

**NOTICE OF LA MARQUE
CITY COUNCIL
BY TELEPHONE CONFERENCE**

In accordance with order of the Office of the Governor issued March 16, 2020, the La Marque City Council will conduct a Special meeting on **Monday, July 20, 2020 at 6:00 PM by telephone and video conference** in order to advance the public health goal of limiting face-to-face meetings to slow the spread of the Coronavirus/COVID-19. This Notice, the meeting agenda, and the agenda packet can be found online at:

<https://ci.la-marque.tx.us/AgendaCenter>

THERE WILL BE NO PUBLIC ACCESS TO CITY HALL DURING THE MEETING.

The public will be permitted to offer public comments telephonically as provided below and as permitted by the Mayor during the meeting. A recording of the telephonic meeting will be made and will be available to the public in accordance with the Open Meetings Act upon written request.

THE PUBLIC TOLL-FREE DIAL-IN NUMBER TO PARTICIPATE IN THE MEETING IS:

1 (346) 248-7799

ONCE YOU ARE CONNECTED, YOU MUST ENTER THE FOLLOWING:

Meeting ID: 92493940502

Press *6 to mute or unmute your phone line. You may also connect to the meeting on your smartphone, tablet or computer by going to the following internet address:

<https://zoom.us/j/92493940502>

Once you are on the website, you may need to enter the following:

Meeting ID: 924 9394 0502

If you require accommodation to participate in this meeting, contact the City Clerk at 409-938-9259 or cityclerk@cityoflamarque.org at least 48 hours prior to the meeting start time.



1111 Bayou Road
La Marque, Texas
409-938-9202

Mayor Bobby Hocking

Mayor Pro-Tem Keith Bell- District A

Councilmember Chris Lane- District B

Councilmember Robert Michetich- District C

Councilwoman Casey McAuliffe- District D

**CITY OF LA MARQUE
CITY COUNCIL
SPECIAL AGENDA
of
JULY 20, 2020**

Notice is hereby given that the City Council of the City of La Marque, Texas will conduct a Special Meeting via teleconference (ZOOM) on Monday, July 20, 2020, beginning at 6:00 p.m. for the purpose of considering the following agenda:

(1) CALL MEETING TO ORDER

(2) ROLL CALL

(3) NEW BUSINESS

- a. Discussion/possible action relating to City Manager to present the Proposed FY 2020-2021 Budget of the City of La Marque – City Manager C. Jackson
- b. Discussion/possible action relating to approve agreements with Texas Department of Transportation (TxDOT) to design the relocation of City of La Marque water/sewer utilities that are in conflict with the IH-45 widening project from North of FM 519 to N of Texas City WYE – Public Works Director C. Cary
- c. Discussion/possible action relating to the Budget Calendar – Finance Director S. Kou

(4) EXECUTIVE SESSION

The City Council for the City of La Marque, Texas reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed above, as authorized the Texas Government Code Section 551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices) and 551.086 (Economic Development)

1. Section 551.074 – Personnel Matters

(5) ACTION TAKEN FROM EXECUTIVE SESSION

1. Discussion/possible action to be taken from the Executive Session

(6) REQUESTS AND ANNOUNCEMENTS

Requests by Mayor and Council Members for items to be placed on future City Council agendas and announcements on city events/community interests TEX. GOV'T CODE §551.415. (b), "items of community interest" includes:

- (1) expressions of thanks, congratulations, or condolence;*
- (2) information regarding holiday schedules;*
- (3) an honorary or salutary recognition of a public official, public employee, or other citizen, except that a discussion regarding a change in the status of a person's public office or public employment is not an honorary or salutary recognition for purposes of this subdivision;*
- (4) a reminder about an upcoming event organized or sponsored by the governing body;*
- (5) information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the municipality or county; and*
- (6) announcements involving an imminent threat to the public health and safety of people in the municipality or county that has arisen after the posting of the agenda.*

(7) ADJOURNMENT

CERTIFICATION:

I hereby certify that the above notice of meeting was posted at 1109-B Bayou Road, La Marque, Texas on or before **July 17, 2020**, before 5:30 p.m.

Robin Eldridge, TRMC
City Clerk

.....
● This facility is wheelchair accessible and accessible parking spaces are available. Request for accommodations or
● interpretive services must be made 48 hours prior to this meeting. Please contact the City Clerk's office at 409-938-
● 9259, or Fax 409-935-0401, or e-mail cityclerk@cityoflamarque.org for further information.
●



CITY COUNCIL AGENDA FORM

Meeting Date: July 20, 2020

Prepared by: Chaise Cary

Agenda item: _____

Reviewed by: Charlene Warren

Charles Jackson

Department: Public Works

AGENDA ITEM DESCRIPTION: Discussion/possible action relating to approve agreements with Texas Department of Transportation (TxDOT) to design the relocation of City of La Marque water/sewer utilities that are in conflict with the IH-45 widening project from North of FM 519 to N of Texas City WYE

☒

ATTACHMENTS FOR REFERENCE:

1. TxDOT Standard Utility Agreement U-15981
2. TxDOT Standard Utility Agreement U-16125

STAFF BRIEFING:

- The Texas Department of Transportation (TxDOT) is in the process of finalizing plans for the subject project on the IH-45 in Galveston County
- The adjustment of conflicting utilities on this project is fully reimbursable for like-kind relocations using Federal funds
- The City of La Marque (Local Government) has various contradictory utility lines that need to be adjusted
- The Local Government (City of La Marque) has agreed to have CONSOR to design the utility and include the adjustment work in the plans for the roadway projects
- Adico, LLC, City Consulting Engineer, has been working with TxDOT consultants to identify the water and sanitary sewer conflicts within TxDOT ROW
- In lieu of the City contracting these services out and seeking reimbursements from TxDOT, the staff has recommended the option for the TxDOT to design and construct the facilities, with the City approval, to meet TxDOT target deadline
- TxDOT has prepared the attached letter of concurrence for City execution

HISTORY:

- TxDOT is currently in the design phase of the IH-45 Widening project from North of FM 519 to N of Texas City WYE. (IH 45 CSJ 0500-04-104).
- The relocation of all utilities within the ROW is required for the expansion.
- Adico has identified six conflicts that will require relocation.
- TxDOT will pay costs for engineering, design, and inspection.

TARGET IMPLEMENTATION: July 20, 2020

SIGNIFICANT ACTION DATES:

01/20/2020 - TxDOT letter of concurrence agreement approved by Council

02/10/2020 - TxDOT letter of concurrence agreement approved by Council



CITY COUNCIL AGENDA FORM

ACTION:

- | | |
|--|---|
| ☐ Ordinance | ☐ Resolution |
| ☐ Special Presentation | ☐ Proclamation |
| ☐ Finance Report | ☐ Public Hearing |
| ☐ Other | |
| ☒ Mark if this item does not conflict with any Resolution, Ordinance or City Charter, policies, procedures | |

Cost Details:

Budgeted	N/A
Actual Bid	N/A
Estimated Expenditure	N/A
Acct. Name(s)	
Line Item #	
Other Funding	

STAFF'S RECOMMENDATION: Motion to approve agreements with TxDOT to design the relocation of the City of La Marque water/sewer utilities that are in conflict with the IH-45 widening project from North of FM 519 to N of Texas City WYE

FISCAL IMPACT: The estimated cost for relocation is to be determined. No fiscal impact to the City. All costs associated will be at the expense of TxDOT.

STANDARD UTILITY AGREEMENT

U-Number: **U15981**

District: Houston
Federal Project No.:
ROW CSJ: 0500-04-139
Highway Project Letting Date: 08-2020

County: Galveston
Highway: IH 45
From: N of FM 519
To: N of Texas City WYE

This Agreement by and between the State of Texas, acting by and through the Texas Transportation Commission, ("**State**"), and City of La Marque, ("**Utility**"), acting by and through its duly authorized representative, shall be effective on the date of approval and execution by and on behalf of the **State**.

WHEREAS, the **State** has deemed it necessary to make certain highway improvements as designated by the **State** and approved by the Federal Highway Administration within the limits of the highway as indicated above (the "**Highway Project**");

WHEREAS, the proposed Highway Project will necessitate the adjustment, removal, and/or relocation of certain facilities of the **Utility** as indicated in the following statement of work: Adjustment of existing water line utilities that are in conflict with the proposed reconstruction of IH 45 within the City of La Marque, Texas. Remove 868 LF of 8" water line and 748 LF of 12" water line, crossing IH 45 at sta. 1620+00 and sta. 1621+31. Install 735 LF of 20" waterline at sta. 1621+23. Remove 783 LF of 8" water line crossing Main street at sta. 417+53. Install 655 LF of 8" water line along Main street from sta. 414+74 to sta. 419+62. Install 548 LF of 8" water line crossing Main street at sta. 415+47, along FM 519 to sta. 604+87. Remove 69 LF of 8" water line on Main street sta. 417+00. Install 128 LF 8" water line crossing Main street at sta. 417+20. Remove 280 LF of 12" water line along IH 45 NBFR from sta. 21619+14 to sta. 21620+82. Install 275 LF of 12" water line along IH 45 NBFR from sta. 21619+14 to sta. 21620+82. Remove 469 LF of 14" water line along IH45 NBFR sta. 21620+95 to 21625+10. Install 484 LF of 14" water line NBFR sta. 21620+82 to 21625+10. Remove 128 LF of 8" water line along IH45 NBFR from sta. 21648+13 to sta. 21649+53. Install 156 LF of 8" water line along IH45 NBFR from sta. 21648+13 to sta. 21649+53. ; and more specifically as shown in the **Utility's** plans, specifications and estimated costs, which are attached hereto as Attachment "A".

WHEREAS, the **State** will participate in the costs of the adjustment, removal, and relocation of certain facilities to the extent as may be eligible for State and/or Federal participation.

WHEREAS, the **State**, upon receipt of evidence it deems sufficient, acknowledges the **Utility's** interest in certain lands and facilities that entitle it to reimbursement for the adjustment, removal, and relocation of certain of its facilities located upon the lands as indicated in the statement of work above.

NOW, THEREFORE, BE IT AGREED:

The **State** will pay to the **Utility** the costs incurred in adjustment, removal, and relocation of the **Utility's** facilities up to the amount said costs may be eligible for **State** participation.

All conduct under this agreement, including but not limited to the adjustment, removal, and relocation of the facility, the development and reimbursement of costs, any environmental requirements, and retention of records will be in accordance with all applicable federal and state laws, rules and regulations, including, without limitation, the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act, 42 U.S.C. §§ 4601, et seq., the National Environmental Policy Act, 42 U.S.C. §§ 4321, et seq., the Buy America provisions of 23 U.S.C. § 313 and 23 CFR 635.410, as amended, Texas Transportation Code § 223.045, the Utility Relocations, Adjustments, and

Initial Date
TxDOT

Initial Date
Utility

acquired by TxDOT. This written authorization to proceed with the physical work is in addition to the authorization to commence work outlined below. Notwithstanding the foregoing, the provisions of this paragraph are required only when TxDOT has not obtained completion and clearance of its environmental review of the Highway Project prior to the execution of this Agreement by the State and the Utility.

The **Utility** shall comply with the Buy America provisions of 23 U.S.C. § 313, 23 CFR 635.410, as amended, and the Steel and Iron Preference provisions of Texas Transportation Code § 223.045 and, when products that are composed predominately of steel and/or iron are incorporated into the permanent installation of the utility facility, use domestically manufactured products. TxDOT Form 1818 (Material Statement), along with all required attachments, must be submitted, prior to the commencement of the adjustment, removal, and relocation of the facility, as evidence of compliance with the aforementioned provisions. Failure to submit the required documentation or to comply with the Buy America, and Steel and Iron Preference requirements shall result in: (1) the **Utility** becoming ineligible to receive any contract or subcontract made with funds authorized under the Intermodal Surface Transportation Efficiency Act of 1991; (2) the **State** withholding reimbursement for the costs incurred by the **Utility** in the adjustment, removal, and relocation of the **Utility's** facilities; and (3) removal and replacement of the non-compliant products.

The **Utility** agrees to develop relocation or adjustment costs by accumulating actual direct and related indirect costs in accordance with a work order accounting procedure prescribed by the **State**, or may, with the **State's** approval, accumulate actual direct and related indirect costs in accordance with an established accounting procedure developed by the **Utility**. Bills for work hereunder are to be submitted to the **State** not later than one (1) year after completion of the work. Failure to submit the request for final payment, in addition to all supporting documentation, within one (1) year after completion of the work may result in forfeiture of payment for said work.

When requested, the **State** will make intermediate payments at not less than monthly intervals to the **Utility** when properly billed. Such payments will not exceed 90 percent (90%) of the eligible cost as shown in each such billing. Intermediate payments shall not be construed as final payment for any items included in the intermediate payment.

The **State** will, upon satisfactory completion of the adjustment, removal, and/or relocation and upon receipt of final billing prepared in an approved form and manner and accounting for any intermediate payments, make payment in the amount of 90 percent (90%) of the eligible costs as shown in the final billing prior to audit and after such audit shall make an additional final payment totaling the reimbursement amount found eligible for **State** reimbursement.

Alternatively, the **State** agrees to pay the **Utility** an agreed lump sum of \$N/A as supported by the attached estimated costs. The **State** will, upon satisfactory completion of the adjustments, removals, and relocations and upon receipt of a final billing, make payment to the **Utility** in the agreed amount.

Upon execution of this agreement by both parties hereto, the **State** will, by written notice, authorize the **Utility** to perform such work diligently and to conclude said adjustment, removal, and relocation by the stated completion date which is attached hereto in Attachment "C". The completion date shall be extended for delays caused by events outside the **Utility's** control, including an event of Force Majeure, which shall include a strike, war or act of war (whether an actual declaration of war is made or not), insurrection, riot, act of public enemy, accident, fire, flood or other act of God, sabotage, or other events, interference by the **State** or any other party with the **Utility's** ability to proceed with the work, or any other event in which the **Utility** has exercised all due care in the prevention thereof so that the causes of other events are beyond the control and without the fault or negligence of the **Utility**.

This agreement in its entirety consists of the following elements:

Standard Utility Agreement – ROW-U-35;

- Plans, Specifications, and Estimated Costs (Attachment "A");
- Accounting Method (Attachment "B");
- Schedule of Work (Attachment "C");
- Statement Covering Contract Work – ROW-U-48 (Attachment "D");
- Utility Joint Use Acknowledgment – ROW-U-JUAA and/or Utility Installation Request – Form 1082 (Attachment "E");
- Eligibility Ratio (Attachment "F");

Initial Date
TxDOT

Initial Date
Utility

- Betterment Calculation and Estimate (Attachment “G”); and
- Proof of Property Interest – ROW-U-1A, ROW-U-1B, or ROW-U-1C (Attachment “H”).

All attachments are included herein as if fully set forth. In the event it is determined that a substantial change from the statement of work contained in this agreement is required, reimbursement therefore shall be limited to costs covered by a modification or amendment of this agreement or a written change or extra work order approved by the **State** and the **Utility**.

This agreement is subject to cancellation by the **State** at any time up to the date that work under this agreement has been authorized, and such cancellation will not create any liability on the part of the **State**. However, the **State** will review and reimburse the **Utility** for eligible costs incurred by the **Utility** in preparation of this Agreement.

The State Auditor may conduct an audit or investigation of any entity receiving funds from the **State** directly under this contract or indirectly through a subcontract under this contract. Acceptance of funds directly under this contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the State Auditor, under the direction of the Legislative Audit Committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit.

The **Utility** by execution of this agreement does not waive any of the rights that the **Utility** may have within the limits of the law.

It is expressly understood that the **Utility** conducts the adjustment, removal, and relocation at its own risk, and that the **State** makes no warranties or representations regarding the existence or location of utilities currently within its right of way.

Initial Date
TxDOT

Initial Date
Utility

The signatories to this agreement warrant that each has the authority to enter into this agreement on behalf of the party represented.

UTILITY

Utility: City of La Marque
Name of Utility

By: _____
Authorized Signature

Print or Type Name

Title: _____

Date: _____

EXECUTION RECOMMENDED:

Director of TP&D (or designee), Houston District

THE STATE OF TEXAS

Executed and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

By: _____
District Engineer (or designee)

Date: _____

Initial Date
TxDOT

Initial Date
Utility

SIGNATURE AUTHORITY

U-No. **U15981**

District: Houston
Federal Project No.:
ROW CSJ No.: 0500-04-139

County: Galveston
Highway No.: IH 45
Contract No.:

WHEREAS, **City of La Marque**, hereinafter called the **Owner**, deems it necessary and proper to enter into an agreement with the State of Texas, whereby the Texas Department of Transportation will cause the relocation of various facilities operated by **Owner**, which are in conflict with the Texas Department of Transportation's proposed improvements on an existing or future State of Texas project from within public, private or Owner's property interests to the public, private, or Owner's property interests.

NOW THEREFORE, according to the governing documents of the utility company attached as **Exhibit A**, be it resolved by the above named **Owner** that **Bobby Hocking, as Mayor, or his/her successor in this position**, has general signature authority on all utility adjustment work of Owner, and, as such, no further authorization for execution of a specific utility agreement is necessary. **Bobby Hocking, as Mayor, or his/her successor in this position**, is hereby authorized and directed to sign any and all utility agreements, or any other necessary documents, required to complete the utility relocation on behalf of the **Owner**.

Passed, approved, and adopted this _____ day of _____, 20____.

IN WITNESS WHEREOF, the parties hereto have affixed their signatures.

ATTEST:

Owner: City of La Marque
Utility Name

By: _____
Authorized Signature

Title: _____

Date: _____

Acknowledgement

State of Texas
County of _____

This instrument was acknowledged before me on this _____ day of _____, 20____, by _____
_____ of _____ [name
of utility company], a _____ [state] _____ [type of company, e.g. LLC, Inc., L.P., etc.].

Notary Public's Signature
Notary's Name (Printed): _____
My commission expires: _____

EXHIBIT "A"
A Copy of the Governing Document of the Utility Company Designating Signature Authority

Attachment “A”

Plans, Specifications, and Estimated Costs

All material items that must meet Buy America or Steel and Iron Preference Provision requirements must be indicated with an asterisk (*).

Initial Date
TxDOT

Initial Date
Utility

**Standard Utility Agreement
Statement of Work
U Number: U15981
City of La Marque, Texas**

Federal Project No.:

Highway: IH 45

ROW CSJ: 0500-04-139

Construction CSJ: 0500-04-104

County: Galveston

Limits: From N of FM 519 to N of Texas City WYE

Brief Description of Utility Facility(s) to be Adjusted Under This Agreement.

Adjustment of existing City of La Marque water line facilities that are in conflict with the proposed reconstruction of IH 45 main lanes and frontage roads from North of FM 519 to North of Texas City WYE, and included the reconstruction of roadways along Main Street and Lake Road in conjunction with the reconstruction of IH 45.

Existing Facility, Proposed Adjustments and Scope of Work:

The City of La Marque is in Galveston County, Texas, and is part of the Galveston metropolitan area. IH 45 bisects the City of La Marque with existing City facilities along both sides of IH 45, and crossing IH 45 main lanes and frontage roads, with water line facilities to serve residents and businesses in the City of La Marque. Water line adjustments were designed to meet Texas Commission on Environmental Quality (TCEQ) requirements.

Water lines:

Lake Road Crossing IH 45 at Main Lane (ML) Sta. 1621+23: The existing 8" and 12" water lines crossing IH 45 on both sides of Lake Road were in conflict with the proposed 7'x4' RCB storm sewer and were combined & adjusted below the proposed storm sewer. The proposed 20" water line that connects to proposed 14" water line along the IH 45 NBFR and also connects to an existing 12" water line along the south ROW line of Main Street. The proposed 20" water line will be encased in 30" steel casing when crossing under IH 45 and Main Street.

Along Main Street Sta. 414+74 to Sta. 419+62: Existing 8" water line crossing FM 519 and Main street was a UAR violation, running under pavement, to proposed roadways and was adjusted to fit UAR standards. The proposed 8" water line connects to proposed 20" water line along south ROW line of Main street and also connects to existing 8" water line along south ROW line of Main Street just before Corbett Street.

Crossing Main Street Sta. 415+47 along FM 519 to sta. 604+87: Existing 8" water line crossing FM 519 and Main street was a UAR violation, running under pavement, to proposed roadways and was adjusted to fit UAR standards. The proposed 8" water line, encased in 18" steel casing when crossing under Main

street, connects to proposed 8" water line along south ROW line of Main street and ends at the IH 45 SBFR and proposed FM 519 intersection.

Crossing Main Street Sta. 417+20: Existing 8" water line crossing FM 519 and Main street was a UAR violation, running under pavement, to proposed roadways and was adjusted to fit UAR standards. The proposed 8" water , encased in 18" steel casing when crossing under Main street, connects to proposed 8" water line along south ROW line of Main street and also connects to existing 8" water line along the south ROW line of Florence Street.

Along IH 45 NBFR from Sta. 21619+14 to Sta. 21620+82: Existing 12" water line was in conflict with 36" RCP storm sewer. The proposed 12" water line connects to existing 12" water line along West ROW line of Lake Road and also connects to proposed 14" water line on East side of Lake road along proposed ROW. Proposed 12" water line will be encased in 20" steel casing when crossing Lake road.

Along NBFR Sta. 21621+00 to FM 519 Sta 612+30: Existing 14" water line was in conflict with proposed storm drains and 24" RCP storm sewers and was adjusted below the proposed drainage. The proposed 14" water line connects to proposed 20" water line along IH 45 NBFR ROW line and also connects to existing 14" water line along existing ROW line at Irene street and FM 519 intersection.

Along NBFR and Crossing Bayou Road Sta. 21648+13 to 21649+53: The existing 8" water line was in conflict with proposed 36" RCP storm sewer and was adjusted to avoid the proposed storm sewer. The proposed 8" water line, encased in 18" steel casing when crossing Bayou road, connects to an existing 8" water line along the east ROW line of Bayou road and also connects to an existing 8" water line along the IH 45 NBFR .

CONSTRUCTION COST ESTIMATE
UTILITY ADJUSTMENT - WATER
(RCSJ 0500-04-139)
U- Number: U15981

ADJUSTMENT OF SANITARY SEWER IN CONFLICT WITH PROPOSED RECONSTRUCTION/WIDENING OF IH 45
MAIN LANES FROM NORTH OF FM 519 TO NORTH OF TEXAS CITY WYE

ITEM/DESC CODE	DESCRIPTION		UNIT	UNIT PRICE	QTY	CSJ TOTAL
		Buy America				
400 6006	CUT & RESTORING PAV		SY	\$60.00	7	\$ 420.00
401 6001	FLOWABLE BACKFILL		CY	\$200.00	601	\$ 120,200.00
402 6001	TRENCH EXCAVATION PROTECTION		LF	\$2.40	3,157	\$ 7,576.80
7049 6017	WATER MAIN PIPE (PVC)(12IN)(DR18)(C900)		LF	\$120.00	280	\$ 33,600.00
7049 6052	FIRE HYDRANT BRANCH (LEAD) (6IN)		LF	\$55.00	70	\$ 3,850.00
7049 6063	JCK TUN BOR OR AUG WTR MAIN (STL)(20IN)	*	LF	\$750.00	90	\$ 67,500.00
7049 6069	JCK TUN BOR OR AUG CSG (STL) (18IN)	*	LF	\$650.00	220	\$ 143,000.00
7049 6070	JCK TUN BOR OR AUG CSG (STL) (22IN)	*	LF	\$750.00	680	\$ 510,000.00
7049 6072	JCK TUN BOR OR AUG CSG (STL) (30IN)	*	LF	\$800.00	426	\$ 340,800.00
7049 6074	SERVICE LINE (SHORT SIDE) (5/8" TO 1")		EA	\$810.00	7	\$ 5,670.00
7049 6075	SERVICE LINE (LONG SIDE) (5/8" TO 1")		EA	\$2,100.00	7	\$ 14,700.00
7049 6104	FIRE HYDRANT ASSEMBLY	*	EA	\$5,000.00	8	\$ 40,000.00
7049 6114	REMOVING FIRE HYDRANT		EA	\$500.00	3	\$ 1,500.00
7049 6127	CUT AND PLUG WATER MAIN (8IN)		EA	\$1,100.00	3	\$ 3,300.00
7049 6129	CUT AND PLUG WATER MAIN (12IN)		EA	\$1,200.00	2	\$ 2,400.00
7049 6130	CUT AND PLUG WATER MAIN (14IN)		EA	\$1,200.00	1	\$ 1,200.00
7049 6140	WET CONNECTION (8IN)		EA	\$2,200.00	4	\$ 8,800.00
7049 6142	WET CONNECTION (12IN)		EA	\$1,400.00	2	\$ 2,800.00
7049 6143	WET CONNECTION (14IN)		EA	\$1,500.00	1	\$ 1,500.00
7049 6201	WTR MAIN PIPE(PVC)(8 IN)(DR 18) (C900)		LF	\$76.00	1,437	\$ 109,212.00
7049 6213	2" BLOW-OFF VALVE	*	EA	\$6,000.00	1	\$ 6,000.00
7049 6215	WATER MAIN PIPE (PVC)(14IN)(DR18)(C900)		LF	\$120.00	703	\$ 84,360.00
7049 XXXX	WATER MAIN PIPE (PVC)(18IN)(DR18)(C900)		LF	\$180.00	737	\$ 132,660.00
SUBTOTAL						\$ 1,640,628.80

NOTE: All steel and iron material items designated by an asterisk (*) must comply with "Buy America" requirements

City of La Marque
TxDOT Expansion (IH 45 CSJ 0500-04-104)
Water Line Adjustment Construction
Monday, April 20, 2020

Project Duration: 150 Days (22 weeks)

Item	Description	Units	Est Quantity	Unit Cost	Amount
A. Research, Plan Review, Coordination and Plan Review					
1	City Engineer	Hrs.	20	\$235.00	\$4,700.00
2	Senior Engineer	Hrs.	25	\$175.00	\$4,375.00
3	Field Inspector	Hrs.	2.5	\$125.00	\$312.50
Subtotal Estimated Fee:					\$9,387.50
B. COLM Utility Inspections					
1	Pre-construction Meeting				
	City Engineer	Hrs.	2	\$235.00	\$470.00
	Construction Inspector	Hrs.	2	\$95.00	\$190.00
2	Coordination with City Staff and public relations				
	City Engineer	Hrs.	20	\$235.00	\$4,700.00
	Construction Inspector	Hrs.	12	\$95.00	\$1,140.00
3	COLM Inspections (112 work days or 16 weeks)				
	City Engineer (Weekly - 2 hours)	Hrs.	32	\$235.00	\$7,520.00
	- Mileage (40 miles per trip X 16 trip)	Mi.	640	\$0.58	\$371.20
	Construction Inspector (1.5 hours/day)	Hrs.	168	\$95.00	\$15,960.00
	- Mileage (40 miles per trip X 75 trip)	Mi.	2240	\$0.58	\$1,299.20
	- Public Work Director	Hrs.	40	\$48.00	\$1,920.00
	- Public Work - Foreman - UT22	Hrs.	60	\$25.00	\$1,500.00
4	Waterline Testing				
	Construction Inspector	Hrs.	20	\$95.00	\$1,900.00
5	Review lab test				
	City Engineer	Hrs.	10	\$235.00	\$2,350.00
6	Submittal Review				
	City Engineer	Hrs.	10	\$95.00	\$950.00
7	Substantial Completion Walkthrough				
	City Engineer	Hrs.	8	\$235.00	\$1,880.00
	Construction Inspector	Hrs.	8	\$95.00	\$760.00
8	Final Walkthrough				
	City Engineer	Hrs.	6	\$235.00	\$1,410.00
	Construction Inspector	Hrs.	6	\$95.00	\$570.00
9	Closeout				
	City Engineer	Hrs.	6	\$235.00	\$1,410.00
Subtotal Estimated Fee:					\$46,300.40
Total Estimated:					\$55,687.90

Control CSJ: 0500-04-104

ROW CSJ: 0500-04-139

U15981

Cost Estimate

City of La Marque

Water

U15981 Cost Summary

CATEGORY	NOTES	SUBTOTAL
Utility Construction Cost Estimate	Included in highway construction contract- to be paid by TxDOT directly to highway contractor	\$ 1,640,628.80
Engineering Design Costs	Paid by TxDOT to CONSOR Engineers by Contract No.36-7IDP5047_WA1	\$ 34,194.39
Reimbursible Costs Estimate	Based on City of La Marque hourly rates- to be paid by TxDOT to City of La Marque	\$ 55,687.90
	SUB-TOTAL	\$ 1,730,511.09

Total Amount Reimbursable to City of La Marque	\$ 55,687.90
---	---------------------

c:\bms\pwe-use\east-006\hoi, tran\dms07903\A_1H45_GSQ_UTL_01.dgn
11:25:06 AM
7/1/2020

SUMMARY OF WATER QUANTITIES											
DESCRIPTION	SHEET NO.	400	401	402	7049	7049	7049	7049	7049	7049	7049
		6006	6001	6001	6017	6052	6063	6069	6070	6072	6074
		CUT & RESTORING PAV	FLOWABLE BACKFILL	TRENCH EXCAVATION PROTECTION	WATER MAIN PIPE (PVC) (12IN) (DR18) (C900)	FIRE HYDRANT BRANCH (LEAD) (6IN)	JCK TUN BOR OR AUG WTR MAIN (STL) (20IN)	JCK TUN BOR OR AUG CSG (STL) (18IN)	JCK TUN BOR OR AUG CSG (STL) (22IN)	JCK TUN BOR OR AUG CSG (STL) (30IN)	SERVICE LINE (SHORT SIDE) (5/8" TO 1")
		SY	CY	LF	LF	LF	LF	LF	LF	LF	EA
CSJ 0500-04-104											
WATER MAIN	SHEET 1 OF 11		109	400		10				110	1
WATER MAIN	SHEET 2 OF 11			337		10				316	1
WATER MAIN	SHEET 3 OF 11		79	400		10					1
WATER MAIN	SHEET 4 OF 11		46	232		10					1
WATER MAIN	SHEET 5 OF 11		20	100				87			
WATER MAIN	SHEET 6 OF 11		79	400				103			1
WATER MAIN	SHEET 7 OF 11		30	149		10					
WATER MAIN	SHEET 8 OF 11		17	350	280	10	90		60		1
WATER MAIN	SHEET 9 OF 11		82	350		10			350		1
WATER MAIN	SHEET 10 OF 11	7	108	283					270		
WATER MAIN	SHEET 11 OF 11		31	156				30			
CSJ: 0500-04-104 TOTALS											
		7	601	3,157	280	70	90	220	680	426	7

SUMMARY OF WATER QUANTITIES (CONTINUED)											
DESCRIPTION	SHEET NO.	7049	7049	7049	7049	7049	7049	7049	7049	7049	7049
		6075	6104	6114	6127	6129	6130	6140	6142	6143	
		SERVICE LINE (LONG SIDE) (5/8" TO 1")	FIRE HYDRANT ASSEMBLY	REMOVING FIRE HYDRANT	CUT AND PLUG WATER MAIN (8IN)	CUT AND PLUG WATER MAIN (12IN)	CUT AND PLUG WATER MAIN (14IN)	WET CONNECTION (8IN)	WET CONNECTION (12IN)	WET CONNECTION (14IN)	
		EA	EA	EA	EA	EA	EA	EA	EA	EA	
CSJ 0500-04-104											
WATER MAIN	SHEET 1 OF 11	1	1			1			1		
WATER MAIN	SHEET 2 OF 11	1									
WATER MAIN	SHEET 3 OF 11	1	2	1							
WATER MAIN	SHEET 4 OF 11	1			1			1			
WATER MAIN	SHEET 5 OF 11			1				1			
WATER MAIN	SHEET 6 OF 11	1	1								
WATER MAIN	SHEET 7 OF 11		1								
WATER MAIN	SHEET 8 OF 11	1	1	1		1			1		
WATER MAIN	SHEET 9 OF 11	1	2								
WATER MAIN	SHEET 10 OF 11						1			1	
WATER MAIN	SHEET 11 OF 11				2			2			
CSJ: 0500-04-104 TOTALS											
		7	8	3	3	2	1	4	2	1	

SUMMARY OF WATER QUANTITIES (CONTINUED)									
DESCRIPTION	SHEET NO.	7049	7049	7049	7049	7049	7049	7049	7049
		6162	6201	6213	6215	XXXX			
		GATE VALVE (12IN) *	WTR MAIN PIPE (PVC) (8 IN) (DR 18) (C900)	2" BLOW-OFF VALVE	WATER MAIN PIPE (PVC) (14IN) (DR18) (C900)	WATER MAIN PIPE (PVC) (18IN) (DR18) (C900)	GATE VALVE (8IN) *	GATE VALVE (14IN) *	GATE VALVE (18IN) *
		EA	LF	EA	LF	LF	EA	EA	EA
CSJ 0500-04-104									
WATER MAIN	SHEET 1 OF 11					400			1
WATER MAIN	SHEET 2 OF 11					337		1	1
WATER MAIN	SHEET 3 OF 11		400				1		
WATER MAIN	SHEET 4 OF 11		232				2		
WATER MAIN	SHEET 5 OF 11		100				2		
WATER MAIN	SHEET 6 OF 11		400				1		
WATER MAIN	SHEET 7 OF 11		149	1					
WATER MAIN	SHEET 8 OF 11	1			70				
WATER MAIN	SHEET 9 OF 11				350				
WATER MAIN	SHEET 10 OF 11				283			1	
WATER MAIN	SHEET 11 OF 11		156				2		
CSJ: 0500-04-104 TOTALS									
		1	1,437	1	703	737	9	2	2

* FOR CONTRACTOR INFORMATION ONLY. IT IS NOT PAID FOR
DIRECTLY, BUT WILL BE SUBSIDIARY TO WATER MAIN PIPES.



F-12040
©2020



IH 45

SUMMARY OF UTILITY
ADJUSTMENT QUANTITIES

SHEET 1 OF 2

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1053
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

WATER LINE AND SANITARY SEWER LINE GENERAL NOTES:

1.

THE CONTRACTOR WILL NOTIFY CITY OF LA MARQUE MR. DINH HO, P.E., CITY ENGINEER (PHONE: 832-895-1093, EMAIL dinh@adico-llc.com) AND MR. CHAISE CARY, PUBLIC WORK DIRECTOR (PHONE: 409-938-9280, EMAIL: c.cary@cityoflamarque.org) 48 HOURS BEFORE STARTING WORK ON WATER MAINS AND SANITARY SEWER. OPENING AND CLOSING OF EXISTING WATER VALVES WILL BE BY CITY OF LA MARQUE PERSONNEL. FOR ALL CITY INSPECTIONS, SEND REQUESTS TO: inspections@adico-llc.com.
2.

THE CONTRACTOR WILL VERIFY THE LOCATION AND ELEVATION OF ALL WATER MAINS AND SANITARY SEWER PRIOR TO EXCAVATION. ANY ADJUSTMENT AND/OR RELOCATION OF WATER MAINS AND SANITARY SEWER WILL BE COORDINATED AND APPROVED BY CITY OF LA MARQUE.
3.

THE CONTRACTOR WILL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC AND PRIVATE UTILITY LINES DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO WATER LINES AND WASTE WATER COLLECTION SYSTEMS. ALL DAMAGES WILL BE REPAIRED IN ACCORDANCE WITH CITY OF LA MARQUE AND TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REQUIREMENTS, WITH NO COST TO THE OWNER OF THE UTILITY.
4.

CUTTING, PLUGGING, GROUTING, REMOVING, HANDLING, CLEANUP, AND DISPOSAL OF ASBESTOS CEMENT (AC) PIPE WILL BE PERFORMED BY THE DEPARTMENT’S THIRD PARTY CONTRACTOR.
5.

CONSTRUCT PROPOSED WATER LINES AND SANITARY SEWER BY OPEN CUT EXISTING DRIVEWAYS AND CITY STREETS IN HALF SECTIONS UNLESS OTHERWISE SHOWN ON THE PLANS. CONTRACTOR WILL MAINTAIN PUBLIC ACCESS TO CITY STREETS AND DRIVEWAYS AT ALL TIMES.
6.

THE CONTRACTOR WILL REMOVE ABANDONED UTILITIES THAT ARE IN CONFLICT WITH PROPOSED CONSTRUCTION AT NO EXPENSE TO THE DEPARTMENT. REMOVAL AND SATISFACTORY DISPOSAL OF ABANDONED UTILITIES THAT ARE IN CONFLICT WITH PROPOSED CONSTRUCTION WILL BE SUBSIDIARY TO ITEM 100, PREPARING RIGHT OF WAY.
7.

ABANDONED EXISTING WATER LINES AND SANITARY SEWERS WILL BE FILLED WITH FLOWABLE GROUT.
8.

ADJUSTING SANITARY SEWER MANHOLE INCLUDES THE RECONSTRUCTION OF PORTIONS OR ALL OF THE EXISTING MANHOLE AND RESHAPING BOTTOM OF MANHOLE WITH CONCRETE GROUT TO PROVIDE A SMOOTH CHANNEL FOR SEWAGE FLOW.
9.

PVC SANITARY SEWER PIPE AND FITTINGS WILL BE C900 OR C905, COLOR GREEN, WITH RESTRAINED JOINTS.
10.

PVC WATER MAIN PIPE AND FITTINGS WILL BE DR18, C900 OR C 905, COLOR BLUE, WITH RESTRAINED JOINTS.
11.

DUCTILE IRON PIPE AND FITTINGS FOR WATERLINE WILL BE CLASS 350 AND POLYETHYLENE LINED ON THE INSIDE, WITH MECHANICAL JOINTS.
12.

ALL WATER LINE VALVES WILL OPEN IN A COUNTER CLOCKWISE DIRECTION AND WILL HAVE RESTRAINED JOINTS.
13.

THE CONTRACTOR WILL CONNECT ALL EXISTING WATER METERS TO THE PROPOSED WATER LINES. INCLUDE COST OF ALL LABOR AND MATERIAL REQUIRED IN RELATED BID ITEMS ON THE PROJECT.
14.

THE CONTRACTOR MAY BE REQUIRED TO CONSTRUCT SANITARY SEWER BYPASS AND PUMPING SEWAGE TO PROVIDE CONTINUANCE OF SEWER SERVICE DURING CONSTRUCTION OPERATIONS. ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO CONSTRUCT THE SANITARY SEWER BYPASS AND PUMPING SEWAGE WILL BE INCLUDED IN RELATED BID ITEMS ON THE PROJECT.
15.

ALL RESTRAINED JOINTS RESTRAINERS INCLUDING BOLTS, NUTS AND WASHERS WILL BE EPOXY COATED. WATER LINES AND SANITARY SEWER RESTRAINED JOINTS, INCLUDING BOLTS AND NUTS, WILL BE COATED WITH ASPHALTIC MATERIAL AFTER THEY ARE INSTALLED ON THE CARRIER PIPE. INCLUDE COST FOR ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED IN RELATED BID ITEMS ON THE PROJECT.
16.

PLUG HOLE IN EXISTING MANHOLES THAT HAVE CONNECTIONS WITH ABANDONED SEWER LINES. PLUGS WILL BE MINIMUM 9-INCH THICK CLASS "A" PORTLAND CEMENT CONCRETE. PLUGS LARGER THAN 9-INCHES IN DIAMETER WILL BE REINFORCED WITH NO. 4 BARS AT 8-INCHES ON CENTERS, BOTH WAYS. INCLUDE COST OF ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED IN RELATED BID ITEMS ON THE PROJECT. BACKFILL EXISTING MANHOLES TO ONE FOOT BELOW NATURAL GROUND WITH 12 INCH THICK CEMENT STABILIZED SAND.
17.

PRIOR TO BACKFILLING ALL UNDERGROUND WATER LINES, INSTALL A CONTINUOUS NO. 14 COPPER TRACER WIRE LOCATED DIRECTLY OVER BURIED WATER LINES, WITH A TRACER WIRE LOOP ACCESSIBLE AT NATURAL GROUND AT EACH VALVE STACK. TAPE THE TRACER WIRE TO CENTER OF WATER LINE AT 10-FOOT INTERVALS SO THAT IT WILL NOT MOVE DURING BACKFILL OPERATIONS. INCLUDE COST OF ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED IN RELATED BID ITEMS ON THE PROJECT.
18.

DEWATERING BY WELL POINT WILL BE REQUIRED TO INSTALL WATER LINES AND SANITARY SEWER. INCLUDE COST OF ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED IN RELATED BID ITEMS ON THE PROJECT.

19.

CONSTRUCT PROPOSED SANITARY SEWER STARTING AT THE DOWNSTREAM END AND PROCEED UPSTREAM AS FOLLOWS:

d)

INSTALL NEW SANITARY SEWER LINES AND MANHOLES, INCLUDING TEES AT ALL PROPOSED SANITARY SEWER SERVICE CONNECTIONS. MAINTAIN UNINTERRUPTED SANITARY SEWER SERVICE WITH EXISTING SANITARY SEWER LINES DURING INSTALLATION OF NEW SANITARY SEWER LINES.

b)

TEST NEW SANITARY SEWER LINES AND MANHOLES FOR LEAKAGE.

c)

CONNECT NEW SANITARY SEWER LINE TO CITY OF LA MARQUE SANITARY SEWER SYSTEM, KEEPING THE EXISTING SANITARY SEWER LINE IN CONTINUOUS SERVICE.

d)

INSTALL NEW 6-INCH PVC, C900 SERVICE CONNECTIONS TO NEW SANITARY SEWER LINES. INCLUDE ALL COST FOR LABOR AND MATERIAL REQUIRED IN UNIT PRICE BID FOR SANITARY SEWER LATERAL (6") (PVC).

e)

COMPLETE NEW SANITARY SEWER CONNECTIONS TO ALL EXISTING SANITARY SEWER LINES, THEN ABANDON THE EXISTING SANITARY SEWER LINES.
20.

CONSTRUCT PROPOSED WATER LINE AS FOLLOWS:

d)

MAINTAIN UNINTERRUPTED WATER SERVICE WITH EXISTING WATER LINES DURING INSTALLATION OF NEW WATER LINES, INCLUDING ALL FIRE HYDRANTS.

b)

TEST NEW WATER LINES FOR LEAKAGE. DISINFECT WATER LINES AFTER PASSING THE LEAKAGE TEST.

c)

CONNECT NEW WATER LINE TO CITY OF LA MARQUE WATER SUPPLY SYSTEM, KEEPING THE EXISTING WATER LINE AND ALL FIRE HYDRANTS IN CONTINUOUS SERVICE. CONNECT EXISTING WATER LINES TO NEW WATER LINES AT EACH STREET INTERSECTION TO AVOID DEAD ENDS.

d)

INSTALL SERVICE CONNECTIONS TO EXISTING WATER METERS.

e)

COMPLETE NEW WATER LINE CONNECTIONS TO ALL EXISTING WATER LINES, THEN ABANDON THE EXISTING WATER LINES.
21.

THE CONTRACTOR SHALL CUT AND RESTORE EXISTING PAVEMENT AS REQUIRED TO CONSTRUCT PROPOSED WATER LINES AND SANITARY SEWER. EXISTING PAVEMENT WILL BE RESTORED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:

d)

EXISTING ASPHALT PAVEMENT AND TEMPORARY PAVEMENT:

SAW CUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT. CONSTRUCT 12-INCH DEPTH ASPHALT STABILIZED BASE AND 2-INCH HMAC OVERLAY.

b)

EXISTING CONCRETE PAVEMENT RESTORED AS PERMANENT:

SAW CUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT. CLEAN EXISTING REINFORCEMENT AND TIE INTO NEW WORK. CONSTRUCT 9-INCH DEPTH REINFORCED CONCRETE PAVEMENT WITH REINFORCING STEEL NO. 4 BARS AT 18-INCH SPACING (BOTH WAYS).
- STATE OF TEXAS

DANNY LUU

91884

LICENSED PROFESSIONAL ENGINEER

Dannyluu

7/1/2020

CONSOR

F-12040

©2020

Texas Department of Transportation

IH 45

WATER LINE AND
SANITARY SEWER
GENERAL NOTES

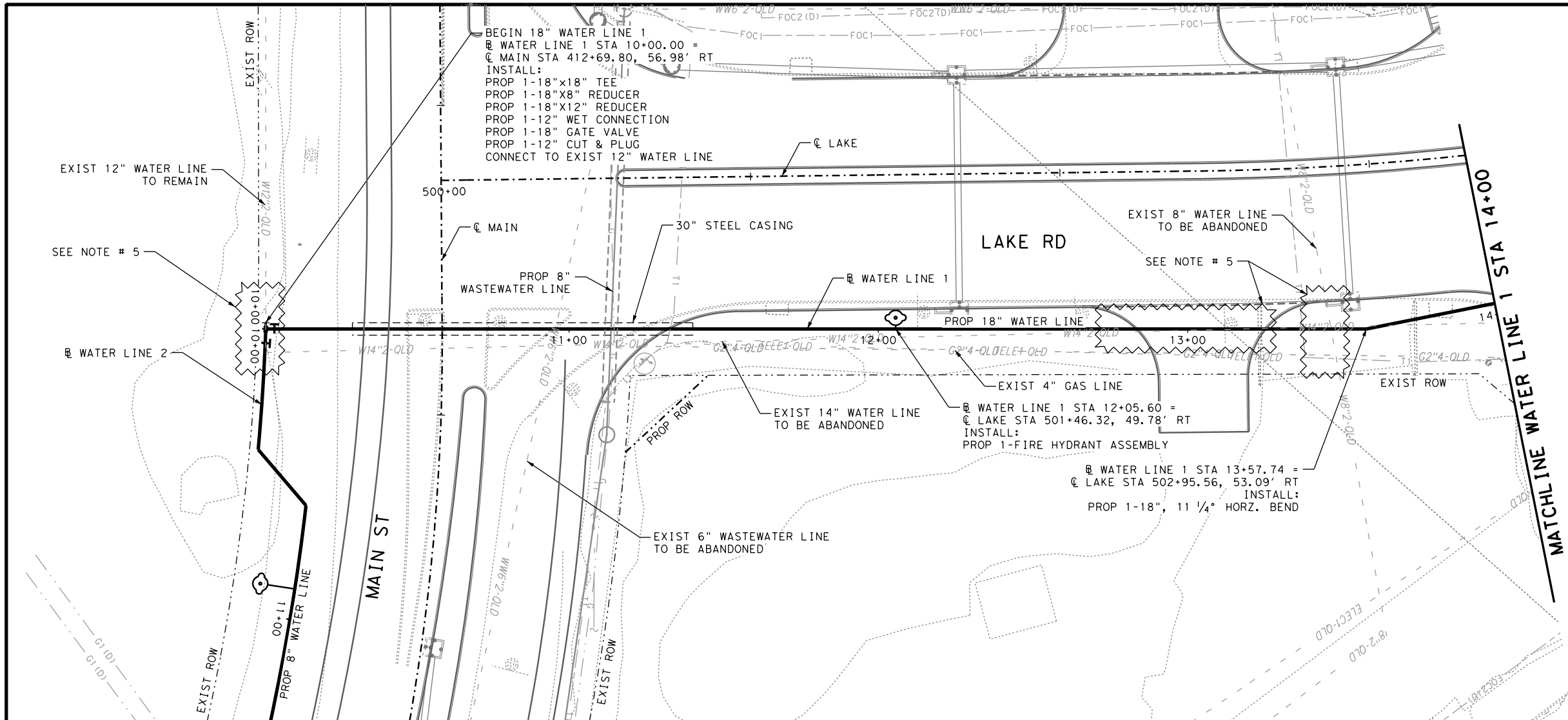
SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1494
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

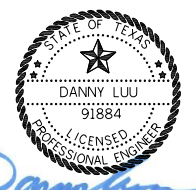
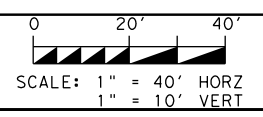
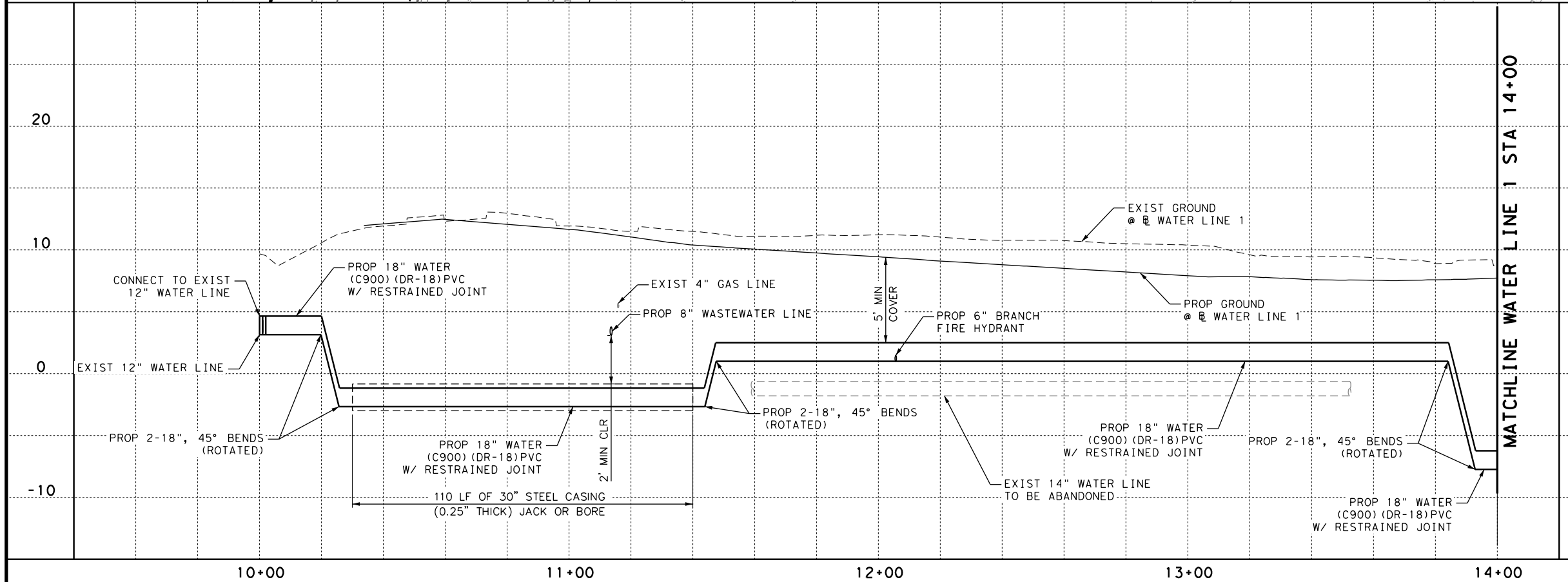
c:\bms\pwe-useas+-006\hoi1.tran\dms07918\A_1H45_UCN01.dgn
11:25:39 AM
7/1/2020

7/1/2020 11:25:39 AM

c:\bms\pwe-useas+-006\hoi1.tran\dms07918\A_1H45_UCN01.dgn



- NOTES:
1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
 2. PROPOSED STORM SEWER SIZE & FLOWLINE ELAVATIONS ARE SGOWN ON STORM SEWER PLAN & PROFILE SHEETS.
 3. ALL ABANDONED WATERLINES WILL BE FILLED WITH FLOWABLE GROUT UNDER BID ITEM 401.
 4. SAWCUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT AT WATERLINE CROSSING.
 5. ANTICIPATED CONFLICT WITH ABANDONED EXISTING ASBESTOS CEMENT WATER LINE. SEE GENERAL NOTES FOR REMOVAL INFORMATION.



7/1/2020



IH 45

**WATER MAIN
REPLACEMENT
(LAKE RD)**

(BEGIN TO STA 14+00)

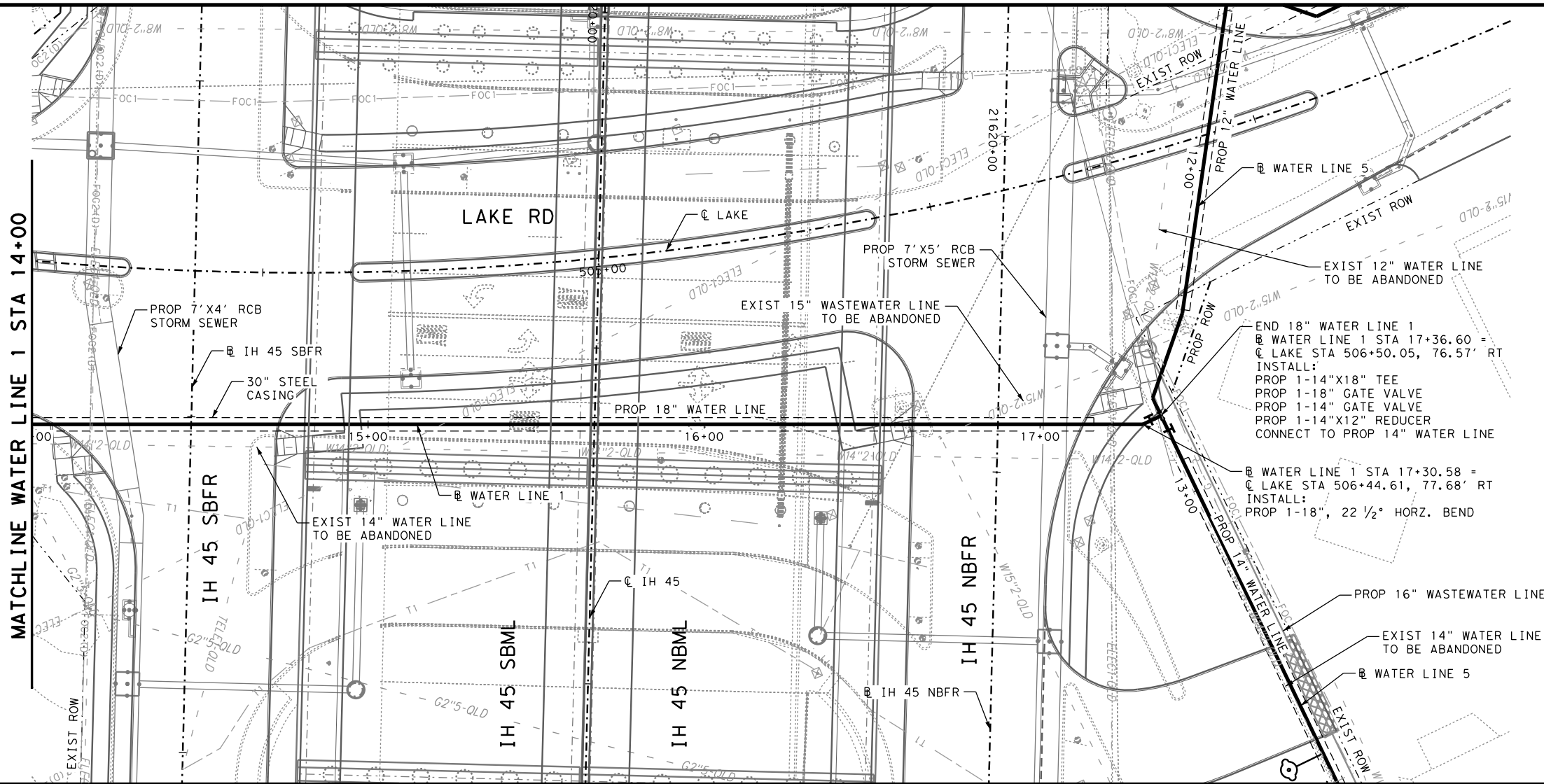
SHEET 1 OF 11

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1495
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

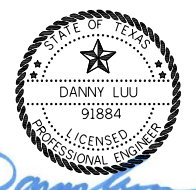
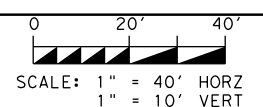
c:\bms\pwe-useeast-006\hoi1.tran\dms07918\A_IH45_UW01.dgn
11:26:02 AM
7/1/2020

7/1/2020 11:26:02 AM

c:\bms\pwe-useeast-006\hoi1.tran\dms07918\A_IH45_UW01.dgn



- NOTES:
1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
 2. PROPOSED STORM SEWER SIZE & FLOWLINE ELEVATIONS ARE SGOWN ON STORM SEWER PLAN & PROFILE SHEETS.
 3. ALL ABANDONED WATERLINES WILL BE FILLED WITH FLOWABLE GROUT UNDER BID ITEM 401.
 4. SAWCUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT AT WATERLINE CROSSING.



7/1/2020

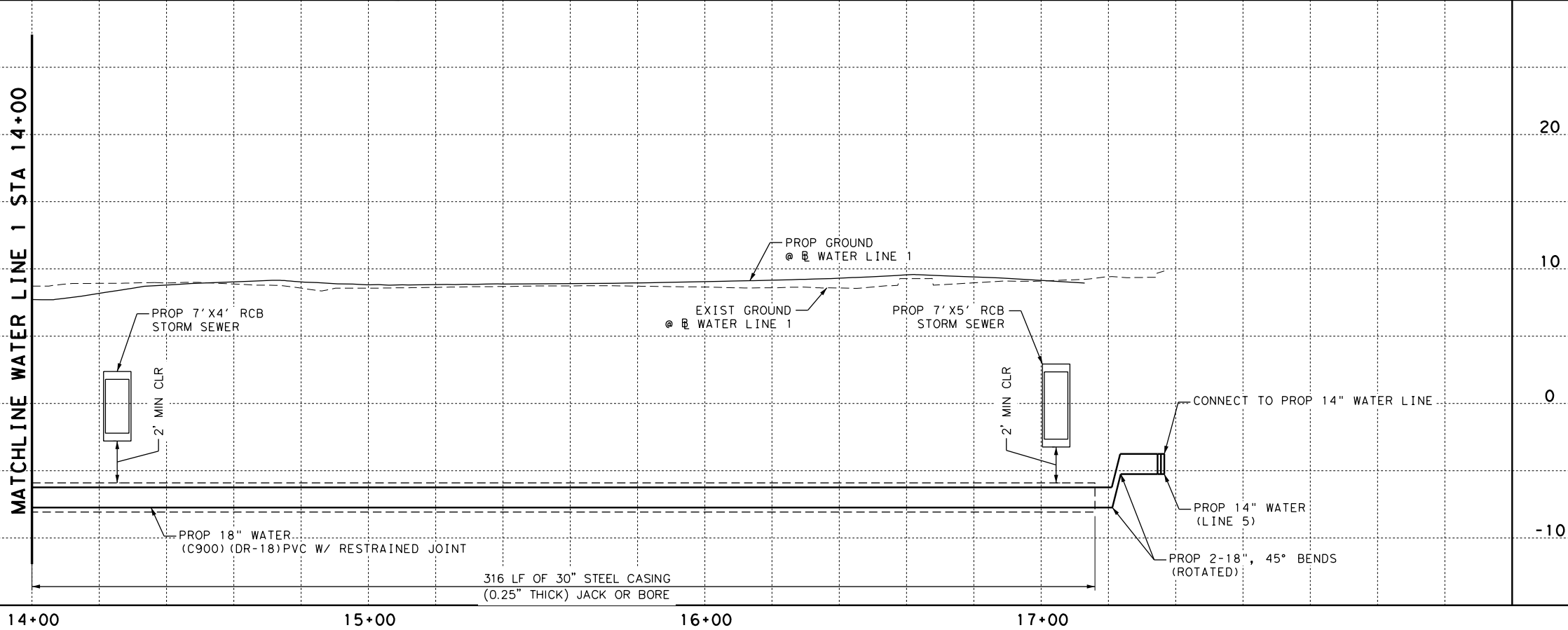


IH 45

**WATER MAIN
REPLACEMENT
(LAKE RD)
(STA 14+00 TO END)**

SHEET 2 OF 11

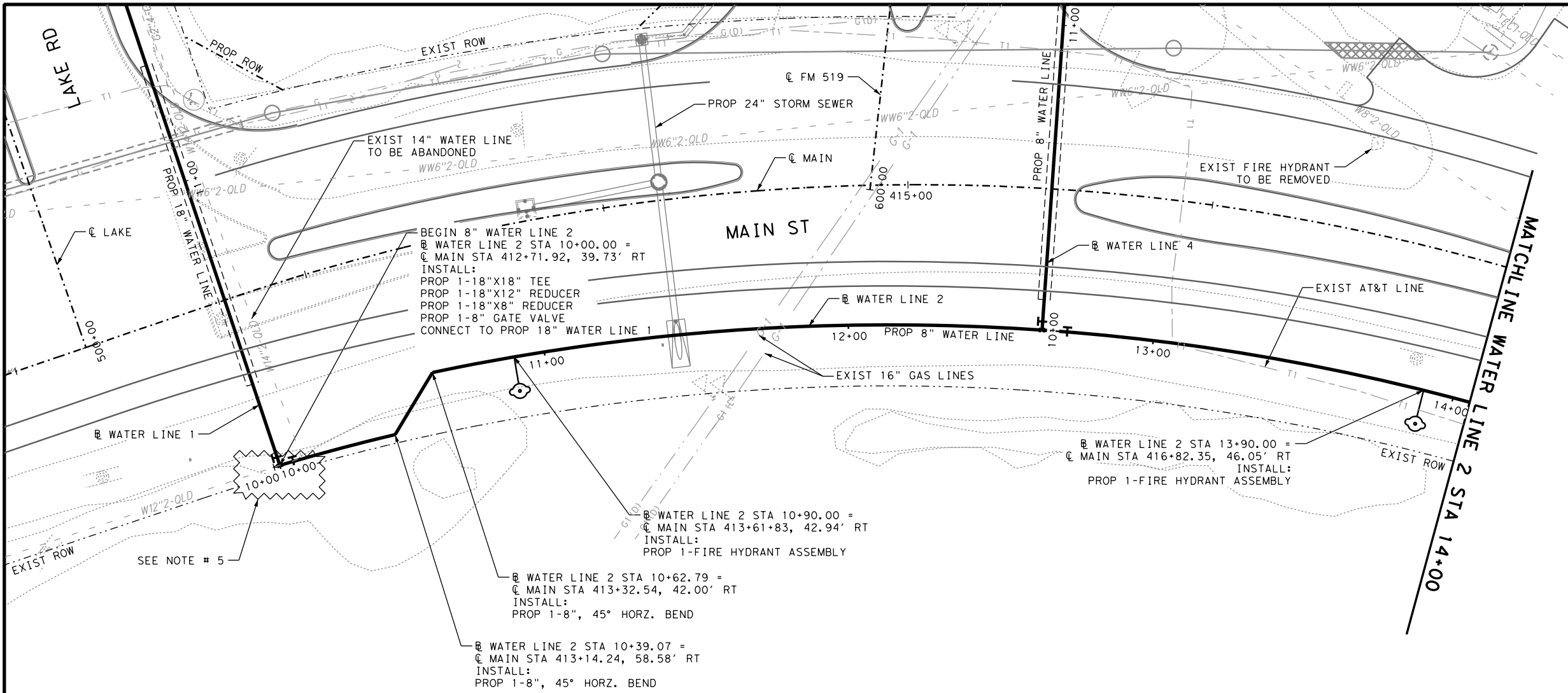
FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1496
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45



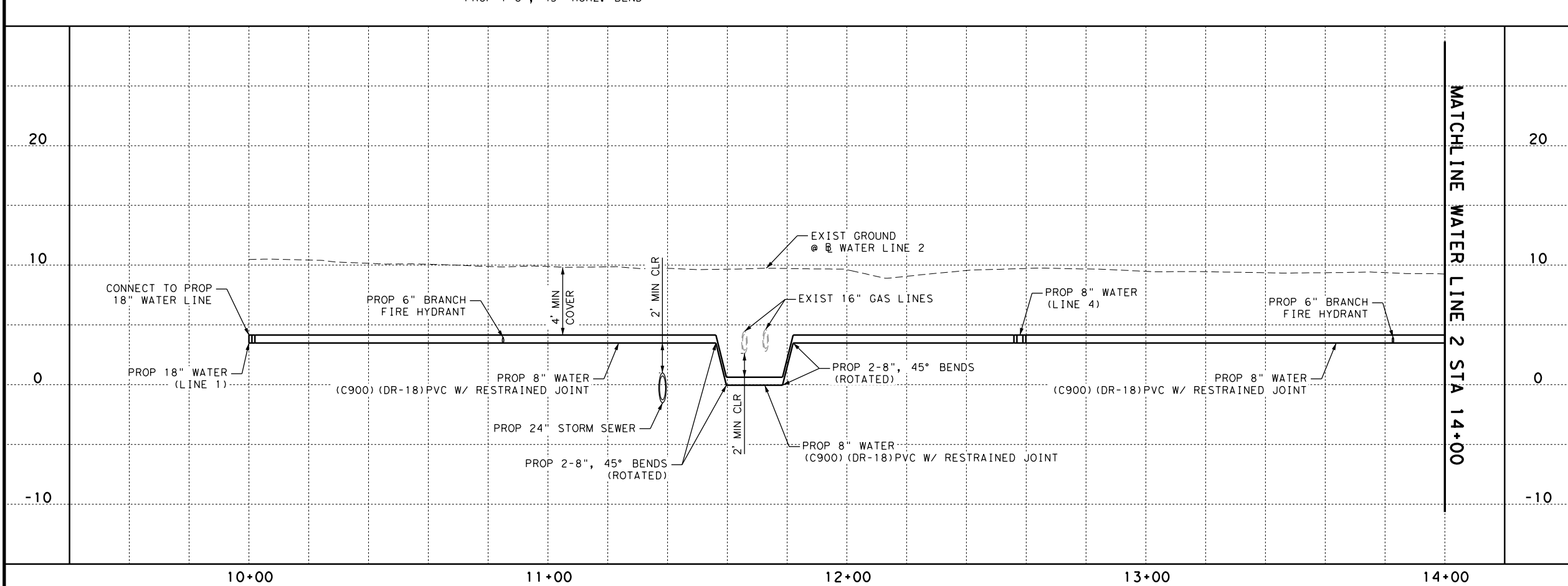
c:\bms\pwe-useeast-006\hoi1.tran\dms07918\A_IH45_UW02.dgn
11:26:21 AM
7/1/2020

7/1/2020 11:26:21 AM

c:\bms\pwe-useeast-006\hoi1.tran\dms07918\A_IH45_UW02.dgn



- NOTES:
1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
 2. PROPOSED STORM SEWER SIZE & FLOWLINE ELAVATIONS ARE SGOWN ON STORM SEWER PLAN & PROFILE SHEETS.
 3. ALL ABANDONED WATERLINES WILL BE FILLED WITH FLOWABLE GROUT UNDER BID ITEM 401.
 4. SAWCUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT AT WATERLINE CROSSING.
 5. ANTICIPATED CONFLICT WITH ABANDONED EXISTING ASBESTOS CEMENT WATER LINE. SEE GENERAL NOTES FOR REMOVAL INFORMATION.



020'

40'

SCALE: 1" = 40' HORZ
1" = 10' VERT

STATE OF TEXAS

DANNY LUU

91884

LICENSED PROFESSIONAL ENGINEER

Dannyluu

7/1/2020

CONSOR

F-12040

©2020

Texas Department of Transportation

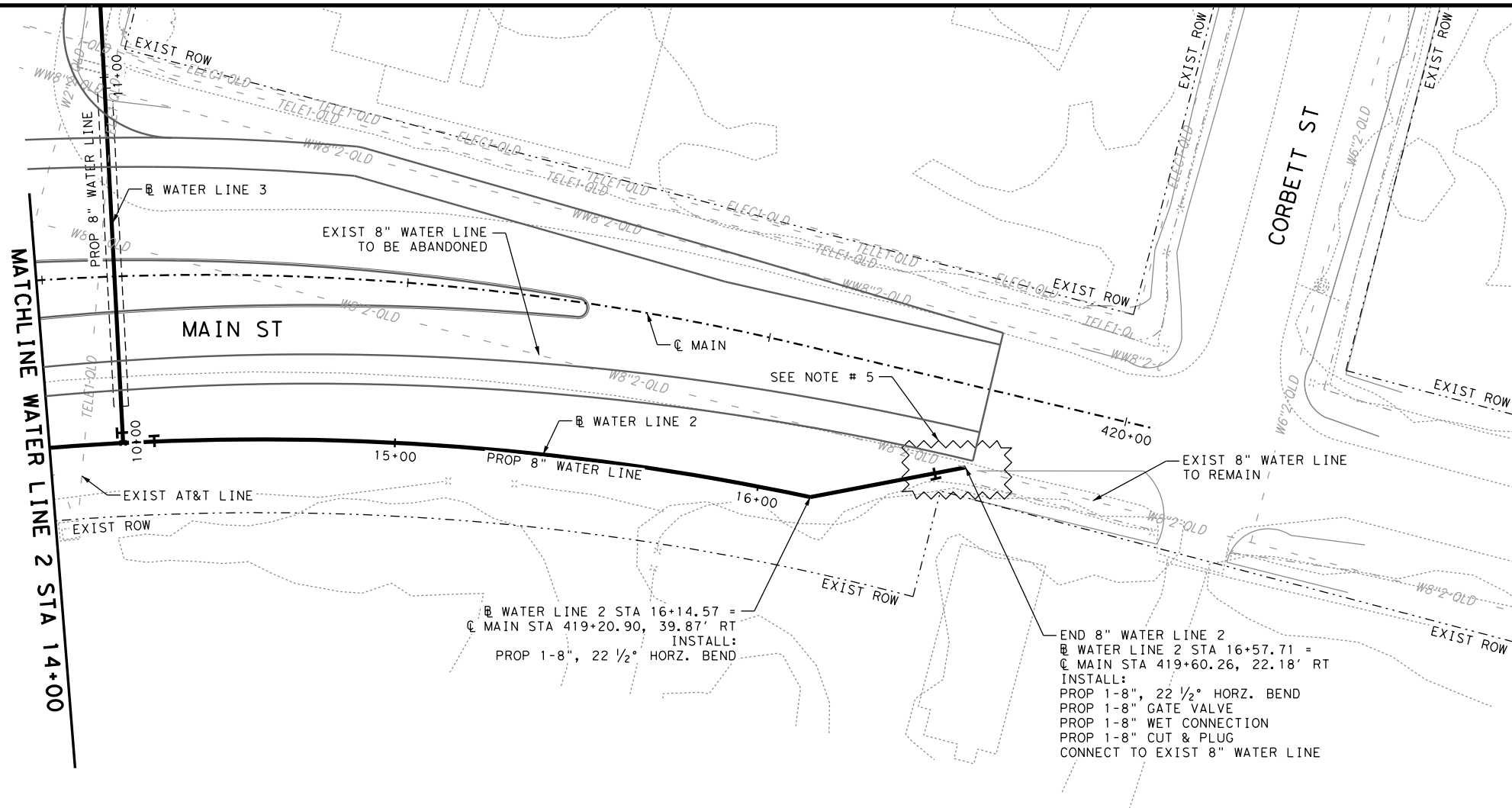
IH 45

WATER MAIN REPLACEMENT (MAIN ST)

(BEGIN TO STA 14+00)

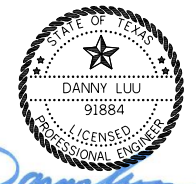
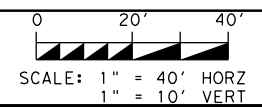
SHEET 3 OF 11

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1497
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45



NOTES:

1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
2. PROPOSED STORM SEWER SIZE & FLOWLINE ELEVATIONS ARE SHOWN ON STORM SEWER PLAN & PROFILE SHEETS.
3. ALL ABANDONED WATERLINES WILL BE FILLED WITH FLOWABLE GROUT UNDER BID ITEM 401.
4. SAWCUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT AT WATERLINE CROSSING.
5. ANTICIPATED CONFLICT WITH ABANDONED EXISTING ASBESTOS CEMENT WATER LINE. SEE GENERAL NOTES FOR REMOVAL INFORMATION.



7/1/2020



F-12040
©2020



IH 45

**WATER MAIN
REPLACEMENT
(MAIN ST)**
(STA 14+00 TO END)

SHEET 4 OF 11

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1498
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

BEGIN 8" WATER LINE 3
@ WATER LINE 3 STA 10+00.00 =
@ MAIN STA 417+20.58, 45.52' RT
INSTALL:
PROP 1-8" TEE
PROP 2-8" GATE VALVE
CONNECT TO PROP 8" WATER LINE

EXIST 8" WATER LINE
TO BE ABANDONED

18" STEEL CASING

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

SEE NOTE # 5

END 8" WATER LINE 3
@ WATER LINE 3 STA 11+27.15 =
@ MAIN STA 417+18.63, 81.61' LT
INSTALL:
PROP 1-8" WET CONNECTION
PROP 1-8" 22 1/2° HORZ. BEND
CONNECT TO EXIST 8" WATER LINE
(TO BE FIELD VERIFY)

EXIST 8" WASTEWATER LINE
TO REMAIN

CONNECT TO PROP 8" WATER LINE

PROP 8" WATER
(LINE 2)

87 LF OF 18" STEEL CASING
(0.25" THICK) JACK OR BORE

PROP GROUND
@ WATER LINE 3

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

EXIST 8" WASTEWATER LINE

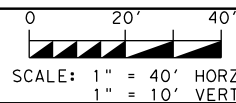
EXIST 8" WASTEWATER LINE

CONNECT TO EXIST
8" WATER LINE

PROP 8" WATER
(C900) (DR-18) PVC
W/ RESTRAINED JOINT

NOTES:

1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
2. PROPOSED STORM SEWER SIZE & FLOWLINE ELAVATIONS ARE SGOWN ON STORM SEWER PLAN & PROFILE SHEETS.
3. ALL ABANDONED WATERLINES WILL BE FILLED WITH FLOWABLE GROUT UNDER BID ITEM 401.
4. SAWCUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT AT WATERLINE CROSSING.
5. ANTICIPATED CONFLICT WITH ABANDONED EXISTING ASBESTOS CEMENT WATER LINE. SEE GENERAL NOTES FOR REMOVAL INFORMATION.



Danny Luu

7/1/2020



F-12040
©2020

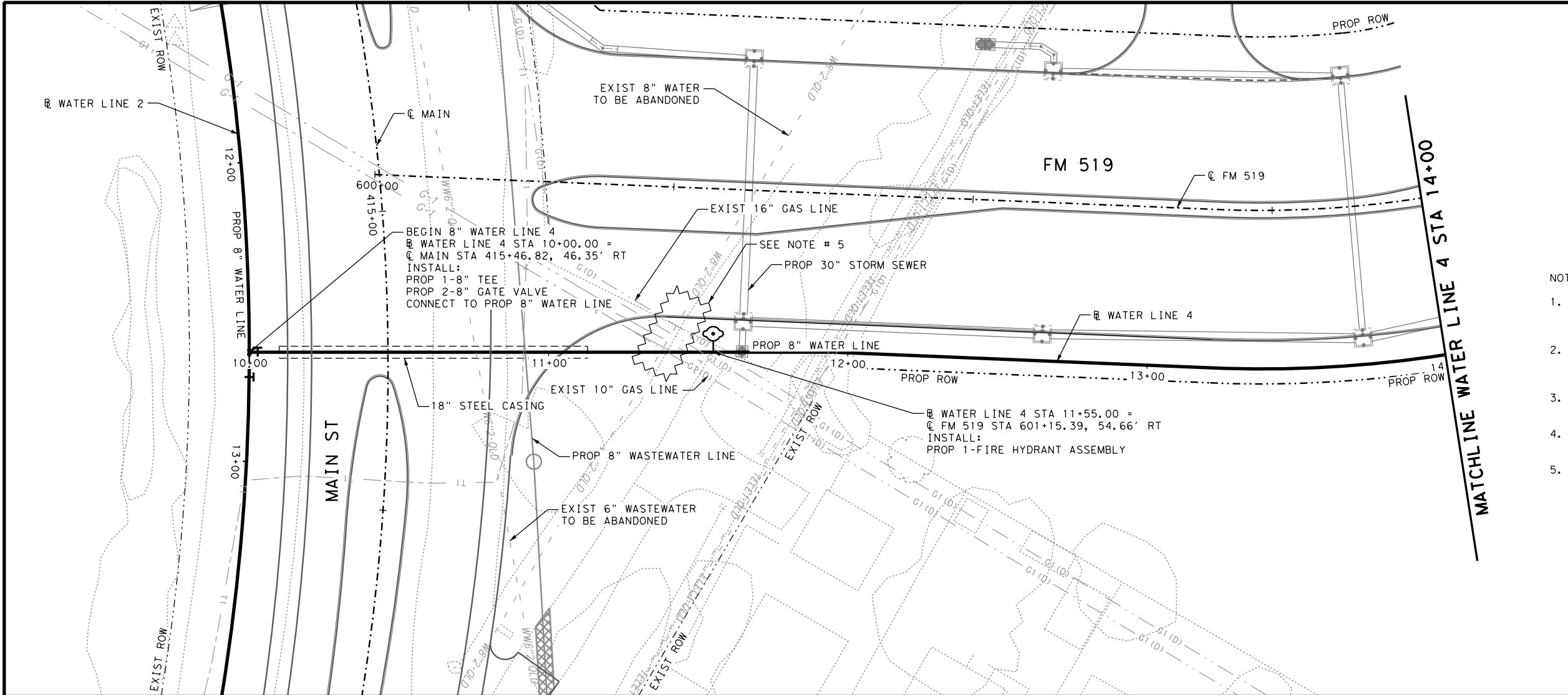


IH 45

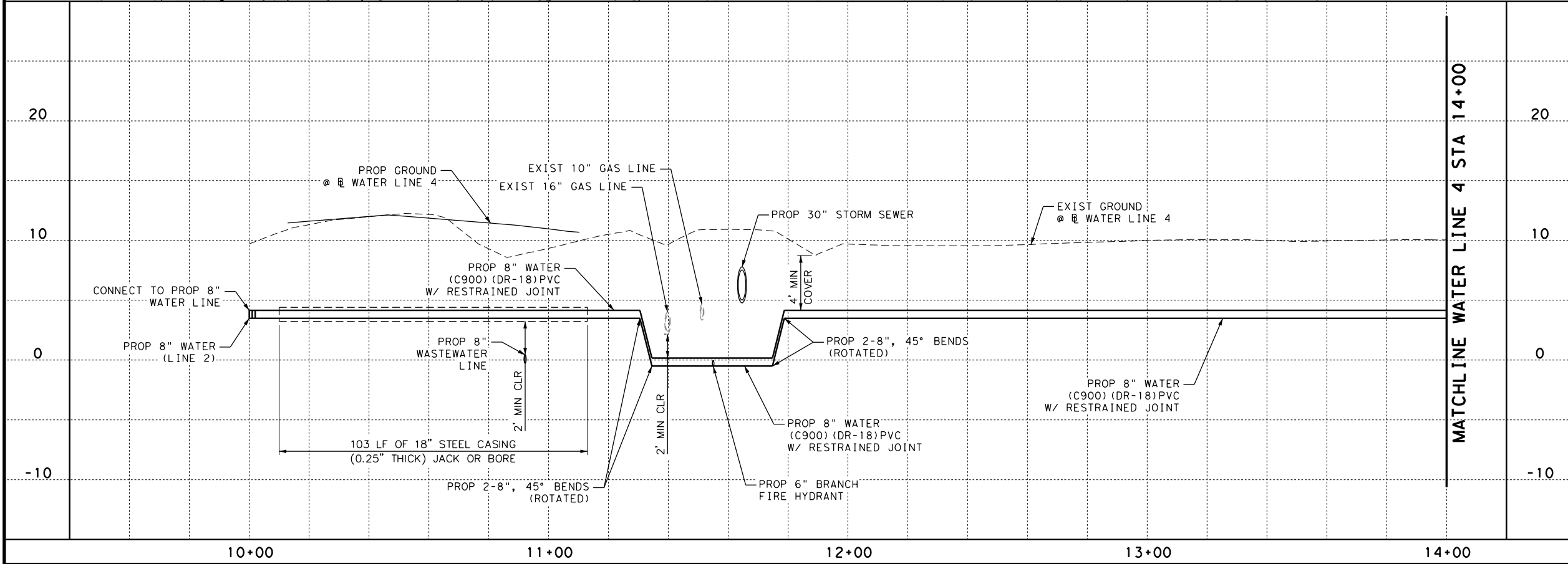
WATER MAIN
REPLACEMENT
(MAIN ST)
(BEGIN TO END)

SHEET 5 OF 11

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1499
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45



- NOTES:
1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
 2. PROPOSED STORM SEWER SIZE & FLOWLINE ELAVATIONS ARE SGOWN ON STORM SEWER PLAN & PROFILE SHEETS.
 3. ALL ABANDONED WATERLINES WILL BE FILLED WITH FLOWABLE GROUT UNDER BID ITEM 401.
 4. SAWCUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT AT WATERLINE CROSSING.
 5. ANTICIPATED CONFLICT WITH ABANDONED EXISTING ASBESTOS CEMENT WATER LINE. SEE GENERAL NOTES FOR REMOVAL INFORMATION.



020'40'

SCALE: 1" = 40' HORZ
1" = 10' VERT

STATE OF TEXAS
DANNY LUU
91884
LICENSED PROFESSIONAL ENGINEER

Danny Luu

7/1/2020

CONSOR

F-12040
©2020

Texas Department of Transportation

IH 45

WATER MAIN REPLACEMENT (FM 519)
(BEGIN TO STA 14+00)

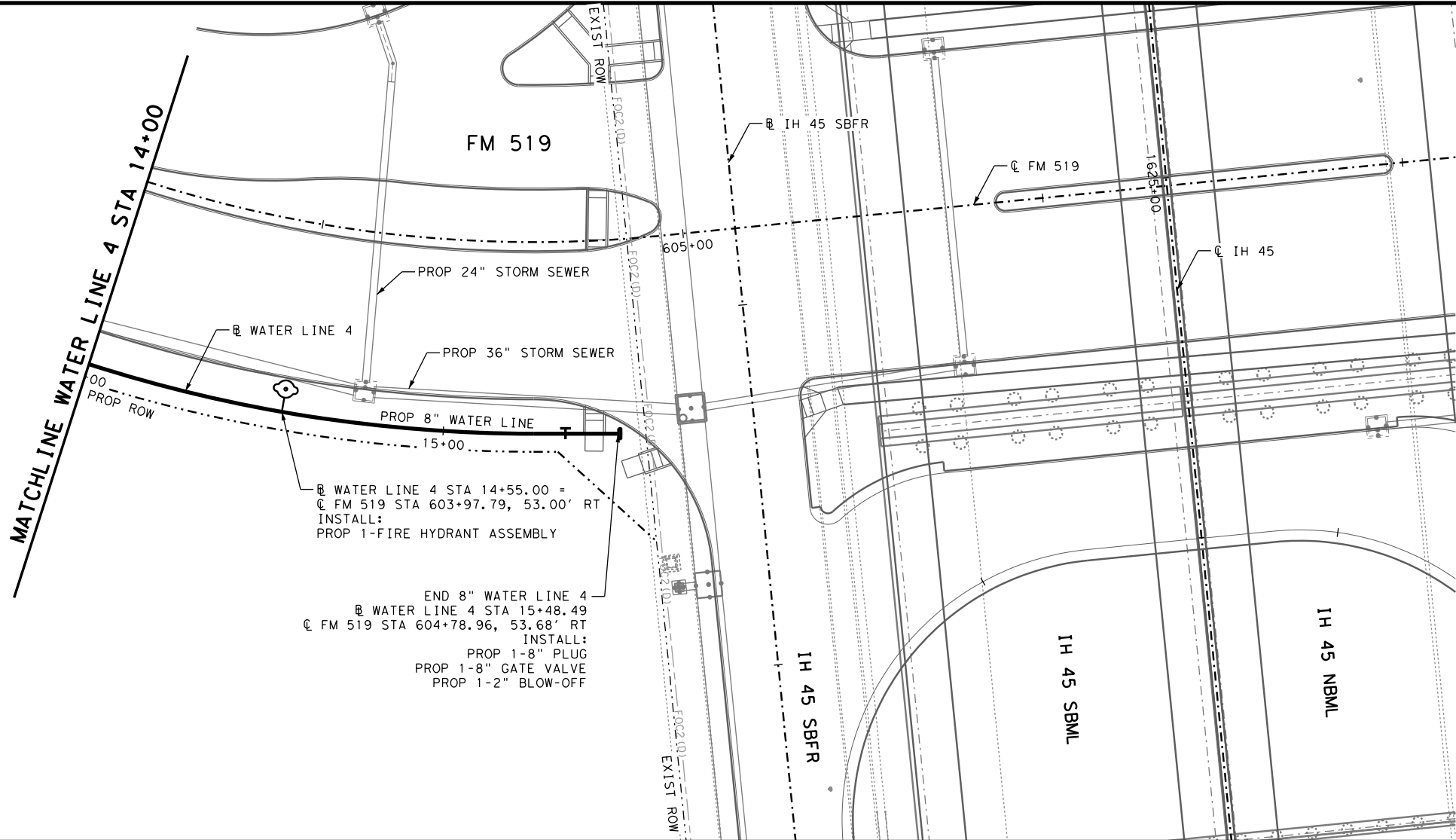
SHEET 6 OF 11

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1500
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

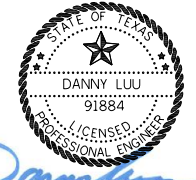
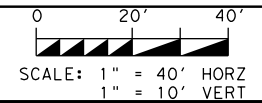
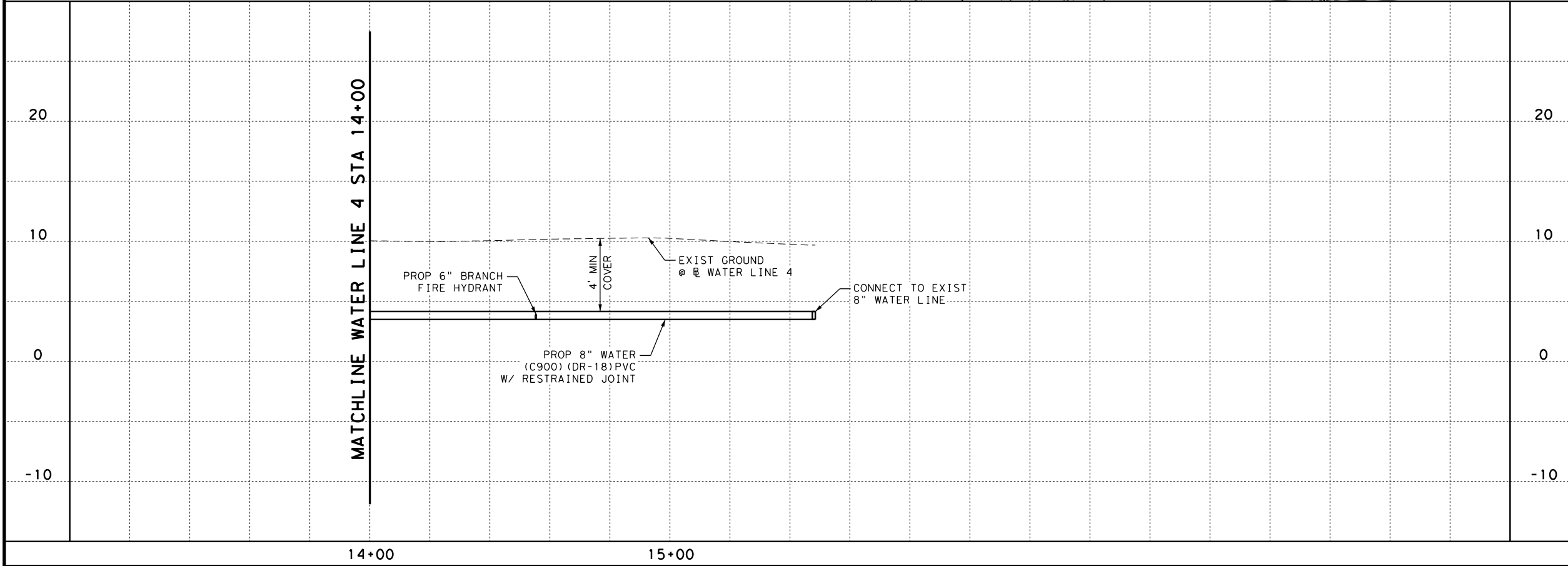
c:\bms\pwe-useeast-006\hoi1.tran\dms07918\VA_IH45_UW06.dgn
11:27:48 AM
7/1/2020

7/1/2020 11:27:48 AM

c:\bms\pwe-useeast-006\hoi1.tran\dms07918\VA_IH45_UW06.dgn



- NOTES:
1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
 2. PROPOSED STORM SEWER SIZE & FLOWLINE ELAVATIONS ARE SGOWN ON STORM SEWER PLAN & PROFILE SHEETS.
 3. ALL ABANDONED WATERLINES WILL BE FILLED WITH FLOWABLE GROUT UNDER BID ITEM 401.
 4. SAWCUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT AT WATERLINE CROSSING.



7/1/2020



F-12040
©2020



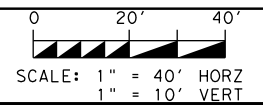
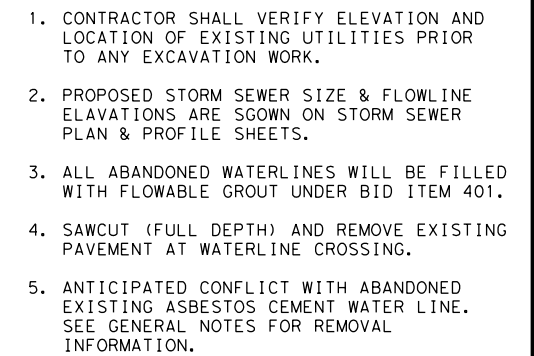
IH 45

**WATER MAIN
REPLACEMENT
(FM 519)**

(STA 14+00 TO END)

SHEET 7 OF 11

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1501
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45



7/1/2020



F-12040
©2020



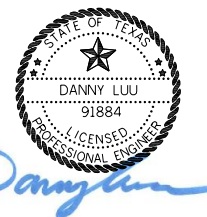
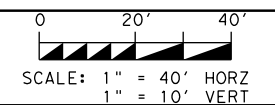
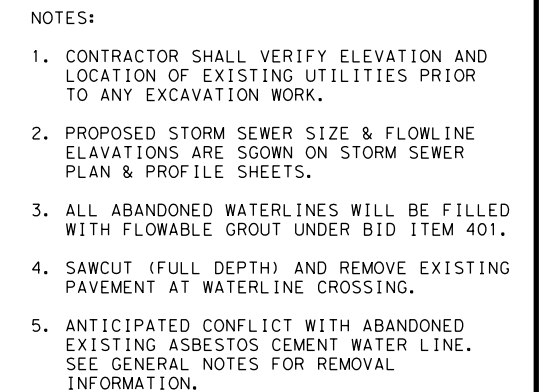
IH 45

**WATER MAIN
REPLACEMENT
(FM 519)**

(BEGIN TO STA 13+50)

SHEET 8 OF 11

FED RD DIV NO.	FEDERAL AID PROJECT			SHEET NO.
6				1502
STATE	DISTRICT	COUNTY		
TEXAS	HOU	GALVESTON		
CONTROL	SECTION	JOB	HIGHWAY	
0500	04	103, etc.	1H 45	



7/1/2020



F-12040
©2020



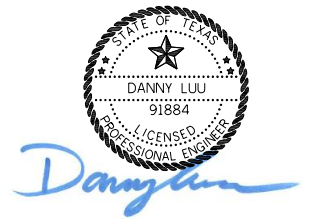
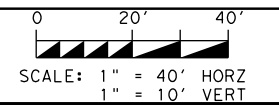
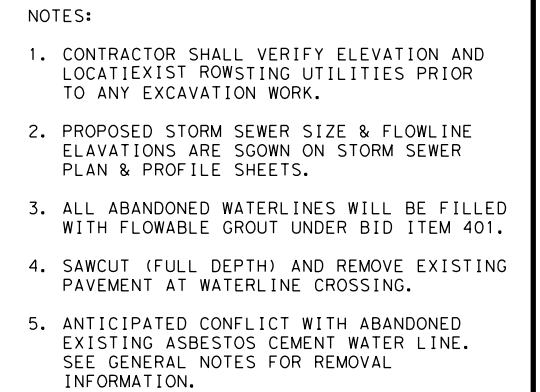
I H 45

**WATER MAIN
REPLACEMENT
(FM 519)**

(STA 13+50 TO STA 17+00)

SHEET 9 OF 11

FED RD DIV. NO.	FEDERAL AID PROJECT		SHEET NO.
6			1503
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103.e+e.	1H 45



7/1/2020



F-12040
©2020



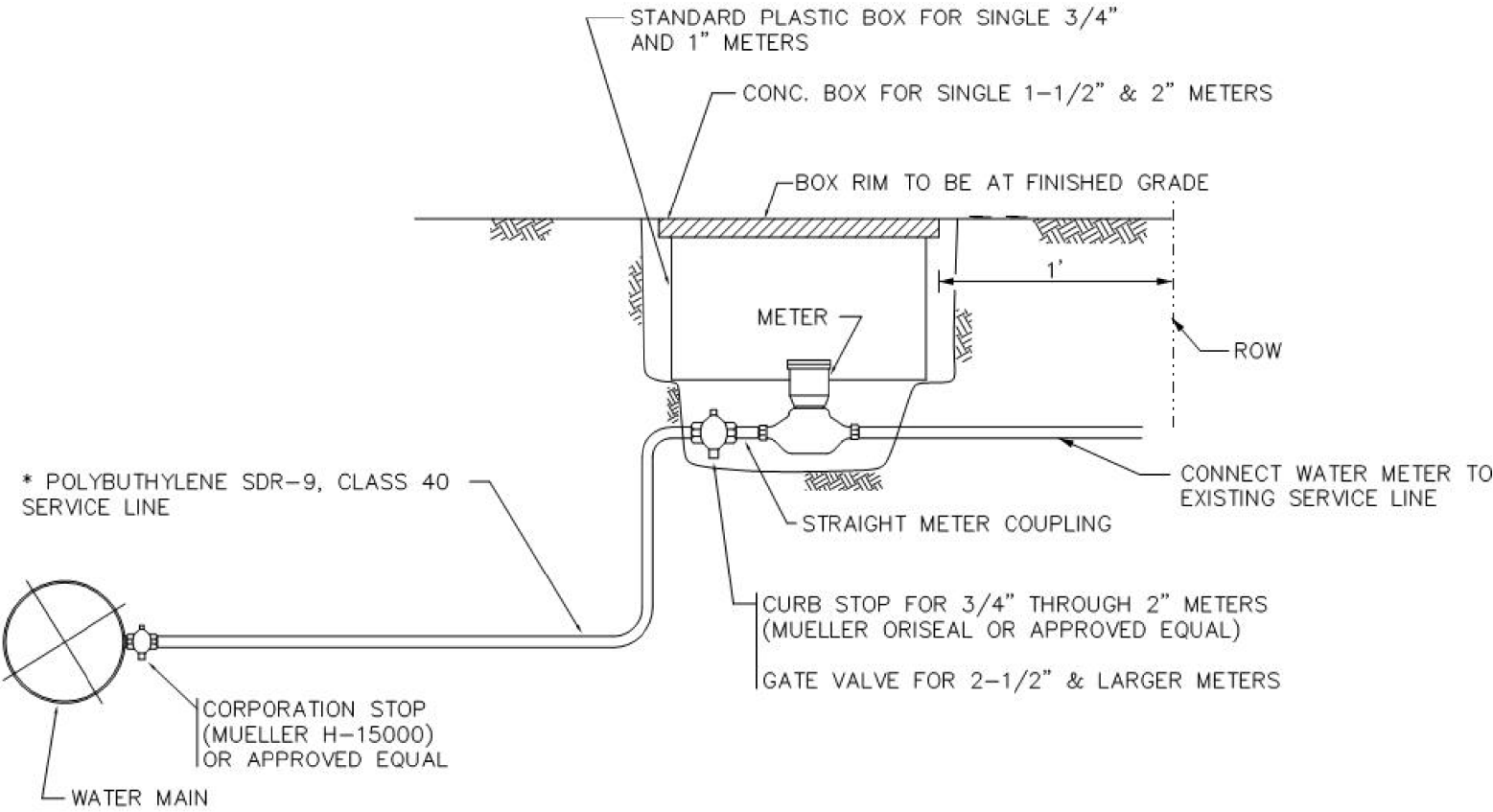
IH 45

**WATER MAIN
REPLACEMENT
(FM 519)
(STA 17+00 TO END)**

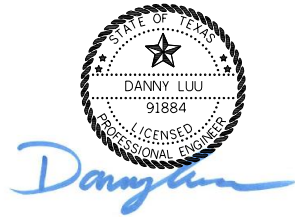
SHEET 10 OF 11

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1504
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	1H 45

- * 3/4" POLY TUBING FOR 3/4" X 5/8" METER INSTALLATION FOR SINGLE SERVICE TAP.
- * 1" POLY TUBING FOR 1" METER INSTALLATION FOR DOUBLE SERVICE TAP.



WATER SERVICE CONNECTION



7/1/2020



F-12040
©2020

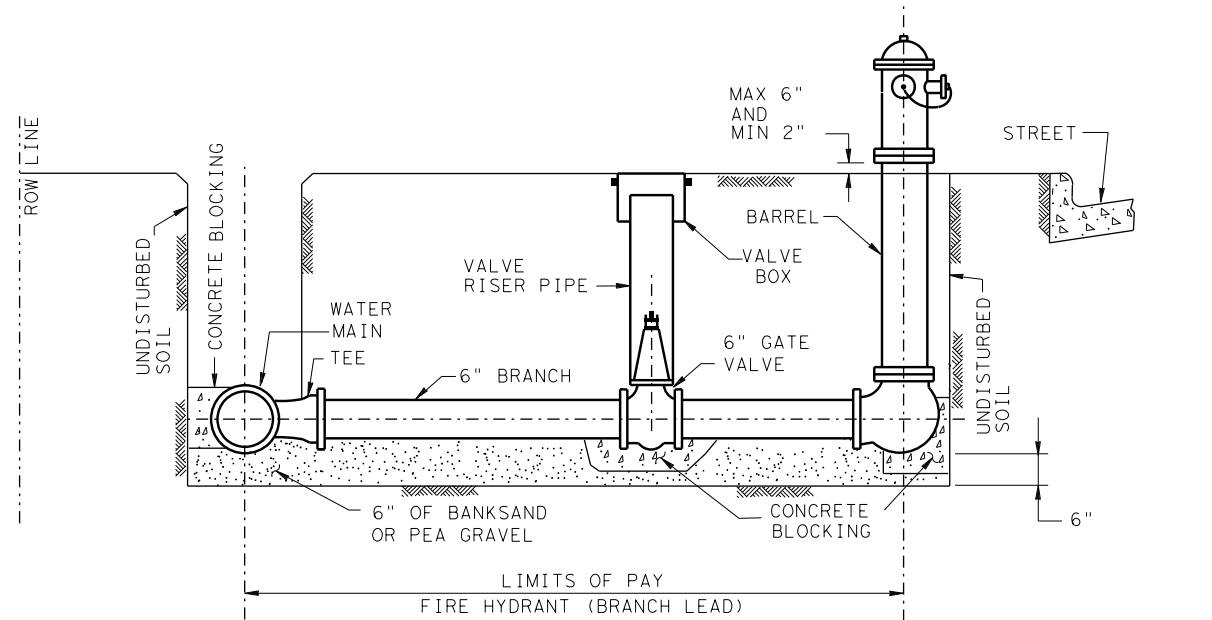


IH 45

MISCELANEOUS WATER
DETAILS

SHEET 1 OF 1			
FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1511
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

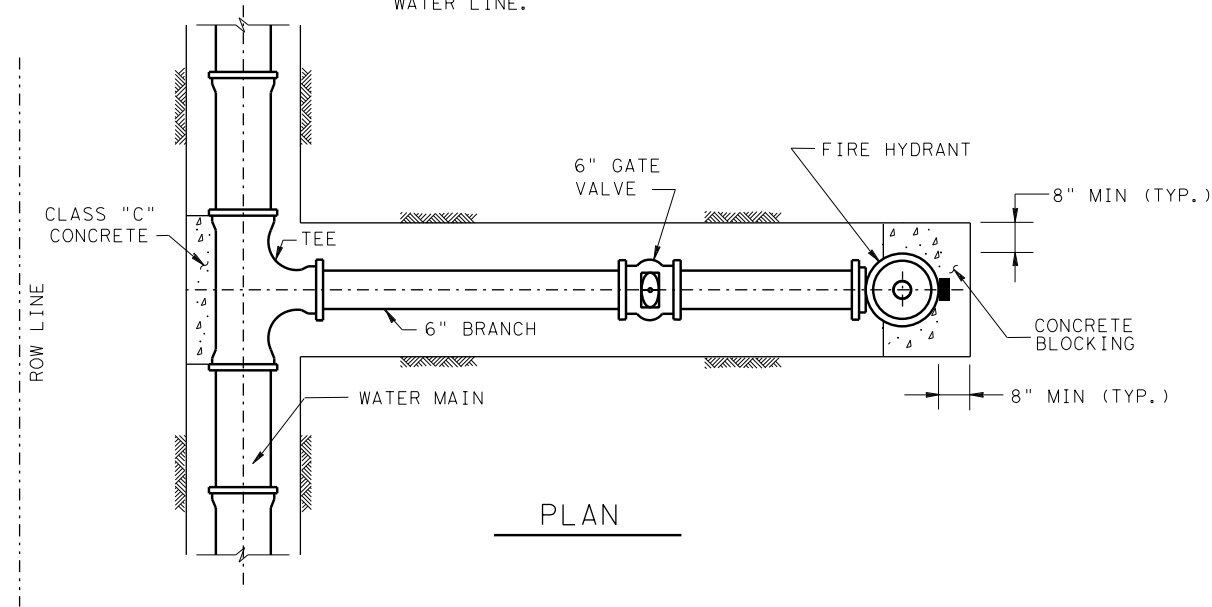
DATE: 7/1/2020 11:34:05 AM
FILE: c:\bms\pwe-useast-006\ha1.tran\dms18985\WLS-11 (MOD).dgn



SECTION

NOTES:

1. FIRE HYDRANT ASSEMBLY INCLUDES HYDRANT, BARREL, GATE VALVE w/ BOX, AND RISER PIPE.
2. ON CURB AND GUTTER ROADWAYS, LOCATE FIRE HYDRANTS AT PC'S OF INTERSECTION CURB RADIUS, 3 FT. BEHIND CURB OR PROJECTED FUTURE CURB.
3. ON OPEN-DITCH ROADWAYS, LOCATE HYDRANTS WITHIN 5 FT. OF THE RIGHT-OF-WAY LINES.
4. ENSURE FIRE HYDRANT NOZZLE FACES THE STREET.
5. LOCATE HYDRANT VALVE IMMEDIATELY ADJACENT TO WATER LINE.



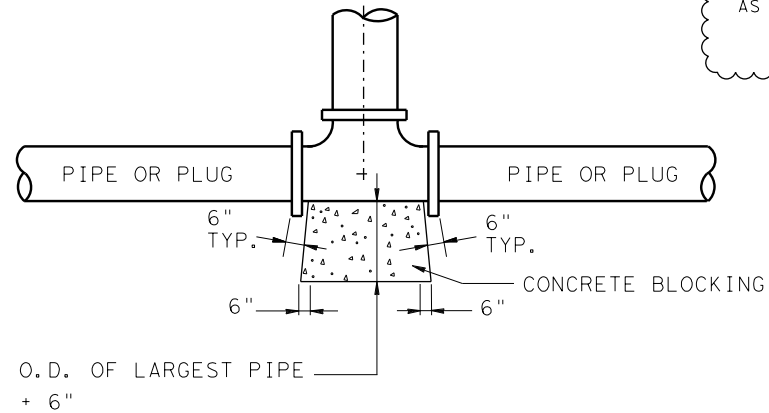
PLAN

STANDARD

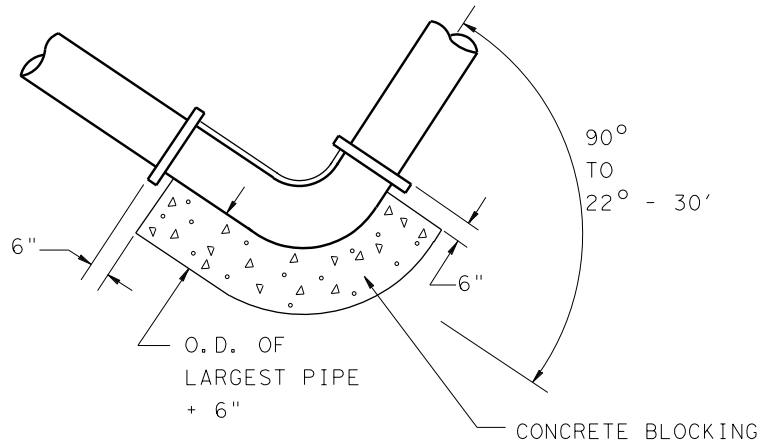
FIRE HYDRANT DETAIL

(NOT TO SCALE)

NOTE: MINIMUM THICKNESS OF THRUST IS THE O.D. OF LARGEST PIPE + 6 IN.



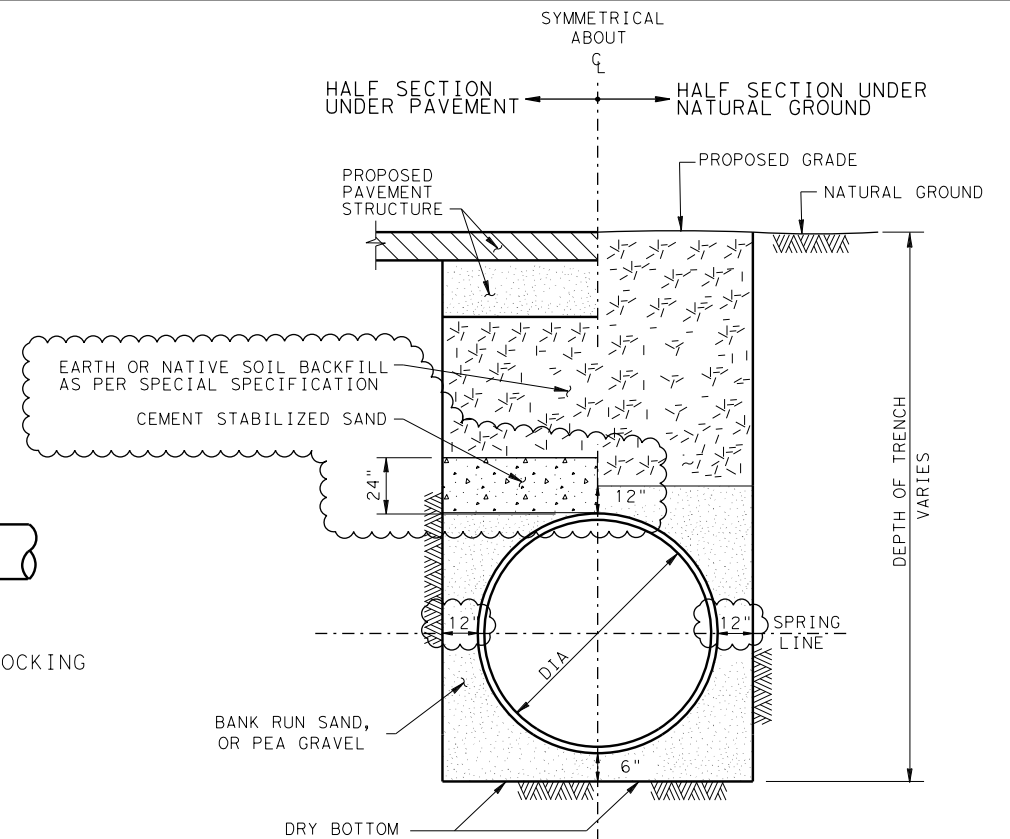
DETAIL "A"



DETAIL "B"

CONCRETE BLOCKING DETAILS

(NOT TO SCALE)

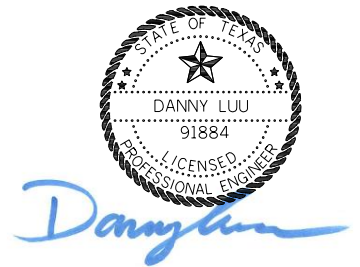


WATER DISTRIBUTION MAIN

BEDDING AND BACKFILL FOR

OPEN CUT TRENCHES

(NOT TO SCALE)



7/1/2020



WATER LINE STANDARD

WLS-II (MOD)

FILE:	STDF5.DGN	DN: TxDot	CK: TxDot	DW: TxDot	CK: TxDot
© TxDOT	FEBRUARY 2011	DIST	FED REG	PROJECT NO.	SHEET
REVISIONS	HOU	6			1513
03/15 2014 SPECS	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	GALVESTON	0500	04	03	45

c:\bms\pwe-useast-006\ha1.tran\dms18985\WLS-11 (MOD).dgn STD F5

Attachment “B” Accounting Method



Actual Cost Method of Accounting

The utility accumulates cost under a work order accounting procedure prescribed by the Federal or State regulatory body and proposes to request reimbursement for actual direct and related indirect costs.



Lump Sum Method of Accounting

Utility proposed to request reimbursement based on an agreed lump sum amount supported by a detailed cost analysis.

Initial

Date

TxDOT

Initial

Date

Utility

Attachment “C” Schedule of Work

Estimated Start Date: October 1, 2020, (subject to physical work restrictions prior to the issuance of environmental clearance as required by the provisions of this agreement)

Estimated Duration (days): 150

Estimated Completion Date: April 1, 2021

Initial Date
TxDOT

Initial Date
Utility

Attachment “D”

Statement Covering Contract Work

(ROW-U-48)
(ROW-U-48-1, if applicable)

Initial Date
TxDOT

Initial Date
Utility



STATEMENT COVERING UTILITY CONSTRUCTION CONTRACT WORK
(AS APPEARING IN ESTIMATE)

Form ROW-U-48
(Rev. 3/19)
Page 1 of 1

U-Number: U15981

ROW CSJ Number: 0500-04-139 District: Houston
County: Galveston Highway No.: IH 45
Federal Project No.: _____

I, Bobby Hocking, Mayor, a duly authorized and qualified representative of
City of La Marque, Texas, hereinafter referred to as **Owner**, am fully cognizant of the
facts and make the following statements in respect to work which will or may be done on a contract basis as it appears in the
estimate to which this statement is attached.

It is more economical and/or expedient for **Owner** to contract this adjustment, or **Owner** is not adequately staffed or equipped
to perform the necessary work on this project with its own forces to the extent as indicate on the estimate.

Procedure to be Used in Contracting Work

- ☐ A. Solicitation for bids is to be accomplished through open advertising and contract is to be awarded to the lowest
qualified bidder who submits a proposal in conformity with the requirements and specifications for the work to be
performed. Associated bid tabulations will be provided to the **State**.
- ☐ B. Solicitation for bids is to be accomplished by circulating to a list of pre-qualified contractors or known qualified
contractors and such contract is to be awarded to the lowest qualified bidder who submits a proposal in conformity
with the requirements and specifications for the work to be performed. Associated bid tabulations will be provided to
the **State**. Such presently known contractors are listed below:
- 1.
 - 2.
 - 3.
 - 4.
 - 5.
- ☐ C. The work is to be performed under an existing continuing contract under which certain work is regularly performed
for **Owner** and under which the lowest available costs are developed. The existing continuing contract will be made
available to the **State** for review at a location mutually acceptable to the **Owner** and the **State**. If only part of the
contract work is to be done under an existing contract, give detailed information by attachment hereto.
- ☐ D. The utility proposes to contract outside the foregoing requirements and therefore evidence in support of its proposal
is attached to the estimate in order to obtain the concurrence of the State, and the Federal Highway Administration
Division Engineer where applicable, prior to taking action thereon (approval of the agreement shall be considered as
approval of such proposal).
- ☒ E. The utility plans and specifications, with the consent of the State, will be included in the construction contract
awarded by the State. In the best interest of both the **State** and the **Owner**, the **Owner** requests the **State** to include
the plans and specifications for this work in the general contract for construction of Highway IH 45
in this area, so that the work can be coordinated with the other construction operations; and the construction
contract is to be awarded by the **State** to the lowest qualified bidder who submits a proposal in conformity with the
requirements and specifications for the work to be performed. If this option is chosen, attach form ROW-U-48-1, the
terms of which are incorporated herein by reference.

Signature

Date

Title

**Statement Covering Utility Construction Contract Work – In the State’s
Highway Construction Contract
(As Referenced in Form ROW-U-48, Option E)**

Work Responsibilities

- A. The **Utility** shall provide the following services under this contract:
- i. Responsible for engaging the services of a Texas Registered Professional Engineer to prepare drawings and technical specifications for relocations and adjustments along IH 45 From North of FM 519 to North of Texas City WYE.
 - ii. Provide the plans and specifications to the State to include in the current planning specifications and estimate package being prepared by representatives of the Texas Department of Transportation’s Galveston Area Office.
 - iii. Secure all necessary permitting as may be required for the installation of the Water line.
 - iv. Arrange and coordinate with the contractor, through the State, materials and equipment testing, rejection of all work not conforming to minimum requirements of the construction contract documents, maintenance of the proposed Water line during construction, and the relocation of Water line and connection of services to customers.
 - v. Advise the State of work that Utility determines should be corrected or rejected.
 - vi. Arrange, observe, and inspect all acceptance testing and notify the State of the results of these activities.
 - vii. Provide inspection services for the construction, notify the State of defects and deficiencies in the work, and observe actions of the contractor to correct such defects and deficiencies.
 - viii. Assume all responsibility for the maintenance of the existing Water line during and upon completion of the construction contract.
 - ix. Ensure all Texas Commission on Environmental Quality and all other regulatory rules, regulations and laws are strictly adhered to.
 - x. Prepare and submit both a certificate of substantial completion and a list of observed items requiring completion or correction for the relocations and adjustments to the Project Engineer for concurrence.
 - xi. Coordinate all construction activities performed by Utility’s staff for the relocations and adjustments through the Project Engineer.

B. The State shall provide the following services under this contract:

- i. Combine the Water line relocation and adjustment plans with the plans being prepared for the Project.
- ii. Review and approve the final construction plans prior to any construction-related activities. In order to ensure federal and/or state funding eligibility, projects must be authorized by the State prior to advertising for construction.
- iii. Advertise for construction bids, issue bid proposals, receive and tabulate the bids, and award and administer the contract for construction of the Project.
- iv. Negotiate and administer all field changes and change orders required for the Project. All change orders increasing construction costs for Utility's Project shall be submitted to Utility for review and approval together with an evaluation. Utility agrees to review and either approve or disapprove all change orders within five (5) business days after receipt of such order unless Utility Board's approval is necessary in which case Utility shall bring the item to Utility Board as soon as reasonably possible.
- v. Provide overall project management to supervise the day-to-day activities of the construction and monitor the activities of the contractor to promote the timely and efficient completion of the Project in accordance with the approved Plans and Specifications and construction schedule.
- vi. Conduct field observations and coordinate with Utility's inspectors and the contractor to cure defects and deficiencies in the construction prior to final acceptance.
- vii. Make timely payment to the contractor for work performed in connection with the Project.
- viii. Ensure access and permit Utility's inspectors and other authorized representatives to inspect the waterline construction at all times.
- ix. Conduct and coordinate final inspection of the Project in the presence of Utility's Engineer and Inspector, transmit final list of items to be completed or repaired and observe contractor correction of same.
- x. Maintain job file.

Attachment “E”

Utility Joint Use Acknowledgment – (ROW-U-JUAA) and/or Utility Installation Request – (Form 1082)

- ☐ Utility Joint Use Acknowledgment (ROW–U–JUAA)
- ☒ Utility Installation Review/Permit Number:

Initial Date
TxDOT

Initial Date
Utility

Attachment “F” Eligibility Ratio

Eligibility Ratio established: 100 %

- ☐ Non-interstate Highway (Calculation attached)
- ☒ Interstate Highway

Initial Date
TxDOT

Initial Date
Utility

Attachment “G” Betterment Calculation and Estimate

- ☐ Elective Betterment Ratio established: %
(Calculation attached)
- ☒ Forced Betterment
(Provide supporting documentation)
- ☐ Not Applicable

Initial Date
TxDOT

Initial Date
Utility

IH 45 Water line Forced Betterment:

Existing System:

8" Water line – Crosses FM 519, Lake Road and IH 45: The existing 8" water line conflicts with proposed work thru out the Lake Road, FM 519(west of IH 45) and IH 45 proposed work in multiple locations with the proposed storm sewer and bridge bents. The existing lines also crosses the realigned FM 519 at a 61-degree angle. This crossing also conflicts with proposed drainage system in multiple locations. This line is the water supply line for the multiple parcels between IH 45 SB Frontage Rd and Main Street (South of Lake Rd to Corbett St.) The length of this existing line is 1,641 LF.

14" Water line – Crosses IH 45 at Lake Road: The existing 14" water line crossing IH 45 conflicts with the proposed storm sewer along both the NB and SB Frontage road. The 14" line intersects the 12" line on the east side of Lak Rd. This line continues down the east side Main St to the end of the project.

12" Water line crossing Lake Road (East of IH 45): Due to the reconfiguration of Lake Road sections of this 12" line is a UAR violation since there will be existing valves in the proposed pavement and conflicts with proposed drainage system.

12" Water line along Main St. (West of IH 45): There is an existing 12" line that tie to the 14" line on the west side of Main St. This line supplies water to the northern section of

In order to eliminate all the conflicts due to the reconfiguration of the roads and drainage systems the multiple water lines within the project limit were also reconfigured. This reconfiguration has resulted in two forced betterments which include the following:

Crossing IH 45: The 8" and 14" crossing have been combined to a single crossing of 18" line to provide adequate room for the other utilities that are also crossing the intersection such as AT&T and CNP gas. The cross-sectional area of the existing pipes are as follows:

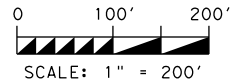
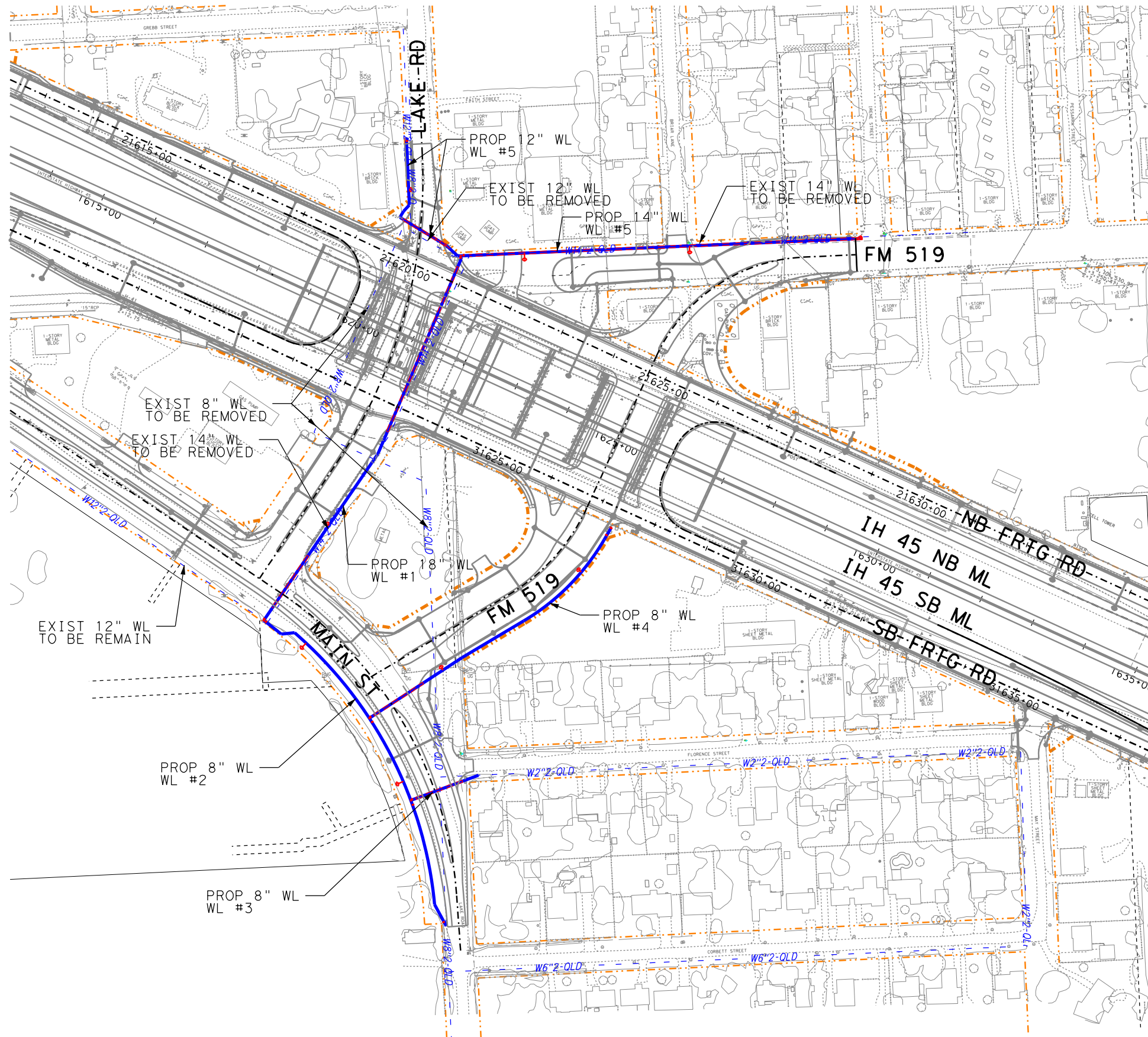
8" pipe = 0.3491 SF

14" pipe =1.0691 SF

Total Cross section Area = 1.418 SF is needed to match the existing system

A 16" line only provides 1.3963 SF which is too small so an 18" line providing a 1.761 SF was used. This increase in the cross-section area is considered a Forced Betterment for the crossing. The total amount of 18" pipe being used for this line is 737 LF.

8" line Along Realigned FM 519 (West of IH 45): The existing 8" line is being abandoned. This requires a new water line be installed to maintain water service with multiple properties that are south of Lake Rd. In order to reduce conflict points. The new 8" line tie into the existing 12" line and the 18" line on West side on Main St. This new 8" line includes a crossing extending up the realigned FM 519 and Main St west of the SB Frontage Rd. This new 8" line should be classified as a Forced Betterment since realigned FM 519 and new ROW required the existing 8" line be relocated to eliminate the conflicts. The proposed line is the same size as the existing line. The total amount of 8" line to be installed is 1,437 LF. This line is 549 LF of the total lines being replaced. See Water Better Layout for more information.



NO.	DATE	REVISION	APPROV.



F-12040



©2020

IH 45

WATERLINE BETTERMENT
EXHIBIT

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			-
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	104	IH 45

Attachment “H” Proof of Property Interest

☐ Supporting documentation of compensable property interest that establishes reimbursement eligibility as referenced in Texas Transportation Code §203.092.

☐ Property interest documented through applicable affidavits and required attachments.

☐ ROW-U-1A **and**

☐ ROW-U-1B

Or

☐ ROW-U-1C

☒ The roadway improvement project is designated as an Interstate Highway project; therefore, no supporting documentation of compensable interest is required.

Initial Date
TxDOT

Initial Date
Utility

STANDARD UTILITY AGREEMENT

U-Number: **U16125**

District: Houston
Federal Project No.:
ROW CSJ: 0500-04-139
Highway Project Letting Date: 08-2020

County: Galveston
Highway: IH 45
From: N of FM 519
To: N of Texas City WYE

This Agreement by and between the State of Texas, acting by and through the Texas Transportation Commission, ("**State**"), and City of La Marque, ("**Utility**"), acting by and through its duly authorized representative, shall be effective on the date of approval and execution by and on behalf of the **State**.

WHEREAS, the **State** has deemed it necessary to make certain highway improvements as designated by the **State** and approved by the Federal Highway Administration within the limits of the highway as indicated above (the "**Highway Project**");

WHEREAS, the proposed Highway Project will necessitate the adjustment, removal, and/or relocation of certain facilities of the **Utility** as indicated in the following statement of work: Adjustment of existing sanitary sewer utilities that are in conflict with the proposed reconstruction of IH 45 within the City of La Marque, Texas. Remove 485 LF of 15" sanitary line and 308 LF of 8" sanitary line from IH 45 from Lake road sta 506+51 to FM 519 609+51. Install 422 LF of 16" sanitary sewer from Lake road sta 506+51 to FM 519 609+51. Remove 347 LF of 21" sanitary line and 68 LF of 8" sanitary line crossing and along FM 519 Sta. 609+51 to Sta. 612+85. Install 418 LF of 21" sanitary line crossing and along FM 519 Sta. 609+51 to Sta. 612+85. Remove 441 LF of 24" force main at sta. 1663+00. Install 437LF of 24" force main Crossing IH 45 at Main sta. 1662+51; and more specifically as shown in the **Utility's** plans, specifications and estimated costs, which are attached hereto as Attachment "A".

WHEREAS, the **State** will participate in the costs of the adjustment, removal, and relocation of certain facilities to the extent as may be eligible for State and/or Federal participation.

WHEREAS, the **State**, upon receipt of evidence it deems sufficient, acknowledges the **Utility's** interest in certain lands and facilities that entitle it to reimbursement for the adjustment, removal, and relocation of certain of its facilities located upon the lands as indicated in the statement of work above.

NOW, THEREFORE, BE IT AGREED:

The **State** will pay to the **Utility** the costs incurred in adjustment, removal, and relocation of the **Utility's** facilities up to the amount said costs may be eligible for **State** participation.

All conduct under this agreement, including but not limited to the adjustment, removal, and relocation of the facility, the development and reimbursement of costs, any environmental requirements, and retention of records will be in accordance with all applicable federal and state laws, rules and regulations, including, without limitation, the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act, 42 U.S.C. §§ 4601, et seq., the National Environmental Policy Act, 42 U.S.C. §§ 4321, et seq., the Buy America provisions of 23 U.S.C. § 313 and 23 CFR 635.410, as amended, Texas Transportation Code § 223.045, the Utility Relocations, Adjustments, and Reimbursements provisions of 23 CFR 645, Subpart A, and the Utility Accommodation provisions of 23 CFR 645, Subpart B.

The **Utility** shall supply, upon request by the **State**, proof of compliance with the aforementioned laws, rules, regulations, and guidelines prior to the commencement of the adjustment, removal, and relocation of the facility.

Initial Date
TxDOT

Initial Date
Utility

is responsible for entering any property within the proposed limits of the Highway Project that has not yet been acquired by TxDOT. This written authorization to proceed with the physical work is in addition to the authorization to commence work outlined below. Notwithstanding the foregoing, the provisions of this paragraph are required only when TxDOT has not obtained completion and clearance of its environmental review of the Highway Project prior to the execution of this Agreement by the State and the Utility.

The **Utility** shall comply with the Buy America provisions of 23 U.S.C. § 313, 23 CFR 635.410, as amended, and the Steel and Iron Preference provisions of Texas Transportation Code § 223.045 and, when products that are composed predominately of steel and/or iron are incorporated into the permanent installation of the utility facility, use domestically manufactured products. TxDOT Form 1818 (Material Statement), along with all required attachments, must be submitted, prior to the commencement of the adjustment, removal, and relocation of the facility, as evidence of compliance with the aforementioned provisions. Failure to submit the required documentation or to comply with the Buy America, and Steel and Iron Preference requirements shall result in: (1) the **Utility** becoming ineligible to receive any contract or subcontract made with funds authorized under the Intermodal Surface Transportation Efficiency Act of 1991; (2) the **State** withholding reimbursement for the costs incurred by the **Utility** in the adjustment, removal, and relocation of the **Utility's** facilities; and (3) removal and replacement of the non-compliant products.

The **Utility** agrees to develop relocation or adjustment costs by accumulating actual direct and related indirect costs in accordance with a work order accounting procedure prescribed by the **State**, or may, with the **State's** approval, accumulate actual direct and related indirect costs in accordance with an established accounting procedure developed by the **Utility**. Bills for work hereunder are to be submitted to the **State** not later than one (1) year after completion of the work. Failure to submit the request for final payment, in addition to all supporting documentation, within one (1) year after completion of the work may result in forfeiture of payment for said work.

When requested, the **State** will make intermediate payments at not less than monthly intervals to the **Utility** when properly billed. Such payments will not exceed 90 percent (90%) of the eligible cost as shown in each such billing. Intermediate payments shall not be construed as final payment for any items included in the intermediate payment.

The **State** will, upon satisfactory completion of the adjustment, removal, and/or relocation and upon receipt of final billing prepared in an approved form and manner and accounting for any intermediate payments, make payment in the amount of 90 percent (90%) of the eligible costs as shown in the final billing prior to audit and after such audit shall make an additional final payment totaling the reimbursement amount found eligible for **State** reimbursement.

Alternatively, the **State** agrees to pay the **Utility** an agreed lump sum of \$N/A as supported by the attached estimated costs. The **State** will, upon satisfactory completion of the adjustments, removals, and relocations and upon receipt of a final billing, make payment to the **Utility** in the agreed amount.

Upon execution of this agreement by both parties hereto, the **State** will, by written notice, authorize the **Utility** to perform such work diligently and to conclude said adjustment, removal, and relocation by the stated completion date which is attached hereto in Attachment "C". The completion date shall be extended for delays caused by events outside the **Utility's** control, including an event of Force Majeure, which shall include a strike, war or act of war (whether an actual declaration of war is made or not), insurrection, riot, act of public enemy, accident, fire, flood or other act of God, sabotage, or other events, interference by the **State** or any other party with the **Utility's** ability to proceed with the work, or any other event in which the **Utility** has exercised all due care in the prevention thereof so that the causes of other events are beyond the control and without the fault or negligence of the **Utility**.

This agreement in its entirety consists of the following elements:

Standard Utility Agreement – ROW-U-35;

- Plans, Specifications, and Estimated Costs (Attachment "A");
- Accounting Method (Attachment "B");
- Schedule of Work (Attachment "C");
- Statement Covering Contract Work – ROW-U-48 (Attachment "D");
- Utility Joint Use Acknowledgment – ROW-U-JUAA and/or Utility Installation Request – Form 1082 (Attachment "E");

Initial Date
TxDOT

Initial Date
Utility

- Eligibility Ratio (Attachment “F”);
- Betterment Calculation and Estimate (Attachment “G”); and
- Proof of Property Interest – ROW-U-1A, ROW-U-1B, or ROW-U-1C (Attachment “H”).

All attachments are included herein as if fully set forth. In the event it is determined that a substantial change from the statement of work contained in this agreement is required, reimbursement therefore shall be limited to costs covered by a modification or amendment of this agreement or a written change or extra work order approved by the **State** and the **Utility**.

This agreement is subject to cancellation by the **State** at any time up to the date that work under this agreement has been authorized, and such cancellation will not create any liability on the part of the **State**. However, the **State** will review and reimburse the **Utility** for eligible costs incurred by the **Utility** in preparation of this Agreement.

The State Auditor may conduct an audit or investigation of any entity receiving funds from the **State** directly under this contract or indirectly through a subcontract under this contract. Acceptance of funds directly under this contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the State Auditor, under the direction of the Legislative Audit Committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit.

The **Utility** by execution of this agreement does not waive any of the rights that the **Utility** may have within the limits of the law.

It is expressly understood that the **Utility** conducts the adjustment, removal, and relocation at its own risk, and that the **State** makes no warranties or representations regarding the existence or location of utilities currently within its right of way.

Initial Date
TxDOT

Initial Date
Utility

The signatories to this agreement warrant that each has the authority to enter into this agreement on behalf of the party represented.

UTILITY

Utility: City of La Marque
Name of Utility

By: _____
Authorized Signature

Print or Type Name

Title: _____

Date: _____

EXECUTION RECOMMENDED:

Director of TP&D (or designee), Houston District

THE STATE OF TEXAS

Executed and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

By: _____
District Engineer (or designee)

Date: _____

Initial Date
TxDOT

Initial Date
Utility

SIGNATURE AUTHORITY

U-No. **U16125**

District: Houston
Federal Project No.:
ROW CSJ No.: 0500-04-139

County: Galveston
Highway No.: IH 45
Contract No.:

WHEREAS, **City of La Marque**, hereinafter called the **Owner**, deems it necessary and proper to enter into an agreement with the State of Texas, whereby the Texas Department of Transportation will cause the relocation of various facilities operated by **Owner**, which are in conflict with the Texas Department of Transportation's proposed improvements on an existing or future State of Texas project from within public, private or Owner's property interests to the public, private, or Owner's property interests.

NOW THEREFORE, according to the governing documents of the utility company attached as **Exhibit A**, be it resolved by the above named **Owner** that **Bobby Hocking, as Mayor, or his/her successor in this position**, has general signature authority on all utility adjustment work of Owner, and, as such, no further authorization for execution of a specific utility agreement is necessary. **Bobby Hocking, as Mayor, or his/her successor in this position**, is hereby authorized and directed to sign any and all utility agreements, or any other necessary documents, required to complete the utility relocation on behalf of the **Owner**.

Passed, approved, and adopted this _____ day of _____, 20____.

IN WITNESS WHEREOF, the parties hereto have affixed their signatures.

ATTEST:

Owner: City of La Marque
Utility Name

By: _____
Authorized Signature

Title: _____

Date: _____

Acknowledgement

State of Texas
County of _____

This instrument was acknowledged before me on this _____ day of _____, 20____, by _____
_____ of _____ [name
of utility company], a _____ [state] _____ [type of company, e.g. LLC, Inc., L.P., etc.].

Notary Public's Signature
Notary's Name (Printed): _____
My commission expires: _____

EXHIBIT "A"
A Copy of the Governing Document of the Utility Company Designating Signature Authority

Attachment “A”

Plans, Specifications, and Estimated Costs

All material items that must meet Buy America or Steel and Iron Preference Provision requirements must be indicated with an asterisk (*).

Initial Date
TxDOT

Initial Date
Utility

**Standard Utility Agreement
Statement of Work
U Number: U16125
City of La Marque, Texas**

Federal Project No.:

Highway: IH 45

ROW CSJ: 0500-04-139

Construction CSJ: 0500-04-104

County: Galveston

Limits: From N of FM 519 to N of Texas City WYE

Brief Description of Utility Facility(s) to be Adjusted Under This Agreement.

Adjustment of existing City of La Marque sanitary sewer facilities that are in conflict with the proposed reconstruction of IH 45 main lanes and frontage roads from North of FM 519 to North of Texas City WYE, and included the reconstruction of roadways along Main Street and Lake Road in conjunction with the reconstruction of IH 45.

Existing Facility, Proposed Adjustments and Scope of Work:

The City of La Marque is in Galveston County, Texas, and is part of the Galveston metropolitan area. IH 45 bisects the City of La Marque with existing City facilities along both sides of IH 45, and crossing IH 45 main lanes and frontage roads, with sanitary sewer facilities to serve residents and businesses in the City of La Marque. Sanitary sewer adjustments were designed to meet Texas Commission on Environmental Quality (TCEQ) requirements.

Sanitary Sewers:

Along Main Street, Crossing Lake Road and FM 519, Sta. 411+69 to Sta. 416+76: 534 LF of existing 6" sanitary sewer was in violation of the UAR, ran longitudinally under proposed roadway, and was in conflict with proposed 24" and 30" RCP storm sewer. Replacement with 539 LF of 8" sanitary sewer, encased in 123 LF of 18" steel casing under Lake road, at 0.44% minimum slope was required as "Forced Betterment" to meet existing sanitary sewer upstream and downstream flow line elevation constraints and meet TCEQ minimum slope requirements. Three manholes were added downstream due to the change in direction of the sanitary sewer.

Lake Road Sta. 506+51 Along FM 519 609+51: Existing 15" and 8" sanitary sewers were in conflict with proposed storm sewers. In order to meet upstream flowline and downstream flow line elevation constraints and meet TCEQ minimum slope requirements, existing 15" and 8" sanitary sewers will be replaced with one 421 LF 16" PVC.

Crossing and Along FM 519 Sta. 609+51 to Sta. 612+85: Existing 21" sanitary sewer was in conflict with proposed 24" RCP storm sewer and proposed roadway. In order to meet upstream flowline and downstream flow line elevation constraints and meet TCEQ minimum slope requirements, existing 21"

sanitary sewer and 8" sanitary line will be replaced with 418 LF 21" PVC. Proposed 21" sanitary sewer will be encased in 30" steel casing when crossing under FM 519. Four manholes were added downstream due to the change in direction of the sanitary sewer.

Crossing IH 45 at Main Lane (ML) Sta. 1662+51 : Existing 24" Force main was in conflict with proposed 48" RCP storm sewer. Replacement with 437 LF of 24" Force main, encased in 300 LF of 30" steel casing under IH 45, connects to existing 24" force main along IH 45 SBFR, and also connect to existing 24" force main along IH 45 NBFR.

CONSTRUCTION COST ESTIMATE
UTILITY ADJUSTMENT - SANITARY SEWER
(RCSJ 0500-04-139)
U- Number: U16125

ADJUSTMENT OF SANITARY SEWER IN CONFLICT WITH PROPOSED RECONSTRUCTION/WIDENING OF IH 45
MAIN LANES FROM NORTH OF FM 519 TO NORTH OF TEXAS CITY WYE

ITEM/DESC CODE	DESCRIPTION		UNIT	UNIT PRICE	QTY	CSJ TOTAL
		Buy America				
400 6005	CEM STABIL BKFL		CY	\$57.00	388	\$ 22,116.00
400 6006	CUT & RESTORING PAV		SY	\$120.00	119	\$ 14,280.00
402 6001	TRENCH EXCAVATION PROTECTION		LF	\$2.40	1,378	\$ 3,307.20
7017 6017	SANITARY SEWER (8 IN) (PVC) (SDR 26)		LF	\$80.00	539	\$ 43,120.00
7017 6042	CASING (STEEL) (SANITARY SEWER) (16 IN)	*	LF	\$360.00	20	\$ 7,200.00
7017 6051	MANHOLE (SAN SEWER) (4' DIA)		EA	\$6,600.00	8	\$ 52,800.00
7017 6067	JCK BOR OR TUN CSNG(STL)(SAN SWR)(18IN)	*	LF	\$700.00	123	\$ 86,100.00
7017 6071	JCK BOR OR TUN CSNG(STL)(SAN SWR)(30IN)	*	LF	\$790.00	140	\$ 110,600.00
7017 6106	ABAND/FILL EXIST SAN SEWER PIPE (6")		LF	\$5.10	539	\$ 2,748.90
7017 6108	SANITARY SEWER LATERAL (6")(PVC)		LF	\$64.00	100	\$ 6,400.00
7017 6128	REMOVE EXIST SAN SWR PIPE (6IN)		LF	\$11.00	100	\$ 1,100.00
7017 6129	REMOVE EXIST SAN SWR PIPE (8IN)		LF	\$10.00	422	\$ 4,220.00
7017 6136	ABAND/FILL EXIST SAN SWR PIPE (15IN)		LF	\$23.00	500	\$ 11,500.00
7017 6178	REMOVE EXIST SAN SWR PIPE (21IN)		LF	\$15.00	100	\$ 1,500.00
7017 6179	JCK BOR OR TUN CSNG(STL)(SAN SWR)(33IN)	*	LF	\$1,000.00	300	\$ 300,000.00
7017 6180	ABAND/FILL EXIST SAN SWR PIPE (21IN)		LF	\$50.00	330	\$ 16,500.00
7017 6181	SANITARY SEWER (FM) (24IN) (PVC) (C900)		LF	\$200.00	438	\$ 87,600.00
7017 6182	SANITARY SEWER (21IN) (PVC) (SDR 26)		LF	\$100.00	417	\$ 41,700.00
7017 6183	SANITARY SEWER (16IN) (PVC) (C900) (DR 25)		LF	\$100.00	422	\$ 42,200.00
SUBTOTAL						\$ 790,676.10

NOTE: All steel and iron material items designated by an asterisk (*) must comply with "Buy America" requirements

City of La Marque
 TxDOT Expansion (IH 45 CSJ 0500-04-104)
 Sanitary Sewer Line Adjustment Construction
 Monday, April 20, 2020

Project Duration: 150 Days (22 weeks)

Item	Description	Units	Est Quantity	Unit Cost	Amount
A. Research, Plan Review, Coordination and Plan Review					
1	City Engineer	Hrs.	14	\$235.00	\$3,290.00
2	Senior Engineer	Hrs.	28	\$175.00	\$4,900.00
4	Construction Administrator	Hrs.	2	\$125.00	\$250.00
Subtotal Estimated Fee:					\$8,440.00
B. COLM Utility Inspections					
1	Pre-construction Meeting				
	City Engineer	Hrs.	2	\$235.00	\$470.00
	Construction Inspector	Hrs.	2	\$95.00	\$190.00
2	Coordination with City Staff and public relations				
	City Engineer	Hrs.	20	\$235.00	\$4,700.00
	Construction Inspector	Hrs.	12	\$95.00	\$1,140.00
3	COLM Inspections (105 work days or 15 weeks)				
	- City Engineer (Weekly - 2.0 hours)	Hrs.	30	\$235.00	\$7,050.00
	Mileage (40 miles per trip X 15 trip)	Mi.	600	\$0.58	\$348.00
	- Construction Inspector (1.5 hours/day)	Hrs.	157.5	\$95.00	\$14,962.50
	Mileage (40 miles per trip X 52 trip)	Mi.	2080	\$0.58	\$1,206.40
	- Interim Public Work Director	Hrs.	40	\$48.00	\$1,920.00
	- Public Work - Foreman - UT22	Hrs.	40	\$25.00	\$1,000.00
4	Sanitary Sewer Line and Manhole Testings				
	Construction Inspector	Hrs.	30	\$95.00	\$2,850.00
5	Review lab test				
	City Engineer	Hrs.	10	\$235.00	\$2,350.00
6	Submittal Review				
	City Engineer	Hrs.	10	\$95.00	\$950.00
7	Substantial Completion Walkthrough				
	City Engineer	Hrs.	8	\$235.00	\$1,880.00
	Construction Inspector	Hrs.	8	\$95.00	\$760.00
8	Final Walkthrough				
	City Engineer	Hrs.	6	\$235.00	\$1,410.00
	Construction Inspector	Hrs.	6	\$95.00	\$570.00
9	Closeout				
	City Engineer	Hrs.	6	\$235.00	\$1,410.00
Subtotal Estimated Fee:					\$45,166.90
Total Estimated Fee:					\$53,606.90

Control CSJ: 0500-04-104
ROW CSJ: 0500-04-139
U16125

Cost Estimate
City of La Marque
Sanitary Sewer

U16125 Cost Summary

CATEGORY	NOTES	SUBTOTAL
Utility Construction Cost Estimate	Included in highway construction contract- to be paid by TxDOT directly to highway contractor	\$ 790,676.10
Engineering Design Costs	Paid by TxDOT to CONSOR Engineers by Contract No.36-7IDP5047_WA1	\$ 17,071.60
Reimbursible Costs Estimate	Based on City of La Marque hourly rates- to be paid by TxDOT to City of La Marque	\$ 53,606.90
	SUB-TOTAL	\$ 861,354.60

Total Amount Reimbursable to City of La Marque	\$ 53,606.90
---	---------------------

c:\bms\pwe-useeast-006\hdi, tran\dms07903\A_1H45_GSQ_UTL_02.dgn
11:25:23 AM
7/1/2020

SUMMARY OF WASTEWATER QUANTITIES											
DESCRIPTION	SHEET NO.	400	400	402	7017	7017	7017	7017	7017	7017	7017
		6005	6006	6001	6017	6042	6051	6067	6071	6106	6108
		CEM STABIL BKFL	CUT & RESTORING PAV	TRENCH EXCAVATION PROTECTION	SANITARY SEWER (8 IN) (PVC) (SDR 26)	CASING (STEEL) (SANITARY SEWER) (16 IN)	MANHOLE (SAN SEWER) (4' DIA)	JCK BOR OR TUN CSNG (STL) (SAN SWR) (18IN)	JCK BOR OR TUN CSNG (STL) (SAN SWR) (30IN)	ABAND/FILL EXIST SAN SEWER PIPE (6")	SANITARY SEWER LATERAL (6") (PVC)
		CY	SY	LF	LF	LF	EA	LF	LF	LF	LF
CSJ 0500-04-104											
WASTEWATER MAIN	SHEET 1 OF 5	61		300	300		2	123		300	
WASTEWATER MAIN	SHEET 2 OF 5	49	15	239	239	20	1			239	
WASTEWATER MAIN	SHEET 3 OF 5	120	54	400			1				50
WASTEWATER MAIN	SHEET 4 OF 5	158	50	439			4		140		50
WASTEWATER FORCE MAIN	SHEET 5 OF 5										
CSJ: 0500-04-104 TOTALS		388	119	1,378	539	20	8	123	140	539	100

SUMMARY OF WASTEWATER QUANTITIES (CONTINUED)										
DESCRIPTION	SHEET NO.	7017	7017	7017	7017	7017	7017	7017	7017	7017
		6128	6129	6136	6178	6179	6180	6181	6182	6183
		REMOVE EXIST SAN SWR PIPE (6IN)	REMOVE EXIST SAN SWR PIPE (8IN)	ABAND/FILL EXIST SAN SWR PIPE (15IN)	REMOVE EXIST SAN SWR PIPE (21IN)	JCK BOR OR TUN CSNG(STL)(SAN SWR)(33IN)	ABAND/FILL EXIST SAN SWR PIPE (21IN)	SANITARY SEWER (FM) (24IN) (PVC) (C900)	SANITARY SEWER (21IN) (PVC) (SDR 26)	SANITARY SEWER (16IN) (PVC) (C900) (DR 25)
		LF	LF	LF	LF	LF	LF	LF	LF	LF
CSJ 0500-04-104										
WASTEWATER MAIN	SHEET 1 OF 5									
WASTEWATER MAIN	SHEET 2 OF 5									
WASTEWATER MAIN	SHEET 3 OF 5	50	400	470						400
WASTEWATER MAIN	SHEET 4 OF 5	50	22	30	100		330		417	22
WASTEWATER FORCE MAIN	SHEET 5 OF 5					300		438		
CSJ: 0500-04-104 TOTALS		100	422	500	100	300	330	438	417	422



F-12040
©2020



IH 45

SUMMARY OF UTILITY
ADJUSTMENT QUANTITIES

SHEET 2 OF 2

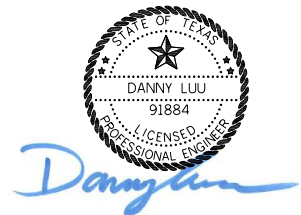
FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1054
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

c:\bms\pwe-useeast-006\hdi, tran\dms07903\A_1H45_GSQ_UTL_02.dgn

WATER LINE AND SANITARY SEWER LINE GENERAL NOTES:

1. THE CONTRACTOR WILL NOTIFY CITY OF LA MARQUE MR. DINH HO, P.E., CITY ENGINEER (PHONE: 832-895-1093, EMAIL dinh@adico-llc.com) AND MR. CHAISE CARY, PUBLIC WORK DIRECTOR (PHONE: 409-938-9280, EMAIL: c.cary@cityoflamarque.org) 48 HOURS BEFORE STARTING WORK ON WATER MAINS AND SANITARY SEWER. OPENING AND CLOSING OF EXISTING WATER VALVES WILL BE BY CITY OF LA MARQUE PERSONNEL. FOR ALL CITY INSPECTIONS, SEND REQUESTS TO: inspections@adico-llc.com.
2. THE CONTRACTOR WILL VERIFY THE LOCATION AND ELEVATION OF ALL WATER MAINS AND SANITARY SEWER PRIOR TO EXCAVATION. ANY ADJUSTMENT AND/OR RELOCATION OF WATER MAINS AND SANITARY SEWER WILL BE COORDINATED AND APPROVED BY CITY OF LA MARQUE.
3. THE CONTRACTOR WILL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC AND PRIVATE UTILITY LINES DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO WATER LINES AND WASTE WATER COLLECTION SYSTEMS. ALL DAMAGES WILL BE REPAIRED IN ACCORDANCE WITH CITY OF LA MARQUE AND TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REQUIREMENTS, WITH NO COST TO THE OWNER OF THE UTILITY.
4. CUTTING, PLUGGING, GROUTING, REMOVING, HANDLING, CLEANUP, AND DISPOSAL OF ASBESTOS CEMENT (AC) PIPE WILL BE PERFORMED BY THE DEPARTMENT'S THIRD PARTY CONTRACTOR.
5. CONSTRUCT PROPOSED WATER LINES AND SANITARY SEWER BY OPEN CUT EXISTING DRIVEWAYS AND CITY STREETS IN HALF SECTIONS UNLESS OTHERWISE SHOWN ON THE PLANS. CONTRACTOR WILL MAINTAIN PUBLIC ACCESS TO CITY STREETS AND DRIVEWAYS AT ALL TIMES.
6. THE CONTRACTOR WILL REMOVE ABANDONED UTILITIES THAT ARE IN CONFLICT WITH PROPOSED CONSTRUCTION AT NO EXPENSE TO THE DEPARTMENT. REMOVAL AND SATISFACTORY DISPOSAL OF ABANDONED UTILITIES THAT ARE IN CONFLICT WITH PROPOSED CONSTRUCTION WILL BE SUBSIDIARY TO ITEM 100, PREPARING RIGHT OF WAY.
7. ABANDONED EXISTING WATER LINES AND SANITARY SEWERS WILL BE FILLED WITH FLOWABLE GROUT.
8. ADJUSTING SANITARY SEWER MANHOLE INCLUDES THE RECONSTRUCTION OF PORTIONS OR ALL OF THE EXISTING MANHOLE AND RESHAPING BOTTOM OF MANHOLE WITH CONCRETE GROUT TO PROVIDE A SMOOTH CHANNEL FOR SEWAGE FLOW.
9. PVC SANITARY SEWER PIPE AND FITTINGS WILL BE C900 OR C905, COLOR GREEN, WITH RESTRAINED JOINTS.
10. PVC WATER MAIN PIPE AND FITTINGS WILL BE DR18, C900 OR C 905, COLOR BLUE, WITH RESTRAINED JOINTS.
11. DUCTILE IRON PIPE AND FITTINGS FOR WATERLINE WILL BE CLASS 350 AND POLYETHYLENE LINED ON THE INSIDE, WITH MECHANICAL JOINTS.
12. ALL WATER LINE VALVES WILL OPEN IN A COUNTER CLOCKWISE DIRECTION AND WILL HAVE RESTRAINED JOINTS.
13. THE CONTRACTOR WILL CONNECT ALL EXISTING WATER METERS TO THE PROPOSED WATER LINES. INCLUDE COST OF ALL LABOR AND MATERIAL REQUIRED IN RELATED BID ITEMS ON THE PROJECT.
14. THE CONTRACTOR MAY BE REQUIRED TO CONSTRUCT SANITARY SEWER BYPASS AND PUMPING SEWAGE TO PROVIDE CONTINUANCE OF SEWER SERVICE DURING CONSTRUCTION OPERATIONS. ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO CONSTRUCT THE SANITARY SEWER BYPASS AND PUMPING SEWAGE WILL BE INCLUDED IN RELATED BID ITEMS ON THE PROJECT.
15. ALL RESTRAINED JOINTS RESTRAINERS INCLUDING BOLTS, NUTS AND WASHERS WILL BE EPOXY COATED. WATER LINES AND SANITARY SEWER RESTRAINED JOINTS, INCLUDING BOLTS AND NUTS, WILL BE COATED WITH ASPHALTIC MATERIAL AFTER THEY ARE INSTALLED ON THE CARRIER PIPE. INCLUDE COST FOR ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED IN RELATED BID ITEMS ON THE PROJECT.
16. PLUG HOLE IN EXISTING MANHOLES THAT HAVE CONNECTIONS WITH ABANDONED SEWER LINES. PLUGS WILL BE MINIMUM 9-INCH THICK CLASS "A" PORTLAND CEMENT CONCRETE. PLUGS LARGER THAN 9-INCHES IN DIAMETER WILL BE REINFORCED WITH NO. 4 BARS AT 8-INCHES ON CENTERS, BOTH WAYS. INCLUDE COST OF ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED IN RELATED BID ITEMS ON THE PROJECT. BACKFILL EXISTING MANHOLES TO ONE FOOT BELOW NATURAL GROUND WITH 12 INCH THICK CEMENT STABILIZED SAND.
17. PRIOR TO BACKFILLING ALL UNDERGROUND WATER LINES, INSTALL A CONTINUOUS NO. 14 COPPER TRACER WIRE LOCATED DIRECTLY OVER BURIED WATER LINES, WITH A TRACER WIRE LOOP ACCESSIBLE AT NATURAL GROUND AT EACH VALVE STACK. TAPE THE TRACER WIRE TO CENTER OF WATER LINE AT 10-FOOT INTERVALS SO THAT IT WILL NOT MOVE DURING BACKFILL OPERATIONS. INCLUDE COST OF ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED IN RELATED BID ITEMS ON THE PROJECT.
18. DEWATERING BY WELL POINT WILL BE REQUIRED TO INSTALL WATER LINES AND SANITARY SEWER. INCLUDE COST OF ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED IN RELATED BID ITEMS ON THE PROJECT.

19. CONSTRUCT PROPOSED SANITARY SEWER STARTING AT THE DOWNSTREAM END AND PROCEED UPSTREAM AS FOLLOWS:
- a) INSTALL NEW SANITARY SEWER LINES AND MANHOLES, INCLUDING TEES AT ALL PROPOSED SANITARY SEWER SERVICE CONNECTIONS. MAINTAIN UNINTERRUPTED SANITARY SEWER SERVICE WITH EXISTING SANITARY SEWER LINES DURING INSTALLATION OF NEW SANITARY SEWER LINES.
 - b) TEST NEW SANITARY SEWER LINES AND MANHOLES FOR LEAKAGE.
 - c) CONNECT NEW SANITARY SEWER LINE TO CITY OF LA MARQUE SANITARY SEWER SYSTEM, KEEPING THE EXISTING SANITARY SEWER LINE IN CONTINUOUS SERVICE.
 - d) INSTALL NEW 6-INCH PVC, C900 SERVICE CONNECTIONS TO NEW SANITARY SEWER LINES. INCLUDE ALL COST FOR LABOR AND MATERIAL REQUIRED IN UNIT PRICE BID FOR SANITARY SEWER LATERAL (6") (PVC).
 - e) COMPLETE NEW SANITARY SEWER CONNECTIONS TO ALL EXISTING SANITARY SEWER LINES, THEN ABANDON THE EXISTING SANITARY SEWER LINES.
20. CONSTRUCT PROPOSED WATER LINE AS FOLLOWS:
- a) MAINTAIN UNINTERRUPTED WATER SERVICE WITH EXISTING WATER LINES DURING INSTALLATION OF NEW WATER LINES, INCLUDING ALL FIRE HYDRANTS.
 - b) TEST NEW WATER LINES FOR LEAKAGE. DISINFECT WATER LINES AFTER PASSING THE LEAKAGE TEST.
 - c) CONNECT NEW WATER LINE TO CITY OF LA MARQUE WATER SUPPLY SYSTEM, KEEPING THE EXISTING WATER LINE AND ALL FIRE HYDRANTS IN CONTINUOUS SERVICE. CONNECT EXISTING WATER LINES TO NEW WATER LINES AT EACH STREET INTERSECTION TO AVOID DEAD ENDS.
 - d) INSTALL SERVICE CONNECTIONS TO EXISTING WATER METERS.
 - e) COMPLETE NEW WATER LINE CONNECTIONS TO ALL EXISTING WATER LINES, THEN ABANDON THE EXISTING WATER LINES.
21. THE CONTRACTOR SHALL CUT AND RESTORE EXISTING PAVEMENT AS REQUIRED TO CONSTRUCT PROPOSED WATER LINES AND SANITARY SEWER. EXISTING PAVEMENT WILL BE RESTORED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
- a) EXISTING ASPHALT PAVEMENT AND TEMPORARY PAVEMENT:
SAW CUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT. CONSTRUCT 12-INCH DEPTH ASPHALT STABILIZED BASE AND 2-INCH HMAC OVERLAY.
 - b) EXISTING CONCRETE PAVEMENT RESTORED AS PERMANENT:
SAW CUT (FULL DEPTH) AND REMOVE EXISTING PAVEMENT. CLEAN EXISTING REINFORCEMENT AND TIE INTO NEW WORK. CONSTRUCT 9-INCH DEPTH REINFORCED CONCRETE PAVEMENT WITH REINFORCING STEEL NO. 4 BARS AT 18-INCH SPACING (BOTH WAYS).



7/1/2020



F-12040

©2020



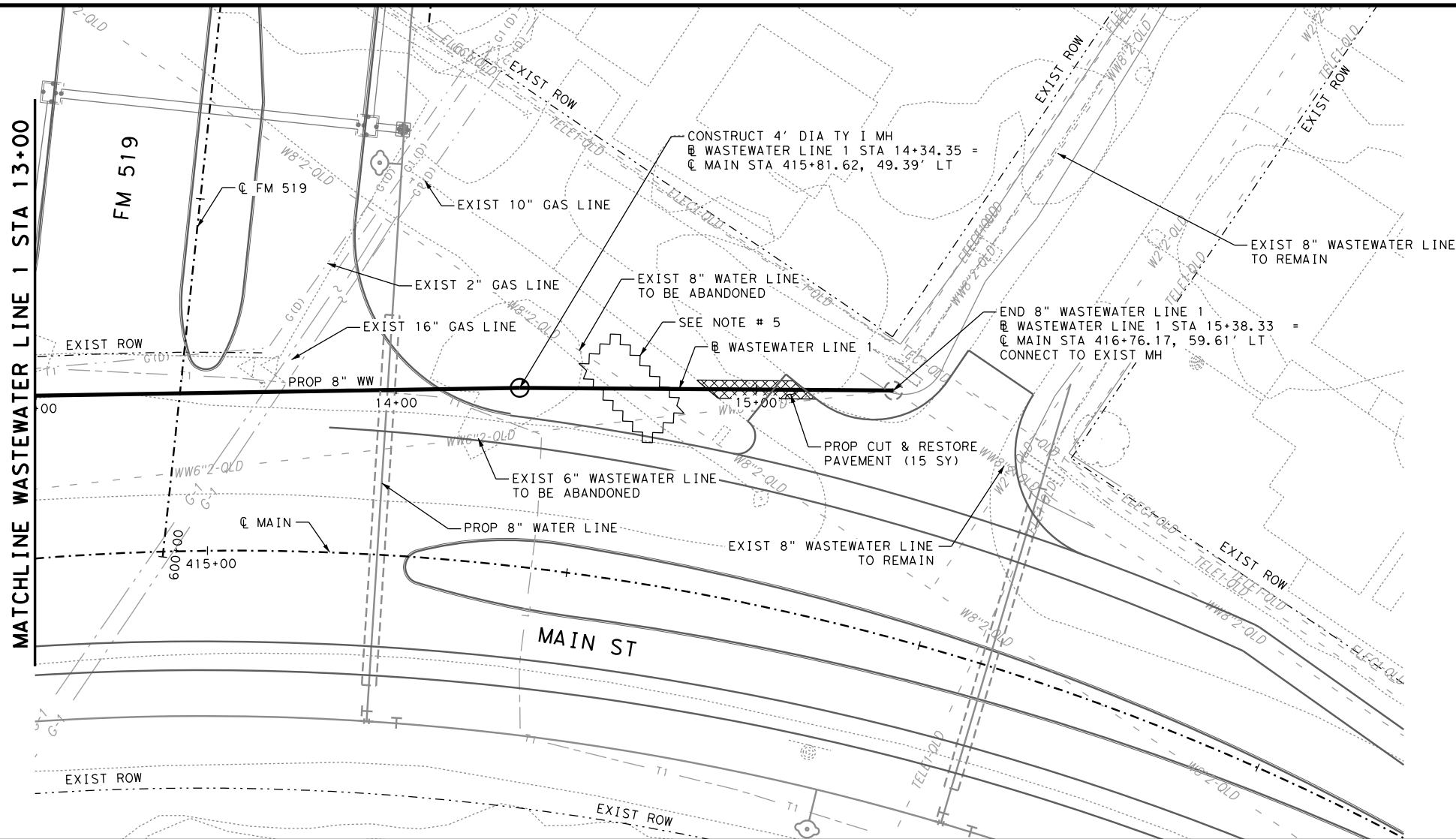
Texas Department of Transportation

IH 45

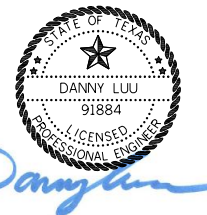
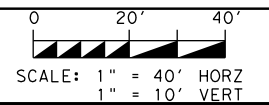
WATER LINE AND SANITARY SEWER GENERAL NOTES

SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1494
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45



- NOTES:
1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
 2. PROPOSED STORM SEWER SIZE & FLOWLINE ELAVATIONS ARE SGOWN ON STORM SEWER PLAN & PROFILE SHEETS.
 3. CONSTRUCT MANHOLE TOP TO MATCH FINISHED GRADE.
 4. PROVIDE INFLOW PROTECTORS FOR ALL SANITARY SEWER MANHOLES PER CITY OF LA MARQUE CRITERIA MANUAL.
 5. ANTICIPATED CONFLICT WITH ABANDONED EXISTING ASBESTOS CEMENT WATER LINE. SEE GENERAL NOTES FOR REMOVAL INFORMATION.



7/1/2020



F-12040
©2020



IH 45

**WASTEWATER MAIN
REPLACEMENT
(MAIN ST)
(STA 13+00 TO END)**

SHEET 2 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1507
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

MATCHLINE WASTEWATER LINE 1 STA 13+00

13+00

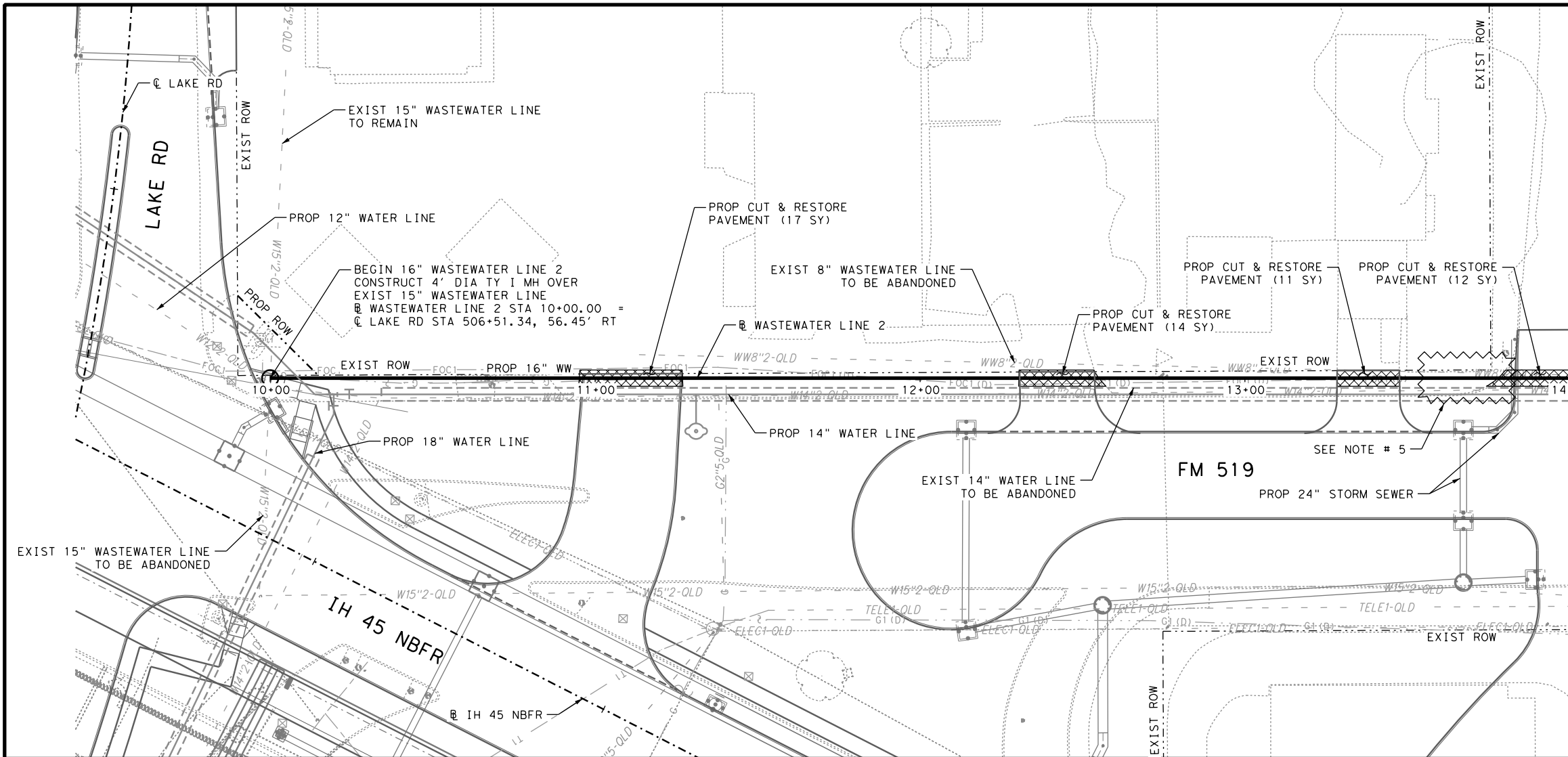
14+00

15+00

16+00

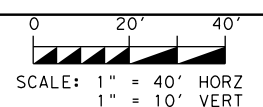
20
10
0
-10

20
10
0
-10



MATCHLINE WASTEWATER LINE 2 STA 14+00

- NOTES:
1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
 2. PROPOSED STORM SEWER SIZE & FLOWLINE ELAVATIONS ARE SGOWN ON STORM SEWER PLAN & PROFILE SHEETS.
 3. CONSTRUCT MANHOLE TOP TO MATCH FINISHED GRADE.
 4. PROVIDE INFLOW PROTECTORS FOR ALL SANITARY SEWER MANHOLES PER CITY OF LA MARQUE CRITERIA MANUAL.
 5. ANTICIPATED CONFLICT WITH ABANDONED EXISTING ASBESTOS CEMENT WATER LINE. SEE GENERAL NOTES FOR REMOVAL INFORMATION.
 6. ALL COST INCLUDING LABOR AND MATERIALS REQUIRED TO CONSTRUCT THE CONCRETE ENCASEMENT WILL BE INCLUDED IN RELATED BID ITEMS ON THE PROJECT.



7/1/2020



F-12040 ©2020

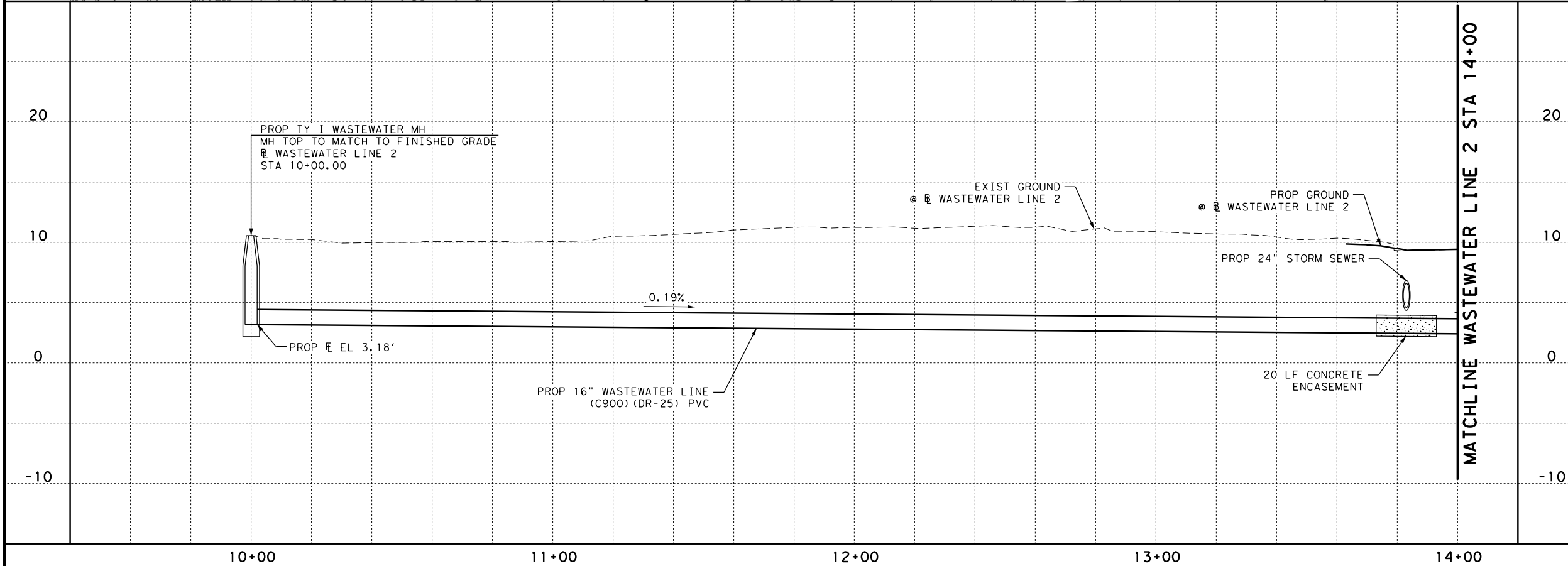


IH 45

WASTEWATER MAIN REPLACEMENT (FM 519)
(BEGIN TO STA 14+00)

SHEET 3 OF 4

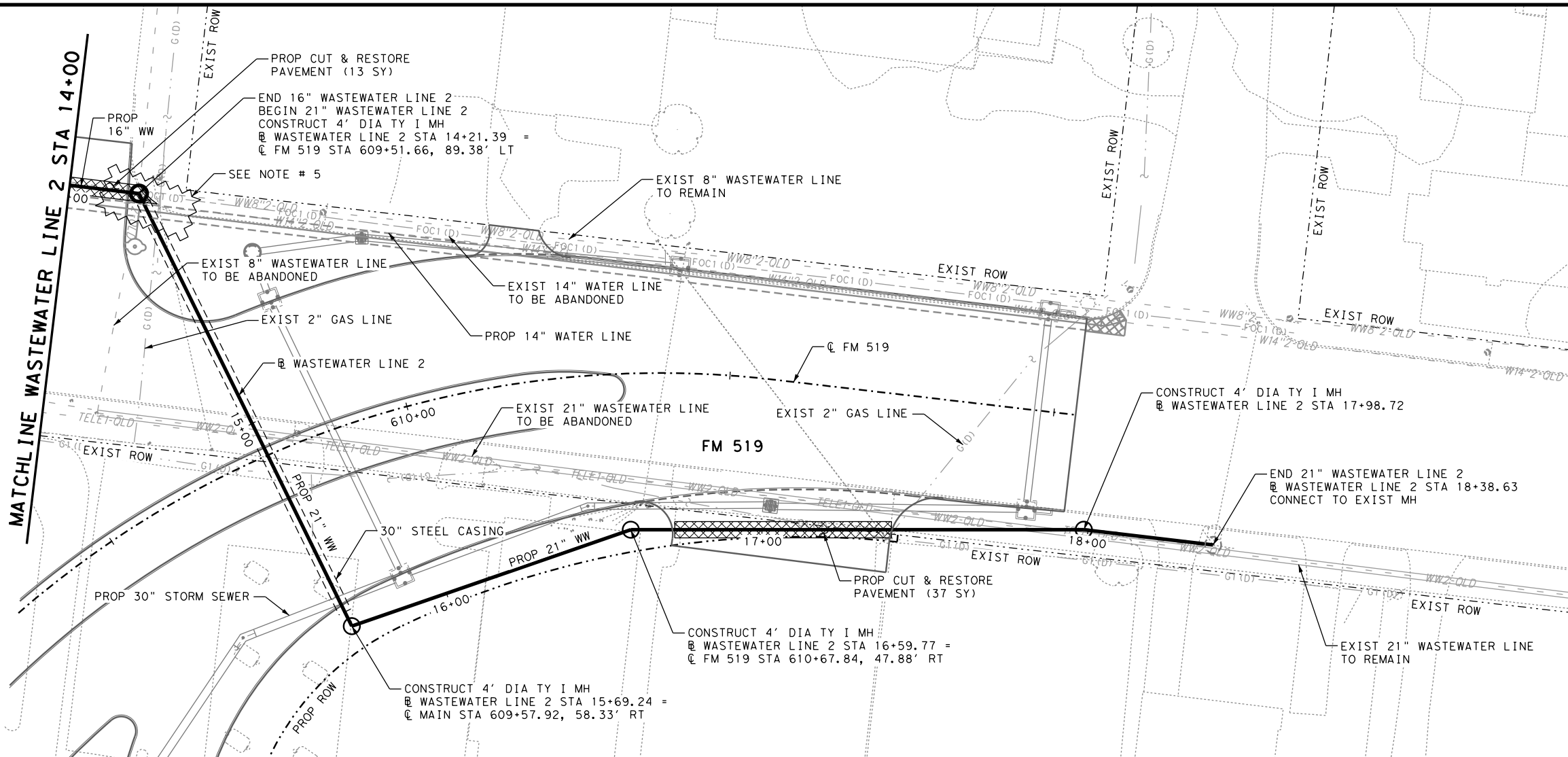
FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1508
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45



c:\bms\pwe-useadst-006\h01.fran\dms07918\A_IH45_UWW03.dgn
11:30:54 AM
7/1/2020

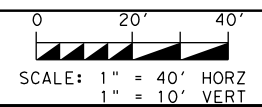
7/1/2020 11:30:54 AM

c:\bms\pwe-useadst-006\h01.fran\dms07918\A_IH45_UWW03.dgn



NOTES:

1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
2. PROPOSED STORM SEWER SIZE & FLOWLINE ELEVATIONS ARE SHOWN ON STORM SEWER PLAN & PROFILE SHEETS.
3. CONSTRUCT MANHOLE TOP TO MATCH FINISHED GRADE.
4. PROVIDE INFLOW PROTECTORS FOR ALL SANITARY SEWER MANHOLES PER CITY OF LA MARQUE CRITERIA MANUAL.
5. ANTICIPATED CONFLICT WITH ABANDONED EXISTING ASBESTOS CEMENT WATER LINE. SEE GENERAL NOTES FOR REMOVAL INFORMATION.



7/7/2020



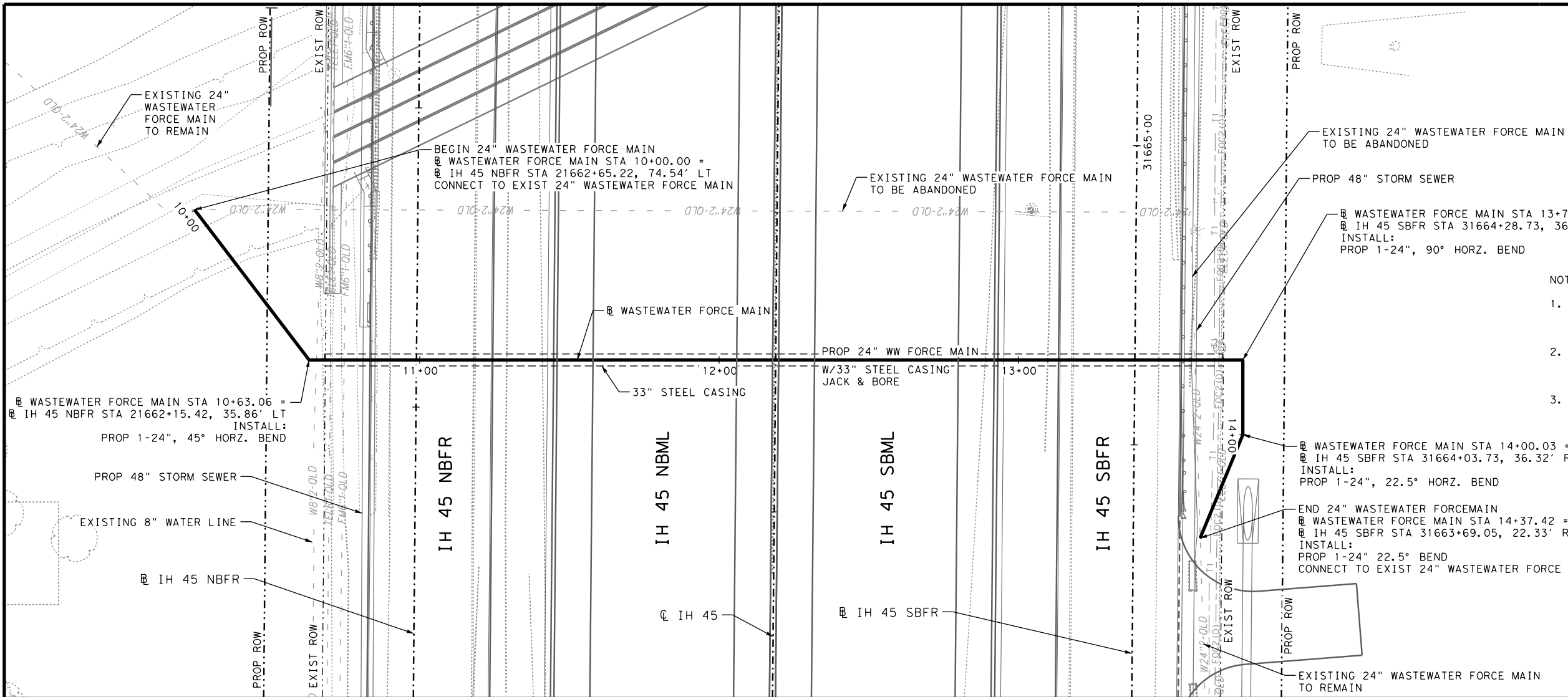
IH 45

WASTEWATER MAIN REPLACEMENT (FM 519)
(STA 14+00 TO END)

SHEET 4 OF 4

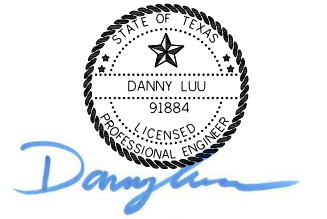
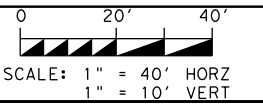
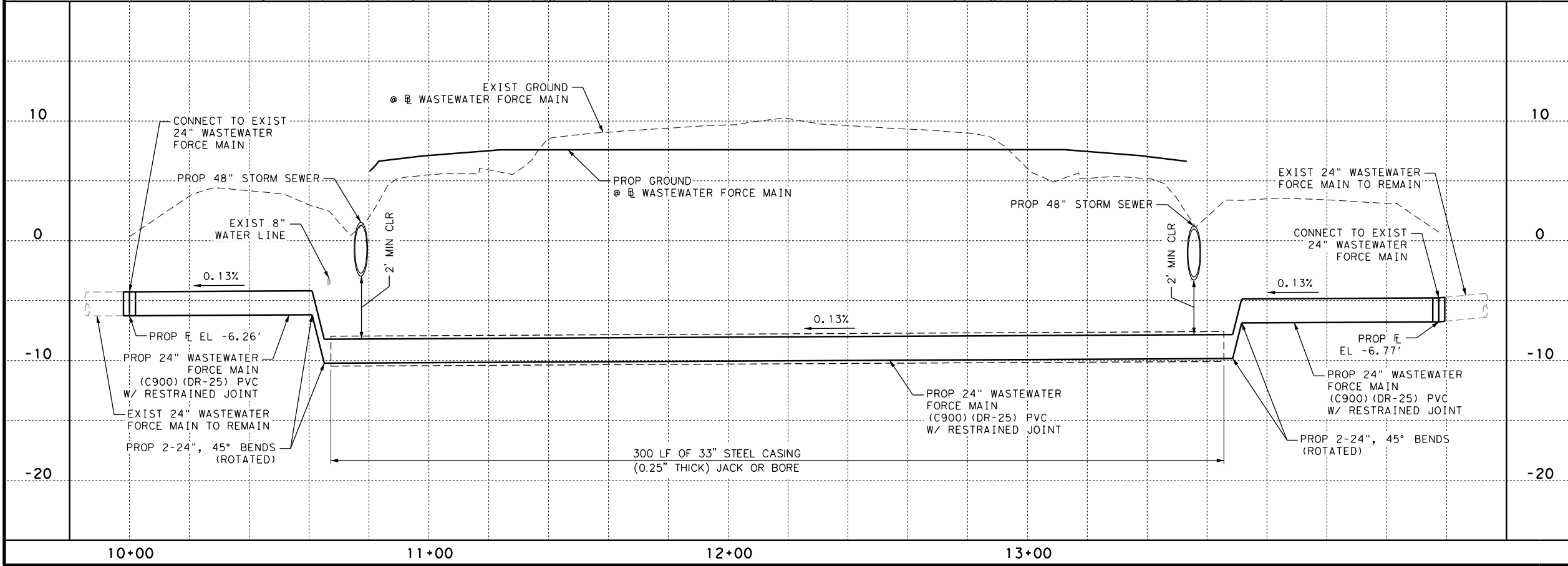
FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1509
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

c:\bms\pwe-useas+-006\hgt1.fran\dms07918\A_IH45_UWW05.dgn
11:44:41 AM
7/1/2020



NOTES:

1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION WORK.
2. PROPOSED STORM SEWER SIZE & FLOWLINE ELEVATIONS ARE SHOWN ON STORM SEWER PLAN & PROFILE SHEETS.
3. CONSTRUCT MANHOLE TOP TO MATCH FINISHED GRADE.



7/1/2020



F-12040
©2020



IH 45

**WASTEWATER FORCE MAIN
REPLACEMENT
(MAINLANE)
(BEGIN TO END)**

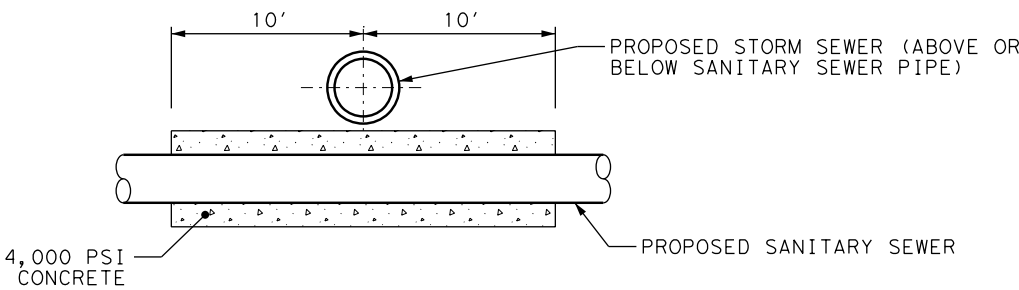
SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1510
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

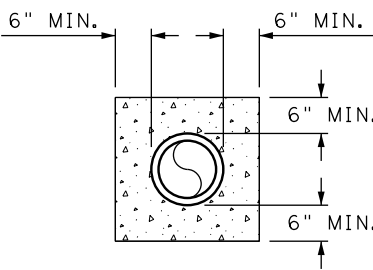
7/1/2020

11:44:41 AM

c:\bms\pwe-useas+-006\hgt1.fran\dms07918\A_IH45_UWW05.dgn



ELEVATION VIEW



CROSS-SECTION VIEW

CONCRETE ENCASEMENT DETAILS

NOTES:

1. CONCRETE ENCASEMENT SHALL HAVE A MINIMUM OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. CONCRETE SHALL FILL VOID BETWEEN STORM SEWER AND SANITARY SEWER WHEN VERTICAL SEPARATION IS LESS THAN 12".



7/1/2020



F-12040
©2020



IH 45

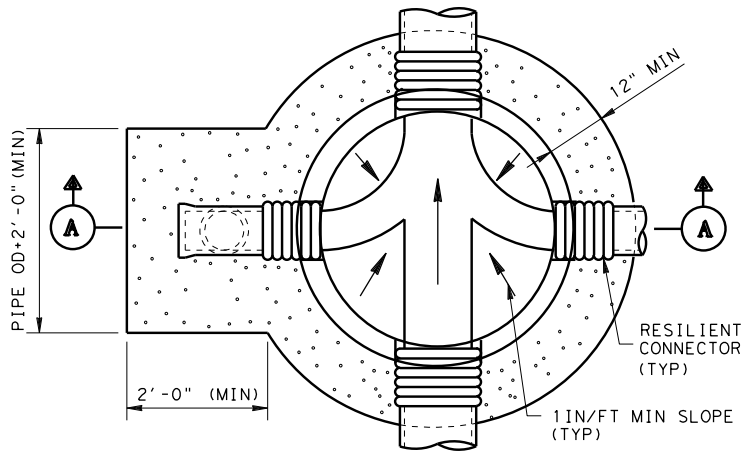
**MISCELLANEOUS WASTEWATER
DETAILS**

SHEET 1 OF 1

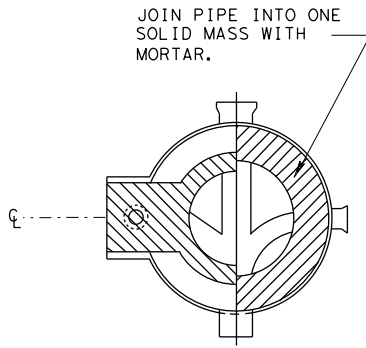
FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			1512
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	103, etc.	IH 45

GENERAL NOTES:

1. DEPTH OF MANHOLE DETERMINES SECTIONS REQUIRED.
2. THE MAXIMUM TOTAL HEIGHT OF THE ADJUSTMENT RINGS IS 1.5 FT.
3. INSTALL MANHOLE DROP AND INTERSECTING PIPES ONLY WHEN CALLED FOR IN THE PLAN AND PROFILE DRAWING.
4. ECCENTRIC PRECAST CONCRETE MANHOLE MAY BE USED.
5. FOR PRECAST SECTIONS, PROVIDE JOINTS BETWEEN SECTIONS, WITH O-RING GASKETS CONFORMING TO ASTM C 443.
6. WHERE RIGID JOINTS BETWEEN PIPE AND CAST-IN-PLACE MANHOLE BASE ARE USED, PROVIDE A POLYETHYLENE-ISOPRENE WATERSTOP MEETING PHYSICAL PROPERTY REQUIREMENTS OF ASTM C 923, SUCH AS PRES-SEAL WS SERIES, OR APPROVED EQUAL.



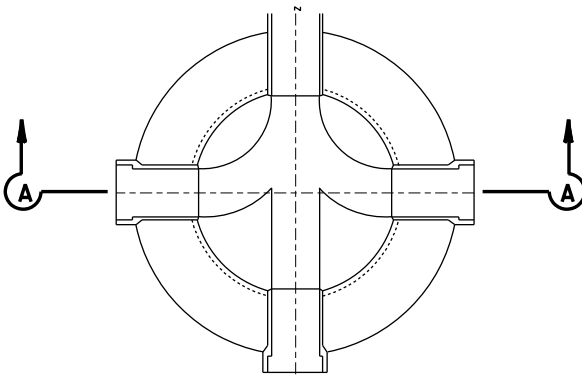
FOUNDATION PLAN
(PRECAST MANHOLE)



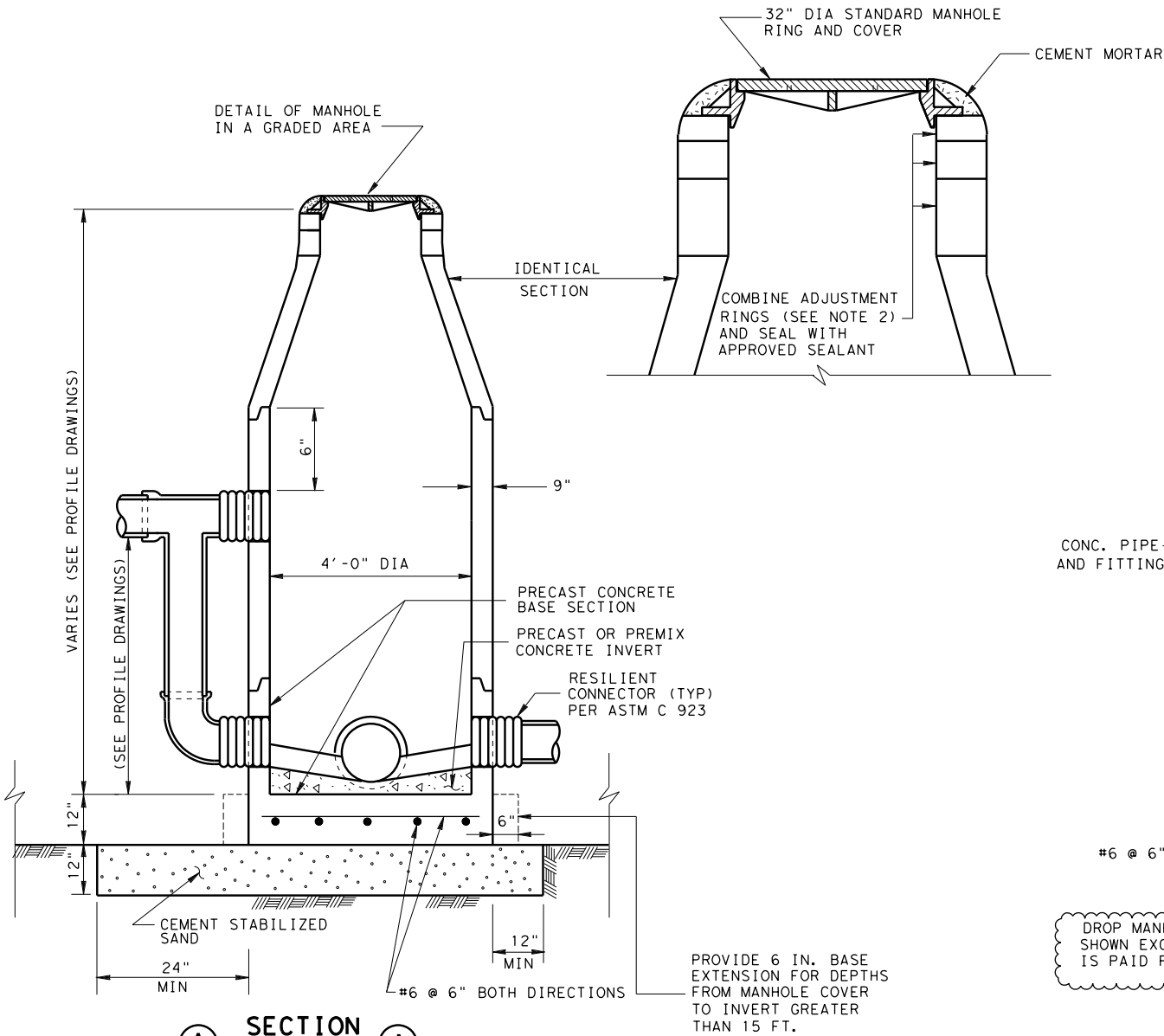
SECTION A-B

GENERAL NOTES:

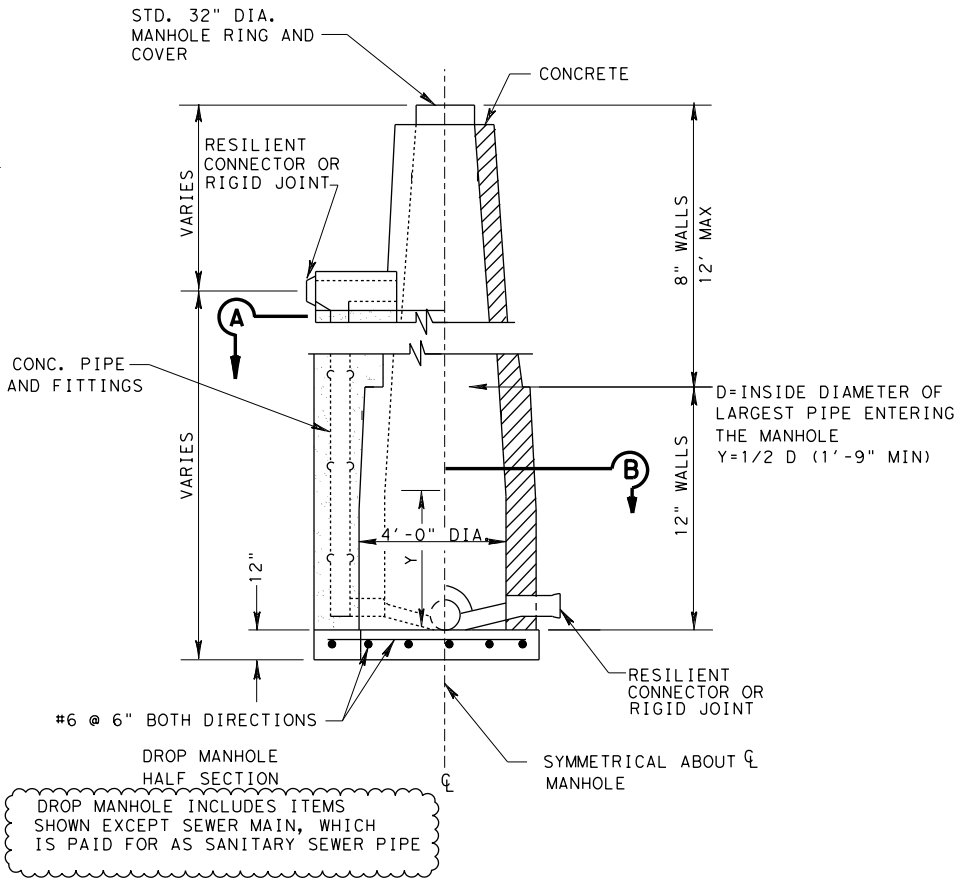
7. STAINLESS STEEL INFLOW PREVENTERS MADE BY KOLA, INC., OR APPROVED EQUAL, SHALL BE USED ON ALL SANITARY SEWER MANHOLES.
8. CONSTRUCT MANHOLES IN GRADED AREAS TO STAGE I AND FINISHED AFTER GRADING OPERATIONS ARE SUBSTANTIALLY COMPLETE.
9. WHERE THE FLOWLINE OF A PIPE ENTERING A MANHOLE IS GREATER THAN 2.5 FT. ABOVE THE FLOWLINE OF THE MANHOLE, A STANDARD DROP AS DETAILED ON THIS SHEET IS REQUIRED. USE THE SAME DIAMETER FOR THE DROP PIPE AS THE CONNECTING INFLOW PIPE.
10. JOIN PIPES INTO SOLID MASS WITH MORTAR.



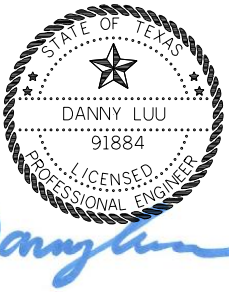
SECTION B-B



SECTION A-A
MANHOLE TYPE I (PRECAST)



MANHOLE TYPE I (CAST-IN-PLACE)



7/1/2020



SANITARY SEWER
DETAILS

SSD-I (MOD)

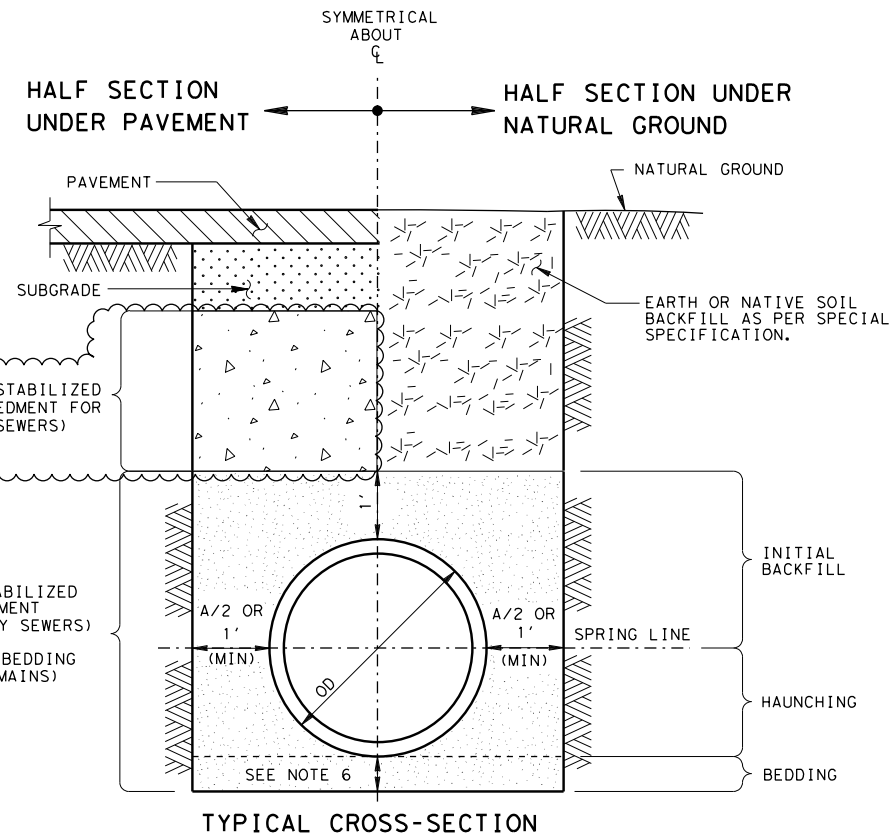
FILE: STDF1.DGN	DN: TxDoT	CK: TxDoT	DW: TxDoT	CK: TxDoT
© TxDoT MAY 2006	DIST	FED REG	PROJECT NO.	SHEET
12/2004 REVISED 6/2006	HOUSTON	6		1514
	COUNTY	CONTROL	SECT	JOB
	GALVESTON	0500	04	03
				TH 45

SHEET 1 OF 4

c:\bms\pwe-useast-006\ha1.tran\dms18985\SSD-1 (MOD).dgn STD F1

1. GROUTING THE MANHOLE STRUCTURE ANNULAR SPACE IS PERMITTED IN CASES WHERE INSUFFICIENT WORK SPACE EXISTS FOR PLACING AND COMPACTING CEMENT STABILIZED SAND.

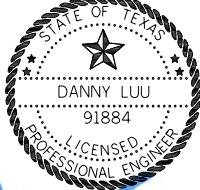
3. STAINLESS STEEL INFLOW PREVENTERS MADE BY KOLB, INC.,
OR APPROVED EQUAL, SHALL BE USED ON ALL SANITARY SEWER MANHOLES.

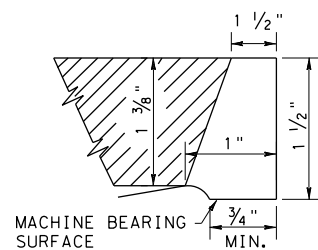


NOTES:

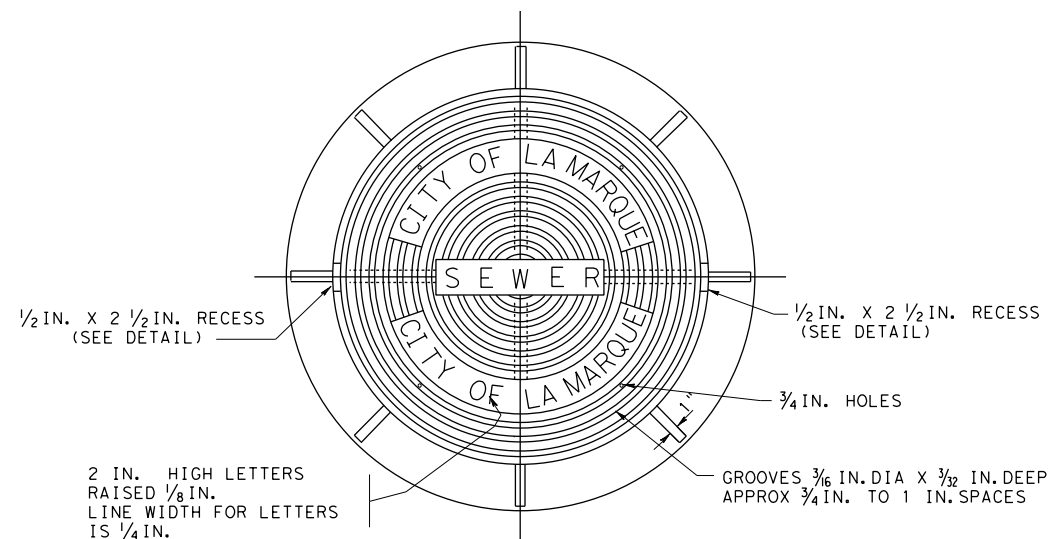
3. USE THIS DETAIL ONLY FOR DRY STABLE TRENCH CONDITIONS.
4. MIN. TRENCH WIDTH IS PIPE OD PLUS AN ALLOWANCE "A" FOR THE NOMINAL PIPE SIZE:
- | <u>NOMINAL PIPE SIZE</u> | <u>"A"</u> |
|--------------------------|------------|
| LESS THAN 18 IN. | 18 IN. |
| 18 IN. TO 30 IN. | 24 IN. |
| OVER 30 IN. | 36 IN. |
5. MAX TRENCH WIDTH IS THE MIN TRENCH WIDTH PLUS 24 IN. UNLESS OTHERWISE NOTED.
6. MINIMUM CEMENT STABILIZED SAND BEDDING IS THE GREATER OF 1/8 OD OR 6 IN.

<u>NOMINAL PIPE SIZE</u>	<u>"A"</u>
LESS THAN 18 IN.	18 IN.
18 IN. TO 30 IN.	24 IN.
OVER 30 IN.	36 IN.

 									
7/1/2020									
		CONSOR							
F-12040									
 Texas Department of Transportation Houston District									
SANITARY SEWER DETAILS SSD-2 (MOD)									
FILES: STDF2.DGN		DIN: TxDot		CK: TxDot		DW: TxDot		CK: TxDot	
© TxDOT MAY 2006		DIST HOUSTON		FED REG 6		PROJECT NO.		SHEET	
REVISIONS REVISED 6/2006		COUNTY		CONTROL		SECT		JOB	
				0500		04		03. etc	
		GALVESTON		0500		04		03. etc	
c:\bms\pwe-useast-006\hai_tran\dms18985\SSD-2 (MOD).dgn								STD F2	

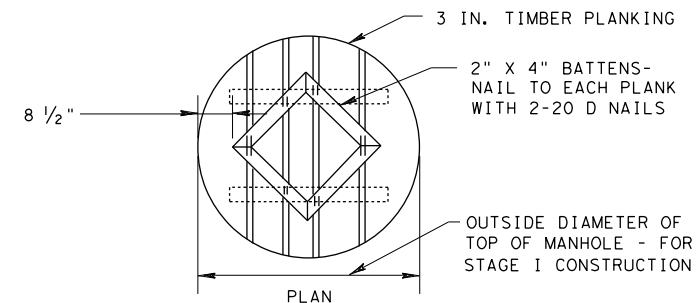


RECESS DETAIL

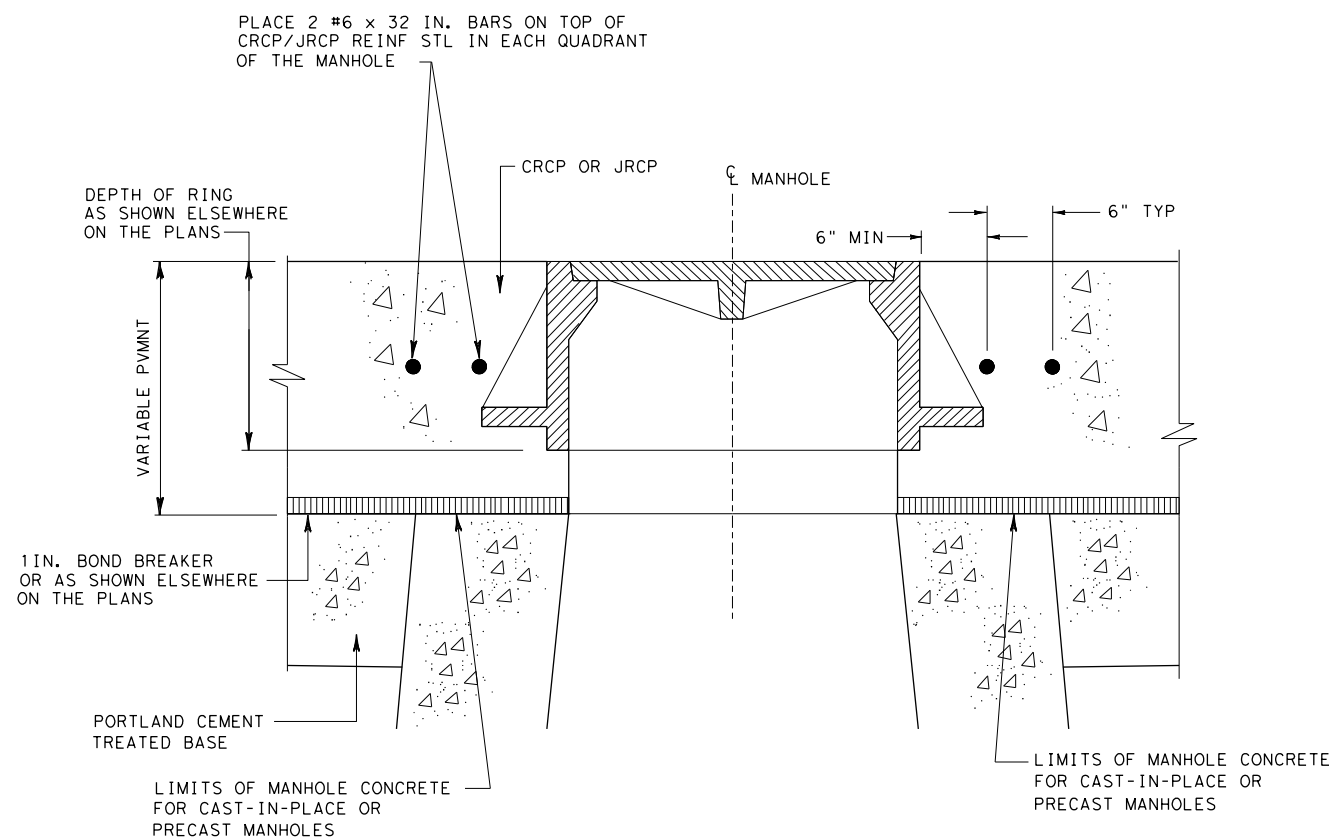


NOTE:
MANHOLE COVERS SHALL HAVE CITY OF LA MARQUE LOGO ON THEM

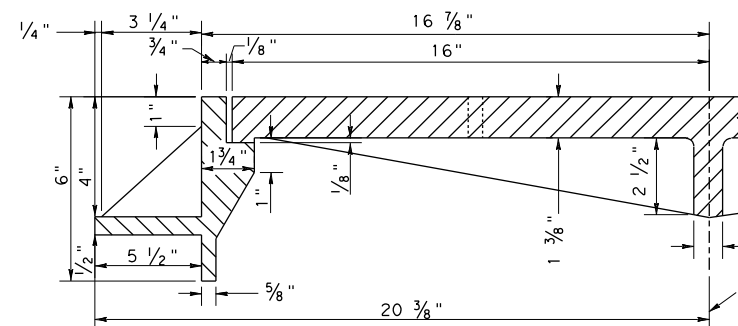
PLAN-MANHOLE RING AND COVER



TEMPORARY TIMBER
COVER FOR MANHOLES

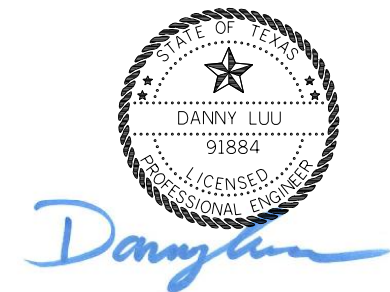


RING AND COVER CAST
MONOLITHICALLY WITH PAVEMENT



HALF SECTION
32 IN. MANHOLE RING AND COVER
STANDARD MANHOLE RING AND COVER

NOTE: JRCP = JOINTED REINFORCED CONCRETE PAVEMENT
CRCP = CONTINUOUSLY REINFORCED CONCRETE PAVEMENT



7/1/2020



F-12040



SANITARY SEWER
DETAILS

SSD-3 (MOD)

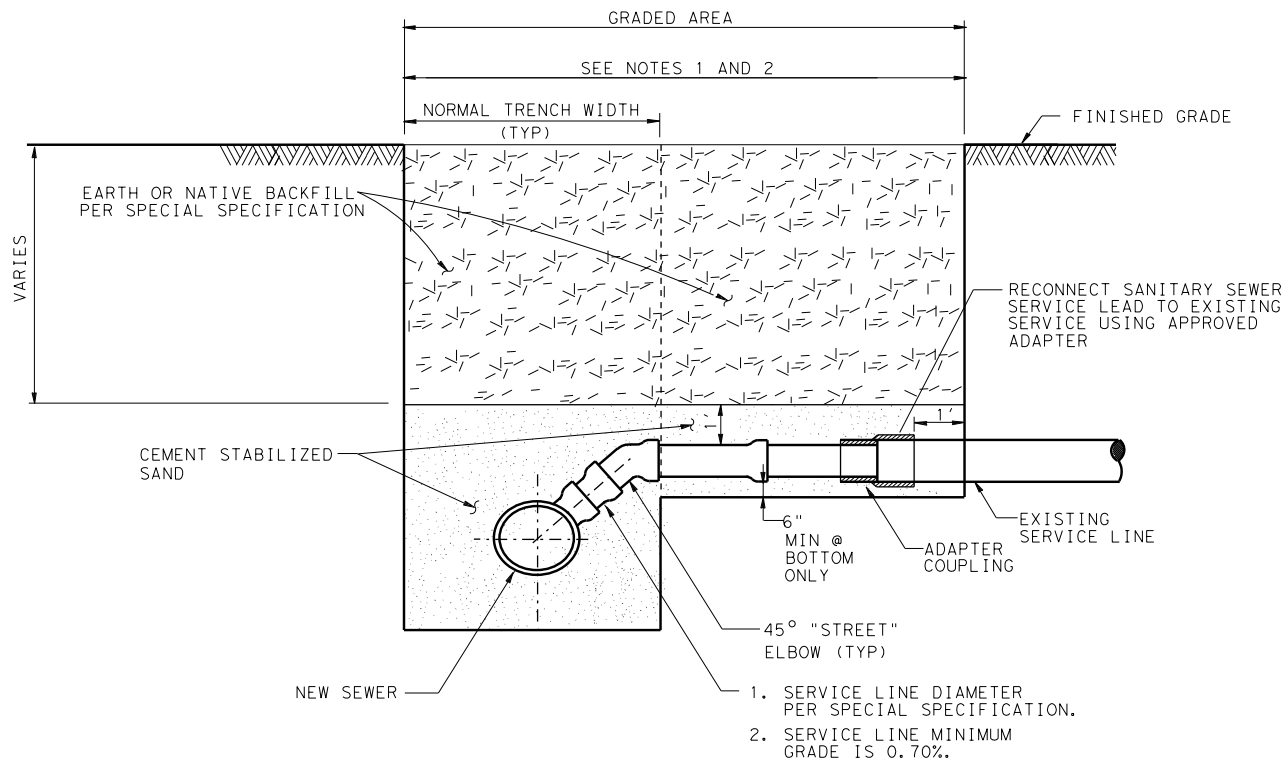
FILE:	STDF3.DGN	DN:	TxDot	CK:	TxDot	DW:	TxDot	CK:	TxDot
©	TxDOT	MAY 2006	DIST	FED REG	PROJECT NO.				SHEET
REVISIONS			HOUSTON	6					1516
REVISED 6/2006			COUNTY	CONTROL	SECT	JOB	HIGHWAY		
			GALVESTON	0500	04	03	IH 45		

SHEET 3 OF 4

c:\bms\pwe-useast-006\hai.tran\dms18985\SSD-3 (MOD).dgn STD F3

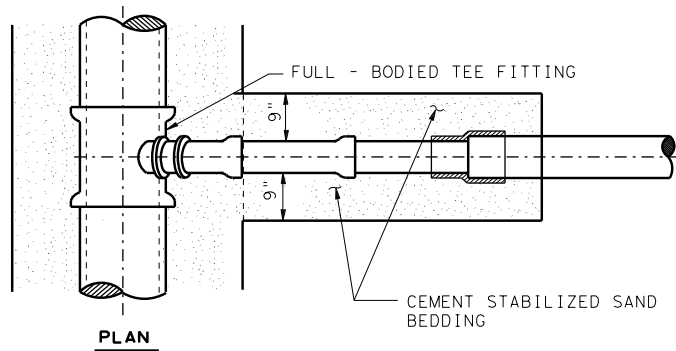
DATE: 7/1/2020 11:34:53 AM
FILE: c:\bms\pwe-useast-006\hai.tran\dms18985\SSD-3 (MOD).dgn

DATE: 7/1/2020 11:35:15 AM
FILE: c:\bms\pwe-useast-006\hai.tran\dms18985\SSD-4.dgn



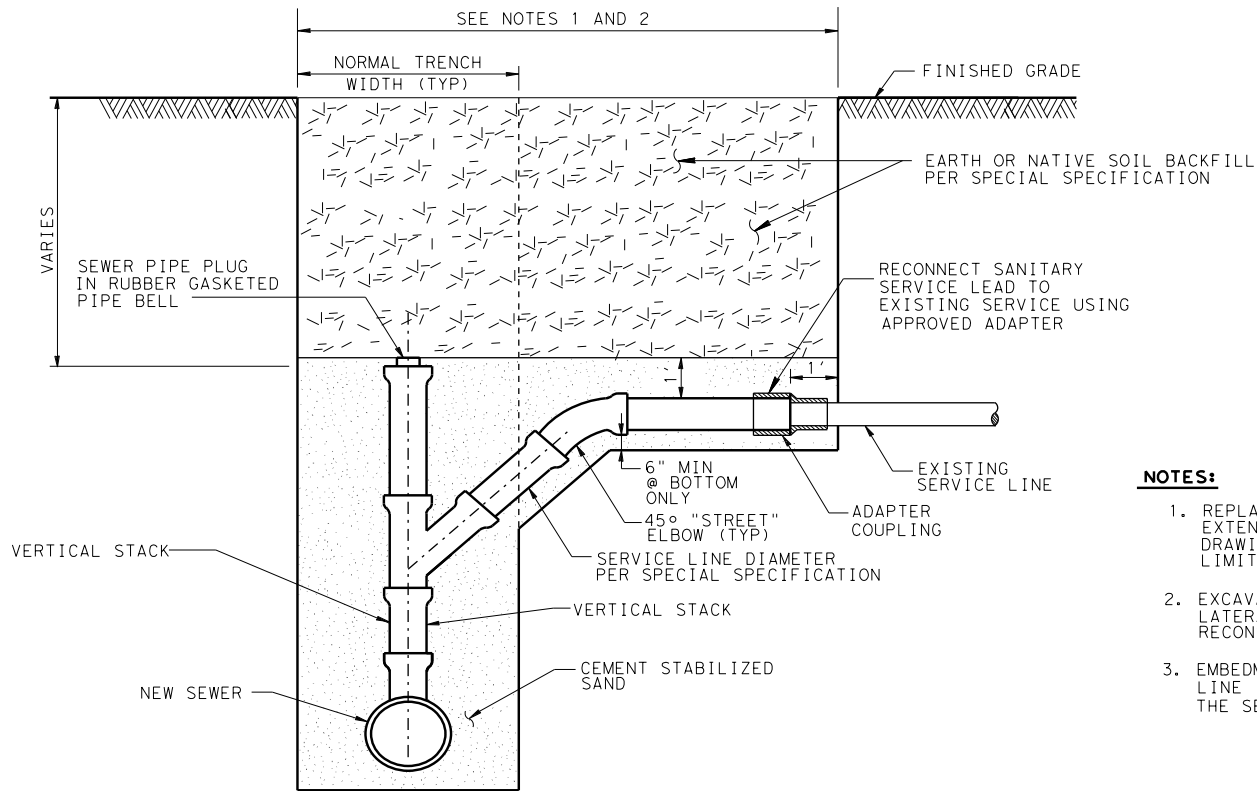
**CROSS-SECTION OF SEWERS
AT SERVICE CONNECTION**

(NOT TO SCALE)



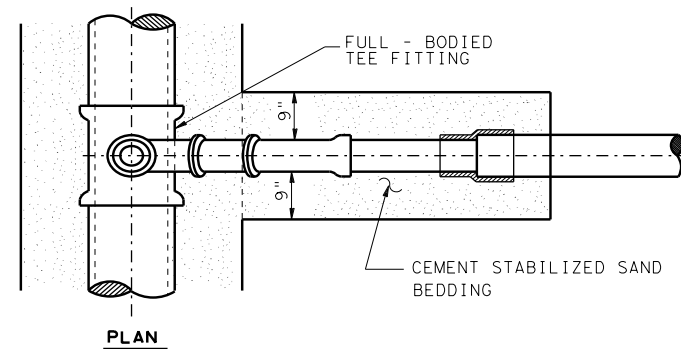
**SERVICE RECONNECTION
ON NEW OR
REPLACEMENT SEWER**

(NOT TO SCALE)



**CROSS-SECTION OF SEWERS
AT SERVICE CONNECTION**

(NOT TO SCALE)



**SERVICE RECONNECTION
WITH STACK**

(NOT TO SCALE)

 **Texas Department of Transportation**
Houston District (Roadway)

**SANITARY SEWER
DETAILS**

SSD-4

FILE: STDF4.DGN	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT MAY 2006	DIST	FED REG	PROJECT NO.	SHEET
REVISIONS REVISED 6/2006	HOUSTON	6		1517
	COUNTY	CONTROL	SECT	JOB
	GALVESTON	0500	04	03, etc
				1H 45

SHEET 4 OF 4

c:\bms\pwe-useast-006\hai.tran\dms18985\SSD-4.dgn STD F4

Attachment “B” Accounting Method



Actual Cost Method of Accounting

The utility accumulates cost under a work order accounting procedure prescribed by the Federal or State regulatory body and proposes to request reimbursement for actual direct and related indirect costs.



Lump Sum Method of Accounting

Utility proposed to request reimbursement based on an agreed lump sum amount supported by a detailed cost analysis.

Initial

Date

TxDOT

Initial

Date

Utility

Attachment “C” Schedule of Work

Estimated Start Date: October 1, 2020, (subject to physical work restrictions prior to the issuance of environmental clearance as required by the provisions of this agreement)

Estimated Duration (days): 150

Estimated Completion Date: April 1, 2021

Initial Date
TxDOT

Initial Date
Utility

Attachment “D”

Statement Covering Contract Work

(ROW-U-48)
(ROW-U-48-1, if applicable)

Initial Date
TxDOT

Initial Date
Utility



STATEMENT COVERING UTILITY CONSTRUCTION CONTRACT WORK
(AS APPEARING IN ESTIMATE)

Form ROW-U-48
(Rev. 3/19)
Page 1 of 1

U-Number: U16125

ROW CSJ Number: 0500-04-139 District: Houston

County: Galveston Highway No.: IH 45

Federal Project No.: _____

I, Bobby Hocking, Mayor, a duly authorized and qualified representative of
City of La Marque, Texas, hereinafter referred to as **Owner**, am fully cognizant of the
facts and make the following statements in respect to work which will or may be done on a contract basis as it appears in the
estimate to which this statement is attached.

It is more economical and/or expedient for **Owner** to contract this adjustment, or **Owner** is not adequately staffed or equipped
to perform the necessary work on this project with its own forces to the extent as indicate on the estimate.

Procedure to be Used in Contracting Work

- ☐ A. Solicitation for bids is to be accomplished through open advertising and contract is to be awarded to the lowest
qualified bidder who submits a proposal in conformity with the requirements and specifications for the work to be
performed. Associated bid tabulations will be provided to the **State**.
- ☐ B. Solicitation for bids is to be accomplished by circulating to a list of pre-qualified contractors or known qualified
contractors and such contract is to be awarded to the lowest qualified bidder who submits a proposal in conformity
with the requirements and specifications for the work to be performed. Associated bid tabulations will be provided to
the **State**. Such presently known contractors are listed below:
- 1.
 - 2.
 - 3.
 - 4.
 - 5.
- ☐ C. The work is to be performed under an existing continuing contract under which certain work is regularly performed
for **Owner** and under which the lowest available costs are developed. The existing continuing contract will be made
available to the **State** for review at a location mutually acceptable to the **Owner** and the **State**. If only part of the
contract work is to be done under an existing contract, give detailed information by attachment hereto.
- ☐ D. The utility proposes to contract outside the foregoing requirements and therefore evidence in support of its proposal
is attached to the estimate in order to obtain the concurrence of the State, and the Federal Highway Administration
Division Engineer where applicable, prior to taking action thereon (approval of the agreement shall be considered as
approval of such proposal).
- ☒ E. The utility plans and specifications, with the consent of the State, will be included in the construction contract
awarded by the State. In the best interest of both the **State** and the **Owner**, the **Owner** requests the **State** to include
the plans and specifications for this work in the general contract for construction of Highway IH 45
in this area, so that the work can be coordinated with the other construction operations; and the construction
contract is to be awarded by the **State** to the lowest qualified bidder who submits a proposal in conformity with the
requirements and specifications for the work to be performed. If this option is chosen, attach form ROW-U-48-1, the
terms of which are incorporated herein by reference.

Signature _____

Date _____

Title _____

**Statement Covering Utility Construction Contract Work – In the State’s
Highway Construction Contract
(As Referenced in Form ROW-U-48, Option E)**

Work Responsibilities

- A. The **Utility** shall provide the following services under this contract:
- i. Responsible for engaging the services of a Texas Registered Professional Engineer to prepare drawings and technical specifications for relocations and adjustments along IH 45 From N of FM 519 to N of Texas City WYE.
 - ii. Provide the plans and specifications to the State to include in the current planning specifications and estimate package being prepared by representatives of the Texas Department of Transportation’s Galveston Area Office.
 - iii. Secure all necessary permitting as may be required for the installation of the Sewer line.
 - iv. Arrange and coordinate with the contractor, through the State, materials and equipment testing, rejection of all work not conforming to minimum requirements of the construction contract documents, maintenance of the proposed Sewer line during construction, and the relocation of Sewer line and connection of services to customers.
 - v. Advise the State of work that Utility determines should be corrected or rejected.
 - vi. Arrange, observe, and inspect all acceptance testing and notify the State of the results of these activities.
 - vii. Provide inspection services for the construction, notify the State of defects and deficiencies in the work, and observe actions of the contractor to correct such defects and deficiencies.
 - viii. Assume all responsibility for the maintenance of the existing Sewer line during and upon completion of the construction contract.
 - ix. Ensure all Texas Commission on Environmental Quality and all other regulatory rules, regulations and laws are strictly adhered to.
 - x. Prepare and submit both a certificate of substantial completion and a list of observed items requiring completion or correction for the relocations and adjustments to the Project Engineer for concurrence.
 - xi. Coordinate all construction activities performed by Utility’s staff for the relocations and adjustments through the Project Engineer.

B. The State shall provide the following services under this contract:

- i. Combine the Sewer line relocation and adjustment plans with the plans being prepared for the Project.
- ii. Review and approve the final construction plans prior to any construction-related activities. In order to ensure federal and/or state funding eligibility, projects must be authorized by the State prior to advertising for construction.
- iii. Advertise for construction bids, issue bid proposals, receive and tabulate the bids, and award and administer the contract for construction of the Project.
- iv. Negotiate and administer all field changes and change orders required for the Project. All change orders increasing construction costs for Utility's Project shall be submitted to Utility for review and approval together with an evaluation. Utility agrees to review and either approve or disapprove all change orders within five (5) business days after receipt of such order unless Utility Board's approval is necessary in which case Utility shall bring the item to Utility Board as soon as reasonably possible.
- v. Provide overall project management to supervise the day-to-day activities of the construction and monitor the activities of the contractor to promote the timely and efficient completion of the Project in accordance with the approved Plans and Specifications and construction schedule.
- vi. Conduct field observations and coordinate with Utility's inspectors and the contractor to cure defects and deficiencies in the construction prior to final acceptance.
- vii. Make timely payment to the contractor for work performed in connection with the Project.
- viii. Ensure access and permit Utility's inspectors and other authorized representatives to inspect the waterline construction at all times.
- ix. Conduct and coordinate final inspection of the Project in the presence of Utility's Engineer and Inspector, transmit final list of items to be completed or repaired and observe contractor correction of same.
- x. Maintain job file.

Attachment “E”

Utility Joint Use Acknowledgment – (ROW-U-JUAA) and/or Utility Installation Request – (Form 1082)

☐ Utility Joint Use Acknowledgment (ROW–U–JUAA)

☒ Utility Installation Review/Permit Number:

Initial Date
TxDOT

Initial Date
Utility

Attachment “F” Eligibility Ratio

Eligibility Ratio established: %

- ☐ Non-interstate Highway (Calculation attached)
- ☒ Interstate Highway

Initial Date
TxDOT

Initial Date
Utility

Attachment “G”

Betterment Calculation and Estimate

- ☐ Elective Betterment Ratio established: %
(Calculation attached)
- ☒ Forced Betterment
(Provide supporting documentation)
- ☐ Not Applicable

Initial Date
TxDOT

Initial Date
Utility

IH 45 Sanitary Sewer Forced Betterment:

Along Main Street, Crossing Lake Road and FM 519, Sta. 411+69 to Sta. 416+76: 534 LF of existing 6" sanitary sewer was in violation of the UAR, ran longitudinally under proposed roadway, and was in conflict with proposed 24" and 30" RCP storm sewer. Replacement with 539 LF of 8" sanitary sewer, encased in 123 LF of 18" steel casing under Lake road, at 0.44% minimum slope was required based on TCEQ requirements tying into an existing Manhole with an 8" line at Sta 416+76. This 8" line is a forced "Forced Betterment" due to TCEQ requirements for following reasons:

1. A 8" wastewater line has to have a minimum slope of 0.335% per TCEQ requirements.
2. A 6" wastewater line has to have a minimum slope of 0.500% per TCEQ requirements.

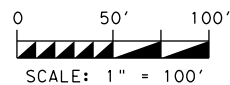
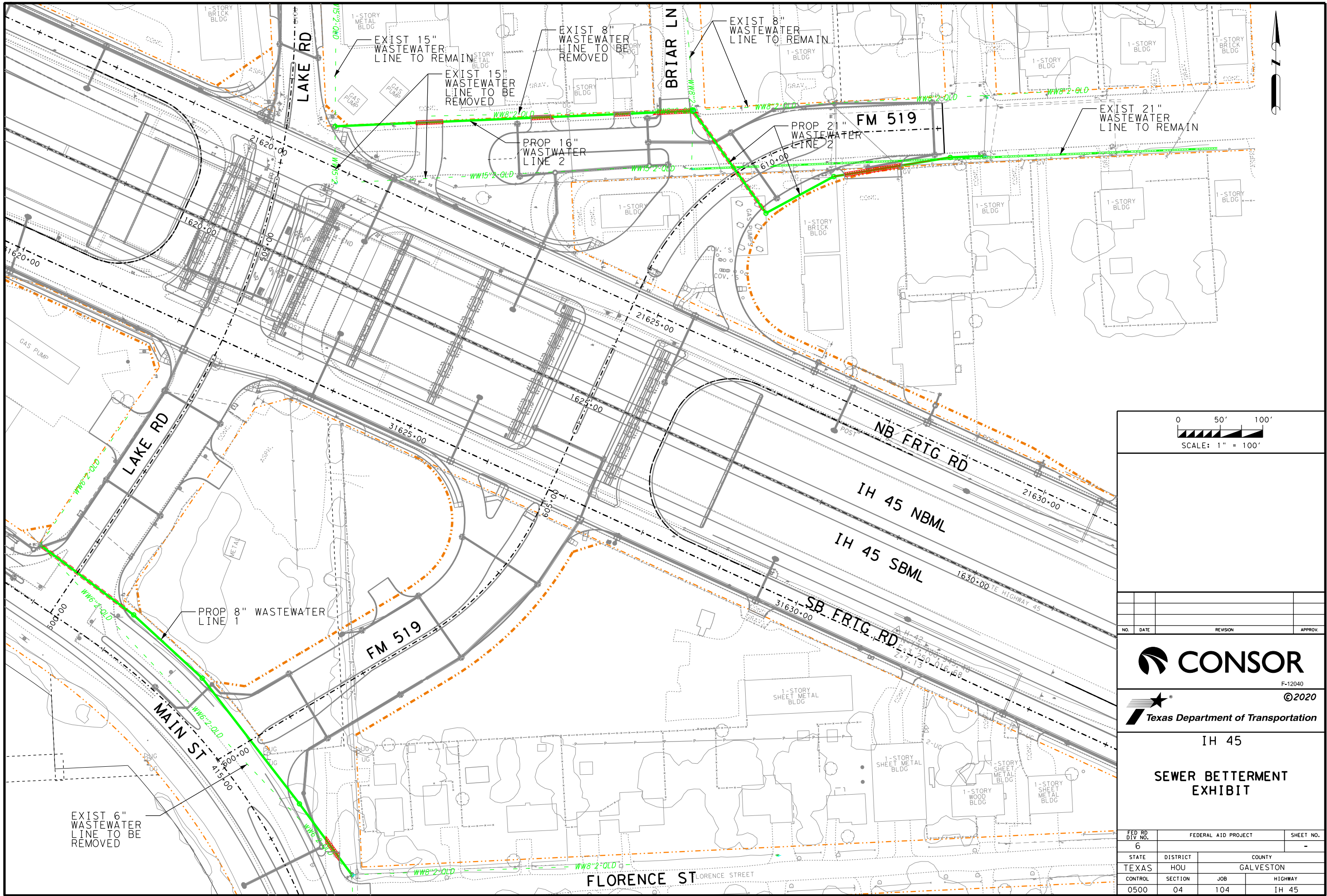
Since the tie in points on either end where fixed a slope of 0.44% was required for the line to meet these existing ties in locations while missing the water lines and drainage lines. This slope does not meet the minimum slope of 0.500% for a 6" wastewater line, therefore an 8" line was required.

Three manholes were added to the line for change in direction of the sanitary sewer. The existing 6" line running along Lake Rd that was not in conflict and will not be relocated. See Sewer Force Betterment Exhibit

Along Lake road and the Realigned FM 519, Lake Rd Sta 506+51 to FM 519 approximately 45 ft past Sta 612+06: There are three existing sanitary sewer line an 8" (377 LF) and 15" (486 LF) drain into a 21" (345 LF). Sections of all three lines have UAR violation by running longitudinal with manholes in proposed pavement and conflicts with the storm sewer system that is to be installed. The system for the sanitary line was reconfigured the 8" line is being removed and the 15" line is being changed to a 16" (839 LF) pressured line and being relocated to the other side of the street. The 16" line should be considered a forced betterment due to separation requirement between the sanitary line and the proposed water line (per TCEQ) if a 9ft separation cannot be met then 150 psi pipe is required. The PVC pipe C900 DR 25 is not available in 15" diameters so 16" pipe was used. See Sewer Force Betterment Exhibit

The existing 15", and 8 "meet at a manhole with the outfall pipe of 21" that will now be in the proposed pavement. This configuration is maintained with the two existing 8", the 16" intersect at a manhole at the north east corner of Briar Ln. The outfall at this location is a 21" wastewater line crossing to the south of FM 519. This is the same configuration as the existing but was shifted to the north side of FM 519 due to wastewater trunk line being shifted to the north side.

H:\TXPROJ\TX2618-01\DWG\DWG_104\DCNM\SC\COLM Sewer Betterment Exhibits\LA_IH45_SEWER OVERALL01.dgn
1:55:21 PM
7/10/2020



NO.	DATE	REVISION	APPROV.

CONSOR

F-12040

©2020



IH 45

**SEWER BETTERMENT
EXHIBIT**

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6			-
STATE	DISTRICT	COUNTY	
TEXAS	HOU	GALVESTON	
CONTROL	SECTION	JOB	HIGHWAY
0500	04	104	IH 45

Attachment “H” Proof of Property Interest

☐ Supporting documentation of compensable property interest that establishes reimbursement eligibility as referenced in Texas Transportation Code §203.092.

☐ Property interest documented through applicable affidavits and required attachments.

☐ ROW-U-1A **and**

☐ ROW-U-1B

Or

☐ ROW-U-1C

☒ The roadway improvement project is designated as an Interstate Highway project; therefore, no supporting documentation of compensable interest is required.

Initial Date
TxDOT

Initial Date
Utility

Fiscal 2020-21 Annual Operating and Capital Plan Calendar of Events for Budget Preparation and Adoption

May 8th	Deadline for all department requests to be submitted to Finance
May 18th-May 22nd	City Manager and Finance Director meet with individual departments
May 25th-July 17th	City Manager and Finance Director balance the budget
July 20th	City Manager Proposes Budget (Special Council Meeting)
July 20th	Budget filed with City Clerk
July 27, 28, and 30th	Council workshops (Proposed)
July 27th-31st	Certified Values for 2020 received from Appraisal District
August 10th	Announcement of Public Hearings (<i>August 17th and September 15th</i>)
August 10th	Publication of tax rates: newspapers, TV, website, etc.
August 17th	First Tax Public Hearing
September 8th	First Budget Public Hearing
September 8th	Budget & Tax Adoption First Reading
September 15th	Budget Hearing & Adoption-Second and Final Reading; Ordinance Public Hearing (<i>Per Charter</i>)
September 15th	Tax Rate Hearing & Adoption Second & Final Reading; Ordinance Public Hearing (<i>Per Charter</i>)
October 1	Fiscal Year Begins

