarded thereof, such bidder fails to enter into the contract and furnish satisfactory performance and payment bonds. If a bid bond is submitted, it shall be executed on forms contained in these contract documents by a corporate surety authorized to do business in the State of Texas and acceptable to the City of Midland.

WAIVER OF ATTORNEY FEES

BY SUBMITTING A BID, BIDDER AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE OWNER, REGARDING THE AWARD OF ATTORNEY’S FEES, WHICH ARE IN ANY WAY RELATED TO THE CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE CONTRACT. THE BIDDER SPECIFICALLY AGREES THAT IF THE BIDDER BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS CONTRACT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS CONTRACT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET. SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, THE BIDDER AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY’S FEES TO WHICH BIDDER MIGHT OTHERWISE BE ENTITLED.

BIDDER AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING KNOWN RIGHT. THE BIDDER ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THE CONTRACT. THE BIDDER FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE OWNER AND THE BIDDER. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF SOVEREIGN IMMUNITY.

THE BIDDER AND OWNER ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION.

WAIVER

BIDDER’S WAIVER:

BY SUBMITTING A BID, THE BIDDER AGREES TO WAIVE AND DOES HEREBY VOLUNTARILY AND INTENTIONALLY WAIVE, ABANDON AND RELINQUISH ANY CLAIM THE BIDDER HAS OR MAY HAVE IN THE FUTURE AGAINST THE CITY OF MIDLAND, TEXAS, AND THE CITY’S EMPLOYEES, AGENTS AND OFFICERS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE FOLLOWING:

1. **THE ADMINISTRATION, EVALUATION OR RECOMMENDATION OF ANY BID;**

2. **WAIVER OR DELETION OF ANY OF THE REQUIREMENTS UNDER THE BID DOCUMENTS OR THE CONTRACT DOCUMENTS;**

3. **ACCEPTANCE OR REJECTION OF ANY BIDS; OR**

4. **AWARD OF THE CONTRACT**

BY SUBMITTING A BID, THE BIDDER ACKNOWLEDGES THAT THE BIDDER UNDERSTANDS ALL OF THE TERMS OF THE BIDDING DOCUMENTS AND CONSENTS TO THE BIDDING PROCESS AND THE POSSIBILITY OF A NEGATIVE ASSESSMENT. BY SUBMITTING A BID, THE BIDDER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE BIDDER AND THE CITY OF MIDLAND, TEXAS. THE BIDDER AGREES THAT THIS IS THE INTENTIONAL RELINQUISHMENT OF A PRESENTLY EXISTING KNOWN RIGHT. BY SIGNING THE REQUEST FOR BID AND/OR BELOW, YOUR COMPANY AGREES TO THE ABOVE WAIVER(S).

City of Midland

Amy Turner
City Secretary

Form Revised December 2022

INSTRUCTION AND INFORMATION FOR BIDDERS

1. LOCATION AND EXTENT OF WORK

The work and construction contemplated to be accomplished under this Contract is located in the City of Midland, Texas, and consists of municipal public works projects as set forth in the proposal.

The location and details for the construction and related work are shown upon a set of drawings dated December 8, 2022 and numbered from 1 (1) through C01 (71) inclusive. These drawings and plans, together with the specifications, form a part of the Contract. Where figures are shown on the drawings, they shall take precedence over scaled distances and dimensions.

2. TIME AND PLACE OF RECEIVING BIDS

All bids shall be sealed, addressed to the Mayor and City Council of the City of Midland, Texas, and will be received by the City Secretary in her office at City Hall, 300 N. Loraine Street, Midland, Texas, mailing address is P.O. Box 1152, Midland, Texas 79702, until time stated on the Advertisement for Bids.

3. PREPARATION OF BID FORM

Bids shall be submitted only on the forms provided therefore in the Contract Documents, and must not be submitted in letter form or in any other form. They shall be filled out in ink in both script and figures. The Proposal form provided in the Contract Documents sets forth in detail the various items and approximate quantities thereof contained in the Project. Bids submitted in any other form will be considered irregular and will be returned to the Bidder without receiving consideration by the Owner.

All bids must be submitted in sealed envelopes bearing on the outside the name of the Bidder, his address, and the name of the Project for which the bid is submitted. It is the sole responsibility of the Bidder to see that his bid is received in proper time. Any bid received after the scheduled closing time for receipt of bids will be returned to the Bidder unopened.

The bid must be signed in the name of the Bidder and must bear the signature in longhand of the persons duly authorized to sign the bid.

Changes in or additions to the bid form, recapitulations of the work bid upon, alternative proposals, or any other modification of the bid form which is not specifically called for in the Contract Documents may result in the Owner's rejection of the bid as not being responsive to the invitation. No oral or telephonic modification of any bid submitted will be considered and a telegraphic modification may be considered only if the postmark evidences that a confirmation of the telegram duly signed by the Bidder was placed in the mail prior to the opening of bids.

The bid submitted must not contain any erasures, interlineations or other corrections unless each such correction is suitably authenticated by affixing in the margin immediately opposite the correction the surnames of the person or persons signing the bid.

4. EXAMINATION OF SITE, DRAWINGS, ETC

Each Bidder is requested to visit the site of the proposed work and fully acquaint himself with the conditions relating to the construction and labor so that he may fully understand the facilities, difficulties and restrictions attending the execution of the work under the Contract. Bidders shall thoroughly examine and be familiar with the Plans and the Specifications. The failure or omission of any Bidder to receive or examine any form, instrument, addendum or other document or to visit the site and acquaint himself with conditions there existing shall in no way relieve any Bidder from obligations with respect to his bid or to the Contract. The submission of a bid shall be taken as prima-facie evidence of compliance with this section.

5. WITHDRAWAL OF BIDS

Any Bidder may withdraw his bid, either personally, by written request, or by telegraphic request confirmed in the manner specified above, at any time prior to the scheduled closing time for receipt of bids.

6. AGREEMENT AND BONDS

The successful Bidder will be required to furnish a Performance Bond, and a Payment Bond, in an amount equal to one hundred percent (100%) of the total Contract price, such bond to be executed in five (5) original counterparts by a Corporate Surety authorized to do business in the State of Texas, and acceptable to the City of Midland. All Bonds must be executed on forms contained in these Contract Documents. The form of Agreement which the successful Bidder, and Contractor will be required to execute is also included herewith. The form of Agreement and the form of the Bonds should be carefully examined by the Bidder.

7. INTERPRETATION OF PLANS AND DOCUMENTS

If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part of the Plans, Specifications, or other Contract Documents or finds discrepancies in, or omissions from the Plans or Specifications, he may submit to the Owner written request for an interpretation or correction thereof. The person submitting the request will be responsible for its prompt delivery. Any interpretation or correction of the Contract Documents will be made only by Addendum duly issued and a copy of such addendum will be mailed or delivered to each person receiving a set of such Contract Documents. The Owner will not be responsible for any other explanations or interpretations of the Contract Documents. No oral interpretations of any provision in the Contract Documents will be made to any Bidder.

8. BIDDERS INTERESTED IN MORE THAN ONE BID

No person, firm or corporation shall be allowed to make, or file more than one bid for the same work unless alternate bids are specifically called for. A person, firm or corporation that has submitted a sub-proposal to a Bidder, or that has quoted prices of materials to a Bidder is not thereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or making a prime proposal.

9. AWARD OF CONTRACT

The Owner reserves the right to reject any or all bids submitted and not make an award. The Owner also reserves the privilege of accepting any item as a separate contract or the combination of items of a contract. The Owner and Bidder agree that, if the Contract is awarded, that it will be awarded to either the lowest responsible bidder/proposer, or to the bidder/proposer who provides goods or services at the best value for the

City of Midland. In determining the best value for the City of Midland, the City of Midland may consider the criteria enumerated in Section 252.043 of the Texas Local Government Code. Further, the Owner reserves all rights granted by Section 271.027 of the Texas Local Government Code. The Owner reserves the right to award the bid to the lowest responsible bidder.

10. OPENING OF BIDS

Bidders are invited to be present at the opening of the Proposals. All Proposals shall be made and received with the understanding that the Bidder accepts the terms and conditions contained in the Contract Documents.

11. COMPARISON OF BIDS

All bids will be compared on the basis of the Proposal.

12. BID GUARANTY

A Certified Check, Bank Money Order, issued by a bank satisfactory to the Owner, or a Bidder's Bond on the form provided and approved by the City Attorney, in the amount of five percent (5%) of the largest possible lump sum bid submitted, payable without recourse to the Owner, must accompany the Bidder's Proposal, as a guaranty that the Bidder will enter into a Contract and execute the required Performance Bond and Guaranty in the forms provided within fifteen (15) days after notice of award of Contract to him. Bids or Proposals without the required Bid Guaranty will not be considered. All Proposals shall remain in effect for a period of thirty (30) days after date of bid opening.

13. CONTRACT DOCUMENTS

The complete Contract Documents may include the following: (1) Notice to Bidders, (2) Instructions and Information for Bidders, (3) Proposal, (4) Experience Record, (5) Bid Bond, (6) Contract Agreement, (7) Performance Bond, (8) Payment Bond, (9) Insurance Certificate, (10) General Conditions, (11) Special Conditions, (12) Detailed Specifications all of which are bound together, and/or (13) Certificate of Payment. The Contract Documents shall also include Drawings or Detailed Plans for the proposed work. A complete set of the Contract Documents and the detailed plans are on file in the Office of the City Secretary.

14. TIME ELEMENT

The work to be done under this Contract shall be commenced within fifteen (15) days from the date of the notice from the City to the Contractor to commence work. The Contractor shall commence performance of the Contract on the date stated in the City's notice to the Contractor to proceed and shall complete the performance of the Contract without delay.

15. PAYMENTS

Payments to the Contractor will be based upon the prices stated in the proposal and upon basis of the work performed as determined by the Engineer. The Engineer's determination shall be considered as final unless changes are authorized by the City in writing which shall affect the work. Upon issuance of the Certificate of Completion, the Engineer shall proceed to take final measurements and prepare a final statement of the value of all work performed and materials furnished under the terms of the agreement and shall certify same to the Owner who shall pay to the Contractor on or after the 30th day, and before the 35th day, after the date of the

Certificate of Completion, the balance due the Contractor under the terms of this agreement, provided he has fully performed his contractual obligations under the terms of this Contract, and said payment shall become due in any event upon said performance by the Contractor. Notwithstanding any provision of these Contract documents to the contrary, it is expressly understood and agreed by the parties hereto that neither the Certificate of Acceptance, nor the final or any other payment hereunder, nor any partial or total occupancy or possession of the project by the Owner, shall relieve the Contractor of his responsibility for completion of the entire project in a good workmanlike manner and in full compliance with the plans and specifications and the fulfillment of any warranties which may be required in the Contract documents.

Revised December 2022

NOTICE TO BIDDERS

IF THIS PURCHASE REQUIRES A CONTRACT, THE ATTACHED **CONTRACT AND INSURANCE REQUIREMENTS ARE NON-NEGOTIABLE**. MODIFICATIONS BY BIDDER/CONTRACTOR OF ANY MATERIAL TERM(S) TO THE CONTRACT DOCUMENTS WILL BE DEEMED A NON-RESPONSIVE BID. NON-RESPONSIVE BIDS WILL BE REJECTED. BIDDER/CONTRACTOR MUST BE WILLING TO SIGN THE CONTRACT AS IS AND WITHOUT MODIFICATIONS, PROVIDE PROPERLY EXECUTED BONDS (IF APPLICABLE) AND PROVIDE INSURANCE SPECIFICALLY AS REQUIRED WITHIN THE CONTRACT DOCUMENTS **WITHIN 21 DAYS** OF THE DATE OF THE TRANSMITTAL LETTER.

IF THE SELECTED BIDDER/CONTRACTOR CANNOT MEET THE ABOVE REQUIREMENTS, THEN **THE CITY RESERVES THE RIGHT TO AWARD THIS PURCHASE TO ANOTHER BIDDER**.

IMPORTANT NOTICE – IF THE CONTRACT DOCUMENTS REQUIRE WORKER'S COMPENSATION INSURANCE, BIDDER/CONTRACTOR MUST CARRY WORKER'S COMPENSATION INSURANCE TO BE ELIGIBLE FOR THIS CONTRACT. IF YOU CANNOT PROVIDE WORKER'S COMPENSATION INSURANCE AS REQUIRED BY STATE OF TEXAS STATUTE, WE RESPECTFULLY REQUEST THAT YOU "NO BID" THIS WORK.

COMPLIANCE: Company agrees that it shall comply with Texas Government Code Section 2252.908, *et seq.*, as amended. Company agrees that it shall comply with Texas Local Government Code Section 176.006, *et seq.*, as amended. For further instructions on how to comply with Texas Government Code Section 2252.908 and Texas Local Government Code Section 176.006,

please go to https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm and https://www.ethics.state.tx.us/filinginfo/conflict_forms.htm.

ANY VENDOR WHO FAILS TO COMPLY WITH THE TERMS OF THE AWARD **MAY BE DECLARED AN IRRESPONSIBLE VENDOR**. BIDS SUBMITTED BY SAID VENDOR SHALL NOT BE CONSIDERED AGAIN FOR A MINIMUM PERIOD OF SIX MONTHS AS DETERMINED BY THE CITY MANAGER.

IMPORTANT NOTICE

Conflict Of Interest Reporting Requirements

Compliance with LOCAL GOVERNMENT CODE TITLE 5. MATTERS AFFECTING PUBLIC OFFICERS AND EMPLOYEES SUBTITLE C. MATTERS AFFECTING PUBLIC OFFICERS AND EMPLOYEES OF MORE THAN ONE TYPE OF LOCAL GOVERNMENT CHAPTER 176. DISCLOSURE OF CERTAIN RELATIONSHIPS WITH LOCAL GOVERNMENT OFFICERS; PROVIDING PUBLIC ACCESS TO CERTAIN INFORMATION.

Form CIQ: This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session. This questionnaire shall be filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a). By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code. A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

Bidders are responsible for filing Conflict of Interest form "CIQ" in accordance with the above referenced statute. Failure to do so is a class C Misdemeanor. Contracts or Purchase Orders awarded to a vendor that has violated this law is subject to termination at such time that the violation is discovered with no recourse to the City of Midland. The bidder will be subsequently removed from the bidders list for a minimum of one year.

When there is no known conflict of interest as defined by the statute, it is not necessary to file/submit the Form CIQ. The form must be submitted if a conflict is subsequently discovered.

By submitting a response to this request, vendor represents that it complies with the requirements of Chapter 176 of the Texas Local Government Code.

For a current list of the local government officers go to: http://www.midlandtexas.gov/

Upon completion of the form, sign and submit with bid or mail to:

City of Midland
Attn: City Secretary
PO Box 1152
Midland, Texas 79702

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

N/A

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information is being disclosed.**

_____

Name of Officer

4 **Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

5 **Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

_____

Signature of vendor doing business with the governmental entity

1/10/2023

Date

CITY OF MIDLAND

Consideration of Location of Bidder's Principal Place of Business
For Bids of $50,000 up to $100,000 for Services and $500,000 for Commodities
Affidavit of Eligibility

Pursuant to Texas Local Government Code 271.9051, in purchasing real property, personal property that is not affixed to real property, or services, if the City receives one or more bids from a bidder whose principal place of business is in the City of Midland and whose bid is within five percent (5%) of the lowest bid price received by the City from a bidder who is not a resident of the City of Midland, the City may enter into a contract with:

(1) the lowest bidder; or

(2) the bidder whose principal place of business is in the City of Midland if the City Council determines, in writing, that the local bidder offers the City the best combination of contract price and additional economic development opportunities for the City of Midland created by the contract award, including the employment of residents of the City of Midland and increased tax revenues to the City of Midland.

In order to receive consideration, bidders must submit this affidavit to:

Erika Martinez
Purchasing Manager
City of Midland
300 N. Loraine St.,
PO BOX 1152
Midland, TX 79702-1152

Complete all areas below. Incomplete affidavits may be rejected.

Local Business Name: Entrench, Inc.

Local Address (must be within the City limits): 3405 S. CR 1216, Midland, TX 79708/P.O. Box 7605, Midland, TX 79

1. Is the above address the principal place of business for the business named above? ☒ Yes ☐ No
2. How many residents of the City of Midland are employed at the above business location? 3
3. Year your business was established in the City of Midland: 2010
4. If you collect sales tax for ANY class of customer, provide the following Reseller information:

   Reseller Permit Number: _____

   Company Name and Address (as it appears on permit):

   _____

   _____

   _____

5. Does your business have more than one office in the State of Texas? ☐ Yes ☒ No
   If Yes, identify the office location considered as the point-of sale for the purpose of sales tax calculation:

   _____

   _____

6. Was the local business required to pay business and/or real property tax for the most recent tax year?

   ☒ Yes ☐ No

   If Yes, did the local business pay any of this tax to the City of Midland? ☐ Yes ☒ No

Under penalty of perjury, the undersigned states that the foregoing statements are true and correct. It is further acknowledged that any person, firm, corporation or entity intentionally submitting false information to the City in an attempt to qualify for eligibility shall be prohibited from bidding on City of Midland products and services for a period of one (1) year.

Authorized Signature: _____ Date: 1/10/2023

Printed Name and Title: Alberto Caballero, President

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ Go to *www.irs.gov/FormW9* for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

Print or type. See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
Entrench, Inc

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☑ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.
1728 W. Bender

Requester's name and address (optional)

6 City, state, and ZIP code
Hobbs, NM 88240

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			-			-				

or

Employer identification number

2	7	-	3	3	6	2	1	2	8

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here Signature of U.S. person ▶ [signature] Date ▶ 1/10/23

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

ENTRINC-01 SBOSWEL

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/10/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Stacey Boswell
Burke Insurance Group, LLC 1690 S. Telshor Blvd Las Cruces, NM 88011	PHONE (A/C, No, Ext): (575) 524-2222 2 FAX (A/C, No): E-MAIL ADDRESS: sboswell@burke-insurance.com
	INSURER(S) AFFORDING COVERAGE — NAIC #
	INSURER A : Cincinnati Insurance Company (The) — 10677
INSURED	INSURER B : Builders Trust of NM — 525190
Entrench, Inc. 3311 N. Grimes Hobbs, NM 88240	INSURER C :
	INSURER D :
	INSURER E :
	INSURER F :

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [X] PRO-JECT [ ] LOC OTHER:	X	X	EPP 0405600	10/1/2022	10/1/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,00 $ 100,00 $ 10,00 $ 1,000,00 $ 2,000,00 $ 2,000,00
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY [ ] SCHEDULED AUTOS X HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY	X	X	EPP 0405600	10/1/2022	10/1/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Hired & Non-Own	$ 1,000,00 $ $ $ $ 1,000,00
A	X UMBRELLA LIAB [X] OCCUR EXCESS LIAB [ ] CLAIMS-MADE DED RETENTION $			EPP 0405600	10/1/2022	10/1/2023	EACH OCCURRENCE AGGREGATE	$ 1,000,00 $ 1,000,00 $
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [ ] If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	X	WC-100-0006086-2023A	1/1/2023	1/1/2024	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 2,000,00 $ 2,000,00 $ 2,000,00

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Project: Garfield Street Utility Bond

SEE ATTACHED ACORD 101

CERTIFICATE HOLDER

City of Midland
PO Box. 1152
Midland, TX 79702

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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AGENCY CUSTOMER ID: ENTRINC-01 SBOSWEL

LOC #: 1

ADDITIONAL REMARKS SCHEDULE

AGENCY Burke Insurance Group, LLC	NAMED INSURED Entrench, Inc. 3311 N. Grimes Hobbs, NM 88240 Lea
POLICY NUMBER SEE PAGE 1	
CARRIER SEE PAGE 1 / NAIC CODE: SEE P 1	EFFECTIVE DATE: SEE PAGE 1

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

Description of Operations/Locations/Vehicles:
City of Midland is named as Additional Insured per Additional Insured Endorsement for ongoing and completed operation for General Liability as required by written contract. City of Midland is named as Additional Insured on all policies except Worker's Compensation per written contract. A waiver of subrogation exists in favor of City of Midland as to the general liability, auto, and workers compensation policies per written contract. The general liability, auto policies are primary and non-contributory.

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TECHNICAL SPECIFICATIONS

FOR: Garfield Street Utility Bond Project – Break Out 02

All construction for this project must conform to the City of Midland "STANDARD SPECIFICATIONS" issued by the Engineering Services Department which are herein made a part of these specifications by reference.

The bidder/contractor is to pay particular attention to the following items in the "STANDARD SPECIFICATIONS" for this project.

1) Preparation of Right of Way
2) Excavation, Embankment and Preparation of Subgrade
3) Concrete Curb and Gutter, Sidewalks, Driveways, Valley Gutters, Center Drains and Rip Rap
4) Concrete Structures
5) Flexible Base, Caliche
6) Bituminous Prime
7) Bituminous Tack
8) Hot Mix Asphaltic Concrete
9) Double Course Asphalt Surface Treatment
10) Preparation of Asphaltic Concrete Surface for Overlay or Seal Coat
11) Seal Coat
12) Asphalt –Rubber Seal Coat
13) Polymer Modified Slurry
14) PVC Pipe Casings
15) Water Line Specifications
16) Gravity Flow Sewers for Waste Water and Storm Water

The "STANDARD SPECIFICATIONS" are available from the Department of Engineering Services, City Hall, 300 North Loraine Street, Suite 510, Midland, Texas.

GENERAL CONDITIONS AND PROVISIONS

1. DEFINITIONS

The following terms as used in this contract shall be defined and interpreted as follows:

(a) "Contract" or "This Contract" or "Agreement": The particular Contract executed by the Contractor and the Owner of which these general conditions are integral parts.

(b) "Contractor": The person, firm or corporation to whom this Contract is awarded by the Owner and who is a party thereto.

(c) "Owner", "City", or pronouns instead: The entity that is a party to this Contract, contracting under the official name of the City of Midland, Texas or the City Council of the City of Midland.

(d) The words "as directed", "as required", "as permitted", "acceptable to", "satisfactory", and the words of like import, shall mean that the direction, requirement or permission of the Engineer is intended.

(e) "Engineer": The word "Engineer" used in these specifications or in this Contract means the duly authorized representative or agent of the Owner supervising the performance of the Contract and representing the Owner in his Contractual relations and negotiations with the Contractor during the period of construction. The Engineer will be represented by assistants and inspectors authorized to act for him. On all questions concerning the acceptability of material or equipment, the classifications of material, the execution of the work, conflicting interest of Contractors performing related work and the determination of costs, the decision of the Engineer shall be final, but shall not relieve the Contractor of his responsibility for completion of the entire work in a good and workmanlike manner and in full compliance with the plans and specifications.

Inspectors are required to see that all the provisions of the Contract specifications are faithfully adhered to. Any inspector may, if authorized by the Engineer, stop the work entirely if there is not sufficient quantity of suitable and approved material on the ground to carry it on properly, or for any other good and sufficient cause. Any work done in the absence of an inspector may be ordered opened up for thorough examination, and must be rebuilt or replaced at the Contractors sole expense if found to be deficient or not in accordance with the plans and specifications. But no approval by an inspector shall be construed as an acceptance of defective or improper work or material, which must be rebuilt or properly replaced whenever discovered. Inspectors have not the power to give orders or directions under any possible circumstances, except as herein defined and provided, and on authority of the Engineer

(f) "Subcontractor": Any person, firm or corporation other than an employee of the contractor, supplying, for and under agreement either with the Contractor or any subcontractor of the Contractor, labor or material, or both, at the site of the project in connection with this Contract.

(g) "Project": The structure or improvement to be constructed in whole or in part through the performance of this Contract.

(h) "Work on the Project": Such work as is performed or ordinarily would be performed at the site of the project.

(i) "Surety": Any firm or corporation executing a Surety Bond or Bonds payable to the Owner securing the performance of the Contract either in whole or in part.

(j) Whenever certain articles are specifically mentioned, by brand name or name of the manufacturer, such materials shall be taken as standard and guide for quality, operation, capacity, etc. The term "or equal" shall mean that articles of equal characteristics as required, but of different brand or manufacturer, may be substituted and accepted, subject in all instances to the approval of the Engineer.

(k) "Special Provisions", "Special Conditions", "Project Specific Specification" or "Job Specific Specifications" are included as amendment of and/or additions to the General Conditions and/or Standard Specifications for the particular project in which they are included and will take precedence over the General Conditions and Standard Specifications only in so far as the amendments and/or additions. All other provisions in the General Conditions and/or Standard Specifications will not be affected.

(l) "Drawings" "Contract Drawings", "Plans" "Detail Drawings" "Detail Sheets" or "Plans and Details" refers to the set of drawings which show the details for the construction and related work anticipated on this project and upon which bids are being solicited.

2. CONFLICT OF PROVISIONS

Unless it is specifically provided otherwise, any provision in any other part of this Contract which may be in conflict or inconsistent with any provision in the General Conditions and Provisions shall be void to the extent only of such conflict or inconsistency.

3. DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR

The Contractor shall have charge of and shall be responsible for the entire work under this Contract until its completion and acceptance by the city. A competent superintendent, foreman or other representative, invested with sufficient authority to conduct the work properly, shall be maintained on the work at all times.

It is expressly agreed and understood that no decision of the Engineer or any certificate issued nor payment made to the Contractor nor partial or entire use or occupancy of the work by the Owner, shall be an acceptance of any work or materials not in accordance with this Contract, nor constitute a waiver of the Contractor's responsibility to perform the entire work in a good and workmanlike manner and in accordance with the plans and specifications.

4. TIME ELEMENT

The work shall be commenced and finished within the time set out in the Form of Contract.

The time of completion of this Contract is an essential element and consideration. Since, therefore, time is of the essence thereof, and in the event of delay in the completion of the entire work required hereunder beyond the period prescribed, or beyond the period for which time may be extended by authority of the Owner for good cause shown, the Owner shall be paid damages for such delay. Inasmuch as the amount of such damages is difficult to ascertain, it is hereby stipulated and agreed that such damages shall be liquidated and the Owner shall be paid damages at the rate as set forth in the Special Provisions, said damages to be paid to the Owner for each and every day that the Contractor be in default in completing the entire work required under this Contract. The Owner shall have the right to deduct such amounts from any monies due, or which may become due, under

this Contract. In the event that no amount for such damages is shown in the Special Provisions of these specifications, it is agreed that the amount of damages shall be Five Hundred dollars ($500.00) per day.

If during the progress of the work weather conditions, or other circumstances beyond the control of the Contractor should prevail to the extent that the work cannot be prosecuted and completed within the time specified in the Contract, the Contractor shall file with the Engineer within one week of the occurrence of such delay a request for a credit on the time of completion. Unless the Contractor files such request, the liquidated damages specified above will be enforced.

5. PAYMENT TO CONTRACTOR

ESTIMATED QUANTITIES:

This Contract, including the specifications, plans and estimate, is intended to show clearly all work to be done and material to be furnished hereunder. Where the estimated quantities are shown for the various classes of work to be done and material to be furnished under this Contract, they are approximate and are to be used only as a basis for estimating the probable cost of the work and for comparing the proposals offered for the work. It is understood and agreed that the actual amount of work to be done and material to be furnished under this Contract may differ somewhat from these estimates, and that where the basis for payment under this Contract is the unit price method, payment shall be for the actual amount of such work done and the material furnished.

Where payment is based on the unit price method, the Contractor agrees that he will make no claim for damages, anticipated profits or otherwise on account of any differences which may be found between the quantities of work actually done, the material actually furnished under this Contract and the estimated quantities contemplated and contained in the proposal provided, however, that in case the actual quantity of any major item should become as much as twenty percent (20%) more than, or twenty percent (20%) less than the estimated or contemplated quantity for such items, then either party of this agreement, upon demand, shall be entitled to a revised consideration upon the portion of the work above or below twenty percent (20%) of the estimated quantity.

A "Major Item" shall be construed to be any individual item incurred in the proposal that has a total cost equal to or greater than five percent (5%) of the total Contract cost, computed on the basis of the proposal quantities and the Contract unit price.

Any revised consideration is to be determined by agreement between the parties, otherwise by the terms of this Contract, as provided under "Extra Work".

PAYMENT; RETAINAGE:

On or before the 1st day of each month the Contractor shall prepare an itemized statement showing the total value of the work completed by the Contractor up to and including the 25th day of the preceding month; said statement shall also include the value of all sound materials delivered on the site of the work that are to be fabricated into the work. NO ESTIMATE WILL BE MADE ON UNCOMPLETED PORTIONS OF THE WORK.

After all work is completed by Contractor, including all Change Orders altering the original scope and amount of the contract are completed, and the City has inspected and approved that the work is completed and in compliance with the contract and all subsequent Change Orders, the City may thereafter issue payment to Contractor in the amount of the contract and all Change Orders. The City shall be the final judge of when the

work is completed by Contractor. The City, in its sole discretion, shall determine if the work under the contract and under any Change Orders has been done to the City's requirements.

The City may make periodic payments to Contractor; provided, however, such periodic payments may only be made pursuant to this section, and only after all work and all Change Orders are completed by Contractor and approved by the City. The approval shall be in the City's sole discretion. Requests for progress payments may be made to the extent of the materials and labor completed at the end of each month. Upon approval by the City or the City's representative, the request and invoice shall be forwarded for payment less 5% retainage. The total of these payments shall not exceed 95% of the total contract amount.

FINAL COMPLETION AND ACCEPTANCE:

Within ten (10) days after the Contractor has given the Engineer written notice that the work has been completed, or substantially completed, the Engineer and the Owner shall inspect the work and within said time, if the work be found to be completed or substantially completed in accordance with the Contract documents, the Engineer shall issue to the Owner and the Contractor his Certificate of Completion.

FINAL PAYMENT:

Upon the issuance of the Certificate of Completion, the Engineer shall proceed to make final measurements and prepare final statement of the value of all work performed and materials furnished under the terms of the Contract and shall certify same to the Owner, who shall pay to the Contractor the balance due the Contractor under the terms of this Contract, provided he has fully performed his obligations under the terms of this Contract. Notwithstanding any provision of these Contract Documents to the contrary, it is expressly understood and agreed by the parties hereto that neither the certificate of acceptance, nor the final or any other payment hereunder, nor any partial or total occupancy or possession of the project by the Owner, shall relieve the Contractor of his responsibility for completion of the entire project in a good and workmanlike manner and a full compliance with the plans and specifications and the fulfillment of any warranties which may be required in the Contract Documents.

6. OWNER'S RIGHT TO WITHHOLD CERTAIN AMOUNTS AND MAKE APPLICATION THEREOF

In addition to the amount which the Owner may otherwise retain under the Contract, the Owner may withhold a sufficient amount or amounts of any payment or payment otherwise due to the Contractor, as in this judgment may be necessary to cover:

(a) Payments which may be past due and payable for just claims against the Contractor or any subcontractor for labor or materials furnished for the performance of this Contract.

(b) For defective work not remedied.

(c) For failure of the Contractor to make proper payments to his subcontractors.

7. CERTIFICATE OF PAYMENT

Contractor shall, prior to issuance of final payment pursuant to the terms herein stated, provide proof satisfactory to the owner that all debts, bills and expenses incurred by the Contractor, his agents, employees or subcontractors employed by him, for labor, wages, materials and other purposes, in the furtherance of this

project, have been paid and satisfied in full. Satisfactory proof shall consist of an executed Certificate of Payment.

8. EXTRA, ADDITIONAL OR OMITTED WORK PAYMENT

The Owner, upon proper action by its governing body, may require changes in this Contract, or additions to, or deductions from the work to be performed or the materials to be furnished pursuant to this Contract. No employee, agent or representative of the Owner, with the exception of the governing body authorized to award this Contract, has any power to approve any change in this Contract and it is the responsibility of the Contractor before proceeding with any change to satisfy himself that the change has been properly authorized on behalf of the Owner. No charge for any extra work or other change in the Contract will be allowed unless the extra work or change has been authorized in writing by the Owner, or its duly authorized representative, and the price therefore is stated in such written authority.

Adjustments, if any, in the amounts to be paid the Contractor where such adjustments are made by reason of additions to or deductions from the quantities of units or items bid upon in the proposal schedules, shall be paid for in accordance with the provisions of the Specifications, at the unit and/or lump sum prices bid in such proposal schedules.

Adjustments, if any, in the amounts to be paid the Contractor where such adjustments are made by reason of additions of items not appearing in the proposal schedules, or addition of work of such a nature that unit and/or lumps sum prices contained in the proposal schedules cannot reasonably or equitably be applied to provide proper payment therefore, the payment to the Contractor for such work shall be determined by one or more of the following methods:

(a) By an acceptable lump sum proposal from the Contractor.

(b) By unit prices contained in the Contractor's proposal and incorporated in the Contract or fixed by subsequent agreement between the Owner and the Contractor.

(c) By a cost method pursuant to which the Contractor shall be paid the costs of the change or addition. He shall be required to keep and present in such form as the Owner may direct, a correct account of the cost of the change or addition, together with all vouchers therefore. The cost may include an allowance for overhead and profit not to exceed fifteen percent (15%) of the net cost.

In computing the cost, there shall be considered reasonable and proper net expenditures for labor, materials, power tools and equipment, pro rata charges for foremen, deductions for social security, old age and unemployment benefits and workmen's compensation insurance and surety bond premium. In computing cost of machinery and equipment involved in additional work, the amount to be paid shall be not more than one hundred percent (100%) of the latest schedule of "Equipment Ownership Expense" adopted by Associated General Contractors of America. No overhead and profit shall be allowed on the deductions for Social Security, old age and unemployment benefits. All other expenditures shall be treated as overhead costs.

No extra work shall be performed or change made unless in pursuance of a written order from the Owner stating that the extra work or change is authorized and no claim for an addition to the Contract sum shall be valid unless so ordered; provided, however, that nothing in this Article shall excuse the Contractor from proceeding with the prosecution of the work so changed.

The Contractor shall, when required by the Owner, furnish an itemized breakdown of the quantities and prices used in computing the value of any change, addition or deduction that might be ordered.

If the Contractor should claim that any instruction, request, drawing, specification, action, condition, omission, default, or other situation obligated or may obligate the Owner to pay additional compensation to the Contract, or constitutes a waiver of any provision in the Contract, he shall notify the Owner in writing of such claim within ten (10) days from the date he has actual or constructive notice of the factual basis supporting the claim. The Contractor's failure to notify the Owner within such ten (10) days period shall be deemed a waiver and relinquishment of any such claim against the Owner. The procedure for consideration of such claims shall be as stated in this Article.

9. ASSIGNMENT OF CONTRACT

The Contractor shall not assign this Contract or any part thereof, nor any monies due or to become due thereunder without the prior written consent of the Owner. No assignment of this Contract shall be valid unless it shall contain a provision that the funds to be paid to the assignee under the assignment are subject to a prior lien for services rendered or material supplied for performance of the work called for under this Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

10. SUBCONTRACTORS

Specialty subcontractors may be utilized for the performance of such parts of the work under this Contract as, under normal practices, are performed by Specialty subcontractors, unless the Owner determines that the Contractor has heretofore customarily performed such specialty work with his own organization and is equipped to do so, or unless the Owner determines that performance of the specialty work by Specialty subcontractors will result in increased costs or inordinate delays.

The Contractor shall not subcontract any work to be performed or any materials to be furnished in the performance of this Contract without the prior written consent of the Owner. If the Contractor shall subcontract any part of this Contract, the Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractor and of the persons either directly or indirectly employed by the subcontractor as he is for the acts and omissions of persons directly employed by himself. Nothing contained in this Contract shall create any Contractual relations between any subcontractor and the Owner. The Contractor shall ensure that the sub contractor has the insurance coverage required by this contract.

The Owner's consent to or approval of any subcontract under this Contract shall not in any way relieve the Contractor of his obligations under this Contract and no such consent or approval shall be deemed to waive any provisions of this Contract.

11. SUSPENSION OF WORK

Pending settlement of disputes on any point of controversy, the Engineer may suspend action on all or any part of the work. The Contractor shall not be entitled to any claim for loss or damage by reason of such, nor shall he be entitled to extension of time, although such extension of time may be granted by the Engineer if he deems it in the interest of the work.

12. RIGHT OF OWNER TO TERMINATE CONTRACT

If, in the opinion of the Engineer, the Contractor shall be improperly performing the work under this Contract, or shall neglect or refuse to take out or rebuild such work as shall have been rejected by the Engineer as being defective or unsuitable, or if, any time, the Engineer shall be of the opinion that the work is unnecessarily delayed and will not be finished within the prescribed time, or if the Contractor shall abandon the work, or shall neglect or refuse to comply with the instructions of the Engineer relative thereto, or shall fail in any manner to comply with the Specifications or Stipulations herein contained, the Engineer shall notify the Contractor to that effect in writing, and if the Contractor shall not within five (5) days thereafter take such measures as will, in the judgment of the Engineer, insure the satisfactory performance or construction of the work, the City may annul and cancel the Contract, in which event it shall notify the Contractor to discontinue all work under this Contract, and the Contractor shall immediately respect such notice and stop work and cease to have any rights to the possession of the ground and shall forfeit his Contract. Such annulment shall not entitle the Contractor to any claim for damages on account thereof, nor shall it affect the right of the City of Midland to recover damages on account of such failure. The City Council may thereupon advertise and re-let a new Contract for the uncompleted work without further ordinance, in the same manner as was followed in the letting of this Contract, and any excess of cost arising there from over and above what would have resulted from the prices set forth in this Contract will be charged against the Contractor and his surety or sureties hereto, who shall be liable therefore.

13. RIGHT OF CONTRACTOR TO TERMINATE CONTRACT

If the work should be stopped under an order of any court or other public authority for a period of three (3) months, through no act or fault of the Contractor or of anyone employed by him, or if the City should fail to make payment to the Contractor within thirty (30) days after such payment is due, as set out in the Contract, then the Contractor may, upon seven (7) days written notice to the City and the Engineer, stop work or terminate his Contract and recover from the City payment for all work executed and for any loss sustained upon any plant or materials and reasonable profit and damages.

14. INCIDENTAL WORK

Any and all minor details of the work not specifically mentioned in the Specifications but obviously necessary for the proper completion of the work, such as the proper connection of new work to old, shall be considered as incidental to and a part of and included with the work for which the prices are named in the Contract Documents. The Contractor will not be entitled to any extra or additional compensation therefore, unless specifically stated otherwise.

15. PERMITS – COMPLIANCE WITH LAW

The Contractor shall, at his expense, obtain all permits and licenses necessary for the performance of this Contract, and give all necessary notices, pay all fees required by law, and comply with all laws, ordinances, rules and regulations governing the Contractor's performance of the Contract.

Portions of this contract qualify for exemption pursuant to the provisions of the Texas Limited Sales, Excise and Use Tax Act. The Contractor shall obtain a sales tax exemption certificate from the City. All labor performed on the project and all materials incorporated into the project qualify for such tax exemption. However, equipment and parts for equipment purchased to be used on the project, but are not incorporated into the project; do not qualify for said tax exemption. Contractor shall issue a resale certificate in lieu of paying such sales tax for all

materials incorporated into the project. Further Contractor shall separate the charges for materials incorporated into the project from the charges for labor.

16. INSPECTION BY OWNER

The Owner and its representatives shall at all times have access to all parts of the work and to the shops wherein the work is in preparation for the purpose of inspection, and the Contractor shall at all times maintain proper facilities and provide safe access for such inspection.

The Owner shall have the right to reject materials and workmanship which are defective, or to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the premises without charge to the Owner. If the Contractor does not correct such rejected work within a reasonable time, fixed by written notice, the Owner may correct same and charge the expense to the Contractor. No inspector shall have the power to waive the obligation resting upon the Contractor to furnish good material or do work as herein prescribed, and any failure or omission of any inspector or the Engineer to condemn any defective material or work shall not release the Contractor from the obligation to at once tear out, remove and properly rebuild the same at any time upon discovery of the defect and upon receipt of notice of the Engineer to do so.

Should it be considered necessary or advisable by the Owner at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out any portion thereof, the Contractor shall on request promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any respect due to the fault of the Contractor or his subcontractor, he shall defray all the expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the additional cost of labor and materials necessarily involved in such examination and replacement, plus fifteen percent (15%) for overhead and profit, shall be allowed the Contractor.

Where the Specifications require work to be specifically tested or approved, it shall not be tested or covered up without timely notice to the Owner of its readiness for inspection and without the approval or consent thereto by the Owner. Should any such work be covered up without such notice, approval or consent, it must, if required by the Owner, be uncovered for examination at the Contractor's expense.

17. PATENTS

The Contractor shall hold and save the Owner and its officers, agents, servants, and employees harmless from liability of any nature or kind, including all costs and legal expenses, for or on account of, any patented or unpatented invention, process, article or appliance, manufactured for or used in the performance of the Contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract.

18. MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts of neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement or arbitration, if such other Contractor or subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other Contracts that have been or may be awarded by the Owner in the prosecution of the project to the end that the Contractor may perform this Contract in the light of such other Contract, if any.

Nothing herein contained shall be interpreted as granting the Contractor exclusive occupancy of the site of the project. The Contractor shall not cause any unnecessary hindrance or delay to any other Contractor working on the project. If the performance of any Contract for the project is likely to be interfered with by the simultaneous execution of some other Contract or Contracts, the Owner shall decide which Contractor shall cease work temporarily and which shall continue, or whether the work under the Contracts can be coordinated so that the Contractors may proceed simultaneously. The Owner shall not be responsible for any damages suffered or extra costs incurred by the Contractor, resulting directly or indirectly from the award or performance or attempted performance of any other Contract or Contracts on the project, or caused by any decision or omission of the Owner respective to the order of precedence in the performance of Contracts.

19. NOTICE AND SERVICE THEREOF

Any notice from one party to another under the Contract shall be in writing and shall be dated and signed by the party giving such notice or by duly authorized representative of such party. Any such notice shall not be effective for any purpose whatsoever unless served in the following manner; namely, if the notice is given to the Owner, (a) by personal delivery thereof to the individual duly authorized to direct and supervise the project of the Owner, or (b) by depositing the same in the United States Mail, enclosed in a sealed envelope, addressed to the City of Midland, 300 North Loraine Street, Midland, Texas, 79701, postage prepaid and certified; or if the notice is given to the contractor (a) by personal delivery thereof to the project superintendent or other person authorized to act for the contractor, or (b) by depositing the same in the United States Mail, enclosed in a sealed envelope, addressed to the Contractor at his regular place of business or at such other address as may have been established for the conduct of the work under this Contract, postage prepaid and certified; or (c) if the notice is given to the Surety or any other person by personal delivery to such Surety or other person, or by depositing the same in the United States Mail, enclosed in a sealed envelope addressed to such Surety or other person, at the address of such surety or other person last communicated by him to the party giving the notice, postage prepaid and certified.

20. QUALITY OF MATERIALS AND WORKMANSHIP

It is the intention of this Contract to have only first class materials and the best workmanship throughout, and the methods and appliances adopted by the Contractor must be such as will secure a satisfactory quality of work and will enable him to complete the work in the time agreed upon. If at any time such methods and appliances appear inadequate, the Engineer may order the Contractor to improve their character or increase their efficiency, and the Contractor must conform to such order; but the failure of the Engineer to order such improvement of methods or increase of efficiency will not relieve the Contractor from his obligations to perform good work or finish it in the time agreed upon. The Contractor shall submit samples or specimens of any and all materials proposed to be used in the work when required to do so by the Engineer. All materials must be of specified quality and fully equal to approved samples. All work must be done and completed in a thorough and workmanlike manner. All materials furnished and all work done must be satisfactory to the Engineer and will be subject to rigid inspection, and if not in accordance with the Specifications in the opinion of the Engineer, shall be made to conform thereto.

It is understood that except as otherwise specifically stated in the Contract, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence of temporary

construction of every nature, and all other services and facilities required for the completion of the Contract within the specified time.

21. SPECIAL METHODS

The Engineer may consent to special methods for carrying out the work in difficult cases, but the Contractor will not be relieved of responsibility for the result. The Contractor shall be responsible for the result of all work performed by him whether directed by the Engineer or not.

22. REMOVAL OR REPLACEMENT OF WORK DONE WITHOUT LINES OR GRADES

Any work done without lines or grades given by the Engineer or under his direction or without the supervision of an inspector, may be ordered removed and replaced by the Engineer at the Contractor's expense.

23. COVERING WORK

No work shall be covered until it has been examined and approved by the Engineer.

24. UNFAVORABLE WEATHER

During unfavorable weather and other adverse conditions, only such portions of the work may be done which will not be damaged thereby, unless by special means or precautions approved by the Engineer.

25. ALL WORK SUBJECT TO FINAL INSPECTION

Failure to neglect on the part of the Engineer or his inspectors to condemn or reject bad or inferior work or materials shall not be construed to imply his acceptance of such work or materials if it becomes evident at any time prior to the final acceptance of the work and the release of the Contractor.

26. PUBLIC CONVENIENCE

When materials for construction are brought on the work site they shall be neatly piled so as to cause as little obstruction to travel as possible, and so that they may be conveniently inspected.

No material or other obstruction shall be placed within five (5) feet of fire hydrants, which must at all times be readily accessible to the fire department, nor shall any material be piled within two (2) feet of any trees.

The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault or negligence in connection with the prosecution of the Contract and shall be responsible for the proper care and protection of all materials delivered and work performed until completion, and final acceptance by the Owner.

The Contractor shall provide such heat, covering and enclosures as are necessary to protect all work and materials against damage by weather conditions.

The Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavement, utilities, adjoining property, and structures, and avoid damage thereto, and he shall at his own expense completely repair any damage thereto caused by his operations.

If required by the Engineer, the Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations, and other parts of all existing structures adjacent and adjoining the site of the Project, which are in any way affected by the excavations or other operations connected with the completion of the work under this Contract. Whenever any notice is required to be given by the Owner or the Contractor to any adjoining or adjacent landowner or other party before commencement of any work under this Contract, such notice shall be given by the Contractor. The Contractor shall indemnify the Owner and save it harmless from any damages on account of settlement or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the Owner may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

During the progress of the work the convenience of the public and of the residents along streets must be provided as far as practicable. Convenient access to driveways, houses and buildings along streets must be maintained whenever possible.

Temporary approaches and crossings of streets and sidewalks must be provided and kept in good condition whenever practicable.

The Contractor shall provide and maintain such fences, barriers, "Street Closed" signs, red lights and watchmen as may be necessary to prevent avoidable accidents to residents and to the public.

The Contractor alone shall be held responsible for all injuries to persons, and for all damages to property of the City or others, caused by or resulting from the negligence of himself, his employees or agents during the progress of or connected with the prosecution of the work, whether within the limits of the work or elsewhere. He must restore all injured public or private property to a condition as good as it was when he entered upon the work, purchasing new materials to replace all that which is injured or destroyed during the course of the work.

In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization from the Owner is authorized to act at his discretion to prevent such threatened loss or injury and he shall so act.

27. TRAFFIC CONTROL

It is the policy of the City of Midland to keep at least two travel lanes open to traffic at all times and where possible to have three travel lanes between 7:30 a.m. and 9:00 a.m. and 4 p.m. and 6 p.m. (Two (2) lanes in the direction of peak travel).

At least 48 hours before beginning work the contractor shall present a traffic control and/or barricade plan prepared as per the approved Barricading Standards to the Traffic Engineering Division for review and approval. When approved and barricades are in place, they shall be inspected by the Traffic Engineering Division prior to beginning work.

Traffic control signs, such as stop signs, yield signs, etc., are placed in various intersections for the safety and protection of the traveling public. The contractor shall not move, alter or damage said signs for any reason. If said signs must be removed for construction purposes, contractor shall notify the City of Midland, Traffic Division Operations Superintendent at least 48 hours (not including weekends) before construction activities are scheduled to begin. All construction barricading, warning signs, and other construction traffic control devices shall be in place and shall be in accordance with the Texas Manual on Uniform Traffic Control Devices and approved Barricading Standards included in plans before traffic signs can be removed. The contractor shall notify the Traffic Division Operations Superintendent at least 72 hours (not including weekends) before

scheduled removal of construction barricades, warning signs, and traffic control devices. But in all cases the contractor shall not remove said barricades, warning signs, and traffic control devices until the City of Midland's Traffic Department has replaced stop signs, yield signs, etc., in their proper location. The Contractor shall notify Traffic Engineering Division at least 24 hours in advance of any Traffic Signal modification due to construction (i.e. eliminating left turn phases). Notice shall also be given to the Traffic Engineering Division at least 24 hours prior to removing barricades at signalized intersections.

28. PROTECTION OF NEW WORK

All new work shall be carefully protected by the Contractor, and any work injured from any cause before the completion of the whole project must be rebuilt by the Contractor at his own expense.

29. MONUMENTS OR STAKES

The Contractor must carefully protect from disturbance or injury all monuments, stakes and bench marks, of City County, State or Federal Government and shall not excavate nearer than five (5) feet to any of them without the permission of the Engineer, or until they have been removed, witnessed or otherwise disposed of by the Engineer.

30. USE OF COMPLETED PORTIONS

The City shall have the right to take possession of and use any completed or partially completed portions of the work notwithstanding the time for completing the entire work on such portions may not have expired; but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of, or delays the work, the Contractor shall be entitled to such extra compensation or extension of time, or both as the Engineer may determine.

The Owner, in taking possession of completed portions, shall agree to accept the decision of the Engineer on matters relating to responsibility for damages that may occur to any portions of the work during the period of possession preceding acceptance and final payment.

31. USE OF PREMISES

The Contractor shall confine his apparatus, storage of materials and construction operations to such limits as may be directed by the Owner, and shall not unreasonably encumber the premises with his materials.

The Contractor shall enforce any instructions of the Owner regarding advertising, fires, danger signals, barricades and smoking, and shall require all persons employed on the work to comply with all building, post or institutional regulations while on the premises.

32. SAFETY RESTRICTIONS

The following procedures will be followed regarding the subject item on this contract:

A warning sign painted yellow with black letters that are legible at twelve feet shall be placed inside and outside vehicles such as cranes, cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment or similar apparatus. The warning sign shall read as follows:

"WARNING - UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES."

Equipment that may be operated within ten feet of high voltage lines shall have an insulating cage type of guard about the boom or arm, except back hoes or dippers, and insulator links on the lift hook connections.

When necessary to work within six feet of high voltage electric lines, notification shall be given to the power company who will erect temporary mechanical barriers, de – energize the line, or raise or lower the line. The notifying department

The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

No person shall work within six feet of high voltage line without precautions having been taken and protection provided as outlined in Paragraph (3) above.

33. INSURANCE REQUIREMENTS AND WORKERS COMPENSATION

INSURANCE REQUIREMENTS

Contractor shall at all times during the term of this Contract maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):	
— Personal Injury:	$1,000,000.00 per person
	$1,000,000.00 per occurrence
— Property Damage:	$500,000.00 per occurrence
Business Automobile Liability:	$250,000.00 combined single limit -
	Personal Injury and Property Damage
Workers' Compensation:	Statutory limits
Employers' Liability:	$500,000.00 per accident or occurrence

The Commercial General Liability shall be on a per project aggregate, including completed operations, and shall be on an occurrence basis. This insurance shall name the City as an additional insured and waive subrogation in favor of the City.

The Business Automobile Liability insurance provided by Contractor shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-city vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of $250,000.00 covering any vehicle used for the execution of the

work that is the subject of this Contract. This insurance shall name the City as an additional insured and waive subrogation in favor of the City.

The Workers' Compensation coverage provided by Contractor shall inure to the benefit of employees injured during the course and scope of their employment by Contractor pursuant to this Contract. The Workers' Compensation shall waive all rights of subrogation in favor of the City.

All insurance required pursuant to this Contract shall provide for a waiver of subrogation in favor of the City. All insurance required pursuant to this Contract, except for Workers' Compensation Insurance, shall name the City as an additional insured on a claims occurred basis. City shall be provided the notice by Contractor's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage.

Contractor shall contractually require all contractors, subcontractors, and sub-subcontractors that work on any portion of the work that is the subject of this Contract to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts specified herein. All contractors, subcontractors, and sub-subcontractors shall obtain insurance policies that provide blanket waivers of subrogation in favor of the City of Midland and policies that name the City of Midland as an additional insured on a claims occurred basis (except workers' compensation).

The parties agree that, prior to the execution of the Contract, Contractor shall provide one or more certificates of insurance specifically stating that these requirements have been met and subject to the approval of the City. The City shall not be required to provide any insurance whatsoever pursuant to this Contract.

The Contractor certifies that the certificate of insurance provided as required herein complies with the requirements of Senate Bill 425, passed during the 82nd regular session of the Texas Legislature, and effective January 1, 2012. The Contractor shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of the Contractor.

34. INDEMNIFICATION

INDEMNITY: THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND THE OWNER AND ALL OF THE OWNER'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, LOSSES, PROPERTY DAMAGE AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF THE CONTRACTOR, THEIR AGENTS OR EMPLOYEES, OR ANY SUBCONTRACTOR, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS

CONTRACT, AND CONTRACTOR WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST THE OWNER OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES.

THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND THE OWNER AND ALL OF THE OWNER'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, ACCIDENTAL DEATH, PROPERTY DAMAGE, LOSSES, AND EXPENSES OF ANY CHARACTER WHATSOEVER INCLUDING ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF THE OWNER, THE OWNER'S OFFICERS, AGENTS AND EMPLOYEES, WHETHER SUCH NEGLIGENT ACT WAS THE SOLE PROXIMATE CAUSE OF THE INJURY OR DAMAGE OR A PROXIMATE CAUSE JOINTLY AND CONCURRENTLY WITH THE CONTRACTOR OR THE CONTRACTOR'S EMPLOYEES, AGENTS OR SUBCONTRACTORS NEGLIGENCE IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS CONTRACT, AND CONTRACTOR WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST THE OWNER OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES.

THE CONTRACTOR AGREES THAT HE WILL INDEMNIFY AND SAVE THE OWNER HARMLESS FROM ALL CLAIMS GROWING OUT OF ANY DEMANDS OF SUBCONTRACTORS, LABORERS, WORKMEN, MECHANICS, MATERIALMEN, AND FURNISHERS OF MACHINERY AND PARTS THEREOF, EQUIPMENT, POWER TOOLS, ALL SUPPLIES, INCLUDING COMMISSARY INCURRED IN THE FURTHERANCE OF THE PERFORMANCE OF THIS CONTRACT. WHEN OWNER SO DESIRES, THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE THAT ALL OBLIGATIONS OF THE NATURE HEREINABOVE DESIGNATED HAVE BEEN PAID, DISCHARGED OR WAIVED. THE CONTRACTOR, ITS SURETIES AND INSURANCE CARRIERS SHALL DEFEND, INDEMNIFY AND SAVE HARMLESS THE OWNER AND ALL OF ITS OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, OR CLAIMS OF ANY CHARACTER WHATSOEVER, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ARISING FROM ANY ACT OF THE CONTRACTOR OR ANY SUBCONTRACTOR, THEIR AGENTS OR EMPLOYEES, IN THE EXECUTION AND SUPERVISION OF THIS CONTRACT, AND WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST THE OWNER OR ANY OF ITS OFFICERS, AGENTS, OR EMPLOYEES INCLUDING ATTORNEY'S FEES.

35. RELEASE

NOTWITHSTANDING ANY OTHER PROVISION, CONTRACTOR HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES OWNER, OWNER'S EMPLOYEES AND OFFICERS, FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH CONTRACTOR HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKING CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS OR OWNER'S NEGLIGENCE.

36. INDEPENDENT CONTRACTOR

It is expressly understood and agreed that Contractor shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant or employee of the Owner; that Contractor shall have exclusive control of and the exclusive right to control the details of the services and work performed hereunder, and all persons performing the same; and shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors; that the doctrine of respondent superior shall not apply as between Owner and Contractor, its officers, agents, employees, contractors and subcontractors; and

that nothing herein shall be construed as creating a partnership or joint enterprise between Owner and Contractor. No person performing any of the work and services described hereunder by Contractor shall be considered an officer, agent, servant or employee of the Owner. Further, it is specifically understood and agreed that nothing in this Contract is intended or shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control" which would give rise to vicarious liability. Contractor shall be an independent contractor under this Contract and shall assume all of the rights, obligations and liabilities, applicable to it as such independent contractor hereunder. The Owner does not have the power to direct the order in which the work is done. The Owner shall not have the right to control the means, methods or details of the Contractor's work. Contractor shall assume exclusive responsibility for the work. Contractor is entirely free to do the work in its own way.

37. QUALIFICATIONS FOR EMPLOYMENT

Preference shall be given to qualified local residents in the employment of laborers and mechanics for work on the Project under this Contract. No person under the age of sixteen (16) years shall be employed on the project under this Contract. No person whose age or physical condition is such as to make his employment dangerous to his health or safety or to the health or safety of others shall be employed on the Project under this Contract: Provided, that this shall not operate against the employment of physically handicapped persons, otherwise employable, where such persons may be safely assigned to work which they can ably perform. No person currently serving sentence in a penal or correctional institution and no inmate of an institution for mentally defective shall be employed on the project under this contract.

38. PAYROLLS OF CONTRACTOR AND SUBCONTRACTORS

The Contractor and each of his subcontractors shall prepare payrolls for the workers on the Project. Not later than the seventh (7th) day following the payment of wages, the Contractor shall transmit to the Owner, if requested, a certified legible copy and two confirmed copies of such payroll.

Such copies of payrolls shall be accompanied by substantial proof that all bills for services rendered and materials supplied have been duly paid and by such other data as the Owner may require.

39. POSTING WAGE RATES

The Contractor shall post at appropriate conspicuous points at the site of the Project a schedule showing the wage rates for the various classes of laborers and mechanics to be engaged in work on the Project under this Contract and all deductions, if any, required by law to be made from unpaid wages actually earned by the laborers and mechanics so engaged.

40. PAYMENT OF EMPLOYEES

The Contractor shall post at appropriate conspicuous points at the site of the Project a schedule showing the wage rates for the various classes of laborers and mechanics to be engaged in work on the Project under this Contract and all deductions, if any, required by law to be made from unpaid wages actually earned by the laborers and mechanics so engaged.

41. WAGE UNDERPAYMENT AND ADJUSTMENTS

The Contractor agrees that, in case of underpayment of wages to any worker on the project under this Contract by the Contractor or any subcontractor, the Owner shall withhold from the Contractor out of payments due, an amount sufficient to pay such worker the difference between the wages required to be paid under this Contract and the wages actually paid such worker for the total number of hours worked and that the Owner may disburse such amount so withheld by it for and on account of the Contractor to the employee to whom such amount is due. The Contractor further agrees that the amounts to be withheld pursuant to this Article may be in addition to other amounts that may be retained by the Owner pursuant to other provisions of this Contract.

42. COMPUTATION OF WAGES ON 8 – HOUR DAY

The wages of each laborer and mechanic engaged in work on the project under this Contract shall be computed on a basis of eight (8) hours per day, eight (8) hours continuous employment except for lunch periods, constituting a day's work.

Legal holiday work shall be paid for at the regular governing per diem wage rates.

Work in excess of 40 hours per week shall be paid for at 1 ½ times the basic rate of pay.

43. OVERTIME WORK AND WORK ON SUNDAYS AND LEGAL HOLIDAYS

The Contractor will not be permitted to work on Sundays or legal holidays except in an emergency and then only upon written permission of the Engineer.

Any work necessary to be performed after regular working hours and when permitted on Sundays or legal holidays, shall be performed without additional expense to the Owner.

No work on any Contract item will be permitted before daylight or later than one hour after sundown.

44. CONTRACT SECURITY

The Contractor shall furnish a performance bond and payment bond in an amount equal to one hundred percent (l00%) of the amount of the Contract as security for the faithful performance of the Contract, including the payment of all persons performing labor on the project and furnishing of materials in connection with this Contract. All Bonds must be executed in five (5) original counterparts by a corporate surety authorized to do business in the State of Texas. Bonds executed by individuals or any other than recognized and authorized corporate surety companies will not be acceptable.

45. DELAYS

The Contractor shall receive no compensation for delays or hindrances to the work, except when, in the judgment of the Engineer, direct or unavoidable extra cost to the Contractor is caused by such hindrances or delays. When such extra compensation is claimed, a written statement thereof shall be presented by the Contractor, as provided in Paragraph 18 hereof. Such claim, if found correct, will be approved, and the decision of the Engineer whether extra cost has been incurred and the amount thereof, shall be final. If delays are caused by specific orders to stop work, given by the Engineer, or by the performance of extra work, or by unforeseen causes beyond the control of the Contractor, or by the failure of the Owner to provide materials or necessary instructions for carrying on the work, or to provide the necessary right-of-way or site for installation,

then delay will entitle the Contractor to an equivalent extension of time. Application for extension of time must be approved by the Owner and, shall not release the Sureties from their obligations, which shall remain in full force until the discharge of the Contract.

LATE COMPLETION; LIQUIDATED DAMAGES:

It is hereby understood and mutually agreed, by and between Contractor and the City, that the date of beginning and the time for completion as specified in the contract of the work to be done hereunder are ESSENTIAL CONDITIONS of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the "Notice to Proceed." Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between Contractor and the City, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

In the event Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the City, then Contractor and Contractor's surety, if any, shall be liable for and does hereby agree, as a part consideration for the awarding of this contract, to pay to the City $500.00, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that Contractor shall be in default after the time stipulated in the contract for completing the work. Further, the City shall have the right to cancel this contract for such delay. In the event the City cancels this contract pursuant to the terms of this section, the City shall pay to Contractor only those monies deemed appropriate by the City, in its sole discretion, to compensate Contractor for any work actually performed, less any liquidated damages Contractor owes the City.

The said amount is fixed and agreed upon by and between Contractor and the City because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the City would in such event sustain, and said amount is agreed to be the amount of damages which the City would sustain and said amount shall be retained from time to time by the City from current periodical estimates.

It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract. Provided, that Contractor shall not be charged with liquidated damages or any excess cost when the City determines, in its sole discretion, that Contractor is without fault and Contractor's reasons for the time extension are acceptable to the City. Provided, further, that Contractor shall not be charged with liquidated damages of any excess cost when the delay in completion of the work is due:

a. To any preference, priority or allocation order duly issued by the Government;

b. To unforeseeable cause beyond the control and without the fault or negligence of Contractor, including, but not restricted to, acts of God, or of the public enemy, acts of the City, acts of another contractor in the performance of a contract with the City, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather; and

c. To any delays of subcontractors or suppliers occasioned by any of the causes specified in subsections (a) and (b) of this article.

Provided, further, that Contractor shall, within ten (10) calendar days from the beginning of such delay, unless the City shall, in its sole discretion grant a further period of time prior to the date of final settlement of the contract, notify the City, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify Contractor within a reasonable time of its decision in the matter.

CONTRACTOR AGREES THAT THE PAYMENT OF SUCH LIQUIDATED DAMAGES MAY BE RECOVERED BY THE CITY FROM RETAINAGE HELD BY THE CITY. NOTWITHSTANDING ANY OTHER PROVISION HEREOF, CONTRACTOR HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES CITY, CITY'S EMPLOYEES AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES, OR CAUSES OF ACTION OF ANY KIND WHATSOEVER ARISING FROM THE CITY WITHHOLDING PAYMENT FROM CONTRACTOR AS LIQUIDATED DAMAGES FOR CONTRACTOR'S FAILURE TO COMPLETE THE WORK WITHIN THE TIME SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR CITY'S NEGLIGENCE.

CONTRACTOR SHALL RECEIVE NO FINANCIAL COMPENSATION FOR DELAY OR HINDRANCE TO THE WORK. IN NO EVENT SHALL THE CITY BE LIABLE TO CONTRACTOR OR ANY SUBCONTRACTOR OR SUPPLIER, ANY OTHER PERSON OR ANY SURETY FOR OR ANY EMPLOYEE OR AGENT OF ANY OF THEM, FOR ANY DAMAGES ARISING OUT OF OR ASSOCIATED WITH ANY DELAY OR HINDRANCE TO THE WORK, REGARDLESS OF THE SOURCE OF THE DELAY OR HINDRANCE, INCLUDING EVENTS OF FORCE MAJEURE, AND EVEN IF SUCH DELAY OR HINDRANCE RESULTS FROM, ARISES OUT OF OR IS DUE, IN WHOLE OR IN PART, TO THE NEGLIGENCE OF THE CITY. CONTRACTOR'S SOLE REMEDY IN ANY SUCH CASE SHALL BE AN EXTENSION OF TIME.

46. ERRORS AND OMISSIONS

The Contractor will not be permitted to take advantage of any error or omission in these specifications. Suitable instructions will be given by the Engineer when such error or omission is discovered.

47. SPECIFICATIONS AND DRAWINGS

The Contractor shall keep on the work a copy of the Specifications and Drawings, and shall at all times give the Engineer access thereto. Any drawings or plans listed in the detailed specifications shall be regarded as part thereof and of the Contract. Anything mentioned in these specifications and not mentioned or shown in the drawings, or shown in the drawings and not mentioned in these specifications, shall be done as though shown or mentioned in both. The Engineer will furnish from time to time, such detailed drawings, plans, profiles and information as he may consider necessary for the Contractor's guidance.

In the event of any discrepancy between the plans and these specifications, the decisions of the Engineer will be decisive thereon. The written dimensions on the plans are to be taken as correct, but the Contractor is required to check carefully all dimensions before beginning work thereon. Should any errors or omissions be discovered, the Engineer's attention shall be called to the same, and the proper corrections made. All notes on the plans shall be carefully observed by the Contractor and are a part of the Contract.

48. CONSTRUCTION STAKING

The Engineer will furnish a complete set of plans and profiles and set control stakes at fifty foot (50') intervals along the entire length of the project and at such control points he deems necessary for proper execution of the work. The Contractor will thereafter be required to lay out the work accurately and furnish at his own expense, all lines, levels, and dimensions necessary to the proper and correct execution of the entire work and be responsible for any errors resulting from his own work.

The Contractor shall give the Engineer at least 36 hours notice in writing before requiring stakes to be set on any new portion of the work, and he shall state clearly in such notice the exact locality or localities where such stakes are needed for immediate use.

The Contractor must satisfy himself, before commencing work, as to the meaning or correctness of all stakes or marks, and no claim will be entertained by the Owner for or on account of any alleged inaccuracies, or for the alterations subsequently rendered necessary on account of such alleged inaccuracies unless the Contractor notifies the Engineer thereof in writing before commencing to work thereon.

The Contractor will at all times conduct the work in such a manner as to prevent damage to construction stakes set by the Engineer. When construction stakes are damaged to such extent that they must be reset, as a result of carelessness or negligence on the part of the Contractor or his workmen, the costs thereof shall be kept by the Engineer and shall be deducted from the moneys due or to become due the Contractor under the terms of his contract.

Benchmark and survey stakes shall be preserved by the Contractor, and in case of their destruction or removal by him or his employees, they will be replaced by the Engineer at the Contractor's expense.

49. SANITATION

The Contractor shall provide suitable drinking water receptacles or containers equipped with dust-tight covers and spigots or faucets. A supply of sanitary paper drinking cups shall be kept on hand for general use near the drinking water containers. The use of common drinking cups or tin cups will not be permitted.

The Contractor shall furnish "Porta-Johns" or other approved sanitary facilities for use by all workers on the Project. Such facilities shall be placed and kept in close proximity of the site where work is being performed. Such facilities shall be properly serviced and maintained.

The Engineer may establish such other sanitary rules and regulations as may seem necessary and desirable to the safe prosecution of the work, such rules and regulations to apply to all forces employed under this Contract, and if, the Contractor fails to observe and enforce these rules, the Engineer may enforce them at the expense of the Contractor.

50. WATER FOR CONSTRUCTION

The Contractor may obtain all water necessary for construction purposes from the Municipal Waterworks System at the regular customer service rate, but the Contractor must make all necessary arrangements with the Director of Utilities for necessary connections and meters. The Contractor must make his own provisions and provide such equipment as is necessary for conveying water from point of service to point of use. No extra compensation will be allowed and the Contractor shall anticipate the expense connected herewith and absorb said expense in the prices bid for the various bid items.

51. SEQUENCE AND SPEED OF WORK

The Engineer shall direct the order and sequence of the work. If at any time before the commencement or during the progress of the work, the materials and appliances used appear to the Engineer as insufficient and improper for securing the quality of work required or the required rate of progress, he may order the Contractor to increase their efficiency or to improve their character and the Contractor shall conform to such order. The

failure of the Engineer to demand any increase of such efficiency or improvement shall not release the Contractor from his obligations to secure the quality of work or the rate of progress specified.

52. INSPECTION AND TESTING OF MATERIAL

The sampling and testing of materials used or proposed to be used in the construction of this project will be made by the Engineer, his designated representative or certified testing laboratory personnel in accordance with methods prescribed by the American Society of Testing Materials and/or the American Association of State Highway Officials, with subsequent approved revisions made prior to the date of the Proposal. The selection of the method of test shall be designated by the Engineer. The Contractor shall bear the cost of all tests required before a material or a method is approved for use on the job, unless the Owner specifically agrees to bear the cost of these tests.

All tests required by the Owner after materials and/or methods have been approved and after they have been incorporated or used in the job will be paid for by the Owner, except if the Owner's tests reveal non-conformance with the specifications, subsequent tests on that part of the work required to determine if the replaced or reworked material meets the specifications, will be paid for by the Contractor. The City will pay only one time for any required testing.

The following is a summary of test required for the approval of materials or methods:

Material	**Test**
Subgrade	Maximum density, optimum moisture
Caliche Base:	Maximum density, optimum moisture, hardness, gradation, liquid limit, plasticity index, Texas Triaxial Classification
Aggregates for hot-mix:	Gradation, unit weight, abrasion, soundness, liquid limit, plasticity index, density
Asphalt, emulsions and tars:	Certified plant test and certificates of compliance with each shipment
Hot- Mix asphaltic concrete:	Design mix, swell test, stripping test
Portland cement concrete pavement:	Design mix with test cylinders

Any materials shipped by the Contractor from the factory prior to having satisfactorily passed such testing and inspection by the Owner's representative or prior to the receipt of notice from said representative that such testing and inspection will not be required, shall not be incorporated in the work.

The Owner may, at its discretion, approve materials and/or methods for use on this project without testing when they are from sources previously tested and approved for City of Midland projects.

53. CONSTRUCTION SCHEDULE

It shall be the responsibility of the Contractor to furnish the Construction Engineer prior to construction a schedule out – lining the anticipated time each phase of construction will begin and be completed, including sufficient time being allowed for clean – up.

54. PROFILES AND ELEVATIONS

Profiles and elevations of the ground are shown on the plans hereto attached. These profiles and elevations are believed to be reasonably correct, but are not guaranteed to be absolutely so, and are represented only as an approximation. Elevations are referred to datum given by the Engineer.

55. CLEANUP

During the progress of the work, the Contractor shall maintain the work area in a reasonably clean and safe condition. Dirt, debris, excess excavation and other objectionable materials shall be removed from the site and disposed of on a daily basis.

After completion of all the work contemplated to be done in accordance with the detailed plans and these specifications, the premises and area along the entire line of the work shall be thoroughly cleaned up and all remaining structural materials, excess or surplus excavation and debris of any nature shall be removed and disposed of in a satisfactory manner and as directed by the Engineer. The site of all work shall appear neat and finished. All portions of the project when completed shall be ready for use or occupancy.

No compensation or payment shall be made for any cleanup work. The price for such cleanup work shall be absorbed in the items covered in the proposal.

56. GUARANTEE

The contractor shall and hereby does guarantee: (1) all work performed by him directly and all work performed by his subcontractors; (2) that all material specified; and (3) that any defect due to improper workmanship or material discovered and made known to him within one year (1) f the date of final acceptance of the improvements shall be repaired, replaced, corrected or otherwise made good by him without additional expense to the Owner. The Contractor shall, in case of work performed by his subcontractors and where guarantees are required, secure guarantees from said subcontractors and deliver copies of same to the Engineer upon completion of the work.

57. WAIVER OF ATTORNEY FEES:

BY EXECUTING THIS CONTRACT, CONTRACTOR AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE OWNER, REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THE CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE CONTRACT. THE CONTRACTOR SPECIFICALLY AGREES THAT IF THE CONTRACTOR BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS CONTRACT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS CONTRACT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET. SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, THE CONTRACTOR AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH CONTRACTOR MIGHT OTHERWISE BE ENTITLED.

CONTRACTOR AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING KNOWN RIGHT. THE CONTRACTOR ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THE CONTRACT. THE CONTRACTOR FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN

THE OWNER AND THE CONTRACTOR. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF SOVEREIGN IMMUNITY.

THE CONTRACTOR AND OWNER ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION.

58. GOVERNING LAW AND VENUE

This Contract shall be governed by the laws of the State of Texas. All performance and payment made pursuant to this Contract shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this Contract or the performance of this Contract shall be in Midland County, Texas. The obligations and undertakings of each of the parties to this Contract shall be deemed to have occurred in Midland County, Texas. This Contract shall be governed by, interpreted, enforced and construed under the law of the State of Texas. The laws of the State of Texas shall govern, construe and enforce all the rights and duties of the parties, including but not limited to tort claims and any and all contractual claims or disputes, arising from or relating in any way that would direct application of the laws of another jurisdiction.

59. SOVEREIGN IMMUNITY

By executing this Contract, the City is not waiving its right of sovereign immunity. The City is retaining its immunity from suit. The City is not granting consent to be sued by legislative resolution or action.

THERE IS NO WAIVER OF SOVEREIGN IMMUNITY.

60. NO THIRD – PARTY BENEFICIARY

The City's approval of this contract does not create a third party beneficiary. There is no third party beneficiary to this contract. No person or entity who is not a party to this contract shall have any third party beneficiary or other rights hereunder.

61. NOTICE OF ALLEGED BREACH; STATUTORY PREREQUISITES

As a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this agreement, Contractor or his legal representative, shall give the City Manager or any other reasonable official of the City, notice in writing (consisting of one original and seven copies of notice attached to a copy of this agreement) of such damages, duly verified, within one hundred and twenty (120) days after the same has been sustained. The discovery rule does not apply to the giving of this notice. The notice shall include when, where and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which the Contractor will settle, the physical and mailing addresses of Contractor at the time and date the claim was presented and the physical and mailing addresses of Contractor for the six months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom the Contractor relies to establish its claim; and a failure to so notify the City Manager within the time and manner provided herein shall exonerate, excuse and except the City from any liability whatsoever. The City is under no obligation to provide notice to Contractor that Contractor's notice is insufficient. City reserves the right to request additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after receipt of notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any other provision, Contractor's failure to comply with the requirements herein shall perpetually bar Contractor's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless if City has actual or constructive notice or knowledge of said claim or alleged damages. Contractor agrees that the requirements of this entire Agreement are reasonable.

62. ASSIGNMENT

Contractor shall not, either directly or indirectly, assign all or any part of this contract or any interest, right or privilege herein, without the prior written consent of the owner. The issue on whether or not to grant consent to an assignment is in the sole discretion of the owner.

63. FEDERAL WAGE REQUIREMENTS

If applicable, the Davis-Bacon Act, 29 CFR 5.5, and any related acts or regulations are hereby incorporated by reference and made a part of this Contract, and all terms and requirements under said laws, by such incorporation, are made terms and requirements of this Contract, to which the parties to this Contract have agreed to be bound.

64. PROMPT PAY ACT

The owner and contractor agree that Texas Government Code, Chapter 2251, Payment for Goods and Services (the "Prompt Pay Act") does not waive governmental immunity.

65. OTHER FEDERAL REQUIREMENTS

Company agrees that all iron or steel products produced through a manufacturing process and used in the project that is the subject of this Contract shall be produced in the United States in accordance with Government Code § 2252.202, et seq., as amended.

Updated July 2021

SPECIAL PROVISIONS

ATTENTION: All Bidders are directed to pay special attention to the NOTICE TO BIDDERS section of the bid packet. Bidders have sole responsibility for complying with the current bid process requirements. Bidders also have sole responsibility for verifying that any bid submitted is completed correctly and includes all of the required documentation, including addendums.

1. SCOPE OF WORK:

Included in this Project will be **Garfield Street Utility Bond Project – Break Out 02** to be performed as outlined in the Plans and Specifications, which are necessary to satisfactorily complete the work.

The project will include the removal, abandonment, replacement, relocation, and installation of existing and proposed storm drain, water, and wastewater infrastructure and appurtenances including all necessary mobilization, material storage and protection, saw-cutting, pavement removal, excavation, trenching, utility removal, utility abandonment, utility installation, embedment, backfill, pavement repair, sidewalk repair, erosion control, traffic control, and job site safety. Coordination with City of Midland staff and organizations such as OSHA, Midland Memorial Hospital, Midland Fire Department, Midland Independent School District, franchise utilities, and One Call (Texas 811) for notifications for pending work may be necessary to satisfactorily complete the work. Notifications to adjacent property owners, as directed by City of Midland staff, and all other work is to be performed as outlined in the Construction Drawings and Specifications.

This project is part of the final phase of the larger overall Garfield Street bond project extending from Michigan Avenue to Wadley Avenue. The first phases were each complete as a separate project from this one and included the installation of water and wastewater improvements from Michigan Avenue to Kansas Avenue, the installation of storm drain at Louisiana Avenue, and the placement of pavement from Michigan Avenue to Louisiana Avenue.

The Owner reserves the right to abandon, without obligation to the Contractor, any part of the project, or the entire project, at any time before the Contractor begins any construction work authorized by the Owner.

Standard Specifications for Construction of the City of Midland will govern all construction, except as modified by these Special Provisions.

2. ORDER OF PRECEDENCE:

The Special Provisions take precedence over the General Conditions in this bid packet anywhere these two sections are not in agreement.

The Special Provisions take precedence over the City of Midland Specifications in this bid packet anywhere these two sections are not in agreement.

The Contractor is to bid the quantities in the Proposal section of the bid packet even if there is a discrepancy between the Proposal quantities and those noted or measured in the construction drawing set.

In the Proposal the long-hand dollar amount written in the Description column for each bid item will take precedence over the numerical dollar amount listed in the Unit Price column if there is a discrepancy between the two.

In the construction drawing set any written or noted dimension takes precedence over dimensions measured based on the drawing scale unless otherwise directed by the Engineer.

Any changes or revisions made as part of an Addendum for this project take precedence over the original bid packet and construction drawing set where the documents are in conflict.

3. EXAMINATION OF SITE:

Prospective bidders are to make a careful examination of the entire site of the project and are to make such explorations as may be necessary to determine the subsoil and/or water conditions to be encountered; improvements and obstructions which may be encountered; methods of providing ingress-egress to private as well as public property; methods of handling traffic during construction and maintenance of the entire project as well as any section thereof, protection of all existing structures both above and below ground; and how the plans fit the proposed project and especially if any discrepancies exist.

4. PAYMENT:

Payment and retainage (five percent, 5%) shall be per the General Conditions.

Payment will be made for material installed, not for material delivery, for all Proposal Bid Items except those specifically listed below, which will be the only Proposal Bid Items to be paid upon material delivery for this project:

Water Bid Items: 1-10

Wastewater Bid Items: 1-6

Storm Drain Bid Items: 1-9, 11-12

Retainage will apply the same to all bid items and invoices regardless of whether an invoice is for bid items paid upon material delivery or not.

Any and all payments for bid items that are paid upon material delivery are paid with the expectation that the material will be installed per the construction drawings and specifications, and that the material delivered will be protected and kept in good condition by the Contractor until it is installed. Material that is not property stored or protected and becomes weathered or damaged before installation must be replaced with new material meeting the standards and requirements of the construction drawings and specifications before it can be installed, and this will be done by the Contactor at no additional cost to the City of Midland.

5. SAFETY REQUIREMENTS:

It is the responsibility of the Contractor to follow and comply at all times with Occupational Safety and Health Administration (OSHA) and all other applicable safety regulations and requirements throughout the course of the project's work. The City of Midland reserves the right to require additional safety measures on the project site at any time if they are needed in the opinion of the Engineer for the safety of the work crews or public.

6. SAFETY RESTRICTIONS – WORK NEAR HIGH VOLTAGE LINES:

The following procedure will be followed regarding the subject item on this contract:

1) A warning sign painted yellow with black letters that are legible at twelve feet shall be placed inside and outside vehicles such as cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment or similar apparatus. The warning sign shall read as follows:

   "**WARNING – UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES"**

2) Equipment that may be operated within ten feet of high voltage lines shall have an insulation cage-type of guard about the boom or arm, except back hoes or dippers, and insulator links on the lift hook connections.

3) When necessary to work within six feet of high voltage electric lines, notification shall be given to the power company of who will erect temporary mechanical barriers, de-energize the line, or raise or lower the line. The notifying department shall maintain an accurate log of all such calls to the Power Company, and shall record action taken in each case.

4) The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

5) No person shall work within six feet of a high voltage line without protection having been taken as outlined in Paragraph (3).

7. TRAFFIC CONTROL:

All proposed traffic control shall be approved by the City where applicable. All traffic control plans must be submitted to and approved by the Construction Manager no less than two (2) business days prior to starting the construction work. Traffic control for each phase of work must be approved prior to starting that work.

Generic traffic control plans or typical details may be submitted for shoulder work on any class of roadway, or for work on local or collector streets that does not require the closure of any travel lanes (i.e., all lanes are open to traffic on striped roadways, or adequate width remains available for two-way traffic on unstriped roadways). Once a generic traffic control plan or typical detail for a certain type of setup has been approved one time, the Contractor shall only be responsible for notifying the Construction Manager of the location, type of setup, and dates on which they intend to utilize the pre-approved traffic control for the duration of the contract. No additional plan submittals will be required in these cases, except that the City reserves the right to suspend this exception at its discretion. For any work not fitting the above exception, or in the event that the exception is suspended by the City, a site-specific traffic control plan will be required for each work location and time period.

1. All temporary traffic control shall be in general conformance with the *Texas Manual on Uniform Traffic Control Devices* (TMUTCD) (latest edition as adopted by the Texas Department of Transportation), except as specifically directed by the City Engineer or City Traffic Engineer.
2. All temporary traffic control shall be designed, installed, and maintained by competent and qualified personnel with adequate experience in traffic control.
3. All temporary traffic control involving multiple lane closures or traffic shifts, full closures of collector or arterial streets, traffic control extending through a railroad crossing, or any setup reasonably determined by the City to be "complex", shall be implemented only by a contractor with specific experience and expertise in the field of traffic control (i.e., a qualified "barricade company").

4. A Traffic Control Plan (TCP) shall be submitted to the Engineering Services Department, Construction Manager, in advance of any work in the right-of-way that impacts traffic. No work shall occur until an approved TCP has been returned to the Contractor.
5. A copy of the approved TCP shall be kept in the possession of the person responsible for supervising the traffic control at all times while working in the right-of-way. The approved TCP shall be presented to City staff or law enforcement upon demand at any time.
6. Depending on site conditions and the nature of the work, temporary traffic control may be approved by the City for either of the following:
    a. All Times – All traffic control, including closures, may remain in place 24 hours per day until expiration of the approved TCP.
    b. Off-Peak Only – Lane or road closures are NOT permitted from 6:00-9:00 AM and 4:00-7:00 PM on weekdays (Monday through Friday). Other traffic control not related to lane or road closures may remain in place 24 hours per day until expiration of the approved TCP.
7. The contractor setting the temporary traffic control shall be responsible for the maintenance and upkeep of all signs, barricades, and other devices, at all times.
    a. All temporary traffic control setups shall be maintained at least one time per day, including weekends and holidays.
    b. More frequent maintenance shall be performed as needed, with particular emphasis to following up after severe weather events or during times of high winds.
    c. Maintenance shall include:
        i. Verifying and correcting the location and orientation of all signs, barricades, and other devices;
        ii. Keeping signs and reflective areas of barricades and other devices clean and free of dirt buildup so as to maintain appropriate visibility and legibility; and
        iii. Ensuring the proper location, orientation, and operation of arrow boards or message boards, if present.
8. Arrow boards shall be required for lane closures under the following conditions:
    a. On roadways with a posted speed limit of 55 MPH or greater, for closures lasting more than one (1) hour;
    b. On roadways with a posted speed limit of 45 MPH or greater, for closures lasting more than four (4) hours;
    c. On any roadway if lanes will remain open to traffic travelling in the same direction on both sides of a closed lane during any overnight hours (from 7:00 PM to 6:00 AM); and

At other times as shown on the approved TCP, or as otherwise directed by the City.

8. DETOURS:

The Contractor is to prosecute his work in such a manner as to create a minimum of interruption to traffic and pedestrian facilities and to the flow of vehicular and pedestrian traffic within the project area.

9. PROPERTY AND RIGHT-OF-WAY ACCESS:

Access to adjacent properties must be maintained at all times unless otherwise directed by the Engineer. If the contractor will not be working in an area for a period of one week or more, special care is to be taken to address any unsafe conditions such as excavated areas or obstructions outside the worked area that could be tripping hazards, etc. Contractor must notify affected properties no less than two (2) business days prior to any planned access interruptions.

Contractor must coordinate with the City of Midland regarding any planned access interruptions for public Right-of-Way, or to restore any public infrastructure damaged during construction activities.

10. PROPERTY AND RIGHT-OF-WAY SERVICE:

Service to adjacent properties must be maintained at all times unless otherwise directed by the Engineer. Such services include water, wastewater, fiber, cable, electric, and gas. Contractor must notify affected properties no less than two (2) business days prior to any planned service interruption.

Contractor must coordinate with the City of Midland regarding any planned service interruptions for public water or wastewater, or to restore any public infrastructure damaged during construction activities.

Contractor must coordinate with private service providers for any necessary service interruptions to their infrastructure or to restore service to their infrastructure in the event that a private service is disrupted, damaged, etc. during construction.

11. CONSTRUCTION SCHEDULE:

It is the responsibility of the Contractor to furnish the Construction Engineer, prior to construction, with a schedule outlining the anticipated time each phase of construction will begin and be completed, including sufficient time being allowed for clean-up.

12. CONSTRUCTION STAKING:

It is the responsibility of the Contractor to provide the project construction staking at fifty foot (50’) intervals along the entire length of the project as well as at such control points as the Contractor deems necessary for proper execution of the work. Construction staking is to include grading and cuts as well as horizontal alignments and construction control points. Cut sheets are to be provided to the Engineer by the Contractor for review and approval.

13. SURVEY:

The Contractor is to provide GPS survey shots for all meters replaced to the City of Midland with each completed work order submittal. Survey data is to be shot in Texas Central Zone with 1983 NAD at 1.0' accuracy or better. Survey data is to be provided in Excel csv. file format with all rounding functions turned off.

14. CONSTRUCTION MATERIALS:

The Contractor is to only provide new materials for permanent installation in any and all parts of this project, and all such materials must comply with the General Conditions, the Bid Packet Specifications, and all applicable City of Midland Standards and Specifications.

For this project, the Standard Specification is hereby amended to read:

Qualifications of Material Sources – Contractor is only to use pavement mixtures that have a proven record of acceptance by the City of Midland, or another Texas municipality, or have a proven record of meeting similar standards for state highway projects.

Concrete is only to be placed when the ambient temperature is between 40 degrees and 95 degrees Fahrenheit and the ambient temperature in the shade is higher than 40 degrees Fahrenheit or is 40 degrees Fahrenheit and rising.

All concrete pavement joints are to be sealed with Texas Department of Transportation (TxDOT) DMS-6310 SL-2 sealant, an American Society for Testing and Materials (ASTM) D 1190 Hot-Applied Single Component Joint Sealant, or a City of Midland approved equal. This will not apply to curb or sidewalk joints.

No construction materials are to be placed or installed during rain events unless they are necessary to resolve an emergency situation or to facilitate the project site erosion control measures.

15. EROSION CONTROL:

Erosion control is the responsibility of the Contractor and erosion control measures are to be implemented so as to prevent sediment erosion from wind, rain, and other elements from the project site. Should the Owner feel that supplementary erosion control measures are required in addition to those implemented by the Contractor then the Contractor will include additional erosion control measures within reason to the Owner's satisfaction and/or TCEQ requirements.

Reasonable erosion control measures include but are not limited to: construction entrance(s), concrete washout(s), perimeter silt fence or fiber wattle, rock rip-rap dams for concentrated runoff control, gutter and inlet protection measures such as sand bags, and stabilization of the construction area surfaces when construction work is not actively occurring by means of vegetative cover or seeded erosion control blankets.

Supplemental erosion control measures are ancillary to the project and not paid as a separate item, unless otherwise noted in the Proposal or Pay Notes.

Site cleanup work is to be done for this project as soon as possible as per the General Conditions and will be ancillary to the project and not paid as a separate item, unless otherwise noted in the Proposal or Pay Notes. Site cleanup is to take place throughout the project's construction as needed to maintain a clean and professional looking work area. No more than three calendar days are to elapse after completion of construction before the final roadway and right-of-way cleanup has been completed to the satisfaction of the Engineer.

16. WASTE MATERIAL:

Excess material from excavation and other construction or demolition activity will become the property of the Contractor. Excess excavation will be disposed of at locations secured by the Contractor and if necessary, approved by the Engineer. No material is to be placed on private property or City property without the approval of the Engineer and the property owner. Removal of excess material, excavation, and waste material are ancillary to the project and not paid as a separate item, unless otherwise noted in the Proposal or Pay Notes.

Excess concrete material must be washed out in a concrete washout within the project's job site area, or else any and all other concrete material washout must occur away from the job site area in the Contractor's or concrete Supplier's own operation yards or properties. Under no circumstances are concrete trucks allowed to washout in any job site excavations, channels, public right-of-way, or on private property.

Existing fire hydrants and existing water meters indicated for removal as part of the project are to be returned to the City of Midland by the Contractor and remain City property. These are ancillary to the project and will not be paid as separate items.

17. TESTING:

It is the Contractor's responsibility to perform all required testing for any and all materials and workmanship performed or installed as part of the project's work. The cost of all such testing is to be borne solely by the Contractor unless required by the Engineer for work or materials that had previously been tested and approved and had not experienced any change in condition since that time as a result of the Contractor's work or actions; or unless additional testing outside of the project scope is performed at the request of the Engineer.

Required testing includes:

Concrete Pavement – A Slump Test is required for every cylinder set (3 test cylinders) taken, and no less than 1 cylinder set per day is to be taken for testing when concrete is placed. Test results are to be given to the engineer upon completion of each test, with 1 cylinder set taken for:

A. Every 50 cubic yards of concrete placed for concrete pavement between street intersections.

B. Every 50 cubic yards of concrete placed for concrete pavement at a street intersection.

C. Every 2 sets of fillets and valley gutters at street approaches. (1 set = 2 fillets and 1 valley gutter)

D. Every 4 alley approaches or driveway approaches.

E. There will be no testing for curb, ramps, and sidewalks.

Concrete Pavement For Trench Repair – A Slump Test is required only if directed by the Engineer for pavement patches that are equal to or greater than 50 cubic yards (roughly equal to an 8' wide by 340' long by 6" thick pavement section). The slump test is to be performed once for every cylinder set (3 cylinders) taken, and no less than 1 cylinder set per day is to be taken for testing when concrete is placed. Test results are to be given to the engineer upon completion of each test. There will be no testing for curb, ramps, and sidewalks.

Asphalt Hot-Mix Pavement – A Nuclear Gauge Density Test is required for either each day that asphalt hot-mix is placed or for every 250 linear feet of asphalt hot-mix pass, whichever results in more frequent testing. The laboratory density limits will be a minimum limit of 96%, a maximum limit of 98%, and an optimum limit of 97%. The acceptable field density range for construction of this project is 93% - 98% with a target density of 95%. Test results are to be given to the Engineer upon completion of each test.

Asphalt Hot-Mix Pavement For Trench Repair – A Nuclear Gauge Density Test is required only if directed by the Engineer for pavement patches that are equal to or greater than 620 square yards (roughly equal to an 8' wide by 700' long pavement section). The laboratory density limits will be a minimum limit of 96%, a maximum limit of 98%, and an optimum limit of 97%. The acceptable field density limit will be a minimum limit of 93%, a maximum limit of 98%, and an optimum limit of 95%. Test results are to be given to the Engineer upon completion of each test.

Water Pipes & Fittings – Perform Pressure Testing and Bacterial Testing (Bac T)/Chlorination testing for all water mains and fire hydrants.

- Pressure Test – Perform test as described in the City of Midland Water Line Specifications, PART 10, Hydrostatic Tests, with the sole difference being that a continuous pressure of 180 pounds per square inch (psi) must be maintained over a continuous period of not less than four (4) hours rather than eight (8) hours. The acceptable field pressure limit will be a minimum 180 psi and a maximum 185 psi. A 2-3 psi drop in the measured pipe pressure during the first two (2) hour period will be acceptable to account for the compression of air within the pipe so long as the minimum and maximum allowed field pressure limits are not exceeded. There can be no variation in the measured pipe pressure during the last two (2) hours of the pressure test.

- Bac T/Chlorination Testing – Perform disinfection and test as described in the City of Midland Water Line Specifications, Part 9, Disinfection Of Pipe Lines.

Wastewater Gravity Pipes/Manholes – Perform air testing, mandrel testing, hydrostatic testing, and closed circuit televising (CCTV) for all wastewater mains and manholes.

- Air Test – Perform test as described in the City of Midland Gravity Flow Pipe Sewers And Fittings For Wastewater And Storm Water, Part 3.14, Testing Gravity Mains And Manholes.

- Mandrel Test – A successful mandrel pull is required for all wastewater pipes installed.

- Hydrostatic Testing – Perform test as described in the City of Midland Gravity Flow Pipe Sewers And Fittings For Wastewater And Stormwater Specifications, Part 3.14, Hydrostatic Testing.

- Closed Circuit Televising (CCTV) – Provide CCTV video of the wastewater mains for the full length of the wastewater system installed, including through all wastewater structures. CCTV video is not required for wastewater laterals unless directed by the Engineer.

Force Mains & Fittings (Wastewater & Storm Drain) – Perform pressure testing for all wastewater and storm drain force mains.

- Pressure Test – Perform test as described in the City of Midland Water Line Specifications, PART 10, Hydrostatic Tests, with the sole difference being that a continuous pressure of 180 pounds per square inch (psi) must be maintained over a continuous period of not less than four (4) hours rather than eight (8) hours. The acceptable field pressure limit will be a minimum 180 psi and a maximum 185 psi. A 2-3 psi drop in the measured pipe pressure during the first two (2) hour period will be acceptable to account for the compression of air within the pipe so long as the minimum and maximum allowed field pressure limits are not exceeded. There can be no variation in the measured pipe pressure during the last two (2) hours of the pressure test.

Storm Drain Pipes & Structures – Perform as-built survey and closed circuit televising (CCTV) for all storm drain pipes and structures.

- As-Built Survey of Storm Drain Pipes & Culverts – Provide as-built survey shots at fifty-foot (50’) intervals along the storm drain pipe or culvert at the top of the pipe or culvert installed.

- As-Built Survey of Storm Drain Structures – Provide as-built survey shots at the inverts of all storm drain structures that are installed to verify the storm drain grades, including all manholes, junction boxes, and inlets.

- Closed Circuit Televising (CCTV) – Provide CCTV video of the storm drain for the full length of the storm drain system installed, including through all storm drain structures. CCTV video is not required for storm drain laterals unless directed by the Engineer.

18. COMPLIANCE:

The said Contractor further agrees to comply with all applicable provisions of the laws and building and construction codes of the City of Midland and the State of Texas, and with any regulations for the protection of workers which may be promulgated by the Government, and will protect such work with all necessary lights, barriers, safeguards, and warnings as provided for in said specifications and the Ordinance regulations.

19. PERSONNEL:

It is the Contractor's responsibility to have a supervising representative of the Contractor on the construction site any time that construction work is taking place. The Contractor's representative must be on the Contractor's direct payroll. Sub-contractors or paid consultants will not satisfy this requirement.

It is also the Contractor's responsibility to provide the City with a reliable contact for issue escalation coordination. Such contacts would include the Contractor's site foreman, the Contractor's construction project manager, etc.

20. INTENT OF THE PROPOSAL:

The intent of the proposal is to determine the lowest responsible bidder based on the total of the quantities and unit prices. Once the lowest responsible bidder is selected, the project will be awarded based on the terms and requirements of the contract outlined in the bid packet and construction drawings.

21. CONTRACT DEADLINE:

The deadline for substantial completion of this project is __365__ calendar days total starting from the Notice to Proceed date.

Extensions of the project deadline may be requested by the Contractor for documented excepting conditions such as weather days, delays due to conflicts with existing franchise lines, etc. which are reasonably beyond the Contractor's control. Any and all deadline extensions must be submitted by the Contractor in writing to Engineer for review, and the approval or denial of the request rests solely with the Engineer.

Unless specifically granted in writing by the Engineer, there will be no suspension of project time between phases of construction.

22. WARRANTY PERIOD:

There is a one (1) year calendar warranty period on this project for all work performed or materials installed effective immediately upon acceptance of the improvements by the Owner. The warranty period will be based on the acceptance date of the project as a whole, and not any individual phases of the project.

23. BID PACKET COMPLETION ITEMS OF NOTE:

Bidders must be willing to sign the Contract as is if a bid is submitted. Revisions, alterations, deletions, additions, or any other changes of any kind by the bidder to the bid packet or other bid documents (such as the construction drawing set, addendums, etc.) will result in the bid submittal being deemed 'Non-Responsive' and the bid will not be accepted.

Bidders are reminded to make sure that the Conflict of Interest forms are completed if applicable before submitting a bid.

All bid items in the Proposal section must be completed for a bid submittal to be considered complete. Any bid item left blank, only partially completed, or that the bidder indicates they chose to not provide a bid for will be considered incomplete, and the entire bid submittal will also be deemed incomplete, the bid submittal will be deemed 'Non-Responsive', and the bid will not be accepted. Bidders bear sole responsibility for making sure that the Proposal is complete and in accordance with the instructions provided to bidders in the bid packet.

All acknowledgement forms for all addendums that are issued during the bid process for this project must be filled out and be included with any bid submittal for that bid submittal to be considered complete. Any bid submittal lacking these completed addendum acknowledgement forms will be deemed 'Non-Responsive' and the bid will not be accepted. Bidders bear sole responsibility for making sure that they have obtained all addendums issued prior to submitting their bid.

Bidders must provide documentation as part of the bid packet submittal proving that they possess active licenses that are equivalent to or a higher class than a Water Operator D license and also equivalent to or a higher class than either a Wastewater D license or a Class 1 Collections license, and the Contractor must maintain both of these active licenses for the entirety of the project. Any bid submittal that does not include this required documentation for both licenses will be rejected as a non-responsive bid. If a Contractor allows either or both of the required licenses to lapse at any time during the course of the project then all work under this project will be halted and the City of Midland will have sole discretion to either allow the Contractor to renew both of their active licenses before resuming work or to end the project immediately.

PROPOSAL

TO: Honorable Mayor and City Council
City of Midland
Midland, Texas

Mayor and Members of Council: The undersigned bidder, having examined the drawings, specifications and contract documents, the location of the proposed work, and being fully advised as to the extent and character of the work, proposes to furnish all material, equipment, and to perform all labor and work necessary for the completion of the construction of the work described by and in accordance with the attached drawings, specifications, and contract, for the following prices, to wit:

Project Name: Garfield Street Utility Bond Project – Break Out 02

Project Number: BPU18-02

Base Bid: Miscellaneous Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	1 LS	Mobilization, furnished, installed, complete and in place, for the sum of: Twenty five thousand dollars and zero cents per month. (Pay Note M1)	$25,000.00	$ 25,000.00
2)	1 LS	Bypass Pumping, furnished, installed, complete and in place, for the sum of: Fifteen thousand dollars and zero cents per month. (Pay Note M2)	$15,000.00	$15,000.00
3)	1 LS	Erosion/Sediment Control, furnished, installed, complete and in place, for the sum of: Twenty two thousand dollars and zero cents per month. (Pay Note M3)	$22,000.00	$ 22,000.00
4)	1 LS	Traffic Control, furnished, installed, complete and in place, for the sum of: Twenty four thousand dollars and zero cents per month. (Pay Note M4)	$24,000.00	$ 24,000.00
5)	1 LS	Job Site Safety, furnished, installed, complete and in place, for the sum of: Twenty five thousand dollars and zero cents per month. (Pay Note M5)	$25,000.00	$ 25,000.00

Base Bid: Miscellaneous Items				
Item No.	Quantity	Description	Unit Price	Total Amount
6)	775 SY	2" Asphalt Pavement Repair – COM Standard Detail 311, furnished, installed, complete and in place, for the sum of: Fifty dollars and zero cents per square yard. (Pay Note P2)	$ 50.00	$ 38,750.00
7)	8,720 SY	2" Asphalt Pavement Repair – COM Project Detail C01, furnished, installed, complete and in place, for the sum of: Fifty five dollars and zero cents per square yard. (Pay Note P2)	$ 55.00	$479,600.00
8)	N/A	Material Mark-up, complete and in place, for the sum of: Fifteen percent. (Pay Note M6)	% 15	$ N/A
9)	N/A	Labor Mark-up (Regular Work Hours), complete and in place, for the sum of: Fifteen percent. (Pay Note M7)	% 15	$ N/A
10)	N/A	Equipment Rental Mark-up (Non-Standard Equipment Only), complete and in place, for the sum of: Fifteen percent. (Pay Note M8)	% 15	$ N/A
Total Miscellaneous Items 1-10		$ 629,350.00		

Base Bid: Demolition Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	2,770 LF	Removal & Disposal of Existing Water Main, complete and in place, for the sum of: Fifteen dollars and zero cents per linear foot. (Pay Note D1)	$15.00	$41,550.00
2)	2,510 LF	Removal & Disposal of Existing Wastewater Main, complete and in place, for the sum of: Seventeen dollars and zero cents per linear foot. (Pay Note D1)	$ 17.00	$42,670.00
3)	390 LF	Removal & Disposal of Existing Storm Drain, complete and in place, for the sum of: Twenty five dollars and zero cents per linear foot. (Pay Note D1)	$ 25.00	$9,750.00
4)	260 SY	Flowable Fill for Existing Pipes Abandoned In Place, furnished, installed, complete and in place, for the sum of: One hundred thirty dollars and zero cents per square yard. (Pay Note D2)	$130.00	$33,800.00
5)	2 EA	Removal & Disposal of Existing Fire Hydrant Assembly, complete and in place, for the sum of: Seven hundred fifty dollars and zero cents per each. (Pay Note D3)	$750.00	$ 1,500.00
6)	13 EA	Removal & Disposal of Existing 48" Manhole, (0'-5' Deep), complete and in place, for the sum of: One thousand five hundred dollars and zero cents per each. (Pay Note D4)	$1,500.00	$19,500.00
7)	90 VF	Remove & Disposal of Existing 48" Manhole Additional Depth, (> 5' Deep), complete and in place, for the sum of: Two hundred fifty dollars and zero cents per vertical foot. (Pay Note D5)	$ 250.00	$22,500.00
Total Demolition Items 1-7		$ 171,270.00		

Base Bid: Water Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	3,740 LF	12" AWWA C-900 DR18, PVC, Water Main, furnished, installed, complete and in place, for the sum of: One hundred five dollars and zero cents per linear foot. (Pay Note W1)	$105.00	$392,700.00
2)	160 LF	8" AWWA C-900 DR18, PVC, Water Main, furnished, installed, complete and in place, for the sum of: Seventy dollars and zero cents per linear foot. (Pay Note W1)	$70.00	$11,200.00
3)	840 LF	6" AWWA C-900 DR18, PVC, Water Main, furnished, installed, complete and in place, for the sum of: Sixty dollars and zero cents per linear foot. (Pay Note W1)	$60.00	$50,400.00
4)	14 EA	12" Gate Valve & Box (MJxMJ/FL), furnished, installed, complete and in place, for the sum of: Sixty two hundred dollars and zero cents per each. (Pay Note W2)	$6,200.00	$ 86,800.00
5)	3 EA	8" Gate Valve & Box (MJxMJ/FL), furnished, installed, complete and in place, for the sum of: Thirty one hundred dollars and zero cents per each. (Pay Note W2)	$3,100.00	$9,300.00
6)	23 EA	6" Gate Valve & Box (MJxMJ/FL), furnished, installed, complete and in place, for the sum of: Two thousand two hundred thirty dollars and zero cents per each. (Pay Note W2)	$2,230.00	$ 51,290.00
7)	16 EA	Fire Hydrant Assembly & Riser, furnished, installed, complete and in place, for the sum of: Five thousand two hundred seventy five dollars and zero cents per each. (Pay Note W3)	$5,275.00	$ 84,400.00

Base Bid: Water Items				
Item No.	Quantity	Description	Unit Price	Total Amount
8)	2.1 TON	Ductile Iron Fittings, furnished, installed, complete and in place, for the sum of: Thirteen thousand seven hundred fifty dollars and zero cents per ton. (Pay Note W4)	$13,750.00	$28,875.00
9)	27 EA	12"x1" Tapping Saddle for water service connection, furnished, installed, complete and in place, for the sum of: Nine hundred seventy five dollars and zero cents per each. (Pay Note W5)	$975.00	$26,325.00
10)	740 LF	1" Water Service Lateral, Connection & Water Meter Installation, furnished, installed, complete and in place, for the sum of: One thousand fifty dollars and zero cents per linear foot. (Pay Note W6)	$1,050.00	$777,000.00
11)	4,700 LF	Open Trenching of Water Main, furnished, installed, complete and in place, for the sum of: Twenty dollars and zero cents per linear foot. (Pay Note W7)	$20.00	$94,000.00
Total Water Items 1-11		$1,612,290.00		

Base Bid: Wastewater Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	20 LF	18" SDR 26 ASTM D3034, PVC, Wastewater Main, furnished, installed, complete and in place, for the sum of: Two hundred five dollars and zero cents per linear foot. (Pay Note WW1)	$ 205.00	$ 4,100.00
2)	3,380 LF	12" SDR 26 ASTM D3034, PVC, Wastewater Main, furnished, installed, complete and in place, for the sum of: One hundred five dollars and zero cents per linear foot. (Pay Note WW1)	$ 105.00	$ 354,900.00
3)	180 LF	8" SDR 26 ASTM D3034, PVC, Wastewater Main, furnished, installed, complete and in place, for the sum of: Seventy dollars and zero cents per linear foot. (Pay Note WW1)	$ 70.00	$12,600.00
4)	80 LF	6" SDR 26 ASTM D3034, PVC, Wastewater Main, furnished, installed, complete and in place, for the sum of: Fifty dollars and zero cents per linear foot. (Pay Note WW1)	$ 50.00	$4,000.00
5)	1 EA	72" Fiberglass Manhole & Cover, (0'-5' Deep), furnished, installed, complete and in place, for the sum of: Eleven thousand nine hundred dollars and zero cents per each. (Pay Note WW2)	$11,900.00	$ 11,900.00
6)	10 EA	48" Fiberglass Manhole & Cover, (0'-5' Deep), furnished, installed, complete and in place, for the sum of: Six thousand nine hundred dollars and zero cents per each. (Pay Note WW2)	$6,900.00	$ 69,000.00

Base Bid: Wastewater Items				
Item No.	Quantity	Description	Unit Price	Total Amount
7)	11 VF	72" Fiberglass Manhole Additional Bury Depth, (> 5' Deep), furnished, installed, complete and in place, for the sum of: One thousand six hundred fifty dollars and zero cents per vertical foot. (Pay Note WW3)	$ 1,650.00	$18,150.00
8)	80 VF	48" Fiberglass Manhole Additional Bury Depth, (> 5' Deep), furnished, installed, complete and in place, for the sum of: Seven hundred fifty dollars and zero cents per vertical foot. (Pay Note WW3)	$750.00	$ 60,000.00
9)	2,540 LF	Open Trenching of Wastewater Main (0'-14' Deep), furnished, installed, complete and in place, for the sum of: Seventy five dollars and zero cents per linear foot. (Pay Note WW4)	$ 75.00	$ 190,500.00
10)	1,120 LF	Open Trenching of Wastewater Main (14'-16' Deep), furnished, installed, complete and in place, for the sum of: Ninety five dollars and zero cents per linear foot. (Pay Note WW4)	$ 95.00	$ 106,400.00
Total Wastewater Items 1-10		$ 831,550.00		

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	190 LF	6'x4' Reinforced Concrete Box Culvert, Storm Drain, furnished, installed, complete and in place, for the sum of: Five hundred ninety dollars and zero cents per linear foot. (Pay Note SD1)	$ 590.00	$112,100.00
2)	3,840 LF	3'x3' Reinforced Concrete Box Culvert, Storm Drain, furnished, installed, complete and in place, for the sum of: Three hundred forty five dollars and zero cents per linear foot. (Pay Note SD1)	$ 345.00	$1,324,800.00
3)	240 LF	24" Reinforced Concrete Pipe (RCP), Storm Drain, furnished, installed, complete and in place, for the sum of: Two hundred twenty dollars and zero cents per linear foot. (Pay Note SD2)	$ 220.00	$ 52,800.00
4)	40 LF	18" Reinforced Concrete Pipe (RCP), Storm Drain, furnished, installed, complete and in place, for the sum of: One hundred ninety dollars and zero cents per linear foot. (Pay Note SD2)	$ 190.00	$7,600.00
5)	1,300 LF	24" ASTM F2619, HDPE, Storm Drain, furnished, installed, complete and in place, for the sum of: One hundred fifty dollars and zero cents per linear foot. (Pay Note SD2)	$ 150.00	$195,000.00
6)	3 EA	8'x8' Reinforced Concrete Junction Box, furnished, installed, complete and in place, for the sum of: Twenty one thousand three hundred dollars and zero cents per each. (Pay Note SD3)	$21,300.00	$ 63,900.00
7)	15 EA	6'x6' Reinforced Concrete Junction Box, furnished, installed, complete and in place, for the sum of: Fifteen thousand five hundred ten dollars and zero cents per each. (Pay Note SD4)	$15,510.00	$ 232,650.00

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
8)	16 EA	48" Reinforced Concrete Manhole & Cover, (0'-5' Deep), furnished, installed, complete and in place, for the sum of: Nineteen thousand six hundred dollars and zero cents per each. (Pay Note SD5)	$19,600.00	$313,600.00
9)	5 EA	48" Fiberglass Manhole & Cover, (0'-5' Deep), furnished, installed, complete and in place, for the sum of: Eight thousand four hundred dollars and zero cents per each. (Pay Note SD6)	$8,400.00	$42,000.00
10)	15 VF	48" Fiberglass Manhole Additional Bury Depth, (> 5' Deep), furnished, installed, complete and in place, for the sum of: Seven hundred dollars and zero cents per vertical foot. (Pay Note SD7)	$700.00	$ 10,500.00
11)	4 EA	10'x5' Reinforced Concrete Curb Inlet, furnished, installed, complete and in place, for the sum of: Fourteen thousand four hundred dollars and zero cents per each. (Pay Note SD8)	$14,400.00	$57,600.00
12)	1 EA	5'x2.5' Reinforced Concrete Grate Inlet, furnished, installed, complete and in place, for the sum of: Twelve thousand seven hundred fifty dollars and zero cents per each. (Pay Note SD9)	$12,750.00	$ 12,750.00
13)	5,610 LF	Open Trenching of Storm Drain, furnished, installed, complete and in place, for the sum of: Twenty five dollars and zero cents per linear foot. (Pay Note SD10)	$25.00	$140,250.00
Total Storm Drain Items 1-13		$ 2,565,555.00		

Bid Price For:	
1. Miscellaneous Items	$ 629,350.00
2. Demolition Items	$ 171,270.00
3. Water Items	$ 1,612,290.00
4. Wastewater Items	$ 831,550.00
5. Storm Drain Items	$ 2,565,555.00
Total Price	$ 5,810,015.00

In addition to providing the individual prices for the items above, Contract shall write the total bid amount in the sum of

Five million eight hundred ten thousand fifteen dollars

and zero cents total.

The undersigned bidder hereby declares that he has visited the site of the work and has carefully examined the contract documents pertaining to the work covered by the above bid. The selected contractor will receive written notice to proceed.

Bidder agrees to substantially complete all work within 365 calendar days after receipt of notice to proceed.

PUBLIC INFORMATION

To the extent that Bidder is submitting a bid for a contract described by Section 552.371 of the Texas Government Code, Bidder agrees as follows in accordance with Section 552.372(b) of the Texas Government Code: The requirements of Subchapter J, Chapter 552, Government Code, may apply to this bid, and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

Enclosed herewith in this proposal is a cashier's check, cash or bid bond on a form approved by the City Attorney, for

Two hundred ninety thousand five hundred dollars

and seventy five cents total. ($ 290,500.75)

which it is agreed shall be collected and retained by the owner as liquidated damages in the event this proposal is accepted by the Owner within thirty days (30) after the date advertised for the reception of bids and the undersigned fails to execute the contract and required bonds with the owner, under the conditions thereof, within (15) days after the date said proposal is accepted; otherwise said check or bond shall be returned to the undersigned on demand.

Entrench, Inc.		
Name of Contractor		
Submitted By	Alberto Caballero, President Print Name and Title	
1728 W. Bender		
Mailing Address		
Hobbs	NM	88240
City	State	Zip

PAY NOTES

Garfield Street Utility Bond Project - Break Out 02

Bid Item		Pay Quantity Note
Miscellaneous Items		
1	Mobilization	M1
2	Bypass Pumping	M2
3	Erosion/Sediment Control	M3
4	Traffic Control	M4
5	Job Site Safety	M5
6	2" Asphalt Pavement Repair - COM Standard Detail 311	M6
7	2" Asphalt Pavement Repair - COM Project Detail C01	M6
8	Material Mark-up	M7
9	Labor Mark-up (Regular Work Hours)	M8
10	Equipment Rental Mark-up (Non-Standard Equipment Only)	M9
Demolition Items		
1	Removal & Disposal of Existing Water Main	D1
2	Removal & Disposal of Existing Wastewater Main	D1
3	Removal & Disposal of Existing Storm Drain	D1
4	Flowable Fill for Existing Pipes Abandoned In Place	D2
5	Removal & Disposal of Existing Fire Hydrant Assembly	D3
6	Removal & Disposal of Existing 48" Manhole (0'-5' Deep)	D4
7	Removal & Disposal of Existing 48" Manhole Additional Depth (> 5' Deep)	D5
Water Items		
1	12" AWWA C-900 DR18, PVC, Water Main	W1
2	8" AWWA C-900 DR18, PVC, Water Main	W1
3	6" AWWA C-900 DR18, PVC, Water Main	W1
4	12" Gate Valve & Box (MJxMJ/FL)	W2
5	8" Gate Valve & Box (MJxMJ/FL)	W2
6	6" Gate Valve & Box (MJxMJ/FL)	W2
7	Fire Hydrant Assembly & Riser	W3
8	Ductile Iron Fittings	W4
9	12"x1" Tapping Saddle	W5
10	1" Water Service Lateral, Connection & Water Meter Installation	W6
11	Open Trenching of Water Main	W7

Wastewater Items

1	18" SDR 26 ASTM D3034, PVC, Wastewater Main	WW1
2	12" SDR 26 ASTM D3034, PVC, Wastewater Main	WW1
3	8" SDR 26 ASTM D3034, PVC, Wastewater Main	WW1
4	6" SDR 26 ASTM D3034, PVC, Wastewater Main	WW1
5	72" Fiberglass Manhole & Cover (0'-5' Deep)	WW2
6	48" Fiberglass Manhole & Cover (0'-5' Deep)	WW2
7	72" Fiberglass Manhole Additional Bury Depth (> 5' Deep)	WW3
8	48" Fiberglass Manhole Additional Bury Depth (> 5' Deep)	WW3
9	Open Trenching of Wastewater Main (0'-14' Deep)	WW4
10	Open Trenching of Wastewater Main (14'-16' Deep)	WW4

Storm Drain Items

1	6'x4' Reinforced Concrete Box Culvert, Storm Drain	SD1
2	3'x3' Reinforced Concrete Box Culvert, Storm Drain	SD1
3	24" Reinforced Concrete Pipe (RCP), Storm Drain	SD2
4	18" Reinforced Concrete Pipe (RCP), Storm Drain	SD2
5	24" ASTM F2619, HDPE, Storm Drain	SD2
6	8'x8' Reinforced Concrete Junction Box (Provided by City of Midland)	SD3
7	6'x6' Reinforced Concrete Junction Box	SD4
8	48" Reinforced Concrete Manhole & Cover (0'-5' Deep)	SD5
9	48" Fiberglass Manhole & Cover (0'-5' Deep)	SD6
10	48" Fiberglass Manhole Additional Bury Depth (> 5' Deep)	SD7
11	10'x5' Reinforced Concrete Curb Inlet	SD8
12	5'x2.5' Reinforced Concrete Grate Inlet	SD9
13	Open Trenching of Storm Drain	SD10

PAY QUANTITY NOTES

M1 Includes the necessary equipment, labor, materials, and incidentals for Mobilization to the job site per the construction drawings complete and in place. Mobilization shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M2 Includes the necessary equipment, labor, materials, and incidentals for Bypass Pumping per the construction drawings and City of Midland standards and specifications, including all appurtenances. Bypass pumping should be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M3 Includes the necessary equipment, labor, materials, and incidentals to implement Erosion/Sediment Control per the construction drawings. Erosion/Sediment Control shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M4 Includes the necessary equipment, labor, materials, and incidentals to implement Traffic Control per the construction drawings and/or the approved Traffic Control Plan, including all temporary pavement marker tabs and their placement, maintenance, replacement, and removal, as well as all appurtenances. Any required traffic control devices are to meet the City of Midland Traffic Division Standards. Traffic Control shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M5 Includes the necessary equipment, labor, materials, and incidentals to implement Job Site Safety and to provide a safe work environment for the project work area (including all personal protection equipment, trench safety, etc.) per the construction drawings and in compliance with all applicable Federal, State, and Local requirements or regulations including those of OSHA and the City of Midland. JOB SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. Job Site Safety shall be bid as lump sum, and paid on a prorated basis for the duration of the construction project.

M6 Includes the necessary equipment, labor, materials, and incidentals for Asphalt Pavement Repair per the construction drawings and City of Midland standards and specifications, including all pavement, flowable fill, select, compaction, prime coat, tack coat, and appurtenances. Asphalt may be Type "D" HMAC Asphalt with PG 70-22, or either Type "B" or "C" HMAC Asphalt with PG 64-22. All asphalt is assumed to be 110 LBS / SY at 1" thick. Prime and tack coats are to be Bituminous Prime Coat (MC-30, 0.20 GAL / SY), and Tack Coat (MC-30, 0.10 GAL / SY). Measurement and payment to be made per square yard measured along the ground surface.

M7 Includes the Material Mark-up for materials and material sizes (pipe, valve, manhole, etc.) required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of the material in question plus the set percent increase established by this bid item. The Contractor must provide a copy of the invoice for the material cost from the supplier to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any material. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

M8 Includes the Labor Mark-up (Regular Work Hours) for labor required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of labor in question plus the set percent increase established by this bid item. The Contractor must provide a typical hourly pay rate for work crews prior to the percent increase along with the number of workers on the crew and the number of hours worked by the crew for the project in question to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any labor. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

M9 Includes the Equipment Rental Mark-up (non-standard equipment only) required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of the equipment rental in question plus the set percent increase established by this bid item. The Contractor must provide a copy of the invoice for the rented equipment from the equipment supplier to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any rented equipment. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

D1 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Utility Mains per the construction drawings and City of Midland standards and specifications, including the removal and disposal of all pipes, fittings, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all valves, manholes, fittings, junctions, structures, and appurtenances.

D2 Includes the necessary equipment, labor, materials, and incidentals for the placement of Flowable Fill for Existing Pipes Abandoned In Place (Portland Cement 2-Sack = 188 LBS/CY) per the construction drawings and City of Midland standards and specifications, including all plugging or capping the pipe to be abandoned, and appurtenances. Measurement and payment to be made per square yard of flowable fill placed in pipe abandoned in place.

D3 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Fire Hydrant Assembly per the construction drawings and City of Midland standards and specifications. Fire hydrant assemblies are to be returned to the City Utility Maintenance Department unless otherwise directed by the Engineer of Record or their representative. This includes removal and disposal of all structures, fittings, pipes, and appurtenances. Measurement and payment to be per each fire hydrant assembly removed.

D4 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Manholes to a depth of 5' per the construction drawings and City of Midland standards and specifications, including the removal and disposal of all drop structures, other structures, base, and appurtenances. Measurement and payment to be made per each manhole removed.

D5 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Manholes at depths exceeding 5' per the construction drawings and City of Midland standards and specifications, including the removal and disposal of all drop structures, other structures, and appurtenances. Measurement and payment to be per vertical foot of existing manhole removed below a depth of 5' measured from the lowest invert at the manhole flowline and rounded up to the nearest 0.5'.

W1 Includes the necessary equipment, labor, materials, and incidentals for the installation of Water Mains per the construction drawings and City of Midland standards and specifications, including all embedment, detector wire, tracer tape, necessary testing, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all valves, fittings, structures, and appurtenances.

W2 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Gate Valve & Box per the construction drawings and City of Midland standards and specifications, including all embedment, valve box, joint restraint, thrust blocking, concrete collar, and appurtenances. Measurement and payment to be made per each valve and box installed. Includes valves associated with tapping sleeves.

W3 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Fire Hydrant Assembly and Riser per the construction drawings and City of Midland standards and specifications, including all risers, embedment, gravel sump, thrust blocking, necessary testing, and appurtenances. Measurement and payment to be made per each fire hydrant assembly installed.

W4 Includes the necessary equipment, labor, materials, and incidentals for the installation of Ductile Iron Fittings per the construction drawings and City of Midland standards and specifications, including all embedment, wrapping, thrust blocking, joint restraints, and appurtenances. All fittings are to be C153 ductile iron compact fittings. Fitting weights are established from Tyler Union Quality Waterworks Products Catalog PC-U2014, December, 2014 and payment will be made at the standard compact weight. Nuts, bolds, glands, and other associated accessories are not included as part of the fitting weight and are considered subsidiary to the weight of the fitting. Any additional required fittings not shown on the drawings will be paid for at weights established in the Tyler Union Waterworks Catalog.

W5 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Tapping Saddle for a water service connection per the construction drawings and City of Midland standards and specifications, including all embedment, thrust blocking, and appurtenances. Measurement and payment to be per each tapping saddle installed.

W6 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Water Service Connection, Lateral, and/or Water Meter Installation per the construction drawings and City of Midland standards and specifications, including all brass goods from the corporation stop to the brass angle valve (inclusive), as well as the installation of a new meter box, including all excavation, embedment, backfill, polyethylene service line or other pipe and all appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all valves, fittings, and appurtenances. The new water meter will be provided by the City of Midland.

W7 Includes the necessary equipment, labor, materials, and incidentals for Open Trenching of Water Main per the construction drawings and City of Midland standards and specifications, including all unclassified excavation, backfill not including flowable fill backfill, providing trench safety and protection for workers to install pipe, structures, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures, fittings, and appurtenances.

WW1 Includes the necessary equipment, labor, materials, and incidentals for the installation of Wastewater Mains per the construction drawings and City of Midland standards and specifications, including all embedment, detector wire, tracer tape, necessary testing, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures and appurtenances.

WW2 Includes the necessary equipment, labor, materials, and incidentals for the installation of Fiberglass Manhole & Cover to a depth of 5' per the construction drawings and City of Midland standards and specifications, to the depth shown on the construction drawings and including all embedment, base, necessary testing, concrete collars, and appurtenances. Measurement and payment to be made per each manhole installed.

WW3 Includes the necessary equipment, labor, materials, and incidentals for the installation of Fiberglass Manhole Additional Bury Depth (> 5' pipe invert bury depth) per the construction drawings and City of Midland standards and specifications, including all embedment and appurtenances. Measurement and payment to be made per vertical foot measured from the lowest flowline invert at the manhole to 5' below the rim elevation.

WW4 Includes the necessary equipment, labor, materials, and incidentals for Open Trenching of Wastewater Main per the construction drawings and City of Midland standards and specifications, including all unclassified excavation, backfill not including flowable fill backfill, providing trench safety and protection for workers to install pipe, structures, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures, fittings, and appurtenances.

SD1 Includes the necessary equipment, labor, materials, and incidentals for the installation of Reinforced Concrete Box Culvert per the construction drawings and City of Midland standards and specifications, including all embedment, detector wire, tracer tape, necessary testing, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the box culvert centerline through all structures and appurtenances.

SD2 Includes the necessary equipment, labor, materials, and incidentals for the installation of Storm Drains per the construction drawings and City of Midland standards and specifications, including all embedment, detector wire, tracer tape, necessary testing, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures and appurtenances.

SD3 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Reinforced Concrete Junction Box provided by the City of Midland per the construction drawings and City of Midland standards and specifications, including all embedment, base, securing of junction box to fiberglass manhole riser, forms, reinforcement, placement, necessary testing, and appurtenances. Measurement and payment to be made per each junction box installed. Once construction activity begins the Contractor has sole responsibility for properly storing any junction boxes provided by the City of Midland until they are installed, and if any boxes are damaged or destroyed prior to installation due to improper storage or construction activity then the Contractor must replace the junction boxes with new junction boxes meeting the standards and requirements of the construction drawings and specifications before they can be installed, and this will be done at no additional cost to the City of Midland.

SD4 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Reinforced Concrete Junction Box per the construction drawings and City of Midland standards and specifications, including all embedment, base, securing of junction box to fiberglass manhole riser, forms, reinforcement, placement, necessary testing, and appurtenances. Measurement and payment to be made per each junction box installed.

SD5 Includes the necessary equipment, labor, materials, and incidentals for the installation of Concrete Manhole & Cover per the construction drawings and City of Midland standards and specifications, to the depth shown on the construction drawings and including all embedment, base, necessary testing, concrete collars, and appurtenances. Measurement and payment to be made per each manhole installed.

SD6 Includes the necessary equipment, labor, materials, and incidentals for the installation of Fiberglass Manhole & Cover to a depth of 5' per the construction drawings and City of Midland standards and specifications, to the depth shown on the construction drawings and including all embedment, base, necessary testing, concrete collars, and appurtenances. Measurement and payment to be made per each manhole installed.

SD7 Includes the necessary equipment, labor, materials, and incidentals for the installation of Fiberglass Manhole Additional Bury Depth (> 5' pipe invert bury depth) per the construction drawings and City of Midland standards and specifications, including all embedment and appurtenances. Measurement and payment to be made per vertical foot measured from the lowest flowline invert at the manhole to 5' below the rim elevation.

SD8 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Reinforced Concrete Curb Inlet per the construction drawings and City of Midland standards and specifications, including all embedment, base, forms, reinforcement, placement, sealing, finishing, necessary testing, and appurtenances. Measurement and payment to be made per each curb inlet installed.

SD9 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Reinforced Concrete Grate Inlet per the construction drawings and City of Midland standards and specifications, including all embedment, base, forms, reinforcement, placement, sealing, finishing, necessary testing, and appurtenances. Measurement and payment to be made per each grate inlet installed.

SD10 Includes the necessary equipment, labor, materials, and incidentals for Open Trenching of Storm Drain per the construction drawings and City of Midland standards and specifications, including all unclassified excavation, backfill not including flowable fill backfill, providing trench safety and protection for workers to install pipe, structures, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures, fittings, and appurtenances.

BID BOND

THE STATE OF TEXAS §

COUNTY OF MIDLAND §

SURETY NO _____

KNOW ALL MEN BY THESE PRESENTS, THAT Entrench, Inc., 3311 N. Grimes, Hobbs, New Mexico 88240 (Hereinafter called the Principal), as Principal, and The Cincinnati Insurance Company, 6200 S. Gilmore Road, Fairfield, Ohio 45014-5141 (Hereinafter called the Surety, as Surety, are held and firmly bound unto the City of Midland, Texas a home rule municipal corporation of Midland County, Texas, (hereinafter called the Obligee), in the amount of Five Percent (5%) of Amount Bid Dollars ($ 5%) for the payment whereof the said Principal and surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a Bid or Proposal to enter into a certain written contract for the construction of Garfield Street Utility Bond Project – Break Out 02.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully, enter into such written Contract, then this obligation shall be void; otherwise to remain in full force and effect.

IT IS EXPRESSLY UNDERSTOOD AND AGREE that if said Principal should withdraw its Bid anytime after such Bid is opened and before official rejection to such Bid or, if successful in securing the award thereof, said Principal should fail to enter into the Contract and furnish satisfactory Performance Bond and Payment Bond, the Obligee, in either of such events, shall be entitled and is hereby given the right to collect the full amount of this Bid Bond as liquidated damage.

PROVIDED, further that if any legal action be filed upon this Bond venue shall lie in Midland County, Texas.

IN WITNESS WHEREOF, the said Principal and surety do sign and seal this instrument, this 11th day of January, 2023.

Entrench, Inc.
Principal

By _____

Address 3311 N. Grimes

Hobbs, New Mexico 88240

The Cincinnati Insurance Company
Surety

By _____
Stacey Boswell, Attorney-In-Fact

Address 6200 S. Gilmore Road

Fairfield, Ohio 45014-5141

APPROVED AS TO FORM:

City Attorney

NOTE: Attach Power of Attorney

Form Revised December 2022

BidB 2

THE CINCINNATI INSURANCE COMPANY
THE CINCINNATI CASUALTY COMPANY

Fairfield, Ohio

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That THE CINCINNATI INSURANCE COMPANY and THE CINCINNATI CASUALTY COMPANY, corporations organized under the laws of the State of Ohio, and having their principal offices in the City of Fairfield, Ohio (herein collectively called the "Companies"), do hereby constitute and appoint

William W Burke, Jr, Stacey Boswell, Shawn Gustafson, William Burke,

of Las Cruces, NM
their true and legal Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and deliver on behalf of the Companies as Surety, any and all bonds, policies, undertakings or other like instruments, as follows:

Forty Million Dollars and 00/100 ($40,000,000.00)

This appointment is made under and by authority of the following resolutions adopted by the Boards of Directors of The Cincinnati Insurance Company and The Cincinnati Casualty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the President or any Senior Vice President be hereby authorized, and empowered to appoint Attorneys-in-Fact of the Company to execute any and all bonds, policies, undertakings, or other like instruments on behalf of the Corporation, and may authorize any officer or any such Attorney-in-Fact to affix the corporate seal; and may with or without cause modify or revoke any such appointment or authority. Any such writings so executed by such Attorneys-in-Fact shall be binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company.

RESOLVED, that the signature of the President or any Senior Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Secretary or Assistant Vice-President and the Seal of the Company may be affixed by facsimile to any certificate of any such power and any such power of certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certified by certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS WHEREOF, the Companies have caused these presents to be sealed with their corporate seals, duly attested by their President or any Senior Vice President this 16th day of March, 2021.

THE CINCINNATI INSURANCE COMPANY
THE CINCINNATI CASUALTY COMPANY

STATE OF OHIO)SS:
COUNTY OF BUTLER)

On this 16th day of March, 2021 before me came the above-named President or Senior Vice President of The Cincinnati Insurance Company and The Cincinnati Casualty Company, to me personally known to be the officer described herein, and acknowledged that the seals affixed to the preceding instrument are the corporate seals of said Companies and the corporate seals and the signature of the officer were duly affixed and subscribed to said instrument by the authority and direction of said corporations.

Keith Collett, Attorney at Law
Notary Public – State of Ohio
My commission has no expiration date.
Section 147.03 O.R.C.

I, the undersigned Secretary or Assistant Vice-President of The Cincinnati Insurance Company and The Cincinnati Casualty Company, hereby certify that the above is the Original Power of Attorney issued by said Companies, and do hereby further certify that the said Power of Attorney is still in full force and effect.

Given under my hand and seal of said Companies at Fairfield, Ohio, this 11th day of January , 2023 .

BN-1457 (3/21)

CONTRACT

THE STATE OF TEXAS §

COUNTY OF MIDLAND §

THIS CONTRACT, made and entered into this 25th day of January , 2023 , by and between the City of Midland of the County of Midland and State of Texas, acting through its Mayor thereunto duly authorized so to do, Party of the First Part, hereinafter termed OWNER, and

Entrench, Inc. of the City Hobbs ,

County of Lea , State of New Mexico, Party of the Second Part, herein-after termed CONTRACTOR.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Party of the first Part (OWNER), and under the conditions expressed in the bond bearing even date herewith, the said Party of the Second Part (CONTRACTOR), hereby agrees with the said Party of the First Part (OWNER) to commence and complete the construction of certain improvements described as follows: Garfield Street Utility Bond Project – Break Out 02 together with appurtenances and incidentals.

Conditions of the Contract and at his (or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendent, labor, insurance and other accessories and services necessary to complete the said construction in accordance with the conditions and prices stated in the Proposal attached hereto, and in accordance with the Notice to the Contractors, General and Special Conditions of Agreement, Plans and other drawings and printed or written explanatory matter thereof, and the Specifications and addenda therefore as prepared by Engineering and Transportation Department of the City of Midland, Texas, herein entitled the ENGINEER, together with the CONTRACTOR'S written Proposal, the General Conditions of the Contract, and the Performance and Payment Bonds hereto attached; all of which are made a part hereof and collectively evidence and constitute the entire Contract.

The CONTRACTOR hereby agrees to commence work within fifteen (15) calendar days after the written notice to do so and to substantially complete the same within 365 calendar days after receipt of notice to proceed, subject to such extensions of time as are provided by the General and Special Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds the price or prices shown in the proposal, which forms a part of this Contract, such payments to be subject to the General and Special Conditions of the Contract.

The SUM TOTAL of this Contract shall be: $5,810,010 Dollars and 00 Cents.

INSURANCE

Contractor shall at all times during the term of this Contract maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):	
— Personal Injury:	$1,000,000.00 per person
	$1,000,000.00 per occurrence
— Property Damage:	$500,000.00 per occurrence
Business Automobile Liability:	$250,000.00 combined single limit - Personal Injury and Property Damage
Workers' Compensation:	Statutory limits
Employers' Liability:	$500,000.00 per accident or occurrence

The Commercial General Liability shall be on a per project aggregate, including completed operations, and shall be on an occurrence basis. This insurance shall name the City as an additional insured and waive subrogation in favor of the City.

The Business Automobile Liability insurance provided by Contractor shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-city vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of $250,000.00 covering any vehicle used for the execution of the work that is the subject of this Contract. The insurance shall name the City as an additional insured and waive subrogation in favor of the City.

The Workers' Compensation coverage provided by Contractor shall inure to the benefit of employees injured during the course and scope of their employment by Contractor pursuant to this Contract. The Workers' Compensation shall waive all rights of subrogation in favor of the City.

All insurance required pursuant to this Contract shall provide for a waiver of subrogation in favor of the City. All insurance required pursuant to this Contract, except for Workers' Compensation Insurance, shall name the City as an additional insured on a claims occurred basis. City shall be provided the notice by Contractor's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage.

Contractor shall contractually require all contractors, subcontractors, and sub-subcontractors that work on any portion of the work that is the subject of this Contract to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts specified herein. All contractors, subcontractors, and sub-subcontractors shall obtain insurance policies that provide blanket waivers of subrogation in favor of the City of Midland and policies that name the City of Midland as an additional insured on a claims occurred basis (except workers' compensation).

The parties agree that, prior to the execution of the Contract, Contractor shall provide one or more certificates of insurance specifically stating that these requirements have been met and subject to the approval of the City. The City shall not be required to provide any insurance whatsoever pursuant to this Contract.

The Contractor certifies that the certificate of insurance provided as required herein complies with the requirements of Senate Bill 425, passed during the 82nd regular session of the Texas Legislature, and effective January 1, 2012. The Contractor shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of the Contractor.

WAIVER OF ATTORNEY FEES

WAIVER OF ATTORNEY FEES: BY EXECUTING THIS CONTRACT, CONTRACTOR AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE OWNER, REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THE CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE CONTRACT. THE CONTRACTOR SPECIFICALLY AGREES THAT IF THE CONTRACTOR BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS CONTRACT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS CONTRACT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET. SEQ., AS AMEDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, THE CONTRACTOR AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH CONTRACTOR MIGHT OTHERWISE BE ENTITLED.

CONTRACTOR AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING KNOWN RIGHT. THE CONTRACTOR ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THE CONTRACT. THE CONTRACTOR FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE OWNER AND THE CONTRACTOR. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF SOVEREIGN IMMUNITY.

THE CONTRACTOR AND OWNER ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION.

SOVEREIGN IMMUNITY

By executing this Contract, the City is not waiving its right of sovereign immunity. The City is retaining its immunity from suit. The City is not granting consent to be sued by legislative resolution or action.

THERE IS NO WAIVER OF SOVEREIGN IMMUNITY.

GOVERNING LAW AND VENUE

This Contract shall be governed by the laws of the State of Texas. All performance and payment made pursuant to this Contract shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this Contract or the performance of this Contract shall be in Midland County, Texas. The obligations and undertakings of each of the parties to this Contract shall be deemed to have occurred in Midland County, Texas.

COMPLIANCE – Contractor agrees that it shall comply with Texas Government Code Section 2252.908, *et seq.*, as amended. Contractor agrees that it shall comply with Texas Local Government Code Section 176.006, *et seq.*, as amended.

VERIFICATION

To the extent that Sections 2271.002 and 2274.002 of the Texas Government Code (collectively, the "Anti-Boycott Statutes") apply to this Contract, Contractor hereby verifies:

- that Contractor does not boycott Israel and will not boycott Israel during the term of this Contract;
- that Contractor does not boycott energy companies and will not boycott energy companies during the term of this Contract; and
- that Contractor does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of this Contract against a firearm entity or firearm trade association.

To the extent that the Anti-Boycott Statutes do not apply to this Contract, such verification is not required, and Contractor shall be deemed to have not made such verification.

RECORDS RETENTION AND PRODUCTION OF INFORMATION

To the extent that this contract is a contract described by Section 552.371 of the Texas Government Code, Contractor shall (1) preserve all contracting information related to the Contract as provided by the records retention requirements applicable to the City of Midland for the duration of the contract, (2) promptly provide to the City of Midland any contracting information related to the Contract that is in the custody or possession of Contractor on request of the City of Midland, and (3) on completion of the Contract, either (i) provide at no cost to the City of Midland all contracting information related to the Contract that is in the custody or possession of Contractor, or (ii) preserve the contracting information related to the Contract as provided by the records retention requirements applicable to the City of Midland.

PUBLIC INFORMATION

To the extent that this Contract is a contract described by Section 552.371 of the Texas Government Code, Contractor agrees as follows in accordance with Section 552.372(b) of the Texas Government Code: The requirements of Subchapter J, Chapter 552, Government Code, may apply to this contract, and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

IN WITNESS WHEREOF, the parties to these presents have executed this Agreement in the year and day first above written.

Parties of the First Part (Owner)

By: _____
Lori Blong, Mayor

ATTEST:

_____
Amy Turner, City Secretary

APPROVED ONLY AS TO FORM:

By: _____
John Ohnemiller, City Attorney

By: _____
Party of the Second Part (CONTRACTOR)

By: _____
Title

THE STATE OF _____ §

COUNTY OF _____ §

BEFORE ME, the undersigned authority, on this _____ day of _____, 20__ personally appeared _____, an officer of Entrench, Inc. _____, known to me to be the person and official whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same as an act and deed of said corporation, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 20_____

_____
Notary Public

Form Revised January 2023

PERFORMANCE BOND

THE STATE OF TEXAS §

COUNTY OF MIDLAND § SURETY NO _____

KNOW ALL MEN BY THESE PRESENTS, THAT _____ (Hereinafter called the Principal[s]), as Principal(s), and _____ (Hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Midland, Texas a home rule municipal corporation of Midland County, Texas, (hereinafter called the Obligee), in the amount of _____ DOLLARS ($ _____) for the payment whereof the said Principal and surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____day of _____ , 20___ , for the furnishing of materials and equipment to perform all labor and work necessary for the construction of Garfield Street Utility Bond Project – Break Out 02 , specifically including in the scope of this work and bond, the additional maintenance guaranty provisions set forth in the contract conditions, which contract is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein, as well as the Principal's primary obligation to perform according to plans and specifications.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform the work in accordance with the plans, specifications, instructions to bidder, general and special conditions and other contract documents, including any addendum thereto, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED further that if any legal action be filed upon this Bond venue shall lie in Midland County, State of Texas.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications or drawings accompanying the same, or any assignment of the contract as may be provided for in the instructions to bidders, shall in anywise affect its obligation on this Bond, and it does waive notice of any such change, extension of time, alteration or addition to the terms of the contract, assignment thereof, or the work to be performed thereunder.

IN WITNESS WHEREOF, the said Principal and surety do sign and seal this instrument, this _____ day of _____ , 20___.

_____	_____
Principal	Surety
By _____	By _____
Address _____	Address _____
_____	_____
_____	_____

APPROVED AS TO FORM:

_____

City Attorney

NOTE: Attach Power of Attorney

PAYMENT BOND

THE STATE OF TEXAS §

COUNTY OF MIDLAND § SURETY NO _____

KNOW ALL MEN BY THESE PRESENTS, THAT _____ of the City of _____ of the County of _____ and State of Texas as Principal, and _____, as Surety, are held and firmly bound unto the City of Midland, Texas, as Obligee, in the amount of _____ DOLLARS ($ _____) for the payment whereof the said Principal and Surety bind themselves, their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____ day of _____, 20__, for the furnishing of materials, equipment to perform all labor and work necessary for Garfield Street Utility Bond Project – Break Out 02, hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, the condition of the obligation is that if the said Principal shall pay all claimants supplying labor and material to him or a subcontractor in the prosecution of the work provided for in said contract, then this obligation shall be null and void; otherwise, it is to remain in full force and effect.

Surety, for value received, stipulates and agrees that no change, extension of time alteration or addition to the terms of the contract, or to the work performed there under, or the plans, specifications of drawings accompanying the same, or any assignment of the contract as may be provided for in the instructions to bidders, shall in anywise affect its obligation on this Bond, and it does waive notice of any such change, extension of

time, alteration or addition to the terms of the contract, assignment thereof, or to the work to be performed there under.

IN WITNESS WHEREOF the said Principal and Surety have signed and sealed this instrument, this _____ day of _____ , 20__ .

_____	_____
Principal	Surety
By _____	By _____
Address _____	Address _____
_____	_____
_____	_____

APPROVED AS TO FORM:

_____

City Attorney

NOTE: Attach Power of Attorney

Form Revised December 2022

CERTIFICATE OF PAYMENT

THE STATE OF TEXAS §

COUNTY OF MIDLAND §

_____Garfield Street Utility Bond Project – Break Out 02_____

The undersigned states that all debts, bills, and expenses that were incurred by the undersigned, his agents, or subcontractors employed by him, for labor, wages, materials and other purposes furnished for the above project have been paid and satisfied in full.

The undersigned, as general contractor for the above described project agrees to indemnify, hold harmless and defend the City, its officers, agents, and employees, from and against all claims and suits for damages, expenses, including court costs and attorney fees, arising out of or resulting from the undersigned contractor, his agents or subcontractors employed by him for expenses, warranties for items furnished, or labor performed and for any party that has supplied materials in connection with the repair or construction of the above referenced premises.

The undersigned contractor agrees to waive any and all claims it may have against the City, associated with, resulting from or arising out of the work performed at the above premises.

Further, the undersigned states that all labor performed by the undersigned, his agents, and subcontractors employed by him, has been completed in the usual and customary workmanlike manner and all work performed is accompanied with the usual and appropriate warranties for such work or repair, absent any disclaimer previously approved by the City of Midland.

I, the undersigned, release and relinquish unto the City of Midland, and their assigns the above described lien upon the above referenced property and hereby certify that all debts, bills, and expenses incurred by the undersigned, his agents, or subcontractors employed by him in connection with work done at the above

premises have been fully paid, in exchange for payment in full to be made by the City of Midland for the performance on the above described premises.

WITNESS MY HAND on this _____ day of _____, 20_____.

_____
Signature

_____
Typed or Printed Name

_____
Title

_____
Name of Company

SUBSCRIBED AND SWORN to before me on the _____ day of _____, 20_____.

_____
Notary Public, State of Texas

_____
Typed or printed name

_____
My Commission expires:

Form Revised December 2022

City of Midland Specifications

PREPARATION OF RIGHT OF WAY

1. GENERAL

Includes the preparation of right-of-way for construction by clearing, grubbing, removing and disposing of all obstructions and objectionable material from the right-of-way and designated easements, which is not specifically provided for on the plans.

Obstructions and objectionable material refer to all objects or material that do not meet the quality of standards for the courses of pavement to be constructed or which protrude into the excavation for slopes.

Measurement and Payment - Measurement and payment will be at the units and prices for the applicable bid item in the proposal.

When no specific bid items are included in the bid proposal for work specified under this section this work shall be considered as incidental to other items of work and the cost shall be included in the bid for these items. No separate payment will be made.

2. CONSTRUCTION METHODS

Removal - Obstructions and objectionable material to be removed by blading, plowing, bulldozing, or other methods approved in writing by the Engineer. The use of explosives will not be permitted. Solid objects must be removed to a depth of at least one (1) foot below the finished slope or subgrade elevation. Hollow objects must be removed entirely.

Disposal - Material to be removed from the right-of-way becomes the property of the Contractor. If disposal areas are available, they will be indicated on the plans.

Preservation of Trees and Shrubs - Trees and shrubs to be preserved in the right of way are shown on the plans and must be protected from injury during construction.

Removal of Concrete - Cut concrete at the right-of-way line straight and vertical by sawing or other approved methods prior to the removal of concrete in the right-of-way.

EXCAVATION, EMBANKMENT AND PREPARATION OF SUBGRADE 1
1. GENERAL 2
2. CONSTRUCTION METHODS 2

EXCAVATION, EMBANKMENT AND PREPARATION OF SUBGRADE

1. GENERAL

Includes the excavation, embankment and preparation of subgrade determined by the lines, grades and sections shown on the plans and in accordance with the provisions of the specifications.

Excavation - Includes excavation to planned grade, disposal of the material, removal of unsuitable subgrade material and borrow material when required in the construction. All excavation to be classified as common.

Embankment - Consists of excavated or borrow materials placed and compacted in horizontal layers in accordance with the specifications.

Subgrade - The upper eight inches (8") of embankment or the upper eight inches (8") below the roadway excavation finished grade. The subgrade shall extend from six inches (6") back of curb to six inches (6") back of curb where curb and gutter is to be constructed.

Measurement and Payment - Measurement and payment to be at the units and prices for the applicable bid items in the proposal.

2. CONSTRUCTION METHODS

Excavation - Made at the location and to the lines and grades shown on the plans in areas previously prepared in accordance with provisions of Section 2A. Dispose of excess material not required in the embankment and material that is unsuitable for subgrade. Excavation tolerance to be plus or minus 1/10 foot from the plan grade.

The area between the curb and property line shall be excavated or filled, whichever is necessary, to curb height at back of curb and finished to a straight even surface to the property line. The minimum elevation at the property line shall be the elevation of the top of the curb. The maximum elevation at the property line shall be equal to a rise of 1/4 inch per foot from the back of the curb to the property line.

During the excavation of this project, it will be required that all parkways be excavated and shaped at the same time the roadway is excavated. Excess excavation will be disposed of at locations approved by the Engineer.

Embankment shall be constructed at the locations and to the lines and grades shown on the plans in areas previously prepared in accordance with Section 2A of these specifications. Top eight inches (8") of natural ground to be compacted

to embankment density requirements. Embankment shall be constructed from suitable material obtained from the excavation or borrow free of roots, rocks in excess of three inches (3"), debris and other objectionable material. Excavation deficiencies shall be supplemented from a borrow source approved by the Engineer. Embankment shall be constructed in uniform horizontal layers not to exceed eight inches (8") of loose depth and compact with suitable equipment to a minimum of ninety percent (90%) AASHTO T180. The materials shall be processed by aeration or watering to bring the material to the approximate optimum moisture. Dry layers will not be permitted. Soft spots that develop in the embankment shall be removed and replaced with suitable material. No payment will be made for removal of soft spots. Tolerance for embankment grading shall be one-half foot (1/2) plus or minus the plan grade.

Preparation of Subgrade - Eight inches (8") of the upper portion of the embankment or excavation shall be shaped and compacted to a minimum density of 95 percent (95%) AASHTO T180 and finished within a tolerance of one-half inch (1/2") in ten feet (10'). The finished subgrade shall be protected and maintained in a satisfactory condition until covered by succeeding construction.

Compaction Tests - Field density tests will be made by the Owner or by a laboratory selected by the Owner. The Contractor shall notify the Engineer when compaction has been achieved. The Contractor shall allow 24 hours for scheduling of test. Prior to the taking of subgrade density test, the entire subgrade will be tested by proof-rolling using a pneumatic roller weighing not less than 50,000 lbs. gross with tire pressure being not less than 110 psi. Any soft spots, pumping, or other evidence of weakness shall be remedied before density tests are made. Proof rolling shall be in the presence of the Engineer or his duly authorized representative.

The City will pay the cost of initial density tests made on the subgrade. If the subgrade fails to meet the density requirements on the first test, the contractor will be required to have subsequent density tests made by the commercial lab selected by owner. The cost of all subsequent density tests will be born by the contractor.

08/07

CONCRETE CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS,

VALLEY GUTTERS, CENTER DRAINS AND RIP RAP

1. GENERAL

Includes the construction of concrete curb and gutter, sidewalks, driveways, valley gutters, center drains and rip rap in accordance with lines, grades and the sections shown on the plans and constructed in full compliance with provisions of the specifications.

A proven performance record by the Texas Highway Department shall be supplied by material producers for all materials supplied by them.

2. MATERIALS

Concrete - All concrete other than rip rap shall be Class "A" concrete in accordance with Texas Highway Department specifications Item No. 421. Concrete for rip rap shall be the class as shown on the plans and detail drawings. When no concrete class is shown the plans concrete for rip rap shall be Class "B" concrete.

Concrete batch designs shall be furnished for each project and shall include all classes of concrete proposed for use on the project.

Reinforcing Steel - Reinforcing steel shall be deformed bars or wire mesh fabric conforming to the requirements of "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" Item No. 440 and shall be of the sizes and grades as shown on the plans.

The contractor, at his option, may use fiber reinforcing in lieu of the wire mesh for all concrete slab on grade. When fiber reinforcing is used, it shall be "Fiber Mesh" or "Caprolan RC" or approved equal. The material and rate of application shall be approved by the Engineer prior to its use.

Expansion Joints - Bituminous pre-molded joint filler shall be composed of top grade fiber, treated by special impregnation system with water repellent bituminous materials. It shall be a non-extruding type, resilient, expanding on release of compression, preventing open joint crevices. The pre-molded joint filler shall be of such character, that it will not be deformed by handling during hot weather, nor shall it become brittle in cold weather. It shall be free from visible external defects such as holes, ragged or untrue edges, breaks, cracks or tears. It may be covered on both sides with paper to facilitate handling.

The joint filler shall be accurately cut to the dimensions and shapes required. It shall be of the thickness required by the plans, or as specified elsewhere.

3. CONSTRUCTION METHODS

GENERAL

No concrete shall be placed when, in the Engineers opinion, weather or other conditions would be detrimental to the structure placed. No concrete shall be placed on grade when the ground temperature is 35^{o} F or lower. Concrete may be placed when the ground temperature is rising from 35^{o} F. Concrete placed in cold weather shall be protected from freezing for 72 hours after being placed.

CURB AND GUTTER

EXCAVATION AND SUBGRADE - Excavation for curb, gutter, and combined curb and gutter shall be done with the subgrade excavation for the street. Street subgrade shall extend from six inches (6") back of curb to (6") back of curb and shall be compacted for a full width to a minimum of 95% AASHTO T180-61. Where subgrade is more than three inches (3") below bottom of curb, fill shall be compacted caliche base constructed from six inches (6") back of curb to six inches (6") back of curb as specified for base course.

Whenever subgrade or base is dry or dusty, it shall be thoroughly moistened, not made muddy, before the concrete is placed.

Forms - Forms shall be of steel, of a type to be approved by the Engineer, except that curves may be formed with wood sections built up or laminated, upon prior approval by the Engineer.

The forms shall be attached securely to stakes, shall be set true to line and grade, and braced sufficiently to remain true during the placing and tamping of the concrete. Forms shall be thoroughly cleaned and oiled before each use.

Curves - All changes in direction of the curbs shall be by means of true circular curves of the radii as shown on the plans.

Expansion Joints - Expansion joints shall be placed between curb and gutter sections at the tangent points of all curves, at each side of the inlet boxes, drives, alleyways, and at intervals of not more than forty feet (40') in straight runs. The expansion material shall be pre-molded three-fourths inch (3/4") in thickness, and shall conform to the requirements of expansion material as specified herein. It shall be cut to the full size and shape or the cross section of the curb and gutter, less one-half inch (1/2") from the finished surface thereof. The edges of sections against the joint shall be finished with an edging tool and the joint raked clean of concrete.

Finishing - There shall be provided on the job a metal screed or mule designed to give proper shape to the curb and gutter. It shall be bent to the exact shape of the finished curb and gutter and the forward edge turned up slightly to prevent disturbing the mortar. It shall be designed to ride on the forms and when properly manipulated shall leave the curb and gutter in its proper shaped condition. An "S" trowel shall be used to finish the surface and minor imperfections shall be corrected with a mason's trowel. Care shall be taken to finish

the gutter flow line to a true, uniform grade. All edges shall be finished with an edging tool, and joints marked with a jointer. Joint marks shall coincide with actual joints and shall be straight and true.

Curing - The completed curb and gutter, shall be cured in accordance with the requirements of the item "Membrane Curing", Texas Highway Department Item 531.

DRIVEWAYS AND ALLEY RETURNS

Driveways and alley returns shall be constructed of Class "A" concrete to the lines and grades as shown on the plans and detail sheets. All driveways and alley returns shall be reinforced as shown on the detail drawings.

Excavation and Subgrade - Excavation shall be accomplished in the same manner as for streets and curbs. The subgrade for all driveways and alley returns shall be compacted to 95% modified proctor density for 8 inches depth.

Driveways for single family residences and property used for two family residential purposes (duplexes) may be placed on the compacted subgrade. All other driveways shall be considered as commercial driveways and shall be constructed on 6 inches compacted flexible base.

Flexible Base - Commercial driveways and alley returns shall be constructed on 6 inches of flexible base conforming to Section 2-C- Flexible Base, Caliche.

Forms - Forms shall be constructed of steel or, when approved by the engineer, wood conforming to the requirements for curb and gutter forms.

Expansion Joints - Expansion joints shall be placed at the ends of abutting curb and gutter at the end of radii for all driveways and alley returns. In addition, expansion joints shall be placed at the ends of abutting sidewalk sections and at any point where the driveway or alley return abuts another concrete structure. Expansion joint material shall be pre-molded three fourths inch (3/4") in thickness, cut to the shape and dimensions required and shall extend the full depth of the concrete.

Finishing - Shaping and finishing of driveways and alley returns shall be accomplished by using a screed to shape the driveway or alley return to the lines and grade required. Finishing shall be accomplished by use of wooden floats and stiff bristled brushes or brooms. The last finish shall be by brushing or brooming in
A direction transverse to the direction of traffic.

During the entire finishing process care shall be taken to maintain the true gutter invert in line with the street curb and gutter.

Curing - Finished driveways and alley returns shall be cured in accordance with the requirements "membrane curing" "Texas Department of Highways and Public Transportation, 1982 Standard Specifications for Highways, Streets and Bridges", Item Number 531.

CONCRETE VALLEY GUTTERS, CENTER DRAINS AND DRAINWAYS

Concrete slab type street drainage structures with or without curbs, shall be constructed of Class "A" concrete to the lines and grades as shown on the plans and detail sheets or as may be established in the field by the engineer.

Subgrade excavation preparation and compaction and flexible base shall be the same as specified for street construction. All drainage structures within the roadway shall be constructed on a flexible caliche base so that the thickness of the concrete slab plus base is equal to the thickness of the hot mix asphaltic concrete surface plus base.

Forms - Forms shall be as specified for curb and gutter.

Reinforcing - All slab type drainage structures shall be reinforced as shown on the plans and detail drawings. Care shall be taken to maintain all reinforcing in good condition and at its proper location within the slab.

Expansion Joints - Expansion joint material shall be as specified for curb and gutter and for driveways and alley returns.

Expansion joints for valley gutter shall be placed at the ends of radii and at the juncture between the fillet and the cross valley as shown on the detail sheet.

For center drains, expansion joints shall be placed at the ends of widened or transition sections and at each end of a section containing a manhole or other structure and at intervals of sixty feet (60') measured along the center line of the drain.

Additional expansion joints shall be placed where drainage slabs abut backs of curbs, sidewalks and at contact points with other concrete structures.

Contraction Joints - Contraction joints shall be spaced at 15' intervals along the center line of center drains. These contraction joints shall be saw cut 3/8" wide minimum and 1/4 the depth of the slab using an approved concrete saw.

Saw cut contraction joints shall be made after the concrete has set sufficiently to prevent excessive raveling during sawing and shall be completed before the concrete is 48 hours old.

Finishing - Finishing shall be the same as for alley returns and driveways with the last finishing operation for structures subject to vehicular traffic being by broom or stiff brush in a direction transverse to the direction of traffic.

Curing - Curing shall be the same as for curb and gutter and driveways and alley returns.

SIDEWALKS

Sidewalks shall be constructed of Class A" concrete to the lines and grades as shown on the plans and detail drawings or as may be established in the field by the engineer. Sidewalks shall be constructed parallel to the back of the curb and on a grade parallel to

the top of curb grade. The minimum thickness for any sidewalk is 4 inches. The minimum width of any sidewalk is 4 feet.

Excavation and Subgrade - Excavation for sidewalk shall be made with street excavation where applicable. Care shall be exercised in excavating for sidewalks. Any over excavation or any fill required for sidewalk must be brought to grade in lifts not to exceed two inches (2") and thoroughly tamped. Subgrade for sidewalks shall be compacted to at least the density of the adjacent soil or to 85% modified proctor whichever is greater.

When a sidewalk is to be constructed on an embankment the fill must extend at least 3 feet beyond the edge of the sidewalk.

If the subgrade is dry or dusty it must be thoroughly moistened but not made muddy before concrete is placed.

Forms - Forms for sidewalks may be either steel or wood. Forms must be in good shape and true to line and grade. If nominal 2" x 4" lumber is used the subgrade must be finished one half inch (1/2") below the bottom of the form to provide the required 4 inch thickness.

Expansion Joints - Expansion joint material shall be pre-molded conforming to these specifications and shall be one half inch (1/2") thick. The expansion joint shall extend the full depth of the sidewalk.

Expansion joints shall be placed at points where the sidewalk contacts the back of curb, at all junctures between sidewalks all directions, and at all points where the sidewalk abuts a driveway, alley return or other concrete structure including fence foundations.

Transverse expansion joints shall be constructed in the sidewalk at intervals not exceeding twenty eight feet (28') as measured along the centerline of the walk except for sidewalks that are constructed wider than four feet (4') in which case expansion joints may be placed at intervals that are multiples of the width but not exceeding thirty feet (30').

Contraction Joints - Contraction joints consisting of trowel cuts one and one half inches (1-1/2") deep shall be spaced at four foot (4') intervals along the sidewalk. Contraction joints shall be edged using an edging tool with a 1/4 inch or 3/8 inch radius.

For sidewalks wider than four feet (4') contraction joints may be placed at intervals equal to the width of the walk up to but not exceeding ten feet (10').

Finishing - Sidewalks shall be "struck off" with a screed to provide an even surface and float finished using a wooden float.

The final finish on the sidewalk shall be accomplished by brooming or brushing using a stiff bristled brush or broom with the final strokes being in the transverse direction.

Curing - Curing shall be as specified for curb and gutter and driveways and alley returns.

CONCRETE RIP RAP

Concrete rip rap shall be constructed of concrete of the class and to the line and grades as shown on the plans.

Excavation and Subgrade - Care shall be taken not to over excavate for rip rap. The subgrade for rip rap shall be compacted to at least the density of the adjacent undisturbed soil or 85% modified proctor whichever is higher.

Forms - Forms, where required, may be either steel or wood. Forms must be in good condition and true to line and grade.

Expansion Joints - Expansion joints, where required, will meet the requirements of expansion joints materials as specified herein and will be placed as shown on the plans or directed by the engineer.

Finishing - Finishing shall be by screed and wooden float to produce true uniform surface.

Curing - Curing shall be as specified for other concrete herein.

Slope Paving - Slope paving may be required behind the curb or behind sidewalks where street paving requires deeper cuts in developed areas. Slope paving shall be constructed of Class "A" concrete and shall be constructed to the lines and grades as shown on the plans or as established in the field. Slope pavement shall be four inches (4") thick and shall be constructed in accord with the specifications for sidewalks.

When no slope grade is given on the plans the slope gradient shall be l:l.

Unless listed separately on the bid proposal, slope pavement shall be measured and paid for as sidewalk.

4. BACKFILL AND CLEANUP

GENERAL

Backfill and clean up are an integral part of the various items covered by this specification and must be completed for each item before that item will be considered for payment.

CONCRETE STRUCTURES WITHIN THE PAVED AREA OF STREETS

Backfill and clean up for concrete structures within the paved areas of streets, alleys, etc. shall receive special attention to assure the integrity of the street pavement.

Structures constructed in previously paved areas shall have sufficient surface removed along with base and subgrade where necessary to set full face forms for the concrete. As soon as the forms are removed all loose material shall be removed from the form trench and the trench filled to the base level with Portland cement stabilized backfill material

consisting of two (2) sacks Portland cement to one (l) cubic yard of caliche base material or one (l) cubic yard "blow sand". When the cement stabilized backfill has cured the pavement edge shall be saw cut to provide true and straight lines and the pavement restored to its original or revised grade using Hot mix asphaltic concrete conforming to the requirements of Section 2-F of these specifications.

For structures constructed on previously prepared subgrade or base course, clean up and backfill shall be considered complete when the subgrade or base course has been made ready to receive the next course.

When a structure is constructed on a finished base course and it is necessary to remove base material to set forms, backfill and cleanup shall be as described for previously paved areas and shall be considered complete when the base course is made ready to receive the surface course or courses.

BACKFILL BEHIND CURBS AND ALONG SIDEWALKS

Backfill behind curbs and along sidewalks that is to be grassed shall be made using good top soil. Top soil shall be free of caliche, rocks, clods, lumps, debris and other objectionable material. This backfill shall be compacted to at least the density of undisturbed adjacent soil but not less than 85% modified proctor.

Backfill behind curbs and along sidewalks that is to receive paving shall be constructed to conform to the base and subgrade of the adjacent paving and shall be compacted to 95% modified proctor. Or the contractor may elect to backfill to the top of the base with two (2) sack cement stabilized backfill.

In undeveloped areas and in areas where no sidewalks exist the contractor shall slope from the back of the curb to a maximum height of 1/4 inch per foot rise from the top of the curb to the property line on a straight line grade. The minimum elevation at the property lines shall be top of curb elevation.

In deeper cut areas slope paving may be required. When slope paving is required it shall be constructed to the lines and grades shown on the plans. Backfill and shaping beyond the slope paving shall be in accord with the applicable portions of this specification.

CONCRETE CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS **1**

VALLEY GUTTERS, CENTER DRAINS AND RIP RAP **1**

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Updated 3/06

CONCRETE STRUCTURES

1. GENERAL

This specification covers concrete structures including but not limited to junction boxes, culverts, head walls, cast in place manholes, valve vaults, meter vaults and retaining walls.

2. MATERIALS

CONCRETE

Concrete for cast in place manholes, junction boxes, storm sewer inlet boxes, valve vaults and direct traffic culvert and bridge decks shall be a modified class "C" concrete using a minimum of 6 sacks cement per cubic yard with a maximum water content of 5 gallons per sack of cement and producing a concrete with 4000 psi 28 day compressive strength.

Concrete for other structures shall be class "A" as specified in "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" item number 421. Concrete for riprap shall be class "B".

Reinforcing steel shall conform to the requirements of item number 440 or "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" and shall be of the sizes and grades as shown on the plans.

3. CONSTRUCTION

Construction of concrete structures shall be in accordance with the provisions of item 420 "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges".

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FLEXIBLE BASE, CALICHE

1. GENERAL

This item consists of the construction of a caliche flexible base course to the lines, grades and thickness shown on the plans and in accordance with the provisions of the specifications.

Qualification of Material Source - There will be no designated material sources, but the source proposed by the Contractor must be approved by the Engineer. The contractor shall furnish evidence of capability to crush and screen the material with suitable equipment.

Measurement and Payment - Measurement and payment to be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Material from the approved source shall meet the following requirements when tested in accordance with the referenced testing standards:

Gradation - Tested by ASTM C 136-67 to meet the following gradation limits:

Sieve Size	Percent Passing
1-3/4"	100.0
7/8"	65-90
3/8"	50-70
No. 4	30-60
No. 40	15-35

Liquid Limit and Plasticity Index **-** Tested by ASTM D423-66 and D 424-59.

Liquid Limit - 30.0 Maximum
Plasticity Index - 10.0 Maximum
Triaxial Classification - Tested by Texas Highway Department Method TEX 117-E, Part II - minimum class 3.0.

Source Quality Control - The contractor shall exercise caution in the operation of the material source to prevent the inclusion of inferior materials.

3. CONSTRUCTION

A. The subgrade shall be finished true to the lines and grades as shown on the plans or as established by the Engineer and finished within specified tolerances and properly maintained to prevent drying and/or loosening of the surface.

No base material may be dumped on any subgrade until it has been tested and approved by the Engineer.

B. Flexible caliche base material shall be placed in uniform courses and processed to provide a uniformly mixed base course of the proper moisture content for compaction. The processing and compaction procedure used shall provide a uniform base course compacted to ninety-five percent (95%) modified proctor density (YACHT T180) minimum. The minimum thickness of any one compacted course shall be three inches (3"). The maximum thickness of any one compacted course shall be eight inches (8").

Any soft or segregated spots that appear in the base shall be removed, replaced or reprocessed and recompacted prior to final finishing of the base. The finished base shall conform to the lines and grades as shown on the plans or established by the Engineer. Finished tolerances shall not exceed one half inch (1/2") in ten feet (10').

The finished base shall be primed as soon after finishing as practical and shall be protected until the hot mix asphaltic concrete surface is applied. In no case will prime be applied until the finished base has been approved by the Engineer.

4. TESTING

A. All test for approval of the source shall be performed by a commercial lab selected by the owner and shall be paid for by the contractor.

B. Gradation and soil constants tests (ASTM C-136, D423 and D424) and THD Triaxial Test (THD TEX117-E Part II) will be performed for source approval. Should the appearance, workability or other visual checks indicate a possible change in the material being furnished, the Engineer may require the contractor to retest the material for source approval.

C. Field quality control test will consist of the finish tolerance test and density test.

The finish tolerance test will be performed by the contractor at his expense using a 10' rolling straight edge. This test shall be performed at the direction of the Engineer or his representative. When required, the test shall consist of checking one path in each lane with the rolling straight edge.

Density test will be made by the City or a commercial laboratory chosen by the City using Troxler 3411-B nuclear density gauges or approved equal at the minimum rate of one test for each 1000 square yards of base. In no case shall less than three tests be run on any one area processed as a unit. The City will bear the cost of the first test or set of tests only. If the base fails the first test the contractor, at his own expense, will be required to have all subsequent tests performed by the commercial laboratory chosen by the city.

8/07

BITUMINOUS PRIME

1. GENERAL

This item consists of the application of a bituminous prime coat to the finished caliche base in accordance with the provisions of the Specifications.

Qualification of Material Source - Material shall be supplied by a producer with a proven performance record of acceptance by the Texas Highway Department.

Measurement and Payment - Measurement and payment will be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Cut-back asphalt grade MC-30, Texas Highway Department Item 300.

Source Quality Control - Certificates of compliance to be furnished by the producer to the Engineer.

3. CONSTRUCTION METHODS

Condition of Base - The surface of the base shall be tightly compacted to the line and grade shown on the plans and within the tolerances of the specifications. The surface shall be clean and the base shall contain sufficient moisture to assure the proper penetration of the prime.

The prime shall be applied with an approved distributor to the surface of the base at a rate of between 0.15 and 0.40 gallon per square yard. The application rate shall be varied to meet field conditions and to obtain uniform coverage, and adequate penetration. Properly applied prime coat should penetrate from 3/8" to 1/2" into the base and should cure in approximately 72 hours with ambient temperatures at or near 70 degrees F. The prime shall be applied at a temperature within the range of temperatures recommended in Item 300 of Texas Highway Department Standard Specifications. The temperature shall be varied within this range to provide a viscosity that will assure even spreading and penetration of the base. Air Temperatures at the time of application shall be above 50'F.

BITUMINOUS TACK

1. GENERAL

This item consists of the application of a bituminous tack coat to the primed base or existing asphaltic concrete or Portland cement concrete pavement in accordance with the provisions of the specification.

Qualification of Material Source - Material shall be supplied by producer with a proven performance record of acceptance by the Texas Highway Department.

Measurement and Payment - Measurement and payment will be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Cut-back asphalt grade RC-250, Texas Highway Department Item 300.

3. CONSTRUCTION METHODS

Conditions of Surface - Prior to application of tack to the base course the prime must be completely penetrated into the base and the surface cleaned of foreign objects.

The tack shall be applied with an approved distributor at a rate of between 0.05 and 0.10 gallons per square yard. The temperature of application shall be within the range recommended by the Texas Highway Department in Item 300. The surface temperature to which tack is being applied shall be above 50 degrees F. at the time of application.

When the asphaltic concrete surface is being placed on primed caliche base, use of the tack coat may be waived by the Engineer if the contractor can show that adequate adhesion of the surface being placed to the base course is achieved without it.

Tack coat shall be placed on all asphaltic concrete or portland cement concrete surfaces on which an additional course of asphaltic concrete surfacing is to be placed. The tack coat shall be rolled with a pneumatic roller to assure even distribution over the entire surface and to achieve proper penetration into and adhesion to the surface being overlayed.

HOT MIX ASPHALTIC CONCRETE

I. GENERAL

Includes the construction of the hot mix asphaltic concrete surface in accordance with lines, grades and the sections shown on the plans and with the provisions of the specifications.

Qualification of Material Sources - Producers of oil asphaltic concrete mixture to have a proven record of acceptance by the Texas Highway Department.

Measurement and Payment - Measurement and payment to be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Oil Asphalt - Oil asphalt grade AC-l0 or AC-20, Texas Highway Department Item 300. When no asphalt grade is shown on the plans, and unless directed otherwise by the Engineer, asphalt for this project shall be grade AC-10.

Coarse Aggregate - Crushed stone or crushed gravel with a minimum of 75 percent of the aggregates having two or more crushed faces. Additional requirements:

(a) Los Angeles Abrasion: ASTM C l3l, Wear not to exceed 40.

(b) Decantation: Maximum 2.0 percent by weight

Fine Aggregates - Natural sand and screenings crushed from the same or similar material meeting the requirements of the course aggregates. Additional requirements.

(a) Plasticity Index: Maximum of 6.

(b) Sand Equivalents: Minimum of 50 for each individual fine aggregate.

Paving Mixtures - The paving mixture(s) shall be as shown on the plans and details. If no mixtures are shown on the plans surface or wearing courses up to l-3/4 inches thick shall be Type D, base courses up to 2 inches thick shall be Type C and base courses over 2 inches thick shall be Type B or Type A.

(a) Gradation: The master gradations for the paving mixtures are:

TYPE "A" (Coarse Graded Base Course):	Percent Aggregate by weight or volume
Passing 2" sieve	100
Passing l-3/4" sieve	95 to 100
Passing l-3/4" sieve, retained on 7/8" sieve	16 to 42
Passing 7/8" sieve, retained on 3/8" sieve	16 to 42
Passing 3/8" sieve, retained on No. 4 sieve	10 to 26
Passing No. 4 sieve, retained on No. l0 sieve	5 to 21
Total retained on No. l0 sieve	68 to 84
Passing No. l0 sieve, retained on No. 40 sieve	5 to 21
Passing No. 40 sieve, retained on No. 80 sieve	3 to 16
Passing No. 80 sieve, retained on No. 200 sieve	2 to 16
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 7 percent of the mixture by weight.

TYPE "B" (Fine graded Base or Leveling-up course)	Percent Aggregate by Weight or Volume
Passing l" sieve	100
Passing 78" sieve	95 to 100
Passing 7/8" sieve, retained on 3/8" sieve	21 to 53
Passing 3/8" sieve, retained on No. 4 sieve	11 to 42
Passing No. 4 sieve, retained on No. l0 sieve	5 to 26
Total retained on No. l0 sieve	58 to 74
Passing No. l0 sieve, retained on No. 40 sieve	6 to 32
Passing No. 40 sieve, retained on No. 80 sieve	4 to 21
Passing No. 80 sieve, retained on No. 200 sieve	3 to 21
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 7 percent of the mixture by weight.

Type "C" (Coarse Graded Surface Course):	Percent Aggregate by Weight or Volume
Passing 7/8" sieve	100
Passing 5/8" sieve	95 to 100
Passing 5/8" sieve, retained on 3/8" sieve	16 to 42
Passing No. 4 sieve, retained on No. l0 sieve	11 to 37
Total retained on No. l0 sieve	54 to 74
Passing No. l0 sieve, retained on No. 40 sieve	6 to 32
Passing No. 40 sieve, retained on No. 80 sieve	4 to 27
Passing No. 80 sieve, retained on No. 200 Sieve	3 to 27
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 7 percent of the mixture by weight.

TYPE "D" (Fine Graded Surface Course):	Percent Aggregate by Weight or Volume
Passing l/2" sieve	100
Passing 3/8" sieve	85 to 100
Passing 3/8" sieve, retained on 4" sieve	21 to 53
Passing No. 4 sieve, retained on No. l0 sieve	54 to 74
Total retained on No. l0 sieve	54 to 74
Passing No. l0 sieve, retained on No. 40 sieve	6 to 32
Passing No. 40 sieve, retained on No. 80 sieve	4 to 27
Passing No. 80 sieve, retained on No. 200 sieve	3 to 27
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 4 to 8 percent of the mixture by weight.

TYPE "F" (Fine Graded Surface Course):	Percent Aggregate by Weight or Volume
Passing 3/8" sieve	100
Passing No. 4 sieve	95 to 100
Passing No. 4 sieve, retained on No. l0 sieve	58 to 73
Passing No. l0 sieve, retained on No. 40 sieve	6 to 26
Passing No. 40 sieve, retained on No. 80 sieve	3 to 13
Passing No. 80 sieve, retained on No. 200 sieve	2 to 11
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 6.5 percent of the mixture by weight.

(b) Tolerances: Deviations from job mix formula limited to:

(l) Sizes larger than the l0 sieve- Plus or Minus 4 percent.

(2) No. l0 sieve and smaller - Plus or Minus 3 percent.

(3) The deviation from the job mix formula shall be further limited in that the total deviation from the job mix formula between any two adjacent aggregate grades shall not exceed the allowable deviation for either one.

(4) Asphalt - Plus or Minus 0.3 percent.

(c) Density - The mixture shall be designed to produce an acceptable mixture within tolerance, at or near optimum density. The mixture molded in the laboratory should have the following percent of maximum theoretical density:

Minimum	Maximum	Optimum
96	98	97

(d) Stability: Minimum of 35 Hveem

Source Quality Control - Paving mixture and plant tests to be performed by laboratory selected and paid by the Owner, except as noted.

Job Mix Formula - The contractor shall submit a job mix formula, prepared by laboratory chosen by the owner, at least l0 days in advance of laying operations to allow time for review by the engineer. Substitution of one or more materials will require a new job mix formula and must be approved by the engineer.

The design of job mix formula whether for original submittal or revisions shall be paid for by the contractor.

Plant Tests - Check of raw material uniformity, quality and flow, hot bin gradations, temperature of mixture, mixture tests for density, stability and percent asphalt and other necessary tests to be performed bythe laboratory selected by the owner for each day's production.

Oil Asphalt - Producer to furnish certificates of compliance to the Engineer.

3. CONSTRUCTION METHODS

A. GENERAL

Condition of Base - The surface of the base shall be tight and free of debris. The prime coat shall be uniformly distributed, well penetrated and completely cured prior to application of the tack coat. If the mixture will adhere to the surface of the base without the application of a tack coat, the tack coat can be eliminated. If the surface of the base is one half (l/2") inch or more lower than the proposed bottom of the asphaltic concrete it shall be corrected by placing and compacting a level up course of the asphaltic concrete before the mat is placed on it.

Stockpiling, Storage, Batching and Mixing - Shall meet the requirements of Item 340, "Texas Highway Department l982 Standard Specifications for Road and Bridge Construction.

Weather Limitations - Shall be the requirements of Item 340,"Texas Highway Department l982 Standard Specifications for Road and Bridge Construction." With the added provision that no asphaltic concrete shall be placed when the surface on which the mat is to be placed is below 50 degrees F.

Thickness - Shall be as shown on plans. Unless shown otherwise on the plans, the maximum compacted thickness of any one course of asphaltic concrete shall be two and one-half (2-l/2) times the maximum aggregate size of the mixture being placed. The minimum shall be one (l) inch or one and one fourth (1-1/4) times the maximum particle size which ever is greater.

B. PLACING

Placing of Asphaltic Concrete shall be accomplished using an approved self propelled spreading and finishing machine with a heated vibrating screed capable of producing a surface that will meet the requirements of the typical cross section and the surface test, and when the mixture is dumped directly into the finishing machine shall have adequate power to propel the delivery vehicles in a satisfactory manner. The finishing machine shall be equipped with a flexible spring and/or hydraulic type hitch sufficient in design and capacity to maintain contact between the rear wheels of the hauling equipment and the pusher rollers of the finishing machine while the mixture is being unloaded.

The use of any vehicle which requires dumping directly into the finishing machine and which the finishing machine cannot push or propel in such a manner as to obtain the desired lines and grades without resorting to hand finishing will not be allowed. Vehicles dumping directly or indirectly into the finishing machine shall be so designed and equipped that unloading into the finishing machine can be mechanically and/or automatically operated in such a manner that overloading the finishing machine being used cannot occur and the required lines and grades shall be obtained without resorting to hand finishing.

Automatic screed controls will be required and shall meet the requirements item, 528 "automatic screed controls for asphaltic concrete spreading and finishing machines "Texas Department of Highways and Public Transportation 1982 Specifications for Construction of Highways, Streets and Bridges".

The screed shall be ski controlled using a ski of not less than l8' in length. Curb shoe control will not be allowed.

The spreading and finishing machine shall be maintained in good working order and operated by competent trained personnel.

The Engineer may require the contractor to place a test strip to prove the capability of the machine and the competency of the operating personnel to produce a satisfactory finished surface.

In dips and on curved surfaces where the ski control cannot be used, the surface will be controlled using a l0' straight edge.

Fillet areas, turn outs and other areas not accessible to the spreading machine may be hand laid provided a satisfactory surface is produced.

C. COMPACTION AND FINISHING

Compaction Requirements - The asphaltic concrete surface shall be compacted so that the compacted mixture will contain not more than seven percent (7%) nor less than three percent (3%) air voids.

The surface of the pavement, after compaction, shall be smooth and true to the established line, grade and cross section, and when tested with a l0 foot rolling straightedge, except as provided herein, the maximum deviation shall not exceed l/8 inch in l0 feet, and any surface not meeting this requirement shall be corrected as directed by the engineer.

Raking and Leveling - Minor leveling may be accomplished using asphalt rakes prior to compacting the surface. The surface shall be leveled by loosening the surface of the asphaltic concrete using an asphalt rake then adding or removing material and smoothing the surface. Any large aggregate worked to the surface in this process shall be removed before compaction. The large aggregate shall not be spread over the new asphaltic concrete surface.

Edges and joints with compacted asphalt or concrete gutters shall be carefully squared and excess material removed before compaction. Care shall be taken to see that NO excess material laps over onto the surface of existing asphaltic concrete paving or concrete gutters. Large aggregate worked to the surface in this process shall be removed. It shall not be spread over the new asphaltic concrete surface.

Rolling - In general rolling shall conform to the requirements of item 340 of the Texas Department of Highways and Transportation 1982 Specifications for Construction of Highways, Streets an Bridges except as modified herein.

It shall be the responsibility of the contractor to have rolling equipment available on the job to properly compact the paving mixture in place as required without delay to the lay down operation. Rollers provided shall meet the qualifications for their type as follows:

PNEUMATIC TIRE ROLLERS: The rollers shall be acceptable medium pneumatic tire rollers conforming to the requirements of the item, "Rolling (pneumatic tire)", Type B, unless otherwise specified on plans.

TWO AXLE TANDEM ROLLER: This roller shall be an acceptable power driven tandem roller weighing not less than 8 tons.

THREE WHEEL ROLLER: This roller shall be an acceptable power driven three wheel roller weighing not less than l0 tons.

THREE AXLE TANDEM ROLLER: This roller shall be an acceptable power driven three axle roller weighing not less than l0 tons.

Vibrating rollers will not be used without prior written approval of the engineer. Written approval will be granted only upon demonstration by the contractor that the roller and operator can produce a satisfactory surface within the tolerances of these specifications. Only the operator or operators thus approved will be allowed to operate the vibrating roller on this project.

Areas not accessible to standard rollers shall be compacted using trench rollers, impact tampers, hand tamps or other approved means that will produce the density and surface required.

JOINTS- Shall be carefully rolled to provide compaction of the asphalt against the existing surface or face of the concrete gutter. Joints between concrete gutters and Hot Mix Asphaltic Concrete shall be placed so that the HMAC will be approximately l/2 inch higher than the concrete when compaction is completed. At transverse joints such as valley gutters and fillet areas where finishing asphalt paving 1/2 inch above the edge of concrete will adversely affect ride quality the asphalt shall be finished 1/4 inch above the edge of the concrete.

Transverse joints shall be rolled in the transverse direction with the first pass extending approximately six (6") inches onto the new asphalt each additional pass shall extend approximately twelve (12") inches further onto the new asphalt until the full width of the roller is on the new asphalt. Longitudinal rolling may begin then.

All transverse joints shall be checked with a l0" straight edge while the material is

still hot enough to roll. Any corrections shall be made by loosening the material using an asphalt rake and adding or removing material and recompacting the surface. The surface shall be rechecked and when the joint is acceptable the asphalt spreading machine may proceed with the pass.

Final or finish rolling shall be accomplished using a two axle tandem roller to remove roller marks. This rolling shall be accomplished after the surface has cooled sufficient to minimize further marking but before it is too cool to respond to rolling.

STRAIGHTEDGES AND TEMPLATES - The contractor shall provide acceptable l0 foot straightedge for surface testing. Satisfactory templates shall be provided as required by the Engineer.

4. FIELD QUALITY CONTROL

Test Lots - Field Quality Control Tests shall be made by lot with a lot being the amount of contiguous surface laid in one day. No lot shall exceed l0,000 S.Y. If a days laying exceeds l0,000 S.Y., that days laying shall be divided into two approximately equal lots. The same lot divisions shall be used for all Quality Control Tests. Each separate block or combination of contingeous (blocks) of paving shall be considered as a separate lot even though they may be placed in a single day and do not comprise l0,000 S.Y. of surface.

Surface Tests - Surface tolerance tests will be performed in both longitudinal and transverse directions. The test for longitudinal surface tolerance will be performed with a ten-foot rolling straightedge furnished by the contractor, and calibrated and used in accordance with the manufacturer's recommendation or other approved method.

The maximum allowable deviation in surface shall be 1/8 inch in 10 feet. Tests for longitudinal surface tolerance will be performed by the contractor, accompanied by the engineer within 24 hours of the completion of a lot. One path in each lane for the length of the entire lot will be tested. The location of the test path (Distance from centerline or pavement edge) will be determined by the engineer through the use of random numbers. Any deviations in the surface finish of a roadway wearing course which exceeds l/4 inch must be corrected. After corrections have been made, the entire lot must meet the l/8 inch surface tolerance.

Thin course "scab on" patching will NOT be permitted. Corrections may be made by planning, milling and patching or by removing and replacing affected surface area.

When milling and patching is used to correct surface defects the minimum depth of removal shall be l".

For milling and patching or surface removal the area removed or milled shall be sufficiently large to avoid the appearance of patching.

When planning is used to correct defects the thickness of the remaining paving shall meet the thickness requirements as shown on the plans.

Surface tolerance test will be performed on the last or wearing course only.

Asphaltic concrete pavement constructed under these specifications that does not meet the surface tolerance requirements and is allowed to remain in place will be paid for at a reduced rate determined by multiplying the price bid for the wearing surface course by a surface tolerance quality factor. This rate shall apply to the entire lot.

Lower courses will not be affected by this quality factor but will be paid for at the price bid or such price as it may be affected by other quality factors.

The surface tolerance quality factor will be determined according to the following schedule:

Linear % of pavement exceeding 1/8 inch surface tolerance	Surface tolerance quality factor
0.0 to 1.0	1.0
1.1 to 1.5	0.9
1.6 to 2.5	0.8
over 2.5	0.5

Roadway surface requirements will not be applied for paved drives, aprons, turnouts, and other irregular sections, however, asphaltic concrete shall be placed in such a manner as to provide a neat and uniform appearance and shall be compacted by methods satisfactory to the engineer.

The contractor may request permission to reconstruct a portion of the pavement when, in his opinion, the surface tolerance quality factor can be improved. Upon approval of the engineer, the contractor shall take sufficient tests to isolate the portion or portions of pavement to be pre- constructed and remove and reconstruct the pavement. All costs in connection with this reconstruction are to be born by the contractor. The minimum width of this reconstruction shall be l/2 the street width unless approved otherwise in writing by the engineer. The portions reconstructed shall be re-tested and the surface tolerance quality factor recomputed using the new information along with the test from the area within the portion of the lot not reconstructed.

When other quality factor reductions are provided for on the plans or in the specifications the effect shall be cumulative ie: QFl x QF2 x QF3 x ....x QFn x unit price.

No payment will be made for pavement with a combined quality factor of less than 0.5.

Thickness Test - Thickness test will be made by the engineer on each course of asphaltic concrete laid. Test specimens shall be made by a commercial laboratory selected by the owner. Test specimens shall be cores having a minimum nominal diameter of 6". These cores shall be made in the presence of the inspector at locations designated by the inspector using an approved power operated coring machine.

For thickness and compaction test, each lot shall be divided into approximately equal sublots corresponding in width to each pass of the lay down machine and containing up to but not exceeding 2,000 square yards each. If a lot contains less than 2,000 square yards the engineer may, at his option, divide the lot into two equal sublots, or, if the contractor has a record of satisfactory workmanship, the engineer may waive tests on said lots.

The engineer will locate one test spot for each l,000 S.Y. and/or fraction thereof in each sub-lot using random numbers. If a spot thus located falls within one foot of a longitudinal joint or lip of gutter or within two feet of an unsupported edge or within l5 feet of the beginning or ending edge of a pass, the engineer will relocate the spot using random numbers. The commercial laboratory chosen by the owner will remove the test specimen from each designated spot, mark the specimen and the adjacent pavement for future reference and perform the required tests. Test specimens shall be removed with special caliper type tongs having circular jaws of the diameter of the specimen being removed. These jaws shall grip at least 1/2 of the circumference of the specimen. Screw drivers or other type of prying instruments shall not be used to remove the specimens.

The thickness of a specimen shall be determined by averaging four (4) measurements made at ninety degree (90) intervals around the specimen. Any thickness less than design thickness shall be considered as deficient.

For hot mix asphaltic concrete pavement less than 2 inches thick the maximum allowable deficiency in any one test specimen is l/8 inch provided that no more than twenty five percent (25%) of the specimens tested show a deficiency. For pavement in excess of 2 inches in thickness the maximum allowable deficiency in any one specimen shall be l/8 inch plus l/l6 inch for each additional inch of thickness provided that no more than twenty five percent (25%) of the test specimens show a deficiency.

When a test specimen has a greater deficiency and less than (25%) of the test specimens show a deficiency the contractor shall, at his own expense, determine the extent of the deficiency and correct it by removing and replacing the surface. The minimum width for such correction will be the full width of the pass or passes of the lay down machine in which the deficiency occurs.

The minimum length of such correction shall be three times the width removed. When more than (25%) of the test specimens show a deficiency the surface may at

the engineers option be declared uniformly deficient and the contractor shall correct the deficiency by removing and reconstructing the surface or by constructing an overlay of not less than l inch thickness over the deficient area. The construction of an overlay will require milling at lip lines and dips.

The corrected surface shall meet all the requirements of these specifications.

Asphaltic concrete pavement constructed under these specifications that is less than design thickness, if allowed to remain in place, will be paid for at a reduced rate determined by multiplying the unit price bid in the bid proposal by a thickness quality factor. This rate shall apply to the entire lot in which the deficiency is found.

The thickness quality factor for hot mix asphaltic concrete pavement less than 2 inches in thickness shall be:

Thickness Deficiency	Quality Factor
Maximum l/8" for any one specimen with no more than 25% of the specimens showing a deficiency.	l.0
Pavement not meeting the 25% limitation with an average specimen deficiency up to l/8 inch.	0.75
Average specimen deficiency of l/8 inch to l/4 inch	.55
Average deficiency of more than l/4 inch	0.0

The thickness quality factor for hot mix asphaltic concrete more than 2 inches thick will be l.0 if the maximum deficiency for any one specimen is l/8 inch plus l/l6 inch for each additional inch of thickness over 2 inches and not more than twenty five percent (25%) of the test specimens in the lot are deficient. For thickness test that fall outside this area either by single specimen thickness deficiency or more than twenty five percent (25%) of the specimens showing deficiency the thickness quality factor shall be computed as follows:

$$\text{Thickness Quality Factor} = \frac{1}{\left(\frac{1}{\text{Thickness Ratio}}\right)^2}$$

The thickness ratio for a lot is the average specimen thickness for that lot, with no allowance for thickness in excess of design, divided by the design thickness. For determining the average specimen thickness, those specimens in excess of design thickness shall be considered at design thickness.

The minimum thickness quality factor for which payment will be allowed is .55. Any pavement with a thickness quality factor below .55 will be considered as having a thickness quality factor of 0. This shall apply only if the contractor requests, in writing, to have this paving remain in place and this request is approved in writing by the engineer.

When the deficient area is in a lower course of a multi-course paving structure the contractor may reduce or correct the deficiency by increasing the thickness of the subsequent course or courses as follows:

When subsequent course is	Maximum increase in course thickness
Type B	1/2"
Type C	3/8"
Type D	1/4"

When corrected in this manner the thickness quality factor shall be determined using the combined thickness of the corrected courses and shall apply to all unit prices applicable to this lot.

The contractor may request permission to reconstruct a portion of the pavement when, in his opinion, the thickness quality factor can be improved. Upon approval of the engineer, the contractor shall take sufficient tests to isolate the portion or portions of pavement to be reconstructed and remove and reconstruct the pavement. All cost in connection with this reconstruction are to be born by the contractor. The minimum width of this reconstruction shall be l/2 the street width unless approved otherwise in writing by the engineer. The portions reconstructed shall be retested and the thickness quality factor recomputed using the new information along with the test from the area within the portion of the lot not reconstructed.

When other quality factor reductions are provided for on the plans or in the specifications the effect shall be cumulative ie: QFl x QF2 x QF3 x....x QFn x unit price.

No payment will be made for pavement with a combined quality factor of less than 0.5.

Compaction Test: Compaction test will be made by the commercial laboratory chosen by the owner on the core samples removed from the paving for thickness testing.

The percent air voids will be calculated using maximum theoretical specific gravity of the mixture.

The contractor may attempt to correct deficiencies in compaction by additional pneumatic rolling upon written permission of the engineer. Requests for permission to conduct additional rolling shall be submitted, in writing, to the engineer no later than three days following notification of the deficiency by the commercial laboratory and the additional rolling shall be completed within ten (l0) days following said notification weather permitting.

In no case shall the additional rolling be delayed beyond thirty (30) days from the date the surface was laid. All cost for additional rolling and additional coring and testing of the re-rolled surface shall be born by the contractor.

Asphaltic concrete pavement not meeting this specification and that is allowed to remain in place shall be paid for at a reduced rate determined by multiplying the price bid in the bid proposal by a compaction quality factor determined according to the following schedule:

Percent air voids (average of all specimens for the lot)	Compaction Quality factor	
less than 3	0	
3.0 to 8.0	1.0	
8.1 to 9.0	0.9	
9.1 to 10.0	0.7	
10.1 to 11.0	0.5	and the engineer may require a chip seal to be applied at the contractor's expense
More than 11		0 and the engineer may require a chip seal to be applied at the contractor's expense.

NOTE: HMAC surfacing with between 11% and 15% air voids may, upon written request by the Contractor, be reviewed by the Engineer to determine if it may be left in place. The Engineer's review will consider the type of street and expected traffic conditions among other factors and a written determination will be issued. If the surface is allowed to remain in place, a chip seal will be required at the Contractor's expense. The quality factor for this paving will remain at 0.

The reduced rate shall apply to the entire lot.

The effect of compaction quality factors shall be cumulative and shall be applied as described for surface quality factors and thickness quality factors.

Cost for Field Quality Control - The surface tolerance test shall be made by the contractor at his expense.

The initial thickness and compaction test will be made at no cost to the contractor except for the cost of materials and labor to repair the holes left when cores are removed.

The cost of all thickness test to isolate a deficient area and the cost of retesting the corrected area shall be born by the contractor.

The cost of all retesting of compaction after additional rolling to correct compaction deficiencies shall be born by the contractor.

Areas reconstructed to remedy deficiencies shall meet all the requirements of these specifications and shall be tested in the same manner as original construction. The cost of all tests on reconstructed areas shall be born by the contractor.

5. ADDITIVES

Anti-stripping: An approved liquid anti-stripping agent shall be added to the asphalt used in the hot mix asphaltic concrete. The rate of application shall be in accordance with the manufacturer's recommendation. The minimum anti-stripping agent added shall be one-half (l/2) of l%.

The anti-stripping agent used shall have a proven record when used with similar aggregate and shall be approved by the engineer in writing prior to the date set for reception of bids.

DOUBLE COURSE ASPHALT SURFACE TREATMENT

1. SCOPE

The work to be done under this section consists of furnishing all labor, materials and equipment necessary to construct a Double Asphalt Surface Treatment on the prepared base course in accordance with the sections shown on the plans and as specified herein or as directed by the Engineer.

2. MATERIALS

2.1 Asphalt

The asphalt used shall be of the grade and type specified below. The material shall be homogeneous and free from water, shall not foam when heated to 347° F., and shall meet the following requirements.

Viscosity Grade AC-5
Texas Highway Department 1982 Specifications

Viscosity 140 F. Stokes	500 +/- 100	
	Min.	Max.
Viscosity 140 F. Stokes	1.4	--
Penetration 77° F. 100 g. 5 sec.	135	--
Flash Point C.O.C.F.	425	--
Solubility in trichlorethylene percent	99.0	--

Tests on residues from thin film oven test:

Viscosity 140 F. Stokes	--	1500
Ductility, 77° F. 5 cms per min. cms.	100	--

Spot Test – negative for all grades.

2.2 Aggregate

All aggregate shall be composed of sound and durable particles of crushed stone or crushed gravel. At least eighty-five percent (85%) of the particles of the aggregate retained on the No. 4 sieve shall have one or more crushed faces. Aggregate particles shall be free from organic matter, clay, loam, or pebbles coated therewith, and shall not contain more that (5%) of slate, shale, schist or soft particles of sandstone. The aggregates shall have a percent of wear of not more than thirty-five (35). (Los Angeles Abrasion Tests of Coarse Aggregate, AASHO Designation

T-96 as revised). Crushed limestone will not be acceptable for this project.

Double Asphalt Surface Treatment

No. 1 Aggregate – (Texas Highway Department 1982 Grade 3)	Retained on ¾" Sieve -	0% by weight
	Retained on 5/8" Sieve -	0 – 2% by weight
	Retained on ½" Sieve -	20, 35% by weight
	Retained on 3/8" Sieve -	85 – 100% by weight
	Retained on ¼" Sieve	95 – 100% by weight
	Retained on No. 10 Sieve-	99-100% by weight

No. 2 Aggregate - (Texas Highway Department 1982 Grade 5)	Retained on ½" Sieve -	0% by weight
	Retained on 3/8" Sieve -	0 – 5% by weight
	Retained on No. 4 Sieve -	40 – 85% by weight
	retained on No. 10 Sieve -	98 –100% by weight
	Retained on No. 20 Sieve-	99 100% by weight

3. CONSTRUCTION METHODS

3.1 Preparation of base

If the surface of the base course is not in proper condition for placement of surfacing, it shall first be brought true to the section and grade as established. The base shall be checked, and any deviation in excess of ¼-inch from grade or from true cross section shall be corrected by scarifying then adding or removing material, reshaping and re-compacting by sprinkling and rolling. No "scab" or "featheredge" patches will be permitted. After correction of any defects in the base, it shall be cleaned of dirt, dust, or other deleterious material by sweeping or other approved methods and primed.

The base course shall be primed with MC-30 Asphalt as directed by the Engineer. The asphalt used shall meet the 1982 Texas Highway Department Specifications Item 300.

The base course shall be checked at least 24 hours in advance of placing the surfacing and any defects shall be repaired and re-primed. Immediately prior to placing the surfacing, the base shall be cleaned of all dirt, dust, or other deleterious materials by sweeping with rotary and hand brooms or other approved methods.

Prime coats shall not be applied more than 7 days in advance of placing the surface course. Areas that have been primed longer than the time

specified above prior to placing the surface course shall be re-primed at the Contractor's expense.

3.2 Handling and Applying Asphalt

All storage tanks, piping, retorts, booster tanks, and distributors used in storing or handling asphalt shall be kept clean and in good operating condition at all times, and they shall be operated in such a manner that there will be no contamination of the asphalt with foreign material. Asphalt shall not be heated above 400° F. at any time, and when applied, it shall be at a temperature of not less than 300° F. and not more than 350° F. The Engineer will select the temperature of application, and the Contractor shall apply the asphalt at a temperature within 15° of the temperature selected. All asphalt material heated above 400° F. will be rejected. Re-circulating heating equipment shall be equipped with recording temperature gauges.

The prime coat shall not be applied when the air temperature is below 50° F. and falling or when in the opinion of the Engineer weather conditions are not suitable. Prime coat shall not be applied when the temperature of the surface on which it is to be applied is less than 40° F. The prime coat shall be applied at least 24 hours in advance of placing the surface course. Prime coat shall be applied with an approved distributor at a rate of 0.30 gallon per square yard, or as directed by the Engineer.

Double Asphalt Surface Treatment shall not be applied when the temperature of the surface on which it is to be placed is below 50° F. and is falling but may be applied when the air temperature is above 40° F. and rising. No asphalt shall be placed when general weather conditions, in the opinion of the engineer, are unsuitable. No double asphalt surface treatment shall be placed from September 30 to April 15.

Asphalt shall be applied on the clean surface by an approved type of self-propelled pressure distributor so operated as to distribute the material in the quantity specified, evenly and smoothly, under a pressure necessary for proper distribution. The Contractor shall provide necessary facilities for determining the temperature of the asphalt in all of the heating equipment and in the distributor, for determining the rate and pressure at which it is applied, and for securing uniformity at the junction of two distributor loads. The beginning and ending of each shot of asphalt shall start and stop on a strip of heavy craft paper of not less than thirty (30) inches in width.

In areas inaccessible to the distributor, asphalt shall be applied by means of a hose and spray nozzles attached to the distributor. Care shall be

taken during application of any asphalt to shield the curb and gutter from the asphalt spray; satisfactory means of handling this matter will be insisted upon.

3.3 Application of Aggregate

Immediately after making the first application of asphalt, the surface shall be covered with No. 1 aggregate. The aggregate shall be spread with an approved self-propelled continuous feet aggregate spreader box, or approved equal, at rates as specified below or as directed by the Engineer. If necessary to obtain uniform distribution of aggregates, hand brooming and hand spotting of aggregates will be required. After completion of placing the aggregates, all areas shall be bull-wheeled with a three- wheeled roller weighing not less than 8 tons followed immediately by two complete passes with an approved self propelled pneumatic roller.

The second application of asphalt shall then be made and the No. 2 aggregate shall be applied in the same manner as stated above for the No. 1 aggregate. The Contractor shall be responsible for the maintenance of the surface and the distribution of the excess aggregate until the work is accepted.

On the two successive days following completion of the work as specified above, all areas shall be rolled with at least four complete coverage's with a pneumatic roller. This rolling shall be done in the warm part of the day.

3.4 Rate of Application of Materials

The asphalt and aggregate shall be applied at the rates specified in the following schedule:

Double Asphalt Surface Treatment

Application	Aggregate Gal. Asphalt/Sq. Yd.	Aggregate Cu. Yd. To Sq. Yds.	Designation
First	0.30	1:70	No. 1
Second	0.40	1:110	No. 2

3.5 Cleanup

After completion of the asphalt surfacing, all debris resulting from the construction shall be cleaned up and removed from the site of the work to

an approved place of disposal. The ditches, shoulders and back slopes shall be bladed and graded to true grades and cross sections as shown on the plans. The entire premises of the work shall be left in a clean condition satisfactory to the Engineer, and all costs of cleanup shall be included in the contract unit prices for the items of work involved.

DOUBLE COURSE ASPHALT SURFACE TREATMENT 1
1. SCOPE 1
2. MATERIALS 1
2.1 Asphalt 1
Viscosity Grade AC-5 1
Texas Highway Department 1982 Specifications 1
Viscosity 140 F. Stokes 1.4 --..... 1
2.2 Aggregate 1
Double Asphalt Surface Treatment 2
3. CONSTRUCTION METHODS 2
3.1 Preparation of base 2
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3.4 Rate of Application of Materials 4
Double Asphalt Surface Treatment 4
3.5 Cleanup 4

3/2006

PREPARATION OF ASPHALTIC CONCRETE SURFACE FOR OVERLAY OR SEAL COAT

1. GENERAL

This item includes patching, milling and incidentals to prepare the asphaltic concrete surface for tack coating and overlay or for application of a seal coat.

2. MATERIALS

a. Asphalt

Asphalt for hot mix asphaltic concrete shall be Grade ACl0 Texas Highway Department Item 300.

Asphaltic concrete shall be Type D or Type F Texas Highway Department Item 340 except when the overlay is the second phase of phased construction in which case the asphaltic concrete for full depth patching shall be the grade as shown on the plans.

b. Portland Cement Stabilized Base

Cement stabilized base shall conform to Texas Highway Department Item 274 and shall consist of caliche base materials described in Section 2-C of this specification. Stabilized using 2 sacks of Portland cement per cubic yard. Cement stabilized base may be blade mixed at or near the job site if the contractor can produce a uniformly mixed acceptable product by this method.

3. PATCHING

a. Patching Surface Raveling

Where, in the opinion of the engineer, surface raveling has caused sufficient loss of material to require patching, the contractor shall thoroughly clean the area to be patched by brooming, and/or compressed air nozzle. When the patched area is completely free of loose aggregate and other foreign matter the contractor shall lightly brush the area with emulsified asphalt type SS1 and apply Type F hot mix asphaltic concrete. The asphaltic concrete shall be raked using an asphalt rake and finished smooth a little higher than the existing surrounding surface and compacted using a steel wheel roller and/or a pneumatic roller. Rollers shall be sufficient size and weight to achieve

adequate compaction. Small areas may be compacted using vibrating plate compacters when approved by the Engineer.

b. Patching Deteriorated Surface

When, in the opinion of the engineer, the surface has deteriorated to a point where replacement is required the engineer shall mark the area to be removed and replaced. The contractor shall saw cut for the full depth of the asphaltic concrete and remove said pavement. The saw cut shall be rectangular in shape with the edges being parallel to and at 90` to the centerline of the street. The minimum width for any patch shall be one (l') foot. After the surface has been removed the base shall be carefully smoothed and all loose base material shall be removed. When needed the base shall be reprimed using a light shot of RC 250 or MC 30 asphalt. After the prime coat has penetrated the base material, the contractor shall apply tack coat to the sawed edges of the surface and place Type D asphaltic concrete to a sufficient depth above the existing surface to provide a compacted surface slightly higher than the adjacent surface. The patch shall be compacted to a density of 92% to 97% Rice density using steel wheel and or pneumatic rollers.

c. Patching Deteriorated Substructure

When the base and or subgrade have failed and are to be removed, the contractor shall remove the surface as specified for deteriorated surface patching. The weakened base shall be removed to a uniform depth to expose undamaged base or subgrade. The minimum depth of removal shall be six (6") inches. The base and subgrade thus removed shall be replaced with Portland cement stabilize base and compacted to 95% modified proctor density and finished at the level of the abutting base. The finished base shall be primed and the surface replaced as specified for patching deteriorated surface.

4. MILLING

Surface milling shall be accomplished using approved asphalt milling machines. The maximum depth of milling shall be one (l") inch.

Milling shall be as directed by the engineer to remove asphaltic concrete placed at valley gutters, gutters and at the ends of the first phase of phased construction for drainage and to remove the asphaltic concrete placed for a smooth connection between that phase and the existing paving. The Engineer may also direct milling to

remove ridges and ruts that have formed on the pavement surface.

The Contractor shall be responsible for controlling the milling operation so that only these areas which require milling are milled. No measurement or payment will be made for milling where only superficial surface marks are left and from which no material is removed. When milling is required to remove ridges and ruts the low areas between ridges and ruts will be considered as "milled surface" for payment.

If a smooth straight joint can not be made by milling the contractor may be required to saw cut a one (l") inch depth groove at the edge of the milled area and remove material between the saw cut and the milled area by hand. No separate payment will be made for this saw cut when required.

5. MEASUREMENT AND PAYMENT

a. Patching Surface Raveling

Measurement will be made of the actual square footage of surface area patched. Payment will be made at the price bid per square foot for patching surface raveling in the bid proposal.

b. Patching Deteriorated Surface

Measurement will be made of the square yards of street surface replaced.

Payment will be made for the actual number of square yards of street surface replaced at the price bid per square yard for patching deteriorated surface in the bid proposal.

c. Portland Cement Stabilized Base

Measurement will be made of the actual cubic yards of compacted cement stabilized base in place.

Payment will be made at the price per cubic yard bid for compacted in place Portland cement stabilized base in the bid proposal.

d. Saw Cutting

Measurement will be made of the actual length of full depth saw cut made as directed by the engineer. No measurement will be made of the sawing required to square up poor milling edges.

Payment will be made at the price per linear foot of full depth saw cutting for the actual number of feet of saw cut as measured above.

No payment will be made for saw cutting required to square up the edges left by improper, inadequate or poor quality milling.

e. Milling

Measurement will be made of the actual area milled. No measurement will be made of areas where milling leaves only superficial surface marks from which no material was removed.

Payment will be made for the actual number of square yards of surface milling as measured above at the unit price bid per square yard of surface milling in the bid proposal.

SEAL COAT

I. DESCRIPTION

This item shall consist of the application of liquid asphalt to the existing pavement surface followed by placement of cover aggregate and rolled to increase adhesion, together with other operations necessary to form a complete durable seal coat.

II. MATERIALS

A. Asphaltic Materials

The material shall be homogeneous, shall be free from water, shall not foam when heated to 347 degrees F and shall meet the following requirements:

		VISCOSITY GRADE	
TEST		AC-5 Min/Max	AC-10 Min/Max
Viscosity, 140 F stokes		500+100	1000+200
Viscosity, 275 stokes		1.4	1.9
Penetration, 77F, 100g, 5 sec.		135	85
Flash Point, C.O.C.F.		425	450
Solubility in trichlorethylene	%	99.0	99.0
Tests on residues from thin film oven test: Viscosity, 140 F stokes		1500	3000
Ductility, 77 F 5cms per min, cms		100	70
Spot Test		Negative for all grades	

B. Storage, Heating and Application Temperatures

Asphalt materials should be applied at the temperature which provides proper and uniform distribution and within practical limits avoiding higher temperatures than necessary. Satisfactory application usually should be obtained within the recommended ranges shown below. No material shall be heated above the following maximum temperatures:

Applications and Mixing

TYPE-GRADE	Recommended Range, F	Maximum Allowable, F	Heating and Storage Maximum, F
AC-5, 10	275-350	375	400

NOTE:Heating of asphalt materials (except emulsions) constitutes a fire hazard to various degrees. Proper precautions should be used in all cases and especially with RC cutbacks.

Warning to Contractors: Attention is called to the fact that asphaltic materials are very flammable. The utmost care shall be taken to prevent open flames from coming in contact with the asphaltic materials or the gases of same. The Contractor shall be responsible for damages from any fires or accidents which may result from heating the asphaltic materials.

C. Additives

1. Latex Additive: A minimum of two percent by weight latex additive (solids basis) shall be added to AC-5 asphalt when specified on the plans or in other specifications in the contract. The latex additive shall be governed by the following specifications:

The latex is to be an anionic emulsion of butadiene-styrene low-temperature copolymer in water, stabilized with fatty-acid soap so as to have good storage stability, and possessing the following properties:

Monomer ratio, B/S 70/30
Minimum solids content 67%
Solids content per gal @ 67% ..... 5.3 lbs
Coagulum on 80-mesh screen ..... 0.1% max

Type Anti-oxidant ..... staining
Mooney Viscosity of Polymer
(M/L4 @ 212 F) ....100 min
pH of Latex ..... 9.4 - 10.5
Surface Tension ..... 28-42 dynes/cm^2
Brookfield Viscosity
of Latex ..... 1200 ps max @ 67% solids

The finished latex-asphalt shall meet the following requirements:

Viscosity at 140 F, stokes ..... 1500 max
Ductility at 39.2F, 1cm per min, cm..... 100 min

2. Anti-stripping Agent. An approved liquid anti-stripping agent shall be added to the asphalt used on this project when called for on the plans or elsewhere in the specifications or bid proposal. The rate of application shall be in accordance with the manufacturers recommendations. The minimum anti-stripping agent added shall be one/half (1/2) of 1%. The anti-stripping agent shall be Permatac or approved equal.

D. Regular Aggregate

Regular aggregate shall be Type B Grade 4 or Grade 5 crushed gravel, or crushed stone as specified in Item 302 of the Texas State Department of Highways and Public Transportation (T.S.D.H.P.T.) 1982 Standard Specification for Construction of Highways, Streets, and Bridges with the following exceptions:

1. Limestone other than natural limestone rock asphalt will not be approved for use on this project.

2. Aggregate shall contain not more than 1% by weight of organic matter, clays, loam or pebbles coated therewith and shall contain not more than 5% by weight of any one of or combination of slate, shale, schist or soft particles of sandstone when tested in accordance with Test Method Tex-217-F.

3. Aggregate Gradation, expressed as a percentage of weight, shall be as follows:

Grade 4	Percent by Weight		
Retained on 5/8" sieve			0
Retained on 1/2" sieve	0	-	2
Retained on 3/8" sieve	5	-	35
Retained on No. 4 sieve	80	-	100
Retained on No. 10 sieve	98	-	100
Passing No. 200 sieve	0	-	0.5

Grade 5	Percent by Weight		
Retained on 1/2" sieve			0
Retained on 3/8" sieve	0	-	5
Retained on No. 4 sieve	40	-	85
Retained on No. 10 sieve	98	-	100
Retained on No. 20 sieve	99	-	100

When no aggregate grade is shown on the plans or called for elsewhere in the specifications or bid proposal, Grade 5 aggregate will be furnished.

4. The percent of wear, as determined by ASTM C-131, shall not exceed 25%.

5. The percent loss of the aggregate, as determined by ASTM C-88 using a magnesium sulfate solution and a four cycle test, shall not exceed 30%.

E. Precoated Aggregate

Precoated aggregate shall be Type PB Grade 4 or Grade 5 crushed gravel, or crushed stone as specified in Item 304 of the T.S.D.H.P.T. 1982 Standard Specification for Construction of Highways, Streets, and Bridges with the following exceptions:

1. Those exceptions listed in Paragraph II 2(B) above.

2. The precoated aggregate shall be coated with 1.0 to 2.0 per cent by weight of asphaltic cement of Grade AC-20.

F. Joint Paper

Paper used for starting and stopping asphalt application, as well as making fabricated paper discs to protect manhole covers and valve covers, shall be a non-absorbent, high grade 60# Kraft paper, 30" in width.

The contractor shall cover all manhole and valve box lids with paper discs, furnished by Contractor, immediately before application of asphalt and remove same immediately after application of rock.

G. Delivery Tickets

A legible copy of the delivery tickets for all materials to be used on this project shall be furnished to the City's representative at the time materials are delivered to the project stock pile and storage site.

III. CONSTRUCTION METHODS

A. Equipment

In general, all equipment used on this project shall be in good working order and in sufficient quantity to insure proper expedition of the seal operation.

1. Asphalt Handling Equipment

The asphalt distributor shall have been recently calibrated and the Engineer shall be furnished an accurate and satisfactory record of such calibration. The distributor shall be an approved type of self-propelled pressure distributor so operated as to distribute the material in the quantity specified, evenly and smoothly, under a pressure necessary for proper distribution. The Contractor shall provide all necessary facilities for determining the temperature of the asphaltic material in all of the heating equipment and in the distributor, for determining the rate at which asphalt is applied, and for securing uniformity at the junction of two distributor loads. All storage tanks, piping, retorts, booster tanks, and distributors used in storing or handling asphaltic material shall be kept clean and in good operating

condition at all times, and they shall be operated in such manner that there will be no contamination of the asphalt with foreign material. It shall be the responsibility of the Contractor to provide and maintain in good working order a recording thermometer at the storage heating unit at all times.

2. Drag Broom

A drag broom shall be required if the aggregate is not properly distributed. The drag broom shall be furnished at no additional cost to the City.

3. Pneumatic-tire Roller

Pneumatic-tire rollers shall be of the self-propelled type consisting of not less than 7 pneumatic-tired wheels, running on axles in such manner that the rear group of tires will not follow in the tracks of the forward group, and mounted on a rigid frame and provided with a loading platform or body suitable for ballast loading. The roller shall be not less that 10 tons in weight and carry not less than 50 pounds pressure in each tire.

4. Aggregate Spreader

Aggregate spreader shall be an approved self-propelled continuous feed aggregate spreader. The spreader shall be equipped with a disposable trash box for placing debris removed from spreader box scalping screen.

5. Miscellaneous Equipment

The Contractor shall have available for immediate use at no additional cost one rock blade and one drag broom if their use is required by the Engineer. These pieces of equipment shall not be pulled by rollers. In addition, the Contractor shall furnish one tail gate aggregate spreader and one dump truck, equipped to receive the tail gate spreader.

6. Truck Scale

A truck scale conforming to the requirements of item 520 of "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" shall be furnished by the Contractor at aggregate stockpile sites.

B. Surface Preparation

The City of Midland will sweep all streets to be sealed ahead of the Contractor. This sweeping by the City of Midland is not intended to be a final cleaning preparation for the application of asphalt but is intended as an aid to the Contractor.

Prior to placing the seal coat, loose dirt and other objectionable material shall be removed from the existing surface by the Contractor. The surface will be cleaned with rotary brooms. Hand brooms will be used in areas not accessible to the rotary broom. The Engineer shall approve all streets before application of any asphalt.

C. Application of Bituminous Material

Paper shall be spread on the surface for a sufficient distance back form the end of each application so that flow through sprays may be started and stopped on the paper, and so that all sprays will operate properly over the entire length being treated.

No asphaltic material shall be applied when the total of air temperature plus pavement surface temperature is less than 120" F.

No equipment or vehicular traffic shall be allowed to cross over joint paper in place, except the distributor.

Immediately following the application of asphaltic material, the Contractor shall remove all joint paper and load same on a designated vehicle. At the end of each day, all paper shall be disposed of at the City Landfill.

Following all preparation outlined above, the Contractor shall immediately apply asphaltic materials at the specified rates and temperatures designated by the Engineer.

If the Contractor employs only one distributor in the seal operation, he shall be required to seal all designated filets and street stubs in the seal area before moving to another section of the City. If two distributors are used, one distributor will be employed only to seal filets and street stubs.

The use of a second distributor to seal filets and street stubs shall require the following additional equipment; one dump truck equipped with tailgate spreader, and one self-propelled pneumatic roller. All rolling shall be deferred until aggregate is dry.

D. Application of Aggregate

Aggregate shall be immediately and uniformly applied and spread by an approved self-propelled continuous-feed aggregate -8- spreader, unless otherwise authorized by the Engineer. Aggregate shall be applied at the approximately rate directed by the Engineer.

Vehicles used to transport aggregate from stockpiled area to spreading machine shall be weighed and a weight ticket issued for each load. Weight tickets shall show truck identification No., tare weight of truck, gross weight, and net weight of aggregate. The weight ticket shall be delivered to the city's representative at the aggregate spreader.

E. Rolling

A minimum of three (3) rollers shall be employed by the Contractor. Rolling shall be controlled by the Engineer during the entire project. The speed of all rollers will be held to a maximum of 5 miles per hour during the rolling process. When surface moisture is present on aggregate, "Rolling shall be deferred until aggregate is dry.

F. Stockpiling

All aggregate stockpiles shall be placed on a paved surface or areas acceptable to the Engineer.

When dust from the aggregate creates a nuisance or when aggregate fails to adhere to the asphalt the Engineer may require the Contractor to "water down" the aggregate stock pile.

When, directed by the Engineer, or desired by the Contractor, aggregate stockpiles will be "watered down". When the "watered down" aggregate does not adhere to the asphalt properly the Engineer may direct that water for this purpose contain 5% EA10S emulsified asphalt and/or an approved wetting agent. The Engineer may direct the contractor to increase the amount of emulsified asphalt added to the water if, in his opinion, desired results are not being achieved. No separate payment shall be made for emulsified asphalt, water or wetting agent but the cost shall be considered as an incidental cost for furnishing satisfactory aggregate.

G. Cleanup

Clean up shall be maintained on a timely manner as the work progresses. All debris scattered on the sidewalks and driveways shall be swept up by the Contractor. Sweeping debris onto freshly sealed streets shall not be allowed.

City forces will remove excess aggregate from the street and gutters after the project is completed.

H. Maintenance

The Contractor will be required to maintain all sealed streets until final acceptance of the project by the Engineer. Maintenance shall consist of adding additional coverstone when required, rolling, pony blading, or drag brooming.

IV. MEASUREMENT

Asphaltic material shall be measured in gallons at the applied temperature at the point of application.

Aggregate shall be measured by the ton in vehicles as delivered to the aggregate spreader and applied on the street. Trucks will not be allowed to leave the construction area with a partial load. If it becomes necessary for a truck to leave the area because of mechanical failure or other reasons, a second weigh ticket for that truck will be required.

Rolling shall be measured by the hours of actual rolling for each roller.

V. PAYMENT

Payment shall be made as provided under "Measurement" at the unit price bid for "aggregate", "asphalt", and "rolling" and shall be full compensation for furnishing and incorporating the materials "Aggregate" and "Asphalt" (and additives where applicable) into a composite product; for delivering, stockpiling; for brooming, compaction, and rolling; for cleaning the existing surface; for cleaning excess bituminous material; cleaning gutters; for cleaning sidewalks and driveways; for cleaning stockpile sites; for all required maintenance; for pony blading; for drag brooming; for adding additional cover aggregate; for all labor, equipment, supervision, tools, overhead, profit, and any other incidentals necessary to complete the work required under the conditions of these plans and specifications to the satisfaction of the Engineer.

08/07

ASPHALT - RUBBER SEAL COAT

(Stress Absorbing Membrane)

1. SCOPE

This specification covers the material, equipment, and construction procedures for a Stress Absorbing Membrane (seal coat).

2. PREQUALIFICATION OF A NEW ASPHALT-RUBBER MATERIAL

Pre-qualification of a new asphalt-rubber material or applicator may be requested at any time. Pre-qualification will be based on three controlled field applications evaluated after three years' performance under traffic. New asphalt-rubber material that has been evaluated and pre-qualified by an agency recognized nationally may be pre-qualified by that agency upon disclosure of suitable evidence of successful performance. Notwithstanding other agency pre-qualification, the City reserves the right to withhold pre-qualification pending the performance evaluation of local controlled field applications.

3. MATERIALS

3.1 Asphalt

The grade of asphalt cement for the asphalt-rubber mixture shall be AC - 5 or AC - 10 which shall comply with the requirements of Item 300 "Asphalt, oils and emulsions" of Texas State Department of Highways and Public Transportation 1982 Standard Specification for Construction of Highways, Streets and Bridges. The grade selected shall be based on laboratory testing by the asphalt-rubber supplier, to insure compatibility with the granulated reclaimed rubber.

If indicated necessary by laboratory testing, an approved anti-stripping additive may be added to the asphalt cement up to 1.0 percent by weight of asphalt.

3.2 Granulated Reclaimed Rubber

The granulated reclaimed rubber used shall be produced primarily from the processing of automobile and truck tires. The rubber shall be produced by ambient temperature grinding processes only.

The gradation of the granulated reclaimed rubber when tested in accordance with ASTM C-136 and using a 50 gram +/- 1 gram sample, shall meet the

following requirements:

Sieve Sizes	Percent Passing
#8	100
#10	95 - 100
#16	40 - 60
#30	0 - 10
#50	0 - 5

The use of rubber from multiple sources is acceptable provided that the overall blend of rubber meets the gradation requirements.

The individual granulated rubber particles, irrespective of diameter, shall not be greater in length than 3/16 inch (5mm).

The granulated rubber shall have a specific gravity of 1.15 +/- 0.05 and shall be free of loose fabric, wire and other contaminants except that up to 4 percent (by weight of rubber) calcium carbonate or talc may be added to prevent rubber particles from sticking together. The rubber shall be sufficiently dry so as to be free flowing and not produce a foaming problem when blended with the hot asphalt cement.

The granulated reclaimed rubber shall be accepted by certification from the rubber supplier.

3.3 **Diluent**

The diluent shall have the following properties:

Flash Point	130^{o} F Minimum
Initial Boiling Point (ASTM D-86)	340^{o} F Minimum
Dry Point (ASTM D-86)	390^{o} - 415^{o} F
Total Saturates	85% Minimum

3.4 **Asphalt - Rubber**

The asphalt-rubber supplier shall furnish to the engineer a minimum of 10 days before the beginning of membrane placement, the asphalt-rubber mix formulation which shall contain the following information:

Asphalt Cement
Source of Asphalt Cement

Grade of Asphalt Cement
Percentage of Asphalt Cement by total weight of the asphalt-rubber mixture.

Granulated Reclaimed Rubber
Source of Granulated Rubber
Grade of Granulated Rubber
Percentage of Granulated Rubber by total weight of the asphalt-rubber mixture.

If granulated rubber from more than one source is utilized the above information will be required for each granulated rubber used.

Diluent
Source of Diluent
Grade of Diluent
Percentage of Diluent allowable by volume of the asphalt-rubber mixture.

3.5 **Cover Aggregate**

Aggregate shall be composed of a clean and durable crushed rock, crushed gravel or crushed slag conforming to Item 304 "Aggregate for Surface Treatments (pre-coated)" of Texas State Department of Highways and Public Transportation 1982 Standard Specification for Construction of Highways, Streets and Bridges, grade No. 3 or No. 4.

Proposed aggregate samples shall be submitted to the asphalt-rubber supplier a minimum of 21 days prior to application, to test for aggregate stripping characteristics. The results shall be submitted to the engineer. Anti-strip will be included as a contingency bid item.

4. **EQUIPMENT**

4.1 **General**

The equipment used by the contractor shall include a self propelled rotary power broom or mobile pickup broom for pavement cleaning and excess cover material removal.

4.2 **Asphalt-Rubber Equipment**

All equipment utilized in the production and application of the asphalt-rubber shall be so designed and accessible that the Engineer can readily determine

the percentage by weight for each material being incorporated into the mixture and shall be as described as follows:

4.2.1 An asphalt heating tank with a hot oil heat transfer system or retort heating system capable of heating asphalt cement to the necessary temperature for blending with the granulated rubber. This unit shall be capable of heating a minimum of 3,000 gallons of asphalt cement.

4.2.2 An asphalt-rubber mechanical blender with a two stage continuous mixing process capable of producing a homogenous mixture of asphalt cement and granulated rubber, at the mix design specified ratios, as directed by the engineer. This unit shall be equipped with a granulated rubber feed system capable of supplying the asphalt cement feed system, as not to interrupt the continuity of the blending process. A separate asphalt cement feed pump and finished product pump are required. This unit shall have both an asphalt cement totaling meter in gallons and a flow rate meter in gallons per minute.

4.2.3 A truck mounted self powered distributor truck equipped with a retort heating unit, and an internal mixing device capable of maintaining a uniform mixture of asphalt cement and granulated rubber. It shall be equipped with a full circulating spreader bar and a pumping system capable of applying asphalt-rubber material within +/- .05 gallons per square yard tolerance of the specified application rate and must give a uniform covering of the surface to be treated. The distributor shall have a boot board on the rear of the vehicle and a bootman shall accompany the distributor. The bootman shall ride in a position so that all spray bar tips are in full view and readily accessible for unplugging if a plugged tip should occur. The distributor shall also include a tachometer, pressure gauge, volume measuring device and a thermometer.

4.3 Cover Material Spreader

The cover material (chip) spreader shall be a self-propelled machine with an aggregate receiving hopper in the rear, belt conveyors to carry the aggregate to the front, and a spreading hopper equipped with a full-width distribution auger and spread roll. The spreader shall be in good mechanical condition and be capable of applying the cover material uniformly across the spread at the specified rate.

4.4 Rolling Equipment

A minimum of three operational self-propelled pneumatic-tired rollers shall be used for the required rolling of the cover material. The pneumatic tired rollers shall carry a minimum loading of 3,000 pounds on each wheel and a

minimum air pressure of 100 pounds per square inch in each tire.

4.5 **Hauling Equipment**

Trucks for hauling cover material shall be tailgate discharge and shall be equipped with a device to lock onto the hitch at the rear of the cover material spreader. Haul trucks shall also be compatible with the cover aggregate spreader so that the dump bed will not push down on the spreader when fully raised or have too short a bed which results in aggregate spillage while dumping into the receiving hopper.

5. **CONSTRUCTION**

5.1 **General**

Streets to receive the asphalt-rubber stress absorbing membrane or seal coat shall be prepared in accord with Section 2-C-1 "Preparation of Asphaltic Concrete Surface for Overlay or Seal Coat" of these specifications.

Immediately prior to the application of the asphalt-rubber membrane, the surface shall be thoroughly cleaned in order to insure adequate adhesion of the asphalt-rubber to the pavement.

Due to the handling characteristics of asphalt-rubber, when radii and other irregular areas are to be sealed it is recommended that this be done with an RS or CRS chip seal emulsion or paving grade asphalt cement.

5.2 **Asphalt-Rubber Mixing and Reaction**

The percentage of granulated rubber shall be 23 percent plus or minus 3 percent by weight of total asphalt-rubber mixture, the exact granulated rubber content shall be as determined by the mix design submitted by the asphalt-rubber supplier. During membrane placement the granulated rubber percentage shall not fluctuate more than 1 percent by weight of total asphalt-rubber mixture.

The temperature of the asphalt cement shall be between 350^{o} and 400^{o} F at the addition of the granulated rubber. The asphalt and rubber shall be combined and mixed together in the asphalt-rubber blending unit and reacted in the distributor for a period of time as required by the engineer which shall be based on laboratory testing by the asphalt-rubber supplier. The temperature of the asphalt-rubber mixture shall be above 350^{o} F during the reaction period.

After the reaction between asphalt cement and granulated rubber has occurred, the viscosity of the hot asphalt-rubber-mixture may be adjusted for spraying and/or better "wetting" of the cover material by the addition of a diluent. The diluent shall comply with the requirements of Section 3.3 and shall not exceed 7.5 percent by volume of the hot asphalt-rubber mixture.

When a job delay occurs after full reaction, the asphalt-rubber may be allowed to cool. The asphalt-rubber shall be reheated slowly just prior to application but not to a temperature exceeding 350° F. An additional quantity of diluent not exceeding 3 percent by volume of the hot asphalt-rubber mixture may be added after reheating.

5.3 Application of Asphalt-Rubber Material

Placement of the asphalt-rubber membrane shall be made only under the following conditions.

1. The pavement surface temperature shall be 45° F and rising.

2. The pavement surface is clean and absolutely dry.

3. The wind conditions are not excessive.

4. All construction equipment such as asphalt-rubber distributor, cover material spreader, haul trucks with cover material, and rollers are in position and ready to commence membrane placement operations.

5. Rain is not imminent.

The asphalt-rubber mixture shall be applied at a temperature of 300° to 350° F at a rate of between .55 and .65 gallons per square yard. Transverse joints shall be constructed by placing building paper across and over the end of the previous asphalt-rubber application. Once the spraying has progressed beyond the paper, the paper shall be removed immediately and disposed of as directed by the engineer. All longitudinal joints shall not exceed a four inch overlap.

5.4 Application of Cover Material

Cover material shall be applied immediately to the asphalt-rubber after spreading at a rate of 25 to 35 pounds per square yard.
At the time of application to the asphalt-rubber, cover material shall be

surface dry so as to gain proper adhesion to the asphalt-rubber material.

5.5 Rolling

At least three operational pneumatic-tired rollers complying with the requirements of Section 4.4 shall be provided to accomplish the required embedment of the cover material. At some project locations or where production rates dictate, fewer rollers may be utilized as directed by the engineer. At no time shall there be less than two operational pneumatic tired rollers on a project.

Sufficient rollers shall be used for the initial rolling to cover the width of the aggregate spread with one pass. The first pass shall be made immediately behind the cover material spreader, and if the spreading is stopped for an extended period, the cover material spreader shall be moved ahead or off the site so that all cover material may be immediately rolled. Four complete passes with rollers shall be made with all rolling completed within one hour after the application of the cover material.

5.6 Traffic Control

Except when it is necessary that hauling equipment must travel on the newly applied membrane, traffic of all types must be kept off the membrane until it has had time to set properly. The speed of all hauling equipment shall not exceed 15 miles per hour when traveling over a membrane which is not adequately set. The minimum traffic free period shall not be less than one hour.

5.7 Removing Loose Cover Material

Sweeping can begin a minimum of one hour after membrane placement.

5.8 Method of Measurement and Basis of Payment

5.8.1 Asphalt-Rubber

a) Measurement will be made of the actual number of gallons of Asphalt-Rubber including asphalt placed in accord with these specifications.

b) Payment will be made at the price bid per gallon of Asphalt-Rubber in the bid proposal and will be full compensation for furnishing all asphalt, rubber, extender and for all labor,

equipment and incidentals for placing the asphalt-rubber on the Street surface.

5.8.2 **Cover Aggregate**

a) Measurement will be made of the actual number of tons of pre-coated aggregate placed in accord with these specifications.

b) Payment will be made at the price bid per ton of pre-coated aggregate in the bid proposal and shall be full compensation for furnishing all pre-coated aggregate and for all labor and equipment including rollers and rolling for the complete surface in place.

5.8.3 **Rolling**

a) No measurement will be made of rolling but rolling shall be considered as incidental to placing of the cover aggregate.

b) No separate payment will be made for rolling. The cost of rolling shall be included in the price per ton of cover aggregate in the bid proposal.

5.8.4 **Anti strip agent**

a) Anti stripping agent, when used, shall be measured by the gallon.

b) Payment for anti stripping agent shall be made at the price per gallon of anti stripping agent bid in the bid proposal.

08/07

POLYMER MODIFIED SLURRY SEAL (MICRO-SURFACE)

I. SCOPE

This specification covers the design, application, testing, quality control and measurement and payment for a complete in place "polymer modified micro surface" constructed on existing paved surfaces cleaned and prepared in accordance with the item 2-C-1 "PREPARATION OF ASPHALTIC CONCRETE SURFACE FOR OVERLAY OR SEAL".

2. DESCRIPTION

This specification covers all materials, equipment, construction and application procedures for rut filling and/or surfacing of existing paved surfaces. The micro-surfacing shall be a mixture of cationic polymer modified asphalt emulsion, mineral aggregate, mineral filler, water and other additives, properly proportioned, mixed and spread on the paved surface in accordance with this guideline and as directed by the Engineer.

3. MATERIALS

3.1 Emulsified Asphalt

(1.) The emulsified asphalt shall be a cationic emulsified type, designated as CSS-1P and shall comply with the following requirements.

	Min.	Max.
Viscosity, Saybolt Furol, 25 C (77 F), Sec.	**20**	**100**
Storage Stability test, one day, percent	**-**	**1**
Particle charge test		**Positive**
Sieve test, percent	**-**	**0.1**
Distillation:		**-** **-**
Oil distillate, by volume of emulsion, %	**-**	**0.5**
Residue, %		**62** **-**
Test on Residue from Distillation:		
Penetration, 77 F, 100 g, 5 seconds	**55**	**90**
Ductility, 77 F, 5 cm/min, cm	**70**	**-**
Solubility in trichloroethylene , %	**97**	**-**
Softening Point, R. & B., F	**135**	**-**
Viscosity, absolute 60 C (140 F), Poise		**8000** **-**

This standard distillation procedure shall be modified as follows: The temperature on the lower thermometer shall be brought slowly to 350 degrees plus or minus 10 degrees F and maintained at this point for 20 minutes. Complete the total distillation in 60 plus or minus 5 minutes from the first application of heat.

(2). The emulsion shall be modified with an approved Polymer. The distillation residue of the modified emulsion shall contain a minimum of three percent (3%) polymer solids by weight. The modified emulsion shall pass all applicable storage and settlement tests. The polymer material shall be milled into the emulsion or blended into the asphalt cement prior to the emulsification process. The cement-mixing test shall be waived for this emulsion.

(3). The polymer modified emulsified asphalt shall be so formulated that when the paving mixture is applied with the relative humidity at not more than 50% and the ambient temperature at least 75^{o} F, the paving mixture will sufficiently cure so that uniformly moving traffic can be allowed in approximately one hour. Locations such as driveways, Intersections and where sharp turning may take place or where vehicles may accelerate sharply, additional curing time may be required.

(4). The contractor shall notify the Engineer of the source of his asphaltic material prior to the design or production of the surfacing mixture and this source shall not be changed during the course of the project, except on written permission by the Engineer.

3.2 Mineral Aggregate

(1) Description. One Hundred percent (100%) of the mineral aggregate shall be crushed and shall be composed of clean, tough and durable particles of traprock, granite, sandstone or other approved aggregates. A sand equivalent of 65 or higher is required. The aggregate shall have a weight loss of not more than 12% when sodium sulfate is used or 18% when magnesium sulfate is used in accordance with Test Method Tex-411-A, using 5 cycles. The aggregate shall be one that has proven resistant to polishing in roadway surfacing.

(2.) Grades. When tested by Test Method Tex-200-F, Part I, the gradation requirements shall be as follows:

Grade 1 (Fine Graded Surface Course)	Percent Aggregate By Weight
Passing 3/8" sieve	100
Passing No. 4 sieve	98-100
Passing No. 8 sieve	75 -90
Passing No. 16 sieve	50- 75
Passing No. 30 sieve	30- 50
Passing No. 50 sieve	18- 35
Passing No. 200 sieve	5 -15

Grade 2 (Coarse Graded Surface Course)	Percent Aggregate By Weight
Passing 1/2" sieve	100
Passing 3/8" sieve	99-100
Passing No.4 sieve	86- 94
Passing No. 8 sieve	45- 65
Passing No. 16 sieve	25- 46
Passing No. 30 sieve	15 - 35
Passing No. 50 sieve	10 - 25
Passing No. 200 sieve	5- 15

(3.) Mineral Filler. Mineral filler shall be non-air entrained Portland cement that is free of lumps or foreign matter.

3.3 Water

The water shall be portable and shall be free of harmful soluble salts.

3.4 Other Additives

Additives supplied by the emulsion manufacturer may be added to the emulsion mix or to any of the component materials to provide control of the set time in the field.

4. LABORATORY EVALUATION

4.l General

Before work commences, the contractor shall submit a signed mix design covering the specific materials to be used on the project. This design shall be performed by the contractors or suppliers laboratory or by a qualified laboratory chosen by the owner. Once the materials are approved, no substitution will be permitted, unless first tested and approved by the laboratory preparing the mix design. The cost of mix design shall be born by the contractor.

4.2 Designing Job Mix

The qualified laboratory shall develop the job mix design and present certified test results for the contractor approval. Compatibility of the aggregate and modified CSS-1P shall be verified by the mix design. The mix design must be made using samples taken from the actual materials proposed for use in the project and in accordance with the procedures and requirements of Article 5.1 below.

5. PAVING MIXTURE

5.1 Mixture Design.

The mix shall be designed in accordance with Texas State Highway Department Bulletin C-14 and Test Method Tex-204-F, using Test Method Tex-227-F to supplement Test Method Tex-201-F and Tex-202-F to conform to the requirements herein. The above laboratory mixing and curing procedures may be modified as approved by the Engineer. The emulsified asphalt content will be selected by the Engineer to provide an optimum laboratory compacted density within the range of 94 to 97%. A minimum Hveem stability of 35 is required for placements exceeding a depth of twice the maximum aggregate size.

This is a mix design requirement, to be verified by testing of trial batch material prior to placement of project material. Hveem Stability testing will be performed by the selected laboratory. The Engineer will determine the frequency of job control density and stability testing. The Contractor shall furnish the mix design for the type of mixture specified together with applicable design worksheets and data. The Bulk Specified Gravity will be determined for each aggregate to be used in the design mixture. If the determined values vary by 0.300 or more, the mixture design will be by the Volumetric Method, Test Method Tex-204-F, Part II. To substantiate the design, trial mixtures will be produced and tested using all of the proposed project materials and equipment prior to any placement. The Engineer may waive trial mixtures if the same design has been proven to be in conformance with these requirements.

5.2 Composition of Mixture.

The Engineer shall approve the design mix and all micro-surfacing materials and methods prior to use and shall designate the proportions to be used within the following limits.

Residual Asphalt	**6 to 9 percent by weight of dry aggregate or 13.5 to 23 percent by volume of the aggregate**
Mineral Filler	**0.5% to 3.0% by dry weight of aggregate**
Modifier	**As required to provide the specified properties**
Water	**As required to provide proper consistency**

5.3 Type

The paving mixture shall consist of a uniform mixture of coarse aggregate, fine aggregate and asphaltic material. The mix may also contain mineral filler and/or additives when required.

The mixture shall be designed so that the mineral aggregate will produce a gradation, which conforms to the limitations for the master grading for the type specified herein. The gradation will be determined in accordance with Test Method Tex-200-F (Dry Sieve Analysis) and shall be based upon aggregate only. The amount of asphaltic material shall conform to the limitation for the type specified.

The aggregate grade shall be as shown on the plans. If no grade is shown on the plan grade 2 aggregate shall be used.

5.4 Tolerances

The aggregate portion of the paving mixture produced shall not vary from the design gradation by more than the tolerances that follow. The material passing the No. 200 sieve is further restricted to conform to the limitations for the master grading for the type specified. The asphaltic material portion of the paving mixture shall not vary from the design amount by more than the allowed tolerance and is also restricted to conform to the master limits. The method of test for determining the aggregate gradation and asphalt content of the mixture shall be Test Method Tex-210-F or other methods of proven accuracy.

	Percent by Weight or Volume as Applicable
Passing 3/8" sieve, retained on No. 4 sieve	**Plus or minus 5**

Passing No. 4 sieve, retained on No. 8 sieve	**Plus or minus 5**
Total retained on No. 8 sieve	**Plus or minus 5**
Passing No. 8 sieve, retained on No. 16 sieve	**Plus or minus 3**
Passing No. 16 sieve, retained on No. 30 sieve	**Plus or minus 3**
Passing No. 30 sieve, retained on No. 50 sieve	**Plus or minus 3**
Passing No. 50 sieve, retained on No. 200 sieve	**Plus or minus 3**
Passing No. 200 sieve	**Plus or minus 2**

Asphaltic Material Plus or minus 0.5 by wt. or l.2 by vol.

6. EQUIPMENT

6.1 General.

All equipment for the handling of all materials and mixing and placing of the mixture shall be maintained in good repair and operating condition and subject to the approval of the Engineer. Any equipment found to be defective and potentially affecting the quality of the paving mixture will be replaced or, at the option of the Contractor, satisfactorily repaired. It will be the contractor responsibility to prove to the Engineer that the repaired equipment is properly functional.

6.2 Mixing and Proportioning Equipment.

(1.) The material shall be mixed by a self-propelled micro-surfacing mixing machine which shall be a continuous flow mixing unit able to accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler, field control additive and water to a revolving multi-blade twin shafted mixer and discharge the mixed product on a continuous flow basis. The machine shall have sufficient storage capacity for aggregate, emulsified asphalt, mineral filler, field control additive and water to maintain an adequate supply to the proportioning controls. The machine shall be equipped with self-loading devices, which provide for the loading of all materials while continuing to lay micro surfacing.

The machine shall be equipped with opposite side driving stations to optimize longitudinal alignment. The machine shall be equipped to allow the mix operator to have full hydrostatic control of the forward and reverse speed during application of the micro-surfacing material.

The self-loading devices, opposite side driving stations and forward and reverse speed controls shall be original equipment manufacturer design.

(2). Individual volume or weight controls for proportioning each material to be added to the mix shall be provided. Each material control device shall be calibrated and properly marked.

(3) The aggregate feed to the mixer shall be equipped with a revolution counter or similar device so the amount of aggregate used may be determined at any time.

(4) The emulsion pump shall be a positive displacement type and shall be equipped with a revolution counter or similar device so that the amount of emulsion used may be determined at any time.

(5.) The mixing machine shall be equipped with a water pressure system and nozzle type spray bar to provide a water spray immediately ahead of and outside the spreader box.

(6.) The mixing machine shall be equipped with an approved fines feeder that shall provide a uniform, positive, accurately metered, predetermined amount of the specified mineral filler.

6.3 Spreading Equipment.

The paving mixture shall be spread uniformly by means of a mechanical type spreader box attached to the mixer, equipped with paddles, screws or augers to agitate and spread the materials throughout the box. A front seal shall be provided to insure no loss of the mixture at the road contact surface. The rear seal shall act as a final strike off and shall be adjustable and shall break in the middle so that the screed can be adjusted to fit the crown of the street including inverted crowns. The rear seal carrier shall be capable of being fitted with a rubber seal or a steel strike off bar.

The spreading equipment shall be readily adjustable in width so that laying widths can be changed without undue delay before starting each pass if necessary.

The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved to produce a free flow of material to the rear strike-off. The seam where two spreads join, shall be neat appearing and uniform.

7. STOCKPILING AND STORAGE.

7.1 Aggregate Storage.

If the mineral aggregates are stored or stockpiled, they shall be handled in such a manner as to prevent segregation, mixing of the various materials or sizes, and contamination with foreign materials. The grading of aggregates proposed for use and as supplied to the mixing plant shall be uniform. Suitable equipment of acceptable size shall be furnished by the Contractor to work the stockpiles and prevent segregation of the aggregates. The mineral aggregate shall be screened and weighed at the contractor stockpile prior to job site delivery. The Engineer shall approve screens and scales.

7.2 Storage and Heating of Asphaltic Materials.

The asphaltic material storage shall be ample to meet the requirements of the plant. Asphalt shall not be heated to a temperature in excess of that specified
in the Item "Asphalt's, Oils and Emulsions" Texas Highway Department 1982 Standard Specifications. All equipment used in the storage and handling of asphaltic material shall be kept in a clean condition at all times and shall be operated in such manner that there will be no contamination with foreign matter.

8. CONSTRUCTION METHODS

8.1 General

It shall be the responsibility of the Contractor to produce, transport, and place the specified paving mixture in accordance with these specifications and as approved by the Engineer.

8.2 Street Preparation

Prior to starting the micro-surfacing operation, streets designated to be surfaced shall be prepared in accordance with item 2-C-1 "Preparation of Asphaltic Concrete Surface for Overlay or Seal".

8.3 Weather Limitations.

The material shall be spread only when the atmospheric temperature is at least fifty (50 degrees) F and rising and the weather is not foggy or rainy. No material will be placed when the surface on which it is to be placed is below 50^{o} F.

8.4 Final Surface Preparation

Immediately before placing the micro-surface, the area to be sealed shall be thoroughly cleaned of all vegetation, loose aggregate and soil, and moistened. Water for prewetting the surface shall be applied immediately ahead of the spreader box by use of a pressure spray bar equipped with nozzles that produce a fine mist. The rate of application of water shall be sufficient to dampen the entire surface without any free flowing water ahead of the spreader box. The rate of the mist spray shall be adjusted from time to time during the placing operation to accommodate changes in temperature, surface texture, humidity and dryness of the pavement surface.

8.5 Placing the Mix

(1). The mixture shall be spread to fill cracks and minor surface irregularities and leave a uniform skid resistant application of aggregate and asphalt on the surface. The finished surface shall be neat in appearance without drag marks, excessive buildup or other detracting irregularities.

(2). The speed of operation of the surfacing equipment shall be controlled by the mixer operator at forward speeds between 85 and 225 feet per minute depending on conditions and appearance of the newly placed surface.

If transverse rippling occurs the speed of the equipment shall be reduced until the ripples disappear.

(3). The Engineer shall designate either rubber seal/screed or the steel strike off screed according to the Project requirements.

(4). The depth of mixture in the spreader box shall be carefully controlled to prevent transverse ridging and premature setup of material in the corners of the box and ahead of the screed. In general the depth of mixture in the box should be approximately to the mid point of the auger-agitator.

(5). Auxiliary equipment shall be kept in good working order and free of leaks. Any truck or transport used to bring materials on to the street being surfaced that develops leaks either of the material being transported or fuel and/or oil leaks will be removed from the job site and not allowed to return until it has been thoroughly repaired.

Scales and screens used at the contractors stockpile and storage site shall be kept in good working order.

(6). Spills of surfacing materials or fuel, oil or other detrimental substances on the street ahead of the surfacing operation shall be thoroughly removed before the surface is placed. This may required the operation to be shut down until the street has been cleaned.

(7). No excessive streaks shall be left in the finished surface. When such excessive streaking occurs, the operation shall be immediately stopped and corrective action is taken before resuming the operation.

8.6 Joints

(1). Longitudinal joints shall be placed on lane lines. On residential streets an eight-foot parking lane will be assumed with the centerline being the other lane line.

(2). All longitudinal and transverse joints shall be straight and neat in appearance without excessive build up or bare spots. Any irregularity shall be corrected immediately before the material has started to set up.

(3). The overlap at longitudinal joints shall not exceed 4 inches. When the overlapped pass is only partially set care shall be exercised to avoid skid marks. Any skid marks that occur shall be immediately corrected by removing any partially set material that has been displaced and placing fresh mix in the mark and shaping by use of Lutes, squeegees, hand drags, etc.

Overlapping of longitudinal joints shall not leave a visible build up. Any buildup shall be immediately removed by use of lutes, squeegees, hand drags, shovels or other approved means.

8.7 Mix Stability

The modified mixture shall posses sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading; it shall be free of excess water or emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

8.8 Hand Work

Areas that cannot be reached with the mixing machine shall be surfaced using hand squeegees to provide complete and uniform coverage. The area to be hand-worked shall be lightly dampened prior to mix placement. Care shall be exercised to leave no unsightly appearance from handwork. The same type finish as applied by the spreader box shall be required. Handwork shall be completed during the machine applying process.

8.9 Lines

Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide a good appearance.

8.10 Work Force

The contractor shall maintain a work force of adequate size to accomplish the work as specified herein, including the loading and transporting of materials to the job site, the placing of the micro surface, the monitoring of joints and surface and the correction of any deficiencies that occur.

If, at any time, the Engineer or his representative determines that the work force is not adequate to perform all the tasks required for the proper completion of the micro surfacing, work on the project will be halted until adequate personnel are provided and/or modifications in procedure are implemented that will assure proper placement of the surfacing material.

8.11 Scratch or Level up course

A scratch or level up course will be required on certain streets as shown on the plans and/or as directed by the Engineer. This course shall be the same material as the polymer modified surface course and will be placed in the same manner except the spreader shall be equipped with a steel strike off screed. This screed shall be set to run as close to the pavement surface as practical.

The appearance of this course is not as critical as the final surface so long as any marks or blemishes that occur are not of such magnitude that they will affect the appearance of the final course.

8.12 Correction of Deficiencies and Blemishes

After the laydown work is completed and before final acceptance by the

Engineer, spot application of micro- surfacing material may be required to correct any deficiencies such as streaks, scuff marks, tire tracks, gaps, etc. to improve the ride quality and overall appearance. The spot application shall be performed with a full width spreader box when required.

9. QUALITY CONTROL

9.1 Materials

The contractor will permit the Engineer and/or the Independent laboratory to take samples of the aggregate and asphalt emulsion used in the project at the Engineers discretion. Gradation and sand equivalent tests may be run on the aggregate and residual asphalt content tests on the emulsion. Test results will be compared to specifications. Tests will be run at the expense of the owner. The owner must notify the contractor immediately if any test fails to meet the specifications.

9.2 Polymer Modified Micro-Surfacing

Samples of the material may be taken directly from the mixing unit(s). Consistency and residual asphalt content tests may be made on the samples and compared to the specifications. Tests will be run at the expense of the owner. The owner must notify the contractor immediately if any test fails to meet specifications.
The Engineer may use the recorders and measuring facilities of the unit to determine application rates, asphalt emulsion content, mineral filler and additive.

9.3 Non-Compliance

If any two successive tests fail on the stockpile material, the job shall be stopped. It is the responsibility of the contractor, at his own expense, to prove to the Engineer that the conditions have been corrected. If any two successive tests on the mix from the same machine fail, the use of the machine shall be suspended. It will be the responsibility of the contractor, at his own expense, to prove to the Engineer that the problems have been corrected and that the
machine is working properly.

10. CLEAN UP

10.1 Protecting and Cleaning Manholes and Valves

Prior to beginning the sealing operation the contractor shall locate all manhole covers and valve boxes in the area to be sealed. Placing one or

more layers of heavy craft paper or other suitable material over them shall protect manhole covers and valve boxes. The protective covering shall be secured in place so that it does not move or tear during the sealing operation. The contractor shall remove the protective covering and any seal material placed over manhole covers and valve boxes as soon as the seal has set sufficiently to prevent damage to the adjoining seal in the process. The edges around manhole covers and valve boxes shall be neat and smooth and shall conform to the shape and size of the manhole cover or valve box.

10.2 Streets

Clean up along streets shall be accomplished as the work progresses and any excess material that is raked onto or otherwise placed on adjoining concrete curb and gutter, valley gutters or fillet areas or on adjacent asphalt or concrete paving shall be removed before it breaks or sets up.

Before a section of street is opened to traffic all clean up work shall be completed on that section.

11. MEASUREMENT AND PAYMENT

11.1 General

Payment will be made for these items listed in the bid proposal only. All work, materials, labor and appurtenance required to complete the project as shown on the plans or called for in the specifications but not listed in the bid proposal shall be considered as incidental and no separate payment will be made. The cost of these incidentals must be included in the price bid for the various items listed in the bid proposal.

11.2 Measurements

(1). Measurement will be made of the actual number of tons of each type or grade of the Composite Polymer Modified Slurry Seal (Micro-Surface) complete in place. For this specification a ton is considered 2000 lbs. and the composite slurry seal mixture is defined as the asphalt,
aggregate and additives.

All materials shall be weighed on certified public scales or the contractor shall place a set of standard truck scales at a site approved by the Engineer. Scales shall conform to the requirements of the item "Weighing and measuring equipment" Texas Highway Department 1982 Standard Specifications.

(2). Aggregate - The quantity of aggregate used in the accepted portions of the work shall be measured by net ticket weight of each individual load of
aggregate shipped to the project from the approved job site scale.

The weight of mineral additive used shall be calculated and included in the total aggregate weight.

(3). Polymer Modified Asphalt Emulsion. The quantity of polymer modified asphalt emulsion in the accepted portion of the work shall be measured by tons of material based on the accepted load tickets issued from the manufacturer. At the completion of the project any unused emulsion shall be weighed back and that quantity deducted from the accepted asphalt emulsion quantity delivered.

11.3 Payment

Payment will be made for the number of tons of micro surface measured at the applicable unit price bid per ton of micro surface in the bid proposal. This payment shall be full and complete compensation for the complete in place micro surface.

08/07

P.V.C. PIPE CASINGS

1. SCOPE

   This item consists of furnishing and installing PVC pipe for casing for future water and electric lines at locations shown on the plans or as directed by the Engineer.

2. MATERIAL

   Pipe shall be ASTM D 1785 schedule 40 PVC pipe or ASTM D 2241 PVC SDR 32.5 pressure pipe. The ASTM designation and schedule or SDR shall be clearly marked on the outside of the pipe.

3. CONSTRUCTION

   Pipe shall be laid in straight alignment and grade in trenches as narrow as the diameter of the pipe can be laid. Pipe shall be placed after the sub grade is prepared but before base material is placed. Bedding under the pipe shall be a minimum of 2 inches in thickness and shall be carefully graded and leveled before pipe is placed. Joints shall be water tight. They may be solvent cement welded using approved materials, or may be made using a gasketed collars or push on gasketed bell and spigot. When collars are used care shall be exercised to assure that the collar is centered over the joint. All joints shall be made in accord with the manufacturer's recommendations. After pipe has been joined and inspected the pipe shall be encased in bedding/encasement material to a thickness of 3 inches above the pipe. Care shall be exercised to be sure the encasement material is worked in under the haunches of the pipe and compacted along the side of the pipe to assure adequate lateral support. The balance of the trench shall be back filled using cement stabilized backfill consisting of 2 sacks of Portland cement to 1 cubic yard of blow sand or crushed caliche mixed with sufficient water to form a stiff place able mixture that can be consolidated in the trench by rodding or vibrating. The back fill shall be "struck off" at the finished sub grade level using square point shovels or suitable screeds. The ends of the pipe shall be tightly plugged to prevent the entrance of water debris or other foreign material. These plugs shall be PVC or rubber stoppers designed to endure until the water lines and/ or electric lines are places.

4. MEASUREMENT AND PAYMENT

   Casing pipe shall be measured by the linear foot along the center of the pipe and shall be paid for at the unit price in the bid proposal.

WATER LINE SPECIFICATIONS

1. SCOPE OF WORK

The work covered by this section consists of all water pipe lines and piping, including valves, valve boxes, tapping sleeves, fire hydrants and other accessories, required to complete the project. The contractor shall furnish all materials, labor, superintendence, tools, equipment and incidentals necessary for the complete construction of this work in accordance with the drawings and these specifications.

2. PIPE AND MATERIAL

2.1 General

Pipe shall be polyvinyl chloride (PVC) AWWA C900, ductile iron AWWA C-151 or steel cylinder concrete pipe AWWA C-303.

2.2 Polyvinyl Chloride (PVC) Pipe

A. PVC pipe furnished for use on this project shall conform to the requirements of AWWA C900 Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. through 12 in., for water distribution pressure class 150, DR18. and shall be NSF approved for potable water supply.

B. The pipe furnished shall have an integral bell designed for joint assembly using elastomeric seals.

C. Markings for the pipe shall include all the requirements of AWWA C900 and the MSF approval stamp.

D. Elastomeric seals shall be furnished by the pipe manufacturer. Seals shall be manufactured to conform with the requirements of ASTM F4 77 and shall be specifically designed for use with the pipe furnished.

E. Lubricants intended for use with PVC pipe and seals (gaskets) shall be compatible with both PVC and the seal material. Lubricant shall not support growth of bacteria and shall not adversely affect the potable quality of the water that is to be transported.

F. Pipe laying lengths shall be 20'.

G. Service taps on PVC water lines shall be made using hinged type or double strap type saddles. Tapping saddles shall support the full circumference of the pipe and shall have a bearing area of sufficient width along the axis of the pipe to prevent distortion of the pipe when saddle is tightened.

No direct taps into the wall of PVC pipe will be permitted.

Seals for tapping saddles shall be recessed into the body of the saddle and shall be

a rubber - compound conforming to the requirements of ASTM F477.

Tapping saddles shall be SMITH-BLAIR Taper Seal Style 313 or DMD Dresser style 194 or approved equal.

H. Tapped connections for water mains and fire lines made on PVC water mains shall be accomplished using full bodied ductile iron tapping sleeves of a pressure rating equal to or greater than the pressure rating of the pipe specified.

I. Bedding for AWWA C900 PVC water pipe shall extend from a minimum depth of 4 inches below the outside of the water line to a minimum cover of 6 inches over the top outside of the water line.

J. AWWA C900 PVC water pipe shall be installed in accord with the applicable requirements for installing ductile iron pipe.

Care shall be taken to install each joint of PVC water pipe to, but not beyond the factory insertion mark on the pipe.

When a joint of PVC water pipe must be cut, the end of the pipe shall be carefully beveled to match the factory bevel on the uncut pipe. An insertion mark matching the factory insertion mark on the uncut pipe must be made before the pipe is inserted into the bell.

When PVC water pipe is to be inserted into a ductile iron fitting or valve, the factory bevel must be removed to form a square plain end pipe.

2.2 (a) Metallic Marking Tape (For PVC Water Pipe)

2.2(a).1 General

When non-metallic pipelines are to be installed, then the Contractor shall furnish and lay, above the pipeline, a continuous strip of metallic identification tape.

2.2 (a).2 Tape Material

The metallic identification tape shall be at least two inches (2”) in width and shall be of corrosive resistant metal of sufficient thickness to be stable and reflect electronic signals to electronic pipeline detector when buried to a dept of twenty-four (24”) below normal ground level.

The metallic tape shall be painted blue on one side and shall have 1-inch high letters painted continuously on the same side of the tape which read, “CAUTION: BURIED WATER LINE BELOW” or other words to this effect.

The marking tape shall be “Detectable Warning Tape”, as manufactured by the Omega Marking Company, or equal approved by the Engineer.

2.2(a).3 Construction Methods

The Contractor shall backfill over non-metallic pipelines to a depth which is less than twenty-four (24”) and not more than twelve inches (12) from the top of the cut of the ditch section in which the pipeline is laid. Contractor shall stop the backfilling material to a generally uniform level. All machine tamping, jetting and other compaction activities shall be accomplished up to this point of height in the backfilling the marking tape is placed in the trench.

The Contractor shall then lay the marking tape in the pipe trench and shall be held in position by the spot placement of backfill materials over it to keep it from sliding t the sides and/or from being blown about in the ditch by the wind. The tape shall be lid with the painted side, which shall also be the side with the identification lettering on it, in the “up” position. The tape shall be laid in the flat position and kept there until backfill is accomplished.

The Contractor shall then complete the backfilling operation in such a manner that the marking tape is not cut, crimped, ruptured or separated by the backfilling work.

2.2(a).4 Measurement and Payment

No separate pay item will be provided for furnish and placing the marking tape. This item shall be considered subsidiary to the non-metallic pipe being placed.

2.3 Ductile Iron Pipe

A. All ductile iron pipe used in the construction of water works improvements shall be Cement Lined and shall be manufactured in accordance with and shall meet the requirements of AWWA Specification C-l5l.

B. Pipe shall be cast in lengths of not less than l2 feet and shall be designed for a working pressure of l50 pounds per square inch. Thickness of ductile iron pipe shall be as shown on the plans and bid proposal or shall be computed in accordance with AWWA Specification C-l50, based on l50 pounds per square inch working pressure for 10 feet of cover and laying condition 2.

C. All ductile iron pipe shall have an exterior, bituminous coating and an inside cement-mortar lining in accordance with the requirements of AWWA Specification C-l04.

2.4 Polyethylene Plastic Tubing

Service lines shall be constructed with polyethylene plastic tubing as specified in ASTM D 2737 with a rating of l60 psi.

2.5 Ductile Iron Pipe Fittings

All fittings for ductile iron pipe and PVC pipe shall be ductile iron and shall be mechanical joint all connections except tees for fire hydrant leads unless shown otherwise on the plans. Tees for connecting fire hydrant leads shall be MJ- with a flange outlet.

All ductile iron fittings shall conform to AWWA Specification C-110, designed for a working pressure of 250 psi. All ductile iron fittings shall have an external coating and shall be cement lined in accordance with the specifications for coating and lining the pipe.

2.6 Pretensioned Concrete Cylinder Pipe

A. The contractor shall furnish and install all concrete cylinder pipe and fittings, including connections and appurtenances complete as shown on the plans and specified herein.

B. The contractor shall submit six (6) sets of full and complete shop drawings on the concrete cylinder pipe and fittings. All of the drawings and data shall be complete and shall include a complete description of the pipe offered, including cuts, tabulated layout and all pertinent engineering data required for a complete evaluation of the submittal. Submittal data shall be in such form and so presented that the Engineer may readily review the data.

C. Prior to delivery of the pipe to the project site, the manufacturer shall furnish an affidavit certifying that all pipe, fittings, and specials, and other products and materials furnished, comply with the applicable provisions of this specification.

D. The pipe manufacturer shall furnish a factory trained, job experienced field representative who shall visit the project periodically during the course of installation. He shall also be subject to call by the contractor and/or engineer to advise and assist with the solution of field problems.

During visits, the representative shall observe all phases of the project including location and condition of pipe strung ahead of the contractor, trench width, if applicable, bedding and backfill, assembly of pipe joints and protection of steel. If, in the opinion of the representative any phase of the installation is unsatisfactory, he shall so advise the contractor's superintendent and also advise the owner or engineer's representative on the job site.

E. All closure sections shall be the jack on type and "field welding" will not be permitted without the written permission of the engineer.

F. Pipe manufacturer will install all necessary taps for the contractor to disinfect and field hydrostatic test the pipe.

G. Pretensioned concrete cylinder pipe, fittings and specials shall be designed, fabricated and tested in accordance with the latest requirements of AWWA C-303, "Reinforced Concrete Pressure Pipe Steel Cylinder Type, Pretensioned, for Water and Other Liquids" with additional requirements or modifications as described herein.

H. Pretensioned concrete cylinder pressure pipe shall be designed for l50 psi, working pressure and manufactured in 32 foot nominal lengths in accordance with the provisions of AWWA Standard C-303.

I. Inspection and Testing

(1) The owner reserves the option to have an independent testing laboratory, at the owner's expense, inspect pipe and fittings at the pipe manufacturer's plant to ensure compliance with the applicable specifications. The owner's testing laboratory and Engineer shall have free access to those parts of the manufacturer's plant that are necessary to ensure compliance with the governing standard. The pipe manufacturer shall notify the owner, in writing, at least two weeks ahead of pipe fabrication as to start of fabrication and fabricating schedule so that the owner can advise the manufacturer as to owners' decision regarding tests to be performed by an independent testing laboratory. In event the owner elects to retain an independent testing laboratory to make material tests and weld test, it is the intent that the tests be limited to one spot testing of each category unless the tests do not show compliance with the standard. If these tests do not show compliance, the owner reserves the right to have the laboratory make additional tests and observations to ensure compliance of the finished product with the standard.

(2) In any event, the manufacturer shall perform the tests described in AWWA C 303, and furnish the owner with a copy of the test reports, if requested, at the expense of the pipe manufacturer. The pipe manufacturer shall furnish the owner with affidavit of compliance as outlined in the standard.

(3) All welds for water tightness in special pipe and fittings that have not been hydrostatically tested may be examined by use of visible dye penetrant system meeting requirement of ASTM El65; however, collar reinforcement and all other lap welds shall be tested by introducing air under l0 psi pressure between the collar and cylinder and checking for leaks around and through the welds with soap solution.

The area to receive the dye penetrant shall be cleaned free from contaminants that might interfere with the penetrant process. The temperature of the steel in the weld area shall be between 60 and l25 degrees F. when the penetrant is applied. Dwell time of six hours shall be allowed after application of the penetrant and developer before interpreting the results.

Defects that are found shall be repaired and the test repeated until all defects

are eliminated. Colored penetrant shall be removed before fittings are lined.

2.7 Casing Pipe

Casing pipe to be installed in bore or open cut may be limited service pipe, corrugated galvanized steel pipe or new straight seam or spiral welded steel pipe. Casing pipe shall be furnished in thickness or gage as shown on the plans.

Limited service pipe proposed for use on this project must be approved a minimum of four (4) working days prior to the time of opening bids and shall be in good condition and shall meet the same service requirements as the corrugated galvanized steel or welded steel pipe.

Welded steel casing pipe shall be coated inside and out using a coal tar epoxy or shall be bituminous coated in side and out by the hot dip method.

2.8 Bedding Materials

A. All water pipelines placed on this project shall be bedded with crushed stone bedding materials to the minimum as shown on the plans and in the Detail Drawings.

B. Granular material furnished for foundation, bedding, encasement, backfill, or other purposes as may be specified, shall consist of any natural or synthetic mineral aggregate such as, crushed gravel, crushed rock, crushed stone, or slag, and shall conform to the following specifications and/or gradation.

Note, all materials used for these purposes shall be crushed and shall have at least two broken faces. Pea gravel will NOT be allowed.

	Foundation	Bedding	Encasement	Backfill
ASTM c33 Grade #57	X			
ASTM C33 Grade #67	X			
ASTM C33 Grade #8		X	X	
THD 1982 ITEM 302 Type "D" Grade #4		X	X	
THD 1982 Item 302 Type "D" Grade #5			X	
Crusher Fines**			*X	X

* 100 percent of crusher fines that are to be used within 12 inches of the top of pipe must pass the 3/4" sieve.

** Approximate Gradation for Crusher Fines

Sieve Size	% Passing
2 inch	100
#4	35 - 100
#10	20 - 100
#40	5 - 35
#200	4 - 10

Crushed stone material proposed as an alternate for use on this project and not meeting the above specifications must be approved in writing at least 48 hours prior to the time scheduled for opening bids.

C. Granular materials provided for Foundation, Bedding, Encasement, or backfill use as required by the contract, either as part of the pipe item work unit or as a separate contract item, shall be classified as to use in accordance with the following:

MATERIAL USE DESIGNATION	ZONE DESIGNATION
Granular Foundation	Placed below the bottom of pipe grade as replacement for unsuitable or unstable soils, to achieve better foundation support.
Granular Bedding	Placed below the midpoint of the pipe prior to pipe installation, to facilitate proper shaping and achieve uniform pipe support. Also for Class B Bedding where specified.
Granular Encasement	Placed below an elevation one half (6") foot above the top of pipe, after pipe installation, for protection of the pipe and to assure proper filling of voids and thorough consolidation of backfill.
Granular Backfill	Placed below the surface base course, if any, as the second stage of backfill, to minimize trench settlement and provide support for surface improvements.

In each case above, unless otherwise indicated, the lower limits of any particular zone shall be the top surface of the next lower course as constructed. The upper limits of each zone are established to define variable needs for material gradation and compaction or void content, taking into consideration the sequence of construction and other conditions. The material use and zone designations described above shall only serve to fulfill the objectives and shall not be construed to restrict the use of any particular material in other zones where the gradation requirements are met.

3. **VALVES AND VALVE BOXES**

3.1 General

A. Valves 4" through l2" shall be resilient seated gate valves with non-rising stems and shall open by turning to the left (counter clock wise).

B. Valves l4" and larger shall be resilient seated butterfly valves and have operators suitable for direct burial and shall open by turning to the left (counter clock wise).

All valves except valves for use in fire hydrant leads shall have mechanical joint ends unless shown otherwise on the plans. Valves for use in fire hydrant leads shall be flange by mechanical joint.

C. All valves and fire hydrants shall be spray coated with a two component thermal setting epoxy to cover all interior wetted ferrous surfaces. Finished coating shall have a minimum thickness of 4 mils. The coating shall conform to the coating section of these specifications.

D. All valves for buried service shall be equipped with 2" square AWWA operating nuts.

3.2 Gate Valves

A. Gate valves shall be iron body, resilient **wedge gate** and shall be in compliance with AWWA Standard C-509-80 or latest revision thereof and shall have the following design features:

B. All valves shall have a working pressure of 200 psi and shall be bottle tight tested at this pressure from both directions. The gate body shall also be hydrostatically tested at 400 psi. Zero leakage will be required in all tests. The body, bonnet, and stuffing box shall be flange together with ASTM A-307 Grade B bolts and nuts to insure repairability.

C. Stems shall be machined from modified manganese bronze rod with an integral forged thrust collar machined to size.

D. Stem seals shall be dual "O" ring type.

E. Valve discs shall be rubber encapsulated or have disc seat rings molded of natural rubber, internally steel reinforced retained to the disc by self-locking type 304 stainless steel screws. Valve gates shall seat against a machined epoxy coated mating surface in the body of the valve.

F. All internal ferrous metal surfaces (machined or cast) shall be factory spray coated with a two component thermosetting epoxy to a nominal thickness of 4 mils and the exterior shall be coated with asphalt varnish as specified for coating of the pipe. (See Sec. 3.4 of these specifications for epoxy coating).

G. Valves shall be Mueller A-**2360** or Dresser-M&H **4067** or approved equal. Any alternate (approved equal) to these specifications **shall have completely interchangeable parts with either of the specified valves.**

3.3 Butterfly Valves

A. General - All butterfly valves shall be of the rubber seated tight-closing type. They shall meet or exceed AWWA Standard C-504, Class l50B. Both valve ends shall be mechanical-joint per AWWA Standard C-lll. Accessories (bolts, glands, and gaskets) shall be supplied by the valve manufacturer.

B. All valves must use full AWWA C-504 Class l50 B valve shaft diameter, and full Class l50 B underground service operator torque rating throughout entire travel, to provide capability for operation in emergency service.

C. Valve body shall be high strength cast iron ASTM A 126 Class B with l8-8 type 304 stainless steel body seat. Valve vane shall be high strength cast iron ASTM A 48 Class 40 or ASTM A 536, Grade 65-45-l2 ductile iron having rubber seat mechanically secured with an integral l8-8 stainless steel clamp ring and l8-8 stainless steel self locking screws.

D. Rubber seat shall be a full circle 360^{o} seat not penetrated by the valve shaft. Valve shall have permanently set two way thrust bearing. Packing shall be designed for permanent duty in underground service.

E. Valve operator shall be of the traveling nut type, sealed, gasketed and lubricated for underground service. It shall be capable of withstanding an overload input torque of 450 ft. lbs. at full open or closed position without damage to the valve or valve operator. It shall be designed to resist submergence in water to 25 ft. head pressure. Number of turns to operate valve shall be as listed below in order to closely resemble conventional distribution valve practices and to minimize water hammer:

Pipe and Valve Size	Turns to close	Pipe and Valve Size	Turns to Close
4" - 6"	16-1/2	14" - 16"	48"
8"	24	18" - 20"	72
10" - 12"	36	24"	90

F. Valves shall be capable of easy closure by one man using standard valve key, even under emergency line-break conditions as severe as those that would - cause a valve maximum opening torque requirement of as much as two times AWWA Class l50 B.

G. All valves shall be tested bottle-tight at rated working pressure by the manufacturer as follows:

l4" up. . . . . l50 psi

In addition a hydrostatic test with vane partially open shall be given to the assembled valve as follow:

l4" up. . . . . 300 psi

H. Valve shafts shall be l8-8 type 304 stainless steel. Shaft bearings shall be of the self lubricating sleeve type.

I. Valve discs or vanes for valves 30" and larger shall be the flow through (bridge or truss) type.

J. Butterfly valves shall be Dresser-M&H Model "450", "4500" or "l450" or Mueller line seal III or approved equal. Alternates (approved equal) to these specifications must be approved in writing 48 hours prior to time bids are received.

3.4 Coating

A. The coating shall be a two part thermosetting epoxy protective coating and shall function as a physical, chemical and electrical barrier between the base metal to which it is applied and the surroundings.

B. The coating shall be non-toxic and shall not impart taste to water. The coating must be formulated from materials deemed acceptable per the FOOD AND DRUG ADMINISTRATION DOCUMENT TITLE 2l of the FEDERAL REGULATIONS ON FOOD ADDITIVES SECTION l2l.25l4 entitled, RESINS AND POLYMERIC COATINGS.

C. The coating shall have a satin finish and shall be suitable for field over coating and touchup with same coating material without sanding or special surface preparation, or application of heat in excess of room temperature.

D. The coating shall have a successful record of performance in valves, pipe or other allied equipment for a minimum of two years.

E. The coating adhesion to the substrate shall exceed cohesion of the coating film as demonstrated by the following test:

(1) Prepare test panel and apply coating per manufacturer's recommendation.

(2) After sample has properly cured per manufacturer's recommendation, scribe an "X" using a sharp knife or scalpel through the coating to the metal substrate.

(3) Then with the point of the knife at the juncture of two scribes, attempt to lift off coating. Coating should not lift off substrate or between coats readily, but should break up leaving coating material on the substrate of this damaged area.

(4) No disbandment of the film shall be noted as tested above after immersion in tap water for l500 hours at l00`F.

F. A falling sand abrasion test using ASTM D968 shall produce an abrasion coefficient of 25-30 liters/mil. As an alternative, a Taber Abrader Test should find 3.5 - 3.7 milligrams coating loss per l00 cycles when using a CSF l0 Wheel (l000 gram weight).

3.5 Valve Boxes

All valves to be used in buried service shall be enclosed in cast iron valve boxes. Care shall be taken to place and maintain the 2" square operating nut in the center of the valve box. The valve box shall be two piece cast iron suitable for use with PVC pipe box risers. The 6 inch diameter cover shall be marked " Water". The PVC riser pipe shall be furnished in lengths as required (minimum pipe cover 42") PVC pipe for valve box riser may be ASTM C-900, ASTM D1785 schedule 40, ASTM D2241 pressure class 125 or ASTM D3034 DR 35. Valve boxes shall have a concrete ring 8" thick and having a radius equal to the radius of the valve box plus one foot (1') cast around them. Valve boxes placed in unpaved areas shall be set level with or slightly higher than the finished ground elevation. Valve boxes set in paved areas shall match the finished pavement surface.

3.6 Fire Hydrants

A. Fire hydrants shall conform to the requirements of AWWA C 502 dry barrel type. The fire hydrants shall be designed for a depth of bury of 4.5 feet, however the depth of bury may vary according to field conditions and extensions or shorter bury depth may be required.

B. The hydrants shall have a 5-l/4 inch valve opening, two 2-l/2 inch hose nozzles and one 4-l/2 inch pumper nozzle.

C. Hose threads shall be National Standard threads.

D. The hydrants shall be sized for 6-inch mains and shall have an inlet connection compatible with the type pipe used. All gaskets, nuts, bolts and other jointing materials shall be considered part of the fire hydrant installation.

E. Operating nut shall be standard l-l/2 inch pentagon opening counter-clockwise. The hydrant shall close with the pressure.

F. Hydrants shall be painted Federal Safety Yellow.

G. Fire hydrants shall have all interior wetted ferrous surfaces epoxy coated as required in the general and coating section of this item.

H. The hydrants shall have a minimum of two (2) drain holes located on opposite sides of the hydrant. The entire drainage channel must be made of non-corrosive material and sealed by acceptable resilient material (metal and/or leather seals are not acceptable).

I. The hydrants shall have a breakable safety flange and breakable stem coupling which breaks cleanly upon impact.

J. The hydrants shall be AWWA improved type hydrants and shall have self-oiling reservoirs.

K. Fire hydrants shall be the Mueller Centurion, the Dresser -M & H 929 Reliant, or The American Darling.

4. EXCAVATION, TRENCHING BEDDING AND BACKFILLING

4.l Trenching

A. The trench shall be excavated to the lines and grades as established by the engineer and as shown on the plans. The depth of cover for all main lines on which the grades and elevations are not shown on the plans, shall in general be Forty-two (42) inches. The amount of cover may vary over or under 42 inches as directed by the engineer but in no case will the amount of cover be less than thirty-six (36) inches. Depth of cover for service lines shall be as shown on the detail drawings.

B. Water lines constructed in proposed streets and service drives shall have the depth of cover measured from the finished grade. The contractor is hereby cautioned that proposed street finished grades are sometimes cut below the existing ground elevation.

C. The minimum width of the trench shall be the outside diameter of the pipe plus twelve (l2) inches for pipe diameter through l8", the outside diameter of the pipe plus eighteen (l8) inches for pipe diameters over l8". The trenching equipment shall be maintained on a sufficiently level road bed to provide substantially vertical trench walls. The maximum horizontal offset of the trench wall from bottom of trench to the top of the trench (under-cutting) shall be four (4) inches.

D. The trench shall be over excavated to an even grade to the depth of required bedding so that the bottom of the pipe will rest on a uniform thickness of bedding material on the bottom of trench throughout the entire length of the pipe. In order to obtain a true even grade, the bedding material shall be fine graded by hand. On lines that are to be laid to established grades batter boards shall be set at fifty foot intervals and the trench graded to the established grade.

E. Any part of the trench excavated below grade shall be corrected by filling with bedding material. The bedding material shall be thoroughly compacted.

E. If large rock, rock fragments or other unyielding materials are encountered in the bottom of the trench they shall be removed to a depth of six inches below grade, and the void filled with thoroughly compacted approved bedding material.

G. Bell holes of ample dimensions shall be dug at each joint to permit the jointing of pipe to be made properly and of sufficient depth to prevent the bell of the pipe from resting on undisturbed materials.

H. Wherever necessary to prevent caving, the trench shall be adequately braced and sheeted. Trench safety shall be in accordance with item l4 "Shoring and Sheeting of this specification.

I. Trench digging machinery may be used to make the trench excavations except in places where operation of same would cause damages to trees, buildings or other existing structures either above or below ground. In such instances hand trenching methods shall be employed.

J. All excavated material shall be stockpiled in a manner that will not endanger the work or existing structures and that will cause the least amount of obstructions to walks and driveways.

K. There will be no classification of the excavated materials and the term excavation shall include all materials encountered in excavating the trenches or structural excavations.

L. The contractor shall take all necessary precautions for protecting paved areas from being damaged by the trenching and backfilling equipment. Any damage done to any paved area, outside of the area set forth in the plans, as a result of the construction work shall be repaired by the contractor at his own expense.

M. Where the lines are located behind curbs, the contractor shall take special precautions to protect trees and shrubs. Care shall be exercised to cause as little damage to lawns as possible.

Where lines cross under curbs, gutters or curbs and gutters, tunneling will be required.

N. Blasting for excavation of solid rock will be permitted only after securing the

approval of the Director of Engineering and Transportation and the engineer and only when proper precautions are taken for protection of persons and property. The hours of blasting will be fixed by the engineer. Any damage caused by blasting shall be paid for by the contractor. The method or procedure relative to blasting shall conform to all state laws and local ordinances.

O. The contractor will be required to locate all known utility lines, including consumer service lines, far enough in advance of the trenching to make proper provisions for protecting the lines and to allow for any deviations that may be required from the established lines and grades.

P. The contractor shall not be allowed to disrupt the service on any utility lines except consumers service lines, which may be taken out of service for short periods of time, if the contractor obtains permission from the engineer and from the owner of the premises being served by the utility.

Q. The contractor shall immediately notify the proper utility company of any damage to utility lines, in order that service may be reestablished with the least possible delay. Repair of any damage to existing lines and the repair of consumer lines which are authorized to be cut or temporarily taken out of service shall be made by the contractor at his own expense, and as directed by an official representative of the utility company involved.

R. All utility lines shall be properly supported to prevent settlement or damage to the line both during and after construction.

S. Any permanent relocations of existing utility lines shall be done by the proper utility company without expense to the contractor.

4.2 Backfill General

A. All pipeline excavations shall be backfilled in a manner that will restore pre-existing conditions as the minimum requirement and fulfill all supplementary requirements indicated in the Plans and Specifications. The backfilling operations shall be started as soon as conditions will permit on each section of pipeline to provide continuity in subsequent operations and restore normal public service as soon as practicable on a section-by- section basis. All operations shall be pursued diligently, with proper and adequate equipment, to assure acceptable results.

B. Depositing of the backfill shall be done so the shock of falling material will not injure the structure. Grading over and around all parts of the work shall be done as directed by the Engineer.

C. Whenever soil types which are determined by the Inspector to be undesirable for backfill are excavated from the trench, such material shall be hauled away and deposited where directed by the Inspector at no additional compensation.

D. In the absence of special work item requirements the backfilling shall be accomplished with the use of suitable materials selected from the excavated

materials to the extent available and practical. Should the materials available from the trench section be unsuitable or insufficient, the required additional materials shall be furnished from outside sources at the Owners expense.

E. Suitable material shall be defined as a mineral soil reasonable free of foreign materials (rubbish, debris, etc.) frozen clumps, oversize stone, rock, concrete or bituminous chunks and other unsuitable materials, that may damage the pipe installation, prevent thorough compaction, or increase the risks of after settlement unnecessarily. Material selection shall be such as to make the best and fullest utilization of what is available, taking into consideration particular needs of different backfill zones. Material containing stone, rock, or chunks of any sort shall only be utilized where and to the extent there will be no detrimental effects.

F. Backfill materials shall be carefully placed in relatively uniform depth layers spread over the full width and length of the trench section in a manner and/or sequence that will provide simultaneous support on both sides of the pipeline. Each layer shall be compacted effectively, by approved mechanical of hand methods, until there is no further visual evidence of increased consolidation. Compaction of the in place layer shall be completed acceptably before placing material for a succeeding layer thereon. The manner of placement, layer thickness, compaction equipment, and procedure effectiveness shall be subject to approval of the Engineer. Water jetting or flooding shall NOT be used to compact trench backfill.

G. Within the pipe bedding and encasement zones described as that portion of the trench which is below an elevation one foot above the top of the pipe, the materials placed shall be limited in particular size to 3/4 inch maximum. For larger pipe in access of 18 inches in diameter the Engineer may allow particle sizes up to 2 inches maximum if it can be shown that the backfill can be satisfactorily compacted without leaving voids or damaging pipe or joints. Above these zones, the placement of material containing stones, boulders, chunks, etc. shall be governed by the layer thickness and compaction equipment capabilities.

H. Compaction of materials placed within the pipe bedding and encasement zones shall be accomplished with portable or hand equipment methods to achieve thorough consolidation under and around the pipe and avoid damage to the pipe. Above the pipe zone material, the use of heavy roller type compaction equipment shall be limited to safe pipe loading.

I. The maximum loose thickness of each backfill layer shall be l2 inches, except that l6 inches will be permitted for Granular Materials placed above an elevation one foot above the top of pipe, and with the provision that, by authority of the Engineer in consideration of the demonstrated capability of special type vibratory compactors, these maximums may be increased at his discretion. "Hydro tamps" or "vibra tamp: or other heavy vibrating equipment shall not be used until the backfill has reached a depth of four (4) feet above the top of the pipe.

J. All surplus or waste materials remaining after completion of the backfilling operations shall be disposed of in an acceptable manner within 24 hours after

completing the backfill work on each particular pipeline section. Disposal at any location within the project limits shall be as specified, or as approved by the Engineer; otherwise, disposal shall be accomplished outside the project limits at the Contractor's discretion. The backfilling and surplus or waste disposal operations shall be a part of the work required under the pipeline installation items, not as work that may be delayed until final cleanup.

K. Until final acceptance of the project, the Contractor shall assume full Responsibility and expense for all backfill settlement and shall refill and restore the work as directed to maintain an acceptable surface condition. All additional materials required shall be furnished without additional cost to the Owner.

4.3 Backfill Procedure above Pipe Zone, in Public Rights-of-way and other areas where settlement is important.

A. Backfill above the pipe zone shall be made using Portland cement stabilized backfill or crushed stone screening (crusher fines).

B. Backfill around structures such as manholes, junction boxes, transformer boxes and valve boxes shall be made using portland cement stabilized backfill material or crushed stone screening (crusher fines).

C. The minimum depth of stabilized backfill or crusher fines shall be twelve (12") inches.

When utilities are being constructed under existing paving, the stabilized backfill or crusher fines shall extend from top of the pipe zone to the top of the base course.

When utilities are being constructed under existing unpaved streets that are not scheduled for immediate pavement construction, the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the existing roadway surface.

When utilities are being constructed in new streets that are scheduled for immediate paving or in streets in a new subdivision for which a paving contract with the property developer has been approved the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the bottom edge of the eight (8") inches of subgrade, or, if the paving contractor has constructed a portion of the roadway prior to the construction of the utilities stabilized backfill shall extend to the top of the course the contractor has finished. In no case shall the backfill extend above the top of the base course.

If the final course of asphaltic concrete has been placed, the street or alley surface shall **NOT** be cut for utility installation.

In new streets where stabilized backfill is required only to the bottom of the subgrade course, the minimum depth of stabilized backfill may be reduced to six (6") inches in which case the maximum depth of the "pipe zone" shall be limited to six (6") inches above the top of the utility line or conduit.

D. Backfill Materials

(1) Portland cement stabilized backfill shall consist of caliche base material, blow sand or native soil stabilized by the addition of Portland cement. Crushed stone or concrete aggregate shall **NOT** be used.

The Contractor shall submit a mix design prepared by an approved Commercial Laboratory that will produce a minimum 7 day compressive strength of 150 psi. In no case shall the minimum cement content of the mix be less than 1 sack per cubic yard.

(2) Cement used in Portland cement stabilized backfill shall be Type I or Type II conforming to the requirements of ASTM Designation C150.

(3) Caliche used for Portland cement stabilized backfill shall be crushed material con-forming to Texas State Department of Highways and Transportation 1982Standard Specifications for Construction of Highways, Streets and Bridges Item 248 Type F, Grade 2.

(4) Blow sand used for Portland cement stabilized backfill shall be clean, free from organic matter, clay lumps, rock and other deleterious matter.

(5) Native soil used for Portland cement stabilized backfill shall be clean, free from clods and organic matter, and rock in excess of 2".

(6) Crushed stone screening (crusher fines) used for back fill shall be sharp grained particles of crushed stone conforming to the following gradation

Sieve Size	% Passing
2"	100
#4	35-100
#10	20-100
#40	5-35
#200	4-10

and may be the by product of crushing stone for other purposes or may be stone specifically crushed for use in backfill. Crusher fines not meeting these specifications may be approved for backfill upon demonstration that the desired results will be obtained.

E. Backfill Construction

(1) Portland cement stabilized caliche backfill or Portland cement stabilized native soil backfill may be constructed using either the "dry" method or the "wet" method.

(a) The dry method of stabilized backfill construction consists of dry mixing of the cement and caliche, sand or soil to produce a homogenous mixture then adding and mixing sufficient water for proper compaction and hydration of the cement. The water content of the mixture will be approximately one to two percent above the optimum moisture for soil compaction. The mixing may be accomplished by using batch mixers or on the job site by "blade Mixing" or other suitable method to produce the desired backfill material. The mixed material shall be placed in lifts of up to a maximum of 12 inches and compacted to ninety five (95%) modified proctor density by use of suitable compacting equipment.

(b) In the "wet" method of cement stabilized backfill construction, the materials shall be mixed in an approved concrete batching plant or mixer to the consistency of concrete and placed as concrete would be placed. The slump of the backfill material shall be such that all voids will be filled, approximately four (4") to six (6") inches. The backfill shall be consolidated by rodding or by the use of mechanical vibrators.

(c) The mix design used must be for the method of placement chosen.

(2) Portland cement stabilized blow sand backfill shall be mixed and placed by the "wet" method as described above.

(3) Crushed stone screening (crusher fines) shall be wetted uniformly throughout with sufficient moisture to assure proper compaction before being placed in the trench.

The moistened crushed stone screening (crusher fines) shall be placed in maximum lifts of twelve (12") inches and consolidated using vibratory type compaction equipment except when it has been demonstrated that the compaction equipment employed will adequately compact deeper lifts in which case the maximum depth of a lift shall be limited by the capabilities of the equipment used.

Tests to determine the compacted density of the backfill shall be ordered by the Engineer if in his opinion the compaction is not adequate. Test showing a minimum compacted density of 90% modified proctor will be deemed adequate compaction.

5. INSTALLATION OF DUCTILE IRON PIPE

5.1 Pipe Laying - General

A. All pipe and accessories shall be unloaded, handled, laid, jointed, tested for defects and for leakage and chlorinated in the manner herein specified.

B. The pipe, fittings, valves, and accessories shall be inspected upon delivery and during the progress of the work and any material found to be defective will be rejected by the engineer and the contractor shall remove such defective material from the site of the work.

C. The contractor shall be responsible for all material furnished by him and he shall replace at his own expense all such material that is found to be defective in manufacturer or has become damaged in handling after delivery.

D. All pipe, fittings, valves, and other accessories shall, unless otherwise directed, be unloaded at the point of delivery, hauled to and distributed at the site of the work by the contractor. Loading and unloading, of pipe and fittings shall be by hoisting or by sliding, or rolling on skidways in such a manner as to avoid shock or damage to the material. Under no circumstances shall pipe or fittings be dropped. Pipe handled on skidways must not be skidded or rolled against pipe already on the ground.

The pipe, fittings and accessories shall be placed along the site in such a manner as to be kept as free as possible from dirt, sand, mud, and other foreign matter.

E. All pipe shall be laid and maintained to the lines and grades shown on the plans
or as established on the ground by the engineer.

F. Wherever it is necessary to deflect pipe from a straight line either in a vertical or horizontal plane to avoid obstructions, to plumb valves and hydrants, or where vertical or horizontal curves are shown or permitted, the degree of deflection at each joint shall not exceed the maximum deflection recommended by the manufacturer of the particular kind of pipe being laid and the degree of deflection shall be approved by the engineer.

G. After the trench grade has been completed and all bell holes dug and the grade inspected, the pipes and accessories my be placed in the trench. All pipe, fittings, valves, and hydrants shall be carefully lowered into the trench piece by piece by means of derricks, ropes, or other suitable tools or equipment, in such a manner as to prevent damage to the material in any way. Under no circumstances shall pipe or accessories be dropped or dumped in the trench.

H. Before lowering into trench the pipe shall be again inspected for defects and the pipe while suspended shall be lightly hammered to detect cracks. Any defective, damaged or unsound pipe and materials shall be rejected.

I. All foreign matter or dirt shall be removed from the inside of the pipe and from all bells, spigots or parts of the pipe used in forming the joint, before the pipe is lowered into the trench, and it shall be kept clean by approved means during and after laying.

5.2 Laying and Jointing Ductile Iron Pipe

A. Unless otherwise directed, pipe shall be laid with bells facing in direction of laying; and for lines on appreciable slopes, bells shall, at the discretion of the engineer, face up grade. Cutting of pipe for inserting valves, fittings or closure pieces shall be done in a neat and workmanlike manner without damage to the pipe or the cement lining.

B. The jointing shall be completed for all pipe laid each day. No open joints will be left in the trench overnight. At times when pipe laying is not in progress, the open ends of pipe shall be closed by approved means. No trench water shall be permitted to enter the pipe.

C. No pipe shall be laid in water, or when the trench conditions or weather is unsuitable for such work, except by written permission of the engineer.

D. Rubber Gasket joints for cast iron or ductile iron pressure pipe and fittings shall conform to AWWA Standard C-lll.

E. Before laying the pipes, all lumps, blisters and excess coal tar coating shall be removed from the bell and spigot ends of each pipe; the outside of the spigot and the inside of the bell shall be wire brushed and wiped clean and dry. Pipe ends shall be kept clean until joints are made.

F. The pipe and fittings shall be properly aligned and free to move in any direction while bolting, and the bolts shall be gradually tightened at a uniform rate around the entire flange.

G. Flange joints where used shall be bolted with flange bolts of best quality mild steel and of the size and length required by AWWA C-ll5: Bolts and nuts shall be provided with standard hexagonal heads. Gasket rings shall be used and shall be made of best quality rubber composition sheet packing one-eighth (l/8) inch thick, of a brand and quality approved by the engineer.

H. Standard plugs shall be inserted into the bells of all dead end pipes, tees, or crosses and spigot ends shall be capped. Plugs or caps shall be jointed to the pipe or fittings in the same manner used in joining the pipe.

6. SPECIFICATIONS FOR INSTALLING PRETENSIONED CONCRETE CYLINDER PIPE

6.l General

The applicable portions of the specifications for installing ductile iron pipe shall apply except as amended or supplemented herein.

6.2 Pipe Laying

A. Pipe and fittings shall be handled with care at all times to avoid damage. They shall be lifted by hoists or slide or rolled on skid-ways in such manner as to avoid shock. Under no circumstances shall they be dropped. Pipe must not be skidded or rolled against other pipe or object.

B. Just before making the joint, the bell and spigot rings shall be thoroughly cleaned by wire-brushing until clean and dry. The gasket and the inside surface of the bell shall be lubricated with a light film or soft vegetable soap compound (flax soap) to facilitate telescoping the joint. The rubber gasket shall be stretched uniformly as it is placed in the spigot groove to insure a uniform volume of rubber around the circumference of the groove.

C. The joint shall be telescoped by pulling directly along the centerline of the pipe so that the spigot enters squarely into the bell. After the spigot has been telescoped into the bell, the bell end of the pipe being laid shall be moved in accordance with the plans to secure proper grade and alignment. After the joint is in place, a thin metal feeler gauge shall be used to check the position of the rubber gasket around the circumference of the joint.

D. The inside joint recess shall be filled immediately prior to placing the pipe together by buttering the bell end with mortar. After the joint is engaged, the joint mortar of pipe l8" in diameter and larger shall be finished off smooth by hand. The mortar in pipe smaller than l8" in diameter shall be smoothed and cleaned with a swab.

E. After the spigot has been telescoped into the bell, the joint checked and found satisfactory, a canvas wrapper shall be placed around the pipe, covering the joint. The canvas type wrapper shall be of the quality manufactured by the Mar-Mac Manufacturing Company or approved equal burlap type, and shall be hemmed at each edge to allow threading with a steel strap to securely fasten the wrapper around the pipe by means of a stretcher and sealer.

The wrapper shall have a minimum width of 7" and sufficient length to encircle the pipe leaving enough space between the ends at the top to allow the cement mortar to be poured. The entire joint shall be poured with cement mortar and rodded or agitated to eliminate voids and settlement. Prior to pouring the cement mortar the joint shall be thoroughly cleaned and saturated with clean water. Any joint showing shrinkage or excessive cracking shall be cleaned and remade. In hot weather,

additional measures may be required to obtain the best quality of joint, such as additional wet burlap, curing membrane, or immediate careful and well controlled backfilling of the joint with damp earth.

F. The mortar used at the exterior joint shall consist of one part Portland cement to 2-l/2 parts fine, sharp, clean sand and mixed with water to the consistency of thick cream. Mortar required at the joint shall not be placed in freezing weather unless adequately protected from freezing.

G. The joints for pipe to be installed in casing shall be made as for pipe laid in trench except that the outside portion of the joint shall be wrapped in a special polyurethane wrap impregnated with unhydrated cement manufactured for this purpose, prior to being jacked into the casing pipe. The wrap shall be "Flex-Protex" as manufactured by Mar-Mag Mfg. Corporation or approved equal. The interior of the joints shall be mortared after the pipe to be installed in casing has been jacked into place. The pipe shall not be moved after interior mortaring is completed. After the water line has been installed in the casing the ends of the casing shall be sealed using concrete or cement mortar.

H. Steel cylinder reinforced concrete pipe shall not be pressure tested until it has been in place a minimum of l4 days.

I. The contractor shall fill the steel cylinder reinforced concrete pipe under slight pressure and allow approximately 24 hours for water absorption by concrete lining before performing pressure test.

7. SETTING VALVES, VALVE BOXES, FIRE HYDRANTS AND FITTINGS

7.1 General

Valves and fittings shall be set at the locations shown on the plans or at locations as established by the engineer, and shall be set and jointed to the pipe in the manner heretofore specified for pipe installation. All valves buried in the ground shall have a cast iron valve box set over the valve and set to grade. All valves shall be set vertical, unless otherwise specified, and shall be thoroughly inspected and checked for operation before installation.

7.2 Valve Boxes

Cast Iron valve boxes shall be firmly supported and maintained centered and plumb over the wrench nut of the valve, with box cover flush with the surface of the ground or street paving.

Valve boxes shall be supported by a ring of concrete as shown on the plans and Detail Drawings. This ring shall be Class "A" concrete having a minimum thickness of six (6") inches and shall extend a minimum of twelve (12") inches in all directions from the outside diameter of the valve box and shall be supported on thoroughly compacted backfill.

7.3 Setting Fire Hydrants

A. Fire hydrants shall be located at points shown on the plans, the exact location of the hydrant to be established by the engineer. All hydrants shall be set plumb, to the grade as established by the engineer, and shall have their nozzles parallel with and/or at right angles to the curb, with the pumper nozzle facing the curb. The hydrants shall be supported in such a manner as not to cause a strain on the fire hydrant lead or branch.

The bowl of the hydrant shall be well braced against unexcavated earth at the end of the trench with concrete blocking. The concrete blocking shall be placed so as not to interfere with the hydrant drains and so that the joints or flanges are accessible.

B. Each hydrant shall be connected to the main with a six (6) inch ductile iron branch controlled by an independent six (6) inch gate valve. Each hydrant shall be set upon a stone or concrete slab not less than four (4) inches thick and not less than one square foot of surface area. Where solid rock exists in the bottom of the trench and same is excavated to the proper depth to form a foundation for the hydrant, the slab of stone or concrete may be omitted.

C. There shall be placed around the base of the hydrant not less than seven (7) cubic feet of sound broken stone or clean gravel, or other suitable material to provide reservoir capacity so that the hydrant will completely drain when closed. The gravel or broken stone shall reach from the bottom of the trench to at least six (6) inches above the waste opening in the hydrant. Each hydrant shall be operated by the contractor to prove to the inspector that the drain hole has not been plugged with concrete or other material.

8. **ANCHORAGE OF BENDS, TEES AND PLUGS, ETC.**

Reaction or thrust blocking shall be applied to all pipe lines at all tees, plugs, caps, valves, fire hydrants, and at bends deflecting ll-1/4 degrees or more. Concrete shall be used for blocking the pipe and fittings. Concrete for thrust block shall have a minimum compressive strength of 3,000 psi and shall conform to Texas Highway Department Class "A" concrete. Before thrust blocking is placed the element to be blocked shall be carefully wrapped in polyethylene sheeting having a minimum thickness of 3 mils. The blocking shall be placed between solid ground and the fitting to be anchored; the area of bearing on pipe and on the ground in each instance shall be that required by the engineer. The blocking shall be so placed that the pipe and fitting joints will be accessible for repair.

9. DISINFECTION OF PIPE LINES

The contractor shall furnish all labor, equipment, and materials necessary to the disinfecting of the new pipe lines which shall be disinfected before being placed in service. The lines shall be disinfected by the application of a chlorinating agent. The chlorinating agent may be a liquid chlorine, liquid chlorine gas water mixture, or a calcium hypochlorite solution, which shall be fed into the lines through a suitable solution feed device, or other methods approved by the engineer. The chlorinating agent shall be readily dissolvable and of a type that will rapidly mix with the water as it is loaded into the water line. Tablets or other solid form shall not be used unless they are dissolved before being placed into the line. The chlorinating agent shall be applied at or near the point from which the line is being filled, and through a corporation stop or other approved connection inserted in the horizontal axis of the newly laid pipe. The water being used to fill the line shall be controlled to flow into the section to be disinfected very slowly, and the rate of application of the chlorinating agent shall be in such proportion to the rate of water entering the pipe that the chlorine dose applied to the water entering the line shall be at least 50 parts per million. The treated water shall be retained in the pipe lines for a period of not less than twenty four (24) hours. At the end of the retention period all treated water shall be thoroughly flushed from the lines until the replacement water in the lines shall have a chlorine residual of not more than 0.2 parts per million. Where it is necessary to place the new lines in service in less than 24 hours, the concentration of chlorine may be increased to 300 ppm and the lines flushed and placed in service in 3 hours. Disinfecting procedures shall conform to AWWA C 60l.

l0. HYDROSTATIC TESTS

All pipe lines constructed under this contract before being accepted, shall be tested at l20% design pressure as described in the following paragraphs. This test shall apply to all newly laid pipe or any valved sections thereof.

The required test pressure (l80 pounds per square inch) shall be maintained over a continuous period of not less than eight (8) hours.

Each valved section of pipe shall be slowly filled with water, being certain that all air is expelled from the pipe by using hydrants, blow-offs or taps at points of highest elevation in the line. The specified pressure shall be applied by means of a pump and flow meter (gpm and amount) connected to the pipe in a manner satisfactory to the engineer. The contractor shall furnish all necessary equipment, materials and labor to satisfactorily make the hydrostatic tests.

After the line section to be tested has been brought to pressure, a visual inspection shall be made of all joints, fittings, valves, and appurtenance. Any leaks thus located shall be corrected before continuing with the test.

If the test indicates a leakage in excess of a rate equal to twenty-five (25) gallons per inch of nominal diameter of pipe line per mile per day (maximum 600 gallon per mile per day total leakage) the cause of such leaks shall be determined and corrected and the line retested until satisfactory results are obtained.

11. **REMOVING AND REPLACING PAVEMENT**

A. When it is necessary to cut existing paving to install utilities the paving shall be repaired as soon after the backfill is consolidated or the cement stabilized backfill has reached sufficient strength as practical. The repair shall be made using Texas Highway Department Type "D" Hot Mix Asphaltic Concrete and shall have a minimum thickness equal to the thickness of the existing surface.

B. Edges along the trenches and around pits shall be saw cut to remove damaged edges and/or surface. Saw cuts shall be straight and parallel to or at right angles to the street or alley center line in so far as practical. Meandering, zig-zag or notched saw lines will not be permitted. The saw cuts shall be such that a minimum of 6" of surface is removed beyond the edges of the trench.

C. The edges of the saw cut and surface of the backfill material shall be tack coated prior to the placing of hot mix asphaltic concrete. The tack coat shall be either RC-250 cut back asphalt or RS2h emulsified asphalt or approved equal. When emulsified asphalt is used for tack coat the asphaltic concrete shall not be placed until the break of the emulsion is complete and all free water has evaporated or has been removed.

D. After the tack coat is cured the hot mix asphaltic concrete shall be placed uniformly throughout the repair area. The edges of the repair shall be squared up and the hot mix asphaltic concrete thoroughly compacted. Any large aggregate that is separated from the mix during the leveling process shall be removed from the surface and disposed of off the project. Care shall be taken that none of the mix over laps the old paving. Any mix that has "scabbed" onto the paving shall be removed before the section is reopened to traffic.

Sufficient mix shall be placed so that the finished repair is from one eight (1/8") inch to one quarter (1/4") inch above the old paving surface to allow for further consolidation by traffic.

12. **TUNNELING UNDER UTILITY LINES, ETC**.

Where pipes, conduits or concrete curbs, gutters or other obstructions are encountered in the construction, the cost of tunneling under such obstructions shall be included as a part of the cost of the pipe line, or other pay items, complete in place.

13. **HIGHWAY CROSSING**

A. The City of Midland will obtain any required permits from the State Highway Department for installation of the water line along and across the highway right-of-way. It shall be the contractor's duty and responsibility to coordinate the time of making the crossing and the manner of handling traffic.

B. Installations of the casing pipe shall be accomplished by boring or open cut trench as indicated on the drawings and in accordance with the Texas Department of Transportation permit and requirements. Equipment used shall be of such size and capacity as to allow the placement of the casing to proceed in a safe and expeditions manner. Installation of the casing and the excavation and removal of the materials

within the casing shall proceed simultaneously.

The boring shall proceed from a pit provided for the boring equipment and workmen. Excavation and location of the pit shall be approved by the Engineer. Boring without the concurrent installation of the casing pipe will not be permitted. The use of water or other fluids in connection with the boring operation will be permitted only to the extent of lubricating cuttings. Jetting will not be permitted. Overcutting in excess of one inch shall be remedied by concrete pressure grouting the entire length of the installation. All joints for casing pipe installed in bore shall be welded. Care shall be taken to keep the casing pipe on the proper line and grade.

C. After the casing pipe has been installed and is accepted by the Engineer, the pipe shall be shoved through the casing. The pipe shall be pushed or pulled through the casing by exerting pressure on the barrel of the pipe and not on the bell, and shall be done in such a manner that the joint is always in compression during the shoving operation. Hardwood, or other suitable material skids shall be banded with stainless steel bands to each joint of pipe In accordance with the pipe manufacturers recommendation. The hardwood skids shall be of sufficient dimensions to allow the bell of the pipe to clear the casing pipe by at least one-half inch. The length of the skid shall be in accordance with the pipe manufacturers recommendations. A minimum of three bands shall be used to secure the skids to the pipe. The skids shall be such that the carrier pipe will be centered in the casing pipe. The design of skids and bonding techniques shall be submitted to the Engineer for approval prior to use.

In general waterline installation in the casing pipe shall conform to AWWA C 600-Section 6 requirements.

After completion of pipe installation in casing, the ends of the casing shall be sealed off by use of concrete grout. The minimum compressive strength of the grout shall be 2,000 psi in 28 days.

14. **SHORING & SHEETING**

14.1 Description

This item shall govern for the Trench Safety Systems required for the construction of all trench excavation to be utilized in the project and including all additional excavation and backfill necessitated by the safety system. A trench shall be defined as a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet. The depth is five feet or more.

Trench Safety Systems include but are not limited to sloping, sheeting, trench boxes or trench shields, sheet piling, cribbing, bracing, shoring, dewatering or diversion of water to provide adequate drainage.

l4.2 Construction Methods

Trench safety systems shall be accomplished in accordance with the detailed specifications set out in the provisions of Excavation, Trench, and Shoring, Federal Occupational Safety and Health Administration (OSHA) Standards, 29CFR, Part 1926, Subpart P, as amended, including Proposed Rules published in the Federal Register (Vol. 52, No. 72) on Tuesday, October 31, l989. The sections that are incorporated into these specifications by reference include Sections 1926-650 through 1926-652. Legislation that has been enacted by the Texas Legislature, being Tex. Rev. Civ. Stat. Ann. arts. 1015q, 2368a.6 (Vernon Supp. 1988) with regard to Trench Safety Systems, is hereby incorporated, by reference into these specifications.

A reproduction of the OSHA Publication 2226 is attached for the convenience of the Contractor. The City assumes no responsibility for the accuracy of the reproduction or that it reflects current law. The Contractor is responsible for obtaining a copy of this section of the Federal Register for his use.

If the contractor elects to use a trench protective system that, in the Proposed Rules, requires "Design by a qualified person or a qualified engineer," [For example see 1926.652(b) (3) and 1926.652(c) (4)], "a qualified person or qualified engineer" shall be a Professional Engineer registered in the State of Texas. The Contractor is responsible for obtaining boring and soil analysis as required for the planned design. The trench excavation is to be designed in conformance with OSHA standards and regulations.

14.3 Safety Program

The Contractor shall submit a safety program specifically for the construction of trench excavation. The trench safety program shall be in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

14.4 Inspection

The Contractor shall make daily inspections of the Trench Safety Systems to ensure that the systems meet OSHA requirements. Daily inspection is to be made by a "competent person" provided by the Contractor. If evidence of possible cave-ins, or slides, is apparent, all work in the trench shall cease until the necessary precautions have been taken by the Contractor to safeguard personnel entering the trench. It is the sole duty, responsibility and prerogative of the Contractor, not the owner or the Engineer, to determine the specific applicability of the designed trench safety systems to each field condition encountered on the project. The Contractor shall maintain a permanent record of daily inspections.

14.5. Safety Restrictions - work near high voltage lines

The following procedures will be followed regarding the subject item on this contract:

A. Warning signs painted yellow with black letters that are legible at twelve feet shall be placed inside and outside vehicles such as cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment or similar apparatus. The warning sign shall read as follows:

"WARNING - UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES."

B. All equipment except back hoes or dippers that may be operated within ten feet of high voltage lines shall have an insulating cage-type of guard about the boom or arm and insulator links on the lift hook connections.

C. When necessary to work within six feet of high voltage electric lines, notification shall be given the power company who will erect temporary mechanical barriers, de-energize the line, or raise or lower the line. The notifying department shall maintain an accurate log of all such calls to the Power Company, and shall record action taken in each case.

D. The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

l5. MEASUREMENT AND PAYMENT

l5.l General

The unit price or lump sum price bid on each item, as stated in the proposal, shall include furnishing all labor, superintendence, machinery, equipment, and materials necessary to complete the various items of work in accordance with the plans and specifications. Cost of work or materials shown on the plans and called for in the specifications and on which no separate payment is made shall be included in the bid price on the various pay items.

l5.2 Water Lines

A. Measurement

The length of pipe lines for the various sizes, classes and types to be paid for will be determined by measurement along the center lines of the pipe installed, measurement being made from the center of fitting to center of fitting or end of pipe, without any deduction for the length of intermediate fittings or valves including pipe installed in casing.

B. Payment

Furnishing and installing approved type pipe of the various sizes and classes shown on the plans or as required will be paid for at the unit price bid per linear foot for furnishing and installing the various sizes and classes of approved pipe complete in place. The unit price bid shall be complete compensation for furnishing and installing the pipe complete in place including all excavation, backfilling, testing and disinfection of lines and shall include any and all incidental work not otherwise included in the bid items or otherwise provided for in the specifications.

l5.3 Solid Rock Excavation

All excavation for pipe trenches shall be unclassified and no extra compensation will be made for solid rock excavation. The contractor is expected to make boring of his own and satisfy himself to the character of material which will be encountered.

l5.4 Gate Valves or Butterfly Valves

A. Measurement

Gate valves or butterfly valves will be counted in the field after installation by the size and type specified and actually installed.

B. Payment

The unit price bid for each type and size valve shall be complete compensation for furnishing and installing the valves, complete in place, including the furnishing and installation of cast iron valve boxes on all valves to the finished grade of the adjacent surface. All valves in paved areas shall be set to finish pavement grades

l5.5 Fire Hydrants

A. Measurement

Fire hydrants will be counted in the field after installation in accordance with the plans and specifications.

B. Payment

The unit price bid shall be complete compensation for furnishing and installing the fire hydrants, complete in place, each, including lead pipe the gravel drain, concrete blocking, extension or additional bury depth as required for a complete installation.

I5.6 Service Connections

A. Measurement

The number of service connections of the type and size specified to be paid for will be counted in the field after complete installation.

B. Payment

The unit price bid shall be complete compensation for furnishing and installing the service connections, complete in place, including the meter box and lid, service line, corporation stop, meter stop and incidentals required for a complete installation.

I5.7 Ductile Iron Fittings

A. Measurement

The weight of the various ductile iron fittings and specials were estimated by using the standard weights for cast iron fittings as established by the American Water Works Association or American Standard Association. Measurement of ductile iron fittings will be made by counting the actual number of fittings installed and multiplying the number of fittings by the catalog weights for those types of fittings actually installed. Allowance will be made for glands and bolts.

B. Payment

The ductile iron fittings or specials required in the construction of the various size pipe lines as shown on the plans or as required will be paid for at the unit price bid per ton for furnishing and installing the ductile iron fittings complete in place. The unit price shall also include all materials, excavation, backfilling, concrete blocking and other incidental work required for the complete installation.

I5.8 Steel Cylinder Concrete Pipe Fittings

A. Measurement

No separate measurement or count of fittings and specials for steel cylinder concrete pipe will be made.

B. Payment

No separate payment will be made for fittings or specials for steel cylinder concrete pipe used on this project, but the cost of same shall be included in the price bid per linear foot for the various classes and sizes of pipe in the bid proposal.

l5.9 Casing Pipe In Bored Hole Or Open Cut

A. Measurement

Measurement of the casing pipe, of the type and size specified, shall be made by the linear foot of casing installed complete in bored hole or installed complete in open cut.

B. Payment

The unit price bid per linear foot for casing in bored hole or for casing in open cut shall be complete compensation for furnishing and installing the casing, complete in place, including all pits, boring equipment, materials and labor required for a complete installation. Payment for carrier pipe installed in the casing will be made as stated under Waterlines above.

l5.l0 Paving Cut and Repair

A. Measurement

Measurement of paving cut and repair will be made by the square yard for replacing pavement of the type specified. The area of the pavement replaced shall be determined by actual measurements on the ground; however, measurement will be limited to areas within widths of cuts as shown on the plans unless additional widths are authorized by the engineer. Any pavement removed or damaged outside of the aforementioned limits shall be replaced as prescribed with these specifications, but will not be measured for payment.

B. Payment

The unit price bid, per square yard, shall be complete compensation for cutting and removing the pavement, and constructing the concrete base and surfacing of the type specified, all as specified herein and as shown on the plans.

15.ll Trench Safety Systems, Sheeting and Shoring

A. Measurement

Trench Safety Systems shall be measured by the linear foot along the centerline of trench including manholes and other line structures.

B. Payment

Payment for Trench Safety Systems, measured as prescribed above, shall be made at the unit price bid per linear foot of "Trench Safety Systems: Payment of all work prescribed under this item shall be full compensation for the Trench Safety Systems including all Engineering cost and any additional excavation and backfill required, for furnishing, placing, maintaining and removing all shoring, sheeting, or bracing; for dewatering or diversion of water; for all jacking and jack removal; and for all other labor, materials, tools, equipment and incidentals necessary to complete the work.

Revised 08/07

GRAVITY FLOW PIPE SEWERS AND FITTINGS
FOR WASTE WATER AND STORM WATER

PART I – GENERAL

1.01 SCOPE

A. The work covered by this specification shall include the furnishing of all material, labor and equipment to construct, complete in place, all Gravity sewers including jointing, gaskets, fittings, castings, mortar, concrete, the placing of sewer pipe, and the construction of manholes and other appurtenance, all in accordance with the details shown on the plans and these specifications for the drainage of sanitary and/or storm sewage.

B. Sanitary and storm sewer lines constructed under these specifications shall be straight in grade and alignment between manholes. Manholes shall be constructed at any change in grade and at any change in alignment. In general manholes are to be constructed at 300 feet intervals or less with the maximum distance between manholes being 350 feet when approved by the Engineer.

1.02 QUALITY ASSURANCE

A. The Contractor, at the Engineer's request, shall furnish a certificate from the manufacturer of the pipe and fittings that the manufacturer is fully competent and capable of manufacturing sewer pipe, fittings, and accessories of the type, size and grade proposed for use in this project that are of uniform texture and strength that will fully comply with these specifications and have so manufactured this class of pipe in sufficient quantities to be certain that it will meet all normal field conditions of usage. The manufacturer must have adequate equipment and quality control facilities to be sure that each extrusion casting or run of pipe is uniform in texture, dimensions, and strength.

B. All PVC, HDPE, or plastic resin based pipe and fittings shall be covered during storage to protect them from excessive heat and direct sunlight.

C. All pipe and accessories shall be stored above ground and fully supported so that they will not bend or deflect excessively under their own weight.

D. Pipe in any way damaged or deformed during storage shall not be incorporated into this project, but at the direction of the Engineer, shall be permanently removed from the job site and project area.

1.03 TYPE OF PIPE

A. Pipe for sanitary sewers 15 inches in diameter and less shall be PVC. Pipe for storm drains 15 inches in diameter and less may be corrugated steel pipe when called for on the plans and in the bid proposal. Pipe 18 inches in diameter and larger shall be of the type shown on the plans and bid proposal.

B. The contractor may be allowed to bid a choice of two or more of the pipe materials when pipe 18 inches in diameter and larger are proposed for use on a project. When such choice is allowed the permissible choices will be clearly stated on the plans and/or bid proposal and a blank space will be provided for the contractor to write in the type of pipe proposed for use on the project. When such blank spaces are provided, the contractor must choose one of the permitted pipe materials as specified in part 2 “Materials” of these specifications and write in the type of pipe bid. Failure to write in the type of pipe bid may be reason to disqualify the bid. One or more types of pipe 18 inches in diameter and larger may be excluded from consideration on any given project by notes on the plans and/or the bid proposal.

PART 2 – MATERIALS

2.01 POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS FOR SANITARY AND STORM SEWERS

A. GRAVITY SEWERS

(1) Pipe and fittings in nominal diameters from 4-inch through 15-inch shall be manufactured in accordance with ASTM D3034, “Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings” and pipe and fittings in diameter 18” through 36” shall be manufactured in accordance with ASTM F-679 or ASTM F-794, closed profile, subject to the modifications and limitations below.

B. MODIFICATIONS AND LIMITATIONS

(1) The concrete slab manhole tops shall be reinforced with number 4 steel reinforcing bars spaced at 12 inches on center each way. Additional diagonal bars shall be placed on 4 sides around the manway opening. The diagonal bars shall be number 4 rebar with a minimum length equal to the diameter of the manway opening plus 4 inches. The steel reinforcing mat shall be placed in the bottom of the slab with 1-1/2 inches protective covering.

(2) The term Dimension Ratio (DR) or standard dimension ratio (SDR) is the ratio of the average outside pipe diameter to the minimum wall thickness rounded to the nearest 0.5. The maximum DR for PVC sewer pipe shall be 35. PVC pipe sewers that will have less than 4 feet of cover shall be DR26.

(3) PVC pipe manufactured under ASTM F679 or F794 shall have a wall thickness that will meet or exceed the D.R. and stiffness specified herein. The minimum pipe stiffness for pipe having a DR of 26 shall be 115 psi. The minimum pipe stiffness for DR 35 pipe shall be 46 psi.

(4) Where DR 26 pipe is specified, all necessary fittings shall be the same as for SDR 35 PVC pipe.

(5) Minimum wall thickness for ASTM D-3034 PVC pipe shall be as follows:

Nominal Size (in.)	Min. Wall Thickness (in.)	
	DR 26	DR 35
4	0.162	0.120
6	0.241	0.180
8	0.323	0.240
10	0.404	0.300
12	0.481	0.360
15	0.588	0.437

The minimum wall thickness for PVC pipe meeting ASTM F-679 or F-794 requirements shall be the thickness as set forth in said ASTM specification that will meet or exceed the pipe stiffness and DR required.

(5) The identification markings as shown in Section 12 of ASTM 3034 shall note the specified DR of 26 where applicable.

(6) All pipe and fittings shall have the dimensions for inside diameter, outside diameter, etc. as shown in ASTM D3034 and/or ASTM F-679 except that the inside diameter DR 26 may be reduced by the added wall thickness.

(7) The pipe and fittings shall be homogeneous throughout and free from visible cracks, holes, foreign inclusions, or other injurious defects. The pipe shall be as uniform as commercially practical in color, opacity, density, and other physical properties.

(8) The Contractor shall provide wyes, tees, bends, adapters, and any other fittings called for in the specifications and/or shown on the plans or directed by the Engineer.

(9) The standard length of ASTM, D-3034 SDR 35 or SDR 26 PVC pipe under this specification shall be 20 feet with a minimum of 10 feet, except that all pipe used in service lines shall not exceed 10 feet in length unless otherwise approved by the Engineer. The standard laying length for ASTM F-679 PVC pipe shall be 13 feet. The Engineer must approve other laying lengths.

C. SEWER LATERALS AND CONNECTIONS

Pipe and fittings for service lines shall be the same material and thickness class as required for the main sewer. Schedule 40 PVC pipe may be used for 4" service lines when PVC pipe meeting requirements of ASTM 3034, SDR 35 is required.

D. JOINING SYSTEMS

(1) PIPE JOINTS

The pipe shall be joined with an integral bell, bell and spigot type rubber gasket joint. Each integral bell joint shall consist of a formed bell complete with a single rubber o-ring gasket. Gaskets shall be manufactured in accordance with ASTM F477 and shall be installed in accordance with the pipe manufacturer's instructions using all the necessary materials, lubricants and equipment recommended by the manufacturer.

For pipe 18" through 36" gaskets shall be factory installed and chemically bonded to the bell end of the pipe.

Lubricant shall be water soluble, non-toxic and have no deteriorating effects on gasket or pipe materials and shall not support the growth of bacteria. Lubricant shall be suitable for use at temperatures from 5^{o} to 120^{o} F (-15^{o} to 50^{o} C). Containers shall be labeled with the manufacturer's name and identified as PVC pipe joint lubricant. Each lubricant container shall have printed instructions for usage and joint assembly.

Field welded joints will not be allowed.

(2) FITTING JOINTS

All fittings shall utilize rubber gasket joints of the same type design and specifications as pipe joints.

(3) PIPE SPIGOT

The pipe spigot shall have a bevel and an insertion stop mark. The assembled joint shall be designed so the gasket shall be radially compressed to assure a positive water-tight seal for all installation conditions recommended by the manufacturer and under all combinations of production tolerances for the joint components. Each size joint shall be qualified to no leakage under various test conditions in conformance with ASTM Specification D-3212, "Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals."

E. INSPECTION AND TESTING

(1) INSPECTION REQUIREMENTS

Certification: as the basis of the acceptance of the material, the manufacturer will furnish a certificate of conformance to these specifications. The manufacturer will furnish other conformance certification in the form of affidavit of conformances, test results, and copies of test reports.

(2) PHYSICAL TEST REQUIREMENTS

For each 4,000 linear feet of pipe manufactured of each class and size of pipe, the following certified test data shall be required:

1. The basic dimensions shall be measured.
2. The allowable crush load (lbs/ft ^{2}) shall be calculated.
3. Impact resistance, fusion quality and ductility shall be tested.

F. MARKING AND DELIVERY

Each pipe shall be identified with the name of manufacturer, nominal size, cell classification, ASTM designation F794, Uni-Bell Plastic Pipe Association designation Uni-B-9, the pipe stiffness designation “PS-46 psi” and manufacturer’s date code.

1. MANHOLE CONNECTIONS

The Contractor shall provide smooth pieces of pipe for connecting sewer line into manholes. The Contractor shall be required to assist the manhole gasket supplier with the nominal outside diameter of these smooth pieces of pipe, as manufactured. There shall be only one plain end thickness for each diameter of pipe specified for the project.

2. DELIVERY

All pipe couplings and fittings shall be prepared for standard commercial shipment.

The pipe shall be inspected upon delivery to the job site for final acceptance. The contractor shall be responsible for all material furnished by him and he shall replace, at his own expense, all such material that is found to be defective in manufacture or which has become damaged in handling until final acceptance has been made. Pipe, which exhibits excessive ovalty or curvature, shall be rejected.

PVC pipe and fittings shall be covered during storage to protect them from excessive heat and direct sunlight.

All pipe and accessories shall be stored above ground and fully supported so as not to bend or deflect excessively under its own weight.

2.01(a) Metallic Marking Tape (For PVC Sewer Pipe)

2.01 (a).1 General

When non-metallic pipelines are to be installed, then the Contractor shall furnish and lay, above the pipeline, a continuous strip of metallic identification tape.

2.01 (a).2 Tape Material

The metallic identification tape shall be at least two inches (2”) in width and shall be of corrosive resistant metal of sufficient thickness to be stable and reflect electronic signals to electronic pipeline detector when buried to a dept of twenty-four (24”) below normal ground level.

The metallic tape shall be painted green on one side and shall have 1-inch high letters painted continuously on the same side of the tape which read, “CAUTION: BURIED SEWER LINE BELOW” or other words to this effect.

The marking tape shall be “Detectable Marking Tape”, as manufactured by the Omega Marking Company, or equal approved by the Engineer.

2.01(a).3 Construction Methods

The Contractor shall backfill over non-metallic pipelines to a depth which is less than twenty-four (24”) and not more than twelve inches (12) from the top of the cut of the ditch section in which the pipeline is laid. Contractor shall stop the backfilling material to a generally uniform level. All machine tamping, jetting and other compaction activities shall be accomplished up to this point of height in the backfilling the marking tape is placed in the trench.

The Contractor shall then lay the marking tape in the pipe trench and shall be held in position by the spot placement of backfill materials over it to keep it from sliding t the sides and/or from being blown about in the ditch by the wind. The tape shall be lid with the painted side, which shall also be the side with the identification lettering on it, in the “up” position. The tape shall be laid in the flat position and kept there until backfill is accomplished.

The Contractor shall then complete the backfilling operation in such a manner that the marking tape is not cut, crimped, ruptured or separated by the backfilling work.

2.01(a).4 Measurement and Payment

No separate pay item will be provided for furnish and placing the marking tape. This item shall be considered subsidiary to the non-metallic pipe being placed.

2.02 CORRUGATED STEEL PIPE (CSP) FOR STORM SEWERS AND CULVERTS ONLY

1. PIPE

A. STEEL SHEET STOCK

(1) Corrugated steel pipe shall be manufactured using galvanized steel sheet AASHTO M 218 or aluminized steel sheet AASHTO M 274.

(2) The lining for smooth lined corrugated steel pipe shall be polymer coated on both sides. The minimum thickness of the polymer coating shall be 10 mils.

B. PIPE DESIGNATION

(1) Pipe furnished shall be manufactured in accordance with AASHTO Specification M 36.

(2) Corrugated steel pipe shall be one or more of the following type as designated in AASHTO M 36.

Type I - Full circular cross section having helical corrugations.

Type IA - Full circular smooth lined pipe constructed of an outer shell having helical corrugations with a smooth sheet lining attached to the outer shell at helical lock seams.

Type IR - Full circular cross section with helical rib protruding outward.

Type II - Type I pipe formed into a pipe arch.

Type IIA - Type IA pipe formed into a pipe arch.

The type of pipe furnished on this project will be as shown on the plans and in the bid proposal.

When no type of pipe is called for on the plans or in the bid proposal helically corrugated circular single wall pipe (Type I or Type IR) shall be furnished.

C. MANUFACTURERS CERTIFICATION

(1) The pipe manufacturer will be required to certify the adequacy of the pipe furnished for the application and design life of the project.

(2) The design life for storm sewers constructed under this specification is 50 years.

(3) The pipe manufacturer will be required to run soil pH, soil resistivity and such other test as they deem necessary to design pipe thickness and protective coatings required to assure the adequacy of the pipe supplied.

D. CORRUGATION AND MINIMUM THICKNESS

(1) Thickness used in this specification refers to the bare steel thickness before coating is applied. The minimum thickness for any single wall corrugated steel pipe furnished under this specification is 16 gage.

(2) All corrugated steel pipe furnished under these specifications shall have helical corrugations.

(3) Circular corrugated steel pipe 48” in diameter and smaller shall have 2-2/3” x ½” corrugation and shall be a minimum of 16 gage in thickness.

Circular corrugated steel pipe larger than 48” in diameter may have either 2-2/3 x ½” or 3” x 1” corrugations. The minimum thickness for corrugated steel pipe larger than 48” in diameter and having 2-2/3 x ½” corrugation shall be as follows:

54” Diameter - 12 gage
60” Diameter - 10 gage
66” through 90” Diameter - 8 gage

The minimum thickness for circular corrugated steel pipe having 3” x 1” corrugation and diameters of 54” through 90” shall be 14 gage.

(4) For smooth lined corrugated steel pipe the minimum thickness for the lining shall be 20 gage and the minimum thickness for the outer shell shall be 18 gage.

The corrugations for the outer shell shall be 2-2/3” x ½” for pipe 48” diameter and smaller. Larger diameter pipe may use 3” x 1” corrugations in the outer shell. The sum of the thickness for the outer shell and the liner shall be a minimum of one thickness unit greater than the thickness that would be required for single wall pipe of the same diameter or span.

(5) Spiral rib steel pipe (Type IR) shall have outward projecting spiral corrugations of ¾” x 1” at 11-1/2” on center in accord with AASHTO specification M 36 or ¾” x ¾” at 7-1/2” on center as described in AASHTO specification M 196.

The minimum thickness for spiral rib pipe 48” in diameter and smaller shall be 16 gage.

The minimum thickness for spiral rib pipe 54” and 60” in diameter shall be 14 gage.

The minimum thickness for spiral rib pipe 66” and 72” in diameter shall be 12 gage.

The minimum thickness for spiral rib pipe larger than 72” in diameter shall be as shown on the plans.

(6) The corrugations and minimum thickness of corrugated steel pipe arch shall be in accord with the following table:

EQUIV. Dia. (in.)	2-2/3" x ½" Corrugations Span (in.)	Rise (in.)	Gage	3" x 1" Nominal Size Span (in.)	Rise (in.)	Gage
15"	17	13	14			
18"	21	15	14			
24"	28	20	14			
30"	35	24	14			
36"	42	29	14	40	31	16
42"	49	33	12	40	36	14
48"	57	38	10	53	41	12
54"	64	43	10	60	46	12
60"	71	47	8	66	51	12
66"	77	52	8	73	55	12
72"	83	57	8	81	59	12
78"				87	63	12
84"				95	67	12
90"				103	71	12

When 2-2/3" x ½" corrugations are called for on the plans and/or on the bid schedule the substitution of 3" x 1" corrugations will be allowed only upon the demonstration by the contractor that there is sufficient head room to accommodate the higher rise for arch pipe of this cross section.

E. END TREATMENT AND JOINING

(1) The ends of all corrugated steel pipe furnished for this project shall be rolled to provide circumferential corrugations for coupling. The end corrugations for all pipe 48" in diameter and less shall be 2-2/3 x ½". The end corrugations for single wall helically corrugated steel pipe or for smooth lined corrugated steel pipe 54" in diameter and larger shall be the same pitch as the pipe furnished and may be either 2-2/3" x ½" or 3" x 1". The end corrugations for spiral rib (Type IR) corrugated steel pipe shall be 2-2/3" x ½" or 3" x 1" for pipe 54" and larger in diameter.

(2) Coupling bands shall be made of the same material as the pipe and shall be not more than 3 nominal sheet thicknesses lighter than the pipe joined and in no case less than .052 inch.

Jointing devices for joining corrugated steel pipe shall have a gasket and shall produce a joint meeting the infiltration/exfiltration requirements of these specifications.

If it should be necessary to cut a joint of Helically corrugated pipe and join the unreformed end to another section of pipe or fitting extra width bands will be required and special care must be taken to insure a water tight connection.

Locking bands shall be corrugated and shall securely fit into at least one full annular corrugation. The corrugations on the locking band must match the corrugations on the pipe being joined.
The minimum width for locking bands is as follows:

for 2-2/3 x ½ inch corrugations	10-1/2 inches
3 x 1 inch corrugation	12 inches

For helical corrugations that have not been reformed the coupling bands must be at least 2 inches wider than the widths listed above.

Unless shown otherwise on the plans all bolts for coupling or locking bands shall be ½ inch in diameter. Bands 12 inches wide or less shall have a minimum of 2 bolts. Bands wider than 12 inches shall have a minimum of 3 bolts.

Bolts must be galvanized in accordance with AASHTO Designation M232 or ASTM A164 Type RS.

(3) Gaskets for corrugated steel pipe shall be closed cell expanded rubber and shall be formed into a continuous band. Gaskets may be either “O” ring or flat band as recommended by the pipe manufacturer. Flat band gaskets shall be a minimum of 7” wide and 3/8” thick. “O” ring gaskets shall be 13/16” diameter minimum for pipe 36” in diameter or less and 7/8” for pipe larger than 36” diameter and having ½” deep corrugations. “O” ring gaskets shall be a minimum of 1-3/8” diameter for pipe having 1” deep corrugations. When “O” ring gaskets are furnished, an additional flat gasket shall be furnished and placed between the overlapping ends of the coupling band. This flat gasket shall completely fill the gap between the “O” rings. All gasket materials shall be capable of producing a water tight joint that will meet the leakage requirements of these specifications.

2. CORRUGATED STEEL MANHOLE FITTINGS, AND CLEAN OUTS

A. FABRICATION

(1) Corrugated steel manholes and fittings shall be constructed of the same material and type of pipe furnished for the storm sewer line with the exception that manhole risers shall be helical corrugated single wall circular pipe when used with pipe arch sewers or smooth lined corrugated steel pipe. The thickness of the manhole riser shall be the same as would be required for the same type and diameter pipe if it were used for the storm sewer.

(2) Cleanouts for use on shallow storm sewer and inlet leads shall be manufactured from pipe meeting the requirements of these specifications. Cleanouts shall be constructed to the dimensions and in accord with the details shown on the plans.

B. CONNECTION TO MANHOLES AND CLEANOUTS

(1) Stub outs from manholes and cleanouts for connection to storm sewers and inlet leads shall have annular corrugations and shall be compatible with the type and size of pipe being connected. Stub outs provided for connection to PVC pipe storm sewers and inlet leads shall be sized so that the PVC pipe can be inserted into the stub leaving the least amount of annular space between the PVC pipe and the CSP practical. The PVC pipe shall be connected using an approved molded rubber or PVC sleeve connector clamped to both pipes with stainless steel straps.

The connector shall be a flexible coupling as manufactured by Fernco, 300 S. Dayton St., Davison, MI., or approved equal.

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C. LEAKAGE

Manholes, fittings and cleanouts shall meet the leakage requirements of these specifications.

D. SHOP DRAWINGS

The contractor shall submit shop drawings of all manholes, fittings and cleanouts for approval prior to their fabrication. A minimum of 5 sets of drawings for each manhole, each fitting and each cleanout shall be submitted.

E. CONCRETE SLAB TOPS

A reinforced concrete slab top shall be constructed for each manhole and cleanout. The slab shall extend to one foot (1') outside the riser section on all sides and shall have an eccentric 2' diameter opening for the manway located at the outside edge of the riser section. For manholes and cleanouts designated for standard manhole rings and covers the concrete top shall be 8 inches thick and shall be finished smooth to receive the manhole ring.

For manholes designated to receive pressure type manhole rings and covers the concrete slab top shall be a minimum of 12 inches thick and shall have L bolts imbedded in the concrete to fit the requirements of the manhole ring furnished. The slab shall be finished smooth to receive the manhole ring. The manhole ring shall be securely bolted to the slab and sealed using "Ram Nek" or an approved equal bitumastic sealer between the manhole ring and the concrete slab.

The concrete slab manhole tops shall be reinforced with number 4 steel reinforcing bars spaced at 12 inches on center each way. Additional diagonal bars shall be placed on 4 sides around the manway opening. The diagonal bars shall be number 4 rebar with a minimum length equal to the diameter of the manway opening plus 4 inches. The steel reinforcing mat shall be placed in the bottom of the slab with 1-1/2 inches protective covering.

F. PRESSURE MANHOLE RING AND COVER

(1) Pressure type manhole rings and covers shall be Western Iron Works No. 380-24P or approved equal. The manhole cover shall be sealed with an "O" ring gasket in a ring groove and shall be secured to the ring by six (6) 5/8-inch stainless steel bolts.

(2) The ring shall have six (6) 1-1/4 inch bolt holes in the flange for securing the ring to the concrete slab top on the manhole.

3. CORRUGATED STEEL PIPE SLOTTED DRAIN

(1) Corrugated steel pipe slotted drains shall be fabricated from full circle corrugated steel pipe conforming to these specifications.

(2) C.S.P. Slotted drains shall be of a type as manufactured by "Contech Construction Products, Inc.", "Texas Corrugators", "Caldwell Culvert Company" or approved equal.

(3) The upstream end of CSP slotted drains shall be equipped with a bend and a ring and cover of the some size as the pipe from which the slotted drain was fabricated to allow cleaning equipment to be inserted into the slotted drain. The ring and cover shall be Nenah Foundry Co. R-5901 open grate or R-5900 solid lid or approved equal. Unless shown otherwise on the plans the open grate shall be furnished.

(4) When slotted drain is to be connected to PVC leads, molded rubber or PVC flexible connector as specified for connections to manholes and cleanouts shall be furnished.

4. DAMAGED COATING

A. PROTECTION OF PIPE

(1) Pipe fittings and specials shall be handled and stored in a manner that will minimize damage to the coating.

(2) The fabrication process shall be designed to minimize the burning of coatings during welding.

(3) Pipe and/or fittings showing excessive abuse or damage will be rejected.

B. REPAIRING DAMAGE

(1) Pipe on which the metallic coating has been burned by welding or has been otherwise damaged in fabricating or handling, shall be repaired. The repair shall be done so that the completed pipe shall show careful finished workmanship in all particulars.

(2) The damaged area shall be cleaned to bright metal by blast cleaning, power disk sanding, or wire brushing. The cleaned area shall extend at least ½ inch into the undamaged section of the coating. The cleaned area shall be coated within 24 hours and before any rusting or soiling.

(3) Zinc-rich paint shall be applied to a dry film thickness of at least 0.005 inches over the damaged section and surrounding cleaned area. Zinc-rich paint shall be used for repair of damage to all types of metallic coating -zinc, aluminum, and aluminum-zinc alloy.

2.03 CAST-IN-PLACE CONCRETE SEWER PIPE (NON-REINFORCED) FOR STORM SEWERS ONLY

1. DESCRIPTION

This item shall cover machine cast-in-place monolithic non-reinforced concrete pipe, which shall consist of Portland cement concrete placed in a prepared trench at such locations and grades shown on the plans and intended to be used for the conveyance of storm water. Items and item numbers referred to in this specification are the items as given in the "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges."

2. MATERIALS

The cast-in-place pipe shall be constructed of Class "C" concrete. The concrete shall meet the requirements of Item 421, "Concrete for Structures," and Special Provision thereto, except as otherwise noted herein or on the plans. Type III Portland Cement shall be used.

The minimum compressive strength for concrete used in this item is 4000 psi. Backfilling operations may proceed when the concrete has reached 2000 psi compressive strength.

The coarse aggregate grading for pipe diameters 48 inches or less shall conform to that of Aggregate Grade No. 3, one inch (1") maximum size aggregate under Item 421. For pipe diameters over 48 inches, Coarse Aggregate No. 2, one and one third inch (1-1/3") maximum size aggregate shall be used.

No concrete having a slump in excess of 2" will be permitted for use in pipes with diameters of 48 inches and over. For pipes with diameters less than 48 inches, no concrete having a slump in excess of 3" will be permitted for use. At the option of the Contractor, sections of precast reinforced concrete pipe (D-load) may be substituted for cast-in-place concrete pipe. Pipe and installation shall conform to the requirements of Item 465, "Pipe Sewers." Backfill shall be in accordance with the requirements for other storm sewers in these specifications using crusher fines (chat).

3. PIPE MAKING EQUIPMENT

The pipe shall be constructed with equipment specially designed for constructing cast-in-place monolithic concrete pipe. The equipment shall be acceptable to the Engineer and the Contractor may be required to furnish evidence of successful operation in other work of the equipment he proposes to use. Equipment not suitable to produce the quality of work required for the pipeline will not be permitted to operate on the project.

4. DIMENSIONS AND TOLERANCES

The design shell thickness shall be as specified in Table 1.

TABLE I

Internal Diameter inches	Min. Shell Thickness inches
18	2
24	2-1/2
30	3
36	3-1/2
42	4
48	5
54	5-1/2
60	6
66	6-1/2
72	7
84	8
96	9
108	10
120	11

Variation in the internal diameter shall not exceed plus or minus 3 percent. The maximum allowable deviation form the true grade of the design invert of the pipe shall not exceed ½ inch either side of true grade. Where deviation from true grade occurs, true grade shall be re-established at a maximum departure of one-eighth inch per foot.

5. EXCAVATION AND BACKFILL

Excavation shall be in accordance with the requirement for other types of storm drains, except as modified herein. The trench shall be excavated in the lines and grades shown on the plans or as directed by the Engineer. The width of the trench shall be sufficient to accommodate travel of the pipe machine only. The bottom of the trench shall be shaped to the nominal outside circumference of the pipe. Excavation shall be performed from the outlet to the inlet. If the trench is over-excavated for the bottom 210 degrees of the pipe the excess area shall be filled with concrete. If rock is encountered, it will be removed at least 6 inches below the bottom of the pipe and the trench refilled with material sufficiently compacted to

allow operation of the machine and provide a smooth firm surface. The sidewall of the pipe shall be placed against undisturbed material.

Backfill material will be a crusher fine (chat) as described elsewhere in these Specifications. No backfill other than permitted for curing purposes shall be placed until the line has been inspected and approved by the Engineer. The trench may be completely backfilled after the pipe has been in place at least 24 hours and concrete strength requirements have been reached. Light traffic, axle load less than 6,000 pounds, may be routed over the pipe after backfill has been completed for twenty-four (24) hours. Unrestricted traffic may be permitted over the pipe after the backfill has been in place for forty-eight (48) hours.

All backfill material shall be mechanically compacted to 95% modified proctor or as directed by the Engineer.

6. CONSTRUCTION

All surfaces against which concrete are to be placed shall be free from standing water, mud, and debris. Absorptive surfaces against which concrete are to be placed shall be moistened thoroughly so that moisture will not be drawn from the freshly placed concrete.

The concrete shall be placed in one operation around the full circumference of the pipe by means of a traveling form. The forms shall be of sufficient strength to withstand vibrating or tamping the concrete and to permit workmen to walk on the forms without causing springing or bulging at any point.

As the traveling form moves forward, forms shall be placed inside the newly formed pipe to support a minimum of 230 degrees of the upper portion of the pipe.

The concrete shall be vibrated, rammed, tamped or worked with suitable appliances until the concrete has been consolidated to the maximum practicable density, free of rock pockets, and closes snugly against all surfaces or forms and provides a bond between the pipe shell and supporting earth.

When placing operations cease for any reason, the end of the pipe shall be left rough with a slope of approximately 45 degrees. The ends of the pipeline shall be covered with canvas or other suitable cover material to prevent excessive loss of moisture from the interior of the pipe already placed.

When starting pipe laying operation from a previously laid cast-in-place pipe or section of pre-cast pipe, a construction joint shall be made by excavating a “bell” completely around the end of the existing pipe and constructing a concrete collar to extend at least one foot either side of the joint with a minimum thickness equal to that of the wall of the pipe. The end of the existing pipe shall be clean and damp before continuing pipe making operations. Cleaning of the construction joint shall consist of removing all latency, loose or defective concrete, coatings, and any other deleterious materials.

All forms shall be clean and shall be placed at the trench side at the location of their proposed use for inspection by the Engineer. Forms, which are defective in any way, will not be used, and upon condemnation they shall be removed from the site of the work. The forms shall not vary more than ½ inch from the lower edge of a straightedge laid parallel to the centerline of the form, and shall be free of any holes larger than 5/8 inch in greatest dimension. The pipe machine shall be thoroughly clean and serviced prior to the placing of the concrete. Particular attention will be given to all parts of the machine with which concrete comes into contact.

Concrete chutes or trunks shall be provided to reach within 1 foot of the pipe machine hopper. The end of the chute or trunk shall discharge the concrete at the center of the hopper. Provisions shall be maintained to minimize segregation of the concrete mix in all phases of the operation.

Delays in placing shall be handled as follows or as otherwise directed. The concrete hopper on the pipe laying machine shall be kept ½ full at all times, provided, however, that when placing operations cease or are delayed for any reason for more than 20 minutes, the pipe machine shall be pulled forward until all the concrete is exhausted and until the top troweling skirt is clear of the concrete. If the pipe laying operation proceeds within one hour of the time of the last placement, no further steps need to be taken. However, if longer than one hour has elapsed, then a construction joint must be made as previously described. The end of the pipe shall be left rough and at the natural slope when the machine is moved forward.

All junctions of pipe shall be provided for at the time the cast-in-place pipe is placed.

Inside forms shall be removed from the pipe not sooner than 4 hours nor longer than 24 hours after placement of the concrete. Care shall be taken when removing forms to prevent damage to the pipe. The inside of the pipe shall be carefully inspected for imperfections in placement, and any required repairs or smoothing shall be made immediately to provide a uniform interior surface. No wash, mortar or concrete shall be applied to a surface not properly moistened or cleaned. Visible cracks shall be brushed with cement paste or chipped out and pointed up with cement mortar. Any cracks that appear to go through the shell shall be grooved and filled with mortar. All construction operations and methods for providing a watertight pipeline shall be the responsibility of the Contractor. Mortar shall consist of one part cement; two parts well graded sand passing 1/8-inch sieve. Wash shall consist of four parts cement, one part fire clay. The finished surface of the concrete pipe shall be substantially free of fractures, cracks and surface roughness.

7. CURING CONCRETE

Immediately after the concrete is placed the exposed surface of the concrete shall be cured by covering the top with a sheet of polyethylene film sealed with dirt along the edges. During the curing period following the placement of the concrete, the ends of the pipeline and all other openings into the pipeline shall be covered with canvas or other suitable material, except at locations where work is actually in progress. The inside surface of the pipeline shall not be cured.

8. MANHOLES AND BENDS

Manhole bases shall be hand formed on top of the pipe as soon as the pipe-placing machine has passed. Where required, the extra width for manholes shall be excavated ahead of the pipe placing operation. The base for the manhole shall be formed to receive a standard precast concrete barrel section and shall be shaped and smoothed so that the joint can be sealed water tight by use of “Ram Nek” or other approved joint sealing material.

Bends may be formed and cast in place or fabricated using precast reinforced concrete pipe (load D). Design and shop drawings shall be submitted to and approved by the Engineer before the bends are fabricated or cast.

9. MEASUREMENT

Measurement of manholes shall be as specified elsewhere in these specifications. Measurement of bends shall be as for other storm sewer pipe. The method of pipe measurement shall conform to that for other types of storm drainpipe in the section or storm drains in these specifications.

10. PAYMENT

Payment for cast-in-place non-reinforced pipe sewers, measured as prescribed above, will be made at the unit price bid per linear foot for the various sizes of “Pipe Sewers (Cast-in-Place)” complete in place. Payment for manholes shall be as specified elsewhere in these specifications.

Such payment shall be full compensation for furnishing all concrete materials, precast reinforced concrete pipe used in place of cast-in-place pipe, and for all other materials, tools, labor, equipment, and incidentals required to perform the applicable work prescribed herein.

When precast reinforced concrete pipe at the Contractor’s option is used in a line of cast-in-place pipe the additional excavation for the pipe will be subsidiary.

2.04 CENTRIFUGALLY CAST FIBERGLASS REINFORCED RESIN PIPE SEWERS

A. DIRECT BURY PIPES

1. GENERAL

All pipes, joints and fittings shall be manufactured in accordance with the requirements of the applicable standard given below except as noted herein:

Service	Standard
Non pressure Sanitary Sewer	ASTM D3262
Sewer Force Main and Effluent Lines	ASTM D3754

Pipes shall be centrifugally cast, fiberglass-reinforced polyester resin as manufactured by Hobas USA, Inc. or approved equal.

Minimum pipe stiffness when tested in accordance with ASTM D2412 shall be 46 psi.

2. MATERIALS

The manufacturer shall use only approved polyester resin systems for which he can provide a proven history of performance in these particular applications. The historical data shall have been acquired from a composite material of similar construction and composition as the proposed product.

The reinforcing glass fibers used to manufacture the components shall be of highest quality commercial grade of E-glass filaments with binder and sizing compatible with impregnating resins. Sand shall be minimum 98% silica with a maximum moisture content of 0.2%

3. DIMENSIONS

Pipe outside diameters shall be in accordance with AWWA Standard C151 and C950. For diameters larger than covered in those documents, OD's shall be as shown in Table 1.

TABLE I

*WP/s		0/46		50/46		100/46		150/46		200/46	
Nomin Pipe Sz. (in.)	Pipe OD (in.)	Min. wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt (lb/ ft.)
18	19.50	.42	20	.41	20	.40	19	.38	18	.37	18
20	21.60	.46	25	.45	24	.43	23	.42	22	.40	21
24	25.80	.54	35	.53	34	.51	33	.49	31	.47	30
30	32.00	.66	54	.65	53	.62	51	.60	49	.57	47
36	38.30	.78	77	.77	76	.74	73	.71	70	.68	67
42	44.50	.90	104	.88	101	.85	98	.82	94	.78	89
48	50.80	1.02	134	1.00	131	.96	126	.93	122	.88	115
54	57.10	1.14	169	1.12	166	1.08	160	1.04	155	.99	147
60	62.90	1.26	209	1.23	204	1.19	197	1.14	188	1.09	180
66	69.20	1.38	249	1.35	243	1.30	234	1.25	228		
72	75.40	1.50	298	1.47	292	1.41	280	1.36	270		
78	81.60	1.62	352	1.58	343	1.52	331	1.47	320		
84	88.00	1.74	409	1.70	399	1.64	385				
90	94.30	1.86	468	1.82	458	1.75	440				
96	100.6	1.98	531	1.94	520	1.87	501				

- **Maximum nominal working pressure in psi/pipe stiffness in psi**

Pipe shall be supplied in nominal lengths of 20 feet. Actual laying length shall be the nominal plus or minus 2 inches. At least 90% of the total footage of each size and class of pipe, excluding special order lengths, shall be furnished in nominal length sections.

4. **PRESSURE CLASS & TESTING FOR SEWER FORCE MAINS AND EFFLUENT LINES**

The pipe nominal pressure class (PN) shall be equal to or greater than the maximum sustained operating pressure of the line. The minimum pressure rating for non-pressure pipe shall be 15 psi.

The maximum transient (operating plus surge) pressure of the line shall not exceed the pipe nominal pressure class by more than 40%.

Pipe hoop tensile strength for pressure pipe shall be verified as specified in the applicable standard (D3754 or C950) or by random burst testing at the same sampling frequency. All pipes shall be capable of withstanding a test pressure of 2 times the maximum sustained operating pressure of the line without leaking or cracking. This performance shall be periodically verified at the factory for pressure pipe at least once per lot as defined in D3754, section 7.1.

A. JOINTS

Unless otherwise specified, the pipe shall be field connected with fiberglass sleeve couplings that utilize elastomeric sealing gaskets made of EPDM rubber compound as the sole means to maintain joint water tightness. The joints must meet the performance requirements of ASTM D4161.

B. FITTINGS

Flanges, elbows, reducers, tees, wyes, laterals and other fittings shall, when installed, be capable of withstanding all operating conditions. Acceptable configurations include contact molded or metered fiberglass or properly protected standard ductile iron.

Unbalanced thrust forces shall be restrained with thrust blocks or other approved suitable methods. Fiberglass tees, wyes, laterals, or other similar fittings shall be fully encased in reinforced concrete designed to withstand the pressure forces.

2.05 POLYETHYLENE SEWER PIPE

A. SCOPE

(1) This specification covers Polyethylene (PE) pipe with a corrugated outer wall and a smooth interior wall, for use with non-pressure sanitary sewer systems. The PVC fittings and joints are included in the specification.

B. MATERIAL AND MANUFACTURING

1. PIPE MATERIALS

The pipe shall be made from clean virgin Polyethylene compounds having a cell classification of 324420C as defined by ASTM D-3350.

2. FITTING MATERIALS

The fittings shall be made from clean virgin polyvinyl chloride (PVC) compounds having a cell classification of 12454B, 1245C or 13343C as defined by ASTM D-1784.

Pipe shall be manufactured by simultaneous extrusion of the corrugated and smooth walls with the smooth inner wall fused to the outer corrugated wall.

Fittings shall be molded or fabricated.

3. JOINING MATERIALS

a. Gaskets
b. Elastomeric gaskets shall meet the requirements of ASTM F-477.
c. Lubricants

The lubricants used for assembly shall have no detrimental effect on the gasket or the pipe, and shall be per published recommendations of the pipe manufacture.

4. MATERIAL CERTIFICATION

A manufacture's or an independent laboratory certification shall be furnished to the purchaser/engineer that the products were manufactured, sampled, tested, and inspected at the time of manufacture in accordance with this specification.

C. PIPE DIMENSIONS

Pipe dimensions shall meet the following requirements when tested in accordance with ASTM D-2122.

Nominal Size	Avg. O.D.	Avg. I.D.
4	4.790 (121.7)	4.00 (101.6)
6	6.930 (176.0)	6.00 (152.4)
8	9.145 (232.2)	8.00 (203.2)
10	11.405 (289.7)	10.00 (254.0)
12	14.450 (367.0)	12.00 (304.8)
15	17.530 (445.3)	15.00 (381.0)
18	21/150 (537.2)	18.00 (457.2)

D. INSTALLATION

1. Joint Tightness

Minimum joint performance shall show no leakage when tested in accordance with ASTM D-3212.

2. Supplier Assistance

A manufacturers representative of the above referenced pipe material shall be present at the beginning of the installation as required by the Design Engineer or Contractor and shall remain on site until released by the Design Engineer or Field Inspector/Engineer.

2.06 INLETS FOR STORM SEWERS

A. CURB TYPE INLETS

(1) Curb inlets shall be constructed at the locations and to the lines and grades or shown on the plans or as directed by the Engineer.

(2) Curb inlets shall be constructed of reinforced class “C” concrete in accordance with Section 1-B “Concrete Structures” and the plans and detail drawings.

(3) The curb section and the curb inlet shall conform to the curb and gutter section in which it is placed in so far as it is possible.

B. GRATE TYPE INLETS

(1) Grate inlets shall be constructed at the locations and the lines and grades as shown on the plans or as directed by the Engineer.

(2) Concrete boxes for grate inlets shall be constructed of reinforced Class “C” concrete in accordance with Section 1-B “concrete Structures” and the plans and detail drawings.

(3) Grates shall be constructed of ASTM A-48 gray iron having minimum tensile strength of 35,000 psi or ductile iron having a minimum tensile strength of 60,000 psi and a yield strength of 40,000 psi.

The size, style, shape, type, weight and class shall be as shown on the plans.

Grate frames shall be as manufactured for the grate by the grate fabricator. If more than one type or style or frame is available, the type and/or style shall be as indicated on the plans.

C. COMBINATION INLETS

(1) Combination curb and grate inlets shall be constructed at the locations and to the lines and grades as shown on the plans or as directed by the Engineer.

(2) Combination inlets shall be constructed in accordance with the applicable requirements for “Curb type inlets” and “Grate type inlets” above.

D. INLET LEADS

(1) Inlet leads may be PVC pipe or CSP as shown on the plans and called for in the bid proposal.

(2) Inlet leads shall be constructed in accordance with the specifications for type of material used and the plans and detail drawings.

(3) Where two or more leads are joined together to form a single lead to the storm sewer they shall be joined at a cleanout unless shown otherwise on the plans.

(4) Inlet leads shall be connected to the storm sewer at a manhole. The leads shall enter the manhole at a point that will match the .8 points of the two pipes as near as practical.

E. CLEANOUT FOR STORM SEWER INLET LEADS

Cleanouts at the juncture of inlet leads shall be constructed in accordance with the dimensions and requirements shown on the plans and detail drawings.

F. CORRUGATED STEEL SLOTTED DRAINS

(1) Corrugated steel slotted drains shall be as specified in section 2.02-3 of these specifications and shall be furnished in the lengths and diameters as shown on the drawings and in the bid proposal.

(2) Corrugated steel slotted drains are approved for nuisance water inlets only and are sized to allow for considerable clogging before they will cease to function in this capacity.

2.07 MANHOLES

1. GENERAL

A. **CONCRETE MANHOLES ARE NOT TO BE USED FOR SANITARY SEWERS AFTER DECEMBER 31, 2002. FIBERGLASS MANHOLES ARE TO BE USED FOR ALL SANITARY SEWERS**. Concrete manholes can be used for storm water sewers.

All manholes furnished for this project shall be precast unless noted otherwise on the plans and or bid proposal.

Precast manholes shall conform to the requirements of ASTM Specification C-478 with the modifications given in this article.

Concrete used for precast manholes shall have a minimum 28-day compressive strength of 4,000 psi and shall have a minimum cement content of 7 sacks per cubic yards.

All manhole sections shall be furnished with tongue and groove type joints suitable for sealing water tight with rubber or bituminous joint sealer or gaskets.

B. When cast in place components for manholes are called for on the plans the concrete used shall have a minimum 28 day compressive strength of 4,000 psi and a minimum cement content of 7 sacks per cubic yard and shall conform to the requirements of ASTM Specification C-478 with wall thickness as shown on the plans and detail drawings.

Aggregate for the concrete shall meet the sodium sulfate and magnesium sulfate test as required in ASTM Specification C-33.

C. Mortar for filling and shaping the inverts in precast manhole bases and for mortaring precast grade rings and cast iron rings and covers shall consist of one part Portland cement ASTM C150 Type 1 to 3 parts washed sand mixed with just enough water to make a workable mix.

D. Manholes for corrugated steel pipe may be precast concrete or corrugated steel as described in Article 2.02. The type and material shall be as shown on the plans and called for on the bid proposal.

2. PRECAST MANHOLES

A. Manhole base sections shall be cast with an integral floor and shall be constructed in accordance with the details shown on the plans.

B. Manhole riser sections shall be constructed in accordance with the plans and details and these specifications. When pipe openings are required in manhole riser sections they shall be of the same type and meet the same requirements as the pipe openings in the precast bases.

Manhole riser sections for each manhole shall be furnished in the proper combination of lengths to construct the manhole in conjunction with the other components to the finished grade shown on the plans.

C Eccentric cone sections shall be constructed in the same manner as other components except the top of the cone will have a flat surface to accommodate the manhole ring and cover or grade adjusting rings instead of a tongue or groove.

Generally openings will not be required in the wall of the cone section of the manhole.

D. Manhole grade rings shall comply with all the requirements for manhole riser sections except they shall be cast smooth both sides without tongues and/or grooves.

Manhole grade rings shall be sized to fit the smooth small end of the cone section and shall be cast in heights of 2", 4" or 6".

E. Joint seals for precast concrete manholes shall be a bitumastic sealer such as Ram-Nek or approved equal, a soft rubber sealer such as Butyl-Lok or approved equal or an approved "O" ring gasket or a combination of the above if required to achieve a water tight joint.

F. All water tight Storm Sewer Manholes constructed on this project shall have Neenah R-1755-C watertight manhole rings and covers or approved equal.

No separate payment will be made for the protective plastic manhole linings or for the water tight manhole rings and covers but the cost of these items shall be included in the price bid for water tight Storm Sewer Manholes.

In addition to the markings required by ASTM Specification C-478, all components of each manhole shall be, marked with location identifying information such as manhole number or line number and station value where manhole is to be installed. If the manhole has openings for installation of branch lines above the base section, each manhole section shall be clearly marked with the sequence of installation to assure the branch opening will be at the correct elevation.

3. FIBERGLASS MANHOLES

A. SCOPE

Fiberglass reinforced polyester manholes shall be manufactured from commercial grade polyester resin or other suitable polyester or vinyl resins, with fiberglass reinforcements and in accordance with the latest edition of ASTM D 3 753 (Standard Specification for Glass-Fiber Reinforced Polyester Manholes). Fiberglass manholes shall be used with fiberglass or plastic sewer pipe.

B. MATERIALS

1. **Resin:** The resins used shall be a commercial grade unsaturated polyester resin.

2. **Reinforcing Materials**: The reinforcing materials shall be commercial Grade "E" type glass in the form of mat, continuous roving, chopped roving, roving fabric, or a combination of the above, having a coupling agent that will provide a suitable bond with the resin and leave a resin rich surface.

3. **Surfacing Materials**: If reinforcing materials are used on the surface exposed to the contained substance, they shall be a commercial grade chemical-resistant glass organic surfacing mat having a coupling agent that will provide a suitable bond with the resin and leave a resin rich surface.

4. **Fillers and Additives**: Fillers, when used, shall be inert to the environment and wet well construction. Additives, such as thixotropic agents, catalysts, promoters, etc., may be added as required by the specific manufacturing process to be used. The resulting reinforced plastic material must meet the requirement of this specification.

C. FABRICATION

1. **Exterior Surface**: The exterior surface shall be relatively smooth with no sharp projections. Handwork finish is acceptable if enough resin is present to eliminate fiber show. The exterior surface shall be free of blisters larger than ½ inch in diameter, de-lamination and fiber show.

2. **Interior Surface**: The interior surface shall be resin rich with no exposed fibers. The surface shall be free of crazing, de-lamination, blisters larger than ½ inch in diameter, and wrinkles of 1/8 inch or greater in depth. Surface pits shall be permitted up to 6 per square foot if they are less than ¾ inch in diameter and less than 1/16 inch deep.

3. **Defects not permitted**:

Exposed fibers: glass fibers not wet out with resin.
Resin runs: runs of resin and sand on the surface
Dry areas: areas with glass not wet out with resin.
De-lamination: separation in the laminate.
Blisters: light colored areas larger than ½ inch in diameter.
Crazing: cracks caused by sharp objects
Pits or Voids: air pockets.
Wrinkles: smooth irregularities in the surface.
Sharp projection: fiber or resin projection necessitation gloves for handling.

D. PHYSICAL REQUIREMENTS

1. **Load Rating**: The complete manholes shall have a minimum dynamic-load rating of 16,000 ft-lbs. when tested in accordance with this standard. In order to establish this rating, the complete manhole shall not leak, crack, or suffer other damage when load

tested to 40,000 ft-lbs. and shall not deflect vertically downward more than ¼ inch at the point of load application when loaded to 24,000 lbs.

2. **Stiffness**: The manhole cylinder shall have a minimum pipe stiffness value as shown below when tested in accordance with A.S.T.M. 3753 8.5 (note 1)

Depth Ft.	F/dy.psi
3 – 6.5	0.75
7 – 12.5	1.26
13 – 20.5	2.01
21 – 25.5	3.02
26 – 35	5.24

3. **Soundness:** In order to determine soundness, apply an air or water pressure test to the manhole test sample. Test pressure shall not be less than 3 psig or greater than 5 psig. While holding at the established pressure, inspect the entire manhole for leaks. Any leakage through the laminate is cause for failure of the test. Refer to A.S.T.M. 3753 8.6.

4. **Chemical Resistance**: The fiberglass manhole and all related components shall be fabricated from corrosion proof material suitable for atmospheres containing hydrogen sulfide and dilute sulfuric acid as well as other gases associated with the wastewater collection.

5. **Physical Properties**:

	Hoop Direction	Axial Direction
a. Tensile Strength (pi)	18,000	5,000
b. Tensile Modulus (pi)	0.6×10^6	0.7×10^6
c. Flexural Strength (psi)	26,000	4,500
d. Flexural Modulus (psi)	1.4×10^6	0.7×10^6
e. Compressive (psi)	18,000	10,000

6. **Minimum Wall Thickness**: Shall be 0.48” nominal at all depths of the manholes.

E. TEST METHODS: All tests shall be performed as specified in A.S.T.M 3753 latest edition, section 8. Test method D-790 (see note 5) and test method D-695.

F. QUALITY CONTROL: Each completed manhole shall be examined for dimensional requirements, hardness, and workmanship. All required A.S.T.M 3753 testing shall be completed and records of all testing shall be kept and copies of test records shall be presented to customer upon formal written request within a reasonable time period.

G. CERTIFICATIONS: As a basis of acceptance the manufacturer shall provide a independent certification which consist of a copy of the manufacturer’s test report and accompanied by a copy of the test results that the manhole has been sampled, tested,

and inspected in accordance with the provisions of this specification and meets all requirements.

H. SHIPPING AND HANDLING: Do not drop or impact the fiberglass manhole. Fiberglass manhole may be lifted by inserting a 4" x 4" x 30" timber into the top of manhole with cable attached or by a sling or "choker" connection around center of manhole, lift as required. Use of chains or cables in contact with the manhole surface is prohibited.

I. CONCRETE:

1. **Fiberglass Bottom**: Manholes may have fiberglass bottoms that are a minimum of 6" below the OD of the pipe invert when concrete is used to form the invert. Manufactured fiberglass inverts and bench areas are allowed, or concrete may be used to form bench area and invert. Concrete is to be used on top of anti-flotation ring and around the reducer section as required for buoyancy.

2. **Concrete Bottom**: Lower manhole into wet concrete until it rests at the proper elevation, with a minimum of 4 inches of fiberglass manhole inserted into the wet concrete below flow line, then move manhole to plumb. The concrete shall extend a minimum of one foot from the outside wall of the manhole and a minimum of 6 inches above incoming lines. On the inside concrete shall form the bench and invert area and rise a minimum of 4 inches above incoming lines. If required by Engineer concrete may be used around reducer section for buoyancy control.

BACKFILL:

1. **Backfill Material**: Unless shown otherwise on drawings and approved by the Engineer, sand, crushed stone, or crushed gravel shall be used for backfill around the manhole for a minimum distance of one foot from the outside surface and extending from the bottom of the excavation to the top of the reducer section. Suitable material chosen from the excavation may be used for the remainder of the backfill. The material chosen shall be free of large lumps or clods, which will not readily break down under compaction. This material will be subject to approval by Engineer.

2. **Backfill Procedure**: Backfill shall be placed in layers of not more than 12 loose measure inches and mechanically tamped to 95% Modified Proctor Density, unless otherwise approved by Engineer. Backfill shall be placed in such a manner as to prevent any wedging action against the fiberglass manhole structure.

K. MARKING and IDENTIFICATION: Each manhole shall be marked on the inside and outside with the following information:

Manufacturer's name or trademark
Manufacturer's factory location
Manufacturer's serial number
Total length

4. MANHOLE RINGS AND COVERS

A. Manhole rings and covers furnished for this project shall be pattern No. 300-24 as produced by Western Iron Works, Inc., 21 E. 6th St., San Angelo, Texas 76903-5493 or Bass and Hays Foundry, Inc., 238 South Bagdad Rd., Grand Prairie, Texas 75050, or approved equal.

B. WATER TIGHT MANHOLE COVERS

(1) Water tight manhole rings and covers furnished for this project shall be number R-1755-C as manufactured by Neenah Foundry Company, P.O. Box 729, Neenah, Wisconsin 54957, or approved equal.

(2) When watertight replacement sanitary sewer manhole rings and covers are called for on the plans and in the bid proposal they shall be Neenah Foundry Co. No. R-1755-C or approved equal.

No separate payment will be made for adjusting to grade of the replacement watertight manhole rings and covers. The contractor shall schedule this work to coincide with other manhole and water valve adjustments and any costs that might be involved shall be included in the price bid for replacement water tight manhole rings and covers.

(3) Manhole vents shall be used in conjunction with watertight rings and covers spaced every third manhole or as indicated on the plans. Vents shall be constructed as indicated on City design and construction standards.

C. Pressure type manhole rings and covers may be required for certain storm sewer applications. When pressure type manhole rings and covers are called for on the plans and/or bid schedule they shall be Western Iron Works Pattern #380-24P or approved equal. The manhole cover shall be sealed with an “O” ring gasket in a ring groove and shall be secured to the ring by six (6) five-eighths inch (5/8”) stainless steel bolts. The ring shall have six (6) one and one quarter inch (1-1/4”) bolt holes in the flanges for securing the ring to the concrete slab top on the manhole.

D. All manhole covers except grate type shall have two blind pick holes or pick bar cast into them. The blind pick holes or pick bars shall be placed on opposite sides of the cover.

E. All manhole covers except grate type shall have cast into their tops in letters 2 inches high minimum one of the following:

CITY OF MIDLAND
SANITARY SEWER
OR
CITY OF MIDLAND
STORM DRAIN

which ever is applicable.

2.08 GRANULAR MATERIALS

A. GRANULAR MATERIAL GRADATION CLASSIFICATIONS:

Granular materials furnished for foundation, bedding, encasement, backfill, or other purposes as may be specified, shall consist of any natural or synthetic mineral aggregate such as sharp grained sand, crushed gravel, crushed rock, crushed stone, or slag, and shall conform to the following specifications and/or gradation.

Note all materials used for these purposes shall be crushed and shall have at least two broken faces. Pea gravel will NOT be allowed.

	Foundation	Bedding	Encasement	Backfill
ASTM C33 Grade #57	x			
ASTM C33 Grade #67	x			
ASTM C33 Grade #8		x	x	
THD 1982 Item 302 Type D Grade 4		x	x	
THD 1982 Item 302 Type D Grade 5			x	
Crusher fines**			*x	x

*100 percent of crusher fines that are to be used within 12 inches of the top of pipe must pass the ¾" sieve.

** Approximate Gradation for Crusher Fines.

Sieve Size	% Passing
2 inch	100
# 4	35 - 100
# 10	20 - 100
# 40	5 - 35
#200	4 - 10

Crushed stone material proposed as an alternate for use on this project and not meeting the above specifications must be approved in writing at least 48 hours prior to the time scheduled for opening bids.

B. GRANULAR MATERIAL USE DESIGNATIONS:

Granular materials provided for Foundation, Bedding, Encasement, or Backfill use as required by the contract, either as part of the pipe item work unit or as a separate contract item, shall be classified as to use in accordance with the following:

MATERIAL USE DESIGNATION	ZONE DESIGNATION
Granular Foundation	Placed below the bottom of pipe grade as replacement for unsuitable or unstable soils, to achieve better foundation support.
Granular Bedding	Placed below the midpoint of the pipe prior to pipe installation, to facilitate proper shaping and achieve uniform pipe support. Also for Class B bedding where specified.
Granular Encasement	Placed below an elevation one half foot (6") above the top of pipe, after pipe installation, for protection of the pipe and to assure proper filling of voids and thorough consolidation of backfill.

In each case above, unless otherwise indicated, the lower limits of any particular zone shall be the top surface of the next lower course as constructed. The upper limits of each zone are established to define variable needs for material gradation and compaction or void content, taking into consideration the sequence of construction and other conditions. The material use and zone designations described above shall only serve to fulfill the objectives and shall not be construed to restrict the use of any particular material in other zones where the gradation requirements are met.

PART 3 – EXECUTION

3.01 LOCATION OF WORK

A. The work will be located as shown on the plans.

B. It may be necessary for the Engineer to shift lines as reasonable amount to avoid an obstruction to the construction or to reduce right of way difficulties. The Contractor will not be allowed any additional compensation due to shift of lines. Additional compensation will be allowed only for lengthening of lines.

3.02 PROTECTION OF SURFACE STRUCTURES

A. All surface structures and features located outside the permissible excavation limits for underground installations, together with those within the construction areas which are indicated in the Plans as being saved, shall be properly protected against damage and shall not be disturbed or removed without approval by the Engineer.

B. Obstructions such as street signs, guard posts, mail boxes and other items of prefabricated construction may be temporarily removed during construction provided that essential service is maintained in a relocated setting as

approved by the Engineer and that non-essential items are properly stored for the duration of construction. Upon completion of the underground work, all such items shall be replaced in their proper setting. This removal, relocation and replacement shall be at the sole expense of the Contractor.

In the event of damage to any surface structures or improvements, either privately or publicly owned, in the absence of construction necessity, the Contractor will be required to replace or repair the damaged property to the satisfaction of the Engineer and without cost to the Owner.

3.03 INTERFERENCE OF UNDERGROUND STRUCTURES

A. When any underground structure interferes with the planned placement of the pipeline or appurtenances to such an extent that alterations in the work are necessary to eliminate the conflict or avoid endangering effects on either the existing or proposed facilities, the Contractor shall immediately notify the Engineer and the Owner of the affected structure. When any existing facilities are endangered by the Contractor's operations, he shall cease his operations at the site and take such precautions as may be necessary to protect the in place structures until a decision is made as to how the conflict will be resolved.

B. Without specific authorization from the Engineer, no essential utility service shall be disrupted, nor shall any change be made in either the existing structures or the planned installations to overcome the interference. Alterations in existing facilities will be allowed only to the extent that service will not be curtailed unavoidably and then only when the encroachment or relocation will satisfy all applicable regulations and conditions.

C. Wherever alterations are required as a result of unforeseen underground interference not due to any fault or negligence of the Contractor, the Engineer will issue a written order covering any additional or extra work involved and specifying the revised basis of payment, if any. Any alterations made strictly for the convenience of the Contractor shall be subject to prior approval and shall be at the Contractor's expense.

D. No extra compensation will be allowed for delays caused by the interference of underground structures.

3.04 SEPARATION BETWEEN SANITARY SEWERS AND WATER MAINS

A. Sanitary sewers and service lines shall be installed so that the separation between the sewer and water mains is not less than 9 feet in all directions. The 9 feet shall be measured between the nearest outside edges of the pipe.

B. When the required 9 foot minimum separation cannot be maintained and a sanitary sewer must be constructed parallel to a water main, the sanitary sewer shall be constructed of ductile iron or PVC pipe meeting AWWA specification or having NSF approval for potable water pipe, with a pressure rating of 100 psi for both the pipe and the joint. The sanitary sewer line shall

be installed in a separate trench and may be placed no closer than 2 feet vertically and 4 feet horizontally from the water main, with the separation being measured from the nearest outside walls of the pipes. The sanitary sewer shall be constructed lower than the water main.

C. When a sanitary sewer must cross a water main and the 9 feet required separation cannot be maintained, the sanitary sewer may be constructed with a minimum clear separation between the outside diameters of the two pipes of 6 inches if that part of the sanitary sewer within 9 feet of the water main is constructed of ductile iron pipe or PVC pipe meeting AWWA specifications, having a 150 psi pressure rating and equipped with pressure type joints. One length of the sewer pipe must be centered on the water main and where possible, the sanitary sewer should pass under the water line.

D. When the 9 foot required separation cannot be maintained and a sanitary sewer force main must be constructed parallel to a water main, the sanitary sewer force main shall be constructed of ductile iron or PVC pipe meeting AWWA specifications and having a pressure rating of 150 psi and equipped with pressure type joints. The force main must be constructed with a minimum vertical separation of 2 feet and a minimum horizontal separation of 4 feet measured between the outside diameters of the pipes. The force main must be constructed lower than water main.

Table I showing separation of water and sewer lines and construction materials allowed:

TABLE 1
SEPARATION OF WATER AND SEWER LINES

Condition	Location	Material		Separation (Min.)		Comments
		Water	Sewer	Vert.	Horiz.	
NEW WATER AND NEW SEWER SYSTEM						
New Water & New Sewer Gravity Sanitary Sewer Parallel to Water Main	Water above Sewer	Std.	CI DI PVC 150 PSI	2’	4’	Separate Trenches
Gravity Sanitary Sewer Crossing Water Main	Water above Sewer or Sewer above Water	Std	CI DI PVC. 150 PSI	6”	NA	Center one joint of sewer pipe on water main
Gravity Sewer Crossing Water Main	Water above Sewer	Std	ABS, Clay Conc. composite	2’	NA	Cement stabilize sand initial backfill zone each side of crossing. Center of sewer for 9 ft one joint of sewer pipe on water Main
NEW WATER AND EXISTING SANITARY SEWER						
New Water Parallel Existing Sewer	Water above Sewer	Std.	Clay, Conc. ABS CI DI PVC	2’	4’	If sewer shows no sign of leakage, then leave sewer alone. If Sewer shows signs of leakage, then repair or replace.
New Water Crossing Existing Sewer	Water above Sewer	Std	Clay, ABS Conc. composite	2”	NA	If sewer shows no sign of leakage, then leave sewer alone if sewer shows signs of leakage then repair or replace.
New Water Crossing Existing Sewer	Sewer above Water	Std	Clay, ABS Conc. composite	2’	NA	Replace existing sewer with one joint CI,DI,PVC-150 Centering over waterline
New Water Parallel to Existing Sewer	Sewer above Water	Std	Clay, ABS Conc. composite	2’	4’	Replace existing sewer with CI, DI, PVC – 150 PSI or Cement Stabilized sand back- fill initial Backfill none of sewer where parallel closer than 9 ft., or Encase the water in 150 PSI Pipe two nominal sizes larger.

EXISTING WATER AND NEW SANITARY SEWER						
New Sewer parallel Existing Water	Water above Sewer Or Sewer above Water	Std	CI DI PVC 150 PSI	2'	4'	Separate trenches
New Sewer crossing Existing Water	Water above Sewer or Sewer above water	Std	CI DI PVC 150 PSI	6"	NA	Center one joint of sewer pipe on water main.
New Sewer crossing Existing Water	Water Above Sewer	Std	Clay, ABS Conc. composite	2'	NA	Cement Stabilize sand initial backfill zone of sewer for 9 ft each side of crossing. Center one joint of sewer pipe on water main.

3.05 EXCAVATION

A. Excavation of every description and of whatever materials encountered shall be made to the alignment and depth shown on the plans or as directed by the Engineer. Excavation shall be made by open cut. Sides of trenches shall be kept as nearly vertical as possible and the trench shall be so braced, sheeted and drained that workmen may work safely and efficiently therein. The trenches shall be sufficiently straight between designated angle points to permit the pipe to be laid true to line in the approximate center of the trench.

B. The trench width may vary with and depend upon the depth of trench, the diameter of pipe to be laid and the nature of the material to be excavated; but in any case shall be of ample width to permit the pipe to be laid and jointed properly and the backfill to be placed and compacted properly. The minimum width of unsheeted trench shall be 18 inches. The maximum clear width of trench at the top of the pipe shall be not more than two (2) feet greater than the outside diameter of the pipe for pipes up to 33" diameter except by consent of the Engineer. Whenever, for any reason, the maximum trench width is exceeded, the Contractor shall provide, at his own expense, pipe of higher class and/or bedding adequate to sustain the increased soil load as calculated by the Engineer.

C. Trenches shall be undercut to provide for the class bedding specified and/or shown on the plans. Bell holes shall be excavated to insure the pipe resting for its entire length upon the bedding material. Where trenches are under-cut beyond the depth required for bedding the trench shall be brought to grade by using crushed aggregate as specified for foundation herein. The use of loose native soil will NOT be permitted for this purpose.

D. No pipe shall be laid in water. Where the ground water table is at or above trench bottom, the Contractor shall de-water the trench to permit the pipe to be laid on a solid foundation.

   Costs for de-watering by whatever method selected shall be considered incidental to the price bid per foot of pipe.

   The Contractor shall discharge pumps to the natural drainage channels, or if permitted, to other sewer or drains.

Where sewer pipelines are located in or across streambeds or drainage ditches, the Contractor shall divert the stream flow and de-water each section as the work progresses.

E. Temporary support, adequate protection and maintenance of all underground and surface utility structures, drains, sewers, and other obstructions encountered in the progress of the work shall be furnished by the Contractor at his own expense under the direction of the Engineer.

F. Whenever wet, soft or unstable soil, incapable of properly supporting the pipe, manholes or other structure is encountered in the trench, a further depth and/or width shall be excavated and refilled to trench bottom grade with gravel or other approved suitable material thoroughly compacted to assure a firm foundation for the pipe.

G. Rock, boulders and large stones shall be removed to provide a clearance of at least six (6) inches below the outside barrel of the pipes, valves, or fittings and to a clear width of six (6) inches on each side of all pipe and appurtenances for pipe 15 inches in diameter or less, and a clear width of nine (9) inches on each side of all pipe and appurtenances for pipe larger than 15 inches in diameter. Adequate clearance for properly joining pipe laid in rock trenches shall be provided at bell holes. The space between the rock at the bottom of the trench and the bottom of the pipe barrel shall be filled with compacted bedding material.

H. The Engineer shall be notified of any need for blasting to remove materials which cannot be broken up mechanically, and there shall be no blasting operations conducted until the Engineer's approval has been secured. Blasting operations will be allowed only when proper precautions are taken to protect life and property, and then shall be restricted as the Engineer directs. The Contractor shall assume full responsibility for any damage caused by blasting, regardless of the requirements for notification and approval. The Contractor shall secure any required permits for blasting and shall conduct blasting operations in conformance with all applicable State and local laws, regulations and ordinances.

I. In the event the Contractor desires to employ tunneling in locations other than as shown on the Plans in order to avoid replacement of sidewalks, etc., he shall do so only upon receipt of specific permission from the Engineer. Tunneling of this nature shall be considered incidental.

J. Excavated materials will be classified for reuse as being either suitable or unsuitable for backfill or other specified use.

3.06 SPECIAL SAFETY PROVISIONS

1. TRENCH SAFETY SYSTEMS

A. DESCRIPTION

This item shall govern for the Trench Safety Systems required for the construction of all trench excavation to be utilized in the project and including all additional excavation and backfill necessitated by the safety system. A trench shall be defined as a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet. The depth is five feet or more. Trench Safety Systems include but are not limited to sloping, sheeting, trench boxes or trench shields, sheet piling, cribbing, bracing, shoring, de-watering or diversion of water to provide adequate drainage.

B. CONSTRUCTION METHODS

Trench safety systems shall be accomplished in accordance with the detailed specifications set out in the provisions of Excavation, Trench, and Shoring, Federal Occupational Safety and Health Administration (OSHA) Standards, 29CFR, Part 1926, Subpart P, as amended, including Proposed Rules published in the Federal Register (Vol. 52, No. 72) on Tuesday, October 31, 1989. The sections that are incorporated into these specifications by reference include Sections 1926-650 through 1926-652. Legislation that has been enacted by the Texas Legislature, being Tex. Rev. Civ. Stat. Ann. Arts. 1015q, 2368a.6 (Vernon Supp. 1988) with regard to Trench Safety Systems, is hereby incorporated, by reference into these specifications.

A reproduction of the OSHA Publication 2226 is attached for the convenience of the Contractor. The City assumes no responsibility for the accuracy of the reproduction or that it reflects current law. The Contractor is responsible for obtaining a copy of this section of the Federal Register for his use.

If the contractor elects to use a trench protective system that, in the Proposed Rules, requires “Design by a qualified person or a qualified engineer,” [For example see 1926.652 (b) (3) and 1926.652 (c) (4)], a “qualified person or qualified engineer” shall be a Professional Engineer registered in the State of Texas. The Contractor is responsible for obtaining boring and soil analysis as required for the planned design. The trench excavation is to be designed in conformance with OSHA standards and regulations.

C. TRENCH SAFETY PROGRAM

The Contractor shall submit a safety program specifically for the construction of trench excavation. The trench safety program shall be in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

D. INSPECTION

The Contractor shall make daily inspections of the Trench Safety Systems to ensure that the systems meet OSHA requirements. Daily inspection is to be made by a "competent person" provided by the Contractor. If evidence of possible cave-ins, or slides, is apparent, all work in the trench shall cease until the necessary precautions have been taken by the Contractor to safeguard personnel entering the trench. It is the sole duty, responsibility and prerogative of the Contractor, not the owner or the Engineer, to determine the specific applicability of the designed trench safety systems to each field condition encountered on the project. The Contractor shall maintain a permanent record of daily inspections.

2. SAFETY RESTRICTIONS - work near high voltage lines

The following procedures will be followed regarding the subject item on this contract:

A. Warning signs painted yellow with black letters that are legible at twelve feet shall be placed inside and outside vehicles such as cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment or similar apparatus. The warning sign shall read as follows:

"WARNING - UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES."

B. All equipment except back hoes or dippers that may be operated within ten feet of high voltage lines shall have an insulating cage-type of guard about the boom or arm and insulator links on the lift hook connections.

C. When necessary to work within six feet of high voltage electric lines, notification shall be given the power company who will erect temporary mechanical barriers, de-energize the line, or raise or lower the line. The notifying department shall maintain an accurate log of all such calls to the Power Company, and shall record action taken in each case.

D. The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

3.07 PIPE LAYING

A. All gravity pipe shall be laid using approved grade boards, furnished and set by the Contractor at no additional cost to the Owner, according to the grade stakes established by the Engineer. The maximum spacing of grade boards shall be fifty (50) feet. No sewer shall be laid unless there is a minimum of three grade boards set to check the proper grade and alignment ahead. The Contractor shall provide and use a suitable grade rod to insure the proper grade of the pipe.

B. The Contractor may use the laser beam method of setting a line and grade for the sewer by using the laser beam coaxially through the center of the sewer being laid. The laser beam projector is to be rigidly mounted to its support platforms, with a two-point suspension, or equivalent, assuring that all ground and equipment vibrations are kept to an absolute minimum. The Contractor shall furnish all equipment including equipment necessary to control atmospheric conditions in the pipe to keep line and grade to acceptable standards of accuracy. Competent experienced people who have been properly trained to operate the equipment used must operate the laser beam system.

C. The Contractor shall stake check pegs at all manholes throughout the job. Check pegs midway between manholes and any other checkpoints deemed necessary to assure accuracy of the equipment shall be provided by the contractor.

D. Each piece of pipe and special fitting shall be carefully inspected before it is placed and no defective pipe shall be laid in the trench. Pipe laying shall proceed upgrade, starting at the lower end of the grade and with the bells uphill. No pipe shall be laid except in the presence of an inspector representing the Engineer. Any pipe laid except in the presence of an inspector representing the Engineer shall be subject, at the contractor's expense, to a television camera inspection and survey by the city. Trench bottoms found to be unsuitable for foundations after pipe laying operations have started shall be corrected and brought to exact line and grade with approved compacted granular material as specified for foundation in Item 2.07 A. of these specifications.

E. Pipe laying shall proceed up-grade with spigot or tongue ends pointing in the direction of flow. The spigot shall be centered in the bell, and pipe shoved into position, and brought into true alignment. It shall be secured there with bedding material carefully tamped under and on each side of it, excepting at bell holes. Care shall be taken to prevent dirt from entering the joint space.

F. Any defective or damaged pipe discovered after the line is laid or any gravity pipe, which has had its grade or joint, disturbed after laying shall be removed and replaced or relayed. The section of line in which such damaged or displaced section is discovered shall be retested after corrections are made.

G. Where excavation for buildings or other portions of the work have been carried below the line and grades of the pipe, thorough tamping of approved crushed stone backfill and the use of adequate bracing and blocking under the pipe will be required to insure against settling and shearing of the pipe. In areas where noted on plans, Portland cement stabilized material or concrete shall be used for backfill to provide adequate bracing for pipe and protection of structures.

H. All manhole connections for PVC or other Polymer based pipe shall be made using "A Lok Gaskets" or "Kor-N-Seal" boots or other approved water stop devices. Only Portland cement grout that expands upon curing or approved non-shrink grout will be incorporated into any manhole connection.

I. Connections to manholes for other types of pipe shall be in accord with the pipe manufacturers specifications and other applicable requirements of these specifications. The resulting joint shall meet the leakage test requirements of these specifications.

J. The exposed end of all pipes shall be fully protected with a stopper or bulkhead at the end of each day's work to prevent earth, debris, small animals, or other substances from entering the pipe. The interior of the sewer shall be carefully freed from all dirt, jointing compound, or superfluous material of every description as the work progresses.

3.08 CONNECTION AND ASSEMBLY OF JOINTS

1. JOINING PVC OR OTHER POLYMER BASED PIPE

A. The type of joint and the material to be used shall be as shown on the plans or specified herein. Factory cast compression joints shall be free of dirt and lubricated before inserting the barrel into the bell. After the spigot is centered in the bell, the pipe shall be shoved home solidly by using a wood block and bar. The Contractor shall keep the ends of the pipe closed to prevent dirt and other material from entering the pipe during placement. All joints must be water tight, and any leaks or defects discovered must be repaired immediately. Any pipe, which has been disturbed after being laid, must be taken up, the joint cleaned and properly relayed as directed by the Engineer.

Lubricant used shall be as recommended by the pipe manufacturer.

B. Field-cut pipe must be beveled for insertion into the gasketed bell or coupling. Bevels can be made with a hand or power tool. Bevels shall be made to pipe manufacturer's specifications. If pipe manufacturers specifications are not available the bevel may be made at 15 degrees to the longitudinal axis of the pipe through one half (l/2) the wall thickness.

C. After pipe has been cut and beveled, a new full insertion mark located as recommended by the pipe manufacture shall be made using a felt tip pen. The contractor may determine the location of the insertion mark by measuring the mark location on a factory marked joint of pipe if manufacturer's specifications are not available.

2. JOINTING CORRUGATED STEEL PIPE

A. Gaskets for corrugated steel pipe shall be "O" Ring or sleeve types. Sleeve gasket shall be carefully placed on one joint of pipe. When the pipe is aligned and brought end to end the gasket shall be carefully centered over the joint between the ends of the pipe. "O" ring gasket shall be installed in accordance with the manufacturer's recommendation.

B. When "O" ring gaskets are furnished a flat gasket shall be furnished and placed between the overlapping portions of the band. The gasket shall extend the full width of the band and shall be of sufficient depth to assure a watertight joint.

C. The coupling band shall be carefully centered over the joints and tightened to the pipe manufacturer specifications. Care shall be taken during the tightening process to assure a snug uniform fit for the entire circumference of the pipe.

3. PROTECTING AND COVERING JOINTS

A. The contractor shall keep the ends of the pipe closed during the time of construction to prevent the entry of dirt, debris, small animals and other foreign objects.

B. Joints shall not be covered until approved by Engineer or his representative. Connections, which are for future use, shall be properly capped.

3.09 CONNECTIONS TO EXISTING STRUCTURES

A. Where shown on the plans, the contractor shall connect the new sewer to existing manholes. If no stub out is present in the existing manhole for such connection, the contractor shall construct such connection by making a hole in the side of the existing manhole using a coring machine or other approved method and installing a “KOR N Seal” boot as manufactured by N.P.C. Systems, Inc. or other approved water tight manhole connector.

The contractor shall use caution in constructing the connection to the existing manhole. Damage to the manhole that, in the opinion of the Engineer, would impair the use and/or function of the manhole shall be just cause to require the contractor to reconstruct the manhole at contractor’s expense. Such damage shall include but not be limited to cracking of the manhole riser section, spalling around the connection significantly reducing manhole wall thickness or excessive oversize in the opening for the new connection requiring any filler other than the manhole connector and/or non-shrink grout specified.

The contractor shall make such changes in the invert of the manhole as may be necessary to provide a smooth flow of the water through the manhole. Any connection to existing structures required in the Plans shall be accomplished by the Contractor and shall be incidental item with no direct compensation being made unless listed as a pay item in the bid proposal.

B. If the work consists of the construction of a sewer that is to replace an existing sewer, all of the existing service lines shall be kept in operation and connected to the new line.

C. Connections shall be made to all existing sewer lines in the vicinity of the work by removing a section of the sewer for the existing line and inserting in the space a tee branch of proper size, or by the construction of a manhole, regulator chamber of other structure as shown on the Drawings.

D. Connections to building services shall be made in a neat and workman like manner. Clean out plugs shall be installed wherever feasible, by making the connections with a standard wye or tee-wye. When clean out plugs are installed they should be located as near the right of way line as practical.

3.10 BACKFILL OPERATIONS

1. GENERAL

A. All pipeline excavations shall be backfilled in a manner that will restore pre-existing conditions as the minimum requirement and fulfill all supplementary requirements indicated in the Plans and Specifications. The backfilling operations shall be started as soon as conditions will permit on each section of pipeline, so as to provide continuity in subsequent operations and restore normal public service as soon as practicable on a section-by-section basis. All operations shall be pursued diligently, with proper and adequate equipment, to assure acceptable results.

B. For this specification backfill is defined as any material placed in the trench above the bedding zone other than the pipe or conduit and appurtenance.

For flexible pipe the backfill between the bedding material and the crown of the pipe shall be crushed stone suitable for encasement as specified in article 2.07 of the specifications. When Portland cement stabilized backfill is used above the pipe zone; the crushed stone encasement shall extend to 1' above the crown of the pipe.

C. Depositing of the backfill shall be done so the shock of falling material will not injure the structure. Grading over and around all parts of the work shall be done as directed by the Engineer.

D. Whenever soil types which are determined by the Inspector to be undesirable for backfill are excavated from the trench, such material shall be hauled away and deposited at locations shown on the plans or as directed by the Engineer at no additional compensation.

E. Backfill materials placed in the pipe zone shall be carefully placed in relatively uniform depth layers spread over the full width and length of the trench section in a manner and/or sequence that will provide simultaneous support on both sides of the pipeline. Each layer shall be compacted effectively, by approved mechanical of hand methods, until there is no further visual evidence of increased consolidation. Above the pipe zone the backfill material shall be placed uniformly across and along the trench in depth suitable for the compaction method used and compacted to a minimum of the density specified for the material used and the trench location. Compaction of the in place layer shall be completed acceptably before placing material for a succeeding layer thereon.

The manner of placement, layer thickness, compaction equipment, and procedure effectiveness shall be subject to approval of the Engineer. Water jetting or flooding shall NOT be used to compact trench backfill.

F. Compaction of materials placed within the pipe bedding and encasement zones shall be accomplished with portable or hand equipment methods, so as to achieve thorough consolidation under and around the pipe and avoid damage to the pipe. Above the pipe zone, the use of heavy roller type compaction equipment shall be limited to safe pipe loading.

G. The maximum loose thickness of each backfill layer placed above the pipe zone shall be 12 inches, except that 16 inches will be permitted for Granular Materials placed above an elevation one foot above the top of pipe, and with the provision that, by authority of the Engineer and in consideration of the demonstrated capability of special type vibratory compactors, these maximums may be increased at his discretion. “Hydro tamps”, “vibra tamps” or other heavy compacting equipment shall not be used until the backfill has reached a depth of four (4) feet above the top of the pipe.

H. All surplus or waste materials remaining after completion of the backfilling operations shall be disposed of in an acceptable manner within 24 hours after completing the backfill work on each particular pipeline section. Disposal at any location within the project limits shall be as specified, or as approved by the Engineer; otherwise, disposal shall be accomplished outside the project limits at the Contractor’s discretion. The backfilling and surplus or waste disposal operations shall be a part of the work required under the pipeline installation items, not as work that may be delayed until final cleanup.

I. For the duration of the warranty period of the project, the Contractor shall assume full responsibility and expense for all backfill settlement and shall refill and restore the work as directed to maintain an acceptable surface condition. All additional materials required shall be furnished without additional cost to the Owner.

2. BACKFILL IN PUBLIC RIGHTS-OF-WAY AND OTHER AREAS WHERE SETTLEMENT IS CRITICAL

A. GENERAL REQUIREMENTS

(1). Backfill above the pipe zone in public rights-of-way and under paved parking lots, near structures or other utilities where settlement can cause damage shall be made using Portland cement stabilized backfill or crushed stone screenings (crusher fines).

The pipe zone is defined as that portion of the trench extending from the bottom of the trench to 12” above the crown of the pipe or conduit.

(2) Backfill around structures such as manholes, junction boxes, transformer boxes and valve boxes shall be made using Portland cement stabilized backfill material or crushed stone screening (crusher fines).

(3) The minimum depth of stabilized backfill or crusher fines shall be twelve (12”) inches.

When utilities are being constructed under existing paving, the stabilized backfill or crusher fines shall extend from top of the pipe zone to the top of the base course.
When utilities are being constructed under existing unpaved streets that are not scheduled for immediate pavement construction, the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the existing roadway surface.

When utilities are being constructed in streets that are scheduled for immediate paving, the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the bottom edge of the eight (8”) inches of subgrade, or, if the paving contractor has constructed a portion of the roadway prior to the construction of the utilities the backfill shall extend to the top of the course the contractor has finished, or the top of the base course, which ever is lower.

If the final course of asphaltic concrete has been placed, the street or alley surface shall not be cut for utility installation.

In streets where stabilized backfill is required only to the bottom of the subgrade course, the minimum depth of stabilized backfill may be reduced to six (6”) inches in which case the maximum depth of the “pipe zone” shall be limited to six (6”) inches above the top of the utility line or conduit.

B. BACKFILL MATERIALS

(1) Portland cement stabilized backfill shall consist of caliche base material, blow sand or native soil stabilized by the addition of Portland cement. Crushed stone or concrete aggregate shall NOT be used.

When Portland cement stabilized backfill is to be used, the contractor shall submit a mix design prepared by an approved commercial laboratory for approval before the trenching operation is begun. When native soil is to be used samples may be taken along the proposed route by boring or other approved means. Samples must be representative of the full trench depth.

The mix design shall be such that the minimum 7-day compressive strength is 150 psi when tested according to test method Tex 418-A.

The minimum cement content for Portland cement stabilized backfill shall be 1 sack per cubic yard.

Cement used in Portland cement stabilized backfill shall be Type I or Type II conforming to the requirements of ASTM Designation C150.

Caliche used for Portland cement stabilized backfill shall be crushed material conforming to Texas State Department of Highways and Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges Item 248 Type F, Grade 2.

Blow sand used for Portland cement stabilized backfill shall be clean, free from organic matter, clay lumps, rock and other deleterious matter.

Native soil used for Portland cement stabilized backfill shall be clean, free of clods and organic matter, and free of rock in excess of 2”.

(2) Crushed stone screening (crusher fines) used for back fill shall be sharp grained particles of crushed stone conforming to the requirements of Article 2.07 of these specifications.

(3) Trencher excavated rock material shall be screened so that the largest diameter material is less than 2". The screened rock material used for backfill shall have sufficient moisture added so that the backfill will bind with the fines. The rock material backfill shall be tamped or compacted in two (2) foot lifts. A sheeps foot roller shall not be used unless there is two (2) feet or more compacted backfill above the pipe bedding.

C. BACKFILL CONSTRUCTION

(1) Portland cement stabilized caliche backfill or Portland cement stabilized native soil backfill may be constructed using either the "dry" method or the "wet" method.

(a) The dry method of stabilized backfill construction consists of dry mixing of the cement and caliche or soil to produce a homogenous mixture then adding and mixing sufficient water for proper compaction and hydration of the cement. The water content of the mixture will be approximately one to two percent above the optimum moisture for soil compaction. The mixing may be accomplished by using batch mixers or on the job site by "blade mixing" or other suitable method to produce the desired backfill material. The mixed material shall be placed in lifts of up to a maximum of 12 inches and compacted to ninety-five (95%) modified proctor densities by use of suitable compacting equipment.

(b) In the "wet" method of cement stabilized backfill construction, the materials shall be mixed in an approved concrete batching plant or mixer to the consistency of concrete and placed as concrete would be placed. The slump of the backfill material shall be such that all voids will be filled, approximately four (4") to six (6") inches. The backfill shall be consolidated by rodding or by the use of mechanical vibrators.

Portland cement stabilized blow sand backfill shall be mixed and placed by the "wet" method as described above.

Crushed stone screening (crusher fines) shall be wetted uniformly throughout with sufficient moisture to assure proper compaction before being placed in the trench. The moistened crushed stone screening (crusher fines) shall be placed in maximum lifts of twelve inches and consolidated using vibratory type compaction equipment except when it has been demonstrated that the compaction equipment employed will adequately compact deeper lifts in which case the maximum depth of a lift shall be limited by the capabilities of the equipment used.

Tests to determine the compacted density of the backfill shall be ordered by the Engineer if in his opinion the compaction is not adequate. Test showing a minimum compacted density of 90%-modified proctor will be deemed adequate.

3. BACKFILL OUTSIDE OF PUBLIC RIGHTS-OF-WAY WHERE SETTLEMENT IS NOT CRITICAL

A. In areas outside of public rights-of-way and in the absence of special work item requirements the backfilling shall be accomplished with the use of suitable materials selected from the excavated materials to the extent available and practical. Should the materials available from the trench section be unsuitable or insufficient, the required additional materials shall be furnished from outside sources at the Owners expense.

B. Suitable material shall be defined as a mineral soil reasonably free of foreign materials (rubbish, debris, etc.) frozen clumps, oversize stone, rock, concrete or bituminous chunks and other unsuitable materials, that may damage the pipe installation, prevent thorough compaction, or increase the risks of after settlement unnecessarily. Material selection shall be such as to make the best and fullest utilization of what is available, taking into consideration particular needs of different backfill zones. Material containing stone, rock, or chunks of any sort shall only be utilized where and to the extent there will be no detrimental effects.

C. The backfill material placed in this area shall be compacted by suitable means to a minimum density equal to the density of the undisturbed surrounding soil. City Engineer MUST approve water flooding as a means of compaction.

4. TRENCH BACKFILL BEHIND CURB AND GUTTER

A. When utilities are placed behind the curb in paved streets and other landscaped areas the backfill shall be the same as elsewhere in the right-of-way or other applicable location except that in grassed areas and in flower beds the top six (6") inches of backfill shall be good quality top soil. When utilities are placed behind the curb in grassed or landscaped areas where no sidewalk is to be constructed and the edge of the trench is a minimum of 2 feet from the back of curb or where sidewalk is to be constructed and the minimum distance from both the back of curb and the edge of the sidewalk to the edge of the trench is 2 feet the contractor may elect to use suitable native soil for backfill. The native soil backfill shall be compacted to 95% modified proctor density to within 6" of the top of curb height. The top 6" of backfill shall be good topsoil and shall be compacted to the density of the adjacent soil.

B. Sidewalks shall be repaired by removing and replacing the complete section or sections that have been damaged. Strip patching through sidewalks will not be permitted.

The replacement sidewalk shall be of the same design and section as the walk removed and shall be of equal or better workmanship.

C. When utilities are placed in paved areas behind curbs the pavement shall be repaired as specified for street pavement.

D. Grassed areas and flowerbeds shall be restored as nearly as possible to the original condition. Care shall be taken to avoid damage to sprinkler systems.

Mail boxes and other appurtenance in the construction area. Any damage to said items shall be repaired immediately.

E. All repairs made behind the curb shall be to the satisfaction of the property owner responsible for their maintenance and/or to the satisfaction to the City Engineer.

3.11 INLET STRUCTURES AND LEADS AND CLEANOUTS FOR STORM SEWERS

A. Corrugated Galvanized Steel Slotted Drains for Nuisance water inlets only.

(1) Slotted drains shall be the sizes and lengths as shown on the plans and constructed at the locations as shown on the plans or at locations to be established on the job site.

(2) Slotted drains shall not be installed under asphalt pavement but shall have a section of concrete gutter constructed around it as shown on the detail drawings.

Slotted drains shall be protected from the entrance of debris, concrete or HMAC by closing the slot with one or two layers of heavy duct tape or similar material. In addition, the slot for slotted drain shall have a 2-½ inch or ¾ inch board attached to use as a guide for placing and edging the concrete.

Unless otherwise approved or directed by the Engineer the removal of tape and planking from the slotted drain should be accomplished as part of the final clean up.

B. Curb inlets, grate inlets and combination inlets

(1) General

Curb inlets, grate inlets and combination inlets may be pre-cast or cast-in-place at the contractor's option unless specifically shown otherwise on the plans and bid proposal.

(2) Pre-cast inlet boxes

(a) Construction and finish for pre-cast inlet boxes shall conform to details shown on the plans and all applicable requirements for pre-cast manholes.

(b) Tops for curb inlets and combination inlets may be cast in place or pre-cast. Extra care will be required in setting pre-cast tops to assure curb and gutter match.

(c) Pipe connections, bedding, setting and backfill for pre-cast inlets shall be in accord with the applicable requirements for pre-cast manholes article 3.12 of these specifications.

(3) Cast in place inlets

(a) Cast in place inlets shall be constructed of class "C" reinforced concrete as specified in item 1-B "Concrete for Structure" in these specifications.

(b) Forms for cast in place inlets shall be straight, clean and in good condition. Forms shall be properly cleaned and oiled before concrete is placed.

(c) Construction joints may be placed in cast in place inlets at locations shown on the plans. When construction joints are used, extra care will be required to assure that the joints are watertight.

(d) Cast in place inlets may be cast without outside forms if the soil conditions are such that true vertical walls can be cut and will stand during construction without sloughing or otherwise incorporation foreign materials into the concrete.

(e) When inlets are cast without outside forms, a plastic sheet lining may be required to prevent excessive loss of moisture from the concrete and/or to prevent incorporation of foreign material into the concrete.

A. Inlet Leads

(1) Inlet leads shall be constructed of corrugated steel pipe, PVC pipe or other material as called for on the plans and in the bid proposal.

(2) Construction of inlet leads shall be in accord with the applicable requirements for the type of pipe used.

(3) Junctions where two or more inlet leads are joined shall be made at clean outs or manholes.

B. Cleanouts

(1) Clean outs shall be constructed in accord with the plans and detail drawings.

(2) Construction and connections shall be in accord with the applicable specifications for construction of corrugated steel pipe manholes.

3.12 SANITARY SEWER SERVICES AND PLUGGED STUBS

A. Sanitary Sewer Services:

(1) On new sewer main construction all sewer laterals shall be constructed as part of the initial installation. Sewer wye fittings for sewer laterals in new construction shall be molded or fabricated with all gasketed connections. Four (4”) inch laterals shall be installed at all single-family residences and duplex. Laterals installed for apartment complexes, commercial and industrial areas shall be a minimum of six (6”) inches. Depth of laterals will be determined by depth of sewer main and applicable building codes. Laterals shall be installed using tee wyes or wyes and bends so that they will be at 90 degrees to the sewer main. Laterals shall extend to 3’ minimum beyond the property line of the served lot or tract. The contractor shall install sewer laterals according to the typical sewer lateral detail and the most current revisions of the Plumbing Code.

(2) Taps into existing lines shall use a gasketed fitting in conjunction with a full circle repair sleeve coupling, except that taps into existing ductile iron sewer may be made using the Genco Model DF sewer pipe saddle (The General Engineering Co., Frederic, MD Drawing No. R-3220-D dated 12/29/82) or approved equal.

(3) Cemented mitered connections without socket reinforcement shall not be permitted. The contractor will be permitted to use fittings, which are prefabricated, using pipe sections, molded saddles and PVC solvent cement, provided the solvent cement used in fabrication has cured for at least 24 hours prior to the installation. All solvent cement fittings shall e manufactured in the shop under controlled conditions.

(4) All caps and plugs shall be braced, staked, anchored, wired on or otherwise secured to the pipe to prevent leakage under maximum anticipated thrust from internal abnormal operating conditions or test pressures from water or air.

(5) It shall be the duty of the Contractor to keep a record of sewer service wye locations with respect to the nearest downstream manhole, but the Engineer will record ties on the end of all sewer services at the property line. When installing sewer services the Contractor shall, before backfilling, contact the Engineer or his representatives, and assist him in making ties to the end of the service in the open trench. At least two ties shall be made for each service, and if backfilling proceeds before such ties are made, the Contractor shall dig up the end of all such services, with no additional compensation, for the purpose of making ties. During backfilling the Contractor shall furnish and place a vertical steel post or 2 inch by 2 inch wooden stake set flush with finished ground surface, and extending down to the end of the sewer service, a nail shall be placed in the top of the stake to allow location of the service by metal finder.

(6) The main sewer service connection shall consist of installing an in-line wye section in the main sewer line at designated locations. Saddle wye installations will be permitted only when specifically called for. Orientation of service connection fittings shall be as shown in the standard drawings unless otherwise directed by the Engineer.

(7) Where the depth of cover over the main sewer invert is greater than 8 feet (or such other maximum as may be indicated), the service connection shall be extended outward then upward by use of bends to prevent excess loading on the sewer main in accordance with the details shown in the drawings.

(8) The Contractor shall provide the necessary wyes, tees and bends to bring the service to the proper place at the property line.

(9) Wherever service line connections to the main sewer are permitted or required to be made by the open cutout method in the absence of a built-in tee or wye fitting, the connection shall be made by using an approved type coring machine or by other approved methods producing a uniform, smooth circular cut-out as required for proper fit. The cutout discs shall be retrieved and shall not be allowed to remain within the main sewer pipe. The saddle tee shall be securely fastened to the main sewer pipe by means of epoxy resin or other approved adhesive. The entire connection fitting shall be encased in concrete to a minimum thickness of six inches and as may be shown in the standard drawings.

(10)Wherever service line connections to the main sewer are required to be made by means of built-in branch tee or wye fittings, the Contractor shall, in the absence of such fitting, remove a section of the main sewer pipe and replace it with the required branch tee wye or wye section connected by means of an approved sleeve coupling.

(11)Connections of service lines to the main sewer are required to be made by means of built-in branch tee or wye fittings, the Contractor shall, in the absence of such fitting, remove a section of the main sewer pipe and replace it with the required branch tee wye or wye section connected by means of an approved sleeve coupling.

(12)The end of all service connections shall be plugged with PVC plug and sealed with plastic joint material.

(13)Crushed stone bedding and backfill material, concrete encasement and protection, etc., for service line installation shall be the same as for the sewer lines.

(14)No service connections or laterals shall be covered until they have been inspected and located by the Engineer.

B. INSTALLATION OF PLUGGED STUBS ON SANITARY SEWERS

Plugged pipe stubs for future connections to manholes and sewerage structures shall be installed where shown on the Drawings or directed by the Engineer. The pipe stubs shall be installed in accordance with the specifications and details shown on the Drawings for connecting the type of pipe used to manholes.

3.13 MANHOLES

1. General

The manholes shall be constructed at the locations shown on the plans or as directed by the Engineer and in accordance with the details shown on the plans and as specified herein. After the excavation has been completed, the subgrade for the manhole base shall be graded and leveled. A crushed stone foundation having a minimum thickness of 6 inches shall then be placed on the subgrade. The crushed stone foundation shall be leveled and consolidated before the section of the manhole is placed. Pre-cast base sections shall sit in place level and plumb and to the lines and grade as shown on the plans. Cast in place bases shall be placed around the existing sewer line in accord with the plans and detail sheet. When pre-cast manhole bases are used, riser construction may proceed when the base is set on line and grade. When cast in place manhole bases are used, riser construction may proceed when the base has set sufficiently to support the weight of the riser.

Manholes shall be of the type and material shown on the plans and called for in the bid proposal and shall conform to these specifications.

All lift holes shall be filled with approved non shrink grout and bituminous material before final acceptance. Use of bituminous material or other flowable material alone to plug lift holes will not be permitted. Voids in the invert around the sewer pipe on the

inside wall of the manhole shall be grouted with cement rich grout, to conform to the rest of the wash, in accordance with the standard manhole details.

The backfill around the manhole shall be done in accordance with the details shown on the plans and trench backfill specifications.

The Contractor shall take whatever precautions necessary to protect the manholes that are under construction. At the end of the day or at such time as the Contractor deems necessary, all manholes not completed shall be covered, sealed, plugged, etc. to prevent the inflow of storm water or other objectionable material, and to prevent animals and humans from getting into the manhole.

2. PRE-CAST CONCRETE

A. Pre-cast tub bottom sections of manholes shall be set on a crushed stone foundation or bedding according to the details shown on the plans. Care shall be exercised to assure true alignment and grade for the pipe openings.

The invert of the manhole shall be constructed of cement rich grout and shall be formed to true lines; grades and curvature to assure smooth flow through the manhole. The invert shall have a steel trowel finish.

Joints for pre-cast concrete manhole riser sections shall be made Watertight by use of bitumastic or rubber sealers or “O” ring gaskets. Both sides of the tongue and groove joint shall be painted with a bitumastic primer before assembly.

The bitumastic or rubber sealer shall be clean and pliable and shall deform under the pressure of joint closure to assure a complete water tight seal. Care shall be exercised to assure proper alignment of the joint. The walls of the completed manhole shall be straight and vertical.

B. Pre-cast eccentric cone sections and precast slab manhole tops with eccentrically located manway shall be set with the manway adjacent to the up stream side of the manhole. The joints between the cone or slab top and the manhole riser shall be sealed in the same manner as the joints between the riser section. Care shall be taken in placing the cone and or slab tops to assure the manhole ring and cover can be set to match the finished paving.

C. Pre-cast grade rings will be used, when required, to bring the manhole ring and cover up to the finished grade. Grade rings may be set using cement rich grout or bitumastic seal and such as Ram-Nek or approved equal. When cement rich grout is used, care shall be taken that the space between the cone or slab top and the first grade ring and between the grade rings are completely filled without voids.

When bitumastic sealer is used the joints shall be constructed in the same manner as the joints between the riser sections.

When pre-cast manholes with PVC or other approved polymer lining are called for on the plans and bid proposal and are furnished under this contract they shall be constructed as other pre-cast concrete manholes.

In addition the joints in the lining shall be sealed by hot air welding, use of epoxy coating, or other approved means.

3. CAST IN PLACE MANHOLE BASES

A. Cast in place manhole bases shall be used only where shown on the plans or as directed by the Engineer and shall be constructed in accord with the details shown on the plans.

B. Special care shall be taken in casting the surfaces that will mate with the first risersection to assure a smooth even fit and a watertight joint.

C. The first riser section to be used with cast in place manhole bases shall be castwithout tongue or groove. The joint between the riser section and the cast in place base shall be sealed with a bitumastic or rubber sealant in the same manner as the joints in the pre-cast riser sections.

D. Care shall be taken in forming the invert of the manhole around existing sewers to assure adequate opening for the insertion of a “go – no go” mandrel or other testing equipment and cleaning tools.

4. MANHOLE RING AND COVER

A. The tops of the manhole frame and cover (ring) shall be built to the grade shown on the plans. The cast iron frame shall be firmly embedded in mortar.

B. When pressure type manhole rings and cover are specified on storm sewer manholes they shall be bolted to the concrete slab top using the “L” bolts cast into the slab for this purpose. The joint between the ring and the concrete slab top shall be made watertight using a bitumastic or rubber seal and conforming to the requirements of these specifications.

5. CORRUGATED STEEL MANHOLES

A. Corrugated steel manholes shall be constructed in accord with the details shown on the plans and in accord with the applicable requirements for the construction of corrugated steel pipe sewers.

B. Care shall be taken during the placing of backfill around corrugated steel pipe manholes to maintain the horizontal and vertical alignment of the manhole.

C. Since full contact of the flat top slab with the cement stabilized backfill is critical the backfill shall be finished smooth and to the proper grade. A thin layer of cement rich grout shall be placed on the cement stabilized backfill immediately prior to placing the concrete slab top. The grout shall be sufficient t fill all voids between the backfill and the slab and of a consistency to be forced into the voids under the weight of the slab.

3.14 TESTING GRAVITY SEWER MAINS AND MANHOLES

A. Upon completion of the sewer construction including all wyes and service laterals and before any house drains or services are connected, all sewers shall be cleaned and lamped. All runs of sewer between manholes shall be straight and true. Leakage tests shall be made to determine the amount of ground water infiltration into the sewers. Infiltration tests shall be made when groundwater level is 18 inches or more above the top of the outside of the pipe. Measurement will be taken by means of a weir placed in the lines. The maximum allowable rate of leakage shall be 25 gallons per inch diameter per mile of pipe per 24 hours, for any section of pipe with a maximum total leakage of 200 gallons per mile per 24 hours for sanitary sewers with the exception that the maximum leakage for storm drains shall be 200 gallons per inch of diameter per mile per 24 hours with a total maximum leakage of 6,000 gallons per mile per 24 hours.

When the groundwater is not at sufficient height for infiltration testing the Contractor shall use exfiltration to test the sewer lines.

B. In lieu of the infiltration or exfiltration tests the Contractor may perform air tests on the sewers.

C. If the infiltration, exfiltration, or air tests fail to meet requirements specified herein, the Engineer reserves the right to request television work to be done to locate leaks. The Contractor shall furnish all materials and equipment necessary to accomplish all infiltration, exfiltration, air or television testing.

The Contractor shall receive no additional compensation for this testing or inspection work or for repairs of corrective work required to be done to the sewers. The exfiltration tests shall be used in areas where no ground water is present.

D. Test Procedure Hydrostatic (Exfiltration)

(1) The test section shall be bulk headed and the pipe subject to a hydrostatic pressure produced by a head of water at a depth of three (3) feet above the invert of the sewer at the upper manhole under test. In areas where ground water exists, this head of water shall be three feet above the existing water table.

(2) This head of water shall be maintained for a period of one hour during which it is presumed that full absorption of the concrete manhole body has taken place and thereafter for a further period of one (1) hour for the actual test of leakage. Fiber glass manholes are exempt from the one hour absorption requirement. During this one (1) hour test period, the measured maximum allowable rate of exfiltration for any section of sewer shall be the same as allowed for the infiltration test.

E. TEST PROCEDURE AIR

(1) Where the Contractor elects to air test, he shall perform these tests with equipment similar to Air-Loc equipment manufactured by Cherne Industrial, Inc. Hopkins, Minnesota.

(2) The air test shall be made when the sewer is clean. The line shall be plugged at each manhole with pneumatic balls. Low pressure air shall be introduced into the plugged line until the internal air pressure reaches 4.0 psig greater than the average

back pressure of any ground water pressure that may submerge the pipe. At least two (2) minutes shall be allowed for the air temperature to stabilize before readings are taken and the timing started.

(3) When testing pipes 14 inches and less in diameter between consecutive manholes, the portion being tested shall pass if it does not lose air at a rate to cause the pressure to drop from 4.0 to 3.0 psig (greater than the average back pressure of any groundwater that may submerge the pipe) in less time than listed as calculated from Table 1.

When testing pipes greater than 15 inches in diameter between consecutive manholes the portion being tested shall pass if it does not lose air at a rate to cause the pressure to drop from 3.5 psig 3.0 psig (greater than the average back pressure of any groundwater that may submerge the pipe) in less time than that shown in or calculated from Table II.

TABLE I
Specification Time Required for a 1.0 PSIG Pressure Drop for Size and Length of Pipe indicated for Q = 0.0015

Specification Time for Length (L) Shown (min: sec)											
1	2	3	4 (xL)	100 ft.	150 ft.	200 ft.	250 ft.	300 ft.	350 ft.	400 ft.	450 ft.
4	3:46	597	.380	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	.854	5:40	5:40	5:40	5:40	5:40	5:40	5:42	5:42
8	7:34	298	1.520	7:34	7:34	7:34	7:34:	7:36	8:52	10:08	11:24
10	9:26	239	2.374	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48
12	11:20	199	3.418	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38
15	14:10	159	5.342	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04
18	17:00	133	7.692	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41
21	19:50	114	10.470	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31
24	22:40	99	13.674	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33
27	25:30	88	17.306	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48
30	28:20	80	21.366	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	31:10	72	25.852	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	34:00	66	30.768	51:17	75:55	102.34	128:12	153:50	179:29	205:07	230:46

1. Pipe Diameter (in.)
Minimum Time (min:sec)
Length for Minimum Time (ft.)
Time for Longer Length (sec)

NOTE: When using column 4 multiply the number in column 4 opposite the pipe diameter by the length of pipe of that diameter and sum the times for the various pipe size in the run being tested. Computations shall include lengths for service connection laterals.

Table II
Specification Time Required for 0.5 PSIG Pressure Drop for Size and Length of Pipe Indicated for Q + 0.0015

Specification Time for Length (L) Shown (min: sec)											
1	2	3	4 (xL)	100 ft.	150 ft.	200 ft.	250 ft.	300 ft.	350 ft.	400 ft.	450 ft.
4	1:53	597	.190	1:53	1:53	1:53	1:53	1:53	1:53	1:53	1:53
6	2:50	398	.427	2:50	2:50	2:50	2:50	2:50	2:50	2:51	3:12
8	3:47	298	.760	3:47	3:47	3:47	3:47	3:48	4:26	5:04	5:42
10	4:43	239	1.187	4:43	4:43	4:43	4:57	5:56	6:55	7;54	8:54
12	5:40	199	1.709	5:40	5:40	5:40	7:08	8:33	9:58	11:24	12:50
15	7:05	159	2.671	7:05	7:05	8:54	11:08	13:21	15:35	17:48	20:02
18	8:30	133	3.846	8:30	9:37	12:49	16:01	19:14	22:26	25:38	28:51
21	9:55	114	5.235	9:55	13:05	17:27	21:49	26:11	30:32	34:54	39:16
24	11:20	99	6.837	11:24	17:57	22:48	28:30	34:11	39:53	45:35	51:17
27	12:45	88	8.653	14:25	21:38	28:51	36:04	43:16	50:30	57:42	46:54

30 33 36	14:10 15:35 17:00	80 72 66	10.683 12.926 15:384	17:48 21:33 25:39	26:43 32:19 38:28	35:37 43:56 51:17	44:31 53:52 64:06	53:25 64:38 75:55	62:19 75:24 89:44	71:13 86:10 102:34	80:07 96:57 115:23

1 Pipe Diameter (in.)
2 Minimum Time (min:sec)
3 Length for Minimum Time (ft.)
4 Time for Longer Length (sec)

NOTE: When using column 4 multiply the number in column 4 opposite the pipe diameter by the length of pipe of that diameter and sum the times for the various pipe size in the run being tested. Computations shall include lengths for service connection laterals. All service plugs shall be secured in place to prevent displacement during testing operation.

F: DEFLECTION TEST

Deflection tests shall be performed on all flexible pipe, the tests shall be conducted after the backfill has been in place at least 30 days. No pipe shall exceed a deflection of 5 percent. The deflection tests shall be run using a Go-No-Go mandrel having a diameter equal to 95 percent of the inside diameter of the pipe. The tests shall be performed without mechanical pulling device, any pipe not meeting the deflection test shall be excavated and re-bedded at no cost to the owner.

The Contractor at no additional cost to the owner shall furnish the Go-No-GO Mandrel.

Upon completion of all tests, the Contractor shall provide personnel to remove each manhole cover in the presence of the Engineer's representative for inspection and depth measurement.

G. TESTING SANITARY SEWER MANHOLES

All sanitary sewer manholes shall be tested for water tightness by one of the following methods.

Manholes, except those in streets scheduled for immediate paving, shall be complete, having all adjusting rings and cover rings in place and shall be backfilled prior to testing.

Manholes in streets scheduled for immediate paving shall be complete as described above except those acceptance tests shall be made at the top of the cone section.

(1.) Vacuum Test

a. General

This item will govern the testing of all sanitary sewer manholes. All connections to manholes including drop connections shall be in place before testing.

b. Equipment

Equipment for vacuum testing manholes shall be:
MANHOLE VACUUM TESTER as manufactured by:

P.A. Glazier, Inc.
P.O. Box 1002
Worcester, MA. 01613

Or

THE CHERNE AIR-LOC MANHOLE TESTER as manufactured by:

Cherne Industries, Inc.
5700 Lincoln Dr.
Minneapolis, MN 55436-1695

Or approved equal.

c. Preparation for Testing

All connections to the manhole; except plugged stubs for future line extensions, shall be plugged using suitable pneumatic plugs. Line plugs shall be placed at a point outside of the manhole wall (approximately 8" to 10" into the sewer pipe). Drop connections shall be plugged at a point up stream from the drop.
All plugs, pipe connections and plugged stub outs shall be adequately braced to prevent them being drawn into the manhole when vacuum is applied.

d. Testing

The contractor shall set the test equipment in place and operate it in accord with the manufacturer instructions. A copy of these instructions shall be kept on the job site and shall be available to the inspector when tests are performed. When equipment is properly set up a vacuum of 10" of mercury (Hg) shall be drawn and the vacuum line valve closed. After the vacuum pump is shut off the hose shall be disconnected before the test is started.

Note: Vacuum must be at 10" Hg when test is started. The contractor may wish to draw up to 10.5" Hg vacuum and then bleed back to 10" Hg before starting the test. The test shall pass when the minimum time for the vacuum to drop from 10" Hg to 9" Hg is greater than the time shown in the following table:

TABLE 1: Minimum test times for various manhole diameters.

	DIAMETER		
Depth Feet	48"	60"	72"
8'	0:20	0:26	0:33
10'	0:25	0:33	0:41
12'	0:30	0:39	0:49
14'	0:35	0:46	0:57
16'	0:40	0:52	1:05
18'	0:45	0:59	1:13
20'	0:50	1:05	1:21
* ADD	0:05	0:06.5	0:08

Any manhole that fails the test shall be repaired and retested until it passes the test.

e. Contractors Optional Test

The contractor, at his option may wish to test manholes before they are backfilled to assure himself that the manhole is sound.
Manholes that fail the test prior to being backfilled may be repaired under vacuum by coating the area of the leak with a liquid quick setting grout allowing the grout to be drawn into the opening until the leak is stopped.

Manholes will not be accepted on the bases of this test.

f. Fiberglass Manholes

Fiberglass manholes may be tested in the same manner as concrete manholes except that all repairs to the fiberglass body of the manhole shall be made using materials furnished by the manufacturer. Repairs shall be made in accord with the manufacturer instructions.

g. No separate payment will be made for vacuum testing of manholes, but the cost shall be considered incidental to furnishing and construction of manholes as bid in the bid proposal.

2. HYDROSTATIC TESTING

a. General

This item shall govern the hydrostatic testing of manholes and may be used as an alternative to vacuum testing by the contractor.

All connections to manholes including drop connections shall be in place prior to testing manholes.

b. Testing

All connections to the manhole, except plugged stubs installed for future line extensions, shall be plugged upstream from the drop.

Plugs in pipe connections must be placed outside the manhole wall (approximately 8” to 10” into the pipe).

The manhole shall then be filled to the top of the cast iron ring (or top of the cone section for manholes in streets scheduled for immediate paving) and allowed to stand for a minimum of one hour to allow for absorption by the components of the manhole. The inspector may extend the absorption period if it appears that the manhole has not reached a stable state.

The manhole shall then be refilled to the top of the ring (or cone) and allowed to stand for up to 24 hours.

The manhole shall be checked at the end of 4 hours and will be deemed to have passed if no perceptible loss has occurred – if loss has occurred the manhole will be checked after the 24 hour period and will be considered to have passed if loss does not exceed the following schedule

Depth Ft.	Loss Inches
0 - 10’	.2
10 – 20’	.4
20 - 30’	.6

c. No separate payment will be made for Hydrostatic Testing of manholes but the cost shall be considered as incidental to furnishing and constructing manholes as bid in the bid proposal.

H. TELEVISING NEW SEWER LINES

It is the city’s intention to televise all new sanitary sewer lines for record purposes.

Immediately after the contractor completes all testing of sanitary sewer lines and manholes he shall leave all manholes accessible for televising and make allowances for the city’s camera crews working on the project site.

The contractor at his own expense before final acceptance must correct any defects discovered during the televising of sanitary sewers.

3.15 RESTORATION

A. Whenever any surface improvements such as pavement, curbing, pedestrian walks, fencing, or turf have been removed, damaged or otherwise disturbed by the Contractor’s operations, they shall be repaired or replaced to the Engineers satisfaction, to restore the improvement in kind and structure to the pre-existing condition. Each item of restoration work shall be done as soon as practicable after completion of installation and backfilling operations on each section of pipeline.

B. In absence of specific payment provisions, as separate Contract Items, the restoration work shall be compensated for as part of the work required under those Contract Items, which necessitated the destruction and replacement or repair, and there will be no separate payment therefor. If separate pay items are provided for restoration work, only that portion of the repair or reconstruction, which was necessitated by the contract, will be measured for payment. Any improvements removed or damaged unnecessarily shall be replaced or repaired at the Contractor’s expense.

C. Turf restoration shall be accomplished by sod replacement except where seeding is specifically allowed or required.

Caliche or gravel surfaced streets and driveway shall be restored to their original condition by salvaging and replacing the pre-existing caliche or gravel. If the Contractor does not salvage sufficient material during excavation operation, he will be required to furnish material to restore the surface to the depth of the original section. This caliche or gravel restoration shall be considered a part of excavation and backfill and no extra compensation will be made.

E. Bituminous and concrete surfaced streets and driveways will be restored to equal or better condition than existed prior to sewer construction. Measurement will be made of the actual quantities required to be replaced by the sewer construction and paid for at the price bid in the appropriate bid items in the proposal.

No measurement or payment will be made for work done outside the lines considered necessary for sewer construction. The Contractor will be required to replace damage outside these lines at his own expense.

F. Reconstruction of caliche base courses and concrete or bituminous surface courses shall be in substantial compliance with all applicable City of Midland Specifications pertaining to the item being restored.

3.16 CLEANUP

After completing each section of the sewer line, the Contractor shall remove all debris, construction materials, and equipment from the site of the work, grade and smooth over the surface on both sides of the line and leave the entire right-of-way in a clean, neat, and serviceable condition. No separate compensation shall be made for clean up.

3.17 PAYMENT

A. General

Payment in accordance with the following items, at the unit price bid for the work, shall constitute full and complete payment for the entire project including all incidental terms necessary for the complete and successful prosecution of the work in accordance with the intent of the plans and specifications.

Materials and work required to complete the project for which there is no bid item in the bid proposal shall be considered as incidental and the cost shall be included in the prices bid for the various items in the bid proposal.

Where payment is to be made on a unit price basis, it shall be made on the actual measured quantities as constructed in the work.

B. Sewer Pipe in Place

Unit prices bid shall cover furnishing and installation of pipe and jointing materials, including tests and all other necessary work and material to install the pipe complete in place at the depth specified. The unit of work shall be the lineal foot of the various types and sizes as shown in the proposal form. The pipe installation shall be measured

along the centerline of the sewer from center to center of manholes with no deduction in footage for manholes, wye branches, riser bases or other structure.

C. Foundation Corrections Materials

Payment for foundation correction materials shall be made at the unit price bid per cubic yard for material furnished and placed to pro vide adequate pipe base in unstable soil. The unit price shall include extra excavation below pipe grade, the material, placing and tamping.

Additional material required to backfill excess depth of excavation caused by neglect or error on the part of the Contractor or wet conditions, shall be furnished and placed at his own expense.

Removal of Street Surfacing

The Contractor shall receive no extra compensation for the removal of street surfacing including cutting of a straight edge.

E. Trench Safety Systems, Sheeting and Shoring

Measurement: Trench Safety Systems shall be measured by the linear foot of "Trench Safety Systems": Payment for work prescribed under this item shall be full compensation for the Trench Safety Systems including any Engineering and/or consulting fees and any additional excavation and backfill required, for furnishing, placing, maintaining and removing all shoring, sheeting, or bracing; for de-watering or diversion of water; for all jacking and jack removal; and for all other labor, materials, tools, equipment and incidentals necessary to complete the work.

F. Manholes

Payment will be made for the various types of manholes at the unit prices bid for the various types of manholes 0 to 6' deep which price shall include excavation, furnishing and installing all materials pumping where necessary, and backfilling and all incidentals for the complete manhole in place. Measurement for manholes over 6 feet in depth shall be made of the depth of manhole in excess of six (6) feet. Manholes will be measured from the invert to the top of the casting as set.

Payment will be made for the manhole depth in excess of 6 feet at the vertical foot price bid in the bid proposal for extra depth of manhole over 6 feet for each type of manhole furnished.

G. Drop Connections to Manholes

Payment shall be made for drop connections to manhole for each drop connection made as counted in the field at the price bid in the proposal.

Said payment shall be complete compensation for furnishing all materials and fittings and making all connections to the manhole including 2' of vertical depth as measured from the invert of the incoming line to the invert of the manhole.

H. Drop Section for Manholes

Drop sections shall be paid for on a vertical footage basis as measured from the invert of the incoming line to the invert of the manhole less 2 feet and shall be paid for at the price bid per vertical foot for the various size drop connections in the bid proposal.

The price bid per vertical foot includes all fittings, granular material, if used and concrete and shall be full compensation for the complete in service drop connection.

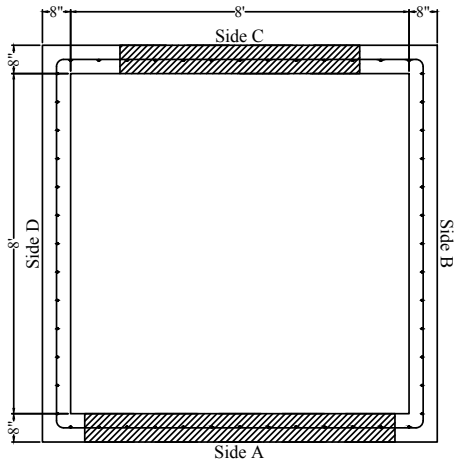
I. Service Lines

Service lines will be measured from centerline of the sewer main to the plug end and paid for at the unit price bid per linear foot of each type of pipe as specified and as shown on the typical details.

J. Barricading and Traffic Control

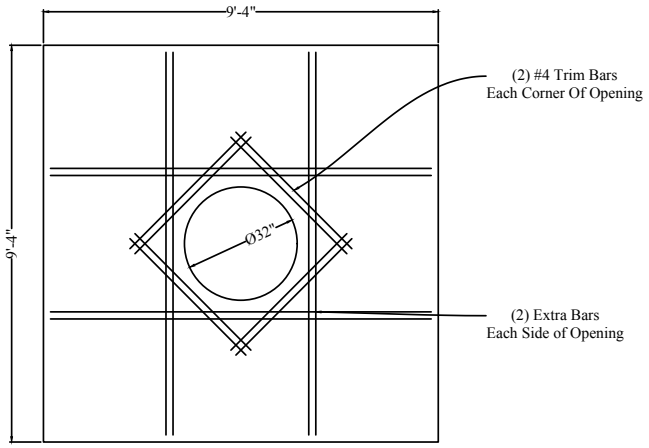
The lump sum price bid in the bid proposal shall be full compensation for furnishing flag persons when required and all barricades, signs and other barricading and traffic control devices and for furnishing barricading plans and erecting and maintaining all such devices and signs as required for the duration of the period.

Updated
08/07

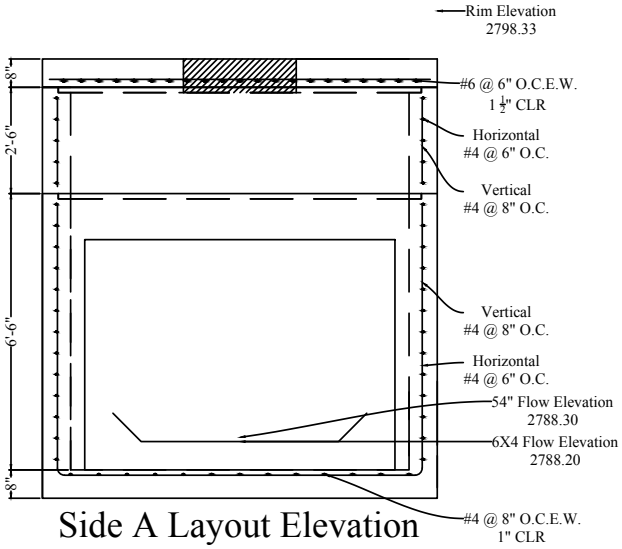


Plan View

(Top Not Shown)



Top Slab Plan View



Side A Layout Elevation

Individual Weights		
Base	2'-6" Riser	Top Slab
31250	8675	8175

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TSH	21-65960	02/22/22	48100#	R2	

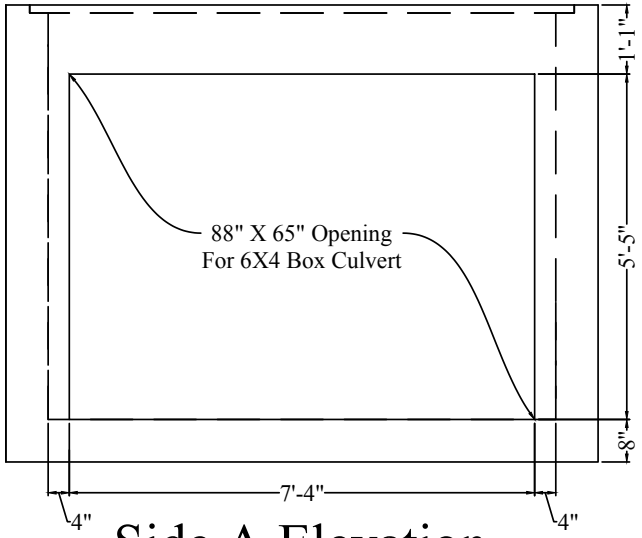
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8'-0" X 8'-0" Junction Box

JOB NAME: Garfield St
Midland, TX

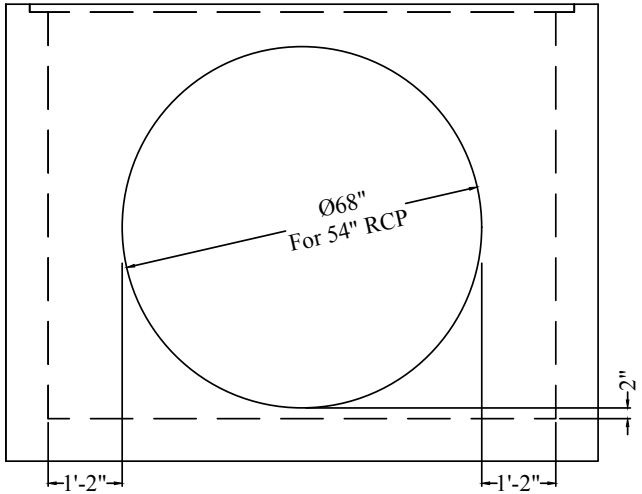
Turner Co.
P.O. Box 885
Rhome, TX 76078

Notes:
1. Concrete: Design Strength 5,000 PSI @ 28 Days
2. Reinforcement: ASTM A-615, Grade 60 or ASTM A-1064 Welded Wire Fabric
3. H-20 Rated
4. Product Tolerances are in Accordance With ASTM C913, Section 7

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Side A Elevation



Side C Elevation

Individual Weights		
Base	2'-6" Riser	Top Slab
31250	8675	8175

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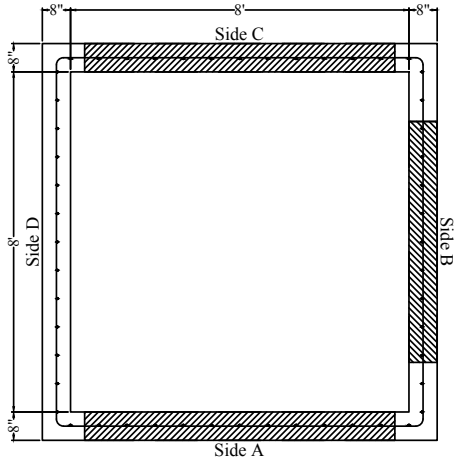
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Midland, TX

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Rhome, TX 76078

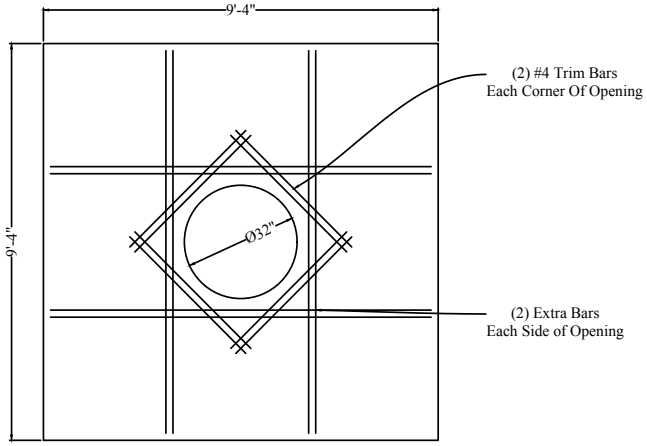
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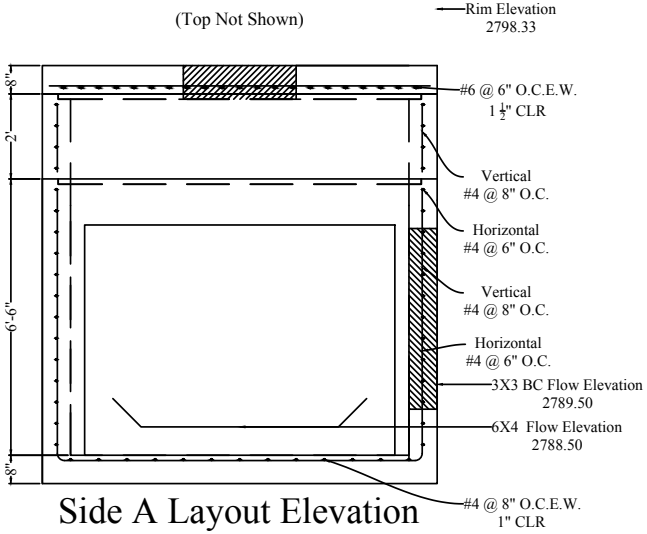


Plan View

(Top Not Shown)



Top Slab Plan View



Side A Layout Elevation

Individual Weights		
Base	2'-6" Riser	Top Slab
31250	8675	8175

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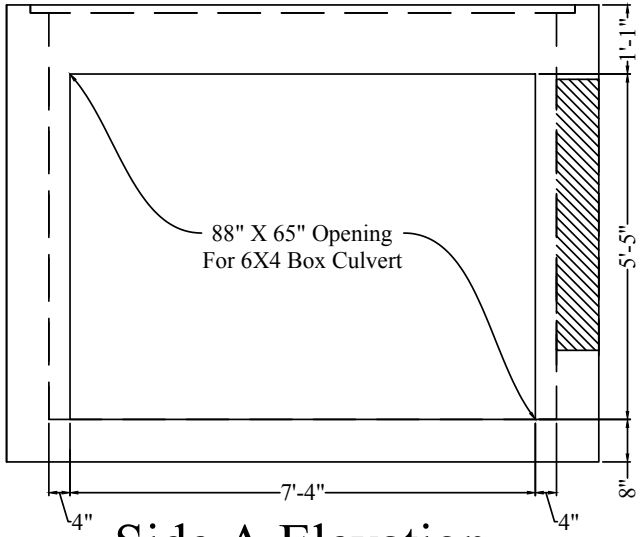
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8'-0" X 8'-0" Junction Box

JOB NAME: Garfield St
Midland, TX

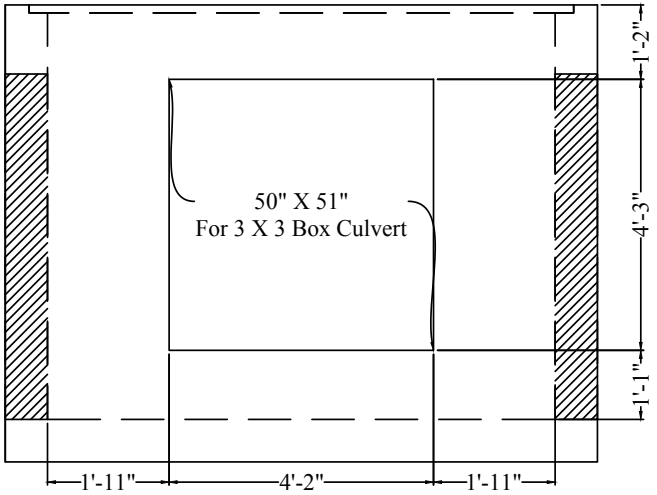
Turner Co.
P.O. Box 885
Rhome, TX 76078

Notes:
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2. Reinforcement: ASTM A-615, Grade 60 or ASTM A-1064 Welded Wire Fabric
3. H-20 Rated
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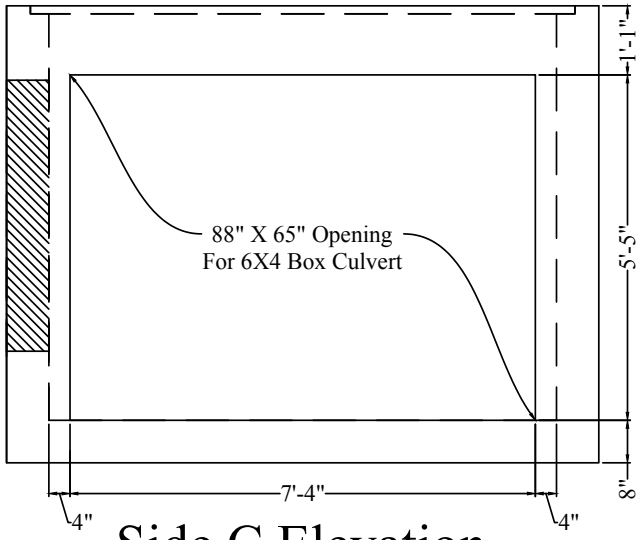
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Side A Elevation



Side B Elevation



Side C Elevation

Individual Weights		
Base	2'-6" Riser	Top Slab
31250	8675	8175

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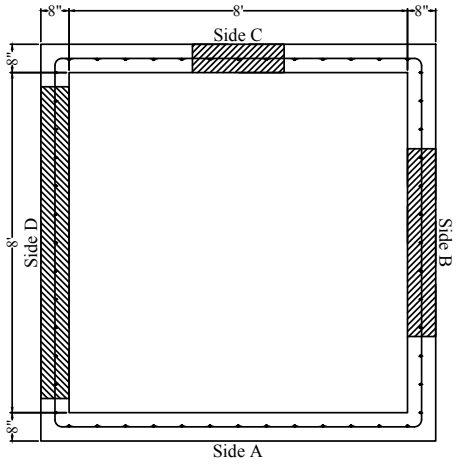
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Midland, TX

Turner Co.
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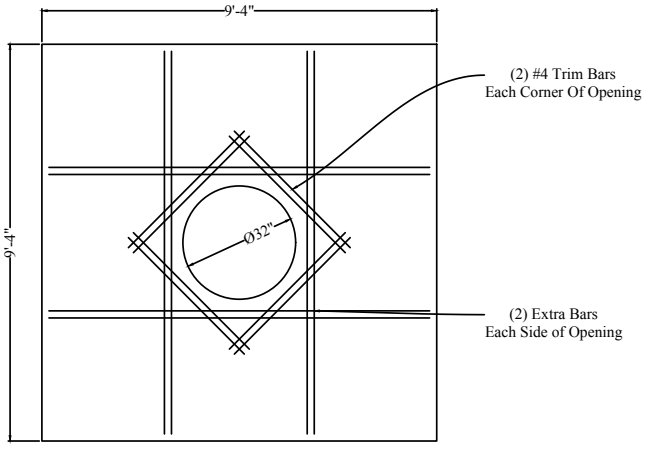
Notes:
1. Concrete: Design Strength 5,000 PSI @ 28 Days
2. Reinforcement: ASTM A-615, Grade 60 or ASTM A-1064 Welded Wire Fabric
3. H-20 Rated
4. Product Tolerances are in Accordance With ASTM C913, Section 7

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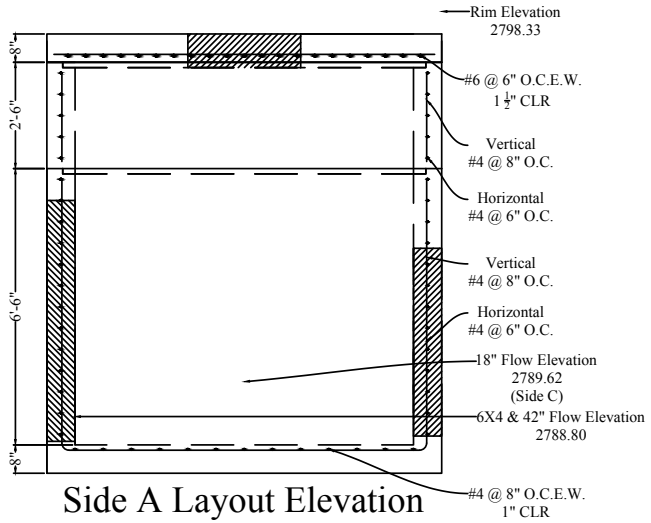


Plan View

(Top Not Shown)



Top Slab Plan View



Side A Layout Elevation

Individual Weights		
Base	2'-6" Riser	Top Slab
31250	8675	8175

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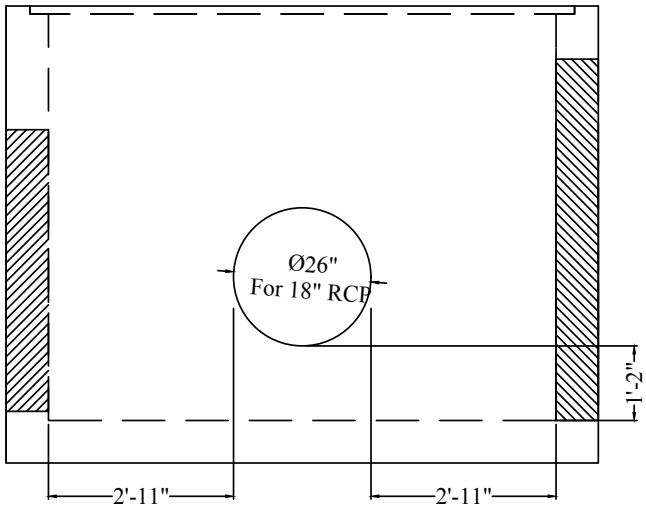
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Midland, TX

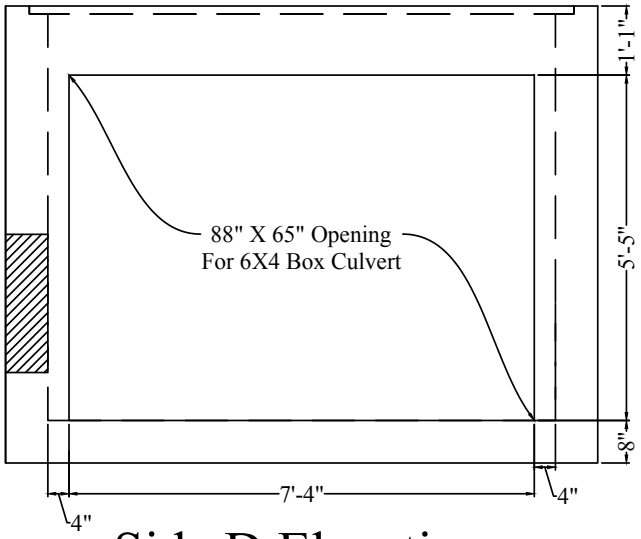
Turner Co.
P.O. Box 885
Rhome, TX 76078

Notes:
1. Concrete: Design Strength 5,000 PSI @ 28 Days
2. Reinforcement: ASTM A-615, Grade 60 or ASTM A-1064 Welded Wire Fabric
3. H-20 Rated
4. Product Tolerances are in Accordance With ASTM C913, Section 7

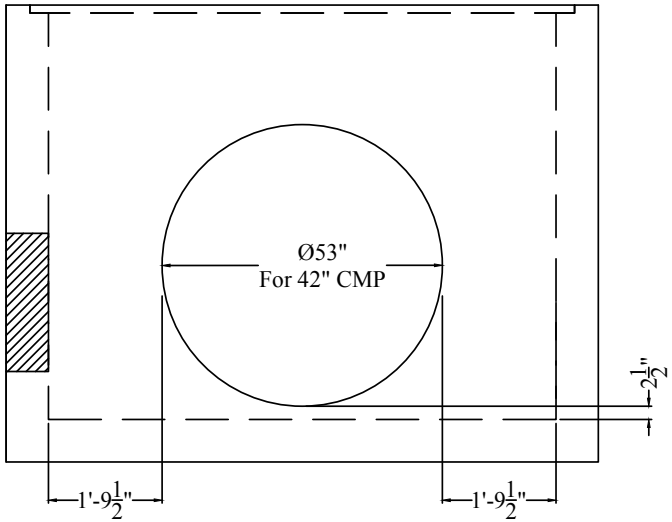
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Side C Elevation



Side D Elevation



Side B Elevation

Individual Weights		
Base	2'-6" Riser	Top Slab
31250	8675	8175

DRAWN BY:	JOB NO:	DATE:	WEIGHT:	Revision Number	Sheet 2 of 2
TSH	21-65960	02/22/22	48100#	R2	

PRODUCT: Station 1+88.00 SD Main 2
8'-0" X 8'-0" Junction Box

JOB NAME: Garfield St
Midland, TX

Notes:
1. Concrete: Design Strength 5,000 PSI @ 28 Days
2. Reinforcement: ASTM A-615, Grade 60 or ASTM A-1064 Welded Wire Fabric
3. H-20 Rated
4. Product Tolerances are in Accordance With ASTM C913, Section 7

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ADDENDUM #01
Project Number BPU18-02

TO ALL BIDDERS ON THE SUBJECT BID: Garfield Street Utility Bond Project – Break Out 02

ADDENDUM #01

DATE: January 6, 2023

1. Q/A and Clarification
2. Non-Mandatory Pre-Bid Meeting Agenda
3. Non-Mandatory Pre-Bid Meeting Attendance

PLEASE RETURN THIS ADDENDUM WITH YOUR BID BY THE CLOSING DATE.

All other terms and conditions shall remain the same.

Entrench, Inc
Company Name

Bidder Authorized Signature

1/10/2023
Date

Alberto Caballero
Please Print Above Name

575-492-1914
Phone

Garfield Street Utility Bond Project – Break Out 02
Project Number BPU18-02

Q/A and Clarification

During the Pre-Bid Meeting, the following questions were raised by one or more bidders. Below is a list of the questions along with the answers and clarifications.

Clarification: All addendum acknowledgement forms must be included with the bid for the bid to be considered complete. Bidders have sole responsibility for making sure they have and acknowledge all addendums provided for this project bid.

Clarification: Contractor must include documentation with the bid submittal proving that they possess an active license equivalent to or a higher class than a Water Operator D license and also an active license equivalent to or a higher class than either a Wastewater D license or a Class 1 Collections license.

Questions and Answers

1. Can the contract timeline be extended from 12 months to 18 months?
    A. Per the Special Provisions Item 21 *"Contract Deadline"* section of the project's Bid Packet, "Extensions of the project deadline may be requested by the Contractor for documented excepting conditions such as weather days, delays due to conflicts with existing franchise lines, etc. which are reasonably beyond the Contractor's control. Any and all deadline extensions must be submitted by the Contractor in writing to Engineer for review, and the approval or denial of the request rests solely with the Engineer."

Garfield Street Utility Bond Project – Break Out 02
Pre-Bid Meeting Agenda
Project No. BPU18-02
January 4, 2023

Discussion Items

1. Sign-In Sheet

2. Personnel Overview

   - Jose Ortiz – Director Engineering Services
   - Gabe McClelland – Senior Engineering Manager
   - Josh Ferguson – Assistant City Engineer
   - Bobby Wojciechowski – Capital Improvement Project Manager
   - Carl Craigo – Utilities Director
   - Rex Swearinger – Water & Wastewater Operations Superintendent, utility coordination
   - Taha Sakrani – Senior Traffic Engineer
   - Troy Clabaugh – Traffic Operations Superintendent
   - Jesse Trejo – Construction Manager, construction management & inspections
   - Madison Brasuell – Project Manager
   - Andy Navarro – Franchise Utility Coordinator
   - Michael Williams – Stormwater Manager
   - Natalie Burgard – Administrative Assistant, document processing & payments
   - Erika Martinez – Purchasing Manager, conduct bid process & bid opening

3. Project Overview and Scope
   - The project will include the removal, abandonment, replacement, relocation, and installation of existing and proposed storm drain, water, and wastewater infrastructure and appurtenances including all necessary mobilization, material storage and protection, saw-cutting, pavement removal, excavation, trenching, utility removal, utility abandonment, utility installation, embedment, backfill, pavement repair, sidewalk repair, erosion control, traffic control, and job site safety. Coordination with City of Midland staff and organizations such as OSHA, Midland Memorial Hospital, Midland Fire Department, Midland Independent School District, franchise utilities, and One Call (Texas 811) for notifications for pending work may be necessary to satisfactorily complete the work. Notifications to adjacent property owners, as directed by City of Midland staff, and all other work is to be performed as outlined in the Construction Drawings and Specifications.
4. Bid Process
   - Pre-Bid meeting attendance is non-mandatory to bid on this project.
   - ATTENTION: All questions submitted before or after the Non-Mandatory Pre-Bid Meeting must be submitted via email to the following email address:

bwojciechowski@midlandtexas.gov

- Purpose of bids is to establish unit prices.
- Quantities listed in the Proposal are not indicative of or guarantees of the actual project.
- Addendum distributed by email the Friday afternoon following the Pre-Bid Meeting.
  - The deadline to ask or send questions for the addendum is this Friday, January 6th, 2022 at Noon.
  - Questions asked after the Noon deadline will be directed to the information already provided in the bid documents or included in the Addendum.
- ATTENTION: Bidders are to submit bids either by mail or in person. If bidders choose to mail their bid packets in, then they are to mail the bid packet to one of the addresses listed below:

  USPS Mailing Address:
  City of Midland, Texas
  Attn: City Secretary's Office
  P.O. Box 1152
  Midland, TX 79702

  – OR –

  Physical Address for mail carriers other than USPS:
  City of Midland, Texas
  Attn: City Secretary's Office
  300 North Loraine St., Suite 330
  Midland, TX 79701

  If bid packets are delivered in person then bidders must drop the bid packets off at the first-floor front desk of City Hall before the bid opening deadline.

- **Bid Opening is Wednesday, January 11, 2023 at 2:00 PM** in the City of Midland Council Chambers located on the 1st Floor of Midland's City Hall.
  - The Bid Opening will be open to the public, and bidders are free to attend in person.
  - No late bids will be accepted.
  - Bidders must be willing to sign the contract as is.
  - Bidders must complete the conflict of interest forms if applicable.
  - Bidders must fill out all bid items in the Proposal. If bid items are left blank then the bid will be considered non-responsive.
  - Bidders have sole responsibility for making sure they have and acknowledge all addendums provided. If all acknowledgement forms are not included with the bid packet submittal then the bid will be considered non-responsive.

5. Notice to Proceed
   - Date of Notice to Proceed to be determined at the Pre-Construction Meeting.
   - Pre-Construction Meeting date will be set after the program bid is awarded.
6. Payment
   - Payment will be as described in the Bid Packet's Special Provisions, 4. Payment.
   - Payment and retainage (five percent, 5%) shall be per the General Conditions
   - Payment will be made for material installed, not for material delivery, for all Proposal Bid Items except those specifically listed below, which will be the only Proposal Bid Items to be paid upon material delivery for this project:
     - Water Bid Items: 1-10
     - Wastewater Bid Items: 1-6
     - Storm Drain Bid Items: 1-9, 11-12
   - Retainage will apply the same to all bid items and invoices regardless of whether an invoice is for bid items paid upon material delivery or not.

- Recommended that invoices state “Invoice Due Upon Receipt”, or have a due date that is two (2) weeks after the date the invoice is submitted.

7. Erosion Control Plan
   - The winning contractor must submit all TCEQ documentation etc., large or small site notice for linear projects. Please read all requirements in the Construction General Permit regarding linear projects and proper documentation. This is to be submitted to the City of Midland at least 2 days for small sites or 7 days for large site before ground is disturbed.
   - Contractor is required to place erosion control BMPs as needed and to regularly maintain any BMPs placed. Project site is to be kept reasonably clean, and any piles or spoils, backfill material, etc. are to always include sandbag BMPs or similar temporary erosion protection emplacements.
   - Contractor is required to remove all temporary BMPs placed at the end of the project. This is considered subsidiary to the overall project.

8. Address Project Specifics
   - City Inspector must be notified of all work occurring and be able to perform inspections on any construction or installation that occurs.
   - Typically work times are Monday – Friday from 8:00 AM – 5:00 PM. No work earlier than 7:00 AM or later than 8:00 PM without City permission unless for emergency conditions.
   - Work is not to occur on Sundays or legal holidays unless required for emergency situations.
   - Work is not to occur on Saturdays unless requested by Contractor in writing at least 48-hours in advance and approved by the City Engineer.
   - Contractor will be responsible for coordinating with Midland Memorial Hospital, Midland Independent School District, Midland Fire Department, and First Baptist Church to coordinate property access, etc. during the duration of the project.
   - The requirement for the Water and Wastewater License is included for this bid. Please make sure you submit proof of an active license in the bid packet.
   - The pay notes for project mobilization, job site safety, etc. are different from others in the past. This will be bid as a lump sum and paid on a prorated basis. Please prepare the bids accordingly.
   - Material stored on the project site must be properly stored and protected from damage and weathering.
   - Material that is not properly stored or protected that becomes damaged or weathered must be replaced by the Contractor with new material meeting the standards and requirements of the construction drawings and specifications before it can be installed at no additional cost to the City.
   - The winning contractor will need to coordinate with the City of Midland (Jesse Trejo) to shut down the intersection at Cuthbert and Garfield. Contractor will also need to coordinate with Jesse Trejo to approve all traffic control plans.
   - Contractor is to take particular care when working in the vicinity of Fire Station 5. This is an emergency response facility that must be able to enter and exit the property with large vehicles for the safety of the public, and this access must be maintained throughout the entirety of the project’s construction activity quickly and easily. The Contractor is expected to coordinate closely with the Fire Station 5 personnel and the City’s Inspector to achieve this result. Additionally, every precaution should be taken to keep the work area as secure and safe as possible when construction activity occurs near this location.
   - Contractor is to take particular care when working in the vicinity of San Jacinto Middle School. This area may potentially see considerable vehicle and pedestrian traffic, including numerous children, and every precaution should be taken to keep the work area as secure and safe as possible when construction activity occurs near this location.
   - Contractor is to take particular care when working in the vicinity of First Baptist Church. This area may potentially see considerable vehicle and pedestrian traffic, including numerous children, and every precaution should be taken to keep the work area as secure and safe as possible when construction activity occurs near this location.

- Contractor is to take particular care when working in the vicinity of Cowden Park along Princeton Avenue. This area may potentially see considerable pedestrian traffic, including children, heading to or from Cowden Park, and every precaution should be taken to keep the work area as secure and safe as possible when construction activity occurs near this location.
- Contractor is remined that this project is in an urban environment. Structures, trees, and overhead lines are common, and contractor is to provide proper equipment to complete all work required for this project in an urban environment.

9. Any Additional Questions

Please direct all questions or comments following the Pre-Bid Meeting to **Bobby Wojciechowski** with the City of Midland.

Engineering Services

Bobby Wojciechowski
Phone: (432) 685-7519
Email: bwojciechowski@midlandtexas.gov

Madison Brasuell
Phone: (432) 685-7289
Email: mbrasuell@midlandtexas.gov

Pre-Bid Meeting Attendance

BPU18-02

Garfield Street Utility Bond Project - Break Out 02

Date: 01.04.2023 - 3:00 PM

☑	Name *(Please Print)*	Company Name *(Please Print)*	Phone Number	Fax Number	Email
✓	Madison Brasuell	City of Midland	(432) 685-7289	-	mbrasuell@midlandtexas.gov
✓	Bobby Wojciechowski	City of Midland	(432) 685-7519	-	bwojciechowski@midlandtexas.gov
✓	Tyler Clutter	TEC	432-967-0032		tyler.clutter@tecexcavation.com
✓	Josh Ferguson	CoM	(432)685-7290	-	jferguson@midlandtexas.gov
✓	Kerry Koehler	COM	432.413.5132	-	kkoehler@midlandtexas.gov
	Taha Sakeem	CoM	685-7511		tsakeem@midlandtx.gov
	Carolina Jimenez	COM	685-7418		cjimenez@midlandtexas.gov

January 24, 2023

8.27

PACKET



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Be it known that

ADALBERTO CABALLERO

has fulfilled the requirements in accordance with the laws of the State of Texas for

CLASS D WATER OPERATOR

License Number: WO0047069
Issue Date: 04/26/2021
Expiration Date: 04/26/2024

Executive Director
Texas Commission on Environmental Quality



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Be it known that

ADALBERTO CABALLERO

has fulfilled the requirements in accordance with the laws of the State of Texas for

CLASS D WASTEWATER TREATMENT OPERATOR

License Number: **WW0066372**
Issue Date: **01/19/2021**
Expiration Date: **01/19/2024**

Executive Director
Texas Commission on Environmental Quality

GARFIELD STREET UTILITY BOND PROJECT
WATER, WASTEWATER, & STORM DRAIN IMPROVEMENTS
FROM GOLF COURSE RD TO MICHIGAN AVE
PROJECT NUMBER BPU18-02

BREAK OUT SET 02

SEPTEMBER 2022

NET LENGTH OF PROJECT = 3800 LF (APPROX.)

CONTRACTOR _____

DATE CONTRACTOR BEGINS

WORK _____

DATE WORK WAS COMPLETED _____

DATE WORK WAS ACCEPTED _____

FINAL CONTRACT COST _____

TEXT REMOVED

MAYOR

PATRICK PAYTON

COUNCIL MEMBERS

SCOTT DUFFORD	**DISTRICT 1**
JOHN NORMAN	**DISTRICT 2**
JACK LADD	**DISTRICT 3**
LORI BLONG	**DISTRICT 4**
DAN CORRALES	**AT LARGE**
ROBIN POOLE	**AT LARGE**

CITY MANAGER

ROBERT PATRICK

ENGINEERING SERVICES DIRECTOR

JOSE E. ORTIZ, P.E.

ASSISTANT CITY ENGINEER

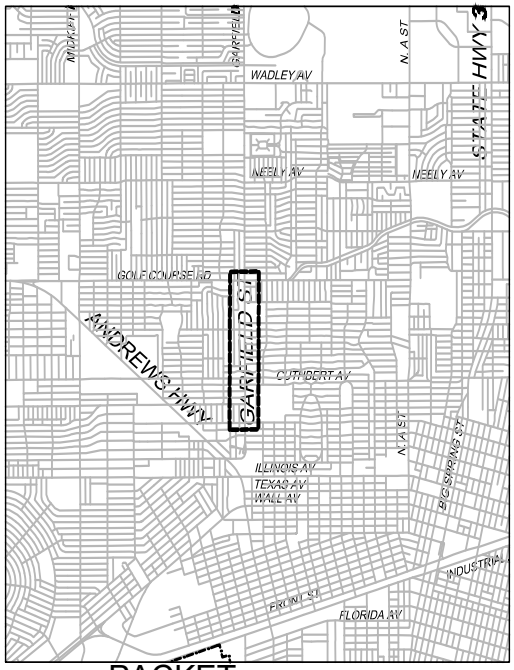
JOSHUA C. FERGUSON, P.E.

OFFICE: (432) 685-7286

CITY OF MIDLAND, 300 N. LORAINE ST., MIDLAND TX 79702

8.276

SHEET INDEX	
SHT. NO.	SHEET DESCRIPTION
1	TITLE SHEET
2-5	GENERAL NOTES
6-9	PROJECT LAYOUT SHEETS
~~9A~~	~~QUANTITY SUMMARY SHEET~~
10-15	REMOVAL PLANS
16	HORIZONTAL ALIGNMENT INFORMATION
17	EROSION CONTROL PLAN
19-27, 30	WATER MAIN PLAN-PROFILE SHEETS
31-39, 42	WASTEWATER MAIN PLAN-PROFILE SHEETS
45-59	STORM DRAIN PLAN-PROFILE SHEETS
60-76	STANDARD DETAILS
C01	GARFIELD ASPHALT TRENCH PAVEMENT REPLACEMENT DETAIL



LOCATION MAP
NO SCALE

PACKET

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

MIDLAND Engineering Services

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

AUTHORIZATION TO CONSTRUCT CITY INFRASTRUCTURE

The issuance or granting of this APPROVAL shall not be construed to be an authorization for any violation of any of the provisions of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction. APPROVALS presuming to give authority to violate or cancel the provisions of of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction shall not be valid. The issuance of this APPROVAL, based on the construction drawings and other data submitted to the Engineering Services Department shall not prevent the Director of Engineering Services Department from requiring the correction of errors in the construction drawings and other data. The Director of Engineering Services Department is authorized to deny acceptance or use of infrastructure where such infrastructure is in violation of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction.

GARFIELD ST. UTILITY IMPROVEMENTS

TITLE SHEET

1

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

January 24, 2023

GENERAL CONSTRUCTION NOTES:

1. THIS DESIGN IS FOR PUBLIC WATER MAIN, WASTEWATER MAIN AND STORM DRAIN IMPROVEMENTS ALONG GARFIELD STREET FROM GOLF COURSE DRIVE TO MICHIGAN AVENUE.

2. NEW WATER MAIN TO BE INSTALLED EIGHT (8') FEET INSIDE WEST EXISTING BACK-OF-CURB. NEW WASTEWATER MAIN TO INSTALLED EIGHT (8') FEET INSIDE EAST EXISTING BACK-OF-CURB. NEW STORM DRAIN MAIN TO BE INSTALLED ALONG CENTERLINE OF EXISTING ROADWAY UP TO STA. 25+00 WHERE IT SHIFTS TO FIVE (5') FEET TO THE WEST.

3. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF MIDLAND STANDARD CONSTRUCTION REQUIREMENTS, SPECIFICATIONS AND DETAILS WHEREVER APPLICABLE. ALL OTHER STANDARDS AND REQUIREMENTS ARE TO COMPLY WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS, REQUIREMENTS, AND STANDARDS. WHEREVER CITY OF MIDLAND STANDARDS AND FEDERAL OR STATE REQUIREMENTS DIFFER THE MORE RESTRICTIVE STANDARD, REQUIREMENT, OR REGULATION WILL GOVERN.

4. CONTRACTOR TO CONTACT ALL UTILITY COMPANIES IN THE AREA FOR FIELD VERIFICATION OF EXISTING FACILITIES.

5. THE EXISTING UTILITIES AND OTHER OBJECTS INDICATED IN THESE PLANS HAVE BEEN LOCATED USING CITY OF MIDLAND RECORDS, SITE INSPECTIONS, AND SPOT SURVEYS. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING FACILITIES SHOWN ON DRAWINGS PRIOR TO CONSTRUCTION AND NOTIFYING THE ENGINEER OF ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND THE PROJECT DESIGN.

6. THE LOCATION OF TELEPHONE, GAS, FIBER OPTIC, AND POWER COMPANY UTILITIES ARE SHOWN IN APPROXIMATE LOCATION ONLY. THE CONTRACTOR SHALL REQUEST THE EXACT LOCATION OF THESE FACILITIES BEFORE COMMENCING WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH OCCUR DUE TO HIS FAILURE TO REQUEST THE LOCATION AND PRESERVATION OF THESE UNDERGROUND FACILITIES.

7. CONTRACTOR SHALL "POTHOLE" ALL FIBER OPTIC AND GAS LINES AHEAD OF THE CONSTRUCTION CREWS TO LOCATE AND VERIFY EXISTING VERTICAL ELEVATIONS PRIOR TO START OF CONSTRUCTION. ALL COSTS ASSOCIATED WITH POTHOLING SHALL BE PAID FOR BY THE CONTRACTOR. ONE-CALL SHALL MARK LINE PRIOR TO POTHOLING.

8. ANY PERMANENT RELOCATION OF AN EXISTING UTILITY NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO RELOCATIONS AND SHALL CONFORM TO THE APPLICABLE GOVERNING STANDARDS AND SPECIFICATIONS OF THE CITY OF MIDLAND AND OTHER RELEVANT AGENCIES.

9. ANY ISSUES, CONFLICTS, OR DISCREPANCIES ENCOUNTERED IN THE FIELD THAT CONFLICT WITH THE DESIGN DRAWINGS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO MAKING ANY DESIGN CHANGES IN THE FIELD. ANY SUCH DESIGN CHANGES MUST FIRST BE APPROVED BY THE ENGINEER BEFORE BEING CONSTRUCTED.

10. OSHA REQUIREMENTS AND ALL OTHER APPLICABLE FEDERAL, STATE, OR CITY OF MIDLAND SAFETY REQUIREMENTS ARE TO BE FOLLOWED AND COMPLIED WITH AT ALL TIMES.

11. ALL WATER SERVICE LATERALS ARE TO BE REPLACED AS INDICATED IN THE CONSTRUCTION DRAWINGS, AND ALL WASTEWATER SERVICE LATERALS DAMAGED ARE TO BE REPLACED TO EQUAL OR BETTER CONDITION AT CONTRACTOR'S SOLE EXPENSE. RECONNECT ALL EXISTING WASTEWATER SERVICE LATERALS TO NEW WASTEWATER MAIN.

12. CONTRACTOR IS TO NOTIFY ALL AFFECTED PROPERTIES PRIOR TO ANY INTERRUPTION OF SERVICE OR ACCESS DUE TO ANY CONSTRUCTION ACTIVITY PERFORMED BY THE CONTRACTOR. SUCH NOTIFICATIONS ARE TO INCLUDE "DOOR KNOCKERS" SUPPLIED BY THE CITY AND PLACED BY THE CONTRACTOR.

13. CONTRACTOR SHALL BE RESPONSIBLE FOR AND ADEQUATELY PROTECT PRIVATE PROPERTY, EXISTING STRUCTURES, UTILITIES, TRESS, SHRUBS, AND OTHER ADJOINING FACILITIES, AND REPAIR OR REPLACE DUE TO DAMAGE CAUSED BY CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

14. CONTRACTOR SHALL PROVIDE A TRENCH SAFETY SYSTEM TO MEET, AS A MINIMUM, THE REQUIREMENTS OF OSHA SAFETY AND HEALTH REGULATIONS, PART 1926, SUBPART P AS PUBLISHED IN THE FEDERAL REGISTER, VOLUME 54, NO. 209, DATED OCTOBER 31, 1989, INCLUDING THE MOST CURRENT REVISION.

15. CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED ½" STEEL PLATES DURING NON-WORKING HOURS.

16. CONTRACTOR SHALL VERIFY THAT BENCHMARKS HAVE NOT BEEN DISTURBED. IF ANY DISCREPANCY IS FOUND, CONTACT THE ENGINEER IMMEDIATELY.

17. ALL CONSTRUCTION MATERIAL STORED ON SITE INTENDED FOR PERMANENT INSTALLATION IS TO BE PROTECTED FROM DAMAGE AT ALL TIMES INCLUDING DAMAGE FROM WEATHER, UV, CONSTRUCTION ACTIVITY, ETC. AND IS TO BE REPLACED PRIOR TO INSTALLATION BY THE CONTRACTOR IF SUCH DAMAGE OCCURS AT CONTRACTOR'S SOLE EXPENSE.

18. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ALL EXCAVATED MATERIAL AND DEBRIS FROM THE SITE AT NO ADDITIONAL EXPENSE TO THE OWNER.

19. ALL SAW-CUTTING IS TO HAVE CLEAN, STRAIGHT EDGES AND IS CONSIDERED INCIDENTAL TO ALL PAVEMENT REMOVAL.

20. ALL CONCRETE REINFORCEMENT IS TO BE INSTALLED AT A RATE OF 1.5-LBS OF FIBER REINFORCEMENT PER EVERY 1.0-CY OF CONCRETE PLACED UNLESS OTHERWISE STATED IN THE CONSTRUCTION DRAWINGS.

21. CONTRACTOR IS TO COORDINATE WITH THE MIDLAND WATER AND WASTEWATER UTILITIES DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO CUTTING OR CONNECTING TO EXISTING UTILITY MAINS OR LINES.

22. CONTRACTOR MUST NOTIFY ALL PROPERTY OWNERS OF ANY PLANNED SERVICE INTERRUPTION NO LESS THAN TWO (2) BUSINESS DAYS PRIOR TO ANY SUCH SERVICE INTERRUPTION. THE CONTRACTOR MUST OBTAIN PERMISSION FROM THE ENGINEER FOR THE DATES OF THE PLANNED SERVICE INTERRUPTION BEFORE NOTIFYING PROPERTY OWNERS.

23. ALL HORIZONTAL SEPARATION DIMENSIONS BETWEEN NEW AND EXISTING UTILITIES ARE APPROXIMATE.

24. ALL PROPOSED PUBLIC UTILITIES ARE TO CONNECT TO THE EXISTING PUBLIC UTILITY SYSTEMS REGARDLESS OF THE DIMENSIONS SHOWN.

25. CONTRACTOR IS TO PERFORM PRE AND POST-CONSTRUCTION TELEVISION INSPECTION OF THE EXISTING AND INSTALLED WASTEWATER MAINS AND STORM DRAINS IN ACCORDANCE WITH THE PROJECT TECHNICAL SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING TELEVISION EQUIPMENT AND PROVIDING VIDEO RECORDING TO THE CITY.

26. EXISTING STAND-UP CURBS ARE 7.0" CURBS RATHER THAN CURRENT 6.0" CITY STANDARD CURBS IN THIS AREA. MATCH EXISTING CURB HEIGHT THROUGHOUT IF CURB INSTALLATION, REPLACEMENT, OR REPAIRS IS NEEDED.

27. PRESSURE INDICATOR RINGS ARE REQUIRED FOR ALL FIRE HYDRANTS IN COMPLIANCE WITH CITY FIRE, INCLUDING ALL REQUIRED FIRE FLOW TESTING. FIRE FLOW TESTING IS SUBSIDIARY TO PROJECT SCOPE.

28. FRANCHISE LINES TO BE LOWERED 2' MIN. BELOW WATER IF IN WAY UNLESS 6" OR LARGER IN DIAMETER.

LEGEND

- EMH = EX. ELECTRIC MANHOLE
- FH = EX. FIRE HYDRANT
- GM = EX. GAS METER
- LP = EX. LIGHT POLE
- MB = EX. MAIL BOX
- PP = EX. POWER POLE
- MH = EX. WASTEWATER MANHOLE
- WM = EX. WATER METER
- WV = EX. WATER VALVE
- — X — = EX. FENCE LINE
- — OE — = EX. OVERHEAD ELECTRIC
- — G — = EX. GAS LINE
- — S — = EX. WASTEWATER MAIN/ LATERAL
- — T — = EX. UNDERGROUND TELEPHONE
- — W — = EX. WATER MAIN/ LATERAL

- ——— = PROP. WATER MAIN/ LATERAL
- = PROP.WATER CROSS
- = PROP. WATER TEE
- = PROP. FIRE HYDRANT
- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- = PROP. STORMDRAIN MANHOLE
- = PROP. WASTE WATER MANHOLE

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

PARKHILL, SMITH & COOPER, INC. TEXAS REGISTERED ENGINEERING FIRM F-450
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

GARFIELD ST.
GENERAL NOTES
SHEET 1 OF 4

2

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

EROSION CONTROL PLAN:

1. UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) GENERAL PERMIT, THE CONTRACTOR IS TO DEVELOP AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE PROJECT, AND PROVIDE ALL REQUIRED ENVIRONMENTAL CONTROLS DURING THE CONSTRUCTION ACTIVITIES. WHERE APPLICABLE, THE CONTRACTOR IS TO UTILIZE THE CITY OF MILDAND'S STANDARD EROSION CONTROL DETAILS. UPON COMPLETION, CONTRACTOR SHALL FILE THE NOTICE OF TERMINATION (NOT).

2. INSTALL EROSION CONTROL MEASURES PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY ON PROJECT SITE.

3. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AT THE SOLE DISCRETION OF THE ENGINEER. IF AT ANY TIME THE ENGINEER BELIEVES THE EXISTING EROSION CONTROL MEASURES ARE INSUFFICIENT FOR THE NEEDS OF THE PROJECT SITE.

4. CONTRACTOR WILL INSTALL BEST MANAGEMENT PRACTICES (BMP'S) AS SHOWN ON CONSTRUCTION DRAWINGS AND IN ACCORDANCE WITH INDUSTRY STANDARDS AND REGULATIONS.

5. CONTRACTOR IS TO COMPLY WITH THE TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (TCEQ) STORM WATER MANAGEMENT PROGRAM (SWMP).

6. CONTRACTOR SHALL IMPLEMENT SOIL STABILIZATION PRACTICES, STRUCTURAL EROSION AND SEDIMENT CONTROLS, POLLUTION PREVENTION, AND SITE SPILL RESPONSE BEST MANAGEMENT PRACTICES, AND SITE INSPECTIONS IN ACCORDANCE WITH STORM WATER POLLUTION PREVENTION PLAN (SWP3 OR SWPPP) REQUIREMENTS AND CONSTRUCTION DRAWINGS.

7. WATER PUMPED OFF THE PROJECT MUST HAVE SEDIMENT AND ANY OTHER SOLIDS IN SUSPENSION REMOVED BEFORE DISCHARGING.

8. PROVIDE, PLACE, AND MAINTAIN EROSION CONTROL PROTECTION AT GUTTER LOCATIONS AT LIMITS OF WORK ZONE, INCLUDING INTERSECTIONS ADJACENT TO WORK ZONE. PROVIDE, PLACE, AND MAINTAIN EROSION CONTROL PROTECTION AT STORM DRAIN INLETS THAT ARE LOCATED WITHIN WORK ZONE.

9. DAMAGES TO ADJACENT PROPERTY OR TO RECEIVING WATERS CAUSED BY IMPROPERLY INSTALLED OR POORLY MAINTAINED EROSION CONTROL MEASURES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

10. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ANY OFF-SITE SILTATION CAUSED BY THE CONTRACTORS CONSTRUCTION OPERATIONS AND/OR FAILURE OF EROSION CONTROL MEASURES, AT NO ADDITIONAL COST TO THE CITY.

11. CONTRACTOR MUST REMOVE AND PROPERLY DISPOSE OF ACCUMULATED SILT AND SEDIMENT FROM EROSION CONTROLS WHEN IT REACHES A DEPTH EQUAL TO HALF THE HEIGHT OF THE CONTROL, OR IMPAIRS THE EFFECTIVENESS OF THE CONTROL.

12. CONTRACTOR IS TO INSPECT THE PROJECT AT A MINIMUM OF EVERY 14 DAYS AND AFTER EVERY RAINFALL OF ½ INCHES OR GREATER TO DETERMINE THE INTEGRITY AND EFFECTIVENESS OF THE EROSION CONTROL MEASURES. CONTRACTOR IS TO PREPARE A WRITTEN INSPECTION REPORT TO BE FILED WITH THE PROJECT RECORD DOCUMENTS.

13. ALL STOCKPILED SOILS ARE TO BE SURROUNDED BY SILT FENCE, OR EQUIVALENT MEASURE AS APPROVED BY ENGINEER, TO PROPERLY CONTROL SEDIMENT RUNOFF.

14. CONTRACTOR IS TO TAKE NECESSARY MEASURES TO MINIMIZE OFFSITE TRACKING OR TRANSPORT OF SEDIMENT AND DEBRIS. ANY CONSTRUCTION DEBRIS (MUD, GRAVEL, ETC.) THAT FALLS ONTO AN ADJACENT AREA MUST BE PROMPTLY REMOVED AT NO ADDITIONAL COST TO THE CITY.

15. ALL TEMPORARY EROSION CONTROL MEASURES MUST BE REMOVED FROM THE SITE UPON COMPLETION OF CONSTRUCTION WHEN STABILIZED.

16. CONCRETE TRUCKS CANNOT UNDER ANY CIRCUMSTANCE WASHOUT IN THE UTILITY TRENCHES. CONTRACTOR IS TO PROVIDE A WASHOUT CONTAINER FOR CONCRETE TRUCKS AND MUST REMOVE ALL WASHOUT AND SPOILS FROM THE PROJECT SITE. LOCATE CONCRETE WASHOUT WITHIN PROJECT AREA AND SHIFT AS NECESSARY FOR CONSTRUCTION ACTIVITY.

17. CONTRACTOR MUST REPAIR AND STABILIZE ANY LAWN OR PRIVATE PROPERTY DAMAGED OR DESTABILIZED BY CONSTRUCTION ACTIVITY TO EQUAL OR BETTER CONDITION THAN EXISTING. THIS INCLUDES ANY NECESSARY SEEDING, WATERING, ETC. AND IS SUBSIDIARY TO THE PROJECT.

CONSTRUCTION PHASING:

1. CONTRACTOR SHALL START BY INSTALLING THE PROPOSED 12" WASTEWATER MAIN EIGHT (8') FEET INSIDE OF THE BACK OF THE EXISTING EAST CURB LINE, INCLUDING ALL CONNECTIONS TO EXISTING WASTEWATER LINES AND WASTEWATER SERVICES. CONTRACTOR SHALL VERIFY FLOWLINE OF EXISTING 21" SANITARY SEWER MAIN IN GOLF COURSE ROAD PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF THERE IS A DISCREPANCY WITH THE EXISTING FLOWLINE ELEVATION SHOWN ON THE PLANS.

2. UPON COMPLETION, TESTING AND APPROVAL OF THE PROPOSED 12" WASTEWATER MAIN, THE CONTRACTOR SHALL REMOVE ALL EXISTING SANITARY SEWER MANHOLES AND FILL ABANDONED LINES WITH FLOWABLE FILL 2-SACK AND CAPPED AT ENDS. THE EXISTING 12" WASTEWATER MAIN IS TO BE ABANDONED IN PLACE UNLESS REMOVED DUE TO CONSTRUCTION OF OTHER UTILITIES.

3. ONCE THE 12" WASTEWATER MAIN IS COMPLETE, THE CONTRACTOR SHALL INSTALL THE PROPOSED 12" WATER MAIN EIGHT (8') FEET INSIDE OF THE BACK OF THE EXISTING WEST CURB LINE, INCLUDING ALL CONNECTIONS TO THE EXISTING WATER LINES AND WATER SERVICES. ALL EXISTING WATER METERS AND BOXES ARE TO BE REPLACED.

4. UPON COMPLETION, TESTING AND APPROVAL OF THE PROPOSED 12" WATER MAIN, THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL EXISTING FITTINGS, VALVES AND VALVE BOXES FROM THE EXISTING WATER MAIN. THE EXISTING 12" WATER MAIN IS TO BE ABANDONED IN PLACE AND FILLED WITH FLOWABLE FILL 2-SACK, UNLESS REMOVED DUE TO CONSTRUCTION OF OTHER UTILITIES.

5. THE PROPOSED 3'x3' BOX CULVERT AND INLETS SHALL BE INSTALLED AFTER BOTH THE PROPOSED 12" WATER MAIN AND 12" WASTEWATER MAIN HAVE BEEN INSTALLED. THE PROPOSED 3'x3' BOX CULVERT WILL BE INSTALLED ALONG THE CENTERLINE OF THE EXISTING ROADWAY. A NEW FIVE (5') FOOT CONCRETE VALLEY GUTTER WILL BE INSTALLED WITH THE SUBSEQUENT GARFIELD ROADWAY PAVING PROJECT.

CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEERING

PARKHILL SMITH & COOPER TEXAS REGISTERED ENGINEERING FIRM F-5600
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

GARFIELD ST.
GENERAL NOTES
SHEET 2 OF 4

3

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

WATER MAIN INSTALLATION:

THE WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS, TITLE 30 TEXAS ADMINISTRATIVE CODE, CHAPTER 290, SUBCHAPTER D.

ALL NEWLY INSTALLED PIPE AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL SANITATION FOUNDATION (ANSI/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.

TITLE 30, CHAPTER 290, SUBCHAPTER D, RULE 290.44(E)(4)(A) NEW WATERLINE INSTALLATION – PARALLEL LINES

(i) WHERE A NEW POTABLE WATERLINE PARALLELS AN EXISTING, NON-PRESSURE OR PRESSURE RATED WASTEWATER MAIN OR LATERAL AND THE LICENSED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS IS ABLE TO DETERMINE THAT THE EXISTING WASTEWATER MAIN OR LATERAL IS NOT LEAKING, THE NEW POTABLE WATERLINE SHALL BE LOCATED AT LEAST TWO FEET ABOVE THE EXISTING WASTEWATER MAIN OR LATERAL, MEASURED VERTICALLY, AND AT LEAST FOUR FEET AWAY, MEASURED HORIZONTALLY, FROM THE EXISTING WASTEWATER MAIN OR LATERAL. EVERY EFFORT SHALL BE EXERTED NOT TO DISTURB THE BEDDING AND BACKFILL OF THE EXISTING WASTEWATER MAIN OR LATERAL.

(ii) WHERE A NEW POTABLE WATERLINE PARALLELS AN EXISTING PRESSURE-RATED WASTEWATER MAIN OR LATERAL AND IT CANNOT BE DETERMINED BY THE LICENSED PROFESSIONAL ENGINEER IF THE EXISTING LINE IS LEAKING, THE EXISTING WASTEWATER MAIN OR LATERAL SHALL BE REPLACED WITH AT LEAST 150 PSI PRESSURE-RATED PIPE. THE NEW POTABLE WATERLINE SHALL BE LOCATED AT LEAST TWO FEET ABOVE THE NEW WASTEWATER LINE, MEASURED VERTICALLY, AND AT LEAST FOUR FEET AWAY, MEASURED HORIZONTALLY, FROM THE REPLACED WASTEWATER MAIN OR LATERAL.

TITLE 30, CHAPTER 290, SUBCHAPTER D, RULE 290.44(E)(4)(B) NEW WATERLINE INSTALLATION – CROSSING LINES

(i) WHERE A NEW POTABLE WATERLINE CROSSES ABOVE A WASTEWATER MAIN OR LATERAL, THE SEGMENT OF THE WATERLINE PIPE SHALL BE CENTERED OVER AND MUST BE PERPENDICULAR TO THE WASTEWATER MAIN OR LATERAL SUCH THAT THE JOINTS OF THE WATERLINE PIPE ARE EQUIDISTANT AND AT LEAST NINE FEET HORIZONTALLY FROM THE CENTERLINE OF THE WASTEWATER MAIN OR LATERAL. WHEN CROSSING AN EXISTING WASTEWATER MAIN OR LATERAL AND IT IS DISTURBED OR SHOWS SIGNS OF LEAKING, THE WASTEWATER MAIN OR LATERAL SHALL BE REPLACED FOR AT LEAST NINE FEET IN BOTH DIRECTIONS (18 FEET TOTAL) WITH AT LEAST 150 PSI PRESSURE-RATED PIPE EMBEDDED IN CEMENT STABILIZED SAND (SEE CLAUSE (V) OF THIS SUBPARAGRAPH) FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END.

I. THE POTABLE WATERLINE SHALL BE AT LEAST TWO FEET ABOVE AN EXISTING, NON-PRESSURE RATED WASTEWATER MAIN OR LATERAL.

II. THE POTABLE WATERLINE SHALL BE AT LEAST SIX INCHES ABOVE AN EXISTING, PRESSURE-RATED WASTEWATER MAIN OR LATERAL.

(ii) WHERE A NEW POTABLE WATERLINE CROSSES A NEW, NON-PRESSURE RATED WASTEWATER MAIN OR LATERAL, THE SEGMENT OF THE WATERLINE PIPE SHALL BE CENTERED OVER AND SHALL BE PERPENDICULAR TO THE WASTEWATER MAIN OR LATERAL SUCH THAT THE JOINTS OF THE WATERLINE PIPE ARE EQUIDISTANT AND AT LEAST NINE FEET HORIZONTALLY FROM THE CENTERLINE OF THE WASTEWATER MAIN OR LATERAL. THE POTABLE WATERLINE SHALL BE AT LEAST TWO FEET ABOVE THE WASTEWATER MAIN OR LATERAL. WHENEVER POSSIBLE, THE CROSSING SHALL BE CENTERED BETWEEN THE JOINTS OF THE WASTEWATER MAIN OR LATERAL. THE WASTEWATER PIPE SHALL HAVE A MINIMUM PIPE STIFFNESS OF 115 PSI AT 5.0% DEFLECTION. THE WASTEWATER MAIN OR LATERAL SHALL BE EMBEDDED IN CEMENT STABILIZED SAND (SEE CLAUSE (V) OF THIS SUBPARAGRAPH) FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE MATERIALS AND METHOD OF INSTALLATION SHALL CONFORM TO ONE OF THE FOLLOWING OPTIONS:

II. WITHIN NINE FEET HORIZONTALLY OF EITHER SIDE OF THE WATERLINE, THE WASTEWATER PIPE AND JOINTS SHALL BE CONSTRUCTED WITH PIPE MATERIAL HAVING A MINIMUM PRESSURE RATING OF AT LEAST 150 PSI. AN ABSOLUTE MINIMUM VERTICAL SEPARATION DISTANCE OF TWO FEET SHALL BE PROVIDED. THE WASTEWATER MAIN OR LATERAL SHALL BE LOCATED BELOW THE WATERLINE.

II. ALL SECTIONS OF WASTEWATER MAIN OR LATERAL WITHIN NINE FEET HORIZONTALLY OF THE WATERLINE SHALL BE ENCASED IN AN 18-FOOT (OR LONGER) SECTION OF PIPE. FLEXIBLE ENCASING PIPE SHALL HAVE A MINIMUM PIPE STIFFNESS OF 115 PSI AT 5.0% DEFLECTION. THE ENCASING PIPE SHALL BE CENTERED ON THE WATERLINE AND SHALL BE AT LEAST TWO NOMINAL PIPE DIAMETERS LARGER THAN THE WASTEWATER MAIN OR LATERAL. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT (OR LESS) INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED EACH END OF THE CASING SHALL BE SEALED WITH WATERTIGHT NON-SHRINK CEMENT GROUT OR A MANUFACTURED WATERTIGHT SEAL. AN ABSOLUTE MINIMUM SEPARATION DISTANCE OF SIX INCHES BETWEEN THE ENCASEMENT PIPE AND THE WATERLINE SHALL BE PROVIDED. THE WASTEWATER LINE SHALL BE LOCATED BELOW THE WATERLINE.

(iii) WHEN A NEW WATERLINE CROSSES UNDER A WASTEWATER MAIN OR LATERAL, THE WATERLINE SHALL BE ENCASED AS DESCRIBED FOR WASTEWATER MAINS OR LATERALS IN CLAUSE (II) OF THIS SUBPARAGRAPH OR CONSTRUCTED OF DUCTILE IRON OR STEEL PIPE WITH MECHANICAL OR WELDED JOINTS AS APPROPRIATE. AN ABSOLUTE MINIMUM SEPARATION DISTANCE OF ONE FOOT BETWEEN THE WATERLINE AND THE WASTEWATER MAIN OR LATERAL SHALL BE PROVIDED. WHEN A NEW WATERLINE CROSSES UNDER A WASTEWATER MAIN, THE PROCEDURES IN §217.53(D) OF THIS TITLE (RELATING TO PIPE DESIGN) MUST BE FOLLOWED.

(iv) WHERE A NEW POTABLE WATERLINE CROSSES A NEW, PRESSURE RATED WASTEWATER MAIN OR LATERAL, ONE SEGMENT OF THE WATERLINE PIPE SHALL BE CENTERED OVER AND SHALL BE PERPENDICULAR TO THE WASTEWATER LINE SUCH THAT THE JOINTS OF THE WATERLINE PIPE ARE EQUIDISTANT AND AT LEAST NINE FEET HORIZONTALLY FROM THE CENTER LINE OF THE WASTEWATER MAIN OR LATERAL. THE POTABLE WATERLINE SHALL BE AT LEAST SIX INCHES ABOVE THE WASTEWATER MAIN OR LATERAL. WHENEVER POSSIBLE, THE CROSSING SHALL BE CENTERED BETWEEN THE JOINTS OF THE WASTEWATER MAIN OR LATERAL. THE WASTEWATER PIPE SHALL HAVE A MINIMUM PRESSURE RATING OF AT LEAST 150 PSI. THE WASTEWATER MAIN OR LATERAL SHALL BE EMBEDDED IN CEMENT STABILIZED SAND (SEE CLAUSE (V) OF THIS SUBPARAGRAPH) FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END.

(v) WHERE CEMENT STABILIZED SAND BEDDING IS REQUIRED, THE CEMENT STABILIZED SAND SHALL HAVE A MINIMUM OF 10% CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 BAGS OF CEMENT PER CUBIC YARD OF MIXTURE). THE CEMENT STABILIZED SAND BEDDING SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER MAIN OR LATERAL. THE USE OF BROWN COLORING IN CEMENT STABILIZED SAND FOR WASTEWATER MAIN OR LATERAL BEDDING IS RECOMMENDED FOR THE IDENTIFICATION OF PRESSURE RATED WASTEWATER MAINS DURING FUTURE CONSTRUCTION.

TITLE 30, CHAPTER 290, SUBCHAPTER D, RULE 290.44(E)(5) WATERLINE AND WASTEWATER MAIN MANHOLE OR LATERAL MANHOLE OR CLEANOUT SEPARATION

THE SEPARATION DISTANCE FROM A POTABLE WATERLINE TO A WASTEWATER MAIN MANHOLE OR LATERAL MANHOLE OR CLEANOUT SHALL BE A MINIMUM OF NINE FEET. WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE POTABLE WATERLINE SHALL BE ENCASED IN A JOINT OF AT LEAST 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT.

WASTEWATER MAIN INSTALLATION:

THE WASTEWATER COLLECTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR DOMESTIC WASTEWATER SYSTEMS, TITLE 30 TEXAS ADMINISTRATIVE CODE, CHAPTER 217, SUBCHAPTER C.

STORM DRAIN IMPROVEMENTS:

1. INCLUDE 1.0' BY 0.5' THICK CONCRETE COLLARS AROUND ALL UTILITY COVERS WITHIN GARFIELD STREET INCLUDING, BUT NOT LIMITED TO: WATER VALVES, WASTEWATER MANHOLES, STORM DRAIN MANHOLES AND STORM DRAIN JUNCTION BOX COVERS.

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING

CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER

03/13/2020

PARKHILL SMITH & COOPER

PSC

MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

GARFIELD ST. GENERAL NOTES SHEET 3 OF 4

4

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

DEMOLITION CONSTRUCTION NOTES:

1. ALL DEMOLITION DIMENSIONS ARE APPROXIMATE AND BASED ON THE MOST RELIABLE DATA AVAILABLE. CONTRACTOR IS TO FIELD VERIFY ACTUAL DIMENSIONS AND NOTIFY ENGINEER OF QUANTITY INCREASES OR DISCREPANCIES.

2. EXISTING ASPHALT PAVEMENT THICKNESS MAY BE AS MUCH AS 10" IN PLACES.

3. CONTRACTOR IS TO TAKE CARE NOT TO DAMAGE OR REMOVE ANY EXISTING INFRASTRUCTURE OR PROPERTY, PUBLIC OR PRIVATE, THAT IS NOT INDICATED BY THIS CONSTRUCTION DRAWING SET. ANY DAMAGE OR REMOVAL MUST BE REPLACED OR REPAIR BY CONTRACTOR AT THEIR SOLE EXPENSE TO EQUAL OR BETTER CONDITION.

4. ALL UTILITY TRENCHING PAVEMENT REPAIRS ARE TO INCLUDE 1.0' T-TOPPING ON BOTH SIDES OF ANY TRENCH EXCAVATION.

5. CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING FACILITIES ENCOUNTERED REGARDLESS OF WHETHER OR NOT THEY ARE INDICATED IN THE CONSTRUCTION DRAWINGS

6. CONTRACTOR IS TO NOTIFY PROJECT ENGINEER OF ANY ADDITIONAL DEMOLITION THAT MAY BE NEEDED AND RECEIVE WRITTEN CONFIRMATION THAT SUCH DEMOLITION IS APPROVED PRIOR TO ANY ADDITIONAL DEMOLITION TAKING PLACE.

7. ALL EXISTING UTILITIES ABANDONED IN PLACE ARE TO BE FILLED WITH FLOWABLE FILL 2-SACK (PORTLAND CEMENT 2-SACK = 188 LBS/CY) AND BE CAPPED AT ENDS OF ABANDONED PIPE SECTION.

8. ALL EXISTING FIRE HYDRANTS, METERS, AND METER BOX COVERS REMOVED FROM THE PROJECT SITE ARE TO BE RETURNED TO THE CITY OF MIDLAND. ALL EXISTING VALVE COVERS, MANHOLE COVERS, AND OTHER MATERIAL OR SPOILS RESULTING FROM DEMOLITION ACTIVITIES ARE THE PROPERTY OF THE CONTRACTOR AND ARE TO BE REMOVED OR DISPOSED OF BY THE CONTRACTOR.

TRAFFIC CONTROL NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL SHALL BE IN GENERAL CONFORMANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES TMUTCD), EXCEPT AS SPECIFICALLY DIRECTED BY THE CITY TRAFFIC ENGINEER.

2. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A TRAFFIC CONTROL PLAN (TCP), IN ACCORDANCE WITH TMUTCD, TO THE CITY OF MIDLAND FOR REVIEW AND APPROVAL NO LESS THAN TWO BUSINESS DAYS BEFORE CONTRACTOR STARTS ANY CONSTRUCTION ACTIVITY. ACCESS TO PROPERTIES ADJACENT TO THE WORK ZONE SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE APPROVED BY THE TRAFFIC ENGINEER. CONTRACTOR WILL LIMIT THE NUMBER OF CONSECUTIVE RESIDENTIAL AND MINOR COLLECTOR STREET CLOSURES. A MINIMUM OF TWO TRAVEL LANES (ONE IN EACH DIRECTION) SHALL REMAIN OPEN AT ALL TIMES ON ALL ARTERIAL STREETS.

3. A COPY OF THE APPROVED TCP SHALL BE KEPT IN THE POSSESSION OF THE PERSON RESPONSIBLE FOR SUPERVISING THE TRAFFIC CONTROL AT ALL TIMES WHILE WORKING IN THE RIGHT-OF-WAY. THE APPROVED TCP SHALL BE PRESENTED TO CITY STAFF OR LAW ENFORCEMENT UPON DEMAND AT ANY TIME.

BREAK OUT SET 2 NOTES:

1. THESE BREAK OUT SET 2 NOTES SUPERCEDE ALL OTHER NOTES OR DIRECTIONS PROVIDED IN THIS CONSTRUCTION DRAWING SET ANYWHERE THAT THERE IS A DISCREPANCY OR DISSAGREEMENT BETWEEN THEM. THESE NOTES DO NOT SUPERCEDE ANY ORDER OF PRECEDENCE OUTLINED IN PROJECT'S SPECIAL PROVISIONS SECTION OF IT'S BID PACKET.

2. PORTIONS OF THIS GARFIELD STREET UTILITY BOND PROJECT THAT WERE PREVIOUSLY COMPLETED AS PART OF GRAFIELD STREET UTILITY BOND PROJECT BREAK OUT 01 OR AS PART OF OTHER PROJECTS ARE INDICATED BY BOTH GRAY HATCHING AND "EXISTING TO REMAIN" LABELS, AND THESE IMPROVEMENTS ARE NO LONGER PART OF THIS PROJECT SCOPE. ANY AND ALL PORTIONS OF THIS CONSTRUCTION DRAWING SET NOT COVERED BY GRAY HATCHING OR "EXISTING TO REMAIN" LABELS ARE STILL PART OF THIS PROJECT'S SCOPE.

3. UNLESS OTHERWISE NOTED IN THIS CONSTRUCTION DRAWING SET, PAVEMENT REMOVAL AND TRENCH REPAIR WIDTHS, INCLUDING T-TOPPING FOR PAVEMENT PATCHING, ARE TO BE NO MORE THAN:

   FOUR-FOOT (4.0') WIDE FOR WATER MAIN REMOVAL AND INSTALLATION

   THREE-FOOT (3.0') WIDE FOR WATER AND WASTEWATER SERVICE LATERAL REMOVAL AND INSTALLATION

   FIVE-FOOT (5.0') WIDE FOR WASTEWATER MAIN REMOVAL AND INSTALLATION

   FIVE-FOOT (5.0') WIDE FOR STORM DRAIN INSTALLATION ALONG PRINCETON AVENUE, STOREY AVENUE, KANSAS AVENUE, AND FOR ALL STORM DRAIN LATERALS

   SEVEN-FOOT (7.0') WIDE FOR STORM DRAIN REMOVAL AND INSTALLATION ALONG GARFIELD STREET

   TEN-FOOT (10.0') WIDE FOR STORM DRAIN REMOVAL AND INSTALLATION ALONG GOLF COURSE AVENUE

   PAVEMENT PATCHING AREAS FOR TRENCH REPAIRS ARE TO MATCH PAVEMENT REMOVAL AREAS FOR TRENCH EXCAVATION UNLESS OTHERWISE NOTED IN THIS CONSTRUCTION DRAWING SET.

4. ALL TRENCH PAVEMENT REPAIRS ARE TO BE PER GARFIELD ASPHALT TRENCH PAVEMENT REPLACEMENT DETAIL C01 UNLESS OTHERWISE NOTED IN THIS CONSTRUCTION DRAWING SET.

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

SMITH & COOPER
PARKHILL SMITH & COOPER TEXAS REGISTERED ENGINEERING FIRM F-9560
CHRISTIAN SCHNITKER
84810
LICENSED
PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

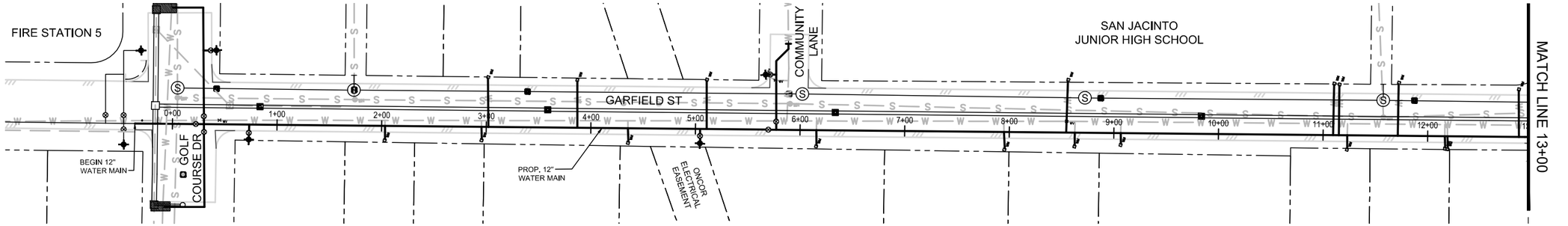
MIDLAND
Engineering Services

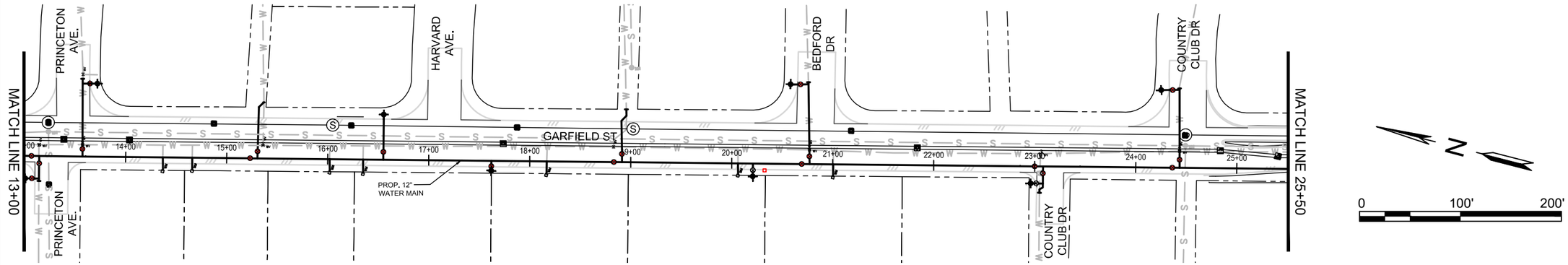
GARFIELD ST. UTILITY IMPROVEMENTS

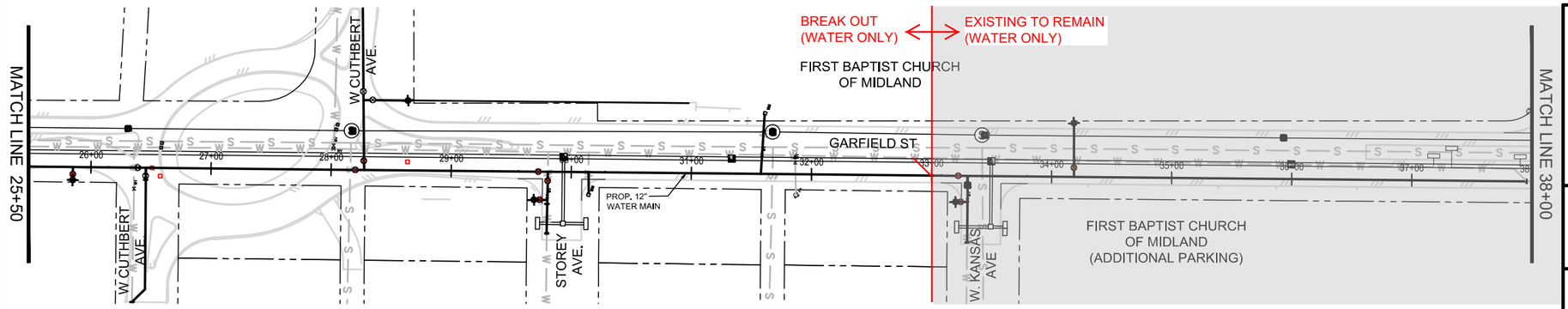
GARFIELD ST.
GENERAL NOTES
SHEET 4 OF 4

5

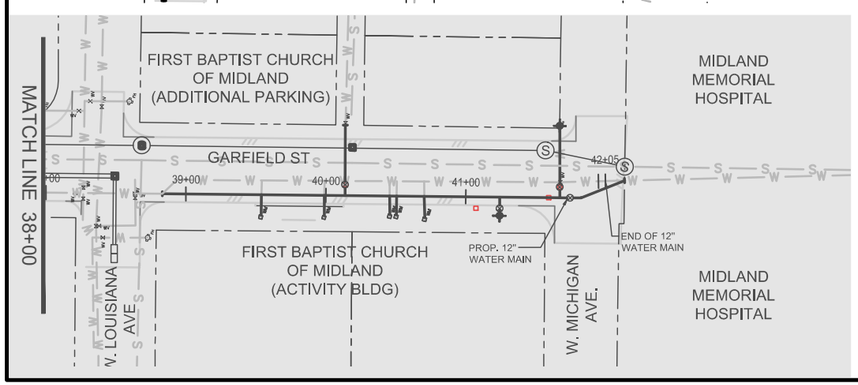
ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18







BREAK OUT (WATER ONLY) ↔ EXISTING TO REMAIN (WATER ONLY)



NOTE:

SEE SHEETS 39 AND 54 FOR BOUNDARY BETWEEN WASTEWATER AND STORM DRAIN TO INSTALL VERSUS EXISTING TO REMAIN.

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

SMITH & COOPER, INC. TEXAS T.B.P.E. F-5590
CHRISTIAN SCHNITGER
84810
LICENSED
PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

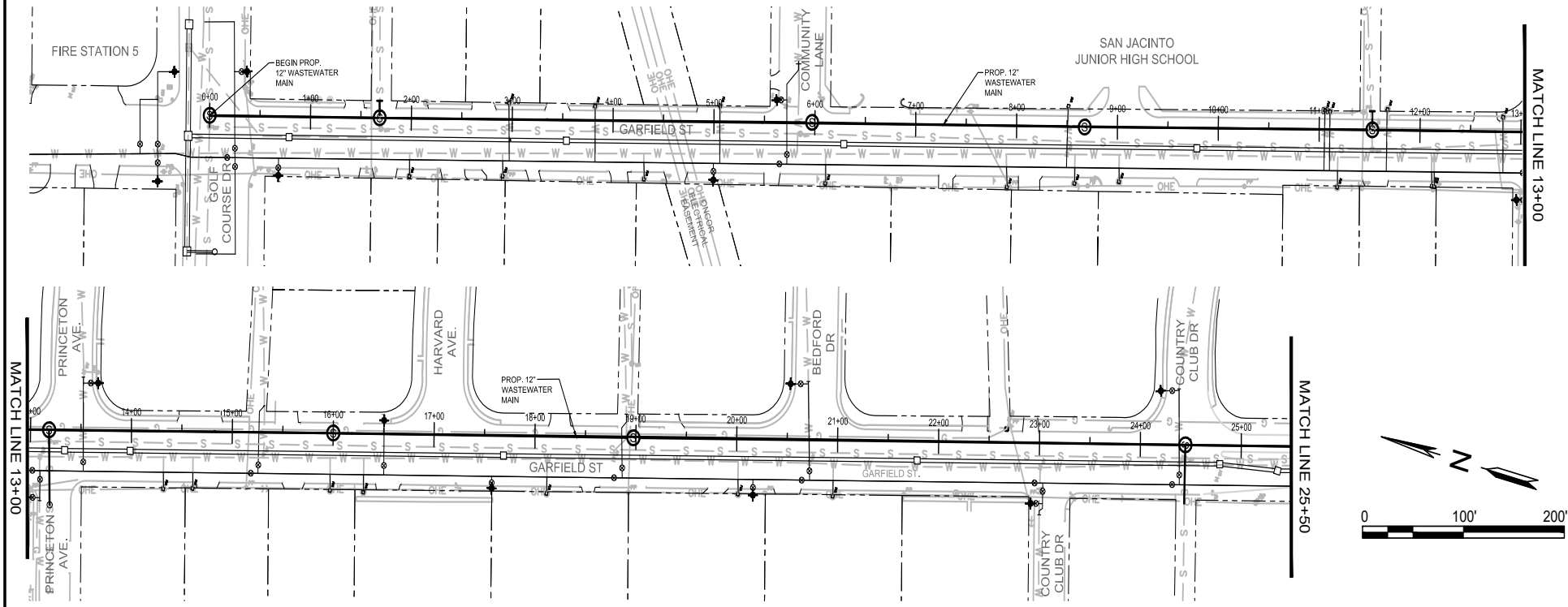
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WATER MAIN LAYOUT

6

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



NOTE:

SEE SHEETS 27 AND 54 FOR BOUNDARY BETWEEN WATER AND STORM DRAIN TO INSTALL VERSUS EXISTING TO REMAIN.

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

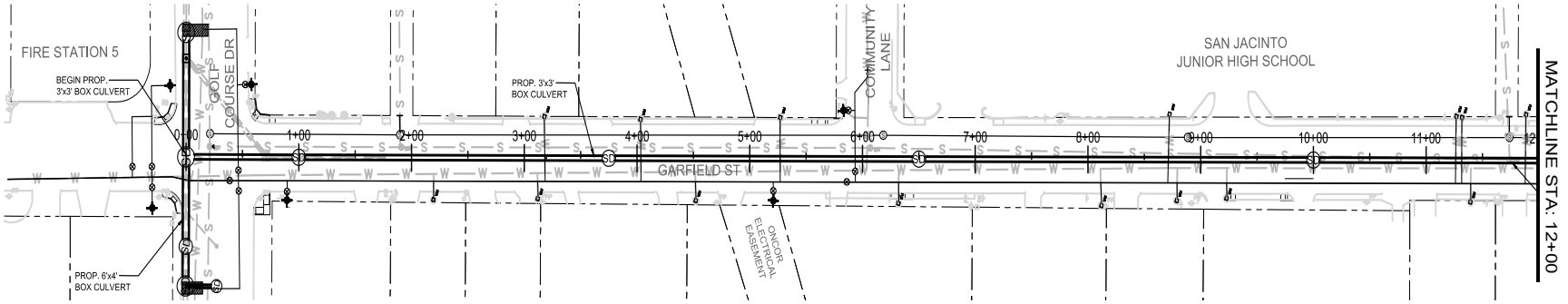
MIDLAND
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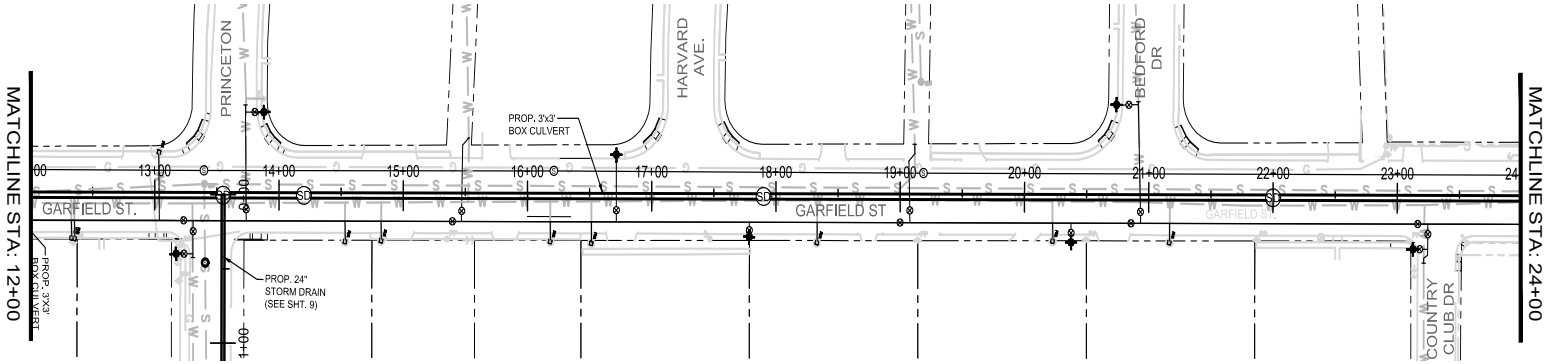
GARFIELD ST. UTILITY IMPROVEMENTS

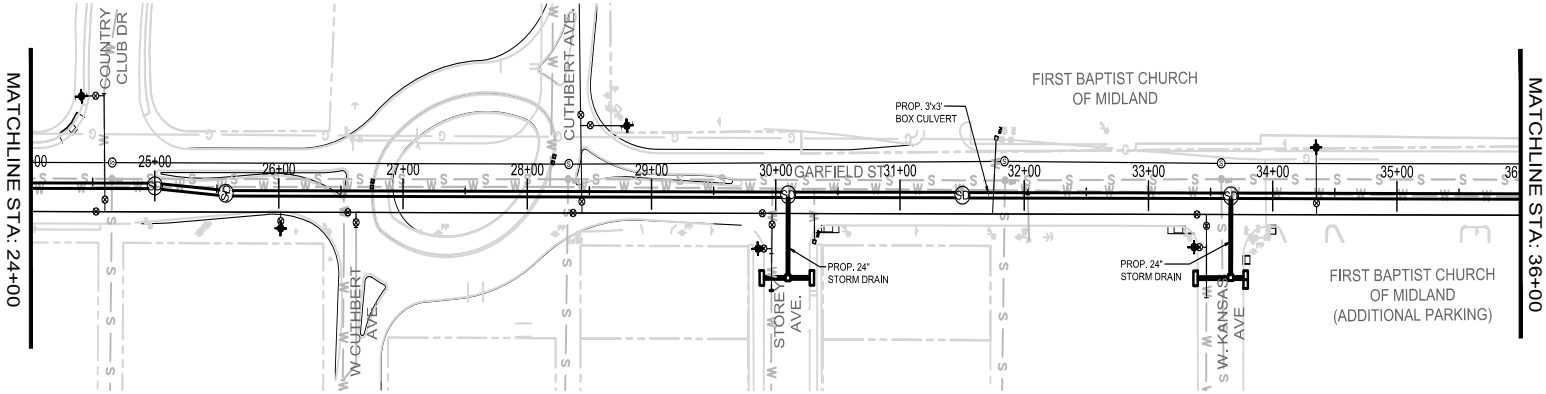
WASTEWATER MAIN LAYOUT

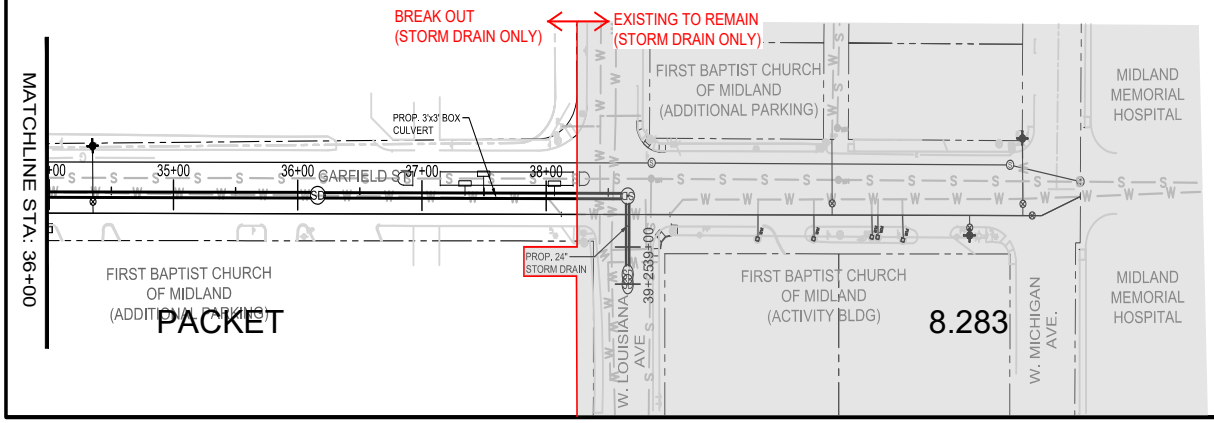
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ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18









NOTE:

SEE SHEETS 27 AND 39 FOR BOUNDARY BETWEEN WATER AND WASTEWATER TO INSTALL VERSUS EXISTING TO REMAIN.

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

N

0 100' 200'

PARKHILL SMITH & COOPER
PSC

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

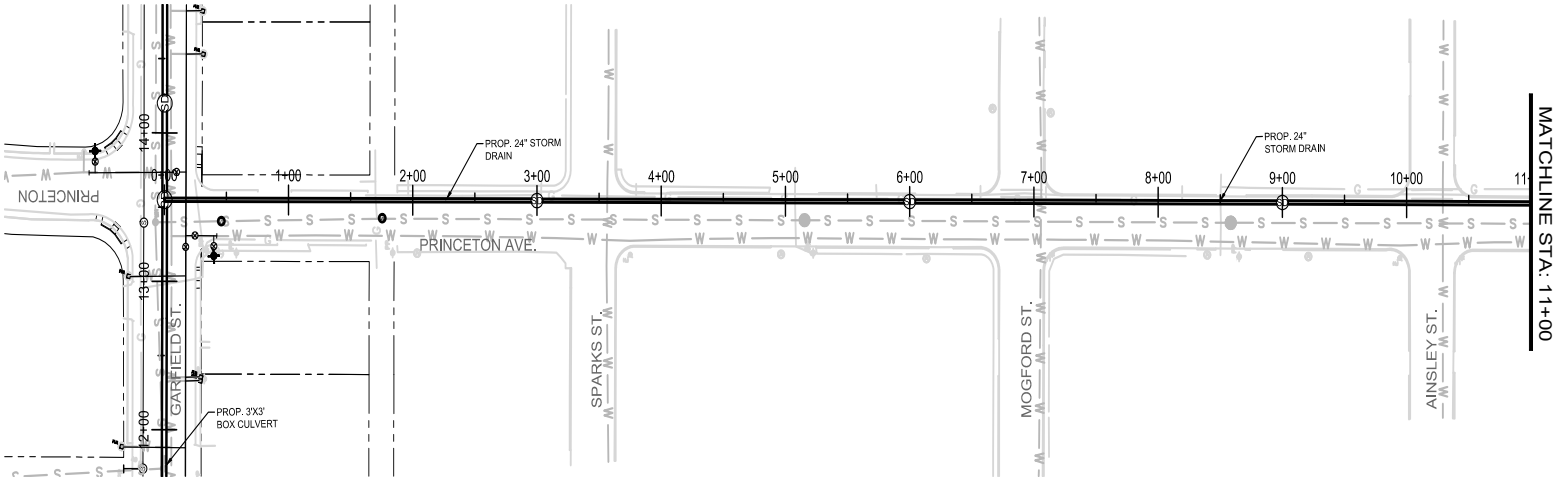
MIDLAND
Engineering Services

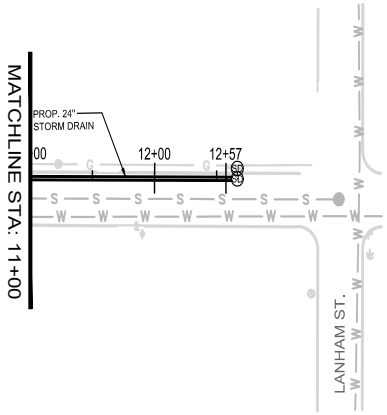
GARFIELD ST. UTILITY IMPROVEMENTS

STORM DRAIN LAYOUT GARFIELD ST.

8

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18





N

0 100' 200'

CHRISTIAN SCHNITGER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

MIDLAND Engineering Services

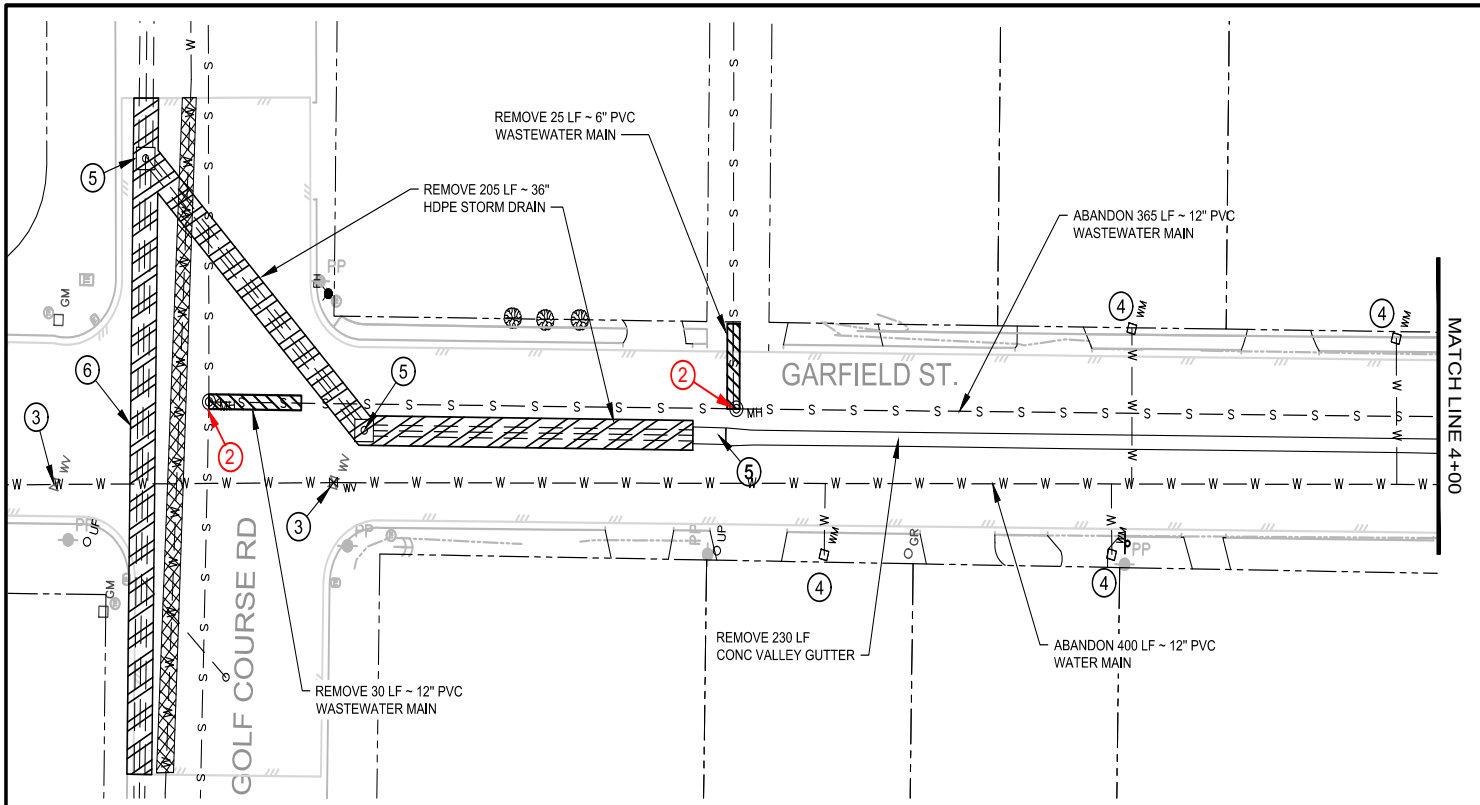
GARFIELD ST. UTILITY IMPROVEMENTS

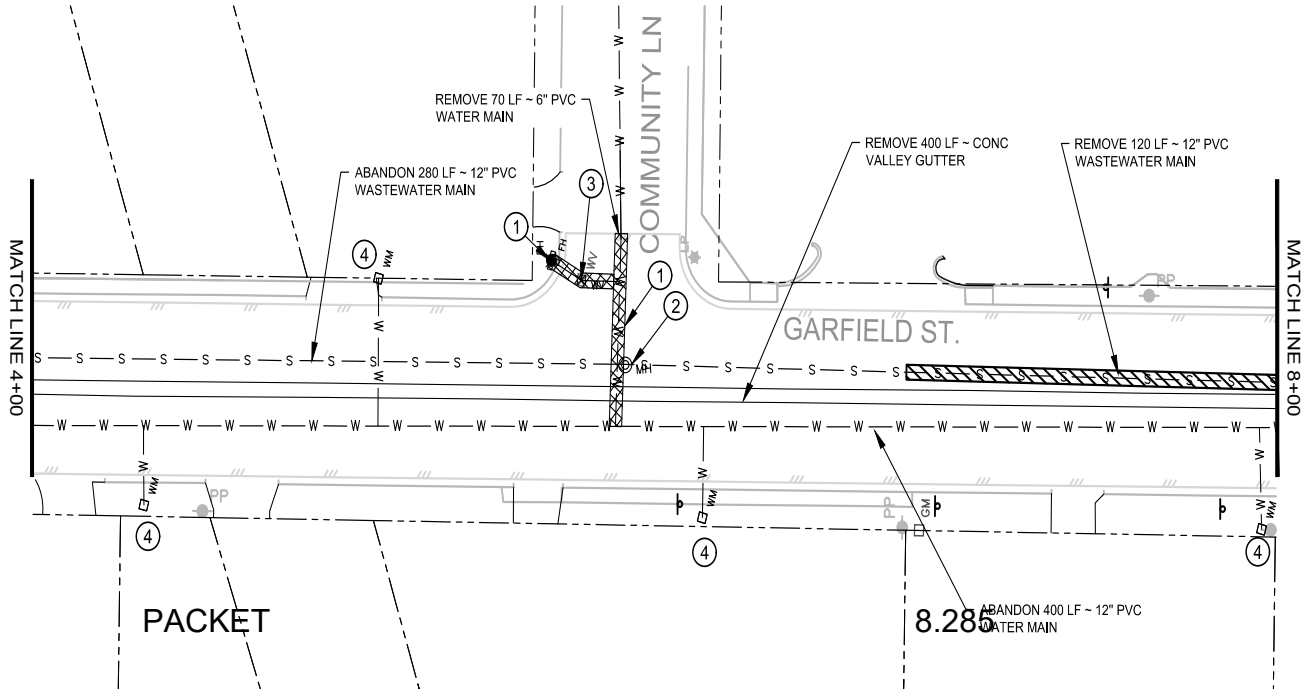
STORM DRAIN LAYOUT
PRINCETON AVE.

9

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING





KEYED NOTES

1. REMOVE AND SALVAGE FIRE HYDRANT. ALL REMOVED FIRE HYDRANTS TO BE RETURNED TO CITY UTILITIES DEPARTMENT.
2. EXISTING WASTEWATER MANHOLE TO BE REMOVED IN ITS ENTIRETY, INCLUDING THE BASE.
3. ALL VALVES AND VALVE BOXES TO BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED.
4. ALL EXISTING WATER METERS AND WATER METER BOXES TO BE REMOVED AND REPLACED. RETURN EXISTING METERS TO CITY.
5. REMOVE EXISTING STORM DRAIN PIPE, JUNCTION BOXES AND INLET.
6. REMOVE 15 LF ~ 54" CMP & 165LF ~ 42" STORM DRAIN

CITY OF MIDLAND
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12.08.2022
ENGINEERING

GENERAL NOTES:

1. EXISTING WATER MAIN IS TO BE REMOVED IF IT CONFLICTS WITH THE CONSTRUCTION OF THE PROPOSED UTILITIES. ALL WATER MAINS 2' OR FURTHER FROM OTHER PROPOSED UTILITY MAINS SHALL BE ABANDONED IN PLACE.
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3. EXISTING WASTEWATER MANHOLES SHALL BE REMOVED IN THEIR ENTIRETY, AND EXCAVATED AREA TO BE BACKFILLED TO CITY STANDARDS.

N

0 40' 80'

SMITH & COOPER INC. TEXAS REGISTERED ENGINEERING FIRM F-9560
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

UTILITY REMOVAL
SHEET 1 of 6

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

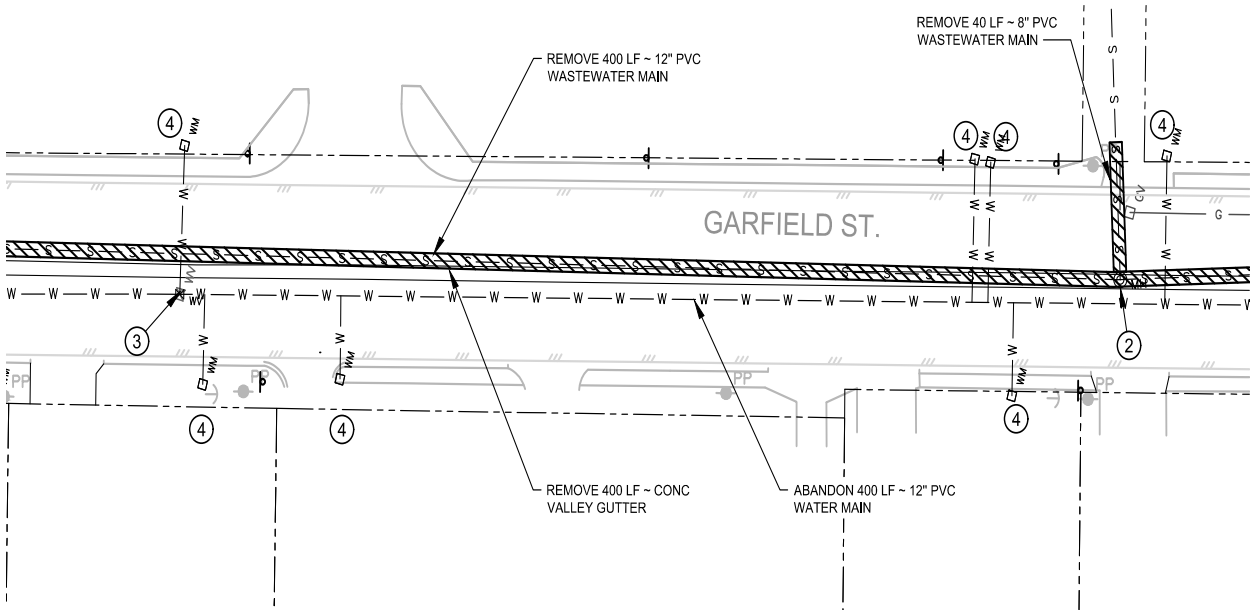
KEYED NOTES

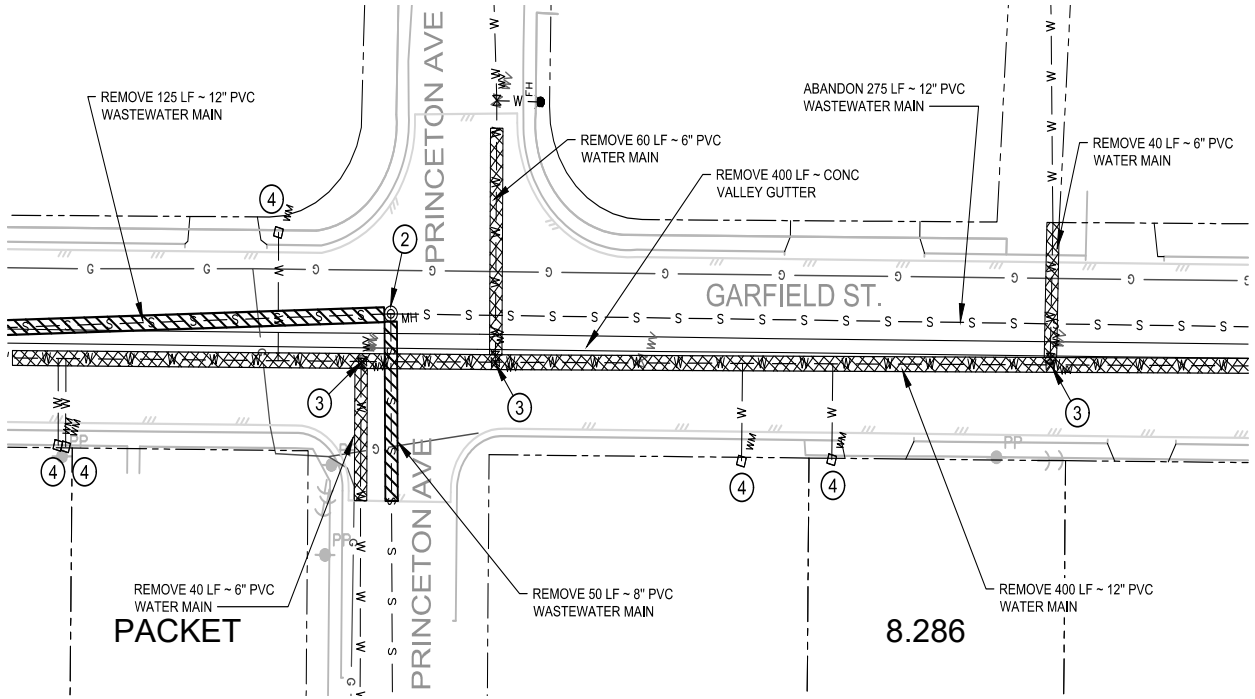
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CITY OF MIDLAND
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ENGINEERING

CHRISTIAN SCHNITKER
84810
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03/13/2020

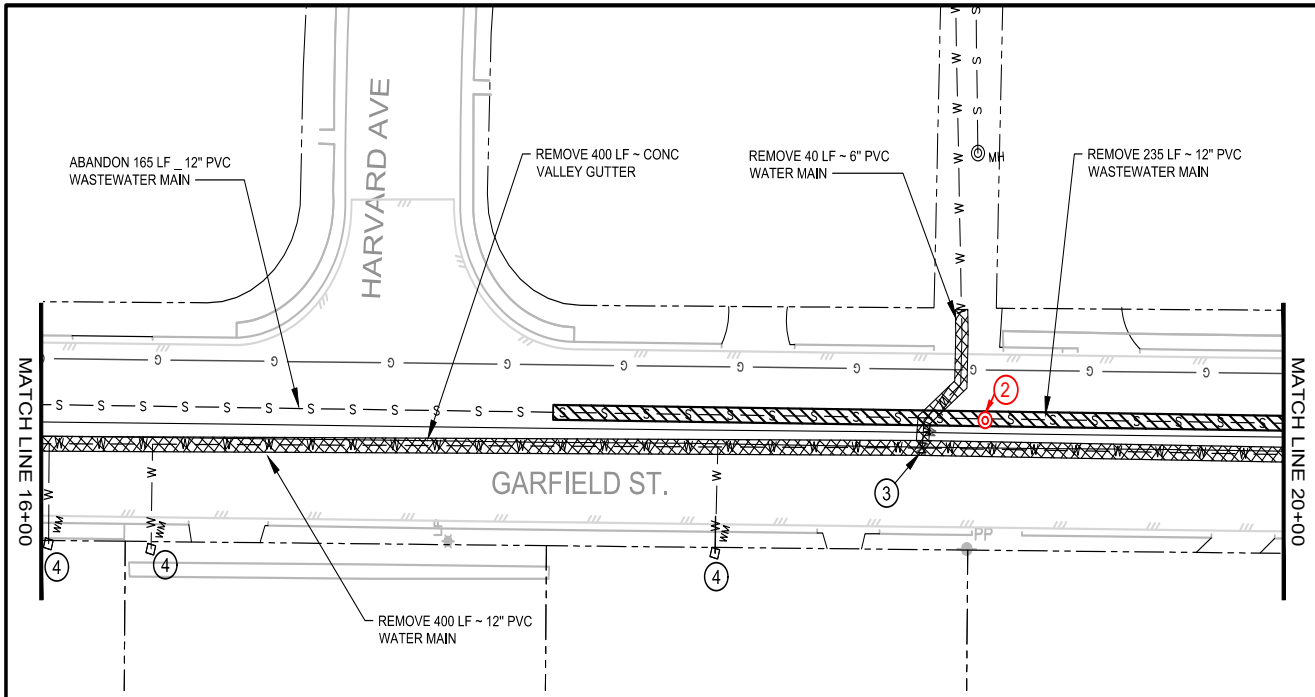
PARKHILL SMITH & COOPER
PSC

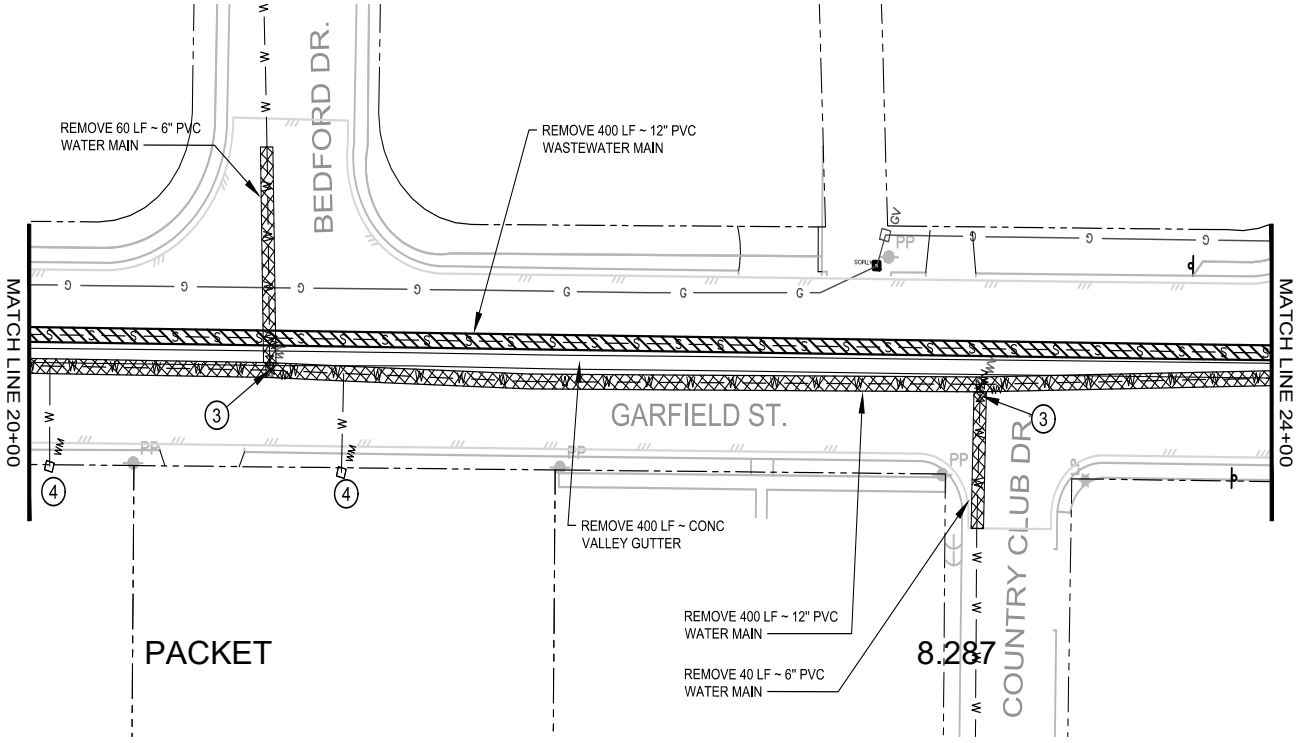
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

UTILITY REMOVAL
SHEET 2 of 6

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18





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CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

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N

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SMITH & COOPER INC. TEXAS REGISTERED ENGINEERING FIRM F-5909
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

PSC

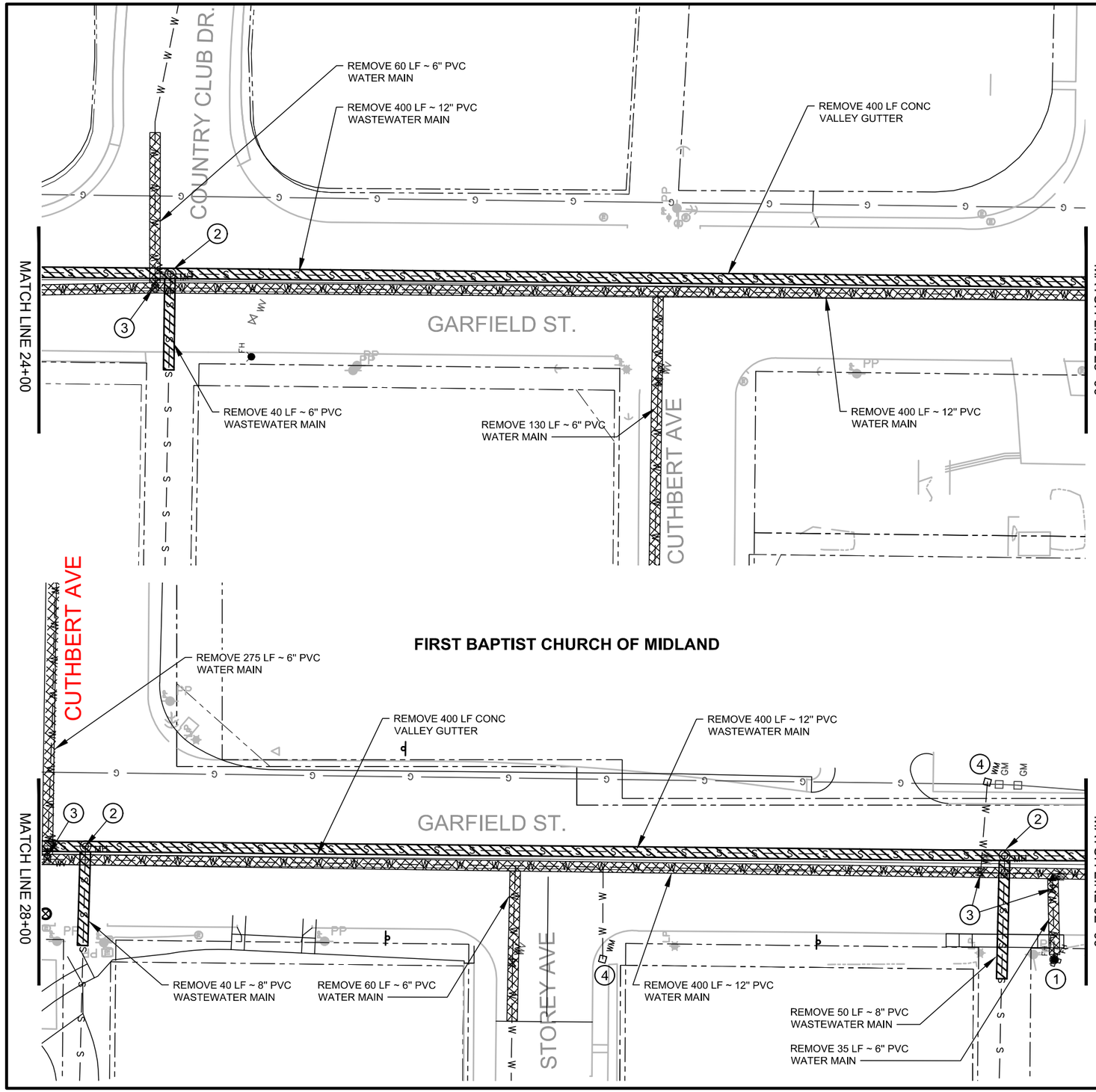
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

UTILITY REMOVAL
SHEET3 of 6

12

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



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CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

PARKHILL, SMITH & COOPER, INC. TEXAS REGISTERED F-580
CHRISTIAN SCHNITGER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

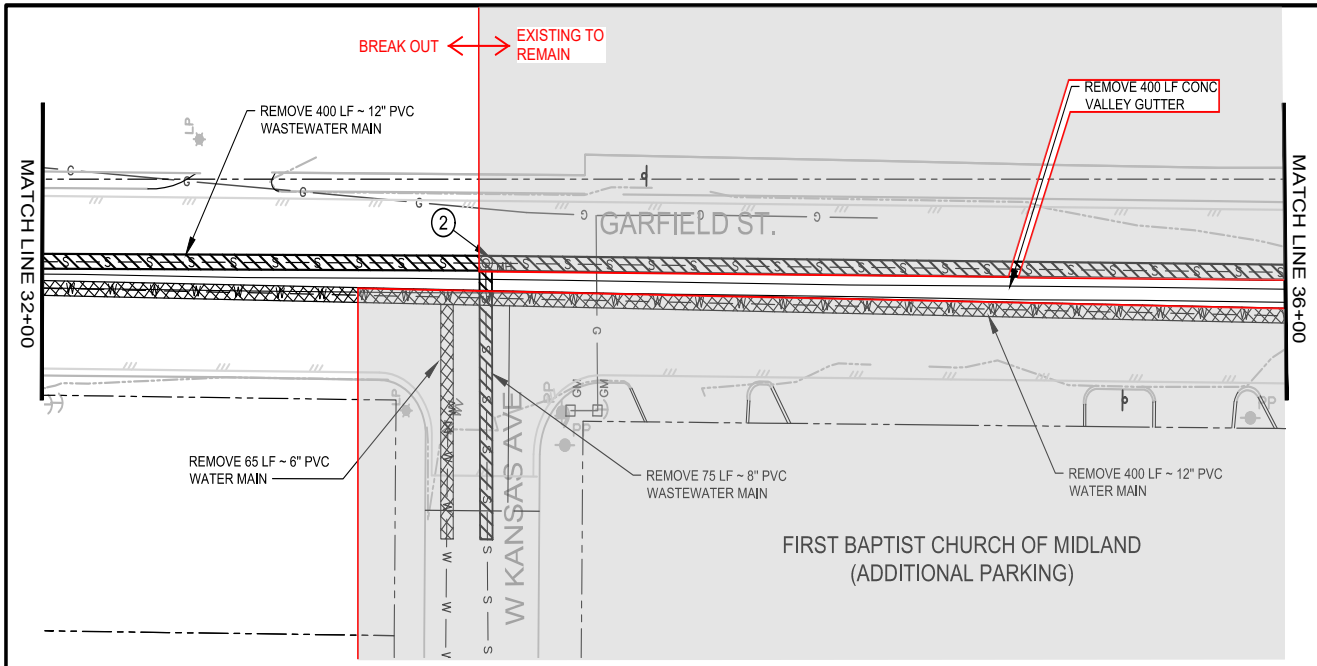
MIDLAND Engineering Services

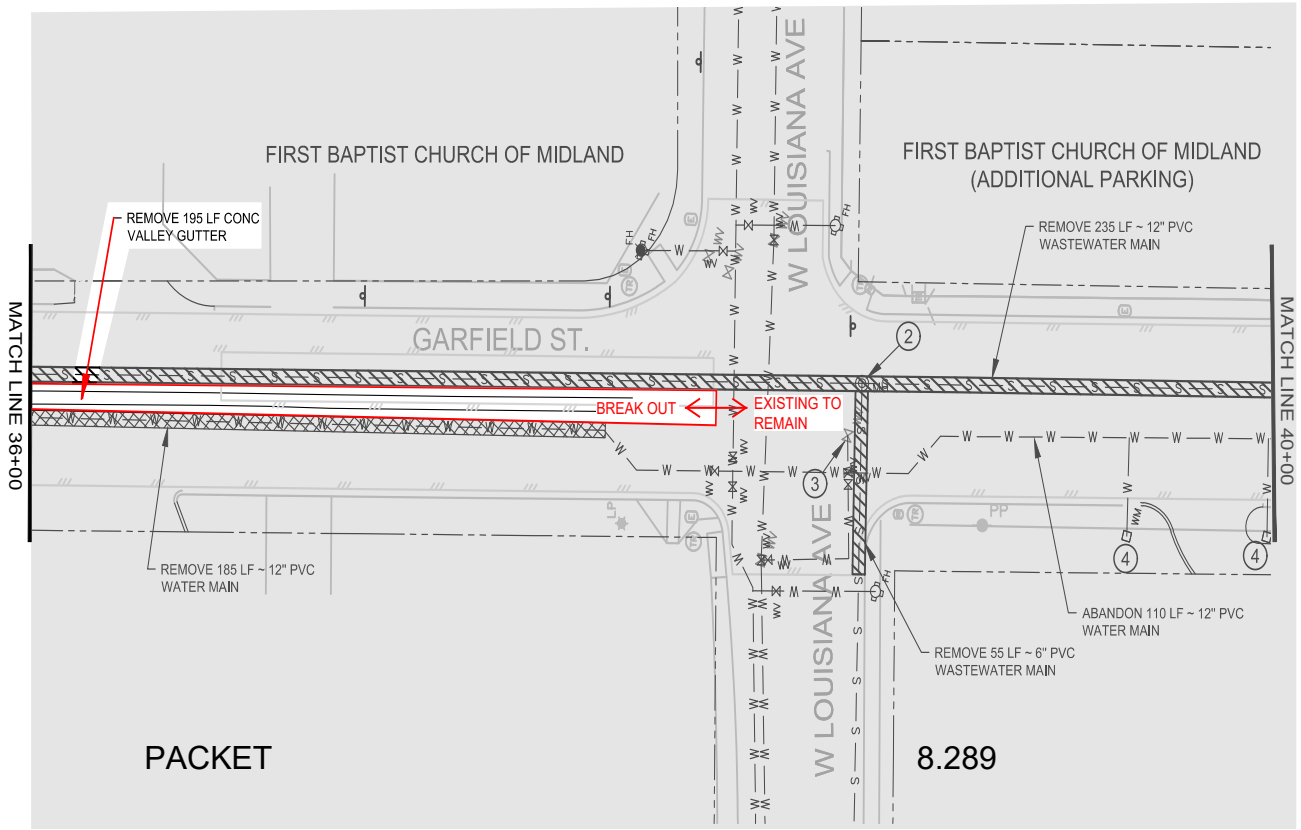
GARFIELD ST. UTILITY IMPROVEMENTS

UTILITY REMOVAL
SHEET 4 of 6

13

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18





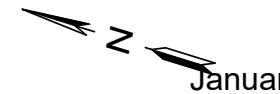
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CITY OF MIDLAND
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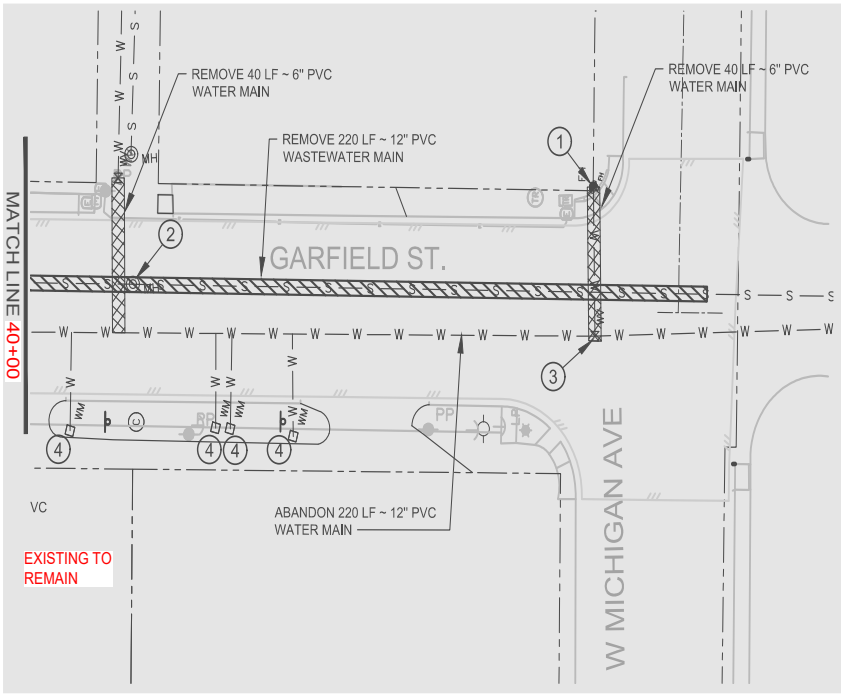
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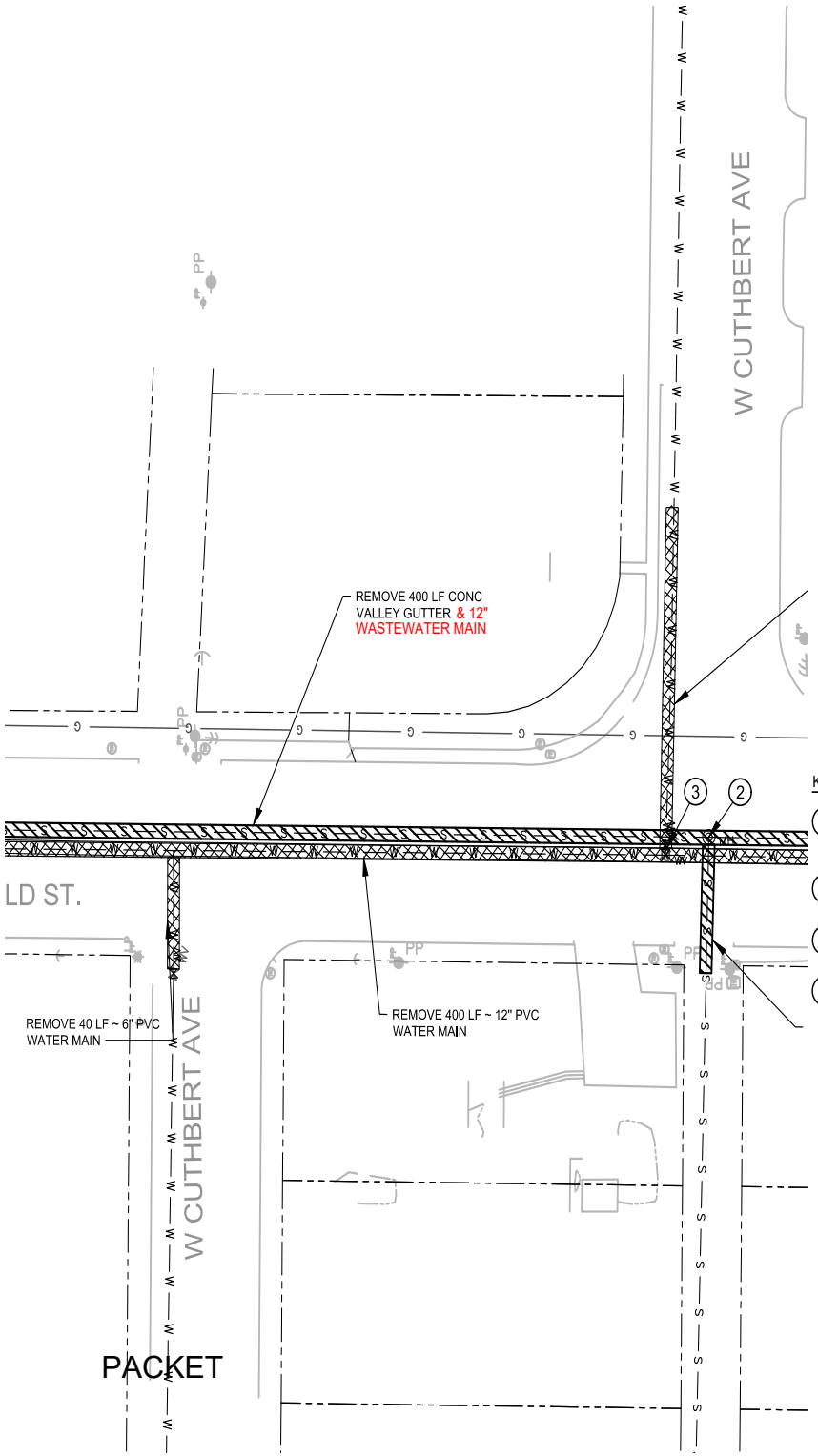
GARFIELD ST. UTILITY IMPROVEMENTS

UTILITY REMOVAL
SHEET 5 of 6

14

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18





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CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

MIDLAND Engineering Services

CITY OF MIDLAND APPROVED AS NOTED 12.08.2022 ENGINEERING

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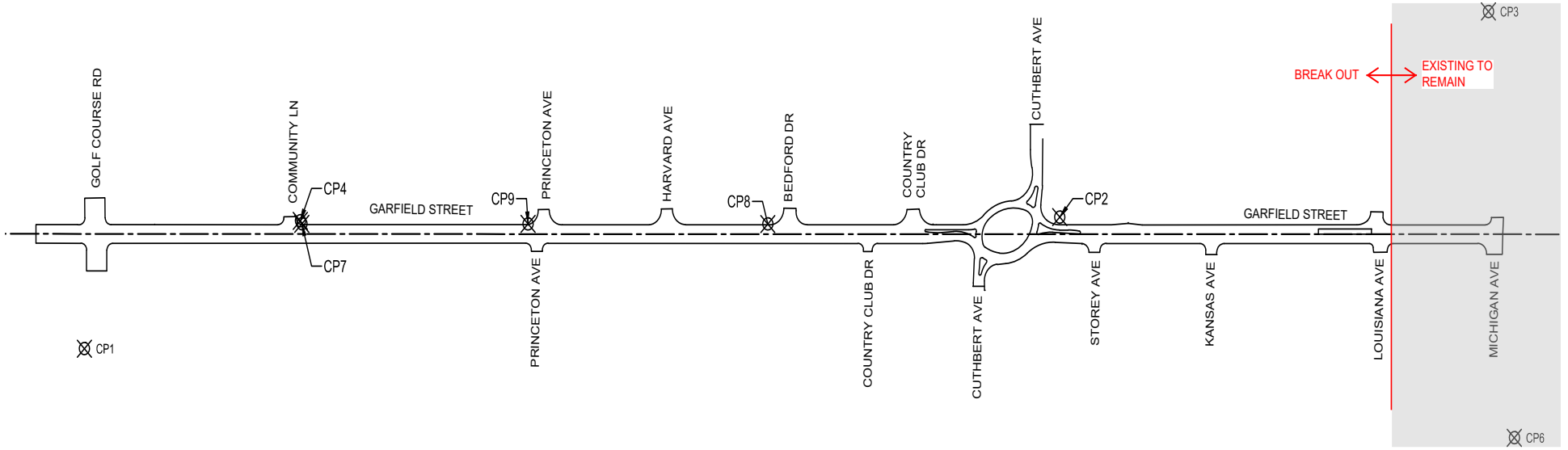
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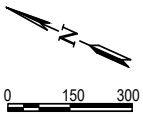
GARFIELD ST. UTILITY IMPROVEMENTS

UTILITY REMOVAL
SHEET 6 of 6

15

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18







EXISTING CORE DATA	
LOCATION	PAVEMENT CORE (IN.)
650 GARFIELD ST	3 3/4
706 GARFIELD ST	4 1/2
823 GARFIELD ST	5
1024 GARFIELD ST	5
1074 GARFIELD ST	5
1204 GARFIELD ST	4 1/2
1349 GARFIELD ST	3 1/2
1460 GARFIELD ST	4
1610 GARFIELD ST	5

CONTROL POINT TABLE

POINT NAME	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP1	10698976.99	1747475.90	2801.29	COM 5540 29 DATUM
CP8	10697077.26	1748286.87	2804.66	COM BM BL-5 2"AC TOC
CP2	10696236.96	1748521.04	2808.74	SPK 2 PK/AW G.FIELD & CUTHBERT
CP9	10697771.21	1748108.74	2802.64	COM BM 2"AC TOC
CP3	10695124.73	1749338.28	2807.12	SPK 9 PK/AW
CP4	10698431.92	1747946.70	2801.18	SPK4 60D/AW G.FIELD & COMMUNITY
CP5	10697502.98	1747255.27	2806.46	SPK 5 1/2"IR/PC
CP6	10694784.09	1748324.64	2812.68	SPK 6 PK/AW KENT&MICHIGAN
CP7	10698425.65	1747940.42	2801.23	COM BM 2" AC TOC

BEGINNING CHAIN GARFIELD_ST DESCRIPTION

POINT ALN01	N 10,694,781.99	E 1,748,850.90	STA 100+00.00
COURSE FROM ALN01 TO ALN 02	N 14° 24' 55.23" E	DIST 9,800.00'	
POINT ALN02	N 10,704,273.45	E 1,746,411.19	STA 198+00.00

ENDING CHAIN GARFIELD_ST DESCRIPTION



03/13/2020

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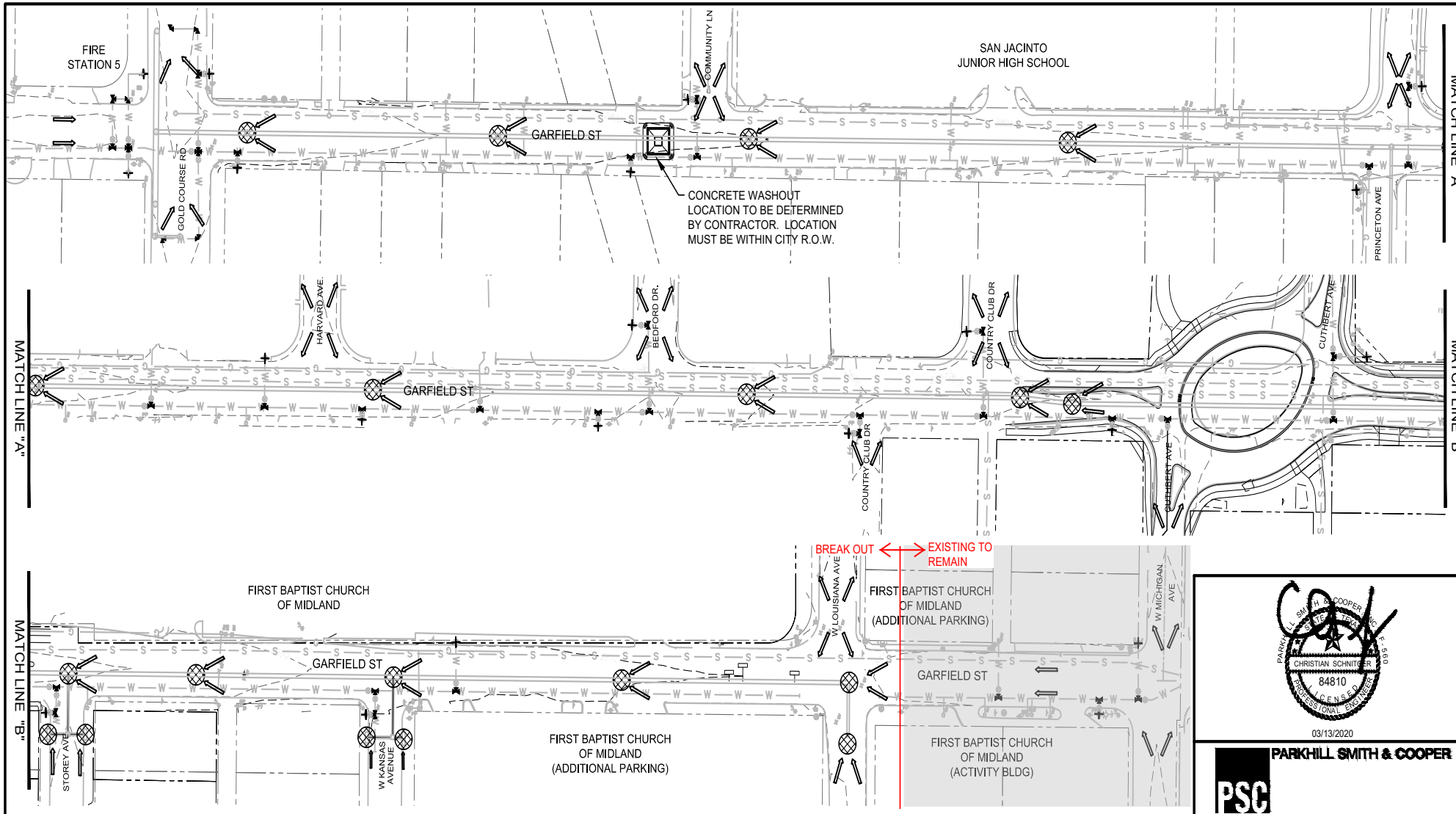
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

GARFIELD ST
HORIZONTAL
ALIGNMENT DATA

16

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

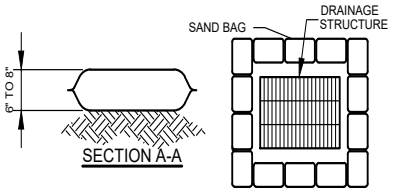


LEGEND

- EXISTING MAJOR CONTOUR (5' INTERVAL)
- EXISTING MINOR CONTOUR (1' INTERVAL)
- CONCRETE WASHOUT (REF. STANDARD CITY DETAIL 704)
- FLOW DIRECTION
- INLET PROTECTION (REF DETAIL A2/THIS SHEET) (FOR CURB INLET, REF. STANDARD CITY DETAIL 714)

EROSION CONTROL NOTES:

1. CONTRACTOR SHALL CLEAN CONSTRUCTION RELATED SEDIMENT FROM THE ROADWAY AT THE END OF EVERY DAY OF CONSTRUCTION.
2. CONTRACTOR SHALL PLACE EXCAVATED TRENCH MATERIAL ON THE UPHILL SIDE OF THE TRENCH DURING CONSTRUCTION.
3. CONTRACTOR SHALL USE SEDIMENT LOGS/WATTLES ALONG UTILITY TRENCH LINES DURING CONSTRUCTION.
4. CONTRACTOR SHALL UTILIZE CATCH BASIN INSERTS FOR PROPOSED GRATE INLETS LOCATED IN THE ROADWAY.



NOTE: STORM INLETS SHALL BE COMPLETELY SURROUNDED WITH FILTRATION MEDIA, WHICH MAY BE FILTER SOCKS OR SAND BAGS (COMPLIANT WITH TxDOT ITEM 506), BUT NOT A COMBINATION.

A2 SAND BAG DETAIL
NO SCALE

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

N

0 100' 200'

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

MIDLAND
Engineering Services

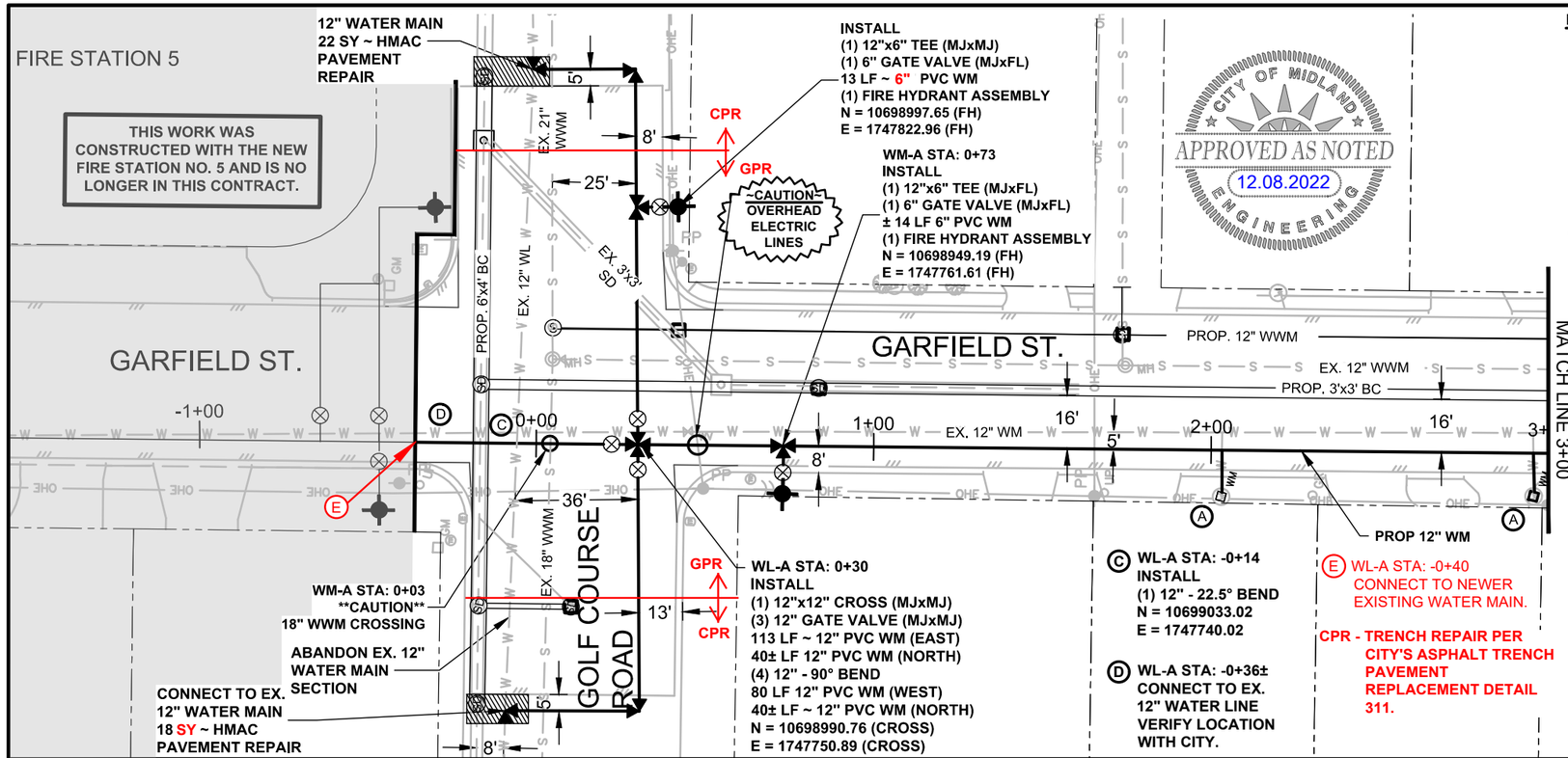
GARFIELD ST. UTILITY IMPROVEMENTS

EROSION CONTROL PLAN

17

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

PACKET 8.A.2.92 January 24, 2023



NOTE:

1. **ALL NEW METERS TO BE 1" AS SHOWN. USE REDUCER AFTER NEW METER IF NEEDED TO CONNECT TO EXISTING PLUMBING PIPE.**
2. **PRESSURE INDICATOR RINGS ARE REQUIRED FOR ALL FIRE HYDRANTS.**

(A) INSTALL:
15 LF ~ 1" WATER SERVICE
REPLACE WATER METER WITH METER PROVIDED BY CITY.

(B) INSTALL:
52 LF ~ 1" WATER SERVICE
REPLACE WATER METER WITH METER PROVIDED BY CITY.

GPR - TRENCH REPAIR PER PROJECT'S GARFIELD ASPHALT TRENCH PAVEMENT REPLACEMENT DETAIL C01.

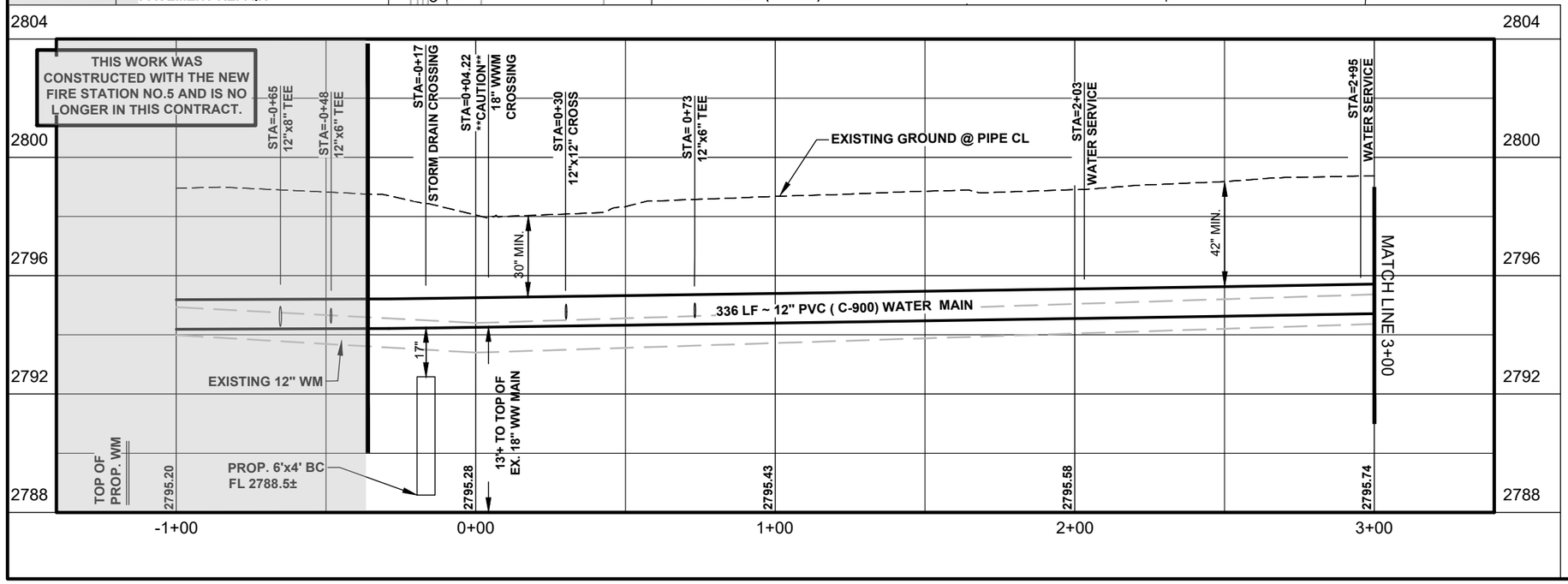
LEGEND

- EMH = EX. ELECTRIC MANHOLE
- FH = EX. FIRE HYDRANT
- GM = EX. GAS METER
- LP = EX. LIGHT POLE
- MB = EX. MAIL BOX
- PP = EX. POWER POLE
- MH = EX. WASTEWATER MANHOLE
- WM = EX. WATER METER
- WV = EX. WATER VALVE
- X = EX. FENCE LINE
- OE = EX. OVERHEAD ELECTRIC
- G = EX. GAS LINE
- S = EX. WASTEWATER MAIN/ LATERAL
- T = EX. UNDERGROUND TELEPHONE
- W = EX. WATER MAIN/ LATERAL
- = PROP. WATER MAIN/ LATERAL
- = PROP.WATER CROSS
- = PROP. WATER TEE
- = PROP. FIRE HYDRANT
- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- SD = PROP. STORMDRAIN MANHOLE
- S = PROP. WASTE WATER MANHOLE

N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'



CHRISTIAN SCHNITGER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

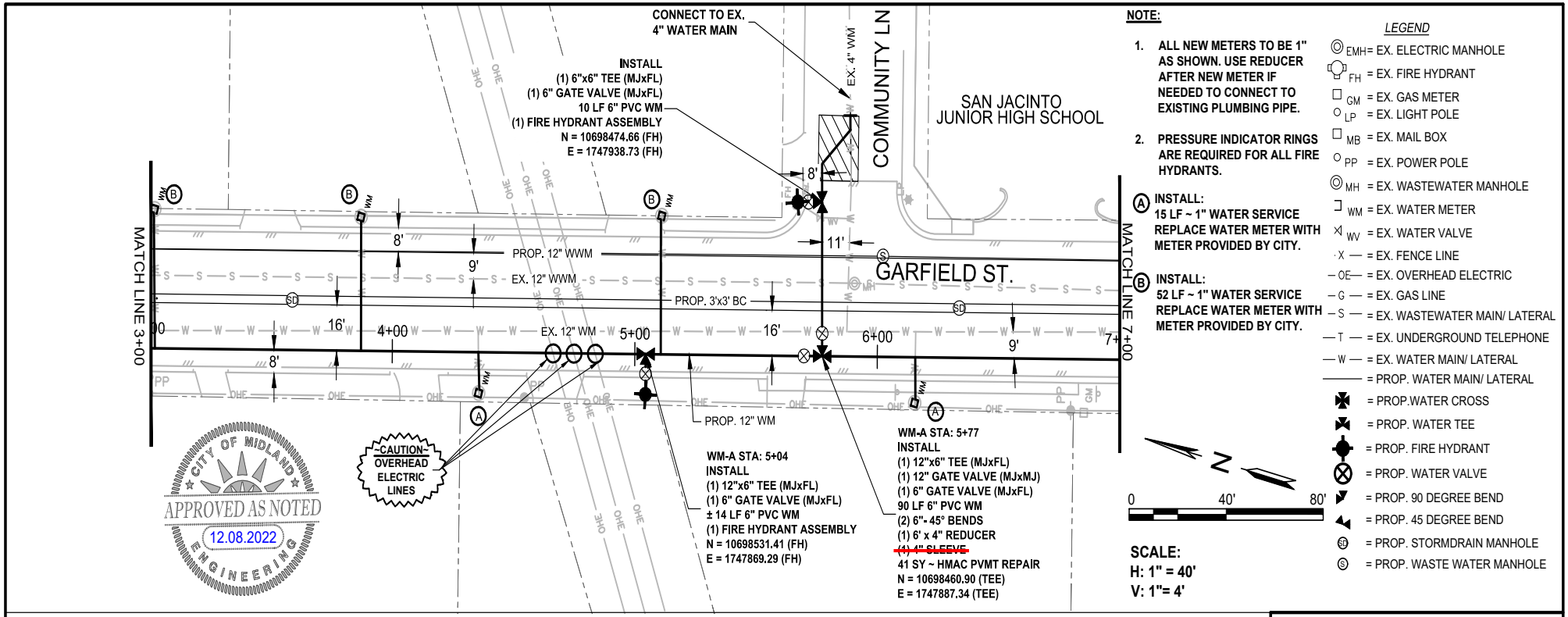
MIDLAND Engineering Services

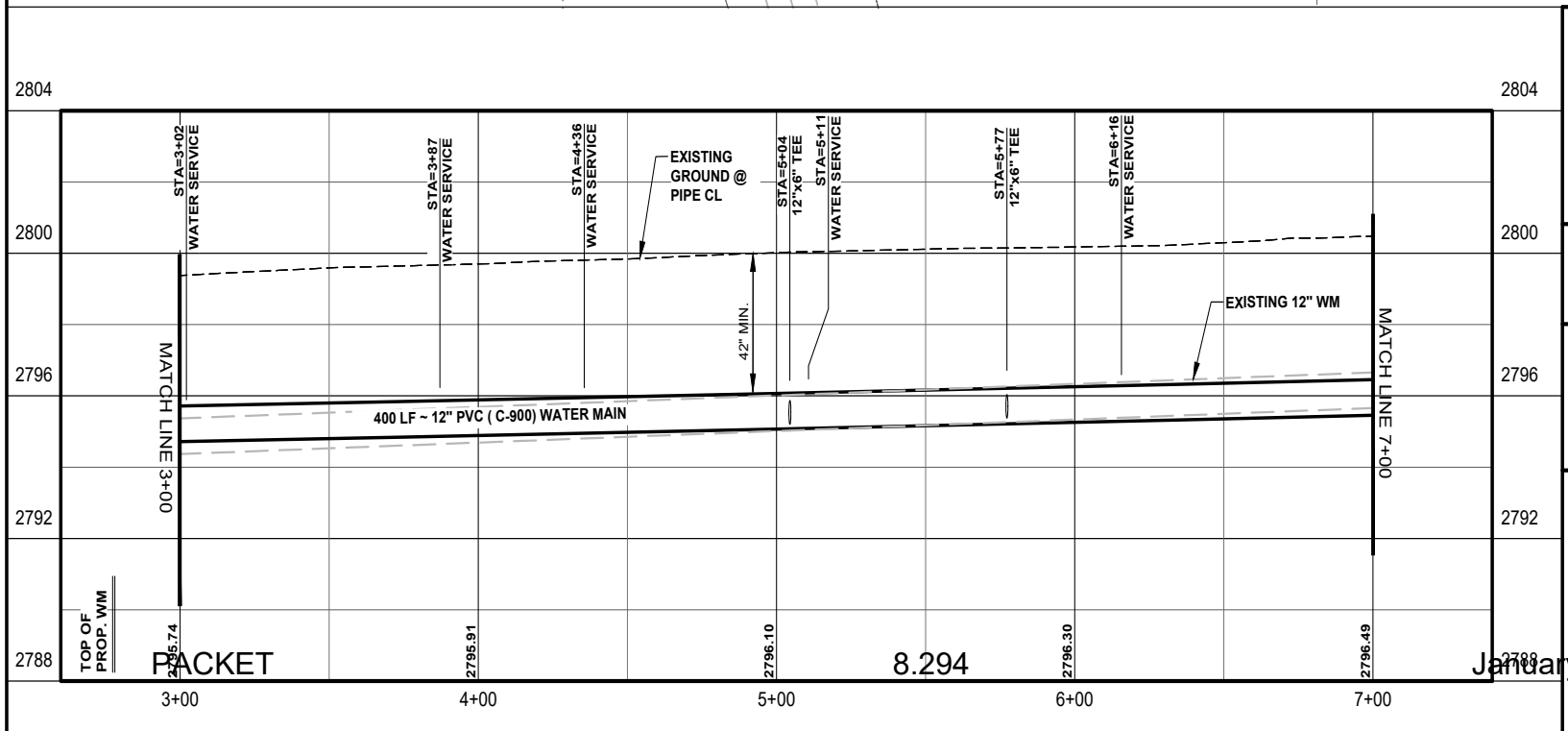
GARFIELD ST. UTILITY IMPROVEMENTS

WATER MAIN
PLAN-PROFILE
STA. -0+40 - STA.3+00

19

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18





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03/13/2020

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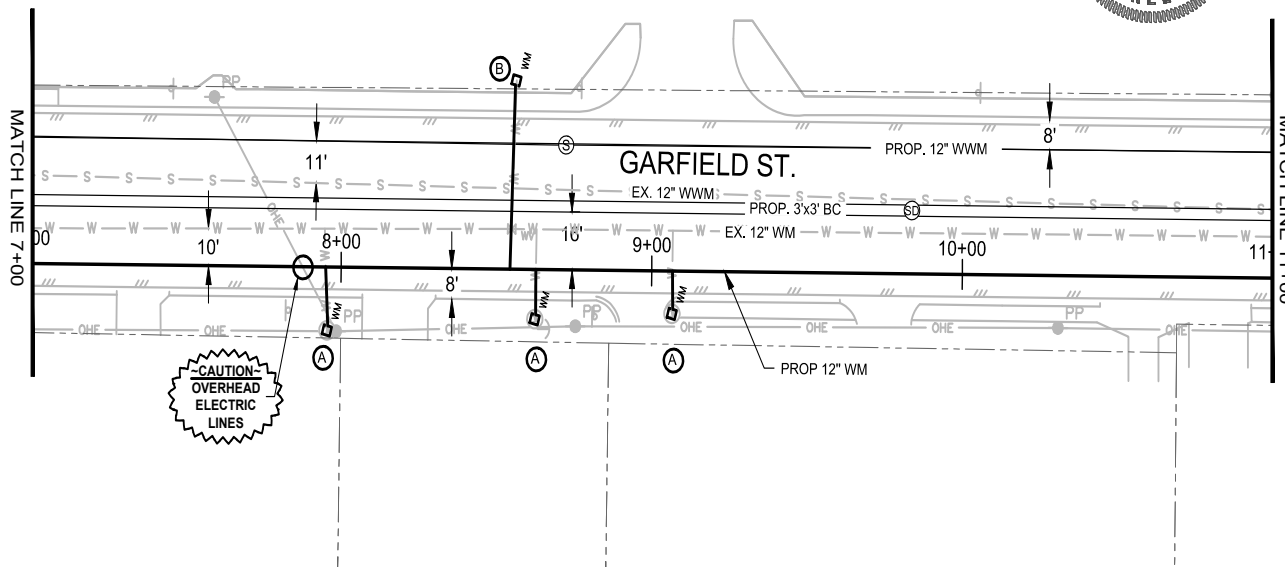
WATER MAIN
PLAN-PROFILE
STA 3+00 - STA. 7+00

20

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

SAN JACINTO
JUNIOR HIGH SCHOOL

CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEERING



NOTE:

1. **ALL NEW METERS TO BE 1" AS SHOWN. USE REDUCER AFTER NEW METER IF NEEDED TO CONNECT TO EXISTING PLUMBING PIPE.**
2. **PRESSURE INDICATOR RINGS ARE REQUIRED FOR ALL FIRE HYDRANTS.**

(A) **INSTALL: 15 LF ~ 1" WATER SERVICE REPLACE WATER METER WITH METER PROVIDED BY CITY.**

(B) **INSTALL: 52 LF ~ 1" WATER SERVICE REPLACE WATER METER WITH METER PROVIDED BY CITY.**

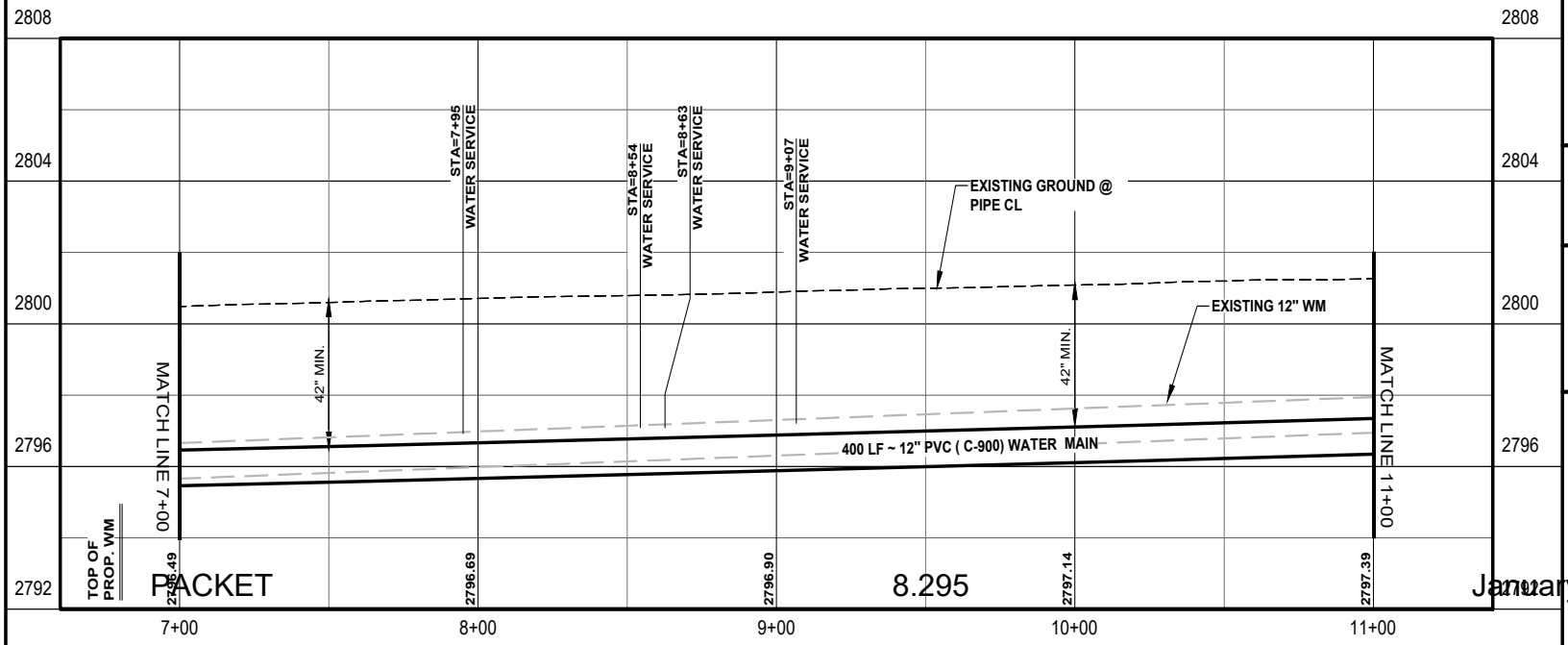
LEGEND

- EMH = EX. ELECTRIC MANHOLE
- FH = EX. FIRE HYDRANT
- GM = EX. GAS METER
- LP = EX. LIGHT POLE
- MB = EX. MAIL BOX
- PP = EX. POWER POLE
- MH = EX. WASTEWATER MANHOLE
- WM = EX. WATER METER
- WV = EX. WATER VALVE
- X = EX. FENCE LINE
- OE = EX. OVERHEAD ELECTRIC
- G = EX. GAS LINE
- S = EX. WASTEWATER MAIN/ LATERAL
- T = EX. UNDERGROUND TELEPHONE
- W = EX. WATER MAIN/ LATERAL
- = PROP. WATER MAIN/ LATERAL
- = PROP.WATER CROSS
- = PROP. WATER TEE
- = PROP. FIRE HYDRANT
- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- SD = PROP. STORMDRAIN MANHOLE
- S = PROP. WASTE WATER MANHOLE

N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'



CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

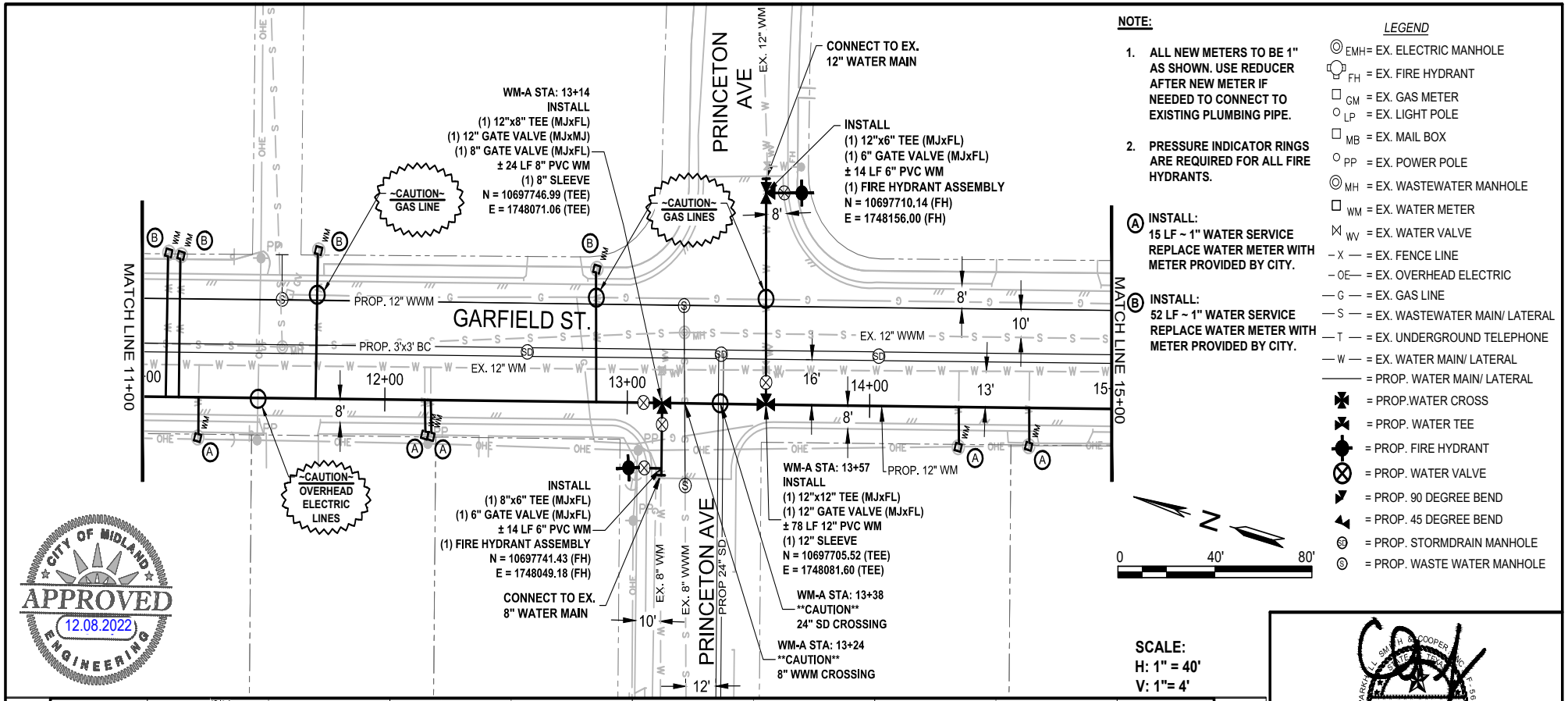
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

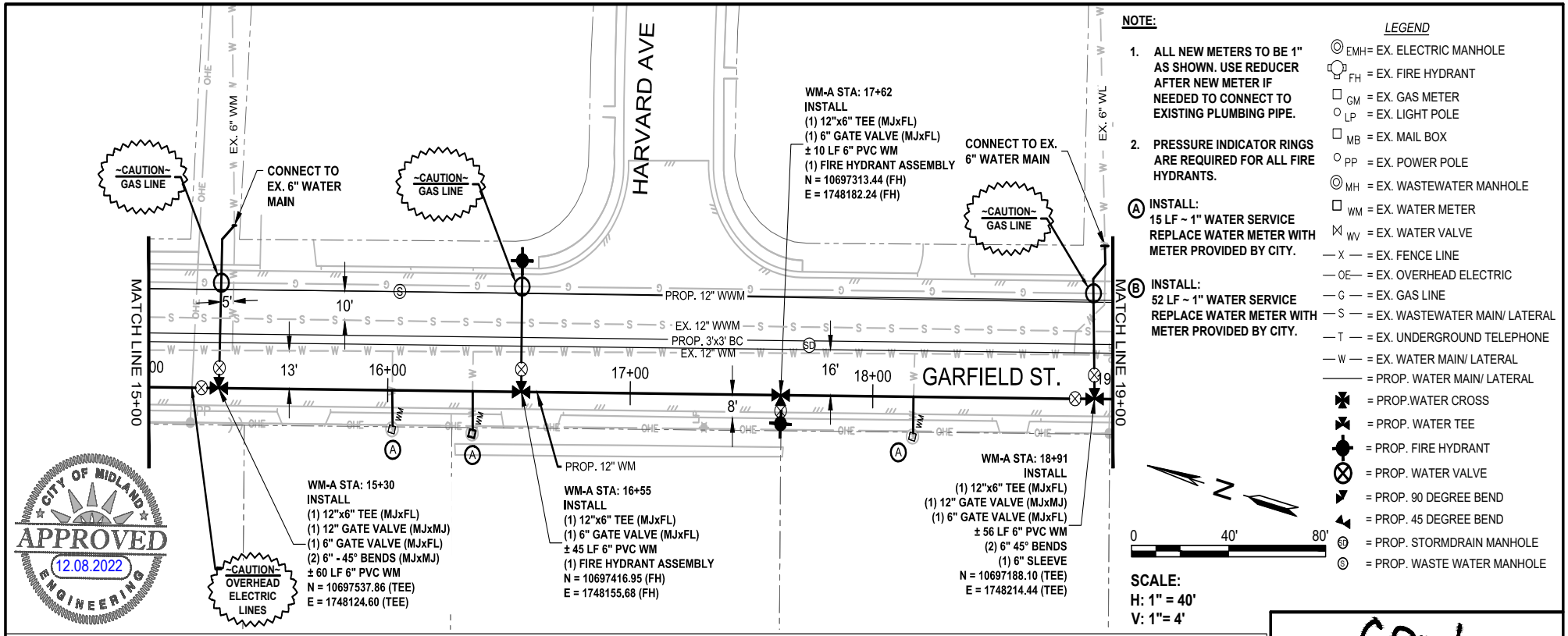
WATER MAIN
PLAN-PROFILE
STA. 7+00 - STA. 11+00

21

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



PACKET 8.296 January 24, 2023



CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEERING

NOTE:

1. ALL NEW METERS TO BE 1" AS SHOWN. USE REDUCER AFTER NEW METER IF NEEDED TO CONNECT TO EXISTING PLUMBING PIPE.
2. PRESSURE INDICATOR RINGS ARE REQUIRED FOR ALL FIRE HYDRANTS.

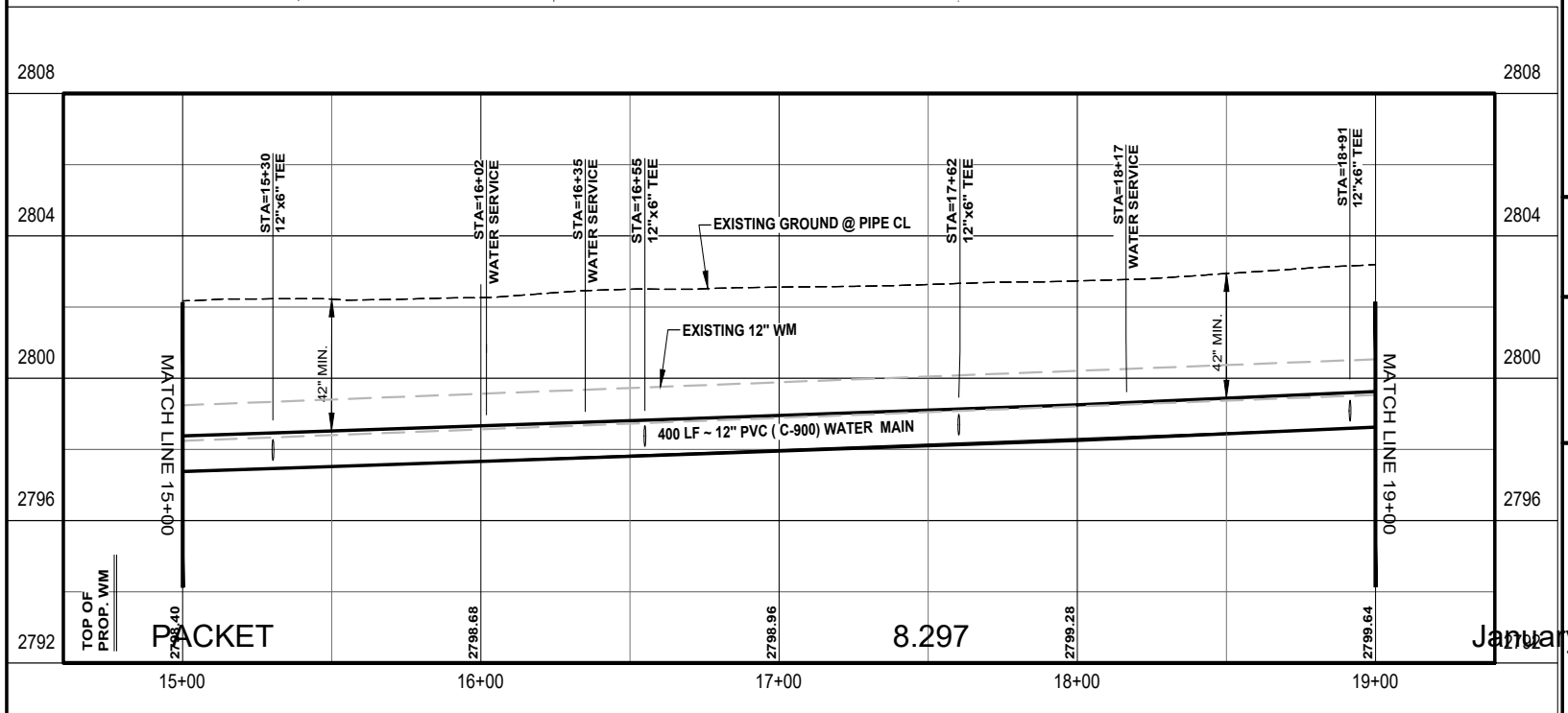
(A) INSTALL:
15 LF ~ 1" WATER SERVICE
REPLACE WATER METER WITH METER PROVIDED BY CITY.

(B) INSTALL:
52 LF ~ 1" WATER SERVICE
REPLACE WATER METER WITH METER PROVIDED BY CITY.

LEGEND

- EMH = EX. ELECTRIC MANHOLE
- FH = EX. FIRE HYDRANT
- GM = EX. GAS METER
- LP = EX. LIGHT POLE
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- WV = EX. WATER VALVE
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- — S — = EX. WASTEWATER MAIN/ LATERAL
- — T — = EX. UNDERGROUND TELEPHONE
- — W — = EX. WATER MAIN/ LATERAL
- = PROP. WATER MAIN/ LATERAL
- = PROP.WATER CROSS
- = PROP. WATER TEE
- = PROP. FIRE HYDRANT
- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- SD = PROP. STORMDRAIN MANHOLE
- S = PROP. WASTE WATER MANHOLE

SCALE:
H: 1" = 40'
V: 1"= 4'



PARKHILL SMITH & COOPER
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

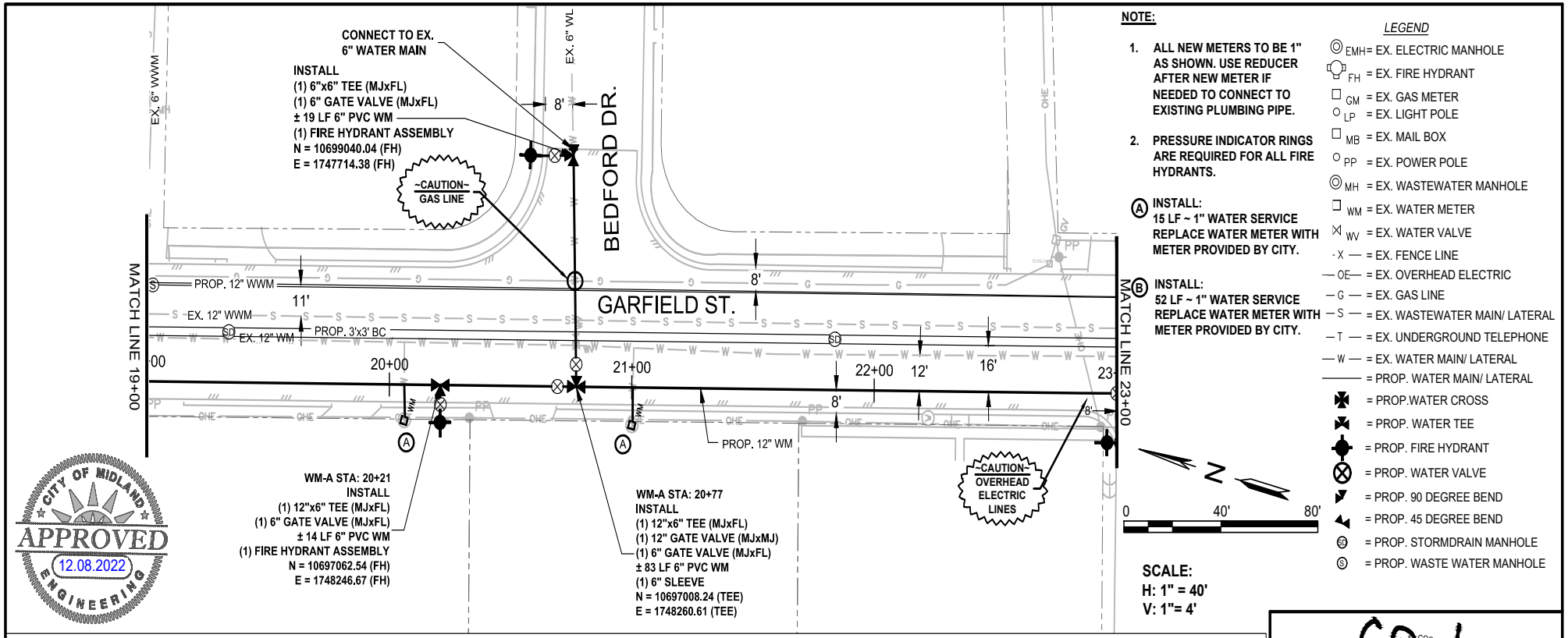
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WATER MAIN
PLAN-PROFILE
STA. 15+00 - STA. 19+00

23

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



NOTE:

1. ALL NEW METERS TO BE 1" AS SHOWN. USE REDUCER AFTER NEW METER IF NEEDED TO CONNECT TO EXISTING PLUMBING PIPE.
2. PRESSURE INDICATOR RINGS ARE REQUIRED FOR ALL FIRE HYDRANTS.

Ⓐ INSTALL:
15 LF ~ 1" WATER SERVICE
REPLACE WATER METER WITH METER PROVIDED BY CITY.

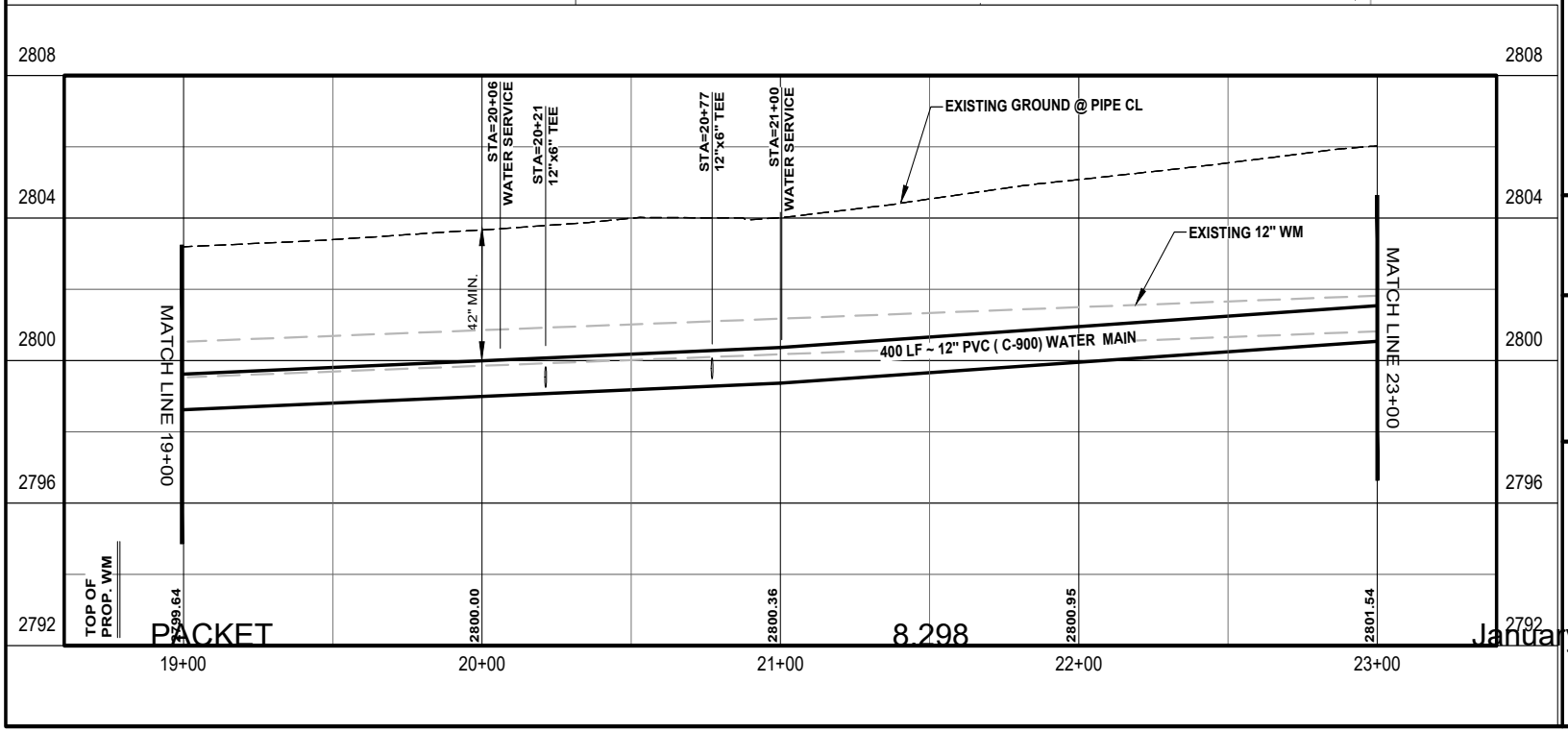
Ⓑ INSTALL:
52 LF ~ 1" WATER SERVICE
REPLACE WATER METER WITH METER PROVIDED BY CITY.

LEGEND

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- GM = EX. GAS METER
- LP = EX. LIGHT POLE
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SCALE:
H: 1" = 40'
V: 1"= 4'

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING



CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WATER MAIN
PLAN-PROFILE
STA. 19+00 - STA. 23+00

24

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEERING

INSTALL
(1) 6"x6" TEE (MJxFL)
(1) 6" GATE VALVE (MJxFL)
± 17 LF 6" PVC WM
(1) FIRE HYDRANT ASSEMBLY
N = 10696673.72 (FH)
E = 1748427.31 (FH)

WM-A STA: 23+08
INSTALL
(1) 12"x6" TEE (MJxFL)
1) 12" GATE VALVE (MJxMJ)
(1) 6" GATE VALVE (MJxFL)
± 26 LF 6" PVC WM
(2) 6" 45° BEND
(1) 6" SLEEVE
N = 10696784.43 (TEE)
E = 1748318.13 (TEE)

CONNECT TO EX. 6" WATER MAIN

PROPOSED ROUNDABOUT TO BE CONSTRUCTED WITH GARFIELD ST. PAVING PROJECT.

~CAUTION~ GAS LINE

COUNTRY CLUB DR.

EX. 6" WM

MATCH LINE 23+00

PROP. 12" WWM

EX. 12" WWM

PROP. 3'x3' SD

EX. 12" WM

GARFIELD ST.

8' 11' 8' 16' 8'

14'

23+00 24+00 25+00 26+00 27+00

MATCH LINE 27+00

INSTALL
(1) 6"x6" TEE (MJxFL)
(1) 6" GATE VALVE (MJxFL)
± 12 LF 6" PVC WM
(1) FIRE HYDRANT ASSEMBLY
N = 10696780.21 (FH)
E = 1748301.62 (FH)

CONNECT TO EX. 6" WATER MAIN

WM-A STA: 24+49
CAUTION 6" WWM CROSSING

WM-A STA: 24+44
INSTALL
(1) 12"x6" TEE (MJxFL)
1) 12" GATE VALVE (MJxMJ
(1) 6" GATE VALVE (MJxFL)
± 80 LF 6" PVC WM
(1) 6" 22.5° BEND
(1) 6" 11.25° BEND
(1) 6" SLEEVE
N = 10696653.29 (TEE)
E = 1748351.86 (TEE)

PROP. 12" WM

~CAUTION~ OVERHEAD ELECTRIC LINES

WM-A STA: 25+85
INSTALL
(1) 12"x6" TEE (MJxFL)
(1) 6" GATE VALVE (MJxFL)
± 11 LF 6" PVC WM
(1) FIRE HYDRANT ASSEMBLY
N = 10696513.72 (FH)
E = 1748376.46 (FH)

SEE SHEET 30 FOR CUTHBERT AVE. WATER MAIN

EX. 6" WWM

EX. 6" WM

W CUTHBERT AVE

NOTE:

1. **ALL NEW METERS TO BE 1" AS SHOWN. USE REDUCER AFTER NEW METER IF NEEDED TO CONNECT TO EXISTING PLUMBING PIPE.**
2. **PRESSURE INDICATOR RINGS ARE REQUIRED FOR ALL FIRE HYDRANTS.**

Ⓐ **INSTALL:**
15 LF ~ 1" WATER SERVICE REPLACE WATER METER WITH METER PROVIDED BY CITY.

Ⓑ **INSTALL:**
52 LF ~ 1" WATER SERVICE REPLACE WATER METER WITH METER PROVIDED BY CITY.

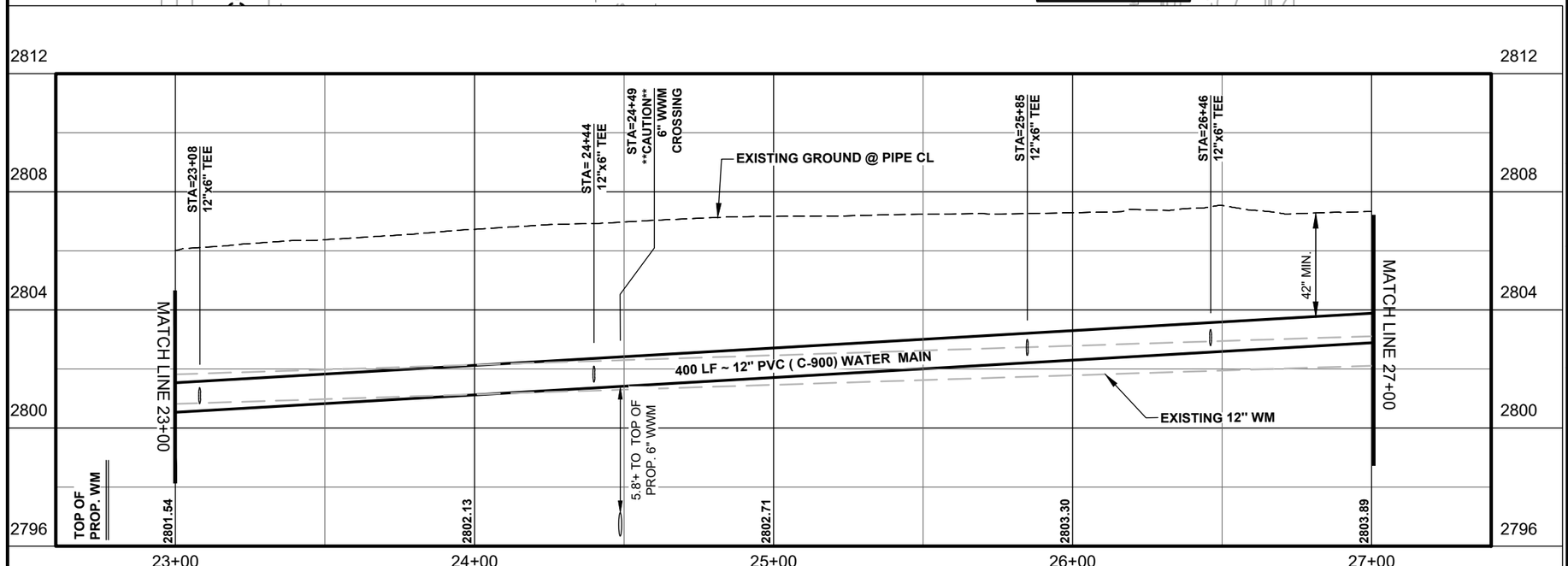
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- = PROP. 90 DEGREE BEND
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- SD = PROP. STORMDRAIN MANHOLE
- S = PROP. WASTE WATER MANHOLE

N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'



CHRISTIAN SCHNITGER
84810
LICENSED PROFESSIONAL ENGINEER
SMITH & COOPER TEXAS, INC. F-560
03/13/2020

PARKHILL SMITH & COOPER
PSC

MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WATER MAIN
PLAN-PROFILE
STA. 23+00 - STA. 27+00

25

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

PROPOSED ROUNDABOUT TO BE CONSTRUCTED WITH GARFIELD ST. PAVING PROJECT.

SEE SHEET 30 FOR CUTHBERT AVE. WATER MAIN

REFER TO SHT. 30

CITY OF MIDLAND APPROVED AS NOTED ENGINEERING 12.08.2022

FIRST BAPTIST CHURCH OF MIDLAND

CUTHBERT AVE

EX. 8" WL

~CAUTION~ GAS LINE

~CAUTION~ OVERHEAD ELECTRIC LINES

GARFIELD ST.

MATCH LINE 27+00

MATCH LINE 31+00

PROP. 12" WWM

EX. 12" WWM

EX. 12" WM

PROP. 3'x3' SD

PROP. 8" WWM

EX. 8" WWM

STOREY AVE

EX. 4" WL

PROP. 12" WM

WM-A STA: 29+80
INSTALL
(1) 12"x6" TEE (MJxFL)
(1) 12" GATE VALVE (MJxMJ)
(1) 6" GATE VALVE (MJxFL)
± 52 LF 6" PVC WM
~~(1) 6"x 4" REDUCER~~
~~(1) 4" SLEEVE~~
N = 10696133.28 (TEE)
E = 1748485.49 (TEE)

INSTALL
(1) 6"x6" TEE (MJxFL)
(1) 6" GATE VALVE (MJxFL)
± 12 LF 6" PVC WM
(1) FIRE HYDRANT ASSEMBLY
N = 10696138.41 (FH)
E = 1748459.70 (FH)

CONNECT TO EX. 4" WATER MAIN
(1) 6"x4" REDUCER (MJxMJ)

NOTE:

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(A) INSTALL:
15 LF ~ 1" WATER SERVICE
REPLACE WATER METER WITH METER PROVIDED BY CITY.

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52 LF ~ 1" WATER SERVICE
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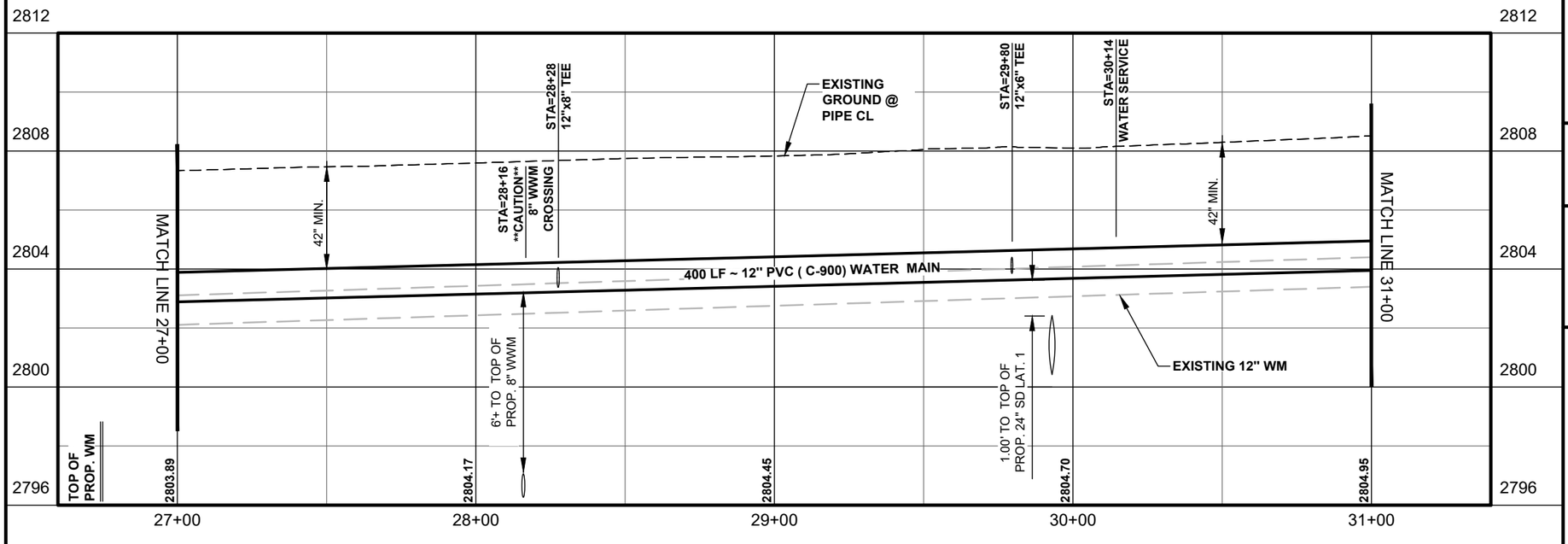
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N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'



CHRISTIAN SCHNITTER 84810 LICENSED PROFESSIONAL ENGINEER
PARKHILL SMITH & COOPER TEXAS REGISTERED ENGINEERING F-595
03/13/2020

PARKHILL SMITH & COOPER

MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WATER MAIN
PLAN-PROFILE
STA. 27+00 - STA. 31+00

26

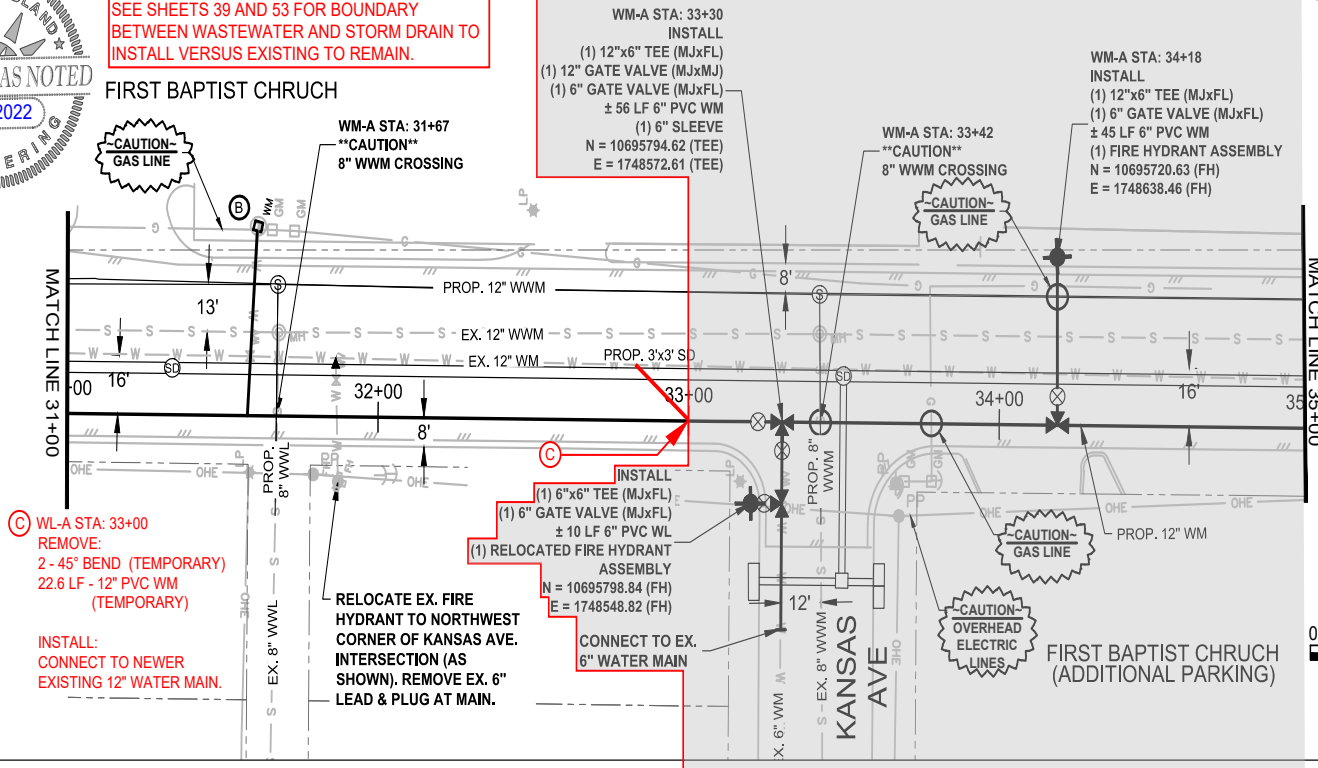
ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

NOTE:

SEE SHEETS 39 AND 53 FOR BOUNDARY BETWEEN WASTEWATER AND STORM DRAIN TO INSTALL VERSUS EXISTING TO REMAIN.

FIRST BAPTIST CHRUCH



Ⓒ WL-A STA: 33+00
REMOVE:
2 - 45° BEND (TEMPORARY)
22.6 LF - 12" PVC WM (TEMPORARY)

INSTALL:
CONNECT TO NEWER EXISTING 12" WATER MAIN.

NOTE:

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2. PRESSURE INDICATOR RINGS ARE REQUIRED FOR ALL FIRE HYDRANTS.

Ⓐ INSTALL:
15 LF ~ 1" WATER SERVICE
REPLACE WATER METER WITH METER PROVIDED BY CITY.

Ⓑ INSTALL:
52 LF ~ 1" WATER SERVICE
REPLACE WATER METER WITH METER PROVIDED BY CITY.

LEGEND

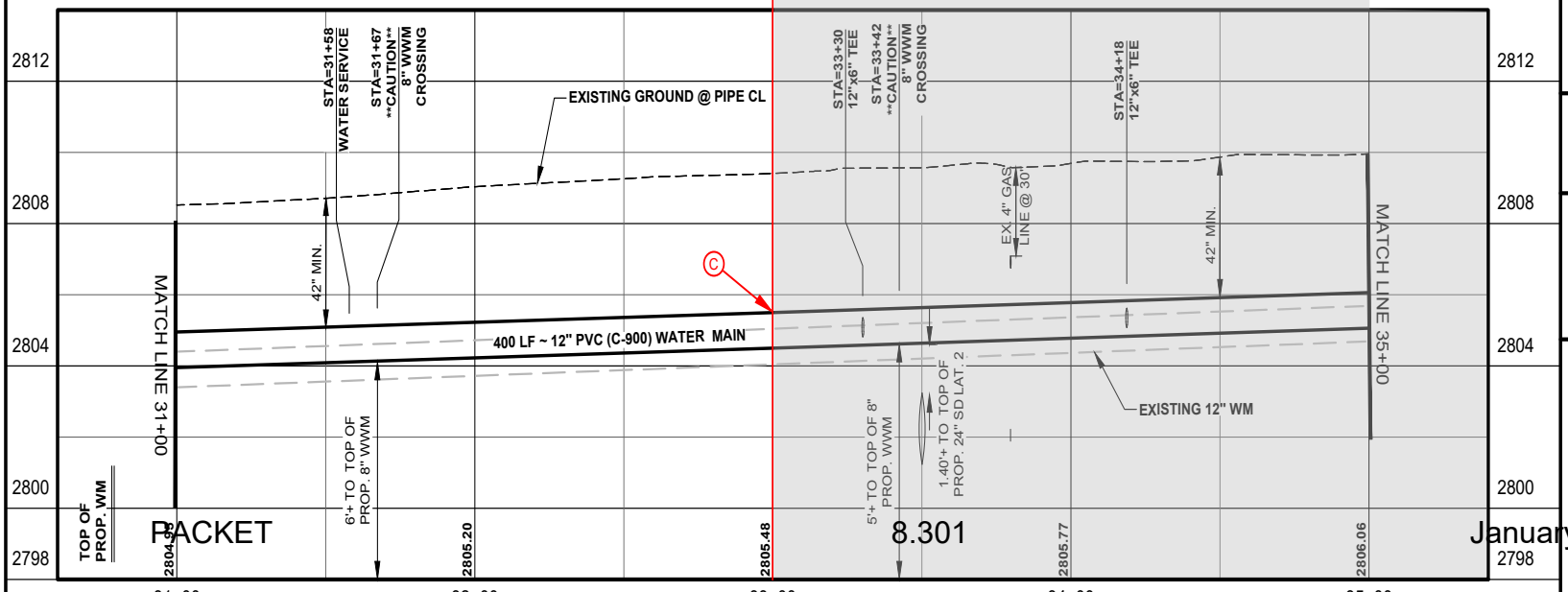
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- SD = PROP. STORMDRAIN MANHOLE
- S = PROP. WASTE WATER MANHOLE

N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'

BREAK OUT (WATER ONLY) ↔ EXISTING TO REMAIN (WATER ONLY)



CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

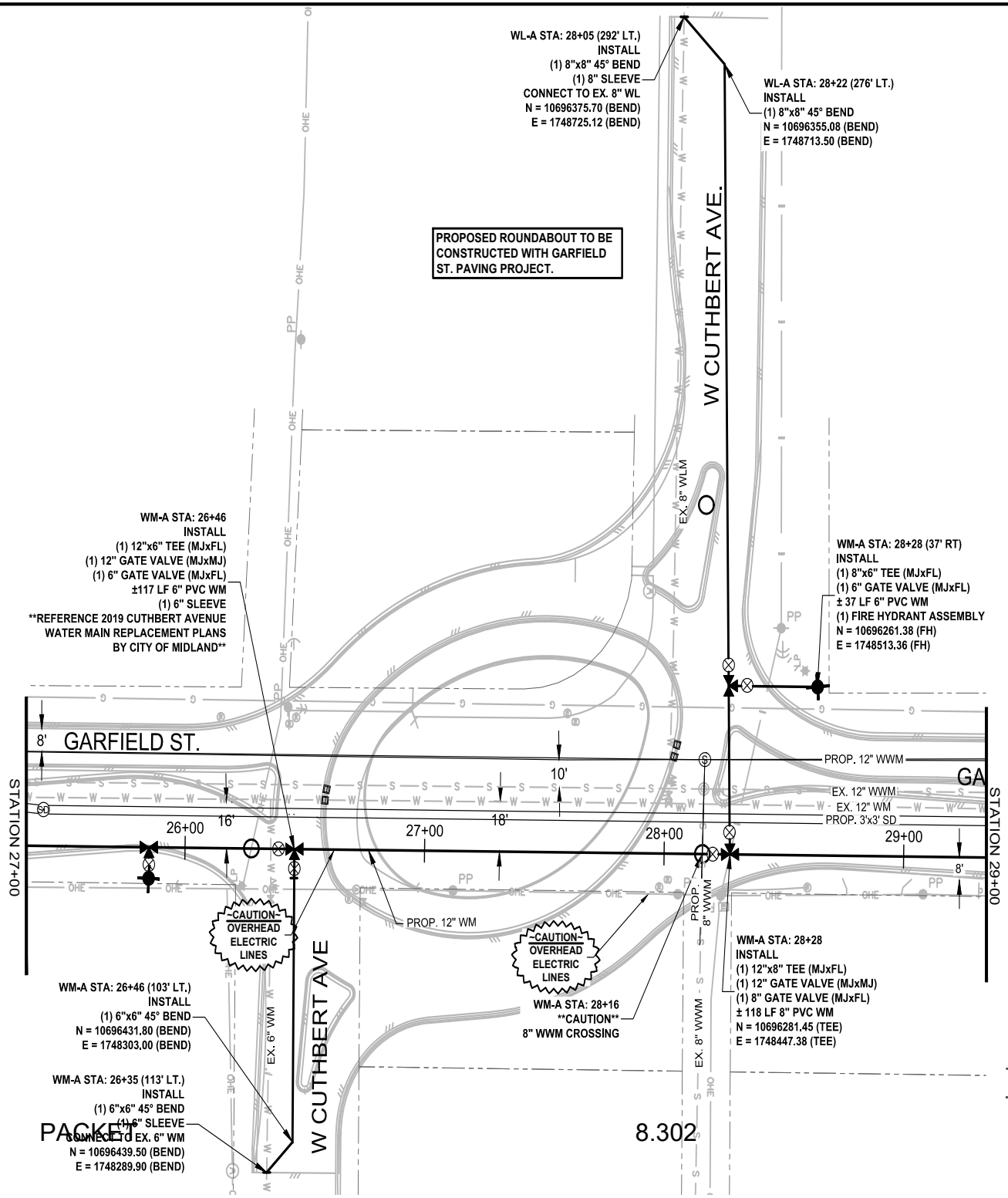
MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WATER MAIN
PLAN-PROFILE
STA. 31+00 - STA. 35+00

27

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



NOTE:

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SCALE:
H: 1" = 40'
V: 1"= 4'

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
PARKHILL, SMITH & COOPER, INC. TBPE F-595
03/13/2020

PARKHILL SMITH & COOPER
PSC

MIDLAND
Engineering Services

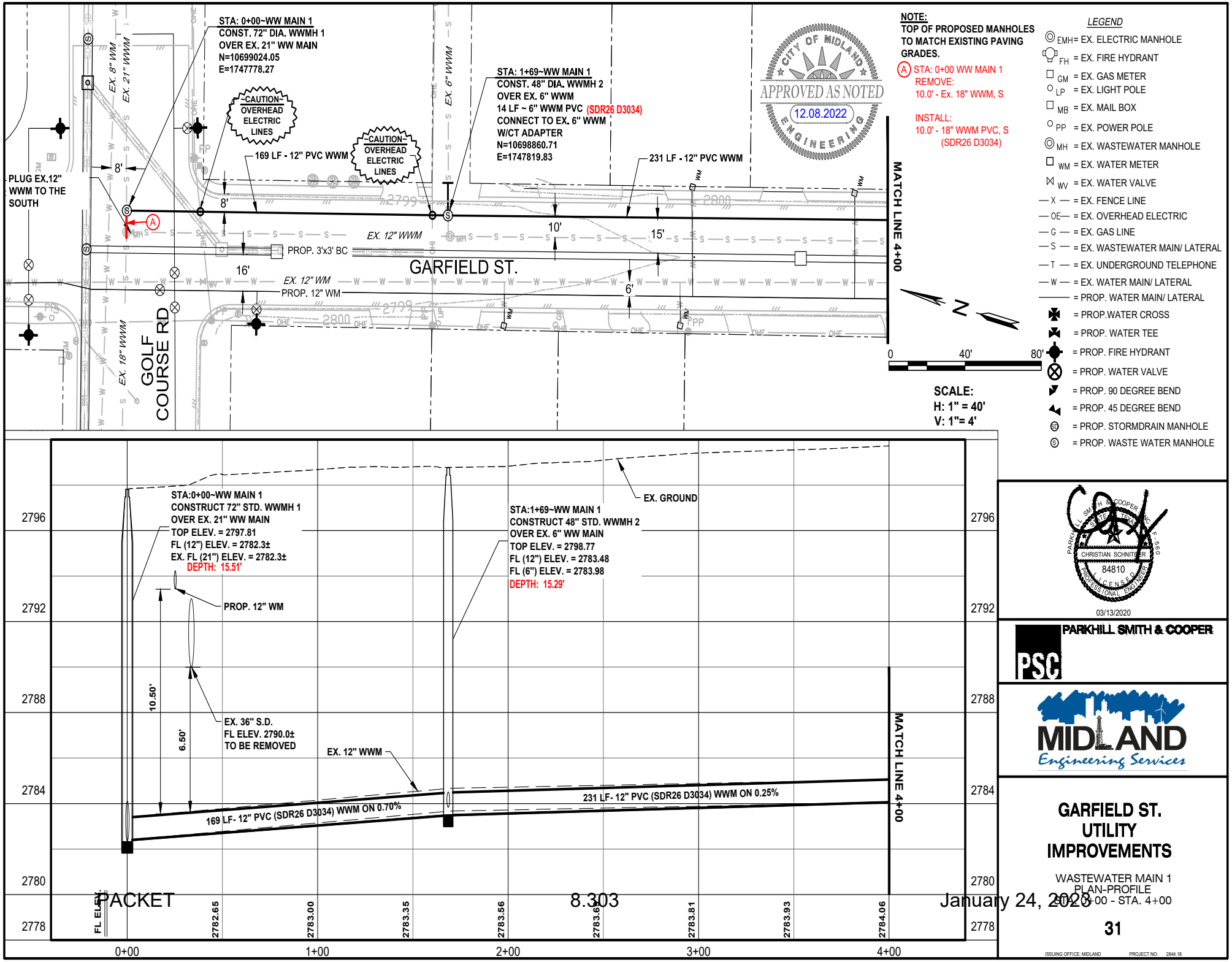
CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEER

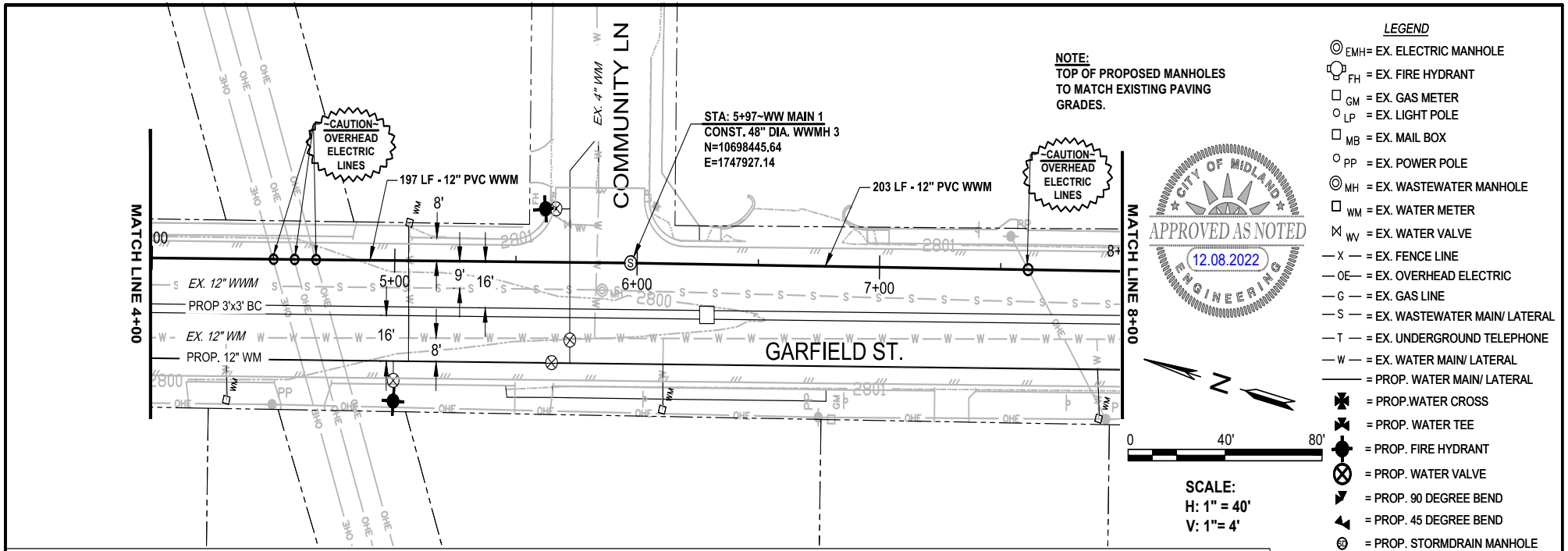
GARFIELD ST. UTILITY IMPROVEMENTS

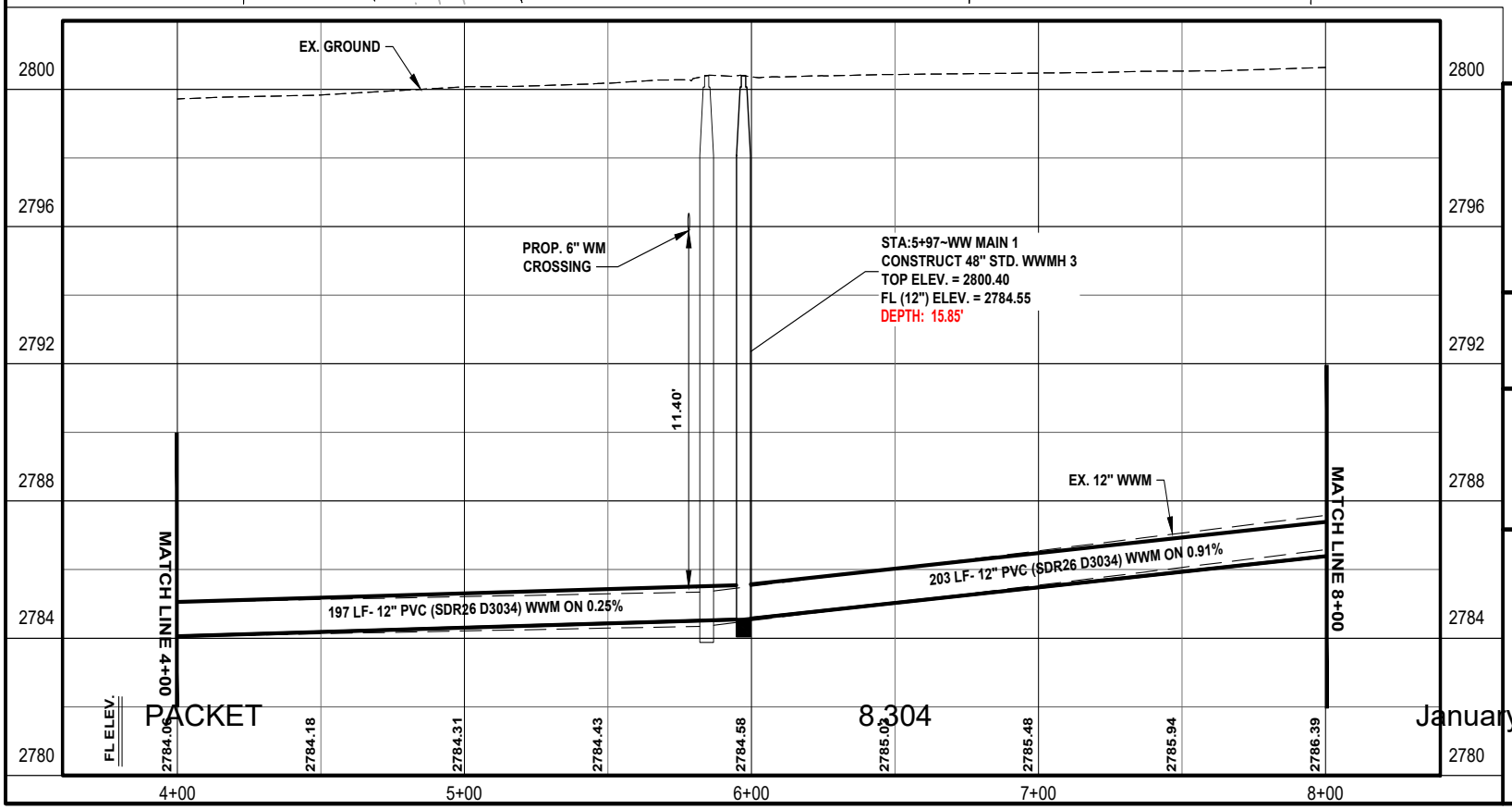
W.CUTHBERT AVE.
INTERSECTION
STA. 27+00 - STA. 29+00

30

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18


STA: 0+00~WW MAIN 1
CONST. 72" DIA. WWMH 1
OVER EX. 21" WW MAIN
N=10699024.05
E=1747778.27
EX. 8" WWM
EX. 21" WWM
CAUTION OVERHEAD ELECTRIC LINES
CAUTION OVERHEAD ELECTRIC LINES
169 LF - 12" PVC WWM
STA: 1+69~WW MAIN 1
CONST. 48" DIA. WWMH 2
OVER EX. 6" WWM
14 LF ~ 6" WWM PVC (SDR26 D3034)
CONNECT TO EX. 6" WWM
W/CT ADAPTER
N=10698860.71
E=1747819.83
EX. 6" WWM
231 LF - 12" PVC WWM
PLUG EX.12" WWM TO THE SOUTH
8'
8'
10'
15'
16'
6'
EX. 12" WWM
PROP. 3'x3' BC
GARFIELD ST.
EX. 12" WM
PROP. 12" WM
GOLF COURSE RD
EX. 18" WWM
MATCH LINE 4+00
APPROVED AS NOTED
CITY OF MIDLAND
12.08.2022
ENGINEERING
NOTE:
TOP OF PROPOSED MANHOLES TO MATCH EXISTING PAVING GRADES.
A STA: 0+00 WW MAIN 1
REMOVE:
10.0' - Ex. 18" WWM, S
INSTALL:
10.0' - 18" WWM PVC, S
(SDR26 D3034)
LEGEND
EMH = EX. ELECTRIC MANHOLE
FH = EX. FIRE HYDRANT
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PP = EX. POWER POLE
MH = EX. WASTEWATER MANHOLE
WM = EX. WATER METER
WV = EX. WATER VALVE
— X — = EX. FENCE LINE
— OE— = EX. OVERHEAD ELECTRIC
— G — = EX. GAS LINE
— S — = EX. WASTEWATER MAIN/ LATERAL
— T — = EX. UNDERGROUND TELEPHONE
— W — = EX. WATER MAIN/ LATERAL
= PROP. WATER MAIN/ LATERAL
= PROP.WATER CROSS
= PROP. WATER TEE
= PROP. FIRE HYDRANT
= PROP. WATER VALVE
= PROP. 90 DEGREE BEND
= PROP. 45 DEGREE BEND
= PROP. STORMDRAIN MANHOLE
= PROP. WASTE WATER MANHOLE
N
0
40'
80'
SCALE:
H: 1" = 40'
V: 1"= 4'
STA:0+00~WW MAIN 1
CONSTRUCT 72" STD. WWMH 1
OVER EX. 21" WW MAIN
TOP ELEV. = 2797.81
FL (12") ELEV. = 2782.3±
EX. FL (21") ELEV. = 2782.3±
DEPTH: 15.51'
PROP. 12" WM
EX. 36" S.D.
FL ELEV. 2790.0±
TO BE REMOVED
10.50'
6.50'
EX. 12" WWM
EX. GROUND
STA:1+69~WW MAIN 1
CONSTRUCT 48" STD. WWMH 2
OVER EX. 6" WW MAIN
TOP ELEV. = 2798.77
FL (12") ELEV. = 2783.48
FL (6") ELEV. = 2783.98
DEPTH: 15.29'
169 LF- 12" PVC (SDR26 D3034) WWM ON 0.70%
231 LF- 12" PVC (SDR26 D3034) WWM ON 0.25%
MATCH LINE 4+00
2796
2792
2788
2784
2780
2778
FL ELEV.
2782.65
2783.00
2783.35
2783.56
2783.69
2783.81
2783.93
2784.06
0+00
1+00
2+00
3+00
4+00
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020
PARKHILL SMITH & COOPER
PSC
MIDLAND
Engineering Services
GARFIELD ST.
UTILITY
IMPROVEMENTS
WASTEWATER MAIN 1
PLAN-PROFILE
STA. 0+00 - STA. 4+00
31
ISSUING OFFICE: MIDLAND
PROJECT NO: 2844.18





CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
PARKHILL, SMITH & COOPER, INC. T.B.P.E. F-5909
03/13/2020

PARKHILL SMITH & COOPER
PSC

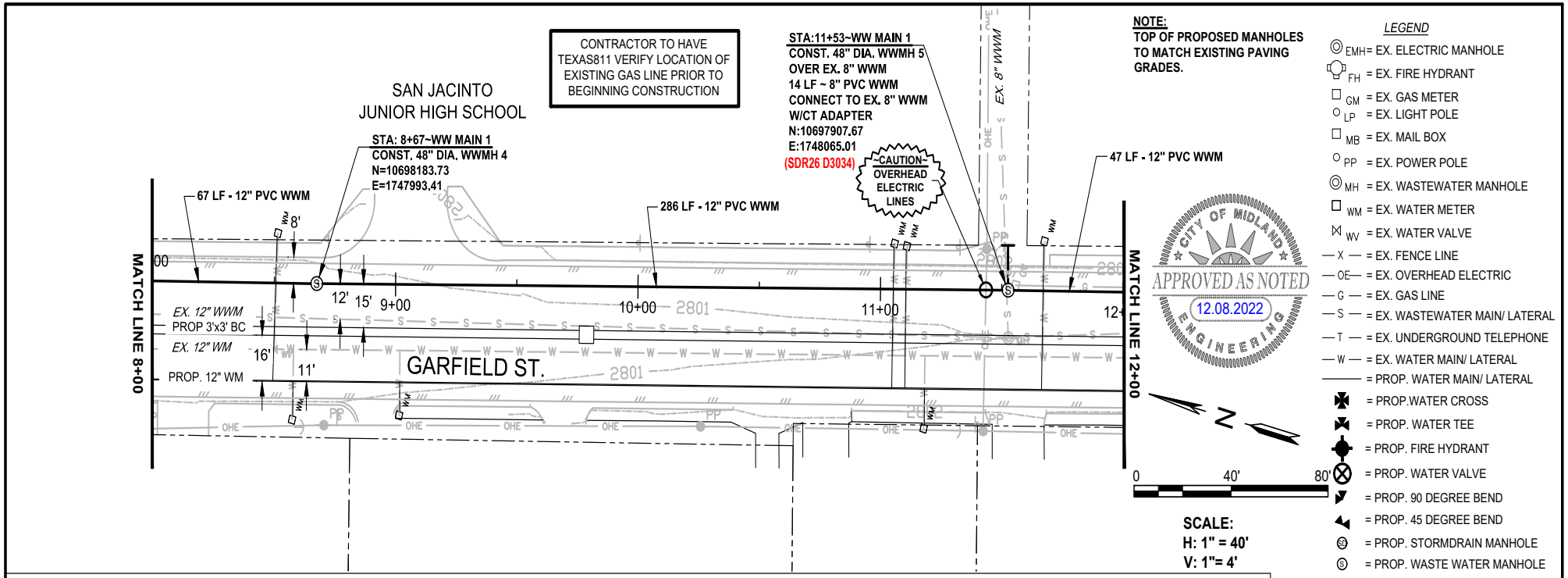
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WASTEWATER MAIN 1
PLAN-PROFILE
STA. 4+00 - STA. 8+00

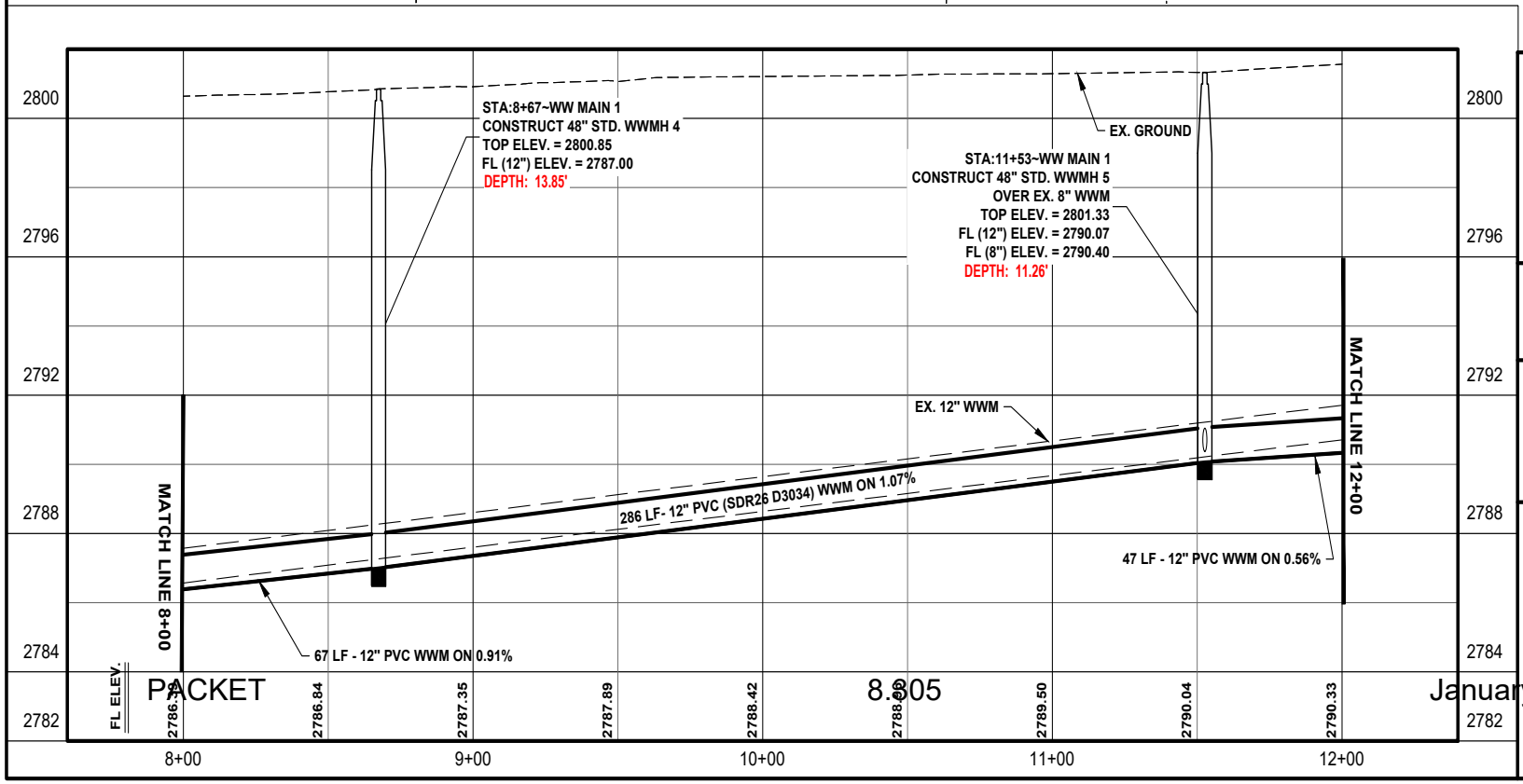
32

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

SCALE:
H: 1" = 40'
V: 1"= 4'



PACKET 8.305 January 24, 2023

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

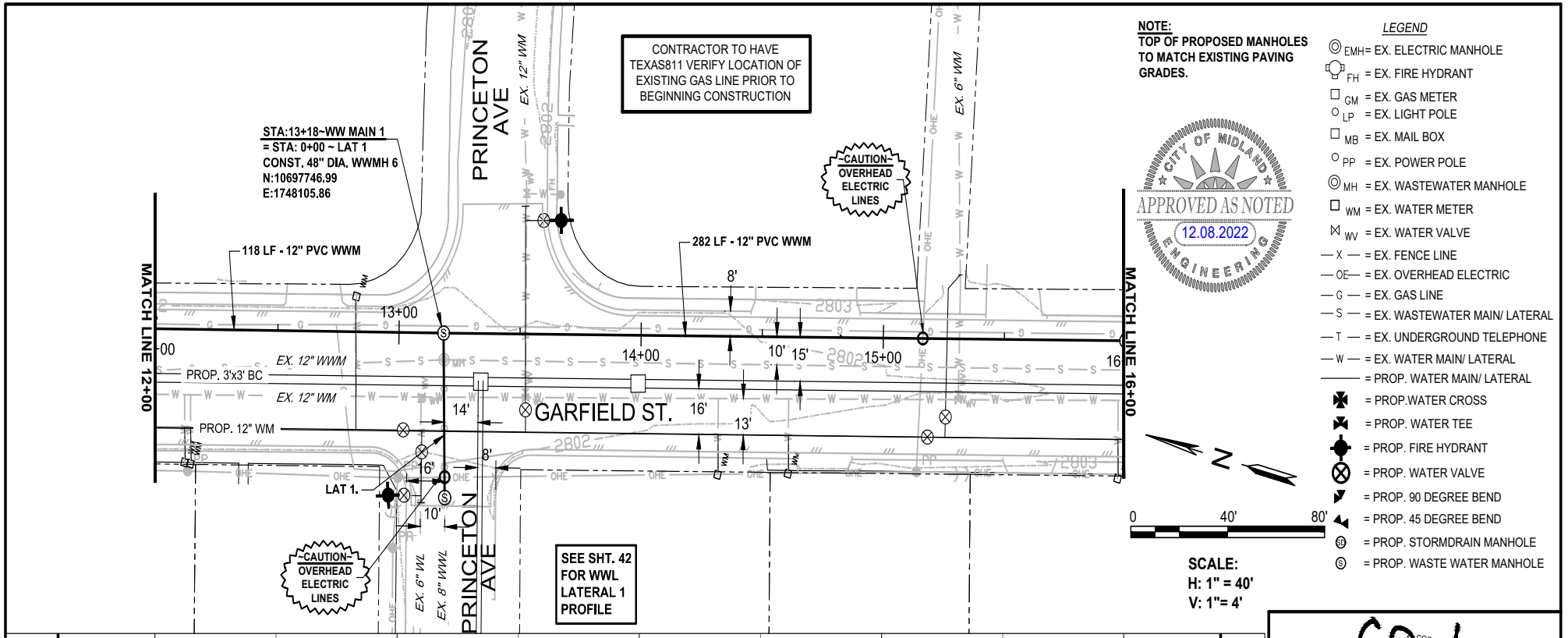
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WASTEWATER MAIN 1
PLAN-PROFILE
STA.8+00 - STA.12+00

33

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



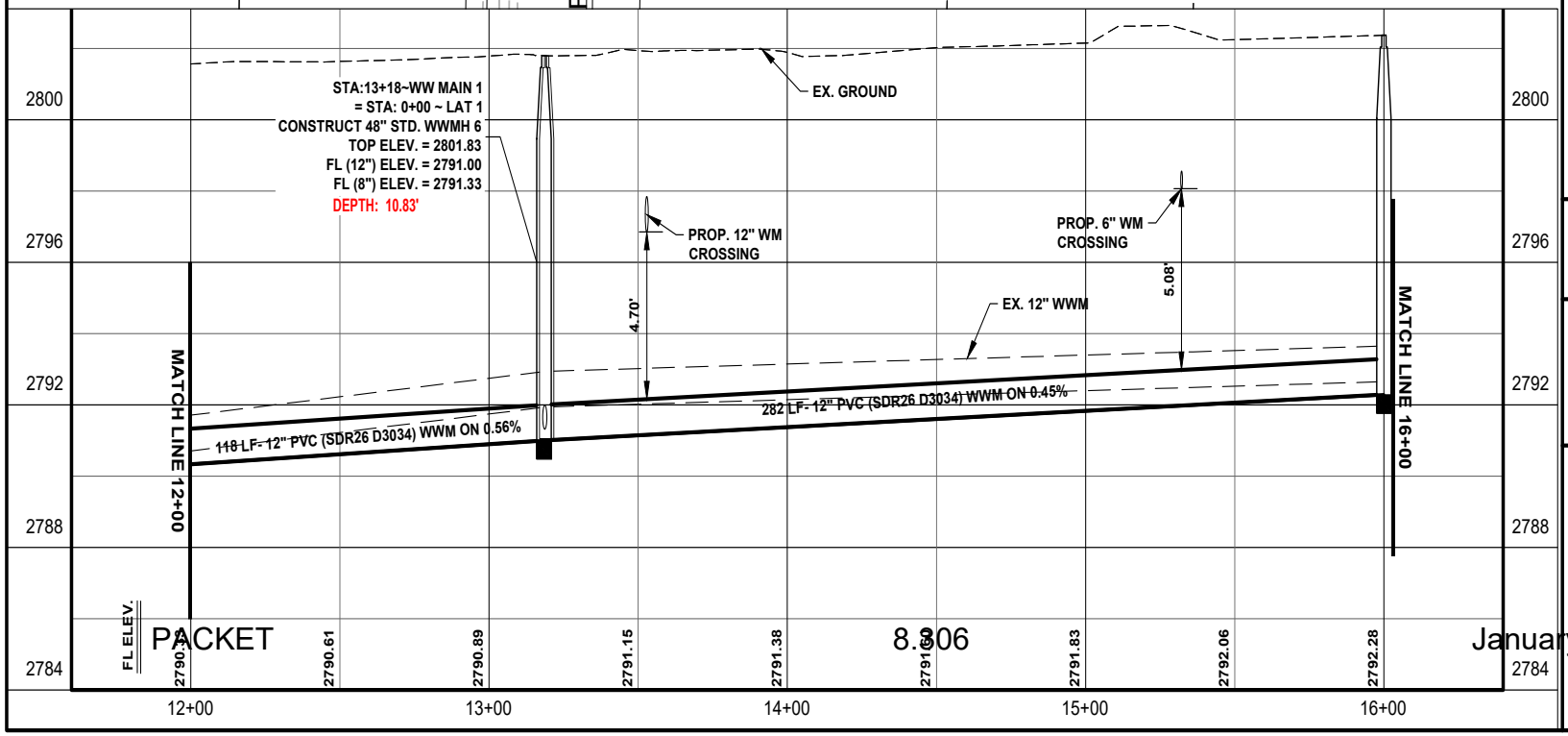
NOTE:
TOP OF PROPOSED MANHOLES TO MATCH EXISTING PAVING GRADES.

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

LEGEND

- EMH = EX. ELECTRIC MANHOLE
- FH = EX. FIRE HYDRANT
- GM = EX. GAS METER
- LP = EX. LIGHT POLE
- MB = EX. MAIL BOX
- PP = EX. POWER POLE
- MH = EX. WASTEWATER MANHOLE
- WM = EX. WATER METER
- WV = EX. WATER VALVE
- X = EX. FENCE LINE
- OE = EX. OVERHEAD ELECTRIC
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- T = EX. UNDERGROUND TELEPHONE
- W = EX. WATER MAIN/ LATERAL
- = PROP. WATER MAIN/ LATERAL
- = PROP.WATER CROSS
- = PROP. WATER TEE
- = PROP. FIRE HYDRANT
- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- = PROP. STORMDRAIN MANHOLE
- = PROP. WASTE WATER MANHOLE

SCALE:
H: 1" = 40'
V: 1"= 4'



CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

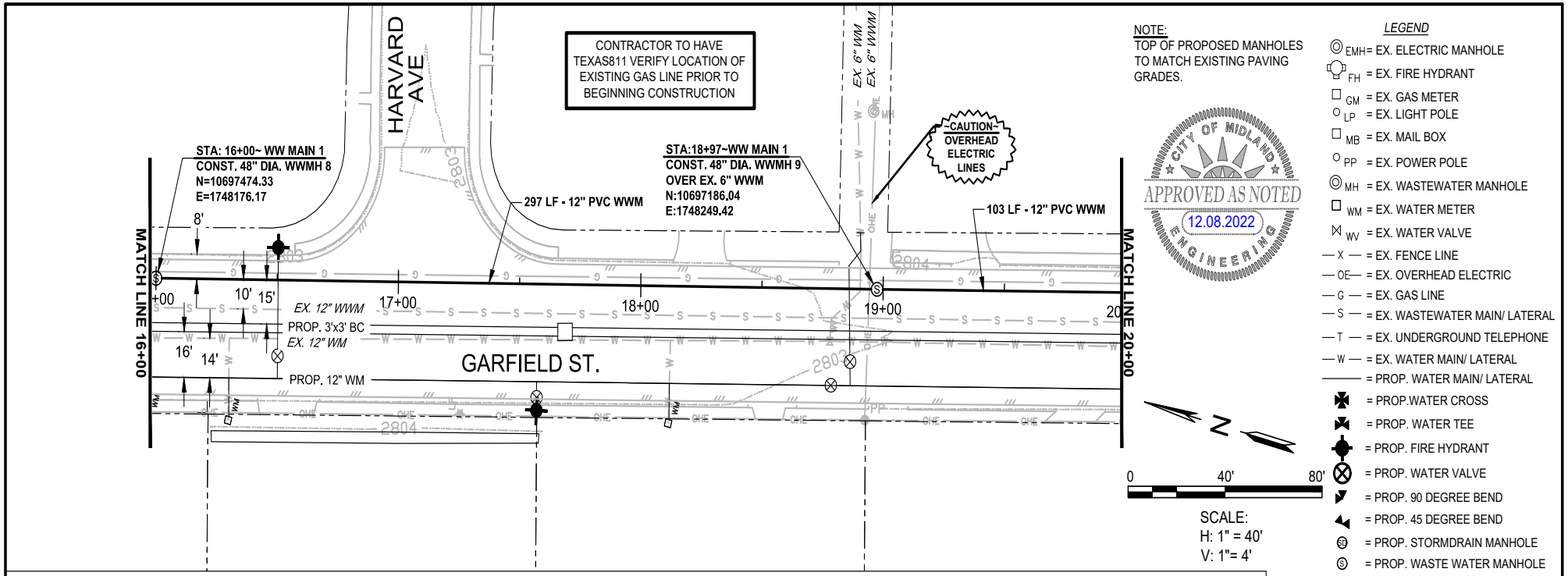
MIDLAND
Engineering Services

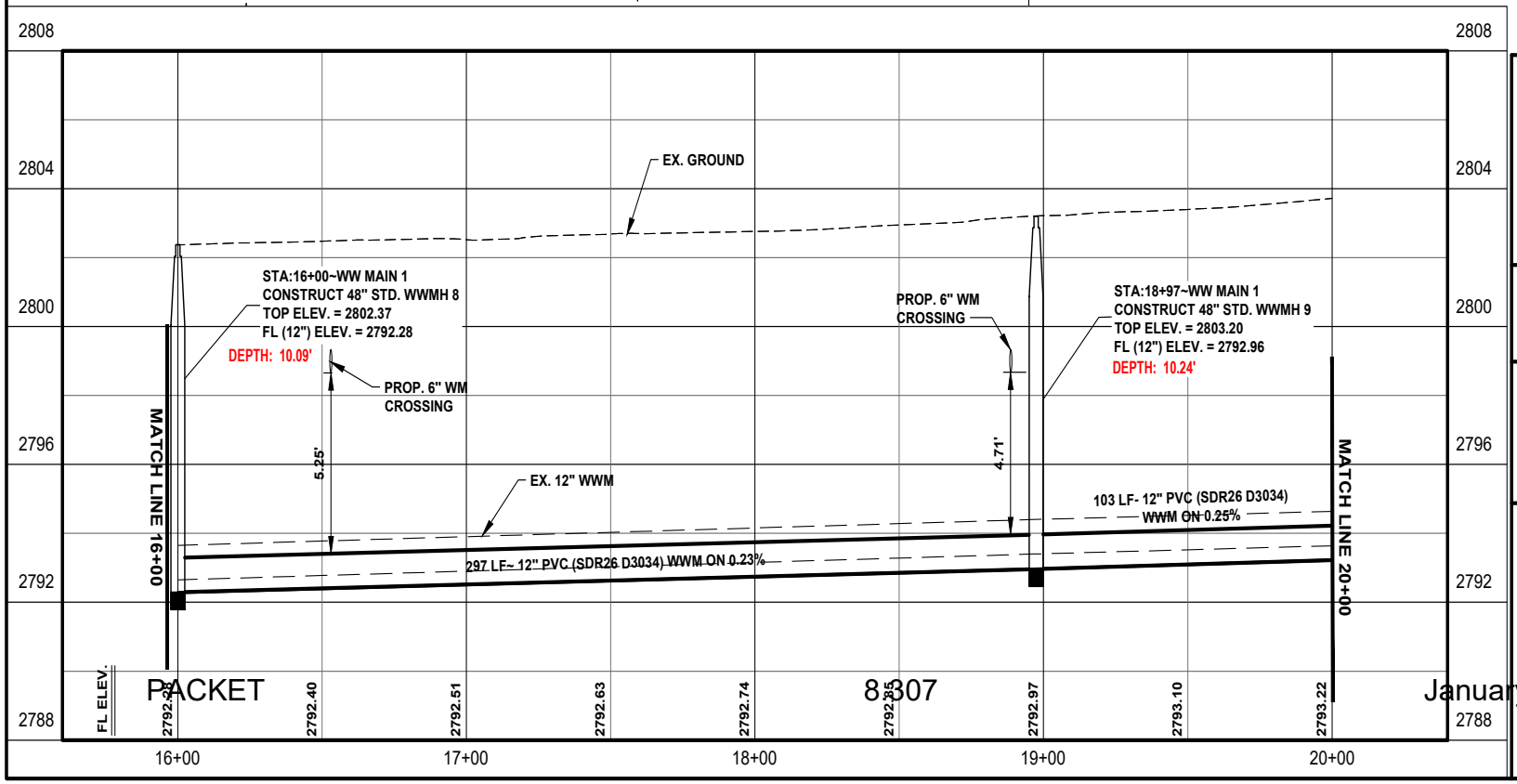
GARFIELD ST. UTILITY IMPROVEMENTS

WASTEWATER MAIN 1
PLAN-PROFILE
STA. 12+00 - STA.16+00

34

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18





PARKHILL SMITH & COOPER
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

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Engineering Services

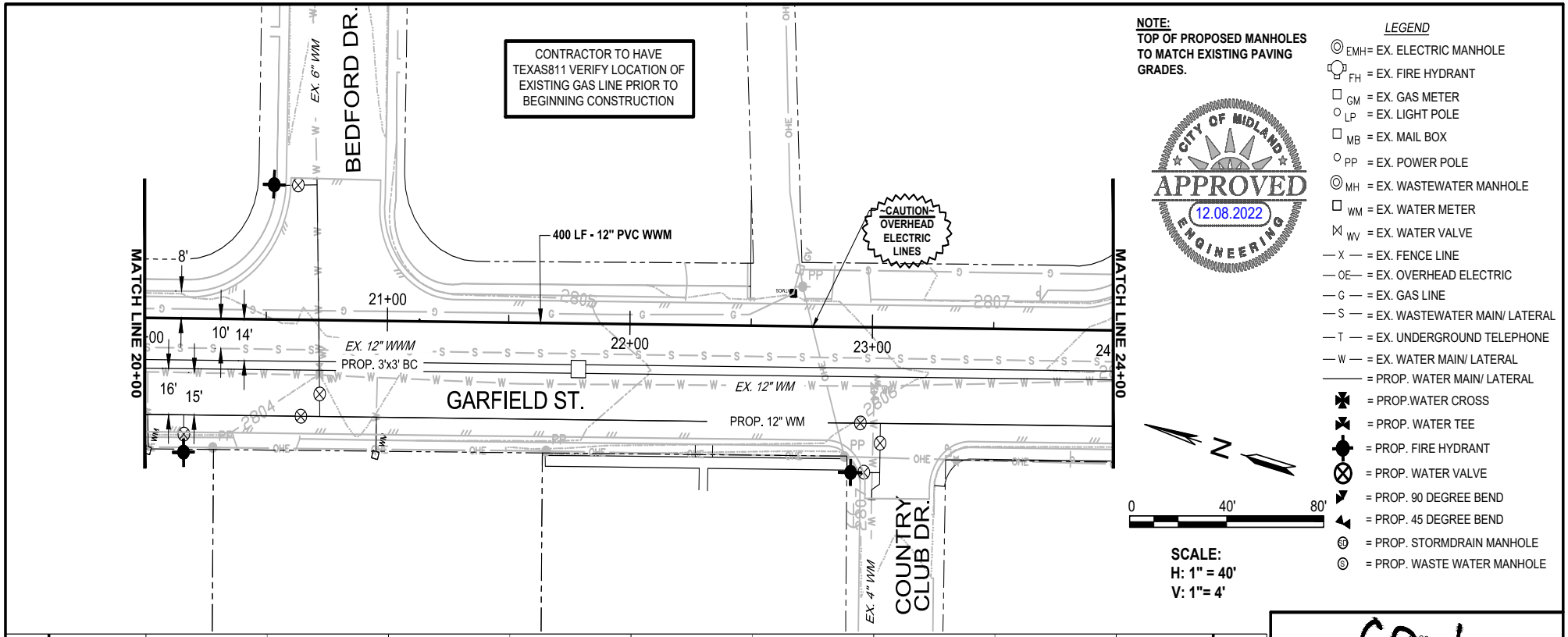
GARFIELD ST. UTILITY IMPROVEMENTS

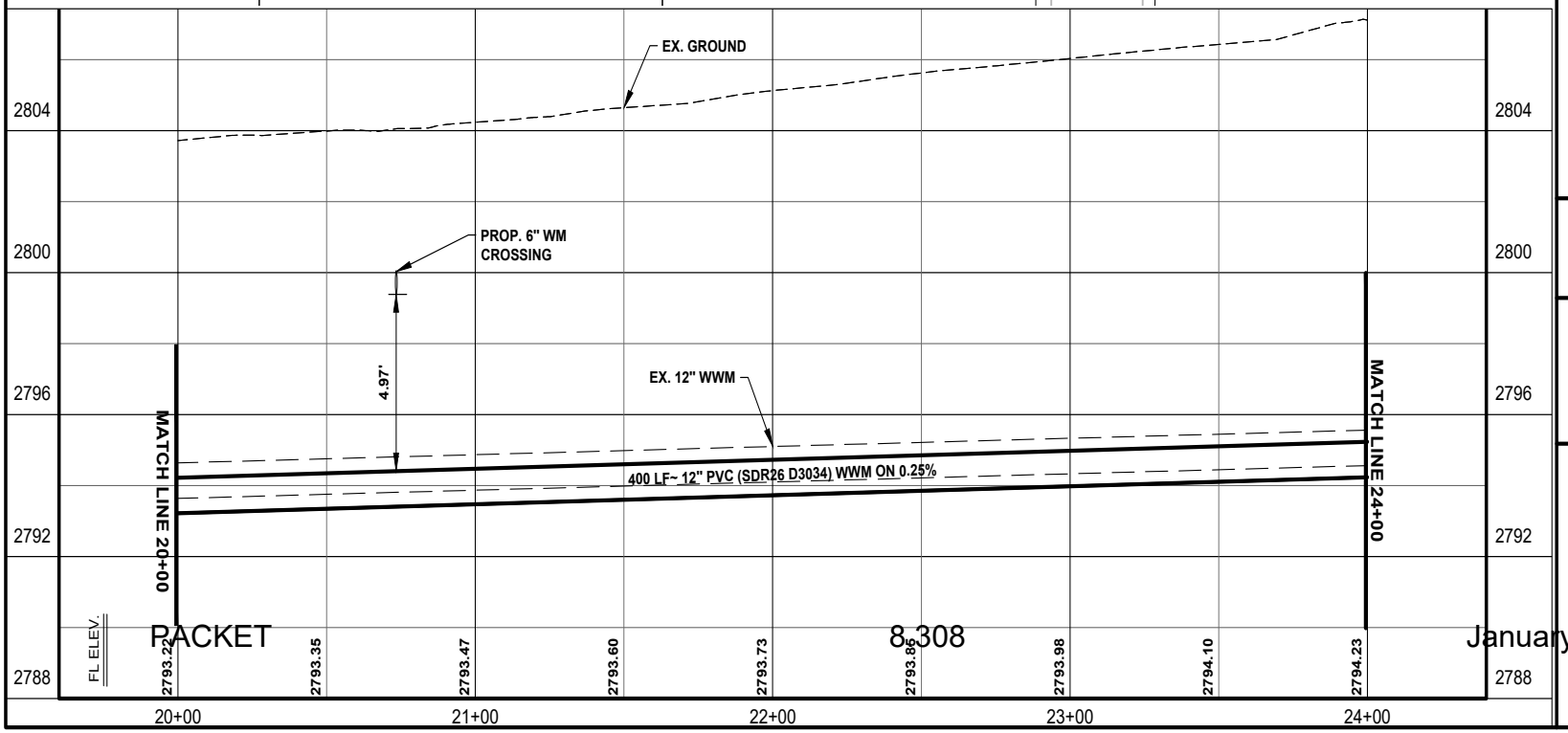
WASTEWATER MAIN 1
PLAN-PROFILE
STA. 16+00 - STA. 20+00

35

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

PACKET 8307 January 24, 2023





CHRISTIAN SCHNITGER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

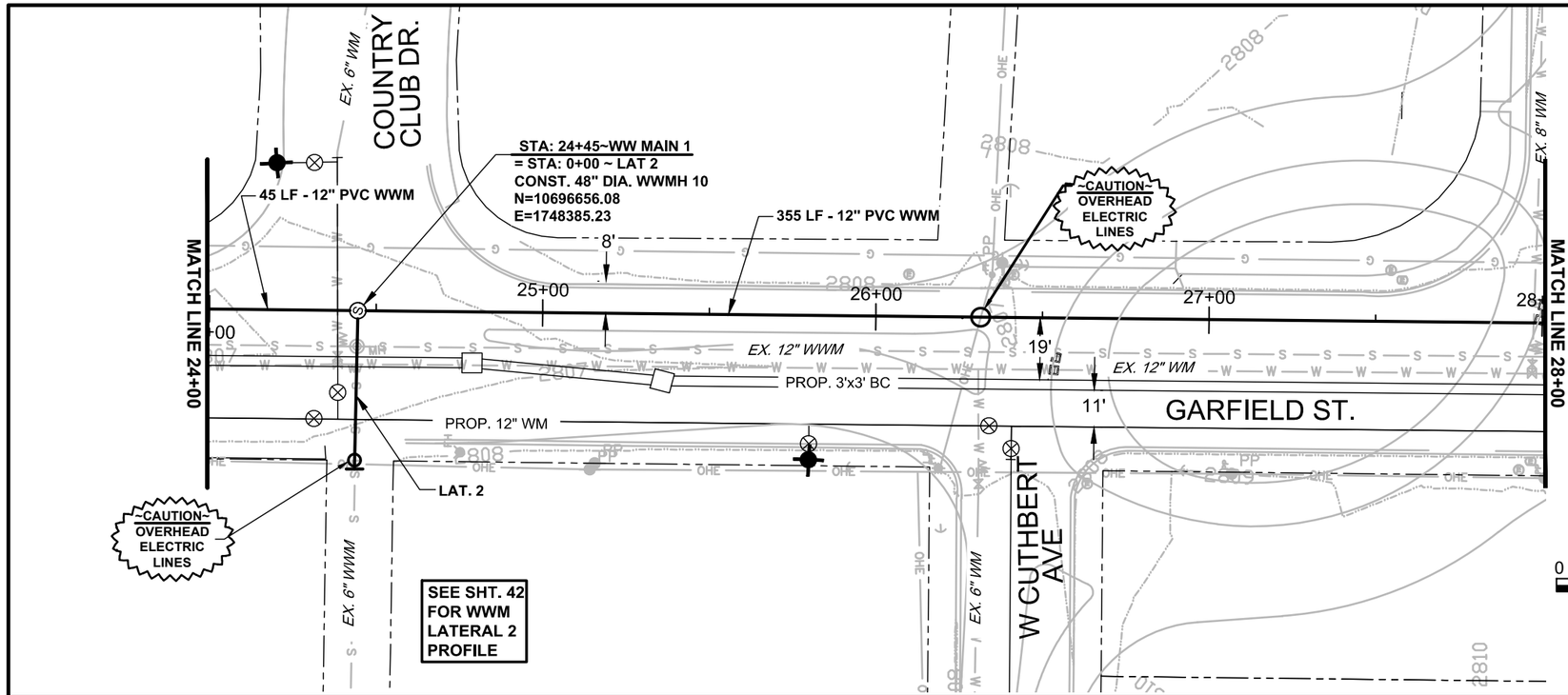
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WASTEWATER LINE 1
PLAN-PROFILE
STA. 20+00 - STA. 24+00

36

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



NOTE:
TOP OF PROPOSED MANHOLES TO MATCH EXISTING PAVING GRADES.

NOTE:
PROPOSED ROUNDABOUT TO BE CONSTRUCTED WITH GARFIELD STREET PAVING PROJECT.

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

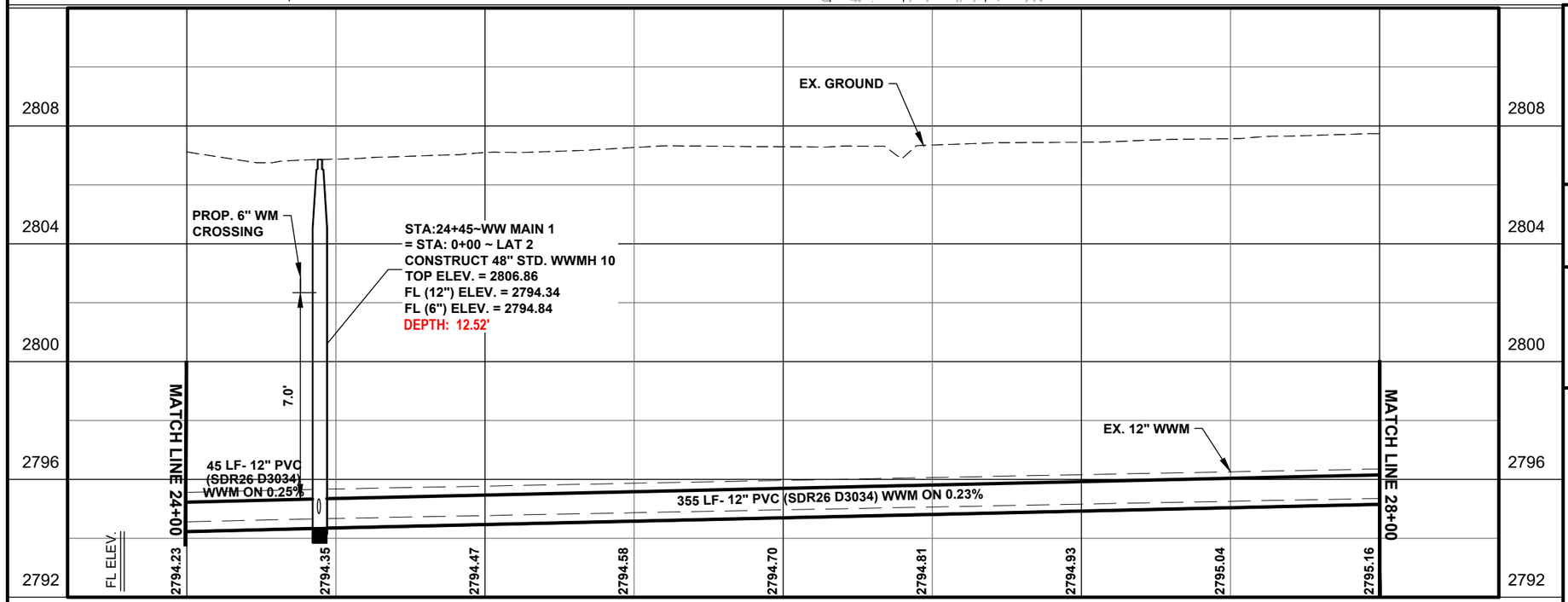
LEGEND

- EMH = EX. ELECTRIC MANHOLE
- FH = EX. FIRE HYDRANT
- GM = EX. GAS METER
- LP = EX. LIGHT POLE
- MB = EX. MAIL BOX
- PP = EX. POWER POLE
- MH = EX. WASTEWATER MANHOLE
- WM = EX. WATER METER
- WV = EX. WATER VALVE
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- = PROP. WATER MAIN/ LATERAL
- = PROP.WATER CROSS
- = PROP. WATER TEE
- = PROP. FIRE HYDRANT
- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- SD = PROP. STORMDRAIN MANHOLE
- S = PROP. WASTE WATER MANHOLE

N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'



CHRISTIAN SCHNITGER
84810
LICENSED
PROFESSIONAL ENGINEER
SMITH & COOPER, INC. TEXAS F-956
03/13/2020

PARKHILL SMITH & COOPER
PSC

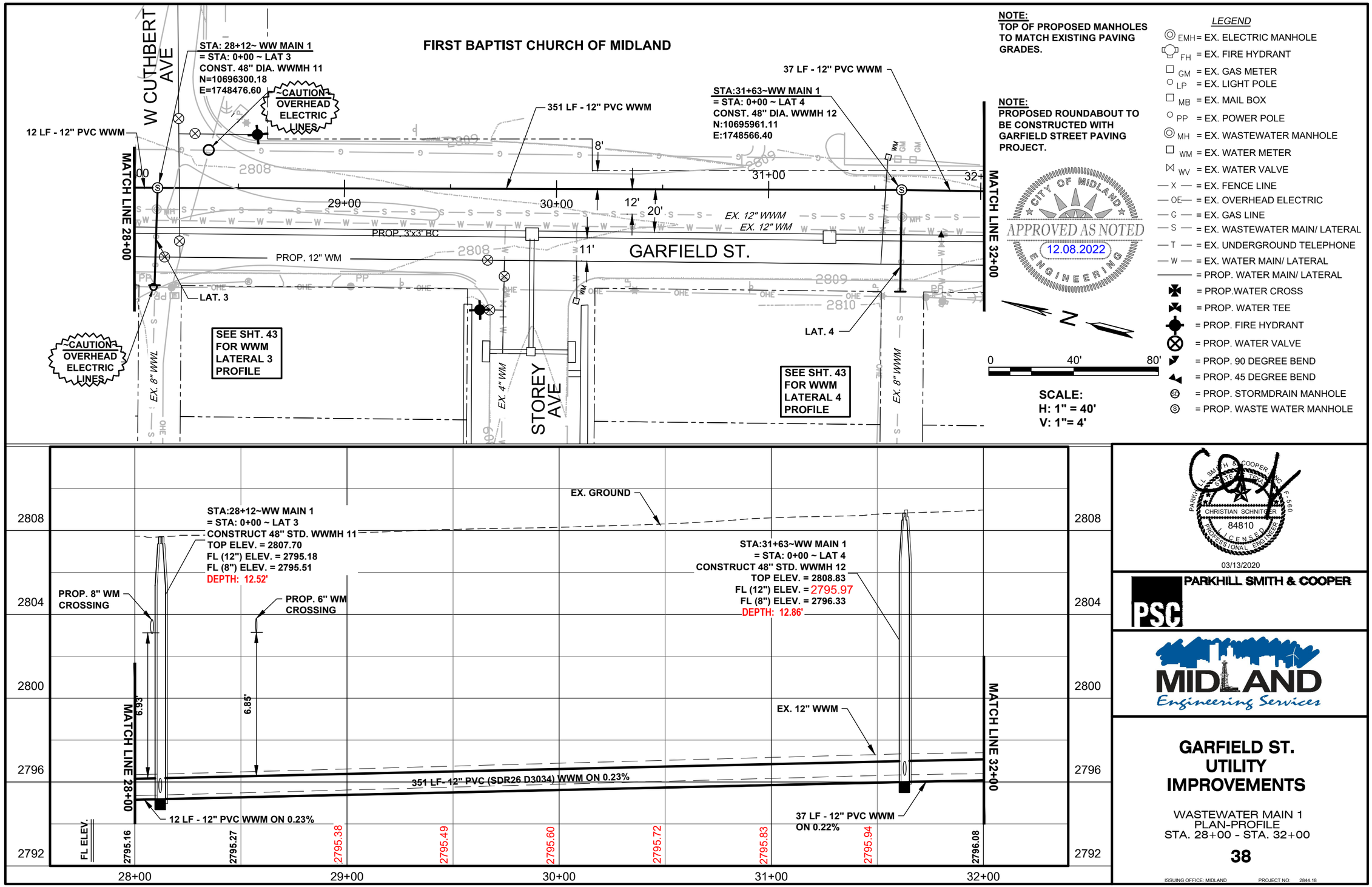
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WASTEWATER MAIN 1
PLAN-PROFILE
STA. 24+00 - STA. 28+00

37

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



PARKHILL SMITH & COOPER TEXAS REGISTERED ENGINEERING F-5690
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

PSC

MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

WASTEWATER MAIN 1
PLAN-PROFILE
STA. 28+00 - STA. 32+00

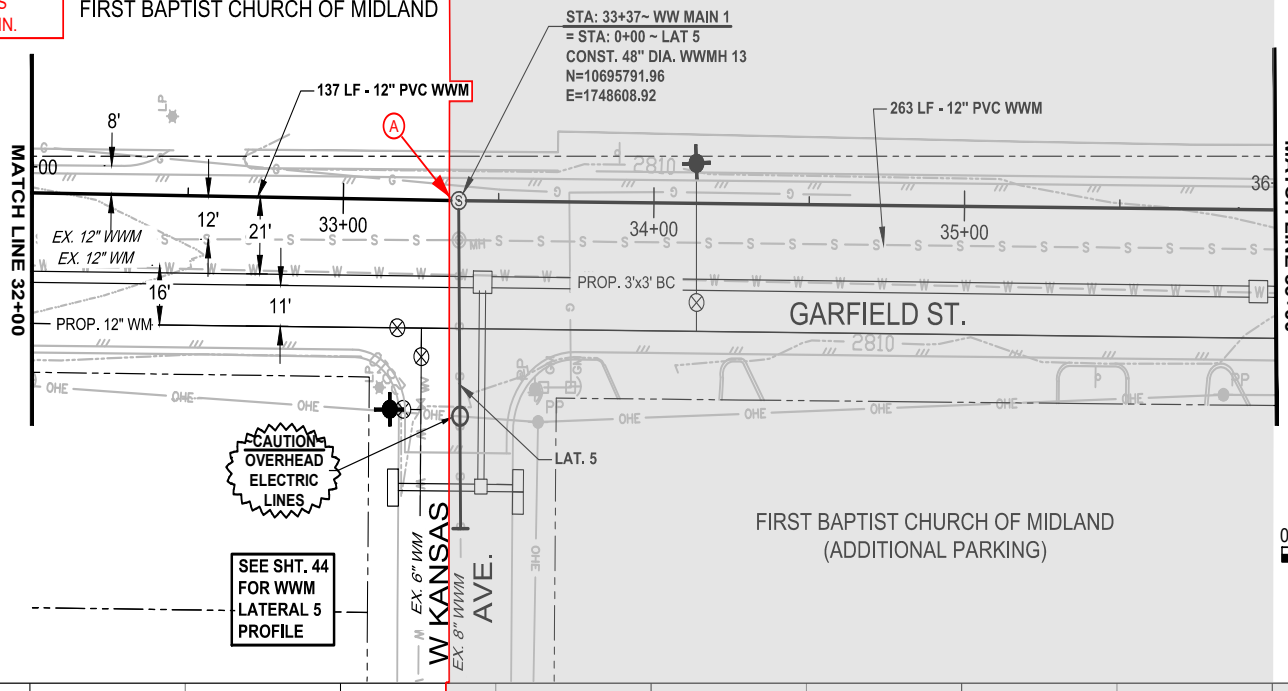
38

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

NOTE:

SEE SHEETS 27 AND 53 FOR BOUNDARY BETWEEN WATER AND STORM DRAIN TO INSTALL VERSUS EXISTING TO REMAIN.

BREAK OUT (WASTEWATER ONLY) ⟷ EXISTING TO REMAIN (WASTEWATER ONLY)



NOTE:
TOP OF PROPOSED MANHOLES TO MATCH EXISTING PAVING GRADES.

(A) STA: 33+35~WW MAIN 1 CONNECT TO NEWER EXISTING MANHOLE.
N=10695791.96
E=1748608.92

CITY OF MIDLAND — APPROVED AS NOTED — 12.08.2022 — ENGINEERING

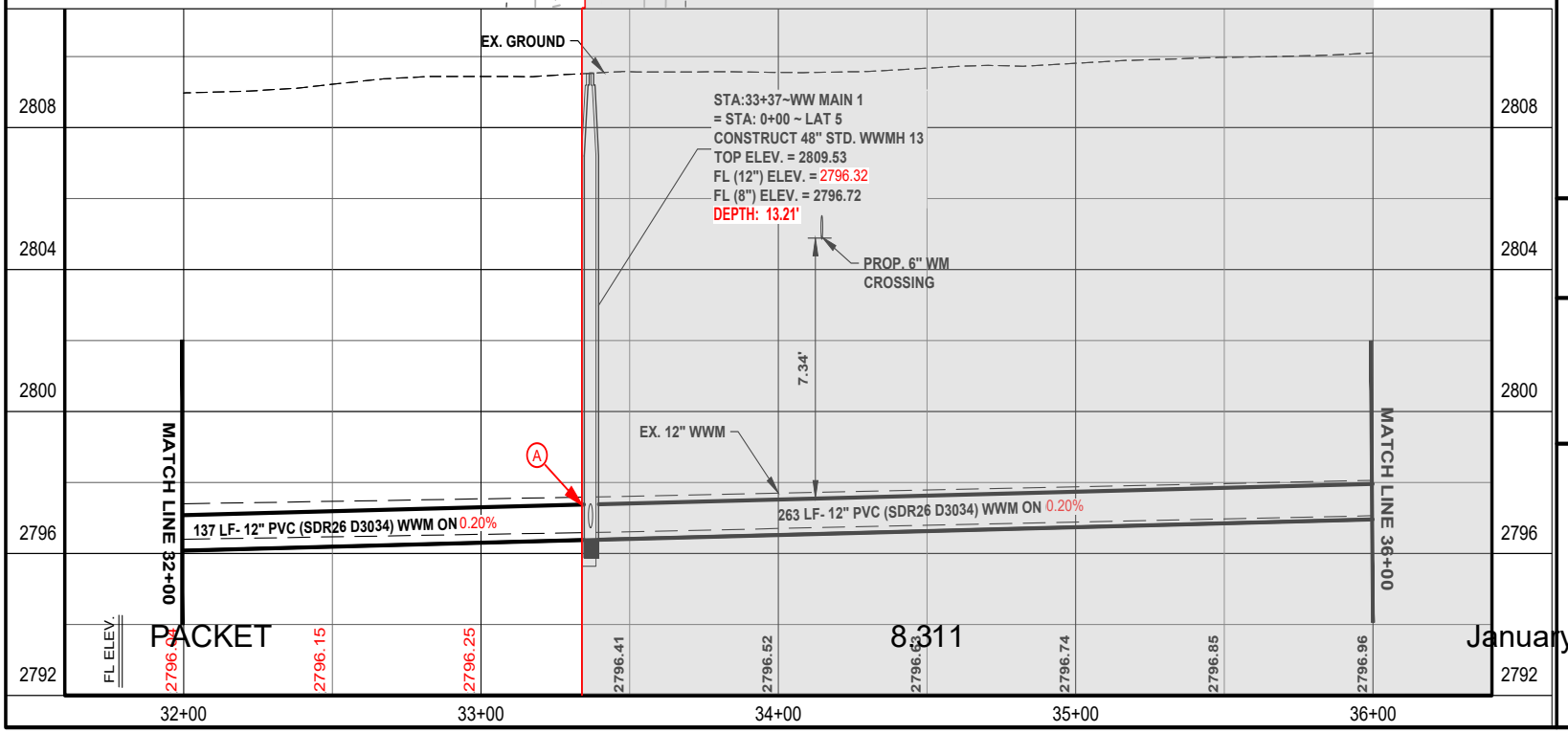
LEGEND

- EMH = EX. ELECTRIC MANHOLE
- FH = EX. FIRE HYDRANT
- GM = EX. GAS METER
- LP = EX. LIGHT POLE
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- WM = EX. WATER METER
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- — X — = EX. FENCE LINE
- — OE — = EX. OVERHEAD ELECTRIC
- — G — = EX. GAS LINE
- — S — = EX. WASTEWATER MAIN/ LATERAL
- — T — = EX. UNDERGROUND TELEPHONE
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- ——— = PROP. WATER MAIN/ LATERAL
- = PROP.WATER CROSS
- = PROP. WATER TEE
- = PROP. FIRE HYDRANT
- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- = PROP. STORMDRAIN MANHOLE
- = PROP. WASTE WATER MANHOLE

N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'



CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER — PARKHILL SMITH & COOPER F-9509

03/13/2020

PARKHILL SMITH & COOPER

PSC

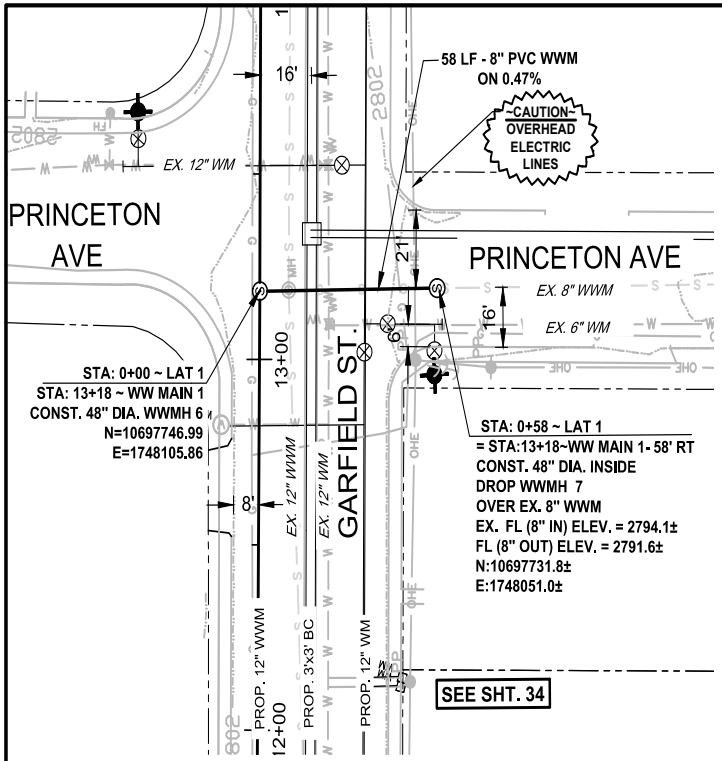
MIDLAND Engineering Services

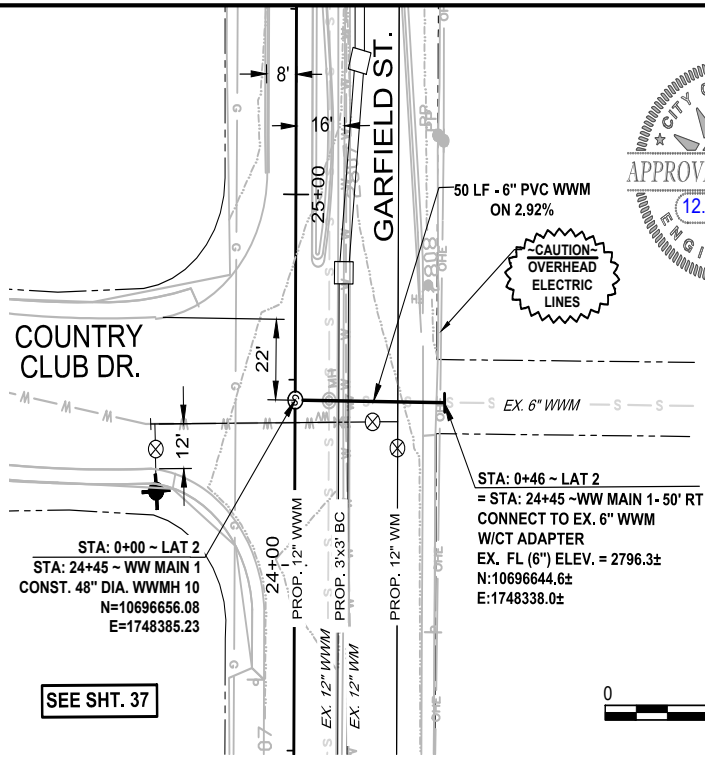
GARFIELD ST. UTILITY IMPROVEMENTS

WASTEWATER MAIN 1
PLAN-PROFILE
STA. 32+00 - STA. 36+00

39

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

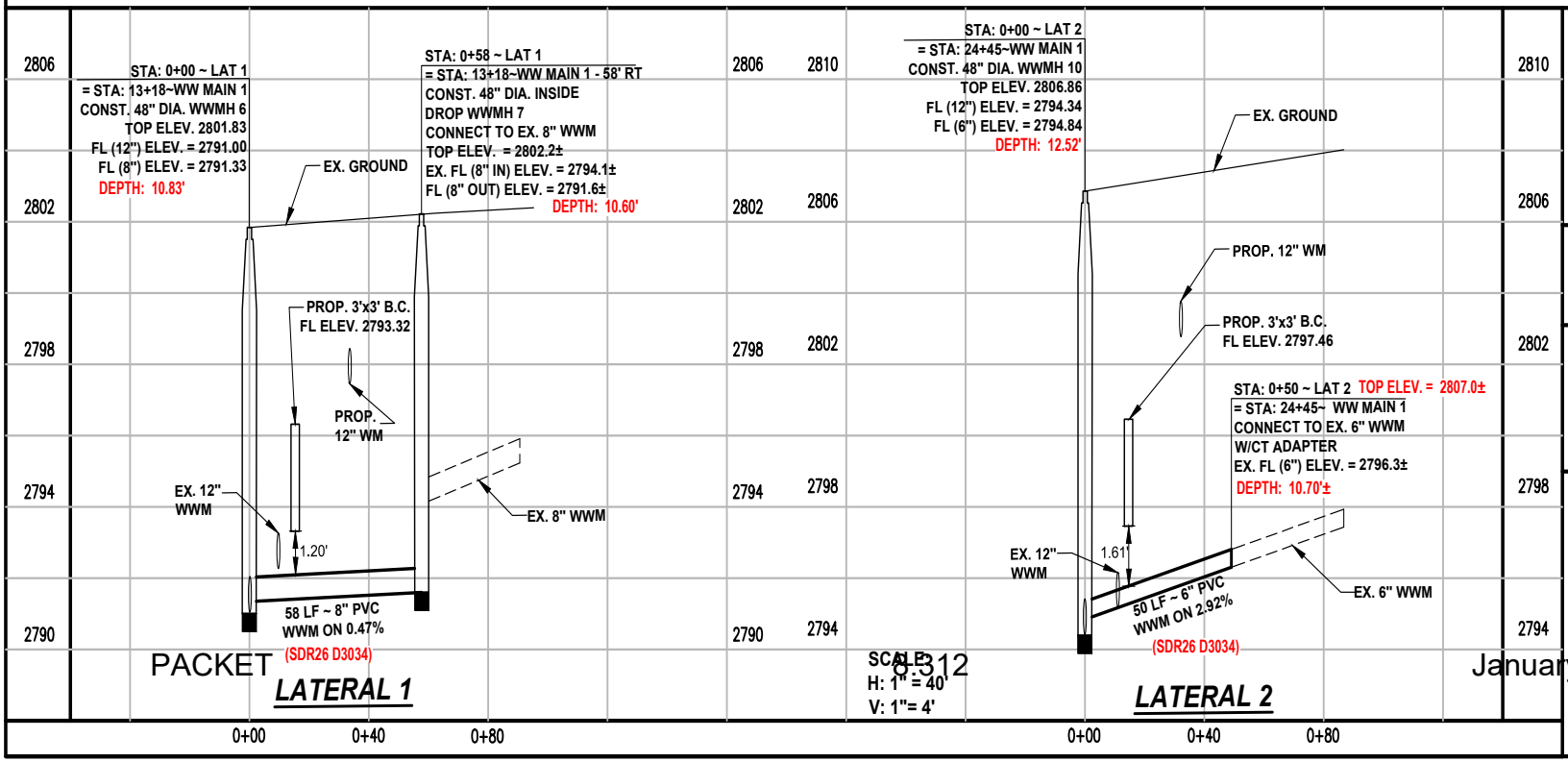




CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

LEGEND

- EMH = EX. ELECTRIC MANHOLE
- FH = EX. FIRE HYDRANT
- GM = EX. GAS METER
- LP = EX. LIGHT POLE
- MB = EX. MAIL BOX
- PP = EX. POWER POLE
- MH = EX. WASTEWATER MANHOLE
- WM = EX. WATER METER
- WV = EX. WATER VALVE
- — X — = EX. FENCE LINE
- — OE — = EX. OVERHEAD ELECTRIC
- — G — = EX. GAS LINE
- — S — = EX. WASTEWATER MAIN/ LATERAL
- — T — = EX. UNDERGROUND TELEPHONE
- — W — = EX. WATER MAIN/ LATERAL
- ——— = PROP. WATER MAIN/ LATERAL
- = PROP.WATER CROSS
- = PROP. WATER TEE
- = PROP. FIRE HYDRANT
- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- = PROP. STORMDRAIN MANHOLE
- = PROP. WASTE WATER MANHOLE



SCALE
H: 1" = 40'
V: 1"= 4'

PARKHILL SMITH & COOPER
PSC

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

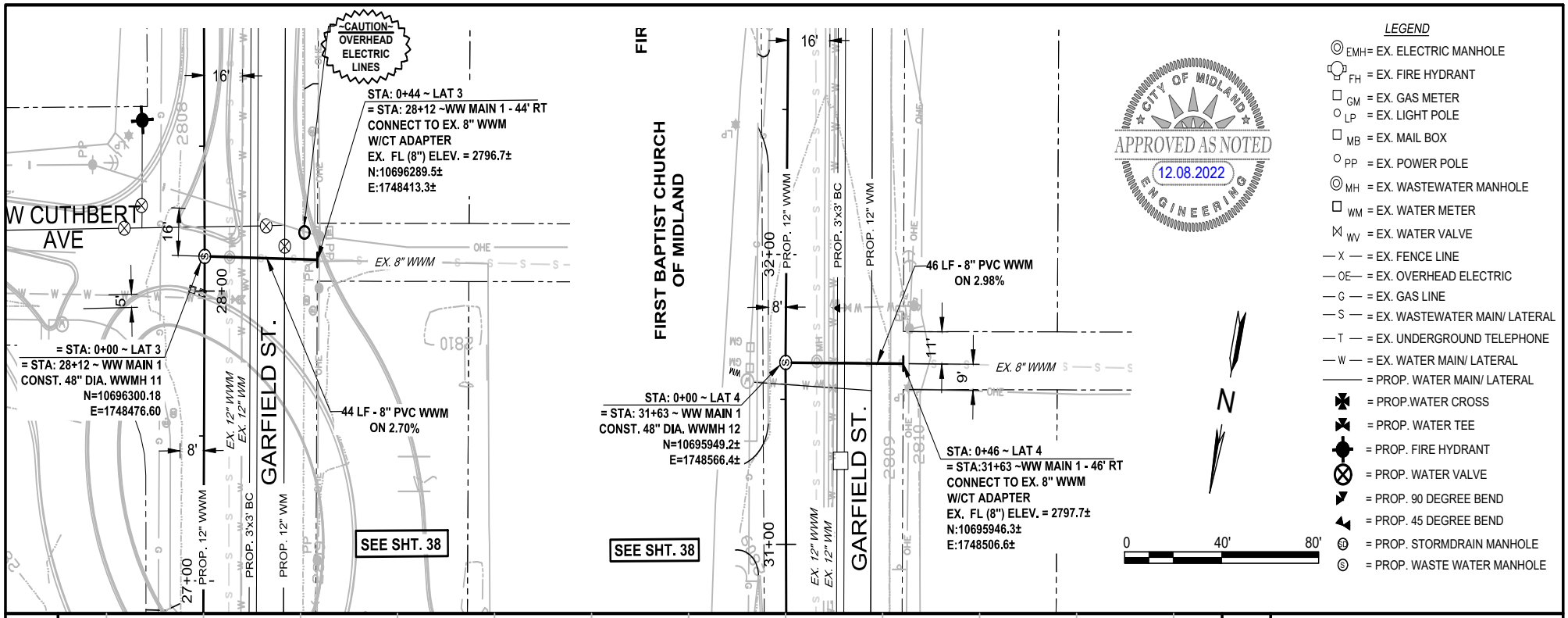
MIDLAND
Engineering Services

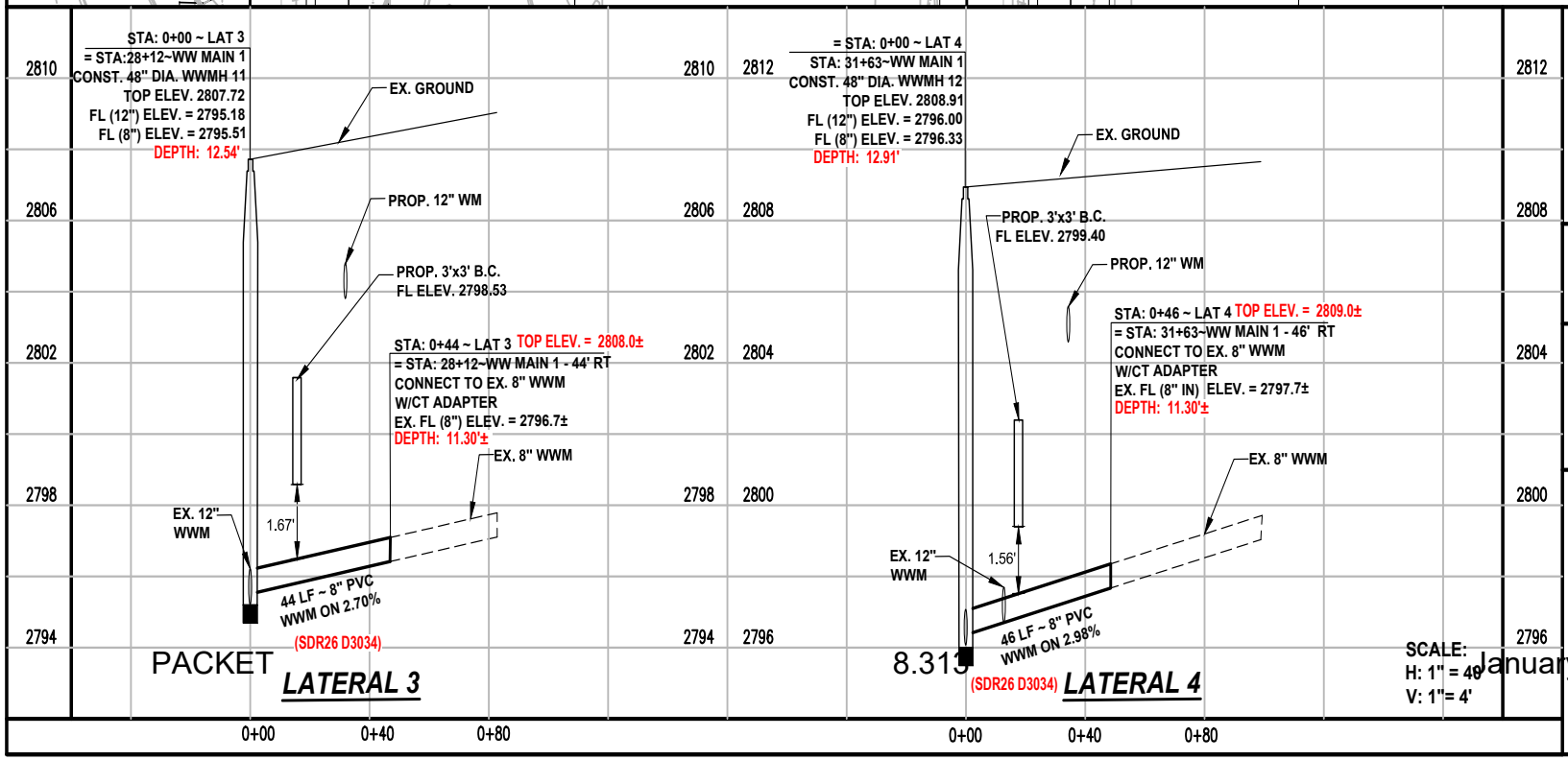
GARFIELD ST. UTILITY IMPROVEMENTS

WASTEWATER LATERALS 1 & 2
PLAN-PROFILE

42

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18





SCALE:
H: 1" = 40
V: 1"= 4'

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PSC

MIDLAND
Engineering Services

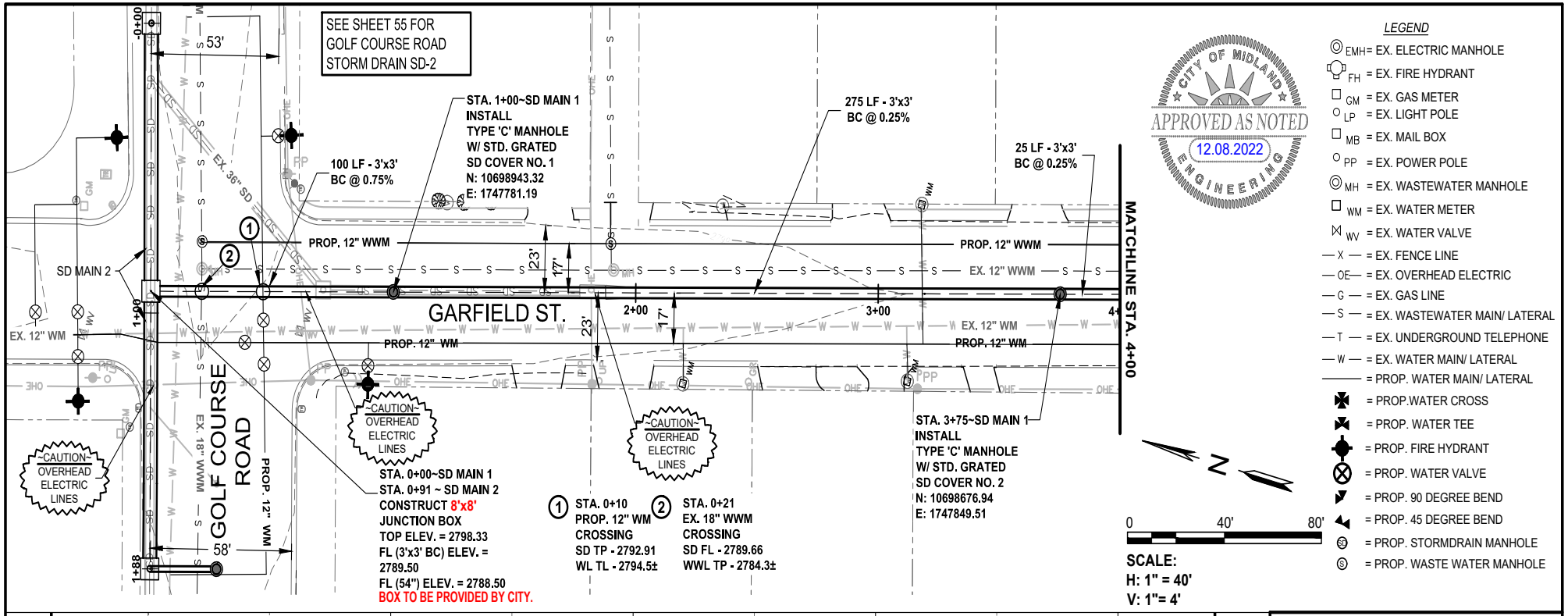
GARFIELD ST. UTILITY IMPROVEMENTS

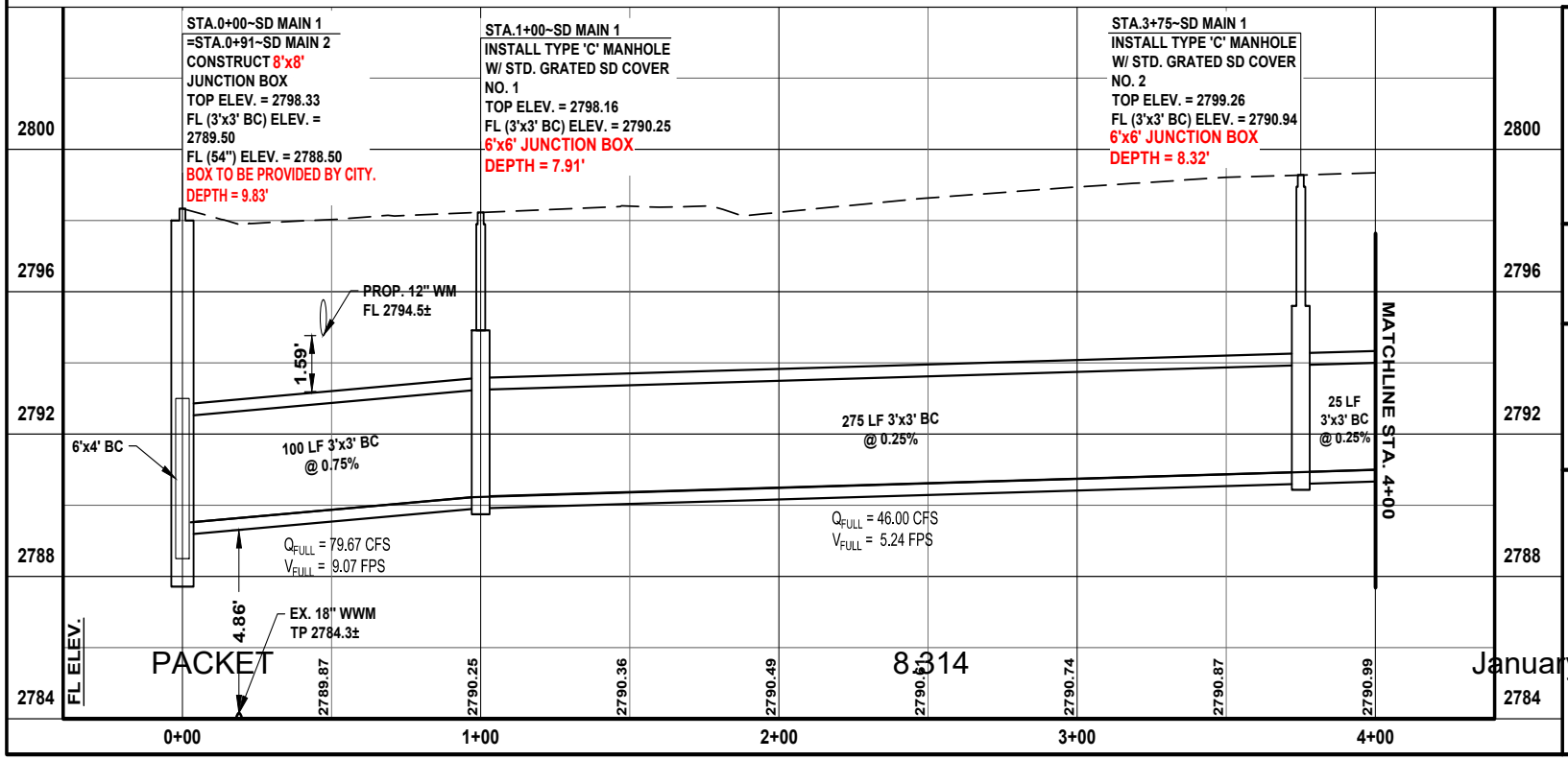
WASTEWATER LATERALS 3 & 4
PLAN-PROFILE

43

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

PARKHILL SMITH & COOPER ENGINEERS & PLANNERS TEXAS REGISTERED F-5509
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020





APPROVED AS NOTED
CITY OF MIDLAND
12.08.2022
ENGINEERING

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

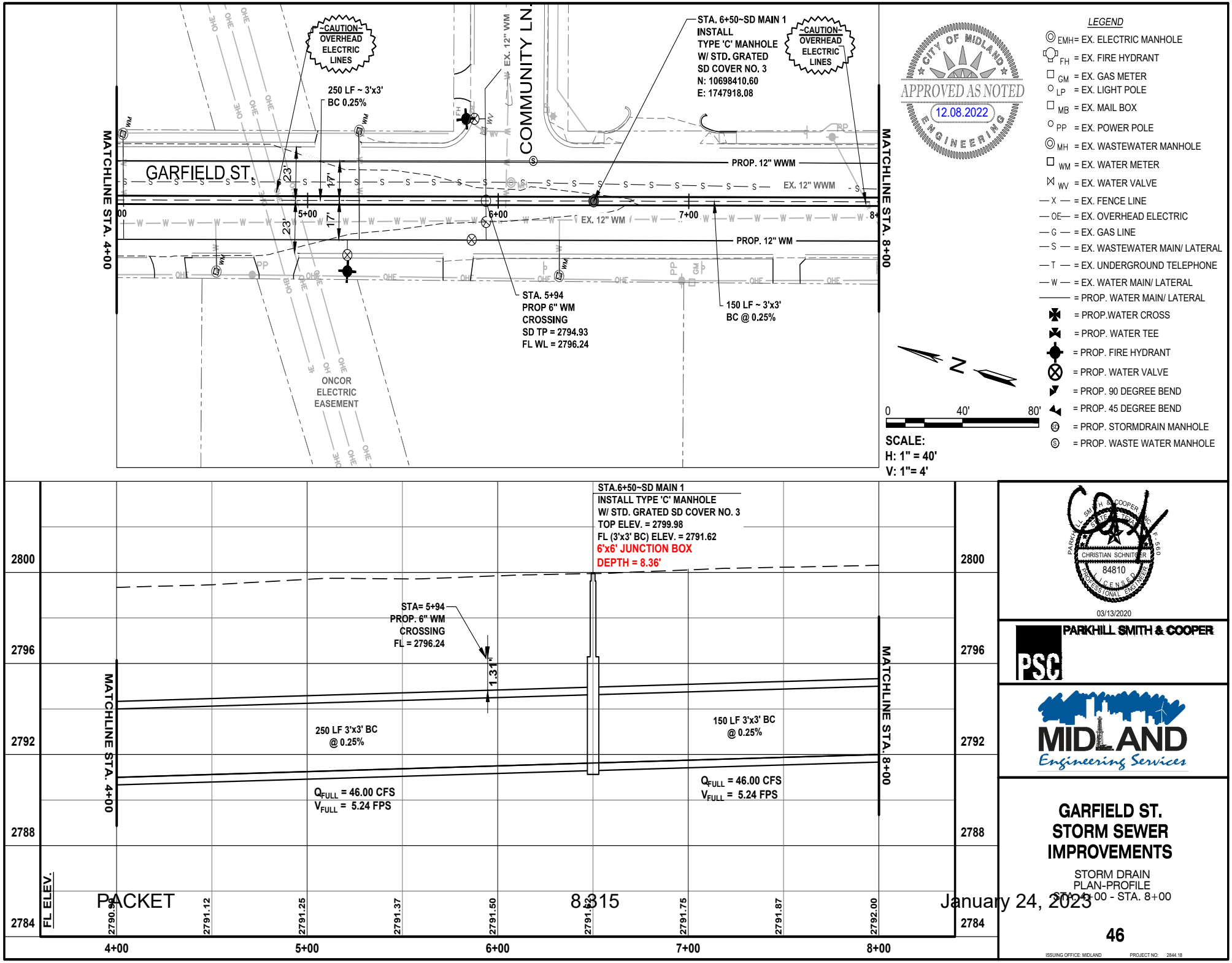
MIDLAND
Engineering Services

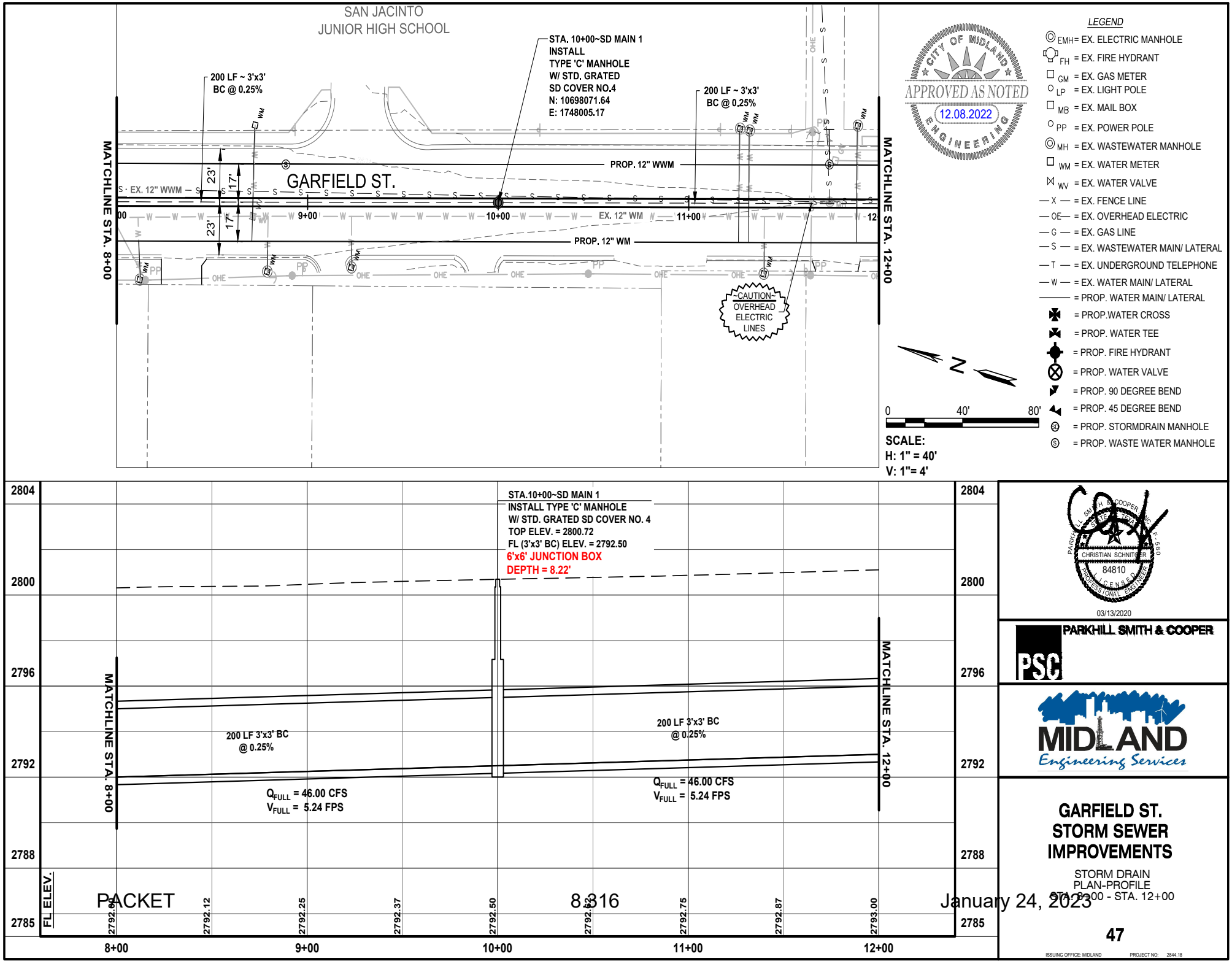
GARFIELD ST. STORM SEWER IMPROVEMENTS

STORM DRAIN
PLAN-PROFILE
STA. 0+00 - STA. 4+00

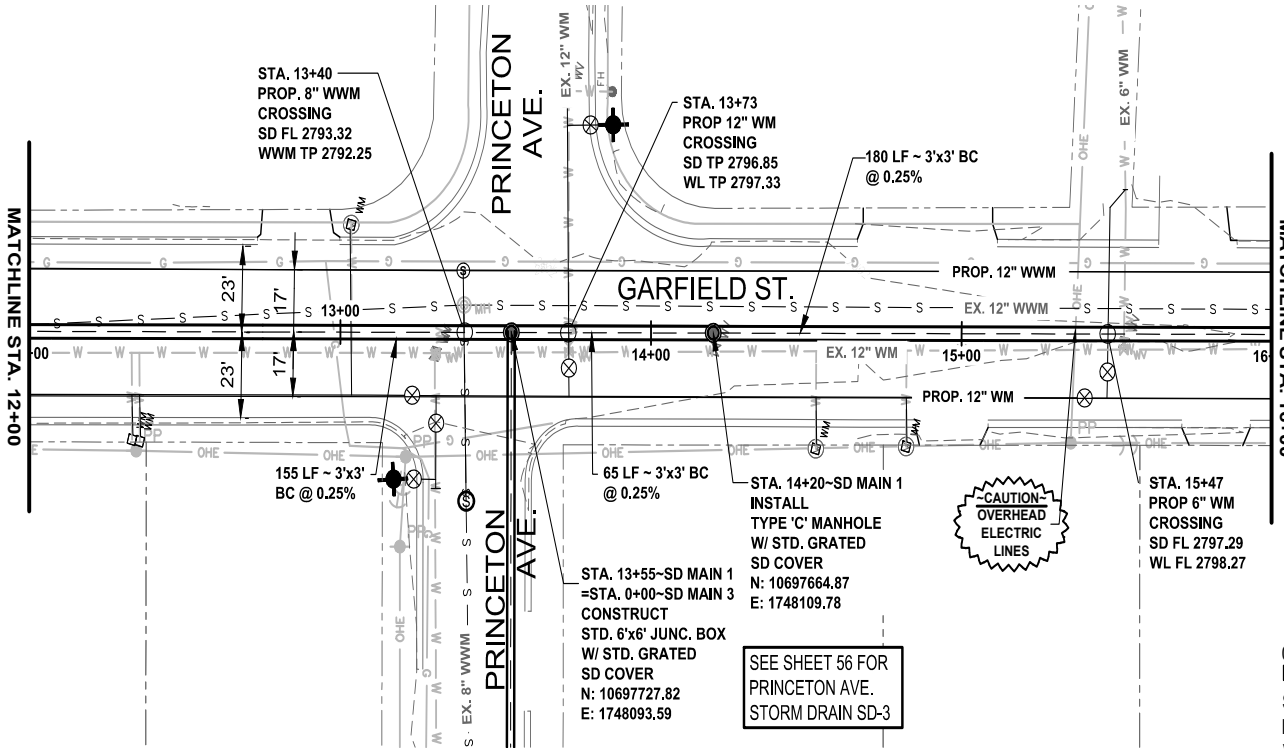
45

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18


GARFIELD ST.
COMMUNITY LN.
MATCHLINE STA. 4+00
MATCHLINE STA. 8+00
~CAUTION~ OVERHEAD ELECTRIC LINES
250 LF ~ 3'x3' BC 0.25%
EX. 12" WWM
STA. 6+50~SD MAIN 1
INSTALL TYPE 'C' MANHOLE W/ STD. GRATED SD COVER NO. 3
N: 10698410.60
E: 1747918.08
PROP. 12" WWM
EX. 12" WWM
EX. 12" WM
23'
17'
5+00
6+00
7+00
STA. 5+94
PROP 6" WM CROSSING
SD TP = 2794.93
FL WL = 2796.24
150 LF ~ 3'x3' BC @ 0.25%
ONCOR ELECTRIC EASEMENT
APPROVED AS NOTED
12.08.2022
ENGINEERING
CITY OF MIDLAND
LEGEND
EMH = EX. ELECTRIC MANHOLE
FH = EX. FIRE HYDRANT
GM = EX. GAS METER
LP = EX. LIGHT POLE
MB = EX. MAIL BOX
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WM = EX. WATER METER
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X = EX. FENCE LINE
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PROP. WATER MAIN/ LATERAL
PROP.WATER CROSS
PROP. WATER TEE
PROP. FIRE HYDRANT
PROP. WATER VALVE
PROP. 90 DEGREE BEND
PROP. 45 DEGREE BEND
PROP. STORMDRAIN MANHOLE
PROP. WASTE WATER MANHOLE
N
0
40'
80'
SCALE:
H: 1" = 40'
V: 1"= 4'
STA.6+50~SD MAIN 1
INSTALL TYPE 'C' MANHOLE
W/ STD. GRATED SD COVER NO. 3
TOP ELEV. = 2799.98
FL (3'x3' BC) ELEV. = 2791.62
6'x6' JUNCTION BOX
DEPTH = 8.36'
STA= 5+94
PROP. 6" WM CROSSING
FL = 2796.24
1.31'
250 LF 3'x3' BC @ 0.25%
150 LF 3'x3' BC @ 0.25%
Q_{FULL} = 46.00 CFS
V_{FULL} = 5.24 FPS
Q_{FULL} = 46.00 CFS
V_{FULL} = 5.24 FPS
MATCHLINE STA. 4+00
MATCHLINE STA. 8+00
FL ELEV.
2800
2796
2792
2788
2784
2790.99
2791.12
2791.25
2791.37
2791.50
2791.62
2791.75
2791.87
2792.00
4+00
5+00
6+00
7+00
8+00
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020
PARKHILL SMITH & COOPER
PSC
MIDLAND
Engineering Services
GARFIELD ST.
STORM SEWER
IMPROVEMENTS
STORM DRAIN
PLAN-PROFILE
STA. 4+00 - STA. 8+00
46
ISSUING OFFICE: MIDLAND
PROJECT NO: 2844.18



PACKET 8316 January 24, 2023



APPROVED AS NOTED
CITY OF MIDLAND
ENGINEERING
12.08.2022

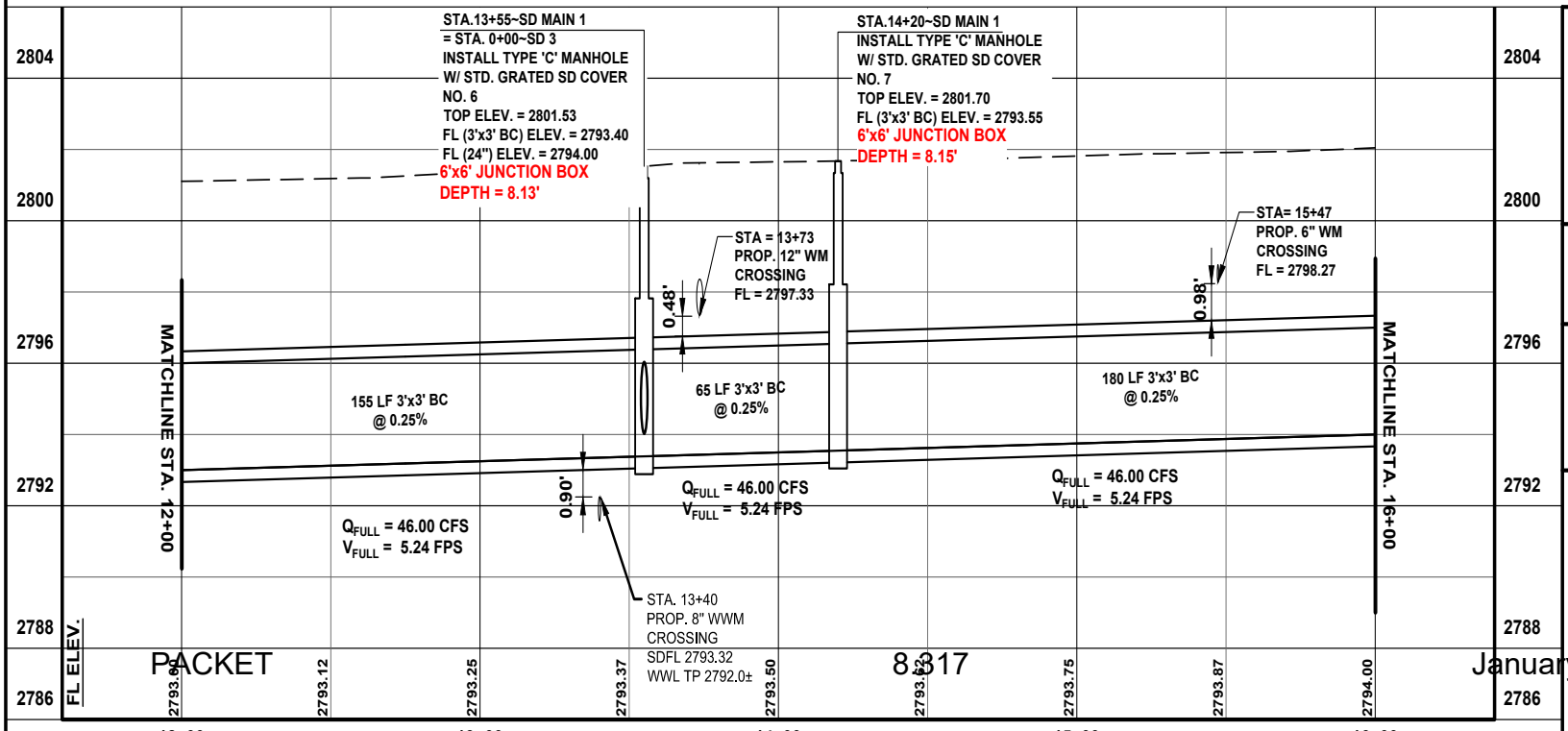
LEGEND

- EMH = EX. ELECTRIC MANHOLE
- FH = EX. FIRE HYDRANT
- GM = EX. GAS METER
- LP = EX. LIGHT POLE
- MB = EX. MAIL BOX
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- WM = EX. WATER METER
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- = PROP. WATER TEE
- = PROP. FIRE HYDRANT
- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- = PROP. STORMDRAIN MANHOLE
- = PROP. WASTE WATER MANHOLE

N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'



PACKET 8317 January 24, 2023

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

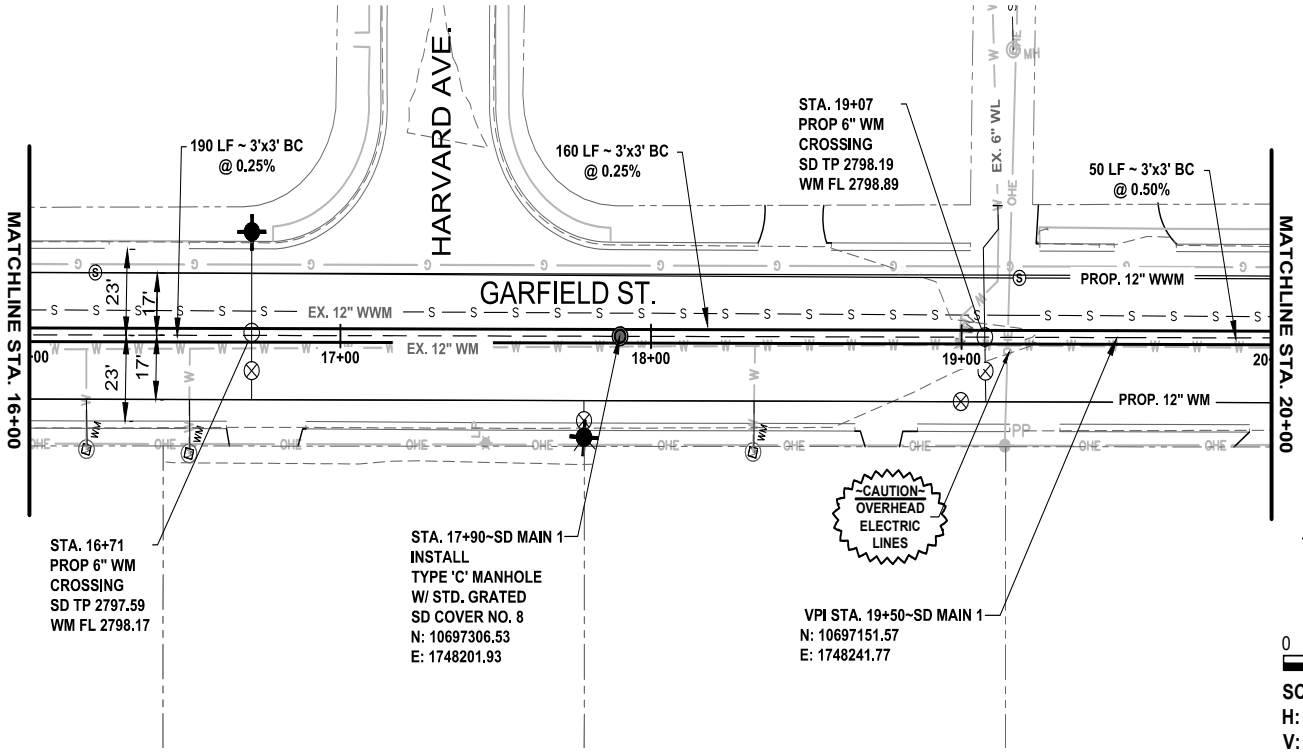
MIDLAND
Engineering Services

GARFIELD ST. STORM SEWER IMPROVEMENTS

STORM DRAIN
PLAN-PROFILE
STA. 12+00 - STA. 16+00

48

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18





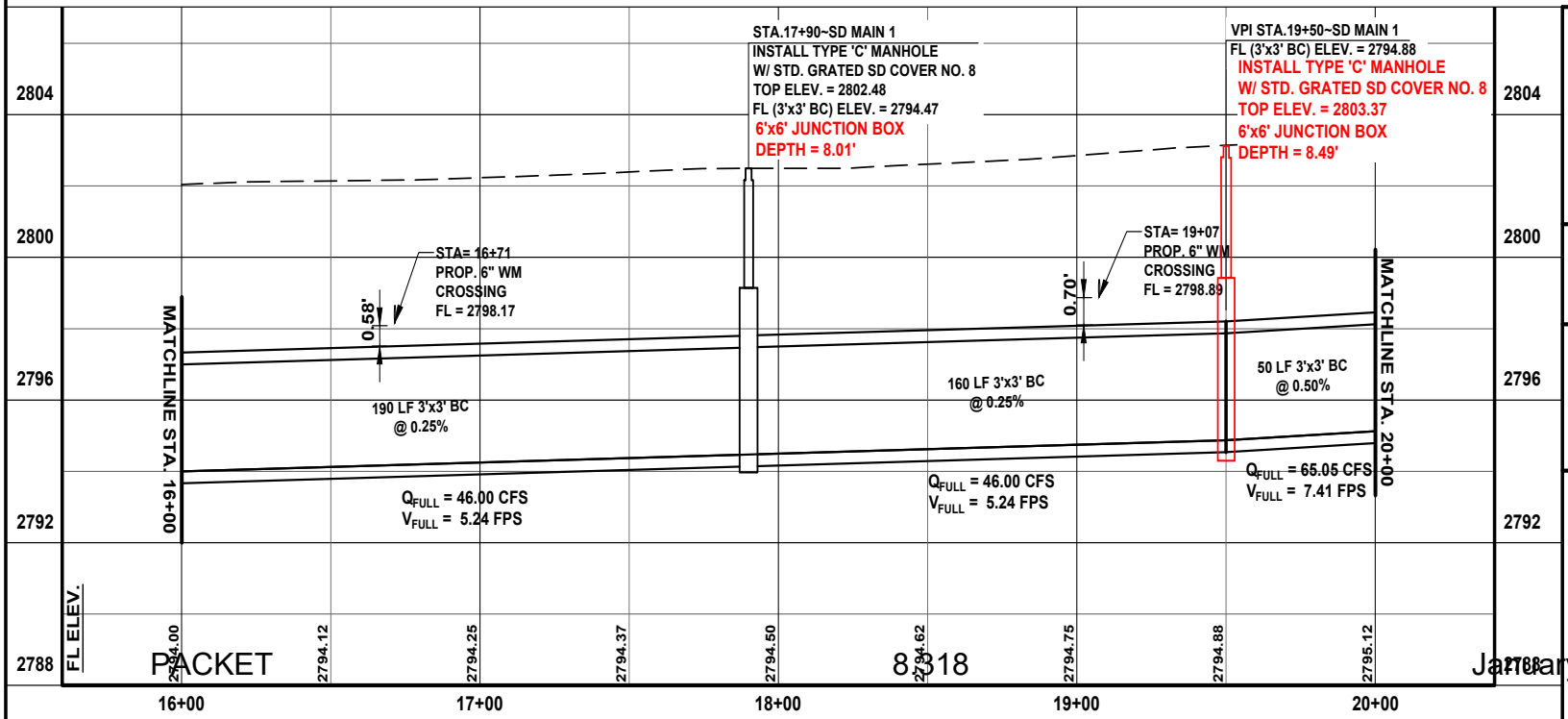
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- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- = PROP. STORMDRAIN MANHOLE
- = PROP. WASTE WATER MANHOLE

N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'





PARKHILL SMITH & COOPER

MIDLAND
Engineering Services

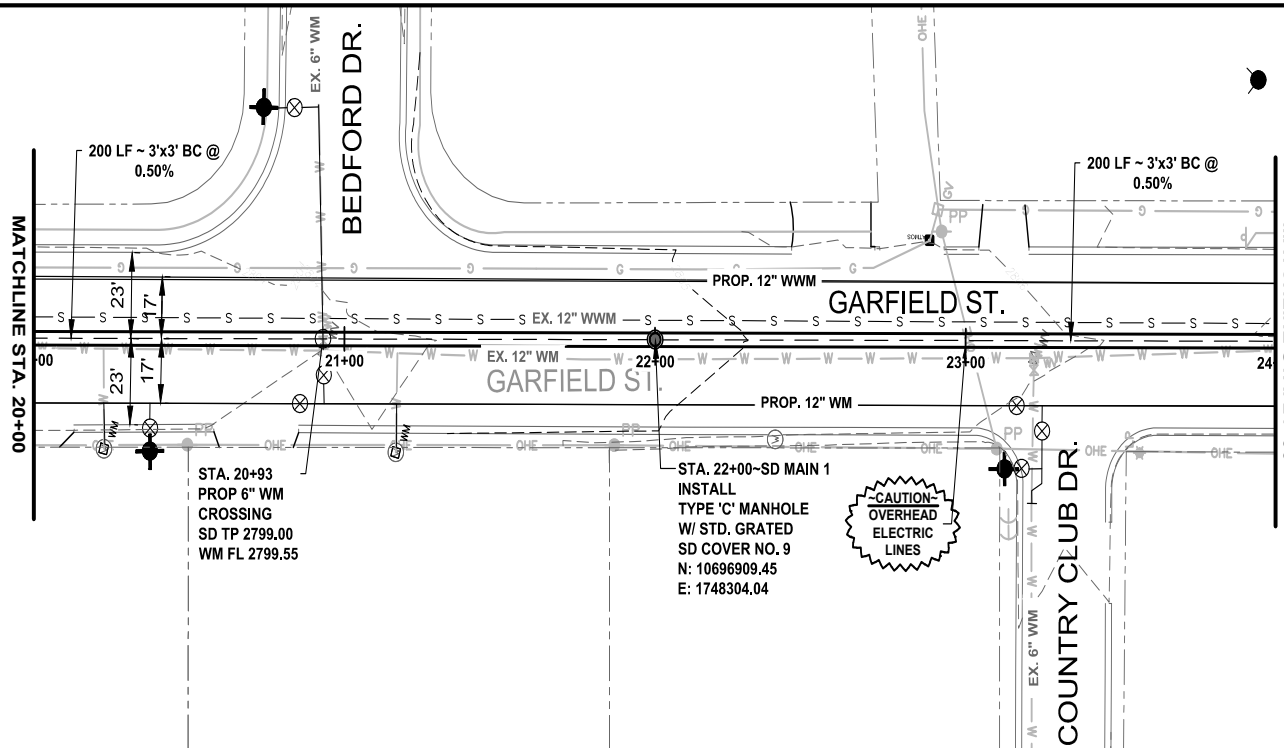
GARFIELD ST. STORM SEWER IMPROVEMENTS

STORM DRAIN
PLAN-PROFILE
STA. 16+00 - STA. 20+00

49

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

PACKET 8318 January 24, 2023



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CITY OF MIDLAND
12.08.2022
ENGINEERING

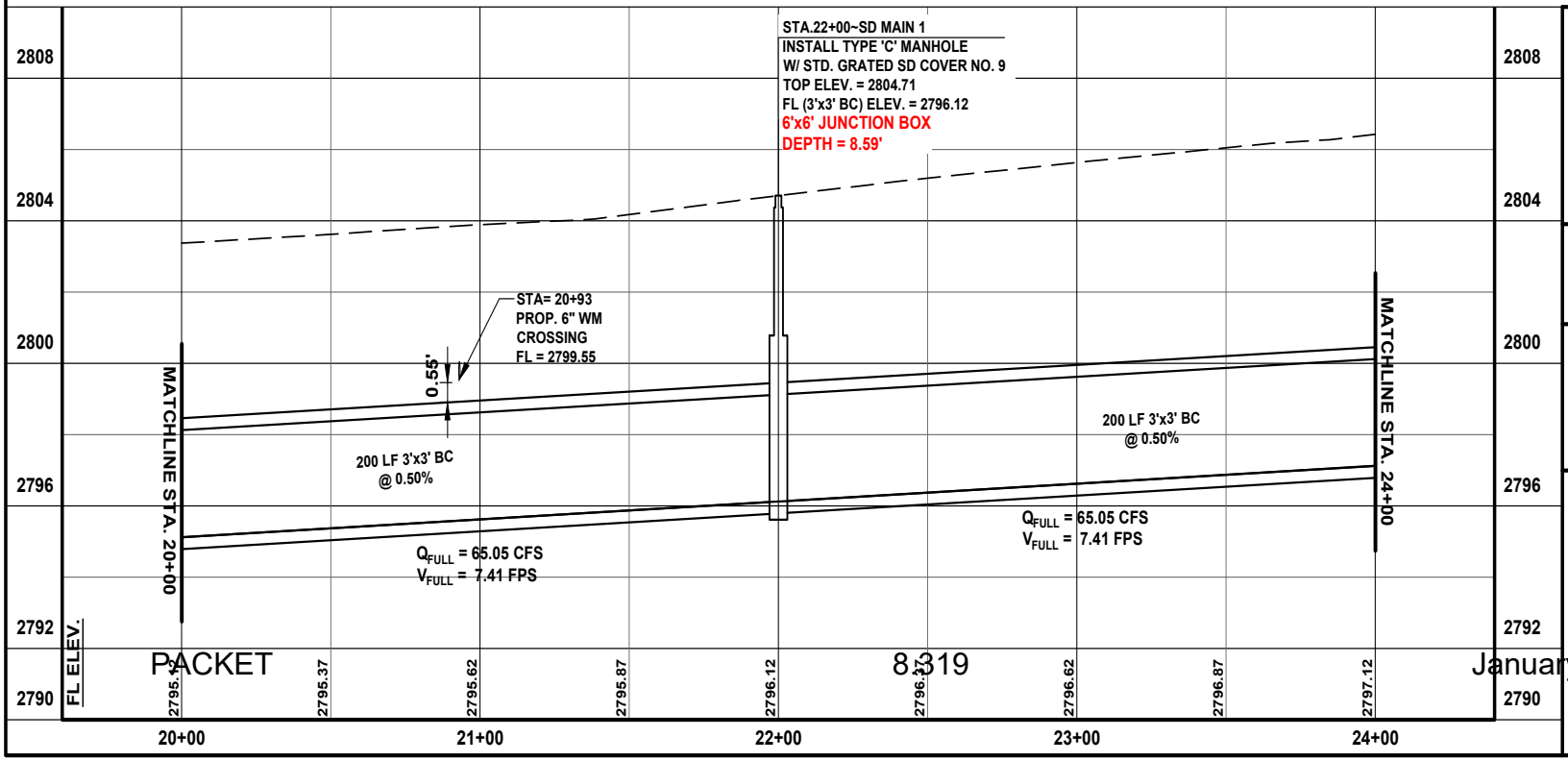
LEGEND

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- = PROP. WASTE WATER MANHOLE

N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'



CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

MIDLAND
Engineering Services

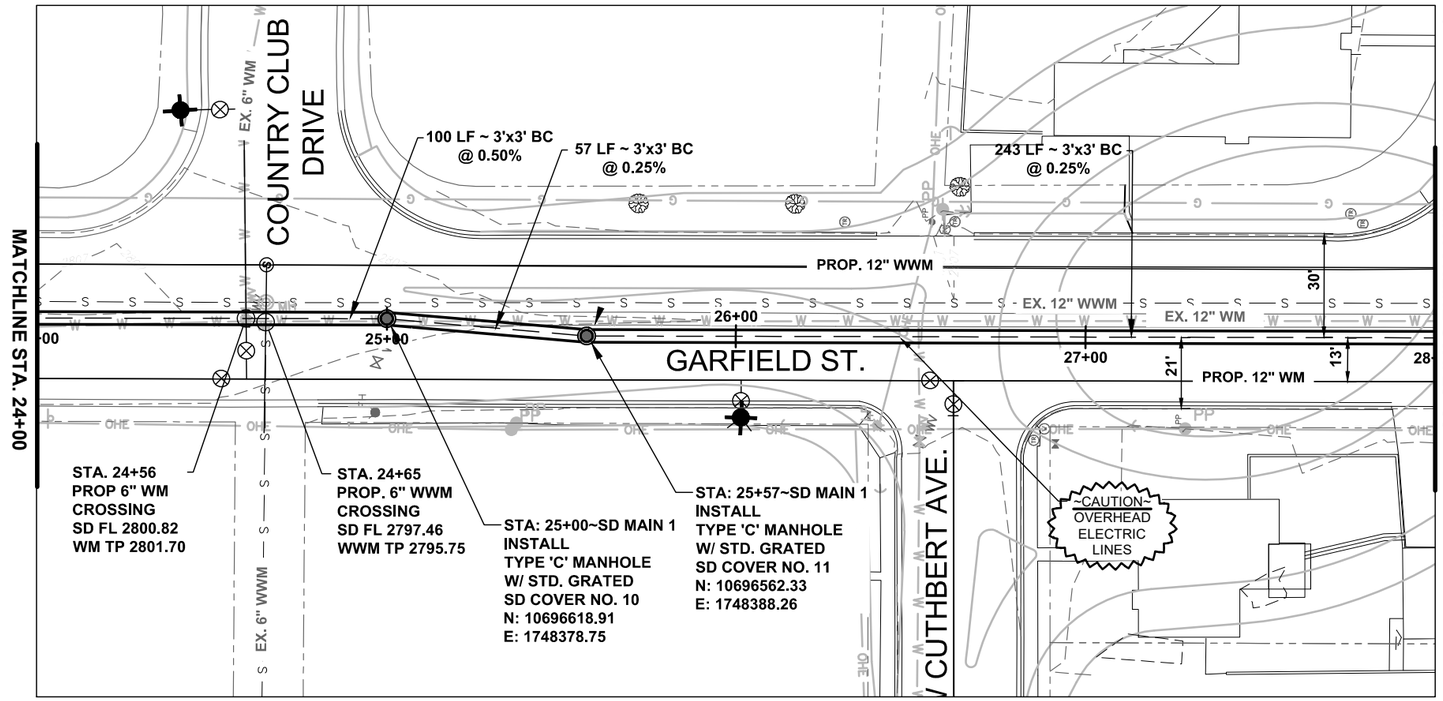
GARFIELD ST. STORM SEWER IMPROVEMENTS

STORM DRAIN
PLAN-PROFILE
STA. 20+00 - STA. 24+00

50

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

PACKET 8319 January 24, 2023



NOTE:

1. **PROPOSED CUTHBERT AVENUE ROUNDABOUT AND STORM DRAIN INLETS TO BE CONSTRUCTED WITH GARFIELD STREET PAVING PLANS**

CITY OF MIDLAND
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12.08.2022
ENGINEERING

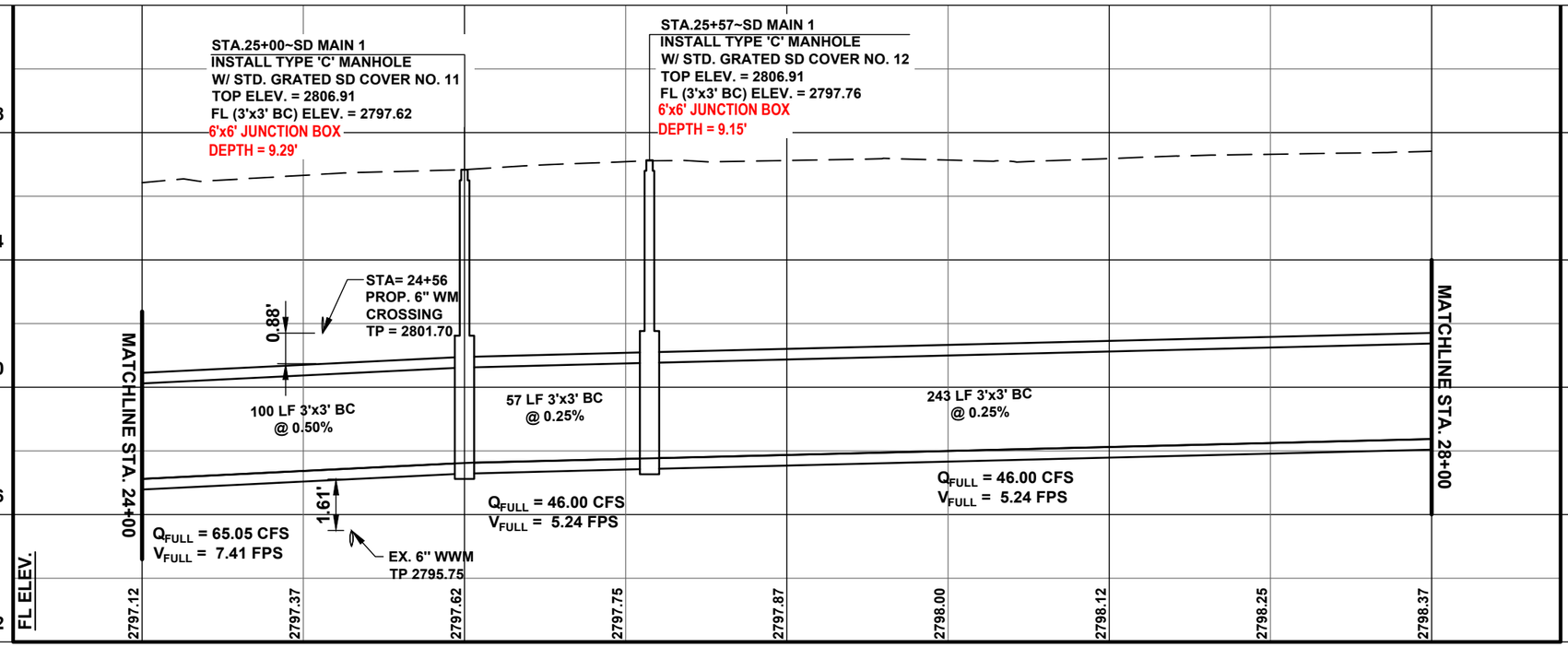
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- = PROP. WATER TEE
- = PROP. FIRE HYDRANT
- = PROP. WATER VALVE
- = PROP. 90 DEGREE BEND
- = PROP. 45 DEGREE BEND
- SD = PROP. STORMDRAIN MANHOLE
- S = PROP. WASTE WATER MANHOLE

N

0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'



SMITH & COOPER, L.L.C. STATE OF TEXAS F-956
CHRISTIAN SCHNITGER
84810
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PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

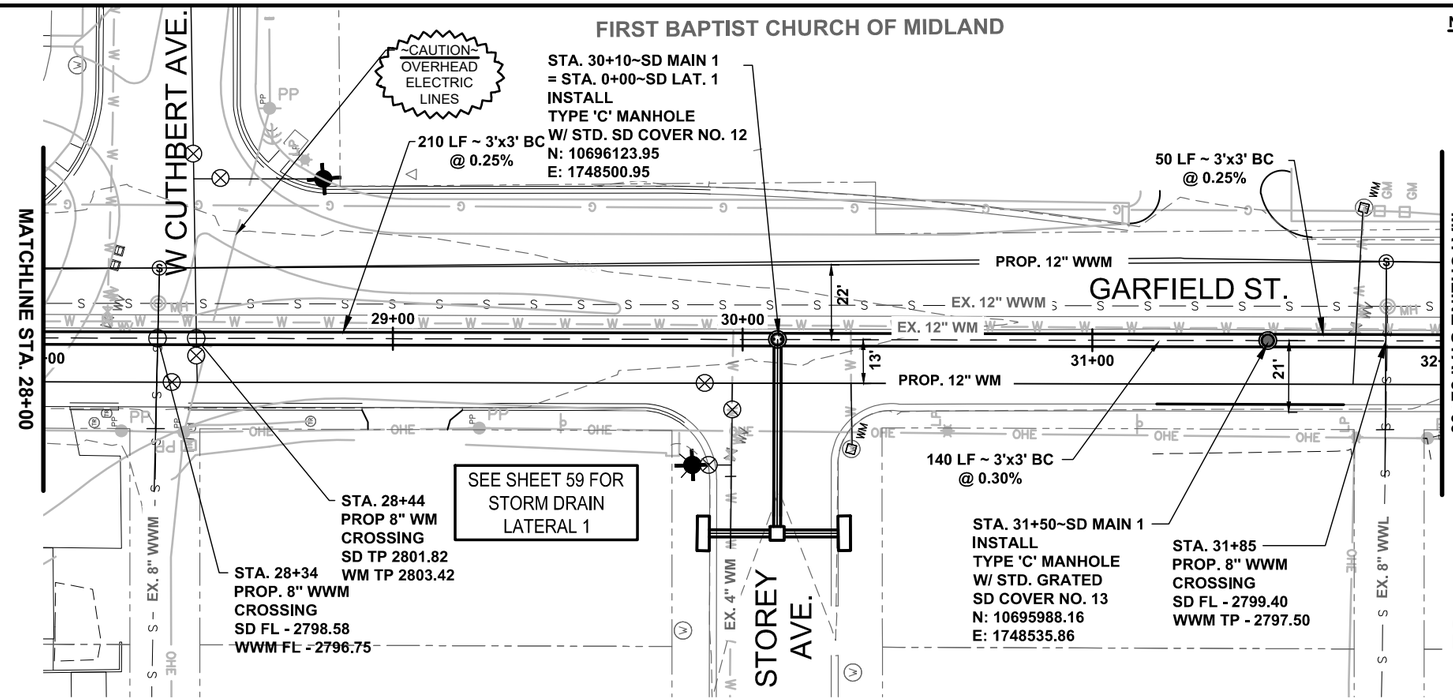
MIDLAND
Engineering Services

GARFIELD ST. STORM SEWER IMPROVEMENTS

STORM DRAIN
PLAN-PROFILE
STA. 24+00 - STA. 28+00

51

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



NOTE:

1. PROPOSED CUTHBERT AVENUE ROUNDABOUT AND STORM DRAIN INLETS TO BE CONSTRUCTED WITH GARFIELD STREETPAVING PLANS

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

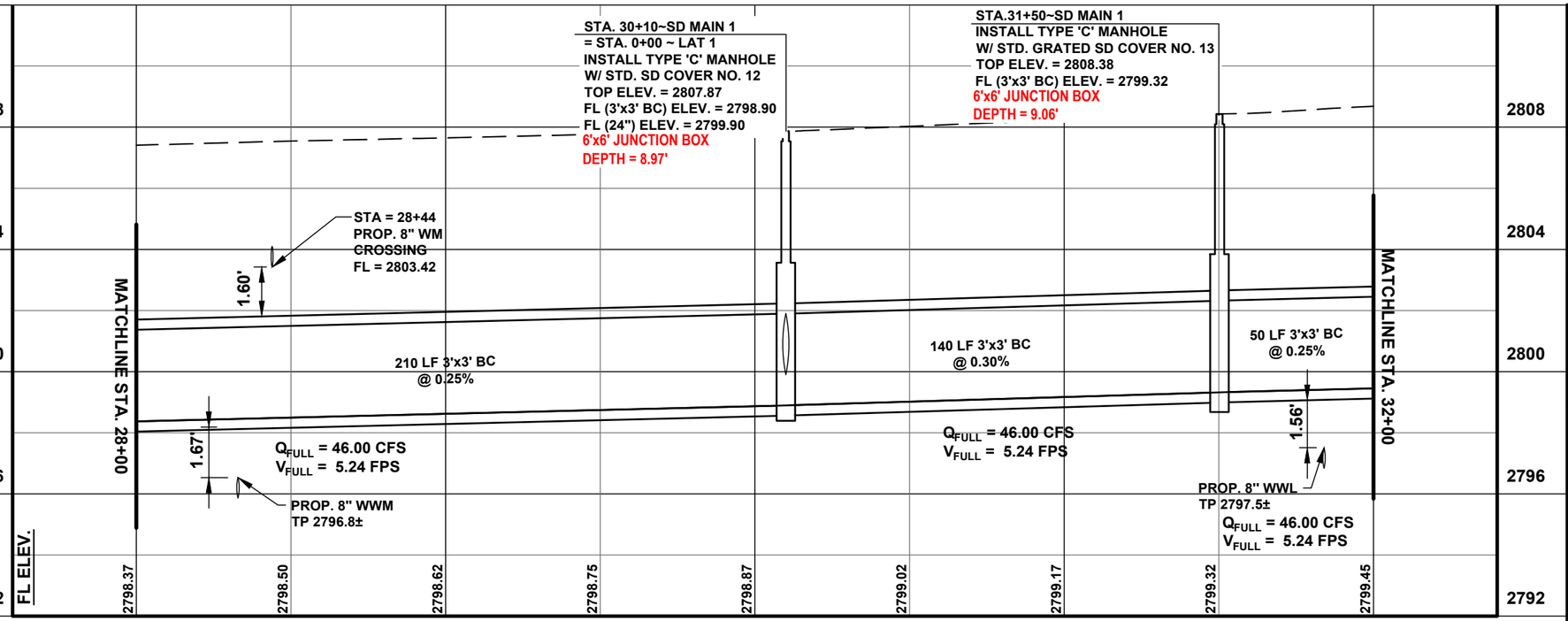
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N

0 40' 80'

SCALE:
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CHRISTIAN SCHNITGER
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PARKHILL SMITH & COOPER TEXAS F-950
03/13/2020

PARKHILL SMITH & COOPER
PSC

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GARFIELD ST. STORM SEWER IMPROVEMENTS

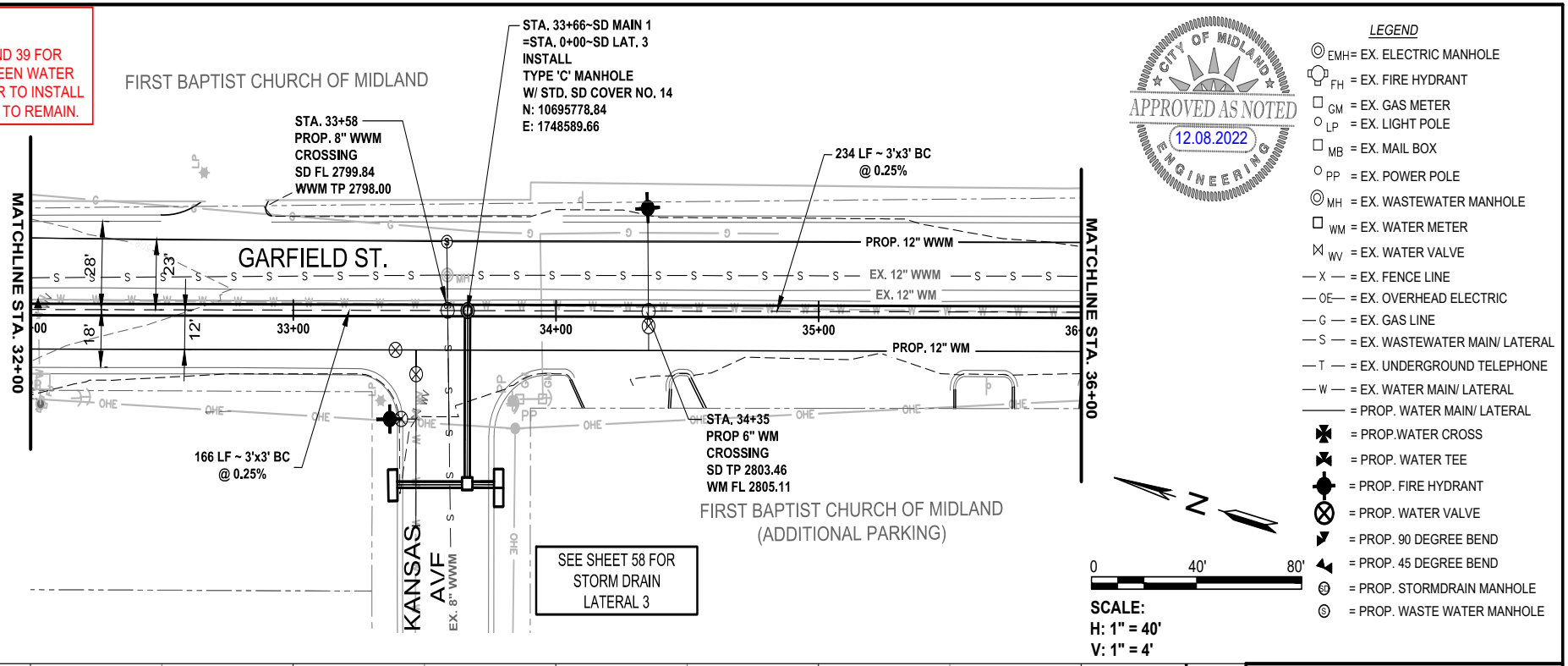
STORM DRAIN
PLAN-PROFILE
STA. 28+00 - STA. 32+00

52

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

NOTE:

SEE SHEETS 27 AND 39 FOR BOUNDARY BETWEEN WATER AND WASTEWATER TO INSTALL VERSUS EXISTING TO REMAIN.

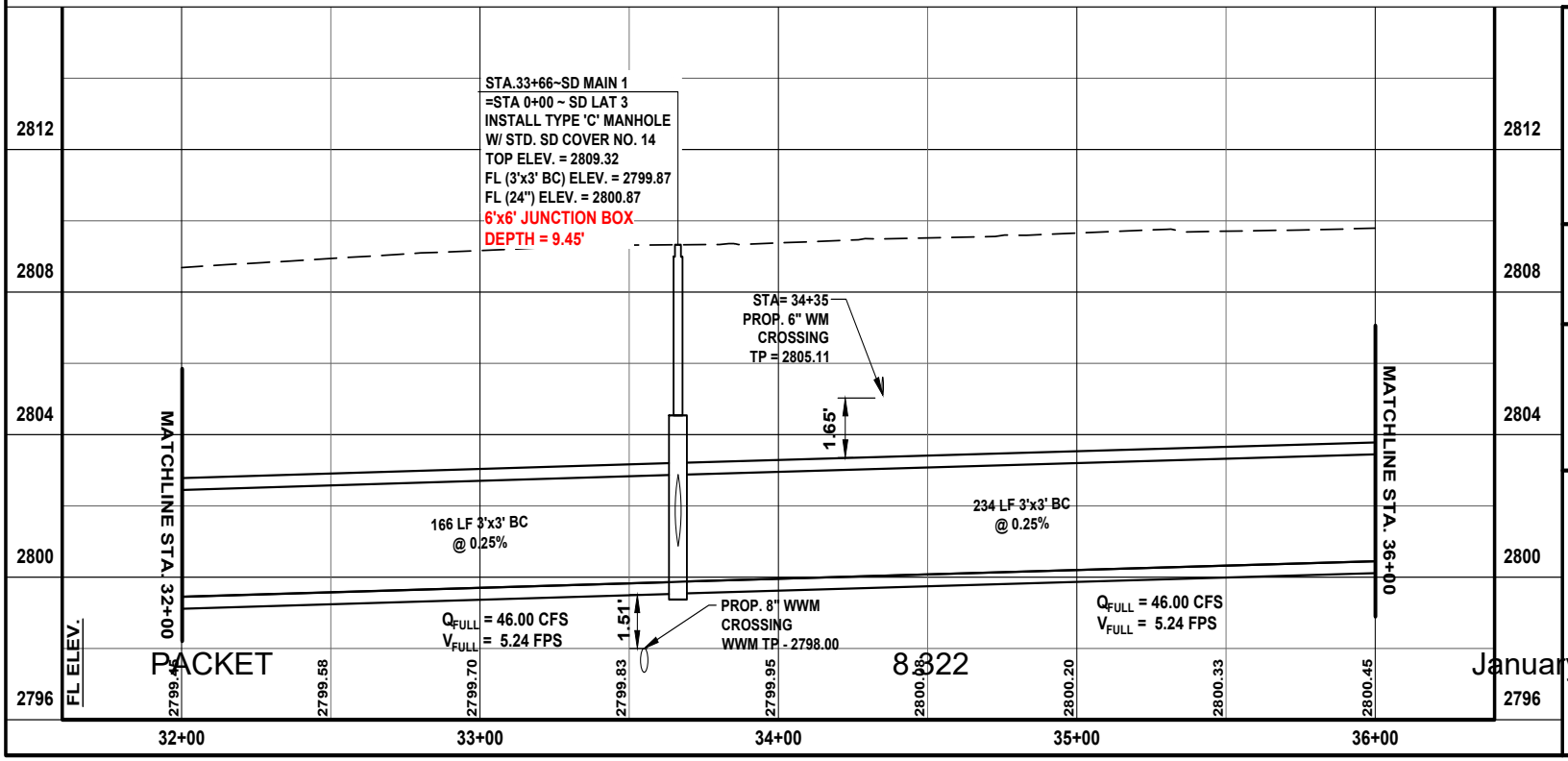


SCALE:
H: 1" = 40'
V: 1" = 4'

APPROVED AS NOTED
12.08.2022
CITY OF MIDLAND ENGINEERING

LEGEND

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CHRISTIAN SCHNITKER
84810
PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

MIDLAND Engineering Services

GARFIELD ST. STORM SEWER IMPROVEMENTS

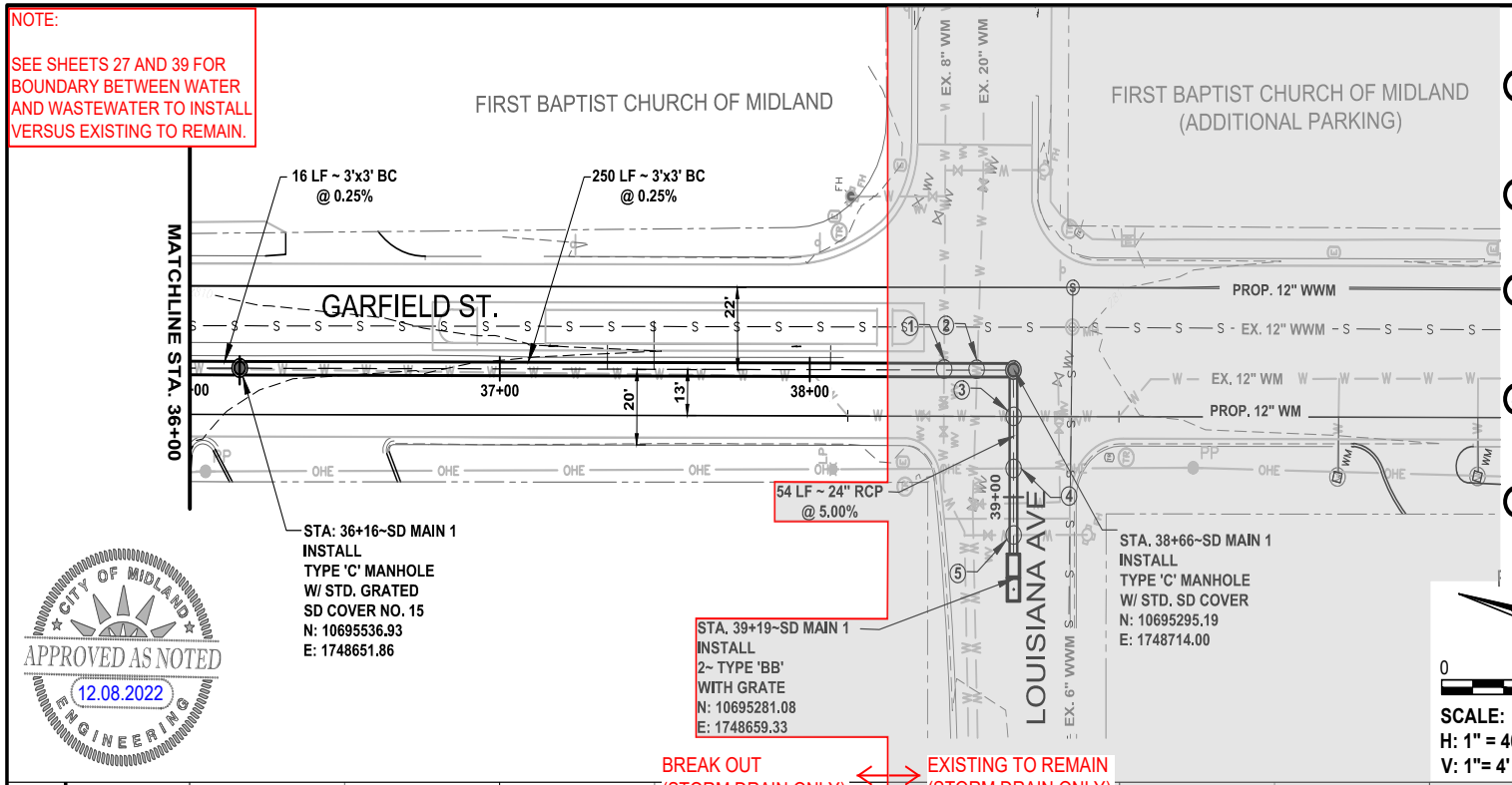
STORM DRAIN
PLAN-PROFILE
STA. 32+00 - STA. 36+00

53

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

NOTE:

SEE SHEETS 27 AND 39 FOR BOUNDARY BETWEEN WATER AND WASTEWATER TO INSTALL VERSUS EXISTING TO REMAIN.



CITY OF MIDLAND
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ENGINEERING

KEY NOTES

1. STA. 38.43
   EX. 8" WM
   FL (8") ELEV. = 2805.87
   (FILED VERIFY)
2. STA. 38+ 54
   EX. 20" WM
   FL(20") ELEV.= 2804.94
   (FIELD VERIFY)
3. STA. 38+78
   EX. 12" WM
   FL (12") ELEV.= 2806.18
   (FIELD VERIFY)
4. STA. 38+92
   EX. 12" WM
   FL (12") ELEV.= 2806.23
   (FIELD VERIFY)
5. STA. 39+01
   EX. 6" WM
   FL (6") ELEV.= 2808.06
   (FIELD VERIFY)

LEGEND

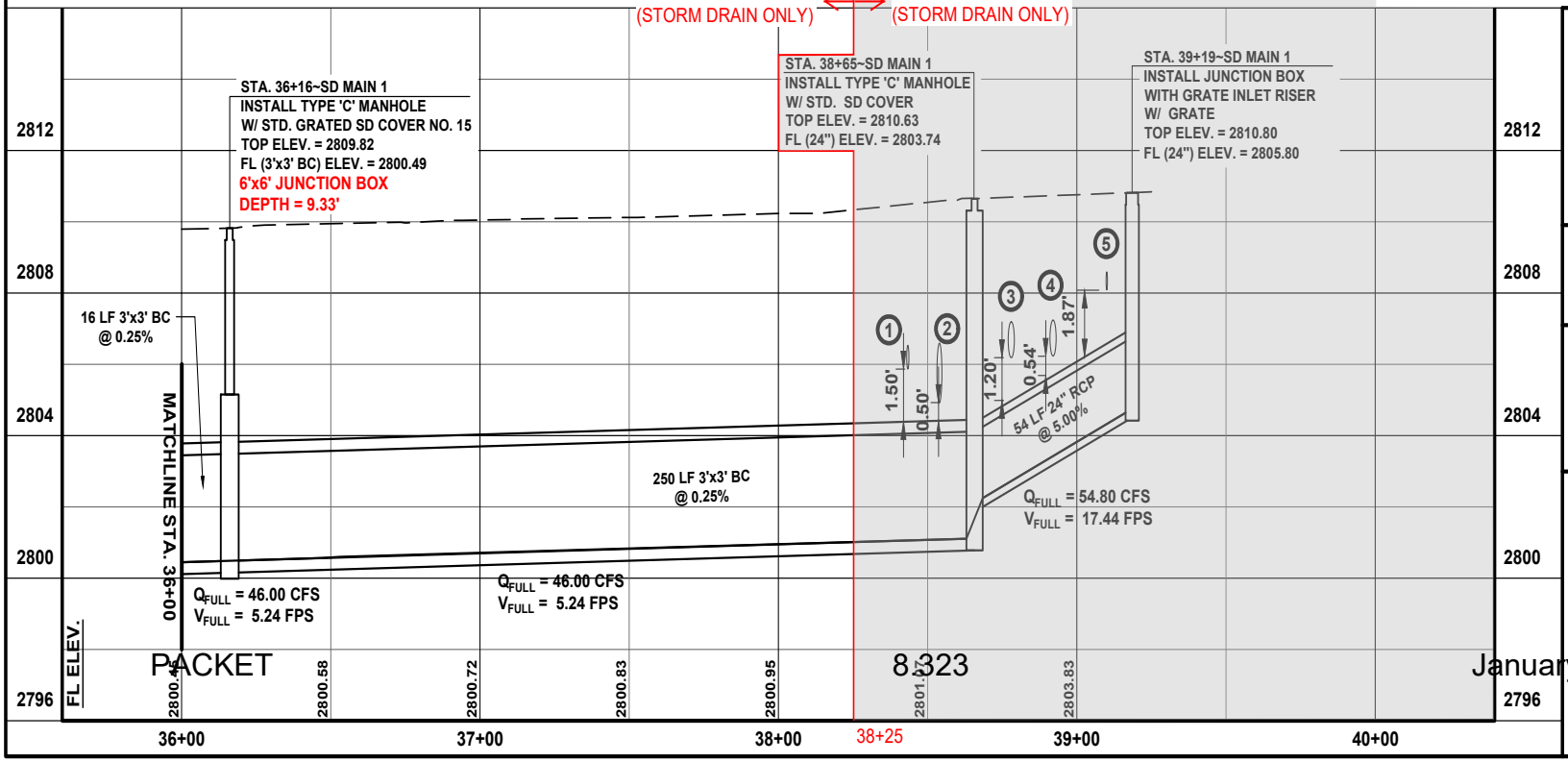
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N

0 40' 80'

SCALE:
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BREAK OUT (STORM DRAIN ONLY) ⟷ EXISTING TO REMAIN (STORM DRAIN ONLY)



CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

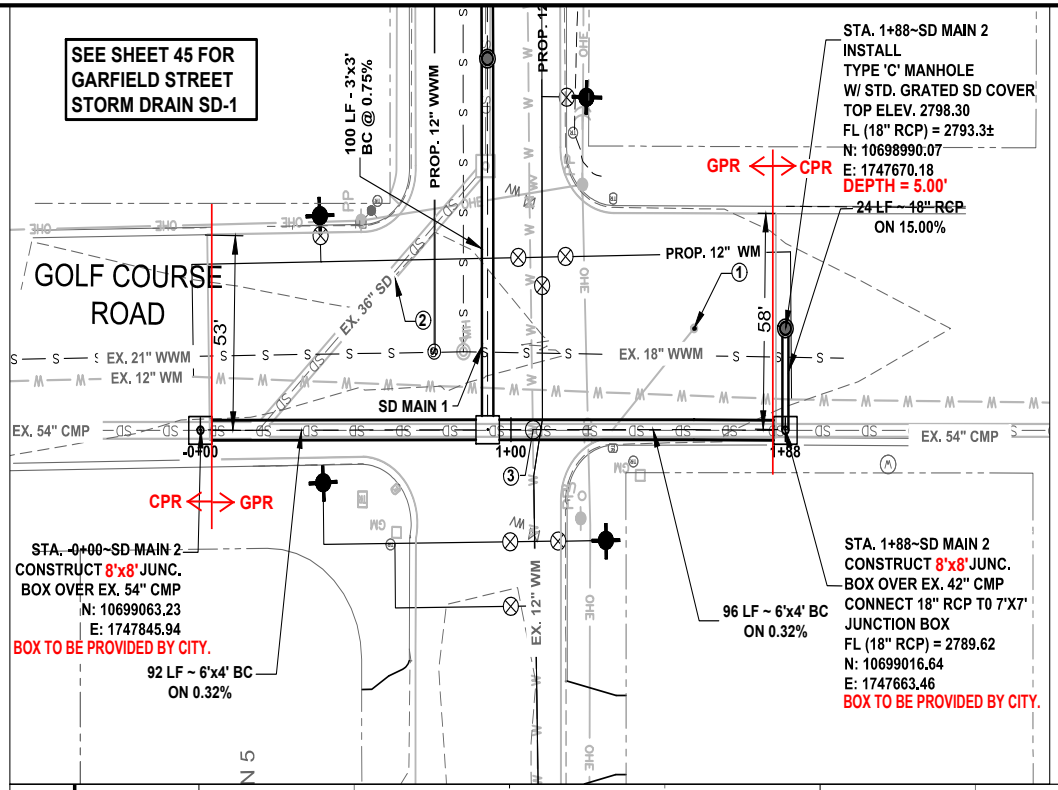
MIDLAND
Engineering Services

GARFIELD ST. STORM SEWER IMPROVEMENTS

STORM DRAIN
PLAN-PROFILE
STA. 36+00 - STA. 39+19

54

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



1. REMOVE EX. STORM DRAIN INLET AND STORM DRAIN PIPE.
2. REMOVE EX. STORM DRAIN INLET AND EX. 36" STORM DRAIN PIPE.
3. STA. 1+08
PROP. 12" WM
CROSSING
SD TP = 2793.53
WM FL = 2794.16

GPR - TRENCH REPAIR PER PROJECT'S GARFIELD ASPHALT TRENCH PAVEMENT REPLACEMENT DETAIL C01.

CPR - TRENCH REPAIR PER CITY'S ASPHALT TRENCH PAVEMENT REPLACEMENT DETAIL 311.

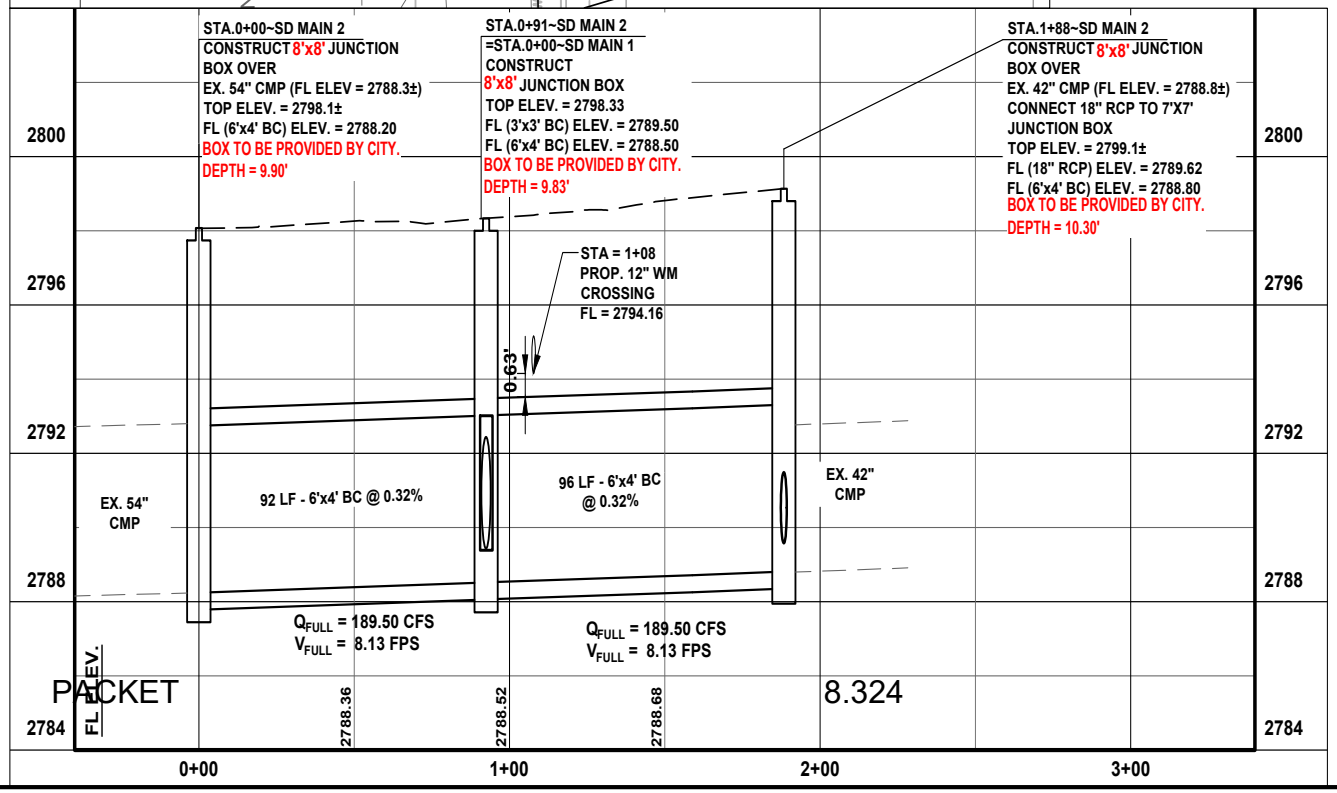
CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

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0 40' 80'

SCALE:
H: 1" = 40'
V: 1"= 4'



CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

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PSC

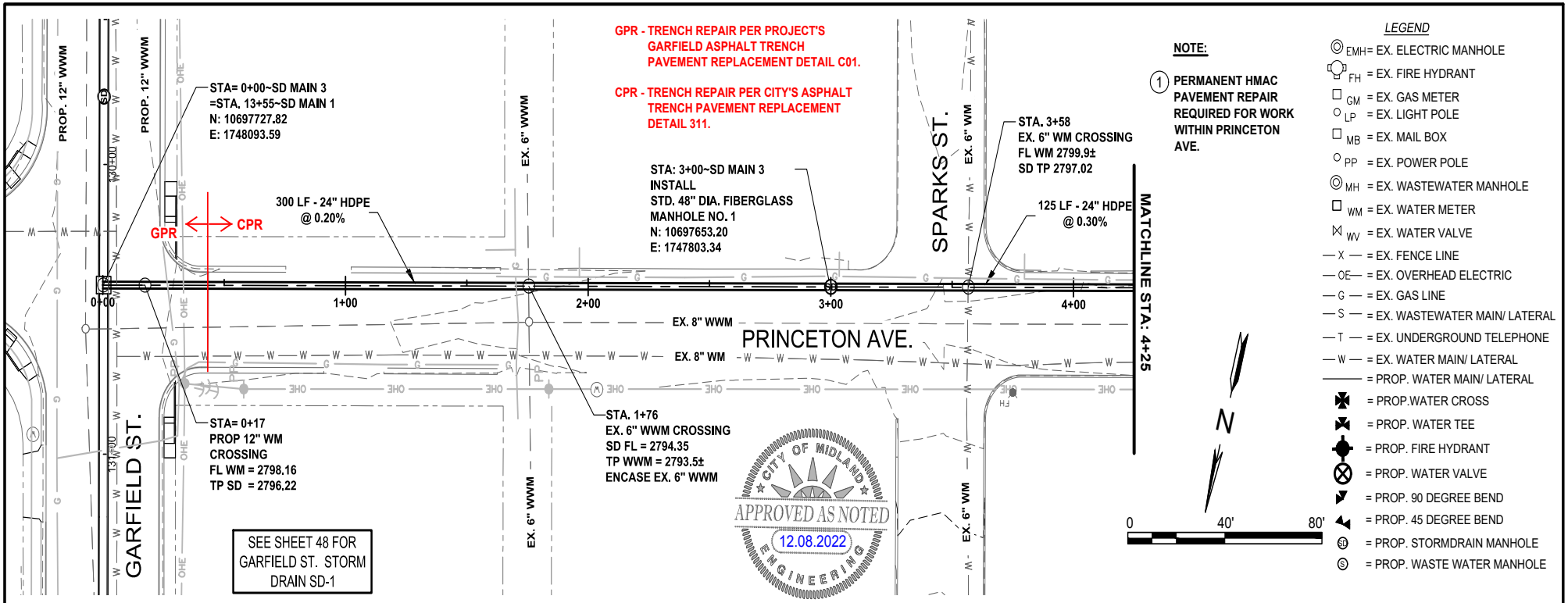
MIDLAND
Engineering Services

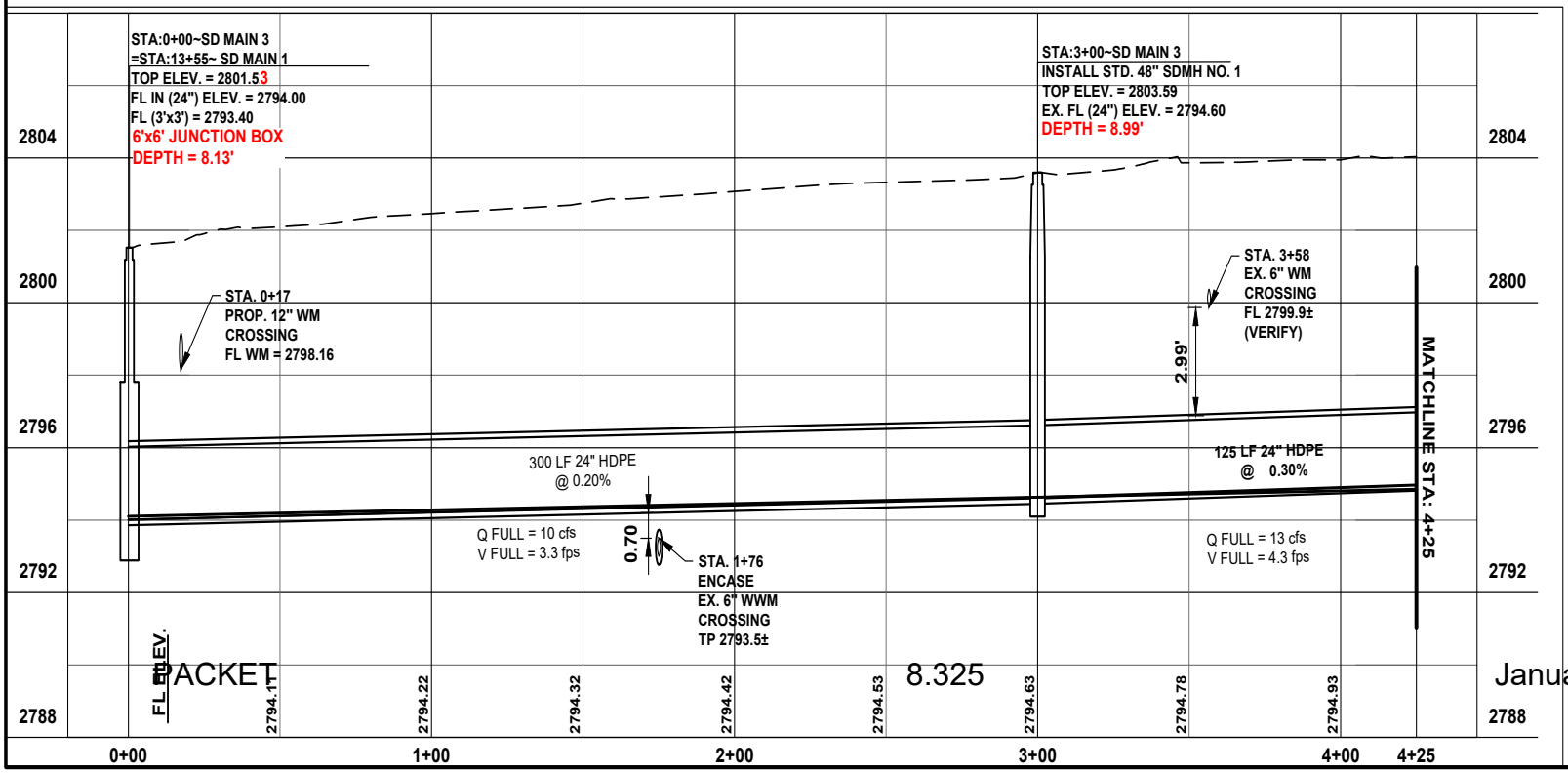
GARFIELD ST. STORM SEWER IMPROVEMENTS

STORM DRAIN
GOLF COURSE DRIVE
PLAN-PROFILE
STA. 0+00 - STA. 1+88

55

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18





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84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

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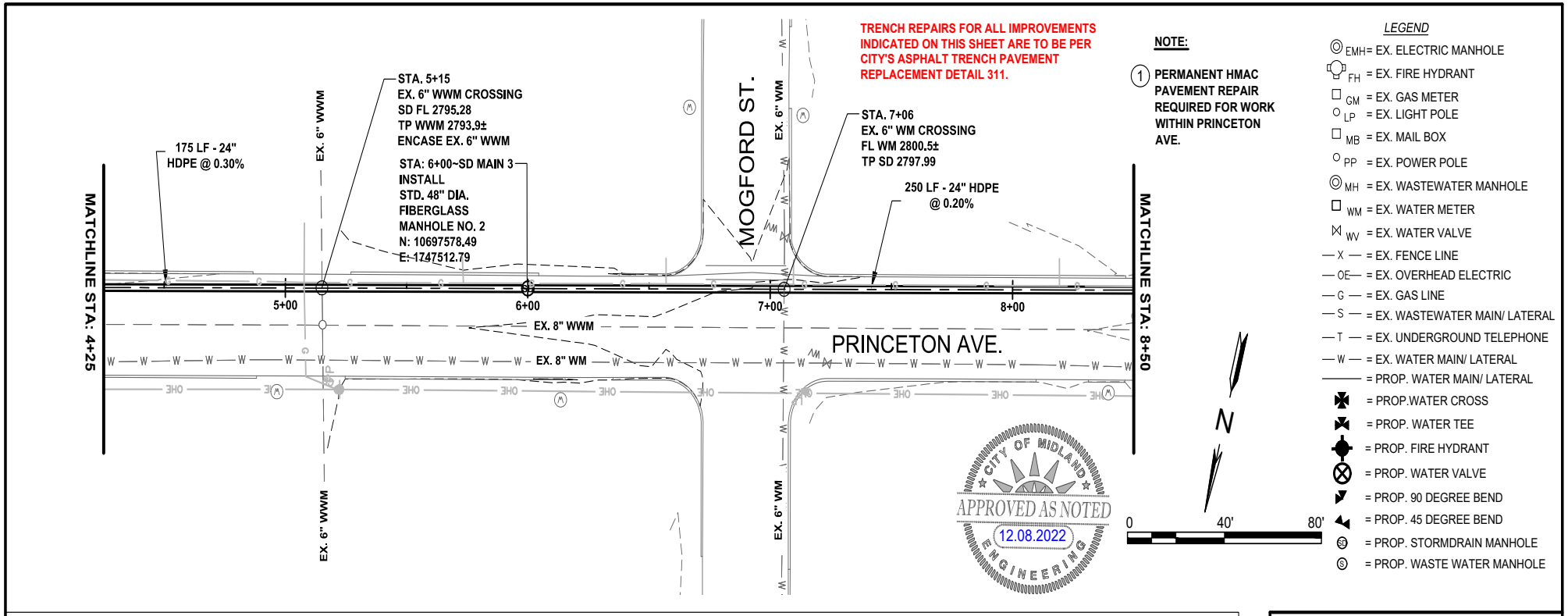
MIDLAND
Engineering Services

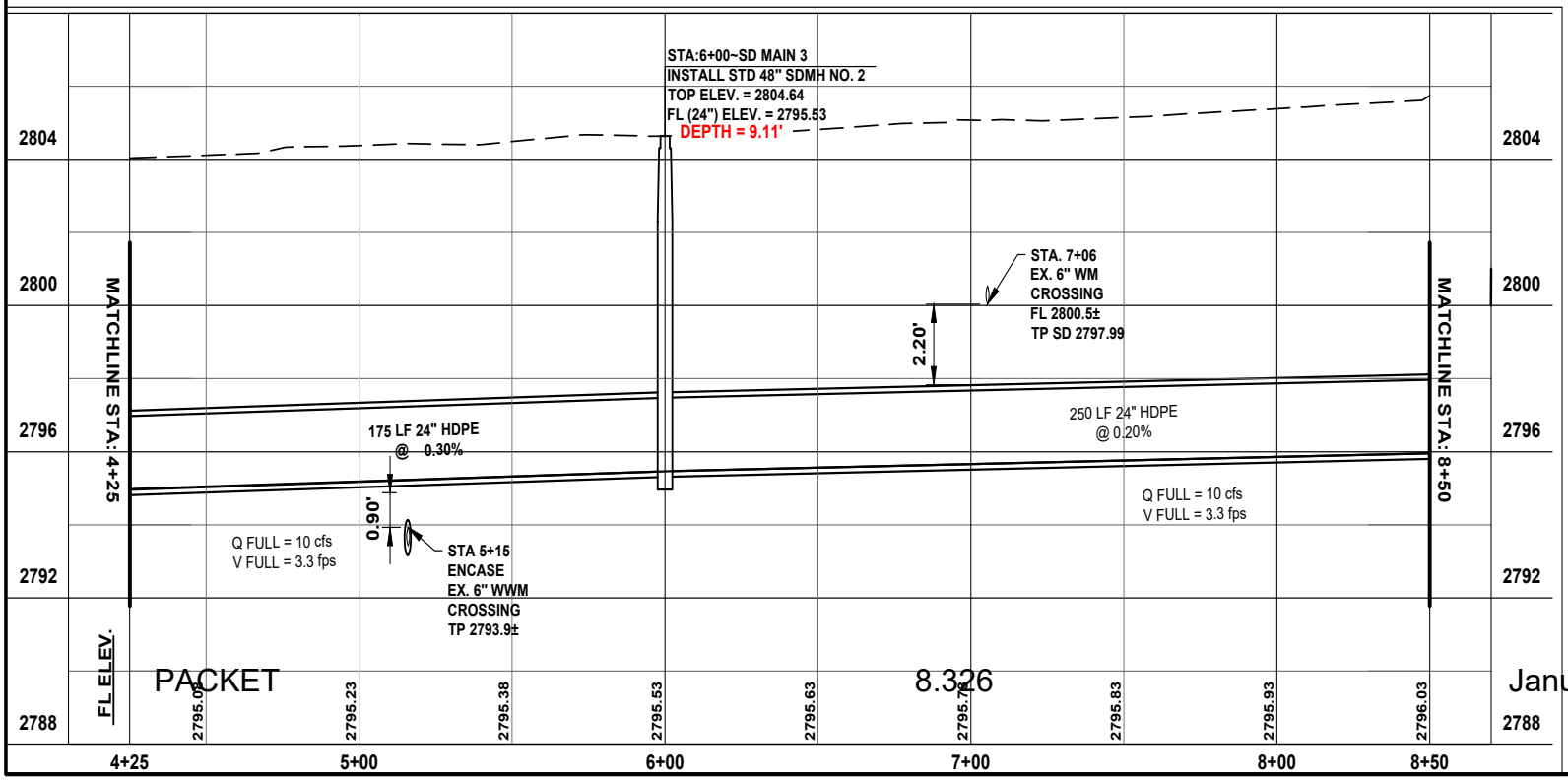
GARFIELD ST. STORM SEWER IMPROVEMENTS

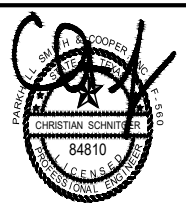
STORM DRAIN
PLAN-PROFILE
PRINCETON AVE.
STA. 0+00 - STA. 4+25

56

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18







PARKHILL SMITH & COOPER

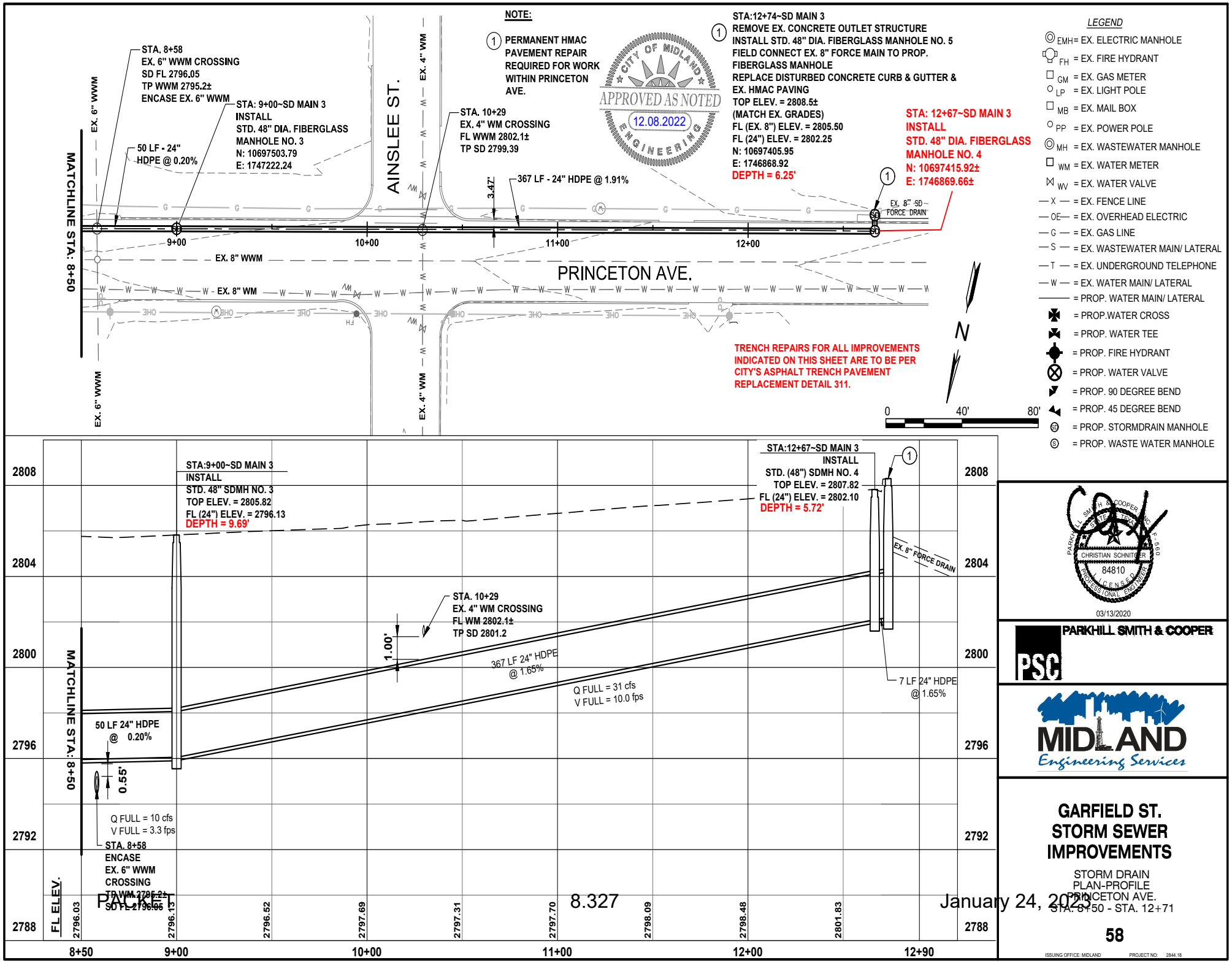
MIDLAND
Engineering Services

GARFIELD ST. STORM SEWER IMPROVEMENTS

STORM DRAIN
PLAN-PROFILE
PRINCETON AVE.
STA. 4+25 - STA. 8+50

57

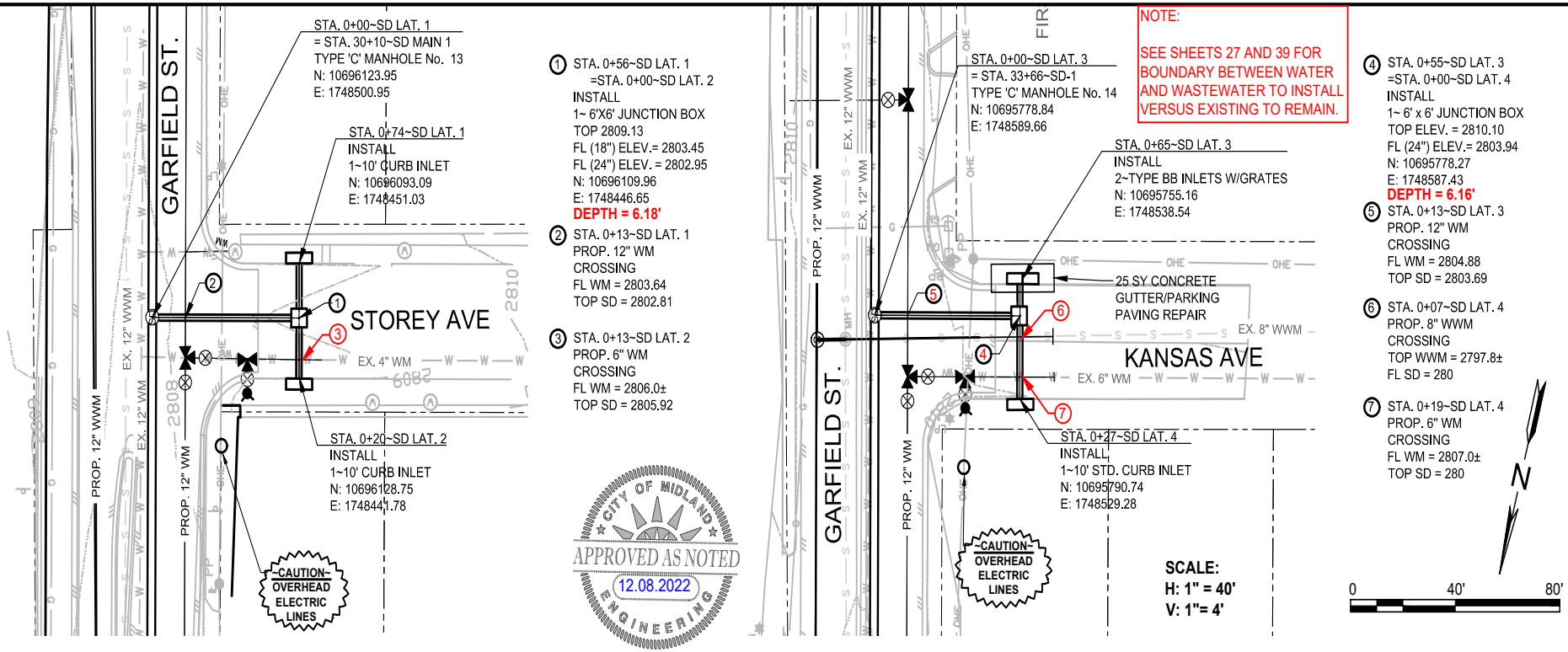
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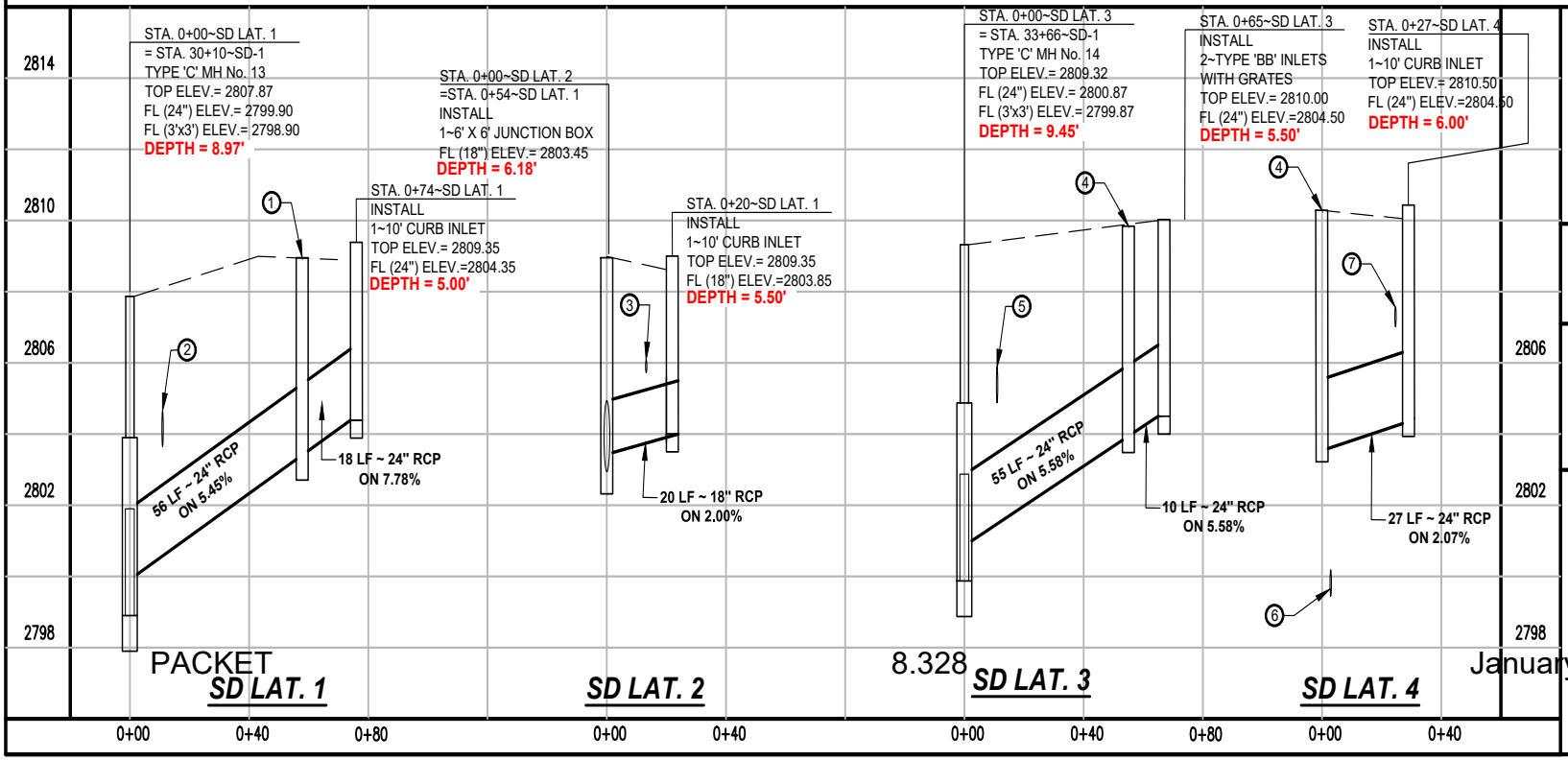


PAVING ST

8.327

January 24, 2023





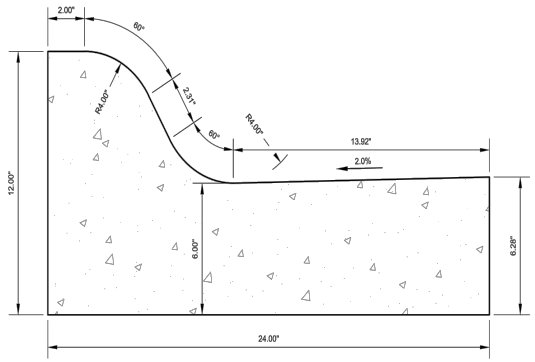
PARKHILL SMITH & COOPER ENGINEERS & PLANNERS
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020
PARKHILL SMITH & COOPER
PSC
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

STORM DRAIN
LATERALS 1 & 2
PLAN-PROFILE

59

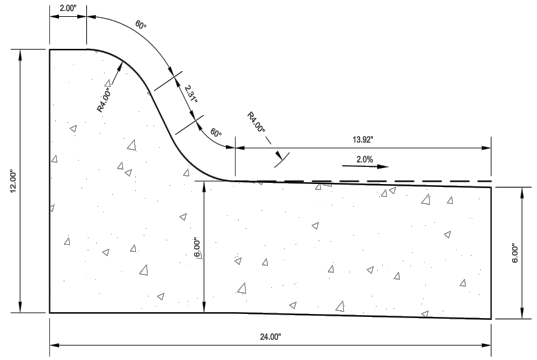
ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



NOTES:

1. CONCRETE TO BE CITY OF MIDLAND CLASS "C", 3600 PSI. USE FIBER REINFORCED CONCRETE PAVEMENT THROUGHOUT.
2. SEAL CONCRETE JOINT AT FACE OF CURB WHEN ADJACENT TO CONCRETE PAVEMENT AND NOT INTEGRAL WITH THAT PAVEMENT.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services	DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
	CHECKED: JCF	TYPE A STANDARD CURB AND GUTTER		205
	APPROVED: MCC			



NOTES:

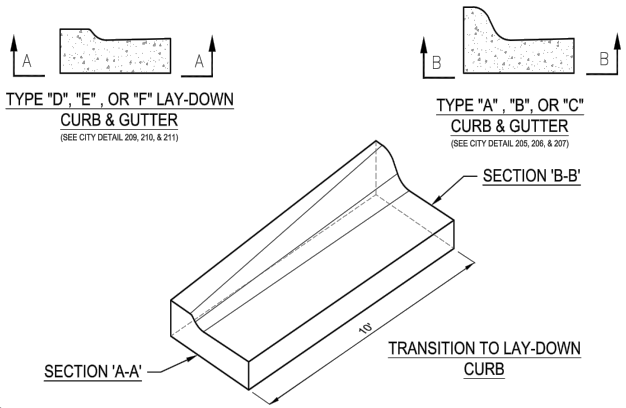
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MIDLAND Engineering Services	DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
	CHECKED: JCF	TYPE C INVERT CURB AND GUTTER		207
	APPROVED: MCC			

NOTE:

CONTRACTOR WILL MATCH EXISTING CURB GEOMETRY WHEN REPLACING THE EXISTING CURB, ALTHOUGH IT DOES NOT MATCH THE CURRENT CITY STANDARD DETAILS.

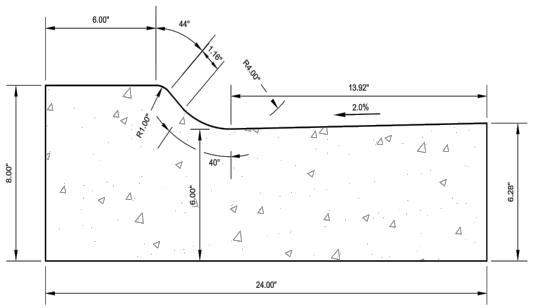
CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING



NOTES:

1. CONCRETE TO BE CITY OF MIDLAND CLASS "C", 3600 PSI. USE FIBER REINFORCED CONCRETE PAVEMENT THROUGHOUT.
2. SEAL CONCRETE JOINT AT FACE OF CURB WHEN ADJACENT TO CONCRETE PAVEMENT AND NOT INTEGRAL WITH THAT PAVEMENT.
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MIDLAND Engineering Services	DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
	CHECKED: JCF	TRANSITION TO LAY-DOWN CURB		208
	APPROVED: MCC			



NOTES:

1. CONCRETE WILL BE THE CITY OF MIDLAND CLASS "C", 3600 PSI. USE FIBER REINFORCED CONCRETE PAVEMENT THROUGHOUT.
2. SEAL CONCRETE JOINT AT FACE OF CURB WHEN ADJACENT TO CONCRETE PAVEMENT AND NOT INTEGRAL WITH THAT PAVEMENT.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services	DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
	CHECKED: JCF	TYPE D LAY-DOWN CURB AND GUTTER		209
	APPROVED: MCC			

PARKHILL SMITH & COOPER ENGINEERS & PLANNERS TEXAS F-5699 CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER

03/13/2020

PARKHILL SMITH & COOPER

PSC

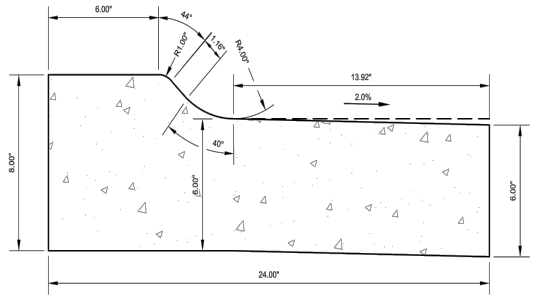
MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

CITY OF MIDLAND STANDARD DETAILS PAVING DETAILS

60

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

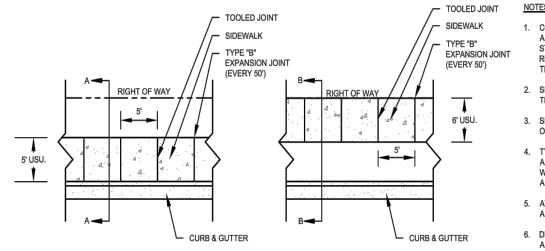


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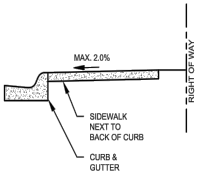
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MIDLAND Engineering Services	DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 211

TYPE F INVERT LAY-DOWN CURB AND GUTTER

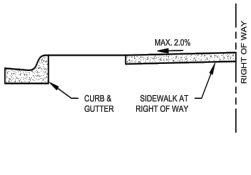


ATTACHED SIDEWALK PLACEMENT



SECTION A - A

DETACHED SIDEWALK PLACEMENT



SECTION B - B

NOTES:

1. CONCRETE TO BE CITY OF MIDLAND CLASS "A" AND HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH OF 3000 PSI. USE FIBER REINFORCED CONCRETE PAVEMENT THROUGHOUT.
2. SIDEWALK TO BE A MINIMUM OF 5' WIDE AND 4" THICK.
3. SIDEWALKS TO HAVE TYPE A SAWCUT JOINTS OR TOOLED JOINTS EVERY 5'.
4. TYPE "B" EXPANSION JOINTS TO BE LOCATED AT ALL PEDESTRIAN ACCESS RAMPS AND WHEREVER NEW SIDEWALK IS PLACED ADJACENT TO EXISTING CONCRETE.
5. ATTACHED SIDEWALK WILL BE LOCATED ADJACENT TO THE BACK OF CURB.
6. DETACHED SIDEWALK WILL BE LOCATED ADJACENT TO THE RIGHT-OF-WAY.
7. SIDEWALK CROSS-SLOPE MAY NOT EXCEED 2.0%.
8. ALL EXPOSED SIDEWALK EDGES TO HAVE A 1/2" RADIUS.
9. WHERE OBSTRUCTION IN SIDEWALK EXIST, THERE SHALL BE A 3' MINIMUM CLEARANCE. SIDEWALK LOCATION MAY BE SHIFTED WITH THE APPROVAL OF THE CITY ENGINEER.
10. ALL SIDEWALKS WITH A CONCRETE SURFACE SHALL HAVE A COURSE BROOM FINISH OR OTHER ROUGH NON-SKID TYPE FINISH AS APPROVED BY THE CITY ENGINEER.
11. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO THE CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
12. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.
13. SIDEWALKS IN DOWNTOWN PER CENTRAL BUSINESS DISTRICT POLICY.

MIDLAND Engineering Services	DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 225

STANDARD SIDEWALK

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING

PARKHILL, SMITH & COOPER, INC. TEXAS REGISTERED ENGINEERING FIRM F-9509
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

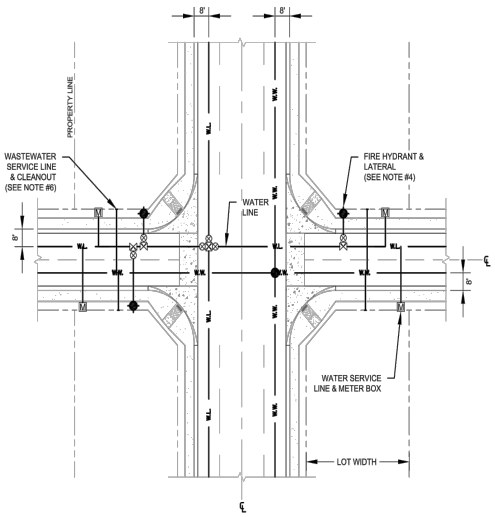
MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

CITY OF MIDLAND
STANDARD DETAILS
PAVING DETAILS

61

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



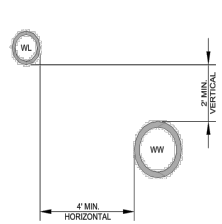
LEGEND

- WL — WATER MAIN
- WW — WASTE WATER MAIN
- GATE VALVE
- CROSS FITTING
- TEE FITTING
- FIRE HYDRANT
- WATER METER
- MANHOLE

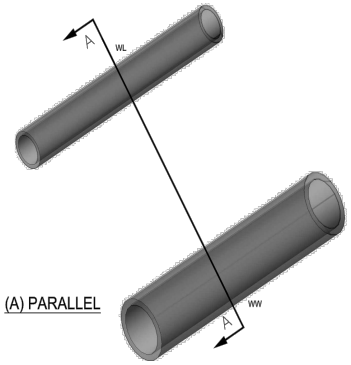
NOTES:

1. IF A SITE INCLUDES ALLEYS, OR IS ADJACENT TO EXISTING ALLEYS, THEN THE WASTEWATER MAIN IS TO BE LOCATED IN THE ALLEY AND NOT THE STREET RIGHT OF WAY.
2. ALL DIMENSIONS SHOWN ARE FROM BACK OF CURB. WHEN BIKE LANES ARE PRESENT CENTER UTILITIES IN THE OUTER VEHICLE TRAVEL LANE.
3. FIRE HYDRANTS PLACED AT INTERSECTIONS TO BE PLACED IN LINE WITH A FILLET BEGINNING-OF-RADIUS OR A FILLET END-OF-RADIUS.
4. FIRE HYDRANTS PLACED AT MID-BLOCK TO BE PLACED IN LINE WITH A LOT LINE.
5. FIRE HYDRANT COVERAGE DOES NOT EXTEND ACROSS ARTERIALS OR MAJOR COLLECTORS. FIRE HYDRANTS MAY BE REQUIRED ON BOTH SIDES OF A STREET OR INTERSECTION AT THESE LOCATIONS.
6. CLEANOUTS ARE TO BE INSTALLED BY THE PROPERTY OWNER.
7. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
8. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services	DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
	CHECKED: JCF	TYPICAL UTILITY LAYOUT		301
	APPROVED: MCC			



SECTION 'A-A'



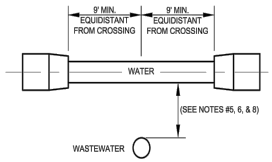
(A) PARALLEL

NOTES:

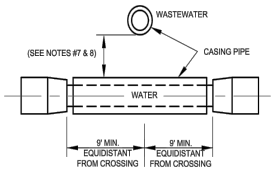
1. SEE CITY DETAIL 807 FOR NEW PETROLEUM OR NATURAL GAS LINE REQUIREMENTS WHEN IN PARALLEL WITH A WATER MAIN. REQUIREMENTS FOR WATER MAINS IN PARALLEL WITH PETROLEUM OR NATURAL GAS LINES ARE THE SAME AS WHEN THEY ARE PARALLEL WITH WASTEWATER MAINS UNLESS STATED OTHERWISE IN CITY DETAIL 807.
2. IF AN EXISTING PETROLEUM OR NATURAL GAS LINE PREDATES A PUBLIC ROW OR EASEMENT THAT THE WATER MAIN IS LOCATED IN THEN THE WATER MAIN DESIGN AND CONSTRUCTION MAY BE SUBJECT TO ADDITIONAL REQUIREMENTS AS PER THE PETROLEUM OR NATURAL GAS LINE OWNER'S STANDARDS.
3. WASTEWATER MAINS AND MANHOLES MUST BE LOCATED AT LEAST 9.0' FROM ALL WATER MAINS IN ALL DIRECTIONS. IF THIS IS NOT POSSIBLE THEN AN ENGINEERING REPORT IS REQUIRED PER TAC TO JUSTIFY WHY, AND THE REQUIREMENTS OF THIS DETAIL WILL APPLY. THIS DETAIL IS INTENDED TO COMPLY WITH TAC 217.53(d) AND TAC 290.44(e). IF TAC AND THIS DETAIL DIFFER THEN THE MORE RESTRICTIVE STANDARD GOVERNS.
4. WHERE WATER MAINS ARE LOCATED IN PARALLEL WITH NEW WASTEWATER MAINS, WASTEWATER MAINS MUST BE CONSTRUCTED AT LEAST 150 PSI PRESSURE CLASS, CORROSION RESISTANT, NON-BRITTLE PIPE SUCH AS CIP, DIP, OR PVC PIPE THAT IS DESIGNED TO SEAL AT ATMOSPHERIC PRESSURE. EXISTING WASTEWATER MAINS IN PARALLEL THAT ARE LEAKING OR ARE DISTURBED AND THEN BEGIN TO LEAK MUST BE REPLACED WITH 150 PSI PRESSURE-RATED PIPE.
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services	DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
	CHECKED: JCF	PARALLEL WATER & WASTEWATER SPACING		306
	APPROVED: MCC			

NEW WATER OVER WASTEWATER



NEW WATER UNDER WASTEWATER



NOTES:

1. SEE CITY DETAIL 309 FOR NEW WASTEWATER MAIN REQUIREMENTS AT WATER MAIN CROSSINGS.
2. WASTEWATER MAINS AND MANHOLES MUST BE LOCATED AT LEAST 9.0' FROM ALL WATER MAINS IN ALL DIRECTIONS. IF THIS IS NOT POSSIBLE THEN AN ENGINEERING REPORT IS REQUIRED PER TAC TO JUSTIFY WHY, AND THE REQUIREMENTS OF THIS DETAIL WILL APPLY.
3. THIS DETAIL IS INTENDED TO COMPLY WITH TAC 217.53(d) AND TAC 290.44(e). IF TAC AND THIS DETAIL DIFFER THEN THE MORE RESTRICTIVE STANDARD GOVERNS.
4. CENTER NEW WATER MAIN PIPE SEGMENT ON CROSSING SO THAT ALL PIPE SEGMENT JOINTS ARE EQUIDISTANT AND AT LEAST 9.0' HORIZONTALLY FROM THE CENTERLINE OF THE CROSSING. NEW WATER MAIN IS TO CROSS WASTEWATER MAIN AT 90° ANGLE.
5. NEW WATER MAINS ARE TO HAVE NO LESS THAN 2.0' VERTICAL SEPARATION OVER THE OUTER EDGE OF ANY EXISTING NON-PRESSURE RATED WASTEWATER MAIN, AND NO LESS THAN 0.5' VERTICAL SEPARATION OVER THE OUTER EDGE OF ANY EXISTING PRESSURE-RATED (150 PSI) WASTEWATER MAIN.
6. VERTICAL SEPARATION DIMENSION REQUIREMENTS FOR NEW WATER MAINS CROSSING OVER NEW WASTEWATER MAINS ARE COVERED IN CITY DETAIL 309.
7. NEW WATER MAIN CROSSING BENEATH NEW OR EXISTING WASTEWATER MAIN TO HAVE NO LESS THAN 2.0' VERTICAL SEPARATION FROM WASTEWATER MAIN WITH MINIMUM 18.0' LONG PIPE ENCASEMENT CENTERED ON THE CROSSING. SEE CITY DETAIL 805 FOR PIPE CASING.
8. VERTICAL SEPARATION DIMENSIONS TO BE MEASURED FROM OUTER EDGE OF ALL PIPE ENCASEMENTS..
9. WHEN CROSSING AN EXISTING WASTEWATER MAIN AND IT IS DISTURBED OR SHOW SIGNS OF LEAKING, THE WASTEWATER MAIN MUST BE REPLACED AT LEAST 9.0' IN BOTH DIRECTIONS FROM THE CROSSING WITH AT LEAST 150 PSI PRESSURE-RATED PIPE EMBEDDED IN CEMENT STABILIZED SAND ENCASEMENT (2.5 SACKS / CUBIC YARD) FOR A TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 1.0' BEYOND THE JOINT ON EACH END.
10. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
11. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services	DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
	CHECKED: JCF	NEW WATER MAIN CROSSING WASTEWATER MAIN		307
	APPROVED: MCC			

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING

PARKHILL SMITH & COOPER TEXAS REGISTERED F-550 CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER

03/13/2020

PARKHILL SMITH & COOPER

PSC

MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

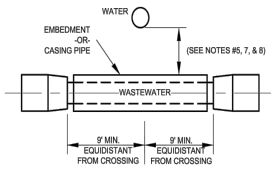
CITY OF MIDLAND STANDARD DETAILS

MULTI-USE UTILITY DETAILS

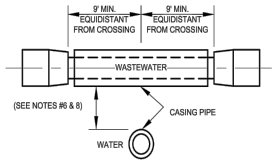
62

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

NEW WASTEWATER UNDER WATER



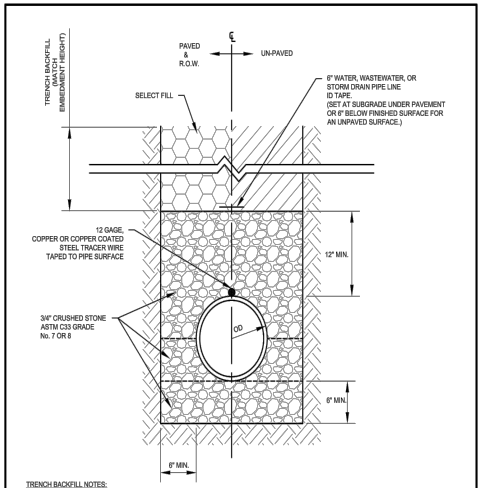
NEW WASTEWATER OVER WATER



NOTES:

1. SEE CITY DETAIL 307 FOR NEW WATER MAIN REQUIREMENTS AT WASTEWATER MAIN CROSSINGS.
2. WASTEWATER MAINS AND MANHOLES MUST BE LOCATED AT LEAST 9.0' FROM ALL WATER MAINS IN ALL DIRECTIONS. IF THIS IS NOT POSSIBLE THEN AN ENGINEERING REPORT IS REQUIRED PER TAC TO JUSTIFY WHY, AND THE REQUIREMENTS OF THIS DETAIL WILL APPLY.
3. THIS DETAIL IS INTENDED TO COMPLY WITH TAC 217.53(d) AND TAC 290.44(e). IF TAC AND THIS DETAIL DIFFER THEN THE MORE RESTRICTIVE STANDARD GOVERNS.
4. CENTER NEW WASTEWATER MAIN PIPE SEGMENT ON CROSSING SO THAT ALL PIPE SEGMENT JOINTS ARE EQUIDISTANT AND AT LEAST 9.0' HORIZONTALLY FROM THE CENTERLINE OF THE CROSSING. WASTEWATER MAIN IS TO CROSS WATER MAIN AT 90° ANGLE.
5. NEW WASTEWATER MAIN CROSSING BENEATH NEW OR EXISTING WATER MUST COMPLY WITH ONE OF THE FOLLOWING:
   A. WASTEWATER MAIN PIPE TO BE PRESSURE RATED SDR-26 D2241 PIPE OR APPROVED EQUAL FROM MANHOLE TO MANHOLE WITH MINIMUM 18.0' LONG CEMENT STABILIZED SAND ENCASEMENT (2.5 SACKS/CUBIC YARD) CENTERED ON THE CROSSING. VERTICAL SEPARATION FROM OUTER EDGE OF WATER MAIN TO BE NO LESS THAN 2.0'.
   B. WASTEWATER MAIN PIPE TO BE HEAVY-WALL GRAVITY PIPE SDR-26 D3034 OR APPROVED EQUAL FROM MANHOLE TO MANHOLE WITH MINIMUM 18.0' LONG PIPE ENCASEMENT CENTERED ON THE CROSSING. SEE CITY DETAIL 805 FOR PIPE CASING. VERTICAL SEPARATION FROM OUTER EDGE OF WATER MAIN TO BE NO LESS THAN 0.5'.
6. NEW WASTEWATER MAIN CROSSING OVER NEW OR EXISTING WATER MAIN TO BE PRESSURE RATED SDR-26 D2241 PIPE OR APPROVED EQUAL FROM MANHOLE TO MANHOLE WITH MINIMUM 18.0' LONG PIPE ENCASEMENT CENTERED ON THE CROSSING. SEE CITY DETAIL 805 FOR PIPE CASING. VERTICAL SEPARATION FROM OUTER EDGE OF WATER MAIN TO BE NO LESS THAN 2.0'.
7. NEW WATER MAINS CROSSING OVER EXISTING WASTEWATER MAINS ARE COVERED IN CITY DETAIL 307.
8. VERTICAL SEPARATION DIMENSIONS TO BE MEASURED FROM OUTER EDGE OF ALL PIPE ENCASEMENTS.
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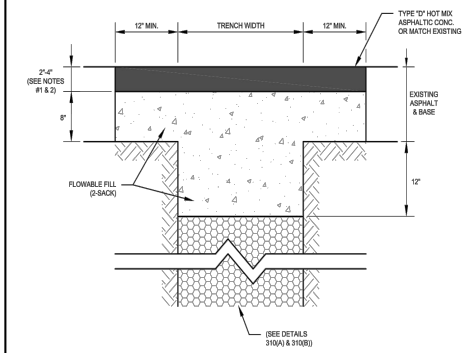
DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	NEW WASTEWATER MAIN CROSSING WATER MAIN		309
APPROVED: MCC			



TRENCH BACKFILL NOTES:

1. APPLIES TO ALL PIPE TYPES. (DUCTILE IRON, PVC, ETC.)
2. UTILIZE SELECT FILL BACKFILL BENEATH ALL PAVED SURFACES. NATIVE MATERIAL BACKFILL CAN ONLY BE USER FOR UNPAVED TRENCH CONDITIONS IF BACKFILL MATERIAL IS ≤ 30LL AND ≤ 15 PI.
3. NATIVE MATERIAL TO BE EXISTING EXCAVATED SOIL FROM TRENCH WITH ALL MATERIAL BROKEN DOWN ≤ 2".
4. MOISTURE CONDITION ALL BACKFILL MATERIAL PRIOR TO PLACING IN TRENCH.
5. PLACE TRENCH BACKFILL MATERIAL IN MAXIMUM 12" LOOSE LIFTS AND COMPACT TO MAXIMUM 8" COMPACTED LIFTS.
6. REFER TO CITY DETAILS 311 AND 312 FOR TRENCH PAVEMENT REPLACEMENT REQUIREMENTS.
7. PLACE LAYERS B, C, AND E FOUND ON CITY DETAIL 310(B) AS SEPARATE LAYERS.
8. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
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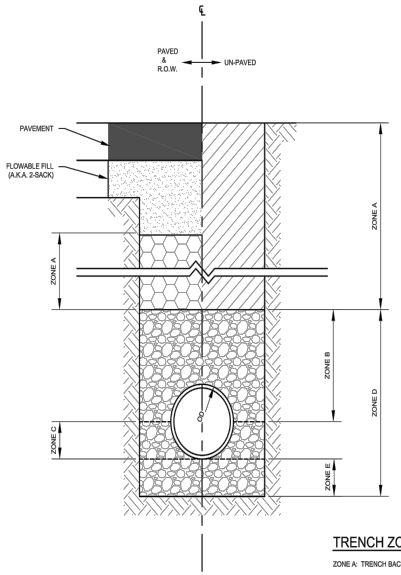
DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: GARFIELD STREET	SCALE: NTS	DETAIL:	
TRENCHING AND BEDDING		310(A)	



NOTES:

1. ASPHALT PAVEMENT THICKNESS TO BE A MINIMUM OF 2" OR MATCH THE EXISTING ASPHALT THICKNESS IF IT IS GREATER THAN 2" THICK.
2. PLACE ASPHALT PAVEMENT IN MAXIMUM 2" LIFTS, 95% MODIFIED COMPACTION.
3. PLACE ALL FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT) AS A SINGLE CONTINUOUS POUR.
4. EXTEND BOTH ASPHALT AND FLOWABLE FILL 12" BEYOND THE EDGE OF THE TRENCH ON BOTH SIDES.
5. SEE DETAILS 310(A) AND 310(B) REGARDING TRENCH BACKFILL REQUIREMENTS BENEATH THE FLOWABLE FILL.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

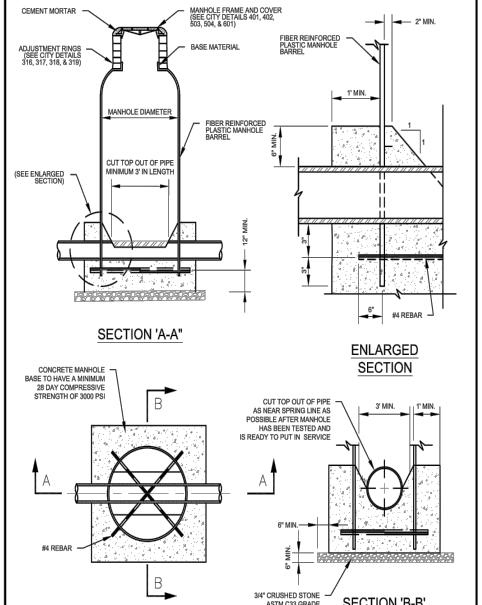
DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:	
ASPHALT TRENCH PAVEMENT REPLACEMENT		311	



TRENCH ZONES:

ZONE A: TRENCH BACKFILL
ZONE B: PIPE BACKFILL
ZONE C: HAUNCHING
ZONE D: PIPE EMBEDMENT
ZONE E: BEDDING

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:	
TRENCHING AND BEDDING		310(B)	



DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:	
TYPICAL FIBERGLASS MANHOLE		313(A)	

CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEERING

PARKHILL SMITH & COOPER
PSC

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

CITY OF MIDLAND
STANDARD DETAILS
MULTI-USE
UTILITY DETAILS

63

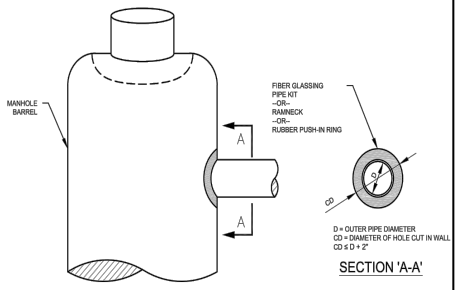
ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

PACKET 8.332 January 24, 2023

NOTES:

1. 48" DIAMETER MANHOLES TO BE USED FOR PIPE DIAMETERS OF 24" OR SMALLER ONLY.
2. INSTALL DROPS AND INTERSECTING PIPES ONLY WHEN CALLED FOR IN CONSTRUCTION DRAWINGS.
3. SET MANHOLE FRAME IN SEALANT PER CITY OF MIDLAND STANDARD SPECIFICATIONS.
4. NEW MANHOLE TO HAVE SEAMLESS AND CONTINUOUS NECK, SHOULDER, AND BARREL.
5. ALL CONCRETE TO BE CLASS "A" CONCRETE.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
MIDLAND Engineering Services	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
	TYPICAL FIBERGLASS MANHOLE		313(B)

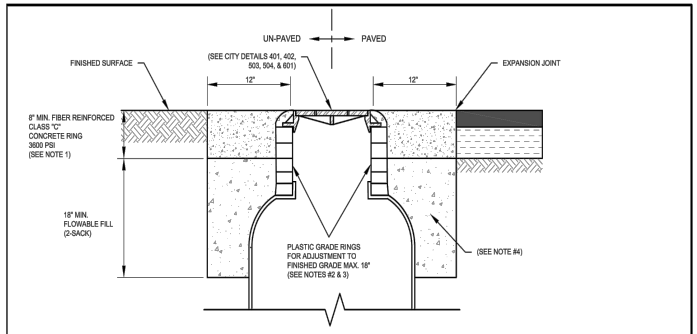


SECTION 'A-A'

NOTES:

1. THE DIAMETER OF THE CUTOUT IN THE MANHOLE BARREL IS TO BE NO MORE THAN 2.0" WIDER THAN THE OUTER WALL DIAMETER OF THE PENETRATING PIPE.
2. THE PENETRATING PIPE IS TO BE CENTERED IN THE MANHOLE BARREL CUTOUT.
3. PIPES PENETRATING MANHOLE MUST BE MINIMUM 8" DIAMETER, AND SERVICE LINES MUST BE CONSTRUCTED TO CITY WASTEWATER MAIN OR STORM DRAIN STANDARDS WITHIN PUBLIC RIGHT OF WAY OR EASEMENT.
4. FORM FLOW SURFACE AND MOUND CONCRETE AROUND PIPE PENETRATIONS, TO FORM A SEAL, IN ONE CONTINUOUS PLACEMENT OPERATION.
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
MIDLAND Engineering Services	EFFECTIVE DATE: 10/01/2018	SCALE:	DETAIL:
	TYPICAL FIBERGLASS MANHOLE PIPE PENETRATION		314

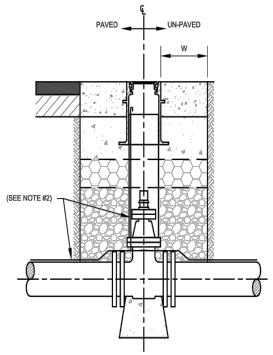


NEW MANHOLE ADJUSTMENT

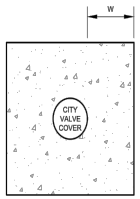
NOTES:

1. INSTALL 12" MIN. FIBER REINFORCED CLASS "C" CONCRETE RING,3600 PSI, WHEN MANHOLE IS LOCATED IN AN ARTERIAL R.O.W.
2. GRADE RINGS TO MEET ASTM STANDARD A48 AND TO BE 2", 4", OR 6" THICKNESS AS REQUIRED. INSTALL ASPHALT TAR IN THICK, UNIFORM COATING OVER ALL OUTER ADJUSTMENT RING SURFACES AND JOINTS.
3. ENGINEERING SERVICES REPRESENTATIVE AND UTILITY SERVICES REPRESENTATIVE MAY ALLOW GREATER ADJUSTMENT RING DEPTH TO ACCOMMODATE PAVING STRUCTURES.
4. REMOVE ALL MATERIAL EXCAVATED FROM SITE AND EXCAVATION, AND FILL TO FINISHED BASE ELEVATION WITH FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT).
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
MIDLAND Engineering Services			NEW MANHOLE ADJUSTMENT		316



CROSS SECTION VIEW

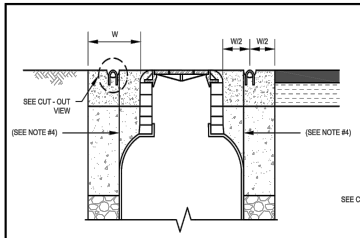


PLAN VIEW

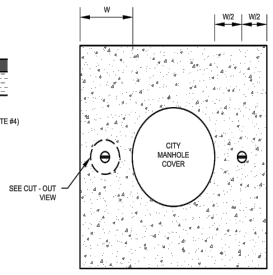
NOTES:

1. SEE OTHER CITY STANDARD DETAILS FOR INFORMATION REGARDING VALVES, COVERS, CONCRETE RINGS, ETC.
2. TRACER WIRE PER DETAIL 310 (A) TO BE TAPED TO SIDE OF VALVE BOX AND STOP 1.0" - 2.0" SHORT OF VALVE BOX COVER. TRACER WIRE TO REMAIN ENTIRELY WITHIN VALVE BOX.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

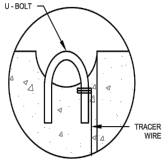
DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	EFFECTIVE DATE: GARFIELD STREET	SCALE: NTS	DETAIL:
MIDLAND Engineering Services			VALVE DETECTOR WIRE END		320



CROSS SECTION VIEW



PLAN VIEW



CUT - OUT VIEW

NOTES:

1. SEE OTHER CITY STANDARD DETAILS FOR INFORMATION REGUARDING MANHOLES, COVERS, CONCRETE RINGS, ETC.
2. U - BOLT IS TO BE GALVANIZED STEEL RATED FOR OUDOOR EXPOSURE, 1.0" DIAMETER.
3. U - BOLT IS TO BE SET FLUSH WITH FINISHED SURFACE OF CONCRETE RING. THERE IS TO BE A SMALL DEPRESSION IN THE CONCRETE SUFFICIENT TO ALLOW A CLAMP OR WIRE TO BE PLACED AROUND THE EXPOSED METAL.
4. TRACER WIRE PER DETAIL 310(A) TO BE TAPED TO SIDE OF MANHOLE AND WRAPPED SECURELY TO END OF U-BOLT WHEN INSTALLED. TRACER WIRE IS TO REMAIN ENTIRELY COVERED.
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
MIDLAND Engineering Services			MANHOLE DETECTOR WIRE END		321

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING

PARKHILL SMITH & COOPER TEXAS REGISTERED ENGINEERING FIRM F-5666 CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER

03/13/2020

PARKHILL SMITH & COOPER

PSC

MIDLAND Engineering Services

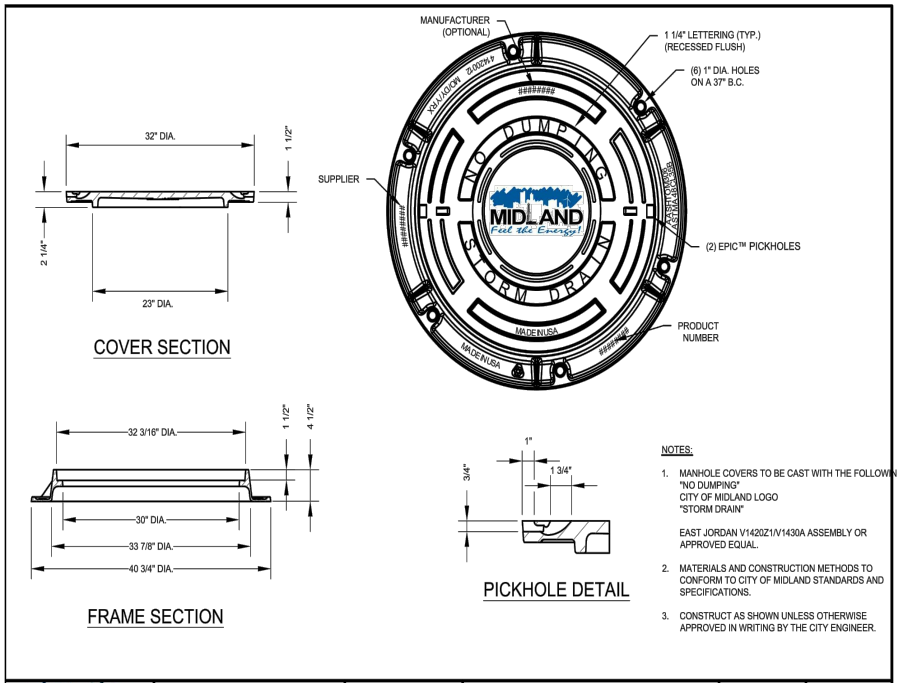
GARFIELD ST. UTILITY IMPROVEMENTS

CITY OF MIDLAND STANDARD DETAILS

MULTI-USE UTILITY DETAILS

64

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

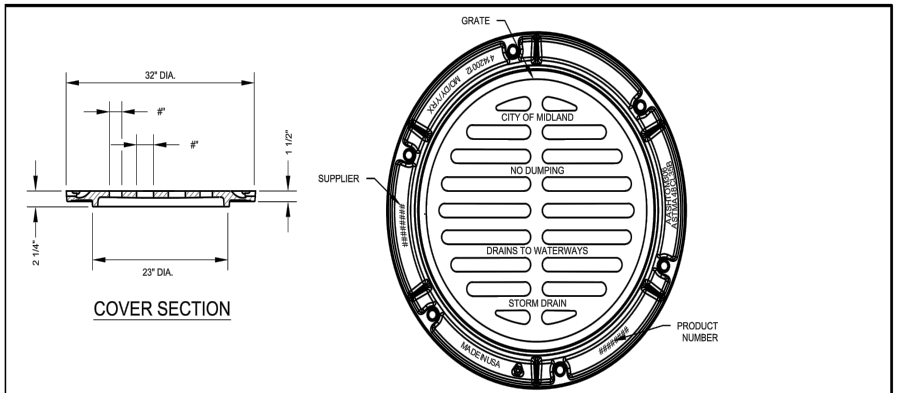


NOTES:

1. MANHOLE COVERS TO BE CAST WITH THE FOLLOWING
   "NO DUMPING"
   CITY OF MIDLAND LOGO
   "STORM DRAIN"

   EAST JORDAN V1420Z1/V1430A ASSEMBLY OR APPROVED EQUAL.
2. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
3. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services	DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS
		TYPICAL STORM DRAIN COVER	DETAIL: 401



NOTES:

1. GRATED MANHOLE COVERS TO BE CAST WITH THE FOLLOWING:
   "CITY OF MIDLAND"
   "NO DUMPING"
   "DRAINS TO WATERWAYS"
   "STORM DRAIN"

   EAST JORDAN "STORM DRAIN"/1040N ASSEMBLY OR APPROVED EQUAL
2. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
3. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services	DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS
		GRATED STORM DRAIN COVER	DETAIL: 402

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING

PARKHILL SMITH & COOPER TEXAS REGISTERED ENGINEERING FIRM F-5600
CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER

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MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

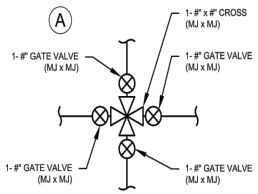
CITY OF MIDLAND STANDARD DETAILS

STORM DRAIN DETAILS

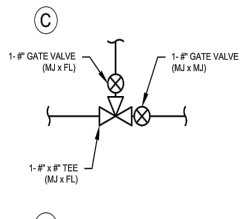
65

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

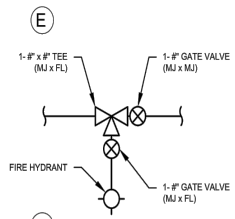
CROSS FITTING RESTRAINTS



TEE FITTING RESTRAINTS



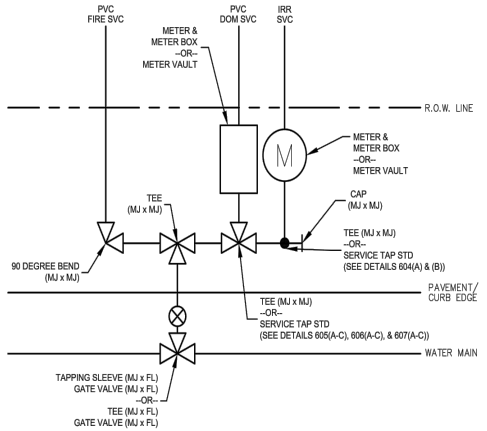
FIRE HYDRANT RESTRAINTS



NOTES:

1. ALL MECHANICAL JOINT (MJ) FITTINGS TO BE RESTRAINED.
2. ALL FLANGES (FL) TO BE ON THE BRANCH SIDE OF TEE FITTINGS.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	TYPICAL FITTING RESTRAINT CONFIGURATIONS		601
APPROVED: MCC			



NOTES:

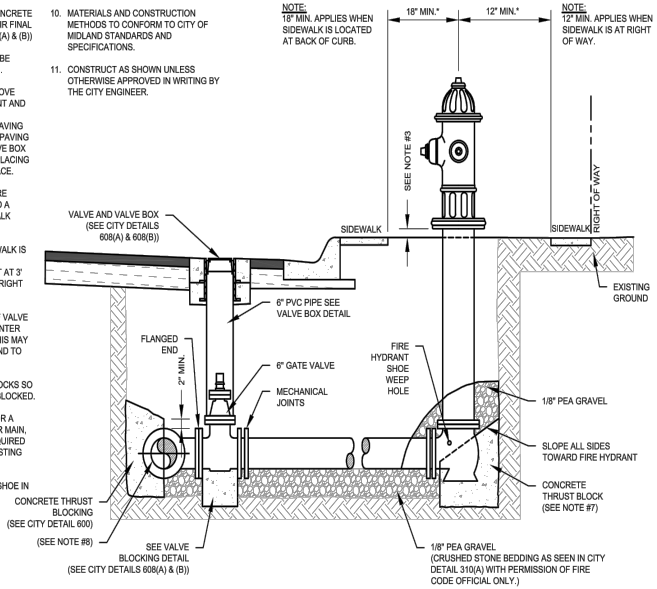
1. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
2. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: GARFIELD STREET	SCALE:	DETAIL:
CHECKED: JCF	STANDARD MULTI-FAMILY & COMMERCIAL WATER SERVICE MANIFOLD		602
APPROVED: MCC			

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING

NOTES:

1. SET ALL VALVE BOXES IN A CONCRETE COLLAR WHEN PLACED AT THEIR FINAL GRADE. (SEE CITY DETAILS 608(A) & (B))
2. ALL CONCRETE PAVEMENT TO BE CLASS "C" CONCRETE, 3600 PSI.
3. LEAVE VALVE BOX 6" TO 10" ABOVE GRADE FOR NEW DEVELOPMENT AND OTHER STREETS AND ALLEYS SCHEDULED FOR IMMEDIATE PAVING UNTIL STREET WORK IS DONE. PAVING CONTRACTOR TO ADJUST VALVE BOX TO FINISHED GRADE BEFORE PLACING LAST COURSE OF HMAC SURFACE.
4. SET FRANGIBLE FLANGE OF FIRE HYDRANT A MINIMUM OF 2" AND A MAXIMUM OF 6" ABOVE SIDEWALK ELEVATION.
5. ON STREETS WHERE NO SIDEWALK IS TO BE CONSTRUCTED, SET CENTERLINE OF FIRE-HYDRANT AT 3' FROM PROPERTY LINE WITHIN RIGHT OF WAY.
6. PLACE FIRE HYDRANT CUT-OFF VALVE A MINIMUM OF 3' FROM THE CENTER LINE OF THE FIRE HYDRANT. THIS MAY REQUIRE THE USE OF A 90° BEND TO OFFSET THE FIRE HYDRANT.
7. SHAPE CONCRETE THRUST BLOCKS SO THAT NO WATER DRAINS ARE BLOCKED.
8. A TEE FITTING IS REQUIRED FOR A CONNECTION TO A NEW WATER MAIN, AND A TAPPING SLEEVE IS REQUIRED FOR A CONNECTION TO AN EXISTING WATER MAIN.
9. DO NOT WRAP FIRE HYDRANT SHOE IN PLASTIC.
10. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
11. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.



DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	FIRE HYDRANT NEW WATER MAIN		603
APPROVED: MCC			

CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER PARKHILL SMITH & COOPER

03/13/2020

PARKHILL SMITH & COOPER

PSC

MIDLAND Engineering Services

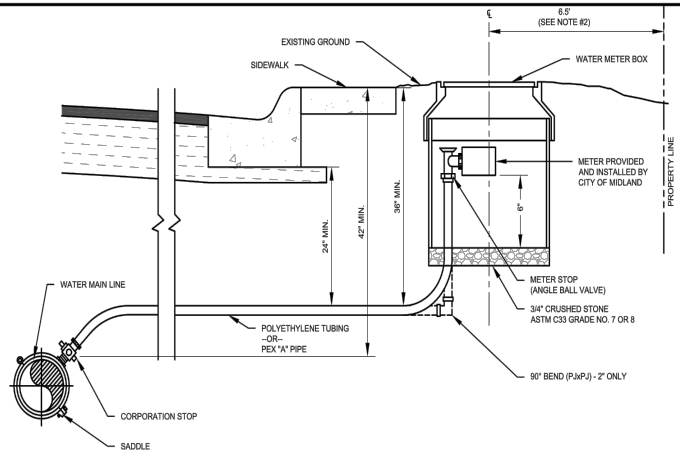
GARFIELD ST. UTILITY IMPROVEMENTS

CITY OF MIDLAND STANDARD DETAILS

WATER DETAILS

66

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



NOTES:

1. ALL WATER SERVICES TO BE 1" OR 2" DIAMETER.
2. THE DISTANCE FROM PROPERTY LINE SHOWN IS FOR 5' SIDEWALK AT THE PROPERTY LINE. WHEN 5' SIDEWALK IS PLACED AT THE BACK OF CURB, PLACE METER BOXES A MINIMUM OF 6.5' FROM THE BACK OF CURB.
3. TWO ADJACENT SERVICE LATERALS MAY BE PLACED IN THE SAME TRENCH. EACH TAP MUST BE SEPARATE AND HAVE BOTH A CORPORATION STOP AND A METER STOP. ("BULLHEAD TAPS ARE NOT PERMITTED".)
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	1" AND 2" WATER METER AND SERVICE CONNECTION		604(A)
APPROVED: MCC			

APPROVED COMPONENT LIST

1" WATER METER SERVICE	2" WATER METER SERVICE
SADDLE OPTION 1: DUCTILE IRON W/DUAL BAND CC THREAD STEEL STRAP 1. FORD FCD202 SADDLE 2. MUELLER DR 2 S SERIES 3. A.Y. MCDONALD SERIES 4855A 4. OR APPROVED EQUAL	SADDLE OPTION 1: DUCTILE IRON W/DUAL BAND CC THREAD STEEL STRAP 1. FORD FCD202 SADDLE 2. MUELLER DR 2 S SERIES 3. A.Y. MCDONALD SERIES 4855A 4. OR APPROVED EQUAL
SADDLE OPTION 2: BRASS W/DUAL BAND CC THREAD STEEL STRAP 1. FORD 202BSD SADDLE 2. MUELLER BR 2 S SERIES 3. A.Y. MCDONALD SERIES 3855 4. OR APPROVED EQUAL	SADDLE OPTION 2: BRASS W/DUAL BAND CC THREAD STEEL STRAP 1. FORD 202BSD SADDLE 2. MUELLER BR 2 S SERIES 3. A.Y. MCDONALD SERIES 3855 4. OR APPROVED EQUAL
CORPORATION STOP 1. FORD FB1000-4-G-NL 2. MUELLER B-25008N 3. A.Y. MCDONALD SERIES 74701B-22 1 4. OR APPROVED EQUAL	CORPORATION STOP 1. FORD FB1000-7-G-NL 2. MUELLER B-25008N 3. A.Y. MCDONALD SERIES 74701B-22 2 4. OR APPROVED EQUAL
CURB STOP METER VALVE 1. FORD BA43-444W-G-NL 2. MUELLER B-25172N 3. A.Y. MCDONALD SERIES 74602B-22 1 4. OR APPROVED EQUAL	CURB STOP METER VALVE 1. FORD BFA43-777W-G-NL 2. MUELLER B-25172N 3. A.Y. MCDONALD SERIES 74602B-22 2 4. OR APPROVED EQUAL
WATER METER BOX 1. EAST JORDAN 32197099A02 2. OR APPROVED EQUAL	WATER METER BOX 1. EAST JORDAN 32244000A01 2. OR APPROVED EQUAL
SERVICE LINE PIPE 1. ASTM D-2737 POLYETHYLENE TUBING 2. MUNICI PEX 'A' PIPE 3. OR APPROVED EQUAL	SERVICE LINE PIPE 1. ASTM D-2737 POLYETHYLENE TUBING 2. MUNICI PEX 'A' PIPE 3. OR APPROVED EQUAL

NOTES:

1. ALL COMPONENTS OF ANY WATER METER SERVICE LINE MUST COME FROM THE SAME BRAND WHENEVER POSSIBLE.
2. PLASTIC WRAP ALL SADDLES.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:	
1" AND 2" WATER METER AND SERVICE CONNECTION		604(B)	

CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEERING



03/13/2020

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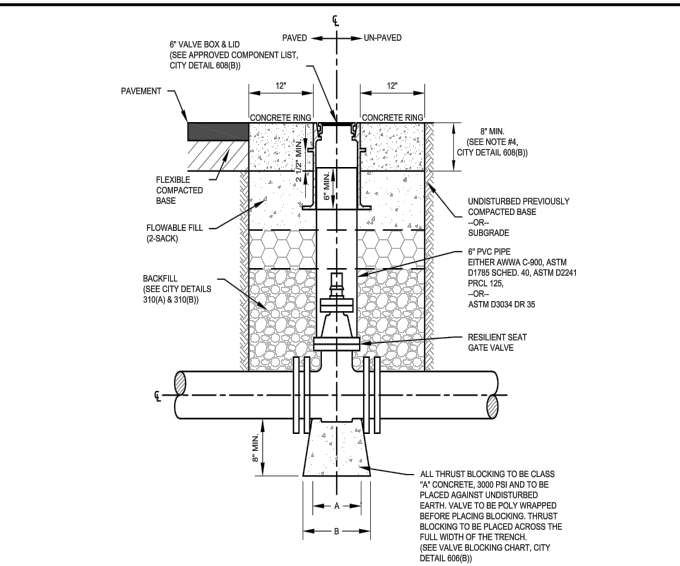
MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

CITY OF MIDLAND
STANDARD DETAILS
WATER DETAILS

67

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	TYPICAL VALVE AND VALVE BOX		608(A)
APPROVED: MCC			

APPROVED COMPONENT LIST

NO.	VALVES	VALVE COVERS	VALVE BOX
1	MUELLER 2360 M/J	MUELLER 2360 FL X FL	BASS & HAYS STANDARD 390-1 "SHORTY"
2	M & H 4067 M/J	M & H 4067-0	OR APPROVED EQUAL
3	CLOW 2838 M/J	CLOW 2840 FL X FL	
4	OR APPROVED EQUAL	OR APPROVED EQUAL	

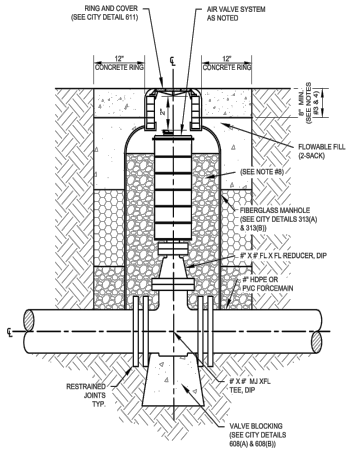
VALVE BLOCKING CHART

PIPE SIZE	A	B
4"	5.0"	10.5"
6"	6.5"	1'-0"
8"	6.5"	1'-0"
10"	8.0"	1'-1.0"
12"	8.5"	1'-2.0"

NOTES:

1. FOR VALVES ON WATER MAIN PIPES LARGER THAN 12" SEE CITY DETAIL 609.
2. SETTING VALVE BOX TO GRADE MAY REQUIRE ADDING PVC PIPE. IF ADDITIONAL PIPE IS REQUIRED, USE BELL SECTION WITH GASKET AND SET BELL DOWN OVER EXISTING PIPE RISER. A GASKETED SELF CENTERING COLLAR MAY BE USED IN LIEU OF THE BELL SECTION.
3. CONCRETE RING TO BE CITY OF MIDLAND CLASS "C", 3600 PSI, UNLESS OTHERWISE NOTED.
4. USE FIBER REINFORCEMENT FOR ALL CONCRETE , WHETHER PAVEMENT OR THRUST BLOCKING.
5. 12" MINIMUM FOR CONCRETE RING IN AN ARTERIAL ROADWAY.
6. FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT.) REQUIRED BENEATH ALL CONCRETE RINGS.
7. FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT.) REQUIRED FOR ALL OVER EXCAVATION BACKFILL.
8. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
9. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

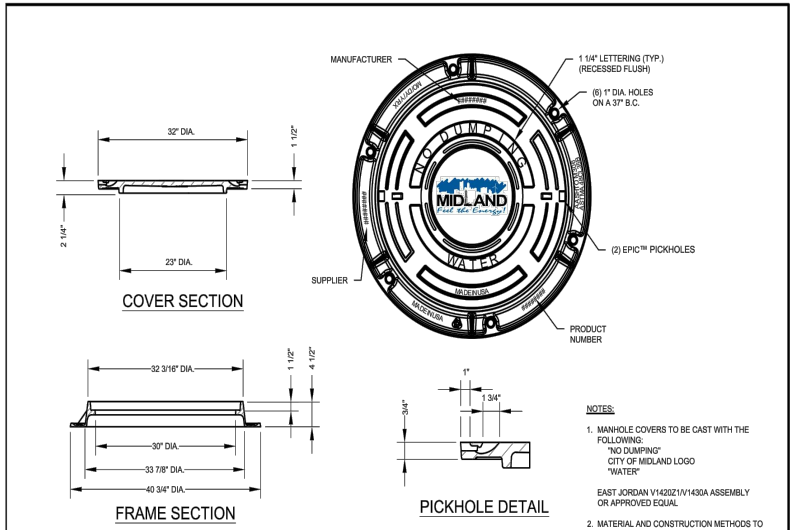
DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	TYPICAL VALVE AND VALVE BOX DETAILS		608(B)
APPROVED: MCC			



NOTES:

1. USE AN A.R.I. D-025 SB WITH A 4" TUBE LENGTH OR APPROVED EQUAL FOR ALL AIR VALVE INSTALLATIONS.
2. EQUIP EACH AIR VALVE SYSTEM WITH A NON-SLAM, DISCHARGE THROTTLING ATTACHMENT (SLOW RELEASE ONE WAY ATTACHMENT).
3. CONCRETE RING TO BE CITY OF MIDLAND CLASS "C" CONCRETE, 3600 PSI.
4. 12" MINIMUM FOR CONCRETE RING IN AN ARTERIAL ROADWAY.
5. USE FIBER REINFORCEMENT FOR ALL CONCRETE, WHETHER PAVEMENT OR THRUST BLOCKING.
6. FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT), REQUIRED BENEATH ALL CONCRETE RINGS.
7. FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT), REQUIRED FOR ALL OVER EXCAVATION BACKFILL.
8. MAY BE EITHER PEA GRAVEL OR 3/4" CRUSHED STONE ASTM C33 GRADE N. 7 OR 8
9. MATERIAL AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
10. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
MIDLAND Engineering Services	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
	WATER AIR RELIEF VALVE		610

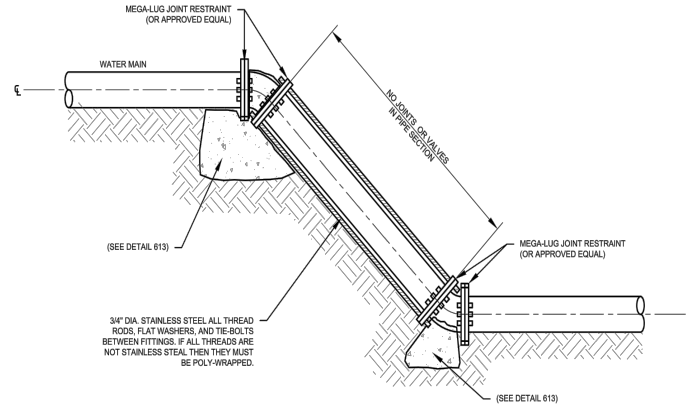


NOTES:

1. MANHOLE COVERS TO BE CAST WITH THE FOLLOWING:
   "NO DUMPING"
   CITY OF MIDLAND LOGO
   "WATER"
   EAST JORDAN V1420Z1/V1430A ASSEMBLY OR APPROVED EQUAL
2. MATERIAL AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
3. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	WATER HORIZONTAL & AIR RELIEF VALVE COVER		611
APPROVED: MCC			

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING



NOTES:

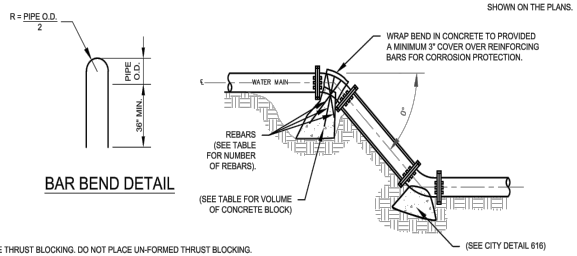
1. FORM ALL CONCRETE THRUST BLOCKING. DO NOT PLACE UN-FORMED THRUST BLOCKING.
2. ALL THRUST BLOCKING TO BE CLASS "A" CONCRETE, 3000 PSI, AND TO BE PLACED AGAINST UNDISTURBED EARTH. USE FIBER REINFORCEMENT THROUGHOUT.
3. FITTINGS TO BE POLY WRAPPED BEFORE BLOCKING IS PLACED.
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	WATER MAIN VERTICAL OFFSET		612
APPROVED: MCC			

DIA. OF PIPE	DEGREE OF BEND θ							
	11 1/4°		22 1/2°		45°		90°	
	VOLUME BLOCK	REBAR NO. SIZE	VOLUME BLOCK	REBAR NO. SIZE	VOLUME BLOCK	REBAR NO. SIZE	VOLUME BLOCK	REBAR NO. SIZE
4"	3 C.F.	2-#3	6 C.F.	2-#3	12 C.F.	2-#3	22 C.F.	2-#3
6"	7 C.F.	2-#3	13 C.F.	2-#3	26 C.F.	2-#3	1.0 C.Y.	2-#3
8"	12 C.F.	2-#3	24 C.F.	2-#3	2.0 C.Y.	2-#4	3.0 C.Y.	2-#4
10"	19 C.F.	2-#3	1.5 C.Y.	2-#4	3.0 C.Y.	2-#4	5.0 C.Y.	2-#6
12"	1.0 C.Y.	2-#3	2.0 C.Y.	2-#4	4.0 C.Y.	2-#6	7.0 C.Y.	2-#8
14"	1.5 C.Y.	2-#4	3.0 C.Y.	2-#4	5.5 C.Y.	2-#6	*	*
16"	2.0 C.Y.	2-#4	3.5 C.Y.	2-#4	7.0 C.Y.	2-#7	*	*

BLOCK FOR EXTERNAL VERTICAL BENDS
DESIGN PRESSURE 180 PSI

* BLOCKING FOR 14" AND 16" 90° BENDS AND FOR ALL BENDS LARGER THAN 16" WILL BE SHOWN ON THE PLANS.



NOTES:

1. FORM ALL CONCRETE THRUST BLOCKING. DO NOT PLACE UN-FORMED THRUST BLOCKING.
2. ALL THRUST BLOCKING TO BE CLASS "A" CONCRETE, 3000 PSI, AND TO BE PLACED AGAINST UNDISTURBED EARTH. USE FIBER REINFORCEMENT THROUGHOUT.
3. FITTINGS TO BE POLY WRAPPED BEFORE BLOCKING IS PLACED.
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	BLOCKING FOR VERTICAL BEND		613
APPROVED: MCC			

PARKHILL SMITH & COOPER ... LICENSED PROFESSIONAL ENGINEER ... CHRISTIAN SCHNITKER 84810 ... 03/13/2020

PARKHILL SMITH & COOPER

MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

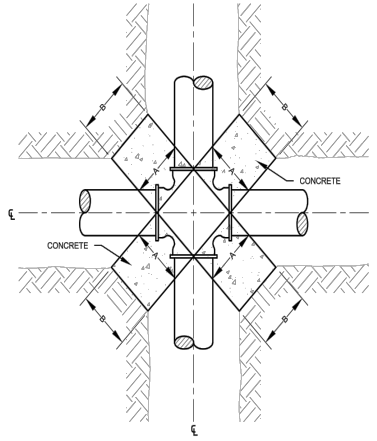
CITY OF MIDLAND STANDARD DETAILS

WATER DETAILS

68

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

PACKET 8.a.37 January 24, 2023



CROSS BLOCKING

CROSS BLOCKING
DESIGN 180 PSI LINE PRESSURE
SOIL BEARING CAP 2K/SF

CROSS DIA.	BLOCKING DIMENSIONS		
	A	B	*C
4"x 4"	0'-11"	1'-0"	1'-0"
6"x 6"	1'-2"	1'-7"	1'-0"
8"x 8"	1'-4"	2'-2"	2'-2"
10"x 10"	1'-8"	2'-8"	2'-8"
12"x 12"	1'-10"	3'-2"	3'-2"
14"x 14"	2'-2"	3'-8"	3'-8"
16"x 16"	2'-4"	4'-3"	4'-3"

*C - VERTICAL DEPTH OF CONCRETE BEARING ON UNDISTURBED EARTH

NOTES:

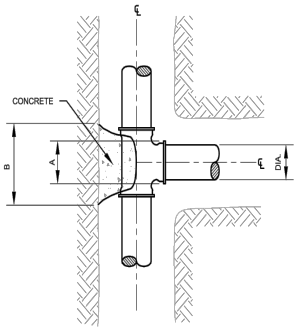
1. FORM ALL CONCRETE THRUST BLOCKING. DO NOT PLACE UN-FORMED THRUST BLOCKING
2. BLOCK CROSSES WITH DIFFERENT SIZE RUNS FOR THE LARGER RUN IN ALL DIRECTIONS.
3. BLOCKING FOR CROSSES LARGER THAN 16" WILL BE AS SHOWN ON THE PLANS.
4. ALL THRUST BLOCKING TO BE CLASS "A" CONCRETE, 3000 PSI, AND TO BE PLACED AGAINST UNDISTURBED EARTH. USE FIBER REINFORCEMENT THROUGHOUT.
5. FITTINGS TO BE POLY WRAPPED BEFORE BLOCKING IS PLACED.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN: DPM
CHECKED: JCF
APPROVED: MCC

EFFECTIVE DATE: 10/01/2018 | SCALE: NTS | DETAIL:

BLOCKING FOR CROSS | 614



TEE

"T" BLOCKING
DESIGN 180 PSI LINE PRESSURE
SOIL BEARING CAP 2K/SF

"T" RUN DIA.	STEM DIA.	BLOCKING DIMENSIONS		
		A	B	*C
TEE				
4"	ALL	11"	1'-0"	1'-0"
6"	ALL	1'-2"	1'-7"	1'-0"
8"	ALL	1'-4"	2'-2"	2'-2"
10"	ALL	1'-8"	2'-8"	2'-8"
1'-0"	THRU 6"	1'-10"	1'-10"	1'-8"
1'-0"	OVER 6"	1'-10"	3'-2"	3'-2"
1'-2"	THRU 8"	2'-2"	2'-2"	1'-11"
1'-2"	OVER 8"	2'-2"	3'-8"	3'-8"
1'-4"	THRU 8"	2'-4"	2'-4"	2'-2"
1'-4"	OVER 8"	2'-4"	4'-3"	4'-3"

*C - VERTICAL DEPTH OF CONCRETE BEARING ON UNDISTURBED EARTH

NOTE:

1. FORM ALL CONCRETE THRUST BLOCKING. DO NO PLACE UN-FORMED THRUST BLOCKING.
2. BLOCKING FOR TEES LARGER THAN 16" RUN TO BE SHOWN ON THE PLANS.
3. ALL THRUST BLOCKING TO BE CLASS "A" CONCRETE, 3000 PSI, AND TO BE PLACED AGAINST UNDISTURBED EARTH. USE FIBER REINFORCEMENT THROUGHOUT.
4. FITTING TO BE POLY WRAPPED BEFORE BLOCKING IS PLACED.
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

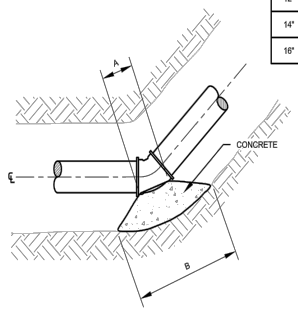
MIDLAND Engineering Services

DRAWN: DPM
CHECKED: JCF
APPROVED: MCC

EFFECTIVE DATE: 10/01/2018 | SCALE: NTS | DETAIL:

BLOCKING FOR TEE | 615

CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEERING



BLOCKING FOR HORIZONTAL BENDS
DESIGN 180 PSI LINE PRESSURE
SOIL BEARING CAP 2K/SF

DIA. OF PIPE	DEGREE OF BEND											
	11 1/4°			22 1/2°			45°			90°		
	A	B	*C	A	B	*C	A	B	*C	A	B	*C
4"	0'-4"	1'-0"	1'-0"	0'-5"	1'-0"	1'-0"	0'-6"	1'-0"	1'-0"	0'-11"	1'-3"	1'-3"
6"	0'-7"	1'-0"	1'-0"	0'-7"	1'-0"	1'-0"	0'-8"	1'-5"	1'-5"	1'-3"	1'-11"	1'-11"
8"	0'-8"	0'-10"	1'-2"	0'-9"	1'-4"	1'-4"	0'-10"	1'-10"	1'-10"	1'-6"	2'-6"	2'-6"
10"	0'-10"	1'-0"	1'-5"	0'-11"	1'-8"	1'-8"	1'-1"	2'-4"	2'-4"	1'-11"	3'-2"	3'-2"
12"	1'-0"	1'-3"	1'-8"	1'-1"	2'-0"	2'-0"	1'-3"	2'-10"	2'-10"	2'-2"	3'-10"	3'-10"
14"	0'-11"	1'-5"	1'-11"	1'-1"	2'-4"	2'-4"	1'-3"	3'-3"	3'-3"			
16"	1'-1"	1'-8"	2'-2"	1'-2"	2'-8"	2'-8"	1'-5"	3'-9"	3'-9"			

*C - VERTICAL DEPTH OF CONCRETE BEARING ON UNDISTURBED EARTH

NOTES:

1. FORM ALL CONCRETE THRUST BLOCKING. DO NOT PLACE UN-FORMED THRUST BLOCKING.
2. ALL THRUST BLOCKING TO BE CLASS "A" CONCRETE, 3000 PSI, AND TO BE PLACED AGAINST UNDISTURBED EARTH. USE FIBER REINFORCEMENT THROUGHOUT.
3. FITTING TO BE POLY WRAPPED BEFORE BLOCKING IS PLACED.
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN: DPM
CHECKED: JCF
APPROVED: MCC

EFFECTIVE DATE: 10/01/2018 | SCALE: NTS | DETAIL:

BLOCKING FOR HORIZONTAL BENDS | 616

PARKHILL SMITH & COOPER TEXAS REGISTERED F-9560
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

MIDLAND Engineering Services

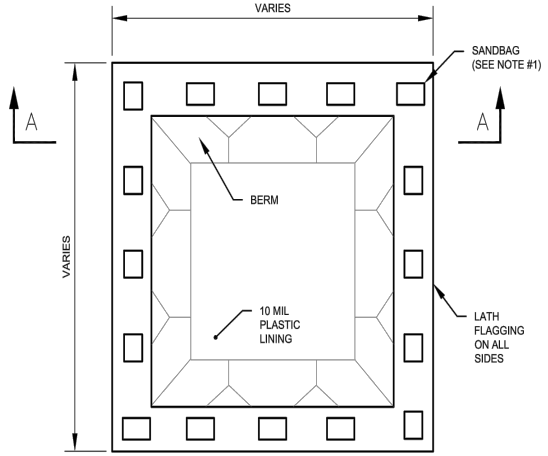
GARFIELD ST. UTILITY IMPROVEMENTS

CITY OF MIDLAND STANDARD DETAILS

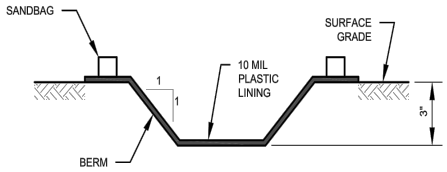
WATER DETAILS

69

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



DEPRESSED WASHOUT



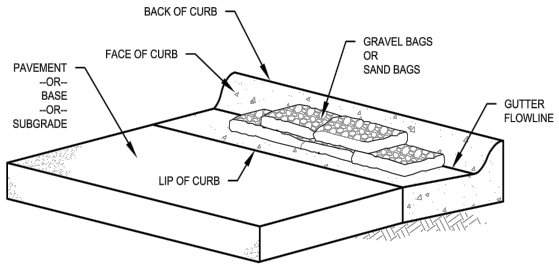
SECTION 'A-A'

NOTES:

1. SECURE WASHOUT STRUCTURES AND LININGS WITH SANDBAGS OR TWO SECURELY FASTENED STAKES AROUND ENTIRE WASHOUT PERIMETER.
2. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
3. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:

MIDLAND Engineering Services — CONCRETE WASHOUT OPTION 1 — 704



NOTES:

1. FILL BAGS TO 60% CAPACITY WITH EITHER CLEAN GRAVEL OR CLEAN SAND.
2. GRAVEL TO BE NO LESS THAN 1" DIAMETER OR GREATER THAN 2" DIAMETER.
3. PLACE BAGS WITH BAG OPENINGS SECURED AND FACE UP, AND SO THAT EACH BAG IS FLAT AND HAS THE GREATEST POSSIBLE SURFACE AREA CONTACT WITH THE CURB.
4. PLACE BAGS AGAINST THE FACE-OF-CURB AND DO NOT PLACE BAGS BEYOND THE LIP-OF-CURB.
5. DO NOT BLOCK ADA RAMPS OR WALKWAYS WITH BAGS.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:

MIDLAND Engineering Services — CURB GRAVEL OR SAND BAGS — 712

CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEERING

PARKHILL SMITH & COOPER
CHRISTIAN SCHNITKER
84810
LICENSED
PROFESSIONAL ENGINEER
03/13/2020

PSC PARKHILL SMITH & COOPER

MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

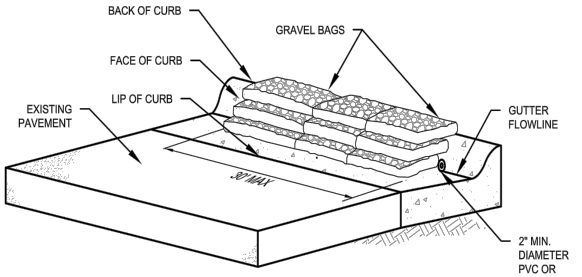
CITY OF MIDLAND STANDARD DETAILS

EROSION CONTROL DETAILS

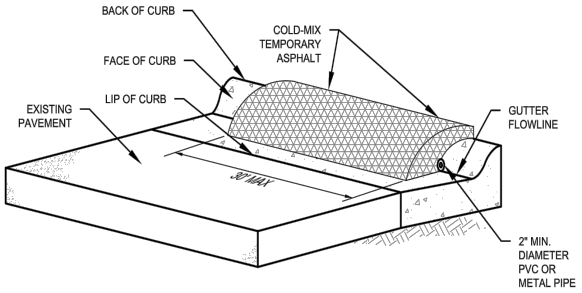
70

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

PACKET
8.3.3e
January 24, 2023



CURB GRAVEL BAG

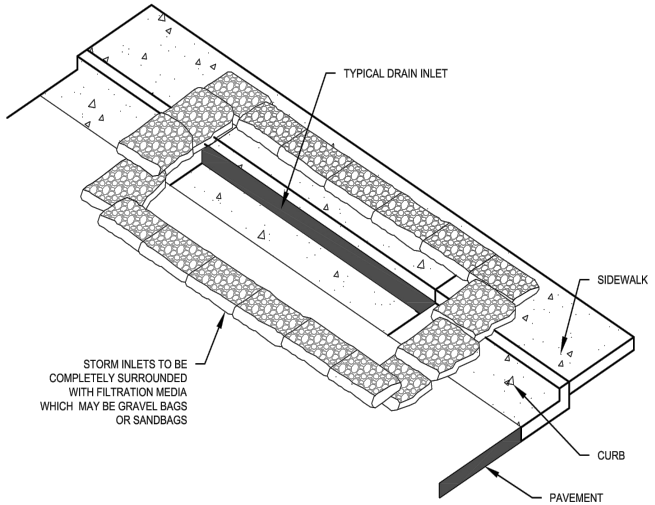


CURB COLD-MIX TEMPORARY ASPHALT

NOTES:

1. UTILIZE THIS DETAIL WHEN ACCESSING PROJECT SITE OVER EXISTING CURB ONLY IF NO USABLE CURB OPENING EXISTS.
2. FILL BAGS TO 60% CAPACITY WITH CLEAN GRAVEL NO LESS THAN 1" DIAMETER AND NO GREATER THAN 2" DIAMETER.
3. PLACE BAGS WITH BAG OPENINGS SECURED AND FACE UP, AND SO THAT EACH BAG IS FLAT AND HAS THE GREATEST POSSIBLE SURFACE AREA CONTACT WITH THE CURB.
4. PLACE BAGS AGAINST THE PIPE AND FACE-OF-CURB . DO NOT PLACE BAGS BEYOND THE LIP-OF-CURB.
5. DO NOT BLOCK ADA RAMPS OR WALKWAYS WITH BAGS.
6. DO NOT PLACE TEMPORARY ASPHALT BEYOND LIP-OF-CURB.
7. PIPE MUST EXTEND ACROSS FULL LENGTH OF TEMPORARY CURB PROTECTION AND BE COMPLETELY EXPOSED AT BOTH ENDS.
8. MINIMUM 4" THICK LAYER OF GRAVEL OR ASPHALT REQUIRED OVER ALL PARTS OF AFFECTED CURB.
9. MAXIMUM WIDTH OF CURB PROTECTION IS 30'.
10. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
11. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
MIDLAND Engineering Services	TEMPORARY CURB PROTECTION		713



GRAVEL BAGS OR SANDBAGS

NOTES:

1. FILL BAGS TO 60% CAPACITY WITH CLEAN GRAVEL OR CLEAN SAND.
2. PLACE BAGS WITH BAG OPENINGS SECURED AND FACE UP, AND SO THAT EACH BAG IS FLAT AND HAS THE GREATEST POSSIBLE SURFACE AREA CONTACT WITH THE SURFACE.
3. GRAVEL TO BE NO LESS THAN 1" DIAMETER OR GREATER THAN 2" DIAMETER.
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
MIDLAND Engineering Services	0 CURB INLET PROTECTION		714

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING

PARKHILL SMITH & COOPER TEXAS REGISTERED F-550 CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER

03/13/2020

PARKHILL SMITH & COOPER

PSC

MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

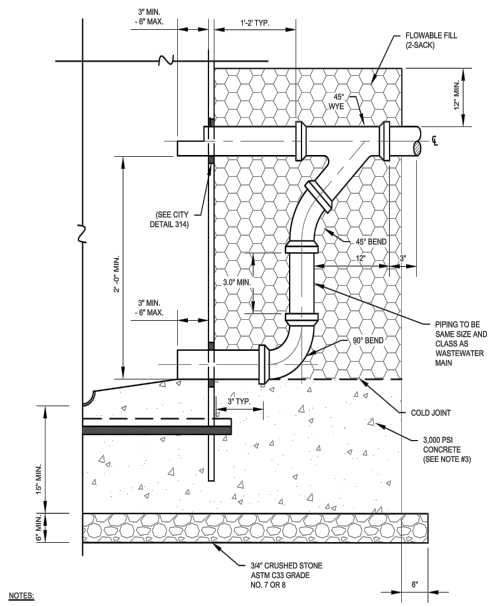
CITY OF MIDLAND STANDARD DETAILS

EROSION CONTROL DETAILS

71

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

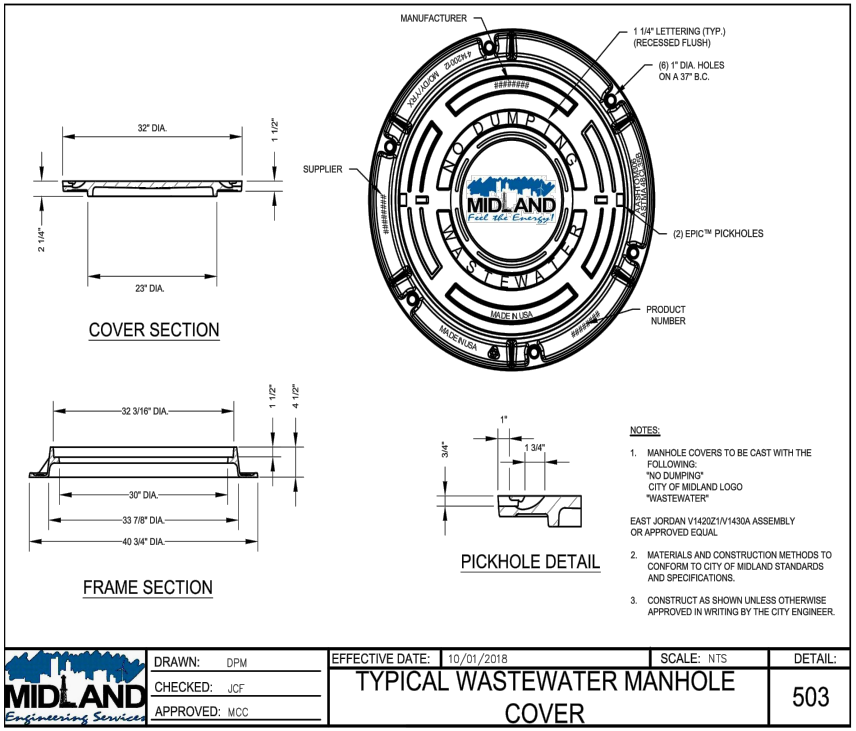
PACKET January 24, 2023



NOTES:

1. FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT), REQUIRED FOR ALL OVER EXCAVATION BACKFILL.
2. INSTALL BEND AND WYE AS NEAR TO MANHOLE WALL AS PRACTICAL, USUALLY 3'-4" FROM THE BEND AT THE BOTTOM.
3. ALL CONCRETE TO BE CLASS "A" CONCRETE.
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
MIDLAND Engineering Services	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
	EXTERNAL DROP STRUCTURE		501

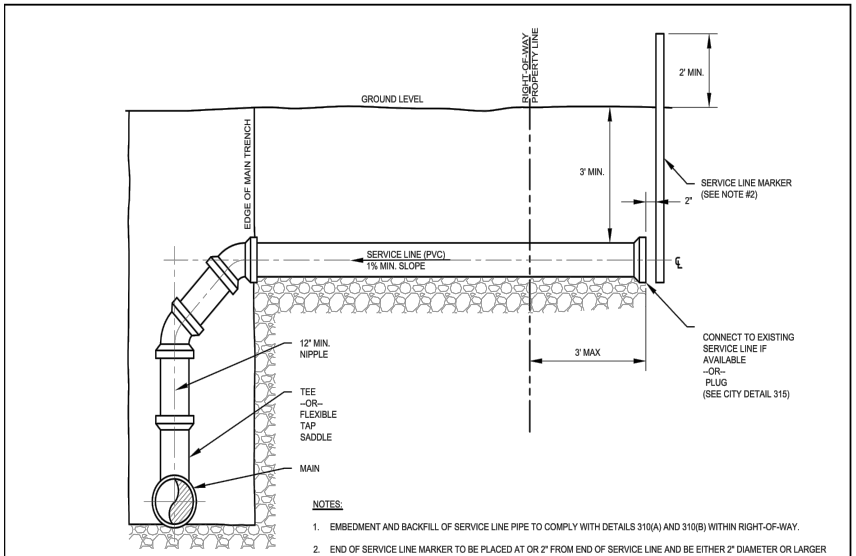


NOTES:

1. MANHOLE COVERS TO BE CAST WITH THE FOLLOWING:
   "NO DUMPING"
   CITY OF MIDLAND LOGO
   "WASTEWATER"

   EAST JORDAN V1420Z1/V1430A ASSEMBLY OR APPROVED EQUAL
2. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
3. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	TYPICAL WASTEWATER MANHOLE COVER		503
APPROVED: MCC			



NOTES:

1. EMBEDMENT AND BACKFILL OF SERVICE LINE PIPE TO COMPLY WITH DETAILS 310(A) AND 310(B) WITHIN RIGHT-OF-WAY.
2. END OF SERVICE LINE MARKER TO BE PLACED AT OR 2" FROM END OF SERVICE LINE AND BE EITHER 2" DIAMETER OR LARGER PVC OR FLEXIBLE POLYETHYLENE PIPE.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHER WISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE:	DETAIL:
CHECKED: JCF	4" AND 6" WASTEWATER SERVICE LATERAL TAP OPTION 1		507
APPROVED: MCC			

CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEERING

CHRISTIAN SCHNITKER
84810
LICENSED
PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

MIDLAND
Engineering Services

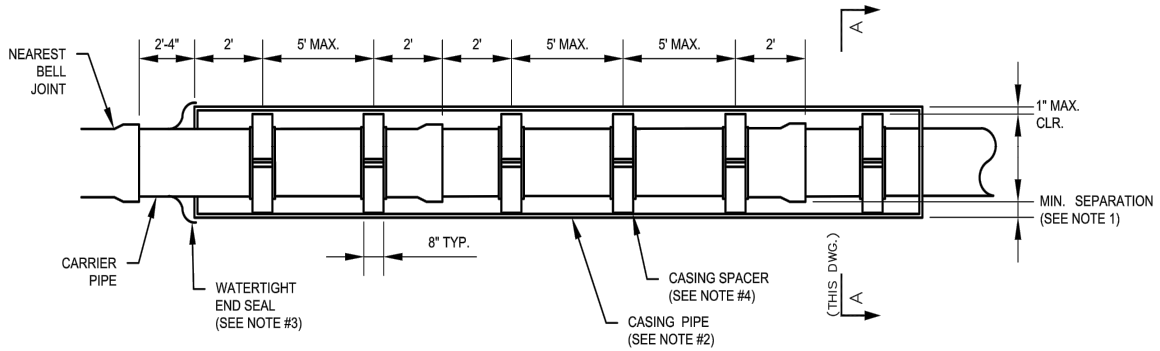
GARFIELD ST.
UTILITY
IMPROVEMENTS

CITY OF MIDLAND
STANDARD DETAILS

WASTEWATER
DETAILS

72

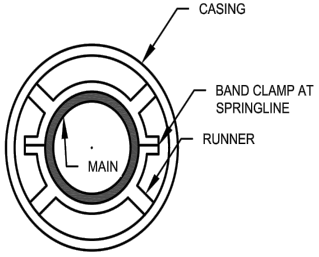
ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



CROSS SECTION VIEW

NOTES:

1. CASING PIPE TO BE MINIMUM TWO (2) NOMINAL SIZES LARGER IN DIAMETER THAN CARRIER PIPE.
2. CASING PIPE TO BE NO LESS THAN 12" DIAMETER PIPE. 12"-16" DIAMETER CASING PIPE MAY BE STEEL OR PVC PIPE. CASING PIPE LARGER THAN 16" DIAMETER MUST BE STEEL PIPE. STEEL CASING PIPE TO BE MINIMUM 1/4" WALL THICKNESS. PVC CASING PIPE TO BE SDR-26 D2241 OR C-900.
3. CASING PIPE TO BE STEEL OR PVC.
4. WATER TIGHT END SEAL TO BE GROUT OR APPROVED MANUFACTURED SEAL.
5. CASING SPACERS TO BE HDPE OR APPROVED EQUAL, MINIMUM FOUR (4) EQUALLY SPACED RUNNERS, WITH BAND CLAMP JOINT LOCATED AT SPRINGLINE. SPACERS FOR CASING PIPE LARGER THAN 24" DIAMETER REQUIRE MINIMUM SIX (6) EQUALLY SPACED RUNNERS.
6. CASING INSTALLED IN OPEN TRENCH IS TO BE BACKFILLED PER CURRENT CITY STANDARDS FOR AN UN-ENCASED MAIN.
7. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
8. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.



SECTION 'A-A'

DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 805

TYPICAL PIPE CASING DETAIL

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING

PARKHILL SMITH & COOPER — CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER — 03/13/2020

PARKHILL SMITH & COOPER

MIDLAND Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

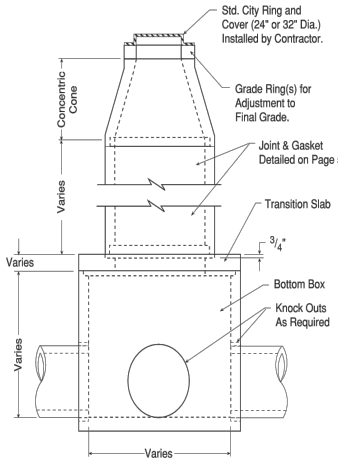
CITY OF MIDLAND STANDARD DETAILS

MISCELLANEOUS DETAILS

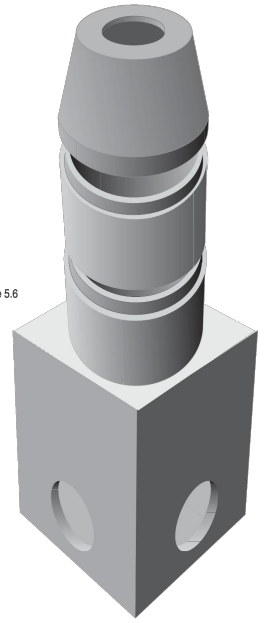
73

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

Precast Manholes



Side View



Isometric View

MANUFACTURER TO PROVIDE STRUCTURAL DESIGN SIGNED AND SEALED BY A LICENSED ENGINEER IN THE STATE OF TEXAS.

Materials & Features

CONCRETE: 5,000 PSI in 28 days.

REINFORCING STEEL: per ASTM A-615 / A-185

REINFORCING to meet AASHTO HS 20-44 Loading.

BASE DESIGN EQUAL TO OR EXCEEDS ASTM C-357

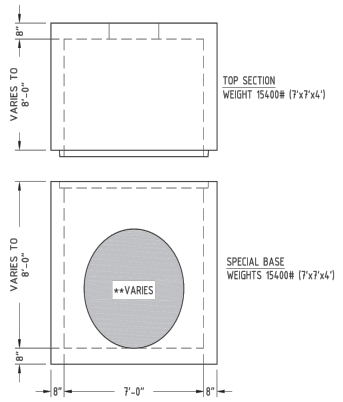
RISER DESIGN EQUAL TO OR EXCEEDS ASTM C-478

In the event a boot is loose contact your Hanson representative to resolve.

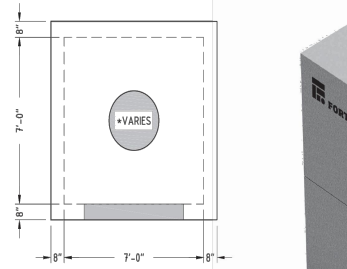
-No Scale-
All dimensions subject to allowable specification tolerances.

TITLE	PLANT	STATE	SECTION/PAGE	DATE
Type "C" Manhole	Houston San Antonio	TX	5.11	11-12-15

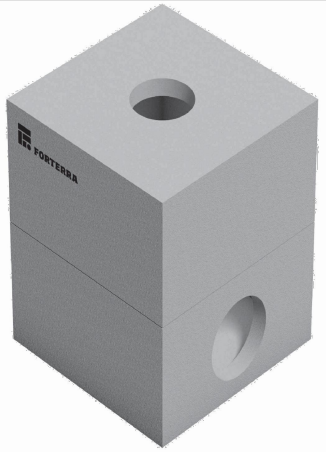
FORTERRA



SIDE VIEW



PLAN VIEW



NOTE:

-MADE IN ACCORDANCE WITH ASTM C913
-STEEL REINFORCEMENT: ASTM A615 GRADE 60 OR EQ. ASTM A1064 WWR
-CUSTOMER TO SPECIFY OPENING SIZE OR CAST-IN RING AND COVER
-HOLE AS REQUIRED BY CUSTOMER

FORTERRA

REGION, STATE	
HOUSTON TX	
DATE	SECT.PAGE
2018	3.6.2

STANDARD JUNCTION BOX
7'-0" x 7'-0"

8'x8' CONCRETE REINFORCED JUNCTION BOXES PROVIDED BY CITY IN PLACE OF THIS.

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

PARKHILL SMITH & COOPER TEXAS REGISTERED F-5699
CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

CITY OF MIDLAND STANDARD DETAILS
STORM DRAIN DETAILS

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ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18

Oldcastle Precast®

Water

30" x 60" Type "BB" Inlet W/4 Grates

Model: TYPE-4BB-INLET

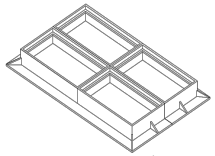
Optional



Grate or Plate

4 Cast Iron Frames & I-Beam

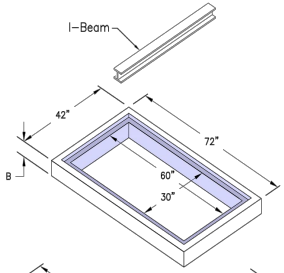
*Note: Grates or Plates Available on Request. (Cast Into Paving)



Variable Riser

Weight : See Chart

Riser	
B	Weight (Lbs.)
6"	648
12"	1,275



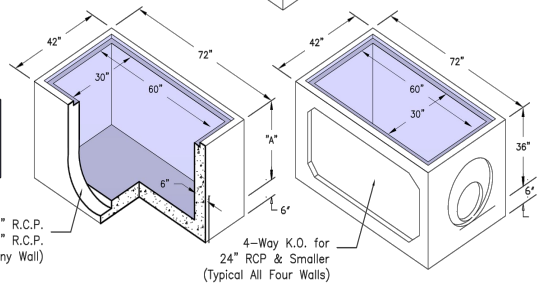
Typical Orientation



Bottom :

Weight : See Chart

Bottom		
A	Weight (Lbs.)	Wall(s)
26"	4,021	A
32"	4,421	A
36"	4,082	4–Way



32" Height for 24" R.C.P.
26" Height for 18" R.C.P.
(Typical Any Wall)

4–Way K.O. for 24" RCP & Smaller
(Typical All Four Walls)

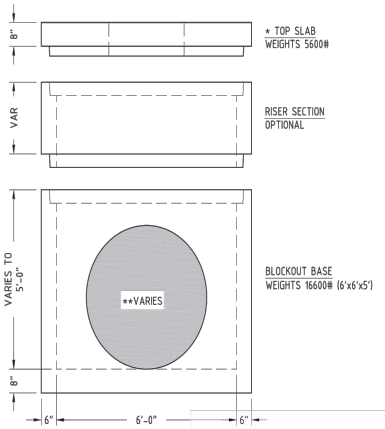
GENERAL NOTES:

1. **Bedding Shall be in Accordance With Job and Plan Specifications.**

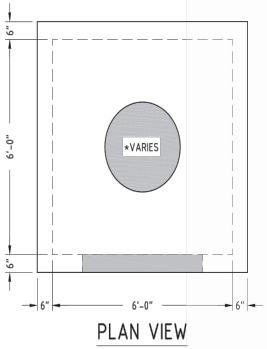
For more information about our products please visit us on the web at:
oldcastleprecast.com
© 2013 Oldcastle Precast, Inc.
IN-59

Texas Region

888-9 Oldcastle
(888-965-3227)



SIDE VIEW



PLAN VIEW



NOTE:

-MADE IN ACCORDANCE WITH ASTM C913
-STEEL REINFORCEMENT: ASTM A615 GRADE 60 OR EQ. ASTM A1064 WWR
-CUSTOMER TO SPECIFY OPENING SIZE OR CAST-IN RING AND COVER
-HOLE AS REQUIRED BY CUSTOMER
-EXTENSION SECTIONS AVAILABLE

FORTERRA

REGION, STATE	
HOUSTON TX	
DATE	SECT.PAGE
2018	3.6.1

STANDARD JUNCTION BOX
6'-0" x 6'-0"

CITY OF MIDLAND APPROVED 12.08.2022 ENGINEERING

PARKHILL SMITH & COOPER — CHRISTIAN SCHNITKER 84810 LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

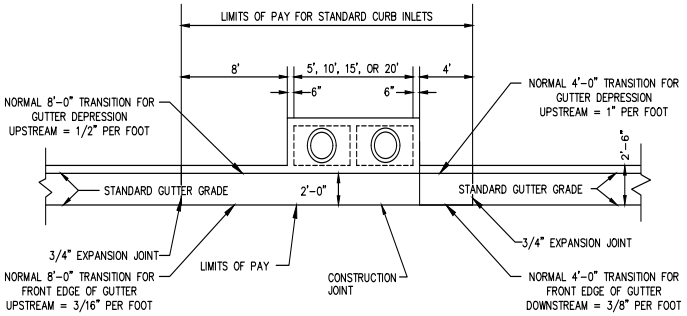
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

CITY OF MIDLAND STANDARD DETAILS
STORM DRAIN DETAILS

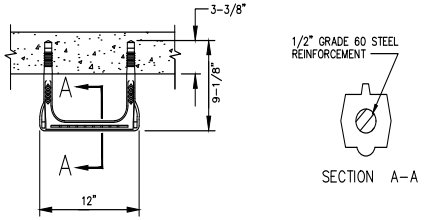
75

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



NOTES:
1. TOP OF INLET TO SLOPE 2% TOWARDS STREET.
2. TWO MANHOLES REQUIRED FOR 15' AND 20' INLETS IF THE INSIDE DEPTH IS LESS THAN 4 FEET.
3. CENTER SUPPORT BEAM REQUIRED FOR 15' AND 20' STANDARD CURB INLETS.
4. #4 BARS DOWELLED INTO INLET ON 18" CENTERS WHERE SIDEWALK IS ADJACENT TO INLET.
5. ADDITIONAL STEEL TO BE PLACED AROUND MANHOLE OPENING.

STANDARD CURB INLET PLAN
SCALE: 1" = 5'-0"

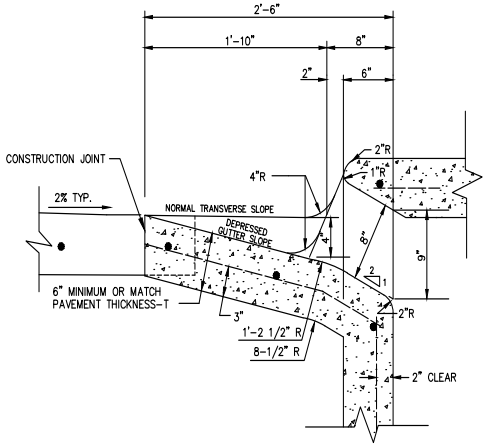


NOTES:
1. STEPS SHALL CONFORM TO ASTM C478-88a.
2. MANHOLE STEPS, SPACED 14" APART & STAGGERED AS DIRECTED BY THE ENGINEER, SHALL BE PROVIDED ON ALL INLETS WHERE THE DEPTH EXCEEDS 5'-0".

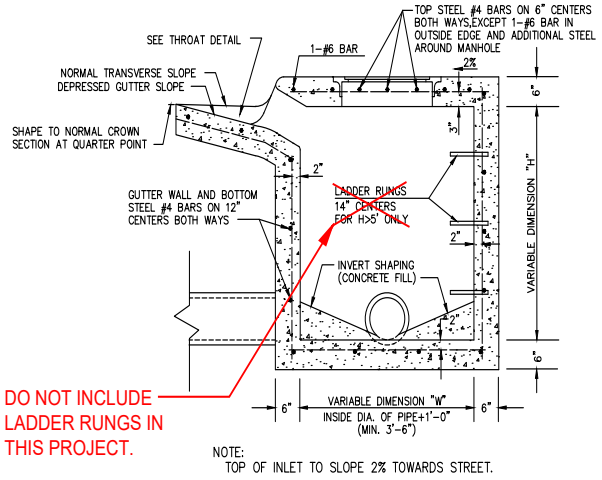
NON-CORROSIVE M.H. STEPS
SCALE: 1-1/2" = 1'-0"

GENERAL NOTES

1. ALL CONCRETE SHALL BE CLASS "A" (5 BAGS OF CEMENT PER C.Y. & A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. AT 28 DAYS).
2. ALL REINFORCING STEEL SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A-615.
3. CHAMFER ALL EXPOSED CORNERS 3/4" EXCEPT WHERE OTHERWISE NOTED.
4. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
5. FIELD CUT AND BEND BARS AS NECESSARY TO ACCOMODATE STORM SEWER PIPE.
6. ALL REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2".
7. RECESSED CURB INLETS SHALL BE REQUIRED ON ALL ARTERIAL AND COLLECTOR STREETS.
8. ROCK FOUNDATION SHALL BE USED DURING PREFABRICATED INLET BOX INSTALLATION. 6" FOR BACKFILL WITH FLOWABLE FILL TO FILL VOIDS OR COMPACT WITH SELECT SURPLUS EXCAVATION COMPACTED IN 8" LIFTS TO 95% STANDARD PROCTOR DENSITY.

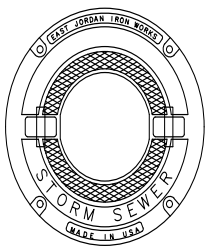


THROAT DETAIL FOR STANDARD INLETS ON CONCRETE STREETS
SCALE: 1-1/2" = 1'-0"



NOTE:
TOP OF INLET TO SLOPE 2% TOWARDS STREET.

INLET SECTION FOR RECESSED AND STANDARD INLETS ON CONCRETE STREETS
SCALE: 3/4"=1'-0"



NOTE:
MANHOLE COVER AND FRAME SHALL BE EAST JORDAN IRON WORKS, INC. NO. 1342 APT AND 1342 ZPT. LOCAL SUPPLIER IS BASS & HAYS FOUNDRY, INC., GRAND PRAIRIE, TEXAS.

MANHOLE DETAIL
SCALE: 1" = 1'-0"

CITY OF MIDLAND
APPROVED AS NOTED
12.08.2022
ENGINEERING

CHRISTIAN SCHNITKER
84810
LICENSED PROFESSIONAL ENGINEER
03/13/2020

PARKHILL SMITH & COOPER
PSC

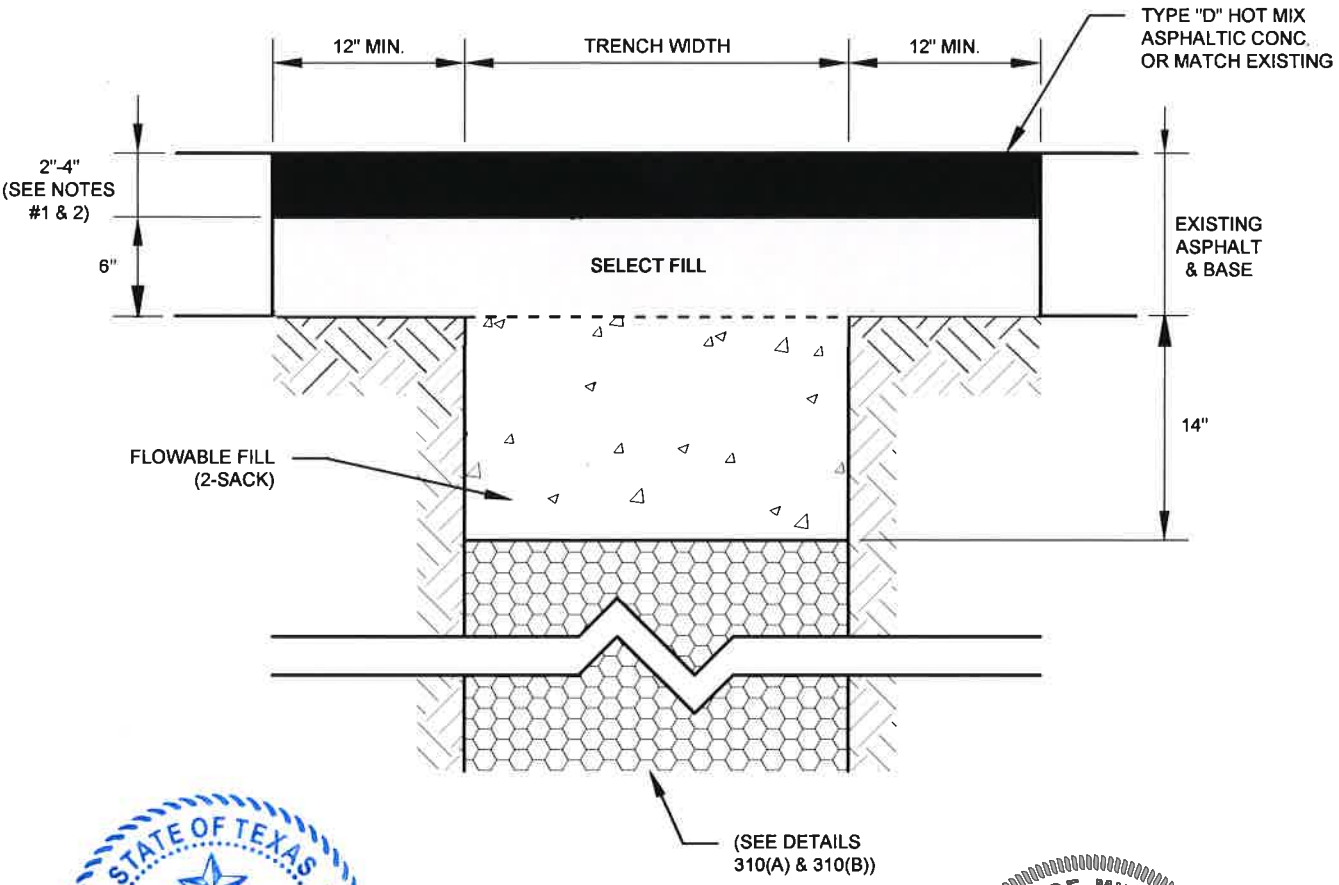
MIDLAND
Engineering Services

GARFIELD ST. UTILITY IMPROVEMENTS

CITY OF MIDLAND STANDARD DETAILS
STORM DRAIN DETAILS

76

ISSUING OFFICE: MIDLAND PROJECT NO: 2844.18



STATE OF TEXAS
DEC 08 2022
JOSHUA C. FERGUSON
117692
LICENSED
PROFESSIONAL ENGINEER

Josh Ferguson

CITY OF MIDLAND
APPROVED
12.08.2022
ENGINEERING

NOTES:

1. ASPHALT PAVEMENT THICKNESS TO BE A MINIMUM OF 2" OR MATCH THE EXISTING ASPHALT THICKNESS IF IT IS GREATER THAN 2" THICK.
2. PLACE ASPHALT PAVEMENT IN MAXIMUM 2" LIFTS, 95% MODIFIED COMPACTION.
3. PLACE ALL FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT) AS A SINGLE CONTINUOUS POUR.
4. EXTEND BOTH ASPHALT AND FLOWABLE FILL 12" BEYOND THE EDGE OF THE TRENCH ON BOTH SIDES.
5. SEE DETAILS 310(A) AND 310(B) REGARDING TRENCH BACKFILL REQUIREMENTS BENEATH THE FLOWABLE FILL.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
MIDLAND Engineering Services	EFFECTIVE DATE: GARFIELD ST. PROJECT	SCALE: NTS	DETAIL:
	GARFIELD ASPHALT TRENCH PAVEMENT REPLACEMENT		C01

City Council Meeting

Item Number: 9

Meeting Date: January 24, 2023

To: City Council / City Manager

From: Erika Martinez, Manager, Purchasing

Subject: **RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH RANDAL SCOTT ARCHITECTS, INC., FOR DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR THE MIDLAND PUBLIC SAFETY TRAINING FACILITIES PHASE 1 IMPROVEMENTS PROJECT FOR A COST OF $2,500,000.00; AND TRANSFERRING AND APPROPRIATING FUNDS (DISTRICT: NONE) (GENERAL SERVICES)**

Purpose:

Resolution awarding the execution of a professional services agreement with Randal Scott Architects, Inc. for preparation of the Midland Public Safety Training Facilities Phase 1 Improvements as directed by City Staff for a cost of $2,500,000.00; and appropriating funds therefore.

Recommended City Council Action:

Approve

Fiscal Impact:

Funding is available in the FY2023 General Operating Fund budget and will be transferred and appropriated to a project for the said purposes.

Discussion:

Resolution 2021-178 awarded a professional services agreement for architectural and engineering services to Randal Scott Architects, Inc. to develop a Master Plan for the Midland Public Safety Training Facility. To continue with this project, staff recommends awarding a professional services agreement for the Public Safety Training Facilities Phase 1 Improvements to Randal Scott Architects, Inc. of Richardson, Texas. Please see the attached memo from

Charles Blumenauer, Fire Chief, and Seth Herman, Police Chief, for additional information.

Therefore, please consider a resolution awarding a professional services agreement for preparation of the Public Safety Training Facilities Phase 1 Improvements to Randal Scott Architects, Inc. of Richardson, Texas for $2,500,000.00; and appropriating funds therefore.

Tina Dauz

City Manager's Office

RESOLUTION NO. _____

RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH RANDAL SCOTT ARCHITECTS, INC., FOR DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR THE MIDLAND PUBLIC SAFETY TRAINING FACILITIES PHASE 1 IMPROVEMENTS PROJECT FOR A COST OF $2,500,000.00; AND TRANSFERRING AND APPROPRIATING FUNDS

WHEREAS, the City Council approved Motion 138-2021, which authorized the issuance of a request for proposals for architectural and engineering services for the Midland Public Safety Training Facility; and

WHEREAS, Resolution 2021-18 awarded a professional services agreement for architectural and engineering services to Randal Scott Architects, Inc., to develop a Master Plan for the Midland Public Safety Training Facility; and

WHEREAS, the City Council finds it to be in the public interest to continue the Midland Public Safety Training Facilities Project with Randal Scott Architects, Inc.; and

WHEREAS, the City Council finds that the professional fees proposed by Randal Scott Architects, Inc., are consistent with and not higher than the recommended practices and fees published by the applicable professional associations and do not exceed any maximum provided by law; and

WHEREAS, the City Council finds that Randal Scott Architects, Inc., provides professional services for a fair and reasonable price; and

WHEREAS, the City Council finds it to be in the public interest to execute a professional services agreement with Randal Scott Architects, Inc., as the most highly qualified provider of said professional services based on demonstrated competence, knowledge, and qualifications and on the reasonableness of the proposed fee for the services;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the City Manager and City Secretary are hereby authorized and directed to execute and attest, respectively, on behalf of the City of Midland, a

professional services agreement with Randal Scott Architects, Inc., for said professional services. A copy of said agreement is attached hereto as Exhibit "1" and incorporated herein for all purposes.

SECTION TWO. That funds are available in the FY2023 General Operating Fund budget and will be transferred and appropriated to a project for said purposes.

SECTION THREE. That the City Comptroller is hereby authorized and directed to pay Randal Scott Architects, Inc., from funds available in a project for said purpose upon receipt of proper invoices or statements approved by the City Manager.

On motion of Council member _____, seconded by Council member _____, the above and foregoing resolution was adopted by the City Council of the City of Midland at a regular meeting on the _____ day of _____, A.D., 2023, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Regina Stephenson, General Services Director

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

MIDLAND Fire Department

Interoffice Memorandum

Date: **01/11/2023**

To: **Regina Stephenson**

From: **Police Chief Seth Herman**
Fire Chief Charles Blumenauer

Subject: **Public Safety Training Facilities**

Training, both of new employees and continuing education for current employees, is requirement by the Texas Commission on Law Enforcement (TCOLE), Texas Commission of Fire Protection (TFCP) and Texas Department of State Health Services. Currently the Midland Police & Fire Department are training in facilities that have outlived there useful life span.

We are writing this memo in support of contracting with Randal Scott Architects to start the Phase 1 Design of the Public Safety Training facility. This project will be a joint facility for both the Midland Police and Fire departments. It will help us design a facility that will not only serve our members but it will also complete other goals for our departments. These goals will include better recruitment and becoming a regional asset.

Seth Herman, Police Chief
Charles Blumenauer, Fire Chief

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made and effective the 24 day of January, 2023, by and between the CITY OF MIDLAND, TEXAS ("*CITY*"), a home-rule municipal corporation, and Randall Scott Architects, Inc. ("*COMPANY*"). CITY and COMPANY are at times individually referred to as a "*Party*" and collectively referred to as the "*Parties*."

ARTICLE I. PURPOSE

The purpose of this Agreement is to state the terms and conditions under which COMPANY shall perform Design, Construction Document, Construction Bidding and Negotiation, and Construction Administration services (the "*Services*") for CITY. The Services are more specifically set forth in **Exhibit A**, which is attached hereto and incorporated herein for all purposes.

ARTICLE II. SERVICES TO BE PERFORMED

COMPANY shall provide the Services in a manner consistent with the same level of skill and care as other professionals that perform similar services for similar projects in approximately the same region and at approximately the same point in time. COMPANY acknowledges that any employee who performs the Services shall be fully qualified and competent to perform the Services.

ARTICLE III. FINANCIAL CONSIDERATIONS

CITY agrees to pay COMPANY an amount not to exceed $ 2,500,000.00 for the performance of the Services. CITY agrees to pay COMPANY according to the schedule set forth in **Exhibit A** upon presentation of a monthly invoice. The monthly invoice shall set forth all service fees for the month and those expenses described in **Exhibit A** that COMPANY incurs during the previous month for which COMPANY receives advanced written approval from the City Manager. All additional and/or reimbursable expenses must be approved by the City Manager prior to incurring such expenses.

Within thirty (30) days of the date COMPANY's invoice is received by CITY, CITY shall pay the full amount of such invoice; provided, however, that if CITY objects to any portion of an invoice, CITY shall notify COMPANY of CITY's objection and the grounds therefor within fifteen (15) days of the date of receipt of the invoice, and the Parties shall immediately make every effort to settle the disputed portion of the invoice. Notwithstanding the foregoing, CITY shall pay

every portion of the invoice that is not in dispute within the 30-day period for payment.

ARTICLE IV. TERM

The term of this Agreement shall be from January 9, 2023 until June 19, 2025, unless the Services are completed sooner or the Agreement is terminated as provided below.

ARTICLE V. TERMINATION AT WILL

CITY may terminate this Agreement at will, for any or no reason, upon giving COMPANY at least one hundred eighty (180) days' written notice. The Parties understand and agree that it is in CITY'S sole and absolute discretion to cancel this Agreement during the term set forth in Article IV without penalty to CITY. COMPANY has no expectation and has received no guarantees that this Agreement will not be terminated during the Agreement's term. The Parties have bargained for the flexibility of terminating this Agreement upon tender of the requisite notice at any time during this Agreement's term. All work and services under the Agreement shall be suspended upon termination of the Agreement becoming effective.

ARTICLE VI. ASSIGNMENT

COMPANY shall not, either directly or indirectly, assign all or any part of this Agreement, or any interest, right or privilege herein, without obtaining CITY's prior written consent. The issue of whether to grant such consent shall be in the sole and absolute discretion of CITY.

ARTICLE VII. OWNERSHIP AND CONFIDENTIALITY OF DOCUMENTS AND OTHER WORK PRODUCT

All reports, information and other data ("*Instruments of Service*") given to, prepared or assembled by COMPANY under this Agreement, and any other related document or item shall become the sole and exclusive property of CITY. The Instruments of Service shall be promptly delivered, without restriction, to CITY and such other persons or entities as CITY may designate; provided, however, that COMPANY may make and/or retain copies of the Instruments of Service for its files and use for its use in marketing and pursuit of new business.

ARTICLE VIII. INDEPENDENT CONTRACTOR

COMPANY shall perform the Services as an independent contractor and not as an officer, agent, servant or employee of CITY. COMPANY shall have exclusive control of and the exclusive right to control the details of the Services and all persons performing the same. COMPANY shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and

subcontractors. The Parties acknowledge and agree that the doctrine of *respondeat superior* shall not apply as between CITY and COMPANY, its officers, agents, employees, contractors and subcontractors. Nothing in this Agreement shall be construed as creating a partnership or joint enterprise between CITY and COMPANY. No person performing the Services shall be considered an officer, agent, servant or employee of CITY. Further, it is specifically understood and agreed that nothing in this Agreement is intended nor shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control" that would give rise to vicarious liability. COMPANY is an independent contractor under this Agreement and shall assume all rights, obligations, and liabilities applicable to it as an independent contractor. CITY does not have the power to direct the order in which the services are performed. CITY shall not have the right to control the means, methods or details of COMPANY'S work. COMPANY shall assume exclusive responsibility for performing the Services, and is entirely free to perform the Services in its own way.

ARTICLE IX. INSURANCE

During the term of this Agreement, COMPANY shall maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):

-Personal Injury:	$1,000,000.00 per person
	$1,000,000.00 per occurrence
-Property Damage:	$500,000.00 per occurrence
Business Automobile Liability:	$250,000.00 combined single limit - Personal Injury and Property Damage
Workers' Compensation:	Statutory limits
Employers' Liability:	$500,000.00 per accident or occurrence

The Commercial General Liability policy shall be on a per project aggregate, including completed operations, and shall be on a claims-occurred basis. This policy shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Business Automobile Liability policy shall cover any vehicle for bodily injury and property damage, including owned vehicles, hired and non-city vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of $250,000.00 covering any vehicle used for the execution of the Services. This policy shall name CITY as an additional insured and

waive subrogation in favor of CITY.

The Workers' Compensation policy shall inure to the benefit of employees injured during the course and scope of their employment by COMPANY pursuant to this Agreement. The Workers' Compensation policy shall waive all rights of subrogation in favor of CITY.

All insurance policies required by this Agreement shall (i) provide for a waiver of subrogation in favor of CITY, and (ii) name CITY as an additional insured on a claims-occurred basis (except for the Workers' Compensation policy). Prior to any reduction or termination of the insurance policies referenced herein, COMPANY shall ensure that its insurance provider submits written notice to CITY no later than thirty (30) days prior to the reduction or termination of such coverage.

COMPANY shall contractually require all contractors, subcontractors, and sub-subcontractors that perform the Services to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts specified herein. All contractors, subcontractors, and sub-subcontractors shall obtain insurance policies that provide blanket waivers of subrogation in favor of the City of Midland and that name the City of Midland as an additional insured on a claims-occurred basis (except Workers' Compensation).

Prior to the execution of the Agreement, COMPANY shall provide one or more certificates of insurance specifically stating that requirements of this Article have been met, which shall be subject to the approval of CITY. CITY shall not be required to provide any insurance pursuant to this Agreement.

By executing this Agreement, COMPANY certifies that the certificate of insurance provided pursuant to this Article complies with the requirements of Chapter 1811 of the Texas Insurance Code. COMPANY shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law and this Agreement is the sole and exclusive responsibility of COMPANY.

ARTICLE X. ATTORNEY FEES

BY EXECUTING THIS AGREEMENT, COMPANY AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST CITY, REGARDING THE AWARD OF ATTORNEY FEES, WHICH ARE IN ANY WAY RELATED TO THIS AGREEMENT OR THE CONSTRUCTION, INTERPRETATION, OR BREACH OF THIS AGREEMENT. COMPANY

SPECIFICALLY AGREES THAT IF COMPANY BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS AGREEMENT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS AGREEMENT (INCLUDING, BUT NOT LIMITED TO, ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED) OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE), COMPANY AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY FEES TO WHICH COMPANY MIGHT OTHERWISE BE ENTITLED.

COMPANY AGREES THAT THIS IS A VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY-EXISTING KNOWN RIGHT. COMPANY ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS AGREEMENT. COMPANY FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN CITY AND COMPANY. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF GOVERNMENTAL IMMUNITY.

COMPANY IS RELYING ON ITS OWN JUDGMENT AND HAD THE OPPORTUNITY TO DISCUSS THIS AGREEMENT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION. THE PROVISIONS OF THIS ARTICLE SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

ARTICLE XI. GOVERNMENTAL IMMUNITY

By executing this Agreement, CITY is not waiving its right of governmental immunity. CITY is retaining its immunity from suit. CITY is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY.**

ARTICLE XII. NO THIRD-PARTY BENEFICIARY

CITY's approval of this Agreement does not create a third-party beneficiary. There is no third-party beneficiary to this Agreement. No person or entity who is not a party to this Agreement shall have any third-party beneficiary or other rights hereunder.

ARTICLE XIII. RELEASE

NOTWITHSTANDING ANY CONTRARY PROVISION CONTAINED HEREIN,

COMPANY HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES CITY AND ITS AGENTS, COUNCIL MEMBERS, EMPLOYEES, AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES, OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH COMPANY HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF AGREEMENT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR CITY'S GROSS NEGLIGENCE. THE PROVISIONS OF THIS ARTICLE SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

ARTICLE XIV. GENERAL PROVISIONS

A. Waiver. No waiver by CITY of a breach of any covenant, condition, or restriction of this Agreement shall be construed or held to be a waiver of any succeeding or preceding breach of the same or any other covenant, condition, or restriction contained in this Agreement.

B. Governing Law and Venue. The laws of the State of Texas shall govern, construe and enforce all rights and duties of the Parties, including, but not limited to, tort claims and any contractual claims or disputes arising from or relating in any way to the subject matter of this Agreement, without regard to conflict of laws and rules that would direct application of the laws of another jurisdiction. All performance and payment made pursuant to this Agreement shall be deemed to have occurred in Midland County, Texas. The obligations and undertakings of the Parties shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claim, suit, or other action arising from or connected in any way to this Agreement shall be in Midland County, Texas.

C. Notice. Any notice or demand made regarding this Agreement shall be made in writing and delivered, either in person or by certified or registered mail, at the addresses provided below. Notice by mail shall be complete upon deposit of the paper, postage prepaid, in a post office or official depository under the care and custody of the United States Postal Service.

If to CITY: City Manager's Office
P.O. Box 1152
Midland, Texas 79702

If to COMPANY: Preston Scott, AIA
Principal
Randall Scott Architects, Inc.
Preston Park Towers West

4975 Preston Park Blvd., Suite 620
Plano, TX 75093

The parties hereto may change the above-designated addresses by giving notice pursuant to the terms of this Section.

D. Severability. If one or more of the provisions contained in this Agreement are held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and this Agreement shall be construed as if the invalid, illegal, or unenforceable provision were never contained herein.

E. Use of Language. Words in the singular shall be held to include the plural, unless the context otherwise requires.

F. Amendments, Modifications, Alterations. No amendment, modification, or alteration of this Agreement shall be binding unless such is evidenced in writing, dated subsequent to the date of this Agreement, and duly executed by the Parties.

G. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed as original, and all of which shall constitute one and the same instrument.

H. Federal Wage Requirements. If applicable, the Davis-Bacon Act, 29 CFR 5.5, and any related acts or regulations are hereby incorporated by reference and made a part of this Agreement, and all terms and requirements under said statutes and regulations are made terms and conditions of this Agreement, to which the Parties have agreed to be bound.

I. Notice of Alleged Breach; Statutory Prerequisites. As a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this Agreement, COMPANY or its legal representative shall give the City Manager, or any other reasonable official of CITY, written notice (consisting of one (1) original and seven (7) copies of such notice attached to a copy of this Agreement) of such duly-verified damages within one hundred fifty (150) days after the same has been sustained. The discovery rule does not apply to the giving of such notice. The notice shall include when, where, and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which COMPANY will settle, the physical and mailing addresses of COMPANY at the time and date the claim was presented, the physical and mailing addresses of COMPANY for the six (6) months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom COMPANY relies to establish its claim. COMPANY's failure to so notify the City Manager within the time and manner provided herein shall exonerate, excuse and except CITY from any

liability whatsoever. CITY is under no obligation to provide notice to COMPANY that COMPANY'S notice is insufficient. CITY reserves the right to request additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after COMPANY's receipt of such notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any contrary provision contained herein, COMPANY's failure to comply with the requirements herein shall perpetually bar COMPANY's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless of whether CITY has actual or constructive notice or knowledge of said claim or alleged damages. COMPANY agrees that the requirements of this entire Agreement are reasonable.

J. Prompt Pay Act. The Parties agree that Texas Government Code, Chapter 2251, Payment for Goods and Services does not waive the CITY's governmental immunity.

K. Compliance. COMPANY shall comply with Texas Government Code § 2252.908, *et seq.*, as amended, and Texas Local Government Code § 176.006, *et seq.*, as amended.

L. Anti-Boycott Statutes. To the extent that Tex. Gov't Code §§ 2271.002 and 2274.002 apply to this Agreement, COMPANY hereby verifies that:

- COMPANY does not boycott Israel and will not boycott Israel during the term of this Agreement;
- COMPANY does not boycott energy companies and will not boycott energy companies during the term of this Agreement; and
- COMPANY does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of this Agreement against any firearm entity or firearm trade association.

If Tex. Gov't Code § 2270.002 does not apply to this Agreement, such verification is not required, and COMPANY shall be deemed to have not made such verification.

M. Records Retention and Production of Information. To the extent that this Agreement is a contract described by Tex. Gov't Code § 552.371, COMPANY shall: (i) preserve all contracting information related to the Agreement as provided by the records retention requirements applicable to CITY for the duration of the contract; (ii) promptly provide to CITY any contracting information related to the Agreement that is in the custody or possession of COMPANY on request of CITY;

and (iii) on completion of the Agreement, either (a) provide at no cost to CITY all contracting information related to the Agreement that is in the custody or possession of COMPANY, or (b) preserve the contracting information related to the Agreement as provided by the records retention requirements applicable to CITY.

N. Public Information. To the extent that this Agreement is a contract described by Tex. Gov't Code § 552.371, COMPANY agrees as follows in accordance with Tex. Gov't Code § 552.372(b): The requirements of Subchapter J, Chapter 552, Government Code, may apply to this contract, and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

O. Conflict of Terms. If a conflict of terms or language exists between: (i) any of the provisions of this Agreement; and (ii) any of the provisions contained in any exhibit(s) attached to this Agreement, precedence shall be given to the provisions of this Agreement. For the avoidance of any doubt, the provisions contained in this Agreement shall supersede any and all conflicting provisions contained in any exhibit(s) attached hereto. Furthermore, the Parties acknowledge and agree that any provision contained in an exhibit(s) attached to this Agreement that imposes an additional express or implied obligation on CITY is hereby made void and of no force or effect. CITY's sole and exclusive obligations under this Agreement are contained in the provisions of this agreement that precede the signature page(s), which evidences the Parties' execution and acceptance hereof.

P. Interpretation. By executing this Agreement, the Parties acknowledge and agree that this Agreement shall not be interpreted or construed against any Party solely because such Party or its legal counsel drafted this Agreement. The Parties have read, understood, and approve of the language and terms set forth herein.

[Signature Page(s) Follows]

EXECUTED IN DUPLICATE the day and year first above mentioned.

THE CITY OF MIDLAND, TEXAS

Robert Patrick, City Manager

ATTEST:

Amy M. Turner, City Secretary

APPROVED AS TO FORM ONLY:

John Ohnemiller, City Attorney

COMPANY:

By: _____

Name: Preston Scott

Title: Principal

STATE OF TEXAS §
§
COUNTY OF DALLAS §

BEFORE ME, the undersigned authority, on this 13 day of January, 2023 personally appeared, Preston Scott an officer of RSA, known to me to be the person and official whose name is subscribed to the forgoing instrument, and acknowledged to me that he executed the same as the act and deed of said corporation, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 13TH day of JAN., 2023.

DINA RENEE JOHNSON
Notary ID #130172249
My Commission Expires
March 30, 2023

Dina Renee' Johnson
Notary Public, State of Texas

2140 LAKE PARK BLVD, SUITE 300 RICHARDSON, TX 75080 | 972.664.9100 | WWW.RSARCHITECTS.COM

RANDALL SCOTT ARCHITECTS

ARCHITECTURE | INTERIORS | PLANNING

"EXHIBIT 'A' – FEE PROPOSAL" TO THE PROFESSIONAL SERVICES AGREEMENT
OWNER ARCHITECT AGREEMENT

January 18, 2023

Charles Blumenauer
Fire Chief
City of Midland Fire Department
1500 W. Wall
Midland, TX 7970

RE: PROPOSAL TO PROVIDE ARCHITECTURAL/ENGINEERING SERVICES FOR PHASE I OF THE PUBLIC SAFETY TRAINING CENTER IN THE CITY OF MIDLAND, TX

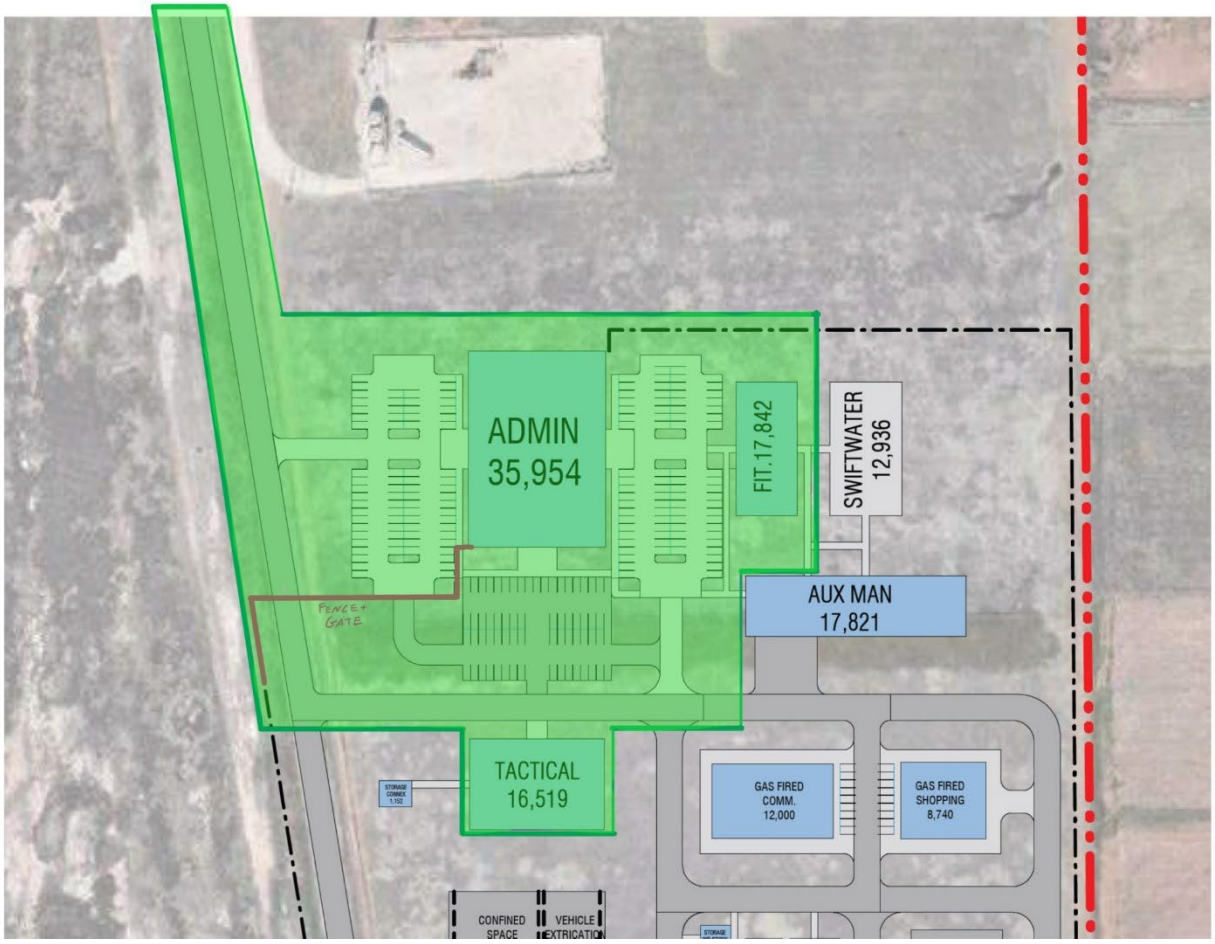
I. PROJECT SCOPE

This proposal is submitted by Randall Scott Architects, Inc. (hereinafter referred to as RSA or Architect) to the City of Midland (herein after referred to as the City, Owner or Client) to provide Architectural/Engineering Design Services for Phase I of a new Public Safety Training Center (PSTC) in Midland, TX.

A. PROJECT CRITERIA

1. **OVERVIEW**
   The following overview of the project requirements was developed through a Master Plan & Needs Assessment performed by RSA for the City of Midland in 2021/2022.
   a. In 2022 the City of Midland approved **$2,500,000** of A/E design services for Phase I of the new PSTC.
   b. The scope of work included in Phase I is indicated in the sketch below. The scope of Phase I is graphically indicated in the sketch via green outline/zone. Phase I is to include the following:
      - **a. Administration Building**
        - i. 30,000 - 35,000 Square Feet
      - **b. Tactical Building (Big Box)**
        - i. 14,000 - 17,000 +/- Square Feet
      - **c. Fitness, Lockers & Defensive Tactics Building**
        - i. 12,000 - 15,000 +/- Square Feet
      - **d. Supporting Parking, Paving, Drives**
        - i. See sketch below for scope/boundary of site work

Scope of Phase I services are graphically indicated in the green zone of the sketch below:



II. PRE-DESIGN PHASE SERVICES

a. THIS PHASE WAS COMPLETED VIA 2022 MASTER PLAN.

III. BASIC SERVICES

A. SCHEMATIC DESIGN

Schematic Design Phase services provided by RSA and our Consultants for this project shall consist of the following:

1. **Meet with Staff and Project Stakeholders (Workshop # 1)** to review the program of requirements for each of the Phase I buildings. The design team will also discuss various preliminary structural systems, envelope systems and building systems with staff to determine a general basis of design for each of the three buildings. These discussed systems will inform the design process and in turn, the construction cost (once the project bids).
2. Prepare a Preliminary Project Schedule for the Project.
3. Perform a code and zoning review for the proposed Project.
4. **Meet with Staff and Project Stakeholders (Workshop # 2)** for a planning charrette based on the Program of Requirements set for each building.
5. Coordinate the MEP, structural, civil, IT/AV, security, landscape architecture and specialty consultants' Schematic Design services.

6. Provide Conceptual Exterior Designs for each of the buildings in Phase I. These will be reviewed with the city and refined based on comments received.
7. Prepare **final Schematic Design Site Plans, Floor Plans and Renderings** of RSA's proposed designs and submit for Stakeholder review.
8. Prepare a presentation of the Final Schematic Design Drawings and if requested, assist Staff in presenting to Council for approval.

B. DESIGN DEVELOPMENT PHASE

Based on the approved Schematic Design documents, the Design Team shall prepare the Design Development documents which may include:

1. General Notes
2. Architectural site plan illustrating the proposed site and building improvements
3. Architectural floor plans with dimensions
4. Roof Plans
5. Partition types
6. Proposed room finish & door schedules
7. Exterior building elevations
8. Wall sections
9. Preliminary section details
10. Reflected ceiling plans
11. Millwork elevations
12. Interior elevations
13. Preliminary interior finishes plans
14. Preliminary mechanical, electrical and plumbing drawings and details
15. Preliminary structural plans and details
16. Preliminary civil plans and details
17. Preliminary AV, IT, Security and Access Control (low voltage systems) plans and details
18. Preliminary landscape architecture plans and site details
19. Prepare and distribute meeting notes documenting the basic issues, resolutions and action items agreed to during this phase.
20. Attend meetings with City Staff to review the Design Development documents, DD cost estimate and status of the Project Schedule.

C. CONSTRUCTION DOCUMENTS PHASE

Based on the approved Design Development documents, the Design Team will prepare final drawings, details and specifications required to construct the Project. The Construction Documents will include a base bid scope of work and add alternates (if requested by the City) which the Design Team will agree upon with the City to assist in managing the project costs when bid. The Design Team will work with the Owner to make final adjustments prior to issuing the final CD's for bidding.

The Construction Documents Phase includes attendance by the Design Team at meetings with the Owner and other entities to coordinate the Construction Documents and pricing. Services during this phase include the preparation and distribution of project meeting notes documenting the basic issues, resolutions and action items agreed to during this phase.

D. BIDDING & NEGOTIATION PHASE

Once the final Construction Documents are approved by the Owner, the Design Team will provide the following services during the Bidding and Negotiation Phase:

1. Distribute electronic PDF files of the bidding documents plans and specifications to interested General Contractors. The printing of these documents for bidding and construction shall be at the Contractor's expense.
2. Attend a Pre-Bid Conference at the project site or a location designated by the Owner if requested.
3. Answer Contractor questions during the bidding phase about the construction documents and intended design.
4. Review substitution requests from bidders up until 7 days prior to bid date. Issue addenda documenting any approved substitution requests.
5. Prepare and issue addenda to the Contractors', clarifying questions on the drawings and specifications.
6. Prepare and distribute project meeting notes documenting the basic issues, resolutions and action items agreed to in meetings attended by the Architect during this phase.

E. CONTRACT ADMINISTRATION PHASE

During the Construction Administration Phase, the Design Team will provide the following Services:

1. Conduct a Pre-Construction Meeting to discuss the issues of coordination, points of contact for each entity and protocol to be followed during the Construction Phase of the project.
2. Visit the site as appropriate to the stage of construction to review construction in an effort to determine in general whether or not, when the Project is completed, it will be constructed in substantial accordance with the Contract Documents. While on site, the Architect will attend OAC Meetings with the Owner and Contractor to review the project status, previous set of construction meeting notes, submittal logs, ASI logs, RFI logs, sustainability documentation (if applicable), and construction schedule status along with coordination issues that need resolution by the group.
3. Review substitution requests from the Contractor only for materials and products which become unavailable during the Construction Phase due to circumstances beyond the Contractor's control.
4. Review submittals and shop drawings required by the Contract Documents.
5. Review the Contractor's Requests for Information (RFI's) and respond as deemed appropriate by the Architect.
6. Prepare Architect's' Supplemental Instructions (ASI's) when deemed necessary by the Architect and issue them to the Contractor.
7. Review the Contractor's Cost Proposal Requests (CPR's), make recommendations to the Owner and process change orders.
8. Review Contractor's Applications for Payment and transmit to the City for payment with any recommended adjustments from the Design Team.
9. Prepare a punch list for each Project and perform a final walk-through for verification that punch list items have been completed.
10. Establish dates of Substantial and Final Completion and prepare certificates for same.
11. Coordinate project close out, receipt of warranty & maintenance binders from the Contractor.
12. Coordinate the preparation of as-built documents and deliver them to the Owner.

IV. ADDITIONAL SERVICES

Additional Services are all services not explicitly listed under Sections II *Pre-Design Services* & III *Basic Services* of this Proposal. Additional Services shall be provided when requested by the City on an hourly or negotiated fee basis in addition to the fees charged for the services outlined in Sections II and III above. Prior to beginning Additional Services work, RSA shall request approval from the City in writing if it believes that Additional Services are warranted or have been requested by the City. Additional Services include, but are not limited to, the following:

A. Revisions requested by the City to the Architect's Work resulting in changes in the design, scope and/or quality. Revisions to the Architect's Work or documents due to changes in the information provided to the Architect by the City.

B. Preparing Design alternatives (other than those listed in Sections II and III above) and redesign services for the project including, but not limited to, redesign services required due to the City making changes to the project scope.
C. Meetings with citizen groups (outside of those listed under the Basic Services portion of this Proposal and normal Council presentations) to present information about the project. RSA will assist staff in presenting our work to Council during regular Council Meetings as a Basic Service if requested.
D. Field verification of existing conditions not indicated on as-built documents provided to the Architect by the City.
E. Consulting services required to complete the project which are not specifically listed under the Professional Fee Sections VI.A *Pre-Design* or VI.B *Basic Services.*
F. Design of structural foundations such as carton form or pier and beam with crawl space foundation systems.
G. Design of off-site utilities beyond the property lines of the project sites being designed by RSA under this agreement.
H. Platting or rezoning services.
I. Surveying services (shall be provided to RSA by the Owner).
J. Geotechnical engineering services and reports (shall be provided to RSA by the Owner).
K. Coordination services associated with environmental, archeological and historic building assessments including, but not limited to: 1) historic building evaluations of the property required by governing agencies, 2) archeological evaluations of the property required by governing agencies; 3) evaluation of the presence and potential impact of special conditions or sensitive receptors present on the property such as wetlands, endangered species and native trees required by governing agencies. 4) additional consulting or coordination required due to past or present landfill conditions.
L. Preparation of change orders not the fault of the architect or his consultants.
M. All work associated with the location and modifications to the floodplain and creek areas adjacent to the project.
N. Development of artwork packages for the building.
O. Design services or enhancements to the drainage creek/channel to the West of the Project.
P. Providing water pressure/flow tests required for fire sprinkler systems.
Q. FF&E (Furniture Fixtures & Equipment) Design

V. PRELIMINARY PROJECT SCHEDULE

The schedule for this project will be determined as part of the scope of services provided by RSA.

VI. PROFESSIONAL FEES

A. BASIC SERVICES

a. The minimum fee for Basic Services inclusive of the Architectural/Engineering services outlined below and in Section III Basic Services of this Proposal for the Public Safety Training Center – Phase I shall be provided based on a lump sum of **$2,500,000**.
    i. Architectural/Engineering Services for Phase I of the PSTC include
        1. Architectural Services
        2. Structural Engineering Services
        3. Civil Engineering Services
        4. Information Technology & Electronic Security Consulting
        5. Audio Visual & Acoustic Consulting
        6. Landscape Architecture and Irrigation Design
        7. Registered Accessibility Specialist

8. Reimbursable Expenses for all A/E services listed in this proposal
9. Newforma Project Management Software License for Project

Note: The above fees are based on Phase I of the Public Safety Training Center as outlined in Section I.A.1 above and as graphically indicated in the "green zone" of the referenced sketch above. If the scope of services are increased beyond this proposal, RSA's fees shall be increased at that time based on a negotiated revised scope of services.

B. ADDITIONAL SERVICES

1. Additional Services for the project shall be provided at the following hourly rates or negotiated on a lump sum basis at the time they are required:

Founding Principal	$350.00/hr.
Principal	$275.00/hr.
Sr. Vice President	$250.00/hr.
Vice President/PM	$225.00/hr.
Project Architect	$200.00/hr.
Staff Architect	$185.00/hr.
Visualization Renderer	$185.00/hr.
Interior Designer	$185.00/hr.
Administrative	$105.00/hr.
Consultants	Cost + 10%

VII. PROFESSIONAL REGISTRATION

The Texas Board of Architectural Examiners, 333 Guadalupe, Suite 2-350, Austin, Texas 78701-3942, phone: 512.305.9000, has jurisdiction over individuals licensed under the Architects' Registration Law, Article 249A, VTCS.

VIII. TERMS AND CONDITIONS

A. This Proposal is valid for 30 days from the date at the top of the first page of this document unless included as an attachment to a fully executed purchase order prior to that date.
B. The Owner and the Architect acknowledge that the Architect's standard of care is one of reasonable professional diligence and care of similarly situated architects performing the same or similar professional design services in the same geographical area.
C. The Owner acknowledges that all projects such as the one being contemplated are required by law to be submitted to the Texas Department of Licensing & Regulation for handicap accessibility review. The Architect will submit plans for the proposed project to TDLR for review. The Owner acknowledges that the construction documents are not complete until TDLR has approved them and any comments they require are incorporated even though construction may have begun or even be completed before comments are received. The Architect and his Consultants shall not be held financially responsible for changes to the project required by TDLR.
D. The Owner acknowledges that RSA has no responsibility for construction means and methods and that these are the sole responsibility of the Contractor/CM at Risk.
E. The Owner acknowledges that RSA has no responsibility for construction site safety and safety procedures and that these are the sole responsibility of the Contractor/CM at Risk.
F. The Owner acknowledges that RSA has no responsibility for the discovery of nor remediation of hazardous materials including, but not limited to, asbestos, PCP's, lead, etc. and that these are the

responsibility of the Owner. The State of Texas requires Owner to perform a hazardous materials survey on all renovation projects, such as this one.

G. The Architect's certification of the Contractor's Applications for Payment constitute a representation to the Owner, based on the Architect's evaluation of the Work and data comprising the Contractor's Application for Payment, that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the contractor is entitled to payment in the amount certified subject to, 1) an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, 2) results of subsequent tests and inspections, 3) correction of minor deviations from the Contract Documents prior to completion and 4) specific qualifications expressed by the Architect. The issuance of a Certificate for Payment shall not be a representation that the Architect has, 1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, 2) reviewed construction means, methods, techniques, sequences or procedures, 3) reviewed copies of requisitions received from subcontractors and suppliers and other data requested to substantiate the Contractor's right to payment, or 4) ascertained how or for what purpose the contractor has used money previously paid on account of the Contract Sum.

Randall Scott Architects appreciates the opportunity to submit the above Proposal and looks forward to continuing working with the City of Midland on this important Project!

Thank you,

RANDALL SCOTT ARCHITECTS, INC.

Preston Scott, AIA
Principal



City Council Meeting

Item Number: 10

Meeting Date: January 24, 2023

To: City Council / City Manager

From: John Simmons, Manager, Right-of-Way

Subject: Motion authorizing the execution of a Right-of-Way License (23-495-003) with Targa Delaware LLC, regarding City-owned property described as Section 2, Block C-24, and sections 22 and 25, Block C-23, Public School Land Survey, Winkler County, Texas (DISTRICT: NONE) (UTILITIES)

Purpose:

This motion will provide the applicant a 30’ wide right of way to place a Sixteen inch (16”) private, steel construction, gas pipeline on the City of Midland-owned T-Bar Ranch.

The applicant will need a 30’ wide temporary workspace in place for construction.

This Right-of-Way License is proposed for a single ten (10) year period, paid in advance with an annual throughput fee. Terms are consistent with the City’s standard license for facilities of this nature.

Recommended City Council Action:

Approve

Fiscal Impact:

Application fee (one time): $1,000

10-year lease rate,

16” pipeline: 688.53 rods x $280 per rod ($192,788.40)

TOTAL COLLECTED $193,788.40

Discussion:

This private-use, steel construction gas line is sixteen inches (16) in diameter and will be buried forty-eight inches (48) deep and will not interfere with the T-Bar Ranch water operations in this area.

Certificates of Insurance (COI) with the City of Midland named as additional insured and a waiver of subrogation in favor of the City of Midland have been collected and on file.

City Secretary to record completed License Agreement

Robert Patrick

City Manager's Office

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/12/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Marsh USA Inc.
2929 Allen Parkway, Suite 2500
Houston, TX 77019

CN101831123--3-22-23 GAUW X

CONTACT NAME:
PHONE (A/C, No, Ext): **FAX (A/C, No):**
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Associated Electric & Gas Ins Services Ltd	3190004
INSURER B : ACE American Insurance Company	22667
INSURER C : ACE Property & Casualty Insurance Company	20699
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Targa Delaware LLC
811 Louisiana Street, Suite 2100
Houston, TX 77002

COVERAGES **CERTIFICATE NUMBER:** HOU-003721603-13 **REVISION NUMBER:** 4

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	X **COMMERCIAL GENERAL LIABILITY** X CLAIMS-MADE ☐ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER:	X	X	YX0321902P	10/31/2022	10/31/2023	EACH OCCURRENCE	$	See Next Page
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$	See Next Page
							MED EXP (Any one person)	$	See Next Page
							PERSONAL & ADV INJURY	$	See Next Page
							GENERAL AGGREGATE	$	See Next Page
							PRODUCTS - COMP/OP AGG	$	See Next Page
								$	
B	**AUTOMOBILE LIABILITY** X ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY	X	X	ISA H10753223	10/31/2022	10/31/2023	COMBINED SINGLE LIMIT (Ea accident)	$	1,000,000
							BODILY INJURY (Per person)	$	
							BODILY INJURY (Per accident)	$	
							PROPERTY DAMAGE (Per accident)	$	
								$	
C	X **UMBRELLA LIAB** ☐ OCCUR **EXCESS LIAB** X CLAIMS-MADE ☐ DED X RETENTION $ 1,000,000	X	X	XOC G28178281 007	10/31/2022	10/31/2023	EACH OCCURRENCE	$	10,000,000
							AGGREGATE	$	10,000,000
								$	
B	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y / N ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	WLR C50722995	10/31/2022	10/31/2023	X PER STATUTE ☐ OTH-ER		
							E.L. EACH ACCIDENT	$	1,000,000
							E.L. DISEASE - EA EMPLOYEE	$	1,000,000
							E.L. DISEASE - POLICY LIMIT	$	1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: Right of Way

The Certificate Holder is included as additional insured (except workers' compensation) where required by written contract. Waiver of subrogation is applicable where required by written contract.

CERTIFICATE HOLDER

City of Midland
300 N. Loraine
Midland, TX 79701

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Marsh USA Inc.

PACKET 10.3 January 24, 2023

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ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
Marsh USA Inc.	Targa Delaware LLC 811 Louisiana Street, Suite 2100 Houston, TX 77002
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 **FORM TITLE:** Certificate of Liability Insurance

As Respects General Liability:

A. Limit of Liability Each Occurrence:
1. $1,000,000*
2. $2,000,000 General Aggregate

B. Joint Venture Limit of Liability Each Occurrence:
Per Limit of Liability Section (3)
$1,000,000*

C. Combined Products Liability and Completed Operations Liability
Aggregate Limit of Liability for the Policy Period:
$2,000,000*

D. Failure to Supply Liability Aggregate Limit of Liability for the Policy Period:
$1,000,000*

E. Pollution Liability Aggregate Limit of Liability for the Policy Period:
$1,000,000*

F. Medical Malpractice Injury Limit of Liability Each Occurrence:
$1,000,000*

G. Wildfire Liability Aggregate Limit of Liability for the Policy Period:
$1,000,000*

*Subject to the $2,000,000 General Aggregate

As Respects General Liability:
Indemnity and Defense Costs are included in the Limits of Liability.

As Respects General Liability:
Policy does not contain an exclusion applicable to construction or demolition work within 50 feet of a railroad.

As Respects General Liability:
Policy does not contain exclusion for explosion, collapse or underground property damage hazards.

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POLICY NUMBER: ISA H10753223 Endorsement Number: 1

FORM MCS-90 **OMB No.: 2126-0008 Expiration: 05/31/2024**

USDOT Number: _ **Date Received:** _

Please note, the expiration date as stated on this form relates to the process for renewing the Information Collection Request for this form with the Office of Management and Budget. This requirement to collect information as requested on this form does not expire. For questions, please contact the Office of Registration and Safety Information, Registration, Licensing, and Insurance Division.

A Federal Agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2126-0008. Public reporting for this collection of information is estimated to be approximately 2 minutes per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Motor Carrier Safety Administration, MC-RRA, Washington, D.C. 20590.

United States Department of Transportation
Federal Motor Carrier Safety Administration

Endorsement for Motor Carrier Policies of Insurance for Public Liability under Sections 29 and 30 of the Motor Carrier Act of 1980

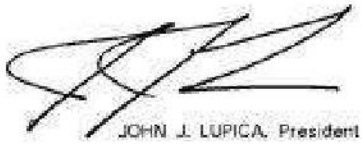
FORM MCS-90

Issued to Targa Resources Corp. **of** TX
(Motor Carrier name) *(Motor Carrier state or province)*

Dated at Wilmington, DE 19803 **on this** 6th **day of** October , 20 22 .

Amending Policy Number: ISA H10753223 **Effective Date:** 10/31/2022

Name of Insurance Company: ACE American Insurance Company



Countersigned by: _____
(authorized company representative)

The policy to which this endorsement is attached provides primary or excess insurance, as indicated for the limits shown *(check only one)*:

[X] *This insurance is primary and the company shall not be liable for amounts in excess of $* 3,000,000 *for each accident.*

[ ] *This insurance is excess and the company shall not be liable for amounts in excess of $* _____ *for each accident in excess of the underlying limit of $* _____ *for each accident.*

Whenever required by the Federal Motor Carrier Safety Administration (FMCSA), the company agrees to furnish the FMCSA a duplicate of said policy and all its endorsements. The company also agrees, upon telephone request by an authorized representative of the FMCSA, to verify that the policy is in force as of a particular date. The telephone number to call is: 215 - 640 - 4555.

Cancellation of this endorsement may be effected by the company or the insured by giving (1) thirty-five (35) days notice in writing to the other party (said 35 days notice to commence from the date the notice is mailed, proof of mailing shall be sufficient proof of notice), and (2) if the insured is subject to the FMCSA's registration requirements under 49 U.S.C. 13901, by providing thirty (30) days notice to the FMCSA (said 30 days notice to commence from the date the notice is received by the FMCSA at its office in Washington, DC).

Filings must be transmitted online via the Internet at http://www.fmcsa.dot.gov/urs.

(continued on next page)

MC1622y (06-21) Wolters Kluwer | Uniform Forms

DEFINITIONS AS USED IN THIS ENDORSEMENT

Accident includes continuous or repeated exposure to conditions or which results in bodily injury, property damage, or environmental damage which the insured neither expected nor intended.

Motor Vehicle means a land vehicle, machine, truck, tractor, trailer, or semitrailer propelled or drawn by mechanical power and used on a highway for transporting property, or any combination thereof.

Bodily Injury means injury to the body, sickness, or disease to any person, including death resulting from any of these.

Property Damage means damage to or loss of use of tangible property.

Environmental Restoration means restitution for the loss, damage, or destruction of natural resources arising out of the accidental discharge, dispersal, release or escape into or upon the land, atmosphere, watercourse, or body of water, of any commodity transported by a motor carrier. This shall include the cost of removal and the cost of necessary measures taken to minimize or mitigate damage to human health, the natural environment, fish, shellfish, and wildlife.

Public Liability means liability for bodily injury, property damage, and environmental restoration.

The insurance policy to which this endorsement is attached provides automobile liability insurance and is amended to assure compliance by the insured, within the limits stated herein, as a motor carrier of property, with Sections 29 and 30 of the Motor Carrier Act of 1980 and the rules and regulations of the Federal Motor Carrier Safety Administration (FMCSA).

In consideration of the premium stated in the policy to which this endorsement is attached, the insurer (the company) agrees to pay, within the limits of liability described herein, any final judgment recovered against the insured for public liability resulting from negligence in the operation, maintenance or use of motor vehicles subject to the financial responsibility requirements of Sections 29 and 30 of the Motor Carrier Act of 1980 regardless of whether or not each motor vehicle is specifically described in the policy and whether or not such negligence occurs on any route or in any territory authorized to be served by the insured or elsewhere. Such insurance as is afforded, for public liability, does not apply to injury to or death of the insured's employees while engaged in the course of their employment, or property transported by the insured, designated as cargo. It is understood and agreed that no condition, provision, stipulation, or limitation contained in the policy, this endorsement, or any other endorsement thereon, or violation thereof, shall relieve the company from liability or from the payment of any final judgment, within the limits of liability herein described, irrespective of the financial condition, insolvency or bankruptcy of the insured. However, all terms, conditions, and limitations in the policy to which the endorsement is attached shall remain in full force and effect as binding between the insured and the company. The insured agrees to reimburse the company for any payment made by the company on account of any accident, claim, or suit involving a breach of the terms of the policy, and for any payment that the company would not have been obligated to make under the provisions of the policy except for the agreement contained in this endorsement.

It is further understood and agreed that, upon failure of the company to pay any final judgment recovered against the insured as provided herein, the judgment creditor may maintain an action in any court of competent jurisdiction against the company to compel such payment.

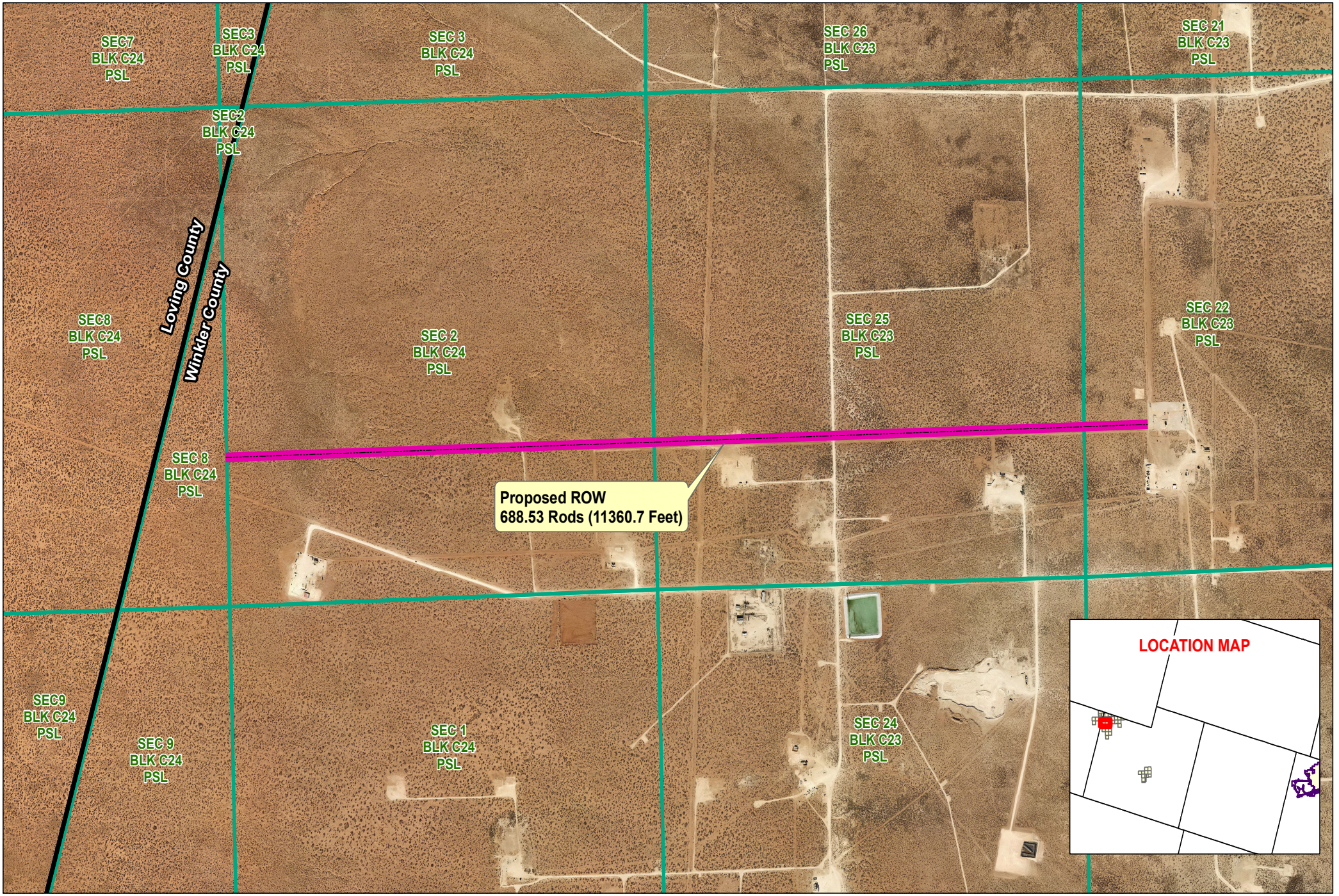
The limits of the company's liability for the amounts prescribed in this endorsement apply separately to each accident and any payment under the policy because of anyone accident shall not operate to reduce the liability of the company for the payment of final judgments resulting from any other accident.

(continued on next page)

SCHEDULE OF LIMITS — PUBLIC LIABILITY

Type of carriage	Commodity transported	January 1, 1985
(1) For-hire (in interstate or foreign commerce, with a gross vehicle weight rating of 10,001 or more pounds).	Property (nonhazardous)	$750,000
(2) For-hire and Private (in interstate, foreign, or intrastate commerce, with a gross vehicle weight rating of 10,001 or more pounds).	Hazardous substances, as defined in 49 CFR 171.8, transported in cargo tanks, portable tanks, or hopper-type vehicles with capacities in excess of 3,500 water gallons; or in bulk Division 1.1, 1.2, and 1.3 materials, Division 2.3, Hazard Zone A, or Division 6.1, Packing Group I, Hazard Zone A material; in bulk Division 2.1 or 2.2; or highway route controlled quantities of a Class 7 material, as defined in 49 CFR 173.403.	$5,000,000
(3) For-hire and Private (in interstate or foreign commerce, in any quantity; or in intrastate commerce, in bulk only; with a gross vehicle weight rating of 10,001 or more pounds).	Oil listed in 49 CFR 172.101; hazardous waste, hazardous materials, and hazardous substances defined in 49 CFR 171.8 and listed in 49 CFR 172.101, but not mentioned in (2) above or (4) below.	$1,000,000
(4) For-hire and Private (in interstate or foreign commerce, with a gross vehicle weight rating of less than 10,001 pounds).	Any quantity of Division 1.1, 1.2, or 1.3 material; any quantity of a Division 2.3, Hazard Zone A, or Division 6.1, Packing Group I, Hazard Zone A material; or highway route controlled quantities of a Class 7 material as defined in 49 CFR 173.403.	$5,000,000

*The schedule of limits shown does not provide coverage. The limits shown in the schedule are for information purposes only.



Date: 1/4/2023

Proposed ROW
Survey Section
County Boundary

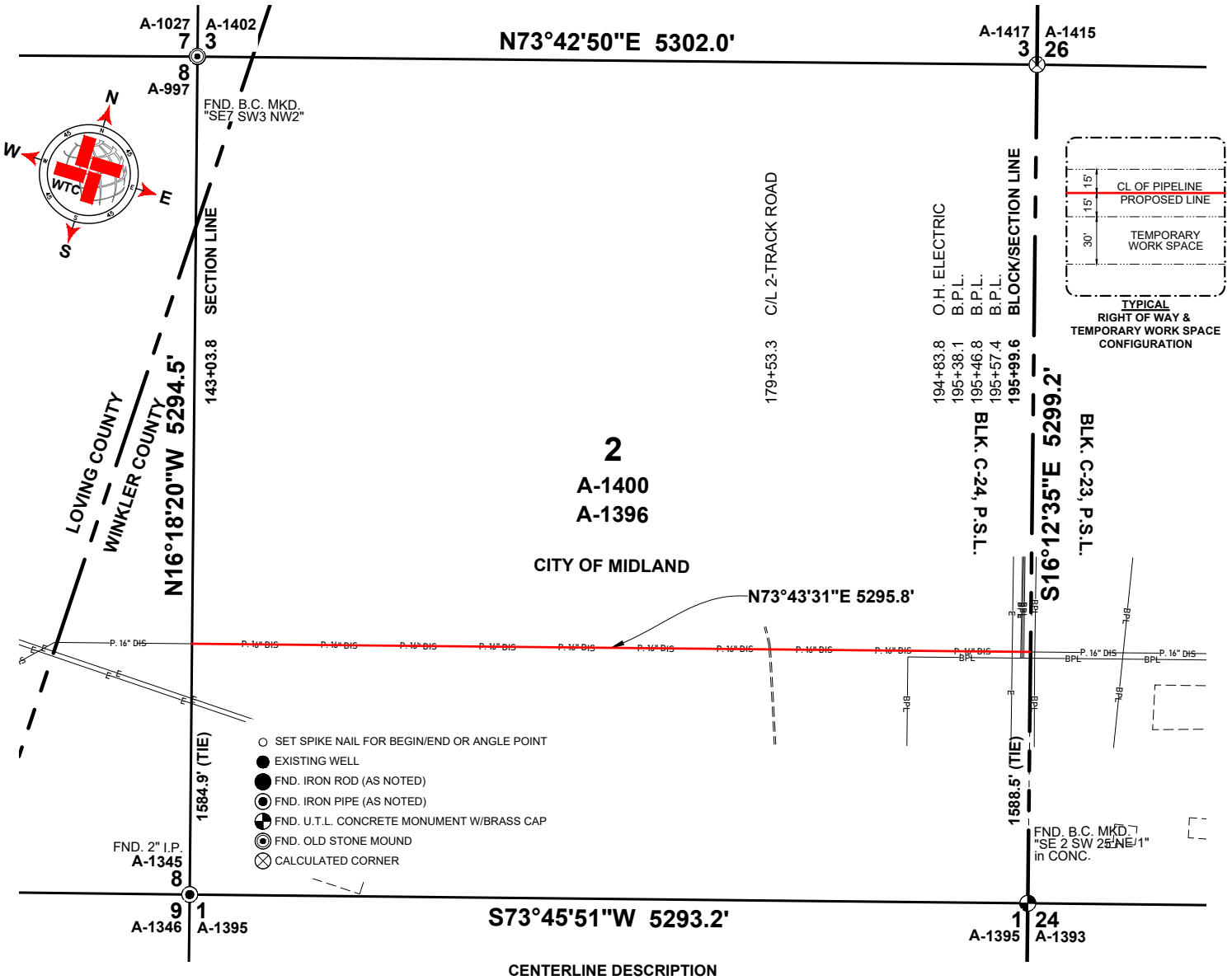
Targa Proposed Crittendon Discharge ROW

January 24, 2023

0 500 1,000 Feet

©THE CITY OF MIDLAND - 2023
THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.
THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.

SECTION 2, BLOCK C-24, ABSTRACT 1396, PUBLIC SCHOOL LAND SURVEY,
WINKLER COUNTY, TX



CENTERLINE DESCRIPTION

CENTERLINE DESCRIPTION OF A PROPOSED 16" DISCHARGE EXTENSION PIPELINE, BEING 30 FEET IN WIDTH AND 5295.8 FEET IN LENGTH CROSSING SECTION 2, BLOCK C-24, ABSTRACT 1396, PUBLIC SCHOOL LAND SURVEY, WINKLER COUNTY, TEXAS, BEING 15 FOOT LEFT AND 15 FOOT RIGHT OF THE SURVEY OF CENTERLINE AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT A POINT ON THE WEST LINE OF SAID SECTION 2, WHICH LIES N.16°18'20"W., 1584.9 FEET, FROM A TWO INCH IRON PIPE, FOUND AND ACCEPTED AS THE SOUTHWEST CORNER OF SAID SECTION 2;
THENCE N.73°43'31"E., 5295.8 FEET TO A POINT ON THE WEST LINE OF SAID SECTION 2, WHICH LIES N.16°12'35"W., 1588.5 FEET, FROM A BRASS CAP MARKED "SE 2 SW 25 NE 1" IN CONCRETE, FOUND AND ACCEPTED AS THE SOUTHEAST CORNER OF SAID SECTION 2, IN ALL BEING 5295.8 FEET OR 320.96 RODS IN LENGTH.

NOTES:
1. BASIS OF BEARING, COORDINATES, AND DISTANCES ARE A LAMBERT CONICAL PROJECTION OF THE TEXAS COORDINATE SYSTEM, STATE PLANE GRID, NAD 83, TEXAS CENTRAL (4203), WITH A CONVERGENCE ANGLE OF -01°28'25.48" AND A COMBINED SCALE FACTOR OF 0.999843640, BASED ON VRS NETWORK STATION "WINK 1219" LOCATED AT LAT: N31°46'57.07002", LON: W103°11.40.73162"
2. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF IMPROVEMENTS AND/OR EASEMENTS WERE BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAVE BEEN SPECIFICALLY OMITTED.
3. SEE DOCUMENTS. AND ELECTRIC DATA FILED IN THE OFFICE OF WTC INC., FOR COMPLETE RECONSTRUCTION OF THESE SECTIONS OR BLOCKS, USING GLO AND/OR COURTHOUSE SURVEY DOCUMENTS.

1000 0 1000 2000 FEET

SCALE: 1" = 1000'

STATE OF TEXAS REGISTERED JAMES C. TOMPKINS 6768 PROFESSIONAL LAND SURVEYOR

I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED FROM ACTUAL FIELD NOTES OR ELECTRONIC DATA OF AN ON-THE-GROUND SURVEY MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

JAMES C. TOMPKINS, RPLS #6768 — DATE: 12/06/2022

SURVEY DATE: 11/22/2022
JOB NO.: WTC55639
DRAFT: JY
SHEET: 05 OF 07

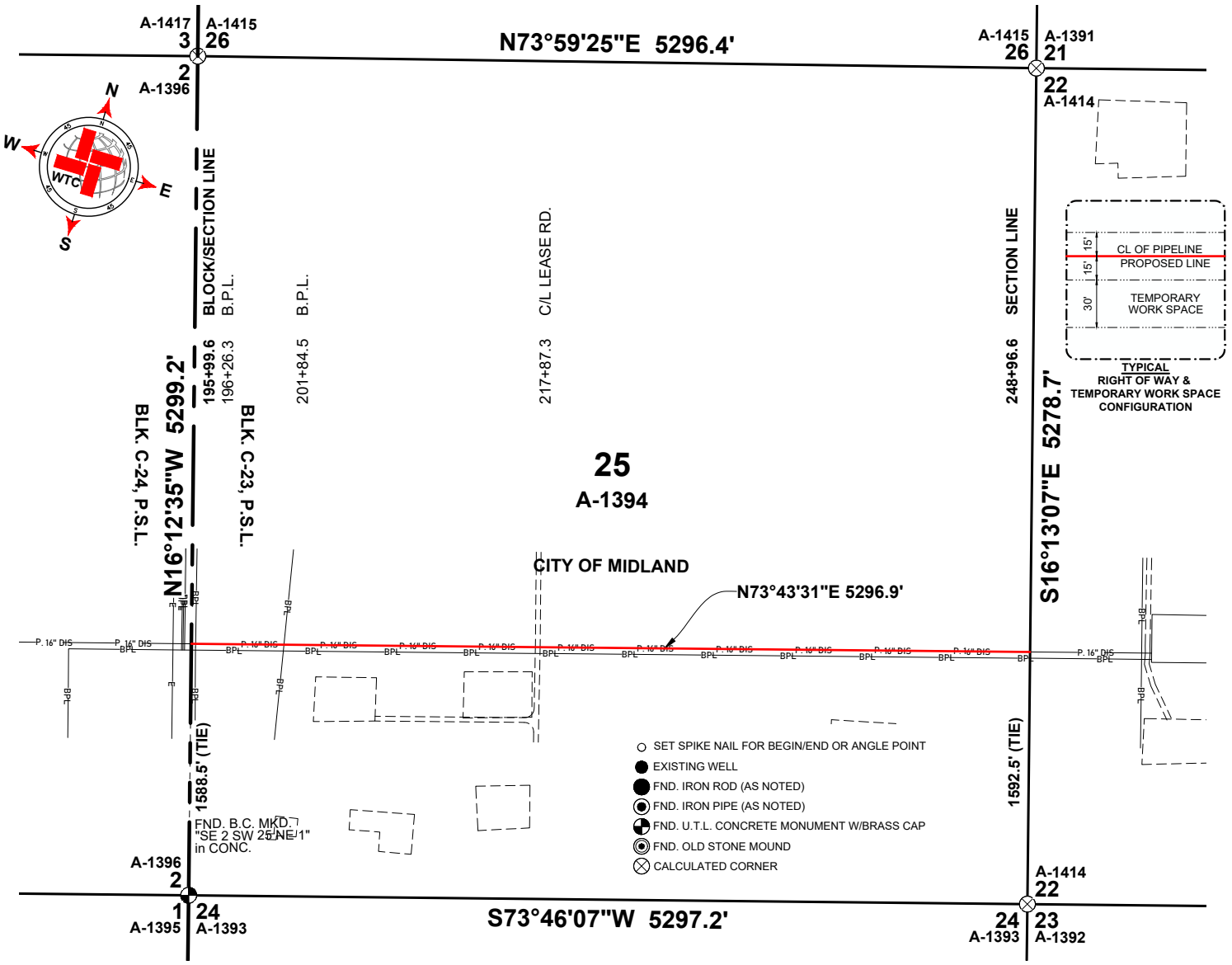
PACKET 10.9 January 24, 2023

TARGA-HILO (CRITTENDEN)
A PROPOSED 16" DISCHARGE EXTENSION PIPELINE CROSSING SEC. 2, BLK. C-24, A-1396, P.S.L., SURVEY, WINKLER COUNTY, TX

W T C, INC.
405 S.W. 1st Street
Andrews, TX 79714
(432) 523-2181
ENGINEERS I SURVEYORS
TEXAS REGISTERED ENGINEERING FIRM F-2746
TEXAS REGISTERED SURVEYOR FIRM #100792-00

PLAT: D:\FH\WTC DWG\55639-TARGA, HILO DISCHARGE EXTENSION PIPELINE LAYOUT TAB: TEXAS-12/6/2022 1:17 PM FHERNANDEZ

SECTION 25, BLOCK C-23, ABSTRACT 1394, PUBLIC SCHOOL LAND SURVEY,
WINKLER COUNTY, TX



CENTERLINE DESCRIPTION

CENTERLINE DESCRIPTION OF A PROPOSED 16" DISCHARGE EXTENSION PIPELINE, BEING 30 FEET IN WIDTH AND 5296.9 FEET IN LENGTH CROSSING SECTION 25, BLOCK C-23, ABSTRACT 1394, PUBLIC SCHOOL LAND SURVEY, WINKLER COUNTY, TEXAS, BEING 15 FOOT LEFT AND 15 FOOT RIGHT OF THE SURVEY OF CENTERLINE AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT A POINT ON THE WEST LINE OF SAID SECTION 25, WHICH LIES N.16°12'35"W., 1588.5 FEET, FROM A FROM A BRASS CAP MARKED "SE 2 SW 25 NE 1" IN CONCRETE, FOUND AND ACCEPTED AS THE SOUTHWEST CORNER OF SAID SECTION 25;
THENCE N.73°43'31"E., 5296.9 FEET TO A POINT ON THE EAST LINE OF SAID SECTION 25, WHICH LIES N.16°13'07"W., 1592.5 FEET, FROM A POINT CALCULATED FOR THE SOUTHEAST CORNER OF SAID SECTION 25, IN ALL BEING 5296.9 FEET OR 321.02 RODS IN LENGTH.

NOTES:

1. BASIS OF BEARING, COORDINATES, AND DISTANCES ARE A LAMBERT CONICAL PROJECTION OF THE TEXAS COORDINATE SYSTEM, STATE PLANE GRID, NAD 83, TEXAS CENTRAL (4203), WITH A CONVERGENCE ANGLE OF -01°28'25.48" AND A COMBINED SCALE FACTOR OF 0.999843640, BASED ON VRS NETWORK STATION "WINK 1219" LOCATED AT LAT: N31°46'57.07002", LON: W103°11.40.73162"
2. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF IMPROVEMENTS AND/OR EASEMENTS WERE BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAVE BEEN SPECIFICALLY OMITTED.
3. SEE DOCUMENTS. AND ELECTRIC DATA FILED IN THE OFFICE OF WTC INC., FOR COMPLETE RECONSTRUCTION OF THESE SECTIONS OR BLOCKS, USING GLO AND/OR COURTHOUSE SURVEY DOCUMENTS.

1000 0 1000 2000 FEET

SCALE: 1" = 1000'

STATE OF TEXAS REGISTERED JAMES C. TOMPKINS 6768 PROFESSIONAL LAND SURVEYOR

I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED FROM ACTUAL FIELD NOTES OR ELECTRONIC DATA OF AN ON-THE-GROUND SURVEY MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

JAMES C. TOMPKINS, RPLS #6768 — DATE: 12/06/2022

SURVEY DATE: 11/22/2022
JOB NO.: WTC55639
DRAFT: JY
SHEET: 06 OF 07

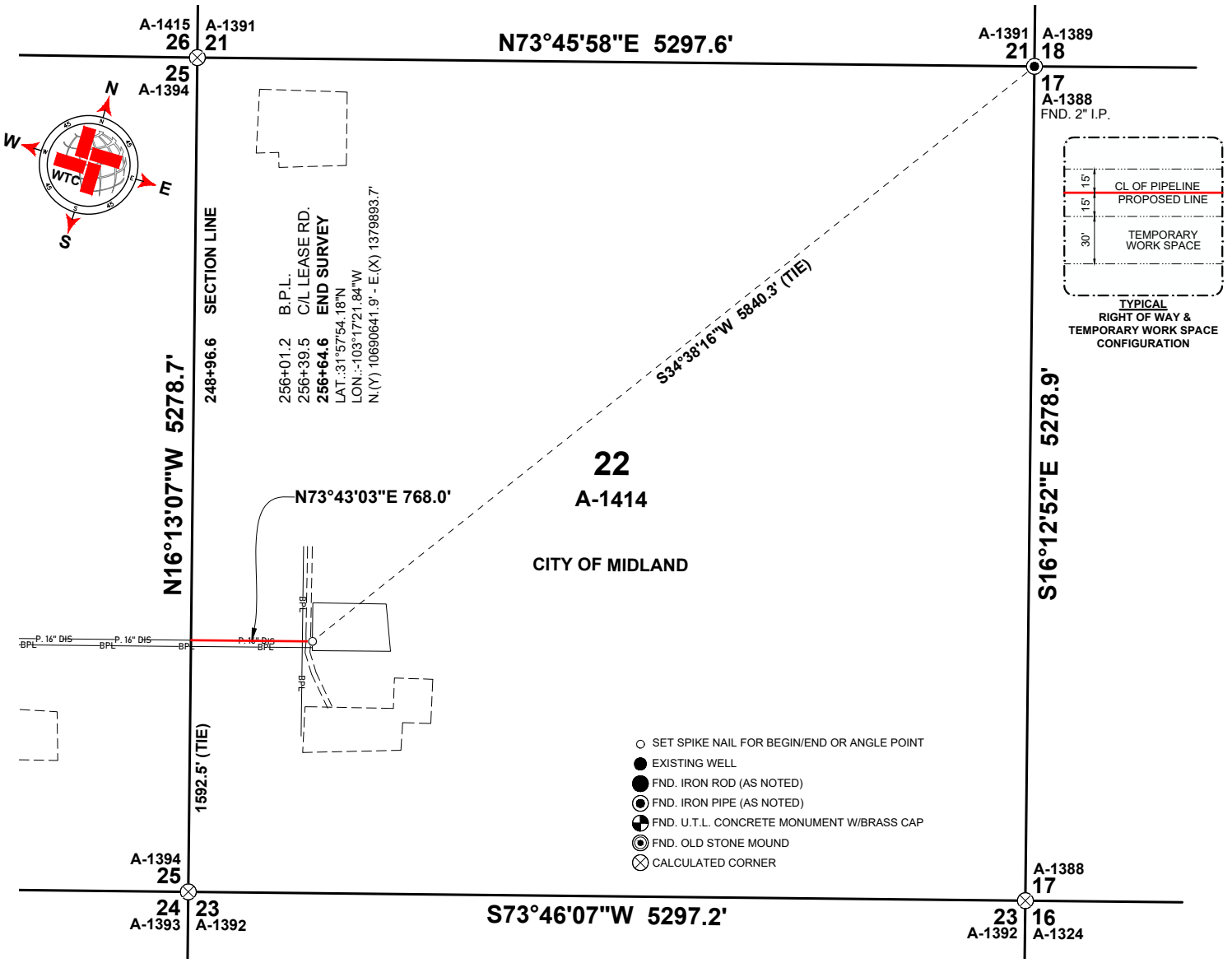
PACKET 10.10 January 24, 2023

TARGA-HILO (CRITTENDEN)
A PROPOSED 16" DISCHARGE EXTENSION PIPELINE CROSSING SEC. 25, BLK. C-23, A-1394, P.S.L., SURVEY, WINKLER COUNTY, TX

W T C, INC.
405 S.W. 1st Street
Andrews, TX 79714
(432) 523-2181
ENGINEERS I SURVEYORS
TEXAS REGISTERED ENGINEERING FIRM F-2746
TEXAS REGISTERED SURVEYOR FIRM #100792-00

PLAT: D:\FH\WTC DWG\55639-TARGA, HILO DISCHARGE EXTENSION PIPELINE LAYOUT TAB: TEXAS-12/6/2022 1:17 PM FHERNANDEZ

SECTION 22, BLOCK C-23, ABSTRACT 1414, PUBLIC SCHOOL LAND SURVEY,
WINKLER COUNTY, TX



CENTERLINE DESCRIPTION

CENTERLINE DESCRIPTION OF A PROPOSED 16" DISCHARGE EXTENSION PIPELINE, BEING 30 FEET IN WIDTH AND 768.0 FEET IN LENGTH CROSSING SECTION 22, BLOCK C-23, ABSTRACT 1414, PUBLIC SCHOOL LAND SURVEY, WINKLER COUNTY, TEXAS, BEING 15 FOOT LEFT AND 15 FOOT RIGHT OF THE SURVEY OF CENTERLINE AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT A POINT ON THE WEST LINE OF SAID SECTION 22, WHICH LIES N.16°13'07"W., 1592.5 FEET, FROM A POINT CALCULATED FOR THE SOUTHWEST CORNER OF SAID SECTION 22;
THENCE N.73°43'03"E., 768.0 FEET TO A SET SPIKE NAIL FOR THE END OF SURVEY IN SAID SECTION 22, WHICH LIES S.34°38'16"W., 5840.3 FEET, FROM A TWO INCH IRON PIPE, FOUND AND ACCEPTED AS THE NORTHEAST CORNER OF SAID SECTION 22, IN ALL BEING 768.0 FEET OR 46.55 RODS IN LENGTH.

NOTES:
1. BASIS OF BEARING, COORDINATES, AND DISTANCES ARE A LAMBERT CONICAL PROJECTION OF THE TEXAS COORDINATE SYSTEM, STATE PLANE GRID, NAD 83, TEXAS CENTRAL (4203), WITH A CONVERGENCE ANGLE OF -01°28'25.48" AND A COMBINED SCALE FACTOR OF 0.999843640, BASED ON VRS NETWORK STATION "WINK 1219" LOCATED AT LAT: N31°46'57.07002", LON: W103°11.40.73162"
2. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF IMPROVEMENTS AND/OR EASEMENTS WERE BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAVE BEEN SPECIFICALLY OMITTED.
3. SEE DOCUMENTS. AND ELECTRIC DATA FILED IN THE OFFICE OF WTC INC., FOR COMPLETE RECONSTRUCTION OF THESE SECTIONS OR BLOCKS, USING GLO AND/OR COURTHOUSE SURVEY DOCUMENTS.

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SCALE: 1" = 1000'

STATE OF TEXAS REGISTERED JAMES C. TOMPKINS 6768 PROFESSIONAL LAND SURVEYOR

I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED FROM ACTUAL FIELD NOTES OR ELECTRONIC DATA OF AN ON-THE-GROUND SURVEY MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

JAMES C. TOMPKINS, RPLS #6768 — 12/06/2022 DATE

SURVEY DATE: 11/22/2022
JOB NO.: WTC55639
DRAFT: JY
SHEET: 07 OF 07

PACKET 10.11 January 24, 2023

TARGA-HILO (CRITTENDEN)
A PROPOSED 16" DISCHARGE EXTENSION PIPELINE CROSSING SEC. 22, BLK. C-23, A-1414, P.S.L., SURVEY, WINKLER COUNTY, TX

W T C, INC.
405 S.W. 1st Street
Andrews, TX 79714
(432) 523-2181
ENGINEERS I SURVEYORS
TEXAS REGISTERED ENGINEERING FIRM F-2746
TEXAS REGISTERED SURVEYOR FIRM #100792-00

PLAT: D:\FH\WTC DWG\55639-TARGA, HILO DISCHARGE EXTENSION PIPELINE LAYOUT TAB: TEXAS-12/6/2022 1:17 PM FHERNANDEZ

RIGHT OF WAY LICENSE

THE STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF MIDLAND §

Date:	January 25, 2023
Licensor:	CITY OF MIDLAND, TEXAS, a home-rule municipal corporation
Licensor's Representative:	Robert Patrick, City Manager
Licensor's Mailing Address:	P.O. Box 1152 Midland, Texas 79702
Licensee:	**Targa Delaware LLC**
Licensee's Representative:	**Norman L. Winter**
Licensee's Mailing Address:	811 Louisiana St., Suite 2100 Houston, Texas 77002
Property:	As described in Article III below
License Number:	**23-495-003**

Licensee desires use of certain Property (as defined below) owned by Licensor in Winkler County, Texas, for purposes set forth below. Licensee acknowledges and agrees that it must obtain a license (the "License") in order to use the public lands of Licensor.

W I T N E S S E T H:

For and in consideration of the execution of this license (this "License") and the mutual promises and covenants of the parties hereto, it is mutually promised, understood and agreed as follows:

I. Term

A. Term. This License shall be for a term of ten (10) years commencing on the date of this License (the "Commencement Date") unless terminated earlier as provided hereafter.

B. Termination. Licensor may terminate this License if Licensee fails to pay, when due, any amount owing under this License and that failure continues for sixty (60) days or, if Licensee commits any material breach or material default in performance of any obligation, prohibition, restriction, provision or covenant contained in this License, and the breach or default continues for a period of thirty (30) days after Licensor delivers notice to Licensee reasonably detailing the breach or default.

Additionally, Licensor may terminate this License at will for any or no reason upon giving at least three hundred sixty-five (365) days' written notice to Licensee. The parties to this License understand and agree that it is in Licensor's sole discretion to terminate this License during the term of this License without penalty to Licensor. Licensee has no expectation and has received no guarantees that this License will not be terminated before the end of the License term. The parties have bargained for the flexibility of terminating this License upon tender of the requisite notice at any time during the term of this License. All work and services under this License shall be suspended upon termination of this License.

Upon expiration or termination of this License, Licensee shall remove all equipment and structures associated with the undertakings contemplated by this License. After removal of all equipment and structures associated with the undertakings contemplated by this License, the surface of the Property shall be restored at the expense of Licensee to its original condition, as close thereto as may be practical, subject to the approval of Licensor upon inspection by Licensor's Representative, which approval shall not be unreasonably withheld. All of said work shall be completed within one hundred eighty (180) days after the expiration or termination of this License. All of the terms, provisions and requirements of this paragraph shall survive the expiration or termination of this License.

II. Financial Consideration

A. License Fee. A license fee in the amount of ONE HUNDRED NINETY-TWO THOUSAND SEVEN HUNDRED EIGHTY-EIGHT and 40/100 Dollars ($192,788.40) ("License Fee") shall be due and payable on or prior to the Commencement Date.

In the event Licensor terminates this License pursuant to the provisions of Section I.B., Licensor agrees to refund to Licensee a pro rata share of the License Fee actually paid by Licensee to Licensor for that portion of the remaining term that is being terminated. For the avoidance of doubt, the amount of any refund payable to Licensee pursuant to this paragraph shall be determined net of any costs or expenses incurred by Licensor in connection with Licensee's unfulfilled obligations under this License (if any).

B. Application Fee. On or prior to the Commencement Date of this License, Licensee shall pay a non-refundable one-time fee of One Thousand and No/100 Dollars ($1,000.00) to Licensor's Representative. Said fee shall revert to Licensor and Licensee shall have no claim to said fee. The fee shall be used to process the application for this License.

C. Delivery of Payment. Payment of the above fees shall be made to Licensor at the office of Licensor's Representative, Attn: Right of Way Manager, P.O. Box 1152, Midland, Texas, 79702. Payment of the above fees shall be exclusive of and in addition to all general municipal taxes of whatever nature, including but not limited to ad valorem taxes and special taxes and assessments for public improvements.

D. Late Payment. Licensee's failure to make payment of any of the above fees within thirty (30) days after such fee is due shall constitute a late payment and Licensee shall pay Licensor a late charge of five percent (5%) of such fee.

III. Use

A. Permitted Use. Licensor does hereby grant unto Licensee, the right to enter upon the Property, being sixty (60) feet in width of the pipeline location as shown on **Exhibit A** attached hereto and incorporated herein for the purpose of operating, repairing, maintaining, replacing and removing, thereon, along the herein described pipeline locations, a steel construction pipeline, not to exceed sixteen (16) inches in diameter, for the transportation of natural gas and to have the right of ingress and egress at convenient points for such purpose and said construction width shall revert to thirty (30) feet after the powerline is completed (the "Property"). **Licensee shall provide Licensor with a complete as-built survey within sixty (60) days of completion of the pipeline(s) and facilities described herein. The parties agree Licensee's failure to provide Licensor with a complete as-built survey within sixty (60) days of completion of the pipeline(s) and facilities described herein may result in the termination of this License. The decision to accept a complete as-built survey after the sixty-day deadline prescribed herein, or, conversely, to terminate this License shall be in the sole and absolute discretion of Licensor.**

B. Road Repair. Licensee covenants and agrees that it will repair, at its own expense, any of Licensor's roads that Licensee, its employees, contractors, representatives, agents or assigns damage on Licensor's property, so that such roads will comply with Licensor's standard specifications.

C. Utility Repair. Licensee covenants and agrees that Licensee shall, at its own expense, repair all water lines, sewer lines, service lines, water meters and other utility lines owned by Licensor that Licensee, its employees, contractors, representatives, agents or assigns, damage so that such water lines, sewer lines, water meters and other utility lines shall comply with Licensor's standard specifications.

D. Pipeline Depth. Licensee covenants and agrees that it will bury the pipeline to be constructed hereunder no less than forty-eight (48) inches in depth. All backfill used in burying such pipeline shall be compacted to a density of ninety percent (90%), except where such pipeline crosses under a paved or traveled portion of any City of Midland right of way where such backfill shall be compacted to a density of ninety-five percent (95%). Licensor shall be afforded the opportunity to test the density on all backfill. Notwithstanding any provision to the contrary contained herein, Licensee covenants and agrees that, at any point that Licensee's pipeline intersects with a City of Midland utility line location, the pipeline shall be bored at a depth of at least (i) nine (9) feet under all City of Midland water utility lines and (ii) two (2) feet under all City of Midland sewer utility lines. Licensee agrees that it shall comply with 30 Tex. Admin. Code § 290.44(e), as amended, to the extent applicable to this License.

E. Approval of Bids. Before Licensee seeks bids on any phase of the repair of public streets, alleys, water lines, sewer lines or any other public utilities, Licensee shall first obtain written approval of the specifications therefor from Licensor's Representative, which approval shall be at Licensor's Representative's sole discretion.

F. Reservation of Rights. Licensor expressly reserves the right to install, repair, or reconstruct streets or roads and all ancillary public uses usual and customary in connection with streets and roads, expressly including but not limited to drainage facilities and related structures in the rights of way used and occupied by Licensee.

Licensor reserves the right to lay and permit to be laid, sewer, gas, water, and other pipelines or cables and conduits, and to do and permit to be done, any underground or overhead installation or improvement that may be deemed necessary or proper by the governing body of Licensor, in, on, across, along, over, under, and through any property occupied by Licensee. In permitting such work to be done, Licensor shall not be liable to Licensee for any damage so caused to Licensee's system or property, **NOR SHALL LICENSOR BE LIABLE TO LICENSEE FOR ANY DAMAGES TO LICENSEE'S PIPELINE ARISING OUT OF THE NEGLIGENCE BY LICENSOR, ITS EMPLOYEES, OFFICERS OR AGENTS, OR LICENSOR'S CONTRACTORS OR SUBCONTRACTORS.** If Licensor requires Licensee to remove, alter, change, adapt, or conform Licensee's facilities because of changes in the grade or construction of a street or in the location or manner of constructing a water pipe, sewer pipe, or other surface, underground or aboveground structure owned by Licensor, Licensee shall make the alterations or changes as soon as practicable, and in no event longer than one hundred eighty (180) days, when ordered in writing by Licensor, without claim for reimbursement for the cost of the relocation or for damages against Licensor. If these requirements impose a financial hardship upon Licensee, Licensee shall have the right to present alternative proposals for Licensor's consideration.

G. Non-exclusive. Licensor expressly reserves the full right to grant other easements or rights of way crossing or running parallel with the rights of way used by Licensee.

H. Abandonment. It is especially provided, however, that as an express condition of this License, and not as a mere covenant, in the event Licensee abandons any equipment or appurtenances associated with the undertakings contemplated by this License, or the Property ceases to be used for the purposes enumerated herein for any period of twelve (12) consecutive months, or longer, other than the time elapsing between the date hereof and construction, and upon giving Licensee one hundred and twenty (120) days' written notice, then and in that event, this License shall automatically terminate and revert to Licensor, its successors or assigns, free and clear of any right, title, or interest of Licensee.

I. Approval of Specifications. In the event Licensee desires to reconstruct, repair, alter, replace or remove any pipeline built hereunder, Licensee shall submit the plans and specifications that pertain to the rebuilding or repairs of Licensor's streets and roads and the rebuilding or repairs of any of Licensor's public utilities to Licensor's Representative for his or her prior written approval, which approval shall be at Licensor's Representative's sole discretion. In the event of emergency repairs necessary to restore service, Licensee shall notify Licensor's Representative before making any repairs if during a Licensor workday. If not on a workday, Licensee shall notify Licensor's Representative on the first workday after repairs have begun.

J. Gates and Fences. Without altering or expanding the limitations on ingress, egress and access to the Property set forth in Paragraph A. of Article III above, Licensee agrees to use existing gates and roadways where available, to enter, leave and cross the Property; provided that Licensee shall not use any road marked "Closed". Licensee and all persons entering or leaving the Property in connection with Licensee's operations hereunder shall keep all outside and interior gates securely closed except during operations related to this License. Licensee shall keep all outside gates, and all other gates designated by Licensor, securely locked except during operations related to this License. At any gate that is to be locked, Licensor may install its own lock in addition to Licensee's lock.

Licensee agrees that Licensee shall not cut or go over any fence at any time or in connection with any operations on the Property without first obtaining Licensor's express prior consent thereto in writing. All gates or openings in fences shall be at mutually agreeable location(s) between Licensee and Licensor and shall be constructed as reasonably required by Licensor. Upon the termination of this License, at Licensor's election, gates in fences shall be left in place and shall thereafter be owned by Licensor or Licensee shall remove such gates and restore the fence to its original condition as nearly as reasonably practicable. The terms, provisions and requirements of this provision shall survive the termination or expiration of this License.

K. Trash. Licensee shall keep the Property free of trash and debris at all times. Under no circumstances, will Licensee be allowed to bury any trash, debris or foreign material of any kind on or under the Property. Licensor shall have the right to expel and permanently ban from the Property any person observed disposing of trash on the Property. Upon the completion of any operations, all ribbons, flags, stakes and similar items shall by promptly removed from the Property.

L. Hunting, Fishing and Alcohol Prohibited. No agent, employee, representative, contractor or subcontractor of Licensee or any other person allowed to enter the Property by Licensee shall be permitted to hunt, fish, trap, camp, picnic, ride motorcycles or four-wheelers or otherwise conduct any social gathering on the Property, nor shall any such persons be permitted to bring firearms, archery equipment, dogs, alcoholic beverages or illegal drugs on the Property at any time. Violations of this provision shall cause the violator to be regarded as a trespasser and subject to prosecution under trespass laws of the State of Texas. Licensor shall have the right to expel and permanently ban from the Property any person observed on the Property in violation of this provision.

M. Storage of Machinery and Equipment. Licensee shall use no part of the Property to store machinery, equipment, or other property of Licensee while it is not being used.

N. Additional Reservations. Licensor reserves the right to use the surface, subsurface or airspace on, below or above the land covered by this License for any purpose allowed by law and deemed necessary or proper by Licensor and to do and permit to be done, any work in connection therewith which may be deemed necessary or proper by Licensor in, on, across, along, over, under, and through any portion of the Property. In the event of such work in connection with said purposes it shall be deemed necessary or proper by Licensor, at Licensor's sole discretion, to alter, change, or relocate any pipeline, property, or casing of Licensee, such alteration or change or relocation shall be commenced and completed by Licensee within one hundred eighty (180) days after being ordered in writing by Licensor pursuant to directions from Licensor without any claim for reimbursement for the cost of the alteration, change or relocation or damages against Licensor. The relocation, change, or alteration shall be at the sole cost of Licensee. Provided, however, that Licensee shall at all times be entitled to receive from appropriate governmental bodies, excluding Licensor, payment for alteration, change or relocation of its system to which it may be lawfully entitled to under applicable federal or state laws with respect to relocation payments. Without limiting the foregoing, Licensor expressly reserves the full right to grant other licenses, easements and/or rights-of-way in, on, across, along, over, under or through all or any portion of the Property. Licensor expressly reserves the right to use and grant to third parties the right to use all or any portion of the Property and the surface, subsurface or airspace on, below or above the Property for

any purpose.

IV. Standard General Conditions

A. Insurance. Licensee shall at all times during the term of this License maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):	
■ Personal Injury:	$1,000,000.00 per person $1,000,000.00 per occurrence
■ Property Damage:	$100,000.00 per occurrence
Business Automobile Liability:	$1,000,000.00 combined single limit-- Personal Injury and Property Damage
Workers' Compensation:	Statutory limits
Employers' Liability:	$1,000,000.00 per accident or occurrence
Umbrella Liability:	$10,000,000.00 each occurrence $10,000,000.00 aggregate

The Commercial General Liability shall be on an occurrence basis. This insurance shall name Licensor as an additional insured and all insurance shall waive subrogation in favor of Licensor.

The Workers' Compensation coverage provided by Licensee shall inure to the benefit of employees injured during the course and scope of their employment by Licensee pursuant to this License. The Workers' Compensation insurance shall waive all rights of subrogation against Licensor.

The Business Automobile Liability insurance provided by Licensee shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-owner vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of $1,000,000.00 covering any vehicle used for the execution of the work that is the subject of this License. This insurance shall name Licensor as an additional insured and all insurance shall waive subrogation in favor of Licensor.

All insurance required pursuant to this License, except for Worker's Compensation Insurance, shall name Licensor as an additional insured. All insurance required pursuant to this License, including Worker's Compensation Insurance, shall provide for a waiver of subrogation as to Licensor. The parties agree that, prior to the execution of this License, Licensee shall provide one or more certificates of insurance showing that the requirements of this article have been met. Licensor shall determine, in its sole discretion, whether such requirements have been satisfied.

Licensor shall be provided written notice by Licensee's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage. Licensor shall not be required to provide any insurance whatsoever pursuant to this License.

Licensee shall contractually require all contractors, subcontractors, and sub-subcontractors that work on any portion of the work that is the subject of this License to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts as required herein and name the City of Midland as an additional insured (except as to Worker's Compensation Insurance). Licensee certifies that the one or more certificates of insurance provided as required herein complies with the requirements of Chapter 1811 of the Texas Insurance Code. Licensee shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of Licensee.

B. Indemnity. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, LICENSEE, ITS SUCCESSORS AND ASSIGNS, AGREE TO INDEMNIFY, PROTECT, DEFEND AND HOLD HARMLESS LICENSOR AND LICENSOR'S REPRESENTATIVES, AGENTS, ATTORNEYS, EMPLOYEES, SUCCESSORS AND ASSIGNS (COLLECTIVELY, "INDEMNITEES") FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LOSSES, DAMAGES, LIABILITIES, LIENS, FINES, PENALTIES, CAUSES OF ACTION, SUITS, CHARGES, JUDGMENTS, ADMINISTRATIVE ORDERS, REMEDIATION REQUIREMENTS, ENFORCEMENT ACTIONS OF ANY KIND, PERSONAL INJURIES, PROPERTY DAMAGE, AND ALL COSTS AND EXPENSES INCURRED IN CONNECTION THEREWITH (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES AND EXPENSES, INCLUDING, WITHOUT LIMITATION, ALL ATTORNEYS' FEES AND EXPENSES INCURRED IN ENFORCING THIS INDEMNITY) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY, DIRECTLY OR INDIRECTLY ARISING OUT OF, CAUSED BY OR RESULTING FROM (IN WHOLE OR IN PART) THIS LICENSE, LICENSEE'S USE OF OR ACTIVITIES ON THE PROPERTY OR ANY OTHER PROPERTY OWNED BY LICENSOR, OR ANY ACT OR OMISSION OF LICENSEE, ANY CONTRACTOR, SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THEM, OR ANYONE THAT THEY CONTROL OR EXERCISE CONTROL OVER (COLLECTIVELY, "LIABILITIES"), EVEN IF SUCH LIABILITIES ARISE FROM OR ARE ATTRIBUTED, IN WHOLE OR IN PART, TO THE NEGLIGENCE OF ANY INDEMNITEE. LICENSEE SHALL PROMPTLY ADVISE LICENSOR OF ANY ACTION, ADMINISTRATIVE OR LEGAL PROCEEDING OR INVESTIGATION TO WHICH THIS INDEMNIFICATION MAY APPLY, AND OF WHICH LICENSEE HAS RECEIVED NOTICE, AND LICENSEE, AT LICENSEE'S EXPENSE, SHALL ASSUME ON BEHALF OF LICENSOR (AND THE OTHER INDEMNITEES) AND CONDUCT WITH DUE DILIGENCE AND IN GOOD FAITH THE DEFENSE THEREOF WITH COUNSEL REASONABLY SATISFACTORY TO LICENSOR; PROVIDED, HOWEVER, THAT ANY INDEMNITEE SHALL HAVE THE RIGHT, AT ITS OPTION, TO BE REPRESENTED THEREIN BY COUNSEL OF ITS OWN SELECTION AND AT ITS OWN EXPENSE. IN THE EVENT OF FAILURE BY LICENSEE TO ASSUME THE DEFENSE OF LICENSOR IN ACCORDANCE WITH THIS INDEMNIFICATION, LICENSOR, AT ITS OPTION, AND WITHOUT RELIEVING LICENSEE OF ITS OBLIGATION HEREUNDER, MAY ASSUME SUCH DEFENSE, AFTER WRITTEN NOTICE THEREOF TO LICENSEE AND LICENSEE'S FAILURE TO RESPOND THERETO WITHIN TEN (10) BUSINESS DAYS AFTER RECEIPT OF SUCH NOTICE (SAID TEN (10) DAY PERIOD SHALL NOT APPLY IN ANY CASE WHERE IMMEDIATE ANSWERS, RESPONSES, OR OTHER

AFFIRMATIVE ACTION IS REQUIRED TO PRESERVE THE RIGHTS OF LICENSOR) BUT ALL REASONABLE COSTS AND EXPENSES SO INCURRED BY LICENSOR IN THAT EVENT SHALL BE REIMBURSED BY LICENSEE TO LICENSOR, TOGETHER WITH INTEREST ON THE SAME FROM THE DATE ANY SUCH EXPENSE WAS PAID BY LICENSOR UNTIL REIMBURSED BY LICENSEE, AT THE RATE OF INTEREST PROVIDED TO BE PAID ON JUDGMENTS, BY THE LAWS OF THE STATE OF TEXAS.

WITHOUT LIMITING THE FOREGOING, LICENSEE AGREES THAT LICENSEE SHALL INDEMNIFY, PROTECT, DEFEND AND SAVE LICENSOR HARMLESS FROM ANY AND ALL CLAIMS, LIENS, JUDGMENTS, SUITS, CAUSES OF ACTION, AND DEMANDS OF ANY SUBCONTRACTORS, LABORERS, WORKMEN, MECHANICS, MATERIALMEN, OR FURNISHERS OF MACHINERY AND PARTS THEREOF, EQUIPMENT, POWER TOOLS, OR SUPPLIES, IN CONNECTION WITH THE CONSTRUCTION, OPERATION, REPAIR, MAINTENANCE, REPLACEMENT OR REMOVAL OF THE PIPELINE OR OTHER PERMITTED FACILITIES DESCRIBED HEREIN.

WITHOUT LIMITING ANY OF THE FOREGOING, LICENSEE SHALL INDEMNIFY, PROTECT AND HOLD HARMLESS AND DEFEND EACH INDEMNITEE FROM ALL LIABILITIES, SUITS, ACTIONS, CLAIMS, DAMAGES, CAUSES OF ACTION, CHARGES, JUDGMENTS, PERSONAL INJURIES, ACCIDENTAL DEATH, PROPERTY DAMAGE, LOSSES AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY ON ACCOUNT OF ANY NEGLIGENT ACT OF ANY INDEMNITEE, WHETHER SUCH NEGLIGENT ACT WAS THE SOLE PROXIMATE CAUSE OF THE INJURY OR DAMAGE OR A PROXIMATE CAUSE JOINTLY AND CONCURRENTLY WITH LICENSEE OR LICENSEE'S EMPLOYEES', REPRESENTATIVES', AGENTS', CONTRACTORS' OR SUBCONTRACTORS' NEGLIGENCE, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS LICENSE, INCLUDING, WITHOUT LIMITATION, SUCH NEGLIGENT ACTS ARISING FROM OR IN ANY WAY CONNECTED WITH THE PLACEMENT, CONSTRUCTION, OPERATION, REPAIR, MAINTENANCE, REPLACEMENT OR REMOVAL OF ANY PART OF LICENSEE'S PIPELINE OR PERMITTED FACILITIES ON LICENSOR'S PROPERTY. LICENSEE WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST LICENSOR OR ANY INDEMNITEE, INCLUDING RELATED ATTORNEY'S FEES.

WITHOUT LIMITING ANY OF THE FOREGOING, LICENSEE, ITS SUCCESSORS AND ASSIGNS, SHALL INDEMNIFY, PROTECT, DEFEND AND HOLD INDEMNITEES HARMLESS FROM AND AGAINST ALL CLAIMS, LOSSES, DAMAGES, LIABILITIES, LIENS, FINES, PENALTIES, CAUSES OF ACTION, SUITS, CHARGES, JUDGMENTS, ADMINISTRATIVE ORDERS, REMEDIATION REQUIREMENTS, ENFORCEMENT ACTIONS OF ANY KIND, PERSONAL INJURIES, PROPERTY DAMAGE, AND ALL COSTS AND EXPENSES INCURRED IN

CONNECTION THEREWITH (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES AND EXPENSES, INCLUDING, WITHOUT LIMITATION, ALL ATTORNEYS' FEES AND EXPENSES INCURRED IN ENFORCING THIS INDEMNITY) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY, DIRECTLY OR INDIRECTLY ARISING OUT OF, CAUSED BY OR RESULTING FROM (IN WHOLE OR IN PART) (i) FAILURE OF LICENSEE, ANY CONTRACTOR, SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THEM, OR ANYONE THAT THEY CONTROL OR EXERCISE CONTROL OVER (COLLECTIVELY, THE "INDEMNIFYING PARTIES"), TO COMPLY WITH ALL APPLICABLE LOCAL, FEDERAL AND/OR STATE ENVIRONMENTAL LAWS, INCLUDING BUT NOT LIMITED TO THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) AND THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) (AS THEY MAY BE REAUTHORIZED AND/OR AMENDED) AND ALL OTHER LOCAL, FEDERAL AND STATE LAWS, IN CONNECTION WITH OR RELATED TO ANY INDEMNIFYING PARTY'S OPERATIONS OR ACTIVITIES ON THE PROPERTY, OR (ii) ANY INDEMNIFYING PARTY'S HANDLING, STORING, RELEASING OR TRANSPORTING OR DISPOSING OF ALL SUBSTANCES, INCLUDING BUT NOT LIMITED TO HAZARDOUS SUBSTANCES AND HAZARDOUS WASTES, ON OR FROM THE PROPERTY OR ANY OTHER LANDS OF LICENSOR.

IT IS THE INTENTION OF THE PARTIES HERETO THAT THE PROVISIONS OF THIS INDEMNIFICATION SHALL APPLY TO AND PROTECT EACH INDEMNITEE FROM THE CONSEQUENCES OF STRICT LIABILITY IMPOSED OR THREATENED TO BE IMPOSED ON SUCH INDEMNITEE, AS WELL AS FROM THE CONSEQUENCES OF THE NEGLIGENCE OF ANY INDEMNITEE, WHETHER OR NOT THAT NEGLIGENCE IS A CONTRIBUTING OR CONCURRING CAUSE OF ANY LIABILITY INDEMNIFIED AGAINST IN THIS ARTICLE IV.B.

THE TERMS, PROVISIONS, REQUIREMENTS AND OBLIGATIONS OF THIS ARTICLE IV.B. SHALL SURVIVE TERMINATION OR EXPIRATION OF THIS LICENSE, AND SHALL NOT BE LIMITED BY OR TO DAMAGES, COMPENSATION OR BENEFITS PAYABLE UNDER INSURANCE POLICIES, WORKER'S COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEES' BENEFIT ACTS.

C. Assignment. The provisions of this License shall inure to the benefit of and be binding upon Licensor and Licensee and their respective successors and permitted assigns. The rights and privileges granted by Licensor under this License inure to the benefit of Licensee. No rights, privileges or obligations hereunder shall be assignable by Licensee without the express prior written consent of Licensor. Any required consent is to be evidenced by a letter written by Licensor's City Manager that fully recites the terms and conditions, if any, upon which consent is given. The granting of consent is in the sole discretion of Licensor's City Manager

D. Independent Contractor. It is expressly understood and agreed that Licensee shall perform all work described herein as an independent contractor and not as an officer, agent, servant or employee of Licensor; that Licensee shall have exclusive control of and the exclusive right to control the details of the work performed hereunder, and all persons performing the same; and

shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors; that the doctrine of respondeat superior shall not apply as between Licensor and Licensee, its officers, agents, employees, contractors and subcontractors; and that nothing herein shall be construed as creating a partnership or joint enterprise between Licensor and Licensee. No person performing any of the work described hereunder shall be considered an officer, agent, servant or employee of Licensor. Further, it is specifically understood and agreed that nothing in this License is intended or shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control" which would give rise to vicarious liability. Licensee shall be an independent contractor under this License and shall assume all of the rights, obligations and liabilities applicable to it as such independent contractor hereunder. Licensor does not have the power to direct the order in which the work is done. Licensor shall not have the right to control the means, methods or details of Licensee's work. Licensee shall assume exclusive responsibility for the work. Licensee is entirely free to do the work in its own way. The provisions of this subparagraph (D.) shall not be deemed or construed as contradicting, limiting or conflicting with the provisions of subparagraph (M.) below.

E. Attorney Fees. SHOULD LICENSOR BE REQUIRED TO RESORT TO EMPLOYMENT OF ATTORNEYS TO ENFORCE THIS LICENSE, OR ANY OF ITS RIGHTS UNDER THIS LICENSE, LICENSOR SHALL BE ENTITLED TO REIMBURSEMENT FROM LICENSEE FOR LICENSOR'S ATTORNEYS' FEES. LICENSEE SHALL REIMBURSE LICENSOR FOR LICENSOR'S ATTORNEYS' FEES INCURRED IN CONNECTION WITH THE PREPARATION AND NEGOTIATION OF THIS LICENSE. BY EXECUTING THIS LICENSE, LICENSEE AGREES TO WAIVE, AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE, ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST LICENSOR REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THIS LICENSE, OR THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS LICENSE. WITHOUT LIMITING THE FOREGOING, LICENSEE SPECIFICALLY AGREES THAT IF LICENSEE BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS LICENSE, OR TO THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS LICENSE, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, LICENSEE AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH LICENSEE MIGHT OTHERWISE BE ENTITLED.

LICENSEE AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING, KNOWN RIGHT. LICENSEE ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS LICENSE. LICENSEE FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN LICENSOR AND LICENSEE. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF GOVERNMENTAL IMMUNITY.

LICENSEE AND LICENSOR ARE RELYING ON THEIR OWN JUDGMENT. EACH

PARTY HAD THE OPPORTUNITY TO DISCUSS THIS LICENSE WITH LEGAL COUNSEL PRIOR TO ITS EXECUTION.

F. Governing Law & Venue. All performance and payments made pursuant to this License shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this License, or the performance of this License shall be in Midland County, Texas. The obligations and undertakings of each of the parties to this License shall be deemed to have been performed in Midland County, Texas. This License shall be construed, interpreted and enforced under the laws of the State of Texas. The laws of the State of Texas shall govern, construe and enforce all the rights and duties of the parties, including but not limited to tort claims and any and all other claims or disputes, arising from or relating in any way to the subject matter of this License, without regard to conflict of laws and rules that would direct application of the laws of another jurisdiction.

G. Release. NOTWITHSTANDING ANY OTHER PROVISIONS OF THIS LICENSE, LICENSEE HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES LICENSOR, AND LICENSOR'S EMPLOYEES AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH LICENSEE HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR LICENSOR'S NEGLIGENCE.

H. Governmental Immunity. By executing this License, Licensor is not waiving its right of governmental immunity. Licensor is retaining its immunity from suit. Licensor is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY.**

I. Third Party Beneficiary. Except as provided in Article IV.B. above with respect to Indemnitees, (i) Licensor's granting of this License does not create any third-party beneficiary, (ii) there is no third-party beneficiary to this License, and (iii) no person or entity who is not a party to this License shall have any third party beneficiary or other rights hereunder.

J. Notices. Any notice or communication required in the administration of this License shall be sent by certified mail, return receipt requested, to the parties' respective mailing addresses as set forth hereinabove.

K. Notice of Alleged Breach; Statutory Prerequisite. Without limiting the provisions of Article IV.G. above, as a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this License, Licensee or its legal representative, shall give the City Manager, or any other reasonable official of Licensor, notice in writing (consisting of one (1) original and seven (7) copies of notice attached to a copy of this License) of such damages, duly verified, within one hundred eighty (180) days after the same has been sustained. The discovery rule does not apply to the giving of this notice. The notice shall include when, where and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which Licensee will settle, the physical and mailing addresses of Licensee at the time and date the claim was presented and the physical and mailing addresses of Licensee for the six

(6) months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom Licensee relies to establish its claim; and a failure to so notify the City Manager or other such official of Licensor within the time and manner provided herein shall exonerate, excuse and except Licensor from any liability whatsoever. Licensor is under no obligation to provide notice to Licensee that Licensee's notice is insufficient. Licensor reserves the right to request reasonable additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after receipt of notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any other provision, Licensee's failure to comply with the requirements herein shall perpetually bar Licensee's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless if Licensor has actual or constructive notice or knowledge of said claim or alleged damages. Licensee agrees that the requirements of this entire License are reasonable.

L. Consideration. The terms of this License are supported by good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties named herein.

M. Waiver of Governmental Immunity; Chapter 271, TEX. LOC. GOV'T CODE. The parties hereto agree that this License does not constitute a "Contract" for providing goods and/or services to Licensor as discussed in Subchapter I of Chapter 271 of the Texas Local Government Code, and Licensor does not waive, to the maximum extent allowed by law, any constitutional, statutory or common law right to sovereign immunity or governmental immunity from liability or suit. Licensor expressly does not consent to be sued or be liable. To the maximum extent allowed by law, nothing in this License constitutes a waiver of Licensor's governmental immunity and the parties hereto expressly agree that this License shall not constitute, nor be interpreted as a waiver of Licensor's governmental immunity under Subchapter I of Chapter 271 of the Texas Local Government Code, nor shall it constitute nor be interpreted as a waiver of Licensor's governmental immunity for the benefit of any third-party lacking privity to this License.

This License does not obligate Licensee to use the Property to construct, repair, operate, replace, or maintain Licensor's facilities or structures described herein, rather, it merely prohibits Licensee from using the Property for any other purpose. This License restricts the use of the Property to a specific purpose but does not require the use of the Property for a specific purpose. Licensee is not providing a service to Licensor. Licensee is paying Licensor for temporary rights in real property, not for a service. Any such provision shall be deemed to be a covenant against noncomplying use, not a covenant to use. Licensee's use of the Property in compliance with a restriction shall not constitute a service, and such complying use shall not operate to waive Licensor's governmental immunity.

N. Compliance. Licensee agrees that it shall comply with Texas Government Code Section 2252.908, as amended, to the extent that this statute applies to this License. Licensee agrees that it shall comply with Texas Local Government Code Section 176.006, as amended, to the extent that this statute applies to this License.

O. Texas Historical Commission Survey. Licensee agrees that it shall comply with Chapter 191 of the Texas Natural Resources Code. By executing this License, Licensee represents that it has

contacted the Texas Historical Commission (the "Commission") for the purpose of determining whether the Commission will request that an archaeological survey be completed before Licensee commences operations on the Property, as contemplated herein. Licensee agrees that it shall complete or cause to be completed an archaeological survey before commencing any operations on the Property if the Commission so requests and deliver the same to Licensor. Notwithstanding any provision contained herein, in the event that any site, object, artifact, or other feature of archaeological, scientific, educational, cultural, or historical interest is encountered during the operations authorized by this License, Licensee will immediately notify Licensor and the Commission so that adequate measures may be undertaken to protect or recover such discoveries or findings, as deemed appropriate by Licensor or the Commission.

P. Waiver. No waiver of any of the provisions of this License shall be deemed or constitute a waiver of any other provisions of this License, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided. Likewise, the failure of Licensor to enforce any provision of this License shall not be deemed nor shall constitute a waiver of the right of Licensor to enforce such provision.

Q. Counterpart Execution. This License may be executed in several counterparts, and any such agreement shall be deemed an original for all intents and purposes.

R. No Release of Liability. Notwithstanding anything to the contrary contained in this License, the termination or expiration of this License shall not relieve Licensee of any liability, duty or obligation under this License, nor shall it preclude Licensor from asserting any right to specific performance, damages or any other rights or remedies to which Licensor may be entitled. Upon termination or expiration of this License for any reason, Licensee shall execute and deliver a recordable release of this License to Licensor in form and substance satisfactory to Licensor.

S. Entire Agreement. This License constitutes the entire agreement between Licensor and Licensee concerning the subject matter hereof, superseding all negotiations, prior discussions, prior licenses and prior agreements and understandings related to the subject matter hereof. This License may only be amended by written instrument executed by Licensor and Licensee.

[Signature Pages Follow]

LICENSOR:
CITY OF MIDLAND, TEXAS

By:_____
Robert Patrick, City Manager

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT AND COMPLETENESS:

_____
Carl Craigo, Director of Utilities

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

LICENSEE:
TARGA DELAWARE LLC

By: _____
Printed Name: Norman L. Winter
Title: Vice President of Land and ROW

THE STATE OF Texas §
§
COUNTY OF Harris §

BEFORE ME, the undersigned authority, on this 11th day of Janvary 2023 personally appeared Norman L. Winter an officer of Targa Delaware LLC known to me to be the person and official whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed of said entity, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 11th day of Janvary, 2023.

_____
Notary Public, State of Texas

KIMBERLY NICHOLE NIETO
Notary ID #131475624
My Commission Expires
March 5, 2026

City Council Meeting

Item Number: 11

Meeting Date: January 24, 2023

To: City Council / City Manager

From: John Simmons, Manager, Right-of-Way

Subject: Motion authorizing the execution of a Right-of-Way License (23-495-004) with Targa Northern Delaware LLC, regarding City-owned property described as Section 27, Block 74, Abstract 1380, Public School Land Survey, Winkler County, Texas (DISTRICT: NONE) (UTILITIES)

Purpose:

This motion will provide the applicant a 30’ wide right of way to place an Eight inch (8”) private, poly-construction, gas pipeline on the City of Midland-owned T-Bar Ranch.

The applicant will need a 20’ wide temporary workspace in place for construction.

This Right-of-Way License is proposed for a single ten (10) year period, paid in advance with an annual throughput fee. Terms are consistent with the City’s standard license for facilities of this nature.

Recommended City Council Action:

Approve

Fiscal Impact:

Application fee (one time): $1,000

10-year lease rate,

8” pipeline: 38.88 rods x $180 per rod ($6,998.40)

Total Collected 7,998.40

Discussion:

This private-use, steel construction gas line is eight inches (8) in diameter and will be buried forty-eight inches (48) deep and will not interfere with the T-Bar Ranch water operations in this area.

Certificates of Insurance (COI) with the City of Midland named as additional insured and a waiver of subrogation in favor of the City of Midland have been collected and are on file.

City Secretary to record completed License Agreement

Robert Patrick

City Manager's Office

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/12/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Marsh USA Inc.
2929 Allen Parkway, Suite 2500
Houston, TX 77019

CN101831123--3-22-23 GAUW X

CONTACT NAME:
PHONE (A/C, No, Ext): **FAX (A/C, No):**
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Associated Electric & Gas Ins Services Ltd	3190004
INSURER B : ACE American Insurance Company	22667
INSURER C : ACE Property & Casualty Insurance Company	20699
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Targa Northern Delaware LLC
811 Louisiana St, Suite 2100
Houston, TX 77002

COVERAGES **CERTIFICATE NUMBER:** HOU-003976844-01 **REVISION NUMBER:** 2

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	X **COMMERCIAL GENERAL LIABILITY** X CLAIMS-MADE ☐ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER:	X	X	YX0321902P	10/31/2022	10/31/2023	EACH OCCURRENCE	$	See Next Page
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$	See Next Page
							MED EXP (Any one person)	$	See Next Page
							PERSONAL & ADV INJURY	$	See Next Page
							GENERAL AGGREGATE	$	See Next Page
							PRODUCTS - COMP/OP AGG	$	See Next Page
								$	
B	**AUTOMOBILE LIABILITY** X ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY	X	X	ISA H10753223	10/31/2022	10/31/2023	COMBINED SINGLE LIMIT (Ea accident)	$	1,000,000
							BODILY INJURY (Per person)	$	
							BODILY INJURY (Per accident)	$	
							PROPERTY DAMAGE (Per accident)	$	
								$	
C	X **UMBRELLA LIAB** ☐ OCCUR **EXCESS LIAB** X CLAIMS-MADE ☐ DED X RETENTION $ 1,000,000	X	X	XOC G28178281 007	10/31/2022	10/31/2023	EACH OCCURRENCE	$	10,000,000
							AGGREGATE	$	10,000,000
								$	
B	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y / N ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	WLR C50722995	10/31/2022	10/31/2023	X PER STATUTE ☐ OTH-ER		
							E.L. EACH ACCIDENT	$	1,000,000
							E.L. DISEASE - EA EMPLOYEE	$	1,000,000
							E.L. DISEASE - POLICY LIMIT	$	1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: Right of Way

The Certificate Holder is included as additional insured (except workers' compensation) where required by written contract. Waiver of subrogation is applicable where required by written contract.

CERTIFICATE HOLDER

City of Midland
300 N. Loraine
Midland, TX 9701

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Marsh USA Inc.

PACKET 11.3 January 24, 2023

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ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
Marsh USA Inc.	Targa Northern Delaware LLC 811 Louisiana St, Suite 2100 Houston, TX 77002
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 **FORM TITLE:** Certificate of Liability Insurance

As Respects General Liability:

A. Limit of Liability Each Occurrence:
1. $1,000,000*
2. $2,000,000 General Aggregate

B. Joint Venture Limit of Liability Each Occurrence:
Per Limit of Liability Section (3)
$1,000,000*

C. Combined Products Liability and Completed Operations Liability
Aggregate Limit of Liability for the Policy Period:
$2,000,000*

D. Failure to Supply Liability Aggregate Limit of Liability for the Policy Period:
$1,000,000*

E. Pollution Liability Aggregate Limit of Liability for the Policy Period:
$1,000,000*

F. Medical Malpractice Injury Limit of Liability Each Occurrence:
$1,000,000*

G. Wildfire Liability Aggregate Limit of Liability for the Policy Period:
$1,000,000*

*Subject to the $2,000,000 General Aggregate

As Respects General Liability:
Indemnity and Defense Costs are included in the Limits of Liability.

As Respects General Liability:
Policy does not contain an exclusion applicable to construction or demolition work within 50 feet of a railroad.

As Respects General Liability:
Policy does not contain exclusion for explosion, collapse or underground property damage hazards.

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POLICY NUMBER: ISA H10753223 Endorsement Number: 1

FORM MCS-90 **OMB No.: 2126-0008 Expiration: 05/31/2024**

USDOT Number: _ **Date Received:** _

Please note, the expiration date as stated on this form relates to the process for renewing the Information Collection Request for this form with the Office of Management and Budget. This requirement to collect information as requested on this form does not expire. For questions, please contact the Office of Registration and Safety Information, Registration, Licensing, and Insurance Division.

A Federal Agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2126-0008. Public reporting for this collection of information is estimated to be approximately 2 minutes per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Motor Carrier Safety Administration, MC-RRA, Washington, D.C. 20590.

United States Department of Transportation
Federal Motor Carrier Safety Administration

Endorsement for Motor Carrier Policies of Insurance for Public Liability under Sections 29 and 30 of the Motor Carrier Act of 1980

FORM MCS-90

Issued to Targa Resources Corp. **of** TX
(Motor Carrier name) *(Motor Carrier state or province)*

Dated at Wilmington, DE 19803 **on this** 6th **day of** October , **20** 22 .

Amending Policy Number: ISA H10753223 **Effective Date:** 10/31/2022

Name of Insurance Company: ACE American Insurance Company

JOHN J. LUPICA, President

Countersigned by: _____
(authorized company representative)

The policy to which this endorsement is attached provides primary or excess insurance, as indicated for the limits shown *(check only one)*:

[X] *This insurance is primary and the company shall not be liable for amounts in excess of $* 3,000,000 *for each accident.*

[ ] *This insurance is excess and the company shall not be liable for amounts in excess of $* _____ *for each accident in excess of the underlying limit of $* _____ *for each accident.*

Whenever required by the Federal Motor Carrier Safety Administration (FMCSA), the company agrees to furnish the FMCSA a duplicate of said policy and all its endorsements. The company also agrees, upon telephone request by an authorized representative of the FMCSA, to verify that the policy is in force as of a particular date. The telephone number to call is: 215 - 640 - 4555.

Cancellation of this endorsement may be effected by the company or the insured by giving (1) thirty-five (35) days notice in writing to the other party (said 35 days notice to commence from the date the notice is mailed, proof of mailing shall be sufficient proof of notice), and (2) if the insured is subject to the FMCSA's registration requirements under 49 U.S.C. 13901, by providing thirty (30) days notice to the FMCSA (said 30 days notice to commence from the date the notice is received by the FMCSA at its office in Washington, DC).

Filings must be transmitted online via the Internet at http://www.fmcsa.dot.gov/urs.

(continued on next page)

MC1622y (06-21) Wolters Kluwer | Uniform Forms

DEFINITIONS AS USED IN THIS ENDORSEMENT

Accident includes continuous or repeated exposure to conditions or which results in bodily injury, property damage, or environmental damage which the insured neither expected nor intended.

Motor Vehicle means a land vehicle, machine, truck, tractor, trailer, or semitrailer propelled or drawn by mechanical power and used on a highway for transporting property, or any combination thereof.

Bodily Injury means injury to the body, sickness, or disease to any person, including death resulting from any of these.

Property Damage means damage to or loss of use of tangible property.

Environmental Restoration means restitution for the loss, damage, or destruction of natural resources arising out of the accidental discharge, dispersal, release or escape into or upon the land, atmosphere, watercourse, or body of water, of any commodity transported by a motor carrier. This shall include the cost of removal and the cost of necessary measures taken to minimize or mitigate damage to human health, the natural environment, fish, shellfish, and wildlife.

Public Liability means liability for bodily injury, property damage, and environmental restoration.

The insurance policy to which this endorsement is attached provides automobile liability insurance and is amended to assure compliance by the insured, within the limits stated herein, as a motor carrier of property, with Sections 29 and 30 of the Motor Carrier Act of 1980 and the rules and regulations of the Federal Motor Carrier Safety Administration (FMCSA).

In consideration of the premium stated in the policy to which this endorsement is attached, the insurer (the company) agrees to pay, within the limits of liability described herein, any final judgment recovered against the insured for public liability resulting from negligence in the operation, maintenance or use of motor vehicles subject to the financial responsibility requirements of Sections 29 and 30 of the Motor Carrier Act of 1980 regardless of whether or not each motor vehicle is specifically described in the policy and whether or not such negligence occurs on any route or in any territory authorized to be served by the insured or elsewhere. Such insurance as is afforded, for public liability, does not apply to injury to or death of the insured's employees while engaged in the course of their employment, or property transported by the insured, designated as cargo. It is understood and agreed that no condition, provision, stipulation, or limitation contained in the policy, this endorsement, or any other endorsement thereon, or violation thereof, shall relieve the company from liability or from the payment of any final judgment, within the limits of liability herein described, irrespective of the financial condition, insolvency or bankruptcy of the insured. However, all terms, conditions, and limitations in the policy to which the endorsement is attached shall remain in full force and effect as binding between the insured and the company. The insured agrees to reimburse the company for any payment made by the company on account of any accident, claim, or suit involving a breach of the terms of the policy, and for any payment that the company would not have been obligated to make under the provisions of the policy except for the agreement contained in this endorsement.

It is further understood and agreed that, upon failure of the company to pay any final judgment recovered against the insured as provided herein, the judgment creditor may maintain an action in any court of competent jurisdiction against the company to compel such payment.

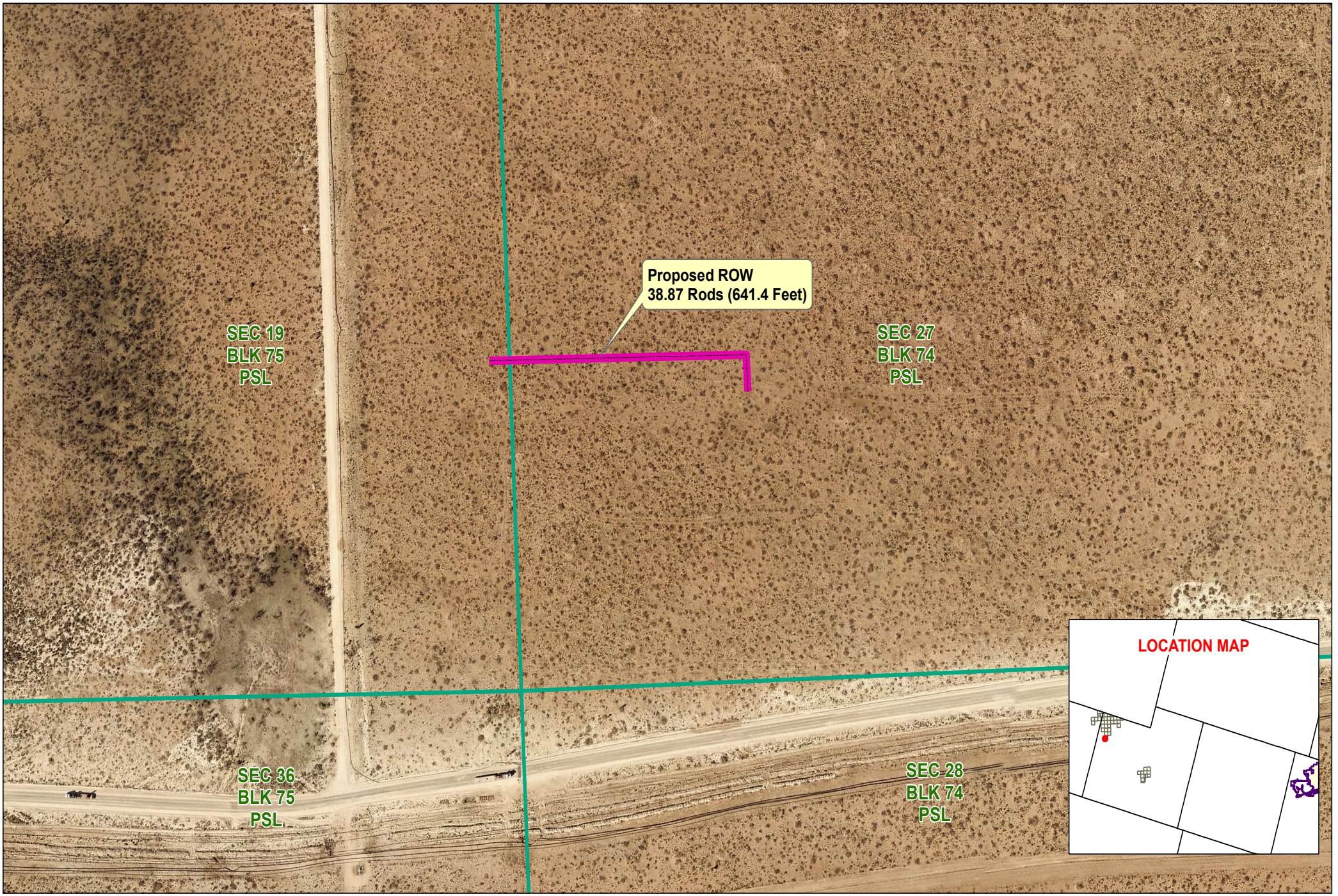
The limits of the company's liability for the amounts prescribed in this endorsement apply separately to each accident and any payment under the policy because of anyone accident shall not operate to reduce the liability of the company for the payment of final judgments resulting from any other accident.

(continued on next page)

SCHEDULE OF LIMITS — PUBLIC LIABILITY

Type of carriage	Commodity transported	January 1, 1985
(1) For-hire (in interstate or foreign commerce, with a gross vehicle weight rating of 10,001 or more pounds).	Property (nonhazardous)	$750,000
(2) For-hire and Private (in interstate, foreign, or intrastate commerce, with a gross vehicle weight rating of 10,001 or more pounds).	Hazardous substances, as defined in 49 CFR 171.8, transported in cargo tanks, portable tanks, or hopper-type vehicles with capacities in excess of 3,500 water gallons; or in bulk Division 1.1, 1.2, and 1.3 materials, Division 2.3, Hazard Zone A, or Division 6.1, Packing Group I, Hazard Zone A material; in bulk Division 2.1 or 2.2; or highway route controlled quantities of a Class 7 material, as defined in 49 CFR 173.403.	$5,000,000
(3) For-hire and Private (in interstate or foreign commerce, in any quantity; or in intrastate commerce, in bulk only; with a gross vehicle weight rating of 10,001 or more pounds).	Oil listed in 49 CFR 172.101; hazardous waste, hazardous materials, and hazardous substances defined in 49 CFR 171.8 and listed in 49 CFR 172.101, but not mentioned in (2) above or (4) below.	$1,000,000
(4) For-hire and Private (in interstate or foreign commerce, with a gross vehicle weight rating of less than 10,001 pounds).	Any quantity of Division 1.1, 1.2, or 1.3 material; any quantity of a Division 2.3, Hazard Zone A, or Division 6.1, Packing Group I, Hazard Zone A material; or highway route controlled quantities of a Class 7 material as defined in 49 CFR 173.403.	$5,000,000

*The schedule of limits shown does not provide coverage. The limits shown in the schedule are for information purposes only.



Date: 1/4/2023

PACKET 11.8

Targa Proposed 8" Gas Pipeline ROW

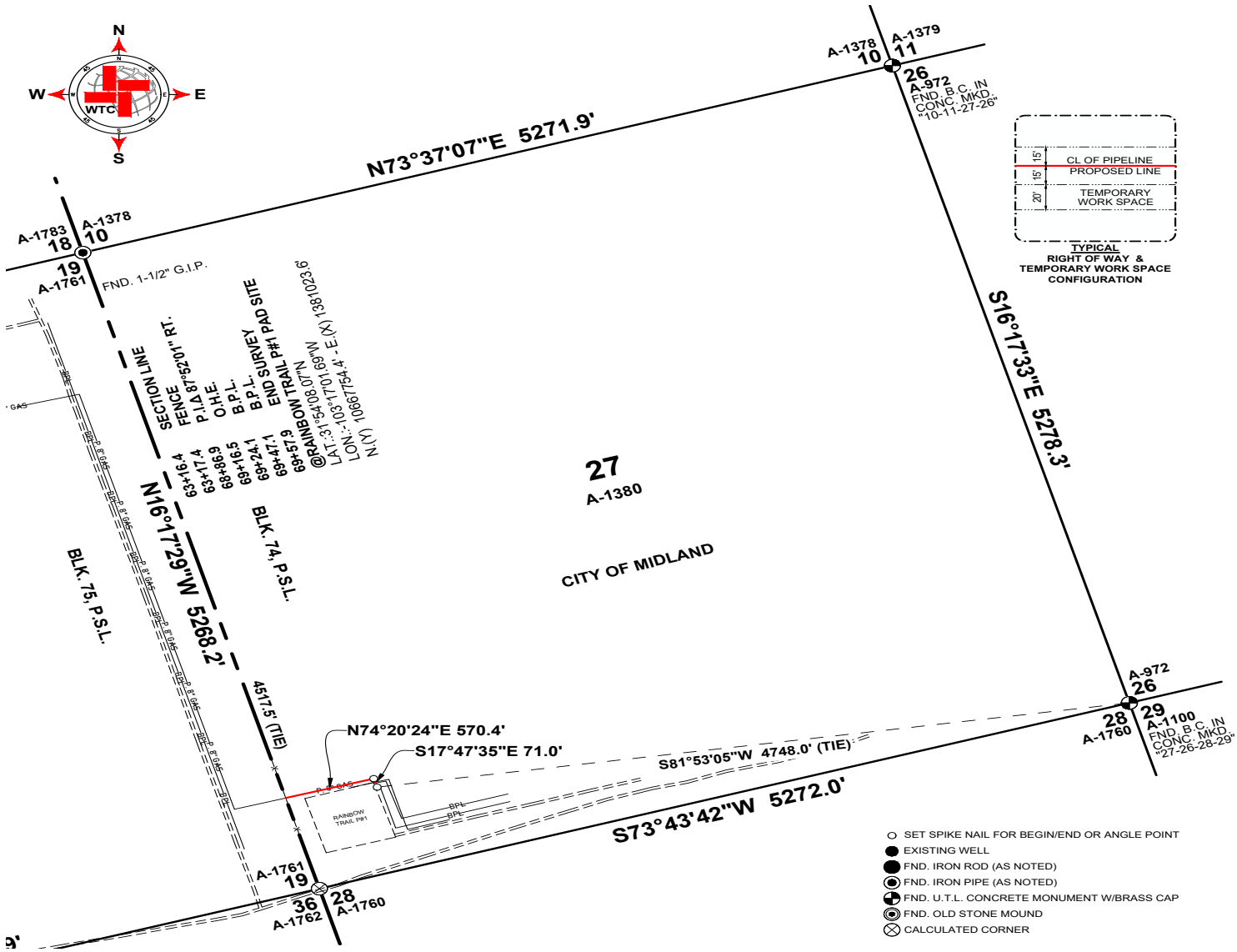
January 24, 2023

Proposed ROW
Survey Section

0 100 200 Feet

©THE CITY OF MIDLAND - 2023
THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.
THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.

EXHIBIT A
SECTION 27, BLOCK 74, ABSTRACT 1380, PUBLIC SCHOOL LAND SURVEY,
WINKLER COUNTY, TX



CENTERLINE DESCRIPTION

CENTERLINE DESCRIPTION OF A PROPOSED 8" GAS PIPELINE, BEING 30 FEET IN WIDTH AND 641.5 FEET IN LENGTH CROSSING SECTION 27, BLOCK 74, ABSTRACT 1380, PUBLIC SCHOOL LAND SURVEY, WINKLER COUNTY, TEXAS, BEING 15 FOOT LEFT AND 15 FOOT RIGHT OF THE SURVEY OF CENTERLINE AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT A POINT ON THE WEST LINE OF SAID SECTION 27, WHICH LIES S16°17'29"E., 4517.5 FEET, FROM A ONE AN DONE-HALF INCH GALVANIZED IRON PIPE, FOUND AND ACCEPTED AS THE NORTHWEST CORNER OF SAID SECTION 27;
THENCE N.74°20'24"E., 570.4 FEET TO A SPIKE NAIL SET FOR AN ANGLE POINT HEREOF;
THENCE S.17°47'35"E., 71.0 FEET TO A SET SPIKE NAIL FOR THE END OF SURVEY IN SAID SECTION 27, WHICH LIES S.81°53'05"W., 4748.0 FEET, FROM A BRASS CAP IN CONCRETE MARKED "27-26-28-29", FOUND AND ACCEPTED AS THE SOUTHEAST CORNER OF SAID SECTION 27, IN ALL BEING 641.5 FEET OR 38.88 RODS IN LENGTH.

NOTES:
1. BASIS OF BEARING, COORDINATES, AND DISTANCES ARE A LAMBERT CONICAL PROJECTION OF THE TEXAS COORDINATE SYSTEM, STATE PLANE GRID, NAD 83, TEXAS CENTRAL (4203), BASED ON AN OPUS SOLUTION ON CONTROL POINT **C BULLET** AT N.=10670906.291' - E.=1376863.581', WITH A CONVERGENCE ANGLE OF -01°31'36.14" AND A COMBINED SCALE FACTOR OF 0.999870150
2. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF IMPROVEMENTS AND/OR EASEMENTS WERE BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAVE BEEN SPECIFICALLY OMITTED.
3. SEE DOCUMENTS. AND ELECTRIC DATA FILED IN THE OFFICE OF WTC INC., FOR COMPLETE RECONSTRUCTION OF THESE SECTIONS OR BLOCKS, USING GLO AND/OR COURTHOUSE SURVEY DOCUMENTS.

1000 0 1000 2000 FEET

SCALE: 1" = 1000'

I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED FROM ACTUAL FIELD NOTES OR ELECTRONIC DATA OF AN ON-THE-GROUND SURVEY MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

PACKET 11 9

JAMES C. TOMPKINS RPLS #6768 — DATE 12/09/2022

STATE OF TEXAS REGISTERED JAMES C. TOMPKINS 6768 PROFESSIONAL LAND SURVEYOR

Targa Northern Delaware LLC

COP BULLET 8" GAS PIPELINE
A PROPOSED 8" GAS PIPELINE
CROSSING SEC. 27, BLK. 74, A-1380,
P.S.L., SURVEY, WINKLER COUNTY, TX
January 24, 2023

OWN BY: M.Y.	PLANT NAME: TARGE DELAWARE LLC, WINKLER CO., TEXAS	
PAGE: 2 OF 02	AFE # 110040	WELL: COP BULLET

JOB# WTC55717

WTC ENGINEERS I SURVEYORS
TEXAS REGISTERED ENGINEERING FIRM F-2746
TEXAS REGISTERED SURVEYOR FIRM #100792-00

W T C, INC.
405 S.W. 1st Street
Andrews, TX 79714
(432) 523-2181

WTC INC
PLAT: X:\PROJECTS\OIL & GAS SURVEYS\TARGA RESOURCES\5577-TARGA RESOURCES, STAKE & PLAT\TARGA\PROPOSED 8IN GAS PIPELINE- (COP-BULLET)\WINKLER CO. TX\DRAWINGS\5577-TARGA RESOURCES, 8IN GAS PIPELINE- (COP-BULLET) LAYOUT TAB: TEXAS-12/9/2022 11:30 AM PHERNANDEZ

RIGHT OF WAY LICENSE

THE STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF MIDLAND §

Date:	January 25, 2023
Licensor:	CITY OF MIDLAND, TEXAS, a home-rule municipal corporation
Licensor's Representative:	Robert Patrick, City Manager
Licensor's Mailing Address:	P.O. Box 1152 Midland, Texas 79702
Licensee:	**Targa Northern Delaware LLC**
Licensee's Representative:	**Norman L. Winter**
Licensee's Mailing Address:	811 Louisiana St., Suite 2100 Houston, Texas 77002
Property:	As described in Article III below
License Number:	**23-495-004**

Licensee desires use of certain Property (as defined below) owned by Licensor in Winkler County, Texas, for purposes set forth below. Licensee acknowledges and agrees that it must obtain a license (the "License") in order to use the public lands of Licensor.

W I T N E S S E T H:

For and in consideration of the execution of this license (this "License") and the mutual promises and covenants of the parties hereto, it is mutually promised, understood and agreed as follows:

I. Term

A. Term. This License shall be for a term of ten (10) years commencing on the date of this License (the "Commencement Date") unless terminated earlier as provided hereafter.

B. Termination. Licensor may terminate this License if Licensee fails to pay, when due, any amount owing under this License and that failure continues for sixty (60) days or, if Licensee commits any material breach or material default in performance of any obligation, prohibition, restriction, provision or covenant contained in this License, and the breach or default continues for a period of thirty (30) days after Licensor delivers notice to Licensee reasonably detailing the breach or default.

Additionally, Licensor may terminate this License at will for any or no reason upon giving at least three hundred sixty-five (365) days' written notice to Licensee. The parties to this License understand and agree that it is in Licensor's sole discretion to terminate this License during the term of this License without penalty to Licensor. Licensee has no expectation and has received no guarantees that this License will not be terminated before the end of the License term. The parties have bargained for the flexibility of terminating this License upon tender of the requisite notice at any time during the term of this License. All work and services under this License shall be suspended upon termination of this License.

Upon expiration or termination of this License, Licensee shall remove all equipment and structures associated with the undertakings contemplated by this License. After removal of all equipment and structures associated with the undertakings contemplated by this License, the surface of the Property shall be restored at the expense of Licensee to its original condition, as close thereto as may be practical, subject to the approval of Licensor upon inspection by Licensor's Representative, which approval shall not be unreasonably withheld. All of said work shall be completed within one hundred eighty (180) days after the expiration or termination of this License. All of the terms, provisions and requirements of this paragraph shall survive the expiration or termination of this License.

II. Financial Consideration

A. License Fee. A license fee in the amount of SIX THOUSAND NINE HUNDRED NINETY-EIGHT and 40/100 Dollars ($6,998.40) ("License Fee") shall be due and payable on or prior to the Commencement Date.

In the event Licensor terminates this License pursuant to the provisions of Section I.B., Licensor agrees to refund to Licensee a pro rata share of the License Fee actually paid by Licensee to Licensor for that portion of the remaining term that is being terminated. For the avoidance of doubt, the amount of any refund payable to Licensee pursuant to this paragraph shall be determined net of any costs or expenses incurred by Licensor in connection with Licensee's unfulfilled obligations under this License (if any).

B. Application Fee. On or prior to the Commencement Date of this License, Licensee shall pay a non-refundable one-time fee of One Thousand and No/100 Dollars ($1,000.00) to Licensor's Representative. Said fee shall revert to Licensor and Licensee shall have no claim to said fee. The fee shall be used to process the application for this License.

C. Delivery of Payment. Payment of the above fees shall be made to Licensor at the office of Licensor's Representative, Attn: Right of Way Manager, P.O. Box 1152, Midland, Texas, 79702. Payment of the above fees shall be exclusive of and in addition to all general municipal taxes of whatever nature, including but not limited to ad valorem taxes and special taxes and assessments for public improvements.

D. Late Payment. Licensee's failure to make payment of any of the above fees within thirty (30) days after such fee is due shall constitute a late payment and Licensee shall pay Licensor a late charge of five percent (5%) of such fee.

III. Use

A. Permitted Use. Licensor does hereby grant unto Licensee, the right to enter upon the Property, being fifty (50) feet in width of the pipeline location as shown on **Exhibit A** attached hereto and incorporated herein for the purpose of operating, repairing, maintaining, replacing and removing, thereon, along the herein described pipeline locations, a steel construction pipeline, not to exceed eight (8) inches in diameter, for the transportation of natural gas and to have the right of ingress and egress at convenient points for such purpose and said construction width shall revert to thirty (30) feet after the powerline is completed (the "Property"). **Licensee shall provide Licensor with a complete as-built survey within sixty (60) days of completion of the pipeline(s) and facilities described herein. The parties agree Licensee's failure to provide Licensor with a complete as-built survey within sixty (60) days of completion of the pipeline(s) and facilities described herein may result in the termination of this License. The decision to accept a complete as-built survey after the sixty-day deadline prescribed herein, or, conversely, to terminate this License shall be in the sole and absolute discretion of Licensor.**

B. Road Repair. Licensee covenants and agrees that it will repair, at its own expense, any of Licensor's roads that Licensee, its employees, contractors, representatives, agents or assigns damage on Licensor's property, so that such roads will comply with Licensor's standard specifications.

C. Utility Repair. Licensee covenants and agrees that Licensee shall, at its own expense, repair all water lines, sewer lines, service lines, water meters and other utility lines owned by Licensor that Licensee, its employees, contractors, representatives, agents or assigns, damage so that such water lines, sewer lines, water meters and other utility lines shall comply with Licensor's standard specifications.

D. Pipeline Depth. Licensee covenants and agrees that it will bury the pipeline to be constructed hereunder no less than forty-eight (48) inches in depth. All backfill used in burying such pipeline shall be compacted to a density of ninety percent (90%), except where such pipeline crosses under a paved or traveled portion of any City of Midland right of way where such backfill shall be compacted to a density of ninety-five percent (95%). Licensor shall be afforded the opportunity to test the density on all backfill. Notwithstanding any provision to the contrary contained herein, Licensee covenants and agrees that, at any point that Licensee's pipeline intersects with a City of Midland utility line location, the pipeline shall be bored at a depth of at least (i) nine (9) feet under all City of Midland water utility lines and (ii) two (2) feet under all City of Midland sewer utility lines. Licensee agrees that it shall comply with 30 Tex. Admin. Code § 290.44(e), as amended, to the extent applicable to this License.

E. Approval of Bids. Before Licensee seeks bids on any phase of the repair of public streets, alleys, water lines, sewer lines or any other public utilities, Licensee shall first obtain written approval of the specifications therefor from Licensor's Representative, which approval shall be at Licensor's Representative's sole discretion.

F. Reservation of Rights. Licensor expressly reserves the right to install, repair, or reconstruct streets or roads and all ancillary public uses usual and customary in connection with streets and roads, expressly including but not limited to drainage facilities and related structures in the rights of way used and occupied by Licensee.

Licensor reserves the right to lay and permit to be laid, sewer, gas, water, and other pipelines or cables and conduits, and to do and permit to be done, any underground or overhead installation or improvement that may be deemed necessary or proper by the governing body of Licensor, in, on, across, along, over, under, and through any property occupied by Licensee. In permitting such work to be done, Licensor shall not be liable to Licensee for any damage so caused to Licensee's system or property, **NOR SHALL LICENSOR BE LIABLE TO LICENSEE FOR ANY DAMAGES TO LICENSEE'S PIPELINE ARISING OUT OF THE NEGLIGENCE BY LICENSOR, ITS EMPLOYEES, OFFICERS OR AGENTS, OR LICENSOR'S CONTRACTORS OR SUBCONTRACTORS.** If Licensor requires Licensee to remove, alter, change, adapt, or conform Licensee's facilities because of changes in the grade or construction of a street or in the location or manner of constructing a water pipe, sewer pipe, or other surface, underground or aboveground structure owned by Licensor, Licensee shall make the alterations or changes as soon as practicable, and in no event longer than one hundred eighty (180) days, when ordered in writing by Licensor, without claim for reimbursement for the cost of the relocation or for damages against Licensor. If these requirements impose a financial hardship upon Licensee, Licensee shall have the right to present alternative proposals for Licensor's consideration.

G. Non-exclusive. Licensor expressly reserves the full right to grant other easements or rights of way crossing or running parallel with the rights of way used by Licensee.

H. Abandonment. It is especially provided, however, that as an express condition of this License, and not as a mere covenant, in the event Licensee abandons any equipment or appurtenances associated with the undertakings contemplated by this License, or the Property ceases to be used for the purposes enumerated herein for any period of twelve (12) consecutive months, or longer, other than the time elapsing between the date hereof and construction, and upon giving Licensee one hundred and twenty (120) days' written notice, then and in that event, this License shall automatically terminate and revert to Licensor, its successors or assigns, free and clear of any right, title, or interest of Licensee.

I. Approval of Specifications. In the event Licensee desires to reconstruct, repair, alter, replace or remove any pipeline built hereunder, Licensee shall submit the plans and specifications that pertain to the rebuilding or repairs of Licensor's streets and roads and the rebuilding or repairs of any of Licensor's public utilities to Licensor's Representative for his or her prior written approval, which approval shall be at Licensor's Representative's sole discretion. In the event of emergency repairs necessary to restore service, Licensee shall notify Licensor's Representative before making any repairs if during a Licensor workday. If not on a workday, Licensee shall notify Licensor's Representative on the first workday after repairs have begun.

J. Gates and Fences. Without altering or expanding the limitations on ingress, egress and access to the Property set forth in Paragraph A. of Article III above, Licensee agrees to use existing gates and roadways where available, to enter, leave and cross the Property; provided that Licensee shall not use any road marked "Closed". Licensee and all persons entering or leaving the Property in connection with Licensee's operations hereunder shall keep all outside and interior gates securely closed except during operations related to this License. Licensee shall keep all outside gates, and all other gates designated by Licensor, securely locked except during operations related to this License. At any gate that is to be locked, Licensor may install its own lock in addition to Licensee's lock.

Licensee agrees that Licensee shall not cut or go over any fence at any time or in connection with any operations on the Property without first obtaining Licensor's express prior consent thereto in writing. All gates or openings in fences shall be at mutually agreeable location(s) between Licensee and Licensor and shall be constructed as reasonably required by Licensor. Upon the termination of this License, at Licensor's election, gates in fences shall be left in place and shall thereafter be owned by Licensor or Licensee shall remove such gates and restore the fence to its original condition as nearly as reasonably practicable. The terms, provisions and requirements of this provision shall survive the termination or expiration of this License.

K. Trash. Licensee shall keep the Property free of trash and debris at all times. Under no circumstances, will Licensee be allowed to bury any trash, debris or foreign material of any kind on or under the Property. Licensor shall have the right to expel and permanently ban from the Property any person observed disposing of trash on the Property. Upon the completion of any operations, all ribbons, flags, stakes and similar items shall by promptly removed from the Property.

L. Hunting, Fishing and Alcohol Prohibited. No agent, employee, representative, contractor or subcontractor of Licensee or any other person allowed to enter the Property by Licensee shall be permitted to hunt, fish, trap, camp, picnic, ride motorcycles or four-wheelers or otherwise conduct any social gathering on the Property, nor shall any such persons be permitted to bring firearms, archery equipment, dogs, alcoholic beverages or illegal drugs on the Property at any time. Violations of this provision shall cause the violator to be regarded as a trespasser and subject to prosecution under trespass laws of the State of Texas. Licensor shall have the right to expel and permanently ban from the Property any person observed on the Property in violation of this provision.

M. Storage of Machinery and Equipment. Licensee shall use no part of the Property to store machinery, equipment, or other property of Licensee while it is not being used.

N. Additional Reservations. Licensor reserves the right to use the surface, subsurface or airspace on, below or above the land covered by this License for any purpose allowed by law and deemed necessary or proper by Licensor and to do and permit to be done, any work in connection therewith which may be deemed necessary or proper by Licensor in, on, across, along, over, under, and through any portion of the Property. In the event of such work in connection with said purposes it shall be deemed necessary or proper by Licensor, at Licensor's sole discretion, to alter, change, or relocate any pipeline, property, or casing of Licensee, such alteration or change or relocation shall be commenced and completed by Licensee within one hundred eighty (180) days after being ordered in writing by Licensor pursuant to directions from Licensor without any claim for reimbursement for the cost of the alteration, change or relocation or damages against Licensor. The relocation, change, or alteration shall be at the sole cost of Licensee. Provided, however, that Licensee shall at all times be entitled to receive from appropriate governmental bodies, excluding Licensor, payment for alteration, change or relocation of its system to which it may be lawfully entitled to under applicable federal or state laws with respect to relocation payments. Without limiting the foregoing, Licensor expressly reserves the full right to grant other licenses, easements and/or rights-of-way in, on, across, along, over, under or through all or any portion of the Property. Licensor expressly reserves the right to use and grant to third parties the right to use all or any portion of the Property and the surface, subsurface or airspace on, below or above the Property for

any purpose.

IV. Standard General Conditions

A. Insurance. Licensee shall at all times during the term of this License maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):	
■ Personal Injury:	$1,000,000.00 per person $1,000,000.00 per occurrence
■ Property Damage:	$100,000.00 per occurrence
Business Automobile Liability:	$1,000,000.00 combined single limit-- Personal Injury and Property Damage
Workers' Compensation:	Statutory limits
Employers' Liability:	$1,000,000.00 per accident or occurrence
Umbrella Liability:	$10,000,000.00 each occurrence $10,000,000.00 aggregate

The Commercial General Liability shall be on an occurrence basis. This insurance shall name Licensor as an additional insured and all insurance shall waive subrogation in favor of Licensor.

The Workers' Compensation coverage provided by Licensee shall inure to the benefit of employees injured during the course and scope of their employment by Licensee pursuant to this License. The Workers' Compensation insurance shall waive all rights of subrogation against Licensor.

The Business Automobile Liability insurance provided by Licensee shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-owner vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of $1,000,000.00 covering any vehicle used for the execution of the work that is the subject of this License. This insurance shall name Licensor as an additional insured and all insurance shall waive subrogation in favor of Licensor.

All insurance required pursuant to this License, except for Worker's Compensation Insurance, shall name Licensor as an additional insured. All insurance required pursuant to this License, including Worker's Compensation Insurance, shall provide for a waiver of subrogation as to Licensor. The parties agree that, prior to the execution of this License, Licensee shall provide one or more certificates of insurance showing that the requirements of this article have been met. Licensor shall determine, in its sole discretion, whether such requirements have been satisfied.

Licensor shall be provided written notice by Licensee's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage. Licensor shall not be required to provide any insurance whatsoever pursuant to this License.

Licensee shall contractually require all contractors, subcontractors, and sub-subcontractors that work on any portion of the work that is the subject of this License to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts as required herein and name the City of Midland as an additional insured (except as to Worker's Compensation Insurance). Licensee certifies that the one or more certificates of insurance provided as required herein complies with the requirements of Chapter 1811 of the Texas Insurance Code. Licensee shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of Licensee.

B. Indemnity. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, LICENSEE, ITS SUCCESSORS AND ASSIGNS, AGREE TO INDEMNIFY, PROTECT, DEFEND AND HOLD HARMLESS LICENSOR AND LICENSOR'S REPRESENTATIVES, AGENTS, ATTORNEYS, EMPLOYEES, SUCCESSORS AND ASSIGNS (COLLECTIVELY, "INDEMNITEES") FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LOSSES, DAMAGES, LIABILITIES, LIENS, FINES, PENALTIES, CAUSES OF ACTION, SUITS, CHARGES, JUDGMENTS, ADMINISTRATIVE ORDERS, REMEDIATION REQUIREMENTS, ENFORCEMENT ACTIONS OF ANY KIND, PERSONAL INJURIES, PROPERTY DAMAGE, AND ALL COSTS AND EXPENSES INCURRED IN CONNECTION THEREWITH (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES AND EXPENSES, INCLUDING, WITHOUT LIMITATION, ALL ATTORNEYS' FEES AND EXPENSES INCURRED IN ENFORCING THIS INDEMNITY) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY, DIRECTLY OR INDIRECTLY ARISING OUT OF, CAUSED BY OR RESULTING FROM (IN WHOLE OR IN PART) THIS LICENSE, LICENSEE'S USE OF OR ACTIVITIES ON THE PROPERTY OR ANY OTHER PROPERTY OWNED BY LICENSOR, OR ANY ACT OR OMISSION OF LICENSEE, ANY CONTRACTOR, SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THEM, OR ANYONE THAT THEY CONTROL OR EXERCISE CONTROL OVER (COLLECTIVELY, "LIABILITIES"), EVEN IF SUCH LIABILITIES ARISE FROM OR ARE ATTRIBUTED, IN WHOLE OR IN PART, TO THE NEGLIGENCE OF ANY INDEMNITEE. LICENSEE SHALL PROMPTLY ADVISE LICENSOR OF ANY ACTION, ADMINISTRATIVE OR LEGAL PROCEEDING OR INVESTIGATION TO WHICH THIS INDEMNIFICATION MAY APPLY, AND OF WHICH LICENSEE HAS RECEIVED NOTICE, AND LICENSEE, AT LICENSEE'S EXPENSE, SHALL ASSUME ON BEHALF OF LICENSOR (AND THE OTHER INDEMNITEES) AND CONDUCT WITH DUE DILIGENCE AND IN GOOD FAITH THE DEFENSE THEREOF WITH COUNSEL REASONABLY SATISFACTORY TO LICENSOR; PROVIDED, HOWEVER, THAT ANY INDEMNITEE SHALL HAVE THE RIGHT, AT ITS OPTION, TO BE REPRESENTED THEREIN BY COUNSEL OF ITS OWN SELECTION AND AT ITS OWN EXPENSE. IN THE EVENT OF FAILURE BY LICENSEE TO ASSUME THE DEFENSE OF LICENSOR IN ACCORDANCE WITH THIS INDEMNIFICATION, LICENSOR, AT ITS OPTION, AND WITHOUT RELIEVING LICENSEE OF ITS OBLIGATION HEREUNDER, MAY ASSUME SUCH DEFENSE, AFTER WRITTEN NOTICE THEREOF TO LICENSEE AND LICENSEE'S FAILURE TO RESPOND THERETO WITHIN TEN (10) BUSINESS DAYS AFTER RECEIPT OF SUCH NOTICE (SAID TEN (10) DAY PERIOD SHALL NOT APPLY IN ANY CASE WHERE IMMEDIATE ANSWERS, RESPONSES, OR OTHER

AFFIRMATIVE ACTION IS REQUIRED TO PRESERVE THE RIGHTS OF LICENSOR) BUT ALL REASONABLE COSTS AND EXPENSES SO INCURRED BY LICENSOR IN THAT EVENT SHALL BE REIMBURSED BY LICENSEE TO LICENSOR, TOGETHER WITH INTEREST ON THE SAME FROM THE DATE ANY SUCH EXPENSE WAS PAID BY LICENSOR UNTIL REIMBURSED BY LICENSEE, AT THE RATE OF INTEREST PROVIDED TO BE PAID ON JUDGMENTS, BY THE LAWS OF THE STATE OF TEXAS.

WITHOUT LIMITING THE FOREGOING, LICENSEE AGREES THAT LICENSEE SHALL INDEMNIFY, PROTECT, DEFEND AND SAVE LICENSOR HARMLESS FROM ANY AND ALL CLAIMS, LIENS, JUDGMENTS, SUITS, CAUSES OF ACTION, AND DEMANDS OF ANY SUBCONTRACTORS, LABORERS, WORKMEN, MECHANICS, MATERIALMEN, OR FURNISHERS OF MACHINERY AND PARTS THEREOF, EQUIPMENT, POWER TOOLS, OR SUPPLIES, IN CONNECTION WITH THE CONSTRUCTION, OPERATION, REPAIR, MAINTENANCE, REPLACEMENT OR REMOVAL OF THE PIPELINE OR OTHER PERMITTED FACILITIES DESCRIBED HEREIN.

WITHOUT LIMITING ANY OF THE FOREGOING, LICENSEE SHALL INDEMNIFY, PROTECT AND HOLD HARMLESS AND DEFEND EACH INDEMNITEE FROM ALL LIABILITIES, SUITS, ACTIONS, CLAIMS, DAMAGES, CAUSES OF ACTION, CHARGES, JUDGMENTS, PERSONAL INJURIES, ACCIDENTAL DEATH, PROPERTY DAMAGE, LOSSES AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY ON ACCOUNT OF ANY NEGLIGENT ACT OF ANY INDEMNITEE, WHETHER SUCH NEGLIGENT ACT WAS THE SOLE PROXIMATE CAUSE OF THE INJURY OR DAMAGE OR A PROXIMATE CAUSE JOINTLY AND CONCURRENTLY WITH LICENSEE OR LICENSEE'S EMPLOYEES', REPRESENTATIVES', AGENTS', CONTRACTORS' OR SUBCONTRACTORS' NEGLIGENCE, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS LICENSE, INCLUDING, WITHOUT LIMITATION, SUCH NEGLIGENT ACTS ARISING FROM OR IN ANY WAY CONNECTED WITH THE PLACEMENT, CONSTRUCTION, OPERATION, REPAIR, MAINTENANCE, REPLACEMENT OR REMOVAL OF ANY PART OF LICENSEE'S PIPELINE OR PERMITTED FACILITIES ON LICENSOR'S PROPERTY. LICENSEE WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST LICENSOR OR ANY INDEMNITEE, INCLUDING RELATED ATTORNEY'S FEES.

WITHOUT LIMITING ANY OF THE FOREGOING, LICENSEE, ITS SUCCESSORS AND ASSIGNS, SHALL INDEMNIFY, PROTECT, DEFEND AND HOLD INDEMNITEES HARMLESS FROM AND AGAINST ALL CLAIMS, LOSSES, DAMAGES, LIABILITIES, LIENS, FINES, PENALTIES, CAUSES OF ACTION, SUITS, CHARGES, JUDGMENTS, ADMINISTRATIVE ORDERS, REMEDIATION REQUIREMENTS, ENFORCEMENT ACTIONS OF ANY KIND, PERSONAL INJURIES, PROPERTY DAMAGE, AND ALL COSTS AND EXPENSES INCURRED IN

CONNECTION THEREWITH (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES AND EXPENSES, INCLUDING, WITHOUT LIMITATION, ALL ATTORNEYS' FEES AND EXPENSES INCURRED IN ENFORCING THIS INDEMNITY) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY, DIRECTLY OR INDIRECTLY ARISING OUT OF, CAUSED BY OR RESULTING FROM (IN WHOLE OR IN PART) (i) FAILURE OF LICENSEE, ANY CONTRACTOR, SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THEM, OR ANYONE THAT THEY CONTROL OR EXERCISE CONTROL OVER (COLLECTIVELY, THE "INDEMNIFYING PARTIES"), TO COMPLY WITH ALL APPLICABLE LOCAL, FEDERAL AND/OR STATE ENVIRONMENTAL LAWS, INCLUDING BUT NOT LIMITED TO THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) AND THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) (AS THEY MAY BE REAUTHORIZED AND/OR AMENDED) AND ALL OTHER LOCAL, FEDERAL AND STATE LAWS, IN CONNECTION WITH OR RELATED TO ANY INDEMNIFYING PARTY'S OPERATIONS OR ACTIVITIES ON THE PROPERTY, OR (ii) ANY INDEMNIFYING PARTY'S HANDLING, STORING, RELEASING OR TRANSPORTING OR DISPOSING OF ALL SUBSTANCES, INCLUDING BUT NOT LIMITED TO HAZARDOUS SUBSTANCES AND HAZARDOUS WASTES, ON OR FROM THE PROPERTY OR ANY OTHER LANDS OF LICENSOR.

IT IS THE INTENTION OF THE PARTIES HERETO THAT THE PROVISIONS OF THIS INDEMNIFICATION SHALL APPLY TO AND PROTECT EACH INDEMNITEE FROM THE CONSEQUENCES OF STRICT LIABILITY IMPOSED OR THREATENED TO BE IMPOSED ON SUCH INDEMNITEE, AS WELL AS FROM THE CONSEQUENCES OF THE NEGLIGENCE OF ANY INDEMNITEE, WHETHER OR NOT THAT NEGLIGENCE IS A CONTRIBUTING OR CONCURRING CAUSE OF ANY LIABILITY INDEMNIFIED AGAINST IN THIS ARTICLE IV.B.

THE TERMS, PROVISIONS, REQUIREMENTS AND OBLIGATIONS OF THIS ARTICLE IV.B. SHALL SURVIVE TERMINATION OR EXPIRATION OF THIS LICENSE, AND SHALL NOT BE LIMITED BY OR TO DAMAGES, COMPENSATION OR BENEFITS PAYABLE UNDER INSURANCE POLICIES, WORKER'S COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEES' BENEFIT ACTS.

C. Assignment. The provisions of this License shall inure to the benefit of and be binding upon Licensor and Licensee and their respective successors and permitted assigns. The rights and privileges granted by Licensor under this License inure to the benefit of Licensee. No rights, privileges or obligations hereunder shall be assignable by Licensee without the express prior written consent of Licensor. Any required consent is to be evidenced by a letter written by Licensor's City Manager that fully recites the terms and conditions, if any, upon which consent is given. The granting of consent is in the sole discretion of Licensor's City Manager

D. Independent Contractor. It is expressly understood and agreed that Licensee shall perform all work described herein as an independent contractor and not as an officer, agent, servant or employee of Licensor; that Licensee shall have exclusive control of and the exclusive right to control the details of the work performed hereunder, and all persons performing the same; and

shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors; that the doctrine of respondeat superior shall not apply as between Licensor and Licensee, its officers, agents, employees, contractors and subcontractors; and that nothing herein shall be construed as creating a partnership or joint enterprise between Licensor and Licensee. No person performing any of the work described hereunder shall be considered an officer, agent, servant or employee of Licensor. Further, it is specifically understood and agreed that nothing in this License is intended or shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control" which would give rise to vicarious liability. Licensee shall be an independent contractor under this License and shall assume all of the rights, obligations and liabilities applicable to it as such independent contractor hereunder. Licensor does not have the power to direct the order in which the work is done. Licensor shall not have the right to control the means, methods or details of Licensee's work. Licensee shall assume exclusive responsibility for the work. Licensee is entirely free to do the work in its own way. The provisions of this subparagraph (D.) shall not be deemed or construed as contradicting, limiting or conflicting with the provisions of subparagraph (M.) below.

E. Attorney Fees. SHOULD LICENSOR BE REQUIRED TO RESORT TO EMPLOYMENT OF ATTORNEYS TO ENFORCE THIS LICENSE, OR ANY OF ITS RIGHTS UNDER THIS LICENSE, LICENSOR SHALL BE ENTITLED TO REIMBURSEMENT FROM LICENSEE FOR LICENSOR'S ATTORNEYS' FEES. LICENSEE SHALL REIMBURSE LICENSOR FOR LICENSOR'S ATTORNEYS' FEES INCURRED IN CONNECTION WITH THE PREPARATION AND NEGOTIATION OF THIS LICENSE. BY EXECUTING THIS LICENSE, LICENSEE AGREES TO WAIVE, AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE, ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST LICENSOR REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THIS LICENSE, OR THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS LICENSE. WITHOUT LIMITING THE FOREGOING, LICENSEE SPECIFICALLY AGREES THAT IF LICENSEE BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS LICENSE, OR TO THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS LICENSE, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, LICENSEE AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH LICENSEE MIGHT OTHERWISE BE ENTITLED.

LICENSEE AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING, KNOWN RIGHT. LICENSEE ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS LICENSE. LICENSEE FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN LICENSOR AND LICENSEE. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF GOVERNMENTAL IMMUNITY.

LICENSEE AND LICENSOR ARE RELYING ON THEIR OWN JUDGMENT. EACH

PARTY HAD THE OPPORTUNITY TO DISCUSS THIS LICENSE WITH LEGAL COUNSEL PRIOR TO ITS EXECUTION.

F. Governing Law & Venue. All performance and payments made pursuant to this License shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this License, or the performance of this License shall be in Midland County, Texas. The obligations and undertakings of each of the parties to this License shall be deemed to have been performed in Midland County, Texas. This License shall be construed, interpreted and enforced under the laws of the State of Texas. The laws of the State of Texas shall govern, construe and enforce all the rights and duties of the parties, including but not limited to tort claims and any and all other claims or disputes, arising from or relating in any way to the subject matter of this License, without regard to conflict of laws and rules that would direct application of the laws of another jurisdiction.

G. Release. NOTWITHSTANDING ANY OTHER PROVISIONS OF THIS LICENSE, LICENSEE HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES LICENSOR, AND LICENSOR'S EMPLOYEES AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH LICENSEE HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR LICENSOR'S NEGLIGENCE.

H. Governmental Immunity. By executing this License, Licensor is not waiving its right of governmental immunity. Licensor is retaining its immunity from suit. Licensor is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY.**

I. Third Party Beneficiary. Except as provided in Article IV.B. above with respect to Indemnitees, (i) Licensor's granting of this License does not create any third-party beneficiary, (ii) there is no third-party beneficiary to this License, and (iii) no person or entity who is not a party to this License shall have any third party beneficiary or other rights hereunder.

J. Notices. Any notice or communication required in the administration of this License shall be sent by certified mail, return receipt requested, to the parties' respective mailing addresses as set forth hereinabove.

K. Notice of Alleged Breach; Statutory Prerequisite. Without limiting the provisions of Article IV.G. above, as a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this License, Licensee or its legal representative, shall give the City Manager, or any other reasonable official of Licensor, notice in writing (consisting of one (1) original and seven (7) copies of notice attached to a copy of this License) of such damages, duly verified, within one hundred eighty (180) days after the same has been sustained. The discovery rule does not apply to the giving of this notice. The notice shall include when, where and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which Licensee will settle, the physical and mailing addresses of Licensee at the time and date the claim was presented and the physical and mailing addresses of Licensee for the six

(6) months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom Licensee relies to establish its claim; and a failure to so notify the City Manager or other such official of Licensor within the time and manner provided herein shall exonerate, excuse and except Licensor from any liability whatsoever. Licensor is under no obligation to provide notice to Licensee that Licensee's notice is insufficient. Licensor reserves the right to request reasonable additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after receipt of notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any other provision, Licensee's failure to comply with the requirements herein shall perpetually bar Licensee's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless if Licensor has actual or constructive notice or knowledge of said claim or alleged damages. Licensee agrees that the requirements of this entire License are reasonable.

L. Consideration. The terms of this License are supported by good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties named herein.

M. Waiver of Governmental Immunity; Chapter 271, TEX. LOC. GOV'T CODE. The parties hereto agree that this License does not constitute a "Contract" for providing goods and/or services to Licensor as discussed in Subchapter I of Chapter 271 of the Texas Local Government Code, and Licensor does not waive, to the maximum extent allowed by law, any constitutional, statutory or common law right to sovereign immunity or governmental immunity from liability or suit. Licensor expressly does not consent to be sued or be liable. To the maximum extent allowed by law, nothing in this License constitutes a waiver of Licensor's governmental immunity and the parties hereto expressly agree that this License shall not constitute, nor be interpreted as a waiver of Licensor's governmental immunity under Subchapter I of Chapter 271 of the Texas Local Government Code, nor shall it constitute nor be interpreted as a waiver of Licensor's governmental immunity for the benefit of any third-party lacking privity to this License.

This License does not obligate Licensee to use the Property to construct, repair, operate, replace, or maintain Licensor's facilities or structures described herein, rather, it merely prohibits Licensee from using the Property for any other purpose. This License restricts the use of the Property to a specific purpose but does not require the use of the Property for a specific purpose. Licensee is not providing a service to Licensor. Licensee is paying Licensor for temporary rights in real property, not for a service. Any such provision shall be deemed to be a covenant against noncomplying use, not a covenant to use. Licensee's use of the Property in compliance with a restriction shall not constitute a service, and such complying use shall not operate to waive Licensor's governmental immunity.

N. Compliance. Licensee agrees that it shall comply with Texas Government Code Section 2252.908, as amended, to the extent that this statute applies to this License. Licensee agrees that it shall comply with Texas Local Government Code Section 176.006, as amended, to the extent that this statute applies to this License.

O. Texas Historical Commission Survey. Licensee agrees that it shall comply with Chapter 191 of the Texas Natural Resources Code. By executing this License, Licensee represents that it has

contacted the Texas Historical Commission (the "Commission") for the purpose of determining whether the Commission will request that an archaeological survey be completed before Licensee commences operations on the Property, as contemplated herein. Licensee agrees that it shall complete or cause to be completed an archaeological survey before commencing any operations on the Property if the Commission so requests and deliver the same to Licensor. Notwithstanding any provision contained herein, in the event that any site, object, artifact, or other feature of archaeological, scientific, educational, cultural, or historical interest is encountered during the operations authorized by this License, Licensee will immediately notify Licensor and the Commission so that adequate measures may be undertaken to protect or recover such discoveries or findings, as deemed appropriate by Licensor or the Commission.

P. Waiver. No waiver of any of the provisions of this License shall be deemed or constitute a waiver of any other provisions of this License, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided. Likewise, the failure of Licensor to enforce any provision of this License shall not be deemed nor shall constitute a waiver of the right of Licensor to enforce such provision.

Q. Counterpart Execution. This License may be executed in several counterparts, and any such agreement shall be deemed an original for all intents and purposes.

R. No Release of Liability. Notwithstanding anything to the contrary contained in this License, the termination or expiration of this License shall not relieve Licensee of any liability, duty or obligation under this License, nor shall it preclude Licensor from asserting any right to specific performance, damages or any other rights or remedies to which Licensor may be entitled. Upon termination or expiration of this License for any reason, Licensee shall execute and deliver a recordable release of this License to Licensor in form and substance satisfactory to Licensor.

S. Entire Agreement. This License constitutes the entire agreement between Licensor and Licensee concerning the subject matter hereof, superseding all negotiations, prior discussions, prior licenses and prior agreements and understandings related to the subject matter hereof. This License may only be amended by written instrument executed by Licensor and Licensee.

[Signature Pages Follow]

LICENSOR:
CITY OF MIDLAND, TEXAS

By:_____
Robert Patrick, City Manager

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT AND COMPLETENESS:

_____
Carl Craigo, Director of Utilities

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

LICENSEE:
TARGA NORTHERN DELAWARE LLC

By: _____
Printed Name: Norman L. Winter
Title: Vice President of Land and ROW

THE STATE OF Texas §
§
COUNTY OF Harris §

BEFORE ME, the undersigned authority, on this 11th day of January, 2023 personally appeared Norman L. Winter an officer of Targa Northern Delaware LLC known to me to be the person and official whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed of said entity, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 11th day of January, 2023.

_____
Notary Public, State of Texas

KIMBERLY NICHOLE NIETO
Notary ID #131475624
My Commission Expires
March 5, 2026

City Council Meeting

Item Number: 12

Meeting Date: January 24, 2023 (January 10, 2023)

To: City Council / City Manager

From: Landon Ochoa, Planner

Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOTS 1A AND 5, BLOCK 1, ROLLING GREEN ACRES ADDITION, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A TRANSITION DISTRICT TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A TRANSITION DISTRICT (GENERALLY LOCATED ON THE NORTH SIDE OF EAST HIGHWAY 80, APPROXIMATELY 250 FEET WEST OF TODD DRIVE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Green Acres Golf, LLC, is requesting a zone change from PD, Planned District for Transition District (Ordinance 9590) to PD, Planned District for Transition District to update their site plan to show a proposed go-kart track and maintenance garage.

Recommended City Council Action:

Approve

Fiscal Impact:

This request does not require any City funds.

Discussion:

Current Zoning:

PD, Planned District for Transition District (Ordinance 9590)

Surrounding Zoning and Land Use:

The property to the west is zoned PD, Planned District for Transition and is vacant. The property to the east is the location of a Dollar General. The property to the north is zoned AE, Agricultural Estate District and is currently vacant.

Analysis:

The applicant, Green Acres Golf, LLC, is requesting to amend their site plan to accommodate a proposed go-cart track and maintenance garage. The new site plan, attached hereto as Exhibit A, shows a design of a new Go-Kart track and a Go-Kart warehouse building. The existing miniature golf course, golf building, and arcade building will remain and are not being altered. The proposed site plan shows a total of 97 parking spaces, of which 5 of these parking spaces are accessible spaces. This site has adequate internal circulation.

The applicant will be required to adhere to the site plan review standards outlined within the City of Midland Zoning Ordinance Section 5.0, Non-residential Zoning District Dimensional Regulation Chart as well as Chapter 9, Landscape Regulations for future landscaping.

This proposed zone change has been circulated to the respective City departments for internal review and their comments, conditions, and requirements are as follows:

Fire: (Approved)

No objections to zone change request.

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2020 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary. Code versions are subject to change depending on time of new code edition adoption in the City of Midland and date of permit application.

Engineering: (Approved)

No objections to zone change. [For Applicant’s Information Only.] Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For Applicant’s Information Only.]

Code: (Approved)

No Oil and Gas issues.

Transportation: (Approved)

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For the Applicant's information only.] No objection to zone change. [For the Applicant's information only.]

Planning:

This request is in compliance with the Tall City Tomorrow Comprehensive Plan, Chapter 3 An Integrated Land Use Vision, "Future Land Use Map" as it designates this area for Employment Reserve, a classification which calls for centers with major office and business uses. In addition to *Chapter 6-Character Plan Goal 4, which is to* "Encourage the development of places where Midland residents can gather and socialize to build connections." (Tall City Tomorrow page 137) This zone change amendment would promote and provide Midland residents with a unique outdoor social gathering experience.

This request was approved at the December 19, 2022, Planning and Zoning meeting.

Therefore, staff recommends approval of this zone change from PD, Planned District for Transition District (Ordinance 9590) to PD, Planned District for Transition District subject to conditions A through E.

Conditions:

A. **That the use and development of the property shall conform to the regulations of the LR, Local Retail District.**

B. **That the use of the property for a miniature golf course, Go-Kart track and Go-Kart garage shall be permitted.**

C. **That this property shall conform to the site plan, which are attached hereto and incorporated herein as Exhibits "A".**

D. **That the landscaping shall conform to the regulations set forth in Title XI, Chapter 9 of the City Code.**

E. **That all signage shall conform to the City of Midland Sign Code.**

Letters of Objection:

Staff has not received any letters of objection as of January 5, 2023.

Attachments:

Application
Site Plan (Exhibit A)
Maps

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOTS 1A AND 5, BLOCK 1, ROLLING GREEN ACRES ADDITION, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A TRANSITION DISTRICT TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A TRANSITION DISTRICT (GENERALLY LOCATED ON THE NORTH SIDE OF EAST HIGHWAY 80, APPROXIMATELY 250 FEET WEST OF TODD DRIVE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, in compliance with the City Charter, the City Code, and State law, have given the requisite notices by United States mail, publication and otherwise; and after a full and fair hearing to all of the property owners generally and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body finds that the public health, safety and general welfare will be best served by rezoning Lots 1A and 5, Block 1, Rolling Green Acres, Section 3, City and County of Midland, Texas (the "Property") to an amended PD, Planned Development District for a Transition District and adopting a site plan therefor, as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is hereby amended to rezone the Property from PD, Planned Development District for a Transition District to an amended PD, Planned Development District for a Transition District.

SECTION TWO. That the base zoning district to which the use and development of the Property shall conform, except as modified by Section Three of this ordinance, is the LR, Local Retail District.

SECTION THREE. That a site plan, which is attached hereto as Exhibit "A" and incorporated herein for all purposes, is hereby adopted, and the use and development of the Property shall be subject to the following conditions and restrictions:

A. That the use and development of the Property shall significantly conform to the site plan attached hereto as Exhibit "A".

B. That the use of the Property for a miniature golf course, go-kart track, and go-kart garage shall be permitted.

C. That the landscaping shall conform to the regulations set forth in Title XI, Chapter 9 of the City Code.

D. That all signage shall conform to the regulations set forth in Title XI, Chapter 7a of the City Code.

SECTION FOUR. That the definitions given in the zoning regulations contained in the City Code of the City of Midland, Texas, shall be applicable to such of those terms as are used herein.

SECTION FIVE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION SIX. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION SEVEN. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars

($2,000.00).

SECTION EIGHT. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

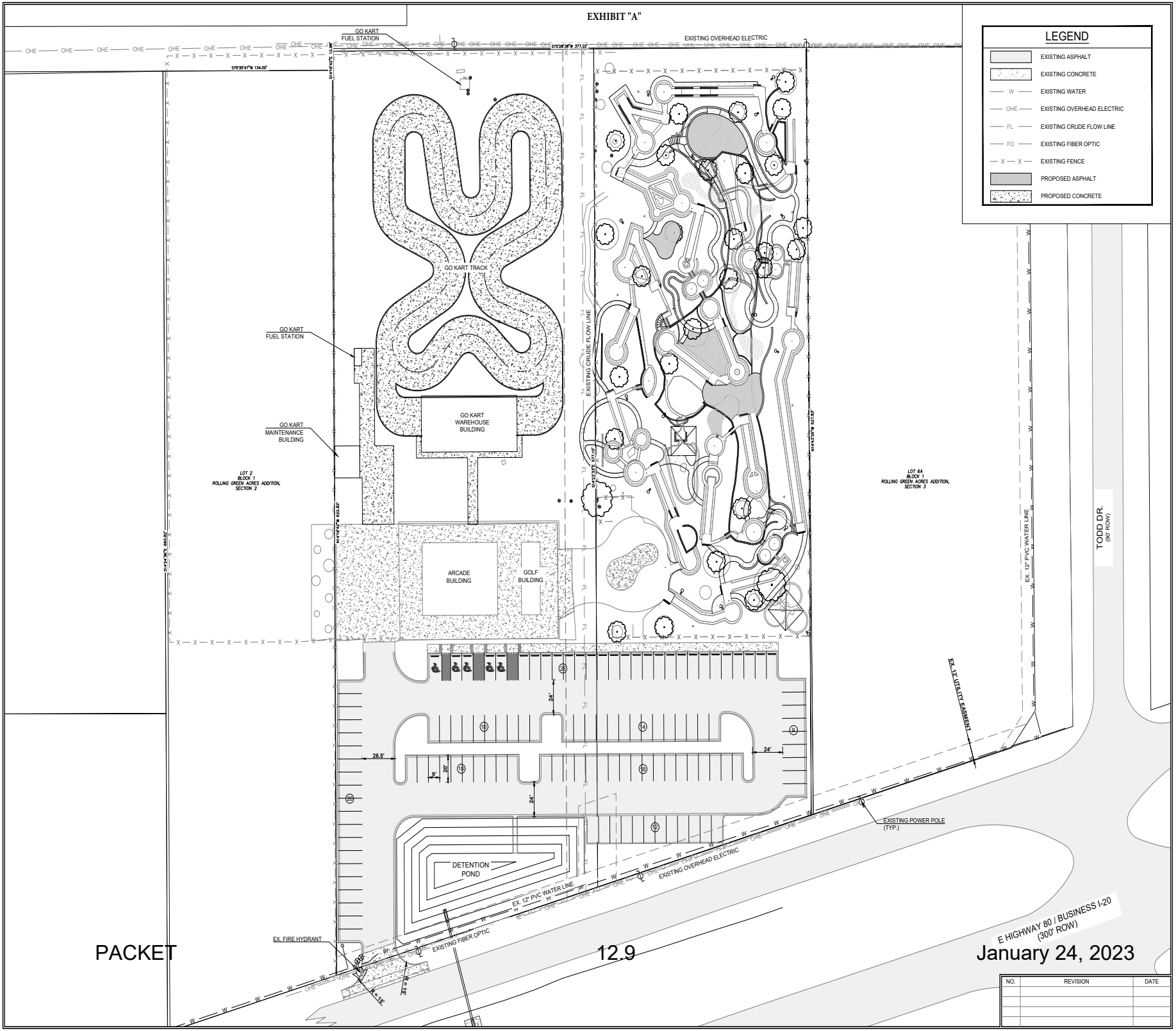
_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney


EXHIBIT "A"
LEGEND
EXISTING ASPHALT
EXISTING CONCRETE
EXISTING WATER
EXISTING OVERHEAD ELECTRIC
EXISTING CRUDE FLOW LINE
EXISTING FIBER OPTIC
EXISTING FENCE
PROPOSED ASPHALT
PROPOSED CONCRETE
GRAPHIC SCALE
0 30' 60'
(IN FEET)
1 inch = 30 ft.
GO KART FUEL STATION
GO KART TRACK
GO KART WAREHOUSE BUILDING
GO KART MAINTENANCE BUILDING
ARCADE BUILDING
GOLF BUILDING
LOT 2 BLOCK 1 ROLLING GREEN ACRES ADDITION, SECTION 2
LOT 6A BLOCK 1 ROLLING GREEN ACRES ADDITION, SECTION 3
TODD DR. (80' ROW)
EX. 12" PVC WATER LINE
EX. 12' UTILITY EASEMENT
EXISTING POWER POLE (TYP.)
DETENTION POND
EXISTING OVERHEAD ELECTRIC
EXISTING FIBER OPTIC
EX. FIRE HYDRANT
E HIGHWAY 80 / BUSINESS I-20 (300' ROW)
NEWTON ENGINEERING, PC
2500 E. 8th St. Odessa, Texas 79761 (432) 580-0707
3209 Caldera Blvd. Midland, Texas 79705 (432) 770-0469
F-13856
GREEN ACRES FAMILY FUN
MIDLAND, TX
PLANNED DEVELOPMENT SITE PLAN
NO. REVISION DATE
Project No. 20-ME02101
Date: JUN 2020
Drawn By: CBD
Checked By: JMN
Scale:
Sheet: 01

MIDLAND
Planning Division

Zone Change/Planned District Amendment/Site Plan Approval

Project Number: Z-22-0314

Case Number:

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Green Acres Golf, LLC		Phone ( ) Email	
Address P.O. Box 52268	City Midland	State TX	Zip 79710

Property Owner Printed Name: Same as applicant		Phone ( ) Email	
Address	City Midland	State TX	Zip 79710

Representative *(if different from Applicant or Property Owner)* Firm: Newton Engineering, PC Printed Name: Chase Dunnam		Phone (432) 559-5128 Email chase@newtoncivil.com	
Address 4501A Santa Rosa Dr.	City Midland	State TX	Zip 79707

Street Address: 2905 E. Hwy 80

Legal Description
Lot: 1A & 5 Block: 1 Subdivision: Rolling Green Acres Addition, Section 3

Current Zoning: PD	**Proposed Zone:** Amended PD *(List by tracts if more than one district is requested)*

Reason for Zone Change Request: Update site plan to show proposed go-cart track and maintenance garage

Present Use of Property: Mini Golf course/arcade

Proposed Use of Property: Adding a go-cart track and maintenance garage

How would this zone change affect the public health, safety and welfare? No change

Describe how conditions affecting the property have changed since present zoning designation: No change

Submittal and Fees
Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Site Plan
- Digital Copies of Site Plan (PDF/JPEG)

Signature *(by property owner only – authorized agent must sign affidavit below)*	
Applicant (signature):	Date: 11/17/22
Applicant (printed): Jeff Beard	
Property Owner (signature):	Date: 11/17/22
Property Owner (printed) : Jeff Beard	

The Zone Change/Planned District Amendment/Site Plan Approval shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appear Jeff Beard who, being by me duly sworn, upon oath says: That (s)he is the owner of _____ or authorized by Green Acres, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

Authorized Agent (*signature*)

Subscribed and sworn to before me, this 17 day of November, 2022, to certify which witness my hand and seal of office.

Sandra Seutter
Notary Public
State Of Texas
Notary ID 130743597
Expires 07-19-2024

NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

RECEIVED
NOV 17 2022

FOR OFFICE USE ONLY

- ☑ Property Owner Authorization
- ☑ Application Fee
- Check # 1235
- ☑ Dimensioned Site Plan
- ☑ Plans in Digital Format (PDF/JPEG)

BY: James Reber

Received By: James Reber Date: 11/17/22

Application will not be considered for scheduling until reviewed by a planner.



LOCATION MAP

Z-22--0314 **Scale: 1" = 3,387'**

Consider a request by Green Acres Golf, LLC for a zone change from PD, Planned District for Transition District to PD, Planned District for Transition District out of Lots 1A and 5, Block 1, Rolling Green Acres, Section 3, City and County of Midland, Texas.

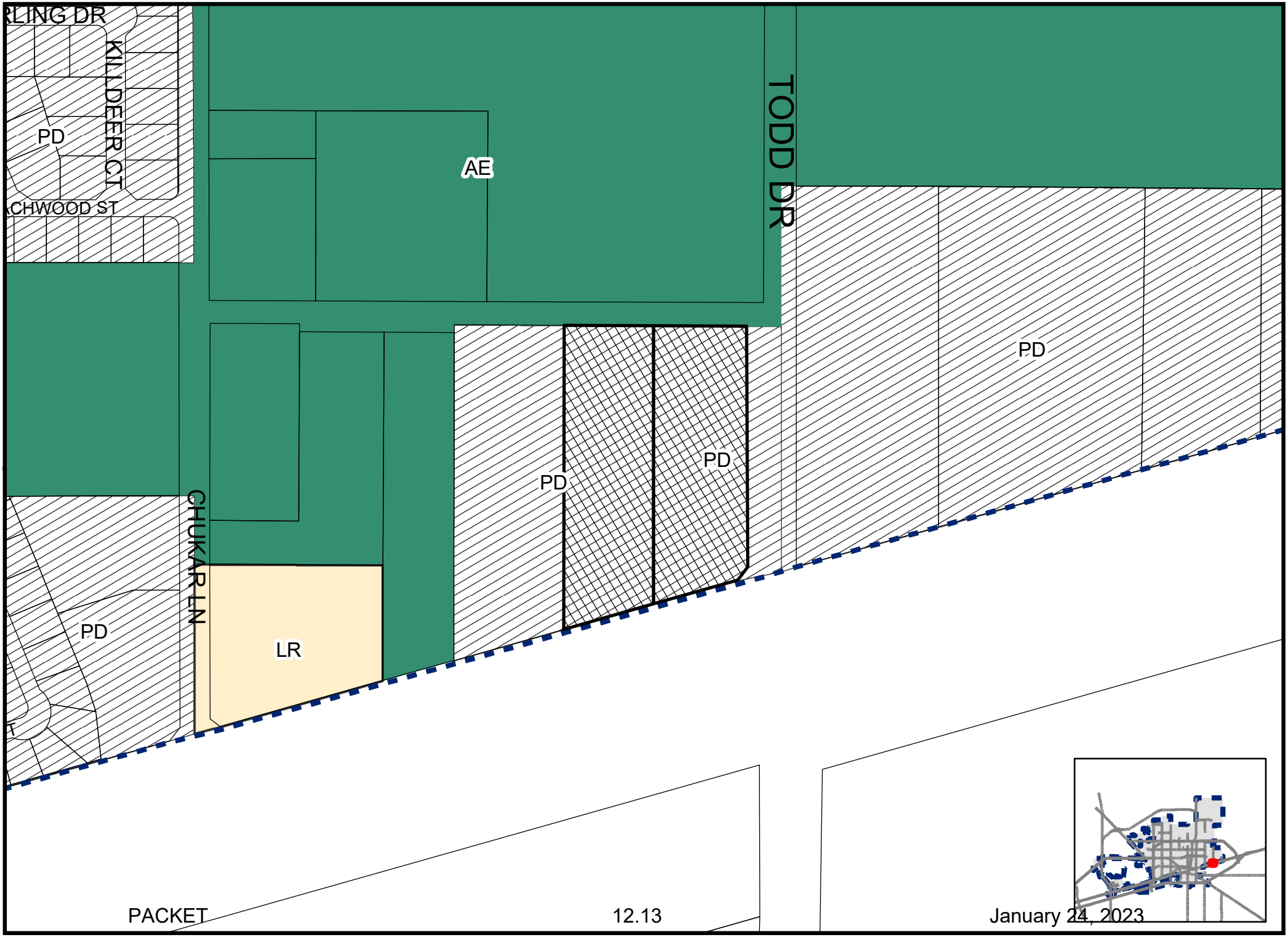
Generally located on the north side of East State Highway 80, approximately 250-feet west of Todd Drive. (Council District 2)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



©THE CITY OF MIDLAND - 2021
THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT. NOR IS IT DESIGNED TO BE THE PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.
THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.



Map By LO, 12/21/2022

Z-22-0314

Scale: 1" = 2,744'

ZONING MAP

© THE CITY OF MIDLAND - 2021: THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.


2214


DOLLAR GENERAL





City Council Meeting

Item Number: 13

Meeting Date: January 24, 2023 (January 10, 2023)

To: City Council / City Manager

From: Landon Ochoa, Planner

Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOTS 1A AND 5, BLOCK 1, ROLLING GREEN ACRES ADDITION, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A TRANSITION DISTRICT TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A TRANSITION DISTRICT (GENERALLY LOCATED ON THE NORTH SIDE OF EAST HIGHWAY 80, APPROXIMATELY 250 FEET WEST OF TODD DRIVE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Green Acres Golf, LLC, is requesting a zone change from PD, Planned District for Transition District (Ordinance 9590) to PD, Planned District for Transition District to update their site plan to show a proposed go-kart track and maintenance garage.

Recommended City Council Action:

Approve

Fiscal Impact:

This request does not require any City funds.

Discussion:

Current Zoning:

PD, Planned District for Transition District (Ordinance 9590)

Surrounding Zoning and Land Use:

The property to the west is zoned PD, Planned District for Transition and is vacant. The property to the east is the location of a Dollar General. The property to the north is zoned AE, Agricultural Estate District and is currently vacant.

Analysis:

The applicant, Green Acres Golf, LLC, is requesting to amend their site plan to accommodate a proposed go-cart track and maintenance garage. The new site plan, attached hereto as Exhibit A, shows a design of a new Go-Kart track and a Go-Kart warehouse building. The existing miniature golf course, golf building, and arcade building will remain and are not being altered. The proposed site plan shows a total of 97 parking spaces, of which 5 of these parking spaces are accessible spaces. This site has adequate internal circulation.

The applicant will be required to adhere to the site plan review standards outlined within the City of Midland Zoning Ordinance Section 5.0, Non-residential Zoning District Dimensional Regulation Chart as well as Chapter 9, Landscape Regulations for future landscaping.

This proposed zone change has been circulated to the respective City departments for internal review and their comments, conditions, and requirements are as follows:

Fire: (Approved)

No objections to zone change request.

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2020 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary. Code versions are subject to change depending on time of new code edition adoption in the City of Midland and date of permit application.

Engineering: (Approved)

No objections to zone change. [For Applicant’s Information Only.] Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For Applicant’s Information Only.]

Code: (Approved)

No Oil and Gas issues.

Transportation: (Approved)

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For the Applicant's information only.] No objection to zone change. [For the Applicant's information only.]

Planning:

This request is in compliance with the Tall City Tomorrow Comprehensive Plan, Chapter 3 An Integrated Land Use Vision, "Future Land Use Map" as it designates this area for Employment Reserve, a classification which calls for centers with major office and business uses. In addition to *Chapter 6-Character Plan Goal 4, which is to* "Encourage the development of places where Midland residents can gather and socialize to build connections." (Tall City Tomorrow page 137) This zone change amendment would promote and provide Midland residents with a unique outdoor social gathering experience.

This request was approved at the December 19, 2022, Planning and Zoning meeting.

Therefore, staff recommends approval of this zone change from PD, Planned District for Transition District (Ordinance 9590) to PD, Planned District for Transition District subject to conditions A through E.

Conditions:

A. **That the use and development of the property shall conform to the regulations of the LR, Local Retail District.**

B. **That the use of the property for a miniature golf course, Go-Kart track and Go-Kart garage shall be permitted.**

C. **That this property shall conform to the site plan, which are attached hereto and incorporated herein as Exhibits "A".**

D. **That the landscaping shall conform to the regulations set forth in Title XI, Chapter 9 of the City Code.**

E. **That all signage shall conform to the City of Midland Sign Code.**

Letters of Objection:

Staff has not received any letters of objection as of January 5, 2023.

Attachments:

Application
Site Plan (Exhibit A)
Maps

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 5,792-SQUARE FOOT PORTION OF THE WEST 90 FEET OF LOTS 10, 11 AND 12, BLOCK 61, ORIGINAL TOWN ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF WEST WALL STREET AND SOUTH CARRIZO STREET), WHICH IS PRESENTLY ZONED CB, CENTRAL BUSINESS DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A BAR FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, Texas, in compliance with the City Charter, the City Code, and State law, have given the requisite notices by United States mail, publication and otherwise; and after holding due hearings affording a full and fair hearing to all of the property owners generally, and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body of the City of Midland finds that the public convenience will be best served by granting a Specific Use Designation With Term for a 5,792-square foot portion of the west 90 feet of Lots 10, 11 and 12, Block 61, Original Town Addition, City and County of Midland, Texas (the "Property"), as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is hereby amended to grant the Property a Specific Use Designation With Term for the sale of all alcoholic beverages in a bar (the "Establishment") for on-premises consumption, together with the uses permitted in the present CB, Central Business District.

SECTION TWO. That the Property shall be subject to the following conditions and

restrictions:

A. That the serviceable area of the Establishment shall be limited to approximately 4,462 square feet as shown in Exhibit "A", which is attached hereto and incorporated herein for all purposes.

B. That the sale and on-premises consumption of alcoholic beverages shall conform to all applicable state and local laws.

C. That the days and hours of alcoholic beverage sales and consumption shall be limited to Monday through Sunday from 12:00 p.m. to 2:00 a.m. of the following day.

D. That the occupancy of the Establishment shall not exceed the maximum occupancy determined by the Building Code and Fire Code.

E. That the Establishment shall meet the requirements of the Fire Department and the Code Administration Division.

F. That the operator of the Establishment shall obtain a Certificate of Occupancy prior to the commencement of the sale of alcoholic beverages for on-premises consumption to ensure that the conditions of this Specific Use Designation With Term are satisfied.

G. That in accordance with Section 11-1-9.07.E.3 of the City Code, the Establishment shall be in operation within 120 days from the final adoption date of this ordinance.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances, inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance

with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

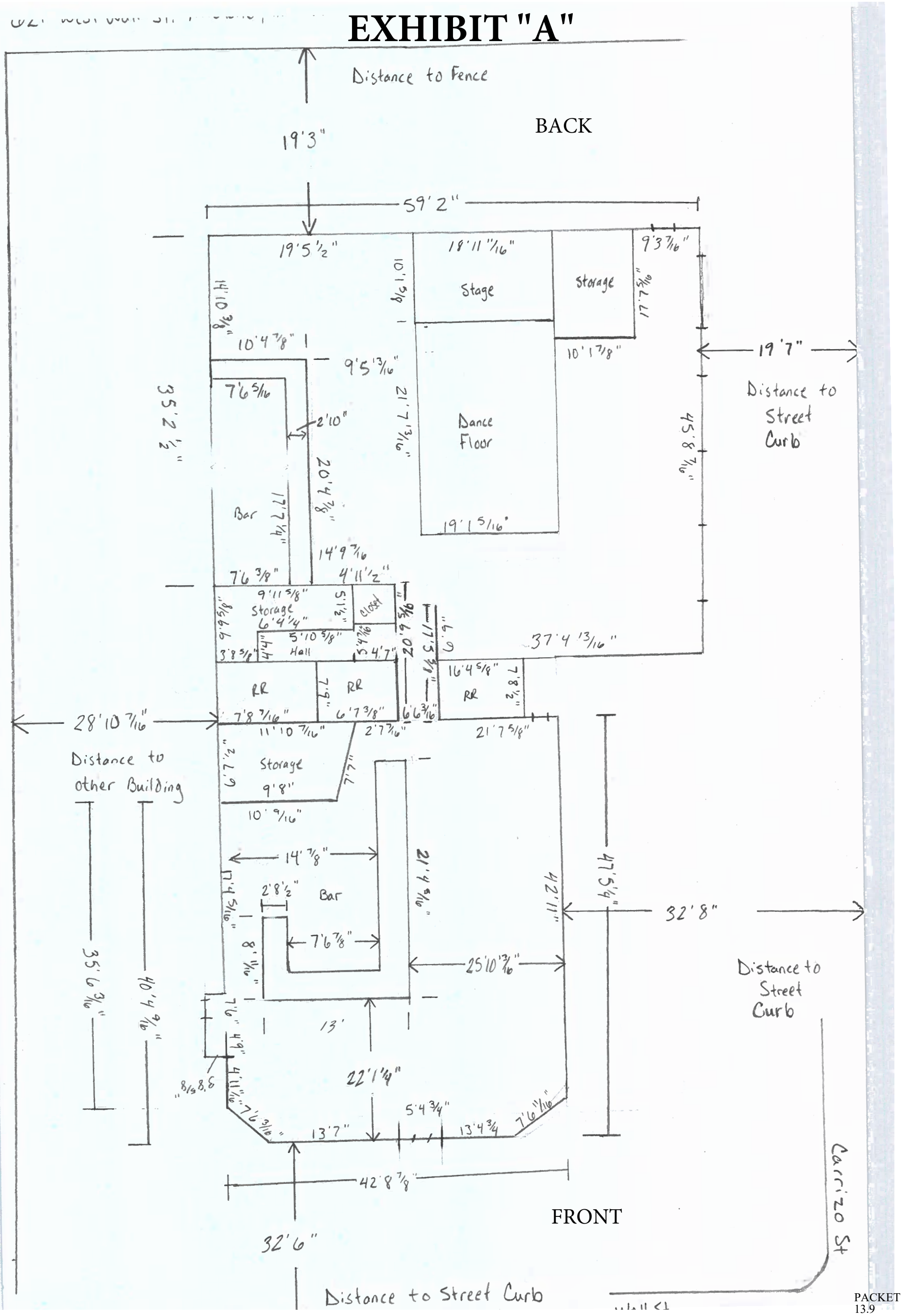
APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

EXHIBIT "A"


Distance to Fence
BACK
19'3"
59'2"
19'5 1/2"
18'11 "/16"
9'3 7/16"
10'1 5/8"
Stage
Storage
17'7 5/16"
14'10 8/16"
10'4 7/8"
10'1 7/8"
9'5 13/16"
19'7"
Distance to Street Curb
7'6 5/16
35'2 1/2"
2'10"
21'7 13/16"
Dance Floor
45'8 7/16"
20'4 7/8"
Bar
17'7 1/4"
19'1 5/16"
14'9 7/16
7'6 3/8"
4'11 1/2"
9'11 5/8"
Storage
6'4 1/4"
5'1 1/2"
Closet
6'9 5/8"
5'10 5/8"
4'4"
Hall
3'8 5/8"
5'4 7/16"
5'4 7"
20'9 5/16"
6'9"
37'4 13/16"
RR
7'8 7/16"
7'9"
RR
6'7 3/8"
16'4 5/8"
RR
3'8 1/2"
28'10 7/16"
11'10 7/16"
2'7 7/16"
6'6 3/16"
21'7 5/8"
Distance to other Building
6'7 1/2"
Storage
9'8"
7'7"
10'9/16"
14'7/8"
2'8 1/2"
Bar
7'6 7/8"
21'4 9/16"
17'11 5/16"
8'11 7/16"
7'6"
25'10 7/16"
42'11"
47'5 1/4"
32'8"
Distance to Street Curb
35'6 3/16"
40'4 9/16"
13'
6'9"
6'4"
8'8 1/8"
7'6 3/16"
22'1 1/4"
5'4 3/4"
13'7"
13'4 3/4"
7'6 11/16"
42'8 7/8"
FRONT
32'6"
Distance to Street Curb
Carrizo St

MIDLAND
Planning Division

Specific Use Permit with Term for the Sale of Alcoholic Beverages for On-Premises Consumption

Project Number: SUP-22-0145

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: 237 West Wall, LLC.		Phone (432) 770-2193 Email csmith@luxcdtx.com	
Address 1401 Ainslee St.	City Midland	State TX	Zip 79701
Property Owner Printed Name: Wall Street Joint Ventures		Phone (713) 385-6527 Email becky.thomson@rtspecialty.com	
Address 918 Malone St.	City Houston	State TX	Zip 77007
Representative *(if different from Applicant or Property Owner)* Firm: _____ Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Street Address: 621 W. Wall St.

Business Name: Double Bar Saloon

Legal Description
Lot: 13 Block: 61 Subdivision: Original Town, Section 25

Current Zoning: CB

Reason for Request: We are planning to open a bar at this location.

Type of Business *(restaurant, bar, lounge, nightclub, etc.)*: Bar

Proposed/Current Days and Hours of Operation: Sunday-Saturday 12:00PM-2:00AM

Proposed Days and Hours of Alcohol Service: Sunday-Saturday 12:00PM-2:00AM

Total Square Footage of Business: 5,792

Square Footage of Alcohol Serviceable Area: 4,462

Restroom Fixtures:	*Men*	**Toilets/Urinals:** 1 / 2	**Bathroom Sinks:** 2
	Women	**Toilets:** 3	**Bathroom Sinks:** 2

Submittal and Fees

Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Floor Plan showing:
  - Seating
  - Exits
  - Restrooms
  - Kitchen (if applicable)
  - Total Square Footage
  - Serviceable Square Footage
- Dimensioned Site Plan showing:
  - Parking
  - Business Footprint
- Digital Copies of Floor Plan & Site Plan (PDF/JPEG)

Signatures

Applicant (signature): Carlin Smith R. Raymon Griffith	Date: 8/29/2022
Applicant (printed): Carlin Smith & R. Raymon Griffith	
Property Owner (signature): Frank G. Tirey	Date: 8/29/2022
Property Owner (printed): Frank G. Tirey	

The Specific Use Designation with Term for the sale of all alcoholic beverages shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared Carlin Smith + Raymon Griffith who, being by me duly sworn, upon oath says: That (s)he is authorized by Frank G. Tirey, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

Carlin Smith R. Raymon Griffith
Authorized Agent (*signature*)

Subscribed and sworn to before me, this 29 day of August, 2022 to certify which witness my hand and seal of office.

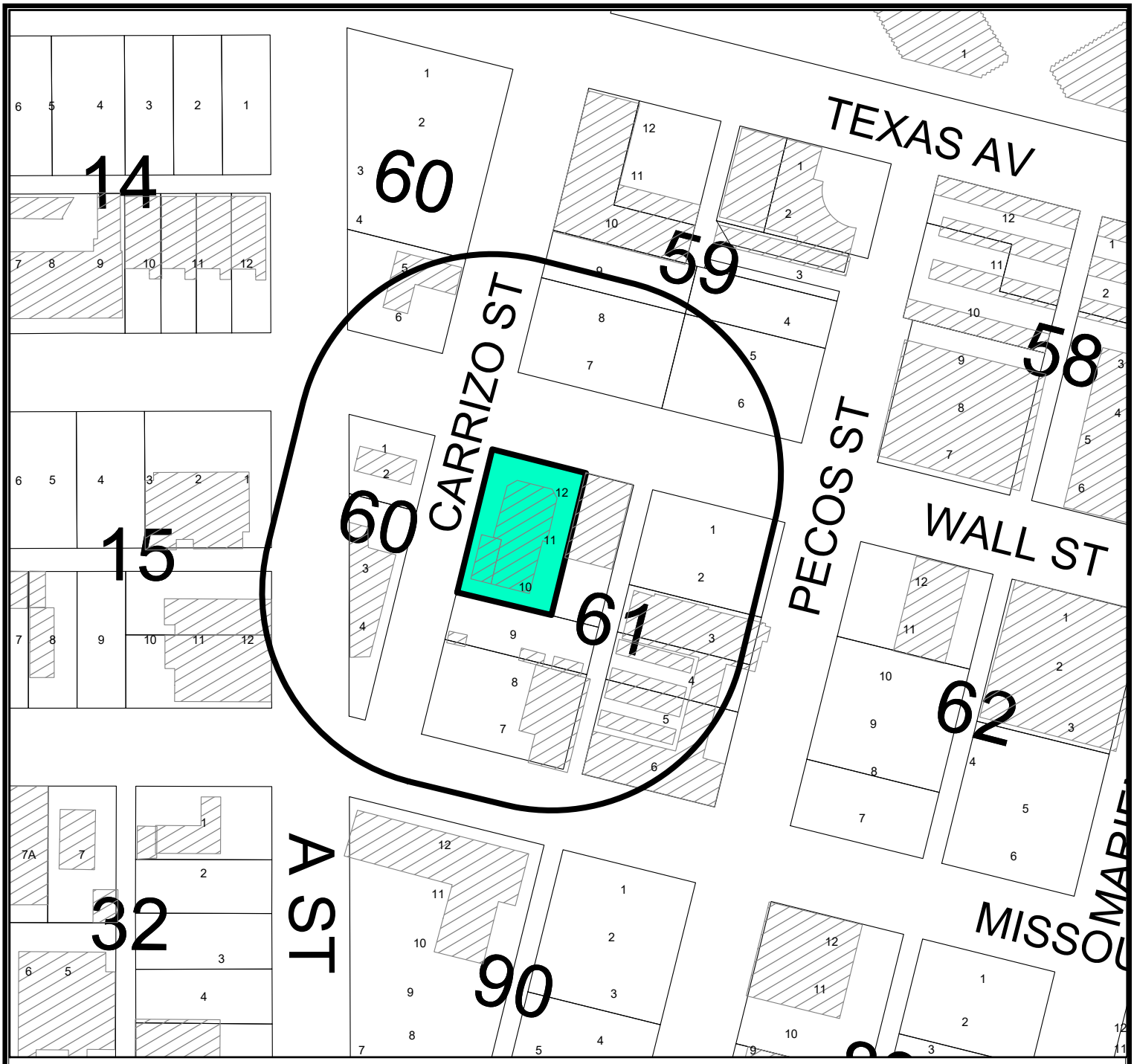
DELMA ECKERT
Notary Public, State of Texas
Comm. Expires 05-11-2025
Notary ID 131125628

Delma Eckert
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

****Application will not be considered for scheduling until reviewed by a planner.****

FOR OFFICE USE ONLY	
☑ Property Owner Authorization	☑ Dimensioned Floor Plan
☑ Application Fee	☑ Site Plan
Check #_____	☑ Plans in Digital Format (PDF/JPEG)
Received By:_____	Date:_____ NOV 17 2022

****Application will not be considered for scheduling until reviewed by a planner.****



LOCATION MAP

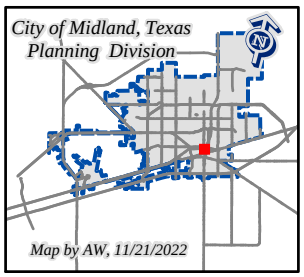
SUD-22-0145 **Scale: 1" = 200'**

Consider a request by 237 West Wall LLC., for a Specific Use Designation with Term for the sale of all alchoholic beverages, for on premises consumption in a bar, on a 5,792-square foot portion of the west 90-feet of Lots 10, 11, and 12, Block 61, Original Town, City and County of Midland, Texas.

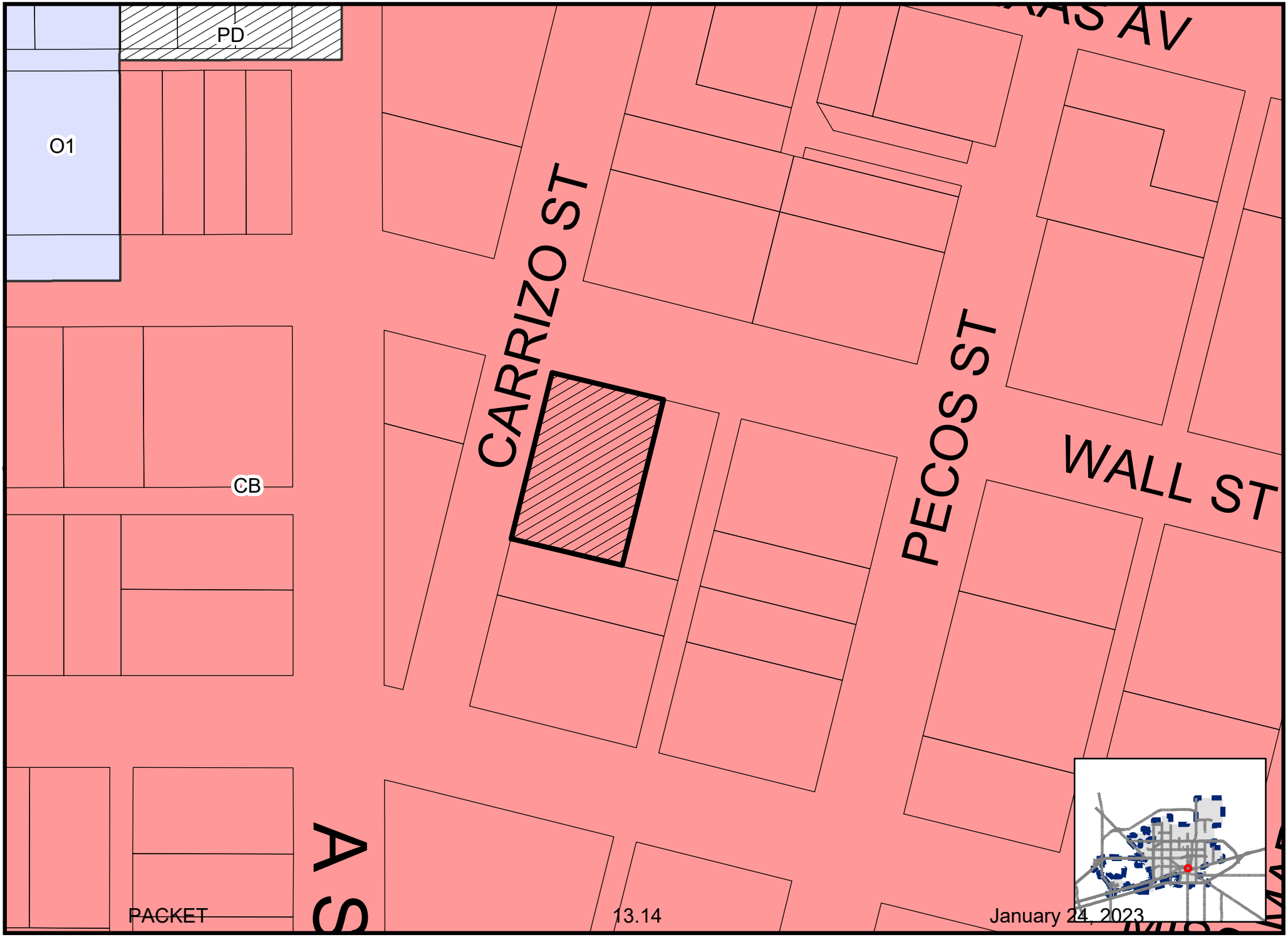
Generally located southeast of the intersection of West Wall Street and South Carrizo Street - (Council District 3)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



January 24, 2023



Map By AW, 11/21/2022

SUD-22-0145

Scale: 1" = 200'

ZONING MAP

© THE CITY OF MIDLAND - 2021: THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.


619


Frost
Frost


THE LONE STAR BAR
CLOSED FOR RE



City Council Meeting

Item Number: 14

Meeting Date: January 24, 2023 (January 10, 2023)

To: City Council / City Manager

From: Alexandra Walling, Planner

Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 8, BLOCK 30, GREENWOOD ADDITION, THIRD, FOURTH, AND FIFTH SECTIONS, CITY AND COUNTY OF MIDLAND, TEXAS, FROM MF-22, MULTIPLE-FAMILY DWELLING DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED ON THE EAST SIDE OF SOUTH CLAY STREET, APPROXIMATELY 90 FEET NORTH OF EAST PENNSYLVANIA AVENUE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Jorge Chavez, is requesting a Zone Change from MF-22, Multiple-Family Dwelling District to SF-3, Single-Family Dwelling District, for a future development of a single-family home located at 609 South Clay Street.

Recommended City Council Action:

Approve

Fiscal Impact:

No City funds would be required for this project.

Discussion:

Current Zoning:

MF-22, Multi-Family Dwelling District

Surrounding Zoning and Land Use:

The properties to the north, east, south, and west are zoned MF-22, Multiple-Family Dwelling District, with the exception of eight lots to the north, east, and south who's zoning has been corrected to SF-3, Single-Family Dwelling District, and are the location of single-family homes and vacant land.

Analysis:

The applicant is requesting to rezone the property from MF-22, Multiple-Family Dwelling District to SF-3, Single-Family Dwelling District, to allow for the construction of a residential home. The property meets the minimum lot size requirements for the SF-3, Single Family Dwelling District. Under the previous zoning code, the current zoning district would have allowed for construction of single-family homes, which allowed for the proliferation of their construction in this area. Under the new Zoning Code adopted in 2019, residential uses became more specified to single family zoning district.

The applicant will be required to adhere to the site plan review standards outline within the City of Midland Zoning Ordinance Section 5.04: - Residential Zoning District Dimensional Regulations Chart.

This proposed zone change has been circulated to the respective City departments for internal review and their comments, conditions, and requirements are as follows:

Fire: (Approved)

No comments.

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2020 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary. Code versions are subject to change depending on time of new code edition adoption in the City of Midland and date of permit application.

Engineering: (Approved)

No objections to zoning/zone change. [For Applicant's Information Only.]

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For Applicant's Information Only.]

Code: (Approved)

No Oil and Gas Issues.

Transportation: (Approved)

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For the Applicant's information only.]

No objection to zone change. [For the Applicant's information only.]

Planning:

According to the Tall City Tomorrow Comprehensive Plan, Urban Residential-Medium (UR-M) land use emphasizes a mix of housing styles such as townhomes, single-family detached, and single-family attached. UR-M land use is applicable in areas of the city where diverse housing types exist in older established neighborhoods. Potential zoning for UR-M land use includes Single-Family Dwelling District, however does not list MF-22, Multiple-Family Dwelling District. Changing 609 South Clay Street to SF-3, Single-Family Dwelling District would fit the intended land use properly. Therefore, the City of Midland Planning Department supports this rezone because of the existing surrounding uses.

This request was recommended for approval at the December 5, 2022, Planning and Zoning Commission meeting.

Staff recommends approval of this zone change from MF-22, Multiple-Family Dwelling District to SF-3, Single-Family Dwelling District, subject to condition A.

Conditions:

A. That the use and development of this property shall conform to the regulations of the SF-3, Single-Family Dwelling District.

Letters of Objection:

Staff has not received any letters of objection as of January 4, 2023.

Attachments:

Application
Survey (Exhibit A)
Maps

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 8, BLOCK 30, GREENWOOD ADDITION, THIRD, FOURTH, AND FIFTH SECTIONS, CITY AND COUNTY OF MIDLAND, TEXAS, FROM MF-22, MULTIPLE-FAMILY DWELLING DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED ON THE EAST SIDE OF SOUTH CLAY STREET, APPROXIMATELY 90 FEET NORTH OF EAST PENNSYLVANIA AVENUE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, in compliance with the City Charter, the City Code, and State law, have given the requisite notices by United States mail, publication and otherwise; and after a full and fair hearing to all of the property owners generally and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body finds that the public health, safety and general welfare will be best served by rezoning Lot 8, Block 30, Greenwood Addition, Third, Fourth, and Fifth Sections, City and County of Midland, Texas (the "Property") to SF-3, Single-Family Dwelling District, as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is hereby amended to rezone the Property from MF-22, Multiple-Family Dwelling District to SF-3, Single-Family Dwelling District.

SECTION TWO. That the definitions given in the zoning regulations contained in the City Code of the City of Midland, Texas, shall be applicable to such of those terms as are used herein.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as

that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

MIDLAND Planning Division

Zone Change/Planned District Amendment/Site Plan Approval

Project Number: Z-22-0311

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Jorge Chavez		Phone (432) 889-7005 Email ferre_chavez@mail.com	
Address 6 12016 E Pennsylvania	City Mid	State TX	Zip 79701

Property Owner Printed Name: Same ↑		Phone ( ) Email	
Address	City	State	Zip

Representative *(if different from Applicant or Property Owner)* Firm: _____ Printed Name: N/A		Phone ( ) Email	
Address	City	State	Zip

Street Address: 609 S. Clay

Legal Description
Lot: 8 Block: 30 Subdivision: Greenwood Add, Sec 3

Current Zoning: MF 22

Proposed Zone: SF2
(List by tracts if more than one district is requested)

Reason for Zone Change Request: Change to Single Family home

Present Use of Property: Vacant

Proposed Use of Property: Single Family Home

How would this zone change affect the public health, safety and welfare? _____

Describe how conditions affecting the property have changed since present zoning designation: _____

Submittal and Fees
Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Site Plan
- Digital Copies of Site Plan (PDF/JPEG)

Signature *(by property owner only – authorized agent must sign affidavit below)*	
Applicant (signature): Jorge Chavez	Date: 11-09-2022
Applicant (printed): Jorge Chavez	
Property Owner (signature): Jorge Chavez	Date: 11-09-2022
Property Owner (printed) :	

The Zone Change/Planned District Amendment/Site Plan Approval shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appear_____who, being by me duly sworn, upon oath says: That (s)he is the owner of _____or authorized by_____, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

_____
Authorized Agent (*signature*)

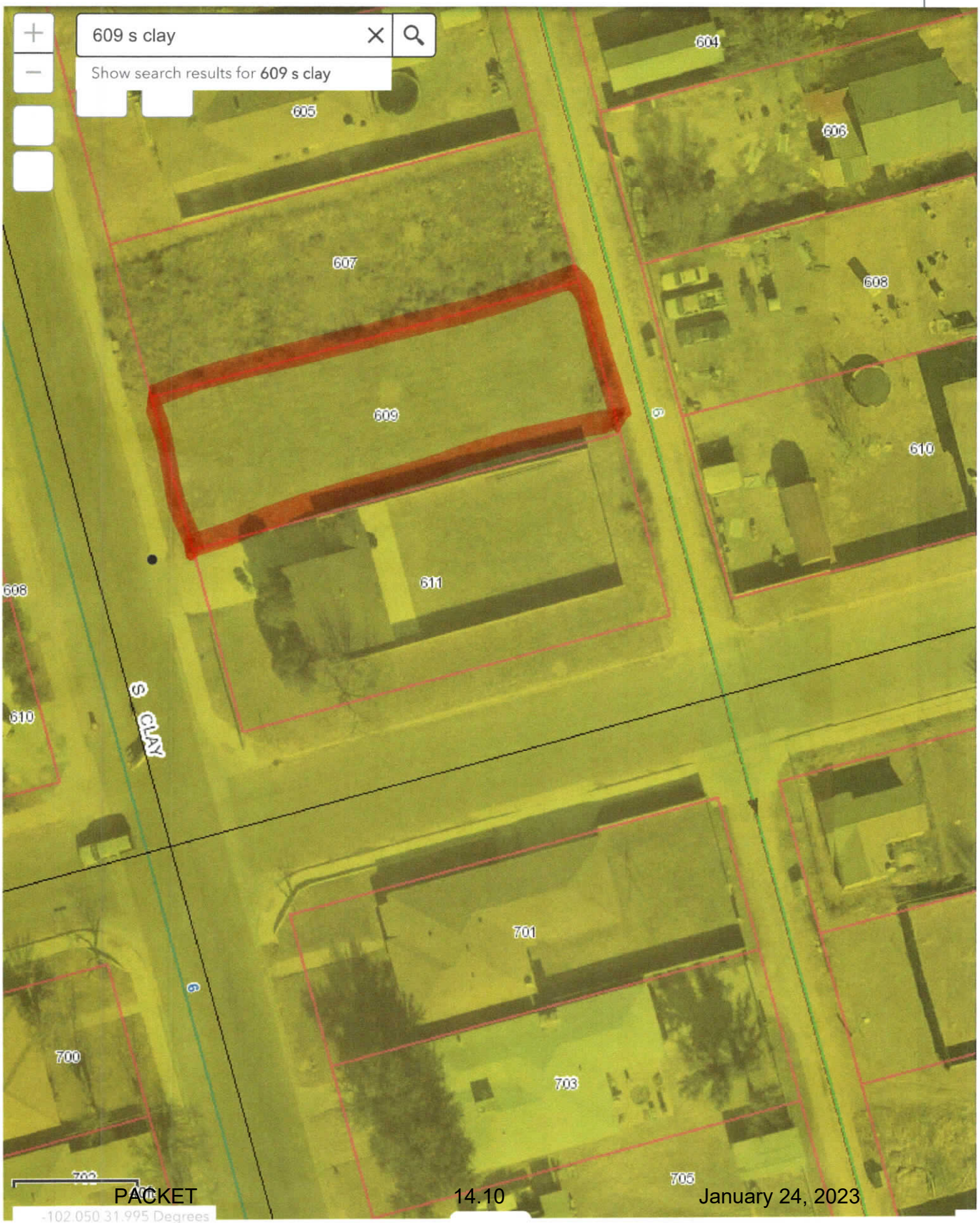
Subscribed and sworn to before me, this_____day of_____, 20____, to certify which witness my hand and seal of office.

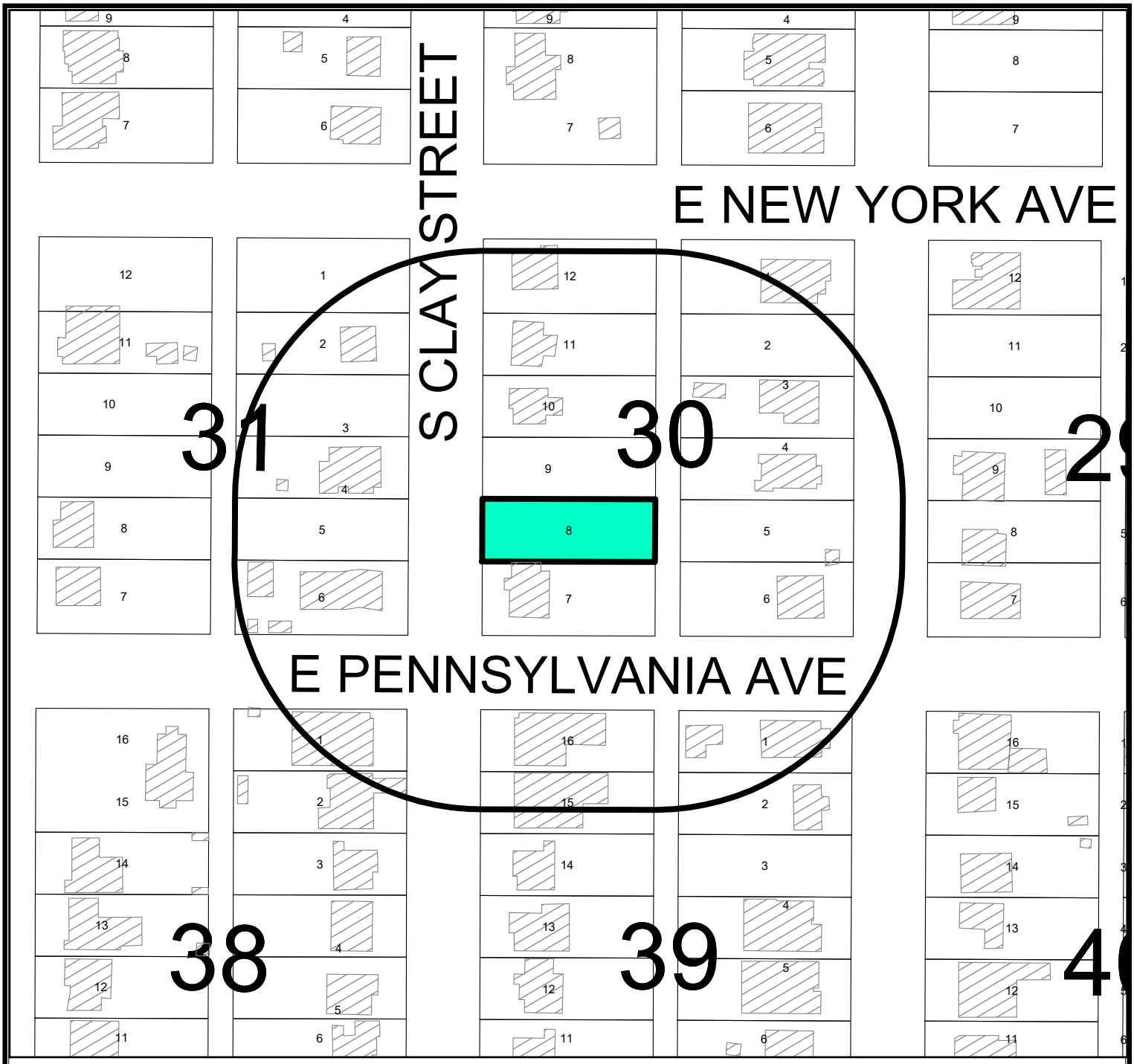
_____
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY

☑ Property Owner Authorization	☑ Dimensioned Site Plan
☑ Application Fee	☑ Plans in Digital Format (PDF/JPEG)
Check # 1527	
Received By: DS	Date: 11-9-22

****Application will not be considered for scheduling until reviewed by a planner.****


Development Services
with ArcGIS Web AppBuilder
609 s clay
Show search results for 609 s clay
604
605
606
607
608
609
610
611
608
610
S CLAY
701
700
703
705
-102.050 31.995 Degrees



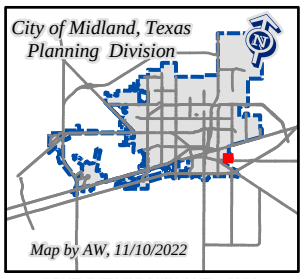
LOCATION MAP

Z-22-0311 **Scale: 1" = 200'**

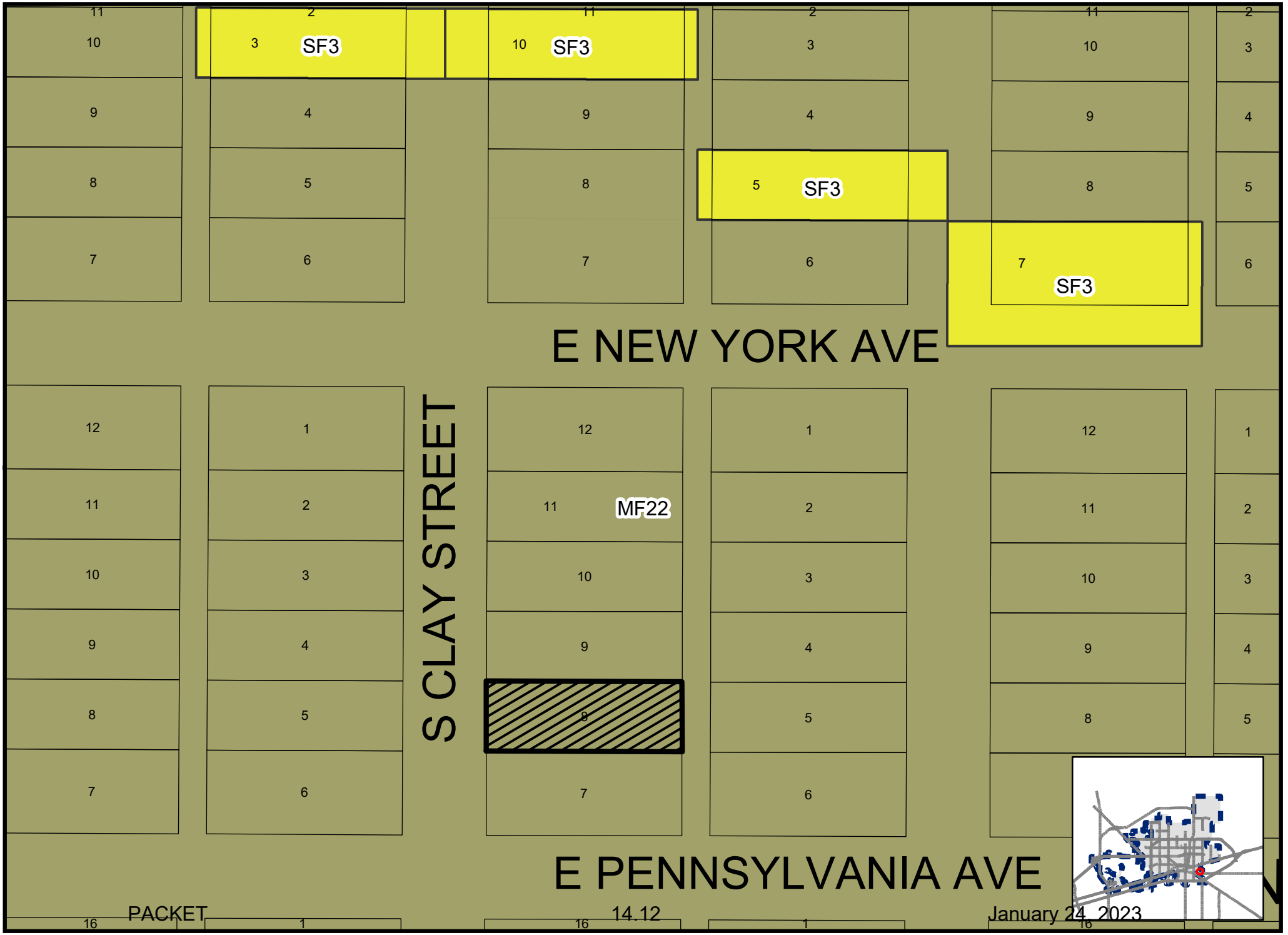
Consider a request by Jorge Chavez for a Zone Change from MF-22, Multiple-Family Dwelling District to SF-3, Single-Family Dwelling District on Lot 8, Block 30, Greenwood Addition, Section 3rd, 4th, and 5th, City and County of Midland, Texas.
Generally located on the east side of South Clay Street, approximately 71-feet north of East Pennsylvania Avenue. (Council District 2)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



January 24, 2023



PACKET 14.12 January 24, 2023

Map By AW, 11/10/2022

Z-22-0311

Scale: 1" = 200'

ZONING MAP

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City Council Meeting

Item Number: 20
Meeting Date: January 10, 2023
To: City Council / City Manager
From: Landon Ochoa, Planner
Subject: **AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOT 12, BLOCK 21, MOODY ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF NORTH MADISON STREET AND EAST ILLINOIS AVENUE), BY PERMITTING A REDUCED MINIMUM LOT WIDTH IN THE EVENT THAT THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND IS AMENDED TO REZONE THE PROPERTY FROM MF-22, MULTIPLE-FAMILY DWELLING DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)**

Purpose:

The applicant, Jorge Chavez Jurado, is requesting a Special Exception from the City of Midland Zoning Ordinance, *Section 5.04 – Residential Zoning District Dimensional Regulations Chart*, concerning the minimum lot dimension to be able to rezone the property into SF-3, Single-Family Dwelling District located at 210 N. Madison St.

Recommended City Council Action:

Approve

Fiscal Impact:

No City funds are required to process this request.

Discussion:

The property is located at 210 North Madison and is the location of a vacant lot. The applicant is requesting a special exception to the minimum lot width for the proposed SF-3, Single Family Dwelling District to be able to proceed with the application of rezoning the property to build a single-family home.

The property is currently zoned MF-22, Multiple-Family Dwelling District and does not meet the minimum lot dimensions for either its current district, or the proposed district.

Per our City of Midland Zoning Ordinance, *Section 5.04 – Residential Zoning District Dimensional Regulations Chart, concerning the width of corner lots in SF-3.*

SF-3, Single Family Dwelling District
Lot Dimensions
Minimum Lot Width:
Corner Lot: 55 feet

As shown on Moody Addition plat, this property is currently 50 feet wide and 140 feet deep.

This request has been circulated to all pertinent City departments for review. Below are the departments' comments.

Fire: (Approved)

No objections to zone change request

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2020 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary. Code versions are subject to change depending on time of new code edition adoption in the City of Midland and date of permit application.

Engineering: (Approved with Conditions)

No objection. Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. Our staff has examined the FEMA flood map and it appears that this property lies entirely within Zone AE, which is a Special Flood Hazard Area subject to inundation by the 1% annual chance flood. An elevation certificate based off of construction drawings will be required to get a building permit to show compliance to the 1 foot of freeboard above the base flood elevation for residential structures. An elevation certificate based off of finish construction will be required for the Certificate of Occupancy.

Code: (Approved)

No Oil and Gas issues.

Transportation: (Approved)

No objection to zone change. [For the Applicant's information only.]

Planning (Approved):

While this request represents a deviation from the existing Zoning Ordinance, due to the unique circumstances surrounding the lot in question, staff is recommending approval of this application for a Special Exception to the City of Midland Zoning Ordinance, Section 5.04 – Residential Zoning District Dimensional Regulations Chart.

This lot has been platted and zoned in a way that prohibits development, therefore, the City has inadvertently forced this property and others around it to remain vacant under the current zoning ordinance. During the initial adoption period of the new zoning ordinance, there were several lots in this area that were re-zoned to SF-3, single family dwelling district that fell into this same issue.

Additionally, the area has dispersed single family housing that was developed before the new zoning ordinance took effect, therefore, developing this property as a single-family home would fit with the character of the neighborhood. This special exception is required in order to change the zoning to SF-3 to better conform to develop a single-family residence.

This request is in compliance with the Tall City Tomorrow Comprehensive Plan, Chapter 3 An Integrated Land Use Vision, "Future Land Use Map" as it designates this area for Urban Residential-Medium, a classification which calls for "a mix of housing styles including singlefamily detached, single-family attached, and townhouses." This special exception would allow for the development of a single-family residence on this lot that would otherwise remain vacant.

Due to these factors, staff is recommending approval of this special exception subject to conditions A and B.

Conditions:

A. **That the property shall significantly conform to the site plan shown in Exhibit "A", which is attached hereto and incorporated herein for all purposes.**

B. **That the minimum allowable width of the lot shall be 50 feet.**

Letters of Objection:

Staff has not received any letters of objection as of January 5, 2023.

Attachments:

Application
Aerial Map (Exhibit A)

_____
City Manager

ORDINANCE NO. _____

AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOT 12, BLOCK 21, MOODY ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF NORTH MADISON STREET AND EAST ILLINOIS AVENUE), BY PERMITTING A REDUCED MINIMUM LOT WIDTH IN THE EVENT THAT THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND IS AMENDED TO REZONE THE PROPERTY FROM MF-22, MULTIPLE-FAMILY DWELLING DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION

WHEREAS, the City Council modified the authority of the Board of Adjustment in Title XI, Chapter 1, Section 7 ("Section 11-1-7") of the Midland City Code; and

WHEREAS, Section 11-1-7 provides for the consideration of requests for special exceptions to the Midland Zoning Ordinance; and

WHEREAS, the Council finds that satisfactory evidence has been presented that the use to be authorized by the granting of the special exception will not be detrimental to the health, safety, comfort and welfare of the occupants of the land area near the tract on which the use to be allowed by special exception will be located; and

WHEREAS, the Council finds that it is clearly and specifically authorized by the terms of Section 11-1-7 to grant such a special exception, and said exception will be in harmony with the general purposes and intent of the zoning provisions of the Midland City Code; and

WHEREAS, after a full and fair public hearing at which all parties in interest were offered an opportunity to be heard, all pursuant to law, the Council finds it to be in the public interest to grant a special exception to the Zoning Ordinance, pursuant to Section 11-1-7, for the purposes herein stated, subject to special conditions;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That a special exception is hereby granted for the property described as Lot 12, Block 21, Moody Addition, City and County of Midland, Texas (the "Property"). Said special exception shall allow a reduced minimum lot width in the event that the Zoning District Map of the City of Midland, Texas, is amended to rezone the Property from MF-22, Multiple-Family Dwelling District to SF-3, Single-Family Dwelling District.

SECTION TWO. That said special exception is subject to the following special conditions:

A. That the minimum lot width shall be 50 feet.

B. That said special exception shall be of no force or effect unless and until the Property is rezoned as described in Section One of this ordinance.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to file this ordinance with the Office of the County Clerk for purposes of recordation.

SECTION SEVEN. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

MIDLAND Planning Division

Special Exception Application

Project Number: E-22-0089

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Jorge Chavez Jurado		Phone (432) 889-7005 Email Ferre_Chavez@ymail.com	
Address	City Midland	State TX	Zip 79701

Property Owner Printed Name: Same ↗		Phone (432) 889-7005 Email Ferre_Chavez@ymail.com	
Address	City Midland	State TX	Zip 79701

Representative *(if different from Applicant or Property Owner)* Firm: _____ Printed Name: N/A		Phone (432) 889-7005 Email Ferre_Chavez@ymail.com	
Address	City Midland	State TX	Zip 79701

Street Address: 210 N. Madison

Legal Description
Lot: 12 Block: 21 Subdivision: Moody Addition

Current Zoning:

This property qualifies as an exception to the City Code because:

- ☐ It is an expansion of a nonconforming use.
- ☐ There are existing nonconforming structures in the area.
- ☐ The addition of architectural or other projections of a minor extent.

Reason for Request: lot dimensions don't meet requirements
Corner lot SF3 needs min 55ft. currently 50ft.

Submittal and Fees
Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Site Plan showing:
  - Parking
  - Building Footprint
- Digital Copies of Site Plan (PDF/JPEG)

Signatures		
Applicant (signature):	Jorge Chavez Jurado	Date: 11-21-2022
Applicant (printed):	Jorge Chavez Jurado	11-21-2022
Property Owner (signature):		Date: 11-21-2022
Property Owner (printed) :		

The Special Exception shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared _____ who, being by me duly sworn, upon oath says: That (s)he is authorized by _____, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

_____
Authorized Agent (*signature*)

Subscribed and sworn to before me, this _____ day of _____, 20 ___, to certify which witness my hand and seal of office.

_____
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

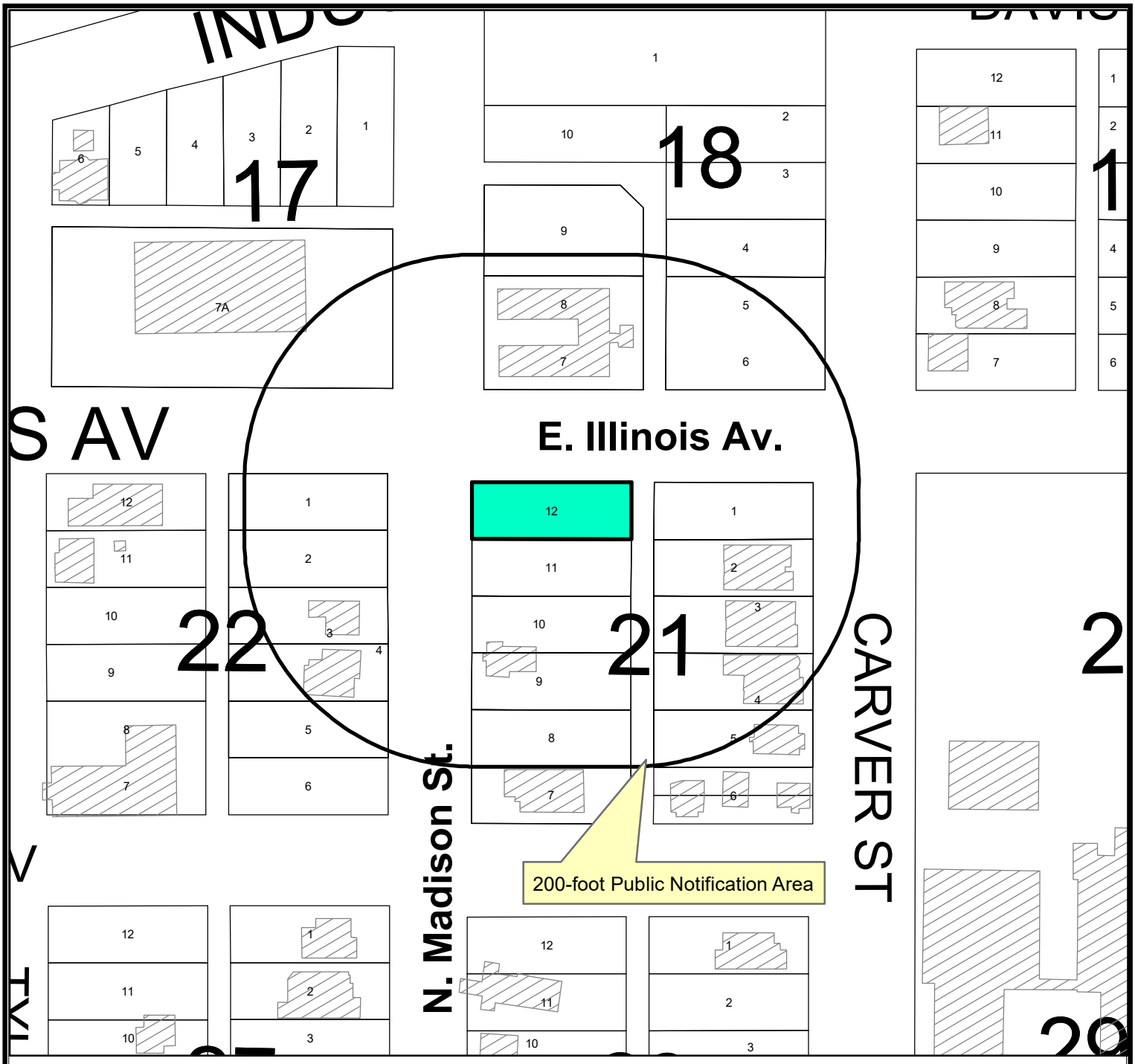
FOR OFFICE USE ONLY

☑ Property Owner Authorization	☑ Dimensioned Site Plan
☑ Application Fee $500	☑ Plans in Digital Format (PDF/JPEG)
Check # 1530	
Received By: Lexi Walling	Date: RECEIVED NOV 21 2022

BY: LW

****Application will not be considered for scheduling until reviewed by a planner.****


Development Services
210 N MADISON ST, 210 210 N
Show search results for 210 N MADIS...
301
LR
10
6
E. ILLINOIS
MF22
140'
50'
211
209
208
207
N MADISON
206
SF3
204
207
205
202
203
200
40ft



LOCATION MAP

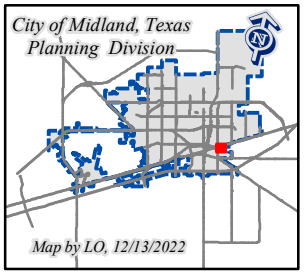
E-22-0089 **Scale: 1" = 1,494'**

Consider a request by Jorge Chavez Jurado for a Special Exception from the City of Midland Zoning Ordinance, Section 5.04 – Residential Zoning District Dimensional Regulations Chart, concerning the minimum lot dimension on Lot 12, Block 21, Moody Addition, City and County of Midland, Texas.

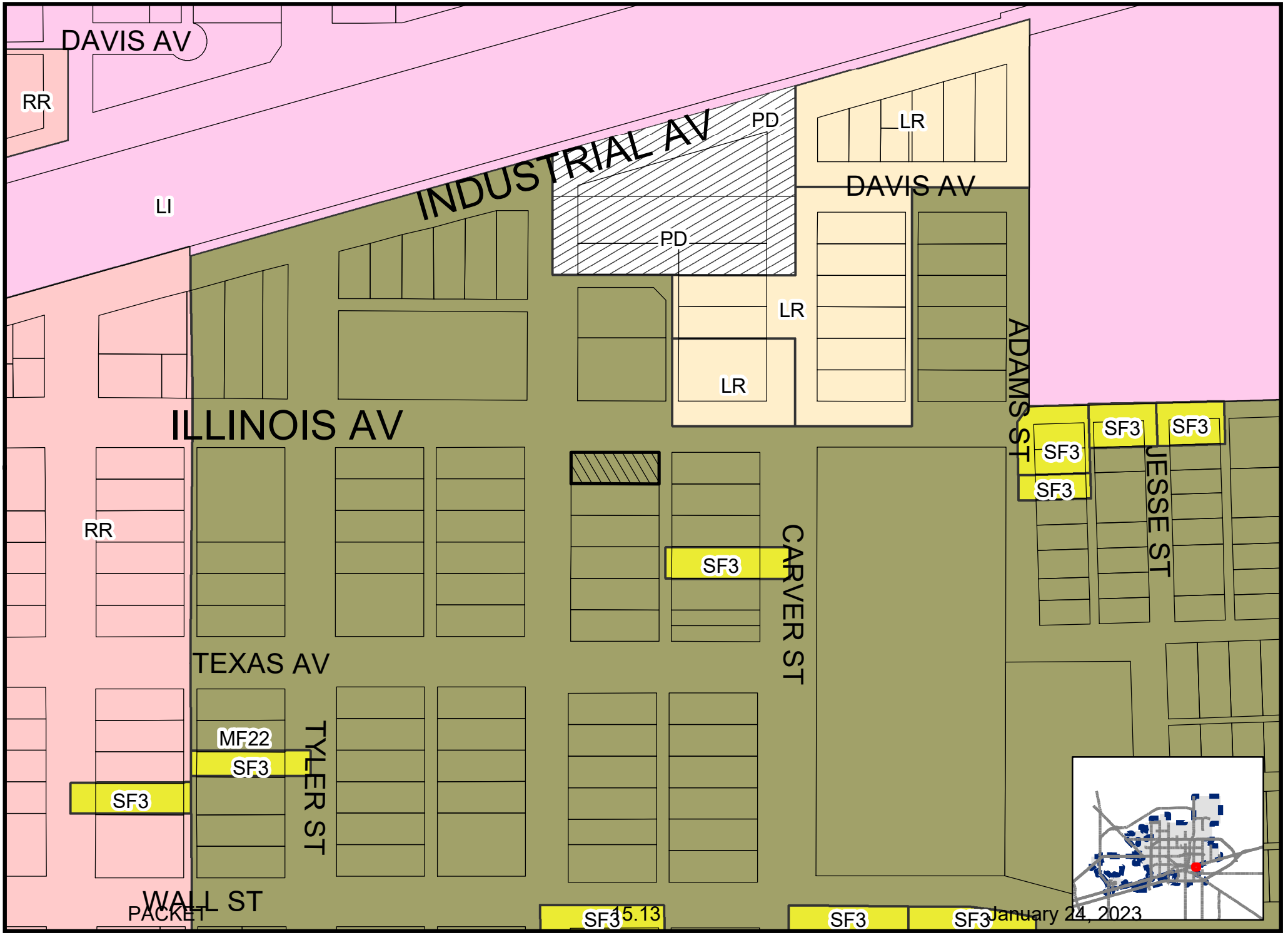
Generally located on the southeast corner of the intersection of N. Madison St. and E. Illinois Av. (Council District 2)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



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THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY NOR IS IT DESIGNED TO BE USED AS THE ONLY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.
THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.



Map By LO, 12/13/2022

E-22-0089

Scale: 1" = 2,287'

ZONING MAP

© THE CITY OF MIDLAND - 2021: THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.









City Council Meeting

Item Number: 16

Meeting Date: January 24, 2023 (January 10, 2023)

To: City Council / City Manager

From: Landon Ochoa, Planner

Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 1,763-SQUARE FOOT PORTION OF LOT 6A, BLOCK 62, BELMONT ADDITION, SECTION 23, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE NORTH SIDE OF EAST INTERSTATE 20, APPROXIMATELY 478 FEET WEST OF SOUTH TERRELL STREET), WHICH IS PRESENTLY ZONED BP, I-20 BUSINESS PARK DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A RESTAURANT FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Elisama Corzo, is requesting a Specific Use Designation (SUD) for the sale of all alcoholic beverages, for on-premises consumption, in a restaurant Texas Lodge Bar & Grill, located at 503 East Interstate 20, Suite 130.

Recommended City Council Action:

Approve

Fiscal Impact:

This proposal does not have a significant financial impact to the City.

Discussion:

Analysis:

The applicant is requesting a Specific Use Designation for Texas Lodge Bar & Grill located at 503 East Interstate 20, Suite 130, to be able to sell all alcoholic beverages for on premises consumption, within a restaurant. The property is zoned BP, I-20 Business Park District, which permits the sale of all alcoholic beverages for on-premises consumption, in a restaurant with the approval of a Specific Use Designation with Term.

The restaurant is currently in operation and does not have a specific use designation for the sale of all alcoholic beverages. The floor plan attached hereto as “Exhibit A” illustrates that the establishment, will have a total square footage of 1,763 square feet, with an alcohol serviceable area of 957 square feet. The site currently has adequate parking, access, and internal circulation.

The restaurant has the following hours of operation:

Monday through Sunday from 11 a.m. to 10 p.m.

The restaurant is proposing the following hours of alcohol service:

Monday through Sunday from 11 a.m. to 10 p.m.

Per Midland City Code, Section 5-4-4, Prohibited Places of Business:

The sale of any alcoholic beverage is hereby prohibited by any person, where the place of business of any such dealer is within 300 feet of any church, public-school, public-school ground, athletic stadium used by any public school or public hospital, the measurements to be along the property lines of the street fronts and from front door to front door and in a direct line across intersections where they occur.

There is a school named Richard Milburn Academy approximately 250 feet west of the Texas Lodge Bar & Grill. There is also a Garely’s Mexican Restaurant approximately 75 feet east of the school which already has an alcohol SUD which was approved on December 8, 2021. A wrong judgment call was made that the school was private. Since then, we have contacted Richard Milburn Academy and they have clarified that they are a public school for ninth through twelfth graders. However, we have received a letter from the school stating that they do not support nor oppose the restaurant getting their alcohol SUD.

This project has been circulated to all City departments for review. Below are the department comments.

Fire: (Approved)

No objections.

Engineering: (Approved)

No objections. [For the Applicant's information only.]

Transportation: (Approved)

No objection. [For the Applicant's information only.]

Building Code: (Approved)

The SUD is acceptable. The property must adhere to the maximum occupant load of 63 for the alcohol serviceable area. Occupancy loads must be posted in accordance with section 1004.3 of the 2015 International Fire Code.

Planning: (Approved)

The request is in compliance with the *Tall City Tomorrow Comprehensive Plan, Chapter 6-Character Plan Goal 4, which is to* "Encourage the development of places where Midland residents can gather and socialize to build connections." (Tall City Tomorrow page 137) Texas Lodge Bar and Grill is an establishment that will provide Midland residents with a unique social gathering experience. The Planning and Zoning Commission Approved this request on December 5, 2022.

Staff recommends approval of this Specific Use Designation with Term for the sale of all alcoholic beverages, for on-premises consumption, in a restaurant, subject to conditions A through G.

Conditions:

A. **That the serviceable area of the restaurant shall be limited to approximately 957 square feet as shown in Exhibit "A", which is attached hereto and incorporated herein for all purposes.**

B. **That the days and hours of alcoholic beverages sales and consumption shall be limited to:**

Monday through Sunday from 11 a.m. to 10 p.m.

C. **That the occupancy of the establishment shall not exceed the maximum occupancy determined by the Building Code and Fire Code.**

D. **That the establishment shall meet all requirements of the Fire Department and Code Administration.**

E. **That the sale and on-premises consumption of alcoholic beverages shall conform to applicable state and local laws.**

F. That the applicant shall obtain a Certificate of Occupancy prior to the commencement of the sale of alcoholic beverages for on premises consumption to ensure that the conditions of this permit are satisfied.

G. That in accordance with Section 9.07.E.3 of the zoning ordinance, the restaurant shall be in operation within 120 days from the final adoption date of this ordinance.

Letters of Objection:

As of January 5, 2023, staff has not received any letters of objections.

Attachments:

Application
Floor Plan (Exhibit A)
Site Plan (Exhibit B)
Maps

Robert Patrick

City Manager's Office

MIDLAND Planning Division

Specific Use Permit with Term for the Sale of Alcoholic Beverages for On-Premises Consumption

Project Number: SUP-22-0143

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Elpsama Cortez		Phone (432) 212-9268 Email texaslodgebargrill@gmail.com	
Address 620 Dale St	City Odessa	State TX	Zip 79761

Property Owner Printed Name: BELMONT REALTY LLC		Phone (432) 570-9206 Email service@overheaddoorpermianbasin.com	
Address P.O. BOX 2932	City MIDLAND	State TX	Zip 79702

Representative *(if different from Applicant or Property Owner)* Firm: _____ Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Street Address: 503 E I20 Frontage Rd, Ste 130, Midland, TX 79701

Business Name: Texas Lodge Bar & Grill

Legal Description
Lot: 06A Block: 062 Subdivision: Belmont, Sec 23

Current Zoning: Business Park

Reason for Request: To obtain TABC license

Type of Business *(restaurant, bar, lounge, nightclub, etc.)*: bar & grill

Proposed/Current Days and Hours of Operation: Monday - Sunday

Proposed Days and Hours of Alcohol Service: 10 AM - 10PM

Total Square Footage of Business: ~~1883~~ 1763

Square Footage of Alcohol Serviceable Area: 957

Restroom Fixtures:	*Men*	**Toilets/Urinals:** 1 / 1	**Bathroom Sinks:** 1
	Women	**Toilets:** 1	**Bathroom Sinks:** 1

Submittal and Fees

Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Floor Plan showing:
  - Seating
  - Exits
  - Restrooms
  - Kitchen
  - Total Square Footage
  - Serviceable Square Footage
- Dimensioned Site Plan showing:
  - Parking
  - Business Footprint
- Digital Copies of Floor Plan & Site Plan (PDF/JPEG)

Signatures

Applicant (signature):	Date: 8/25/22
Applicant (printed): Elisama Corzo	
Property Owner (signature): Robert Belmont Weidner	Date: 8/25/22
Property Owner (printed): Robert Belmont Weidner	

The Specific Use Permit with Term for the sale of all alcoholic beverages shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared Elisa Camelo Corzo who, being by me duly sworn, upon oath says: That (s)he is authorized by Robert B Weidner, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

Authorized Agent (*signature*)

Subscribed and sworn to before me, this 13 day of September, 20 22, to certify which witness my hand and seal of office.

Theodore Michael Schroeder
Notary Public, State of Texas
My Comm. Exp. 02-28-2026
ID No. 13361619-4

NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

****Application will not be considered for scheduling until reviewed by a planner.****

FOR OFFICE USE ONLY	
☑ Property Owner Authorization	☑ Dimensioned Floor Plan
☑ Application Fee	☑ Site Plan
Check # 1085	☑ Plans in Digital Format (PDF/JPEG)
Received By: DS	Date: 9-13-22

****Application will not be considered for scheduling until reviewed by a planner.****

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 1,763-SQUARE FOOT PORTION OF LOT 6A, BLOCK 62, BELMONT ADDITION, SECTION 23, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE NORTH SIDE OF EAST INTERSTATE 20, APPROXIMATELY 478 FEET WEST OF SOUTH TERRELL STREET), WHICH IS PRESENTLY ZONED BP, I-20 BUSINESS PARK DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A RESTAURANT FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, Texas, in compliance with the City Charter, the City Code, and State law, have given the requisite notices by United States mail, publication and otherwise; and after holding due hearings affording a full and fair hearing to all of the property owners generally, and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body of the City of Midland finds that the public convenience will be best served by granting a Specific Use Designation With Term for a 1,763-square foot portion of Lot 6A, Block 62, Belmont Addition, Section 23, City and County of Midland, Texas (the "Property"), as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is hereby amended to grant the Property a Specific Use Designation With Term for the sale of all alcoholic beverages in a restaurant (the "Establishment") for on-premises consumption, together with the uses permitted in the present BP, I-20 Business Park District.

SECTION TWO. That the Property shall be subject to the following conditions and

restrictions:

A. That the serviceable area of the Establishment shall be limited to approximately 957 square feet as shown in Exhibit "A", which is attached hereto and incorporated herein for all purposes.

B. That the sale and on-premises consumption of alcoholic beverages shall conform to all applicable state and local laws.

C. That the days and hours of alcoholic beverage sales and consumption shall be limited to Monday through Sunday from 11:00 a.m. to 10:00 p.m.

D. That the occupancy of the Establishment shall not exceed the maximum occupancy determined by the Building Code and Fire Code.

E. That the Establishment shall meet the requirements of the Fire Department and the Code Administration Division.

F. That the operator of the Establishment shall obtain a Certificate of Occupancy prior to the commencement of the sale of alcoholic beverages for on-premises consumption to ensure that the conditions of this Specific Use Designation With Term are satisfied.

G. That in accordance with Section 11-1-9.07.E.3 of the City Code, the Establishment shall be in operation within 120 days from the final adoption date of this ordinance.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances, inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland,

Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

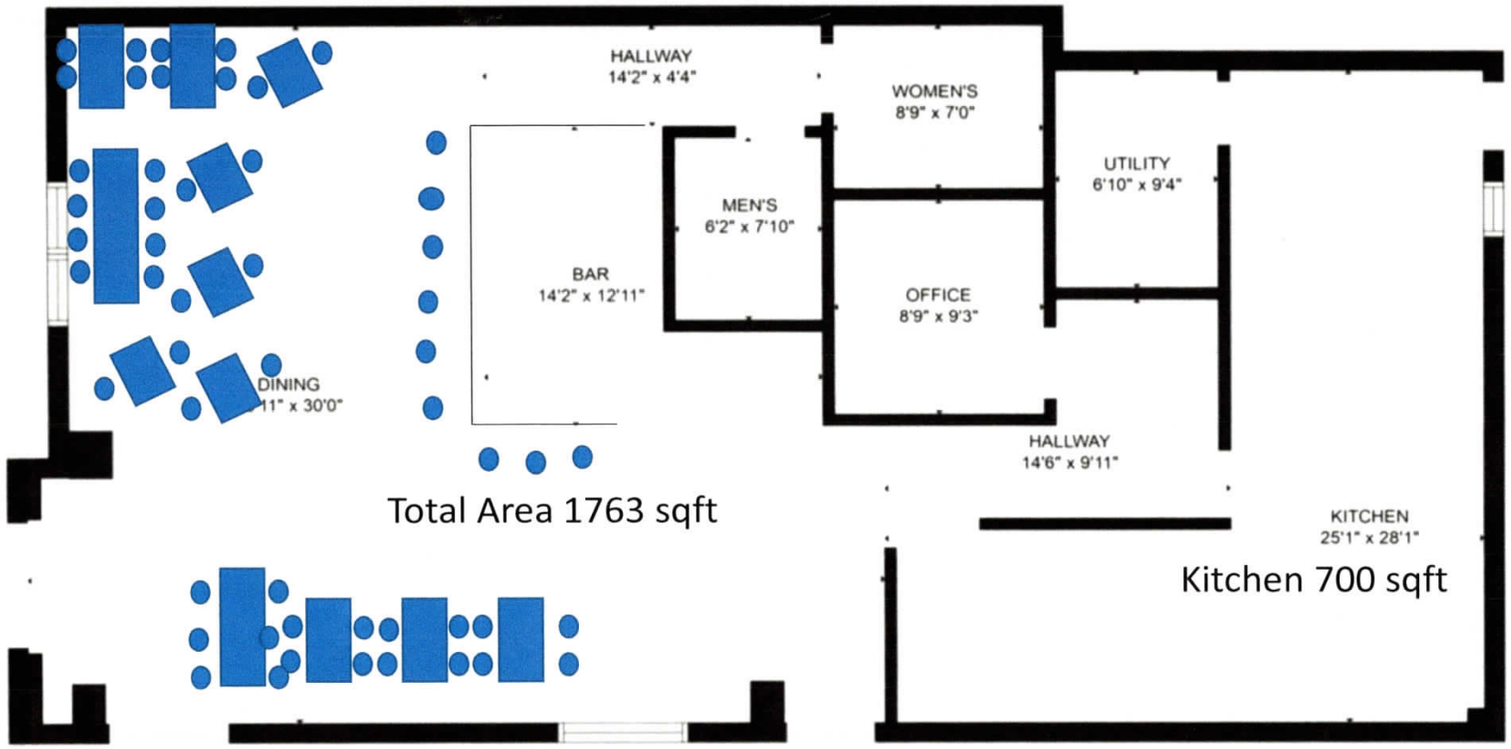
APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

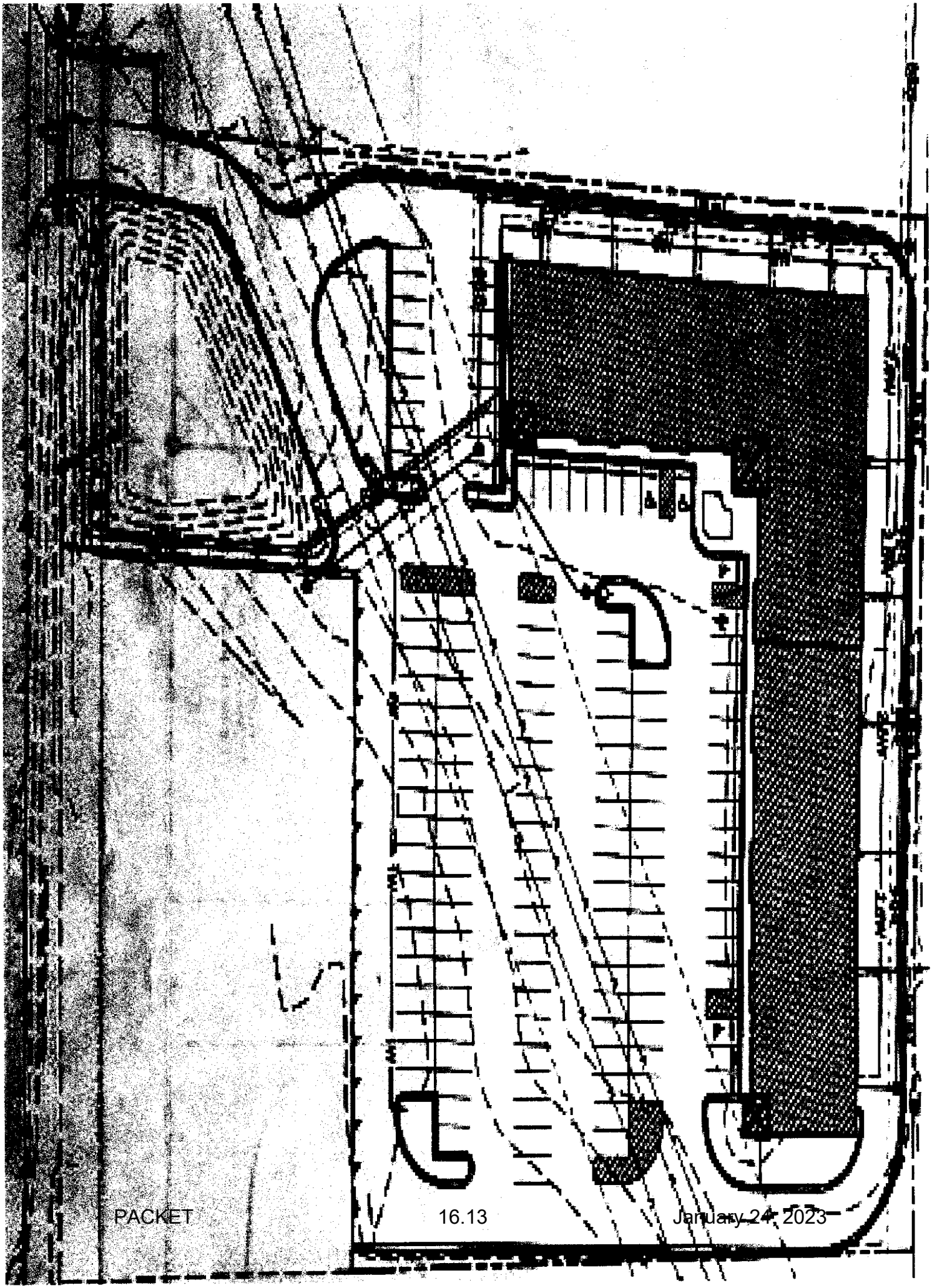
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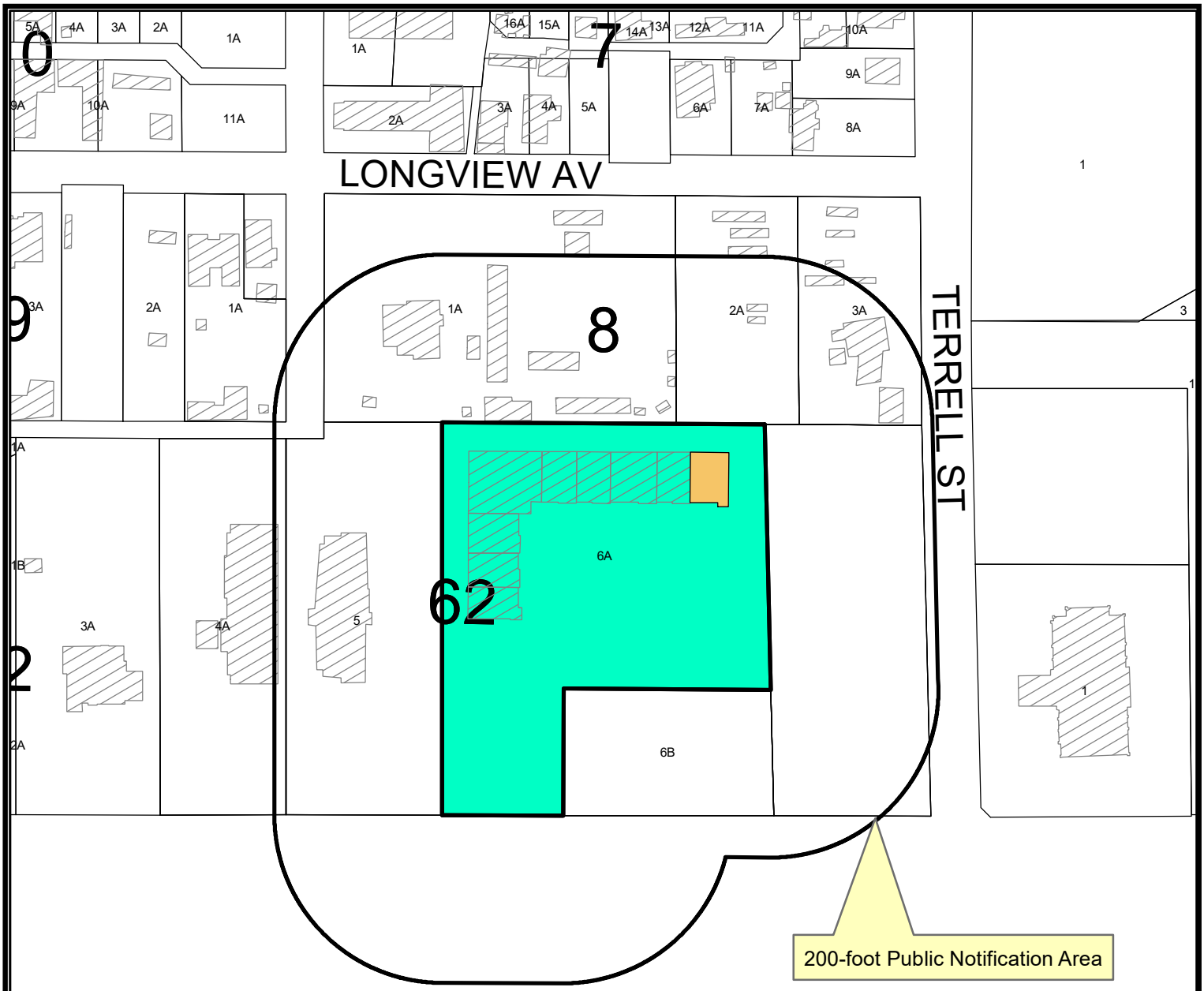
_____
John Ohnemiller, City Attorney

EXHIBIT "A"



GROSS INTERNAL AREA
FLOOR 1 : 1763 sq. ft
TOTAL : 1763 sq. ft





LOCATION MAP

SUD-22-0143 **Scale: 1" = 2,168'**

Consider a request by Elisa Carzo for a Specific Use Designation with Term for the Sale of all Alcoholic Beverages, for on premises consumption in a Restaurant on a 1,763 square foot portion of Lot 6A, Block 62, Belmont Addition, Section 23, City and County of Midland, Texas.
Generally located on the north side of East Interstate 20 approximately 478-feet west of South Terrell Street. (Council District 2)

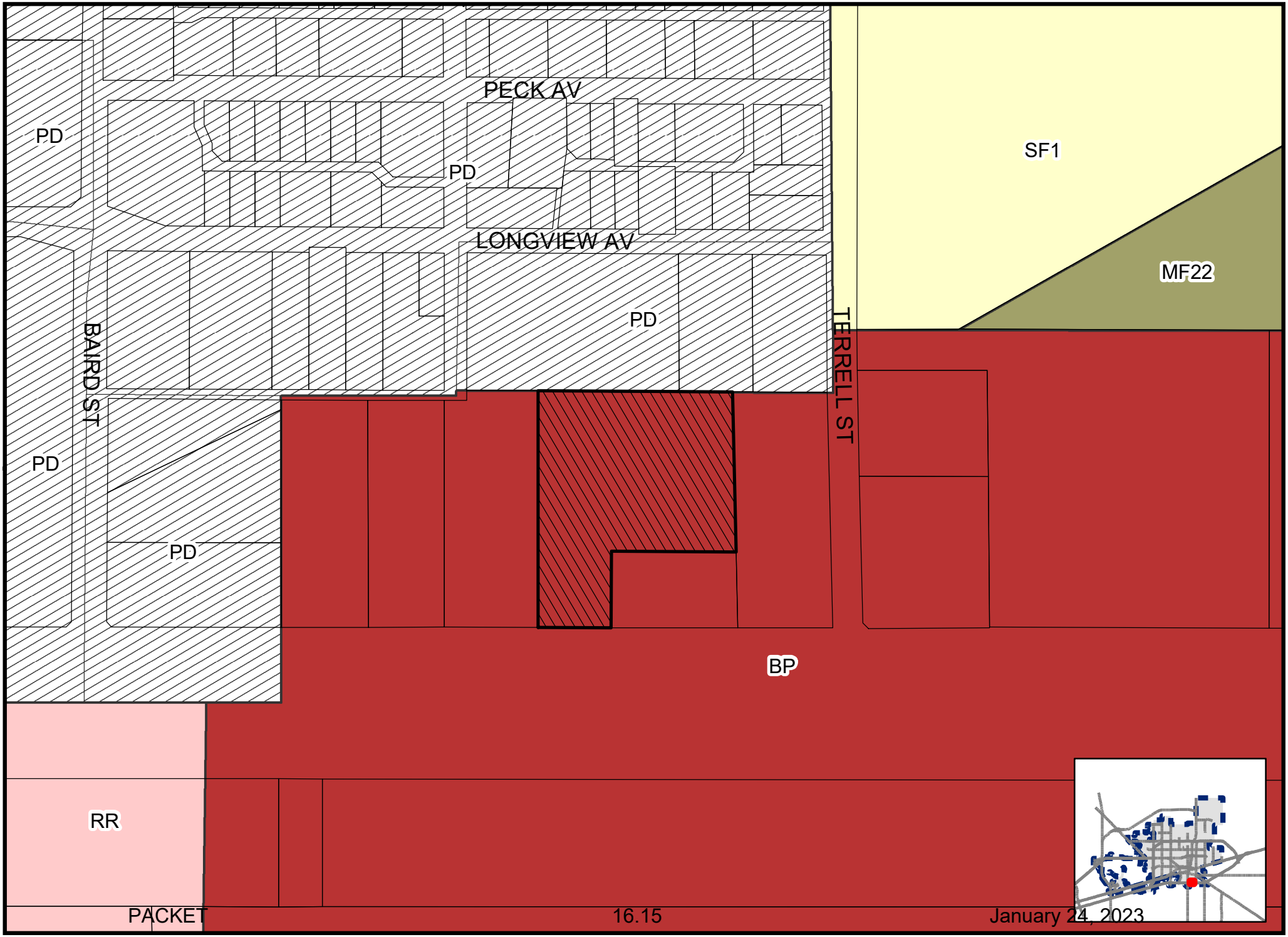
LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



©THE CITY OF MIDLAND - 2021
THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY AND NOR IS IT DESIGNED TO BE USED AS THE ONLY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.
THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.

January 24, 2023



Map By LO, 9/28/2022

SUD-22-0143

Scale: 1" = 2,859'

ZONING MAP

© THE CITY OF MIDLAND - 2021: THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.


Peaceful Massage
HEX
HATS






IHOP
Walmart
Domino's
BARBERSHOP
FX4
FX4


Domino's
BARBERSHOP
TOP NAIL
FX4
TUNDRA


RMA
TEXAS
PUBLIC
SCHOOLS
WELCOME TO RMA
MIDLAND

RMA TEXAS PUBLIC SCHOOLS

Richard Milburn Academy • Central Office
13003 Jones Maltsberger • San Antonio, TX 78247
830-557-6181 • FAX 830-557-5424

November 30, 2022

RE: Belmont Marketplace Shopping Center
503 East I-20
Midland, Texas 79701

To: The City of Midland

Richard Milburn Academy, a Texas Public Charter School, is currently a tenant at the Belmont Marketplace in Midland, TX. Our current lease expired on July 31, 2022. We have extended our lease through January 31, 2023. However, it is our intent to vacate by March as we have had construction delays at the new location we will be moving to.

We have been notified that both Garely's Mexican Restaurant and Texas Lodge Bar & Grill have applied for a sale of alcoholic beverages for on-premises consumption. As a Texas Public Charter School, we would prefer to neither support nor oppose of the sale of alcohol by an establishment located 250 feet away from our Midland campus.

Please do not hesitate to reach out to us should you need additional information.

Sincerely,

Armard Anderson

Armard Anderson, Ed.D.
Superintendent of Schools

City Council Meeting

Item Number: 17

Meeting Date: January 24, 2023 (January 10, 2023)

To: City Council / City Manager

From: James Reber, Planner

Subject: **AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 37.65-ACRE TRACT OF LAND OUT OF SECTION 48, BLOCK 40, T-1-S, T&P RR CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT, OFFICE CENTER, RECREATION CENTER, AND SHOPPING CENTER TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT, OFFICE CENTER, RECREATION CENTER, AND SHOPPING CENTER (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF THOMASON DRIVE AND SOUTH LOOP 250 WEST); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 4) (DEVELOPMENT SERVICES)**

Purpose:

The applicant, Parkhill, is requesting a Zone Change from PD, Planned District, for Housing Development in part, Office Center in Part, Recreation Center in part, and Shopping Center in part, to an amended PD, Planned District, for Housing Development in part, Office Center in Part, Recreation Center in part, and Shopping Center in part, to amend the site plan and density table.

Recommended City Council Action:

☒ **Approve** ☐ **Deny** ☐ **Direction/Informational**

Fiscal Impact:

This request does not require any City funds.

Current Zoning:

PD, Planned Development District, for Housing Development in part, Office Center in Part, Recreation Center in part, and Shopping Center in part. (Ordinance 9949)

Surrounding Zoning and Land Use:

The properties to the north are zoned PD, Planned District for a Shopping Center (Ordinance No. 8227) and PD, Planned District for an Office Center (Ordinance No. 8227 and 8559). The properties to the east are zoned PD, Planned District for a Shopping Center (Ordinance No. 8219), and PD, Planned District for a Housing Development Ordinance No. 9843) and the location of a gas station and multifamily structures. The property to the west is zoned MF-22, Multiple-Family Dwelling District, and is currently vacant. The property to the south is located in the ETJ, Extraterritorial Jurisdiction, and is the location of undeveloped property.

Analysis:

The applicant, Parkhill, is requesting a zone change for the amendment from PD, Planned District, for Housing Development in part, Office Center in Part, Recreation Center in part, and Shopping Center in part, to an amended PD, Planned District, for Housing Development in part, Office Center in Part, Recreation Center in part, and Shopping Center in part. The lot is currently vacant.

This proposed zone change has been circulated to the respective City departments for internal review and their comments, conditions, and requirements are as follows:

Fire: (Approved)

No objections

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2020 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary. Code versions are subject to change depending on time of new code edition adoption in the City of Midland and date of permit application.

Engineering: (Approved)

No objections to zoning/zone change. [For Applicant's Information Only.]

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For Applicant's Information Only.]

Code: (Approved)

No Oil and Gas Issues. Informational: No Oil or Gas wells identified within 500 ft. permitted well radius or in the 135 ft. non-permitted well radius of location on plat. Please note if oil & gas wells are not identified or left off plat, this could prevent receiving city permits for structures. Any plugged and abandoned well would need to be identified.

Transportation: (Approved)

Access spacing will be required to adhere to the TxDOT Access Management Standards along the state highway. [Reference City Code Section 9-4-5(D).]

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For the Applicant's information only.]

No objection to zone change. [For the Applicant's information only.]

Planning (Approved):

The site plan, attached hereto as Exhibit "B," shows a total of two Multi-Family buildings and five Retail / Entertainment buildings. The new density table (Exhibit "C") calls for the same criteria as the old density table for Retail/Restaurant, Office, Hotel, and Apartments, but has created a new section for Entertainment Retail (defined as venues such as a Driving Range, Indoor Go-Carts, Arcades, Miniature Golf, and similar Types.) The exhibit below reflects the criteria for the Entertainment Retail and the new maximum height restriction of fifty-six feet for the building, and 175 feet for a net/fence for a driving range.

Product Type	Maximum Criteria	Maximum GSF **	Maximum Height	Parking
Entertainment Retail***	15,000 SF Per Acre	100,000	56 Feet (Bldg) 175 Feet (Net/Fence)*	1/300 RSF Retail

The new site plan configuration has changed as shown in Exhibit "B."

Staff recommends approval of this zone change from PD, Planned District, for Housing Development in part, Office Center in Part, Recreation Center in part, and Shopping Center in part, to an amended PD, Planned District, for Housing Development in part, Office Center in Part, Recreation Center in part, and Shopping Center in part, subject to conditions A through M.

Conditions:

A. That the use and development of Westridge Village shall conform to the regulations of the 0-2, Office District, except as stated below.

B. That the Planned District Site Layout Plan, which is attached hereto as Exhibit "B" and incorporated herein, shall be considered illustrative and shall only serve as a vision of Westridge Village.

C. That the proposed driveways and drive aisles shown in Exhibit "B" shall be considered preliminary and are subject to approval by the City Manager or his designee.

D. That a Traffic Impact Analysis shall be required before the issuance of a building permit.

E. Use regulations. Land and buildings in the Westridge Village PD may be used for any of the following listed uses, but no land shall hereafter be used and no buildings erected, altered or converted which are arranged, designed or used for other than the following uses:

1. Any use permitted in the 0-2 Office District, MF-16 Multiple Family Dwelling District, TH Townhouse Dwelling District, and RR, Regional Retail District (with the exception of the prohibited uses listed below) is permitted within the aggregate limitations shown in the Program Density Table, which is attached hereto as Exhibit " C" and incorporated herein.

2. The following uses from the RR, Regional Retail District will be prohibited, including:

a. Funeral home or Mortuary;
b. Truck Sales, Heavy Trucks;
c. Scientific Research and Development Center or Laboratory;
d. Pawn Shop;
e. Dance Hall;

F. Area regulations. Except as hereinafter provided in this Section, no building shall be erected, altered or converted for dwelling purposes or any other main use permitted in this Westridge Village PD, unless such use complies with the following regulations.

1. The Westridge Village PD has no minimum or maximum Lot Area, Lot Width or Lot Depth or Front, Side, or Rear Yard requirements. Such requirements will be set forth on the approved comprehensive site plan applicable to each portion of Westridge Village.

G. Height regulations. No building shall be erected to exceed the limitations in height and stories as shown in the Program Density Table on Exhibit "C." "Building Height" shall be measured from the mean ground level elevation immediately adjacent to the building to the rooftop, excluding any rooftop accessories, including without limitation, mechanical equipment and enclosing rooms, stair penthouses and building parapets not in excess of 8 feet in height.

H. Floor Area. Buildable area shall be limited by the Program Density Table on Exhibit " C". A maximum of 1,500,000 gross square feet of Floor Area may be constructed at Westridge Village.

I. Parking: Parking within Westridge Village shall be as set forth on Exhibit " C" for the various uses listed

J. Outdoor Sign Standards: A Master Sign Plan will provide a hierarchy Of signage for Westridge Village typical of mixed -use neighborhood projects, including but not limited to project identification signage located on the perimeter of the property and/ or within the surrounding right-of-way.

K. Site Plan Requirement

1. **Committee. The Mayor of the City shall appoint a Westridge Village Site Plan Review Committee (the " Committee"). The Committee shall be composed of City staff, one or more members of the City Council, and one or more members of the Planning and Zoning Commission; provided, however, that the Committee shall not contain a quorum of the City Council or a quorum of the Planning and Zoning Commission.**

2. **Review. A separate comprehensive site plan for each area of Westridge Village shall be submitted to the City' s Development Services Department for review by the Committee. The Committee may approve or deny a comprehensive site plan or request additional information about a comprehensive site plan. Each separate comprehensive site plan shall be reviewed and approved by the Committee as a condition precedent to the granting of a certificate of occupancy, as per Section 11- 1- 9(C) of the Code.**

3. **Appeal. Any person or entity aggrieved by the action of the Committee in the denial of a comprehensive site plan approval shall have the right to appeal to the City Council. Such appeal shall be taken by filing with the City manager's Office, not later than 14 days after notice of the action complained of has been mailed to such person' s last known address, a written statement shall set a time and place for a hearing on such appeal and notice of such hearing shall be mailed to the appellant. The decision of the City Council on such appeal shall be final and conclusive.**

L. General Traffic Regulations: As long as the streets within Westridge Village remain private, no permits, other than appropriate permits for alcohol consumption, shall be required for any special events held on the streets.

M. Function of this Ordinance. This Ordinance functions as the exclusive land use and zoning regulatory document for Westridge Village. As development proceeds,

additional public hearings for zoning approvals are not required; however, site plan approval is required as set out in Section Two, paragraph of this Ordinance. The provisions of the Code shall apply to Westridge Village except as expressly identified and referenced within this Ordinance.

Letters of Objection:

Staff has not received any letters of objection as of January 5, 2023.

Attachments:

Application
Maps
Preliminary Plat (Exhibit A)
Site Plan (Exhibit B)
Density Table (Exhibit C)
Ordinance 9949

Morris Williams Jr.

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 37.65-ACRE TRACT OF LAND OUT OF SECTION 48, BLOCK 40, T-1-S, T&P RR CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT, OFFICE CENTER, RECREATION CENTER, AND SHOPPING CENTER TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT, OFFICE CENTER, RECREATION CENTER, AND SHOPPING CENTER (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF THOMASON DRIVE AND SOUTH LOOP 250 WEST); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, in compliance with the City Charter, the City Code, and State law, have given the requisite notices by United States mail, publication and otherwise; and after a full and fair hearing to all of the property owners generally and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body finds that the public health, safety and general welfare will be best served by rezoning a 37.65-acre tract of land out of Section 48, Block 40, T-1-S, T&P RR Co. Survey, City and County of Midland, Texas, said tract being more specifically described by metes and bounds in Exhibit "A", which is attached hereto and incorporated herein (the "Property") to an amended PD, Planned Development District for a Housing Development, Office Center, Recreation Center, and Shopping Center and adopting a site plan therefor, as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is hereby amended to rezone the Property from PD, Planned Development District for a Housing Development, Office Center, Recreation Center and Shopping Center to an amended PD, Planned Development District for a Housing Development, Office Center,

Recreation Center, and Shopping Center.

SECTION TWO. That the base zoning district to which the use and development of the Property shall conform, except as modified by Section Three of this ordinance, is the O-2, Office District.

SECTION THREE. That the use and development of the Property shall be subject to the following conditions and restrictions:

A. That the Planned District Site Layout Plan, which is attached hereto as Exhibit "B" and incorporated herein, shall be considered illustrative and shall only serve as a vision of Westridge Village.

B. That the proposed driveways and drive aisles shown in Exhibit "B" shall be considered preliminary and are subject to approval by the City Manager or the City Manager's designee.

C. That a Traffic Impact Analysis shall be required before the issuance of a building permit.

D. *Use regulations*. Land and buildings in the Westridge Village PD may be used for any of the following listed uses, but no land shall hereafter be used, and no buildings erected, altered or converted which are arranged, designed or used, for other than the following uses:

> Any use permitted in the O-2, Office District, MF-16, Multiple-Family Dwelling District, TH, Townhouse (Attached) Dwelling District, and RR, Regional Retail District, with the exception of the prohibited uses listed below, is permitted within the aggregate limitations shown in the Program Density Table, which is attached hereto as Exhibit "C" and incorporated herein.

The following uses from the RR, Regional Retail District, are prohibited, including:

1. Funeral Home or Mortuary;

2. Truck Sales, Heavy Trucks;

3. Scientific Research and Development Center or Laboratory;

4. Pawn Shop; and

5. Dance Hall.

E. *Area regulations*. Except as hereinafter provided in this Section, no building shall be erected, altered or converted for dwelling purposes or any other main use permitted in this Westridge Village PD unless such use complies with the following regulations:

The Westridge Village PD has no minimum or maximum lot area, lot width or lot depth or front, side, or rear yard requirements. Such requirements shall be set forth on the approved comprehensive site plan applicable to each portion of Westridge Village.

F. *Height regulations*. No building shall be erected to exceed the limitations in height and stories as shown in the Program Density Table on Exhibit "C". "Building Height" shall be measured from the mean ground level elevation immediately adjacent to the building to the rooftop, excluding any rooftop accessories, including without limitation, mechanical equipment and enclosing rooms, stair penthouses and building parapets that do not exceed eight feet in height.

G. *Floor area*. Buildable area shall be limited by the Program Density Table on Exhibit "C". A maximum of 1,500,000 gross square feet of floor area may be constructed at Westridge Village.

H. *Parking*. Parking within Westridge Village shall be as set forth in Exhibit "C" for the various uses listed therein.

I. *Outdoor sign standards*. A Master Sign Plan shall provide a hierarchy of signage for Westridge Village typical of mixed-use neighborhood projects, including but not limited to project identification signage located on the perimeter of the property and/or within the surrounding right-of-way.

J. *Site plan requirement*.

1. *Committee*. The Mayor of the City shall appoint a Westridge Village Site Plan Review Committee (the "Committee"). The Committee shall be composed of City staff, two or more members of the City Council, and one or more members of the Planning and Zoning Commission; provided, however, that the Committee shall not contain a quorum of the City Council or a quorum of the Planning Zoning and Commission.

2. *Review*. A separate comprehensive site plan for each area of Westridge Village shall be submitted to the City's Development Services Department for review by the Committee. The Committee may approve or deny a comprehensive site plan or request additional information about a comprehensive site plan. Each separate comprehensive site plan shall be reviewed and approved by the Committee as a condition precedent to the granting of a certificate of occupancy, as per Section 11-1-9(C) of the City Code.

3. *Appeal*. Any person or entity aggrieved by the action of the Committee in the denial of a comprehensive site plan approval shall have the right to appeal to the City Council. Such appeal shall be taken by filing with the City Manager's Office, not later than 14 days after notice of the action complained of has been mailed to such person's last known address, a written statement setting forth fully the grounds for the appeal. The City Council shall set a time and place for a hearing on such appeal, and notice of such hearing shall be mailed to the appellant. The decision of the City Council on such appeal shall be final and

conclusive.

K. *General traffic regulations*. As long as the streets within Westridge Village remain private, no permits, other than appropriate permits for alcohol consumption, shall be required for any special events held on the streets.

L. *Function of this Ordinance*. This Ordinance functions as the exclusive land use and zoning regulatory document for Westridge Village. As development proceeds, additional public hearings for zoning approvals are not required; however, site plan approval is required as set out in Subsection J above. The provisions of the City Code shall apply to Westridge Village except as expressly identified and referenced within this Ordinance.

SECTION FOUR. That the definitions given in the zoning regulations contained in the City Code of the City of Midland, Texas, shall be applicable to such of those terms as are used herein.

SECTION FIVE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION SIX. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION SEVEN. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION EIGHT. The City Secretary is hereby authorized and directed to publish

the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

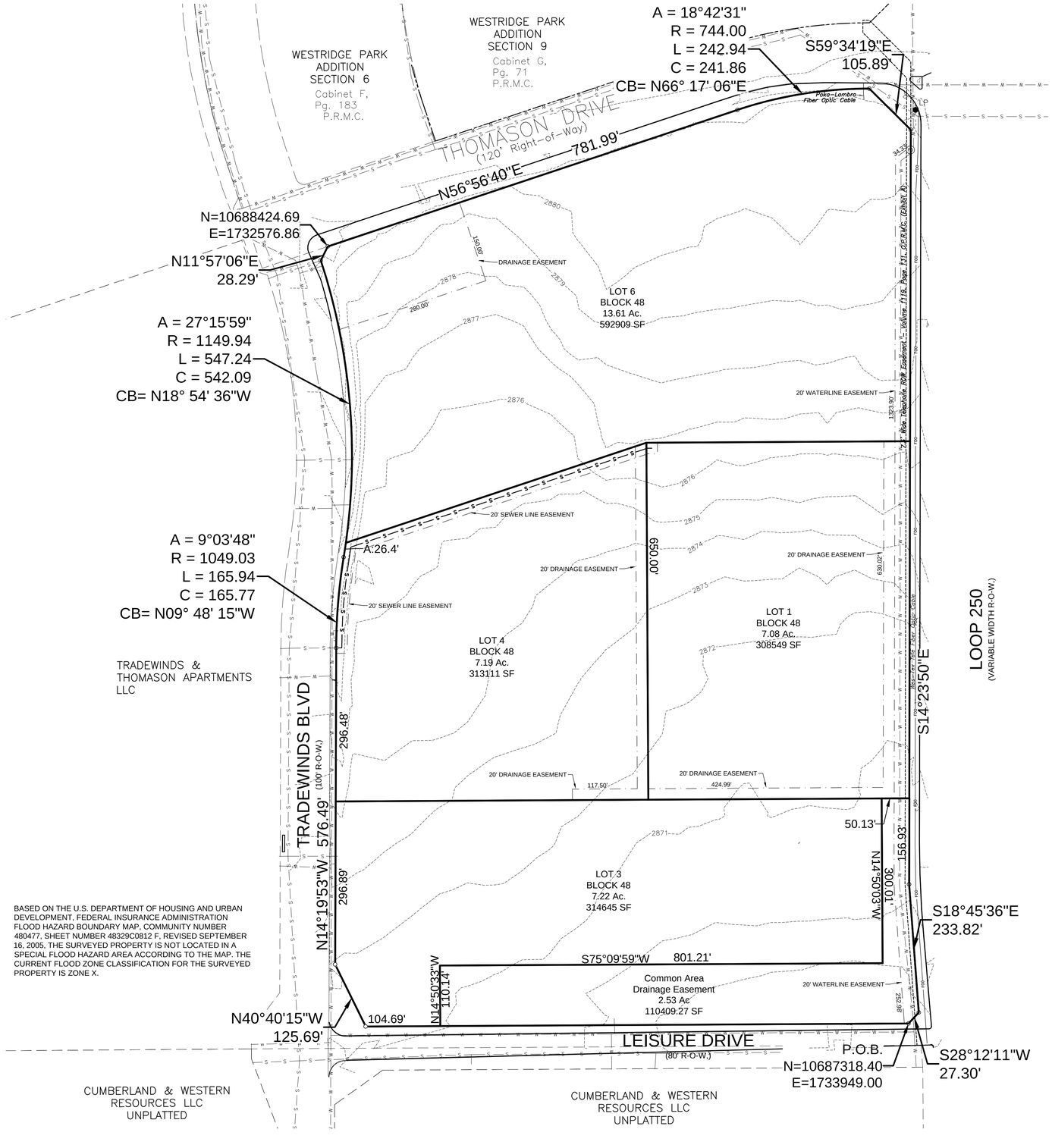
APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

EXHIBIT "A"



BASED ON THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, FEDERAL INSURANCE ADMINISTRATION FLOOD HAZARD BOUNDARY MAP, COMMUNITY NUMBER 480477, SHEET NUMBER 48329C0812 F, REVISED SEPTEMBER 16, 2005, THE SURVEYED PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA ACCORDING TO THE MAP. THE CURRENT FLOOD ZONE CLASSIFICATION FOR THE SURVEYED PROPERTY IS ZONE X.

OWNER'S CERTIFICATES

STATE OF TEXAS
COUNTY OF MIDLAND :

WHEREAS, WESTRIDGE VILLAGE, LP is the record owner of 37.65 Acres of Land Located in Section 48, Block 40 T-1-S, T&P RR Survey Midland County Texas and more particularly described hereon.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS :

That we, WESTRIDGE VILLAGE, LP, do hereby adopt this plat designating the hereinabove described property as WESTRIDGE PARK ADDITION, SECTION 49 to the City of Midland, Texas, and we do hereby dedicate to the public use forever the streets, alleys, and easements shown thereon.

WITNESS our hands at Midland, Texas, this the_____day_____20____.

By: _____
Alan D. Feinsilver, President

STATE OF _____:
COUNTY OF _____:

This instrument was acknowledged before me on _____, 20___ by Alan D. Feinsilver on behalf of WESTRIDGE VILLAGE, LP

_____
Notary Public Signature

UTILITY COMPANY'S CERTIFICATE

This plat has been checked for accessibility of utilities.

_____ Oncor Electric Delivery Service (PLEASE PRINT)

_____ AT&T Texas (PLEASE PRINT)

_____ Atmos Energy (PLEASE PRINT)

_____ SuddenLink Communications (PLEASE PRINT)

_____ Grande Communications (PLEASE PRINT)

SURVEYOR'S CERTIFICATE

KNOW ALL MEN BY THESE PRESENTS

That I, Samuel Wyatt, a Registered Professional Land Surveyor, do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the corner monuments shown thereon were properly placed under my personal supervision, in accordance with the Subdivision Regulations of the City of Midland, Texas.

_____
Samuel Wyatt, R.P.L.S. #6453

SPECIAL STATE PLANE COORDINATE NOTE

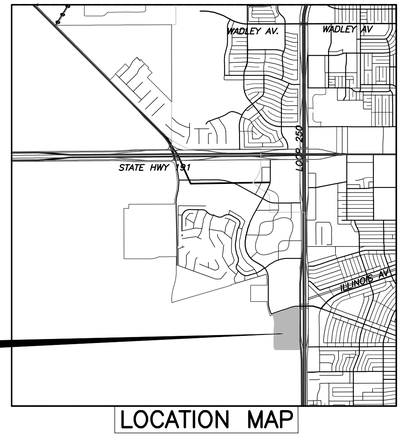
Bearings, coordinates, distances and areas are relative to the Texas State Plane Coordinate System (Central Zone1983 NAD), with a combined scale factor of 0.999880170 and a theta angle equal to -0°56'03" at a 1/2-inch iron rod with a plastic cap marked "PSC CONROL", said control point having the following coordinates: NORTHING = 10,675,139.45 and EASTING = 1,733,931.51 in U.S. Survey Feet.

CERTIFICATE OF APPROVAL

This is to certify that the above and foregoing plat of WESTRIDGE PARK ADDITION, SECTION 47 was approved by proper action of the City Planning and Zoning Commission of the City of Midland, Texas, on this the_____th day of_____20____.

Chairman - LUCY SISNIEGA

Secretary - ELIZABETH SHAUGHNESSY



WESTRIDGE PARK ADDITION SECTION 49

LOCATION MAP

PRELIMINARY PLAT

WESTRIDGE PARK ADDITION
SECTION 47

Being a 37.65 Ac tract of land located in the Northeast quarter of Section 48, Block 40, T-1-S, T.&P.RR.Co, Survey
City and County of Midland, Texas

N

0 100' 200'

LEGEND:

= TRACT/DEED/PLAT LIMITS BOUNDARY LINE
= TRACT/DEED/PLAT ADJOINER LINES
= PLATTED LOT LINE/SUBDIVIDED LINE
= EXISTING WATER LINE
= PLATTED LOT LINE/SUBDIVIDED LINE
= EASEMENT LINE
= EXISTING EASEMENT LINE
= ELEVATION CONTOUR LINE

NOTES:

1. SELLING A PORTION OF THIS ADDITION BY METES AND BOUNDS MAY BE A VIOLATION OF CITY ORDINANCE AND STATE LAW AND SUBJECT TO FINES AND WITHHOLDING OF UTILITIES AND BUILDING PERMITS.
2. INITIAL IMPACT FEES WILL BE ASSESSED DURING THE FINAL PLATTING PROCESS. IMPLEMENTATION AND COLLECTION OF IMPACT FEES WILL TAKE PLACE DURING THE BUILDING PERMIT PROCESS. ADDITIONAL IMPACT FEES OR INCREASES IN FEES MAY NOT BE ASSESSED AGAINST THE TRACT UNLESS THE NUMBER OF SERVICE UNITS TO BE DEVELOPED ON THE TRACT INCREASES.
3. APPROVAL OF A SITE PLAN BY THE CITY OF MIDLAND MAY BE REQUIRED BEFORE THE DEVELOPMENT OF ANY LOT AND BEFORE A BUILDING PERMIT MAY BE OBTAINED.
4. A BLANKET EASEMENT OF INGRESS AND EGRESS IS HEREBY GRANTED FOR WESTRIDGE PARK ADDITION, SECTION 45 TO THE CITY OF MIDLAND FOR GARBAGE AND TRASH COLLECTION AND LOCATION AND MAINTENANCE OF TRASH CONTAINERS, SAVE AND EXCEPT THOSE AREAS OCCUPIED BY A BUILDING OR STRUCTURE. SAID EASEMENT IS CONDITIONED SUCH THAT NO CONSTRUCTION SHALL COMMENCE ON SAID LOT UNTIL EXACT LOCATION OF SAID CONTAINERS AND THE EASEMENTS IN CONNECTION THEREWITH HAVE BEEN SELECTED AND APPROVED BY THE DIRECTOR OF UTILITIES.
5. RELATIVE TO THE EXISTING DRAINAGE EASEMENT: THE MAINTENANCE OF ANY STORMWATER FACILITY IN THIS EASEMENT IS THE RESPONSIBILITY OF THE PROPERTY OWNER. PROPERTY OWNER AGREES TO MAINTAIN THE FACILITY IN WORKING ORDER, WITH INSPECTIONS AND CORRECTIVE ACTION MADE AT LEAST ANNUALLY. REPORTS OF SUCH INSPECTIONS AND MAINTENANCE SHALL BE KEPT FOR INSPECTION BY THE CITY OF MIDLAND STORMWATER ADMINISTRATOR ON REQUEST, OR MAY BE FORWARDED TO THE CITY ENGINEER'S OFFICE.
6. RELATIVE TO THE EXISTING DRAINAGE EASEMENT: THE CITY OF MIDLAND SHALL HAVE THE RIGHT TO MITIGATE DEFICIENCIES IN THE FUNCTION OF THE STORMWATER FACILITY, AND TO BE REIMBURSED BY THE PROPERTY OWNER, IF THE CITY FINDS IT NECESSARY FOR PUBLIC HEALTH AND SAFETY.
7. RELATIVE TO THE EXISTING DRAINAGE EASEMENT: THE CITY OF MIDLAND AND ITS EMPLOYEES, CONTRACTORS, AGENTS, SUCCESSORS, AND ASSIGNS, SHALL HAVE THE FREE AND UNINTERRUPTED RIGHT OF PASSAGE IN, ON, UPON, OVER, UNDER, ACROSS, ALONG AND THROUGH THE PROPERTY DESCRIBED HEREIN FOR THE PURPOSE OF ESTABLISHING, LAYING, CONSTRUCTING, RECONSTRUCTING, INSTALLING, REALIGNING, MODIFYING, REPLACING, IMPROVING, ALTERING, OPERATING, MAINTAINING, ACCESSING, INSPECTING, REPAIRING, RELOCATING AND REMOVING SAID FACILITIES, INCLUDING BUT NOT LIMITED TO, THE RIGHT TO CUT AND TRIM BUSHES AND TREES, TOGETHER WITH THE RIGHT OF INGRESS, EGRESS AND REGRESS FOR SUCH PURPOSES IN, ON, UPON, OVER, UNDER, ACROSS, ALONG AND THROUGH THE PROPERTY DESCRIBED HEREIN.
8. RELATIVE TO THE EXISTING DRAINAGE EASEMENT: DEVELOPER MAY NOT USE ANY PART OF THE PROPERTY DESCRIBED HEREIN IF SUCH USE WILL DAMAGE, DESTROY, INJURE, AND/OR UNDULY INTERFERE WITH THE CITY OF MIDLAND'S USE OF THE PROPERTY. DEVELOPER EXPRESSLY COVENANTS AND AGREES FOR ITSELF, ITS LEGAL REPRESENTATIVES, SUCCESSORS AND/OR ASSIGNS, THAT NO BUILDING, ROADWAYS, OR CURBS AND GUTTERS OF ANY KIND WILL BE PLACED ON THE PROPERTY DESCRIBED HEREIN. WRITTEN PERMISSION FOR ABOVE GROUND APPURTENANCES MUST BE OBTAINED FROM THE CITY OF MIDLAND, PRIOR TO INSTALLATION.
9. THERE IS A RECIPROCAL RIGHT OF ACCESS BETWEEN LOTS 1, 2, 3, 4, AND 5, BLOCK 48 IN ALL LOCATIONS EXCEPT WHERE OTHERWISE OBSTRUCTED BY A BUILDING OR FENCE. NO PHYSICAL BARRIERS WILL BE ERECTED THAT WOULD RESTRICT VEHICULAR TRAFFIC BETWEEN LOTS.

OWNER & DEVELOPER:

WESTRIDGE VILLAGE, LP

1885 Saint James Place, Suite 1100
Houston, Texas 77056
Contact: Alan Fiensilver
(713) 266-1101

ENGINEER:

PARKHILL

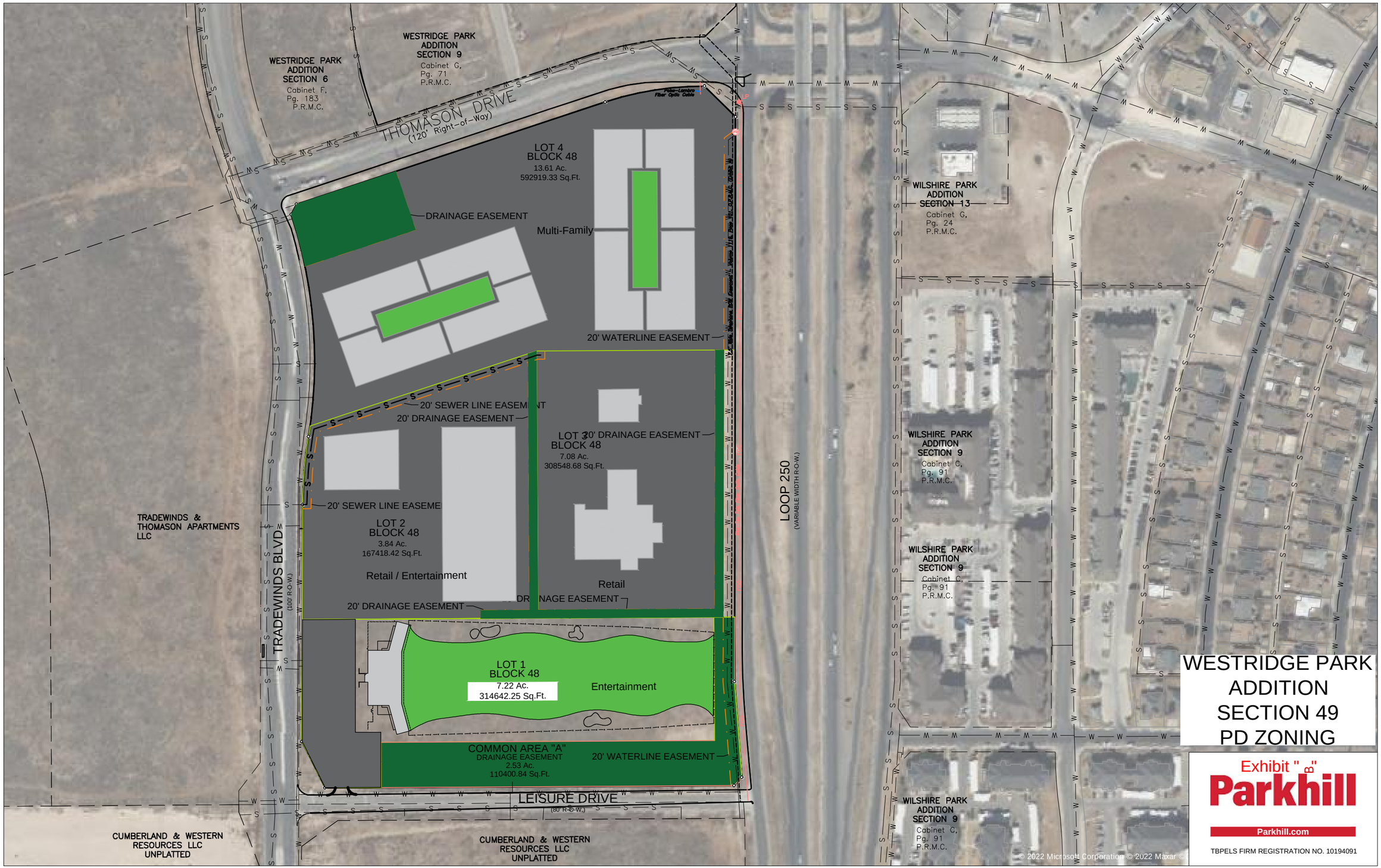
1700 W. WALL STREET
MIDLAND, TEXAS 79701
Contact: Josh Wallender
(432) 697-1447

WESTRIDGE PARK ADDITION
SECTION 47

Parkhill
Parkhill.com
TBPELS FIRM REGISTRATION NO. 10194091

PLAT FILED FOR RECORD
MIDLAND COUNTY, TEXAS
NO. _____ CABINET _____
DATE _____ PAGE _____

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WESTRIDGE PARK ADDITION SECTION 49 PD ZONING

Exhibit " B "

Parkhill

Parkhill.com

TBPELS FIRM REGISTRATION NO. 10194091

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Westridge Village

Southwest Corner Loop 250 and Thomason

EXHIBIT "C"

PD Zoning - Program Density Table

Product Type	Maximum Criteria	Maximum GSF **	Maximum Height	Parking	
Entertainment Retail***	15,000 SF Per Acre	100,000	56 Feet (Bldg) 175 Feet (Net/Fence)*	1/300 RSF Retail	
Retail/Restaurant	15,000 SF Per Acre	300,000	35 Feet	1/300 RSF Retail 8/1000 RSF Restaurant	
Office	Floor Area Ratio 1.2:1 Excluding Parking Garage	600,000	98 Feet	2.5/1000 RSF	
Hotel	Floor Area Ratio 1.2:1 Excluding Parking Garage	150,000	98 Feet	1/Per Key	
Apartments	50 Units Per Acre	900,000	56 Feet	1/Unit 1.5/Unit 2/Unit 2.5/Unit	Studio 1 Bedroom 2 Bedroom 3 Bedroom

* Net/Fence is Specific to a Driving Range Entertainment Venue only.

** Overall Maximum GSF = 1,500,000 GSF (No combination of the above can exceed an overall 1,500,000 GSF)

Note: Gross Square Footage is calculated using Floor Area less square footage related to parking structures, loading dock areas, corridors, mezzaine space, balconies, vertical circulation, and utility rooms.

*** Entertainment Retail is defined as venues such as a Driving Range, Indoor Go-Carts, Arcades, Miniature Golf, and similar Types

MIDLAND
Planning Division

Zone Change/Planned District Amendment/Site Plan Approval

Project Number: Z-22-0312

Case Number:

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Pontikes Development, LLC		Phone (713) 266-1101 Email	
Address 1885 St James Place, Suite 1100	City Houston	State Tx	Zip 77056

Property Owner Printed Name: Westridge Village, LP		Phone (713) 266-1101 Email	
Address 1885 St James Place, Suite 1100	City Houston	State Tx	Zip 77056

Representative *(if different from Applicant or Property Owner)* Firm: Parkhill Printed Name: Josh Wallender (Parkhill PROJ # 6883.19)		Phone (432) 697-1447 Email jwallender@Parkhill.com	
Address 1700 West Wall, Suite 100	City Midland	State Texas	Zip 79701

Street Address: Please see attached Sketch Plan

Legal Description
Lot: Block: Subdivision:

Current Zoning: PD - Ordinance 9949	**Proposed Zone:** Amended PD *(List by tracts if more than one district is requested)*

Reason for Zone Change Request: Better fit for the use of the land

Present Use of Property: Vacant land

Proposed Use of Property: Entertainment Retail, General Retail, Restaurants, Office, Hotel, Multi-Family

How would this zone change affect the public health, safety and welfare? It would bring a new atmosphere to the surrounding community and improve safety, health, and welfare.

Describe how conditions affecting the property have changed since present zoning designation: No Changes

Submittal and Fees
Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Site Plan
- Digital Copies of Site Plan (PDF/JPEG)

Signature *(by property owner only – authorized agent must sign affidavit below)*	
Applicant (signature): Alan Feinsilver	Date: Nov 8, 2022
Applicant (printed): ALAN D FEINSILVER	
Property Owner (signature): Alan Feinsilver	Date: Nov 8, 2022
Property Owner (printed) : ALAN D FEINSILVER	

The Zone Change/Planned District Amendment/Site Plan Approval shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appear Josh Wellender who, being by me duly sworn, upon oath says: That (s)he is the owner of _____ or authorized by Westridge Village LP, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

Authorized Agent (*signature*)

Subscribed and sworn to before me, this 9th day of November, 2022, to certify which witness my hand and seal of office.

DALIA SALINAS
My Notary ID # 128541568
Expires March 9, 2023

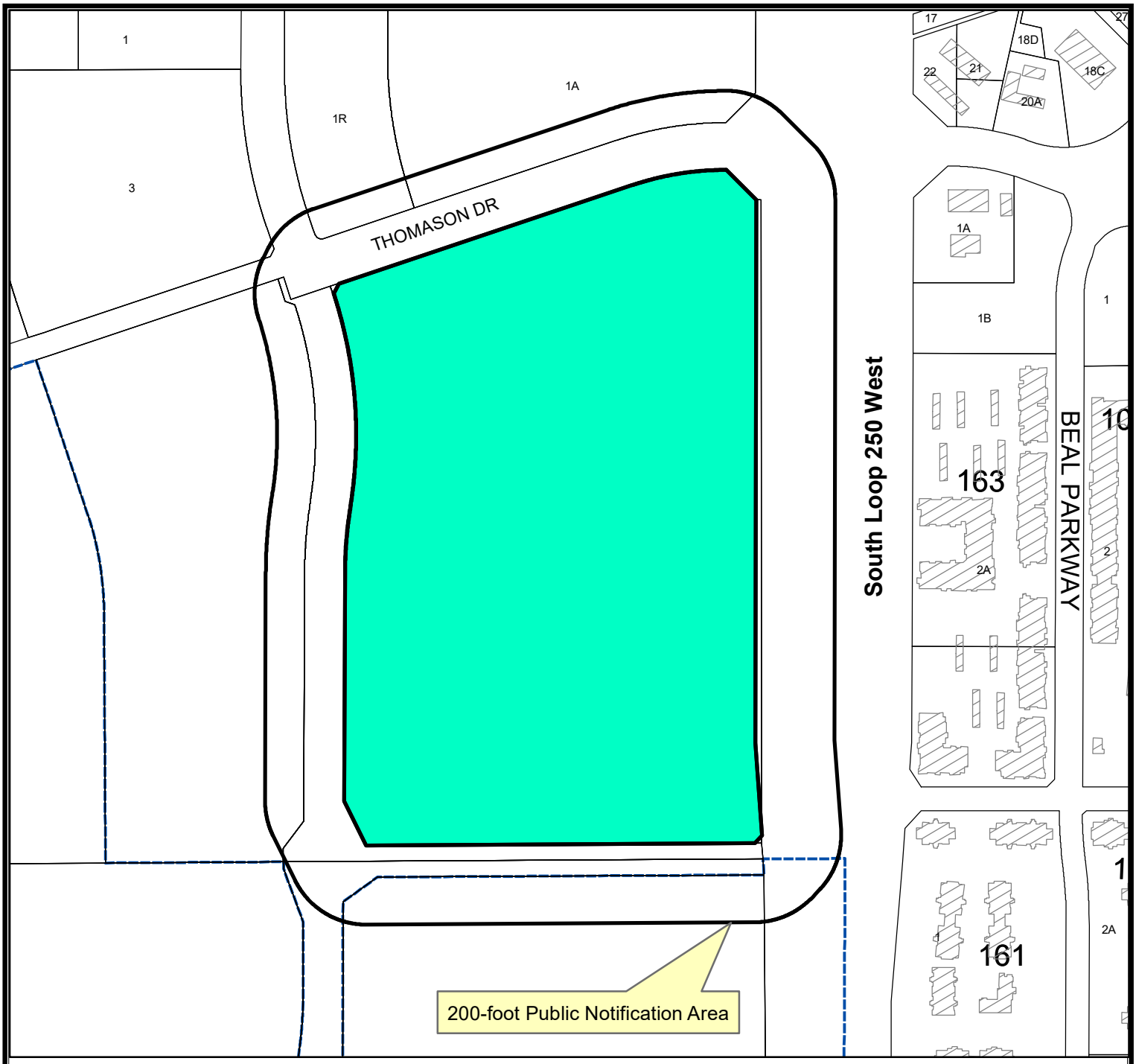
Dalia Salinas

NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY

☑ Property Owner Authorization	☑ Dimensioned Site Plan
☑ Application Fee	☑ Plans in Digital Format (PDF/JPEG)
Check # 001563	
Received By: Jexie Walling	Date: RECEIVED NOV 08 2022
	BY:

****Application will not be considered for scheduling until reviewed by a planner.****



LOCATION MAP

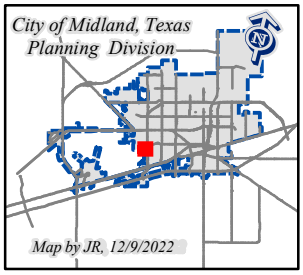
Z-22-0312 **Scale: 1" = 4,336'**

Consider a request by Parkhill for a zone change from PD, Planned District for a Housing Development District, Office Center District in Part, Recreation Center District in part, and Shopping Center District in part, to an amended PD, Planned District for a Housing Development District,Office Center District in Part, Recreation Center District in part, and Shopping Center District in part, on a 37.65-acre tract of land out of the Northeast Quarter of Section 48, Block 40, T-1-S, T & P. R.R. Co. Survey, City and County Midland, Texas.

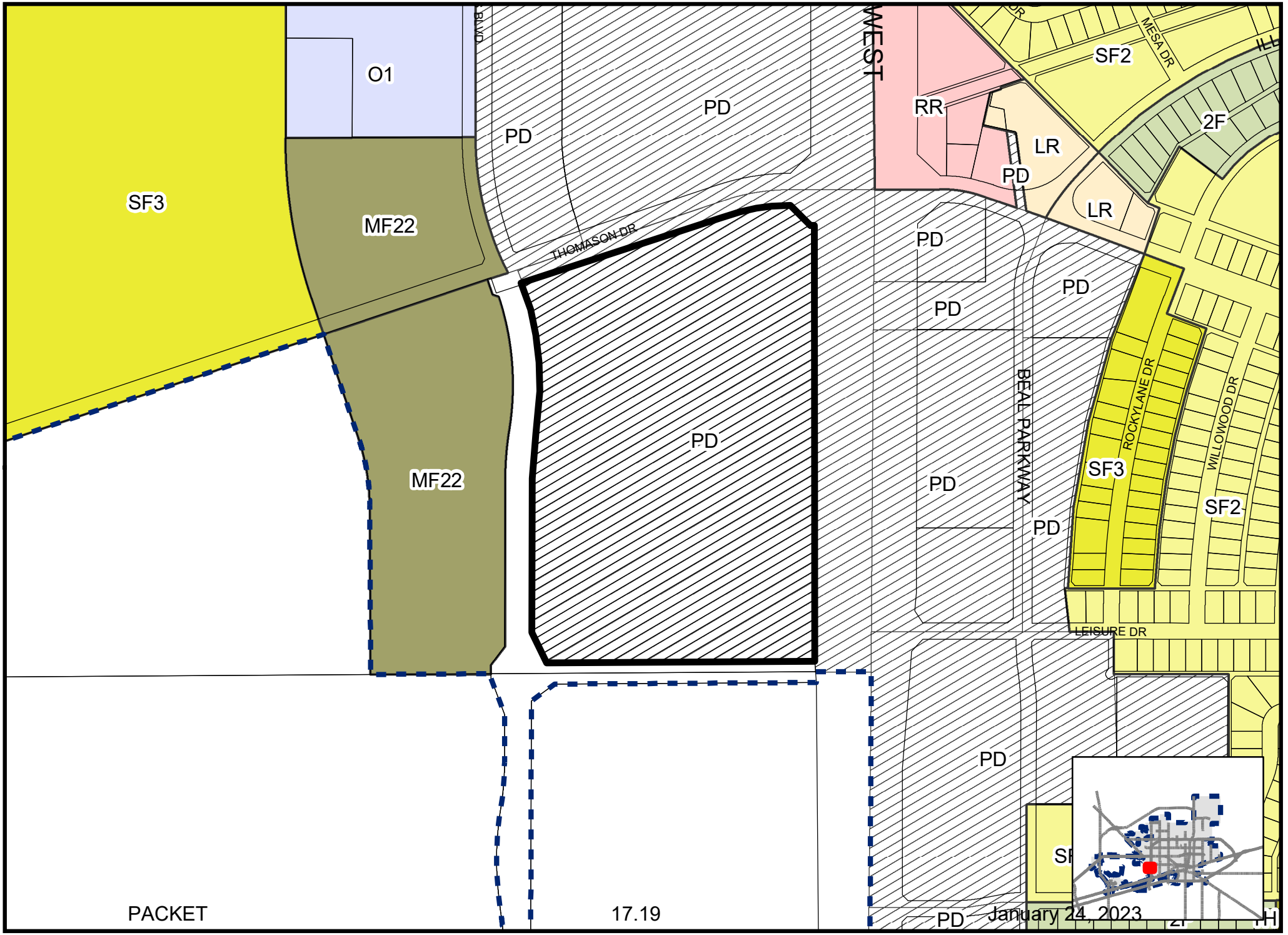
Generally located on the southwest corner of the intersection of Thomason Dr. and S. Loop 250 West. (Council District 4)

L E G E N D

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



©THE CITY OF MIDLAND - 2021
THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY AND NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.
THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.



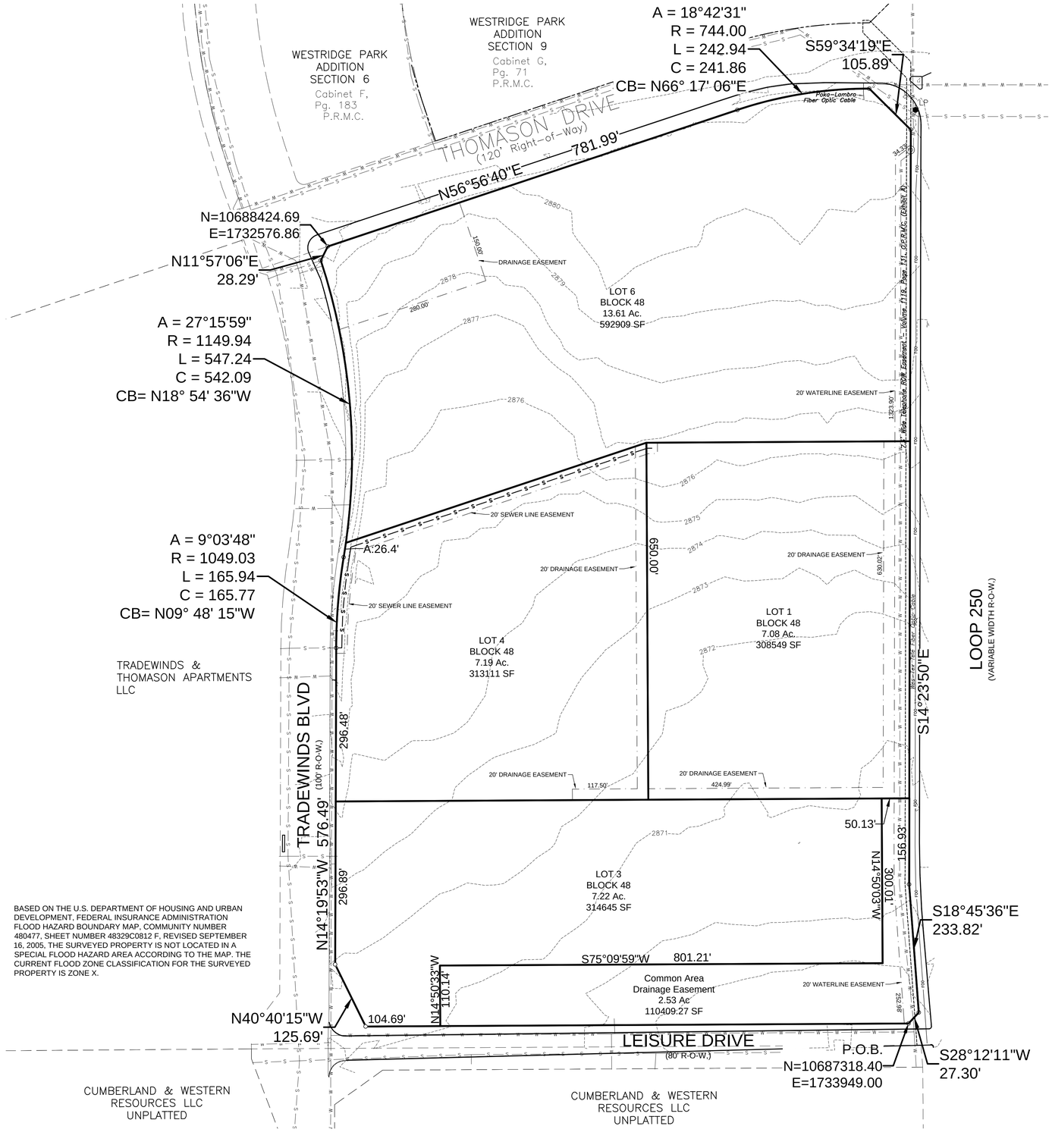
Map By JR, 12/2/2022

Z-22-0312

Scale: 1" = 200'

ZONING MAP

© THE CITY OF MIDLAND - 2021: THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.



BASED ON THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, FEDERAL INSURANCE ADMINISTRATION FLOOD HAZARD BOUNDARY MAP, COMMUNITY NUMBER 480477, SHEET NUMBER 48329C0812 F, REVISED SEPTEMBER 16, 2005, THE SURVEYED PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA ACCORDING TO THE MAP. THE CURRENT FLOOD ZONE CLASSIFICATION FOR THE SURVEYED PROPERTY IS ZONE X.

OWNER'S CERTIFICATES

STATE OF TEXAS
COUNTY OF MIDLAND :

WHEREAS, WESTRIDGE VILLAGE, LP is the record owner of 37.65 Acres of Land Located in Section 48, Block 40 T-1-S, T&P RR Survey Midland County Texas and more particularly described hereon.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS :

That we, WESTRIDGE VILLAGE, LP, do hereby adopt this plat designating the hereinabove described property as WESTRIDGE PARK ADDITION, SECTION 49 to the City of Midland, Texas, and we do hereby dedicate to the public use forever the streets, alleys, and easements shown thereon.

WITNESS our hands at Midland, Texas, this the_____day_____20____.

By: _____
Alan D. Feinsilver, President

STATE OF _____:
COUNTY OF _____:

This instrument was acknowledged before me on _____, 20___ by Alan D. Feinsilver on behalf of WESTRIDGE VILLAGE, LP

_____
Notary Public Signature

UTILITY COMPANY'S CERTIFICATE

This plat has been checked for accessibility of utilities.

_____ Oncor Electric Delivery Service (PLEASE PRINT)

_____ AT&T Texas (PLEASE PRINT)

_____ Atmos Energy (PLEASE PRINT)

_____ SuddenLink Communications (PLEASE PRINT)

_____ Grande Communications (PLEASE PRINT)

SURVEYOR'S CERTIFICATE

KNOW ALL MEN BY THESE PRESENTS

That I, Samuel Wyatt, a Registered Professional Land Surveyor, do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the corner monuments shown thereon were properly placed under my personal supervision, in accordance with the Subdivision Regulations of the City of Midland, Texas.

_____
Samuel Wyatt, R.P.L.S. #6453

SPECIAL STATE PLANE COORDINATE NOTE

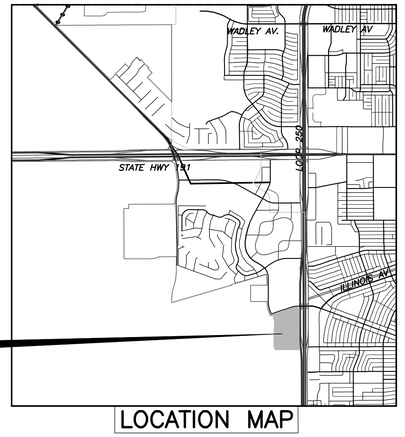
Bearings, coordinates, distances and areas are relative to the Texas State Plane Coordinate System (Central Zone1983 NAD), with a combined scale factor of 0.999880170 and a theta angle equal to -0°56'03" at a 1/2-inch iron rod with a plastic cap marked "PSC CONROL", said control point having the following coordinates: NORTHING = 10,675,139.45 and EASTING = 1,733,931.51 in U.S. Survey Feet.

CERTIFICATE OF APPROVAL

This is to certify that the above and foregoing plat of WESTRIDGE PARK ADDITION, SECTION 47 was approved by proper action of the City Planning and Zoning Commission of the City of Midland, Texas, on this the_____th day of_____20____.

Chairman - LUCY SISNIEGA

Secretary - ELIZABETH SHAUGHNESSY



WESTRIDGE PARK ADDITION SECTION 49

LOCATION MAP

PRELIMINARY PLAT

WESTRIDGE PARK ADDITION
SECTION 47

Being a 37.65 Ac tract of land located in the Northeast quarter of Section 48, Block 40, T-1-S, T.&P.RR.Co, Survey
City and County of Midland, Texas

N

0 100' 200'

LEGEND:

= TRACT/DEED/PLAT LIMITS BOUNDARY LINE
= TRACT/DEED/PLAT ADJOINER LINES
= PLATTED LOT LINE/SUBDIVIDED LINE
= EXISTING WATER LINE
= PLATTED LOT LINE/SUBDIVIDED LINE
= EASEMENT LINE
= EXISTING EASEMENT LINE
= ELEVATION CONTOUR LINE

NOTES:

1. SELLING A PORTION OF THIS ADDITION BY METES AND BOUNDS MAY BE A VIOLATION OF CITY ORDINANCE AND STATE LAW AND SUBJECT TO FINES AND WITHHOLDING OF UTILITIES AND BUILDING PERMITS.
2. INITIAL IMPACT FEES WILL BE ASSESSED DURING THE FINAL PLATTING PROCESS. IMPLEMENTATION AND COLLECTION OF IMPACT FEES WILL TAKE PLACE DURING THE BUILDING PERMIT PROCESS. ADDITIONAL IMPACT FEES OR INCREASES IN FEES MAY NOT BE ASSESSED AGAINST THE TRACT UNLESS THE NUMBER OF SERVICE UNITS TO BE DEVELOPED ON THE TRACT INCREASES.
3. APPROVAL OF A SITE PLAN BY THE CITY OF MIDLAND MAY BE REQUIRED BEFORE THE DEVELOPMENT OF ANY LOT AND BEFORE A BUILDING PERMIT MAY BE OBTAINED.
4. A BLANKET EASEMENT OF INGRESS AND EGRESS IS HEREBY GRANTED FOR WESTRIDGE PARK ADDITION, SECTION 45 TO THE CITY OF MIDLAND FOR GARBAGE AND TRASH COLLECTION AND LOCATION AND MAINTENANCE OF TRASH CONTAINERS, SAVE AND EXCEPT THOSE AREAS OCCUPIED BY A BUILDING OR STRUCTURE. SAID EASEMENT IS CONDITIONED SUCH THAT NO CONSTRUCTION SHALL COMMENCE ON SAID LOT UNTIL EXACT LOCATION OF SAID CONTAINERS AND THE EASEMENTS IN CONNECTION THEREWITH HAVE BEEN SELECTED AND APPROVED BY THE DIRECTOR OF UTILITIES.
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7. RELATIVE TO THE EXISTING DRAINAGE EASEMENT: THE CITY OF MIDLAND AND ITS EMPLOYEES, CONTRACTORS, AGENTS, SUCCESSORS, AND ASSIGNS, SHALL HAVE THE FREE AND UNINTERRUPTED RIGHT OF PASSAGE IN, ON, UPON, OVER, UNDER, ACROSS, ALONG AND THROUGH THE PROPERTY DESCRIBED HEREIN FOR THE PURPOSE OF ESTABLISHING, LAYING, CONSTRUCTING, RECONSTRUCTING, INSTALLING, REALIGNING, MODIFYING, REPLACING, IMPROVING, ALTERING, OPERATING, MAINTAINING, ACCESSING, INSPECTING, REPAIRING, RELOCATING AND REMOVING SAID FACILITIES, INCLUDING BUT NOT LIMITED TO, THE RIGHT TO CUT AND TRIM BUSHES AND TREES, TOGETHER WITH THE RIGHT OF INGRESS, EGRESS AND REGRESS FOR SUCH PURPOSES IN, ON, UPON, OVER, UNDER, ACROSS, ALONG AND THROUGH THE PROPERTY DESCRIBED HEREIN.
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9. THERE IS A RECIPROCAL RIGHT OF ACCESS BETWEEN LOTS 1, 2, 3, 4, AND 5, BLOCK 48 IN ALL LOCATIONS EXCEPT WHERE OTHERWISE OBSTRUCTED BY A BUILDING OR FENCE. NO PHYSICAL BARRIERS WILL BE ERECTED THAT WOULD RESTRICT VEHICULAR TRAFFIC BETWEEN LOTS.

OWNER & DEVELOPER:

WESTRIDGE VILLAGE, LP

1885 Saint James Place, Suite 1100
Houston, Texas 77056
Contact: Alan Fiensilver
(713) 266-1101

ENGINEER:

PARKHILL

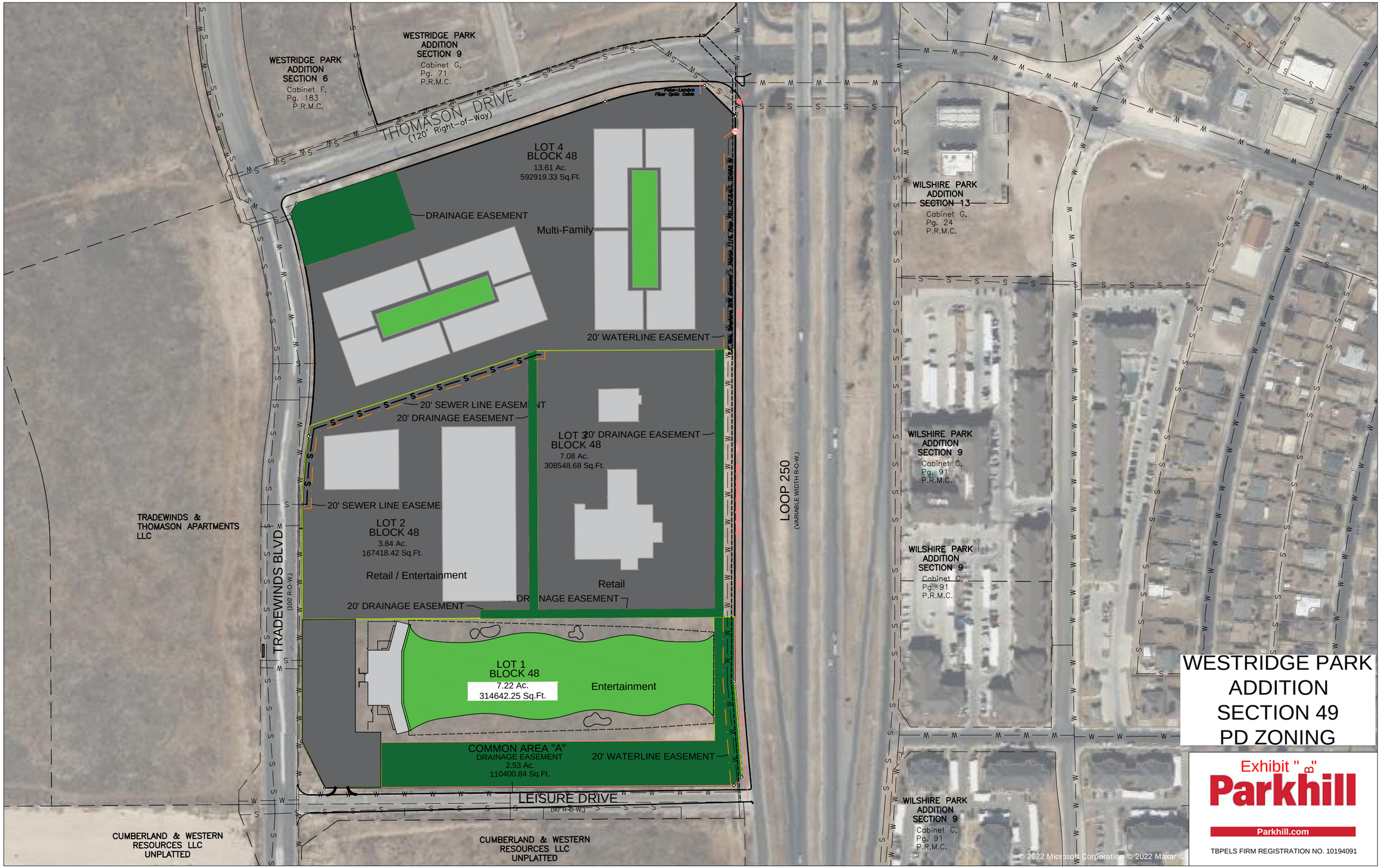
1700 W. WALL STREET
MIDLAND, TEXAS 79701
Contact: Josh Wallender
(432) 697-1447

WESTRIDGE PARK ADDITION
SECTION 47

Parkhill
Parkhill.com
TBPELS FIRM REGISTRATION NO. 10194091

PLAT FILED FOR RECORD
MIDLAND COUNTY, TEXAS
NO. _____ CABINET _____
DATE _____ PAGE _____

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WESTRIDGE PARK ADDITION SECTION 49 PD ZONING

Exhibit " B "

Parkhill

Parkhill.com

TBPELS FIRM REGISTRATION NO. 10194091

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Westridge Village

Southwest Corner Loop 250 and Thomason

EXHIBIT " C"

PD Zoning - Program Density Table

Product Type	Maximum Criteria	Maximum GSF **	Maximum Height	Parking	
Entertainment Retail***	15,000 SF Per Acre	100,000	56 Feet (Bldg) 175 Feet (Net/Fence)*	1/300 RSF Retail	
Retail/Restaurant	15,000 SF Per Acre	300,000	35 Feet	1/300 RSF Retail 8/1000 RSF Restaurant	
Office	Floor Area Ratio 1.2:1 Excluding Parking Garage	600,000	98 Feet	2.5/1000 RSF	
Hotel	Floor Area Ratio 1.2:1 Excluding Parking Garage	150,000	98 Feet	1/Per Key	
Apartments	50 Units Per Acre	900,000	56 Feet	1/Unit 1.5/Unit 2/Unit 2.5/Unit	Studio 1 Bedroom 2 Bedroom 3 Bedroom

* Net/Fence is Specific to a Driving Range Entertainment Venue only.

** Overall Maximum GSF = 1,500,000 GSF (No combination of the above can exceed an overall 1,500,000 GSF)

Note: Gross Square Footage is calculated using Floor Area less square footage related to parking structures, loading dock areas, corridors, mezzaine space, balconies, vertical circulation, and utility rooms.

*** Entertainment Retail is defined as venues such as a Driving Range, Indoor Go-Carts, Arcades, Miniature Golf, and similar Types

January 24, 2023
17.22
PACKET

ORDINANCE NO. 9949

AN ORDINANCE ESTABLISHING THE ZONING CLASSIFICATION OF THE AREA INDICATED AS BEING A 46.38-ACRE TRACT OF LAND OUT OF SECTION 48, BLOCK 40, T-1-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS, AS A PD, PLANNED DISTRICT; SAID TRACT BEING GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF TRADEWINDS BOULEVARD AND THOMASON DRIVE; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION

WHEREAS, notice has been given to all parties in interest and citizens by publication in the official newspaper and otherwise of a hearing to be held before the City Council on July 9, 2019, to consider amendments to the zoning regulations and map establishing the zoning classification of the property described in Section One hereof as a PD, Planned District, as set out in Title XI, Chapter 1 of the City Code of Midland, Texas; and

WHEREAS, such a public hearing was held in the Council Chambers on July 9, 2019, as advertised; and

WHEREAS, after a full hearing, at which all parties in interest and citizens were given an opportunity to be heard; and after considering among other things, the character of the property involved and the surrounding area and its peculiar suitability for particular uses; and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout such municipality, the Council finds it to be in the best interest of the health, safety, morals and general welfare of the City of Midland to amend the zoning regulations accordingly;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the zoning classification of the area indicated on Exhibit "A", attached hereto and incorporated herein by reference, is hereby established as a PD, Planned District.

City Council Agenda

#9949
Approved for Agenda:
mwilliams
City Manager's Office

MEETING DATE: 7/23/2019

APPROVED

TO: City Council / City Manager

FROM: Rolandrea Russell, Senior Planner

SUBJECT: Consider an ordinance on second reading on a request by Pontikes Development, LLC, for the initial zoning of a 46.38-acre tract of land located in Section 48, Block 40, T-1-S, T&P RR. Co. Survey, Midland County, Texas. (Generally located on the southeast corner of the intersection of Tradewinds Boulevard and Thomason Drive.)

Purpose:

The applicant, Pontikes Development, LLC, is requesting for the initial zoning of a 46.38-acre tract of land located in Section 48, Block 40, T-1-S, T&P RR Co Survey, Midland County, Texas located on the southeast corner of the intersection of Tradewinds Boulevard and Thomason Drive that was recently annexed to PD, Planned District.

Recommended City Council Action

☒ Approve ☐ Deny ☐ Directional / Informational

Fiscal Impact:

This request does not have a significant financial impact to the City.

Current Zoning:

No Current Zoning

Surrounding Zoning and Land Use:

The properties to the north are zoned PD, Planned District for a Shopping Center (Ordinance No. 8227) and PD, Planned District for an Office Center (Ordinance Nos. 8227 and 8559). The properties to the east are zoned PD, Planned District for a Shopping Center (Ordinance No. 8219), and PD, Planned District for a Housing Development (Ordinance No. 9843) and the location of a gas station and undeveloped property. The

property to the west was recently annexed and zoned MF-2, Multiple-Family Dwelling District (Ordinance No. 9911). The property to the south is located in the ETJ, Extraterritorial Jurisdiction and the location of undeveloped property.

Analysis:

The applicant, Pontikes Development, LLC, is requesting for the initial zoning of annexed land to a Planned District for the development of a mixed-use development, including office space, retail and multi-family uses. The subject property is immediately east of a recently annexed 17.55-acre tract of land.

The site is currently in the process of being annexed into City Limits.

This case has been circulated to and reviewed by all pertinent City departments for internal review and has received no objections. Their comments are as follows.

Engineering: Approved with Conditions

No objection to zone change.

Developer participation towards the cost of a future traffic signal at Thomason and Tradewinds will be required.

Access points on Tradewinds must align with the pre-planned median break locations already under construction by the City. Coordinate with Engineering for the approved plans.

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations.

Transportation: Approved with Conditions

Depending on the nature and scale of the proposed development, a Traffic Impact Analysis MAY be required prior to approval of construction drawings.

Developer participation towards the cost of a future traffic signal at Thomason and Tradewinds will be required.

Access spacing will be required to adhere to the TxDOT Access Management Standards along the state highway. Minimum spacing on the service road must be at least 360 ft, so the southern driveway will have to be moved farther north while still remaining well south of the physical ramp gore. The northern driveway location appears to be acceptable as shown.

Both access points on the LP 250 service road will likely require right-turn deceleration lanes.
Access points on Tradewinds must align with the pre-planned median break locations already under construction by the City. Coordinate with Engineering for the approved plans.

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations.

No objection to zone change.

Fire:

Awaiting Comments.

Code Administration: Approved

No issues with zone change. Future structures must adhere to the International Building Code, local ordinances, and floodplain requirements if necessary.

Oil and Gas: Approved

No Oil or Gas wells identified within 500 ft. permitted well radius or in the 135 ft. non-permitted well radius of location on plat.

Planning:

This request is in compliance with the Tall City Tomorrow Comprehensive Plan, policies that encourage development of prime sites remaining along the 250 Loop and mixed use developments with similar land use intensities along the arterial corridors" (Tall City Tomorrow, Page 63). This development will make full use of existing infrastructure, while also respecting the character of the surrounding neighborhood.

The Planning and Zoning Commission recommended this request for approval at the May 20, 2019 meeting.

The City Council approved this request at the July 9, 2019 meeting.

Staff recommends approval of this initial zoning of Planned District, subject to the following conditions:

Conditions:

A. **That the use and development of Westridge Village shall conform to the regulations of the O-2, Office District, except as stated below.**

B. **That the Planned District Site Layout Plan, which is attached hereto as Exhibit "B" and incorporated herein, shall be considered illustrative and shall only serve as a vision of Westridge Village.**

C. **That the proposed driveways and drive aisles shown in Exhibit "B" shall be considered preliminary and are subject to approval by the City Manager or his designee.**

D. That a Traffic Impact Analysis shall be required before the issuance of a building permit.

E. *Use regulations.* Land and buildings in the Westridge Village PD may be used for any of the following listed uses, but no land shall hereafter be used and no buildings erected, altered or converted which are arranged, designed or used for other than the following uses:

1. Any use permitted in the O-2 Office District, MF-2 Multiple Family Dwelling District, TH Townhouse Dwelling District, and LR-3 Local Retail District (with the exception of the prohibited uses listed below) is permitted within the aggregate limitations shown in the Program Density Table, which is attached hereto as Exhibit "C" and incorporated herein.

2. The following uses from the LR-3 Local Retail District will be prohibited, including:

   a. Mortuary or funeral home;
   b. Monument sales;
   c. Mobile home camping and travel trailer sales, rental and service;
   d. Motor homes sales, rental and service;
   e. Heavy truck (exceeding one-ton capacity) sales, rental and service;
   f. Scientific or research laboratories which comply with the noise and odor control standards of an IP-3 Industrial Park District;
   g. Pawnshops;
   h. Dancehalls; and
   i. Establishments primarily offering appliances, equipment, vehicles or other commodities for rent or lease (commonly referred to as "rent-all"). Vehicles licensed for use on public roadways may be stored and displayed outside without compliance with the screening provisions of the performance standards contained herein.

F. *Area regulations.* Except as hereinafter provided in this Section, no building shall be erected, altered or converted for dwelling purposes or any other main use permitted in this Westridge Village PD, unless such use complies with the following regulations.

1. The Westridge Village PD has no minimum or maximum Lot Area, Lot Width or Lot Depth or Front, Side, or Rear Yard requirements. Such requirements will be set forth on the approved comprehensive site plan applicable to each portion of Westridge Village.

G. *Height regulations.* No building shall be erected to exceed the limitations in height and stories as shown in the Program Density Table on Exhibit "C". "Building Height" shall be measured from the mean ground level elevation

immediately adjacent to the building to the rooftop, excluding any rooftop accessories, including without limitation, mechanical equipment and enclosing rooms, stair penthouses and building parapets not in excess of 8 feet in height.

H. *Floor Area.* Buildable area shall be limited by the Program Density Table on Exhibit "C". A maximum of 1,500,000 gross square feet of Floor Area may be constructed at Westridge Village.

I. *Parking:* Parking within Westridge Village shall be as set forth on Exhibit "C" for the various uses listed

J. *Outdoor Sign Standards:* A Master Sign Plan will provide a hierarchy of signage for Westridge Village typical of mixed-use neighborhood projects, including but not limited to project identification signage located on the perimeter of the property and/or within the surrounding right-of-way.

K. *Site Plan Requirement*

1. *Committee.* The Mayor of the City shall appoint a Westridge Village Site Plan Review Committee (the "Committee"). The Committee shall be composed of City staff, one or more members of the City Council, and one or more members of the Planning and Zoning Commission; provided, however, that the Committee shall not contain a quorum of the City Council or a quorum of the Planning and Zoning Commission.

2. *Review.* A separate comprehensive site plan for each area of Westridge Village shall be submitted to the City's Development Services Department for review by the Committee. The Committee may approve or deny a comprehensive site plan or request additional information about a comprehensive site plan. Each separate comprehensive site plan shall be reviewed and approved by the Committee as a condition precedent to the granting of a certificate of occupancy, as per Section 11-1-9(C) of the Code.

3. *Appeal.* Any person or entity aggrieved by the action of the Committee in the denial of a comprehensive site plan approval shall have the right to appeal to the City Council. Such appeal shall be taken by filing with the City manager's Office, not later than 14 days after notice of the action complained of has been mailed to such person's last known address, a written statement shall set a time and place for a hearing on such appeal and notice of such hearing shall be mailed to the appellant. The decision of the City Council on such appeal shall be final and conclusive.

L. *General Traffic Regulations:* As long as the streets within Westridge Village remain private, no permits, other than appropriate permits for alcohol consumption, shall be required for any special events held on the streets.

M. *Function of this Ordinance.* This Ordinance functions as the exclusive land use and zoning regulatory document for Westridge Village. As development

proceeds, additional public hearings for zoning approvals are not required; however, site plan approval is required as set out in Section Two, paragraph (11) of this Ordinance. The provisions of the Code shall apply to Westridge Village except as expressly identified and referenced within this Ordinance.

Letters of Objection:

As of July 5, 2019, staff has received no letters of objection to this request.

Attachments:

Exhibit A, Metes & Bounds
Exhibit B, Illustrative Site Layout Plan
Exhibit C, Proposed Program Density Table
Application
Maps

MIDLAND
Planning Division

Annexation/Initial Zoning

Project Number: A-19-0014
Case Number: Z-19-0091

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Pontikes Development, LLC		Phone ( ) Email	
Address 1885 St. James Place, Suite 1100	City Houston	State TX	Zip 77056

Property Owner Printed Name: SBC LP		Phone ( ) Email	
Address 1811 Heritage Blvd, Suite 100	City Midland	State TX	Zip 79707

Representative *(if different from Applicant or Property Owner)* Firm: Parkhill, Smith, & Cooper Printed Name: Josh Wallender (PSC Job # 01.6881.18)		Phone (432) 697-1447 Email jwallender@team-psc.com	
Address 1700 W. Wall Street, Suite 100	City Midland	State TX	Zip 79701

Street Address: Please See Attached Metes and Bounds

Legal Description
Lot: Block: Subdivision:

Proposed Zone: PD - Please See Attached
(List by tracts if more than one district is requested)

Reason for Zone Change Request: Allow for Development of Lots

Present Use of Property: Vacant Land

Proposed Use of Property: Multiple Uses

How would this zone change affect the public health, safety and welfare? This would improve the public, health, and welfare

Submittal and Fees
Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Metes and Bounds Description
- Survey Map
- Dimensioned Site Plan (If applicable)
- Digital Copies of Documents(PDF/JPEG)

RECEIVED
APR 2 1 2019
CITY OF MIDLAND
PLANNING DIVISION OFFICE

Signature *(by property owner only – authorized agent must sign affidavit below)*	
Applicant (signature): Alan D Tanner	Date: 4/24/19
Applicant (printed): ALAN D TANNER	
Property Owner (signature): Shelly K Smith (President)	Date: 4-24-19
Property Owner (printed): SBC, LP	

The Zone Change/Planned District Amendment/Site Plan Approval shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared Josh Wallender who, being by me duly sworn, upon oath says: That (s)he is authorized by SBC LP, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

Authorized Agent (*signature*)

Subscribed and sworn to before me, this 24th day of April, 2019, to certify which witness my hand and seal of office.

ASHLEY BURKS
My Notary ID # 131659739
Expires July 27, 2022

Ashley Burks

NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

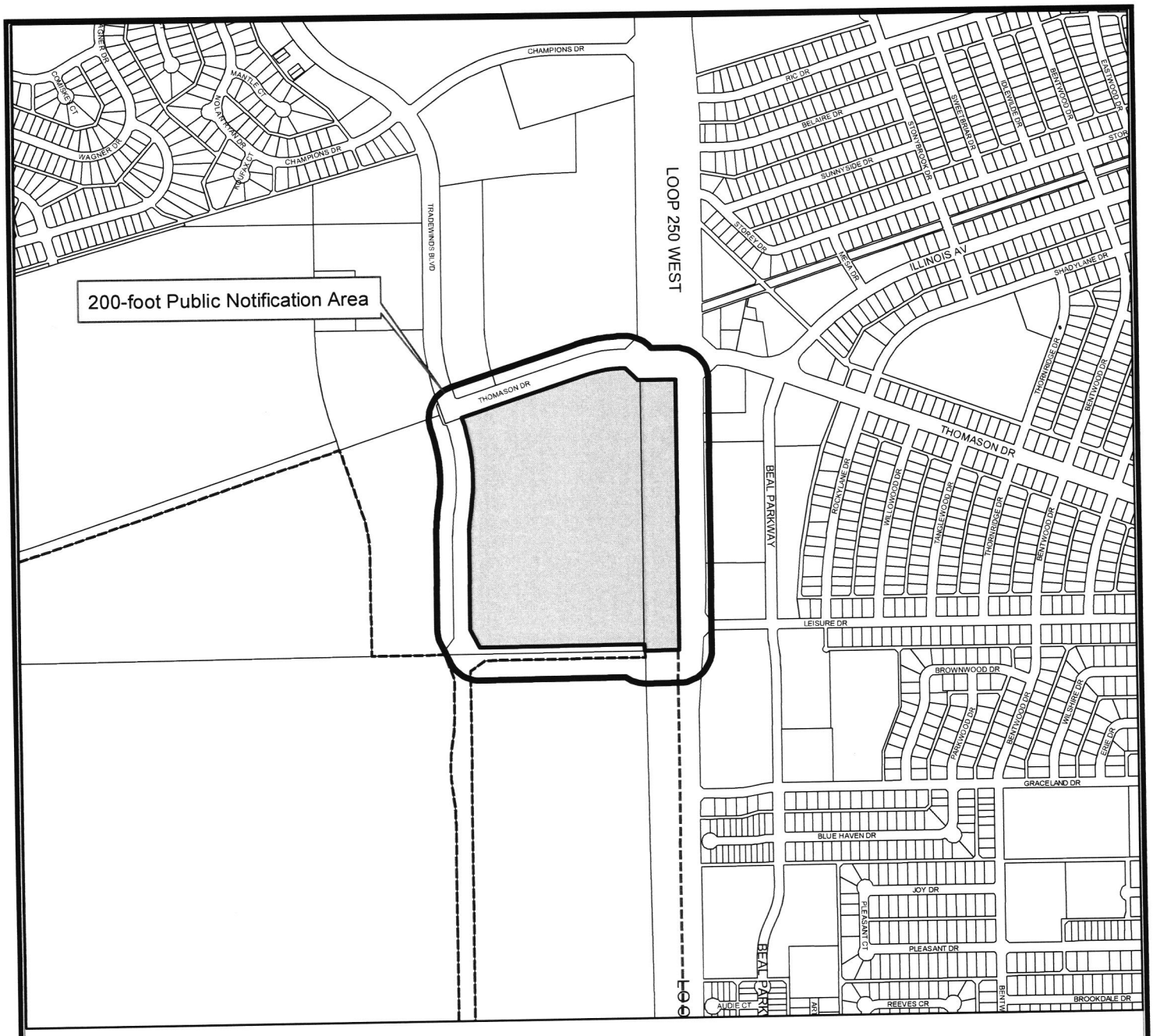
FOR OFFICE USE ONLY

- ☑ Property Owner Authorization
- ☑ Application Fee
  Check # 1333
- ☑ Dimensioned Site Plan
- ☑ Plans in Digital Format (PDF/JPEG)

Received By: Rolandrea Russell Date:

RECEIVED
APR 24 2019
CITY OF MIDLAND
PLANNING DIVISION OFFICE

****Application will not be considered for scheduling until reviewed by a planner.****



LOCATION MAP

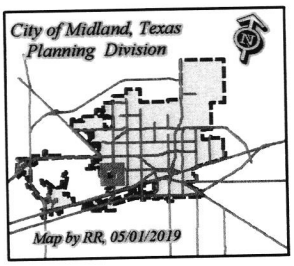
Z-19-0091 **Scale: 1" = 500'**

Consider a request for the Initial Zoning of a 46.38-acre tract of land located in Section 48, Block 40, T-1-S, T&P RR. Survey, Midland County, Texas.

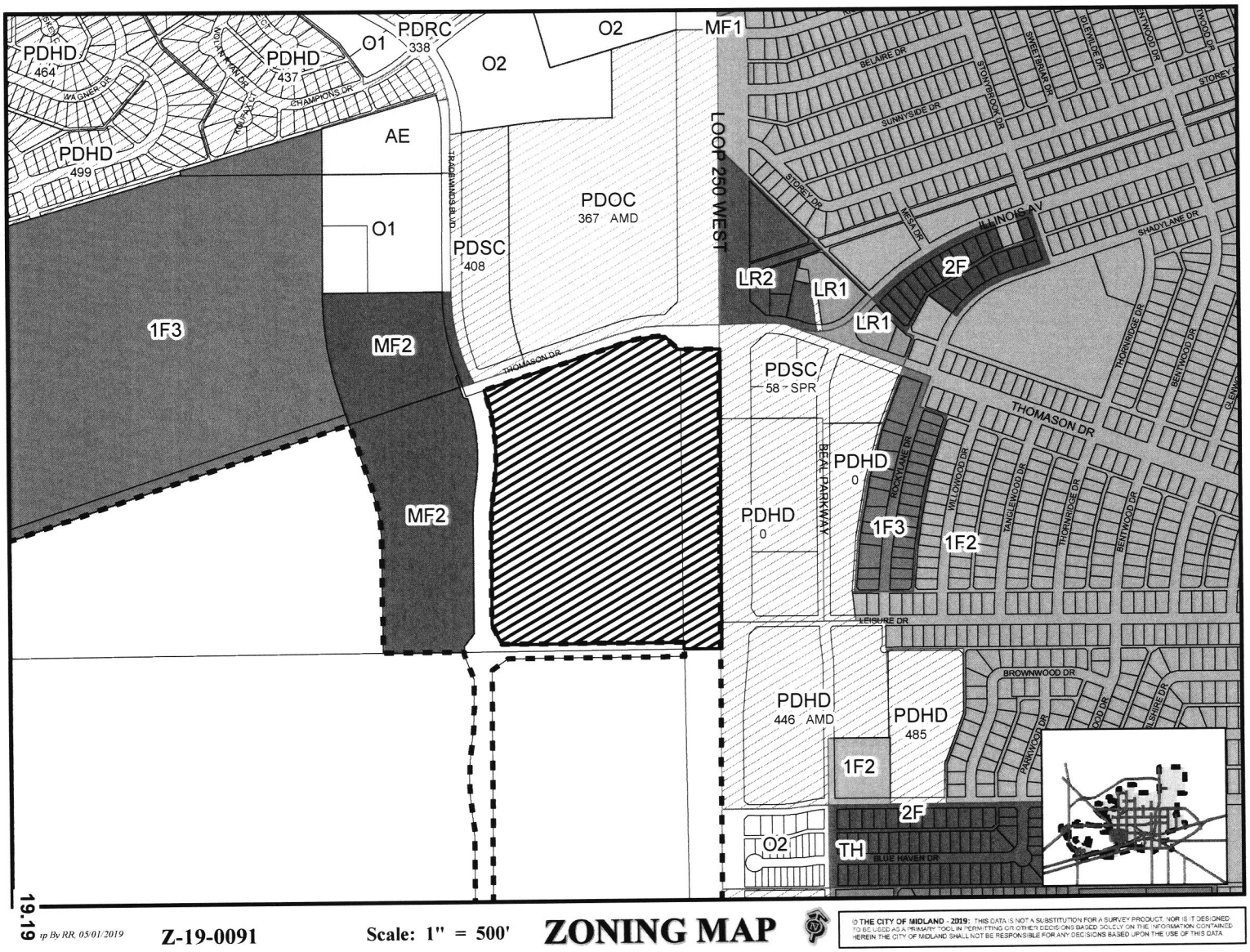
Generally located on the southeast corner of the intersection of Tradewinds Boulevard and Thomason Drive.

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



©THE CITY OF MIDLAND - 2019
THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT. NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.
THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE F ANY DECISIONS BASED UPON THE USE OF THIS DAT



19.19

rp By RR, 05/01/2019

Z-19-0091

Scale: 1" = 500'

ZONING MAP

© THE CITY OF MIDLAND - 2019: THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.

SECTION TWO. That the area indicated on Exhibit "A" ("Westridge Village" or the "Westridge Village PD") shall be subject to the following special conditions and restrictions:

A. That the use and development of Westridge Village shall conform to the regulations of the O-2, Office District, except as stated below.

B. That the Planned District Site Layout Plan, which is attached hereto as Exhibit "B" and incorporated herein, shall be considered illustrative and shall only serve as a vision of Westridge Village.

C. That the proposed driveways and drive aisles shown in Exhibit "B" shall be considered preliminary and are subject to approval by the City Manager or his designee.

D. That a Traffic Impact Analysis shall be required before the issuance of a building permit.

E. *Use regulations*. Land and buildings in the Westridge Village PD may be used for any of the following listed uses, but no land shall hereafter be used, and no buildings erected, altered or converted which are arranged, designed or used, for other than the following uses:

> Any use permitted in the O-2, Office District, MF-2, Multiple-Family Dwelling District, TH, Townhouse Dwelling District, and LR-3, Local Retail District, with the exception of the prohibited uses listed below, is permitted within the aggregate limitations shown in the Program Density Table, which is attached hereto as Exhibit "C" and incorporated herein.

The following uses from the LR-3, Local Retail District, are prohibited, including:

1. Mortuary or funeral home;

2. Monument sales;

3. Mobile home camping and travel trailer sales, rental and service;

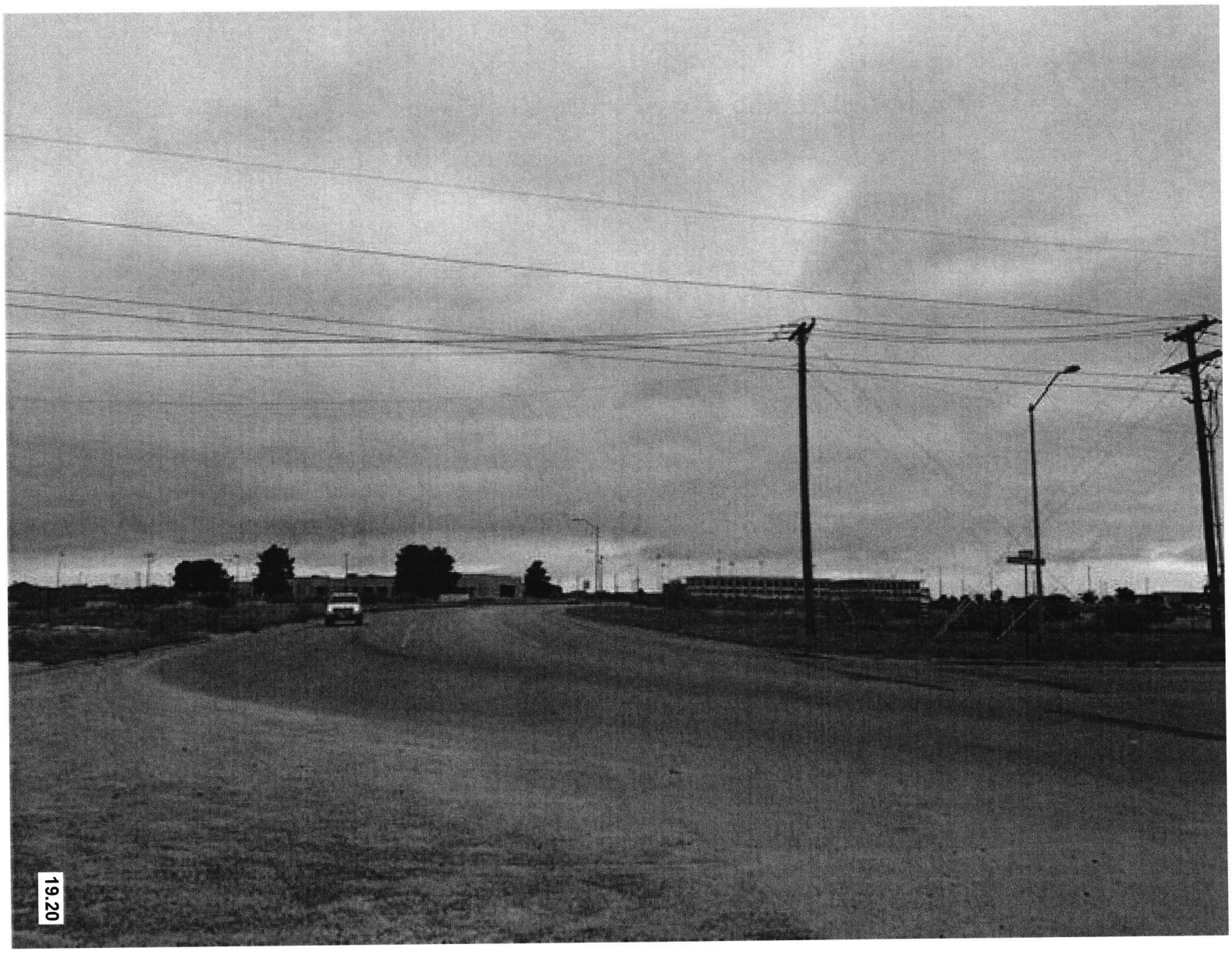
4. Motor homes sales, rental and service;

5. Heavy truck (exceeding one-ton capacity) sales, rental and service;

6. Scientific or research laboratories which comply with the noise and odor control standards of an IP-3, Industrial Park District;

7. Pawnshops;

8. Dancehalls; and


19.20


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9. Establishments primarily offering appliances, equipment, vehicles or other commodities for rent or lease (commonly referred to as "rent-all"); however, vehicles licensed for use on public roadways may be stored and displayed outside without compliance with the screening provisions of the performance standards contained herein.

F. *Area regulations*. Except as hereinafter provided in this Section, no building shall be erected, altered or converted for dwelling purposes or any other main use permitted in this Westridge Village PD unless such use complies with the following regulations:

The Westridge Village PD has no minimum or maximum Lot Area, Lot Width or Lot Depth or Front, Side, or Rear Yard requirements. Such requirements shall be set forth on the approved comprehensive site plan applicable to each portion of Westridge Village.

G. *Height regulations*. No building shall be erected to exceed the limitations in height and stories as shown in the Program Density Table on Exhibit "C". "Building Height" shall be measured from the mean ground level elevation immediately adjacent to the building to the rooftop, excluding any rooftop accessories, including without limitation, mechanical equipment and enclosing rooms, stair penthouses and building parapets that do not exceed eight feet in height.

H. *Floor area*. Buildable area shall be limited by the Program Density Table on Exhibit "C". A maximum of 1,500,000 Gross Square Feet of Floor Area may be constructed at Westridge Village.

I. *Parking*. Parking within Westridge Village shall be as set forth in Exhibit "C" for the various uses listed therein.

J. *Outdoor sign standards*. A Master Sign Plan shall provide a hierarchy of signage for Westridge Village typical of mixed-use neighborhood projects, including but not limited to project identification signage located on the perimeter of the property and/or within the surrounding right-of-way.

K. *Site plan requirement*.

1. *Committee*. The Mayor of the City shall appoint a Westridge Village Site Plan Review Committee (the "Committee"). The Committee shall be composed of City staff, one or more members of the City Council, and one or more members of the Planning and Zoning Commission; provided, however, that the Committee shall not contain a quorum of the City Council or a quorum of the Planning Zoning and Commission.

2. *Review*. A separate comprehensive site plan for each area of Westridge Village shall be submitted to the City's Development Services Department for review by the Committee. The Committee may approve or deny a comprehensive site plan or request additional information about a comprehensive site plan. Each separate comprehensive site plan shall be reviewed and approved by the Committee as a condition precedent to the granting of a certificate of

occupancy, as per Section 11-1-9(C) of the City Code.

3. *Appeal.* Any person or entity aggrieved by the action of the Committee in the denial of a comprehensive site plan approval shall have the right to appeal to the City Council. Such appeal shall be taken by filing with the City Manager's Office, not later than 14 days after notice of the action complained of has been mailed to such person's last known address, a written statement setting forth fully the grounds for the appeal. The City Council shall set a time and place for a hearing on such appeal, and notice of such hearing shall be mailed to the appellant. The decision of the City Council on such appeal shall be final and conclusive.

L. *General traffic regulations.* As long as the streets within Westridge Village remain private, no permits, other than appropriate permits for alcohol consumption, shall be required for any special events held on the streets.

M. *Function of this Ordinance.* This Ordinance functions as the exclusive land use and zoning regulatory document for Westridge Village. As development proceeds, additional public hearings for zoning approvals are not required; however, site plan approval is required as set out in Subsection K above. The provisions of the City Code shall apply to Westridge Village except as expressly identified and referenced within this Ordinance.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the 9th day of July, A.D., 2019; and passed to second reading on motion of Council member Lacy, seconded by Council member Robnett, by the following vote:

Council members voting "AYE": Trost, Hotchkiss, Love, Morales, Lacy, Robnett

Council members voting "NAY": None

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member Lacy, seconded by Council member Love, on the 23 day of July, A.D., 2019, at a regular meeting of the City Council:

Council members voting "AYE": Trost, Hotchkiss, Love, Morales, Dufford, Lacy, Robnett

Council members voting "NAY": None

PASSED AND APPROVED THIS 23rd day of July, A.D., 2019.

Jerry F. Morales, Mayor

ATTEST:

Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

Robert Patrick, Assistant City Manager

Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney

ANNEXATION TRACT
EXHIBIT A

LEGAL DESCRIPTION FOR A 46.38 ACRE TRACT LOCATED IN NORTHEAST QUARTER OF SECTION 48, BLOCK 40, T-1-S, T. & P. RR. Co. SURVEY, MIDLAND COUNTY, TEXAS

Boundary being further described by metes and bounds as follows:

BEGINNING at (N= 10,688,952.08' E= 1,733,767.86') the Northeast corner of this tract and an exterior corner of the City of Midland City Limits boundary, from whence the Northeast corner of said Section 48, bears N75°38'52"E a distance of 93.21 feet and N14°21'08"W a distance of 998.90 feet;

THENCE S14°24'00"E with the West right-of-way line of old FM 1369 and said City Limits boundary, a distance of 1665.23 feet to the Southeast corner of this tract;

THENCE S75°09'57"W with the South line of said Northeast Quarter of Section 48, a distance of 207.83 feet to a 1/2" iron rod with a plastic cap marked "RPLS 4413" found at an exterior corner of this tract;

THENCE N18°45'12"W along a boundary line of said City Limits boundary, a distance of 39.68 feet to a 1/2" iron rod with a plastic cap marked "RPLS 4413" found at an interior corner of this tract and the Southeast corner of a 37.65 Acre Tract previously surveyed on September 20, 2014;

THENCE S75°09'57"W along a boundary line of said City Limits boundary and with the South line of said 37.65 Acre Tract, a distance of 1002.20 feet to a 1/2" iron rod with a plastic cap marked "RPLS 4413" previously found at the most Southerly cutback corner of this tract and said 37.65 Acre Tract;

THENCE N40°40'15"W with a cutback line of said Water and Sewer Line Easement and proposed Tradewinds Boulevard, a distance of 125.69 feet to a 1/2" iron rod with a plastic cap marked "RPLS 4413" found at an interior corner of said Water and Sewer Line Easement and the most Westerly Southwest corner of this tract and said 37.65 Acre Tract;

THENCE N14°19'54"W with an East boundary line of said Water and Sewer Line Easement proposed as Tradewinds Boulevard, a distance of 576.50 feet to a 1/2" iron rod with a plastic cap marked "RPLS 4413" found at a point of curvature of this tract and said 37.65 Acre Tract;

THENCE along an East boundary line of said Water and Sewer Line Easement proposed as Tradewinds Boulevard in a Northerly direction, with a curve to the right with a radius of 1049.89 feet, a delta angle of 9°03'20", an arc length of 165.94 feet, and a chord length of 165.77 feet, which bears N9°48'15"W, to a 1/2" iron rod with a plastic cap marked "RPLS 4413" found at point of reverse curvature of this tract and said 37.65 Acre Tract;

THENCE along a East boundary line of said Water and Sewer Line Easement in a Northerly direction with a reverse curve turning to the left with a radius of 1149.88 feet, a delta angle of 28°15'50", an arc length of 567.23 feet, and a chord length of 561.50 feet, which bears N19°24'29"W, to a 1/2" iron rod with a plastic cap marked "PLS 1974" set at the Northwest corner of this tract and said 37.65 Acre Tract;

THENCE N56°56'40"E with the South boundary line of said Thomason Drive, a distance of 801.99 feet to a 1/2" iron rod found at a point of curvature of said Thomason Drive and this tract and said 37.65 Acre Tract;

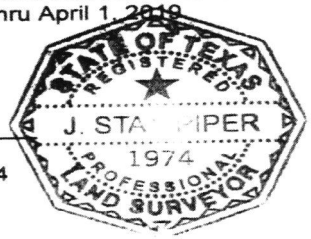
THENCE along a South boundary line of said Thomason Drive in an Easterly direction, with a curve to the right with a radius of 745.25 feet, a delta angle of 18°40'38", an arc length of 242.94 feet, and a chord length of 241.86 feet, which bears N66°16'59"E, to a 1/2" iron rod with a plastic cap marked "PLS 1974" set at a cutback corner of Thomason Drive and the most Northerly Northeast corner of this tract, from whence a bent 1/2" iron rod with plastic cap found bears S83°E, a distance of 0.26 feet;

THENCE S59°34'19"E with the cutback of Thomason Drive, a distance of 105.89 feet to a 1/2" iron rod with a plastic cap marked "PLS 1974" set at the most Easterly Southeast cutback corner of Thomason Drive and Westridge Park Addition, Section 6 as recorded in Cabinet "F", Page 183, Plat Records of Midland County and the most Easterly Northeast cutback corner of this tract, from whence a 5/8" iron rod with plastic cap found bears S60°E, a distance of 0.25 feet;

THENCE N75°36'00"E along a boundary line of said City Limits boundary, a distance of 230.07 feet to the **PLACE OF BEGINNING**. Tract contains an area of 46.38 acres of land.

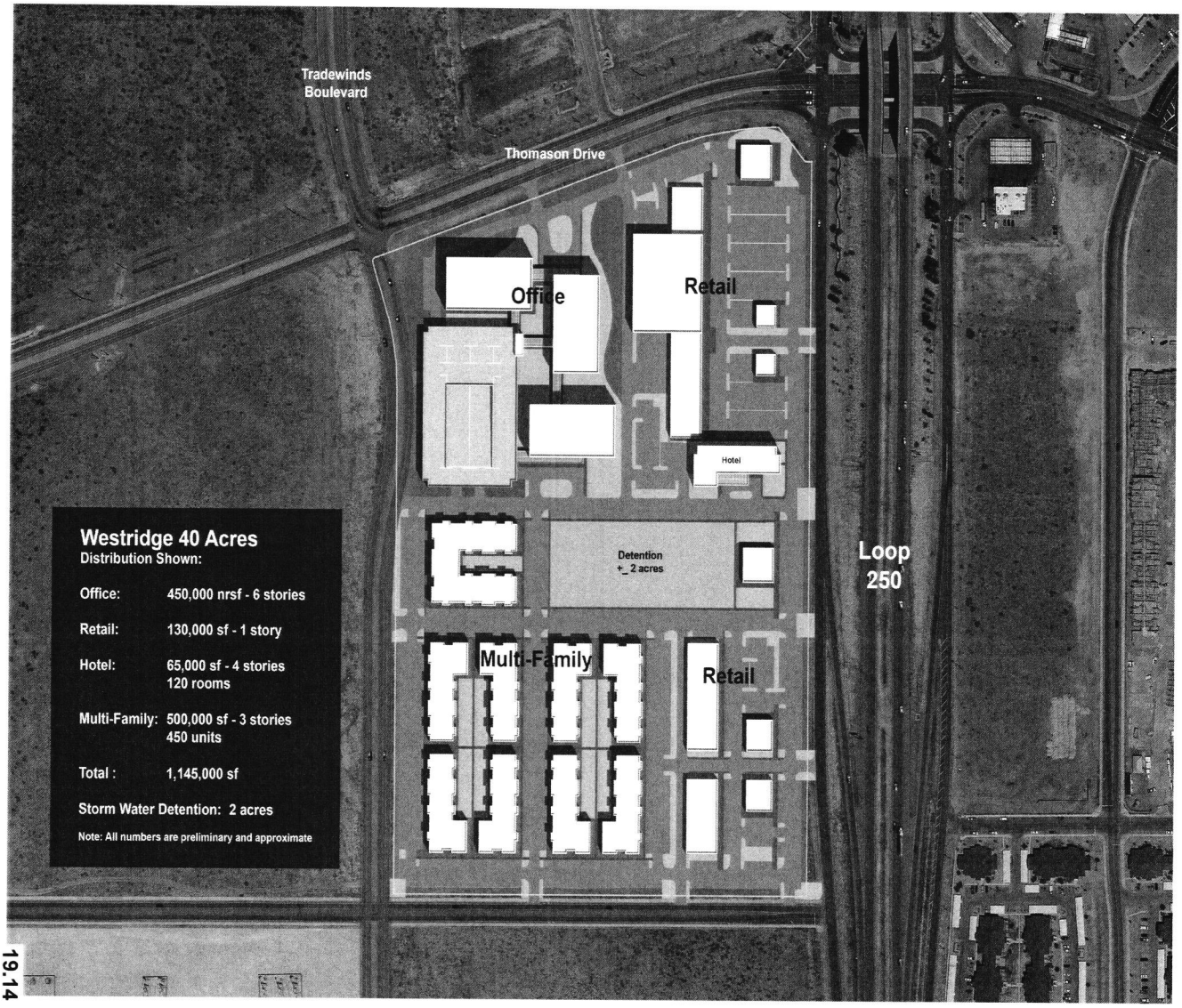
Bearings, distances, and coordinates are relative to the Texas State Plane Coordinate System, NAD 1983/86, Central Zone, with a combined grid factor of 0.9998958, and a theta angle equal to -0°54'48.39" at U.S.C. & G. station "MIDLAND" with published values of Y= 10,690,154.70 and X= 1,746,696.78 in U.S. Survey Feet.

I, J. Stan Piper, Registered Professional Land Surveyor, do hereby certify that this legal description is based on an actual survey made by me or under my supervision, and that the same is true and correct to the best of my knowledge and ability as surveyed on the ground on various dates thru April 1, 2019.



J. Stan Piper
Registered Professional Land Surveyor #1974

Prepared for:
Parkhill, Smith & Cooper, Inc.
1700 W. Wall St., Suite 100
Midland, TX 79701



Kirksey ARCHITECTURE

Thomason at 250
Master Plan
Midland, Texas

19.14

EXHIBIT B

Westridge Village
Southwest Corner Loop 250
and Thomason

EXHIBIT "C"

PD Zoning - Program Density Table

Product Type	Maximum Criteria	Maximum GSF *	Maximum Height	Parking	
Retail/Restaurant	15,000 SF Per Acre	300,000	35 Feet	1/300 RSF Retail 8/1000 RSF Restaurant	
Office	Floor Area Ratio 1.2:1 Excluding Parking Garage	600,000	98 Feet	2.5/1000 RSF	
Hotel	Floor Area Ratio 1.2:1 Excluding Parking Garage	150,000	98 Feet	1/Per Key	
Apartments	50 Units Per Acre	900,000	56 Feet	1/Unit 1.5/Unit 2/Unit 2.5/Unit	Studio 1 Bedroom 2 Bedroom 3 Bedroom

* Overall Maximum GSF = 1,500,000 GSF (No combination of the above can exceed an overall 1,500,000 GSF)
Note: Gross Square Footage is calculated using Floor Area less square footage related to parking structures, loading dock areas, corridors, mezzaine space, balconies, vertical circulation, and utility rooms.

19.15

EXHIBIT C




Loop 250 Frontage Rd
Midland, Texas
Google
Street View - Jun 2021
Monaco Midland
Google
Image capture: Jun 2021 © 2022 Google United States Terms Privacy Report a problem





City Council Meeting

Item Number: 18

Meeting Date: January 24, 2023 (January 10, 2023)

To: City Council / City Manager

From: James Reber,

Subject: **AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR LOT 1, BLOCK 1, CAMELOT ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE WEST SIDE OF ELKINS ROAD, APPROXIMATELY 6,200 FEET NORTH OF EAST STATE HIGHWAY 80), WHICH IS PRESENTLY ZONED O-1, OFFICE DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A SPECIAL EVENTS CENTER FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 4) (DEVELOPMENT SERVICES)**

Purpose:

The applicant, Steve Jeter, d/b/a The Venue, is requesting to a Specific Use Designation with term, for the sale of all alcoholic beverages, for on-premises consumption, in a wedding chapel, reception facility, and special events center, located at 3201 Elkins Rd.

Recommended City Council Action:

Approve

Fiscal Impact:

This proposal does not have a significant financial impact to the City.

Current Zoning:

O1, Office District

Surrounding Zoning and Land Use:

The property is located at 3201 Elkins Rd and is currently zoned O1, Office District, which permits the sale of all alcoholic beverages for on-premises consumption, in a in a wedding chapel, reception facility, and special events center, with the approval of a Specific Use Designation with Term.

Discussion:

The property is located at 3201 Elkins Rd and is currently zoned O1, Office District, which permits the sale of all alcoholic beverages for on-premises consumption, in a in a wedding chapel, reception facility, and special events center, with the approval of a Specific Use Designation with Term.

The event center currently in operation. The site and floor plan attached hereto a “Exhibit A and B” illustrates that the establishment has a total of two buildings and an outdoor enclose space. The event building (primary) has a total square footage of 8,448, of which 3,763 square feet will be dedicated to the alcohol serviceable area. In addition to an enclosed outdoor space located to the southwest of the event building, of which 24,786 square feet will be dedicated to the alcohol serviceable area. Therefore, this property will have a grand total of 33,234 square feet dedicated to the alcohol serviceable area. The second building on the property will not be utilized as part of the event center.

The proposed site plan provides adequate parking, access, and internal circulation. A total of 141 shared parking spaces for all proposed buildings, of which 8 will be accessible spaces.

The proposed days and hours of operation are:

Sunday through Thursday from 10:00 a.m. to 12:00 a.m.
Friday and Saturday from 10:00 a.m. to 2:00 a.m.

The applicant is requesting the following alcohol serviceable hours.

Sunday through Thursday from 10:00 a.m. to 12:00 a.m.
Friday and Saturday from 10:00 a.m. to 2:00 a.m.

Per Midland City Code, Section 5-4-4, Prohibited Places of Business:

The sale of any alcoholic beverage is hereby prohibited by any person, where the place of business of any such dealer is within 300 feet of any church, public-school, public-school ground, athletic stadium used by any public school or public hospital, the measurements to be along the property lines of the street fronts and from front door to front door and in a direct line across intersections where they occur.

There are no schools or churches within 300 feet of the property.

This project has been circulated to all City departments for review. Below are the department comments.

Fire: (Approved)

No objections

Engineering: (Approved)

No objections. [For Applicant's Information Only.]
Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For Applicant's Information Only.]

Oil & Gas: (Approved)

No objections.

Transportation: (Approved)

No objections. [For the Applicant's information only.]

Building Code: (Approved)

The SUD for the property is acceptable. The property must adhere to the maximum occupant load of 116 for the alcohol serviceable area. Occupancy loads must be posted in accordance with section 1004.3 of the 2015 International Fire Code.

Planning:

The request is in compliance with the Tall City Tomorrow Comprehensive Plan, Chapter 6-Character Plan Goal 4, which is to "Encourage the development of places where Midland residents can gather and socialize to build connections." (Tall City Tomorrow page 137) The Venue at Live Oak is an establishment that will provide Midland residents with a unique social gathering experience.

Staff recommends approval of this Specific Use Designation with Term for the sale of all alcoholic beverages, for on-premises consumption, in a wedding chapel, reception facility, and special events center, subject to conditions A through G.

Conditions:

A. That the serviceable area shall be limited to approximately 33,234 square feet as shown in Exhibit "A and B", which is attached hereto and incorporated herein for all purposes.

B. That the days and hours of alcoholic beverages sales and consumption shall be limited to:

Sunday through Thursday from 10:00 a.m. to 12:00 a.m.
Friday and Saturday from 10:00 a.m. to 2:00 a.m.

C. That the occupancy of the establishment shall not exceed the maximum occupancy determined by the Building Code and Fire Code.

D. That the establishment shall meet all requirements of the Fire Department and Code Administration.

E. That the sale and on-premises consumption of alcoholic beverages shall conform to applicable state and local laws.

F. That the applicant shall obtain a Certificate of Occupancy prior to the commencement of the sale of alcoholic beverages for on premises consumption to ensure that the conditions of this permit are satisfied.

G. That in accordance with Section 9.07.E.3 of the Zoning Ordinance, the establishment shall be in operation within 120 days from the final adoption date of this ordinance.

Letters of Objection:

As of January 5, 2023, staff has not received any letters of objections.

Attachments:

Application
Floor Plan (Exhibit A)
Site Plan (Exhibit B)
Maps

Robert Patrick

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR LOT 1, BLOCK 1, CAMELOT ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE WEST SIDE OF ELKINS ROAD, APPROXIMATELY 6,200 FEET NORTH OF EAST STATE HIGHWAY 80), WHICH IS PRESENTLY ZONED O-1, OFFICE DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A SPECIAL EVENTS CENTER FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, Texas, in compliance with the City Charter, the City Code, and State law, have given the requisite notices by United States mail, publication and otherwise; and after holding due hearings affording a full and fair hearing to all of the property owners generally, and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body of the City of Midland finds that the public convenience will be best served by granting a Specific Use Designation With Term for Lot 1, Block 1, Camelot Addition, City and County of Midland, Texas (the "Property"), as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is hereby amended to grant the Property a Specific Use Designation With Term for the sale of all alcoholic beverages in a special events center (the "Establishment") for on-premises consumption, together with the uses permitted in the present O-1, Office District.

SECTION TWO. That the Property shall be subject to the following conditions and

restrictions:

A. That the serviceable area of the Establishment shall be limited to approximately 33,234 square feet as shown in Exhibits "A" and "B", which are attached hereto and incorporated herein for all purposes.

B. That the sale and on-premises consumption of alcoholic beverages shall conform to all applicable state and local laws.

C. That the days and hours of alcoholic beverage sales and consumption shall be limited to the following:

Sunday through Thursday from 10:00 a.m. to 12:00 a.m. (midnight); and
Friday and Saturday from 10:00 a.m. to 2:00 a.m. of the following day.

D. That the occupancy of the Establishment shall not exceed the maximum occupancy determined by the Building Code and Fire Code.

E. That the Establishment shall meet the requirements of the Fire Department and the Code Administration Division.

F. That the operator of the Establishment shall obtain a Certificate of Occupancy prior to the commencement of the sale of alcoholic beverages for on-premises consumption to ensure that the conditions of this Specific Use Designation With Term are satisfied.

G. That in accordance with Section 11-1-9.07.E.3 of the City Code, the Establishment shall be in operation within 120 days from the final adoption date of this ordinance.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances, inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

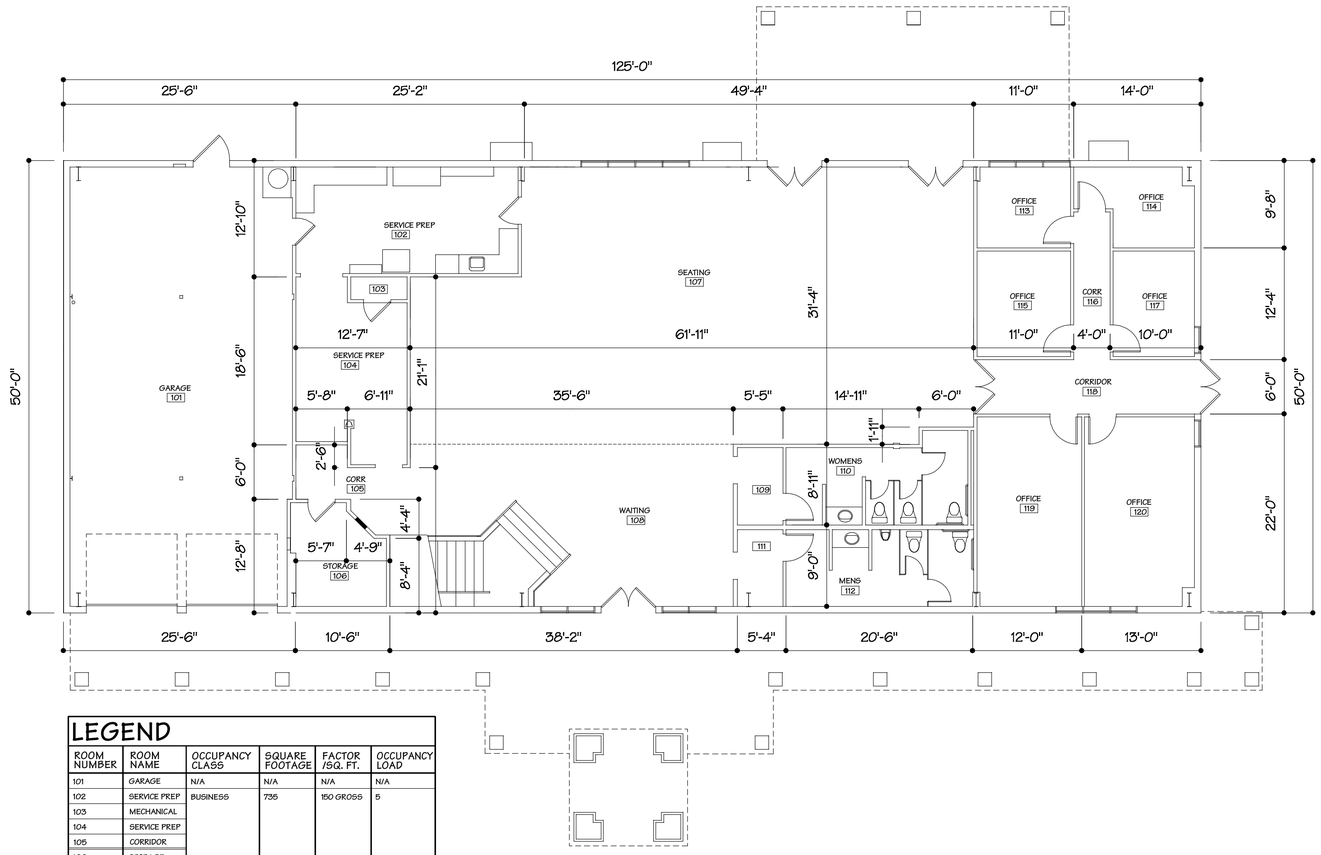
_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney



LEGEND

ROOM NUMBER	ROOM NAME	OCCUPANCY CLASS	SQUARE FOOTAGE	FACTOR /SQ. FT.	OCCUPANCY LOAD
101	GARAGE	N/A	N/A	N/A	N/A
102	SERVICE PREP	BUSINESS	735	150 GROSS	5
103	MECHANICAL				
104	SERVICE PREP				
105	CORRIDOR				
106	STORAGE				
107	SEATING	ASSEMBLY A3	1737	5 NET 7 NET 15 NET	348 248 116
108	WAITING	ASSEMBLY A3	500	5 NET	106
109	VESTIBULE	N/A	N/A	N/A	N/A
110	WOMENS	N/A	N/A	N/A	N/A
111	VESTIBULE	N/A	N/A	N/A	N/A
112	MENS	N/A	N/A	N/A	N/A
113	OFFICE	BUSINESS	1153	150 GROSS	8
114	OFFICE				
115	OFFICE				
116	CORRIDOR				
117	OFFICE				
118	CORRIDOR				
119	OFFICE				
120	OFFICE				
201	MEETING	ASSEMBLY A3	260	15 NET	18
202	TOILET	N/A	N/A	N/A	N/A
203	MEETING	ASSEMBLY A3	199	15 NET	14
204	STORAGE	N/A	N/A	N/A	N/A
205	MEETING	ASSEMBLY A3	308	15 NET	21
206	STORAGE	N/A	N/A	N/A	N/A
207	CORRIDOR	N/A	N/A	N/A	N/A
208	STORAGE	N/A	N/A	N/A	N/A
209	WAITING	ASSEMBLY A3	508	15 NET	34
210	MEETING	ASSEMBLY A3	251	15 NET	17
211	TOILET	N/A	N/A	N/A	N/A

FIRST FLOOR PLAN 1/8"=1'-0"

NORTH

BUILDING AREA ANALYSIS

TOTAL BUILDING FOOT PRINT	8,448	SQ. FT.
TOTAL EXTERIOR AREA	24,786	SQ. FT.
TOTAL INTERIOR & EXTERIOR AREA	33,234	SQ. FT.
TOTAL INTERIOR SERVICEABLE AREA	3763	SQ. FT.
TOTAL EXTERIOR SERVICEABLE	24,786	SQ. FT.
TOTAL SERVICABLE AREA	28,549	SQ. FT.

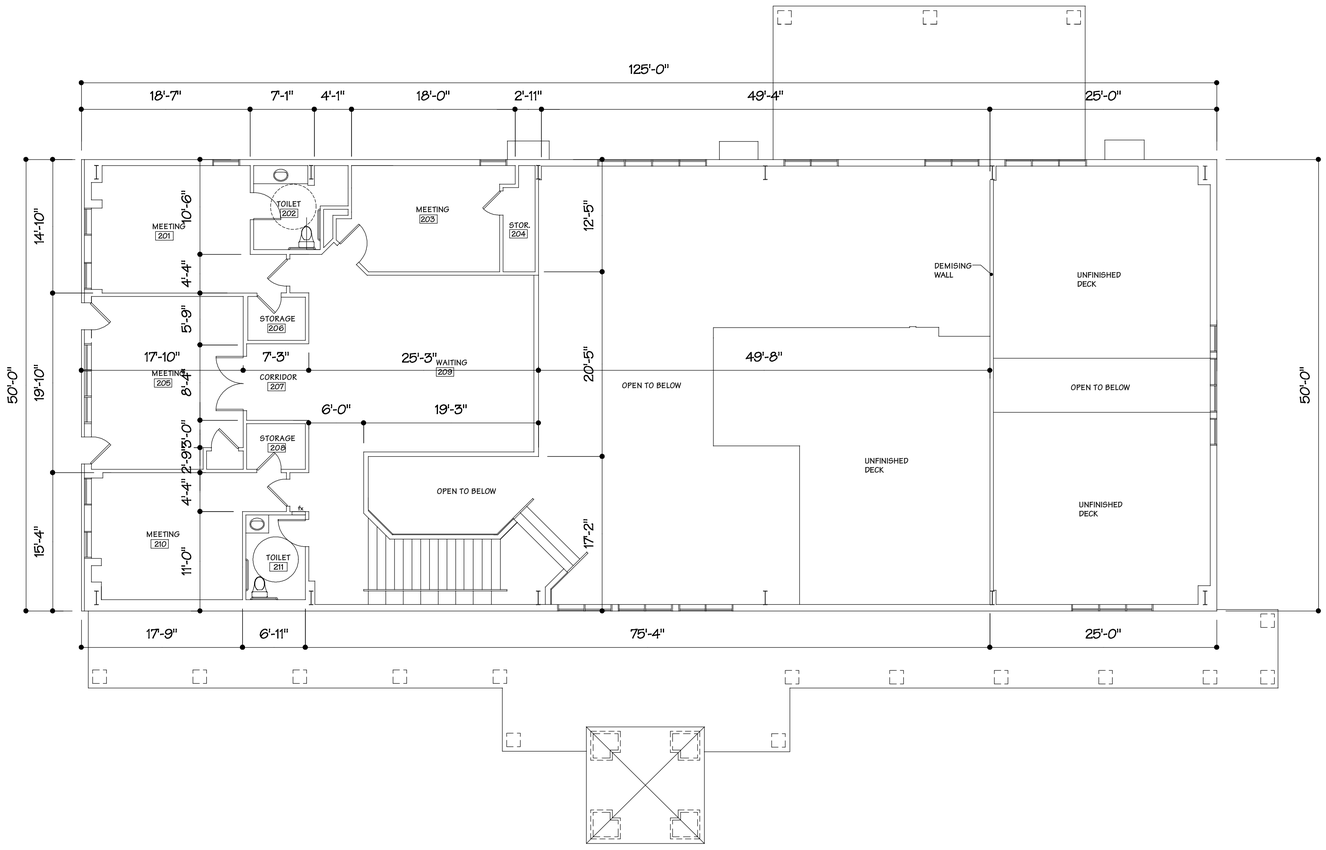
REGISTERED ARCHITECT STATE OF TEXAS 07-25-22

J. PHILLIP FURQUERON, Architect
MIDLAND, TEXAS 79705
407 CHARISMATIC DRIVE
432 270 3646
JPFA

BUILDING REMODEL
3201 ELKINS ROAD
MIDLAND TEXAS

PROJECT NUMBER:
REVISED:
FILE NAME:

SHEET
A1
OF



SECOND FLOOR PLAN 1/8"=1'-0"

NORTH

J. PHILLIP FURQUERON, Architect
MIDLAND, TEXAS 79705
407 CHARISMATIC DRIVE
432 270 3646

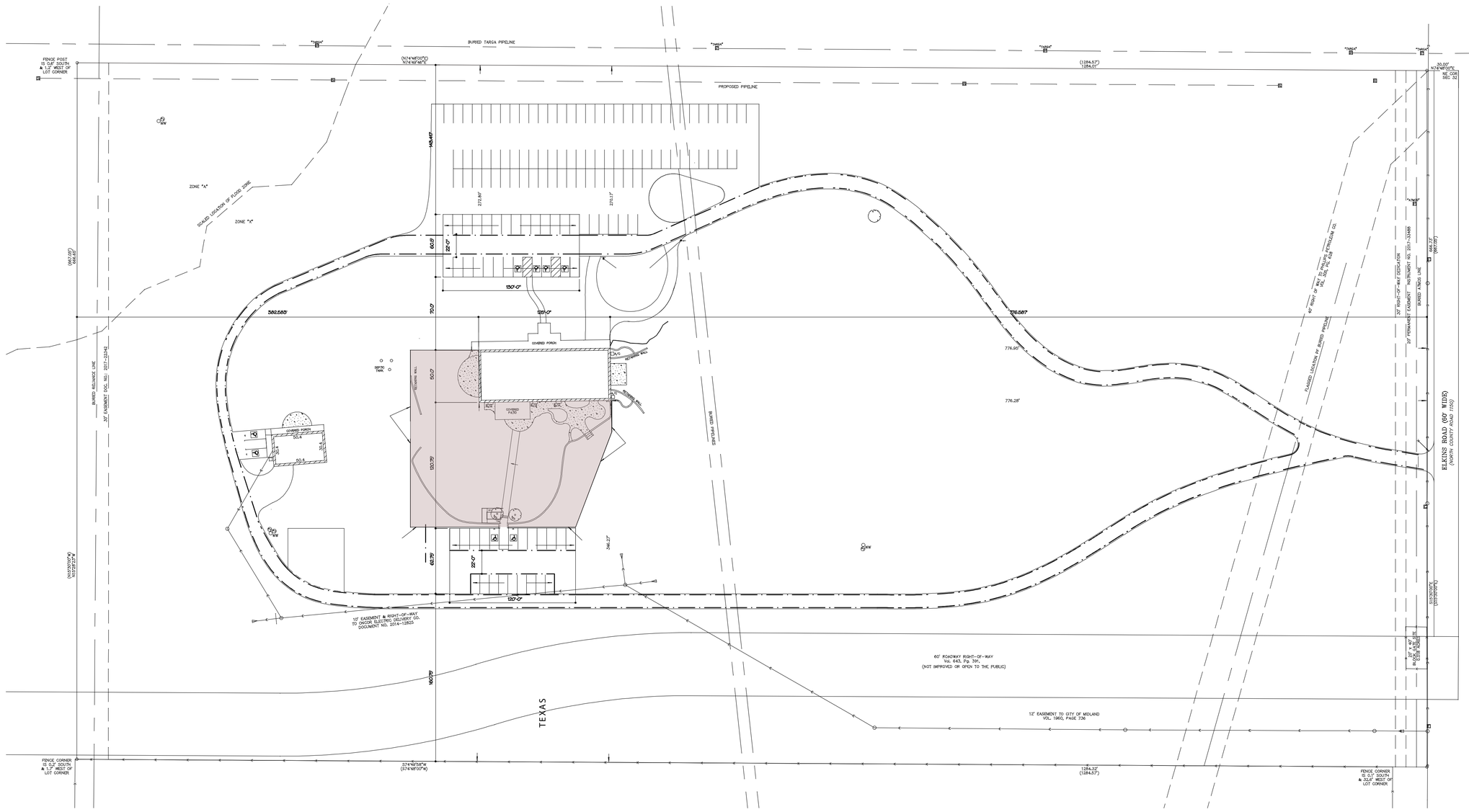
JPFA

BUILDING REMODEL
3201 ELKINS ROAD
MIDLAND TEXAS

PROJECT NUMBER:
REVISED:
FILE NAME:

SHEET
A2
OF

08-19-19



J. PHILLIP FURQUERON, Architect
MIDLAND, TEXAS 79705
407 CHARISMATIC DRIVE
432 270 3646
JPFA

BIULDING REMODEL
3201 ELKINS ROAD

THIS DOCUMENT MAY NOT BE USED FOR BIDDING, PERMITTING, REGULATORY APPROVAL OR CONSTRUCTION PURPOSES PER SUBSECTION 1.103(c) OF THE STATUTES OF THE TEXAS BOARD OF ARCHITECTURAL EXAMINERS
REG. NO.: 10904
DATE:

MIDLAND

MIDLAND Planning Division

Specific Use Designation with Term for the Sale of Alcoholic Beverages for On-Premises Consumption

Project Number: _____

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Steve Jeter		Phone (432) 413-1501 Email steve@kvloperating.com	
Address P.O. Box	City Midland	State TX	Zip 79708
Property Owner Printed Name: 3201 Properties, LLC		Phone (432) 220-5136 Email contact@thevenueatlo.com	
Address P.O. Box 7307	City Midland	State TX	Zip 79708
Representative *(if different from Applicant or Property Owner)* Firm: _____ Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Street Address: 3201 Elkins Rd.

Business Name: 3201 Properties, LLC

Legal Description
Lot: 1 Block: 1 Subdivision: Camelot

Current Zoning: Office 1

Reason for Request: Alcohol consumption & sale of alcohol on premises

Type of Business *(restaurant, bar, lounge, nightclub, etc.)*: venue center

Proposed/Current Days and Hours of Operation: Sunday - Thursday from 10AM - 12AM
Friday - Saturday from 10AM - 2AM

Proposed Days and Hours of Alcohol Service: Sunday - Thursday from 10AM - 12AM & Friday - Saturday from 10AM - 2AM

Total Square Footage of Business: 33,234

Square Footage of Alcohol Serviceable Area: 28,549

Restroom Fixtures: *Men*	**Toilets/Urinals:** 3 / 1	**Bathroom Sinks:** 2
Women	**Toilets:** 4	**Bathroom Sinks:** 2

Submittal and Fees

Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Floor Plan showing:
  - Seating
  - Exits
  - Restrooms
  - Kitchen (if applicable)
  - Total Square Footage
  - Serviceable Square Footage
- Dimensioned Site Plan showing:
  - Parking
  - Business Footprint
- Digital Copies of Floor Plan & Site Plan (PDF/JPEG)

Signatures

Applicant (signature): Steve Jeter	Date: 11/23/2022
Applicant (printed): Steve Jeter	
Property Owner (signature): Steve Jeter	Date: 11/23/2022
Property Owner (printed) : Steve Jeter	

The Specific Use Designation with Term for the sale of all alcoholic beverages shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared _____ who, being by me duly sworn, upon oath says: That (s)he is authorized by _____, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

_____
Authorized Agent (*signature*)

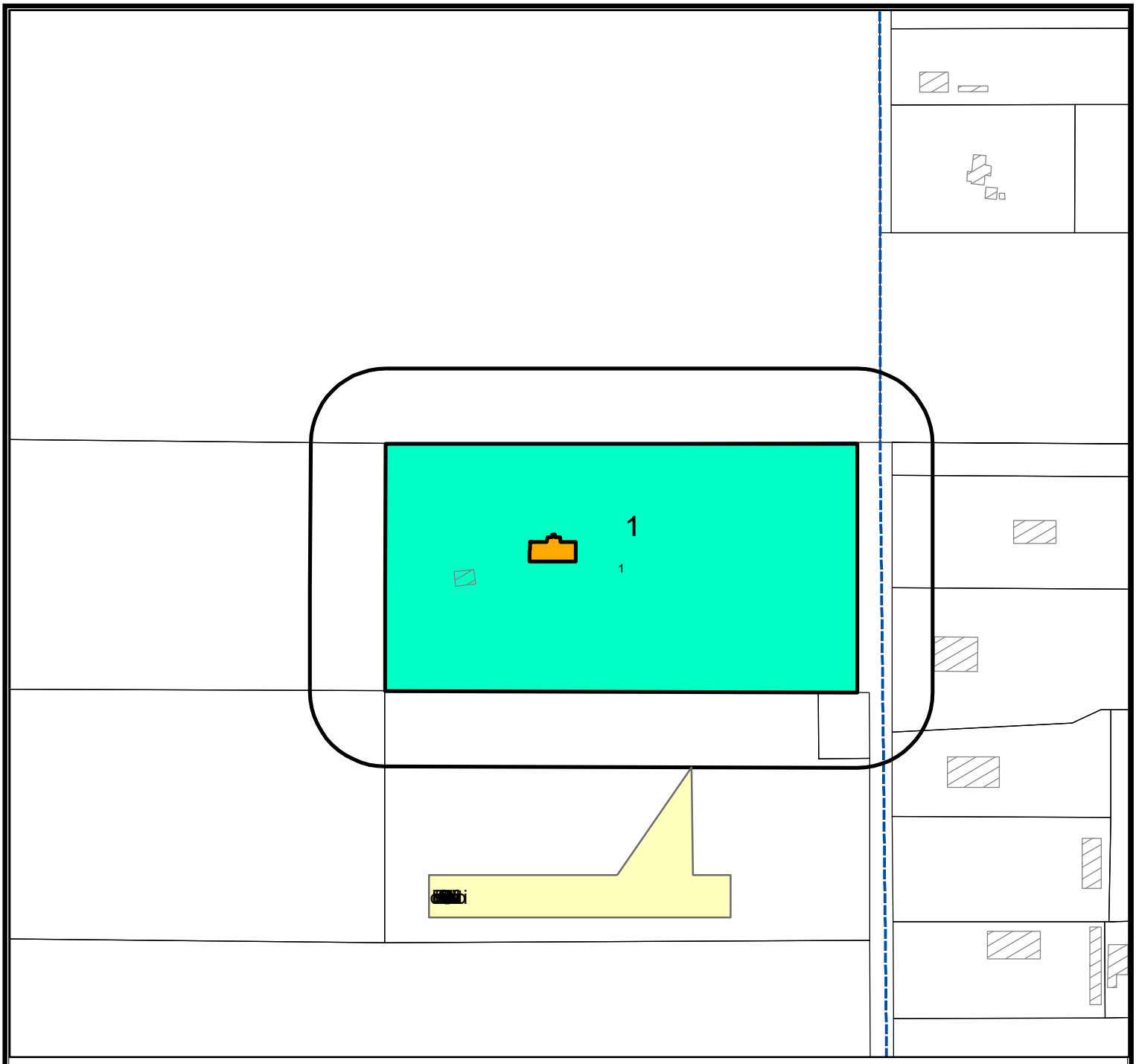
Subscribed and sworn to before me, this _____ day of _____, 20 ___, to certify which witness my hand and seal of office.

_____
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

****Application will not be considered for scheduling until reviewed by a planner.****

FOR OFFICE USE ONLY	
☐ Property Owner Authorization	☐ Dimensioned Floor Plan
☐ Application Fee	☐ Site Plan
Check #_____	☐ Plans in Digital Format (PDF/JPEG)
Received By:_____	Date:_____

****Application will not be considered for scheduling until reviewed by a planner.****



LOCATION MAP

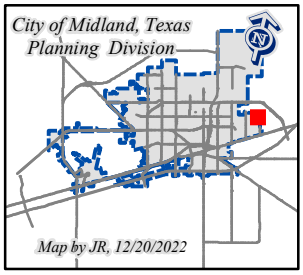
SUD-22-0138 **Scale: 1" = 200'**

Consider a request by Steve Jeter for a Specific Use Designation with Term for the Sale of all Alcoholic Beverages, for on premises consumption in a wedding chapel, reception facility, and special events center, on Lot 1, Block 1, Camelot Addition, City and County of Midland, Texas.

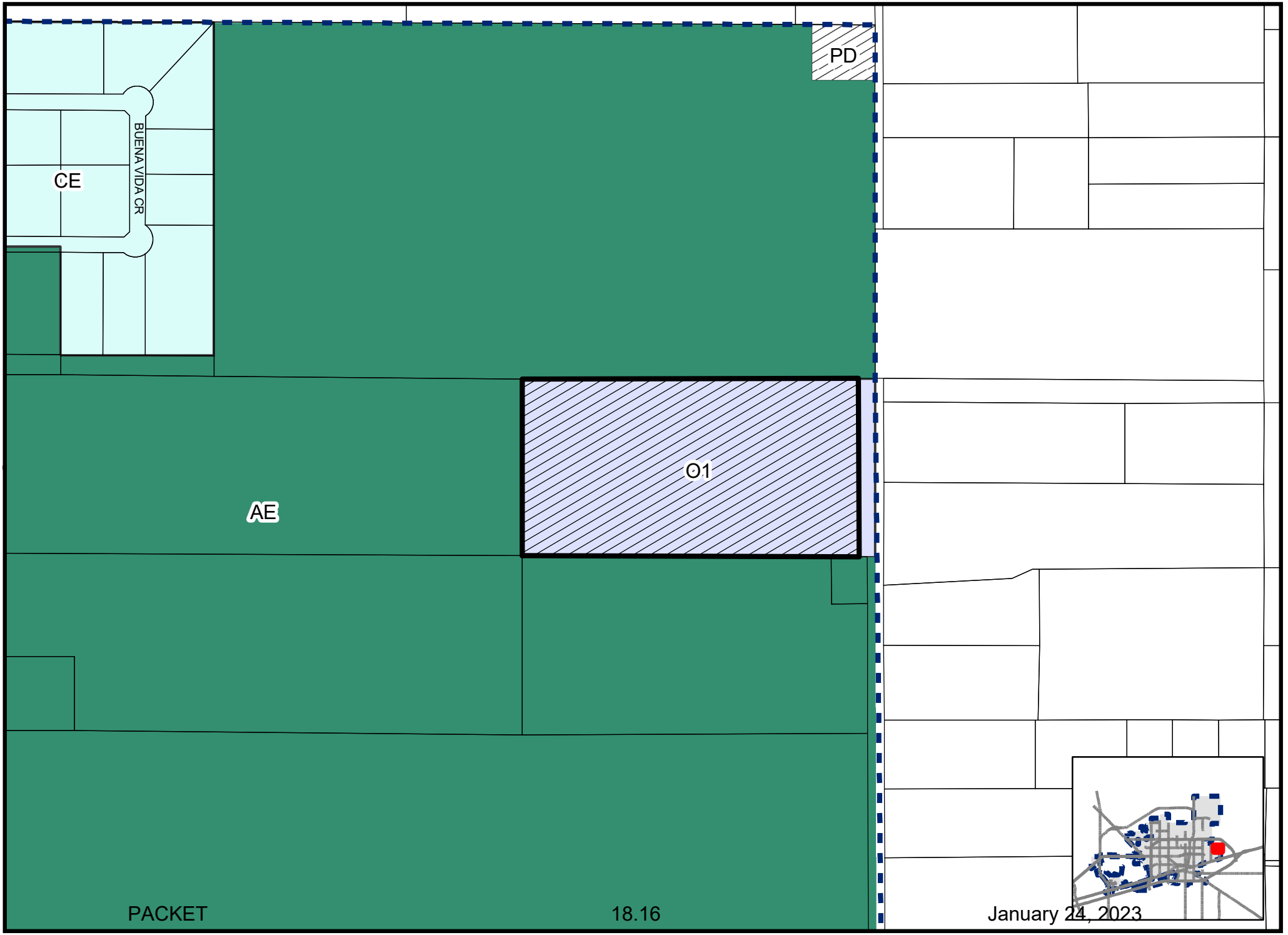
Generally located on the west side of Elkins Rd., approximately 6,200-feet north of E. State Highway 80. (Council District 2)

L E G E N D

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



©THE CITY OF MIDLAND - 2021
THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY AND NOR IS IT DESIGNED TO BE USED AS THE ONLY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.
THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.



Map By JR, 12/8/2022

SUD-22-0138

Scale: 1" = 675'

ZONING MAP

© THE CITY OF MIDLAND - 2021: THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.

ORDINANCE NO. 9759

AN ORDINANCE CHANGING THE ZONING CLASSIFICATION BY AMENDING CHAPTER ONE, TITLE XI, OF THE CITY CODE OF MIDLAND, TEXAS, BY PERMITTING LOT 1, BLOCK 1, CAMELOT ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS, WHICH IS PRESENTLY ZONED AE, AGRICULTURE ESTATE DISTRICT, TO BE USED AS AN O-1, OFFICE DISTRICT (GENERALLY LOCATED ON THE WEST SIDE OF ELKINS ROAD, APPROXIMATELY 610 FEET NORTH OF EAST COUNTY ROAD 72); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, in compliance with the City Charter and the State law with reference to the creation of Districts under the zoning ordinance regulations and zoning map, have given the requisite notices by United States mail, publication and otherwise; and after a full and fair hearing to all of the property owners generally and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body finds that the public health, safety and general welfare will be best served by the creation of an O-1, Office District, as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That Chapter 1, Title XI, of the City Code of Midland, Texas, and the official zoning map of the City of Midland, Texas, are hereby amended insofar as the hereinafter described property is concerned, which is presently zoned AE, Agriculture Estate District, and it shall be used as an O-1, Office District, said property being described as follows:

Lot 1, Block 1, Camelot Addition, City and County of Midland, Texas.

SECTION TWO. That the definitions given in the zoning regulations contained in the City Code of the City of Midland, Texas, shall be applicable to such of those terms as are

Planning and Zoning Commission
Minutes
October 31, 2011

S-11-017 - Hold a public hearing and consider a request by **Gary Dawson** for a *Specific Use Permit Without Term* for an accessory building for living or sleeping quarters on Lot 1, Block 1, Camelot Addition, City and County of Midland, Texas. (Generally located on the west side of Elkins Road, approximately 1 mile north of Business I-20.)

Mr. Compton explained that the applicant wishes to construct an additional small residence on the lot, that current zoning allows for only one residence on the lot, but the specific use permit will allow for the requested residence. He stated that an accessory building may not be rented as a separate living unit.

Chairman Carney opened the public hearing and there being no one wishing to speak in favor or in opposition to the item, closed the public hearing.

A motion for approval, subject to Conditions A-D, was made by Commissioner Watkins, seconded by Commissioner Gatten. The motion carried by the following vote: AYE: Wolf, York, Gatten, Carney, Ferguson, Wilton and Watkins. NAY: None. ABSTAIN: None. ABSENT: Lanning and Woodruff

PLANNING AND ZONING COMMISSION

October 31, 2011

CASE: S-11-017.

REQUEST: Hold a public hearing and consider a request for a Specific Use Permit, Without Term, for an Accessory Building for Living and Sleeping Quarters.

APPLICANT/OWNER: Gary Dawson.

LEGAL DESCRIPTION: Lot 1, Block 1, Camelot Addition, City and County of Midland, Texas.

LOCATION: West side of Elkins Road, approximately one mile north of Business I-20.

CURRENT ZONING: AE, Agriculture Estate District.

DETAILS OF REQUEST:

1. Mr. Dawson owns a 19.67-acre lot on the west side of Elkins Road. He wishes to construct another small residence on this lot. Since the AE District only allows one residence per lot, he is requesting a specific use permit to allow an accessory building that can be used for living and sleeping quarters. The accessory building is proposed to be 1,780 square feet in area, and is located as shown on the attached Exhibit A.

SURROUNDING ZONING AND LAND USE:

2. This lot is located on the west side of Elkins Road. The land on the east side is outside the City limit, and is generally vacant except of an oil well. The land to the north, west and south of this property is zoned AE District, and is generally vacant with the exception of the occasional pump jack. The nearest residence is over one-quarter mile from the applicant's home.

ANALYSIS:

3. The Planning and Zoning Commission has developed several policies that are helpful in reviewing applications for accessory buildings that are used as a living and sleeping quarter:

   A. The maximum floor area should not exceed 600 square feet, or 35 percent of the size of the principle residence, whichever is larger.

B. Vehicular access to the accessory building should not be allowed from the rear of the lot.

C. The specific use permit should delineate who is allowed to stay in the accessory building.

In addition to these policies, the Zoning Code prohibits the use of the accessory building as rental property.

4. The principle residence contains 6,250 square feet, while the accessory building is proposed to be 1,780 square feet, which represents 28 percent the principle residence. With no alley system serving this lot, all access to the accessory building must be through the front of the lot. The applicant indicates that the guesthouse will only be occupied by family members or guests, and he has been advised that it cannot be rented as a separate dwelling unit. We find that this application meets the policy guidelines and regulations of the Zoning Code. Further, there are no nearby residences that could be negatively impacted by approval of this request.

STAFF RECOMMENDATION:

We recommend approval of this request for a Specific Use Permit, Without Term, to allow an accessory building to be used as a living and sleeping quarters, subject to the following conditions:

A. That the accessory building shall not exceed 1,800 square feet in area.

B. That the accessory building shall be located in the location illustrated on Exhibit A.

C. That the accessory building may be occupied only by family members or guests of the owner. It may never be rented as a separate dwelling unit.

D. The owner shall obtain all of the necessary permits from the City of Midland related to the construction of the accessory building.

Cameron Walker, AICP
Planning Division Manager
Department of Development Services

Jim Compton, Senior Planner
Department of Development Services

Attachments:

Application
Maps
Exhibit A

Case Number: S-11-017

CITY OF MIDLAND
Planning Division

SPECIFIC USE PERMIT APPLICATION

GARY DAWSON — 432 352-5365
Applicant Name — Contact Phone #s

3201 ELKINS Rd — 79705
Address — Zip Code

E-Mail address: joshua.gd1977@yahoo.com

SAA
Property Owner Name — Contact Phone #s

Address — Zip Code

E-Mail address:

Operator (if different from Applicant or Property Owner) — Contact Phone #s

Address — Zip Code

Type of Permit: SPECIFIC USE ACCESSORY LIVING QUARTERS

SUP with Term: ___Yes ___No (For Office Use)

Street address and Legal Description of property on which SUP is desired (complete Lot, Block, and Subdivision, or if unplatted, attach a Metes and Bounds description with surveyor's seal.)
3201 ELKINS Rd Lot 1 Blk. 1 CAMELOT SUB.

Current Zoning: AE

Maximum Floor Area: 1780 SQ FT. Max. Occupancy: 1 Adult

Proposed hours and days of use or operation: NA

Reason for request: Family + Friends place to stay

Applicant's opinion as to why the request will not adversely affect the public safety, health, morals, general welfare, and convenience: NO NEIGHBORS WITHIN 1/2 MILE PROPERTY IS 20 AC IN SIZE THIS WILL BE THE ONE AND ONLY OUT BUILDING USED AS A LIVING QUARTERS

REQUIRED SUBMITTALS

1. Application fee: **$300.** (80% of fee will be refunded if no P&Z public hearing is called; if no City Council public hearing is called, then 30% of fee will be refunded.)
2. Site plan – 16 copies (FOLDED)
3. On a CD in .pdf and .jpg format.

SIGNATURES:

Applicant: _____ Date: 9/15/11

Property Owner: _____ Date: 9/15/11

If an Agent is authorized by the property owner to file and execute the application on behalf of the property owner, the Agent must complete the affidavit below.

STATE of TEXAS
COUNTY OF MIDLAND

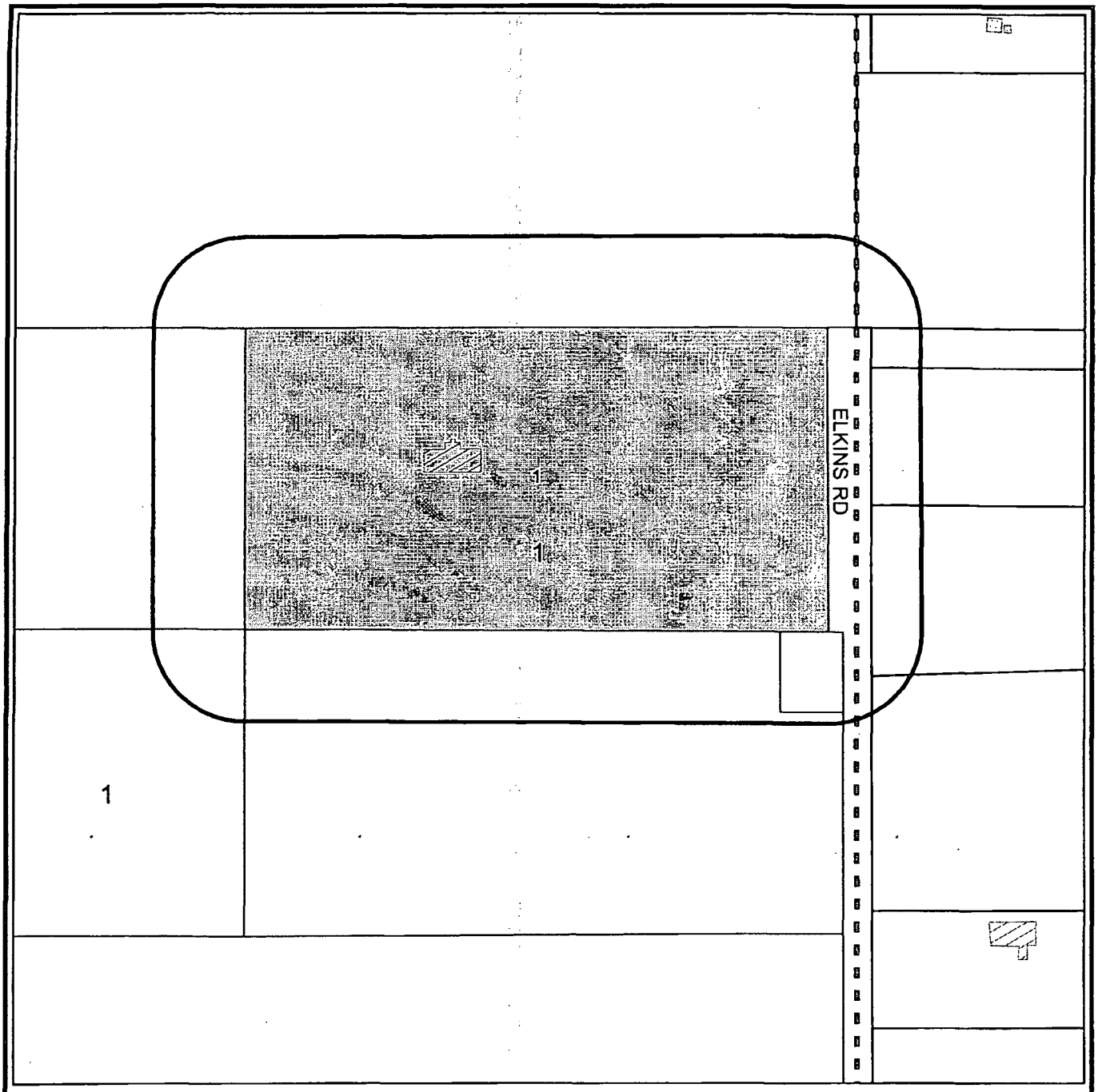
Before me, the undersigned authority, on this day personally appeared _____ who, being by me duly sworn, upon oath says: That (s)he is authorized by _____, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

Subscribed and sworn to before me, this _____ day of _____, 20 ___, to certify which witness my hand and seal of office.

_____
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY	
Rec'd By: BC	Date: 09/16/11
Assigned: JC	
For: P+Z	On: 10/3/11

****Application will not be considered for scheduling until reviewed by a planner.****



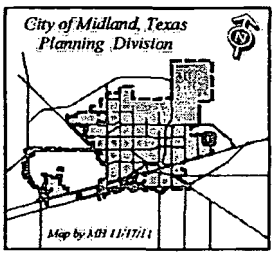
OWNER NOTIFICATION WITHIN CITY LIMITS ONLY

S - 11 - 017 **Scale: 1" = 300'**

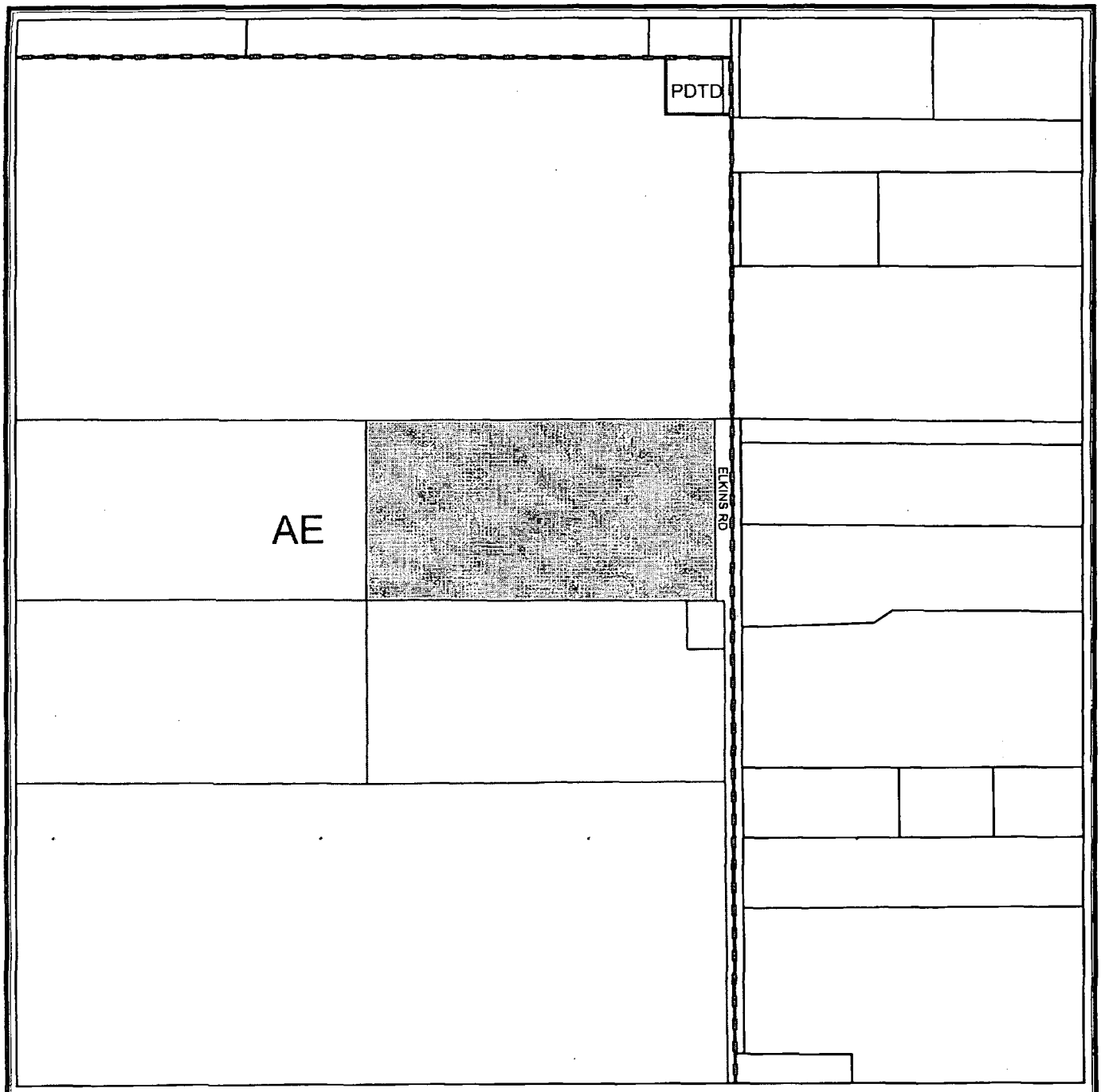
Consider a request for a Specific Use Permit Without Term for an accessory building for living or sleeping quarters on Lot 1, Block 1, Camelot Addition, City and County of Midland, Texas.

LEGEND

- CITY LIMITS
- 200 FT. LEGAL NOTICE LIMIT
- CITY PARCEL
- COUNTY PARCEL
- PUBLIC BLDGS
- PRIVATE BLDGS
- ACCESSORY BLDGS



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ZONING MAP

S - 11 - 017 **Scale: 1" = 500'**

Consider a request for a Specific Use Permit Without Term for an accessory building for living or sleeping quarters on Lot 1, Block 1, Camelot Addition, City and County of Midland, Texas.

LEGEND

ZONING | PARCELS | COUNTY PARCELS

CITY LIMITS | SPECIFIC USE PERMITS

ZONING DISTRICTS:

FD	FUTURE DEVELOPMENT	BP	BUSINESS PARK
PD	PLANNED DISTRICT	P	PARKING
AE	AGRICULTURE ESTATE	01, 02	OFFICE
CE	COUNTRY ESTATE	NS	NEIGHBORHOOD SERVICE
1F1, 1F2, 1F3	ONE-FAMILY DWELLING	LR1, LR2 ,LR3	LOCAL RETAIL
MH	MOBILE HOME DWELLING	C1, C2, C3	COMMERCIAL
TH	TOWNHOUSE DWELLING	IP ,IP1, IP2, IP3	INDUSTRIAL PARK
2F	TWO-FAMILY DWELLING	LI	LIGHT INDUSTRY
MF1, MF2	MULTIPLE FAMILY DWELLING	HI	HEAVY INDUSTRY

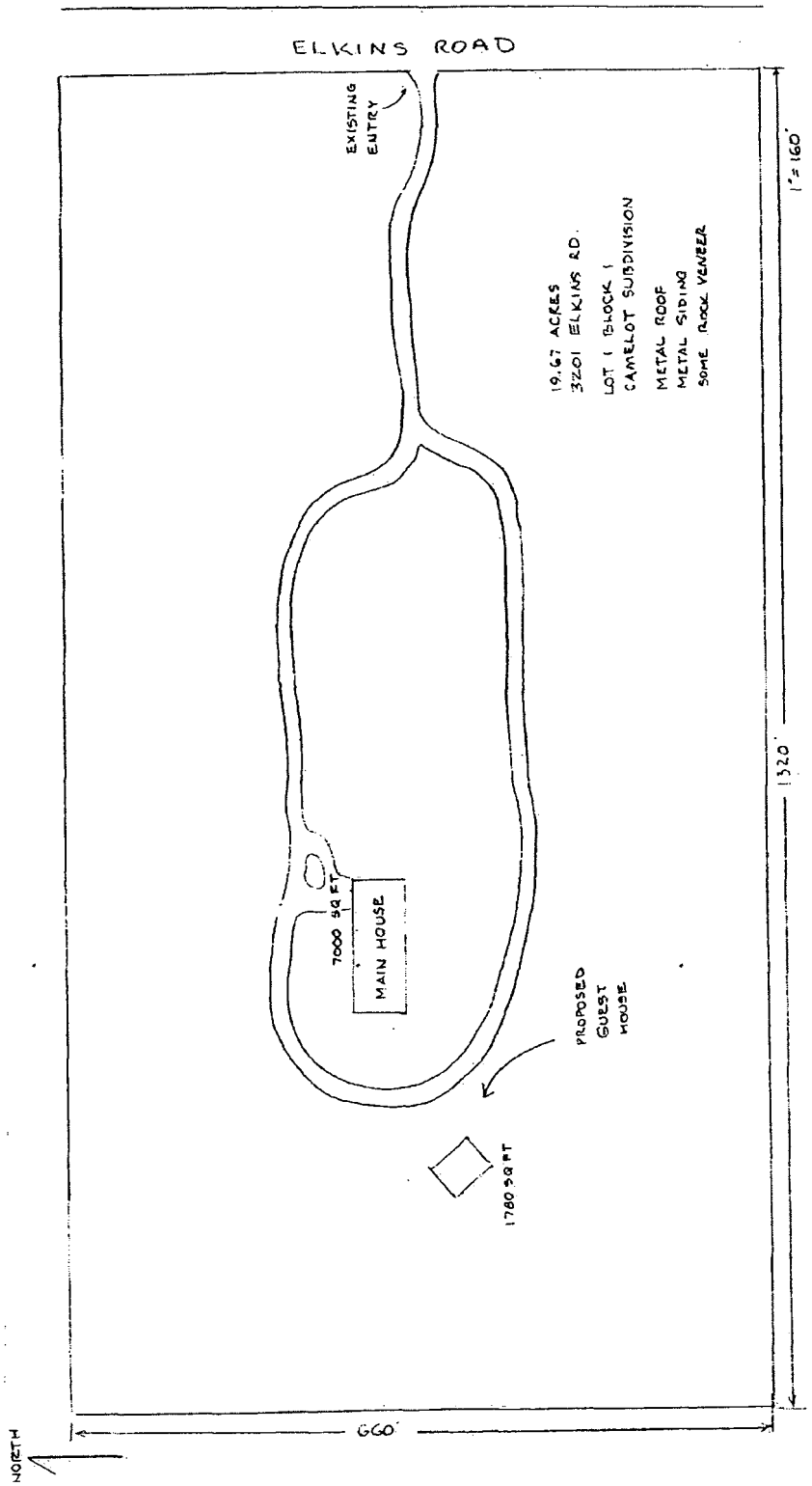


EXHIBIT A

S-11-017

City Council Agenda

Permits-Temp. Land Use-
Accessory Bldg.
8961

Approved for Agenda:
JNichols
City Manager's Office

MEETING DATE: **January 10, 2012**

TO: **CITY COUNCIL/CITY MANAGER**

FROM: **Cameron Walker, Planning Division Manager**

SUBJECT: **S-11-017, Gary Dawson**

Purpose:

Consider an ordinance on second reading on a request by Gary Dawson for a Specific Use Permit for an Accessory Building to be used as a Living and Sleeping Quarters.

Recommended City Council Action

X Approve ☐ Deny ☐ Direction/Informational

Fiscal Impact:

There is no cost to the City to consider this application.

Discussion:

Mr. Dawson owns a 20-acre lot on the west side of Elkins Road, one mile north of Business 20. The land is zoned AE District. He wishes to construct another residential structure; however, he does not wish to subdivide his lot at this time. Consequently, he has submitted this application. The accessory building (1,780 square feet) would not exceed 35 percent of the size of the residential structure, there is no vehicular access from the rear of the property, the residence would only be occupied by family members or guests and the property cannot be rented as a separate dwelling. The Planning and Zoning Commission recommended unanimous approval, and no opposition was expressed at that meeting. No changes have been requested regarding this zone change since first reading.

Attachments:
Proposed Ordinance

City Council Agenda

MIDLAND
Feel the Energy!

Approved for Agenda:
JNichols
City Manager's Office

MEETING DATE: **December 13, 2011**

TO: **CITY COUNCIL/CITY MANAGER**

FROM: **Cameron Walker, Planning Division Manager**

SUBJECT: **S-11-017, Gary Dawson**

Purpose:

Hold a public hearing at approximately 10:39 a.m. and consider an ordinance on a request by Gary Dawson for a Specific Use Permit for an Accessory Building to be used as a Living and Sleeping Quarters.

Recommended City Council Action

☒ Approve ☐ Deny ☐ Direction/Informational

Fiscal Impact:

There is no cost to the City associated with this application.

Discussion:

Mr. Dawson owns a 20-acre lot on the west side of Elkins Road, one mile north of Business 20. The land is zoned AE District. He wishes to construct another residential structure on his property, however, he does not wish to subdivide his lot at this time. Consequently, he has submitted this permit request. The size of the proposed accessory building (1,780 square feet) would be less than 35% of the existing residential structure. There is no vehicular access from the rear of the property and the residence would only be occupied by family members or guests. Approval of this permit request would be conditioned upon the property not being utilized as a separate rental dwelling. The Planning and Zoning Commission recommended unanimous approval, and no public opposition was expressed at that meeting.

Attachments:
October 31, 2011 P&Z Staff Report
Proposed Ordinance

used herein.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the 24th day of April, A.D., 2018; and passed to second reading on motion of Council member Sparks, seconded by Council member Lacy, by the following vote:

Council members voting "AYE": Hotchkiss, Love, Sparks, Morales, Dufford, Lacy, Robnett

Council members voting "NAY": None

The above and foregoing ordinance was read in full and finally adopted by the

City Council Agenda

Approved for Agenda:
JNichols
City Manager's Office

MEETING DATE: December 13, 2011

TO: CITY COUNCIL/CITY MANAGER

FROM: Cameron Walker, Planning Division Manager

SUBJECT: S-11-017, Gary Dawson

Purpose:

Hold a public hearing at approximately 10:39 a.m. and consider an ordinance on a request by Gary Dawson for a Specific Use Permit for an Accessory Building to be used as a Living and Sleeping Quarters.

Recommended City Council Action

☒ Approve ☐ Deny ☐ Direction/Informational

Fiscal Impact:

There is no cost to the City associated with this application.

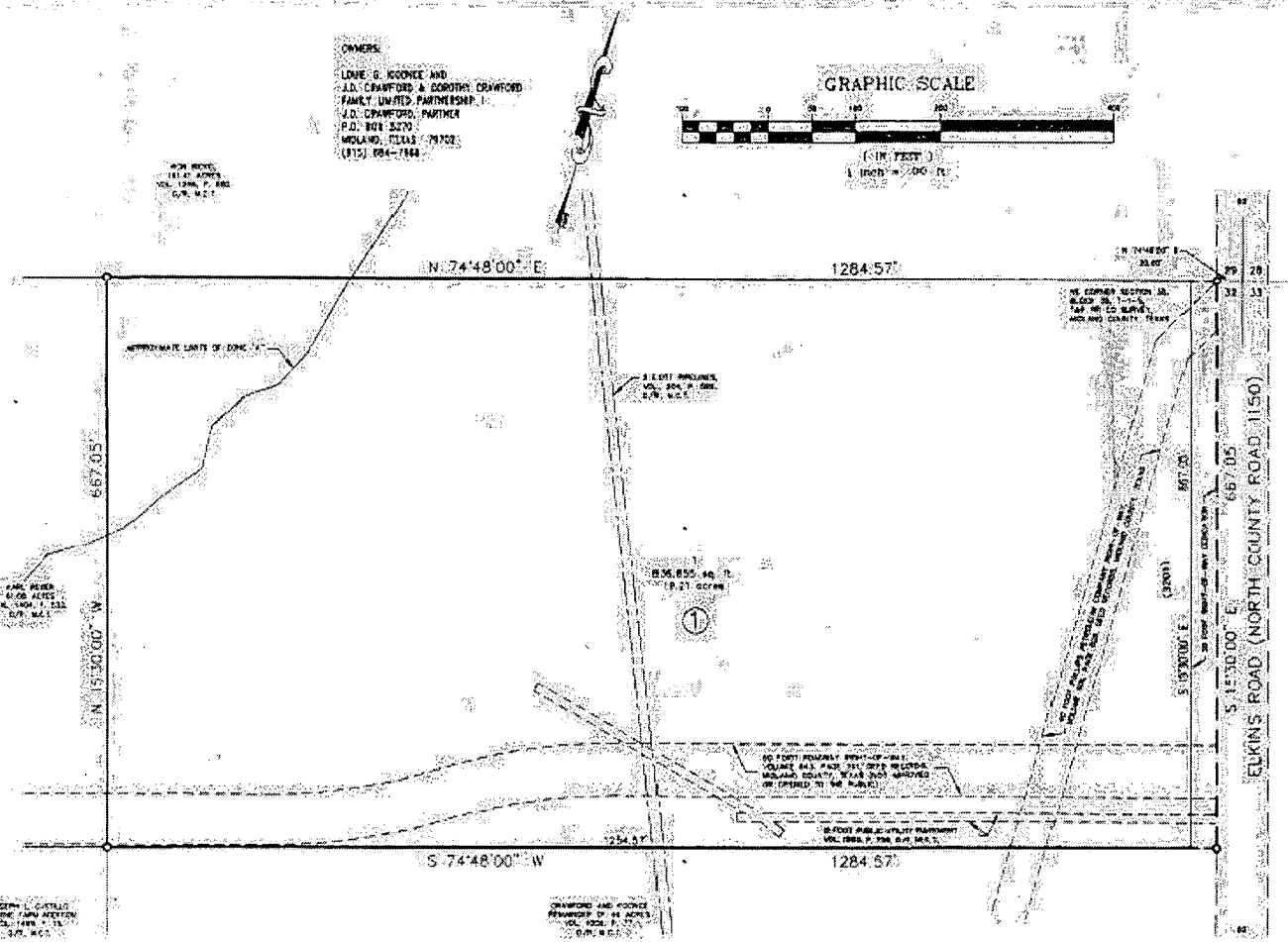
Discussion:

Mr. Dawson owns a 20-acre lot on the west side of Elkins Road, one mile north of Business 20. The land is zoned AE District. He wishes to construct another residential structure on his property, however, he does not wish to subdivide his lot at this time. Consequently, he has submitted this permit request. The size of the proposed accessory building (1,780 square feet) would be less than 35% of the existing residential structure. There is no vehicular access from the rear of the property and the residence would only be occupied by family members or guests. Approval of this permit request would be conditioned upon the property not being utilized as a separate rental dwelling. The Planning and Zoning Commission recommended unanimous approval, and no public opposition was expressed at that meeting.

Attachments:
October 31, 2011 P&Z Staff Report
Proposed Ordinance

CAMELOT ADDITION

A SUBDIVISION OF A 19.67 ACRE TRACT OF LAND OUT OF THE NE/4 OF SECTION 32, BLOCK 38, T-1-S, T&P RR CO SURVEY, MIDLAND COUNTY, TEXAS



STATE OF TEXAS :

COUNTY OF MIDLAND :

WHEREAS, WE, THE UNDERSIGNED, ARE THE RECORD OWNERS OF A TRACT OF LAND BEING 19.67 ACRES OUT OF THE NE/4 OF SECTION 32, BLOCK 38, T-1-S, T&P RR CO SURVEY, MIDLAND COUNTY, TEXAS, AND BEING DESCRIBED MORE FULLY BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A 1/2" REINF. BAR FOUND FOR THE NE CORNER OF THIS TRACT, ON THE NORTH LINE OF SAID SECTION 32, AND THE SOUTH LINE OF THE IRON NICKEL TRACT (REFERENCE: VOLUME 1248, PAGE 660, OFFICIAL RECORDS, MIDLAND COUNTY, TEXAS), AND THE WEST RIGHT-OF-WAY LINE OF ELKINS ROAD (NORTH COUNTY ROAD 1150) FROM WHICH THE NE CORNER OF SAID SECTION 32 BEARS N.74°48'00"E., 30.00 FEET;

THENCE S.15°30'00"E., 667.05 FEET ALONG THE SAID WEST RIGHT-OF-WAY LINE OF ELKINS ROAD (NORTH COUNTY ROAD 1150) TO A 1/2" REINF. BAR SET FOR THE SE CORNER OF THIS TRACT;

THENCE S.74°48'00"W., 1284.57 FEET TO A 1/2" REINF. BAR FOUND FOR THE SW CORNER OF THIS TRACT, SAME BEING THE NE CORNER OF DEPLIME FARMS ADDITION (REFERENCE: VOLUME 1898, PAGE 15, OFFICIAL RECORDS, MIDLAND COUNTY, TEXAS), AND THE SE CORNER OF THE KARL REITER TRACT (REFERENCE: VOLUME 1404, PAGE 533, OFFICIAL RECORDS, MIDLAND COUNTY TEXAS);

THENCE N.15°30'00"W., 667.05 FEET ALONG THE EAST LINE OF THE SAID KARL REITER TRACT TO A 1/2" REINF. BAR SET FOR THE NW CORNER OF THIS TRACT, AND THE NE CORNER OF THE SAID KARL REITER TRACT, IN THE SAID NORTH LINE OF SECTION 32, AND THE SAID SOUTH LINE OF THE IRON NICKEL TRACT;

THENCE N.74°48'00"E., 1284.57 FEET ALONG THE SAID NORTH LINE OF SECTION 32, AND THE SAID SOUTH LINE OF THE IRON NICKEL TRACT TO THE PLACE OF BEGINNING;

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENT:

THAT WE, THE UNDERSIGNED, DO HEREBY ADOPT THIS PLAT DESIGNATING THE HEREINABOVE DESCRIBED PROPERTY AS "CAMELOT ADDITION", AN ADDITION TO THE CITY OF MIDLAND, AND DO HEREBY DEDICATE TO THE PUBLIC USE FOREVER THE STREETS, ALLEYS AND EASEMENTS (AND PARKWAYS) AS SHOWN HEREON.

AND FURTHER HEREIN GIVE AN EASEMENT OF INGRESS AND EGRESS TO THE CITY OF MIDLAND FOR ALL OF CAMELOT ADDITION, AS SHOWN HEREON, FOR GARBAGE AND TRASH COLLECTION AND LOCATION AND MAINTENANCE OF TRASH CONTAINER AND CONDITION SAID EASEMENT THAT NO CONSTRUCTION SHALL COMMENCE UNTIL THE EXACT LOCATION OF SAID CONTAINER AND EASEMENT IN CONNECTION THEREWITH, HAVE BEEN SELECTED AND APPROVED BY THE DIRECTOR OF UTILITIES.

WITNESS MY HAND AT MIDLAND, TEXAS, THIS 24th DAY OF Jan, 2002.

Lowe G. Koonce
LOWE G. KOONCE

J.D. Crawford
J.D. CRAWFORD & DOROTHY CRAWFORD FAMILY LIMITED PARTNERSHIP, I
J.D. CRAWFORD, PARTNER

STATE OF TEXAS
COUNTY OF MIDLAND

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS 24th DAY OF JAN, 2002, BY LOWE G. KOONCE.

NOTARY PUBLIC
MIDLAND COUNTY, TEXAS
Tom Green

DENNIS RYAN MCMILLEN
NOTARY PUBLIC, State of Texas
My Commission Expires
June 21, 2004

STATE OF TEXAS
COUNTY OF MIDLAND

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS 1st DAY OF FEBRUARY, 2002, BY THE J.D. CRAWFORD & DOROTHY CRAWFORD FAMILY LIMITED PARTNERSHIP, I, J.D. CRAWFORD, PARTNER.

NOTARY PUBLIC
MIDLAND COUNTY, TEXAS

CYNTHIA ANN WYATT
Notary Public, State of Texas
My Comm. Expires: 8/21/04

NOTES:

SELLING A PORTION OF THIS ADDITION BY METES AND BOUNDS MAY BE A VIOLATION OF CITY ORDINANCE AND STATE LAW AND SUBJECT TO FINES AND WITHHOLDING OF UTILITIES AND BUILDING PERMITS.

BEARINGS SHOWN ON THIS PLAT ARE RELATIVE TO THE EAST LINE OF SECTION 32, BLOCK 38, T-1-S, T&P RR CO SURVEY, MIDLAND, MIDLAND COUNTY, TEXAS.

THIS TRACT IS SUBJECT TO THE FOLLOWING BLANKET EASEMENTS:

ATLANTIC PIPE LINE CO. EASEMENT, VOLUME 47, PAGE 233, DEED RECORDS, MIDLAND COUNTY, TEXAS.
TEXAS-NEW MEXICO PIPE LINE CO. EASEMENT, VOLUME 304, PAGE 568, DEED RECORDS, MIDLAND COUNTY, TEXAS.
ASHLAND & HILLIARD OIL CO., RIGHT-OF-WAY EASEMENT, VOLUME 432, PAGE 10, DEED RECORDS, MIDLAND COUNTY, TEXAS.
MAGNOLIA PIPE LINE CO. EASEMENT, VOLUME 438, PAGE 199, DEED RECORDS, MIDLAND COUNTY, TEXAS.
SHELL OIL CO. EASEMENT, VOLUME 473, PAGE 303, DEED RECORDS, MIDLAND COUNTY, TEXAS.

FOR FLOOD INSURANCE RATING PURPOSES, THIS PROPERTY LIES WITHIN FLOOD INSURANCE ZONE DESIGNATION "C" & "A" AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) NUMBER 48329C 0100E, MIDLAND COUNTY, TEXAS AND INCORPORATED AREAS EFFECTIVE DATE, DECEMBER 6, 1999, AS ISSUED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA). CENSUS TRACT NO. 101.12.

STORM WATER RUNOFF FROM IMPERVIOUS AND ROOFED AREAS OF THIS LOT IS TO BE DIRECTED TOWARDS PERVIOUS SURFACES SUCH AS LAWNS OR LANDSCAPING WITHIN THE PROPERTY.

THIS PLAT HAS BEEN CHECKED FOR ACCESSIBILITY OF UTILITIES.

SIGNED: N. W. Shuler
OWOOR ELECTRIC DELIVERY COMPANY — N. W. SHULER

SIGNED: Don Sutton
SOUTHWESTERN BELL TELEPHONE COMPANY — DON SUTTON

SIGNED: Charles V. Brown
CHARLES V. BROWN

SIGNED: Bill Bentley
COX COMMUNICATIONS — BILL BENTLEY

SIGNED: Glen North Jr.
CAP ROCK ELECTRIC COOPERATIVE, INC. — GLEN NORTH, JR.

SIGNED: Lowe Koonce
CENTERPOINT ENERGY — LOWE KOONCE

THIS IS TO CERTIFY THAT THE ABOVE AND FOREGOING PLAT OF CAMELOT ADDITION, WAS APPROVED BY PROPER ACTION OF THE CITY PLANNING AND ZONING COMMISSION OF THE CITY OF MIDLAND, ON THIS 4th DAY OF February, 20 02.

SIGNED: Pete Morton
CHAIRMAN — PETER MORTON

ATTEST: Carolyn Walker
SECRETARY — CAROLYN WALKER

THAT I, MAX A. SCHUMANN, JR., A REGISTERED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT I PREPARED THIS PLAT FROM AN ACTUAL AND ACCURATE SURVEY OF THE LAND AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PROPERLY PLACED UNDER MY PERSONAL SUPERVISION, IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF MIDLAND, TEXAS.

Max A. Schumann, Jr.
MAX A. SCHUMANN, JR.
RPLS 1377

STATE OF TEXAS
MAX A. SCHUMANN, JR.
1377
REGISTERED
PROFESSIONAL
LAND SURVEYOR

PLAT FILED FOR RECORD
MIDLAND COUNTY, TEXAS
NO. 4166 CABINET E
DATE 3-5-02 PAGE 209

NO.	DATE	DESCRIPTION	BY
1	01/31/02	REVISED FOR FINAL PLAT	CAM

DRAWN BY: CAM/DAN — DATE: 12/03/01
CHECKED BY: MAS — DRAWING NO.: 07023CO
JOB NO.: 07.023 — SHEET: 1 OF 1

SCHUMANN ENGINEERING CO., INC.
REGISTERED PROFESSIONAL LAND SURVEYORS — REGISTERED PROFESSIONAL CIVIL ENGINEERS
Civil Engineering ~ Land Surveying
408 W. PECOS STREET - P. O. BOX 304
MIDLAND, TEXAS 79702-0304
Office (915) 684-3546
Fax (915) 684-6873

MIDLAND
Planning Division

Zone Change/Planned District Amendment/Site Plan Approval

Project Number:
Case Number: Z-18-0008

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Property Owner Printed Name: GARY J. DAWSON (312 E. ILLINOIS #7 MIDLAND TX 79701 MAILING ADDRESS)		Phone (432) 694 5023 Email joshua-gd1977@att.net	
Address 3201 ELKINS Rd	City MIDLAND	State TX	Zip 79705

Representative *(if different from Applicant or Property Owner)* Firm: Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Street Address: 3201 ELKINS Rd.

Legal Description
Lot: 1 Block: 1 Subdivision: CAMELOT

Current Zoning: RESIDENTIAL AE

Proposed Zone: O1 OFFICE USE
(List by tracts if more than one district is requested)

Reason for Zone Change Request: NEIGHBORHOOD IS MORE COMMERCIAL MOSTLY COMMERCIAL IN RECENT YEARS - MY 20 AC TRACT IS THE ONLY RESIDENT IN THE NEIGHBORHOOD WITHIN City limits - ALL ELSE IS COMMERCIAL

Present Use of Property: AE Agricultural Estate Residential

Proposed Use of Property: Light INDUSTRIAL TO OFFICE.

How would this zone change affect the public health, safety and welfare?
NONE

Describe how conditions affecting the property have changed since present zoning designation: INFLUX OF INDUSTRIAL USE HAS CHANGED THE NEIGHBORHOOD AWAY FROM Residential

Submittal and Fees
Items to be submitted with this application form:
- Application Fee – Payable to the 'City of Midland'
- Dimensioned Site Plan
- *Digital Copies of Site Plan (PDF/JPEG)*

Signature *(by property owner only – authorized agent must sign affidavit below)*	
Applicant (signature): Mary J. Dawson	Date: 2/16/18
Applicant (printed): GARY J. DAWSON	
Property Owner (signature) Mary J. Dawson	Date: 2/16/18
Property Owner (printed) GARY J. DAWSON	

The Zone Change/Planned District Amendment/Site Plan Approval shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared _____ who, being by me duly sworn, upon oath says: That (s)he is authorized by _____ the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

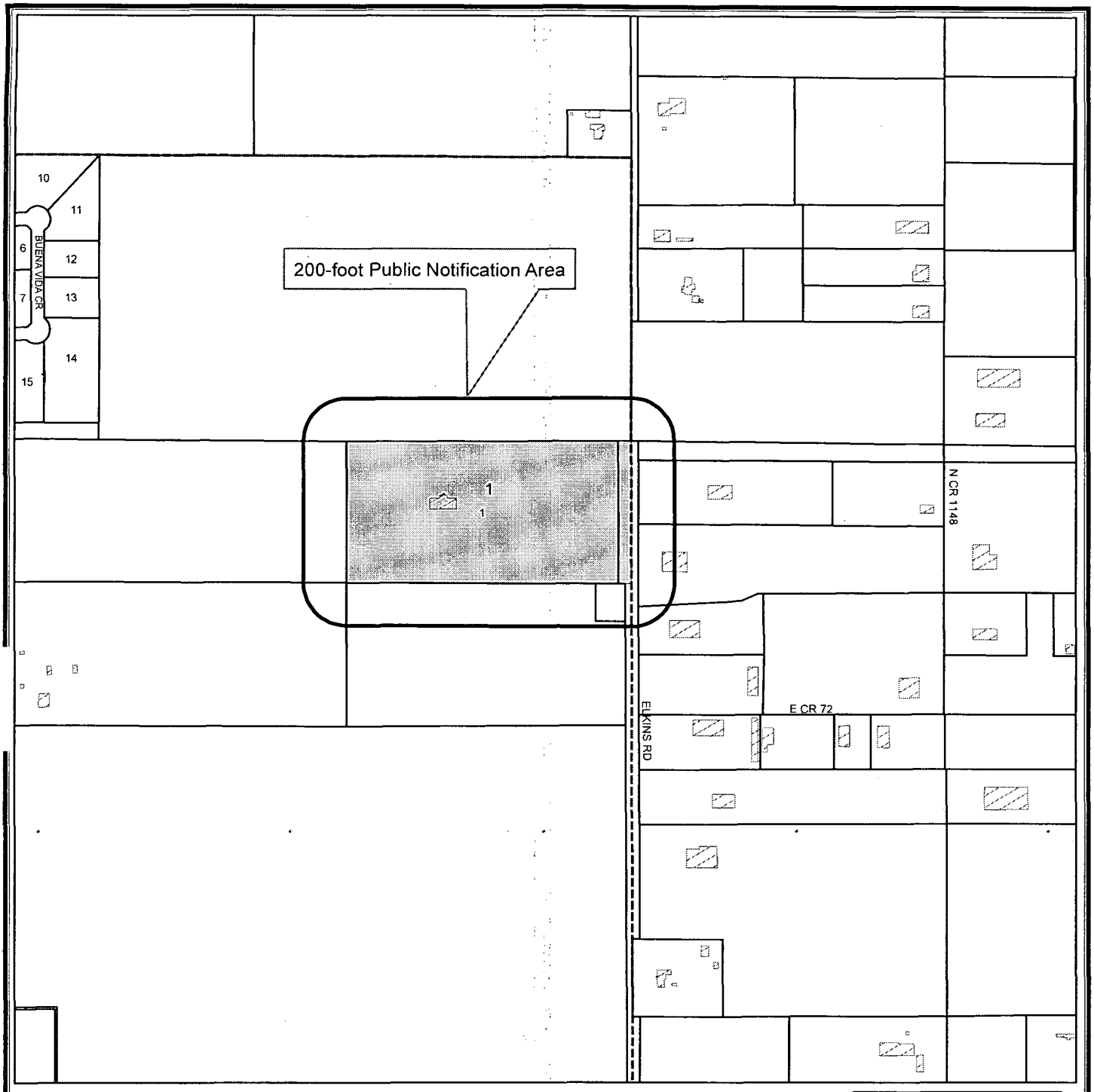
_____
Authorized Agent (*signature*)

Subscribed and sworn to before me, this _____ day of _____, 20___, to certify which witness my hand and seal of office.

_____
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY	
☐ Property Owner Authorization	☐ Dimensioned Site Plan
☐ Application Fee Check #: 1574	☐ Plans in Digital Format (PDF/JPEG)
Received By: [signature]	Date: 2/16/18

****Application will not be considered for scheduling until reviewed by a planner.****



LOCATION MAP

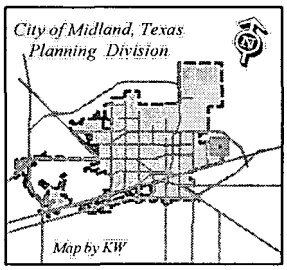
Z-18-0008 **Scale: 1" = 400'**

Consider a request for a Zone Change from AE, Agriculture Estates District, to O-1, Office District on Lot 1, Block 1, Camelot Addition, City and County of Midland, Texas.

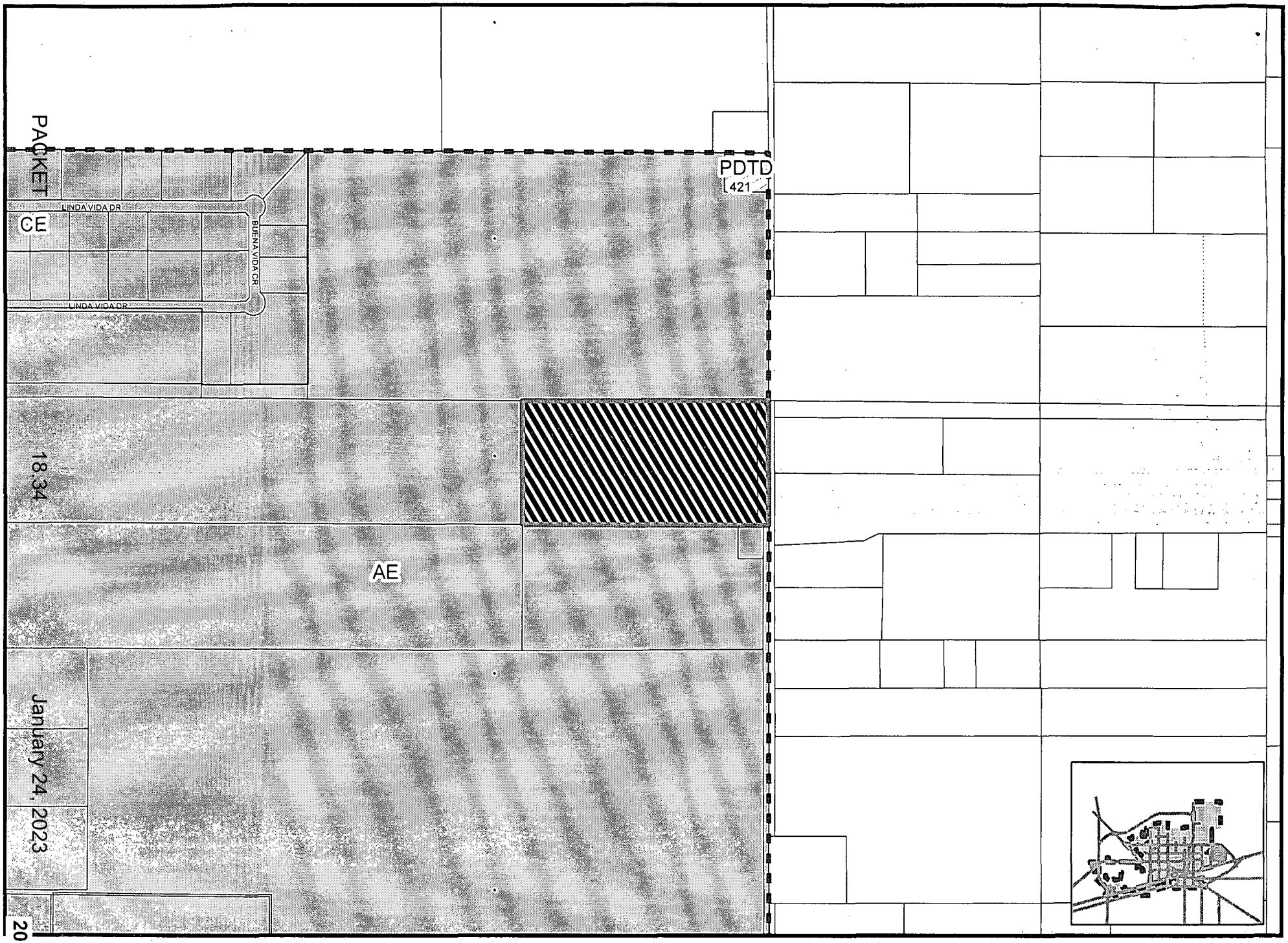
Generally located on the west side of Elkins Road, approximately 610-feet north of East County Road 72. (Council District 2)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



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THE CITY OF MIDLAND WILL NOT BE RESPONSIBLE FOR DECISIONS MADE ON THE USE OF THIS DA



Map By KW

Z-18-0008

Scale: 1" = 400'

ZONING MAP

© THE CITY OF MIDLAND - 2017: THIS DATA IS NOT A SUBSTITUION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLEY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.

following vote upon motion of Council member Lacy, seconded by Council member Robnett, on the 8th day of May, A.D., 2018, at a regular meeting of the City Council:

Council members voting "AYE": Hotchkiss, Love, Sparks, Morales, Dufford, Lacy, Robnett

Council members voting "NAY": None

PASSED AND APPROVED THIS 8th day of May, A.D., 2018.

Jerry F. Morales, Mayor

ATTEST:

Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

Frank Salvato, Assistant City Manager

Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney

9759

City Council Agenda

Approved for Agenda:
fsalvato
City Manager's Office

MEETING DATE: May 8, 2018

TO: City Council / City Manager

FROM: Rolandrea Russell, Planner

SUBJECT: **Consider an ordinance on second reading on a request by Gary J Dawson for a zone change from AE, Agriculture Estates District, to O-1, Office District on Lot 1, Block 1, Camelot Addition, City and County of Midland, Texas. (Generally located on the west side of Elkins Road, approximately 610-feet north of East County Road 72.)**

Purpose:

The applicant, Gary J. Dawson, is requesting a Zone Change from AE, Agricultural Estate District to O-1, Office District on a 20-acre tract of land out of Section 32, Block 38, T-1-S, RR Co. Survey, City and County of Midland, Texas for office use.

Recommended City Council Action

☒ Approve ☐ Deny ☐ Directional / Informational

Fiscal Impact:

This proposal does not have a significant financial impact to the city.

Discussion:

Current Zoning:

AE, Agriculture Estate District

Comprehensive Zoning:

Urban-Low (U-L)

- Single-Family Dwelling District
- Manufactured Housing District
- Office District
- Local Retail District

Urban-Low are neighborhoods with relatively low-density housing and easily accessed neighborhood commercial services. As compared to denser areas, U-L has more space and separation of uses, with farther distances between destinations and fewer shared amenities.

Surrounding Zoning and Land Use:

The properties to the north, south and west are zoned AE, Agriculture Estate District which is a single family-residential zoning district. The properties to the east, across Elkins Road, are located in the ETJ, Extraterritorial Jurisdiction where there are primarily commercial and industrial uses.

Analysis:

The property is currently zoned AE, Agriculture Estate District with an existing Specific Use Permit without Term (Ordinance No.8961) for an accessory dwelling structure to be used for living or sleeping quarters, together with the uses permitted in an AE.

The Specific Use Permit without term does not conflict with the proposed O-1, Office District as per the City of Midland Zoning Ordinance Section, *11-1-10. - Specific use permits.*

> *(B) Specific use permits without term may be issued for the following types of uses and subject to, but not limited to, the specified restrictions, in the following districts:*
>
> > *1. Accessory building for living or sleeping quarters in any district, not including rental as a separate dwelling.*

The applicant, Gary J. Dawson, is now requesting a Zone Change from AE, Agricultural Estate District to O-1, Office District for office; this use is due to an influx of industrial uses across Elkins Rd in the ETJ, Extraterritorial Jurisdiction.

The aforementioned ETJ, Extraterritorial Jurisdiction uses has deterred residential uses, and the proposed O-1, Office District will provide a buffer for future a residential zoning district west of the property. This is the first of an anticipated number of changes along Elkins Rd. which is destined to be a major arterial.

This request has been circulated to and reviewed by respective City departments for internal review and their comments, conditions, and requirements are as follows:

Engineering:

No objections to zoning.

Transportation:

No objections to zoning.

Driveway access evaluated with building permits, not zoning.

Oil and Gas:

No Oil or Gas wells identified within 500 ft. radius of location.

Code Administration:

No comments.

Planning:

This request is in compliance with the *Tall City Tomorrow Comprehensive Plan, Chapter 3 An Integrated Land Use Vision*, Principle 8, "Land use policies and regulations should create and support balanced neighborhoods." (Tall City Tomorrow, Page 59) This request will aid in promoting appropriate transitions between higher intensity uses such as industry, and lower intensity uses, such as homes.

Staff recommends approval of the zone change from AE, Agriculture Estates, to O-1, Office District, subject to condition A.

Condition:

A. That the use and development of this property shall conform to the regulations of the O-1, Office District

Letters of Objection:

As of March 14, 2018 staff has received no letters of objection to this request.

Attachments:

Plat (Exhibit A)
Ordinance No. 8961
Application
Maps

ORDINANCE NO. 8961

AN ORDINANCE CHANGING THE ZONING USE CLASSIFICATION OF LOT 1, BLOCK 1, CAMELOT ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE WEST SIDE OF ELKINS ROAD, APPROXIMATELY ONE MILE NORTH OF BUSINESS INTERSTATE 20), WHICH IS PRESENTLY ZONED AE, AGRICULTURE ESTATE DISTRICT, BY PERMITTING SAID PROPERTY TO BE USED UNDER A SPECIFIC USE PERMIT WITHOUT TERM FOR AN ACCESSORY BUILDING TO BE USED FOR LIVING OR SLEEPING QUARTERS; MAKING SAID PERMIT SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, Texas, in compliance with the City Charter and the State law with reference to the granting of specific use permits under the zoning ordinance regulations and zoning map, have given the requisite notices by United States mail, publication and otherwise; and after holding due hearings and affording a full and fair hearing to all of the property owners generally, and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body of the City of Midland finds that the health, safety and general welfare will be best served by the granting of a Specific Use Permit Without Term, set out hereinafter, subject to the special conditions and restrictions set out hereinafter on the property described in Section One hereof;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the zoning use classification of the following described property, which is presently zoned AE, Agriculture Estate District, to wit:

Lot 1, Block 1, Camelot Addition, City and County of Midland, Texas;

is hereby changed to permit same to be used under a Specific Use Permit Without Term for an accessory building to be used for living or sleeping quarters, together with the uses

permitted in an AE, Agriculture Estate District, subject to the following conditions:

1. That the accessory building shall be located as shown on Exhibit "A", which is attached hereto and incorporated herein.

2. That the accessory building shall not exceed 1,800 contiguous square feet in area.

3. That the use of the accessory building for living or sleeping quarters shall be limited to family members or guests of the occupant of the primary residence; the accessory building shall not be rented out as a separate residence or used for any commercial purpose.

4. That the applicant shall obtain all necessary permits from the City of Midland related to the construction of the accessory building.

SECTION TWO. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances, inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on

first reading, the 10th day of January, A.D., 2011; and passed to second reading on motion of Council member Sparks, seconded by Council member James, by the following vote:

Council members voting "AYE": Morales, Trost, Hailey, Perry, Dufford, James and Sparks

Council members voting "NAY": None

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member Hailey, seconded by Council member Dufford, on the 10th day of January, A.D., 2012, at a regular meeting of the City Council:

Council members voting "AYE": Morales, Trost, Hailey, Perry, Dufford and Sparks

Council members voting "NAY": None

PASSED AND APPROVED THIS 10th day of January, A.D., 2012.

W. Wesley Perry, Mayor

ATTEST:

Amy M. Turner, City Secretary

APPROVED AS TO FORM:

Keith Stretcher, City Attorney

L:\Ordinances\Planning\Specific Use Permit\2011\S-11-017.Dawson - Accessory Bldg.wpd




FIRE LANE - NO PARKING






EXIT
ONLY
ENTER

City Council Meeting

Item Number: 19

Meeting Date: January 24, 2023 (January 10, 2023)

To: City Council / City Manager

From: Alexandra Walling, Planner

Subject: AN ORDINANCE VACATING AND ABANDONING A 0.034-ACRE PORTION OF ALLEY RIGHT-OF-WAY LOCATED ADJACENT TO LOTS 2, 3 AND 4, BLOCK 1, RICHARDSON-ABILENE STREET ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE EAST SIDE OF NORTH MAIN STREET, APPROXIMATELY 120 FEET SOUTH OF BUTLER AVENUE); ADOPTING THE APPRAISAL BY THE CITY MANAGER OF $2,956.00; RETAINING A NONEXCLUSIVE UTILITY EASEMENT; AND ORDERING RECORDATION BY THE CITY SECRETARY (DISTRICT 2) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Aaron Patino, is requesting to vacate a 0.034-acre portion of the alley right-of-way, located adjacent to Lots 2, 3, and 4, Block 1, Richardson-Abilene Street Addition, City and County of Midland, Texas, for ownership purposes.

Recommended City Council Action:

Approve

Fiscal Impact:

The 2022 appraised value of the right-of-way is $2.00 per square foot, for a total value of $2,956.00.

Discussion:

The approximated area that will be vacated is 1,478 square feet (0.034-acres). The applicant has indicated that vehicles travel through the alley at high speeds in order to avoid traffic on Main Street. The applicant plans to construct a fence at each entry point of the alley.

All the appropriate adjacent owners are aware of the proposed vacation and have signed the application.

The Midland Central's Appraisal District's appraisal of the land is $2.00 per square foot or $2,956.00.

This request has been circulated and reviewed by all pertinent City departments and franchise utility companies. Their comments, conditions, and requests are as follows:

Code Compliance: (Approved)

No Oil and Gas issues.

Building Code: (Approved)

No objections.

Engineering: (Approved)

No objections to vacation. Applicant shall be responsible for relocating any utilities, if existing, or providing easements as needed.

Fire: (Approved)

No objections.

Transportation: (Approved)

No objections to vacation. Applicant shall be responsible for relocating any utilities, if existing, or providing easements as needed.

GIS: (Approved)

No comments.

Surveyor (Approved)

No comments.

Solid Waste: (Approved)

Solid waste will move the dumpster out of the alley.

AT&T: (Approved)

I have attached a picture of the map where we have a pedestal on N Baird St. As long as it isn't in the way we are clear.

Atmos: (Approved with Conditions)

Atmos Energy currently has facilities located within the above-described alley Right of Way between N. Baird Street and N. Main. We currently have a gas main that extends along this alley right of way. Atmos could vacate the referenced portion, however since we are currently serving customers off this line, we would need to maintain a utility easement or relocate our facilities. Any relocation costs would be passed on to the individual or entity requesting the vacate.

Grande: (Approved)

We do have communication lines on the one pole in the middle of the property. Is the customer aware that if we remove are communication lines off that pole, the residents in that section will no longer be serviceable by Astound Broadband.

Oncor: (Approved with Conditions)

I went out last week to look at this location, and Oncor has facilities in this alley. Oncor will need to relocate or secure an easement if it is to be vacated

Suddenlink: (Approved with Conditions)

We have existing aerial coax plant in that alley, if we need to vacate there will be some cost to relocate our plant. At the owners expense.

We have to be able to service existing customers, We, Optimum will not vacate any plant without relocation reimbursement.

Midland Central Appraisal District: (Approved)

The vacation area indicated has a current value of $2.00 per square foot or $2,956.00.

Planning:

Pertinent City departments and franchise utility companies have reviewed this vacation request and have approved the request.

Therefore, staff recommends approval of the vacation of a 0.034-acre portion of the alley right-of-way, located adjacent to Lots 2 , 3, and 4, Block 1, Richardson-Abilene Street Addition, City and County of Midland, Texas, for future development to be subject to conditions A through C.

Conditions:

A. **That the City of Midland has received from the property owner the sum of $2,956.00.**

B. That an accessible nonexclusive utility easement is retained.

C. That a replat of the subject property is approved by the City of Midland and filed and recorded with the County Clerk of Midland County.

Letters of Objection:

As of January 4, 2023, staff has not received any letters of objection to this request.

Attachments:

Vacation Survey (Exhibit A)
Application
Maps
Responses from Franchise Utility Companies and Midland Central Appraisal District

Robert Patrick

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE VACATING AND ABANDONING A 0.034-ACRE PORTION OF ALLEY RIGHT-OF-WAY LOCATED ADJACENT TO LOTS 2, 3 AND 4, BLOCK 1, RICHARDSON-ABILENE STREET ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE EAST SIDE OF NORTH MAIN STREET, APPROXIMATELY 120 FEET SOUTH OF BUTLER AVENUE); ADOPTING THE APPRAISAL BY THE CITY MANAGER OF $2,956.00; RETAINING A NONEXCLUSIVE UTILITY EASEMENT; AND ORDERING RECORDATION BY THE CITY SECRETARY

WHEREAS, it has been determined by the Midland City Council that a 0.034-acre portion of alley right-of-way located adjacent to Lots 2, 3 and 4, Block 1, Richardson-Abilene Street Addition, City and County of Midland, Texas, as described in Exhibit "A" attached hereto and made a part hereof for all legal purposes (the "Property"), is no longer needed for public use; and

WHEREAS, Section 272.001 of the Texas Local Government Code provides that a political subdivision may not convey, sell, or exchange its interest in land without observing notice and bid requirements, unless the conveyance is to one or more abutting property owners; and

WHEREAS, an application for vacating the Property has been received by the City from the abutting property owner; and

WHEREAS, the City Manager has appraised the value of the City's property interest in the Property at $2,956.00, as shown in Exhibit "B" attached hereto and incorporated herein by reference; and

WHEREAS, the Council finds it to be in the public interest to abandon and vacate the Property;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Property is hereby vacated and abandoned for all public

purposes. Provided, however, that the City is hereby abandoning only the public interest in the Property, and this ordinance in no way affects any private easement or access easement which abutting property owners may have in the Property.

SECTION TWO. That this ordinance shall not be effective until:

A. the City of Midland has received from the abutting property owner(s) the sum of $2,956.00; and

B. a replat of the Property is approved by the City of Midland and filed and recorded with the County Clerk of Midland County, Texas.

SECTION THREE. That the City herein retains an accessible nonexclusive utility easement across, through, over, under, on and along the Property until all entities that were using the Property for utility purposes as of the date of approval of this ordinance have abandoned their uses of the Property.

SECTION FOUR. That upon the City's receipt of the sum set forth in Section Two hereof, the City Secretary is hereby authorized and directed to file a certified copy of this ordinance with the County Clerk of Midland County, Texas, for purposes of recording in the Official Records of Midland County, Texas.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

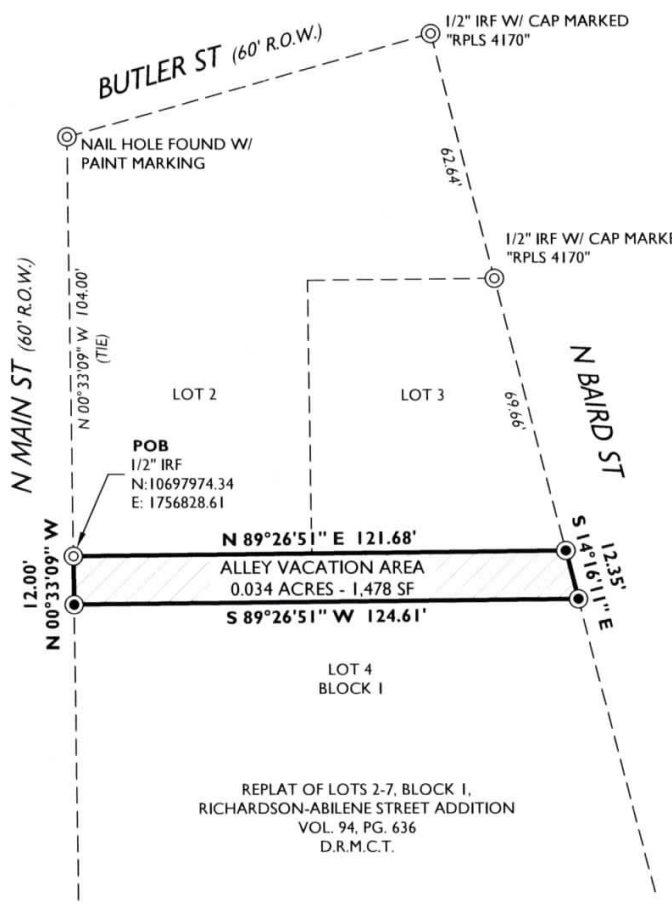
_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

"EXHIBIT A"

OF A 0.034-ACRE TRACT OF LAND, SITUATED IN SECTION 26, BLOCK 39, T-1-S, T.&P. RY Co. SURVEY, MIDLAND COUNTY, TEXAS, FOR THE ABANDONMENT OF A OF 12-FOOT ALLEY AS DEPICTED ON THE REPLAT OF LOTS 2-7, BLOCK 1, RICHARDSON-ABILENE STREET ADDITION, AN ADDITION TO THE CITY OF MIDLAND, MIDLAND COUNTY, TEXAS



LEGAL DESCRIPTION

FIELD NOTES DESCRIPTION OF A 0.034 ACRE TRACT OF LAND SITUATED IN SECTION 26, BLOCK 39, T-1-S, MIDLAND COUNTY, TEXAS, FOR THE ABANDONMENT OF A 12-FOOT ALLEY LOCATED ON THE NORTH SIDE OF LOT 4, BLOCK 1, AS DEPICTED ON THE REPLAT OF LOTS 2-7, BLOCK 1, RICHARDSON-ABILENE STREET ADDITION, AN ADDITION TO THE CITY OF MIDLAND, MIDLAND COUNTY, TEXAS RECORDED IN VOLUME 94, PAGE 636, DEED RECORDS OF SAID MIDLAND COUNTY, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

***BEGINNING** AT N(Y): 10697974.34, E(X): 1756828.61, A ONE-HALF INCH IRON ROD FOUND BEING THE SOUTHWEST CORNER OF LOT 2, BLOCK 1, OF SAID RICHARDSON-ABILENE STREET ADDITION, FROM WHICH A NAIL HOLE WITH PAINT MARKINGS FOUND IN CONCRETE FOR THE NORTHWEST CORNER OF SAID LOT 2 BEARS NORTH 00°33'09" WEST A DISTANCE OF 104.00 FEET;*

***THENCE** NORTH 89°26'51" EAST, A DISTANCE OF 121.68 FEET TO A 1/2" IRON ROD WIRED PLASTIC CAP MARKED "MAVERICK FIRM #10194514" (RPC) SET FOR THE NORTHEAST CORNER HEREOF;*

***THENCE** SOUTH 14°16'11" EAST, A DISTANCE OF 12.35 FEET TO AN RPC SET FOR THE SOUTHEAST CORNER HEREOF;*

***THENCE** SOUTH 89°26'51" WEST, A DISTANCE OF 124.61 FEET TO AN RPC SET FOR THE SOUTHWEST CORNER HEREOF;*

***THENCE** NORTH 00°33'09" WEST, A DISTANCE OF 12.00 FEET TO THE **POINT OF BEGINNING**, CONTAINING 0.034 ACRES OF LAND.*

BASIS OF BEARING, COORDINATES, DISTANCES AND ACREAGE IS A LAMBERT CONICAL PROJECTION OF THE TEXAS COORDINATE SYSTEM, STATE PLANE GRID, CENTRAL ZONE, NORTH AMERICAN DATUM 1983, U.S. SURVEY FOOT.

I GREGORY W. SHOULTS DO HEREBY CERTIFY THAT THIS PLAT IS BASED UPON FIELD NOTES OR ELECTRONIC DATA OF AN ACTUAL ON THE GROUND SURVEY AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

GREGORY W. SHOULTS R.P.L.S.#5356

NOVEMBER 14, 2022

STATE OF TEXAS
REGISTERED
GREGORY W. SHOULTS
5356
PROFESSIONAL
LAND SURVEYOR

LEGEND

◉	SET 1/2" IRON ROD W/RED PLASTIC CAP MARKED "MAVERICK FIRM #10194514"
◎	FOUND MONUMENT AS NOTED
———	TRACT BOUNDARY
- - - - -	EXISTING LOTS
D.R.M.C.T.	DEED RECORDS MIDLAND CO. TX

MAVERICK
ENGINEERING / SURVEY / WATER RESOURCES
1909 West Wall Street, Suite "K"
Midland, Texas 79701
ENGINEER FIRM #: F-15089
SURVEY FIRM #: 10194514
Tel: (432) 262-0999 Fax: (432) 262-0989
www.Maverick-Eng.com

Drawing : F:\2022\220172-AARON PATINO-BAIRD STREET ALLEY & RESIDENCE\DRAWINGS\VACATION\220172 ALLEY VACATION.DWG Last Saved By: ADevine on 11/14/22

MIDLAND
Feel the Energy!

Office of the City Manager

December 27, 2022

Midland City Council
City of Midland, Texas

RE: Request for vacation of a 0.034-acre portion of alley right-of-way located adjacent to Lots 2, 3 and 4, Block 1, Richardson-Abilene Street Addition, City and County of Midland, Texas

Dear Members of the City Council:

The above-referenced property has been appraised in accordance with Chapter 272 of the Texas Local Government Code. The fair market value of the property is $2,956.00. Upon the City's receipt of this sum from the adjoining property owner(s), the ordinance vacating and abandoning the City's interest in the property may be recorded in the Midland County Clerk's office.

Very truly yours,

Gina Sanz for
Robert Patrick

Robert Patrick
City Manager

EXHIBIT "B"

300 N. Loraine, Midland TX 79701 • 432-685-7202 • Fax 432-686-1600

MIDLAND
Planning Division

Vacate Right-of-Way/Public Utility Easement/Land/Street Application

Project Number: V-22-0043

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Aaron Patino		Phone (432) 413-0329 Email aarondpatino85@gmail.com	
Address 927 N. Baird St.	City Midland	State TX	Zip 79701

Application is hereby made to the City Council to vacate the following:

- ☐ Right-of-Way
- ■ Public Utility Easement
- ☐ Land
- ☐ Street

Description of Address: Alley running East to West in between 927 N. Baird St. and 929 N. Baird St.

Reason for Request: The alley serves as a danger to both addresses as well as to neighboring houses. Land being purchased on both sides of the alley and would like to fence off the alley but will have gates for use for all utility companies. Possibly only partial vacation of right of way if necessary to allow for utility companies

Reasons, in applicant's opinion, why the requested vacation will not adversely affect the public welfare or will contribute to it in a positive way: Vehicles consistently travel through this alley at high speeds in order to avoid traffic on Main St. Driveway for 927 is directly adjacent to the alley and with 7 children entering and exiting vehicles, it serves as a grave danger for them with these vehicles. foot traffic in alley comprised of persons caught vandalizing, breaking into vehicles, etc.

Submittal and Fees

Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Sealed metes and bounds description of the property to be vacated (included on the map) and total square feet of vacation. Include ownership, legal and deed information for adjacent property owners
- Digital Copies of Survey (PDF/JPEG)

Utility Company Approval

Clearance is needed from the following utility companies:

- City of Midland
- Atmos Energy
- Oncor Electric
- AT&T
- Suddenlink Cable TV Co.
- Grande Communications

The City will route the request to these companies, but it is the applicant's responsibility to ensure clearance has been obtained to resolve any issues that may arise.

Policies

1. If the vacation request involves only a portion of a section right-of-way, such that approval would not affect the public's ability to travel along said right-of-way, then the request will be scheduled for consideration by the City Council. No public hearing will be needed.

2. If the vacation request involves an entire section of right-of-way, such that approval would cause the public to lose all rights to use it, then the following procedures apply:

   a. Nearby land owners who have a reasonable expectation to use said right-of-way, as determined by the Transportation Division, must first agree to the proposed vacation. It is the applicant's responsibility to obtain a letter of concurrence signed by the affected landowners.

   b. If all letters are received indicating that the affected landowners agree to the request, then a public hearing before the City Council will be scheduled. The Transportation Division will mail public notice of the hearing to landowners within 400 feet of the affected right-of-way.

   c. If a request is approved, the right-of-way shall be divided into two equal parts, with each half becoming the property of the respective abutting owner. If the applicant desires to own the entire width, he or she must negotiate with the opposite landowner.

Signatures

Applicant (signature):		Date: 9/21/22
Affected Property Owners:		
Signature:	Print: Joey Hopkins E.D. of Midland Habitat	Date: 9/21/22
Signature:	Print: Israel Patino Jr.	Date 10/16/22
Signature:	Print:	Date
Signature:	Print:	Date

The Vacation of right-of-way/public utility easement/land/street shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

FOR OFFICE USE ONLY

☑ 1 FOLDED Copy of Survey

☑ Survey in Digital Format (PDF/JPEG)

☑ Application Fee $400

Check # 1134

Received By: Jessie Walling

Date: RECEIVED NOV 22 2022

BY: LW

****Application will not be considered for scheduling until reviewed by a planner.****

Alexandra Walling

From: Ruben Guerra <ruben.guerra@astound.com>
Sent: Friday, December 2, 2022 3:34 PM
To: Alexandra Walling
Subject: Re: New Vacation Request for Alley ROW

Alexandra

We do have communication lines on the one pole in the middle of the property. Is the customer aware that if we remove are communication lines off that pole, the residents in that section will no longer be serviceable by Astound Broadband.

Thank You
Ruben Guerra
Construction Coordinator
O: 432-272-3088
C: 432-653-9369
Ruben.Guerra@astound.com
Astound Business Solutions
Powered by RCN | Grande | Wave
astound.com

On Wed, Nov 30, 2022 at 3:26 PM Alexandra Walling <awalling@midlandtexas.gov> wrote:

> Good evening,
>
> Aaron Patino has requested to vacate the above described Right of Way (see attachment: Exhibit A). Please advise this office if your company has utilities within this right-of-way. We would appreciate any comments you may have concerning this requested vacation returned to us within 5-7 days. You may reach me at (432) 685-7409 if you have any questions.
>
> Thank You,
>
> Alexandra Walling
>
> Planner
>
> Planning Division

Development Services

O. 432-685-7409

awalling@midlandtexas.gov





300 N. Loraine | P.O. Box 1152 | Midland, TX 79702

CAUTION: This email originated from outside your organization — exercise caution when opening attachments or clicking links, especially from unknown senders.

Alexandra Walling

From: UNDERWOOD, JERRY D <ju1659@att.com>
Sent: Monday, December 5, 2022 9:14 AM
To: Alexandra Walling
Subject: RE: New Vacation Request for Alley ROW
Attachments: N Baird pedestal.PNG

Good morning,

I have attached a picture of the map where we have a pedestal on N Baird St. As long as it isn't in the way we are clear.

Thanks,
Jerry

From: Alexandra Walling <awalling@midlandtexas.gov>
Sent: Wednesday, November 30, 2022 3:01 PM
To: UNDERWOOD, JERRY D <ju1659@att.com>
Subject: New Vacation Request for Alley ROW
Importance: High

Good evening,

Aaron Patino has requested to vacate the above described Right of Way (see attachment: Exhibit A). Please advise this office if your company has utilities within this right-of-way. We would appreciate any comments you may have concerning this requested vacation returned to us within 5-7 days. You may reach me at (432) 685-7409 if you have any questions.

Thank You,

Alexandra Walling
Planner
Planning Division
Development Services
O. 432-685-7409
awalling@midlandtexas.gov

MIDLAND
Feel the Energy!

300 N. Loraine | P.O. Box 1152 | Midland, TX 79702

CAUTION: This email originated from outside your organization — exercise caution when opening attachments or clicking links, especially from unknown senders.

Alexandra Walling

From: drambo@midcad.org
Sent: Tuesday, November 29, 2022 2:21 PM
To: Alexandra Walling
Subject: Re: Vacation Request by Aaron Patino

Alexandra:

The vacation requested is currently valued at $2.00 per sqft or $ 2,956.00.

Please send all future requests for vacated properties to Lisa Reyna....LReyna@midcad.org.

Thanks you,
Dennis Rambo
Midland Central Appraisal District
432 699 4991 ext 3030
432 689 7185 fax

From:	Alexandra Walling <awalling@midlandtexas.gov>
To:	"drambo@midcad.org" <drambo@midcad.org>
Date:	11/28/2022 09:58 AM
Subject:	Vacation Request by Aaron Patino

Mr. Rambo,

Aaron Patino has submitted a request to vacate the above described Right of Way (Please see attached exhibits). If you could please send me a value for the property, that would be greatly appreciated! If you have any questions or comments please reach me at (432)-685-7409.

Thank You,

Alexandra Walling
Planner
Planning Division
Development Services
O. 432-685-7409
awalling@midlandtexas.gov

300 N. Loraine | P.O. Box 1152 | Midland, TX 79702

[attachment "V-22-0043, Exhibit A.pdf" deleted by Dennis Rambo/MCAD] [attachment "V-22-0043, MCAD Letter.pdf" deleted by Dennis Rambo/MCAD] [attachment "V-22-0043, Location Map.pdf" deleted by Dennis Rambo/MCAD]

CAUTION: This email originated from outside your organization — exercise caution when opening attachments or clicking links, especially from unknown senders.

Alexandra Walling

From: Arguello, Martin <Martin.Arguello@oncor.com>
Sent: Tuesday, December 6, 2022 8:37 AM
To: Alexandra Walling
Cc: Blankenship, Chad
Subject: FW: New Vacation Request for Alley ROW
Attachments: image001.png; image002.png; image003.png; image004.png; V-22-0043, Location Map.html.pdf; V-22-0043, Oncor Letter.html.pdf; V-22-0043, Exhibit A.html.pdf

Good morning Alexandra! Hoping this email finds you well. I went out last week to look at this location, and Oncor has facilities in this alley. Oncor will need to relocate or secure an easement if it is to be vacated

---

From: Blankenship, Chad
Sent: Wednesday, November 30, 2022 5:04 PM
To: Arguello, Martin <Martin.Arguello@oncor.com>
Subject: Fwd: New Vacation Request for Alley ROW

Martin can you look into this one.

Sent from my iPhone

Begin forwarded message:

> **From:** Alexandra Walling <awalling@midlandtexas.gov>
> **Date:** November 30, 2022 at 3:13:10 PM CST
> **To:** "Blankenship, Chad" <Chad.Blankenship@oncor.com>, "Arguello, Martin" <Martin.Arguello@oncor.com>, "Ortega, Gustavo" <Gustavo.Ortega@oncor.com>
> **Subject: New Vacation Request for Alley ROW**
>
> Good evening,
>
> Aaron Patino has requested to vacate the above described Right of Way (see attachment: Exhibit A). Please advise this office if your company has utilities within this right-of-way. We would appreciate any comments you may have concerning this requested vacation returned to us within 5-7 days. You may reach me at (432) 685-7409 if you have any questions.
>
> Thank You,
>
> Alexandra Walling
> Planner
> Planning Division
> Development Services
> O. 432-685-7409
> awalling@midlandtexas.gov

300 N. Loraine | P.O. Box 1152 | Midland, TX 79702

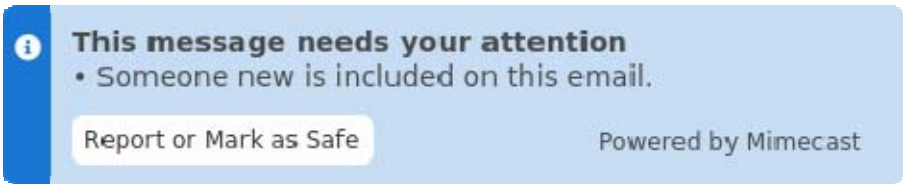
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Alexandra Walling

From: Luis Montez <Luis.Montez@AlticeUSA.com>
Sent: Friday, December 2, 2022 8:09 PM
To: Alexandra Walling; Eron Zapata; Raymond Revilla
Cc: Lorenzo Reyes; Vanessa Chavarria
Subject: RE: External E-mail - New Vacation Request for Alley ROW



We have existing aerial coax plant in that alley, if we need to vacate there will be some cost to relocate our plant. At the owners expense.
We have to be able to service existing customers, We, Optimum will not vacate any plant without relocation reimbursement.

From: Alexandra Walling <awalling@midlandtexas.gov>
Sent: Wednesday, November 30, 2022 4:05 PM
To: Luis Montez <Luis.Montez@AlticeUSA.com>; Eron Zapata <Eron.Zapata@AlticeUSA.com>; Raymond Revilla <Raymond.Revilla@AlticeUSA.com>
Subject: External E-mail - New Vacation Request for Alley ROW

[External Email]

Caution: This email originated outside of Altice USA. Please do not click links or attachments unless you recognize the sender and know the content is safe.

Good evening,

Aaron Patino has requested to vacate the above described Right of Way (see attachment: Exhibit A). Please advise this office if your company has utilities within this right-of-way. We would appreciate any comments you may have concerning this requested vacation returned to us within 5-7 days. You may reach me at (432) 685-7409 if you have any questions.

Thank You,

Alexandra Walling
Planner
Planning Division
Development Services
O. 432-685-7409
awalling@midlandtexas.gov

300 N. Loraine | P.O. Box 1152 | Midland, TX 79702

Caution: This email originated outside of Altice USA. Please do not click links or attachments unless you recognize the sender and know the content is safe.

The information transmitted in this email and any of its attachments is intended only for the person or entity to which it is addressed and may contain information concerning Altice USA and/or its affiliates and subsidiaries that is proprietary, privileged, confidential and/or subject to copyright. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient(s) is prohibited and may be unlawful. If you received this in error, please contact the sender immediately and delete and destroy the communication and all of the attachments you have received and all copies thereof.

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ATMOS ENERGY

West Texas Division
P.O. Box 1111,
Midland, Texas 79702

City of Midland
Alexandra Walling
Planner/Planning Division
300 N. Loraine
Midland, Texas 79701

December 15, 2022

Re: Case Name: Aaron Patino Vacation
Case Number: V-22-0043

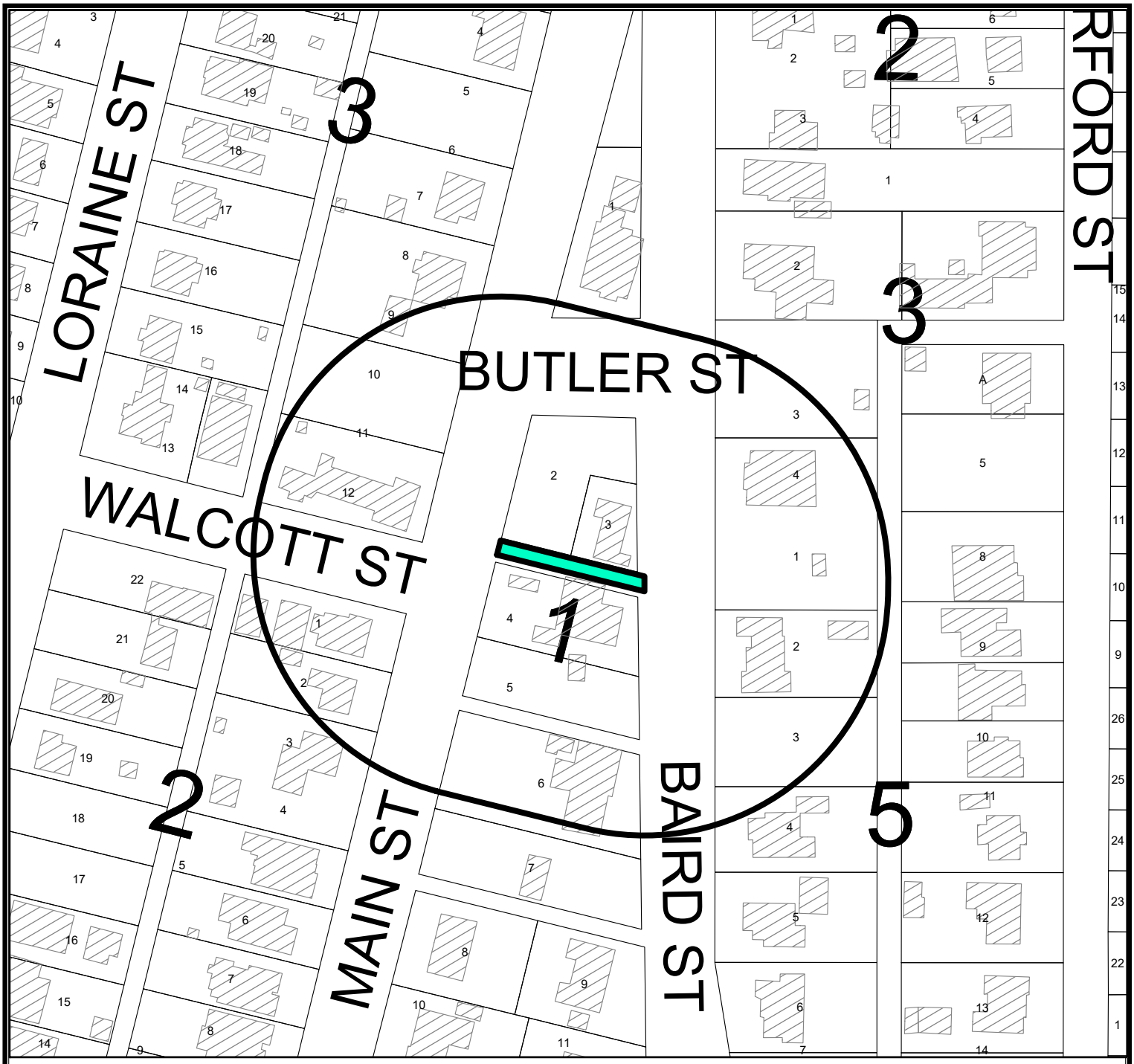
Ms. Walling,

Atmos Energy currently has facilities located within the above-described alley Right of Way between N. Baird Street and N. Main. We currently have a gas main that extends along this alley right of way. Atmos could vacate the referenced portion, however since we are currently serving customers off this line, we would need to maintain a utility easement or relocate our facilities. Any relocation costs would be passed on to the individual or entity requesting the vacate.
Please let me know if you have any further questions.

Sincerely,

Mark Lieb

Mark Lieb
Project Specialist
Atmos Energy/Permian Basin
432-617-3447 office
432-967-0370 cell
mark.lieb@atmosenergy.com



LOCATION MAP

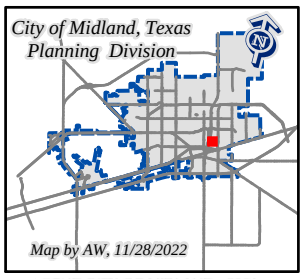
V-22-0043 **Scale: 1" = 200'**

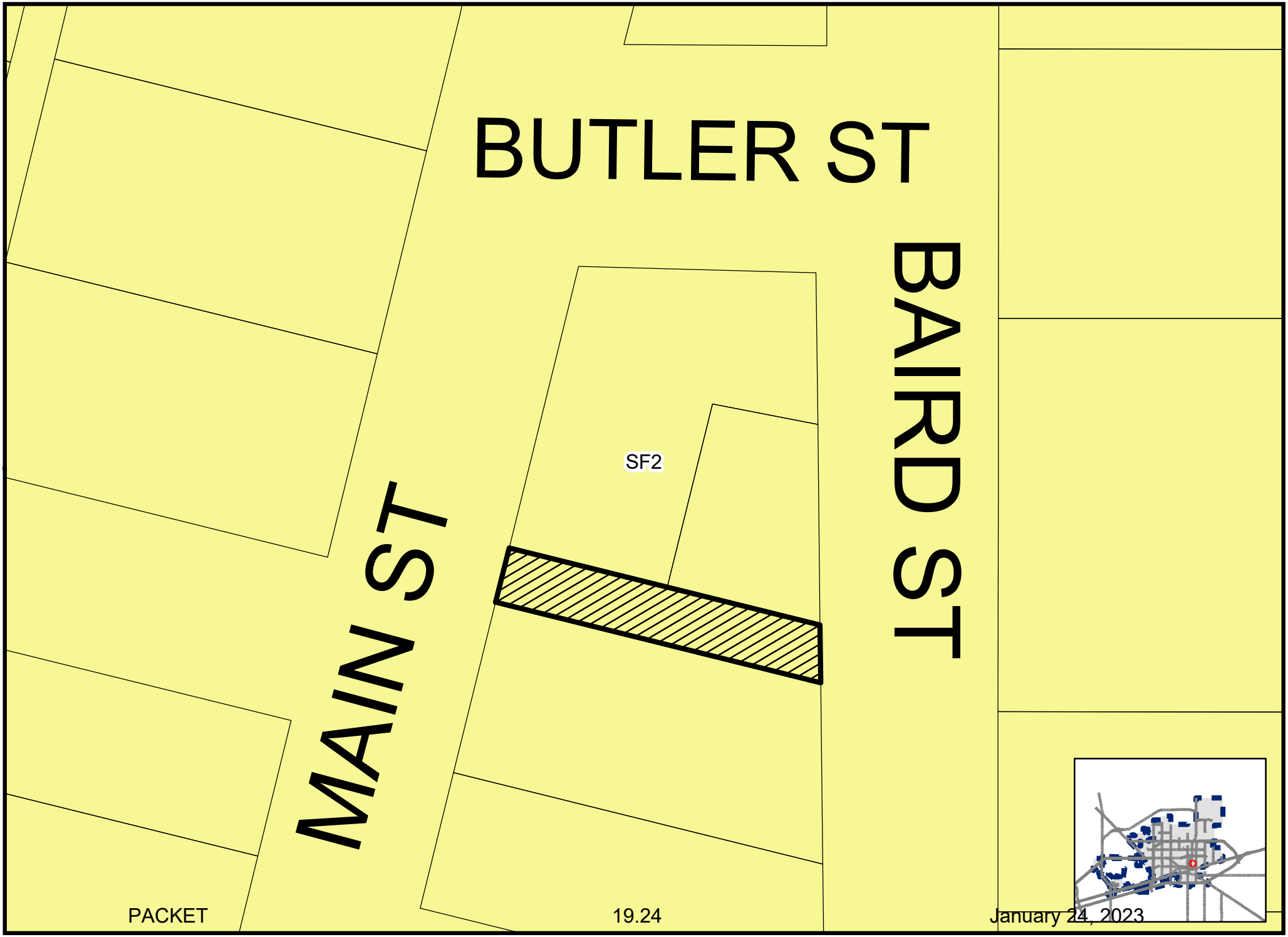
Consider a request for a vacation of a 0.034-acre portion of the alley right-of-way, located adjacent to Lots 2 ,3, and 4, Block 1, Richardson-Abilene Street Addition, City and County of Midland, Texas.

Generally located on the east side of North Main Street, approximately 120-feet south of Butler Avenue - (Council District 2)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS





Map By AW, 12/6/2022

V-22-0043

Scale: 1" = 200'

ZONING MAP

© THE CITY OF MIDLAND - 2021: THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.




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City Council Meeting

Item Number: 20

Meeting Date: January 24, 2023 (January 10, 2023)

To: City Council / City Manager

From: Alexandra Walling, Planner

Subject: AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR A 1.00-ACRE TRACT OF LAND OUT OF THE SOUTHEAST QUARTER OF SECTION 7, BLOCK X, H.P. HILLIARD SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF TANFORAN AVENUE AND ORIOLE DRIVE), BY PERMITTING A REDUCED MINIMUM LOT AREA; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 4) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Mark Smith, is requesting a Special Exception from the City of Midland Zoning Ordinance, Section 5.04 – Residential Zoning District Dimensional Regulations Chart, concerning the minimum lot area for the property located at 4420 Tanforan Avenue.

Recommended City Council Action:

Approve

Fiscal Impact:

No City funds are required to process this request.

Discussion:

The applicant's property is located at 4420 Tanforan Avenue and is the location of a single-family house. The applicant is requesting a special exception to the minimum lot area of the

current zoning district AE, Agricultural Estate District to be able to proceed with the platting process and for ownership purposes.

As mentioned previously the property is zoned AE, Agricultural Estate District and does not meet the minimum lot area requirement. Per our City of Midland Zoning Ordinance, *Section 5.04 –Residential Zoning District Dimensional Regulations Chart:*

AE, Agricultural Estate District
Lot Dimensions
Minimum Lot Area:
Lot: 2 Acres or 87,120 SF

Many of the surrounding lots do not conform to the current minimum lot area in the AE, Agricultural Estates District, which is 2-acres or 87,120 SF. The lots were subdivided with differing lot areas, which was conforming at that time, however is now nonconforming. Therefore, the applicant is requesting to reduce the proposed lot's minimum required area to approximately 1-acre or 43,560 SF.

This request has been circulated to all pertinent City departments for review. Below are the departments' comments.

Engineering: (Approved)

No objections to special exception. [For Applicant's Information Only.]

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For Applicant's Information Only.]

Transportation: (Approved)

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For the Applicant's information only.]

No objection to zone change. [For the Applicant's information only.]

Fire: (Approved)

No objections.

Code Compliance: (Approved)

No Oil and Gas issues.

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2020 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary. Code versions are subject to change depending on time of new code edition adoption in the City of Midland and date of permit application.

Planning Analysis:

While this request represents a deviation from the existing Zoning Ordinance, due to the unique circumstances surrounding the lot in question, staff is recommending approval of this application for a Special Exception to the City of Midland Zoning Ordinance, *Section 5.04 - Residential Zoning District Dimensional Regulations Chart*. This tract of land has been zoned in a way that prohibits further development. The city has inadvertently restricted this property and others around it to modify existing developments under the current zoning ordinance. This request is in compliance with the Tall City Tomorrow Comprehensive Plan, as it designates this area for Urban Residential – Large Lot, a classification which calls for "Neighborhoods with very large lot, single-family homes that are typically within the existing city development area." This special exception would allow for the existing tract of land to fit the intended use appropriately.

Due to these factors, staff is recommending approval of this special exception subject to condition A.

Condition:

A. That the minimum lot area of the property shall be 1-acre or 43,560 SF.

Letters of Objection:

As of January 4, 2023, staff has not received any letters of objection.

Attachments:

Application
Survey (Exhibit A)
Plat (Exhibit B)
Maps

Robert Patrick

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR A 1.00-ACRE TRACT OF LAND OUT OF THE SOUTHEAST QUARTER OF SECTION 7, BLOCK X, H.P. HILLIARD SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF TANFORAN AVENUE AND ORIOLE DRIVE), BY PERMITTING A REDUCED MINIMUM LOT AREA; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION

WHEREAS, the City Council modified the authority of the Board of Adjustment in Title XI, Chapter 1, Section 7 ("Section 11-1-7") of the Midland City Code; and

WHEREAS, Section 11-1-7 provides for the consideration of requests for special exceptions to the Midland Zoning Ordinance; and

WHEREAS, the Council finds that satisfactory evidence has been presented that the use to be authorized by the granting of the special exception will not be detrimental to the health, safety, comfort and welfare of the occupants of the land area near the tract on which the use to be allowed by special exception will be located; and

WHEREAS, the Council finds that it is clearly and specifically authorized by the terms of Section 11-1-7 to grant such a special exception, and said exception will be in harmony with the general purposes and intent of the zoning provisions of the Midland City Code; and

WHEREAS, after a full and fair public hearing at which all parties in interest were offered an opportunity to be heard, all pursuant to law, the Council finds it to be in the public interest to grant a special exception to the Zoning Ordinance, pursuant to Section 11-1-7, for the purposes herein stated, subject to special conditions;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That a special exception is hereby granted for the property described as a 1.00-acre tract of land out of the southeast quarter of Section 7, Block X, H.P. Hilliard Survey, City and County of Midland, Texas, said tract of land being more specifically described in Exhibit "A", which is attached hereto and incorporated herein (the "Property"). Said special exception shall allow a reduced minimum lot area.

SECTION TWO. Said special exception is subject to the following special condition:

That the minimum lot area of a lot on the Property shall be one acre.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to file this ordinance with the Office of the County Clerk for purposes of recordation.

SECTION SEVEN. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed

by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

EXHIBIT "A"

KELLY SURVEYING COMPANY, INC.

FIRM 10194393

Setting Today's Landmark for Tomorrow's Growth

LEGAL DESCRIPTION
FOR A 1.00 ACRE TRACT
LOCATED IN THE SE/4 OF SECTION 7, BLOCK X,
H. P. HILLIARD SURVEY,
MIDLAND COUNTY, TEXAS.

BEING THAT SAME TRACT OF LAND AS DESCRIBED IN INSTRUMENT NUMBER 2010-3879, OFFICIAL PUBLIC RECORDS OF MIDALND COUNTY, TEXAS.

BOUNDARY BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at (Y=10,712,113.38' and X=1,730,683.72') a ½" Iron rod with plastic cap marked "RPLS 5707" set in the east right-of-way line of Oriole Drive and the north right-of-way line of Tanforan Avenue and being the southwest corner of said 1.00 acre tract as described in instrument number 2010-3879, Official Public Records of Midland County also being the southwest corner of this tract;

THENCE N 14°29'34" W along the said east right-of-way line of Oriole Drive and the west line of said 1.0 acre tract, a distance of 264.40 feet to a ½" Iron rod found in the south line of a 15 foot alley and at the northwest corner of said 1.00 acre tract and this tract;

THENCE N 75°38'36" E along the south line of said alley and the north line of said 1.00 acre tract, a distance of 164.75 feet to a ½" Iron rod found at the northwest corner of Lot 2, Block 3, Melody Acres Fourth Section as recorded in Cabinet D, Page 387, Midland County Plat Records and at the northeast corner of said 1.00 acre tract and this tract;

THENCE S 14°29'34" E along the west line of said Lot 2, Block 3 and the east line of said 1.00 acre tract, a distance of 264.40 feet to a ½" Iron rod found in the said north right-of-way line of Tanforan Avenue and at the southwest corner of said Lot 2, Block 3 and being the southeast corner of said 1.00 acre tract and this tract;

THENCE S 75°38'36" W along the said north right-of-way line of Tanforan Avenue and the south line of said 1.00 acre tract, a distance of 164.75 feet to the Point of Beginning, containing 1.00 surface acres of land.

Bearings and Coordinates are relative to the Texas State Plane Coordinate System, 1983 NAD, Central Zone. Combined Grid Factor of 0.999914928 and a Theta Angle of -00°56'26".

This document was prepared under 22 TAC 663.21 and is not to be used to convey or establish interest in real property except those rights and interest implied or established by the creation or reconfiguration of the boundary of the political subdivision for which it was prepared.

Kelly Surveying Company



Dow E Kelly, R.P.L.S. 5707
9 December 2022

2532 Bainbridge Dr.
Odessa, Texas 79762
(432)-349-5894

MIDLAND
Planning Division

Special Exception Application

Project Number: E-22-0090

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Mark A. Smith		Phone ( ) Email	
Address 4420 Tanforan Ave.	City Midland	State TX	Zip 79707

Property Owner Printed Name: Same as applicant		Phone ( ) Email	
Address	City	State	Zip

Representative *(if different from Applicant or Property Owner)* Firm: Newton Engineering, PC Printed Name: Chase Dunnam		Phone (432) 559-5128 Email chase@newtoncivil.com	
Address 4501A Santa Rosa Dr.	City Midland	State TX	Zip 79707

Street Address: 4420 Tanforan Ave.

Legal Description
Lot: Block: Subdivision: Not currently platted

Current Zoning: AE

This property qualifies as an exception to the City Code because:

- ■ It is an expansion of a nonconforming use.
- ☐ There are existing nonconforming structures in the area.
- ☐ The addition of architectural or other projections of a minor extent.

Reason for Request: The 1.00 acre tract does not conform to the current zoning of AE due to size of the tract. It is currently unplatted, but we are in the process of platting the tract as one lot under the name of Melody Acres, Section 16.

Submittal and Fees

Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Site Plan showing:
  - Parking
  - Building Footprint
- Digital Copies of Site Plan (PDF/JPEG)

Signatures		
Applicant (signature):	Mark Smith	Date: 12/2/22
Applicant (printed):	Mark Smith	
Property Owner (signature):	Mark Smith	Date: 12/2/22
Property Owner (printed) :	Mark Smith	

The Special Exception shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared Chase Dunnam who, being by me duly sworn, upon oath says: That (s)he is authorized by Mark Smith, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

Chase Dunnam
Authorized Agent (*signature*)

Subscribed and sworn to before me, this 7 day of December, 2022, to certify which witness my hand and seal of office.

BIANCA M REYES
Notary ID #133704295
My Commission Expires
April 13, 2026

Bianca M. Reyes
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY

- ☑ Property Owner Authorization
- ☑ Application Fee
  Check # Authorization form
- ☑ Dimensioned Site Plan Plat
- ☑ Plans in Digital Format (PDF/JPEG) Plat

Received By: Landon Jones Date: DEC 07 2022

****Application will not be considered for scheduling until reviewed by a planner****

LEGAL DESCRIPTION
FOR A 1.00 ACRE TRACT
LOCATED IN THE SE/4 OF SECTION 7, BLOCK X,
H. P. HILLIARD SURVEY,
MIDLAND COUNTY, TEXAS.

BEING THAT SAME TRACT OF LAND AS DESCRIBED IN INSTRUMENT NUMBER 2010-3879, OFFICIAL PUBLIC RECORDS OF MIDALND COUNTY, TEXAS.

BOUNDARY BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

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THENCE N 14°29'34" W along the said east right-of-way line of Oriole Drive and the west line of said 1.0 acre tract, a distance of 264.40 feet to a ½" Iron rod found in the south line of a 15 foot alley and at the northwest corner of said 1.00 acre tract and this tract;

THENCE N 75°38'36" E along the south line of said alley and the north line of said 1.00 acre tract, a distance of 164.75 feet to a ½" Iron rod found at the northwest corner of Lot 2, Block 3, Melody Acres Fourth Section as recorded in Cabinet D, Page 387, Midland County Plat Records and at the northeast corner of said 1.00 acre tract and this tract;

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Bearings and Coordinates are relative to the Texas State Plane Coordinate System, 1983 NAD, Central Zone. Combined Grid Factor of 0.999914928 and a Theta Angle of -00°56'26".

This document was prepared under 22 TAC 663.21 and is not to be used to convey or establish interest in real property except those rights and interest implied or established by the creation or reconfiguration of the boundary of the political subdivision for which it was prepared.

Kelly Surveying Company



Dow E Kelly, R.P.L.S. 5707
9 December 2022

2532 Bainbridge Dr.
Odessa, Texas 79762
(432)-349-5894

SKETCH PLAT

MELODY ACRES, SECTION 16

BEING A PLAT OF A 1.00 ACRE TRACT OF LAND OUT OF THE SOUTHEAST QUARTER (SE/4) OF SECTION 7, BLOCK X, H.P. HILLIARD SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS



LOCATION MAP

N.T.S.

LEGEND

○ = SET 1/2" IRON ROD WITH PLASTIC CAP MARKED "RPLS 5707" UNLESS NOTED OTHERWISE

◎ = FOUND 1/2" IRON ROD UNLESS NOTED OTHERWISE

GRAPHIC SCALE

40 0 40 80

(IN FEET)
1 INCH = 40 FT.

LOT 9 BLOCK 7 GREEN HILL TERRACE, SECTION 5 CAB. "C", PG. 161

LOT 8 BLOCK 7 GREEN HILL TERRACE, SECTION 5 CAB. "C", PG. 161

ORIOLE DRIVE (60' ROW)

LOT 9 BLOCK 8 GREEN HILL TERRACE, SECTION 2 CAB. "C", PG. 75

LOT 8 BLOCK 8 GREEN HILL TERRACE, SECTION 2 CAB. "C", PG. 75

15' ALLEY

N75° 37' 22"E 164.92'

N: 10712410.21
E: 1730777.33

LOT 3
1.00 ACRES
43,759 SF

N14° 33' 33"W 267.52'

S14° 22' 45"E 264.51'

20' ALLEY

LOT 2 BLOCK 3 MELODY ACRES, SECTION 4 CAB. "D", PG. 387

LOT 5 BLOCK 7 GREEN HILL TERRACE CAB. "A", PG. 26

LOT 6 BLOCK 7 GREEN HILL TERRACE CAB. "A", PG. 26

LOT 7 BLOCK 7 GREEN HILL TERRACE CAB. "A", PG. 26

EX. 8" WATER LINE

FOUND 3/8" IRON ROD

S74° 34' 15"W 164.11'

EX. 6" WATER LINE

EX. 6" WATER LINE

P.O.B.
N: 10712110.33
E: 1730684.83

TANFORAN AVENUE
(60' ROW)

EX. 8" WATER LINE

EX. 12" WATER LINE

SARATOGA DRIVE
(60' ROW)

LOT 1 BLOCK 6 GREEN HILL TERRACE CAB. "A", PG. 26

LOT 1 BLOCK 4 MELODY ACRES, SECTION 5 CAB. "D", PG. 400

MICHAEL RAWLINS 1.00 ACRES

MICHAEL RAWLINS 1.75 ACRES

OWNER'S CERTIFICATE

STATE OF TEXAS
COUNTY OF MIDLAND

WHEREAS, MARK A. SMITH, is the record owner of a 1.00 acre tract of land out of the southeast quarter (SE/4) of Section 7, Block X, H.P. Hilliard Survey, City and County of Midland, Texas and being more particularly shown hereon.

Now, therefore, know all men by these presents:

That I, MARK A. SMITH, do hereby adopt this plat designating the hereinabove described property as MELODY ACRES, SECTION 16, an addition to the City of Midland, Texas, and hereby dedicate to the public use forever of the streets and easements shown hereon.

WITNESS my hand at Midland, Texas, this the _____day of _____, 2022

_____
MARK A. SMITH

ACKNOWLEDGEMENT

STATE OF TEXAS
COUNTY OF MIDLAND

This plat was acknowledged before me on _____, 2022 by MARK A. SMITH.

_____
Notary Public, State of Texas

OWNER:

MARK A. SMITH
4420 TANFORAN AVE.
MIDLAND, TEXAS 79707

PLAT FILED FOR RECORD
MIDLAND COUNTY, TEXAS

NO._____CABINET_____

DATE_____PAGE_____

UTILITY COMPANY CERTIFICATE:
This plat has been checked for accessibility of utilities.

Signed: _____ Oncor Electric Delivery Company

Signed: _____ Optimum

Signed: _____ A. T. & T.

Signed: _____ Astound Broadband

Signed: _____ Atmos Energy

PACKET

KELLY SURVEYING CO. †††

2532 BAINBRIDGE DR.
ODESSA, TX. 79762
(432) 349-5894
TBPLS FIRM#10194393

SURVEYOR'S CERTIFICATE

KNOW BY ALL MEN BY THESE PRESENTS THAT I, DOW E. KELLY, DO HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM AN ACTUAL AND ACCURATE SURVEY OF THE LAND AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PROPERLY PLACED UNDER MY SUPERVISION.

DATED:_____, 20___

_____
DOW E. KELLY, R.P.L.S. No. 5707

PRELIMINARY
THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT.
20 12 January 24, 2023

CERTIFICATE OF APPROVAL:
For approval by the Commission:

This is to certify that the above and foregoing plat of MELODY ACRES, SECTION 16 was approved by proper action of the Planning and Zoning Commission of the City of Midland, Texas. on this _____ day of _____, 2022.

Signed: _____
Lucy Sisniega, Chairman

Signed: _____
Elizabeth Shaughnessy, Secretary

NOTE:
1. SELLING A PORTION OF THIS ADDITION BY METES AND BOUNDS MAY BE A VIOLATION OF CITY ORDINANCE AND STATE LAW AND SUBJECT

2. BEARINGS/DISTANCES/COORDINATES REFERENCED TO THE TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE, NORTH AMERICAN DATUM OF 1983.

3. THIS PROPERTY IS LOCATED IN FLOOD ZONE X (UNSHADED) ACCORDING TO FIRM MAP NUMBER 48329C0040F DATED SEPTEMBER 16, 2005.

4. INITIAL IMPACT FEES WILL BE ASSESSED DURING THE FINAL PLATTING PROCESS. IMPLEMENTATION AND COLLECTION OF IMPACT FEES WILL TAKE PLACE DURING THE BUILDING PERMIT PROCESS. ADDITIONAL IMPACT FEES OR INCREASES IN FEES MAY NOT BE ASSESSED AGAINST THE TRACT UNLESS THE NUMBER OF SERVICE UNITS TO BE DEVELOPED ON THE TRACT INCREASES.

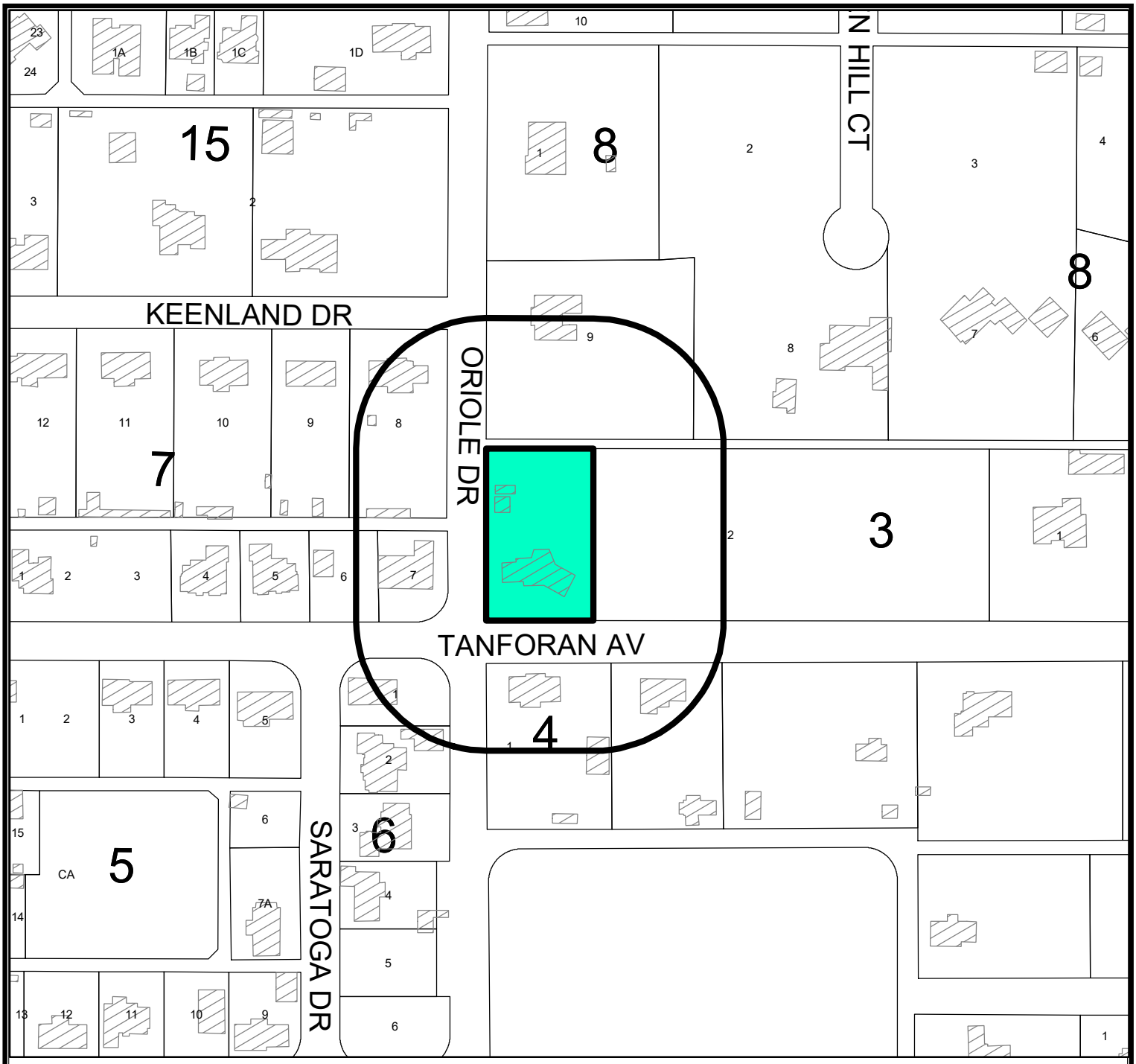
MELODY ACRES, SECTION 16

SCALE: 1" = 40'	DRAWN BY: CBD
DATE: DEC 2022	FILE NAME:

NEWTON ENGINEERING, PC
F-13856
4501A Santa Rosa Dr. Midland, Texas 79707
2481 E. 2nd St. Odessa, Texas 79761
(432)770-0499 (432)935-5707

SKETCH PLAT

PROJECT NUMBER 22-ME1301



LOCATION MAP

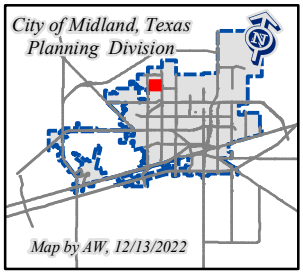
E-22-0090 **Scale: 1" = 200'**

Consider a request by Mark Smith for a Special Exception from the City of Midland Zoning Ordinance, Section 5.04 – Residential Zoning District Dimensional Regulations Chart, concerning the minimum lot area on a 1.00-acre tract of land out of the southeast quarter of Section 7, Block X, H.P. Hilliard Survey, City and County of Midland, Texas.

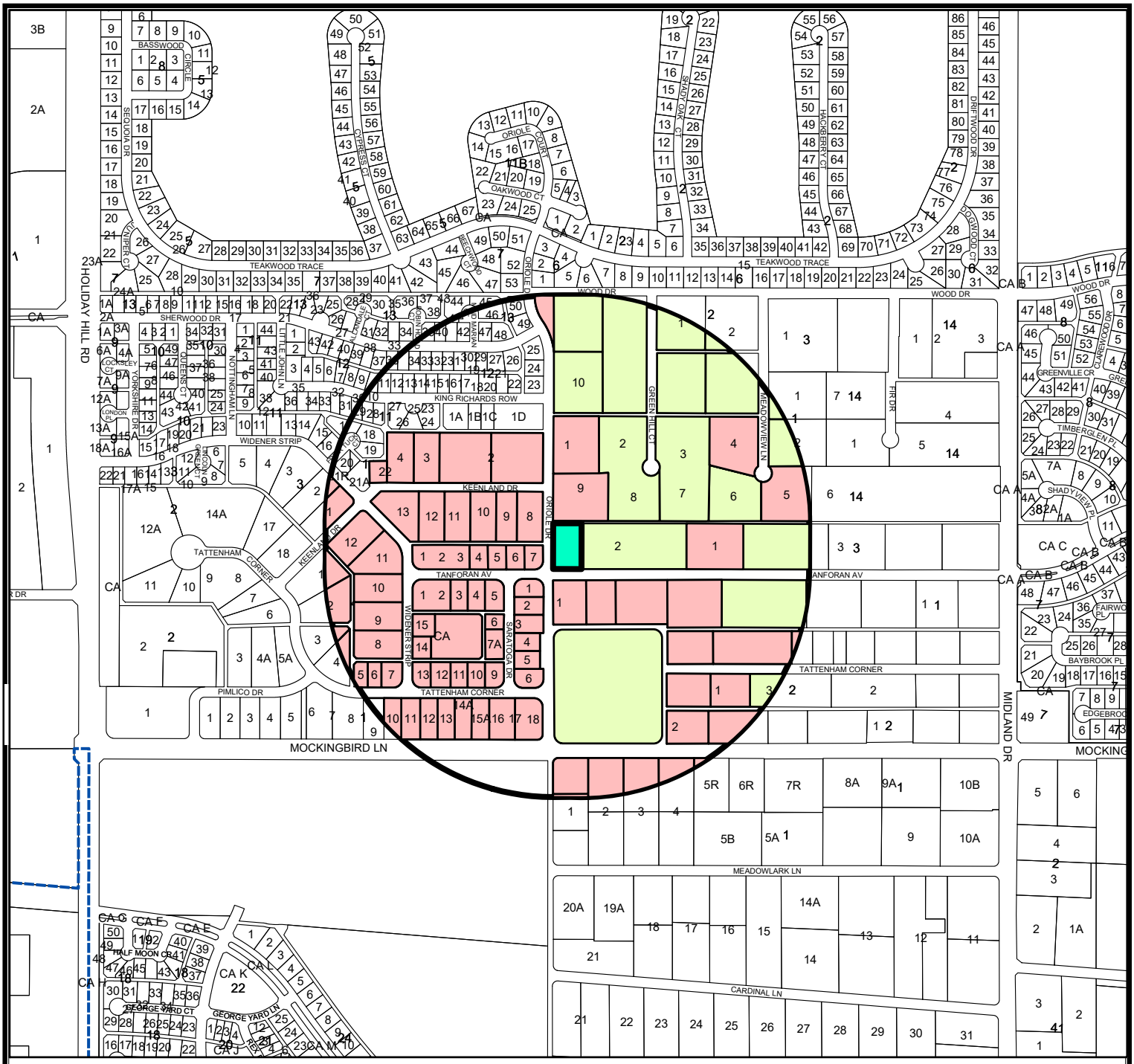
Generally located on the northeast corner of the intersection of Tanforan Avenue and Oriole Drive (Council District 4)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



©THE CITY OF MIDLAND - 2021
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LOCATION MAP

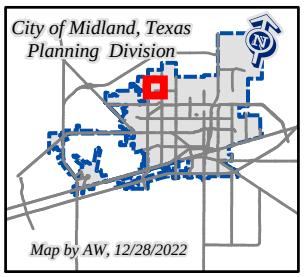
E-22-0090 **Scale: 1" = 200'**

Within the 1/4 mile buffer, there is a total of 101 properties zoned AE, Agricultural Estate District. 83% or 84 properties derived from the total properties are less than 2-acres, which is the required minimum size for AE zoning.

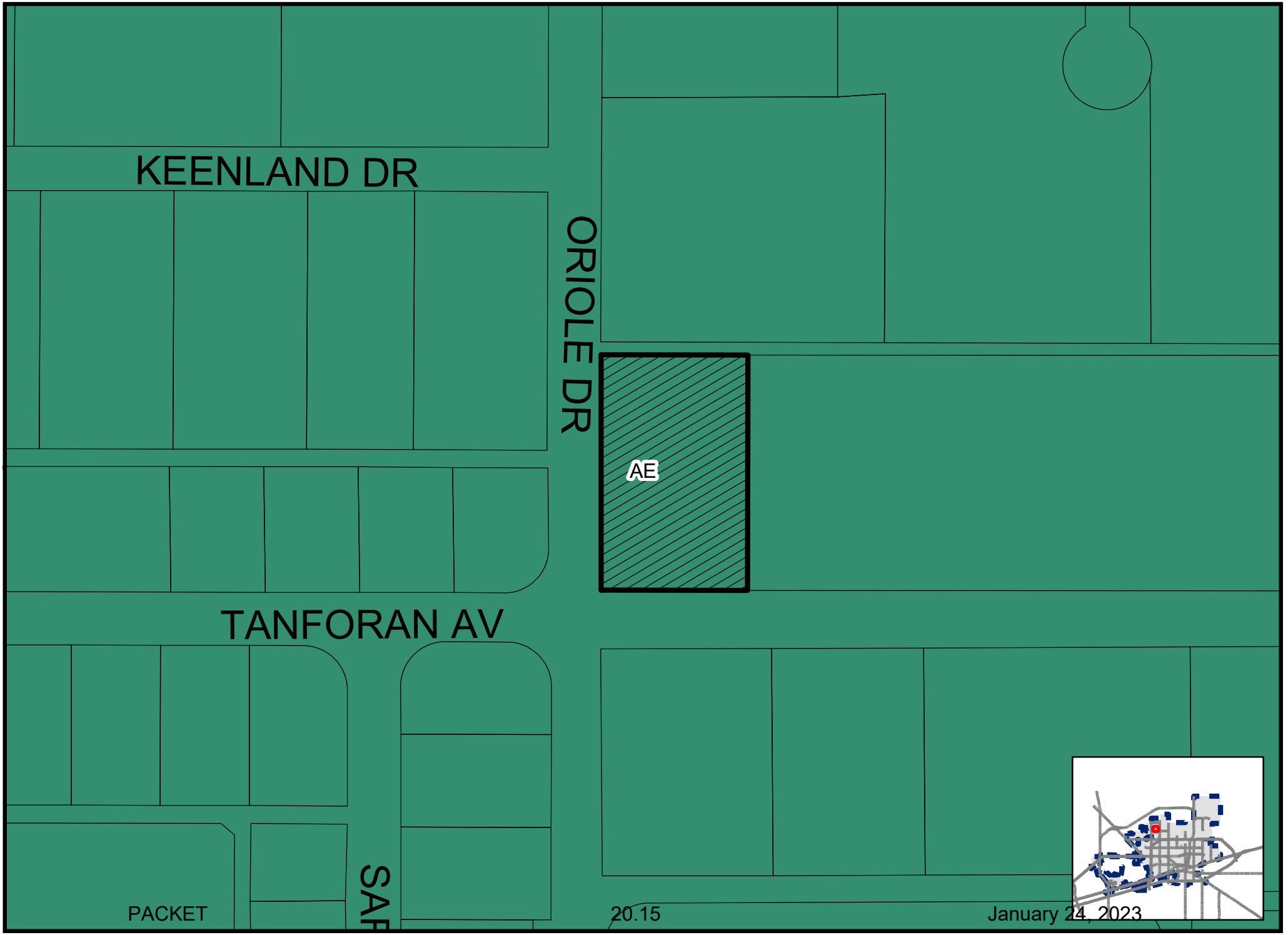
PACKET 20.14

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS
- LESS THAN 2 ACRES
- GREATER THAN 2 ACRES



January 24, 2023



Map By AW, 12/13/2022

E-22-0090

Scale: 1" = 200'

ZONING MAP

© THE CITY OF MIDLAND - 2021: THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.


SPEED
LIMIT
30






STOP



City Council Meeting

Item Number: 21

Meeting Date: January 24, 2023

To: City Council / City Manager

From: James Reber, Planner

Subject: **AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOTS 5 THROUGH 8, THE SOUTH 38 FEET OF LOT 9, AND A 0.067-ACRE PORTION OF ALLEY RIGHT-OF-WAY, BLOCK 17, KELVIEW HEIGHTS ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS, FROM LR, LOCAL RETAIL DISTRICT TO RR, REGIONAL RETAIL DISTRICT (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF LOMA DRIVE AND SCHARBAUER DRIVE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION (DISTRICT 3) (DEVELOPMENT SERVICES)**

Purpose:

The applicant, Maverick Engineering**,** is requesting a Zone Change from LR, Local Retail District, to RR, Regional Retail District, for the future development of a convenience store located at 2301 N Big Spring Street.

Recommended City Council Action:

Approve

Fiscal Impact:

This proposal does not have a significant financial impact to the City.

Current Zoning:

LR, Local Retail District in part, and RR, Regional Retail in part.

Surrounding Zoning and Land Use:

The properties to the north are zoned LR, Local Retail District. Properties to the east are zoned RR, Regional Retail District. Properties to the south are zoned PD, Planned Development District. Properties to the west are zoned MF-16, Multi-Family Dwelling District.

Discussion:

The property is located at 2301 N big Spring Street and is currently the location of retail/office in part, and parking in part. The current zoning is LR, Local Retail District in part, and RR, Regional Retail in part. The applicant is requesting this zone change to redevelop the property into a convenience store. Although both current zoning allows for the proposed land use, rezoning to one benefit future development. Additionally, they are in the process of replating the property into one lot and vacating the alley.

The applicant will be required to adhere to the site plan review standards outlined within the City of Midland Zoning Ordinance Section 5.05: - Nonresidential Zoning District Dimensional Regulations Chart as well as Chapter 9, Landscape Regulations for future landscaping.

This proposed zone change has been circulated to the respective City departments for internal review and their comments, conditions, and requirements are as follows:

Fire: (Approved)

No objections to zone change request

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2020 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary. Code versions are subject to change depending on time of new code edition adoption in the City of Midland and date of permit application.

Engineering: (Approved)

No objection to zone change.

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For Applicant's Information Only.]

Our staff has examined the FEMA flood map and it appears that this property lies almost entirely within Zone AE, which is a Special Flood Hazard Area subject to inundation by the 1% annual chance flood.

An elevation certificate based off of construction drawings will be required to get a building

permit to show compliance to the 1 foot of freeboard above the base flood elevation for residential structures. An elevation certificate based off of finish construction will be required for the Certificate of Occupancy. [For Applicant's Information Only.]

Code: (Approved)

No Oil and Gas Issues.

Transportation: (Approved)

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For the Applicant's information only.]

No objection to zone change. [For the Applicant's information only.]

Planning (Approved):

The City of Midland Planning Department supports this rezone because of the existing surrounding uses. The property is located along Big Spring Street and Scharbauer Drive. Most of the surrounding uses along this corridor are businesses, retail stores, convenience stores and restaurants. Additionally, the Tall City Tomorrow suggests directing higher intensity commercial uses along major streets. Thus, 2301 N Big Spring Street to RR, Regional Retail District, would fit the intended land use appropriately.

This request was recommended for approval by the Planning and Zoning Commission on January 3, 2023.

Staff recommends approval of this zone change from LR, Local Retail District, to RR, Regional Retail District, subject to condition A.

Conditions:

A. **That the use and development of this property shall conform to the regulations of the RR, Regional Retail District.**

Letters of Objection:

Staff has not received any letters of objection as of January 11, 2023.

Attachments:

Application

Metes and Bounds (Exhibit A)
Maps

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOTS 5 THROUGH 8, THE SOUTH 38 FEET OF LOT 9, AND A 0.067-ACRE PORTION OF ALLEY RIGHT-OF-WAY, BLOCK 17, KELVIEW HEIGHTS ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS, FROM LR, LOCAL RETAIL DISTRICT TO RR, REGIONAL RETAIL DISTRICT (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF LOMA DRIVE AND SCHARBAUER DRIVE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, in compliance with the City Charter, the City Code, and State law, have given the requisite notices by United States mail, publication and otherwise; and after a full and fair hearing to all of the property owners generally and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body finds that the public health, safety and general welfare will be best served by rezoning Lots 5 through 8, the south 38 feet of Lot 9, and a 0.067-acre portion of alley right-of-way, Block 17, Kelview Heights Addition, City and County of Midland, Texas (the "Property"), said Property being more specifically described by metes and bounds in Exhibit "A", which is attached hereto and incorporated herein, to RR, Regional Retail District, as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is hereby amended to rezone the Property from LR, Local Retail District to RR, Regional Retail District.

SECTION TWO. That the definitions given in the zoning regulations contained in the City Code of the City of Midland, Texas, shall be applicable to such of those terms as are

used herein.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the

following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

EXHIBIT "A"

MAVERICK
ENGINEERING · SURVEY · WATER RESOURCES
1909 West Wall Street, Suite K · Midland, TX 79701
Tel: 432.262.0999 · Fax: 432.262.0989 · maverick-eng.com
ENGINEER FIRM #: F-15089 | SURVEY FIRM #:10194514

FIELD NOTE DESCRIPTION OF A 1.102 ACRE TRACT OF LAND BEING FULLY DESCRIBED AS LOTS 5-8, THE SOUTH 38 FEET OF LOT 9, AND A 0.067 ACRE PORTION OF PUBLIC ALLEY RIGHT OF WAY, BLOCK 17, KELVIEW HEIGHTS, AN ADDITION TO THE CITY OF MIDLAND, ACCORDING TO THE MAP OR PLAT THEREOF FILED IN CABINET A, PAGE 47, PLAT RECORDS OF MIDLAND COUNTY, TEXAS, ALSO BEING THE CALLED LOT 15, BLOCK 17 OF THE PROPOSED KELVIEW HEIGHTS ADDITION, SECTION 13, AN UNRECORDED SUBDIVISION OF MIDLAND COUNTY, AND BEING MORE PARTICULARLY DESCRIBED BY METES & BOUNDS FOR RERFERENCE AS FOLLOWS;

BEGINNING AT N.(y): 10,702,673.48, E.(x): 1,754,702.51, A PK NAIL WITH WASHER STAMPED "CEI ENG ASSOC" (CEI) FOUND FOR A POINT INTERIOR TO SAID RECORD LOT 7, SITAUTED ON THE APPARENT NORTH RIGHT OF WAY LINE OF WEST SCHARBAUER AVENUE, AND FOR THE SOUTH-SOUTHWEST CORNER HEREOF, SAME BEING A POINT OF CONVEX CURVATURE FOR A CURVE TO THE RIGHT HAVING A RADIUS OF 30.00 FEET, A CHORD BEARING OF N.51°18'58"W., AND A CHORD DISTANCE OF 35.96 FEET;

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THENCE N.14°23'32"W., ALONG THE EAST LINE OF LOMA DRIVE, 175.09 FEET TO A POINT SET IN THE WEST LINE OF SAID LOT 9, FOR THE WEST-NORTHWEST CORNER HEREOF;

THENCE N.75°36'31"E., SEVERING SAID LOT 9, 140.05 FEET TO AN "RPC" SET IN THE WEST LINE OF A RECORD 20 FOOT WIDE NORTH-SOUTH ALLEY RIGHT OF WAY, SAME BLOCK, FOR AN INTERIOR CORNER HEREOF;

THENCE N.75°35'17"W., SEVERING SAID 20 FOOT ALLEY, 20.00 FEET, TO AN "RPC" SET IN THE WEST LINE OF SAID LOT 5, FOR AN INTERIOR CORNER HEREOF;

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THENCE N.75°35'39"E., ALONG THE SOUTH LINE OF SAID LOT 4, 140.03 FEET TO A SPIKE NAIL WITH WASHER FOUND FOR THE COMMON EAST CORNER OF SAID LOTS 4 AND 5, A POINT IN THE WEST RIGHT OF WAY LINE OF NORTH BIG SPRING STREET (TX HWY 349), AND FOR THE NORTHEAST CORNER HEREOF;

THENCE S.14°20'27"E., ALONG THE WEST LINE OF NORTH BIG SPRING STREET RIGHT OF WAY, 103.11 FEET TO A "CEI" FOUND AT A POINT IN THE EAST LINE OF THE RECORD LOT 6, AND FOR THE EAST-SOUTHEAST CORNER HEREOF, SAME BEING A POINT OF CONVEX CURVATURE FOR A CURVE TO THE RIGHT HAVING A RADIUS OF 30.00 FEET, A CHORD BEARING OF S.24°39'07"W., AND A CHORD DISTANCE OF 37.75 FEET;

THENCE ALONG THE ARC OF SAID CURVE, 40.83 FEET TO A SPIKE NAIL WITH WASHER FOUND FOR A POINT INTERIOR TO SAID LOT 6, SITUATED ON THE NORTH RIGHT OF WAY LINE OF WEST SCHARBAUER DRIVE, AND FOR THE SOUTH-SOUTHEAST CORNER HEREOF, SAME BEING A POINT OF CONCAVE REVERSE CURVATURE FOR A CURVE TO THE LEFT HAVING A RADIUS OF 949.45 FEET, A CHORD BEARING OF N.55°27'39"E., AND A CHORD DISTANCE OF 271.17 FEET;

THENCE ALONG THE ARC OF SAID CURVE, AT 120.57 FEET PASSING A SPIKE NAIL WITH WASHER FOUND, AND AT 141.88 FEET PASSING A "CEI" FOUND, IN ALL 272.10 FEET TO THE **POINT OF BEGINNING**, CONTAINING 1.102 ACRES, OR 48,020 SQUARE FEET OF LAND.

November 29, 2022

Gregory W. Shoults
www.maverick-eng.com
Texas RPLS - No. 5356
Maverick Engineering (FIRM – No. 10194514)



MIDLAND Planning Division

Zone Change/Planned District Amendment/Site Plan Approval

Project Number: Z-22-0316

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: STAGG INVESTMENT GROUP - GARY GLASSCOCK		Phone ( ) Email	
Address: 203 W. WALL STREET, STE. 1200	City: MIDLAND	State: TX	Zip: 79701

Property Owner Printed Name: SEE APPLICANT		Phone ( ) Email	
Address	City	State	Zip

Representative *(if different from Applicant or Property Owner)* Firm: MAVERICK ENGINEERING Printed Name: ANDREW L. MELLEN, P.E.		Phone (432-) 262-0999 Email phuckaba@maverick-eng.com	
Address: 1909 W. WALL ST. STE. K	City: MIDLAND	State: TX	Zip: 79701

Street Address: 2301 N. BIG SPRING STREET

Legal Description SEE INCLUDED METES & BOUNDS
Lot: 5-9 Block: 17 Subdivision: KELVIEW HEIGHTS ADDITION

Current Zoning: LR & RR

Proposed Zone: RR
(List by tracts if more than one district is requested)

Reason for Zone Change Request: ADVANCE THE DEVELOPMENT AS PROPOSED

Present Use of Property: RETAIL/OFFICES IN PART. PARKING IN PART

Proposed Use of Property: RETAIL

How would this zone change affect the public health, safety and welfare? NO ADVERSE AFFECT

Describe how conditions affecting the property have changed since present zoning designation: NO CHANGES

Submittal and Fees

Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Site Plan
- Digital Copies of Site Plan (PDF/JPEG)

RECEIVED
DEC 01
BY: JR

Signature *(by property owner only – authorized agent must sign affidavit below)*	
Applicant (signature):	Date:
Applicant (printed):	
Property Owner (signature):	Date: 11/30/2022
Property Owner (printed) : GARY GLASSCOCK - STAGG INVESTMENT GROUP	

The Zone Change/Planned District Amendment/Site Plan Approval shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared ANDREW L. MELLEN who, being by me duly sworn, upon oath says: That (s)he is authorized by STAGG INVESTMENT GROUP, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

Andrew L. Mellen
Authorized Agent (*signature*)

Subscribed and sworn to before me, this 1st day of DECEMBER, 20 22, to certify which witness my hand and seal of office.

Kelsey Ann Lewis
My Commission Expires
2/19/2026
Notary ID
131456388

Kelsey Lewis
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY

☑ Property Owner Authorization	☑ Dimensioned Site Plan
☑ Application Fee	☑ Plans in Digital Format (PDF/JPEG)
Check # 3952	
Received By: James Reber	Date: 12/1/22

RECEIVED
DEC 01 2022
BY: SR

Application will not be considered for scheduling until reviewed by a planner.

MAVERICK
ENGINEERING · SURVEY · WATER RESOURCES
1909 West Wall Street, Suite K · Midland, TX 79701
Tel: 432.262.0999 · Fax: 432.262.0989 · maverick-eng.com
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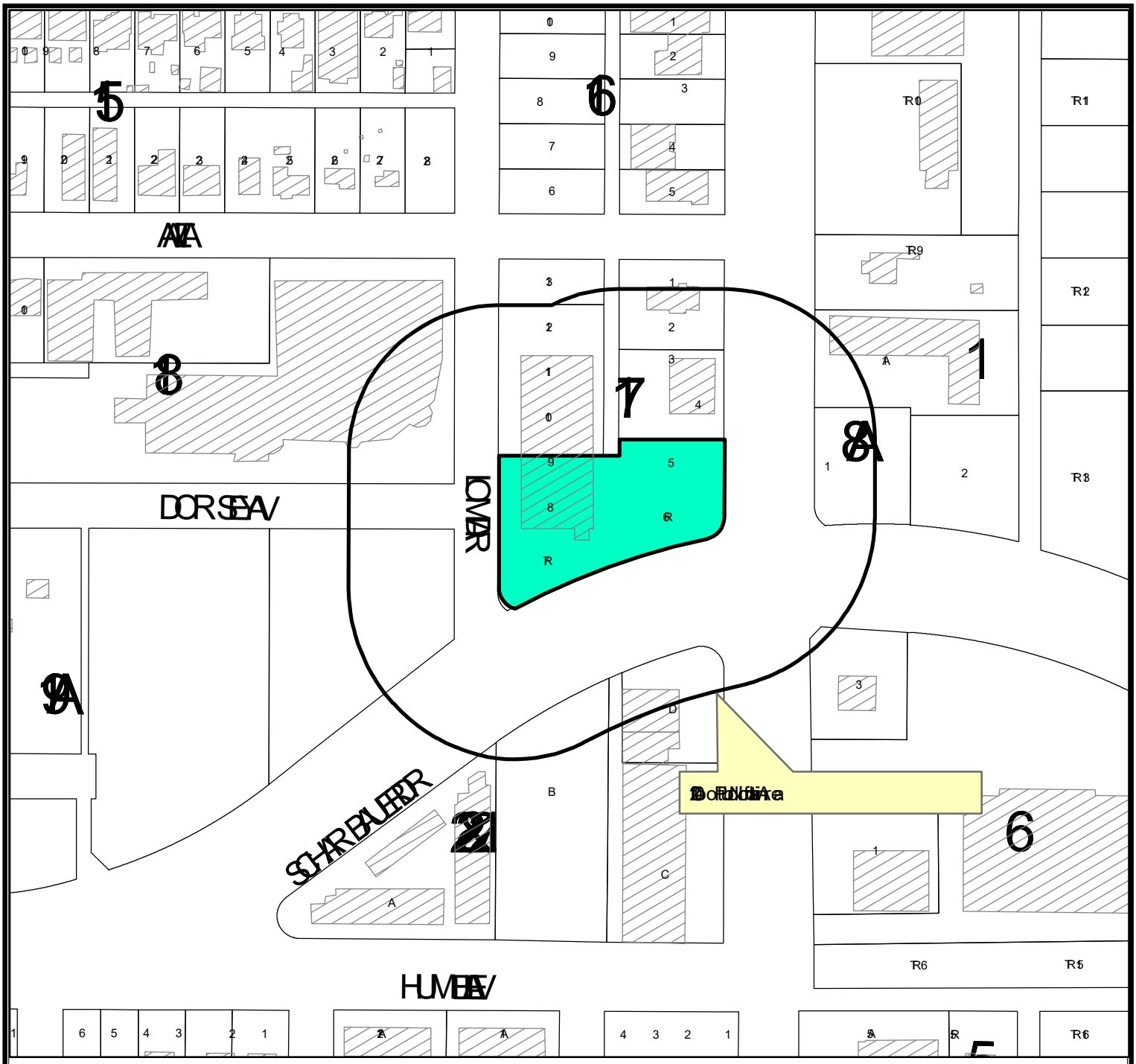
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November 29, 2022

Gregory W. Shoults
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Texas RPLS - No. 5356
Maverick Engineering (FIRM – No. 10194514)





LOCATION MAP

Z-22-0316 **Scale: 1" = 200'**

Consider a request by Maverick Engineering for a zone change from LR, Local Retail District, to RR, Regional Retail District, on Lots 5-8, the South 38 feet of Lot 9, and a 0.067 acre portion of public alley right of way, Block 17, Kelview Heights, City and County of Midland, Texas.

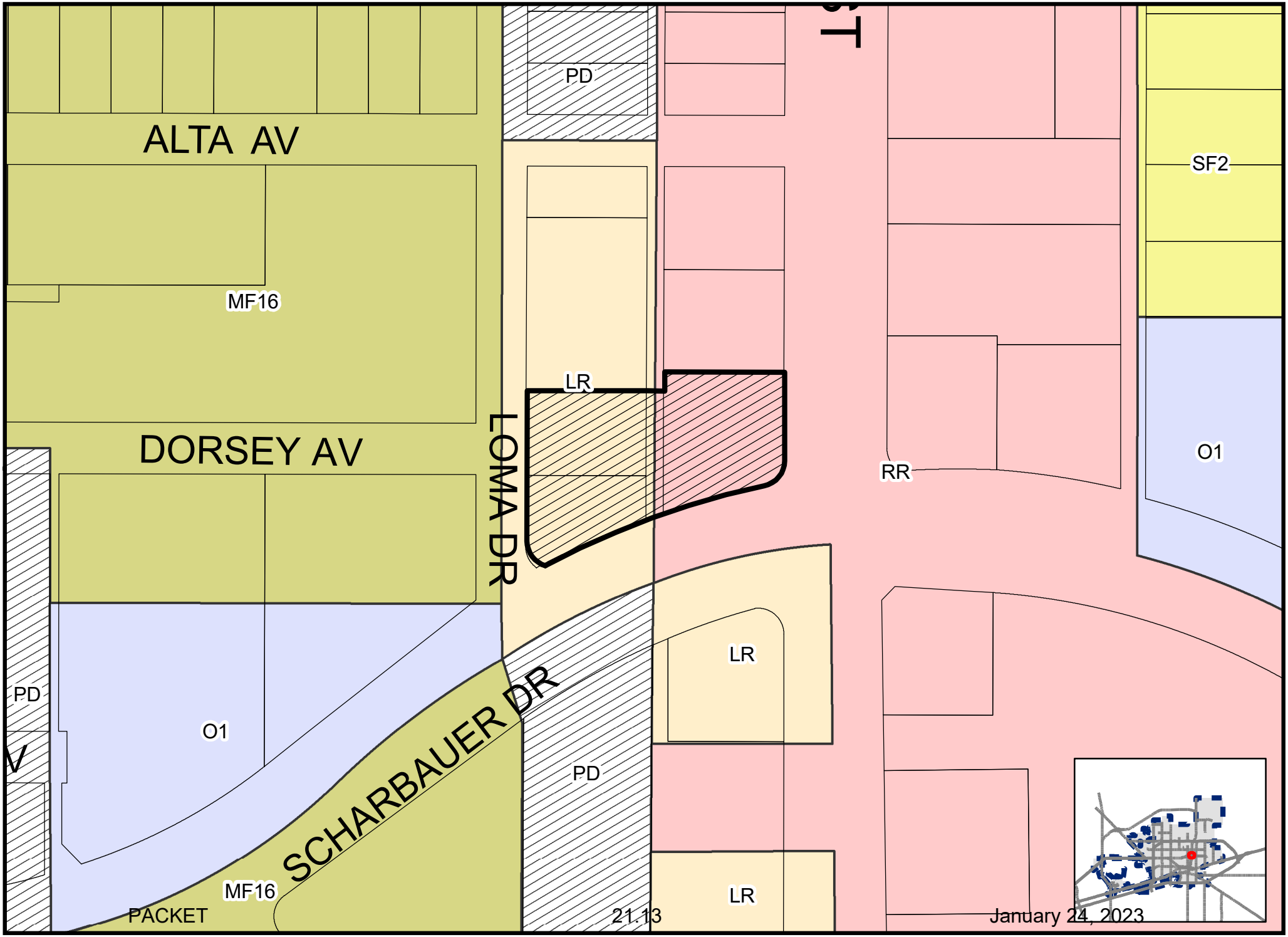
Generally located on the northeast corner of the intersection of Loma Drive and Scharbauer Drive. (Council District 3)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



©THE CITY OF MIDLAND - 2021
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Map By JR, 12/27/2022

Z-22-0316

Scale: 1" = 200'

ZONING MAP

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348 W Scharbauer Dr
Midland, Texas
Google
Street View - Aug 2022
Neely Ave
Alta Ave
Dorsey Ave
Sonic Drive-In
Google






Kelsheau Heights
BAPTIST CHURCH

City Council Meeting

Item Number: 22

Meeting Date: January 24, 2023

To: City Council / City Manager

From: Alexandra Walling, Planner

Subject: AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOT 1, BLOCK 4, BERKSHIRE PLACE, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF SINCLAIR AVENUE AND NORTH N STREET), BY PERMITTING A REDUCED MINIMUM SIDE YARD SETBACK ON THE EAST SIDE OF THE LOT; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 3) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Austin Butler, is requesting a Special Exception from the City of Midland Zoning Ordinance, Section 5.04 – Residential Zoning District Dimensional Regulations Chart, concerning the minimum side yard setback for the property located at 2201 Sinclair Avenue.

Recommended City Council Action:

Approve

Fiscal Impact:

No City funds are required to process this request.

Discussion:

The applicant's property is located at 2201 Sinclair Avenue and is the location of a single-family house. The applicant is requesting a special exception to the minimum side yard setback for a corner (exterior) lot. The property is zoned SF1, Single-Family Dwelling District.

As mentioned previously the property is zoned SF1, Single-Family Dwelling District and does not meet the minimum side yard setback for a corner (exterior) lot. Per our City of Midland Zoning Ordinance, *Section 5.04 –Residential Zoning District Dimensional Regulations Chart:*

SF1, Single-Family Dwelling District
Yard Setback Dimensions
Minimum Side Yard Setback
Corner Lot – Exterior (Street) Yard: 10 (ten) ft.

Many of the surrounding lots do not comply with the current minimum side yard setbacks for SF1, Single-Family Dwelling District. Three properties to the northeast have received a special exception from the City of Midland zoning ordinance for side yard setbacks.

This request has been circulated to all pertinent City departments for review. Below are the departments' comments.

Engineering: (Approved)

No objections. [For Applicant's Information Only.]

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For Applicant's Information Only.]

Transportation: (Approved)

No objections. [For the Applicant's information only.]

Fire: (Approved)

No objections.

Code Compliance: (Approved)

No Oil and Gas issues.

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2020 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary. Code versions are subject to change depending on time of new code edition adoption in the City of Midland and date of permit application.

Planning Analysis:

While this request represents a deviation from the existing Zoning Ordinance, due to the unique circumstances surrounding the lot in question, staff is recommending approval of this application for a Special Exception to the City of Midland Zoning Ordinance, *Section 5.04 - Residential Zoning District Dimensional Regulations Chart*. This tract of land has been zoned in a way that prohibits further development. The city has inadvertently restricted this property and others around it to modify existing developments under the current zoning ordinance.

Due to these factors, staff is recommending approval of this special exception subject to condition A and B.

Condition:

A. **That the minimum side yard setback on the east side of the lot shall be five feet 4.75 inches (5'4.75").**
B. **That the locations of all structures shall significantly conform to the conditions shown on Exhibit "A", which is attached hereto and incorporated herein.**

Letters of Objection:

As of January 11, 2023, staff has not received any letters of objection.

Attachments:

Application
Survey (Exhibit A)
Maps

Robert Patrick

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOT 1, BLOCK 4, BERKSHIRE PLACE, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF SINCLAIR AVENUE AND NORTH N STREET), BY PERMITTING A REDUCED MINIMUM SIDE YARD SETBACK ON THE EAST SIDE OF THE LOT; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS ($2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION

WHEREAS, the City Council modified the authority of the Board of Adjustment in Title XI, Chapter 1, Section 7 ("Section 11-1-7") of the Midland City Code; and

WHEREAS, Section 11-1-7 provides for the consideration of requests for special exceptions to the Midland Zoning Ordinance; and

WHEREAS, the Council finds that satisfactory evidence has been presented that the use to be authorized by the granting of the special exception will not be detrimental to the health, safety, comfort and welfare of the occupants of the land area near the tract on which the use to be allowed by special exception will be located; and

WHEREAS, the Council finds that it is clearly and specifically authorized by the terms of Section 11-1-7 to grant such a special exception, and said exception will be in harmony with the general purposes and intent of the zoning provisions of the Midland City Code; and

WHEREAS, after a full and fair public hearing at which all parties in interest were offered an opportunity to be heard, all pursuant to law, the Council finds it to be in the public interest to grant a special exception to the Zoning Ordinance, pursuant to Section 11-1-7, for the purposes herein stated, subject to special conditions;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That a special exception is hereby granted for the property described as Lot 1, Block 4, Berkshire Place, City and County of Midland, Texas. Said special exception shall allow a reduced minimum side yard setback on the east side of the lot.

SECTION TWO. Said special exception is subject to the following special conditions:

A. That the minimum side yard setback on the east side of the lot shall be five feet 4.75 inches (5' 4.75").

B. That the locations of all structures shall significantly conform to the conditions shown on Exhibit "A", which is attached hereto and incorporated herein.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars ($2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to file this ordinance with the Office of the County Clerk for purposes of recordation.

SECTION SEVEN. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed

by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

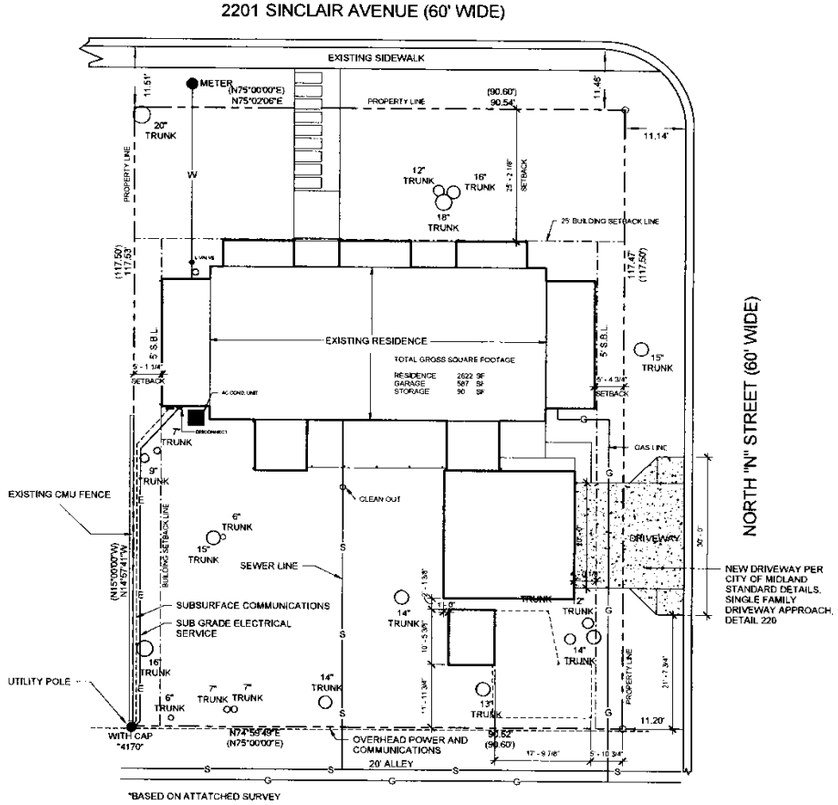
APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

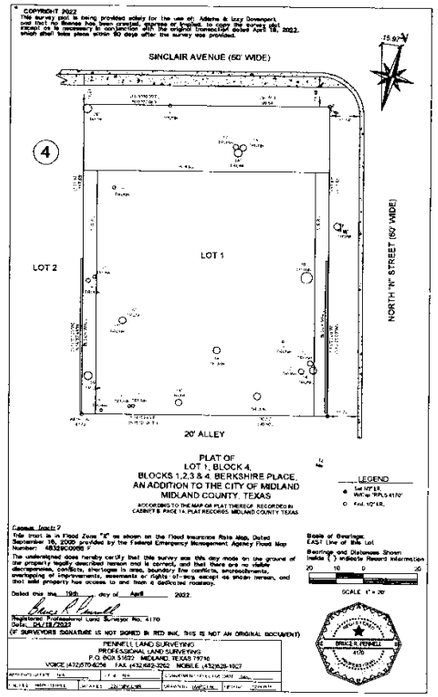
_____
John Ohnemiller, City Attorney

EXHIBIT "A"



1 SITE PLAN
1" = 10'-0"

LEGEND:
EXISTING BUILDING
NEW CONSRTUCTION



2 SURVEY
1" = 20'-0"

Generated by RESCheck-Web Software

Compliance Certificate

Project 2201 Sinclair Avenue

Energy Code:	2015 IECC
Location:	Midland, Texas
Construction Type:	Single-family
Project Type:	Addition
Orientation:	Bldg. Faces 344 deg. from North
Climate Zone:	3 (2570 HDD)
Permit Date:	
Permit Number:	

Construction Site:
2201 Sinclair Avenue
Midland, Texas 79705

Owner/Agent:

Designer/Contractor:
Rhotenberry Weiten Architects
1102 West Texas Avenue
Midland Texas 79701
4326821252

Compliance: Passes using UA trade-off

Compliance: 3.0% Better Than Code — Maximum UA: 338 — Your UA: 327 — Maximum SHGC: 0.39 — Your SHGC: 0.36

This is based on Mainly Plan Code Index values. Any change to compliance the house is based on total trade-off rule. It DOES NOT guarantee an estimate of energy use or cost relative to a minimum code home.

Slab-on-grade (radon)R, are no longer considered in the UA or performance compliance path in RESCheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R value and depth requirements

Envelope Assemblies

Assembly	Cav. R-Value in Parameter	Cavity R-Value	Cont. R-Value	Area	Req. U-Factor	Prop. UA	Req. UA
Flat Ceiling: Flat Ceiling w/ Scissor Truss		038	35.0	0.0	0.031	0.030	25	25
Ceiling: Cathedral Ceiling		1,963	35.0	0.0	0.029	0.030	52	54
Skylight: Wood Frame SHGC: 0.20		6			0.550	0.550	4	4
NORTH WALLS: Wood Frame, 16" o.c. Orientation: Front		420	20.4	0.0	0.058	0.060	18	19
North: Windows (5): Wood Frame SHGC: 0.20 Orientation: Front		109			0.350	0.350	38	38
NORTH DOUBLE WALL: Wood Frame, 16" o.c. Orientation: Front		119	20.4	0.0	0.058	0.060	7	7
EAST WALLS: Wood Frame, 16" o.c. Orientation: Right side		382	20.4	0.0	0.058	0.060	18	18
East Glass Doors (2): Glass Door (over 50% glazing) SHGC: 0.20 Orientation: Right side		40			0.330	0.350	13	14
East: Rain Windows (4): Metal Frame SHGC: 0.20 Orientation: Right side		35			0.330	0.350	12	12
EAST DOUBLE WALL: Wood Frame, 16" o.c. Orientation: Right side		158	20.4	0.0	0.058	0.060	9	9
SOUTH WALLS: Wood Frame, 16" o.c. Orientation: Back								
South: Window: Wood Frame SHGC: 0.20 Orientation: Back		25			0.350	0.350	9	9
SOUTH DOUBLE WALL: Wood Frame, 16" o.c. Orientation: Back		282	20.4	0.0	0.058	0.060	16	16
South Double Wall - Glass Door: Glass Door (over 50% glazing) SHGC: 0.20 Orientation: Back		20			0.330	0.350	7	7
South Double Wall - Window: Wood Frame SHGC: 0.20 Orientation: Back		74			0.350	0.350	26	26
South Double Wall - Rain Windows (2): Metal Frame SHGC: 0.20 Orientation: Back		18			0.330	0.350	6	6
WEST WALLS: Wood Frame, 16" o.c. Orientation: Left side		359	20.4	0.0	0.058	0.060	21	18
West Glass Doors (2): Glass Door (over 50% glazing) SHGC: 0.20 Orientation: Left side		40			0.330	0.350	13	14
West: Rain Windows (3): Metal Frame SHGC: 0.20 Orientation: Left side		26			0.330	0.350	9	9
WEST DOUBLE WALL: Wood Frame, 15" o.c. Orientation: Left side		155	20.4	0.0	0.058	0.060	9	9
FLOOR 1: Slab-On-Grade (Unheated) Insulation Depth: 0.7'		246		0.0	1.042	1.042	0	0

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2015 IECC requirements in RESCheck Version: RESCheck-Web and to comply with the mandatory requirements noted in the RESCheck inspection Checklist.

MARK T. WELLEN — Name - Title — Signature — 12-9-22 Date

RESCHECK
1/4" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

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1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

rwa
rhotenberry
weiten
architects

DAVENPORT RESIDENCE
2201 SINCLAIR AVENUE
MIDLAND, TEXAS

JOB NO. 2218
DRAWING TITLE
SITE PLAN
REVISIONS
DATE
DRAWN BY Author
CHECKED BY Checker
SHEET NO.
SD-100

MIDLAND Planning Division

Special Exception Application

Project Number: E-22-0091

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Austin Butler		Phone (325) 386-5635 Email austin@butlerco.build	
Address 1273 Canterbury Dr	City Abilene	State TX	Zip 79602

Property Owner Printed Name: Adams Davenport		Phone (432) 553-5049 Email adavenport@btaoil.com	
Address 104 South Pecos	City Midland	State TX	Zip 79701

Representative *(if different from Applicant or Property Owner)* Firm: _____ Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Street Address: 2201 Sinclair Ave, Midland, TX 79701

Legal Description
Lot: 1 Block: 4 Subdivision: Berkshire Place

Current Zoning:

This property qualifies as an exception to the City Code because:

- ☐ It is an expansion of a nonconforming use.
- ☐ There are existing nonconforming structures in the area.
- ☒ The addition of architectural or other projections of a minor extent.

Reason for Request: Requesting exception for side yard setback as survey shows 10' setback for this lot. See attached site plan and survey plan on SD100.

Submittal and Fees

Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Site Plan showing:
  - Parking
  - Building Footprint
- Digital Copies of Site Plan (PDF/JPEG)

Signatures	
Applicant (signature):	Date: 12.16.2022
Applicant (printed): Austin Butler	
Property Owner (signature):	Date:
Property Owner (printed) : Adams Davenport	

The Special Exception shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared _____ who, being by me duly sworn, upon oath says: That (s)he is authorized by _____, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

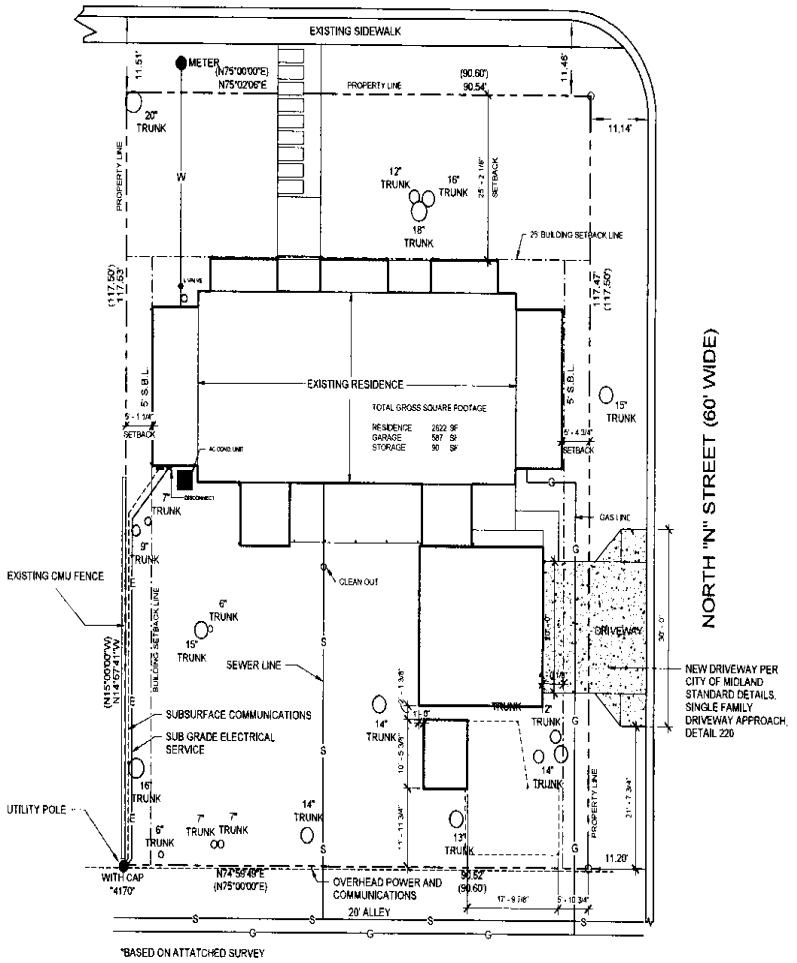
_____
Authorized Agent (*signature*)

Subscribed and sworn to before me, this _____ day of _____, 20 ___, to certify which witness my hand and seal of office.

_____
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY	
☐ Property Owner Authorization	☐ Dimensioned Site Plan
☐ Application Fee	☐ Plans in Digital Format (PDF/JPEG)
Check #_____	
Received By:	Date:

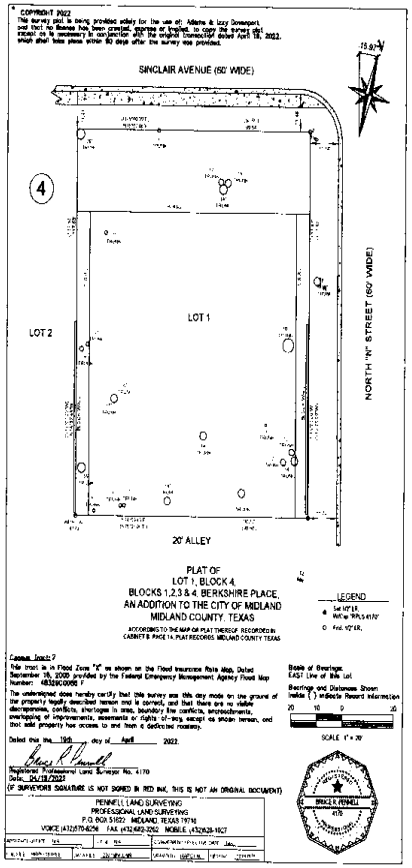
****Application will not be considered for scheduling until reviewed by a planner.****



*BASED ON ATTATCHED SURVEY

1 SITE PLAN
1" = 10'-0"

LEGEND:
- EXISTING BUILDING
- NEW CONSRTUCTION



2 SURVEY
1" = 20'-0"

Generated by REScheck-Web Software

Compliance Certificate

Project: 2201 Sinclair Avenue

Energy Code:	2015 IECC
Location:	Midland, Texas
Construction Type:	Single-family
Project Type:	Addition
Orientation:	Bldg. Faces 344 deg. from North
Climate Zone:	3 (2870 HDD)
Permit Date:	
Permit Number:	

Construction Site:
2201 Sinclair Avenue
Midland, Texas 79705

Owner/Agent:

Designer/Contractor:
Rhodenberry Wellen Architects
1102 West Texas Avenue
Midland, Texas 79701
4326821252

Compliance: Passing UA trade-off

Compliance: 3.8% Better Than Code — Maximum UA: 338 — Your UA: 312 — Maximum SHGC: 0.25 — Your SHGC: 0.20

This is Report is Where Plan Code Index reflects how close to compliance the house is based on code trade-off rules. A HERS REF provides an estimate of energy use or cost relative to a reference code home.

Slab-on-grade is a path in which energy use is no longer considered in the UA or performance compliance path in REScheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R value and depth requirements.

Envelope Assemblies

Assembly	Cavity Ins. R-Value	Framing Fraction	Gross Area	Gross UA	Proposed UA	Code UA
Flat Ceiling: Flat Ceiling or Scissor Truss	38	35.0	0.0	0.031	0.030	25
Ceiling: Cathedral Ceiling	1,903	35.0	0.0	0.029	0.030	52
Skylight: Wood Frame SHGC: 0.20	0			0.550	0.550	4
NORTH WALLS: Wood Frame: 16" o.c. Orientation: Front	420	20.4	0.0	0.058	0.060	18
North: Windows (1): Wood Frame SHGC: 0.20 Orientation: Front	109			0.350	0.350	38
NORTH DOUBLE WALL: Wood Frame, 16" o.c. Orientation: Front	119	20.4	0.0	0.058	0.060	7
EAST WALLS: Wood Frame, 16" o.c. Orientation: Right side	382	20.4	0.0	0.058	0.060	18
East Glass Doors (2): Glass Door (over 50% glazing) SHGC: 0.20 Orientation: Right side	40			0.330	0.350	13
East - Ram Windows (4): Metal Frame SHGC: 0.20 Orientation: Right side	35			0.330	0.350	12
EAST DOUBLE WALL: Wood Frame, 16" o.c. Orientation: Right side	158	20.4	0.0	0.058	0.060	9
SOUTH WALLS: Wood Frame, 16" o.c. Orientation: Back						
South - Window: Wood Frame SHGC: 0.20 Orientation: Back	25			0.350	0.350	9
SOUTH DOUBLE WALL: Wood Frame, 16" o.c. Orientation: Back	282	20.4	0.0	0.058	0.060	10
South Double Wall - Glass Door: Glass Door (over 50% glazing) SHGC: 0.20 Orientation: Back	20			0.330	0.350	7
South Double Wall - Window: Wood Frame SHGC: 0.20 Orientation: Back	74			0.350	0.350	26
South Double Wall - Ram Windows (2): Metal Frame SHGC: 0.20 Orientation: Back	18			0.330	0.350	6
WEST WALLS: Wood Frame, 16" o.c. Orientation: Left side	358	20.4	0.0	0.058	0.060	17
West Glass Doors (2): Glass Door (over 50% glazing) SHGC: 0.20 Orientation: Left side	40			0.330	0.350	13
West - Ram Windows (3): Metal Frame SHGC: 0.20 Orientation: Left side	26			0.330	0.350	9
WEST DOUBLE WALL: Wood Frame, 16" o.c. Orientation: Left side	155	20.4	0.0	0.058	0.060	9
FLOOR 1: Slab-On-Grade (Unheated) Insulation Depth: 0.0	246		0.0	1.042	1.042	0

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2015 IECC requirements in REScheck Version: REScheck-Web and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Mark T. Wellen — Name - Title
Signature
10-9-22 — Date

RESCHECK
1/4" = 1'-0"

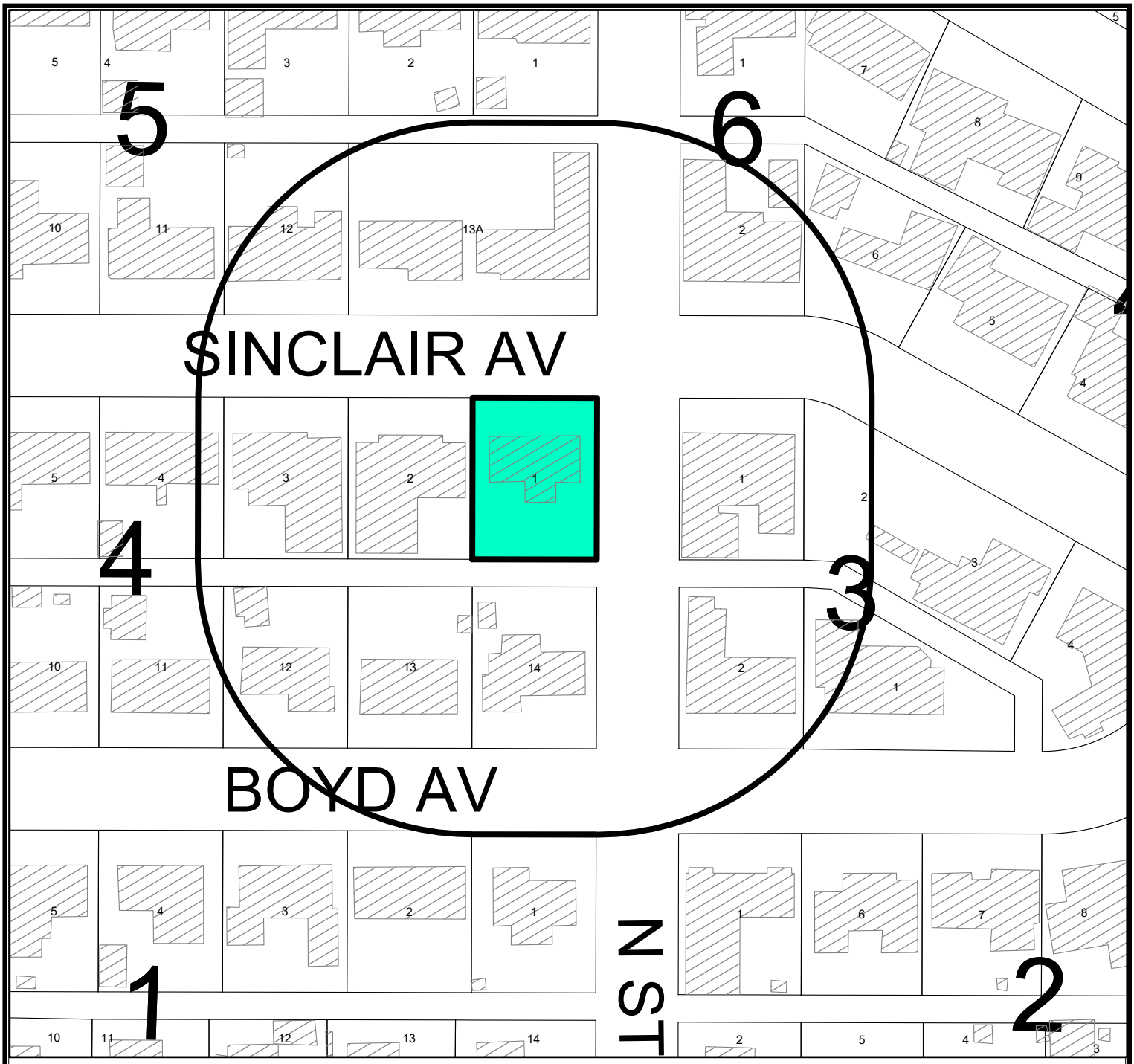
PRELIMINARY
NOT FOR CONSTRUCTION

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rwa rhodenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

DAVENPORT RESIDENCE
2201 SINCLAIR AVENUE
MIDLAND, TEXAS

JOB NO. 2218
DRAWING TITLE: SITE PLAN
REVISIONS
DATE
DRAWN BY Author
CHECKED BY Checker
SHEET NO. SD-100



LOCATION MAP

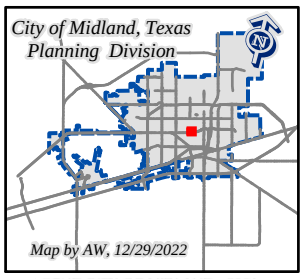
E-22-0091 **Scale: 1" = 200'**

Consider a request by Austin Butler for a Special Exception from the City of Midland Zoning Ordinance, Section 5.04 – Residential Zoning District Dimensional Regulations Chart, concerning the minimum side yard setback on Lot 1, Block 4, Berkshire Place, City and County of Midland, Texas.

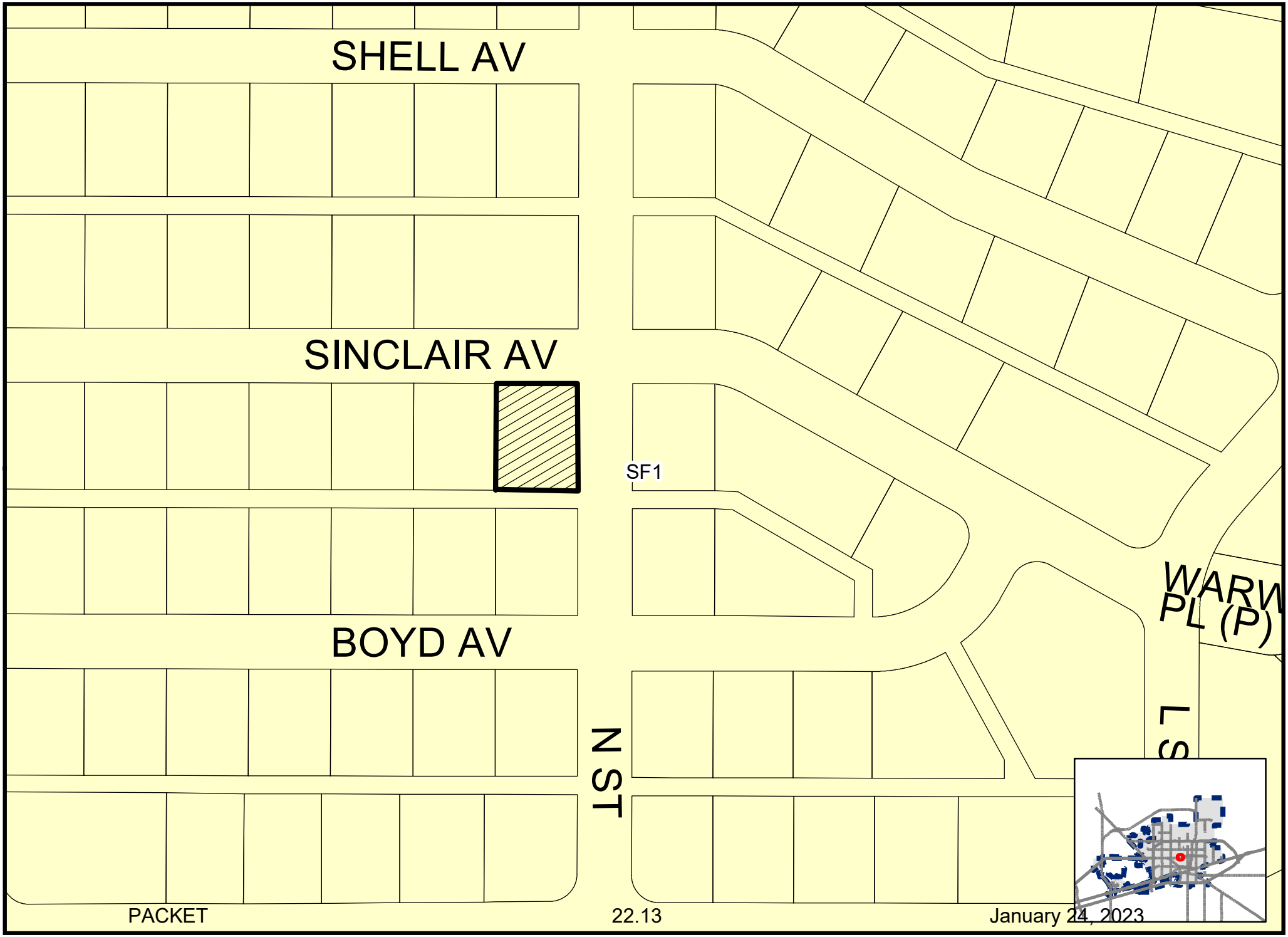
Generally located on the southwest corner of the intersection of Sinclair Avenue and North "N" Street – (Council District 3)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



January 24, 2023



PACKET 22.13 January 24, 2023

Map By AW, 12/29/2022

E-22-0091

Scale: 1" = 200'

ZONING MAP

© THE CITY OF MIDLAND - 2021: THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT, NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN. THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.









City Council Meeting

Item Number: 23

Meeting Date: January 24, 2023

To: City Council / City Manager

From: Cristina Burns, Director of Community Services

Subject: RESOLUTION AUTHORIZING THE EXECUTION OF A DEVELOPMENT AGREEMENT AND LEASE AGREEMENT WITH THE PERMIAN BASIN QUALITY OF PLACE CONSERVANCY FOR THE DESIGN, CONSTRUCTION, MAINTENANCE, AND OPERATION OF CERTAIN IMPROVEMENTS TO HOGAN PARK (DISTRICT 2) (COMMUNITY SERVICES)

Purpose:

Resolution authorizing the execution of a Hogan Park Development Agreement and a Hogan Park Lease Agreement with the Permian Basin Quality of Place Conservancy.

Recommended City Council Action:

Directional/Informational

Fiscal Impact:

Per the proposed agreement, $10,000,000 (minus $5,884,848.42 million that the City has already spent on improvements to the Bill Williams Softball Complex and has encumbered for design services for Hogan Park) will be provided to the Conservancy for development costs and an annual management fee equal to the lesser of $2,000,000 or actual operating costs. The annual management fee can increase annually based on an index escalator not to exceed 1.035.

Discussion:

The Permian Basin Quality of Place Conservancy has expressed interest in developing Hogan Park into a high-quality park with athletic fields and other amenities, such as playgrounds, a splashpad, a multi-purposed social lawn/pavilion, and covered basketball courts. The Conservancy's proposed development and lease agreements include the term, any expenses

for the City, and how the park will be managed, operated, and maintained.

- The property will be maintained as a public park for the use and enjoyment of the residents and visitors of Midland.
- The initial term of the proposed agreement is 25-years with two optional 20-year renewals.
- The City will provide $10,000,000, (minus $5,884,848.42 million that the City has already spent on improvements to the Bill Williams Softball Complex and has encumbered for design services for Hogan Park) to the Conservancy to be used for additional development costs.
- The City will also provide the Conservancy with an annual management fee equal to the lesser of $2,000,000 or the actual operating costs. This fee can increase annually based an index escalator not to exceed 1.035. If the actual operating costs are less than the management fee, the Conservancy will be obligated to pay the City the remainder. The City will then set aside this remainder in a dedicated fund to cover future operating costs at Hogan Park that the Conservancy is unable to pay.
- Through this proposed agreement, the Conservancy will be required to construct the features listed as “Main Features” on Exhibit C. These include the baseball fields, the dog parks, the “Tall City” playground and splashpad, and the covered basketball courts. The Bill Williams Softball Complex is not included in the project scope; additional amenities, such as the trail system around the park, the multi-purpose fields, and sand volleyball courts, are also not included in the scope and can be added in the future at the expense of the Conservancy.
- The Conservancy will be responsible for hiring a Contractor to complete the work.
- Once substantial completion of the project is reached, the Conservancy will operate, manage, maintain, and preserve the park for the term of the lease.
- The Conservancy will set the rules, fees, and reservation process, subject to the City’s approval.
- The City will have the right to use the park for events for up to 20 dates.
- The Conservancy will have the right to seek corporate sponsorships for the project and post related signage.
- The Conservancy will develop an annual budget and provide year-end reports to the City.
- The Conservancy will have the right to use the existing water wells on the property, not to exceed 110% of current usage, and drill new water wells with the City’s approval.
- Per the proposed agreement, if the Conservancy desires to develop another project separate from Hogan Park, a Park Executive Committee can be established, with the City’s approval, that would retain all decision-making authority in respect to the operation and maintenance of Hogan Park.

Per the proposed agreements, the Conservancy can terminate the agreement by July 31, 2023, if it cannot obtain commitments from donors and has until July 1, 2024, to complete a capital campaign to raise the Capital Contribution of a minimum of $30,000,000. Construction of the project should commence no later than July 1, 2025.

These proposed agreements will be effective January 25, 2023.

Attachments:

Proposed Hogan Park Development Agreement
Proposed Hogan Park Lease Agreement

Morris Williams Jr.

City Manager's Office

RESOLUTION NO. _____

RESOLUTION AUTHORIZING THE EXECUTION OF A DEVELOPMENT AGREEMENT AND LEASE AGREEMENT WITH THE PERMIAN BASIN QUALITY OF PLACE CONSERVANCY FOR THE DESIGN, CONSTRUCTION, MAINTENANCE, AND OPERATION OF CERTAIN IMPROVEMENTS TO HOGAN PARK

WHEREAS, the City of Midland (the "City") is the owner of a certain 600-acre tract of real property commonly known as Hogan Park ("Hogan Park"); and

WHEREAS, the City and the Permian Basin Quality of Place Conservancy (the "Conservancy") desire to cause certain improvements and enhancements to be made to Hogan Park (the "Project") that will attract persons and organized sports tournaments from around the West Texas region and contribute to the use and enjoyment of residents and visitors of the City for recreational purposes; and

WHEREAS, the City and the Conservancy desire for the Project to be developed, operated and maintained at high standards in order to reflect positively on the City as a whole; and

WHEREAS, the City and the Conservancy propose that private and public funds and resources be used to provide for the Project; and

WHEREAS, the City Council finds and determines that the development agreement and lease agreement referenced herein (the "Agreements") constitute a program for making a grant of public funds to promote local economic development; and

WHEREAS, the City Council finds and determines that the City expenditures provided for under the Agreements will directly enhance and promote tourism and the convention and hotel industry, and will benefit, improve and promote Hogan Park and the City; and

WHEREAS, the City Council finds it to be in the public interest to authorize the execution of the Agreements for the purposes stated herein;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE

CITY OF MIDLAND, TEXAS:

SECTION ONE. That the above recitals are hereby approved and adopted for all purposes.

SECTION TWO. That the City Manager and City Secretary are hereby authorized and directed to execute and attest, respectively, on behalf of the City of Midland, a development agreement and a lease agreement for the Project between the City of Midland and the Permian Basin Quality of Place Conservancy. The Agreements shall be kept on file in the office of the City Secretary and referenced by the date and number of this Resolution.

SECTION THREE. That the City Manager, or his designee, is hereby authorized and directed, on behalf of the City of Midland, to administer and enforce the terms of the Agreements.

SECTION FOUR. That the City Manager is hereby authorized and directed to negotiate and execute, on behalf of the City of Midland, any and all related agreements, amendments, easements, legal instruments, or documents necessary and appropriate to carry out the intent of the Agreements.

SECTION FIVE. That the City Comptroller is hereby authorized and directed to make payments to the Conservancy in accordance with the terms of the Agreements, and all related agreements, amendments, easements, legal instruments, or documents necessary and appropriate to carry out the intent of the Agreements, from funds available in the appropriate budget account(s) in the fiscal year in which the payment is to be made upon receipt of proper invoice or statement approved by the City Manager.

On motion of Council member _____, seconded by Council member _____, the above and foregoing resolution was adopted by the City Council of the City of Midland at a regular meeting on the _____ day of _____, A.D., 2023, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Lori Merritt Blong, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO FORM ONLY:

_____
John Ohnemiller, City Attorney

HOGAN PARK DEVELOPMENT AGREEMENT

THIS HOGAN PARK DEVELOPMENT AGREEMENT (this "*Agreement*") is made and entered into as of January 25, 2023 (the "*Effective Date*"), by and between the **CITY OF MIDLAND, TEXAS**, a municipal corporation and home-rule city (the "*City*"), and the **PERMIAN BASIN QUALITY OF PLACE CONSERVANCY**, a Texas non-profit corporation (the "*Conservancy*"). The City and the Conservancy are collectively referred to herein as the "*Parties*," or individually as a "*Party*."

RECITALS:

WHEREAS, the City is the owner of the Property (as defined herein), which is situated within its corporate limits and commonly known as Hogan Park; and

WHEREAS, the Parties desire to cause the Property to be developed as a high quality urban park, with athletic fields and related facilities and amenities, for the use and enjoyment of residents and visitors of the City, and for the beautification of the City; and

WHEREAS, due to the location of the Property, the Parties desire for the Property to be developed, operated and maintained at high standards in order to reflect positively on the City and the Permian Basin as a whole; and

WHEREAS, the Parties propose that private and public funds and resources be used to develop the Property as the Project; and

WHEREAS, the City Council for the City finds and determines that (i) this Agreement constitutes a program for making a grant of public funds to promote local economic development, and (ii) the City expenditures provided hereunder will directly enhance and promote tourism and the hotel industry, and will benefit, improve and promote the quality of life in the Permian Basin (the "*Economic Benefits*"); and

WHEREAS, the Parties desire to enter into this Agreement in order to set forth the Parties' respective rights, obligations and undertakings regarding the funding, development and operation of the proposed Project.

NOW, THEREFORE, for and in consideration of the mutual covenants, agreements and benefits to the Parties, it is agreed as follows:

ARTICLE I.
DEFINITIONS

As used herein, the following terms have the meanings set forth below:

"*Actual Operating Costs*" means the Operating Costs incurred and paid by the Conservancy.

"*Additional Future Features*," as shown on **Exhibit C** attached hereto, shall mean features of the Project outside of the Main Features and the Not In Project Scope Features.

"*Annual Management Fee*" means the annual fee paid to the Conservancy by the City for the management of the Project pursuant to Section 3.1.

"*Applicable Laws*" means all codes, ordinances, rules, statutes and regulations applicable in the jurisdiction where the Project is located, including, but not limited to, all health, safety, environmental, building and zoning codes, rules and regulations, and specifically including, without limitation, the Americans with Disabilities Act (42 U.S.C. § 12101 *et seq*.) and the Texas Architectural Barriers Act (Art. 9102, Tex. Civ. Stat. Ann. (1994)).

"*Architect*" means, collectively, Luck Design Team and Halff Associates, Inc.

"*Board Seat Requirements*" is defined in Article V below.

"*Business Day*" means a day other than weekends or national or local holidays.

"*Capital Contribution*" is defined in Section 2.3(a) below.

"*Change Order*" means a document signed by the Conservancy and the Contractor issued on or after the date of the Construction Contract authorizing an addition, deletion or revision in the Work, price, or schedule of the Construction Contract.

"*City Funds*" is defined in Section 2.3 below.

"*City Representative*" means the City Manager of the City or the City Manager's designee.

"City Use Days" is defined in Section 4.2(f) below.

"*City Water Rate*" is defined in Section 4.2(n) below.

"*Construction Commencement Date"* means the date on which the Contractor is authorized and directed by the Conservancy to commence the Work.

"*Construction Contract*" means the construction contract(s) by and between the Conservancy and Contractor, as the same may be amended from time to time, providing for the performance of the Work by the Contractor.

"*Construction Documents*" means the Project Design, Working Drawings, the Construction Contract and all other documents governing Contractor's performance of the Work.

"*Contractor*" means the general contractor selected by the Conservancy to construct all Improvements, install (or oversee the installation of) the Greenscape and perform all other Work for the Project.

"*Development Costs*" means all expenses and capital costs for developing the Project (excluding Operating Costs and the City's acquisition costs for the property), including, all consulting fees for programming and other Project-related professional services, and all soft costs and hard costs for the design, engineering, permitting and construction of the Project.

"*Effective Date*" is defined in the Preamble above.

"*Existing Water Wells*" is defined in Section 4.2(n) below.

"*Fiscal Year*" means a one-year accounting period beginning October 1 and ending September 30.

"*GPM*" is defined in Section 4.2(n) below.

"*Greenscape*" means all sod, flowers, shrubbery, trees and other plants and plantings, and any irrigation systems and equipment serving or relating thereto; and any water features, any and all drains, filters, aerators, pumps, pipes, temperature controls and other systems and equipment serving or relating thereto on the Property. Such term does not include paths, walks, steps, walls, bridges, structures or other hardscape.

"*Improvements*" means all infrastructure and structures (including, without limitation, athletic fields, play areas, shaded areas, stage(s), signage, restrooms, fences, benches and seating), lighting, pavement, parking facilities, paths, walks, steps, walls, bridges, fountains, fixtures, furnishings, equipment and other systems and facilities comprising the Project, including all grading, contouring, excavating and other earthwork in preparation for the Greenscape, but not including the Greenscape.

"*Index*" means the Consumer Price Index-All Urban Consumers published by the Bureau of Labor Statistics, sorted by "all items" for the Southwest Region. If the Bureau of Labor Statistics discontinues publication of the Index or the customized subcategory of "all items," then the City and the Conservancy shall adopt a substitute index or procedure based on data published by the U.S. Department of Labor or by a public or private university, which is intended to reflect any changes in consumer prices.

"*Index Escalator*" means the quotient of A/B; where "**A**" equals the average Index for a given Fiscal Year calculated as of the sixtieth (60^{th}) day preceding the end of each Fiscal Year (the "*Comparison Index*"), and "**B**" equals the Index for the annual average published for the prior Fiscal Year (the "*Base Index*").

"*Lease*" is defined in Section 2.1 below.

"*Main Features*," as shown on **Exhibit C** attached hereto, shall mean the features of the Project required for purposes of the Conservancy achieving Substantial Completion pursuant to this Agreement.

"*New Water Wells"* is defined in Section 4.2(n) below.

"*Not In Project Scope Features*," as shown on **Exhibit C** attached hereto, shall mean features that are part of the overall Project, but which will be completed by the City of Midland outside of construction undertaken by the Conservancy pursuant to this Agreement.

"*Operating Costs*" means all operating expenses and capital costs incurred in connection with the operation, management, maintenance and improvement of the Project following Substantial Completion including, without limitation, expenses related to water, electricity, mowing, fertilization and trash removal and pick-up.

"*Park Executive Committee*" is defined in Article V below.

"*Permits*" means all permits, licenses, approvals or other actions of or by governmental authorities or governmental officials required for the design, construction, or operation of the Project or any part thereof.

"*Person*" means any natural person, foundation, company, corporation, partnership, business, trust, governmental authority or other entity.

"*Private Donors*" means those individuals, companies, corporations, private foundations, businesses and other non-government entities who pledge to donate funds to be applied to the development of the Project.

"*Project*" means the Improvements and Greenscape to be developed to achieve the objective described in the second recital paragraph of this Agreement.

"*Project Design*" means the Project design identified in the schematic design and master plan attached hereto as **Exhibit C** and herein incorporated for all purposes.

"*Project Rules*" is defined in Section 4.2(d) below.

"*Project Schedule*" is defined in Section 2.4(e) below.

"*Property*" means that certain tract of land located at 1201 E. Wadley Ave., Midland, Texas, which is further legally described and depicted on **Exhibit A** attached hereto and incorporated herein for all purposes.

"*Reimbursement Cap*" is defined in Section 3.1 below.

"*Substantial Completion*" means the date on which (i) the Architect has certified, and the Conservancy has reasonably and in good faith agreed with the Architect's certification, that all Work is sufficiently complete in accordance with the Construction Documents so that the Main Features of the Project in **Exhibit C** attached hereto may be used for the purposes for which it is intended; and (ii) all final Permits with respect to the construction of the Work and use of the Main Features have been issued.

"*Term*" is defined in Section 2.2 below.

"*User Fees*" is defined in Section 4.2(e) below.

"*Water Wells*" is defined in Section 4.2(n) below.

"*Work*" means the performance of the construction and installation, or the various separately identifiable parts of the construction and installation, of all Main Features required to be completed substantially in accordance with the Project Design and the Working Drawings.

"*Working Drawings*" means the construction drawings and specifications for the Improvements and the drawings for the Greenscape, prepared by the Architect and other

Project consultants in accordance with the Project Design.

ARTICLE II.
DESIGN AND DEVELOPMENT PHASE

2.1 Occupancy. Contemporaneously with the execution of this Agreement, the Parties have executed a lease with respect to the Property (the "*Lease*"), for twenty-five (25) years with two (2) options to extend the Lease for an additional twenty (20) years each (subject to renewal as set forth therein), a copy of which is attached hereto as **Exhibit B**. Notwithstanding anything contained in this Agreement to the contrary, upon the expiration or earlier termination of the Lease, this Agreement shall also terminate and neither Party shall have any further rights, duties or obligations hereunder, except as may otherwise be expressly set forth herein. Prior to the Construction Commencement Date, the Conservancy shall have the right to occupy and use the Property for planning and design activities, and for testing, surveying, and other investigations consistent with planning, design and fundraising activities.

2.2 Term. Provided that Substantial Completion of the Work has occurred in accordance with the terms of this Agreement, the term of this Agreement shall be effective for the Term (as such term is defined in the Lease) of the Lease, as such may be renewed or extended.

2.3 Development Costs. The Parties hereby agree that the Development Costs shall be subject to the following terms and conditions:

(a) As consideration for the Conservancy obtaining written commitments from donors for a minimum of Thirty Million and No/100 Dollars ($30,000,000.00) for the Development Costs attributable to the Main Features (the "*Capital Contribution*"), the City agrees to provide the Conservancy with funds in the amount of Ten Million and No/100 Dollars ($10,000,000.00) (the "*City Funds*") to be used for the Development Costs for the Main Features. The City Funds shall become due and payable upon (i) the Conservancy providing the City with a determination letter issued from the United States Internal Revenue Service concluding that the Conservancy is a section 501(c)(3) organization under the United States Internal Revenue Code, and (ii) the Conservancy's completion of its obligations contained in Section 2.3(b). All other Development Costs shall be borne solely by the Conservancy. As of the Effective Date, the City represents and warrants that (A) Three Million Three Hundred Seventy Thousand Nine Hundred Eight and 42/100 Dollars ($3,370,908.42) has been spent by the City toward the cost of Not In Project Scope Features and (B) Two Million Five Hundred Thirteen Thousand Nine Hundred Forty and No/100 Dollars ($2,513,940.00) has been spent by the City toward the cost of design fees for the Project, and such amounts shall be deducted from the City Funds for purposes of this Agreement.

(b) The Conservancy shall (i) undertake and complete a capital campaign to raise the Capital Contribution on or before July 1, 2024, and (ii) provide the City satisfactory documentation, in a form reasonably acceptable to the City, evidencing that the Conservancy has obtained written commitments from donors for the Capital Contribution. If the Conservancy has not obtained commitments from donors for the Capital Contribution by July 31, 2023, the Conservancy may terminate this Agreement by providing written notice to the City prior to such date, at which point this Agreement shall be of no further force and effect and the parties shall have no further rights or obligations under this Agreement.

(c) Notwithstanding the above, if the Conservancy terminates or permanently abandons the Project prior to achieving Substantial Completion, then the Conservancy shall repay the City Funds upon receiving thirty (30) days' advance written notice from the City. Further, upon any such termination or abandonment of the Project by the Conservancy, this Agreement and the Lease shall automatically terminate.

2.4 Project Design and Construction. The Conservancy is hereby granted the exclusive right and duty to plan, design, and construct the Project pursuant to the terms of this Section.

(a) The Conservancy shall prepare a pro forma budget with respect to the operation of the Project for the remaining portion of the Fiscal Year following the Effective Date, assuming its development is in accordance with the Project Design. Such pro forma budget shall contain the Conservancy's good faith estimates of reasonably attainable revenue and reasonably foreseeable Operating Costs along with a reasonable determination and designation of any other Project expenses and revenues.

(b) Upon developing and approving the pro forma budget, the Conservancy shall notify the City of such pro forma budget.

(c) The Conservancy shall contract with the Architect and any other consultants as it deems reasonably necessary in order to produce the Working Drawings. However, the Conservancy shall not commence any construction contract for which it has not secured funding, or commitments thereof, to satisfy the contract obligations.

(d) The Conservancy shall contract with the Contractor for the performance of the Work. The Conservancy shall have the right to approve Change Orders; provided, however, that any proposed Change Order that would result in a material change to the Main Features shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed. Notwithstanding anything in this Agreement to the contrary, the City and the Conservancy acknowledge and agree that (i) the Project Design set forth on **Exhibit C** attached hereto includes the Not In Project Scope Features and the Additional Future Features, which are not included within the scope of Substantial Completion for purposes of this Agreement, but are part of the Project for purposes of this Agreement and the Lease, (ii) separate and apart from the Substantial Completion of the Main Features of the Project, the Conservancy may at any time undertake additional fundraising for the construction of such Additional Future Features and may expand the scope of the Construction Contract to include such Additional Future Features, provided that the Development Costs for such Additional Future Features shall be the sole responsibility of the Conservancy and the City Funds shall not be used for the construction of such Additional Future Features and (iii) the City shall be solely responsible for completing the construction of the Not In Project Scope Features.

(e) The Conservancy shall adopt a schedule for completion of the Work (the "*Project Schedule*"). The Project Schedule shall include a Construction Commencement Date of the later of (i) (A) the date the Conservancy has obtained commitments from donors for the Capital Contribution in accordance with Section 2.3(b) above and (B) the Board of Directors for the Conservancy has approved final plans and specifications for the Project or (ii) July 1, 2025, subject to events of force majeure, and the Conservancy shall provide a copy of such schedule to City.

(f) The Conservancy shall have the right, at its sole expense, to manage and supervise (i) all consultants, including the Architect, in all aspects of preparing the Working Drawings in accordance with the Project Design, and (ii) the Contractor in all aspects of the Work. Notwithstanding anything herein to the contrary, all expenses relating to the Working Drawings shall be promptly paid by the City and deducted from the City Funds.

(g) The Conservancy shall (i) hold all funds donated for Development Costs pursuant to Section 2.3, (ii) have the right to approve all draw requests by the Contractor, and (iii) disburse such funds for Development Costs including progress payments to the Contractor for Work performed pursuant to the Construction Contract.

(h) The City and its employees and agents shall have the right, during reasonable hours, to confirm that all work performed on the Project is being completed in accordance with the terms of this Agreement. The Conservancy shall, within thirty (30) days after completion of the Project, provide the City with a written statement or report certifying the total Development Costs along with reasonable evidence of such Development Costs.

2.5 No Developer Fee. The Conservancy shall not be entitled to any developer fee or other compensation from the City for its development services in connection with the design and construction of the Project. The City stipulates, acknowledges and agrees that the value of such services and related expenses constitute additional consideration given to the City and donated by the Conservancy in support of the Project.

ARTICLE III.
ANNUAL MANAGEMENT FEE

3.1 Annual Management Fee. Provided that Substantial Completion of the Work occurs in accordance with the terms of this Agreement, City agrees to pay the Conservancy an Annual Management Fee in an amount equal to the lesser of (i) the Actual Operating Costs (as defined herein) for each Fiscal Year, and (ii) Two Million and No/100 Dollars ($2,000,000.00) (the "*Reimbursement Cap*").

3.2 Payment Terms. On or before the first Business Day of each Fiscal Year following Substantial Completion, the City shall pay to the Conservancy an amount equal to the Reimbursement Cap; provided, however, that for the first Fiscal Year in which Substantial Completion occurs, City's payment shall be due and payable on the thirtieth (30th) day following Substantial Completion and prorated accordingly, if applicable.

3.3 Index Escalator. The Parties acknowledge and agree that the Reimbursement Cap shall be multiplied by the Index Escalator so as to increase the Reimbursement Cap for each Fiscal Year by the applicable percentage increase, if any, in the Index each Fiscal Year, provided that (a) in no event shall the Index Escalator be greater than 1.035 and (b) in no event shall the Index Escalator result in a reduction in the Reimbursement Cap. By way of example, if as of the sixtieth (60^{th}) day preceding the first (1^{st}) Conservancy Fiscal Year, (x) the Base Index is 248.820 and (y) the Comparison Index is 257.207, then the Index Escalator would be 1.034 [calculated as 257.207/248.820] and the Reimbursement Cap for the second (2^{nd}) Conservancy Fiscal Year would be Two Million Sixty-Seven Thousand Four Hundred Fourteen and 20/100 Dollars ($2,067,414.20). However, if as of the sixtieth (60^{th}) day preceding first (1^{st})

Conservancy Fiscal Year, (x) the Base Index is 218.820 and (y) the Comparison Index is 257.207, then the Index Escalator would be 1.175 [calculated as 257.207/218.820], subject to the above-described Index Escalator maximum of 1.035, and the Reimbursement Cap for the second (2nd) Conservancy Fiscal Year would be Two Million Seventy Thousand and No/100 Dollars ($2,070,000.00). No later than forty-five (45) days prior to the beginning of each Fiscal Year during the Term, the Conservancy shall notify the City of the Index Escalator applicable to the Reimbursement Cap for the upcoming Fiscal Year. On the fifth (5th) anniversary of the Effective Date and continuing every five (5) years thereafter, the City Representative, one (1) or more City officials, and one (1) or more representatives of the Conservancy shall meet to discuss the calculation of the Index Escalator and shall attempt in good faith to come to an agreement regarding an equitable adjustment of the Index Escalator calculation, as reflected in an amendment to this Agreement, to ensure that the Index Escalator is reasonably comparable to the percentage increase in the City's budget for the immediately preceding five (5) years, provided that in no event shall the parties be obligated to agree to a change in the Index Escalator if there is a disagreement between the parties during such meeting. Any amendment to this Agreement pursuant to this Section shall not become effective unless and until the same is approved by a resolution of the Midland City Council.

3.4 Actual Operating Costs. On or before thirty (30) days following the end of each Fiscal Year after Substantial Completion, the Conservancy shall (i) compile all information regarding the Operating Costs incurred by the Conservancy for the previous Fiscal Year, (ii) calculate the actual Operating Costs for the previous Fiscal Year (the "*Actual Operating Costs*"), and (iii) submit the same to the City. If the Actual Operating Costs for the previous Fiscal Year amount to less than the Reimbursement Cap, then the Conservancy shall repay the difference to the City within thirty (30) days following the date that the Actual Operating Costs for the previous Fiscal Year are submitted to the City.

3.5 Hogan Park Operating Costs Fund. If the Conservancy is obligated to repay any difference between the Actual Operating Costs and the Reimbursement Cap in any Fiscal Year pursuant to Section 3.4, the City agrees to establish a dedicated fund for future Operating Costs that the Conservancy is unable to pay. All funds repaid by the Conservancy pursuant to Section 3.4 shall be deposited into said dedicated fund and held therein until the expiration of the Term. The Conservancy may request the City to provide a payment from said fund from time to time for the sole purpose of paying Operating Costs for which the Conservancy certifies in writing that: (i) the Conservancy does not currently possess adequate funding to pay; (ii) it is not reasonably foreseeable that the Conservancy will receive adequate funding to pay; (iii) at the time the Conservancy finalized and approved the budget for the applicable Fiscal Year, such costs were not reasonably foreseeable; and (iv) payment of such costs are necessary and appropriate to preserve the standards and objectives of the Project. The Conservancy's certification made pursuant to this Section shall be submitted in writing to the City Representative pursuant to Article VI. Within fifteen (15) Business Days of the City's receipt of the Conservancy's certification, the City shall review and determine, in its sole discretion, whether the Conservancy's certification meets the requirements of this Section as to all Operating Costs listed. If the City determines that the Conservancy's certification meets said requirements as to such Operating Costs, in whole or in part, the City will remit payment to the Conservancy in the applicable amount.

ARTICLE IV.
OPERATING PHASE

4.1 Maintenance and Operating Standards.

(a) Following Substantial Completion, the Conservancy covenants to operate, manage, maintain and preserve the Project for the Term of the Lease.

(b) The Property is commonly referred to as Hogan Park and is located within the corporate limits of the City of Midland, Texas. The Project will be highly visible to, and visited by, tourists, visitors and residents of the greater Midland area including, without limitation, existing and future residents of the City. Accordingly, the Improvements and the Greenscape shall at all times be maintained at high standards of cleanliness, safety and natural beauty. The City and the Conservancy stipulate, acknowledge and agree that maintaining the Project in such manner provides a benefit to the City in encouraging expansion of the hotel and tourism industry in the City generally.

4.2 Operation.

(a) The initial term of the Conservancy's duty to operate the Improvements and the Greenscape in accordance with this Article IV shall begin on the date of Substantial Completion and continue for the remainder of the Term of the Lease.

(b) The Conservancy shall be required to operate, manage, maintain and preserve the Project in a manner consistent with Section 4.1(b) above.

(c) The Conservancy shall be required to pay all Operating Costs in excess of the Annual Management Fees paid by the City.

(d) The Conservancy shall have the exclusive right to establish such reasonable rules and regulations as it may deem necessary or desirable for the Project from time to time, including, but not limited, to rules and regulations relating to the use of, and the types and sizes of activities and events at the Project (collectively, the "*Project Rules*"); provided, however, the Project Rules and all revisions to the Project Rules shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed. On or before August 31 (but no earlier than July 15) of each Fiscal Year, the Conservancy may submit a list of proposed revisions to the Project Rules, which shall become effective upon the written approval of the City Representative. The City Representative's written decision regarding a proposed revision to the Project Rules shall be issued on or before September 30, provided that if the City Representative fails to respond on or before September 30, the City shall be deemed to have consented to the Conservancy's list of proposed revisions to the Project Rules. If the City Representative rejects any material revisions to the Project Rules proposed by the Conservancy, the City Representative and one (1) or more representatives of the Conservancy shall promptly meet to discuss the rejected revisions and mutually agree on acceptable alternative revisions thereto. The Project Rules shall comply with all Applicable Laws, and shall be non-discriminatory to the full extent required by Applicable Laws. The initial Project Rules shall be effective as of the date of Substantial Completion (and prior thereto, if applicable). The Conservancy shall provide copies of all Project Rules and any modifications, deletions, or additions thereto to the City in accordance with the notice provisions of Article VI

below.

(e) The Conservancy shall have the exclusive right to establish non-discriminatory fee structures and/or rate schedules from time to time, and to charge such fees and rates according to such structures and schedules (the "*User Fees*") for uses of and activities and events located at the Project and occurring after Substantial Completion, including use of any portion of the Project for public or private events; provided, however, that the User Fees and all revisions to the User Fees shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed. On or before August 31 (but no earlier than July 15) of each Fiscal Year, the Conservancy may submit a list of proposed revisions to the User Fees, which shall become effective upon the written approval of the City Representative. The City Representative's written decision regarding a proposed revision to the User Fees shall be issued on or before September 30, provided that if the City Representative fails to respond on or before September 30, the City shall be deemed to have consented to the Conservancy's list of proposed revisions to the User Fees. If the City Representative rejects any revisions to the User Fees proposed by the Conservancy, the City Representative and one (1) or more representatives of the Conservancy shall promptly meet to discuss the rejected revisions and mutually agree on acceptable alternative revisions thereto. In no event shall the Conservancy impose any general admission fee or other charge for entry into the Project as a whole, other than User Fees and other fees and charges imposed in connection with certain public or private events as set forth in Section 4.2(f) below. The Conservancy shall provide copies of all schedules or rate structures for User Fees and any revisions thereto to the City in accordance with the notice provisions of Article VI below.

(f) The Conservancy shall have the exclusive right to establish a reservation process for advance scheduling of activities and events at the Project and for advance bookings of the right to use or occupy particular Improvements or areas for such activities and events at the Project, including use of any portion of the Project for public or private events, and to charge User Fees and rental rates for the foregoing; provided, however, that the foregoing and all associated revisions shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed. On or before August 31 (but no earlier than July 15) of each Fiscal Year, the Conservancy may submit a list of proposed revisions to the above items, which shall become effective upon the written approval of the City Representative. The City Representative's written decision regarding a proposed revision to the above items shall be issued on or before September 30, provided that if the City Representative fails to respond on or before September 30, the City shall be deemed to have consented to the Conservancy's list of proposed revisions to the above items. If the City Representative rejects any revisions to the above items proposed by the Conservancy, the City Representative and one (1) or more representatives of the Conservancy shall promptly meet to discuss the rejected revisions and mutually agree on acceptable alternative revisions thereto. The Conservancy shall schedule, organize, promote and conduct activities and events at and uses of the Project on its own initiative in accordance with its annual operating plans and annual budgets, consistent, however, with the development, maintenance and use of the Project as an urban park and with high standards of natural beauty. Notwithstanding the above, in recognition of the City providing access to the Property, the City (which includes all its

departments and affiliated entities) shall be permitted to conduct events at the Project without owing any daily or event rental fees on up to twenty (20) dates (the "*City Use Days*") during each Fiscal Year, provided that (i) in no event will the City Use Days interfere with events scheduled or in the process of being scheduled by the Conservancy, (ii) no more than ten (10) City Use Days shall occur on a Friday, Saturday or Sunday, (iii) the City shall specify the designated areas within the Project to be used in connection with such City Use Days, which designated areas shall be subject to the Conservancy's reasonable approval, (iv) the City shall comply with, and be subject to, the Project Rules in connection with the City's use of the Project during the City Use Days and (v) the City Use Days shall include periods of time necessary for set up and tear down related to events organized by the City; provided, however, if the set up and tear down related to events organized by the City does not materially interfere with the Conservancy's use of the Project (or any applicable portion thereof) or other events scheduled by the Conservancy for the Project, then the time required for such set up and tear down shall not be included as City Use Days. Notwithstanding anything herein to the contrary, the City may utilize the following portions of the Project during the City Use Days, calculated on a per square foot basis out of the total square footage of the Project:

City Use Days	**Percentage of Project**
5	100%
5	No more than 75%
5	No more than 50%
5	No more than 25%

A process will be established by the Parties for scheduling the City Use Days and all City Use Days must be scheduled at least sixty (60) days in advance. With the exception of daily or event rental fees, the City shall be responsible for paying any other costs and expenses associated with events held on any of the City Use Days, including, without limitation, costs and expenses associated with set up and tear down, additional services required to accommodate the City's event.

(g) The Conservancy shall have the exclusive right to and duty to market and promote the Project and the events and activities organized or sponsored by the Conservancy. Furthermore, the Conservancy shall establish a development program to raise private donations and obtain grants for the portion of the Operating Costs not covered by either the Annual Management Fee or revenue generated by User Fees and rentals.

(h) The Conservancy shall have the exclusive right to obtain corporate sponsorships of events, to develop signage regulations, and to name the Project as a whole; provided, however, that fixed signage relating to corporate sponsorships (but not corporate sponsorships of events) and the development of signage regulations shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed. The Parties hereby agree that the signage regulations developed pursuant to this Section shall provide for advertising space at a minimum of fifteen (15) locations at the Property, to be dedicated for City use at no charge to the City (the "*City Advertising Space*") in locations to be mutually determined by the City and the Conservancy. All costs associated with the design,

production, and maintenance of the City Advertising Space shall be the sole and exclusive responsibility of the City. The design of the City Advertising Space shall be subject to the reasonable approval of the Conservancy and shall be consistent with the overall design of the Project, the signage regulations adopted by the Conservancy and all applicable laws and ordinances related thereto. The City shall cooperate with the Conservancy and the Conservancy's consultants to ensure the City's compliance with the immediately preceding sentence.

(i) Following the first adjustment in the Annual Management Fee pursuant to Article III, the Conservancy shall have the exclusive right to design, construct and install other or additional Improvements and Greenscape not previously included in the Main Features of the Project Design; to remove or alter the Improvements and Greenscape originally contemplated in the Project Design; or to modify or replace the Project Design. Notwithstanding the foregoing, the design, construction, and installation of Water Wells shall be governed by Section 4.2(n).

(j) The Conservancy shall prepare and deliver to the City a copy of its annual operating plan and budget for its next succeeding Fiscal Year forty-five (45) days prior to the Conservancy's Fiscal Year end.

(k) The Conservancy shall deliver to the City a copy of its annual year-end report and financials within one hundred twenty (120) days after the Conservancy's Fiscal Year end.

(l) The City Representative shall have the right, during normal business hours and at the City's sole cost and expense, to audit and obtain copies of the books and records of the Conservancy for the then current Fiscal Year, provided such audit shall not take place more than one time per calendar Year, unless otherwise mandated by applicable law.

(m) The Conservancy shall have the right to subcontract and/or delegate all or any part of its rights and obligations under this Agreement as the Conservancy deems necessary or desirable for the efficient and cost-effective performance of such rights and obligations; provided, however, that the Conservancy's subcontracting and/or delegation of the management of the Project as a whole (excluding subcontracting and delegation of rights relating to construction, landscaping, design work, general maintenance, janitorial, marketing and advertising services) shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed.

(n) Notwithstanding anything contained in this Agreement to the contrary, with respect to the Conservancy's use of water at the Project, the City agrees to abstain from increasing water rates charged to the Conservancy for such water usage at the Project above the lowest rate charged to the public for water usage, notwithstanding the volume of water used at the Project. The City represents and warrants that the current rate for City water pursuant to the immediately preceding sentence is Six and 11/100 Dollars ($6.11) per one thousand (1,000) gallons of water (the "*City Water Rate*"). During the Term of the Lease and for the exclusive use and benefit of the Project, the City hereby authorizes the Conservancy to (i)

access and utilize the water wells currently in existence at the Property (the "*Existing Water Wells*"), (ii) repair, replace and re-drill the Existing Water Wells, and (iii) drill new water wells on the Property ("*New Water Wells*" and together with the Existing Water Wells, the "*Water Wells*"); provided, however, during the Term, the rate of production of the Water Wells, on an aggregate basis, shall not exceed one hundred and ten percent (110%) of the current gallon per minute ("*GPM*") rate of production for the Existing Water Wells. The City represents and warrants that the current GPM rate of production for the Existing Water Wells is One Thousand Three Hundred Fifty (1,350) GPM. The drilling of New Water Wells by the Conservancy shall be subject to the written approval from the City Representative, provided the City Representative shall respond within thirty (30) days to a request by the Conservancy to drill a New Water Well (and the City's failure to respond within such thirty (30)-day period shall constitute the City's deemed denial of the Conservancy's request to drill said New Water Well). If the City Representative denies a request by the Conservancy to drill a New Water Well, the City Representative and one (1) or more representatives of the Conservancy shall promptly meet to discuss the City's justification for such rejection and the parties shall negotiate in good faith to agree upon an alternative solution to address the Conservancy's water needs at the Project. The Conservancy shall not use water produced from the Water Wells outside of the Property and the Conservancy shall not sell water produced from the Water Wells to third parties.

ARTICLE V.
DEFAULTS AND REMEDIES

If any Party hereto defaults under the terms of this Agreement, the non-defaulting Party must send written notice detailing the nature of the default of the alleged defaulting Party. The alleged defaulting Party shall have a reasonable period, not to exceed sixty (60) days for any monetary default, or ninety (90) days for any non-monetary default, after receipt of such notice to cure such alleged default to the reasonable satisfaction of the non-defaulting Party. Upon the failure of the alleged defaulting Party to cure the alleged default as set out above, the non-defaulting Party will have the right to pursue all remedies available at law or equity. In addition to any remedies that the Conservancy may have related to a monetary default by the City under this Agreement (i) during the sixty (60) day cure period set forth above, the voting rights of all board members appointed by the City shall be relinquished without further notice until any such default is cured, and (ii) if the City fails to cure any such monetary default by the City within the sixty (60) day cure period set forth above, then following the expiration of such cure period, the positions of all board members appointed by the City to the Board of Directors of the Conservancy shall become at-large positions as set forth in the Bylaws of the Conservancy. Notwithstanding the foregoing, the Conservancy may not seek to amend the Bylaws of the Conservancy during the sixty (60) day cure period set forth above.

In connection with the City's allocation of board seats on the Conservancy board of directors, the Conservancy shall amend its Bylaws to provide for a board of directors comprised of seven (7) board seats, three (3) of which shall be appointed by the City. Additionally, the amended Bylaws of the Conservancy shall specify that (i) the three (3) board seats appointed by the City may not be reduced in number (except as otherwise provided herein), (ii) the City appointees shall serve at the sole discretion and pleasure of the Midland City Council, and (iii) the City appointees may only be appointed or removed upon a duly approved resolution or motion of the Midland City Council (the "*Board Seat Requirements*"). The amended Bylaws of the Conservancy shall be in a form substantially similar to that of **Exhibit D**, which is attached hereto and incorporated herein for all purposes. Notwithstanding anything in this Agreement to the contrary, if the

Conservancy desires to pursue the development of one (1) or more additional projects separate and apart from the Project, the Conservancy and the City may agree to convert the City's three (3) board seats on the Conservancy board to three (3) board seats on an executive committee of the Conservancy (the "*Park Executive Committee*") established for the sole purposes of operating and managing the Project. In connection with the Conservancy's establishment of the Park Executive Committee, the Conservancy shall submit to the City a proposed amendment to the Bylaws providing that (a) the Conservancy board delegates all decision-making authority with respect to the operation and maintenance of the Project to the Park Executive Committee, (b) the establishment of the Park Executive Committee shall not reduce the authority, rights and obligations of the City board members with respect to the Project, and (c) the Park Executive Committee shall be subject to the Board Seat Requirements set forth above. Before entering into such an amendment to the Bylaws, the Conservancy shall provide a proposed draft of the Bylaw amendment to the City for the City's review and written approval. The decision regarding whether to issue said written approval shall be in the sole and absolute discretion of the City. For the avoidance of doubt, the City is under no obligation to agree to convert the City's seats on the Conservancy board of directors to board seats on the Park Executive Committee, and the Conservancy covenants and agrees that it will not amend the Bylaws to convert the City's seats on the Conservancy board of directors to board seats on the Park Executive Committee without the prior written approval of the City. If the City denies the formation of the Park Executive Committee, then a City Representative and one (1) or more representatives of the Conservancy shall promptly meet to discuss the City's justification for such rejection and the parties shall negotiate in good faith to agree upon an alternative solution to address the Conservancy's need to execute other projects separate and apart from the Project. The Conservancy shall achieve Substantial Completion of the Main Features of the Project prior to establishing the Park Executive Committee.

Notwithstanding any contrary provision contained herein, a breach or default by the Conservancy or the City of any material representation, warranty, covenant, term, condition, duty, or obligation contained in the Lease, after passage of the applicable notice and cure periods (if any), shall, at the option of the Conservancy or the City (as applicable), be a default under this Agreement, in which event the Conservancy or the City (as applicable) shall be entitled (but not required) to apply all rights and remedies of the Conservancy or the City (as applicable) under the terms of this Agreement by reason of a party default under the Lease. The Parties acknowledge and agree that the terms of the Lease are incorporated herein by reference for all legal purposes.

ARTICLE VI.
NOTICES

Any notice, consent, approval or other communication required or permitted to be given under this Agreement (a "*notice*"), in order to be effective, must be in writing and must be served by delivering such notice addressed to the Party to be notified (i) effective two (2) days after depositing the notice with the U.S. Postal Service, postage prepaid, sent certified, return receipt requested; or (ii) effective upon receipt if delivered in person, by commercial messenger or by reputable overnight courier to the office of such Party to be notified. For purposes of giving effective notice, the addresses of the Parties are as follows (provided that any such address may be changed from time to time by the changing party giving not less than thirty (30) days' prior written notice thereof to the other Party hereto as provided above):

If to the City:

City of Midland
300 N. Loraine
Midland, Texas 79701
Attn: City Manager

With a copy to:

City Attorney's Office
300 N. Loraine
Midland, Texas 79701
Attn: City Attorney

If to the Conservancy:

Permian Basin Quality of Place Conservancy
P.O. Box 51022
Midland, Texas 79710
Attn: Chris Ginsbach

With copy to:

Jackson Walker LLP
1401 McKinney, Suite 1900
Houston, TX 77019
Attn: Jonny Heins

ARTICLE VII.
GENERAL PROVISIONS

7.1 **Independent Contractor.** It is understood and agreed that the relationships among the City and the Conservancy and will be that of an independent contractor. Nothing contained in this Agreement will be deemed or construed to (i) make the City the agent, servant or employee of the Conservancy, (ii) make the Conservancy the agent, servant or employee of either the City, or (iii) create any partnership, joint venture, or other association between the City and the Conservancy. It is understood and agreed that the Conservancy is a separate entity from the City, and the City will not be held responsible for actions or obligations of the Conservancy.

7.2 **Waiver of Performance.** The failure of any Party to insist, in any one or more instances, on the performance of any of the terms, covenants or conditions of this Agreement, or to exercise any of its rights under this Agreement, will not be construed as a waiver or relinquishment by such Party of such term, covenant, condition or right with respect to further performance.

7.3 **Governing Law.** This Agreement will be governed, construed and enforced in accordance with the laws of the State of Texas and venue for any action concerning this Agreement shall be in a State District Court of Midland County, Texas.

7.4 **Dates.** If a day requiring notice or action falls on a weekend or national or local holiday, the next non-weekend day or non-holiday shall be applicable.

7.5 **Severability.** If any provision of this Agreement is held to be illegal, invalid or unenforceable under present or future laws, the legality, validity and enforceability of the remaining provisions of this Agreement will not be affected thereby, and this Agreement will be liberally construed so as to carry out the intent of the Parties to it.

7.6 Parties in Interest. The terms of this Agreement will be binding upon, and inure to the benefit of, the Parties hereto and their permitted successors and assigns. Nothing in this Agreement, whether express or implied, will be construed to give any person or entity (other than the Parties hereto and their permitted successors and assigns) any legal or equitable right, remedy or claim under or in respect of any terms or provisions contained in this Agreement or any standing or authority to enforce the terms and provisions of this Agreement.

7.7 Assignments. No Party may assign its rights or obligations under this Agreement without the prior written consent of the other Party, which consent shall not be unreasonably withheld.

7.8 Amendments. This Agreement will not be modified or amended in any manner except by a writing signed by the Parties hereto.

7.9 Entire Agreement. This Agreement represents the entire and integrated agreement between the Parties with respect to the subject matter hereof. All prior negotiations, representations or agreements not expressly incorporated into this Agreement are hereby superseded and canceled.

7.10 Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument and any of the Parties hereto may execute this Agreement by signing any such counterpart.

7.11 Captions. Captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Agreement.

7.12 Interpretation. The Parties acknowledge and represent that this Agreement has been jointly drafted by the Parties, that no provision of this Agreement will be interpreted or construed against any Party solely because the Party or its legal counsel drafted such provision and that each of them has read, understood, and approved the language and terms set forth herein.

7.13 Limited Waiver of Sovereign Immunity. The City agrees that this Agreement shall constitute a contract for providing goods and services to the City, subject to the provisions of Subchapter I of Chapter 271, Texas Local Government Code. Further, to the extent allowed by law, the City waives its rights to sovereign or governmental immunity as to an action in equity by the Conservancy for a writ of mandamus or specific performance to enforce all the terms of this Agreement.

[Remainder of this page intentionally left blank; signature pages follow]

EXECUTED by the duly authorized representatives of the Parties hereto to be effective as of the Effective Date.

CITY OF MIDLAND, TEXAS

_____
Robert Patrick, City Manager

THE STATE OF TEXAS §
§
COUNTY OF MIDLAND §

BEFORE ME, the undersigned authority, on this day personally appeared ROBERT PATRICK, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged that he executed and delivered the foregoing instrument for the purposes and consideration therein expressed on behalf of the CITY OF MIDLAND, TEXAS, in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2023.

_____
Notary Public, State of Texas

Signature Page

PERMIAN BASIN QUALITY OF PLACE CONSERVANCY,
A Texas non-profit corporation

By: _____

Name: _____

Title: _____

THE STATE OF TEXAS §
§
COUNTY OF MIDLAND §

BEFORE ME, the undersigned authority, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged that s/he executed and delivered the foregoing instrument for the purposes and consideration therein expressed on behalf of the PERMIAN BASIN QUALITY OF PLACE CONSERVANCY, in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2023.

_____
Notary Public, State of Texas

Signature Page

EXHIBIT A

Property Depiction and Legal Description

An approximate 137-acre tract located in Section 13, Block 39, T-1-S, T&P RR Co. Survey, City and County of Midland, Texas.



EXHIBIT B

Hogan Park Lease Agreement

[ATTACHED]

EXHIBIT C

Schematic Design and Master Plan



Exhibit D

SECOND AMENDMENT
TO
BYLAWS
OF
PERMIAN BASIN QUALITY OF PLACE CONSERVANCY
Midland, Texas

THIS SECOND AMENDMENT TO BYLAWS OF PERMIAN BASIN QUALITY OF PLACE CONSERVANCY (this "Amendment"), dated effective _____, 2023 (the "Effective Date") of Permian Basin Quality of Place Conservancy, a Texas nonprofit corporation (the "Corporation"), is hereby approved by the Board of Directors of the Corporation.

RECITALS. The Board of Directors of the Corporation each hereby approve the amendments to the Bylaws of the Corporation dated April 20, 2022 (as amended by that certain Amendment to Bylaws of the Permian Basin Quality of Place Conservancy dated effective November 9, 2022, the "**Bylaws**") set forth in this Amendment in accordance with Article 10 of the Bylaws.

NOW, THEREFORE, this Amendment hereby sets forth each such amendment to the Bylaws.

1. The Bylaws are hereby amended as follows:

(a) Section 3.01 of the Bylaws is hereby amended and restated to read as follows:

> "3.01 *Board role, size, and compensation:* The board of directors of PQPC (the "Board of Directors") is responsible for overall policy and direction of the PQPC, and delegates responsibility of day-to-day operations to the Executive Director, staff, and committees. The Board of Directors shall have seven (7) members. Members of the Board of Directors receive no compensation other than reasonable expenses. The number of members of the Board of Directors may be increased or decreased from time to time upon a unanimous vote of the Board of Directors. Notwithstanding any contrary provision of the previous sentence, and except as provided in Section 3.06, the Legacy Appointed Directors and the City Appointed Directors (as defined below) may only be eliminated by unanimous vote of the Board of Directors (including the person in the position to be eliminated), or as otherwise provided in Section 3.06."

2. The first (1st) sentence of Section 3.04 of the Bylaws is hereby amended and restated to read as follows:

"3.04 *Election Procedures*. New directors shall be appointed by the Legacy Appointed Directors and the City Appointed Directors, as applicable, in accordance with Section 3.06 below."

3. Section 3.06 of the Bylaws is hereby amended and restated to read as follows:

"3.06 *Vacancies*:

(a) Except as provided below, vacancies on the Board of Directors shall exist if any of the following events occurs: (1) a director dies, resigns or is removed from office; (2) the authorized number of directors is increased; or (3) a director's term of office ends in accordance with Section 3.02. The Board of Directors may declare vacant the office of a director in any of the following cases: (A) if he or she is adjudged incompetent by an order of court, or finally convicted of a felony; (B) if within sixty (60) days after notice of his or her appointment, he or she does not accept the office either in writing or by attending a meeting of the Board of Directors; or (C) if he or she is excessively absent from meetings of the Board of Directors, as set forth in Section 3.07 below.

(b) Four (4) positions on the Board of Directors shall initially be filled by Marc Dingler, Kristina Johnson, Jeff Beard and Chris Ginbsbach (each, a "Legacy Appointed Director" and collectively, the "Legacy Appointed Directors"). Vacancies among the Legacy Appointed Directors shall be filled in accordance with subsections (i) and (ii) below. Successors to each Legacy Appointed Director shall be referred to as Legacy Appointed Directors for purposes of this subsection.

(i) Following the expiration of the term of office of each Legacy Appointed Director or the resignation of a Legacy Appointed Director, such Legacy Appointed Director shall select their successor and such successor must be approved by a majority vote of the remaining three (3) Legacy Appointed Directors. If the remaining three (3) Legacy Appointed Directors do not approve the selected successor by majority vote, the procedure outlined above shall be repeated until a majority vote of the remaining Legacy Appointed Directors is achieved.

(ii) In the event one (1) or more Legacy Appointed Director (A) dies or is removed from office, (B) is adjudged incompetent by an order of court or is finally convicted of a felony, (C) does not accept the office either in writing or by attending a meeting of the Board of Directors or (D) is excessively absent from meetings of the Board of Directors, the remaining Legacy Appointed Directors shall select such Legacy Appointed Director(s)' replacement and must approve such replacement by a majority vote.

(c) Three (3) positions on the Board of Directors shall be filled by written appointment made by a duly approved resolution of the City Council of Midland, Texas (each, a "City Appointed Director" and collectively, the "City Appointed Directors").

(i) With respect to the City Appointed Directors, the City of Midland (the "City") is obligated to provide certain funding amounts to the PQPC under a certain Hogan Park Development Agreement entered into between the City and the PQPC. In the event that the City fails to provide funding as agreed under the Hogan Park Development Agreement, then the PQPC shall provide written notice of such default to the City, and the date of such notice shall begin a period of sixty (60) days for any monetary default and ninety (90) days for any non-monetary default during which such default may be cured with no further consequence (the "Cure Period") except as provided in the following sentence. So long as the City remains in default of such obligation during the Cure Period, the voting rights of all City Appointed Directors on the Board of Directors will be relinquished without further notice until such default is cured within the Cure Period. If the City of Midland's default is not cured within the Cure Period, then

immediately upon expiration of the Cure Period, all City Appointed Director positions on the Corporation Board shall become at-large positions, with the succession of each such position to be implemented in accordance with section 3.06(d) below. If and when such conversion to at-large status shall occur, a new director for each such position shall be immediately elected in accordance with Section 3.06(d). This conversion of a position on the Board of Directors shall in no manner limit the City's obligations under the Hogan Park Development Agreement, and the PQPC shall have all rights to pursue satisfaction and enforcement of its claims under that agreement including making such claims pursuant to the City's limited waiver of sovereign immunity set forth in section 7.13 of that agreement.

(d) Any other vacancy occurring in a director position on the Board of Directors shall be filled by majority vote of the other directors of the PQPC serving at the time and whose voting rights have not been relinquished at that time."

4. Section 3.07 of the Bylaws is hereby amended and restated to read as follows:

"3.07 *Resignation, Termination and Absences:* If the Board of Directors accepts the resignation of a director tendered to take effect at a future time other than the time at which his or her term would otherwise expire, the successor to such director may be selected in accordance with Section 3.06, as applicable to the particular position that is being vacated, to take office when the resignation becomes effective. A director appointed to fill a vacancy that exists for any reason other than the end of his or her predecessor's term of office in accordance with Section 3.06, or the creation of a new director position, shall be appointed to the unexpired term of his or her predecessor in office. Resignation from the Board of Directors must be in writing and received by the secretary. Attendance will be reviewed systematically and it is recommended that board members may be asked to resign from the Board of Directors in situations of excess absences."

5. Except as amended hereby, the Bylaws shall remain in force and effect as they existed immediately prior to this Amendment.

[CERTIFICATION FOLLOWS]

CERTIFICATION

This Amendment was approved by Written Consent of the Board of Directors on _____, 2023.

SECRETARY **DATE**

HOGAN PARK DEVELOPMENT AGREEMENT

THIS HOGAN PARK DEVELOPMENT AGREEMENT (this "*Agreement*") is made and entered into as of January 25, 2023 (the "*Effective Date*"), by and between the **CITY OF MIDLAND, TEXAS**, a municipal corporation and home-rule city (the "*City*"), and the **PERMIAN BASIN QUALITY OF PLACE CONSERVANCY**, a Texas non-profit corporation (the "*Conservancy*"). The City and the Conservancy are collectively referred to herein as the "*Parties*," or individually as a "*Party*."

RECITALS:

WHEREAS, the City is the owner of the Property (as defined herein), which is situated within its corporate limits and commonly known as Hogan Park; and

WHEREAS, the Parties desire to cause the Property to be developed as a high quality urban park, with athletic fields and related facilities and amenities, for the use and enjoyment of residents and visitors of the City, and for the beautification of the City; and

WHEREAS, due to the location of the Property, the Parties desire for the Property to be developed, operated and maintained at high standards in order to reflect positively on the City and the Permian Basin as a whole; and

WHEREAS, the Parties propose that private and public funds and resources be used to develop the Property as the Project; and

WHEREAS, the City Council for the City finds and determines that (i) this Agreement constitutes a program for making a grant of public funds to promote local economic development, and (ii) the City expenditures provided hereunder will directly enhance and promote tourism and the hotel industry, and will benefit, improve and promote the quality of life in the Permian Basin (the "*Economic Benefits*"); and

WHEREAS, the Parties desire to enter into this Agreement in order to set forth the Parties' respective rights, obligations and undertakings regarding the funding, development and operation of the proposed Project.

NOW, THEREFORE, for and in consideration of the mutual covenants, agreements and benefits to the Parties, it is agreed as follows:

ARTICLE I.
DEFINITIONS

As used herein, the following terms have the meanings set forth below:

"*Actual Operating Costs*" means the Operating Costs incurred and paid by the Conservancy.

"*Additional Future Features*," as shown on **Exhibit C** attached hereto, shall mean features of the Project outside of the Main Features and the Not In Project Scope Features.

"*Annual Management Fee*" means the annual fee paid to the Conservancy by the City for the management of the Project pursuant to Section 3.1.

"*Applicable Laws*" means all codes, ordinances, rules, statutes and regulations applicable in the jurisdiction where the Project is located, including, but not limited to, all health, safety, environmental, building and zoning codes, rules and regulations, and specifically including, without limitation, the Americans with Disabilities Act (42 U.S.C. § 12101 *et seq.*) and the Texas Architectural Barriers Act (Art. 9102, Tex. Civ. Stat. Ann. (1994)).

"*Architect*" means, collectively, Luck Design Team and Halff Associates, Inc.

"*Board Seat Requirements*" is defined in Article V below.

"*Business Day*" means a day other than weekends or national or local holidays.

"*Capital Contribution*" is defined in Section 2.3(a) below.

"*Change Order*" means a document signed by the Conservancy and the Contractor issued on or after the date of the Construction Contract authorizing an addition, deletion or revision in the Work, price, or schedule of the Construction Contract.

"*City Funds*" is defined in Section 2.3 below.

"*City Representative*" means the City Manager of the City or the City Manager's designee.

"City Use Days" is defined in Section 4.2(f) below.

"*City Water Rate*" is defined in Section 4.2(n) below.

"*Construction Commencement Date"* means the date on which the Contractor is authorized and directed by the Conservancy to commence the Work.

"*Construction Contract*" means the construction contract(s) by and between the Conservancy and Contractor, as the same may be amended from time to time, providing for the performance of the Work by the Contractor.

"*Construction Documents*" means the Project Design, Working Drawings, the Construction Contract and all other documents governing Contractor's performance of the Work.

"*Contractor*" means the general contractor selected by the Conservancy to construct all Improvements, install (or oversee the installation of) the Greenscape and perform all other Work for the Project.

"*Development Costs*" means all expenses and capital costs for developing the Project (excluding Operating Costs and the City's acquisition costs for the property), including, all consulting fees for programming and other Project-related professional services, and all soft costs and hard costs for the design, engineering, permitting and construction of the Project.

"*Effective Date*" is defined in the Preamble above.

"*Existing Water Wells*" is defined in Section 4.2(n) below.

"*Fiscal Year*" means a one-year accounting period beginning October 1 and ending September 30.

"*GPM*" is defined in Section 4.2(n) below.

"*Greenscape*" means all sod, flowers, shrubbery, trees and other plants and plantings, and any irrigation systems and equipment serving or relating thereto; and any water features, any and all drains, filters, aerators, pumps, pipes, temperature controls and other systems and equipment serving or relating thereto on the Property. Such term does not include paths, walks, steps, walls, bridges, structures or other hardscape.

"*Improvements*" means all infrastructure and structures (including, without limitation, athletic fields, play areas, shaded areas, stage(s), signage, restrooms, fences, benches and seating), lighting, pavement, parking facilities, paths, walks, steps, walls, bridges, fountains, fixtures, furnishings, equipment and other systems and facilities comprising the Project, including all grading, contouring, excavating and other earthwork in preparation for the Greenscape, but not including the Greenscape or the Not In Project Scope Features.

"*Index*" means the Consumer Price Index-All Urban Consumers published by the Bureau of Labor Statistics, sorted by "all items" for the Southwest Region. If the Bureau of Labor Statistics discontinues publication of the Index or the customized subcategory of "all items," then the City and the Conservancy shall adopt a substitute index or procedure based on data published by the U.S. Department of Labor or by a public or private university, which is intended to reflect any changes in consumer prices.

"*Index Escalator*" means the quotient of A/B; where "**A**" equals the average Index for a given Fiscal Year calculated as of the sixtieth (60^{th}) day preceding the end of each Fiscal Year (the "*Comparison Index*"), and "**B**" equals the Index for the annual average published for the prior Fiscal Year (the "*Base Index*").

"*Lease*" is defined in Section 2.1 below.

"*Main Features*," as shown on **Exhibit C** attached hereto, shall mean the features of the Project required for purposes of the Conservancy achieving Substantial Completion pursuant to this Agreement.

"*New Water Wells"* is defined in Section 4.2(n) below.

"*Not In Project Scope Features*," as shown on **Exhibit C** attached hereto, shall mean features that are part of the overall Project, but which will be completed by the City of Midland outside of construction undertaken by the Conservancy pursuant to this Agreement. The Not In Project Scope Features are specifically limited to (a) the features identified as "Not In Project Scope Features" in **Exhibit C** attached hereto that are in existence as of the Effective Date and (b) one (1) playground located in the Bill Williams Softball Complex between Field 1 and Field 2, the replacement of a common area irrigation system(s) located in the Bill Williams Softball Complex (adjacent to Fields 1 through 6), and changes to the façade of the existing restroom

and concession structures located in the Bill Williams Softball Complex (adjacent to Fields 1 through 6).

"*Operating Costs*" means all operating expenses and capital costs incurred in connection with the operation, management, maintenance and improvement of the Project following Substantial Completion including, without limitation, expenses related to water, electricity, mowing, fertilization and trash removal and pick-up.

"*Park Executive Committee*" is defined in Article V below.

"*Permits*" means all permits, licenses, approvals or other actions of or by governmental authorities or governmental officials required for the design, construction, or operation of the Project or any part thereof.

"*Person*" means any natural person, foundation, company, corporation, partnership, business, trust, governmental authority or other entity.

"*Private Donors*" means those individuals, companies, corporations, private foundations, businesses and other non-government entities who pledge to donate funds to be applied to the development of the Project.

"*Project*" means the Improvements and Greenscape to be developed to achieve the objective described in the second recital paragraph of this Agreement.

"*Project Design*" means the Project design identified in the schematic design and master plan attached hereto as **Exhibit C** and herein incorporated for all purposes.

"*Project Rules*" is defined in Section 4.2(d) below.

"*Project Schedule*" is defined in Section 2.4(e) below.

"*Property*" means that certain tract of land located at 1201 E. Wadley Ave., Midland, Texas, which is further legally described and depicted on **Exhibit A** attached hereto and incorporated herein for all purposes.

"*Reimbursement Cap*" is defined in Section 3.1 below.

"*Substantial Completion*" means the date on which (i) the Architect has certified, and the Conservancy has reasonably and in good faith agreed with the Architect's certification, that all Work is sufficiently complete in accordance with the Construction Documents so that the Main Features of the Project in **Exhibit C** attached hereto may be used for the purposes for which it is intended; and (ii) all final Permits with respect to the construction of the Work and use of the Main Features have been issued.

"*Term*" is defined in Section 2.2 below.

"*User Fees*" is defined in Section 4.2(e) below.

"*Water Wells*" is defined in Section 4.2(n) below.

"*Work*" means the performance of the construction and installation, or the various separately identifiable parts of the construction and installation, of all Main Features required to be completed substantially in accordance with the Project Design and the Working Drawings.

"*Working Drawings*" means the construction drawings and specifications for the Improvements and the drawings for the Greenscape, prepared by the Architect and other Project consultants in accordance with the Project Design.

ARTICLE II.
DESIGN AND DEVELOPMENT PHASE

2.1 Occupancy. Contemporaneously with the execution of this Agreement, the Parties have executed a lease with respect to the Property (the "*Lease*"), for twenty-five (25) years with two (2) options to extend the Lease for an additional twenty (20) years each (subject to renewal as set forth therein), a copy of which is attached hereto as **Exhibit B**. Notwithstanding anything contained in this Agreement to the contrary, upon the expiration or earlier termination of the Lease, this Agreement shall also terminate and neither Party shall have any further rights, duties or obligations hereunder, except as may otherwise be expressly set forth herein. Prior to the Construction Commencement Date, the Conservancy shall have the right to occupy and use the Property for planning and design activities, and for testing, surveying, and other investigations consistent with planning, design and fundraising activities.

2.2 Term. Provided that Substantial Completion of the Work has occurred in accordance with the terms of this Agreement, the term of this Agreement shall be effective for the Term (as such term is defined in the Lease) of the Lease, as such may be renewed or extended.

2.3 Development Costs. The Parties hereby agree that the Development Costs shall be subject to the following terms and conditions:

(a) As consideration for the Conservancy obtaining written commitments from donors for a minimum of Thirty Million and No/100 Dollars ($30,000,000.00) for the Development Costs attributable to the Main Features (the "*Capital Contribution*"), the City agrees to provide the Conservancy with funds in the amount of Ten Million and No/100 Dollars ($10,000,000.00) (the "*City Funds*") to be used for the Development Costs for the Main Features. The City Funds shall become due and payable upon (i) the Conservancy providing the City with a determination letter issued from the United States Internal Revenue Service concluding that the Conservancy is a section 501(c)(3) organization under the United States Internal Revenue Code, and (ii) the Conservancy's completion of its obligations contained in Section 2.3(b). All other Development Costs shall be borne solely by the Conservancy. As of the Effective Date, the City represents and warrants that (A) Three Million Three Hundred Seventy Thousand Nine Hundred Eight and 42/100 Dollars ($3,370,908.42) has been spent by the City toward the cost of Not In Project Scope Features and (B) Two Million Five Hundred Thirteen Thousand Nine Hundred Forty and No/100 Dollars ($2,513,940.00) has been spent by the City toward the cost of design fees for the Project, and such amounts shall be credited towards the City Funds for purposes of this Agreement.

(b) The Conservancy shall (i) undertake and complete a capital campaign to raise the Capital Contribution on or before July 1, 2024, and (ii) provide the City satisfactory

documentation, in a form reasonably acceptable to the City, evidencing that the Conservancy has obtained written commitments from donors for the Capital Contribution. If the Conservancy has not obtained commitments from donors for the Capital Contribution by July 31, 2023, the Conservancy may terminate this Agreement by providing written notice to the City prior to such date, at which point this Agreement shall be of no further force and effect and the parties shall have no further rights or obligations under this Agreement.

(c) Notwithstanding the above, if the Conservancy terminates or permanently abandons the Project prior to achieving Substantial Completion, then the Conservancy shall repay the City Funds upon receiving thirty (30) days' advance written notice from the City. Further, upon any such termination or abandonment of the Project by the Conservancy, this Agreement and the Lease shall automatically terminate.

2.4 Project Design and Construction. The Conservancy is hereby granted the exclusive right and duty to plan, design, and construct the Improvements pursuant to the terms of this Section.

(a) The Conservancy shall prepare a pro forma budget with respect to the operation of the Project for the remaining portion of the Fiscal Year following the Effective Date, assuming its development is in accordance with the Project Design. Such pro forma budget shall contain the Conservancy's good faith estimates of reasonably attainable revenue and reasonably foreseeable Operating Costs along with a reasonable determination and designation of any other Project expenses and revenues.

(b) Upon developing and approving the pro forma budget, the Conservancy shall notify the City of such pro forma budget.

(c) The Conservancy shall contract with the Architect and any other consultants as it deems reasonably necessary in order to produce the Working Drawings. However, the Conservancy shall not commence any construction contract for which it has not secured funding, or commitments thereof, to satisfy the contract obligations.

(d) The Conservancy shall contract with the Contractor for the performance of the Work. The Conservancy shall have the right to approve Change Orders; provided, however, that any proposed Change Order that would result in a material change to the Improvements shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed. Notwithstanding anything in this Agreement to the contrary, the City and the Conservancy acknowledge and agree that (i) the Project Design set forth on **Exhibit C** attached hereto includes the Not In Project Scope Features and the Additional Future Features, which are not included within the scope of Substantial Completion for purposes of this Agreement, but are part of the Project for purposes of this Agreement and the Lease, (ii) separate and apart from the Substantial Completion of the Main Features of the Project, the Conservancy may at any time undertake additional fundraising for the construction of such Additional Future Features and may expand the scope of the Construction Contract to include such Additional Future Features, provided that the Development Costs for such Additional Future Features shall be the sole responsibility of the Conservancy and the City Funds shall not be used for the construction of such Additional Future Features, and (iii) the City shall be solely responsible for completing the construction of the Not In Project Scope Features on or

before (A) the date of Substantial Completion, or (B) July 1, 2026, whichever occurs later.

(e) The Conservancy shall adopt a schedule for completion of the Work (the "*Project Schedule*"). The Project Schedule shall include a Construction Commencement Date of the later of (i) (A) the date the Conservancy has obtained commitments from donors for the Capital Contribution in accordance with Section 2.3(b) above and (B) the Board of Directors for the Conservancy has approved final plans and specifications for the Project or (ii) July 1, 2025, subject to events of force majeure, and the Conservancy shall provide a copy of such schedule to City.

(f) The Conservancy shall have the right, at its sole expense, to manage and supervise (i) all consultants, including the Architect, in all aspects of preparing the Working Drawings in accordance with the Project Design, and (ii) the Contractor in all aspects of the Work. Notwithstanding anything herein to the contrary, all expenses relating to the Working Drawings shall be promptly paid by the City and deducted from the City Funds.

(g) The Conservancy shall (i) hold all funds donated for Development Costs pursuant to Section 2.3, (ii) have the right to approve all draw requests by the Contractor, and (iii) disburse such funds for Development Costs including progress payments to the Contractor for Work performed pursuant to the Construction Contract.

(h) The City and its employees and agents shall have the right, during reasonable hours, to confirm that all work performed on the Project is being completed in accordance with the terms of this Agreement. The Conservancy shall, within thirty (30) days Substantial Completion, provide the City with a written statement or report certifying the total Development Costs along with reasonable evidence of such Development Costs.

2.5 No Developer Fee. The Conservancy shall not be entitled to any developer fee or other compensation from the City for its development services in connection with the design and construction of the Project. The City stipulates, acknowledges and agrees that the value of such services and related expenses constitute additional consideration given to the City and donated by the Conservancy in support of the Project.

ARTICLE III.
ANNUAL MANAGEMENT FEE

3.1 Annual Management Fee. Provided that Substantial Completion of the Work occurs in accordance with the terms of this Agreement, City agrees to pay the Conservancy an Annual Management Fee in an amount equal to the lesser of (i) the Actual Operating Costs (as defined herein) for each Fiscal Year, and (ii) Two Million and No/100 Dollars ($2,000,000.00) (the "*Reimbursement Cap*").

3.2 Payment Terms. On or before the first Business Day of each Fiscal Year following Substantial Completion, the City shall pay to the Conservancy an amount equal to the Reimbursement Cap; provided, however, that for the first Fiscal Year in which Substantial Completion occurs, City's payment shall be due and payable on the thirtieth (30th) day following Substantial Completion and prorated accordingly, if applicable.

3.3 Index Escalator. The Parties acknowledge and agree that the Reimbursement Cap shall be multiplied by the Index Escalator so as to increase the Reimbursement Cap for each Fiscal Year by the applicable percentage increase, if any, in the Index each Fiscal Year, provided that (a) in no event shall the Index Escalator be greater than 1.035 and (b) in no event shall the Index Escalator result in a reduction in the Reimbursement Cap. By way of example, if as of the sixtieth (60th) day preceding the first (1st) Conservancy Fiscal Year, (x) the Base Index is 248.820 and (y) the Comparison Index is 257.207, then the Index Escalator would be 1.034 [calculated as 257.207/248.820] and the Reimbursement Cap for the second (2nd) Conservancy Fiscal Year would be Two Million Sixty-Seven Thousand Four Hundred Fourteen and 20/100 Dollars ($2,067,414.20). However, if as of the sixtieth (60th) day preceding first (1st) Conservancy Fiscal Year, (x) the Base Index is 218.820 and (y) the Comparison Index is 257.207, then the Index Escalator would be 1.175 [calculated as 257.207/218.820], subject to the above-described Index Escalator maximum of 1.035, and the Reimbursement Cap for the second (2nd) Conservancy Fiscal Year would be Two Million Seventy Thousand and No/100 Dollars ($2,070,000.00). No later than forty-five (45) days prior to the beginning of each Fiscal Year during the Term, the Conservancy shall notify the City of the Index Escalator applicable to the Reimbursement Cap for the upcoming Fiscal Year. On the fifth (5th) anniversary of the Effective Date and continuing every five (5) years thereafter, the City Representative, one (1) or more City officials, and one (1) or more representatives of the Conservancy shall meet to discuss the calculation of the Index Escalator and shall attempt in good faith to come to an agreement regarding an equitable adjustment of the Index Escalator calculation, as reflected in an amendment to this Agreement, to ensure that the Index Escalator is reasonably comparable to the percentage increase in the City's budget for the immediately preceding five (5) years, provided that in no event shall the parties be obligated to agree to a change in the Index Escalator if there is a disagreement between the parties during such meeting. Any amendment to this Agreement pursuant to this Section shall not become effective unless and until the same is approved by a resolution of the Midland City Council.

3.4 Actual Operating Costs. On or before thirty (30) days following the end of each Fiscal Year after Substantial Completion, the Conservancy shall (i) compile all information regarding the Operating Costs incurred by the Conservancy for the previous Fiscal Year, (ii) calculate the actual Operating Costs for the previous Fiscal Year (the "*Actual Operating Costs*"), and (iii) submit the same to the City. If the Actual Operating Costs for the previous Fiscal Year amount to less than the Reimbursement Cap, then the Conservancy shall repay the difference to the City within thirty (30) days following the date that the Actual Operating Costs for the previous Fiscal Year are submitted to the City.

3.5 Hogan Park Operating Costs Fund. If the Conservancy is obligated to repay any difference between the Actual Operating Costs and the Reimbursement Cap in any Fiscal Year pursuant to Section 3.4, the City agrees to establish a dedicated fund for future Operating Costs that the Conservancy is unable to pay. All funds repaid by the Conservancy pursuant to Section 3.4 shall be deposited into said dedicated fund and held therein until the expiration of the Term. The Conservancy may request the City to provide a payment from said fund from time to time for the sole purpose of paying Operating Costs for which the Conservancy certifies in writing that: (i) the Conservancy does not currently possess adequate funding to pay; (ii) it is not reasonably foreseeable that the Conservancy will receive adequate funding to pay; (iii) at the time the Conservancy finalized and approved the budget for the applicable Fiscal Year, such costs were not reasonably foreseeable; and (iv) payment of such costs are necessary and appropriate to preserve the standards and objectives of the Project. The Conservancy's certification made pursuant to this Section shall be submitted in writing to the City Representative pursuant to Article VI. Within fifteen (15) Business Days of the City's receipt

of the Conservancy's certification, the City shall review and determine, in its sole discretion, whether the Conservancy's certification meets the requirements of this Section as to all Operating Costs listed. If the City determines that the Conservancy's certification meets said requirements as to such Operating Costs, in whole or in part, the City will remit payment to the Conservancy in the applicable amount.

ARTICLE IV.
OPERATING PHASE

4.1 Maintenance and Operating Standards.

(a) Following Substantial Completion, the Conservancy covenants to operate, manage, maintain and preserve the Project for the Term of the Lease.

(b) The Property is commonly referred to as Hogan Park and is located within the corporate limits of the City of Midland, Texas. The Project will be highly visible to, and visited by, tourists, visitors and residents of the greater Midland area including, without limitation, existing and future residents of the City. Accordingly, the Improvements and the Greenscape shall at all times be maintained at high standards of cleanliness, safety and natural beauty. The City and the Conservancy stipulate, acknowledge and agree that maintaining the Project in such manner provides a benefit to the City in encouraging expansion of the hotel and tourism industry in the City generally.

4.2 Operation.

(a) The initial term of the Conservancy's duty to operate the Project in accordance with this Article IV shall begin on the date of Substantial Completion and continue for the remainder of the Term of the Lease.

(b) The Conservancy shall be required to operate, manage, maintain and preserve the Project in a manner consistent with Section 4.1(b) above.

(c) The Conservancy shall be required to pay all Operating Costs in excess of the Annual Management Fees paid by the City.

(d) The Conservancy shall have the exclusive right to establish such reasonable rules and regulations as it may deem necessary or desirable for the Project from time to time, including, but not limited, to rules and regulations relating to the use of, and the types and sizes of activities and events at the Project (collectively, the "*Project Rules*"); provided, however, the Project Rules and all revisions to the Project Rules shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed. On or before August 31 (but no earlier than July 15) of each Fiscal Year, the Conservancy may submit a list of proposed revisions to the Project Rules, which shall become effective upon the written approval of the City Representative. The City Representative's written decision regarding a proposed revision to the Project Rules shall be issued on or before September 30, provided that if the City Representative fails to respond on or before September 30, the City shall be deemed to have consented to the Conservancy's list of proposed

revisions to the Project Rules. If the City Representative rejects any material revisions to the Project Rules proposed by the Conservancy, the City Representative and one (1) or more representatives of the Conservancy shall promptly meet to discuss the rejected revisions and mutually agree on acceptable alternative revisions thereto. The Project Rules shall comply with all Applicable Laws, and shall be non-discriminatory to the full extent required by Applicable Laws. The initial Project Rules shall be effective as of the date of Substantial Completion (and prior thereto, if applicable). The Conservancy shall provide copies of all Project Rules and any modifications, deletions, or additions thereto to the City in accordance with the notice provisions of Article VI below.

(e) The Conservancy shall have the exclusive right to establish non-discriminatory fee structures and/or rate schedules from time to time, and to charge such fees and rates according to such structures and schedules (the "*User Fees*") for uses of and activities and events located at the Project and occurring after Substantial Completion, including use of any portion of the Project for public or private events; provided, however, that the User Fees and all revisions to the User Fees shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed. On or before August 31 (but no earlier than July 15) of each Fiscal Year, the Conservancy may submit a list of proposed revisions to the User Fees, which shall become effective upon the written approval of the City Representative. The City Representative's written decision regarding a proposed revision to the User Fees shall be issued on or before September 30, provided that if the City Representative fails to respond on or before September 30, the City shall be deemed to have consented to the Conservancy's list of proposed revisions to the User Fees. If the City Representative rejects any revisions to the User Fees proposed by the Conservancy, the City Representative and one (1) or more representatives of the Conservancy shall promptly meet to discuss the rejected revisions and mutually agree on acceptable alternative revisions thereto. In no event shall the Conservancy impose any general admission fee or other charge for entry into the Project as a whole, other than User Fees and other fees and charges imposed in connection with certain public or private events as set forth in Section 4.2(f) below. The Conservancy shall provide copies of all schedules or rate structures for User Fees and any revisions thereto to the City in accordance with the notice provisions of Article VI below.

(f) The Conservancy shall have the exclusive right to establish a reservation process for advance scheduling of activities and events at the Project and for advance bookings of the right to use or occupy particular Improvements or areas for such activities and events at the Project, including use of any portion of the Project for public or private events, and to charge User Fees and rental rates for the foregoing; provided, however, that the foregoing and all associated revisions shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed. On or before August 31 (but no earlier than July 15) of each Fiscal Year, the Conservancy may submit a list of proposed revisions to the above items, which shall become effective upon the written approval of the City Representative. The City Representative's written decision regarding a proposed revision to the above items shall be issued on or before September 30, provided that if the City Representative fails to respond on or before September 30, the City shall be deemed to have consented to the Conservancy's list of proposed revisions to the above

items. If the City Representative rejects any revisions to the above items proposed by the Conservancy, the City Representative and one (1) or more representatives of the Conservancy shall promptly meet to discuss the rejected revisions and mutually agree on acceptable alternative revisions thereto. The Conservancy shall schedule, organize, promote and conduct activities and events at and uses of the Project on its own initiative in accordance with its annual operating plans and annual budgets, consistent, however, with the development, maintenance and use of the Project as an urban park and with high standards of natural beauty. Notwithstanding the above, in recognition of the City providing access to the Property, the City (which includes all its departments and affiliated entities) shall be permitted to conduct events at the Project without owing any daily or event rental fees on up to twenty (20) dates (the "*City Use Days*") during each Fiscal Year, provided that (i) in no event will the City Use Days interfere with events scheduled or in the process of being scheduled by the Conservancy, (ii) no more than ten (10) City Use Days shall occur on a Friday, Saturday or Sunday, (iii) the City shall specify the designated areas within the Project to be used in connection with such City Use Days, which designated areas shall be subject to the Conservancy's reasonable approval, (iv) the City shall comply with, and be subject to, the Project Rules in connection with the City's use of the Project during the City Use Days and (v) the City Use Days shall include periods of time necessary for set up and tear down related to events organized by the City; provided, however, if the set up and tear down related to events organized by the City does not materially interfere with the Conservancy's use of the Project (or any applicable portion thereof) or other events scheduled by the Conservancy for the Project, then the time required for such set up and tear down shall not be included as City Use Days. Notwithstanding anything herein to the contrary, the City may utilize the following portions of the Project during the City Use Days, calculated on a per square foot basis out of the total square footage of the Project:

City Use Days	**Percentage of Project**
5	100%
5	No more than 75%
5	No more than 50%
5	No more than 25%

A process will be established by the Parties for scheduling the City Use Days and all City Use Days must be scheduled at least sixty (60) days in advance. With the exception of daily or event rental fees, the City shall be responsible for paying any other costs and expenses associated with events held on any of the City Use Days, including, without limitation, costs and expenses associated with set up and tear down, additional services required to accommodate the City's event.

(g) The Conservancy shall have the exclusive right to and duty to market and promote the Project and the events and activities organized or sponsored by the Conservancy. Furthermore, the Conservancy shall establish a development program to raise private donations and obtain grants for the portion of the Operating Costs not covered by either the Annual Management Fee or revenue generated by User Fees and rentals.

(h) The Conservancy shall have the exclusive right to obtain corporate sponsorships of

events, to develop signage regulations, and to name the Project as a whole; provided, however, that fixed signage relating to corporate sponsorships (but not corporate sponsorships of events) and the development of signage regulations shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed. The Parties hereby agree that the signage regulations developed pursuant to this Section shall provide for advertising space at a minimum of fifteen (15) locations at the Property, to be dedicated for City use at no charge to the City (the "*City Advertising Space*") in locations to be mutually determined by the City and the Conservancy. All costs associated with the design, production, and maintenance of the City Advertising Space shall be the sole and exclusive responsibility of the City. The design of the City Advertising Space shall be subject to the reasonable approval of the Conservancy and shall be consistent with the overall design of the Project, the signage regulations adopted by the Conservancy and all applicable laws and ordinances related thereto. The City shall cooperate with the Conservancy and the Conservancy's consultants to ensure the City's compliance with the immediately preceding sentence.

(i) Following the first adjustment in the Annual Management Fee pursuant to Article III, the Conservancy shall have the exclusive right to design, construct and install other or additional Improvements and Greenscape not previously included in the Main Features of the Project Design; to remove or alter the Improvements and Greenscape originally contemplated in the Project Design; or to modify or replace the Project Design. Notwithstanding the foregoing, the design, construction, and installation of Water Wells shall be governed by Section 4.2(n).

(j) The Conservancy shall prepare and deliver to the City a copy of its annual operating plan and budget for its next succeeding Fiscal Year forty-five (45) days prior to the Conservancy's Fiscal Year end.

(k) The Conservancy shall deliver to the City a copy of its annual year-end report and financials within one hundred twenty (120) days after the Conservancy's Fiscal Year end.

(l) The City Representative shall have the right, during normal business hours and at the City's sole cost and expense, to audit and obtain copies of the books and records of the Conservancy for the then current Fiscal Year, provided such audit shall not take place more than one time per calendar Year, unless otherwise mandated by applicable law.

(m) The Conservancy shall have the right to subcontract and/or delegate all or any part of its rights and obligations under this Agreement as the Conservancy deems necessary or desirable for the efficient and cost-effective performance of such rights and obligations; provided, however, that the Conservancy's subcontracting and/or delegation of the management of the Project as a whole (excluding subcontracting and delegation of rights relating to construction, landscaping, design work, general maintenance, janitorial, marketing and advertising services) shall be subject to the advance written approval of the City Representative, which shall not be unreasonably withheld, conditioned, or delayed.

(n) Notwithstanding anything contained in this Agreement to the contrary, with respect to the Conservancy's use of water at the Project, the City agrees to abstain from increasing water rates charged to the Conservancy for such water usage at the Project above the lowest rate charged to the public for water usage, notwithstanding the volume of water used at the Project. The City represents and warrants that the current rate for City water pursuant to the immediately preceding sentence is Six and 11/100 Dollars ($6.11) per one thousand (1,000) gallons of water (the "*City Water Rate*"). During the Term of the Lease and for the exclusive use and benefit of the Project, the City hereby authorizes the Conservancy to (i) access and utilize the water wells currently in existence at the Property (the "*Existing Water Wells*"), (ii) repair, replace and re-drill the Existing Water Wells, and (iii) drill new water wells on the Property ("*New Water Wells*" and together with the Existing Water Wells, the "*Water Wells*"); provided, however, during the Term, the rate of production of the Water Wells, on an aggregate basis, shall not exceed one hundred and ten percent (110%) of the current gallon per minute ("*GPM*") rate of production for the Existing Water Wells. The City represents and warrants that the current GPM rate of production for the Existing Water Wells is one thousand three hundred fifty (1,350) GPM. The drilling of New Water Wells by the Conservancy shall be subject to the written approval from the City Representative, provided the City Representative shall respond within thirty (30) days to a request by the Conservancy to drill a New Water Well (and the City's failure to respond within such thirty (30)-day period shall constitute the City's deemed denial of the Conservancy's request to drill said New Water Well). If the City Representative denies a request by the Conservancy to drill a New Water Well, the City Representative and one (1) or more representatives of the Conservancy shall promptly meet to discuss the City's justification for such rejection and the parties shall negotiate in good faith to agree upon an alternative solution to address the Conservancy's water needs at the Project. The Conservancy shall not use water produced from the Water Wells outside of the Property and the Conservancy shall not sell water produced from the Water Wells to third parties.

ARTICLE V.
DEFAULTS AND REMEDIES

If any Party hereto defaults under the terms of this Agreement, the non-defaulting Party must send written notice detailing the nature of the default of the alleged defaulting Party. The alleged defaulting Party shall have a reasonable period, not to exceed sixty (60) days for any monetary default, or ninety (90) days for any non-monetary default, after receipt of such notice to cure such alleged default to the reasonable satisfaction of the non-defaulting Party. Upon the failure of the alleged defaulting Party to cure the alleged default as set out above, the non-defaulting Party will have the right to pursue all remedies available at law or equity. In addition to any remedies that the Conservancy may have related to a monetary default by the City under this Agreement (i) during the sixty (60) day cure period set forth above, the voting rights of all board members appointed by the City shall be relinquished without further notice until any such default is cured, and (ii) if the City fails to cure any such monetary default by the City within the sixty (60) day cure period set forth above, then following the expiration of such cure period, the positions of all board members appointed by the City to the Board of Directors of the Conservancy shall become at-large positions as set forth in the Bylaws of the Conservancy. Notwithstanding the foregoing, the Conservancy may not seek to amend the Bylaws of the Conservancy during the sixty (60) day cure period set forth above.

In connection with the City's allocation of board seats on the Conservancy board of directors, the Conservancy shall amend its Bylaws to provide for a board of directors comprised of seven (7) board seats, three (3) of which shall be appointed by the City. Additionally, the amended Bylaws of the Conservancy shall specify that (i) the three (3) board seats appointed by the City may not be reduced in number (except as otherwise provided herein), (ii) the City appointees shall serve at the sole discretion and pleasure of the Midland City Council, and (iii) the City appointees may only be appointed or removed upon a duly approved resolution or motion of the Midland City Council (the "*Board Seat Requirements*"). The amended Bylaws of the Conservancy shall be in a form substantially similar to that of **Exhibit D**, which is attached hereto and incorporated herein for all purposes. Notwithstanding anything in this Agreement to the contrary, if the Conservancy desires to pursue the development of one (1) or more additional projects separate and apart from the Project, the Conservancy and the City may agree to convert the City's three (3) board seats on the Conservancy board to three (3) board seats on an executive committee of the Conservancy (the "*Park Executive Committee*") established for the sole purposes of operating and managing the Project. In connection with the Conservancy's establishment of the Park Executive Committee, the Conservancy shall submit to the City a proposed amendment to the Bylaws providing that (a) the Conservancy board delegates all decision-making authority with respect to the operation and maintenance of the Project to the Park Executive Committee, (b) the establishment of the Park Executive Committee shall not reduce the authority, rights and obligations of the City board members with respect to the Project, and (c) the Park Executive Committee shall be subject to the Board Seat Requirements set forth above. Before entering into such an amendment to the Bylaws, the Conservancy shall provide a proposed draft of the Bylaw amendment to the City for the City's review and written approval. The decision regarding whether to issue said written approval shall be in the sole and absolute discretion of the City. For the avoidance of doubt, the City is under no obligation to agree to convert the City's seats on the Conservancy board of directors to board seats on the Park Executive Committee, and the Conservancy covenants and agrees that it will not amend the Bylaws to convert the City's seats on the Conservancy board of directors to board seats on the Park Executive Committee without the prior written approval of the City. If the City denies the formation of the Park Executive Committee, then a City Representative and one (1) or more representatives of the Conservancy shall promptly meet to discuss the City's justification for such rejection and potential alternative solutions, if any, to address the Conservancy's need to execute other projects separate and apart from the Project; provided, however, that in no event shall the parties be obligated to agree to an alternative solution to address the Conservancy's need to execute other projects if there is a disagreement between the parties during such meeting. The Conservancy shall achieve Substantial Completion of the Main Features of the Project prior to pursuing the establishment of the Park Executive Committee.

Notwithstanding any contrary provision contained herein, a breach or default by the Conservancy or the City of any material representation, warranty, covenant, term, condition, duty, or obligation contained in the Lease, after passage of the applicable notice and cure periods (if any), shall, at the option of the Conservancy or the City (as applicable), be a default under this Agreement, in which event the Conservancy or the City (as applicable) shall be entitled (but not required) to apply all rights and remedies of the Conservancy or the City (as applicable) under the terms of this Agreement by reason of a party default under the Lease. The Parties acknowledge and agree that the terms of the Lease are incorporated herein by reference for all legal purposes.

ARTICLE VI.
NOTICES

Any notice, consent, approval or other communication required or permitted to be given under this Agreement (a "*notice*"), in order to be effective, must be in writing and must be served by delivering such notice addressed to the Party to be notified (i) effective two (2) days after depositing the notice with the U.S. Postal Service, postage prepaid, sent certified, return receipt requested; or (ii)

effective upon receipt if delivered in person, by commercial messenger or by reputable overnight courier to the office of such Party to be notified. For purposes of giving effective notice, the addresses of the Parties are as follows (provided that any such address may be changed from time to time by the changing party giving not less than thirty (30) days' prior written notice thereof to the other Party hereto as provided above):

If to the City:

City of Midland
300 N. Loraine
Midland, Texas 79701
Attn: City Manager

With a copy to:

City Attorney's Office
300 N. Loraine
Midland, Texas 79701
Attn: City Attorney

If to the Conservancy:

Permian Basin Quality of Place Conservancy
P.O. Box 51022
Midland, Texas 79710
Attn: Chris Ginsbach

With copy to:

Jackson Walker LLP
1401 McKinney, Suite 1900
Houston, TX 77019
Attn: Jonny Heins

ARTICLE VII.
GENERAL PROVISIONS

7.1 Independent Contractor. It is understood and agreed that the relationships among the City and the Conservancy and will be that of an independent contractor. Nothing contained in this Agreement will be deemed or construed to (i) make the City the agent, servant or employee of the Conservancy, (ii) make the Conservancy the agent, servant or employee of either the City, or (iii) create any partnership, joint venture, or other association between the City and the Conservancy. It is understood and agreed that the Conservancy is a separate entity from the City, and the City will not be held responsible for actions or obligations of the Conservancy.

7.2 Waiver of Performance. The failure of any Party to insist, in any one or more instances, on the performance of any of the terms, covenants or conditions of this Agreement, or to exercise any of its rights under this Agreement, will not be construed as a waiver or relinquishment by such Party of such term, covenant, condition or right with respect to further performance.

7.3 **Governing Law.** This Agreement will be governed, construed and enforced in accordance with the laws of the State of Texas and venue for any action concerning this Agreement shall be in a State District Court of Midland County, Texas.

7.4 **Dates.** If a day requiring notice or action falls on a weekend or national or local holiday, the next non-weekend day or non-holiday shall be applicable.

7.5 **Severability.** If any provision of this Agreement is held to be illegal, invalid or unenforceable under present or future laws, the legality, validity and enforceability of the remaining provisions of this Agreement will not be affected thereby, and this Agreement will be liberally construed so as to carry out the intent of the Parties to it.

7.6 **Parties in Interest.** The terms of this Agreement will be binding upon, and inure to the benefit of, the Parties hereto and their permitted successors and assigns. Nothing in this Agreement, whether express or implied, will be construed to give any person or entity (other than the Parties hereto and their permitted successors and assigns) any legal or equitable right, remedy or claim under or in respect of any terms or provisions contained in this Agreement or any standing or authority to enforce the terms and provisions of this Agreement.

7.7 **Assignments.** No Party may assign its rights or obligations under this Agreement without the prior written consent of the other Party, which consent shall not be unreasonably withheld.

7.8 **Amendments.** This Agreement will not be modified or amended in any manner except by a writing signed by the Parties hereto.

7.9 **Entire Agreement.** This Agreement represents the entire and integrated agreement between the Parties with respect to the subject matter hereof. All prior negotiations, representations or agreements not expressly incorporated into this Agreement are hereby superseded and canceled.

7.10 **Counterparts.** This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument and any of the Parties hereto may execute this Agreement by signing any such counterpart.

7.11 **Captions.** Captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Agreement.

7.12 **Interpretation.** The Parties acknowledge and represent that this Agreement has been jointly drafted by the Parties, that no provision of this Agreement will be interpreted or construed against any Party solely because the Party or its legal counsel drafted such provision and that each of them has read, understood, and approved the language and terms set forth herein.

7.13 **Limited Waiver of Sovereign Immunity**. The City agrees that this Agreement shall constitute a contract for providing goods and services to the City, subject to the provisions of Subchapter I of Chapter 271, Texas Local Government Code. Further, to the extent allowed by law, the City waives its rights to sovereign or governmental immunity as to an action in equity by the Conservancy for a writ of mandamus or specific performance to enforce all the terms of this Agreement.

[Remainder of this page intentionally left blank; signature pages follow]

EXECUTED by the duly authorized representatives of the Parties hereto to be effective as of the Effective Date.

CITY OF MIDLAND, TEXAS

_____
Robert Patrick, City Manager

THE STATE OF TEXAS §
§
COUNTY OF MIDLAND §

BEFORE ME, the undersigned authority, on this day personally appeared ROBERT PATRICK, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged that he executed and delivered the foregoing instrument for the purposes and consideration therein expressed on behalf of the CITY OF MIDLAND, TEXAS, in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2023.

_____
Notary Public, State of Texas

Signature Page

PERMIAN BASIN QUALITY OF PLACE CONSERVANCY,
A Texas non-profit corporation

By: _____

Name: _____

Title: _____

THE STATE OF TEXAS §
§
COUNTY OF MIDLAND §

BEFORE ME, the undersigned authority, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged that s/he executed and delivered the foregoing instrument for the purposes and consideration therein expressed on behalf of the PERMIAN BASIN QUALITY OF PLACE CONSERVANCY, in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2023.

_____
Notary Public, State of Texas

Signature Page

EXHIBIT A

Property Depiction and Legal Description

An approximate 137-acre tract located in Section 13, Block 39, T-1-S, T&P RR Co. Survey, City and County of Midland, Texas.



EXHIBIT B

Hogan Park Lease Agreement

[ATTACHED]

EXHIBIT C

Schematic Design and Master Plan



Exhibit D

SECOND AMENDMENT
TO
BYLAWS
OF
PERMIAN BASIN QUALITY OF PLACE CONSERVANCY
Midland, Texas

THIS SECOND AMENDMENT TO BYLAWS OF PERMIAN BASIN QUALITY OF PLACE CONSERVANCY (this "Amendment"), dated effective _____, 2023 (the "Effective Date") of Permian Basin Quality of Place Conservancy, a Texas nonprofit corporation (the "Corporation"), is hereby approved by the Board of Directors of the Corporation.

RECITALS. The Board of Directors of the Corporation each hereby approve the amendments to the Bylaws of the Corporation dated April 20, 2022 (as amended by that certain Amendment to Bylaws of the Permian Basin Quality of Place Conservancy dated effective November 9, 2022, the "**Bylaws**") set forth in this Amendment in accordance with Article 10 of the Bylaws.

NOW, THEREFORE, this Amendment hereby sets forth each such amendment to the Bylaws.

1. The Bylaws are hereby amended as follows:

(a) Section 3.01 of the Bylaws is hereby amended and restated to read as follows:

"3.01 *Board role, size, and compensation:* The board of directors of PQPC (the "Board of Directors") is responsible for overall policy and direction of the PQPC, and delegates responsibility of day-to-day operations to the Executive Director, staff, and committees. The Board of Directors shall have seven (7) members. Members of the Board of Directors receive no compensation other than reasonable expenses. The number of members of the Board of Directors may be increased or decreased from time to time upon a unanimous vote of the Board of Directors. Notwithstanding any contrary provision contained herein, and except as provided in Section 3.06, the Legacy Appointed Directors (as defined below) may only be eliminated by unanimous vote of the Board of Directors (including the person in the position to be eliminated), or as otherwise provided in Section 3.06. The City Appointed Directors (as defined below) may only be eliminated as specifically provided for in Section 3.06(c)(i)."

2. Section 3.03 of the Bylaws is hereby amended and restated to read as follows:

"3.03 *Board elections:* Every September, the board of directors and the City Council of Midland, Texas, shall elect and appoint, as applicable, directors to replace those whose terms will expire at the end if the fiscal year. The election of the Legacy Appointed Directors shall take place during the annual meeting of the board of directors, called in accordance with the provisions of these Bylaws. The appointment of the City Appointed Directors shall be fulfilled by duly approved resolutions of the City Council of Midland, Texas that are passed on or before September 30 of each year as applicable.

3. The first (1st) sentence of Section 3.04 of the Bylaws is hereby amended and

restated to read as follows:

"3.04 *Election Procedures*. New directors shall be appointed by the Legacy Appointed Directors and the City Appointed Directors, as applicable, in accordance with Section 3.06 below."

4. The first (1st) paragraph of Section 3.05 of the Bylaws is hereby amended and restated to read as follows:

"3.05 *Officers and Duties:* There shall be four (4) officers of the board, consisting of a president, vice-president, secretary, and treasurer. At any one time, there shall be at least one (1) City Appointed Directors who serve as officers of the board. At least two (2) officers shall serve as signatories on the checking account as prescribed in Section 6.03 and their duties are as follows:

5. Section 3.06 of the Bylaws is hereby amended and restated to read as follows:

"3.06 *Vacancies*:

(a) Except as provided below, vacancies on the Board of Directors shall exist if any of the following events occurs: (1) a director dies, resigns or is removed from office; (2) the authorized number of directors is increased; or (3) a director's term of office ends in accordance with Section 3.02. The Board of Directors may declare vacant the office of a director in any of the following cases: (A) if he or she is adjudged incompetent by an order of court, or finally convicted of a felony; (B) if within sixty (60) days after notice of his or her appointment, he or she does not accept the office either in writing or by attending a meeting of the Board of Directors; or (C) if he or she is excessively absent from meetings of the Board of Directors, as set forth in Section 3.07 below.

(b) Four (4) positions on the Board of Directors shall initially be filled by Marc Dingler, Kristina Johnson, Jeff Beard and Chris Ginbsbach (each, a "Legacy Appointed Director" and collectively, the "Legacy Appointed Directors"). Vacancies among the Legacy Appointed Directors shall be filled in accordance with subsections (i) and (ii) below. Successors to each Legacy Appointed Director shall be referred to as Legacy Appointed Directors for purposes of this subsection.

(i) Following the expiration of the term of office of each Legacy Appointed Director or the resignation of a Legacy Appointed Director, such Legacy Appointed Director shall select their successor and such successor must be approved by a majority vote of the remaining three (3) Legacy Appointed Directors. If the remaining three (3) Legacy Appointed Directors do not approve the selected successor by majority vote, the procedure outlined above shall be repeated until a majority vote of the remaining Legacy Appointed Directors is achieved.

(ii) In the event one (1) or more Legacy Appointed Director (A) dies or is removed from office, (B) is adjudged incompetent by an order of court or is finally convicted of a felony, (C) does not accept the office either in writing or by attending a meeting of the Board of Directors or (D) is excessively absent from meetings of the Board of Directors, the remaining Legacy Appointed Directors shall select such Legacy Appointed

Director(s)' replacement and must approve such replacement by a majority vote.

(c) Three (3) positions on the Board of Directors shall be filled by written appointment made by a duly approved resolution of the City Council of Midland, Texas (each, a "City Appointed Director" and collectively, the "City Appointed Directors"). The City Appointed Directors shall serve at the sole discretion of the City Council of Midland, Texas. The Bylaws shall not be amended to reduce the number of City Appointed Director positions.

(i) With respect to the City Appointed Directors, the City of Midland (the "City") is obligated to provide certain funding amounts to the PQPC under a certain Hogan Park Development Agreement entered into between the City and the PQPC. In the event that the City fails to provide funding as agreed under the Hogan Park Development Agreement, then the PQPC shall provide written notice of such monetary default to the City, and the date of such notice shall begin a period of sixty (60) days during which such monetary default may be cured with no further consequence (the "Cure Period") except as provided in the following sentence. So long as the City remains in monetary default during the Cure Period, the voting rights of all City Appointed Directors on the Board of Directors will be suspended without further notice until such monetary default is cured within the Cure Period; provided, however, that the board of directors shall not amend the Bylaws during the Cure Period when the voting rights of the City Appointed Directors is suspended. If the City of Midland's default is not cured within the Cure Period, then immediately upon expiration of the Cure Period, all City Appointed Director positions on the Corporation Board shall become at-large positions, with the succession of each such position to be implemented in accordance with section 3.06(d) below. If and when such conversion to at-large status shall occur, a new director for each such position shall be immediately elected in accordance with Section 3.06(d). This conversion of a position on the Board of Directors shall in no manner limit the City's obligations under the Hogan Park Development Agreement, and the PQPC shall have all rights to pursue satisfaction and enforcement of its claims under that agreement including making such claims pursuant to the City's limited waiver of sovereign immunity set forth in section 7.13 of that agreement.

(d) Any other vacancy occurring in a director position on the Board of Directors shall be filled by majority vote of the other directors of the PQPC serving at the time and whose voting rights have not been relinquished at that time."

6. Section 3.07 of the Bylaws is hereby amended and restated to read as follows:

"3.07 *Resignation, Termination and Absences:* If the Board of Directors accepts the resignation of a director tendered to take effect at a future time other than the time at which his or her term would otherwise expire, the successor to such director may be selected in accordance with Section 3.06, as applicable to the particular position that is being vacated, to take office when the resignation becomes effective. A director appointed to fill a vacancy that exists for any reason other than the end of his or her predecessor's term of office in accordance with Section 3.06, or the creation of a new director position, shall be appointed to the unexpired term of his or her predecessor in office. Resignation from the Board of Directors must be in writing and received by the secretary. Attendance will be reviewed systematically and it is recommended that board members may be asked to resign from the Board of Directors in situations of excess

absences."

7. Section 4.05 of the Bylaws is hereby amended and restated to read as follows:

"4.05 *Quorum:* A quorum for a meeting shall require a minimum of four (4) Directors to be present. If a quorum is not present at a meeting, the meeting shall be adjourned and reconvened.

8. Section 5.02 of the Bylaws is hereby amended and restated to read as follows:

"5.02 *Executive Committee:* The president, vice-president, secretary, and treasurer serve as the members of the Executive Committee. Except for the power to amend the Articles of Incorporation and Bylaws, the Executive Committee shall have all the powers and authority of the board of directors in the intervals between meetings of the board of directors, and is subject to the discretion and control of the full board.

9. Article 10 of the Bylaws is hereby amended and restated to read as follows:

"ARTICLE 10; *AMENDMENTS TO BYLAWS:* These Bylaws may be altered, amended or repealed, and new Bylaws may be adopted by a four (4) vote majority of the board of directors at any regular or special meeting if at least 48 hours' written notice is given of an intent to alter, amend, or repeal the Bylaws, or to adopt new Bylaws at such meeting. Notwithstanding the foregoing, the board of directors may not seek to alter, amend, or repeal the Bylaws, or adopt new Bylaws during a Cure Period when the voting rights of the City Appointed Directors is suspended.

10. Except as amended hereby, the Bylaws shall remain in force and effect as they existed immediately prior to this Amendment.

[CERTIFICATION FOLLOWS]

CERTIFICATION

This Amendment was approved by Written Consent of the Board of Directors on _____, 2023.

SECRETARY **DATE**

HOGAN PARK LEASE AGREEMENT

THIS HOGAN PARK LEASE AGREEMENT (this "*Lease*"), effective this 25th day of January, 2023 (the "*Effective Date*"), is made by and between the **CITY OF MIDLAND, TEXAS**, a home-rule municipal corporation ("*Lessor*" or "*the City*"), and **PERMIAN BASIN QUALITY OF PLACE CONSERVANCY**, a Texas non-profit corporation, ("*Lessee*"). Lessee and Lessor are sometimes collectively referred to herein as the "*Parties*" or individually as a "*Party*".

RECITALS

WHEREAS, Lessor is the owner of a certain tract of land within its corporate limits and commonly known as Hogan Park (the "*Land*"), and more particularly described in **Exhibit A**, which is attached hereto and incorporated herein for all purposes. The Land and all improvements thereon, if any, being hereinafter referred to as, the "*Property*"; and

WHEREAS, the Parties desire to cause the Property to be developed, pursuant to the Hogan Park Development Agreement, by and between Lessor and Lessee dated of even date herewith (the "*Development Agreement*"), as a high-quality urban park, with athletic fields, courts, playgrounds, dog parks, concessions, parking, restrooms, greenspace and related facilities and amenities, for the use and enjoyment of residents and visitors of the City, for the beautification of the City, to promote tourism and the hotel industry in the City and to benefit, improve and promote the quality of life in the Permian Basin; and

WHEREAS, due to the location of the Property in Midland, Texas, the Parties desire for the Property to be developed, operated and maintained at high standards in order to reflect positively on the City as a whole; and

WHEREAS, the Parties have, contemporaneously herewith, entered into the Development Agreement, which sets forth the Parties' respective rights, obligations and undertakings concerning the improvement of the Property and whereby Lessor agrees to lease the Property to Lessee for the purposes of designing, developing, managing, maintaining, operating and occupying the Project (as defined in the Development Agreement); and

WHEREAS, Lessor desires to lease the Property to Lessee in order to allow Lessee to design, develop, manage, maintain and operate the Project pursuant to the Development Agreement for the benefit of the residents of and visitors to the City and the Permian Basin; and

WHEREAS, Lessee desires to lease the Property in order to design, develop, manage, maintain, operate and occupy the Project pursuant to, and in accordance with the Development Agreement; and

WHEREAS, the Midland City Council has determined that the Project satisfies a public purpose by providing park, open space, and educational opportunities for the benefit of the general public of the City of Midland, Texas, and the Permian Basin.

NOW, THEREFORE, for and in consideration of the mutual covenants, agreements and benefits to the Parties, it is agreed to as follows:

ARTICLE I.
GRANTING CLAUSE

Lessor, in consideration of the covenants and agreements to be performed by Lessee and upon the terms and conditions hereinafter stated, does hereby lease, demise and let unto Lessee the Property, in its as-is, where-is condition, to have and to hold for the Term (hereinafter defined).

ARTICLE II.
TERM

2.1 **Initial Term.** The initial term of this Lease (the "*Initial Term*"), shall commence on the Effective Date and shall expire on the twenty-fifth (25th) anniversary of the date of Substantial Completion (as such term is defined in the Development Agreement) (the "*Expiration Date*"). Upon establishment of the date of Substantial Completion under the Development Agreement, Lessor or Lessee, upon the written request of the other, shall promptly execute and deliver to the requesting Party a certificate acknowledging the Expiration Date calculated as set forth above. Notwithstanding anything herein to the contrary, if Lessee has not obtained commitments from donors for the Capital Contribution (as defined in the Development Agreement) by July 31, 2023, Lessee may terminate this Lease by providing written notice to Lessor prior to such date, at which point this Lease shall be of no further force and effect and the parties shall have no further rights or obligations under this Lease.

2.2 **Renewal Terms.** Lessee shall have the option to renew the Initial Term for two (2) consecutive additional twenty (20) year terms (each, a "*Renewal Term*," and the Initial Term and any Renewal Terms exercised by Lessee being, the "*Term*"); provided that notwithstanding anything contained in this Lease to the contrary, in no event shall the cumulative Term be greater than sixty-five (65) years. Each Renewal Term, if exercised, shall be upon the same terms and conditions as the Initial Term. Lessee may exercise each option to renew the Term for the applicable Renewal Term by providing written notice to Lessor of its intention to do so at least ninety (90) days prior to the end of the Initial Term or the prior Renewal Term, as applicable. It is the intention of Lessor and Lessee to avoid a forfeiture of Lessee's right to extend the Term under the extension option set forth in this paragraph through Lessee's failure to give notice of exercise within the time prescribed. Accordingly, if Lessee shall fail to give such notice on or prior to the foregoing 90-day period, then the time to give such notice shall be deemed to be extended for an additional period commencing on the last day on which such notice by Lessee may be timely given and ending thirty (30) days after the date Lessor gives Lessee written notice of Lessee's failure to exercise such option within the time prescribed. If Lessee exercises such option less than ninety (90) days prior to the end of the then existing Term, but within the extended time permitted by this paragraph, the extended Term shall commence, or shall be deemed to have commenced, at the time it would have commenced if such notice had been given within the original time prescribed and, if necessary, the then-current Term shall be extended on a month-to-month basis in order to allow Lessee to exercise any such option.

ARTICLE III.
RENT

In consideration of Lessee's obligations to design, construct, partially fund, develop, manage, maintain and operate the Project, Lessee shall not be required to pay rent of any kind during the Term.

ARTICLE IV.
USE OF PROPERTY

4.1 **Occupancy and Expenses.** During the Term, Lessee shall have the right to occupy and use the Property, to undertake its obligations and rights under, and in accordance, with the Development Agreement. All costs and expenses related to the Project shall be paid in accordance with the terms of the Development Agreement.

4.2 **Improvements.** Subject to the terms, conditions, limitations, and exclusions contained in the Development Agreement, Lessee shall have the exclusive right, from the Effective Date until the end of the Term, to design, construct, install, remove or alter the Improvements (as defined in the Development Agreement) within the Property. The Improvements placed on the Property by Lessee, or in place on the Effective date of this Lease, shall remain the property of Lessor (subject to Lessee's rights pursuant to this Lease) and may not be removed by Lessee at the expiration or earlier termination of this Lease.

4.3 **Compliance.** Lessee shall comply, and shall use reasonable efforts to cause Lessee's contractor(s) to comply, in all material respects with applicable federal, state, and local laws regarding Lessee's work, services and activities under this Lease and the Development Agreement, including but not limited to all applicable sections of the City of Midland Municipal Code, as amended.

4.4 **Independent Contractor.** It is expressly understood and agreed that Lessee shall perform all work and services described in this Lease and in the Development Agreement as an independent contractor and not as an officer, agent, servant or employee of Lessor. Lessee shall control the details of the work and services performed under this Lease and the Development Agreement, and all persons performing the same; and Lessee shall be solely responsible for the acts and omissions of its officers, employees, agents, contractors and subcontractors. The doctrine of *respondeat superior* shall not apply as between Lessor and Lessee or Lessee's officers, employees, agents, contractors and subcontractors. Lessee shall be an independent contractor under this Lease and the Development Agreement and shall assume all rights, obligations and liabilities applicable to it as such independent contractor. Lessee shall assume exclusive responsibility for the work and services performed pursuant to this Lease and the Development Agreement.

4.5 **Taxes and Liens.** Lessee shall be responsible for the payment of all ad valorem taxes assessed against the Property, if any. Lessee hereby agrees and acknowledges that Lessee shall have no right to place any liens or encumbrances upon Lessor's fee simple interest in the Property.

4.6 **Plat Requirements/Restrictions; Development Fees.** Lessor hereby agrees and acknowledges that Lessee shall construct the Improvements (i) in accordance with the Development Agreement, and (ii) subject to any applicable plat or replat requirements and/or restrictions; provided, however, that Lessor shall cooperate with Lessee in good faith in connection with any platting or replatting requirements and/or restrictions and shall not unreasonably withhold, condition or delay any approval or consent related to the construction of the Improvements in accordance with Lessee's development of the Project (as defined in the Development Agreement). Lessor hereby waives the following fees in connection with Lessee's construction of the Improvements: (i) platting fees; (ii) building permit fees, including fees associated with electrical, mechanical, gas, and plumbing systems; (iii) demolition permit fees; (iv) sign permit fees; (v) water meter fees; and (vi) tap fees. To its knowledge, Lessor represents and warrants that no impact fees will be due and payable by Lessee in connection with the construction of the Improvements.

ARTICLE V.
STANDARD OF MAINTENANCE

At all times during the Term, Lessee shall operate, repair and maintain the Project in accordance with the terms of the Development Agreement.

ARTICLE VI.
INSURANCE

6.1 **Policy Requirements.** Lessee shall, at its own expense, procure, maintain and keep in full force during the Term, and prior to any construction, installation, work or services at the Property as provided in this Lease or the Development Agreement, the stipulated minimum insurance set out herein with one or more companies duly authorized to do business in the State of Texas.

Comprehensive General Liability (including contractual liability):

- Personal Injury: $1,000,000 per person
  $1,000,000 per occurrence
- Property Damage: $1,000,000 per occurrence
- General Aggregate $2,000,000

Business Automobile Liability: $1,000,000

Workers' Compensation: Statutory limits, if required by law

6.2 **Business Automobile Liability.** The Business Automobile Liability insurance shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-owner vehicles, and employee non-ownership.

6.3 **Workers' Compensation.** If required by law, the Workers' Compensation insurance shall inure to the benefit of employees injured during the course and scope of their employment by Lessee pursuant to this Lease or the Development Agreement.

6.4 **Additional Insureds; Waiver of Subrogation.** All insurance, except for Workers' Compensation insurance, shall name Lessor, its council members, officers, employees, agents, successors and assigns as additional insureds. All insurance, including Workers' Compensation insurance, shall provide for a waiver of subrogation in favor of Lessor.

6.5 **Certificates.** All insurance, including Lessor's status as an additional insured, as appropriate, as well as a waiver of subrogation in favor of Lessor, shall be evidenced by one or more certificates of insurance provided to Lessor prior to commencement of the Term or any construction, installation, work or services at the Property pursuant to this Lease or the Development Agreement.

6.6 **Contractors.** Lessee shall contractually require all contractors and subcontractors that perform any work on any portion of the Project or perform any work at the Property to obtain insurance coverage that meets or exceeds the minimum amounts specified herein. All contractors and subcontractors shall obtain insurance policies that name Lessor as an additional insured (except for Workers' Compensation insurance) and that provide blanket waivers of subrogation in favor of Lessor.

6.7 **Builder's All-Risk.** Lessee shall contractually require the general construction contractor for the Project to procure and maintain at its sole cost and expense Builder's All-Risk insurance (in an

amount equal to One Hundred Percent (100%) of the replacement cost value of the Improvements). The general construction contractor shall contractually require all subcontractors that work on any portion of the Project or perform any work at the Property to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts described herein or insurance coverage that is appropriate for such subcontractors' scope of work.

ARTICLE VII.
INDEMNITY

LESSEE SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS LESSOR AND LESSOR'S OFFICERS, EMPLOYEES AND AGENTS FOR, FROM AND AGAINST ALL SUITS, ACTIONS, CLAIMS, DAMAGES, LIABILITIES, PERSONAL INJURIES, LOSSES, OBLIGATIONS, PROPERTY DAMAGE, PENALTIES, COURT COSTS AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING ATTORNEYS' FEES ("*CLAIMS*"), BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF LESSEE OR LESSEE'S OFFICERS, EMPLOYEES, AGENTS OR REPRESENTATIVES, OR ANY CONTRACTOR OR SUBCONTRACTOR OF LESSEE, IN CONNECTION WITH LESSEE'S USE OF THE PROPERTY OR IN ANY WAY ARISING OUT OF, OR RESULTING FROM, LESSEE'S WORK, SERVICES OR ACTIVITIES UNDER THE LEASE OR THE DEVELOPMENT AGREEMENT, PROVIDED THAT LESSEE SHALL NOT BE LIABLE FOR ANY SUCH CLAIMS TO THE EXTENT CAUSED BY LESSOR'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. LESSEE SHALL PAY ANY JUDGMENT WITH COSTS OBTAINED AGAINST LESSOR OR ANY OF LESSOR'S OFFICERS, EMPLOYEES OR AGENTS, INCLUDING ATTORNEYS' FEES. TO THE EXTENT ALLOWED BY LAW, LESSOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS LESSEE AND LESSSE'S OFFICERS, EMPLOYEES AND AGENTS FOR, FROM AND AGAINST ALL CLAIMS BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF LESSOR OR LESSOR'S OFFICERS, EMPLOYEES, AGENTS OR REPRESENTATIVES, OR ANY CONTRACTOR OR SUBCONTRACTOR OF LESSOR, IN CONNECTION WITH LESSOR'S OWNERSHIP OF THE PROPERTY.

ARTICLE VIII.
PEACEFUL POSSESSION

Lessor covenants that Lessee, on performing and observing the covenants and agreements herein contained and provided to be performed by Lessee, shall and may peaceably and quietly have, hold, occupy, use and enjoy the Property during the Term and may exercise all of its rights hereunder, subject only to the provisions of this Lease and the Development Agreement and applicable governmental laws, rules and regulations. Lessor agrees to warrant and forever defend Lessee's right to such occupancy, use and enjoyment of and Lessee's leasehold interest in the Property against the claims of any and all persons whomsoever lawfully claiming the same, or any part thereof, subject only to provisions of this Lease, all matters of record in Midland County, Texas and all applicable governmental laws, rules and regulations.

ARTICLE IX.
DEFAULT OR BREACH

If any Party hereto has defaulted under the terms of this Lease, the non-defaulting Party must send written notice detailing the nature of the default of the alleged defaulting Party. The alleged defaulting Party shall have ninety (90) days after receipt of such notice to cure such alleged default to the reasonable

satisfaction of the non-defaulting Party. Upon the failure of the alleged defaulting Party to cure the alleged default as set out above, the non-defaulting Party shall have the right to pursue all remedies available at law or equity. Notwithstanding anything to the contrary contained in this Lease or the Development Agreement, a breach or default by Lessee or Lessor of any material representation, warranty, covenant, term, condition, duty or obligation contained in the Development Agreement, after passage of the applicable notice and cure periods (if any), shall, at the option of Lessor or Lessee (as applicable), be a default under this Lease and the Development Agreement, in which event Lessor or Lessee (as applicable) shall be entitled (but not required) to apply all rights and remedies of Lessor or Lessee (as applicable) under the terms of this Lease and the Development Agreement by reason of a default under said Development Agreement or hereunder. The Parties acknowledge and agree that the terms of the Development Agreement are incorporated herein by reference for all legal purposes.

ARTICLE X.
WAIVER OF ATTORNEYS' FEES

EACH PARTY AGREES TO WAIVE AND DOES HEREBY KNOWINGLY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE OTHER PARTY REGARDING THE AWARD OF ATTORNEYS' FEES, WHICH ARE IN ANY WAY RELATED TO THIS LEASE OR THE DEVELOPMENT AGREEMENT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THIS LEASE OR THE DEVELOPMENT AGREEMENT. EACH PARTY AGREES THAT IF IT BRINGS OR COMMENCES ANY LEGAL ACTION, SUIT OR PROCEEDING RELATED TO THIS LEASE OR THE DEVELOPMENT AGREEMENT, OR THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS LEASE OR THE DEVELOPMENT AGREEMENT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), THEN SUCH PARTY COVENANTS AND AGREES TO WAIVE AND RELINQUISH, AND DOES HEREBY WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEYS' FEES TO WHICH SUCH PARTY MIGHT OTHERWISE BE ENTITLED.

ARTICLE XI.
DELIVERY OF NOTICE

Any notice, consent, approval or other communication required or permitted to be given under this Lease (a "*notice*"), in order to be effective, must be in writing and must be served by delivering such notice addressed to the Party to be notified (i) effective two (2) days after depositing the notice with the U.S. Postal Service, postage prepaid, sent certified, return receipt requested; or (ii) effective upon receipt if delivered in person, by commercial messenger or by reputable overnight courier to the office of such Party to be notified. For purposes of giving effective notice, the addresses of the Parties are as follows (provided that any such address may be changed from time to time by the changing Party giving not less than thirty (30) days' prior written notice thereof to the other party hereto as provided above):

If to the City:

City of Midland
300 N. Loraine
Midland, Texas 79701
Attn: City Manager

With a copy to:

City Attorney's Office
300 N. Loraine, Suite 320
Midland, Texas 79701
Attn: City Attorney

If to Lessee:

Permian Basin Quality of Place Conservancy
2305 Shell Avenue
Midland, Texas 79705
Attn: Chris Ginsbach

With a copy to:

Jackson Walker LLP
1401 McKinney, Suite 1900
Houston, Texas 77010
Attn: Jonny Heins

ARTICLE XII.
GENERAL PROVISIONS

12.1 Assignments. No Party may assign its rights or obligations under this Lease without the prior written consent of the other Party, which consent shall not be unreasonably withheld.

12.2 Governing Law and Venue. This Lease shall be governed, construed and enforced in accordance with the laws of the State of Texas and venue for any action concerning this Lease shall be in a State District Court of Midland County, Texas.

12.3 Exhibits. Any exhibits to this Lease are incorporated herein by reference for all purposes wherever reference is made to the same.

12.4 Dates and Terms. If a day requiring notice or action falls on a weekend or national or local holiday, the next non-weekend day or non-holiday shall be applicable. All capitalized terms used but not otherwise defined herein shall have the meanings ascribed to such terms in the Development Agreement.

12.5 Severability. If any provision of this Lease is held to be illegal, invalid or unenforceable under present or future laws, the legality, validity and enforceability of the remaining provisions of this Lease shall not be affected thereby, this Lease shall be liberally construed so as to carry out the intent of the Parties and the Parties shall enter into an amendment to this Lease to amend such illegal, invalid or unenforceable provision to ensure compliance with applicable laws taking into account the intent of the Parties.

12.6 Parties in Interest. The terms of this Lease shall be binding upon, and inure to the benefit of, the Parties hereto and their permitted successors and assigns. Nothing in this Lease, whether express or implied, shall be construed to give any person or entity (other than the Parties hereto and their permitted successors and assigns) any legal or equitable right, remedy or claim under or in respect of any terms or provisions contained in this Lease or any standing or authority to enforce the terms and provisions of this Lease.

12.7 Amendments. This Lease shall not be modified or amended in any manner except by a writing signed by the Parties hereto.

12.8 Entire Agreement. This Lease represents the entire and integrated agreement between the Parties with respect to the subject matter hereof. All prior negotiations representations or agreements not expressly incorporated into this Lease are hereby superseded and canceled.

12.9 Counterparts. This Lease may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument and any of the Parties hereto may execute this Lease by signing any such counterpart.

12.10 Captions. Captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Lease.

12.11 Interpretation. The Parties acknowledge and represent that this Lease has been jointly drafted by the Parties, that no provision of this Lease shall be interpreted or construed against any Party solely because the Party or its legal counsel drafted such provision and that each of them has read, understood, and approved the language and terms set forth herein.

12.12 Approval of Parties. Whenever this Lease requires or permits the approval or consent to be given by a Party, the Parties agree that such approval or consent shall not be unreasonably withheld, conditioned or delayed.

12.13 Further Assurances. Each Party hereby agrees that it shall take all actions and execute all documents necessary to fully carry out the purposes and intent of this Lease.

12.14 Legal Relationship. The Parties are not, and shall not be considered as, joint ventures, partners, or agents of each other, and neither shall have the power to bind nor obligate the other, except as set forth in this Lease. Each Party agrees not to represent to any person or entity that it has any authority to act on behalf of the other Party. It is mutually understood and agreed that nothing in this Lease is intended or shall be construed as in any way creating or establishing any partnership, joint venture, or agency between Lessor and Lessee.

12.15 Time of Essence. Time is of the essence in all provisions of this Lease.

12.16 Limited Waiver of Sovereign Immunity. The City agrees that this Lease shall constitute a contract for providing goods and services to the City, subject to the provisions of Subchapter I of Chapter 271, Texas Local Government Code. Further, to the extent allowed by law, the City waives its rights to sovereign or governmental immunity as to an action in equity by Lessee for a writ of mandamus or specific performance to enforce all the terms of this Lease. Lessor represents and warrants that it has all requisite power and authority to enter into this Lease and is duly authorized to execute and deliver this Lease.

[Remainder of this page intentionally left blank; signature pages follow]

EXECUTED by the duly authorized representatives of the Parties hereto, to be effective as of the Effective Date.

CITY OF MIDLAND, TEXAS

_____
Robert Patrick, City Manager

THE STATE OF TEXAS §
§
COUNTY OF MIDLAND §

BEFORE ME, the undersigned authority, on this day personally appeared ROBERT PATRICK, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged that he executed and delivered the foregoing instrument for the purposes and consideration therein expressed on behalf of the CITY OF MIDLAND, TEXAS, in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2023.

_____
Notary Public, State of Texas

Signature Page

PERMIAN BASIN QUALITY OF PLACE CONSERVANCY,
A Texas non-profit corporation

By: _____
Name: _____
Title: _____

THE STATE OF TEXAS §
§
COUNTY OF MIDLAND §

BEFORE ME, the undersigned authority, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged that s/he executed and delivered the foregoing instrument for the purposes and consideration therein expressed on behalf of the PERMIAN BASIN QUALITY OF PLACE CONSERVANCY, in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2023.

_____
Notary Public, State of Texas

Signature Page

EXHIBIT A

Legal Description

An approximate 137-acre tract located in Section 13, Block 39, T-1-S, T&P RR Co. Survey, City and County of Midland, Texas.

Attendance Sheet 2022

Member	1/3	1/18	2/1	2/14	3/7	3/21	4/4	4/18	4/18	5/2	5/16	6/6	6/21	7/5	7/18	8/1	8/15	9/6	9/15	10/3	10/17	11/7	11/21	12/5	12/19
Lucy Sisniega*	X	X	X	X		X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X		X
Diane Williams**	X	X	X	X	X		X	X	X	X		X		X	X	X	X		X	X	X	X	X	X	X
Chase Gardaph Abraham Bejil	X	X	X	X		X	X		X	X	X	X			X		X	X	X	X	X	X	X	X	X
Karmen Byant Emily Holeva					X	X	X	X	X	X			X		X	X	X		X	X		X	X	X	
Stacy Jo Grosse	X	X	X		X	X		X	X		X		X			X		X		X	X	X			
Zachary Deck	X	X	X	X	X	X	X	X	X	X	X	X				X	X		X		X	X	X	X	X
Adrian Carrasco	X			X	X	X	X	X	X	X	X	X			X	X		X	X		X		X	X	X
Alternates																									
Emily Holeva/Salli Vega	X			X		X	X	X	X	X	X	X		X	X	X		X					X	X	X
Beverly Dillow			X		X			X			X	X		X					X	X	X				

*Chairman

**Vice Chairman

New Commissioners Attendance Starts Here

Attendance Sheet Oct 2022 - Jan 2023

Member	10/3	10/17	11/7	11/21	12/5	12/19	1/3	1/17
Lucy Sisniega*	X	X	X	X		X	X	
Diane Williams**	X	X	X	X	X	X	X	X
Abraham Bejil	X	X	X	X	X	X	X	X
Emily Holeva	X		X	X	X		X	X
Stacy Jo Grosse	X	X	X					
Zachary Deck		X	X	X	X	X		
Adrian Carrasco		X		X	X	X	X	
Alternates								
Salli Vega				X	X	X	X	
Beverly Dillow	X	X						

*Chairman

**Vice Chairman

MIDLAND
Feel the Energy!

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

As an applicant for a City board, commission, or committee, please be advised that all information on this application is subject to the Texas Open Records Act and will be available to the public.

PLEASE TYPE OR PRINT CLEARLY:

Date: 12/6/2022

Name: Xavier A Torres

Phone: 432-631-4689 **(Home)**

Address: 1508 Alcove Ct.

432-221-4606 **(Business)**

Midland Texas 79703

(City) (State) (Zip)

Email: xavier.torres@midlandhealth.org

I am [✔] **I am not** [ ] **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? [ ] **yes** [✔] **no**

I have lived in Midland 28 **years.**

Occupation: Registered Nurse

Professional and/or Community Activities:

I am currently the Director of Patient Experience at Midland Health. I am also enrolled in a doctorial program at Texas Tech University Health Sciences Center (TTUHSC).

What is your personal vision for the City?

Being a native Midlander, I hope to have a city where I can continue to raise my family. There are so many great aspects of growing up in Midland. I do see a need for additional venues and business that would make Midland a more appealing location for those who are looking for a place to set roots.

Please specify any time constraints you may have.

There are minimal time constaints. I do travel for school once every other month but this travel is usually at the end of the week and part of the weekend.

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

It is essential that the City of Midland gather information and perspectives from each group of Midlanders. I would like to be a resource to my city. As Midland grows, there is a need to ensure that this growth is done with the advancement of our community

in mind. I would like to be a part of further developing our community to become the greatest in Texas

What contribution would you most like to make?

I would like to provide a perspective from a healthcare worker. There would also be benefit in my perspective as a minority representative. I would like to provide the perspecitive of someone who has started a family in Midland and hopes to continue raising my children in Midland

Additional pertinent information or references:

This appointment may be my first but it would not be my last contribution to our great community. I hope to help others realize the great opportunities that are available within our community. I'd also like to provide a reference, please contact Dr. Kit Bredimus at 432-221-2238 or kit.bredimus@midlandhealth.org for any other information.

(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

Applications are maintained on file in the City Secretary's office for a period of one year. Should you need additional information, please call us at 432-685-7430.

Signature of Applicant

X. Torres, MSN, RN

Applications may be submitted online via email or print in order to send by mail:

City of Midland

City Secretary's Office

PO Box 1152

Midland, TX 79702

Submit Via Email

Print Application

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

As an applicant for a City board, commission, or committee, please be advised that all information on this application is subject to the Texas Open Records Act and will be available to the public.

PLEASE TYPE OR PRINT CLEARLY:

Date: 12/14/2022

Name: Brian Stubbs

Phone: 432-413-3455 **(Home)**

Address: 4901 Kingsboro Ct

432-335-5900 **(Business)**

Midland Tx 79705

Email: brianstubbs2002@yahoo.com

(City) (State) (Zip)

I am [✓] **I am not** [ ] **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? [ ] **yes** [✓] **no**

I have lived in Midland 8.5 **years.**

Occupation: Business Owner

Professional and/or Community Activities:

Chamber of Commerce Board - VP of Promotions, MOUTD board member, REACH school board - Secretary/Treasure, MISD Education Foundation - Vice President, Association of Ingersoll Rand Distributor - Board of Directors, Communities in Schools - Vice President, Education Partnership of the Permian Basin - Secretary, BSA Troop 160 Scout Master, Leadership Midland Graduate.

What is your personal vision for the City?

To make Midland the "hub" for West Texas for business, social, education, and quality of life. Midland is in the middle of our region with great resources, both people and natural. Midland should grow to be the "oasis" for our region where people can have a high quality of life due to the resources the city, county, industry, and philanthropy bring together for our citizens.

Please specify any time constraints you may have.

I am flexible with my work schedule and can make most times.

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at www.midlandtexas.gov)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

I am passionate about growing the commercial environment of Midland. I believe it is a never-ending project to provide a robust business environment for our community. Creating a robust foundation of business and industry is critical to improving Midland as a

whole. Providing jobs and opportunities for everyone in Midland is a critical step in making Midland a better city.

What contribution would you most like to make?

I believe I bring a unique aspect to this board with my past experience. I currently own a small business in the Permian Basin which has seen the benefits, and hardships, of our business landscape. I am also an engineer with strong problem solving skills with the ability to work through complicated, difficult issues to find creative answer and solutions.

Additional pertinent information or references:

I have been a business owner since 2017 and have grown our business significantly in that time. I understand the issues, hurdles, and oppurtunities of owning a business in our region. I am passionate about sharing these opportunities with other people to make Midland a better place for all.

(2) Name of Board/Commission:

Parks and Recreation Commission

What contribution would you most like to make?

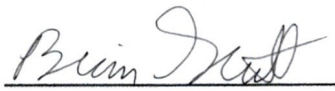
As a resident of Midland, I see a great need to improve the quality of place. We need to better use our resources to make Midland a center of our region where people want to live and work. With the current growth of Midland, we need to become very creative in how we attract and keep people to enable continued growth and improve quality of life.

Additional pertinent information or references:

I am passionate about making Midland a shining star of our region. Balancing a great economy with utilizing our resources to make a great place to live is critical to this goal. I will bring creative ideas to this board and the ability to solve complicated problems with solutions that strive to benefit all.

Applications are maintained on file in the City Secretary's office for a period of one year. Should you need additional information, please call us at 432-685-7430.

Signature of Applicant



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City of Midland

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PO Box 1152

Midland, TX 79702

Submit Via Email

Print Application

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

As an applicant for a City board, commission, or committee, please be advised that all information on this application is subject to the Texas Open Records Act and will be available to the public.

PLEASE TYPE OR PRINT CLEARLY:

Date: 11/29/22

Name: Justin Willmon

Phone: 432-557-8511 (Home)

Address: 4700 Rosewood

432-557-8511 (Business)

midland TX 79707

Email: Justin@welcomehomepg.com

(City) (State) (Zip)

I am ☑ I am not ☐ a U.S. Citizen

Please tell us about yourself:

Are you a graduate of Midland 101? ☐ yes ☑ no

I have lived in Midland 31 years.

Occupation: Real Estate

Professional and/or Community Activities:

Permian Basin Real Estate Association, 2023 TREC YPN commitee member

What is your personal vision for the City?

long term growth, more diversity in our job sectors, sustainable long term events & things to do

Please specify any time constraints you may have.

none

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at www.midlandtexas.gov)

(1) Name of Board/Commission:

midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

Looking to get more involved with the vision and direction of our city as well as the behind the scenes action that goes into developing a community

What contribution would you most like to make?

would like to be a contributing member to promote and develop new & expanded businesses

Additional pertinent information or references:

Long time midland resident, have seen the growth & development of the city since a young age, but also envisions an even better city than we already have

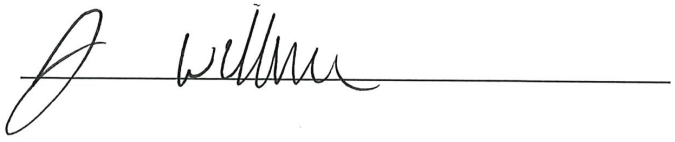
(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

Applications are maintained on file in the City Secretary's office for a period of one year. Should you need additional information, please call us at 432-685-7430.

Signature of Applicant



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Submit Via Email

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APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

As an applicant for a City board, commission, or committee, please be advised that all information on this application is subject to the Texas Open Records Act and will be available to the public.

PLEASE TYPE OR PRINT CLEARLY:

Date: 11/28/2022

Name: Dara Richardson

Phone: 4325591549 **(Home)**

4328944328 **(Business)**

Address: 4424 Seminole Drive

Midland Texas 79703

(City) (State) (Zip)

Email: dararichardson86@gmail.com

I am ☑ **I am not** ☐ **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? ☑ **yes** ☐ **no**

I have lived in Midland 36 **years.**

Occupation: Superintendent of wells

Professional and/or Community Activities:

I am a board member of the Midland County Young Republicans and I also serve as a Precinct Chair for the Midland County Republi

What is your personal vision for the City?

My personal vision for the City of Midland is to see it grow as a community for the better. The city needs conservative values to help bring the communities together.

Please specify any time constraints you may have.

I work full time but I don't see that holding me back from serving as a board member.

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

I'm interested to serve on this board to bring an oil and gas perspective to their future projects.

What contribution would you most like to make?

I would like to make a contribution of my time to bring my oil and gas experience to the table.

Additional pertinent information or references:

I was the Vice President of Operations for Darrell Crass Drilling and am now the Superintendent of wells and well rehabilitation for XRI Holdings.

(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

Applications are maintained on file in the City Secretary's office for a period of one year. Should you need additional information, please call us at 432-685-7430.

Signature of Applicant



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Print Application

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

As an applicant for a City board, commission, or committee, please be advised that all information on this application is subject to the Texas Open Records Act and will be available to the public.

PLEASE TYPE OR PRINT CLEARLY:

Date: 12/31/2022

Name: Lacy Sperry

Phone: 432 208 5907 **(Home)**

Address: 728 Augusta Drive

432 262 4061 **(Business)**

Midland TX 79705

Email: LSperry@eeronline.com

(City) (State) (Zip)

I am ☑ **I am not** ☐ **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? ☐ **yes** ☑ **no**

I have lived in Midland 15 **years.**

Occupation: Director of Communications, Real Estate Investor

Professional and/or Community Activities:

I am currently the director of communications for Endeavor Energy Resources, one of the largest private employers in the county. Re

My husband (Josh Sperry) and I are real estate investors in the Permian Basin (mostly Midland). We buy very distressed properties, (

Josh and I have three children - Addison (16), Jessy (12), and David (9). We are very active with Midland ISD, Stonegate Fellowship,

What is your personal vision for the City?

My personal vision for Midland is a place where families can thrive - with work, school, extracurricular activities, and community involv

I also envision a Midland that has vibrant opportunities in workforce, education, outdoor activities, and community fellowship. We are

Please specify any time constraints you may have.

Time constraints include family and work. However, I have full support from the Endeavor leadership team to serve Midland in this ca

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Midland Development Corporation (MDC)

Please tell us why you are interested in serving on this board or commission.

I am interested in serving on the MDC board for many reasons. First, I feel well prepared for this role because of my professional wor

What contribution would you most like to make?

I would like to help existing businesses grow and thrive. We have so many unique businesses in our community that have unlocked p

Additional pertinent information or references:

Lance Robertson, CEO of Endeavor Energy Resources - LRobertson@eeronline.com

Cairy Phillips, Vice President of Human Resources for Endeavor Energy Resources - CPhillips@eeronline.com

(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

Applications are maintained on file in the City Secretary's office for a period of one year. Should you need additional information, please call us at 432-685-7430.

Signature of Applicant

Lacy Sperry Digitally signed by Lacy Sperry
Date: 2022.12.31 17:44:52 -06'00'

Applications may be submitted online via email or print in order to send by mail:

City of Midland

City Secretary's Office

PO Box 1152

Midland, TX 79702

Submit Via Email

Print Application

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

As an applicant for a City board, commission, or committee, please be advised that all information on this application is subject to the Texas Open Records Act and will be available to the public.

PLEASE TYPE OR PRINT CLEARLY:

Date: 11-29-2022

Name: DANNY NORWOOD

Phone: 682-5544 (Home)

618-5012 (Business)

Address: 1705 MABERRY

Email: danny@dannynorwood.com

MIDLAND, TX. 79705

(City) (State) (Zip)

cell 413-2704

I am ☑ I am not ☐ a U.S. Citizen

I was in the class but it canceled in 2020. b/c of covid.

Please tell us about yourself:

Are you a graduate of Midland 101? ☐ yes ☐ no

I have lived in Midland 64 years.

Occupation: Realtor

Professional and/or Community Activities:

Past Board Member of: March of Dimes, American Cancer Society, Big Brothers, Center for Battered Women, & High Sky.

Current Member of EZ Rider - MAITD.

What is your personal vision for the City?

To see it continue to attract new businesses for people who want to come to Midland - It's been so good to see so many new self employed entrepreneurs!

Please specify any time constraints you may have.

—

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at www.midlandtexas.gov)

(1) Name of Board/Commission:

Midland Development Corp.

Please tell us why you are interested in serving on this board or commission.

I've been selling real estate for 30 years & have a desire to see Midland continue to grow & prosper.

What contribution would you most like to make?

I KNOW MIDLAND & A lot of "NATIVE MIDLANDERS WELL" & feel like my experience in LIVING here my whole life except for going to UT- AUSTIN & graduating I CAME BACK PLUS MY Knowledge of real estate in MIDLAND is a good resource.

Additional pertinent information or references:

(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

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Signature of Applicant

Danny Norwood

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PLEASE TYPE OR PRINT CLEARLY:

Date: 12/2/2022

Name: Zachary Deck

Phone: 703-659-5911 **(Home)**

Address: 1607 W Tennessee Ave

(Business)

Midland TX 79701

Email: zachary.e.deck@gmail.com

(City) (State) (Zip)

I am ☑ **I am not** ☐ **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? ☐ **yes** ☑ **no**

I have lived in Midland 17 **years.**

Occupation: Senior Reservoir Engineer at Diamondback Energy

Professional and/or Community Activities:

Leadership Midland, Midland Planning and Zoning Commission, Midland real estate investors group, Midland Classical Academy

Cross Country coach

What is your personal vision for the City?

I would like to see Midland become a hub of activity for economic and personal growth for the residents of the Permian Basin. I envision growing economic diversity growing Midland's ability to be the leader of the Permian. I have a vision of the city becoming a place where recent transplants increasingly want to put down roots and make Midland their home for years to come.

Please specify any time constraints you may have.

Leadership Midland once a month, cross country coaching pre-dawn mornings in the fall, and Planning and Zoning every other Monday in the afternoon. If I were to be elected to MDC I would end my service with P+Z once my time is up so I can better focus on MDC efforts.

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

I believe Midland is in the process of transitioning into a multi-discipline hub and away from being solely dependent upon oil and gas. I enjoy evaluating the health of various businesses and would like to help the MDC incentivize entities to bring their workers and

capital to Midland.

What contribution would you most like to make?

I would like to utilize my Finance degree to help find creative ways to incentivize businesses to bring and maintain their economic power here in Midland. I believe the MDC operates in the intersection of creative problem solving, financial literacy, and strong personal skills - and I believe I can bring all of these to the table.

Additional pertinent information or references:

I have an undergrad degree in Aerospace Engineering, did research for NASA on two programs (one of which was the SLS that just launched) so I understand the Aerospace industry. I worked in the Federal government so I understand large contracts and operations. Additionally, I have an MBA in Finance so I understand the economics of business development as well.

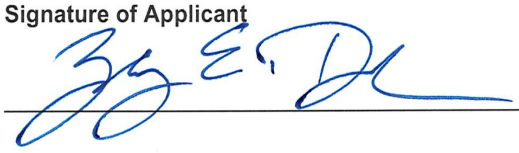
(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

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Signature of Applicant



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Midland, TX 79702

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PLEASE TYPE OR PRINT CLEARLY:

Date: 11/29/2022

Name: Melissa "Mel" Mosier

Phone: 432-640-9278 **(Home)**

Address: 708 Beckley Dr

_____ **(Business)**

Midland TX 79703

Email: mmosier@ez-rider.org

(City) (State) (Zip)

I am [✔] **I am not** [ ] **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? [ ] **yes** [✔] **no**

I have lived in Midland 5 **years.**

Occupation: HR

Professional and/or Community Activities:

Program Director of PBSHRM

Women's Servant Leader at Stonegate Fellowship

Foster for Permian Basin Animal Adovcates

What is your personal vision for the City?

I moved to Midland 5yrs ago and have made it my home. I want others to learn and know what Midland has to offer for families, why it is a great place to live, and what Midland is hoping to accomplish for the future.

Please specify any time constraints you may have.

As long as it schedule in advance I am flexibile.

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at www.midlandtexas.gov)

(1) Name of Board/Commission:

Airport Planning and Development Board, Animal Services Advisory Commission, Midland Development Corporation, Midland Downtown Park Conservancy, Parks and Recreation Commission, Permian Basin Community Center for MH/MR Planning and Zoning Comission

Please tell us why you are interested in serving on this board or commission.

Being apart of a board gives me an insight on the what, hows, and whys of businesses in Midland and what the vision they have for the city, for the future. I would be honored to serve in any capacity

What contribution would you most like to make?

Whatever I can, whether it be my knowledge, my concerns, or my own vision to show others just how wonderful Midland is to live.

Additional pertinent information or references:

I am the board liasion for Midland Odessa Urban Transit District

(2) Name of Board/Commission:

Permain Basin Society of Human Resources

What contribution would you most like to make?

Whatever I can, whether it be my knowledge, my concerns, or my own vision to show others just how wonderful Midland is to live.

Additional pertinent information or references:

Dan Corrales-Councilman at Large

Chuck Harrington - Development Services Director

Lori Blong- New Mayor of Midland

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Signature of Applicant

M Mosier

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APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

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PLEASE TYPE OR PRINT CLEARLY:

Date: 11/29/2022

Name: John L Kennedy

Phone: 432-288-4118 **(Home)**

Address: 1202 Douglas Ave

(Business)

Midland Texas 79701

Email: jkennedy@diamondkpetro.com

(City) (State) (Zip)

I am ☑ **I am not** ☐ **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? ☐ **yes** ☑ **no**

I have lived in Midland 42 **years.**

Occupation: Financial Services Professional

Professional and/or Community Activities:

TRZ Board , Leadership Midland

Petroleum Museum Board

Former MISD Trustee

What is your personal vision for the City?

Managed growth and be able to attract businesses because of our amenities and educational opportunities

Please specify any time constraints you may have.

None

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at www.midlandtexas.gov)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

Help Midland attract new businesses

What contribution would you most like to make?

Develop support for MDC

Additional pertinent information or references:

(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

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Signature of Applicant



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MIDLAND
Feel the Energy!

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

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PLEASE TYPE OR PRINT CLEARLY:

Date: 12/3/2022

Name: J. BRIAN MARTIN

Phone: 432-697-4220 (Home)
432-770-0366 (Business)

Address: 3906 LEDGEBROOK CT.
MIDLAND, TEXAS
(City) (State) (Zip)

Email: MARTINBE3@YAHOO.COM

I am [X] I am not [ ] a U.S. Citizen

Please tell us about yourself:

Are you a graduate of Midland 101? [ ] yes [X] no

I have lived in Midland 46 years.

Occupation: REAL ESTATE ATTORNEY

Professional and/or Community Activities:

I AM ENTERING RETIREMENT AFTER 50 YEARS OF PRACTICE. I HAVE BEEN ACTIVE IN THE COMMUNITY (I WAS AN ASSISTANT CITY ATTORNEY IN THE 1970's) AND WOULD LIKE TO CONTINUE FOLLOWING AND ASSISTING THE CITY OF MIDLAND'S PROGRESS.

What is your personal vision for the City?

CONTINUED GROWTH AT RATIONAL RATES WITH SUPPORTING INFRASTRUCTURE THAT WILL KEEP THE CITIZEN'S SAFE, REASONABLY COMFORTABLE AND WITH COMMUNITY FACILITIES THAT ARE NEEDED AS WELL AS COMPLIMENTARY TO THE CITY.

Please specify any time constraints you may have.

THE BOARDS I SERVE ON MEET MONTHLY IN THE EVENINGS (6:30 or 7:00 P.M.), WHICH ARE USUALLY NOT ON FICTION WITH OTHER BOARDS. SEE ATTACHED RESUME

Please list below the Board(s) or Commission(s) on which you are interested in serving:

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(1) Name of Board/Commission:

MIDLAND DEVELOPMENT CORPORATION.

Please tell us why you are interested in serving on this board or commission.

MY PRACTICE HAS INVOLVED PUBLIC AND PRIVATE DEVELOPMENT, SALE AND PURCHASE OF REAL PROPERTY. ALSO, I HAVE HAD FREQUENT

CONTACT WITH CITY MANAGERS SINCE 1976 TO DATE AS WELL AS THE CITY ATTORNEYS.

What contribution would you most like to make?

ADVICE, COUNSEL, PARTICIPATION IN CITY OF MIDLAND PROJECTS AS THE CITY COUNCIL DEEMS THEM APPROPRIATE AND/OR NECESSARY AND THAT WILL AID THE CITY IN ORDERLY GROWTH.

Additional pertinent information or references:

I HAVE MANY FRIENDS AND ACQUAINTENCES AT THE CITY INCLUDING MIKE CANON (FORMER MAYOR) AS WELL AS THE CITY ATTORNEY OFFICE WITH MARK STEPHENS, COURTNEY SHARP WAS A GOOD FRIEND; ALONG WITH FRED ROE, JIM BROWN

(2) Name of Board/Commission:

PLANNING & ZONING COMMISSION

What contribution would you most like to make?

WHILE I WAS ASSISTANT CITY ATTORNEY I WAS ASSIGNED TO MOST OF THEIR HEARINGS AS LEGAL COUNSEL. IT HAS INTERESTED TITLE ISSUES FROM TIME TO TIME THAT I CAN HELP WITH

Additional pertinent information or references:

I ENJOYED SERVICE ON THE MDC BOARD INITIALLY (IF AVAILABLE), TO UNDERSTAND THE BOARD'S OPERATION AND CONNECTION WITH THE COUNCIL AND IT'S (THE BOARD'S) DUTIES.

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Signature of Applicant

Applications may be submitted online via email or print in order to send by mail:

City of Midland

City Secretary's Office

PO Box 1152

Midland, TX 79702

Submit Via Em

Print Applicat

BIOGRAPHICAL INFORMATION

J. BRIAN MARTIN
Attorney At Law
600 North Loraine
Midland, Texas 79701
December 3, 2022

EDUCATION

St. Mary's University Law School, San Antonio, Texas, 1972, J.D.

St. John's University, Collegeville, Minnesota, 1969, Government/Political Science-B.A.

CERTIFICATION

Licensed State Bar of Texas-1972; Board certified Texas Board of Legal Specialization, Commercial Real Estate Law and Residential Real Estate Law since 1990. "AV Preeminent" rating Martindale-Hubble Peer Review.

COURT CERTIFICATION

United States Supreme Court-1976; United States Court of Appeals, 5th Circuit-1977; United States District Court, Southern District-1976; United States District Court, Western District-1976; United States Court of Military Appeals-1973; All Courts of the State of Texas-1972

PROFESSIONAL ACTIVITIES

State Bar of Texas (Real Estate, Probate and Trust Law Section);
Texas Bar Foundation, Life Fellow (2001 to date);
The College of The State Bar of Texas, (2003 to date);
Midland County Bar Association (since 1976);
Advisory Board Midland College Business Studies (Since 1980);
Instructor-Real Estate Law and Contracts-Midland College (1980 to 1994);
Advisory Board Permian Basin Area Foundation Midland Housing Trust Fund (1992 to date);
Director, Habitat For Humanity of Midland (2000-2006);
Director (VP) MARC, Inc. (2003-to 2010)
President of Board of Directors MARC, Inc. 2012 to 2013;
Board Member, Board Secretary) St. Ann's School Endowment Fund, Inc. 1981 to present and the St. Ann's Finance Council (President).

EMPLOYMENT HISTORY

Captain, Judge Advocate General's Corps, U.S. Army, 1972-1976;
1st Assistant City Attorney, City of Midland, Texas 1976-1981;
Partner-Freeman, Hyde & Martin 1981-1990;
Partner-Morgan, Ward, Leeton & Martin- 1990-1992;
General Counsel-Sr. VP Lone Star Abstract & Title Co. 1992 to 2016.
General Counsel, West Texas Abstract & Title Co. 2016 to October 1, 2022
Retired from private practice.

PRACTICE

Mr. Martin is a sole practitioner (Law Offices of J. Brian Martin and Associates, PC. His primary practice prior to retirement involves real estate finance, residential, retail, farm and ranch and commercial real property development and title examination; litigation involving real estate issues; ad valorem property tax litigation; probate and estate practice; business entity creation and servicing. When requested, the firm has assisted the City of Midland with purchase and sale of real property in the City and facilitated title information and Title insurance coverage for property acquired by the City. Mr. Martin assisted the city with purchase or acquisition of the Loop 250 project at its inception including condemnation matters.

PERSONAL INTEREST

Mr. Martin has been a parishioner (since 1976) of St. Ann's Catholic Church of Midland, Texas where he serves on the St. Ann's School Educational Endowment fund and the Parish Finance Council; He is a member of the Midland Shooters Association of Midland, Texas and has been an avid hunter and sport fisherman since age 12. Mr. Martin has been married 52 years (Evelyn) with two Children (Brian Patrick and Shannon) and three grandchildren (Emory, Jack and Claire). Brian Patrick is a graduate of Texas Tech University (BA Business Management); Shannon is a graduate of Texas A&M University (B.S. Industrial Engineering) and University of Houston Law School (J.D.)

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

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PLEASE TYPE OR PRINT CLEARLY:

Date: 12/29/2022

Name: Barrett J. Brannon

Phone: 806-773-8652 **(Home)**

Address: 2505 Stanolind Avenue

432-425-8316 **(Business)**

Midland Texas 79705

Email: barrett.brannon@pxd.com

(City) (State) (Zip)

I am ☑ **I am not** ☐ **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? ☐ **yes** ☑ **no**

I have lived in Midland 4.5 **years.**

Occupation: Land Manager - Surface - Pioneer Natural Res.

Professional and/or Community Activities:

Professional: Permian Basin Landman Association, previous member of Fort Worth Wildcatters.

Community: Past committee member of Midland Young Life; Trinity Charger Alliance; Beach Ball Bash - Hillcrest School (spouse)

What is your personal vision for the City?

Having lived in various cities over the course of my career, Midland has been the most unique and inviting city.I would love to see the city continue to attract businesses and organizations that would diversify the Midland's economy.

Please specify any time constraints you may have.

None

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

I am very passionate about the growth of Midland. This city truly has unlimited potential and I would like an oppurtunity to help Midland Development Corporation and the City Council direct and facilitate its strategy to grow Midland.

What contribution would you most like to make?

As stated previously, I am very passionate about Midland and willing to sacrifice time to serve. I always keep an open mind, listen to all viewpoints, and ask the right questions in order to fully understand the situation/opportunity. I am also one that can create and maintain rapport which is very important in order for the committee to continue to be effective.

Additional pertinent information or references:

Graduate of Texas Tech University, Rawls College of Business: BBA in Finance and Petroleum Land Management

References - Amanda Day and ReenAnn Rutter - Pioneer Natural Resources - Government & Public Affairs; Daniel Pender- Pioneer Natural Resources - Director of Surface Land and Business Development

(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

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Signature of Applicant

Barrett J. Brannon

Digitally signed by Barrett J. Brannon
DN: cn=Barrett J. Brannon gn=Barrett J. Brannon c=US United States l=US United States
Reason: I am the author of this document
Location:
Date: 2022-12-30 11:46-06:00

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City Secretary's Office

PO Box 1152

Midland, TX 79702

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Print Application

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PLEASE TYPE OR PRINT CLEARLY:

Date: 11/29/2022

Name: James B. Griffis

Phone: M: 713-294-3331 **(Home)**

Address: 1411 W. Cuthbert Ave.

(Business)

Midland TX 79701

Email: james@wticap.com

(City) (State) (Zip)

I am [✔] **I am not** [ ] **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? [ ] **yes** [✔] **no**

I have lived in Midland 9 **years.**

Occupation: Real Estate Development

Professional and/or Community Activities:

Previous Member - Frost Bank Advisory Board (Permian Basin)

Previous Member - Bynum School Endowment

Previous Member - Bynum school Board of Directors

What is your personal vision for the City?

I am personally convinced there is no greater place in the country than Midland, Texas to be an entrepreneur. The amount of support, mentorship and encouragement offered in our city are unmatched. I feel that Midland needs to do a better job of advertising and connecting the support available in order to continue encouraging growth and new businesses.

Please specify any time constraints you may have.

As long as on a set calendar with at least a few weeks notice I am able to work my calendar as needed.

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

My personal passion is starting and growing new businesses, and helping others do the same. I feel that serving on the Midland Development Corporation will allow me to combine my personal passions with activities that will help grow

diversify our economy.

What contribution would you most like to make?
I would like the ability to combine my work and eduction backgrounds with the capabilities and resources of the City of Midland in order to encourage continued growth and prosperity.

Additional pertinent information or references:
Reference: Spencer Robnett, former City Council member, M: 432.553.8545

Reference: Nick McClure, current member of Airport Planning and Development Board

Education: BBA - Finance, Texas A&M University. MBA - Finance, University of St. Thomas.

(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

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Signature of Applicant

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PLEASE TYPE OR PRINT CLEARLY:

Date: 12/4/2022

Name: Kristen Chandler

Phone: 817-964-2471 **(Home)**

Address: 1216 N CR 1105

_____ **(Business)**

Midland TX 79706

Email: KristenCChandler@gmail.om

(City) (State) (Zip)

I am ☑ **I am not** ☐ **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? ☐ **yes** ☑ **no**

I have lived in Midland 7 **years.**

Occupation: Self Employed

Professional and/or Community Activities:

I currently own two businesses in Midland, TX and three businesses in Granbury, TX. The business I own in Midland are B+You (Health, Business, Wellness) Center & Subway location. In Granbury, TX I own Any Lab Test Now; Assurance Medical Diagnostics & More; B+You. I am involved in community sponsorship; church and business mentorship for local entrepreneurs.

What is your personal vision for the City?

I would like to see our community as well as those who travel to see the city of Midland for all of the wonderful things it has to offer. I feel that the City of Midland has made huge strides since we moved here 7 years ago, however I feel like we have so much more to build upon as a city and community education to be done to highlight all of the wonderful things our city has to offer currently.

Please specify any time constraints you may have.

As a busy entrepreneur there are times in which my schedule calls for a last minute meeting or business travel, however for the most part I do have the availability to plan accordingly.

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Planning & Zoning Commission

Please tell us why you are interested in serving on this board or commission.

I am interested in serving because I would like to be involved in the future of the business and real estate development in the city of Midland. I would like to be able to provide my insight from a resident as well a local business owner from my perspective on developm

and improvements that will help the growth and economic sustainability of the city of Midland.

What contribution would you most like to make?

I would hope to contribute a fresh eye to what exists as well as what is

Additional pertinent information or references:

(2) Name of Board/Commission:

Midland Development Corporation

What contribution would you most like to make?

As a local business owner, I have enjoyed meeting other business owners over the years. Hearing their ideas, plans for growth, their struggles/set backs and if/when I can provide solutions or insights I take pride in doing so. I feel like my contribution would serve as a fresh insight to what currently exists, as well as what is on the horizon for the city of Midland from personal/professional pe

Additional pertinent information or references:

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Signature of Applicant

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PLEASE TYPE OR PRINT CLEARLY:

Date: 12/16/2022

Name: Abraham Bejil

Phone: 4322887667 **(Home)**

Address: 5202 Hilltop Dr.

432-221-1644 **(Business)**

Midland TX 79707

Email: abraham.bejil@midlandhealth.org

(City) (State) (Zip)

I am ☑ **I am not** ☐ **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? ☐ **yes** ☑ **no**

I have lived in Midland 20 **years.**

Occupation: Vice President of Facility Services for Midland Healt

Professional and/or Community Activities:

Servant Leader for Stonegate Kids 4/5 grade boys.

Board Director for Texas Association of Healthcare Facilities Management for the West Texas Region

Planning and Zoning Commissioner

What is your personal vision for the City?

A city that enhances the quality of life for everyone who chooses to call Midland their home while fostering an atmoshphere where citizens and businesses can thrive in harmony.

Please specify any time constraints you may have.

No time constraints

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Midland Development Corporation Board

Please tell us why you are interested in serving on this board or commission.

The greatest way to get involved with your community is to serve where needed. I firmly believe that by sharing our time and talents with others, we learn what true servanthood is.

What contribution would you most like to make?

My time and attention to the things that matter to our citizens, businesses, and entrepreneurs.

Also, as the VP of Facility Services for MMH I interact with many local vendors, contractors, architects, professionals, and oversee

multi million dollar projects. I believe this experience would be beneficial to this board and the organization as a whole.

Additional pertinent information or references:

Jeffrey Beard Exec. VP of CrownRock Minerals LP jbeard@crownquest.com

Russell Meyers CEO of Midland Memorial Hospital 432-661-8000; Valerie Sparks MMH IC Officer 432-853-0285

Dr. James Phillips, MD 432-349-7295; Jay K. Bradford, AIA JSA Architects 432-559-1891

(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

Applications are maintained on file in the City Secretary's office for a period of one year. Should you need additional information, please call us at 432-685-7430.

Signature of Applicant

Abraham Bejil Digitally signed by Abraham Bejil
Date: 2022.12.16 10:58:01 -06'00'

Applications may be submitted online via email or print in order to send by mail:

City of Midland

City Secretary's Office

PO Box 1152

Midland, TX 79702

Submit Via Email

Print Application

MIDLAND
Feel the Energy!

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

As an applicant for a City board, commission, or committee, please be advised that all information on this application is subject to the Texas Open Records Act and will be available to the public.

PLEASE TYPE OR PRINT CLEARLY:

Date: 12/29/2022

Name: Becca Heidelberg

Phone: 432·661·2406 (Home) Cell

Address: 1506 W Golf Course Rd. N/A (Business)

Midland TX 79701
(City) (State) (Zip)

Email: rlhcisco@gmail.com

I am ☑ **I am not** ☐ **a U.S. Citizen**

Are you a graduate of Midland 101? ☐ **yes** ☑ **no**

Please tell us about yourself:

I have lived in Midland 22 **years.**

Occupation: Homemaker

Professional and/or Community Activities:

- Teaching Director of After School Kids Community Bible Study (8 years)
- The Junior League of Midland (8 years)
- Texas Tech Club of Midland + TTU Alumni Assoc. + Red Raider Club (22 years)

What is your personal vision for the City?

To encourage growth and new businesses to open in Midland while supporting our existing businesses. I'd like to see some new businesses open that provide activities for teens and young adults. The new trampoline park and expansion of Green Acres are wonderful family activities, but we need ~~new~~ entertainment for singles and people without kids as well.

Please specify any time constraints you may have.

~~I have~~ I have a flexible schedule and can make most times work with a day's notice.

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at www.midlandtexas.gov)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

When I read that the MDC board had an opening, I knew I wanted to apply. I have ~~RACKET~~ Midland go through ~~24.33~~ any changes over the past twenty years. It has been exciting to watch it grow. The development of Centennial Park and the new life downtown has set the momentum

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

As an applicant for a City board, commission, or committee, please be advised that all information on this application is subject to the Texas Open Records Act and will be available to the public.

PLEASE TYPE OR PRINT CLEARLY:

Date: 12/15/2022

Name: Brennan Berry

Phone: (646) 460-4778 **(Home)**

Address: 1503 Harvard Ave.

(432) 242-8850 **(Business)**

Midland TX 79701

Email: bberry@erpfunds.com

(City) (State) (Zip)

I am ☑ **I am not** ☐ **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? ☐ **yes** ☑ **no**

I have lived in Midland 7 **years.**

Occupation: Real Estate Investment

Professional and/or Community Activities:

Currently working as the Chief Operating Officer of ERP Funds, a Midland-based real estate private equity fund that focuses on commercial real estate investments in the Permian Basin (operating over 2.5 million SF as of 2022). I graduated from Leadership Midland in 2018 and currently serve on the Board of Governors for the Midland Community Theater in addition to the DMMD board.

What is your personal vision for the City?

Quality of life in Midland has always been something of interest to me and an area that I would like to pursue with local government. Midland has come a long way in the 7 years that I've lived here however I think we are just at the beginning of really changing the city for the better and through further leadership, I'm confident we can achieve great results.

Please specify any time constraints you may have.

Available to meet most weekdays, either during business hours or after hours. I am generally pretty flexible in regards to timing.

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

The MDC plays a key role in business development in the city along with infrastructure improvements, both of which I am particularly interested in. As someone who does not directly work in oil & gas, I see the need to help diversify the local economy and encourage

small businesses to grow in our region. The MDC has the ability to really bring about change and improve the city in impactful ways.

What contribution would you most like to make?

With a background in real estate, hospitality and project management, I believe I can share unique insights with the board and provide a small business perspective. I'd also like to specifically work on attracting new business to Midland that can help achieve some of the quality of life goals for the city. With recent interest in an entertainment district, I believe I can help achieve results.

Additional pertinent information or references:

I am a licensed real estate broker in Texas which I believe would be a qualification of interest given the MDC's real estate focus. I have also attached my resume to this application to provide further details on my professional experience.

(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

Applications are maintained on file in the City Secretary's office for a period of one year. Should you need additional information, please call us at 432-685-7430.

Signature of Applicant

Brennan Berry Digitally signed by Brennan Berry
Date: 2022.12.17 05:11:19 -06'00'

Applications may be submitted online via email or print in order to send by mail:

City of Midland
City Secretary's Office
PO Box 1152
Midland, TX 79702

Submit Via Email

Print Application

Brennan P. Berry

400 W. ILLINOIS AVE., SUITE 1630, MIDLAND, TX
C: +1 646 460 4778
BBERRY@ERPFUNDS.COM

SKILLS / VALUE ADD

- Strong understanding of the real estate, travel and hotel industry with exposure to the Middle East, UK and US markets
- Results-driven and consistent high-performer; recognized for achievements related to strong sales performance
- Consistently demonstrate leadership, strong work-ethic and conscientious approach to work

PROFESSIONAL EXPERIENCE

ENERGY RELATED PROPERTIES Midland, Texas
Chief Operating Officer, Partner *June 2015 - Present*

- Oversee property management and leasing efforts of a 2.5 million square foot portfolio of office and industrial properties throughout the Permian Basin
- Manage a team of 25 professionals including property managers, engineers and accounting staff
- Maintain key investor relationships including the distribution of financial reporting, leasing updates and market analyses
- Serve as primary point of contact for capital improvement projects and coordinate with contractors and key stakeholders
- Responsible for designing and executing marketing campaigns, including social and traditional media
- Identify acquisition targets and negotiate purchase terms for single and multi-tenant industrial properties

FOUR SEASONS HOTELS AND RESORTS London, United Kingdom
Account Director, London Worldwide Sales Office *January 2014 – May 2015*
Account Manager, London Worldwide Sales Office *November 2011 – January 2014*

- Managed Greater London-based 3rd party meeting planner accounts and corporate end-user clients
- Grew account base revenue over 90% from 2011 to 2013 (2011 goal of £1.57 mil. and 2013 actual revenue of over £3 mil.)
- Achieved President's Club level results in 2013 (exceeded 135% of annual goal)
- Awarded Sales Manager of the Quarter in Q3 2013 out of entire WSO network (roughly 40 eligible candidates)
- Planned and executed familiarization trips with clients to a variety of hotels in the Four Seasons portfolio
- Organized international sales developments and London networking events on behalf of hotels and resorts, managing budgets, client invitations and program logistics
- Managed European Business Development Initiative in 2013, one of twelve colleagues selected globally out of the entire sales and marketing organization

FOUR SEASONS HOTELS AND RESORTS Dubai, United Arab Emirates
Regional Sales Manager, Middle East Worldwide Sales Office *February 2010 – November 2011*
Sales Coordinator, Middle East Worldwide Sales Office *June 2007 – January 2010*

- Managed travel agent and wholesale accounts in the United Arab Emirates and Kuwait
- Identified and prospected potential corporate, group, government and retail travel agent accounts
- Achieved President's Club recognition in 2011 and Sales Manager of the Quarter in Q4 2010
- Organized quarterly sales developments, typically representing 25 hotels throughout the major cities of the GCC
- Oversaw and implemented prospecting campaigns designed to target specific sectors in various markets in the Middle East
- Assisted with the development of an annual marketing plan as well as an annual budget for the regional sales office
- Collaborated with airlines to organize familiarization trips for Middle East-based clients to various Four Seasons Hotels
- Developed a quarterly electronic newsletter and a bi-annual update targeting clients in the meeting planning sector
- Participated in sales trainings in the Middle East that focused on prospecting, communication and account management

THE BROOKINGS INSTITUTION Washington, D.C.
Intern, Middle East Policy *Spring 2007*

- Worked at the Saban Center for Middle East Policy for the Project on U.S. Relations with the Islamic World, specifically researching programs designed to improve relations between the two regions in the wake of 9/11 and interviewing their principals to assess their best practices. Our findings were compiled into the policy paper titled: *The Opportunity of the Obama Era: Can Civil Society Help Bridge Divides between the United States and a Diverse Muslim World?*
- Assisted in organizing the U.S.-Islamic World Forum, a joint-venture between Brookings and the Qatar Ministry of Foreign Affairs

U.S. – SAUDI ARABIAN BUSINESS COUNCIL Washington, D.C.
Intern, Research Department *Fall 2006*

- Researched, compiled and wrote articles for the council's quarterly newsletter and press releases for the council's website
- Updated sector reports weekly, particularly in petrochemicals, tourism and transportation, and power generation
- Updated and edited annual Saudi Arabian business guide in addition to creating new sections for emerging industries

FERRIS, BAKER WATTS, INC. Washington, D.C.
Intern, Washington Sales Office *Winter 2004 - Spring 2005*

- Coordinated in-house operational tasks such as account setups, transfers, and regulatory compliance
- Provided consultation on equity and fixed-income selection
- Developed comprehensive asset allocation plans and portfolio recommendations
- Encoded client account activity electronically to generate performance reports and statements

EDUCATION

THE GEORGE WASHINGTON UNIVERSITY Washington, D.C.
Bachelor of Arts in International Affairs, Concentration in Middle East & Asia, Minor in History *May 2007*
GPA: Major 3.5
Awards: Dean's List 2006 – 2007
Abroad: Semester in Beirut, Lebanon at the American University of Beirut *Spring 2006*
Semester in Tokyo, Japan at Kanda University of International Studies *Fall 2005*
AIESEC exchange to Egypt on Department of State-sponsored Salaam Program *Summer 2005*
Lived in Jeddah, Saudi Arabia on a US Department of State-sponsored homestay program *Summer 2002*
Languages: Arabic – Proficient in Lebanese colloquial dialect
French – Intermediate level
Japanese – Intermediate level

ADDITIONAL

- Licensed real estate broker in Texas and Florida
- Member of the Board of Governors at the Midland Community Theater
- Board Member of the Downtown Midland Management District
- Graduate of the Leadership Midland Class of 2018 (Midland Chamber of Commerce program)

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

As an applicant for a City board, commission, or committee, please be advised that all information on this application is subject to the Texas Open Records Act and will be available to the public.

PLEASE TYPE OR PRINT CLEARLY:

Date: 12/6/2022

Name: Daniel Garcia

Phone: 432.218.6435 **(Home)**

Address: 4403 W. Dengar Avenue

432.240.1966 **(Business)**

Midland Tx 79707

Email: daniel.garcia@midlandisd.net

(City) (State) (Zip)

I am [✔] **I am not** [ ] **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? [ ] **yes** [✔] **no**

I have lived in Midland 37 **years.**

Occupation: Purchasing Supervisor

Professional and/or Community Activities:

Texas Association of School Business Officials

What is your personal vision for the City?

Growth and prosperity for established business and work with attact new businesses. Establish and maintain relationships with other cities in Texas. Work with our local Education leaders to assist with recruting instructional professionals.

Please specify any time constraints you may have.

None at my current position

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

I would like to make a positive contribution to our city.

What contribution would you most like to make?

Ideas that work for the entire community.

Additional pertinent information or references:

Lupe Villanueva - lupe@me.com - 45 years

Carla Martin - Carlaymartin@outlook.com - 15 years

Pam Weinacht - pam.weinacht@wtwco.com - 45 years

(2) Name of Board/Commission:

What contribution would you most like to make?

Additional pertinent information or references:

Applications are maintained on file in the City Secretary's office for a period of one year. Should you need additional information, please call us at 432-685-7430.

Signature of Applicant

Daniel Garcia

Applications may be submitted online via email or print in order to send by mail:

City of Midland

City Secretary's Office

PO Box 1152

Midland, TX 79702

Submit Via Email

Print Application

APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

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PLEASE TYPE OR PRINT CLEARLY:

Date:_____

Name:_____

Phone:_____ **(Home)**

Address:_____

_____**(Business)**

Email:_____

_____

(City) **(State)** **(Zip)**

I am ☐ **I am not** ☐ **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? ☐ **yes** ☑ **no**

I have lived in Midland _____ years.

Occupation:_____

Professional and/or Community Activities:

_____

_____

_____

What is your personal vision for the City?

_____

_____

_____

Please specify any time constraints you may have.

_____

_____

_____

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

_____

_____

_____

Please tell us why you are interested in serving on this board or commission.

_____

_____

What contribution would you most like to make?

_____

_____

_____

Additional pertinent information or references:

_____

_____

_____

(2) Name of Board/Commission:

_____

_____

_____

What contribution would you most like to make?

_____

_____

_____

Additional pertinent information or references:

_____

_____

_____

Applications are maintained on file in the City Secretary's office for a period of one year. Should you need additional information, please call us at 432-685-7430.

Signature of Applicant

_____

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APPLICATION FOR CITY OF MIDLAND BOARDS/COMMISSIONS/COMMITTEES

As an applicant for a City board, commission, or committee, please be advised that all information on this application is subject to the Texas Open Records Act and will be available to the public.

PLEASE TYPE OR PRINT CLEARLY:

Date: 12/26/2022

Name: John Elphick

Phone: 432-553-9253 **(Home)**

Address: 500 W. Illinois, Suite 200

432-553-9253 **(Business)**

Midland TX 79701

(City) (State) (Zip)

Email: john@moriahgroup.net

I am [✔] **I am not** [ ] **a U.S. Citizen**

Please tell us about yourself:

Are you a graduate of Midland 101? [ ] **yes** [✔] **no**

I have lived in Midland 47 **years.**

Occupation: Commercial Real Estate Broker/Developer

Professional and/or Community Activities:

Commercial Real Estate Broker/Developer. Professional representation of owners and users, buyers and sellers, in commercial assets to include office, retail, industrial, multi-family, land, mixed use, hotel and restaurant. Past Building Chair for Petroleum Museum and Jim Hall Chapparal wing. Past board member of Chamber, American Hear Association and Downtown Midland, Inc.

What is your personal vision for the City?

Creating human habitats of extraordinary character and enduring value that are both economically viable and ecologically sustainable The community must serve the needs of all people, bringing access to jobs, housing, education and recreation. All projects should be reflective of our unique history, culture and character. Partnership of and communication with all community leaders must be enhanc

Please specify any time constraints you may have.

None.

Please list below the Board(s) or Commission(s) on which you are interested in serving:

(You can find a complete and current list on the City's website at *www.midlandtexas.gov*)

(1) Name of Board/Commission:

Midland Development Corporation

Please tell us why you are interested in serving on this board or commission.

I believe my professional qualifications and long history make me uniquely qualified to have a significant impact on the path forward for our community.

What contribution would you most like to make?

To ensure that projects presented to the Board meet the vision and high standards, that the third parties developing them are thoroug

vetted financially and in competency and character, and to be a trouble shooter to work out issues as they arise.

Additional pertinent information or references:

I am professionally certified as a CCIM (recognized as the PhD of Commercial Real Estate), a member of International Shopping

Center Council, North Texas Commercial Association of Realtors, North Texas CCIM, NAR and TAR. Significant projects include:

Built, leased, managed 310 W. Wall (First Capital Bank building); Anadarko Building and first mixed use project approved, Westridge

(2) Name of Board/Commission:

Sold Chevron Bulding and aquired new headquarters site, acquired Apache headquarters, acquired Endeavor headquarters, leased

XTO office, acquired Concho headquarters and expanded campus, acquired EOG headquarters, and leased millions of square feet

to other office users. Managed development of McClurg ranch at Lamesa an I-20 to include 4 apartment projects.

What contribution would you most like to make?

Facilitated development of I-20 and Rankin Hwy to include Chesapeake regional office, Starbucks, McAlister's, Tractor Supply, Chik

Fil A, What A Burger, Discount Tire among others. Redeveloped Andrews Hwy & Midkiff (Advance Auto, Familia Dental and Murphy

Oil). Sold first hotel site for Mariott Courtyard in Westridge. Represented Costco site acquisition at SH 191 & SH 158.

Additional pertinent information or references:

I have worked with City Staff extensively and have had significant relationships with City Council members . References include

Bobby Burns and Robert Rendall.

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Signature of Applicant

Applications may be submitted online via email or print in order to send by mail:

City of Midland

City Secretary's Office

PO Box 1152

Midland, TX 79702

Submit Via Email

Print Application

MIDLAND DEVELOPMENT CORPORATION
(Membership - 7: Terms - 3 Years - Staggered)
January 2022 - December 2022

MEMBER	TERM EXPIRES	ATTENDANCE	MEETINGS ATTENDED	TOTAL MTGS	ELIGIBLE	NOTES
VACANT (Lowery)	Jan 14 2023	91%	10	11	No	
Chase Gardaphe	Jan 14 2025	82%	9	11	Yes	
Berry Simpson	Jan 14 2025	91%	10	11	Yes	
P Lourcey Sams	Jan 14 2026	100%	11	11	Yes	
Jill Pennington	Jan 14 2026	64%	7	11	Yes	
Brad Bullock	Jan 14 2027	73%	8	11	Yes	
Lucy Sisniega	Jan 14 2028	89%	8	9	Yes	Appointed Feb. 2022
Applicants Name	Additional Boards Applying to	COUNCIL NOTES				
Abraham Bejil (D4)						
Brennan Berry (D3)						
Kristen Chandler (County)						
John Logan Cooksey (D3)						
Zachary Deck (D3)						
Daniel Garcia (D4)						
James B. Griffis (D3)						
John L. Kennedy (D3)						
J. Brian Martin (D1)	P&Z					
Melissa "Mel" Mosier (D2)						
Danny Norwood (D3)						
Dara Richardson (D4)						
Brian Stubbs (D1)	P&R					
Xavier A. Torres (D3)						
Justin Willmon (D1)						
John Elphick (D3)						
Barrett J. Brannon (D3)						
Lacy Sperry (D1)						
Becca Heidelberg (D3)						

BOARDS AND COMMISSIONS OF THE CITY OF MIDLAND
January 24, 2023

AIRPORT PLANNING AND DEVELOPMENT BOARD

(Advisory)
(Membership-10; Terms - 3 Years expiring 3-3-4.)

	Appt Date	Term Expires	Eligibility Expires
Wes Reeves	08/15*	Sept 30 2023	Sept 30 2023
Gena Linebarger	09/20	Sept 30 2023	Sept 30 2026
Benjamin Fietz	09/20	Sept 30 2023	Sept 30 2026
Beverly Dillow	10/21	Sept 30 2024	Sept 30 2027
Dave Joyner	10/21	Sept 30 2024	Sept 30 2027
James Linderman	04/22	Sept 30 2025	Sept 30 2028
Justin Kuethe	09/19	Sept 30 2025	Sept 30 2025
Nick McClure	09/19	Sept 30 2025	Sept 30 2025
Frank Kisner	09/22	Sept 30 2025	Sept 30 2028
Brandon Patterson	09/22	Sept 30 2025	Sept 30 2028

Justine Ruff (Liaison)
Lori Blong (Council Liaison)

Ex-Officio members are Earl Erdman and Harry Spannaus, the City Manager and the City Attorney. The Secretary is the Director of Aviation.

Eligibility Requirements: Resident of Midland County

ANIMAL SERVICES ADVISORY COMMISSION

(Advisory)
(Membership - 7; Terms - 4 Years)

	Appt Date	Term Expires	Eligibility Expires
Ty Coleman (daily operations)	09/17	Sept 30 2025	Does not expire??
Dr. J. Annette Jensen (Veterinarian)	04/20	Sept 30 2024	Sept 30 2028
Tasha Sport	04/20	Sept 30 2024	Sept 30 2028
Sharla Hotchkiss	04/20	Sept 30 2024	Sept 30 2028
Robert “Robin” Donnelly (County)	11/13	Sept 30 2025	Sept 30 2025
Alyson Dial	09/18	Sept 30 2026	Sept 30 2026
Beth Meeks	09/22	Sept 30 2026	Sept 30 2030

Ty Coleman (Liasion)
Dan Corrales (Council Liaison)

Eligibility Requirements: 1 License Veterinarian, 1 Animal Shelter Employee, 1 Animal Welfare Organization Representative, 1 County or Municipal Official, 2 Citizens

BUILDING AND FIRE CODE REVIEW COMMITTEE/CONSTRUCTION BOARD OF ADJUSTMENTS & APPEALS

(Membership – 9; Terms – 6 Years)

Shall consist of two architects, a fire protection contractor or specialist, a general contractor, an electrical contractor, a homebuilder, a plumbing and mechanical contractor, a structural engineer, a City Council Liaison

	Appt Date	Term Expires	Eligibility Expires
Ryan Almand (Electrical Contractor)	12/18	Sept 30 2024	Sept 30 2030
Jay Bradford (Architect)	12/18	Sept 30 2024	Sept 30 2030
T.J. McClure (Architect)	12/18	Sept 30 2024	Sept 30 2030
Laurence Oeth (Structural Engineer)	12/18	Sept 30 2024	Sept 30 2030
Gary Glasscock (General Contractor)	12/18	Sept 30 2024	Sept 30 2030
Robert Anderson (Homebuilder)	12/18	Sept 30 2024	Sept 30 2030
Dean Kelly (Plumbing & Mechanical Contractor)	04/22	Sept 30 2028	Sept 30 2034
Kenneth Whiting (Fire Protection)	04/22	Sept 30 2028	Sept 30 2034
Jeff Pinkstaff (Liaison)	12/18	Sept 30 2024	Sept 30 2030
Dan Corrales (Council Liaison)			

Eligibility Requirements: Members shall reside within the City.

CAPITAL IMPROVEMENT ADVISORY COMMITTEE

(Advisory)

(Membership – 7)

A minimum of 40% must be representative of real estate, development, or building industries who are not employees or officials of a political subdivision or governmental entity.)

	Appt Date
Carl Craigo	10/19
Walter Pate	06/18
Mark Payne	06/18
Brian Sales	06/18
Chuck Harrington	06/18
Jose Ortiz (Liaison)	06/18
Bill Scott	09/22
Lori Blong (Council Liaison)	

CITIZENS DEVELOPMENT AND HOTEL/MOTEL ADVISORY BOARD

(Advisory)
(Membership - 7; Terms - 2 Years Staggered)

	Appt Date	Term Expires	Eligibility Expires
Clint Williamson	04/21	Sept 30 2023	Sept 30 2025
Ellen K. Ramsey	10/18	Sept 30 2023	Sept 30 2023
Vicky Hailey	09/21	Sept 30 2023	Sept 30 2025
Brandon Ofield	09/20	Sept 30 2024	Sept 30 2024
Ankur Bhakta	09/22	Sept 30 2024	Sept 30 2026
Cole Harrison	09/22	Sept 30 2024	Sept 30 2026
Reggie Lawrence	09/22	Sept 30 2024	Sept 30 2026

Amy Turner (Liaison)
Robin Poole (Council Liaison)
John Norman (Council Liaison)

Eligibility Requirements: Members shall be thoroughly familiar with Chapter 351, “Municipal Hotel Occupancy Taxes”, 1 Member Representative of Hotel/Motel Association.

MIDLAND CENTRAL APPRAISAL DISTRICT BOARD OF DIRECTORS

Five Directors, Elected by Local Taxing Entities.
City Nominates/Cast Vote for one Director
(Terms - 2 Years)

	Appt Date	Term Expires
Robert McNaughton	11/15	Dec 31 2024

MIDLAND DEVELOPMENT CORPORATION

(Membership - 7; Terms -3 Years - Staggered)

	Appt Date	Term Expires	Eligibility Expires
Chase Gardaphe	01/22	Jan 14 2025	Jan 14 2025
Barry Simpson	01/22	Jan 14 2025	Jan 14 2025
VACANT (Lowery)	01/17	Jan 14 2023	Jan 14 2023
P Lourcey Sams	04/20	Jan 14 2023	Jan 14 2026
Jill Pennington	04/20	Jan 14 2023	Jan 14 2026
Brad Bullock	04/21	Jan 14 2024	Jan 14 2027
Lucy Sisniega	02/22	Jan 14 2025	Jan 14 2028

Amy Turner (Liaison)
Lori Blong (Council Liaison)

Eligibility Requirements: No director or employee shall be related to a current City Council member.

MIDLAND DOWNTOWN PARK CONSERVANCY BOARD

(Membership - 7; City Appoints 3 Seats; Terms -3 Years - Staggered)
(Resolution of appointment is made each February and each appointment must be ratified by the Conservancy Board in March at their annual meeting)

	Appt Date	Term Expires	Eligibility Expires
Barry Beal Jr.	08/18	Sep 30 2024	Sep 30 2024
David Byrd	08/18	Sep 30 2023	Sep 30 2023
Sharla Hotchkiss	07/20*	Sep 30 2025	Sep 30 2025

MIDLAND HIGHER EDUCATION FACILITIES CORPORATION

(Membership - 7; Terms - 2 Years Staggered)

	Appt Date	Term Expires	Eligibility Expires
Steve Jones	**09/08***	**Jan 1 2010**	**Jan 1 2012**
Cathy Oestmann	**11/05***	**Jan 1 2010**	**Jan 1 2010**
Vacancy		**Jan 1 2007**	
Vacancy		**Jan 1 2007**	
Vacancy		**Jan 1 2007**	
Vacancy		**Jan 1 2009**	
Curt Kamradt	**11/05***	**Jan 1 2014**	**Jan 1 2014**

Sharla Hotchkiss (Liaison)

MIDLAND HOUSING AUTHORITY COMMISSION

(Membership - 5; Terms - 2 Years expiring 3 even & 2 odd.)
Appointments Made by Mayor (LGC 392.031)

	Appt Date	Term Expires
Latoya Mayberry	06/21	Oct 2023
Sylvestor Cantu	09/18*	Oct 2023
Cheryl Wadley (Resident Commissioner)	11/19	Oct 2023
Wes Gotcher	09/20	Oct 2024
Robert Lehrer	09/20	Oct 2024

Isaac Garnett (Staff Liasion)

Eligibility Requirements: No member may be an officer or employee of the City of Midland.

MIDLAND-ODESSA URBAN TRANSIT DISTRICT BOARD

(Decision Making)
(Membership – 12 with 6 appointed by Midland; Terms - 2 Years Staggered; Can serve 3 terms)

	Appt Date	Term Expires	Eligibility Expires
Joseph Sanchez	12/19	Sept 30 2023	Sept 30 2025
Daniel Norwood	04/21	Sept 30 2023	Sept 30 2025
Brian Stubbs	06/22	Sept 30 2024	Sept 30 2026
Don “Woody” Woodward	09/22	Sept 30 2024	Sept 30 2026
Dan Corrales	09/22	Sept 30 2024	Sept 30 2026
Robert Crites	10/22	Sept 30 2024	Sept 30 2026

Charles Harrington (Liaison)

OIL AND GAS ADVISORY COMMITTEE

(Advisory)
(Membership – 5; Terms – 3 Years expiring 2-2-1)
2 real property developer, real estate sales, or developer; 3 Lic. petroleum engineer, engineer w/ bachelor, or geologist

	Appt Date	Term Expires	Eligibility Expires
Court Adkins (Petroleum Eng.)	09/17	Sept 30 2023	Sept 30 2023
Rhett Bullock (Petroleum Eng.)	09/21	Sept 30 2024	Sept 30 2026
Cameron Willmann (Real Estate)	10/21	Sept 30 2024	Sept 30 2026
Scott Bowden (Real Estate)	10/19	Sept 30 2025	Sept 30 2025
Ross Klabon (Petroleum Eng.)	10/19	Sept 30 2025	Sept 30 2025

Ron Jenkins (Liaison)

Eligibility Requirements: 3 Petroleum Engineers or Geologists and 2 with Property Development or Real Estate Experience.

PARKS AND RECREATION COMMISSION

(Advisory)
(Membership - 9; Terms - 3 Years expiring 3-3-3.)

	Appt Date	Term Expires	Eligibility Expires
Susannah Prucka	04/20	Sept 30 2023	Sept 30 2026
Dal Watson	09/20	Sept 30 2023	Sept 30 2026
Ron Stroman	09/20	Sept 30 2023	Sept 30 2026
Shirley Howard	02/16*	Sept 30 2024	Sept 30 2024
Laura Smith	10/19	Sept 30 2025	Sept 30 2025
Amber Voithorer	09/22	Sept 30 2025	Sept 30 2028
Rachel Overman	09/22	Sept 30 2025	Sept 30 2028
Sarah Judge	09/22	Sept 30 2025	Sept 30 2028
Lynn Rogers	09/22	Sept 30 2025	Sept 30 2028

Cristina Odenburg-Burns (Liaison)
John Norman (Council Liaison)

Eligibility Requirements: Resident Citizen, Taxpayer and Qualified Voter.

PERMIAN BASIN COMMUNITY CENTER FOR MH/MR (PermiaCare)

(Decision Making)
(Membership - 2 (City); Terms - 2 Years)

	Appt Date	Term Expires
Derek Cook (City)	06/21	June 2023
Ryan Peckham (City)	08/20	June 2024

PERSONNEL BOARD OF APPEALS

(Decision Making)
(Membership - 3; No designated terms. Mayor appoints.)

	Appt. Date
Scott Dufford	01/14
Hugh A. “Andy” Shaffer	09/05
Patrick Payton	01/20

Mark Widman (Liaison)

Eligibility Requirements: Board consists of two City Council members and one other member who is not a City employee.

PLANNING AND ZONING COMMISSION

(Advisory & Decision Making)
(Membership - 7; Terms - 3 Years)

	Appt Date	Term Expires	Eligibility Expires
Diane Williams	09/17	Sept 30 2023	Sept 30 2023
Lucy Sisniega	09/20	Sept 30 2023	Sept 30 2026
Stacey Jo Grosse	09/20	Sept 30 2023	Sept 30 2026
Zachary Deck	09/20	Sept 30 2023	Sept 30 2026
Adrian Carrasco	09/21	Sept 30 2024	Sept 30 2027
Emily Holeva	09/22	Sept 30 2025	Sept 30 2028
Abraham Bejil	09/22	Sept 30 2025	Sept 30 2028
ALTERNATES:			
Beverly Dillow	09/21	Sept 30 2024	Sept 30 2027
Sallie Vega	09/22	Sept 30 2025	Sept 30 2028

Elizabeth Shaughnessy (Liaison)

Eligibility Requirements: Resident citizen of City of Midland, owner of real property within the City Limits and qualified Voter.

ZONING BOARD OF ADJUSTMENT AND AIRPORT ZONING BOARD OF ADJUSTMENT

(Decision Making)
(Membership - 5; Terms - 2 Years expiring 3 odd & 2 even.)

	Appt Date	Term Expires	Eligibility Expires
Derek Whiting	01/18*	Sept 30 2023	Sept 30 2023
E.J. Baldridge	02/18	Sept 30 2023	Sept 30 2023
Robert Gray	01/21	Sept 30 2023	Sept 30 2025
Reed Claybrook	03/19*	Sept 30 2024	Sept 30 2024
James Gerety	10/22	Sept 30 2024	Sept 30 2026
ALTERNATES: (not applicable to Airport Zoning)			
Ross Schumann		Sept 30 2025	
VACANCY		**Sept 30 2020**	
VACANCY		**Sept 30 2020**	
VACANCY		**Sept 30 2020**	

Jeff Pinkstaff (Staff Liaison)

* **Indicates appointment to an unexpired term.**