



**Hidalgo County
Planning
Department**

T.J. Arredondo, CFM
Director of Planning

Main Office
1304 S. 25th Street
Edinburg, Texas 78542
Phone (956) 318-2840
Fax (956) 318-2844

Precinct No. 3 Substation
2401 N. Moorefield Road
Mission, Texas 78572
Phone (956) 205-7045
Fax (956) 205-7049

PIPELINE AND UTILITY PERMIT APPLICATION PACKET

THE STATE OF TEXAS

COUNTY OF HIDALGO

PRECINCT 1

**APPLICATION AND AGREEMENT FOR PIPELINE OR
UTILITY PERMIT**

Date: 4/28/22

Texas Gas Service, a Division of ONE Gas, Inc. (hereinafter referred to as "Applicant") does hereby make application to the Hidalgo County through the Hidalgo County Planning Department (hereinafter referred to as "HCPD") to construct, maintain and repair pipelines or utilities across the easements, right-of-ways, property or property interest as described below.

Information required:

1. Name, Address and Phone number of Applicant:

Texas Gas Service, a Division of ONE Gas, Inc.

5602 E Grimes Rd, Harlingen, TX 78550

2. Name, Address and Phone number of company or agency owning Pipeline or Utility (please indicate if same as Applicant):

same

3. Name, Address and Phone number of operator of Pipeline or Utility (please indicate if same as Applicant):

same

4. Name, Address and Phone number of contractor to install Pipeline or Utility:

Spartan Energy Services, LLC

710 Industrial Blvd, Medford, OK 73759

Visit Hidalgo County Planning Department on the web at www.co.hidalgo.tx.us



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5. Is this a common carrier pipeline or utility? If yes, please submit the Applicant's Texas Railroad Commission Form "T-4" or similar form designating the facility:

Please see attached T-4

6. Does Applicant have the Power of Eminent Domain?

yes

7. Will the product be carried for hire or by the owner of the goods?

Carried by owner

8. Name and Legal description of property owner requesting utility services if applicable:

n/a

9. Type of utility work within county road right-of-way:

Bore Crossing Line Extension Along R.O.W. Other Relocate existing line parallel to Road ROW

10. Where is the origin of the line?

Above Ground Block Valve - Along south side of Mile 17N, west of Mile 3 Rd W

Edcouch, TX - 26.30103° N, -97.96496° W

11. Where is the destination of the line?

Above Ground Block Valve - Along north side of SH 107 east of FM 1425

Edcouch, TX - 26.25926° N, -97.85800° W



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12. Utility Crossing Coordinate X: 26.301390° Y: -97.938648°
(NAD 83 Texas South FIPS 4205 feet)
13. Number and size of lines:
1 - 10" pipeline
14. Pressure (each line):
650 psig (MAOP)
15. Content (each line):
natural gas
16. Estimated date of installation of Pipeline or Utility:
As soon as permit gets approved by C.C.



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If requested permit is granted by HCPD, Applicant, in consideration thereof, agrees and binds itself as follows:

1. All pipelines or utilities herein will be horizontally placed within the right-of-way as determined by HCPD and at a minimum depth of five (5) feet below natural ground. Depth, horizontal, and vertical location shall be confirmed by HCPD Inspectors.
2. Location map, profile, and plans concerning the proposed pipeline or utility crossing will furnished with this application.
3. HCPD will be notified in writing ten days prior to the beginning date of construction under this permit.
4. Applicant will bear the entire expense of all future relocations of any pipelines or utilities should such relocation, at the sole discretion of the Hidalgo County Commissioners Court, be necessary for improvements, alteration, or maintenance of the Hidalgo County's easement or property of interest.
5. Applicant will notify the HCPD at least 48 hours prior to covering work and or completion of its work and removal of its equipment from the job site to permit HCPD to make an inspection.
6. Upon notification by the HCPD, the Applicant will promptly repair or rectify any deficiency or condition caused by the Applicant's operations or installations under this permit. Applicant will leave easement in as near the same condition or better, in the HCPD's sole judgment, as it existed prior to the commencement of the operations under this permit.
7. Hidalgo County shall not be liable or responsible for, and shall be saved and held harmless by Applicant, and further shall be indemnified by Applicant, from and against any and all suits, actions, losses, damages, claims, or liability of any character, type, or description, including all expenses of litigation, court costs, attorney's fees, and engineering fees for injury or death to any person, or injury to any property, received or sustained by any person or persons or property, arising out of, or occasioned by, directly or indirectly, the performance of Applicant under this agreement, including claims and damages arising in part from the negligence of the Hidalgo County.



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It is the expressed intent of the parties to this agreement that the indemnity provided for in this section is extended by Applicant to indemnify and protect Hidalgo County from the consequences of Hidalgo County's own negligence, whether that negligence is the sole or contributory cause of the resultant injury death, or damage.

Applicant further agrees to defend, at its own expense, with attorneys acceptable to Hidalgo County and on behalf of the Hidalgo County, and in the name of Hidalgo County, any claim or litigation brought against the Hidalgo County in connection with any such injury, death or damage.

Before construction is begun on such pipeline or utility crossings, Applicant will furnish to the HCPD a certificate of insurance (or other security approved by the HCPD) payable to Hidalgo County and protecting Hidalgo County (as an additional named insured) against any claims for personal injuries or damages to property resulting from the operations of Applicant, its agents, servants, employees, and contractors under this permit. Insurance is to be supplied in accordance with the attached Schedule A.

8. Hidalgo County makes no warranties, expressed or implied, in the granting of this permit; nor does Hidalgo County purport to grant any property interest or exclusive privileges whatsoever by granting such permit. It is specifically understood that Hidalgo County is not the agent for, nor does it act for, the fee owners or any persons or entities having any right, or title to possession of the land upon which the Hidalgo County's easement or other property interest is located. Furthermore, in granting this permit Hidalgo County makes no representation or warranty that it has any property interest, including, but not limited to, an easement or right of way, in the land

upon which Applicant constructs, maintains, repairs, or modifies the pipelines or utilities, made the subject of this application, nor does Hidalgo County make any representation or warranty as to the validity, quality or extent of such property interest, if any. Applicant acknowledges its understanding that Hidalgo County in granting this permit, does not convey or grant to Applicant any rights, title or interest for which is has no legal authority to grant or convey.

9. Applicant binds itself to comply with all federal, state, and local laws or regulations and will obtain all necessary permits from all local and federal agencies required by law before installation or construction is begun.



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10. Applicant will install its pipelines and utilities in a manner and location as shown in the plans and specifications filed with HCPD in support of this application for permit. Hidalgo County Planning Department's representative may at any time make such inspection as such engineer or other representation may deem necessary to assure that the construction of the pipeline or utilities is in accordance with the plans and specifications submitted, and said engineer or representative shall have the right to temporarily suspend Applicant's work if necessary, while such inspection is being made. Should Applicant not install the pipelines or utilities in accordance with the terms and conditions of this permit, Applicant agrees that the Hidalgo County shall have the right to require, at Applicant's expense, the removal of the pipelines and utilities and its replacement in conformance to said plans and specifications and conditions of this permit. Hidalgo County may revoke this permit and suspend all work hereunder if it is determined by Hidalgo County that the pipelines or utilities are not being installed in accordance with such plans and specifications and conditions of this permit. The suspension or revocation of this permit shall not be a basis for a claim for damages against Hidalgo County.
11. Except in emergency situations where it is necessary to protect life and property, Applicant will not make any change, modification, or alteration in or to the pipelines or utilities without first securing a new or amended permit from Hidalgo County prior to the making of any such change. Applicant will maintain the pipelines or utilities hereby authorized in good and safe condition, and in accordance with plans, specifications, and this permit.
12. Applicant agrees to pay HCPD a permit fee to cover administrative costs in the amount of **\$500.00**, plus a reimbursement to HCPD for any necessary engineering fees which may be incurred for the study and processing of the Application. This fee will permit a single pipeline or utility to be within County right-of-way. Applicant further agrees to pay an additional fee of **\$500.00** for each additional line included in permit application at the same location; however, more than one location may be included in a single application.

Requests to lay additional line or lines, not included in an initial permit application, must be made by separate application, with new permit fees paid accordingly and support data provided.



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Permit fees may be waived where Applicant is a state, county, municipality, or a special political subdivision.

13. The Applicant is allowed one hundred twenty days (120) from the granting of the permit to start construction of the pipelines or utilities crossings. Once started, the Applicant is allowed ninety (90) days to complete all work under such permit. All construction must be completed within two hundred ten (210) days from the date of issuance of permit. Upon application, extension of the time periods set forth in this paragraph may be granted by the Hidalgo County Commissioners Court. Such applications for extension must be received by HCPD at least thirty days before the expiration of the two hundred ten (210) days period. A new permit fee, in accordance with Paragraph 12 hereof, will be charged for each extension granted.

Construction of any pipeline or utility crossing will not begin until written approval has been given by HCPD.

14. All provisions of the Pipeline and Utility Permit Administration Policy of Hidalgo County, if any, and all amendments thereto, are hereby incorporated herein as part of the terms and conditions of this permit for all purposes.
15. Applicant warrants and represents that it has secured from all fee owners of the involved property an easement or other property rights to construct, repair or modify the pipeline or utility in the manner set forth herein.
16. This Pipeline and Utility Permit if granted by Hidalgo County is subject to any and all other requirements, specifications and conditions listed in Exhibit A attached hereto.
17. Hidalgo County requires all coordinates of all utility crossings. Horizontal datum to be in NAD 83 State Plane Texas South 4205 feet and vertical datum in NAVD 88 Geoid 12a.



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18. This permit constitutes the entire agreement between the parties with regard to the subject matter hereof, and all prior agreements, representations, and negotiations between the parties regarding the subject matter are hereby superseded. This permit shall not be altered or amended except by an agreement in writing executed by the parties hereto.

19. Applicant warrants and represents that its undersigned representative has full authority to bind Applicant to the terms and conditions of the foregoing Application and Agreement for Pipeline or Utility Permit.

DATED this 4th day of May, 2022.

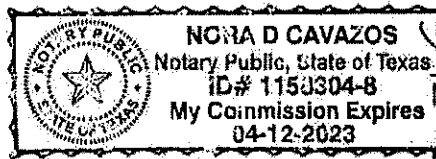
Eliza Yzaguirre
(Name of Applicant – Printed or Typed)

By: [Signature]
Signature

Title: Engineer II

STATE OF TEXAS
COUNTY OF HIDALGO

SUBSCRIBED AND SWORN TO before me the Applicant,
Eliza Yzaguirre, on this 4th day of may, 2022,
to which witness my hand and seal of office.



[Signature]
Notary Public for the State of Texas

My Commission Expires: 4-12-2023



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**APPROVAL OF APPLICATION BY
HIDALGO COUNTY PLANNING DEPARTMENT**

Came on for consideration this _____ day of _____,
20____. The above and foregoing Application for Pipeline and Utility
Permit, and after consideration of the same by the Hidalgo County
Commissioners Court, said Application and Agreement for Pipeline or
Utility Permit is hereby APPROVED.

HIDALGO COUNTY:

Richard F. Cortez, County Judge



PIPELINE AND UTILITY PERMIT APPLICATION PACKET

EXHIBIT A

(Please insert description of project location and supporting documents for proposed utility work)

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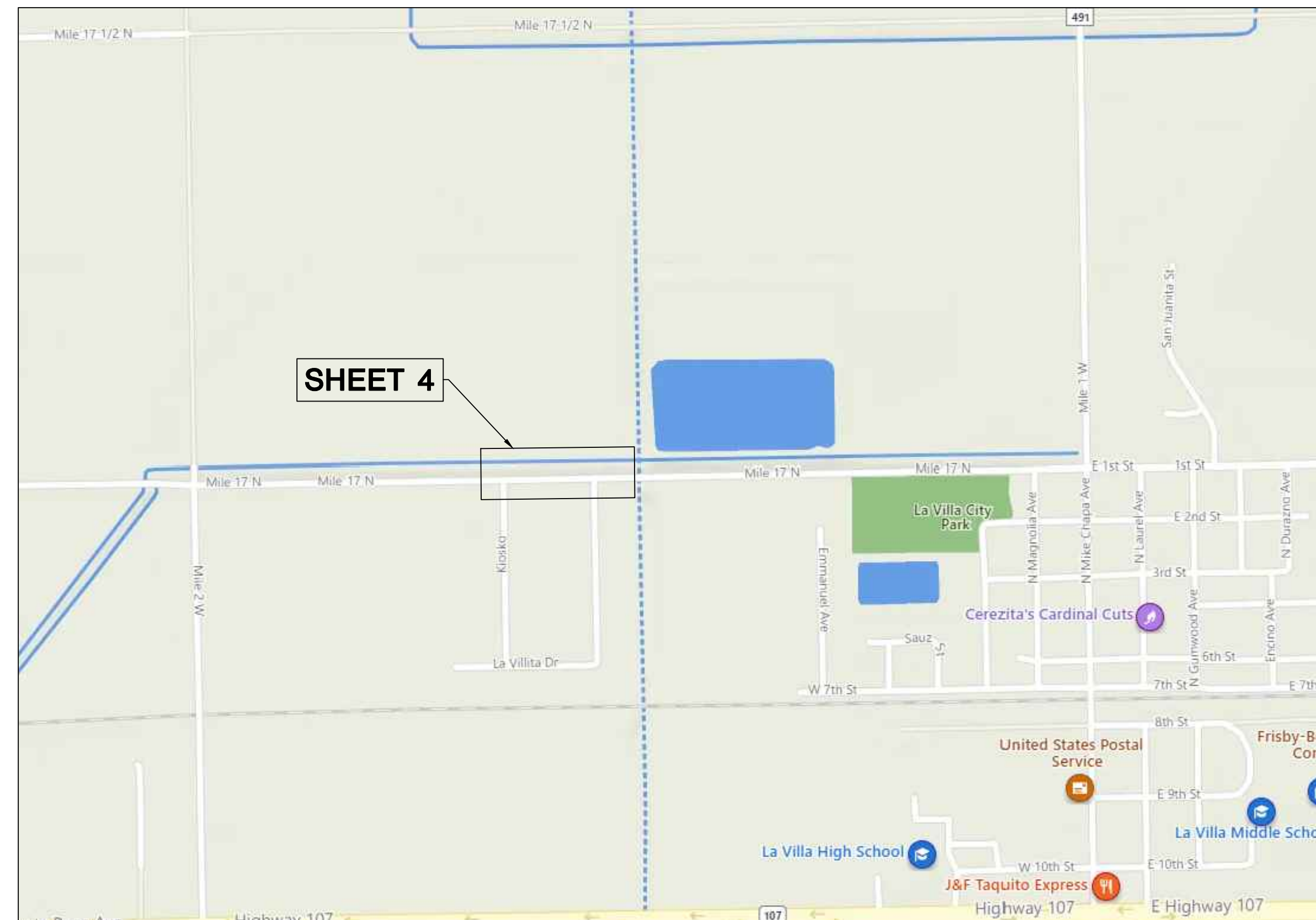


LINE 198-3-RELOCATION LA VILLITA SUBDIVISION ON MILE 17N RD TO CLEAR UNKNOWN SLEEVE MAOP: 650 PSIG

| BARLOWS EQUATION (PER CFR 192.105) | | |
|--|------------------------------|--------|
| P=(2St/D)(FET) | | |
| Variable | Description | Value |
| - | MAOP (psig) | 650 |
| S | SMYS (psi) | 52000 |
| t | Wall Thickness (in) | 0.365 |
| D | Outside Diameter (in) | 10.75 |
| F | Design Factor | 0.5 |
| E | Longitudinal Joint Factor | 1 |
| T | Temperature De-rating Factor | 1 |
| P | Design Pressure (psig) | 1766 |
| %SMYS at MAOP | | 18.41% |
| 10.75 IN OD, 0.365 WT, X52 Steel Pipe, ERW, FBE Coated, API 5L | | |

- NOTES**
- DESIGN PRESSURE NOT TO EXCEED TGS STANDARDS & SPECIFICATIONS OR PIPE MANUFACTURER LIMITATIONS.
 - DESIGN PRESSURE NOT TO EXCEED DESIGN LIMITATIONS FOR PLASTIC PIPE AS LISTED PER CFR 192.123
 - IF GAS TEMPERATURES ABOVE 73F ARE EXPECTED, CALCULATIONS ARE TO BE REVISED.

| SHEET INDEX | |
|--------------|-----------------------------|
| SHEET NUMBER | SHEET TITLE |
| 1 | COVER SHEET |
| 2 | SYMBOLOLOGY |
| 3 | TGS & TXDOT GENERAL NOTES |
| 4 | MILE 17 N |
| 5 | TRAFFIC CONTROL PLAN DETAIL |
| 6 | AS-BUILT (WELD MAP) |
| 7 | AS-BUILT (TVC) |



N
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↓
LOCATION MAP N.T.S.
LA VILLA, TX

UTILITY LOCATIONS SHOWN ON PLAN ARE BASED ON FIELD AND DOCUMENT RESEARCH AND MAY BE NEITHER ACCURATE NOR COMPLETE. CONTRACTOR IS FULLY RESPONSIBLE FOR PHYSICALLY LOCATING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES IN THE CONSTRUCTION VICINITY PRIOR TO ANY WORK.



| TOTAL WORK ORDER QUANTITIES | |
|--|------|
| TOTAL PIPE INSTALLATION | QTY |
| 10" CST, 0.365WT, X52, FBE & ARO (OPEN TRENCH) | 910' |
| TOTAL PIPE RETIRED | QTY |
| 10" CST, 0.250 WT, X52, FBE | 895' |

NOTE: CONTRACTOR MUST VERIFY QUANTITIES

CONTRACTOR TO INSTALL PIPE WITH MINIMUM 5' COVER

| BILL OF MATERIAL | | | |
|------------------|------|-----------------|--|
| QUANTITY | UNIT | MATERIAL NUMBER | DESCRIPTION |
| 910 | FT | 99-010000130 | 10" PIPE, STEEL, 0.365 WT, X52, ERW, FBE 14 - 16 ARO 20 MILS, DRL, API 5L, 40.52 LBS PER FT, BEV |
| 6 | EA | 99-122001007 | 10" 45° ELBOW, 0.365WT, 3R, WE, WPHY 52, SEAMLESS, MSS SP75, SEGMENTABLE |
| 910 | FT | 300000156 | CAUTION TAPE, 3 IN X 1000 FT, IMPRINTED, GAS LINE BURIED, YELLOW WITH BLACK LETTERING |
| 9 | EA | 240000793 | DENZO 7200 COATING, ONE LITER KIT, BASE AND HARDNER, EPOXY KIT, FOR COATING REP, HIGH BUILD |

PROJECT INFORMATION:

OWNER:
TEXAS GAS SERVICE

CONTACT:
RENE CASARES, P.E.
5602 E. GRIMES ROAD
HARLINGEN, TX 78550
(956) 444-3967 (OFFICE)
RENE.CASARES@ONEGAS.COM

SUBMITTAL PREPARED BY:



11211 TAYLOR DRAPER LANE, STE. 310
AUSTIN, TX. 78759
TEL. 630-353-4000
FAX 630-353-7777
WWW.ENENGINEERING.COM
TX BOARD FIRM # - 11507

| | |
|--------------------------|------|
| SEALED BY: | |
| | |
| SIGNATURE | DATE |
| ISSUED FOR PERMIT | |

CONTACT:
PHIL DOLL, PROJECT MANAGER
PHONE:
(630) 967-6764 (OFFICE)

ISSUE FOR BID
SUBJECT TO REVISION

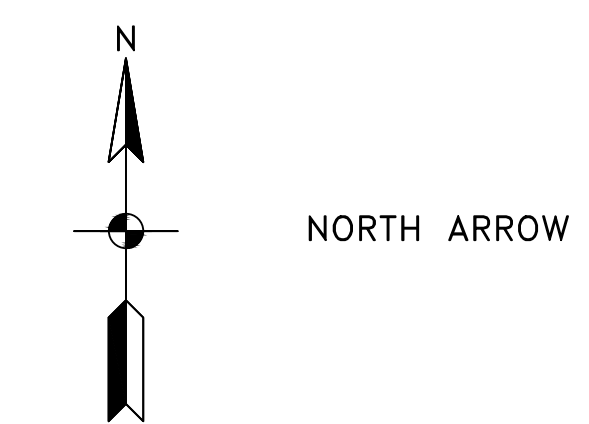
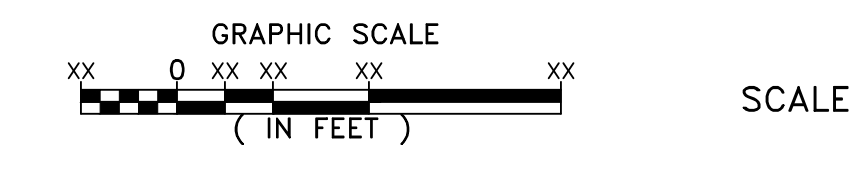
**ISSUE FOR BID
SUBJECT TO REVISION**

- — — — — EXISTING RIGHT OF WAY
- — — — — EXISTING EASEMENT
- — — — — EXISTING CENTERLINE
- - - - - EXISTING LOT LINES
- — — — — EXISTING BUILDING OUTLINE
- — — — — EXISTING PAVEMENT
- — — — — EXISTING FLOODPLAIN
- — — — — EXISTING WATER EDGE
- RW — — — EXISTING REUSE WATER LINE
- CW — — — EXISTING CHILLED WATER LINE
- WL — — — EXISTING WATER
(DOUBLE LINE WHEN ≥ 24")
- WW — — — EXISTING WASTE WATER
(DOUBLE LINE WHEN ≥ 15")
- SS — — — EXISTING STORM SEWER
(DOUBLE LINE WHEN ≥ 18")
- SD — — — EXISTING STORM SEWER
(DOUBLE LINE WHEN ≥ 18")
- OE — — — EXISTING OVERHEAD
ELECTRIC
- UE — — — EXISTING UNDERGROUND ELECTRIC
- OT — — — EXISTING OVERHEAD TELEPHONE
LINE
- UT — — — EXISTING UNDERGROUND TELEPHONE LINE
- UC — — — EXISTING UNDERGROUND COMMUNICATION
LINE
- UF — — — EXISTING UNDERGROUND FIBER LINE
- TS — — — EXISTING UNDERGROUND TRAFFIC SIGNAL
- X — — — EXISTING FENCE
- — — — — EXISTING GUARDRAIL
- — — — — EXISTING RAILROAD
- 999 — — — EXISTING CONTOUR

- | | |
|-----------|---|
| | EXISTING GAS MAIN |
| | RETIRED GAS MAIN |
| | EXISTING GAS SERVICE |
| | RETIRED GAS SERVICE |
| — — — — — | DETAIL – EXISTING GAS MAIN |
| - - - - - | DETAIL – EXISTING GAS MAIN (UNDERGROUND) |
| X | EXISTING RETIREMENT MARK |
| | EXISTING BLIND FLANGE |
| ▶ | EXISTING REDUCER |
| ■ | EXISTING TRANSITION FITTING |
| ⊗ | EXISTING GAS VALVE |
| ● | EXISTING LINE STOPPER |
| ● | EXISTING TAP TEE/HVT |
| ⌒ | EXISTING PIPE CROSSING |
| ⌈ | EXISTING CAP |
| ⇒ | EXISTING FLOW ARROW |

- — — — — PROPOSED GAS MAIN
(BORE/INSERT)
- - - - - PROPOSED GAS MAIN (OPEN TRENCH)
- — — — — PROPOSED GAS SERVICE (BORE/INSERT)
- - - - - PROPOSED GAS SERVICE (OPEN TRENCH)
- — — — — DETAIL – PROPOSED GAS MAIN
- - - - - DETAIL – PROPOSED GAS MAIN
(UNDERGROUND)
- |
- ▶
-
- ⊗
-
-
- ⌒
- ⌈
- ⇒
- ▨
- ▨

- STORM DRAIN INLET
- ⊕ SD STORM DRAIN MANHOLE
-) CULVERT END
- ⊕ WW WASTE WATER MANHOLE
- ⊕ FH FIRE HYDRANT
- ⊕ RW REUSE WATER MANHOLE
- ⊕ W WATER MANHOLE
- ⊕ V WATER VALVE
- ⊕ M WATER METER
- ⊕ T TELEPHONE MANHOLE
- ⊕ C COMMUNICATION MANHOLE
- ⊕ F FIBER MANHOLE
- ⊕ E ELECTRIC MANHOLE
- ⊕ L LIGHT POLE
- ⊕ U UTILITY POLE
- ⊕ E ELECTRIC BOX
- ⊕ U UNKNOWN MANHOLE
- ⊕ b STREET SIGN
- ▨ TRAFFIC BARRIER
- ⊕ T TREE
- ⊕ B BUSH
- 00+00 | STATION MARK



— AA — — — — — SEE MATCHLINE "AA" SHT # XX
STATION 00+00 — — — — — MATCHLINE

PREPARED BY:
ENgineering
11211 TAYLOR LANE, STE. 310
DALLAS, TEXAS 75246
TEL 630-353-4000
FAX 630-353-7777
WWW.ENGINEERING.COM
TX BOARD FIRM # - 11507

Texas Gas Service
A Division of ONE Gas

| | | | |
|---|--------------|------------|-----------|
| DRAWING BY | A. MERAZ | DATE | 4/12/2022 |
| CHECKED BY | C. PETROVSKI | DATE | 4/12/2022 |
| APPROVED BY | P. DOLL | DATE | 4/12/2022 |
| SCALE | NOT TO SCALE | | |
| LINE 198-3-RELOCATION AT LA VILLITA SUBDIVISION ON MILE 17N RD SYMBOLGY | ENE NO. | 2103929.03 | |
| SHEET | 2 OF 7 | | |

**ISSUED FOR
PERMIT**

TXDOT – CONSTRUCTION NOTES,

§21.38. CONSTRUCTION AND MAINTENANCE.

- (a) GENERAL.
 (1) THE PROVISIONS OF THIS SECTION APPLY TO ALL UTILITY TYPES, UNLESS OTHERWISE SPECIFIED IN §21.40 AND §21.41 OF THIS SUBCHAPTER.
 (2) UTILITIES WITH FACILITIES ON THE RIGHT OF WAY SHALL BE RESPONSIBLE AND ACCOUNTABLE TO MAINTAIN AND PROTECT THE SAFETY OF THE TRAVELING PUBLIC AND THE PUBLIC'S INVESTMENT IN THE HIGHWAY FACILITY.
 (3) WHEN AN EXISTING APPROVED UTILITY REQUIRES MAINTENANCE, THE UTILITY SHALL NOTIFY THE DISTRICT 48 HOURS BEFORE THE START OF ANY WORK. IN AN EMERGENCY SITUATION, THE UTILITY SHALL NOTIFY THE DISTRICT AS SOON AS POSSIBLE.
 (4) THE UTILITY SHALL NOT CUT INTO THE PAVEMENT OR CONCRETE RIPRAP WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
 (6) UTILITIES SHALL REIMBURSE THE DEPARTMENT FOR THE COST OF MEASURES TAKEN IN THE INTEREST OF PUBLIC SAFETY, RESTORATION, CLEAN-UP, AND REPAIRS TO THE HIGHWAY AND RIGHT OF WAY MADE NECESSARY BY THE UTILITY FAILURE TO COMPLY WITH THE PROVISIONS OF THIS SUBCHAPTER.

(b) VEGETATION AND SITE CLEAN-UP.

- (1) WHEN UTILITY INSTALLATION IS COMPLETE, THE UTILITY SHALL RETURN THE RIGHT OF WAY TO A CONDITION, AT A MINIMUM, EQUAL TO ITS ORIGINAL CONDITION, INCLUDING RESEEDING OR RESODDING TO PREVENT EROSION. AFTER THE AREA IS BROUGHT TO GRADE, THE ENTIRE DISTURBED AREA SHALL BE COVERED IN ACCORDANCE WITH THE DEPARTMENTS STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS STREETS & BRIDGES,
 (2) TOP RESERVE AND PROTECT TREES, BUSHES, AND OTHER AESTHETIC FEATURES ON THE RIGHT OF WAY, THE DEPARTMENT MAY SPECIFY THE EXTENT AND METHODS OF TREE, BUSH, SHRUBBERY, OR ANY OTHER AESTHETIC FEATURE'S REMOVAL, TRIMMING, OR REPLACEMENT, IN CONJUNCTION WITH PARAGRAPH (1) OF THIS SUBSECTION. THE DISTRICT ENGINEER SHALL USE DUE CONSIDERATION IN ESTABLISHING THE VALUE (OF TREES AND OTHER AESTHETIC FEATURES IN THE PROXIMITY OF & PROPOSED UTILITY LINE AND ANY SPECIAL DISTRICT REQUIREMENTS, JUSTIFIED BY THE VALUE OF THE TREES AND OTHER AESTHETIC FEATURES,
 (3) IF SETTLEMENT OR EROSION OCCURS DUE TO THE ACTIONS OF THE UTILITY, THE UTILITY SHALL, AT ITS EXPENSE, RESHAPE, RESEED, OR RESOD THE AREA AS DIRECTED BY THE DEPARTMENT. RESEEDING, RESODDING, OR REPAIR UNDER THIS SECTION SHALL BE COMPLETED WITHIN A REASONABLE PERIOD OF TIME ACCEPTABLE TO THE
 (4) PRUNING OF TREES SHALL COMPLY WITH THE DEPARTMENT'S ROADSIDE VEGETATION MANAGEMENT MANUAL. WHEN UNAPPROVED PRUNING OR CUTTING OCCURS, THE UTILITY SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF TREES OR FOR DAMAGES TO EXISTING TREES AND BUSHES.
 (5) HIGHWAYS ADJACENT TO UTILITY CONSTRUCTION SITES SHALL BE KEPT FREE FROM DEBRIS, CONSTRUCTION MATERIAL, AND MUD. AT THE END OF EVERY CONSTRUCTION DAY, CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE REMOVED FROM THE HORIZONTAL CLEARANCE, PLACED AS FAR FROM THE PAVEMENT EDGE AS POSSIBLE, AND PROPERLY PROTECTED.
 (6) THE UTILITY SHALL REIMBURSE THE DEPARTMENT FOR ALL COSTS INCURRED TO REPAIR DAMAGE FROM THE ACTIONS OF THE UTILITY, THESE COSTS MAY INCLUDE RESTORATION OF AND REPAIRS TO ROADS, DRIVES, TERRAIN, LANDSCAPING, OR FENCES.

(c) TRAFFIC CONTROL.

- (1) THE UTILITY SHALL BE RESPONSIBLE FOR THE SAFETY OF, AND SHALL MINIMIZE DISRUPTION TO, THE TRAVELING PUBLIC WITH PROPER TRAFFIC CONTROL.
 (2) APPROPRIATE MEASURES SHALL BE TAKEN IN THE INTERESTS OF SAFETY, TRAFFIC CONVENIENCE, AND ACCESS TO ADJACENT PROPERTY THAT MEET THE REQUIREMENTS OF THE DEPARTMENT'S COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICE LIST. THE UTILITY SHALL PLACE APPROPRIATE SIGNS, MARKINGS, AND BARRICADES BEFORE BEGINNING WORK AND SHALL MAINTAIN THEM TO WARN MOTORISTS AND PEDESTRIANS PROPERLY. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE TMUTCD AND THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROJECT REPORT 350.
 (3) ALL UTILITY PITS OPENED WITHIN THE HORIZONTAL CLEARANCE SHALL BE PROPERLY PROTECTED, IN COMPLIANCE WITH NATIONAL COOPERATIVE HIGHWAY RESEARCH PROJECT REPORT 350, WITH CONCRETE TRAFFIC BARRIERS, METAL BEAM GUARD FENCING, APPROPRIATE END TREATMENTS, OR OTHER APPROPRIATE WARNING DEVICES,

(d) WORK RESTRICTIONS.

- (1) THE DEPARTMENT RESERVES THE RIGHT TO HALT CONSTRUCTION OR MAINTENANCE DURING HAZARDOUS SITUATIONS, SUCH AS INCLEMENT WEATHER, PEAK TRAFFIC HOURS, SPECIAL EVENTS, OR HOLIDAYS, OR FOR NONCOMPLIANCE WITH A UTILITY JOINT USE ACKNOWLEDGEMENT OR UTILITY INSTALLATION REQUEST. REQUESTS FOR EMERGENCY MAINTENANCE SHALL BE DIRECTED TO THE APPROPRIATE DISTRICT OFFICE.
 (2) IF THE DEPARTMENT DETERMINES THAT THE FACILITY WAS NOT INSTALLED IN THE LOCATION SHOWN ON THE APPROVED CONSTRUCTION PLANS, THE DEPARTMENT MAY REQUIRE THE UTILITY TO TAKE [APPROPRIATE CORRECTIVE ACTION AS DETERMINED BY THE.

§21.39. OWNERSHIP/ABANDONMENT/IDLING.

A UTILITY THAT WISHES TO ABANDON A UTILITY FACILITY IN PLACE MUST SUBMIT A WRITTEN REQUEST TO THE DISTRICT ENGINEER FOR EACH TYPE OF FACILITY. THE REQUEST MUST INCLUDE THE FOLLOWING DETAILED INFORMATION FOR EACH FACILITY PROPOSED FOR ABANDONMENT:

- (I) OFFSETS FROM PROPERTY LINES AND THE CENTERLINE OF THE HIGHWAY; (II) COORDINATES BASED ON THE GLOBAL POSITIONING SYSTEM (GPS) OR A SURVEY DATUM AS DIRECTED BY THE DEPARTMENT;
 (III) THE AGE, CONDITION, MATERIAL TYPE, CURRENT STATUS, QUANTITY, AND SIZE OF THE FACILITY;
 (IV) A LEGEND EXPLAINING SYMBOLS, CHARACTERS, ABBREVIATIONS, SCALE, AND OTHER DATA SHOWN ON ANY AS-BUILT DRAWING OR RECORD MAPPING; (V) A STATEMENT CERTIFYING THAT THE FACILITY DOES NOT CONTAIN, OR IS NOT COMPOSED OF, HAZARDOUS OR CONTAMINATED MATERIALS; AND
 (VI) ANY ADDITIONAL INFORMATION REQUESTED BY THE DEPARTMENT.

§21.40. UNDERGROUND UTILITIES.

(A) GENERAL.

- (1) ENCASEMENT
 (A) UNDERGROUND UTILITIES CROSSING THE HIGHWAY SHALL BE ENCASSED IN THE INTEREST OF SAFETY, PROTECTION OF THE UTILITY, PROTECTION OF THE HIGHWAY, AND FOR ACCESS TO THE UTILITY. CASING SHALL CONSIST OF A PIPE OR OTHER SEPARATE STRUCTURE AROUND AND OUTSIDE THE CARRIER LINE. THE UTILITY MUST DEMONSTRATE THAT THE CASING WILL BE, ADEQUATE FOR THE EXPECTED LOADS AND STRESSES.
 (B) CASING PIPE SHALL BE STEEL, CONCRETE, OR PLASTIC PIPE AS APPROVED BY THE DISTRICT, EXCEPT THAT IF HORIZONTAL, DIRECTIONAL DRILLING IS USED TO PLACE THE CASING, HIGH-DENSITY POLYETHYLENE (HDPE) PIPE MUST BE USED IN PLACE OF PLASTIC PIPE.
 (C) ENCASEMENT MAYBE OF METALLIC OR NON-METALLIC MATERIAL. ENCASEMENT MATERIAL SHALL BE DESIGNED TO SUPPORT THE LOAD OF THE HIGHWAY AND SUPERIMPOSED LOADS. THEREON, INCLUDING THAT OF CONSTRUCTION MACHINERY. THE STRENGTH OF THE ENCASEMENT MATERIAL SHALL EQUAL OR EXCEED STRUCTURAL REQUIREMENTS FOR DRAINAGE CULVERTS AND IT SHALL BE COMPOSED OF MATERIAL OF SATISFACTORY DURABILITY FOR CONDITIONS TO WHICH IT MAY BE SUBJECTED. THE LENGTH OF ANY ENCASEMENT UNDER THE ROADWAY SHALL BE PROVIDED FROM TOP OF BACKSLOPE TO TOP OF BACKSLOPE FOR CUT SECTIONS, FIVE FEET BEYOND THE TOE OF SLOPE FOR FILL SECTIONS, AND FIVE FEET BEYOND THE FACE OF THE CURB FOR CURB SECTIONS. THESE LENGTHS OF ENCASEMENT INCLUDE AREAS UNDER CENTER MEDIANS AND OUTER SEPARATIONS, UNLESS OTHERWISE SPECIFICALLY ADDRESSED IN SUBSECTIONS (B)-(F) OF THIS SECTION.

(4) INSTALLATION

(A) LINES PLACED BENEATH ANY EXISTING HIGHWAY SHALL BE INSTALLED BY BORING OR TUNNELING. JACKING MAY NOT BE USED UNLESS APPROVED IN WRITING BY THE DISTRICT. THE DISTRICT MAY REQUIRE ENCASEMENT OF LINES INSTALLED BY BORING OR JACKING.

(C) ANNULAR VOIDS GREATER THAN ONE INCH BETWEEN THE BORE HOLE AND CARRIER LINE (OR CASING, IF USED) SHALL BE FILLED WITH A SLURRY GROUT OR OTHER FLOWABLE FILL ACCEPTABLE TO THE DEPARTMENT TO PREVENT SETTLEMENT OF ANY PART OF THE HIGHWAY FACILITY OVER THE LINE OR CASING.

(F) ALL TRAFFIC CONTROL DEVICES, INCLUDING SIGNS, MARKINGS, OR BARRICADES USED TO WARN MOTORISTS AND PEDESTRIANS OF THE CONSTRUCTION ACTIVITY MUST CONFORM TO THE TMUTCD.

(G) WHEN TRENCHING LONGITUDINALLY, BACKFILL OR STABILIZED SAND SHALL BE COMPACTED TO DENSITIES EQUAL TO THAT OF THE SURROUNDING SOIL.

(5) NON METALLIC PIPE DETECTION.

WHERE NONMETALLIC PIPE IS INSTALLED, WHETHER LONGITUDINALLY OR AT A CROSSING, A DURABLE METAL WIRE OR OTHER DISTRICT-APPROVED MEANS OF DETECTION SHALL BE CONCURRENTLY INSTALLED.

(7) CLEARANCES.

EXCEPT AS SPECIFIED IN THIS SUBCHAPTER, THERE SHALL BE A MINIMUM OF 12 INCHES VERTICAL AND HORIZONTAL CLEARANCE BETWEEN A PIPELINE AND AN EXISTING UTILITY, UNLESS A GREATER CLEARANCE IS REQUIRED BY THE DISTRICT. HOWEVER, IF AN INSTALLATION OF ANOTHER UTILITY OR HIGHWAY FEATURE CANNOT TAKE PLACE WITHOUT DISTURBING AN EXISTING UTILITY, THE MINIMUM CLEARANCE WILL BE 24 INCHES.

(11) MARKERS.

IF A HIGH PRESSURE GAS OR LIQUID PETROLEUM LINE CROSSES A HIGHWAY, THE UTILITY SHALL PLACE A READILY IDENTIFIABLE, DURABLE, AND WEATHERPROOF MARKER OVER THE CENTERLINE OF THE PIPE AT EACH RIGHT OF WAY LINE. READILY IDENTIFIABLE, DURABLE, AND WEATHERPROOF MARKERS SHALL BE PLACED AT A MINIMUM DISTANCE OF 500 FEET OR LINE OF SIGHT AT THE RIGHT OF WAY LINE FOR PIPELINES INSTALLED LONGITUDINALLY WITHIN THE RIGHT OF WAY. ALL MARKERS SHALL INDICATE THE NAME, ADDRESS, EMERGENCY TELEPHONE NUMBER OF THE OWNER/OPERATOR, AND OFFSET FROM THE RIGHT OF WAY LINE. FOR GAS OR PETROLEUM PIPELINES, THE PIPELINE PRODUCT, OPERATING PRESSURE, AND DEPTH OF PIPE BELOW GRADE SHALL, ALSO BE INDICATED ON THE MARKERS. AT LOCATIONS WHERE UNDERGROUND UTILITIES HAVE BEEN ALLOWED TO CROSS AT AN ANGLE OTHER THAN 90 DEGREES TO CENTERLINE, THE DISTRICT MAY REQUIRE ADDITIONAL MARKERS IN THE MEDIANS AND OUTER SEPARATIONS OF THE HIGHWAY.

(12) BACKFILLING.

UNDERGROUND UTILITY INSTALLATIONS SHALL BE BACKFILLED WITH PERVIOUS MATERIAL AND OUTLETS FOR UNDERDRAINAGE.

(B) GAS AND LIQUID PETROLEUM LINES.

- (1) LOW-PRESSURE LINES.
 (A) DEPTH OF COVER FOR CROSSINGS.
 DEPTH OF COVER IS THE DEPTH TO THE TOP OF THE CARRIER PIPE OR CASING, AS APPLICABLE, WHERE MATERIALS AND OTHER CONDITIONS JUSTIFY, SUCH AS ON EXISTING LINES REMAINING IN PLACE, THE DISTRICT MAY REQUIRE A MINIMUM DEPTH OF COVER UNDER THE PAVEMENT STRUCTURE OF 12 INCHES OR ONE-HALF THE DIAMETER OF THE PIPE, WHICHEVER IS GREATER.
 (I) FOR ENCASED LOW-PRESSURE GAS LINES, THE MINIMUM DEPTH OF COVER SHALL BE:

- (I) 18 INCHES OR ONE-HALF THE DIAMETER OF THE PIPE, WHICHEVER IS GREATER, UNDER PAVEMENT STRUCTURE;
 (II) 24 INCHES OUTSIDE PAVEMENT STRUCTURE AND UNDER DITCHES (ORIGINAL UNSILTED FLOWLINE); OR
 (III) 30 INCHES FOR UNENCASED SECTIONS OF ENCASED LINES OUTSIDE OF PAVEMENT STRUCTURE.

(II) FOR UNENCASED LOW-PRESSURE GAS LINES, THE MINIMUM DEPTH OF COVER SHALL BE:

- (I) 60 INCHES UNDER THE PAVEMENT SURFACE OR 18 INCHES UNDER THE PAVEMENT STRUCTURE FOR PAVED AREAS;
 (II) 48 INCHES OUTSIDE PAVED AREAS AND UNDER DITCHES (ORIGINAL UNSILTED FLOWLINE); OR
 (III) A LESSER DEPTH IF AUTHORIZED BY THE DISTRICT WHERE A REINFORCED CONCRETE SLAB IS USED TO PROTECT THE PIPELINE.

(B) DEPTH OF COVER FOR LONGITUDINAL PLACEMENT.

THE MINIMUM DEPTH OF COVER FOR LONGITUDINAL INSTALLATIONS SHALL BE 36 INCHES.

(C) ENCASEMENT.

LOW-PRESSURE GAS LINES CROSSING THE PAVEMENT SHALL BE PLACED IN A STEEL ENCASEMENT. THE DISTRICT MAY WAIVE THIS ENCASEMENT REQUIREMENT IF THE LINE IS OF WELDED STEEL CONSTRUCTION AND IS PROTECTED FROM CORROSION BY CATHODIC PROTECTIVE MEASURES OR COLD TAR EPOXY WRAPPING, AND THE UTILITY SIGNS A WRITTEN AGREEMENT THAT THE PAVEMENT WILL NOT BE CUT FOR PIPELINE REPAIRS AT ANY TIME IN THE FUTURE.

(D) VENTS.

ONE OR MORE VENTS SHALL BE PROVIDED FOR EACH CASING OR SERIES OF CASINGS. FOR CASINGS LONGER THAN 150 FEET, VENTS SHALL BE PROVIDED AT BOTH ENDS. ON SHORTER CASINGS, A VENT SHALL BE LOCATED AT THE HIGH END WITH A MARKER PLACED AT THE LOW END. VENTS SHALL BE PLACED AT THE RIGHT OF WAY LINE IMMEDIATELY ABOVE THE PIPELINE, SITUATED SO AS NOT TO INTERFERE WITH HIGHWAY MAINTENANCE OR BE CONCEALED BY VEGETATION, AND SHALL BE NO GREATER THAN SIX INCHES IN DIAMETER. THE OWNER'S NAME, ADDRESS, AND EMERGENCY TELEPHONE NUMBER SHALL BE SHOWN ON EACH VENT.

(E) PLASTIC LINES. PLASTIC LINES SHALL BE ENCASED WITHIN THE RIGHT OF WAY ON CROSSINGS, AND MUST HAVE AT LEAST 30 INCHES OF COVER.
 (F) ABOVEGROUND APPURTENANCES. EXCEPT FOR VENTS, NO ABOVE GROUND UTILITY APPURTENANCES FOR GAS LINES SHALL BE PERMITTED WITHIN THE RIGHT OF WAY

(2) HIGH-PRESSURE LINES. (MORE THAN 60 PSIG)

(A) DEPTH OF COVER FOR CROSSINGS.

(I) DEPTH OF COVER IS THE DEPTH TO THE TOP OF THE CARRIER PIPE OR CASING, AS APPLICABLE, WHERE MATERIALS AND OTHER CONDITIONS JUSTIFY, SUCH AS ON EXISTING LINES REMAINING IN PLACE, THE DISTRICT MAY APPROVE A MINIMUM DEPTH OF COVER UNDER THE PAVEMENT STRUCTURE OF 12 INCHES OR ONE-HALF THE DIAMETER OF THE PIPE, WHICHEVER IS GREATER. FOR ENCASED HIGH-PRESSURE GAS OR LIQUID PETROLEUM LINES, THE MINIMUM DEPTH OF COVER SHALL BE:

- (I) THE GREATER OF 18 INCHES OR ONE-HALF THE DIAMETER OF THE PIPE, UNDER PAVEMENT STRUCTURES;
 (II) 30 INCHES IF THE LINE IS OUTSIDE THE PAVEMENT STRUCTURE OR UNDER A DITCH; OR
 (III) 36 INCHES FOR UNENCASED SECTIONS OF ENCASED LINES OUTSIDE THE PAVEMENT STRUCTURE.

(II) WHERE A REINFORCED CONCRETE SLAB IS USED TO PROTECT THE PIPELINE, THE DISTRICT MAY AUTHORIZE A REDUCTION IN THE DEPTHS SPECIFIED IN THIS SECTION. FOR UNENCASED HIGH-PRESSURE GAS OR LIQUID PETROLEUM LINES, THE MINIMUM DEPTH OF COVER IS AS FOLLOWS:

- (I) 60 INCHES UNDER THE PAVEMENT SURFACE OR 18 INCHES UNDER THE PAVEMENT STRUCTURE IN PAVED AREAS; OR
 (II) 48 INCHES IF THE LINE IS PLACED OUTSIDE THE PAVEMENT STRUCTURE OR UNDER A DITCH.

(B) DEPTH OF COVER FOR LONGITUDINAL PLACEMENT.

THE MINIMUM DEPTH OF COVER SHALL BE 48 INCHES.

(C) ENCASEMENT.

CASING SHALL CONSIST OF A VENTED STEEL PIPE.

(D) UNENCASEMENT.

(I) WHERE ENCASEMENT IS NOT EMPLOYED, THE UTILITY SHALL SHOW THAT THE WELDED STEEL CARRIER PIPE WILL PROVIDE SUFFICIENT STRENGTH TO WITHSTAND THE INTERNAL DESIGN PRESSURE AND THE DEAD AND LIVE LOADS OF THE PAVEMENT STRUCTURE AND TRAFFIC, ADDITIONAL PROTECTIVE MEASURES MUST INCLUDE:

- (I) HEAVIER WALL THICKNESS, HIGHER FACTOR OF SAFETY IN DESIGN, OR BOTH;
 (II) ADEQUATE COATING AND WRAPPING;
 (III) CATHODIC PROTECTION; AND
 (IV) THE USE OF BARLOW'S FORMULA REGARDING MAXIMUM ALLOWABLE OPERATING PRESSURE AND WALL THICKNESS, AS SPECIFIED IN 49 CFR §192.10.

(II) SHALLOW ANODE BED TYPES EXCEEDING 48 INCHES IN WIDTH SHALL NOT BE PERMITTED IN THE RIGHT OF WAY. ALL OTHERS MUST HAVE A DEPTH OF COVERAGE OF AT LEAST 36 INCHES. DEEP WELL ANODE BEDS OF UP TO 60 INCHES IN DIAMETER ARE ACCEPTABLE. RECTIFIER AND METER LOOP POLES SHALL BE PLACED AT OR NEAR THE RIGHT OF WAY LINE.

(III) THE MINIMUM LENGTH OF THE ADDITIONAL PROTECTION SHALL BE THE SAME AS THAT REQUIRED FOR AN ENCASED CROSSING.
 (IV) THE DISTRICT MAY ALLOW EXISTING LINES UNDER LOW-VOLUME HIGHWAYS TO REMAIN IN PLACE WITHOUT ENCASEMENT OR EXTENSION OF ENCASEMENT IF THEY ARE PROTECTED BY A REINFORCED CONCRETE SLAB OR EQUIVALENT PROTECTION OR IF THEY ARE LOCATED AT A DEPTH OF FIVE FEET UNDER THE PAVEMENT STRUCTURE AND NOT LESS THAN FOUR FEET UNDER A HIGHWAY DITCH.

(E) VENTS.

VENTS SHALL BE INSTALLED AT BOTH ENDS OF A CASING, REGARDLESS OF LENGTH, WITH A MARKER ON AT LEAST ONE END. VENTS SHALL BE PLACED AT THE RIGHT OF WAY LINE IMMEDIATELY ABOVE THE PIPELINE, SITUATED SO AS NOT TO INTERFERE WITH HIGHWAY MAINTENANCE OR BE CONCEALED BY VEGETATION. THE OWNER'S NAME, ADDRESS, AND EMERGENCY TELEPHONE NUMBER SHALL BE SHOWN ON EACH VENT MARKER. (F) ABOVEGROUND APPURTENANCES, ABOVEGROUND APPURTENANCES, EXCEPT VENTS FOR GAS LINES, SHALL NOT BE PERMITTED WITHIN THE RIGHT OF WAY.

TEXAS GAS SERVICES HIGH PRESSURE NOTES

- PRESSURE TEST NEW INSTALLATIONS ACCORDING TO THE ATTACHED MAOP FORM IN ACCORDANCE WITH OGSops 2.1116R
- COMPACTION OF TRENCHES IN ALL ROADWAYS SHALL BE DONE IN ACCORDANCE WITH TEXAS GAS SERVICE STANDARDS.
- CONTRACTOR TO FOLLOW CONSTRUCTION WORK ORDER FOR FINAL MATERIAL QUANTITIES AND DESCRIPTIONS.
- AVOID PIPE SEAMS AT: 12, 3, 6, OR 9 O'CLOCK POSITIONS.
- CLEAN ALL WELDS INTERNALLY TO PREVENT DAMAGE TO DOWNSTREAM COMPONENTS TO START UP.
- PIPING ASSEMBLY SHALL BE TESTED VIA HYDROSTATIC ACCORDING TO THE MAP PROVIDED BY ENGINEERING. TEST SHALL EXCLUDE: VALVES, REGULATOR AND STRAINERS IN LIEU OF USING PRE-TESTED PIPE.
- CLEARLY MARK ALL CUT FITTINGS W/FINAL ANGLES AND TRIM LENGTHS.
- PIPELINES SHALL BE ABANDONED IN ACCORDANCE TO OGSops 2.1126R. CONTRACTOR TO BE PROVIDED PROCEDURE PRIOR TO START OF ABANDONMENT.
- ALL ABOVE GRADE FACILITIES SHALL BE REMOVED.
- ALL ABANDONED PIPELINES SHALL BE PHYSICALLY DISCONNECTED FROM ALL SUPPLIES OF GAS. ALL OPENINGS AND ENDS TO BE SEALED ACCORDING TO CONSTRUCTION STANDARD 2620.
- CONTRACTOR TO FOLLOW OGSops 2.1118R FOR PURGING.
- A NON-ABRASIVE PIG SHALL BE RUN THROUGH THE ENTIRE PIPELINE TO REMOVE ANY LIQUIDS THAT MAY HAVE ACCUMULATED.
- ALL LIQUIDS SHALL BE DISPOSED OF ACCORDING TO APPROPRIATE ENVIRONMENTAL STANDARDS.

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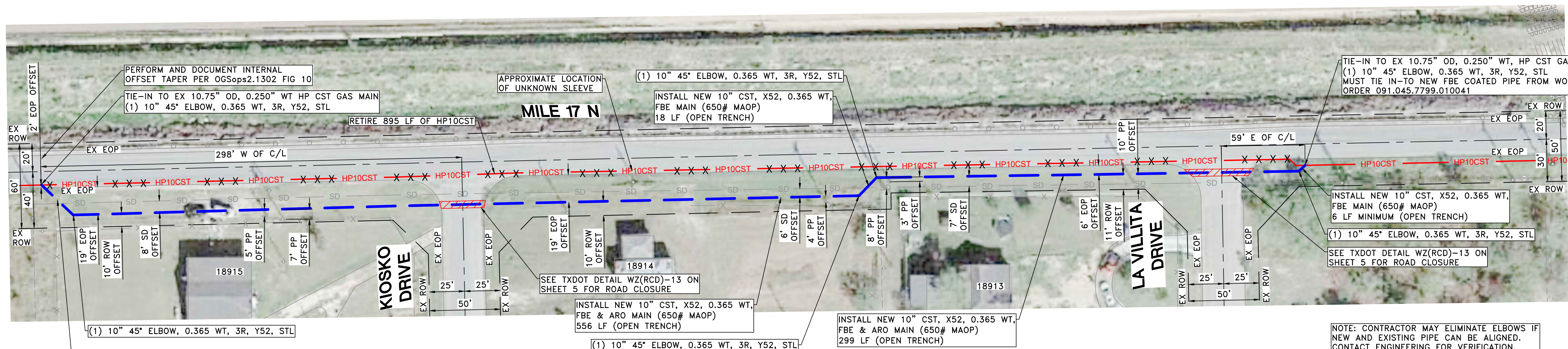
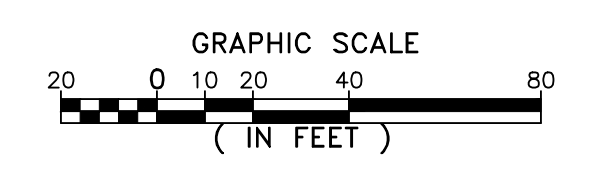
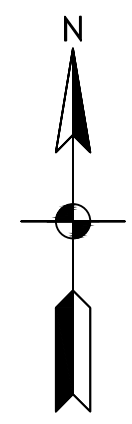
Texas Gas Service
 A Division of ONE Gas



| | | | |
|-------------|--------------|------|-----------|
| DRAWING BY | A. MERAZ | DATE | 4/12/2022 |
| CHECKED BY | C. PETROVSKI | DATE | 4/12/2022 |
| APPROVED BY | P. DOLL | DATE | 4/12/2022 |
| SCALE | NOT TO SCALE | | |

LINE 198-3-RELOCATION AT LA VILLITA
 SUBDIVISION ON MILE 17N RD
 TGS & TXDOT GENERAL NOTES
 ENE NO. 2103929.03
 SHEET 3 OF 7

NOT FOR CONSTRUCTION
SUBJECT TO REVISION

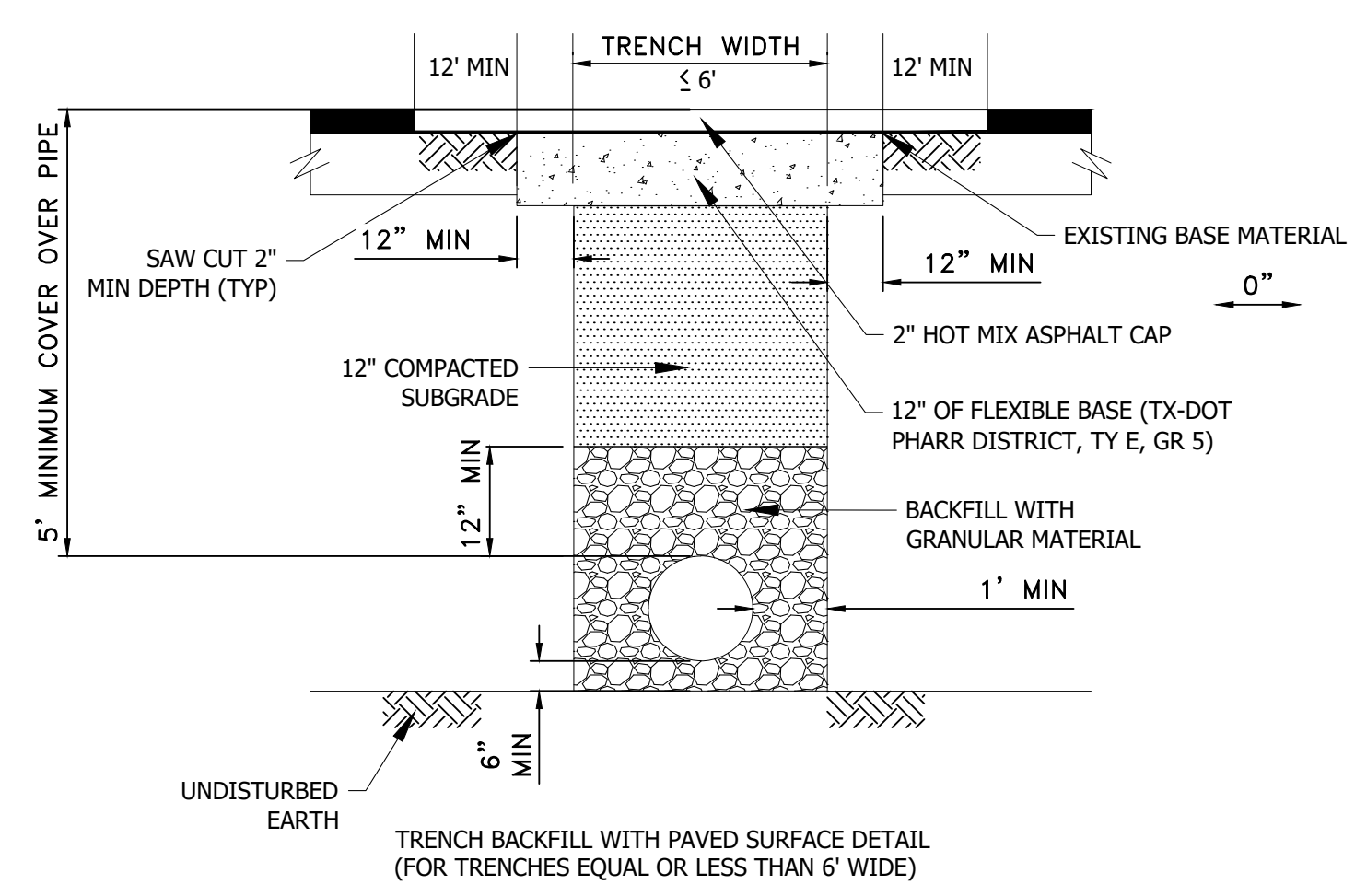


CONTRACTOR TO INSTALL PIPE WITH MINIMUM 5' COVER

LEGEND

- PROPOSED GAS MAIN (BORE/INSERT)
- PROPOSED GAS MAIN (OPEN TRENCH)
- PROPOSED SERVICE (BORE/INSERT)
- PROPOSED SERVICE (OPEN TRENCH)

- NOTES:**
- CONTRACTOR MUST OBTAIN PERMISSION FROM AFFECTED PROPERTY OWNERS FOR ANY CONSTRUCTION RELATED ACTIVITY THAT MAY ENCR OACH ON ADJACENT PROPERTY.
 - CONTRACTOR IS FULLY RESPONSIBLE FOR PHYSICALLY LOCATING (POTHOLING) THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES CROSSING IN BORE PATHS AND PRIOR TO BORING.
 - A MIN 2' VERTICAL AND 2' HORIZONTAL CLEARANCE IS REQUIRED BETWEEN PROPOSED GAS AND EXISTING UTILITIES.
 - APPROPRIATE EASEMENT/APPROVAL MUST BE SECURED FOR PROJECT AREAS OUTSIDE THE RIGHT OF WAY. NO WORK SHALL BE PERFORMED ON PRIVATE PROPERTY UNTIL RIGHT OF ENTRY AND EASEMENT HAS BEEN OBTAINED.
 - INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH ONE GAS OPERATIONS AND MAINTENANCE STANDARDS.



| MAINS | | | | | | |
|---------|------|--------|-------|-------|-----------|-------------|
| INSTALL | | | | | | |
| SIZE | LF | TYPE | W.T. | GRADE | COATING | METHOD |
| 10" | 910' | HP CST | 0.365 | X52 | FBE & ARO | OPEN TRENCH |
| RETIRE | | | | | | |
| SIZE | LF | TYPE | W.T. | GRADE | COATING | METHOD |
| 10" | 895' | HP CST | .250 | B | - | - |

| WELDING PROCEDURE | APPLICATION |
|---|-------------|
| OGSOPS2.1316.28R_5-12INCHX46-X60BUTTFIXED | ALL WELDS |

ISSUED FOR PERMIT

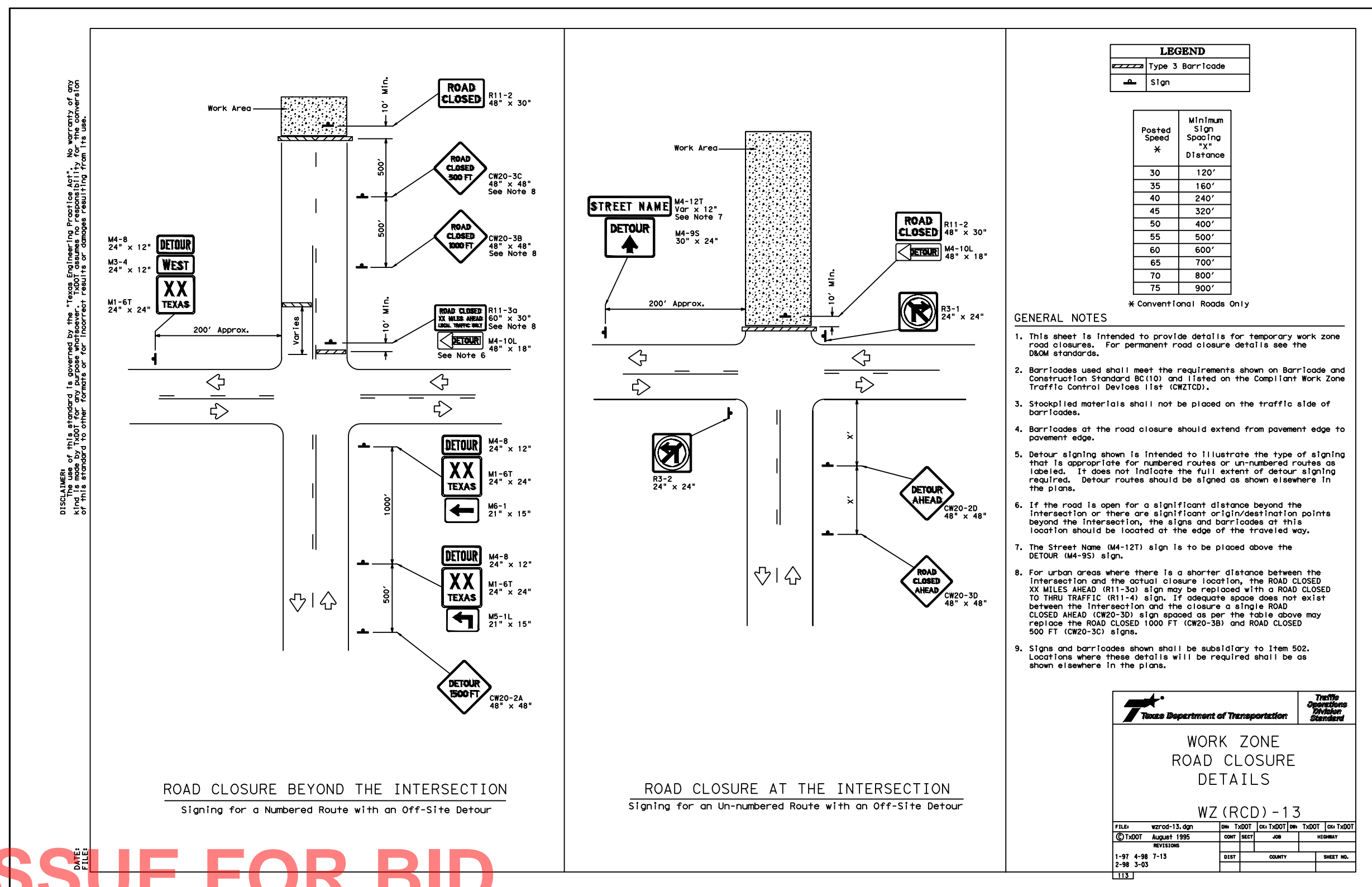
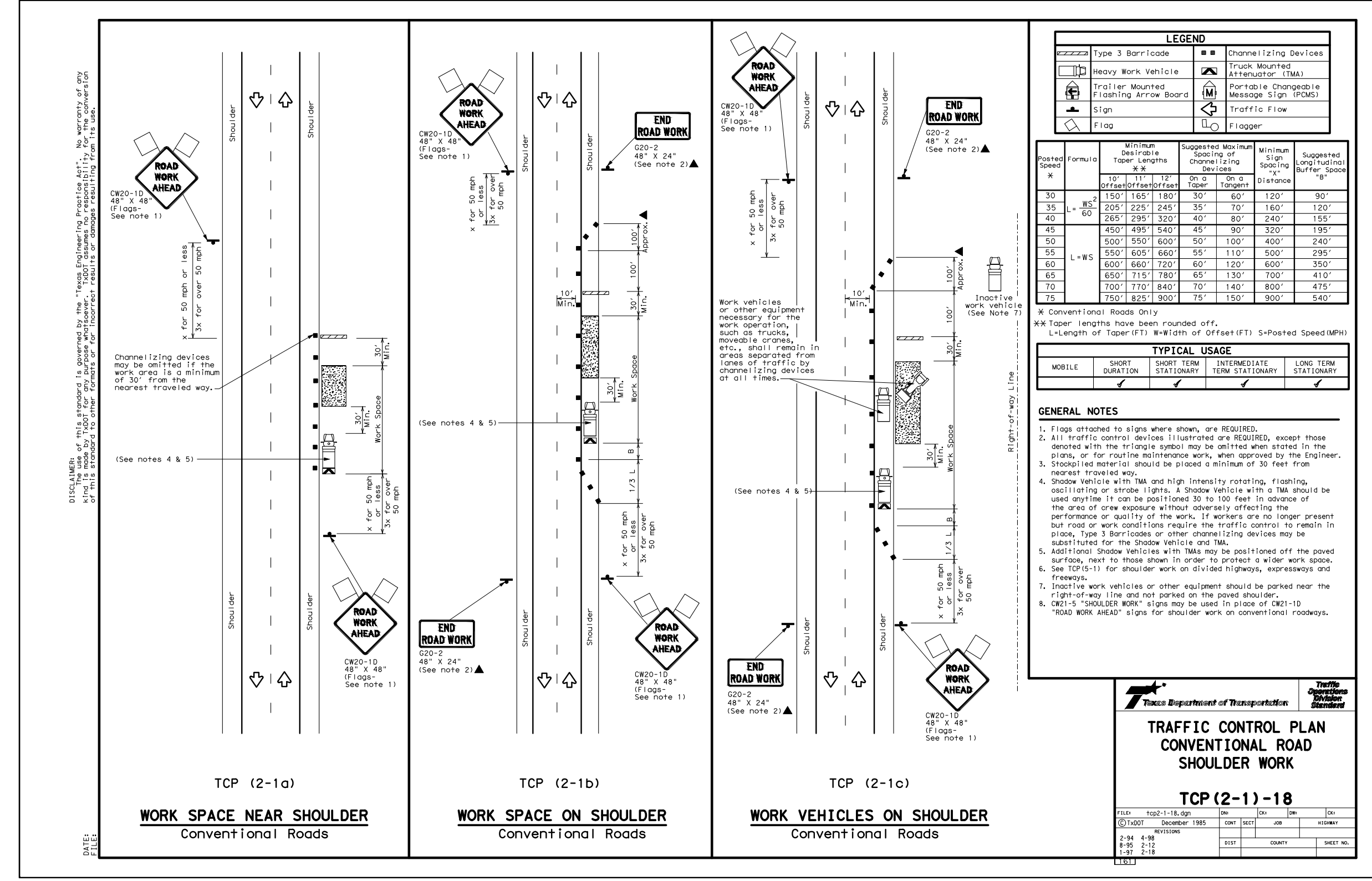
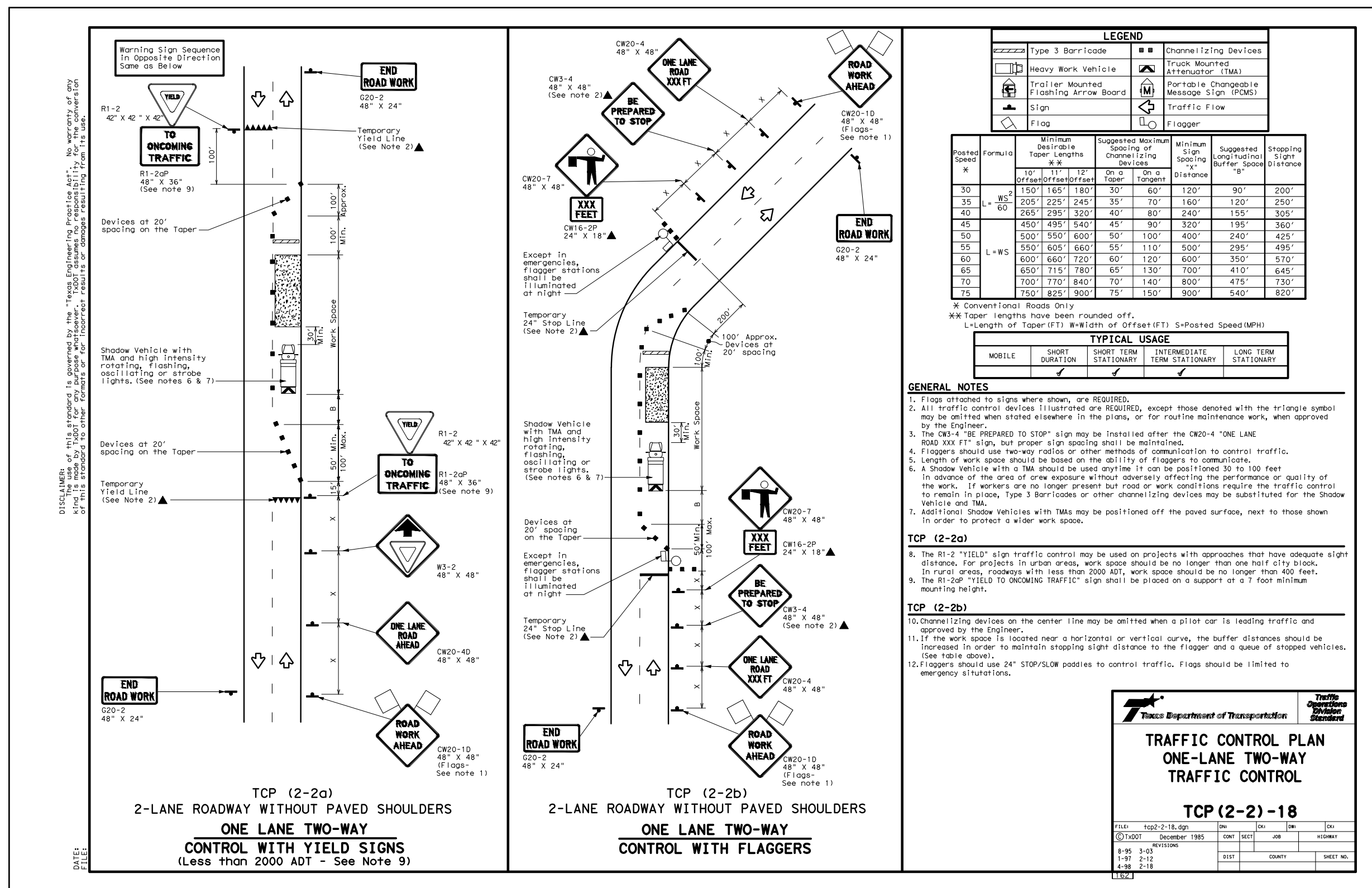
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DRAWING BY: A. MERAZ DATE: 4/12/2022
 CHECKED BY: C. PETROVSKI DATE: 4/12/2022
 APPROVED BY: P. DOLL DATE: 4/12/2022
 SCALE: 1" = 40'

LINE 198-3-RELOCATION AT LA VILLITA SUBDIVISION ON MILE 17N RD
 MILE 17 N
 ENE NO. 2103929.03

SHEET 4 OF 7



ISSUE FOR BID SUBJECT TO REVISION

ISSUED FOR PERMIT

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 CHECKED BY: **C. PETROVSKI** DATE: 4/12/2022
 APPROVED BY: **P. DOLL** DATE: 4/12/2022

LINE 198-3-RELOCATION AT LA VILLITA
 SUBDIVISION ON MILE 17N RD
 TRAFFIC CONTROL PLAN DETAIL

SHEET 5 OF 7



LINE 198-3 - ECDA ANOMALY REPAIRS

ANOMALY #185, #177-178, #76, #70-71 & LA VILLA CG#1

MAOP: 650 PSIG

| BARLOWS EQUATION (PER CFR 192.105) | | |
|--|------------------------------|--------|
| P=(2St/D)(FET) | | |
| Variable | Description | Value |
| - | MAOP (psig) | 650 |
| S | SMYS (psi) | 52000 |
| t | Wall Thickness (in) | 0.365 |
| D | Outside Diameter (in) | 10.75 |
| F | Design Factor | 0.5 |
| E | Longitudinal Joint Factor | 1 |
| T | Temperature De-rating Factor | 1 |
| P | Design Pressure (psig) | 1766 |
| %SMYS at MAOP | | 18.41% |
| 10.75 IN OD, 0.365 WT, X52 Steel Pipe, ERW, FBE Coated, API 5L | | |

- NOTES**
- DESIGN PRESSURE NOT TO EXCEED TGS STANDARDS & SPECIFICATIONS OR PIPE MANUFACTURER LIMITATIONS.
 - DESIGN PRESSURE NOT TO EXCEED DESIGN LIMITATIONS FOR PLASTIC PIPE AS LISTED PER CFR 192.123
 - IF GAS TEMPERATURES ABOVE 73F ARE EXPECTED, CALCULATIONS ARE TO BE REVISED.

PROJECT INFORMATION:

OWNER:
TEXAS GAS SERVICE

CONTACT:
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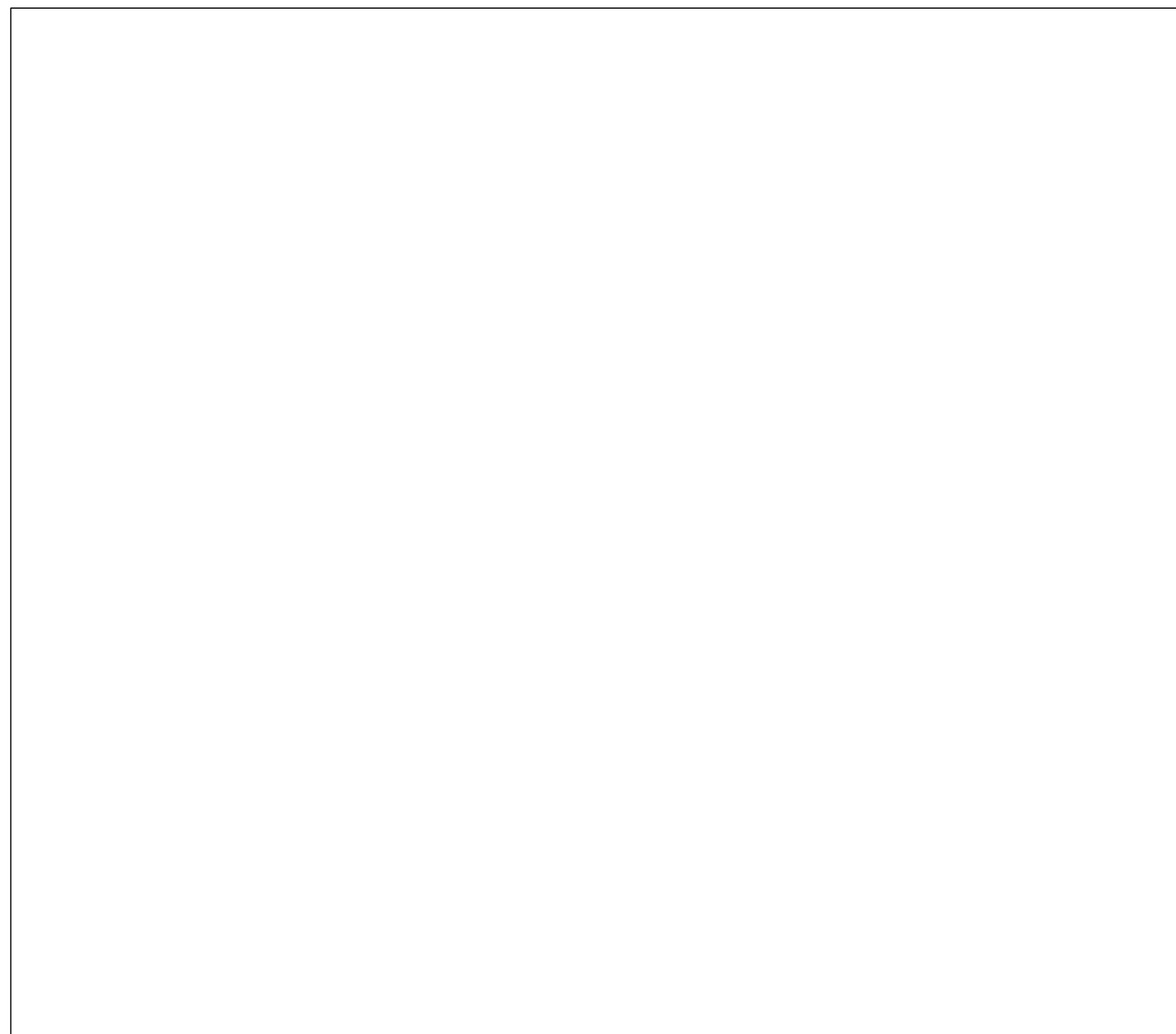


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| | |
|--------------------------|------|
| SEALED BY: | |
| SIGNATURE | DATE |
| ISSUED FOR PERMIT | |

CONTACT:
PHIL DOLL, PROJECT MANAGER
PHONE:
(630) 967-6764 (OFFICE)

| SHEET INDEX | |
|--------------|-----------------------------|
| SHEET NUMBER | SHEET TITLE |
| 1 | COVER SHEET |
| 2 | SYMBOLOLOGY |
| 3 | SITE PLAN |
| 4 | TGS & TXDOT GENERAL NOTES |
| 5 | PLAN (STA 0+00 TO 8+50) |
| 6 | PLAN (STA 8+50 TO 17+00) |
| 7 | PLAN (STA 17+00 TO 22+84) |
| 8 | TRAFFIC CONTROL PLAN DETAIL |
| 9 | AS-BUILT (WELD MAP) |
| 10 | AS-BUILT (TVC) |

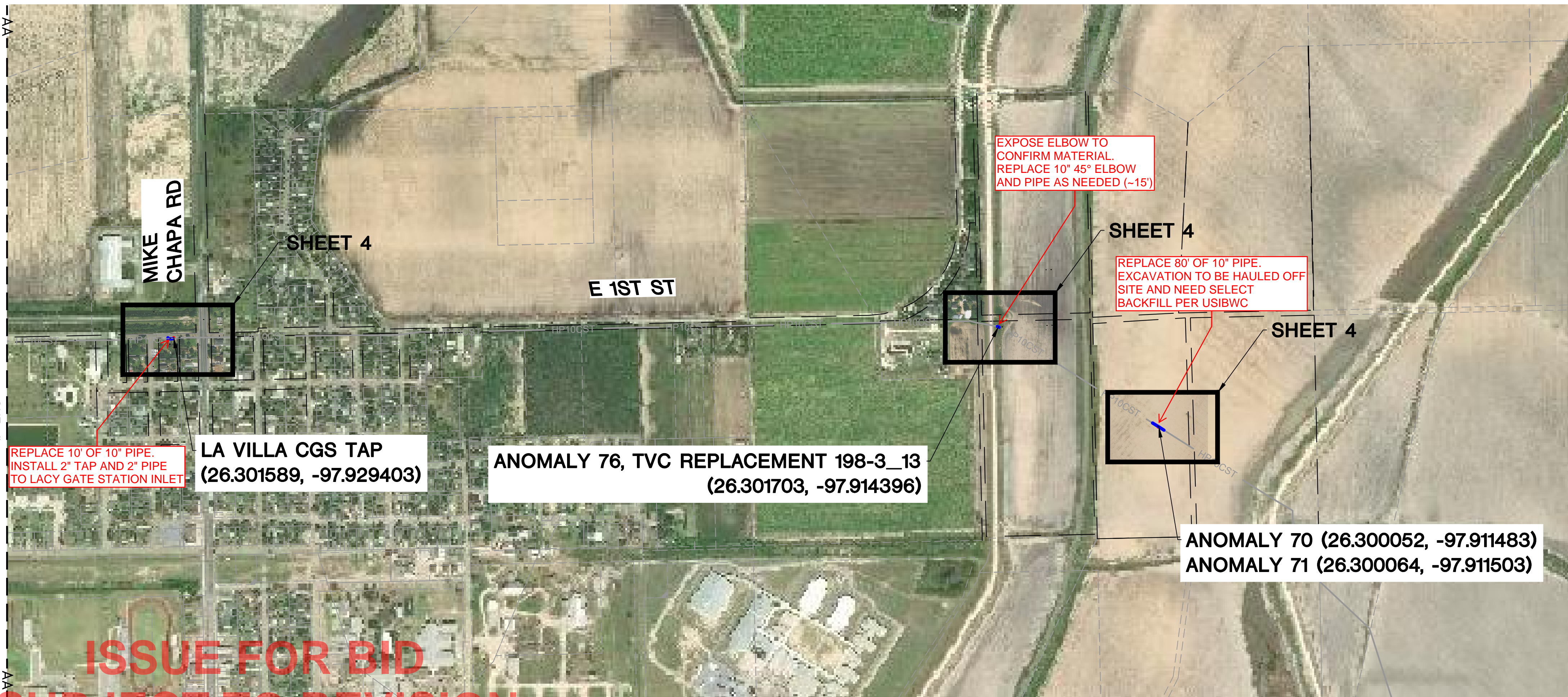


LOCATION MAP N.T.S.
MERCEDES, TX

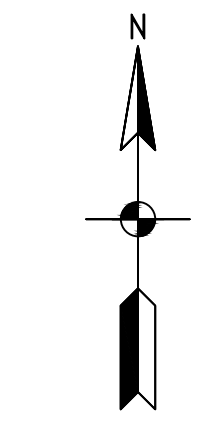
UTILITY LOCATIONS SHOWN ON PLAN ARE BASED ON FIELD AND DOCUMENT RESEARCH AND MAY BE NEITHER ACCURATE NOR COMPLETE. CONTRACTOR IS FULLY RESPONSIBLE FOR PHYSICALLY LOCATING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES IN THE CONSTRUCTION VICINITY PRIOR TO ANY WORK.



ISSUE FOR BID
SUBJECT TO REVISION



**ISSUE FOR BID
SUBJECT TO REVISION**



LEGEND

| | |
|-------------------|-------------------------------------|
| — HP2PE — | EXISTING HIGH PRESSURE LINE |
| — IP2PE — | EXISTING INTERMEDIATE PRESSURE LINE |
| — LP2PE — | EXISTING LOW PRESSURE LINE |
| — (Solid Blue) — | PROPOSED GAS MAIN (BORE/INSERT) |
| — (Dashed Blue) — | PROPOSED GAS MAIN (OPEN TRENCH) |
| — (Solid Blue) — | PROPOSED SERVICE (BORE/INSERT) |
| — (Dashed Blue) — | PROPOSED SERVICE (OPEN TRENCH) |
| - - - - - | LIMITS OF CONSTRUCTION |

PRELIMINARY
4/15/2022

PREPARED BY: **ENEngineering**
 11211 TAYLOR BLVD., SUITE 310
 DALLAS, TEXAS 75246
 TEL 630-353-4000
 FAX 630-353-7777
 WWW.ENENGINEERING.COM
 TX BOARD FIRM # - 11507

Texas Gas Service
 A Division of ONE Gas

| | | | |
|-------------|--------------|------|-----------|
| DRAWING BY | J. MERCURI | DATE | 4/15/2022 |
| CHECKED BY | P. DOLL | DATE | 4/15/2022 |
| APPROVED BY | P. DOLL | DATE | 4/15/2022 |
| SCALE | NOT TO SCALE | | |

LINE 198-3 ANOMALY REPLACEMENTS
GAS MAIN REPLACEMENT
SITE PLAN

ENE NO. 2103929.02
IWO # XXXX-XXXXXXX

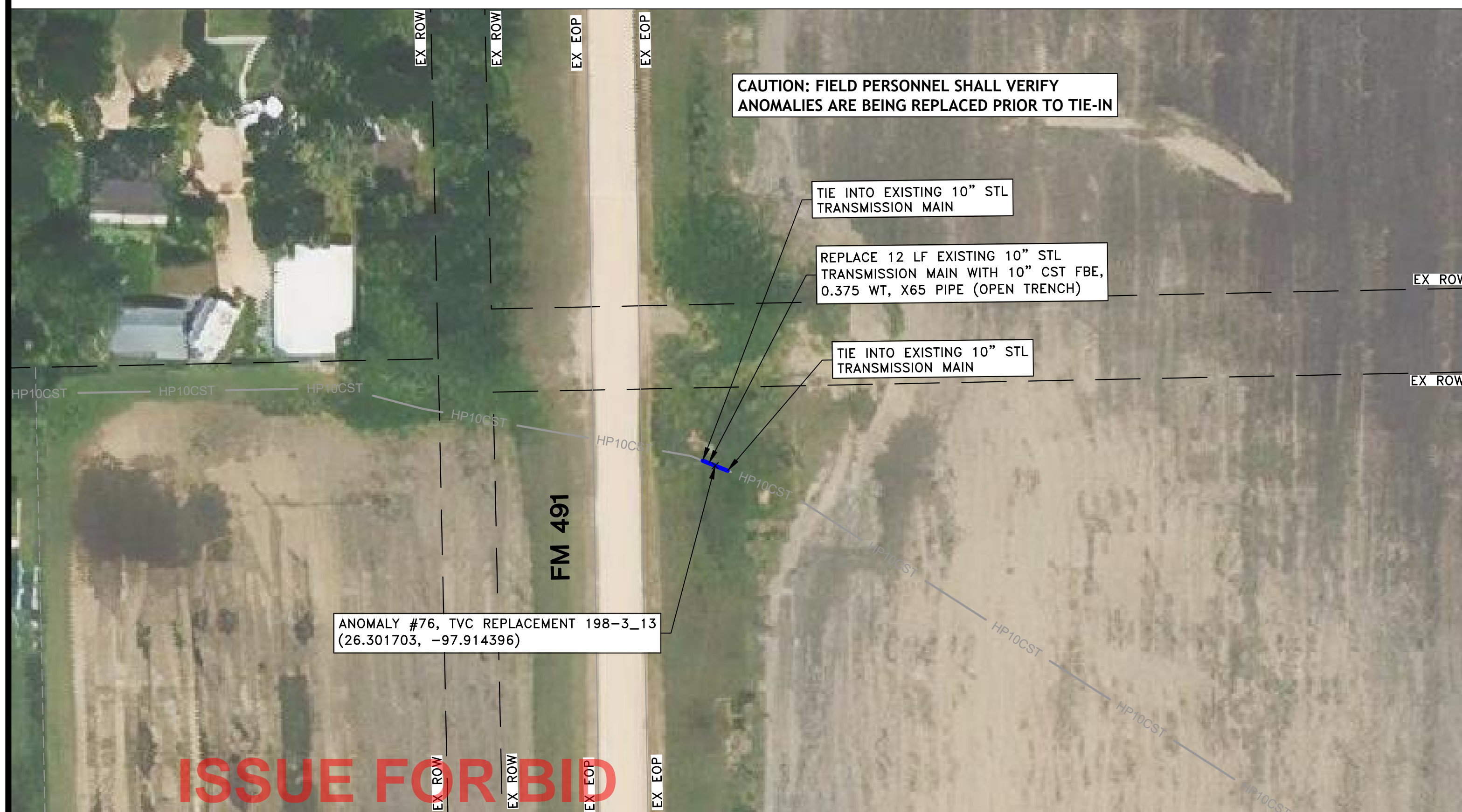
SHEET 3 OF 5



ANOMALY 185, 177 & 178
(SCALE: 1:40)

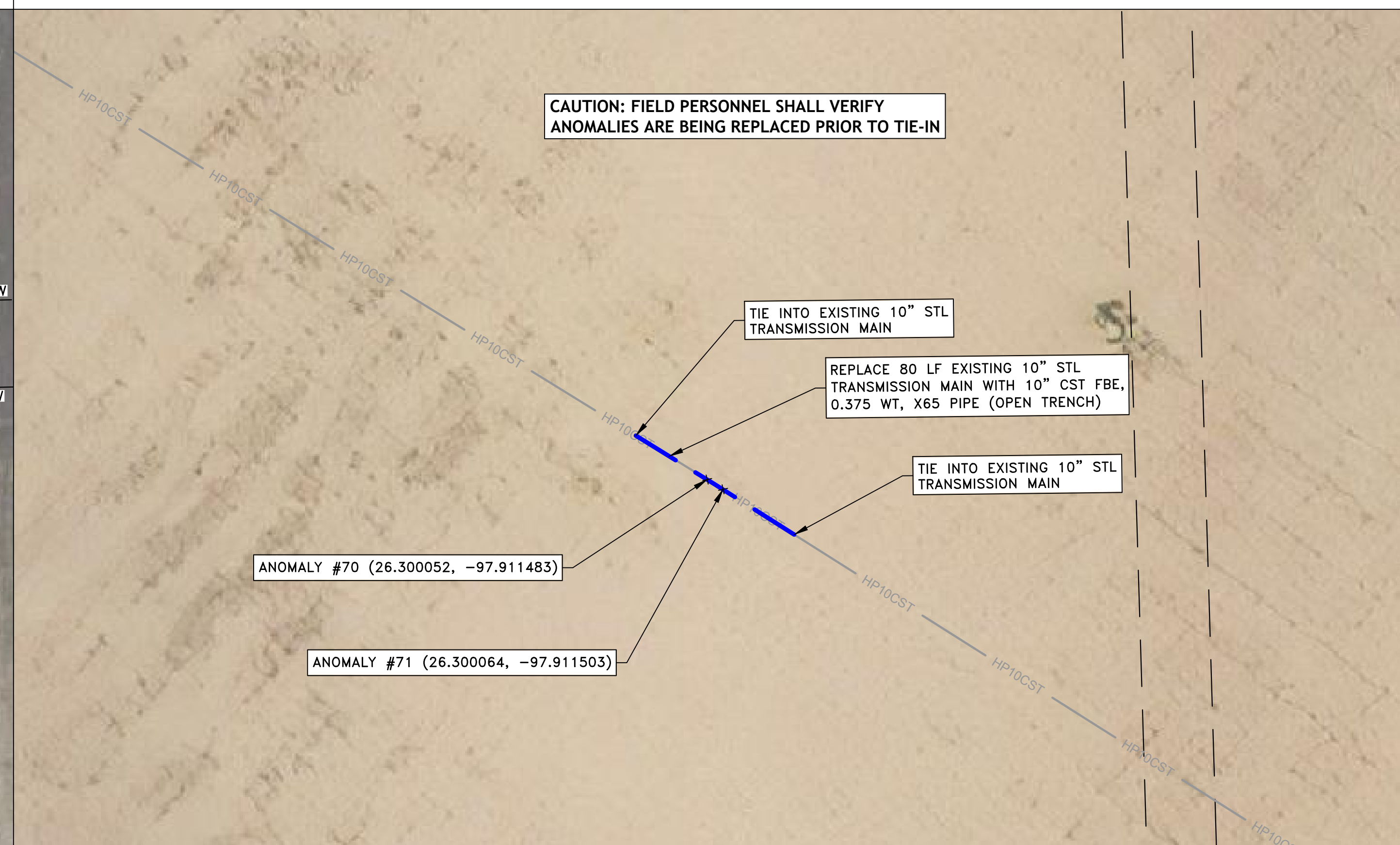


LA VILLA CGS TAP
(SCALE: 1:40)



**ISSUE FOR BID
SUBJECT TO REVISION**

ANOMALY 76
(SCALE: 1:40)



ANOMALY 70 & 71
(SCALE: 1:40)

PRELIMINARY
4/15/2022

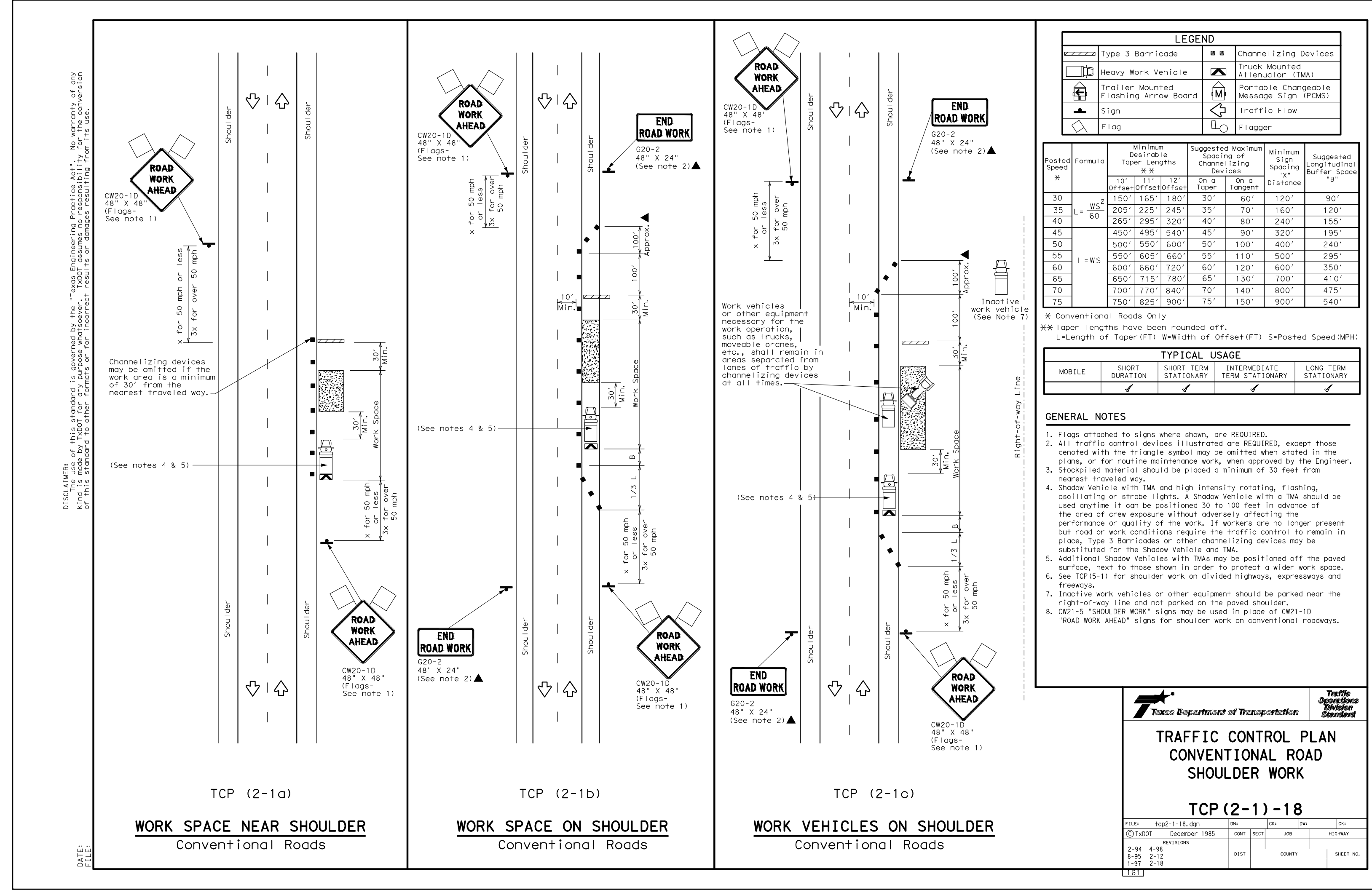
PREPARED BY: **ENgineering**
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DALLAS, TEXAS 75246
TEL 630-353-4000
FAX 630-353-7777
WWW.ENGINEERING.COM
TX BOARD FIRM # - 11507

Texas Gas Service™
A Division of ONE Gas

| | | | |
|-------------|------------|------|-----------|
| DRAWING BY | J. MERCURI | DATE | 4/15/2022 |
| CHECKED BY | CHECKED | DATE | 4/15/2022 |
| APPROVED BY | P. DOLL | DATE | 4/15/2022 |
| SCALE | AS SHOWN | | |

LINE 198-3 ANOMALY REPLACEMENTS
GAS MAIN REPLACEMENT
MILE 17 N ANOMALIES
ENE NO. 2103929.02
SHEET 4 OF 5

**ISSUE FOR BID
SUBJECT TO REVISION**



**PRELIMINARY
4/15/2022**

PREPARED BY:
ENEngineering
11211 TAYLOR BLVD., STE. 310
DALLAS, TX 75243
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TX BOARD FIRM # - 11507

Texas Gas Service
A Division of ONE Gas

DRAWING BY: J. MERCURI
CHECKED BY: CHECKED
APPROVED BY: P. DOLL
DATE: 4/15/2022
SCALE: NOT TO SCALE

**LINE 198-3 ANOMALY REPLACEMENTS
GAS MAIN REPLACEMENT**
SHEET TITLE
ENE NO. 2103929.02
WFO # XXXXX-XXXXXXX

**SHEET
5 OF 5**

RAILROAD COMMISSION OF TEXAS
OVERSIGHT AND SAFETY DIVISION - PIPELINE SAFETY
PIPELINE PERMITTING AND MAPPING SECTION
PERMIT TO OPERATE A PIPELINE IN TEXAS

11/06/2017

Permit Number: 00534
Commodity transported: Natural Gas
Classification: Gas Utility

TEXAS GAS SERVICE COMPANY
Attn: DEAN LAFLAMME
FOUR BRTN SKWY 1301 S MOPAC 400
AUSTIN, Texas 78746

This is to certify that TEXAS GAS SERVICE COMPANY has complied with Railroad Commission rule 16 Tex. Admin. Code §3.70 governing pipelines in accordance with Texas Natural Resources Code, §81.051, and is granted this permit by the Commission to operate the following pipeline or pipelines located in the following county or counties:

Hidalgo, Cameron

RENEWAL ONLY FOR 223.22 MILES.

This permit is valid until the earlier of either one year from the date issued OR until there is a material change in the identity of entity owning the pipeline or pipelines; the entity physically operating the pipeline or pipelines; the entity economically operating the pipeline or pipelines; the commodity being transported in the pipeline or pipelines.

RAILROAD COMMISSION OF TEXAS
PROCESSED BY: Ryan Hejl

TEXAS GAS SERVICE COMPANY
Attn: DEAN LAFLAMME
FOUR BRTN SKWY 1301 S MOPAC 400
AUSTIN, Texas 78746

