



PERMIT TO INSTALL A 12" NATURAL GAS PIPELINE CROSSING ON THE
TEXAS CITY HURRICANE LEVEE NEAR DIKE ROAD.
(29.389472, -94.887526).

To Applicant: Houston Pipe Line Company LP
1300 Main Street
Houston, TX 77002
Attn: Stephen Ross

PERMIT NUMBER: TCSW-26-385

Dear Applicant:

You are hereby granted authority to install one 12" natural gas pipeline over the Texas City Hurricane Levee near Dike Rd. as shown on drawings in Exhibit A.

Your authority is granted under the following terms, limitations and conditions.

1. Your use of the Permitted Premises is limited to the construction activity, limits and conditions as approved in the 408 permit 408-SWG-2025-0040 associated with regulatory permit SWG-2024-00786 issued by the United States Army Corps of Engineers (USACE) Exhibit A. Areas affected by your activities shall be restored to existing or better conditions. Any other use of the Permitted Premises will automatically revoke this Permit.
2. The County does not guarantee or warrant in any capacity that it owns the Permitted Premises or the adjacent levee in fee simple absolute. This permit is effective only insofar as the rights of the County in the Permitted Premises are concerned. You must obtain such permission or authorization as may be necessary on account of any other existing rights by separate negotiations.
3. The County does not warrant in any manner that any portion of Hurricane Levee is suitable for the permitted purposes.
4. This Permit is being given exclusively to you. It is your responsibility to notify any of your employees, representatives, associates, contractors or sub-contractors of the terms and conditions of this permit. It is also your responsibility to ensure that any such person or entities acting on your behalf also abide by the conditions of this permit. You

will be responsible for any damage caused by any of your employees, representatives, associates, contractors or sub-contractors.

5. Any matters relating to this permit shall be addressed to Michael Shannon, Galveston County Engineer at 722 Moody, Galveston, TX 77550, 409.770.5453, michael.shannon@co.galveston.tx.us.
6. The County may permit parties other than you to have use of the Permitted Premises during the permitted period. We will attempt to provide you with the names of such other permitted parties.
7. You are fully responsible for all matters pertaining to traffic regulation, safety and control on all areas of the Permitted Premises attributed to your operations.
8. Your operations will be performed without cost or expense to the County.
9. You agree to be responsible for all damages to the levee and levee roadway caused by your vehicles, equipment or operations or by vehicle, equipment or operations of others acting on your behalf.
10. You will settle, to the County's satisfaction, all claims, damages, demands and causes of action related to the Permitted Premises and levee right-of-way including the levee drainage system, pump station and levee road resulting from your operations or the operations of others acting on your behalf in an expedient manner.
11. You will execute and have your surety execute the attached bond in the amount of \$100,000.00 with the issuance date being the effective date of the permit. The surety bond shall remain in effect for one year, unless the County releases it sooner.
12. The County or its consultant will make all inspections and submit all claims for damages to you within a timely manner. If no damages are determined to have occurred by the County, your bond will be released.
13. Any use of the Permitted Premises, other than for the 12" natural gas pipeline requires a new permit and surety bond. The amount of the bond required will be renegotiated.
14. You shall furnish upon Issuance date to the County a copy of your current Certificate of Liability Insurance coverage, insuring against damages, and damages to the person or property of third parties that are caused by vehicles, equipment or your operations; such third party general liability being with bodily injury limits not less than \$250,000 per person, and \$500,000 per accident, and property damage limits of not less than \$100,000 per accident. Galveston County must be named additional insured on the policy.

15. YOU AGREE TO PROTECT, INDEMNIFY, DEFEND AND HOLD THE COUNTY OF GALVESTON HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS OF DAMAGE TO PERSONS OR PROPERTY OCCURRING OR IN ANY WAY ARISING OUT OF OPERATIONS UNDER THIS PERMIT.

16. You agree to these conditions by signing below.

Dated this _____ day of _____, 2026.

COUNTY OF GALVESTON,

By: _____
Mark Henry, County Judge

ATTEST:

By: _____
Dwight D. Sullivan, County Clerk

Houston Pipe Line Company LP
By: HPL GP, LLC, its general partner

By: Kevin Taliaferro
Kevin Taliaferro, Sr. Director - Land & Right of Way



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT
2000 FORT POINT RD
GALVESTON, TEXAS 77550

EXHIBIT A

March 30, 2026

Central Branch

SUBJECT: Permit No. SWG-2024-00786; Nationwide Permit Verification

Stephen Ross
Houston Pipe Line, LP
1300 Main Street
Houston, Texas 77002
Sent via email to: Stephen.Ross@energytransfer.com

Dear Mr. Ross:

This is in reference to your request, dated June 30, 2025, submitted on your behalf by EXP Energy Services, Inc., to construct 1.86 miles of 12-inch diameter natural gas pipeline across the Texas City Ship Channel from the intersection of Bay Street North and 3rd Avenue to 0.69-mile northeast of the intersection of Dock Road and Industrial Canal Road. The pipeline will be installed by open cut trenching and horizontal directional drilling (HDD) at a depth of -138 feet below the mean lower low water (MLLW) of the Texas City Ship Channel. The applicant proposes to temporarily impact 0.27-acre of palustrine emergent (PEM) wetlands by open cut trenching for the placement of the pipeline. All temporarily impacted areas will be restored to pre-construction contours upon project completion. The project site is located in the Texas City Ship Channel, beginning at the intersection of Bay Street North and 3rd Avenue and ending 0.69-mile northeast of the intersection of Dock Road and Industrial Canal Road, in Texas City, Galveston County, Texas.

This action is subject to Executive Order 14156, “Declaring a National Energy Emergency” issued 20 January 2025. As such, the permit review has been expedited using emergency regulations.

This request is verified by Nationwide Permit (NWP) 12 pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. This NWP verification is valid provided the activity is compliant with the enclosed plans, in 7 sheets. In addition, the activity must be in compliance with the NWP General/Regional Conditions, Section 401 Water Quality Certification, and the Coastal Management Program, which can be found at: <https://www.swg.usace.army.mil/Missions/Regulatory/Permits/Nationwide-General-Permits/>, a hard copy can be provided to you upon request.

NWP 12. Oil or Natural Gas Pipeline Activities: Authorizes activities required for the construction, maintenance, repair, and removal of oil and natural gas pipelines and associated facilities in waters of the United States.

The NWP verification is valid until the NWP is modified, reissued, or revoked. The subject NWPs authorized in 2026 are scheduled to be modified, reissued, or revoked prior to March 15, 2031. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

Also enclosed is a copy of the authorization for work pursuant to Section 14 of the Rivers and Harbors Act of 1899, 33 USC 408 (Section 408). This evaluation was performed in accordance with Engineer Circular (EC) 1165-2-216. This authorization for work under Section 408 is valid for five years from the date of the enclosed letter, unless the Galveston District determines new information warrants a revision prior to the expiration date. If you have any questions regarding your Section 408 authorization, please reference 408-SWG-2025-0040 and contact the Operations Acting Land Use Coordinator, Mr. Aron Edwards at (409) 766-3028 or by email at Aron.S.Edwards@usace.army.mil or Section 408 Coordinator, Ms. Charlene Harry at (409) 766-3865 or by email at Charlene.Y.Harry@usace.army.mil.

This verification does not address nor include any consideration for geographic jurisdiction on aquatic resources and shall not be interpreted as such. If you have any questions, please contact Zechariah Tur by telephone at 409-766-3974 or by electronic mail (email) Zechariah.J.Turk@USACE.Army.Mil. Please notify the Chief of the Compliance Branch in the Galveston District Regulatory Division in writing by email at CESWGRegulatoryInbox@USACE.Army.Mil, upon completion of the authorized project.

FOR THE DISTRICT COMMANDER:



K. Marie Taylor
Leader, Central Branch

cc w/Encl.
Wayne Richardson, EXP Energy Services

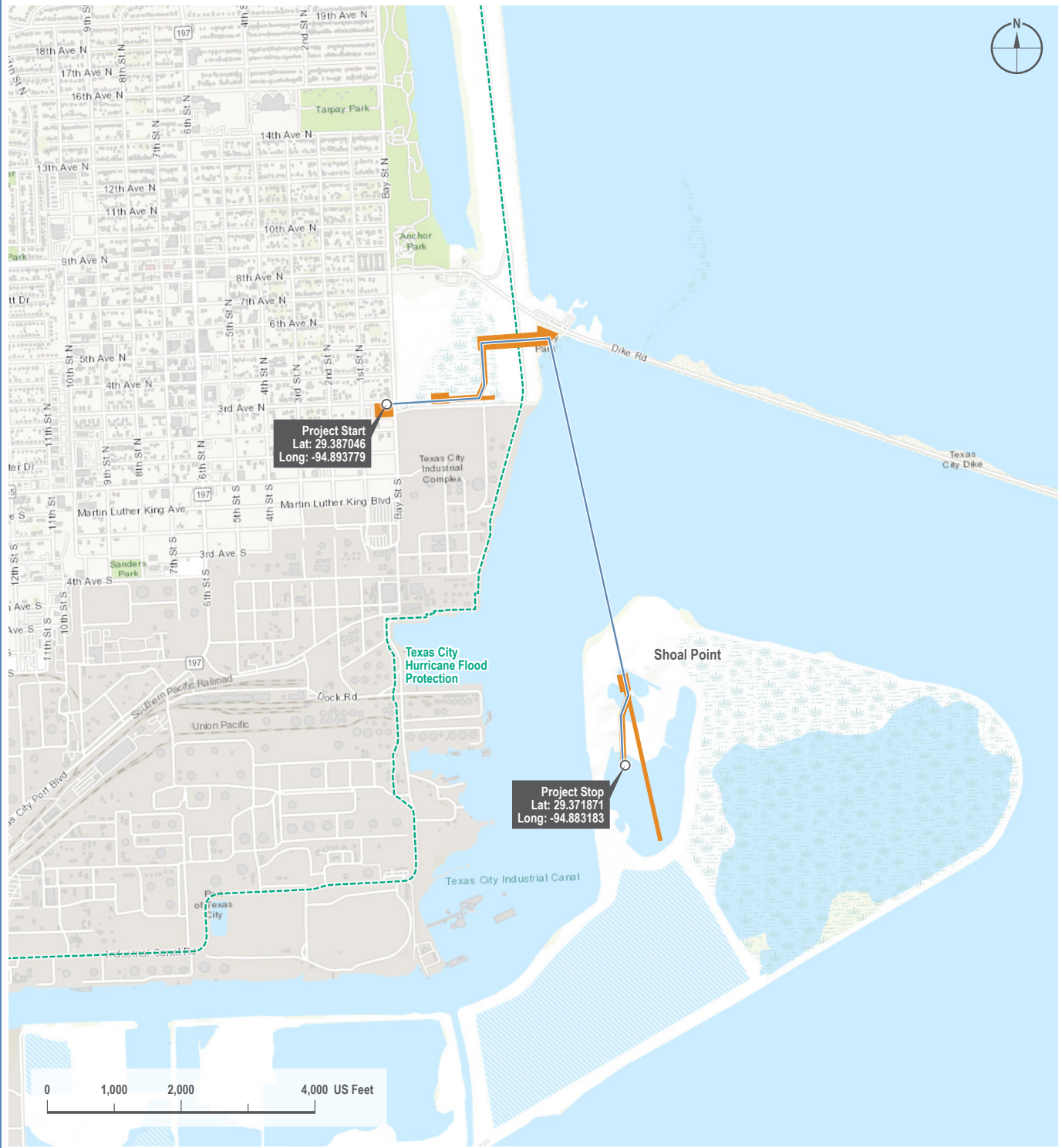
Eighth Coast Guard District, New Orleans, LA

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Coast & Geodetic Survey, Silver Spring, MD

Texas Commission on Environmental Quality

Texas General Land Office

FIGURE 1 - PROJECT LOCATION MAP



Path: G:\Projects\17A_000030723_ET_HPL_Texas_City_Pipeline_Project\090_CED\10_Mapping\02_Overview\02_Environmental\1002-03-002_Project_Location_Map\1002-03-002.aprx

VICINITY MAP



LEGEND

- Proposed Pipeline
- Proposed Project Workspace
- Texas City and Vicinity Hurricane Flood Protection (HFP)

PREPARED BY

EXP Energy Services Inc.
t: +1 (713) 439-3600
11330 Clay Road, Suite 550
Houston, TX 77041
www.exp.com



HPL TEXAS CITY PIPELINE PROJECT



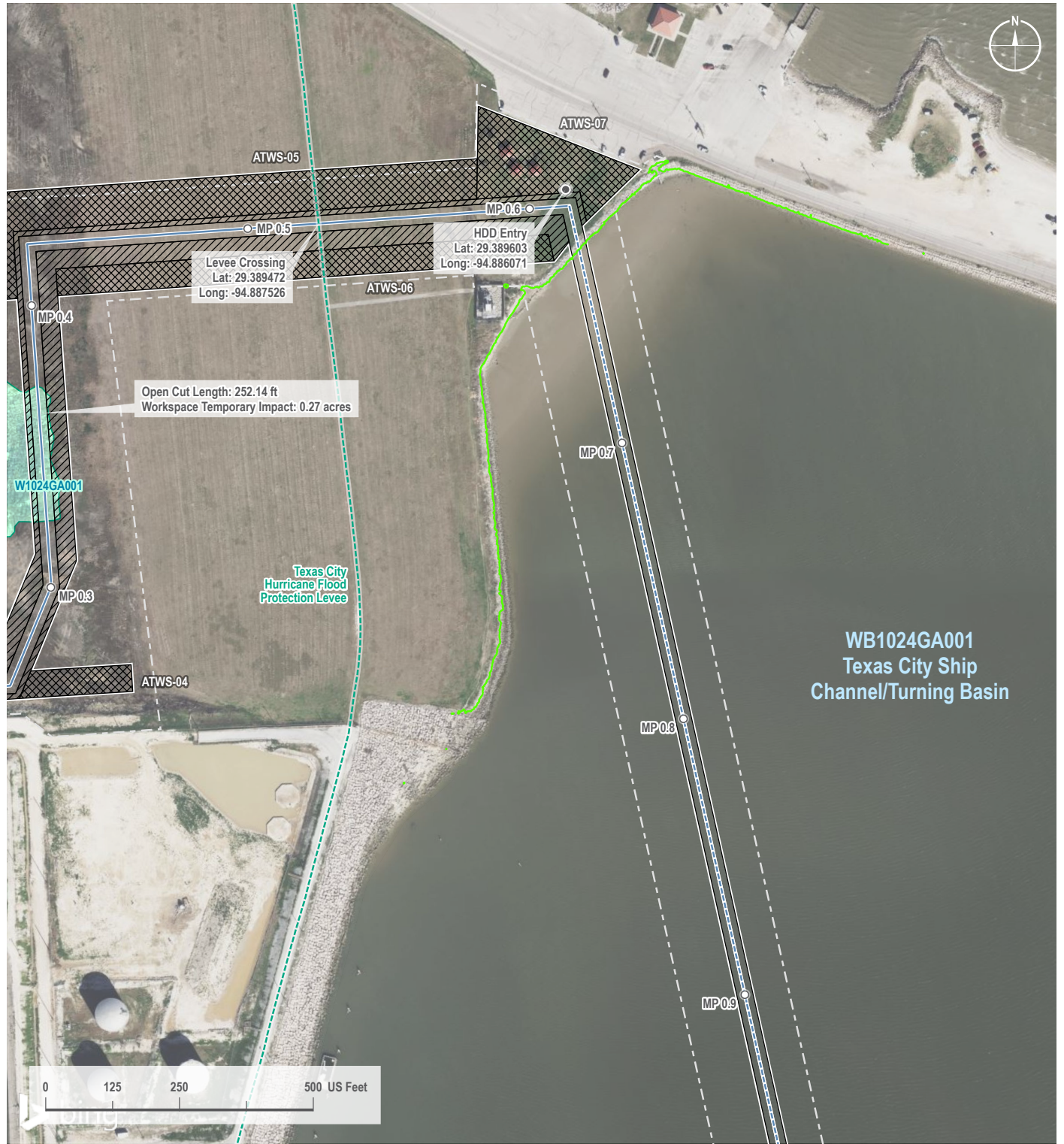
REVISIONS

Date: 2025-04-18	Revised by: GS	Checked by: WR
0 - Issued for Use		
Date:	Revised by:	Checked by:

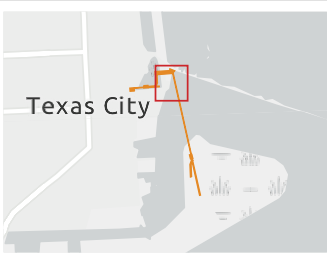
DRAWING INFORMATION

Scale: 1 : 24,000	Project: TX St.Plane S. Central
Sheet: 1 of 1	Drawing Number: 1002-03-002

FIGURE 5 - AERIAL PERMIT MAPS



VICINITY MAP



LEGEND

- Proposed HDD Entry/Exit
- Proposed Pipeline
- HDD Segment (Centerline)
- Mean High Water Line (MHWL)
- Texas City Hurricane Flood Protection Levee
- ▭ Permanent Easement
- ▨ Temporary Workspace
- ▩ Additional Temporary Workspace
- ▭ ESA
- Waterbody
- Wetland

PREPARED BY

EXP Energy Services Inc.
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11330 Clay Road, Suite 550
Houston, TX 77041
www.exp.com



HPL TEXAS CITY PIPELINE PROJECT



REVISIONS

Date: 2025-04-24 Revised by: GS Checked by: WR
0 - Issued for Use

DRAWING INFORMATION

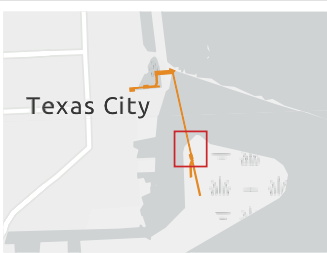
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Drawing Number: 1002-03-006

FIGURE 5 - AERIAL PERMIT MAPS



Path: C:\Project\TXL-0003079-29 - ET - HPL Texas City Pipeline Project\003 - Environmental\02-03-06 Aerial Permit Map\102-03-006.aprx

VICINITY MAP



LEGEND

- Proposed HDD Entry/Exit
- Proposed Pipeline
- - - HDD Segment (Centerline)
- Mean High Water Line (MHWL)
- Permanent Easement
- ▨ Temporary Workspace
- ▩ Additional Temporary Workspace
- ESA
- Waterbody
- Wetland
- Approximate Dredged Material Placement Area

PREPARED BY

EXP Energy Services Inc.
t: +1 (713) 439-3600
11330 Clay Road, Suite 550
Houston, TX 77041
www.exp.com

HPL TEXAS CITY PIPELINE PROJECT

Client:

REVISIONS

Date: 2025-04-24 Revised by: GS Checked by: WR
0 - Issued for Use

DRAWING INFORMATION

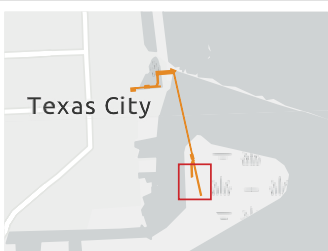
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Projection: TX St.Plane S. Central
Sheet: 4 of 5
Drawing Number: 1002-03-006

FIGURE 5 - AERIAL PERMIT MAPS



Path: C:\Project\TXL-0003079-29-ET-HPL-Texas City Pipeline Project\0003-Environmental\1002-03-006-Aerial Permit\Map\1002-03-006.aprx

VICINITY MAP



LEGEND

- Proposed HDD Entry/Exit
- Proposed Pipeline
- - - HDD Segment (Centerline)
- Permanent Easement
- ▨ Temporary Workspace
- ▩ Additional Temporary Workspace
- ESA
- Waterbody
- Wetland
- Approximate Dredged Material Placement Area

PREPARED BY

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HPL TEXAS CITY PIPELINE PROJECT

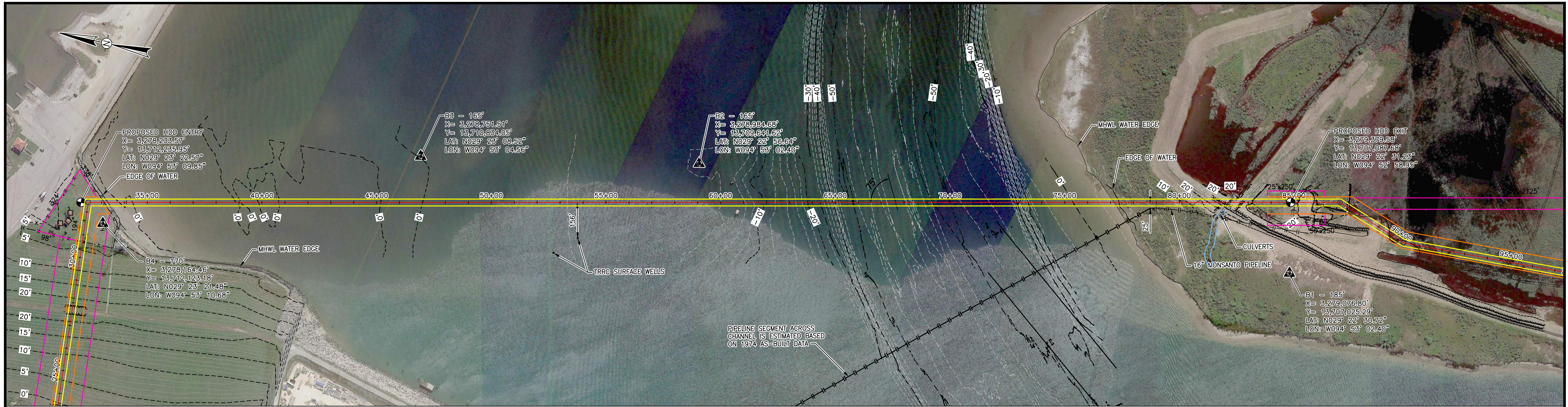
Client:

REVISIONS

Date: 2025-04-24 Revised by: GS Checked by: WR
0 - Issued for Use

DRAWING INFORMATION

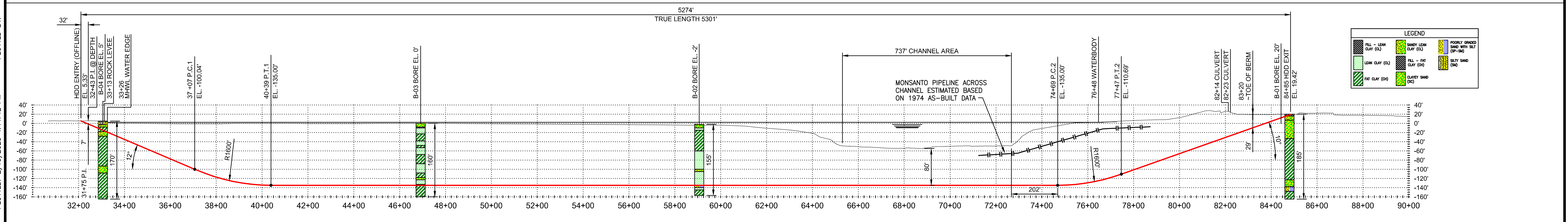
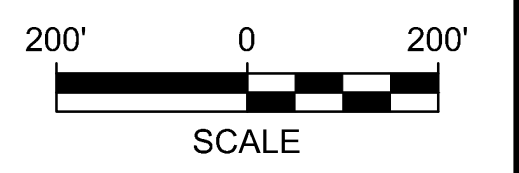
Scale: 1 : 3,000
 Projection: TX St.Plane S. Central
 Sheet: 5 of 5
 Drawing Number: 1002-03-006



NOTES:
 1. SURVEY PROVIDED BY OPEN RANGE FIELD SERVICES, 10/14/2024
 2. BASIN CHANNEL DEPTHS FROM USACE HYDROGRAPHIC MAPS, NOVEMBER 2023.

NOTE: CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL FOREIGN PIPELINE & CABLE CROSSINGS AND COVER PRIOR TO CONSTRUCTION.

PLAN
 SCALE: 1" = 200'



PROFILE
 HORIZONTAL SCALE: 1" = 200'
 VERTICAL SCALE: 1" = 100'

SPECIFICATIONS:
 - CARRIER PIPE: 12.75" O.D. X 0.438" W.T. X52, API 5L PSL 2 SMLS, W/ 14-16 MILS FBE AND 25-30 MILS ARO
 - HYDROSTATIC 4 HOUR PRE-TEST PRESSURE: 1800 PSIG MIN. - 2000 PSIG MAX.
 - DESIGN PRESSURE: MAOP 1440 PSIG
 - DESIGN FACTOR: 0.50

TOLERANCES:
 MINIMUM ALLOWABLE RADIUS OF 1200 FT FOR 3 OR 4 JOINT AVERAGE (BETWEEN 75 TO 100 FT)
 • ENTRY POINT - SHALL BE AT DESIGNED POSITION
 • EXIT POINT - SHALL BE NO MORE THAN 10' FROM DESIGNED CENTERLINE
 • LENGTH OF PILOT HOLE SHALL NOT BE SHORTER THAN DESIGNED
 • VERTICAL POSITION OF BOREHOLE SHALL NOT BE SHALLOWER THAN DESIGN PROFILE WITHOUT PRIOR APPROVAL.
 • HORIZONTAL POSITION OF BOREHOLE CENTERLINE SHALL BE WITHIN 10' OF PROPOSED CENTERLINE

GENERAL NOTES:
 1) GRID PROJECTION BASED UPON TEXAS STATE PLANE, SOUTH CENTRAL ZONE (GRID UNITS IN FEET) GEODETIC DATUM: NAD 1983.
 2) CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL FOREIGN PIPELINE CROSSINGS AND COVER PRIOR TO CONSTRUCTION.
 3) CONTRACTOR TO PROVIDE PILOT HOLE INFORMATION TO COMPANY FOR APPROVAL PRIOR TO COMMENCEMENT OF REAMING.
 4) CONTRACTOR TO PROVIDE AS-BUILT DRAWING AND INFORMATION WITHIN 10 DAYS FROM BOREHOLE COMPLETION AND SHALL INCLUDE THE FOLLOWING AT A MINIMUM:
 • CAD (2017 OR HIGHER) AND PDF FILE OF PIPING PLAN AND PROFILE
 • TABLE OF PILOT HOLE DATA USED TO CREATE PLAN AND PROFILE DRAWINGS
 5) REFERENCE THE TERRACON GEOTECHNICAL REPORT FOR DETAILS, SOILS REPORT - 91245019 - BORING LOGS.
 6) SCALES DENOTED IN THIS DRAWING ARE BASED UPON AN ARCH D (36"x24") PAPER SIZE.

CONTRACTOR HDD PLAN NOTES:
 CONTRACTOR'S PROPOSED HDD PLAN AND ANY OF ITS SUBCONTRACTORS, VENDORS, OR SUPPLIERS UTILIZED TO PERFORM HORIZONTAL DIRECTIONAL DRILLS SHALL BE SUBMITTED TO COMPANY FOR APPROVAL A MINIMUM OF 30 DAYS PRIOR TO START OF DRILLING OPERATIONS. PLAN SHALL INCLUDE AT MINIMUM AND SHALL MEET COMPANY HDD SPECIFICATION IF APPLICABLE:
 • CONTRACTORS' SITE SPECIFIC BORE PLAN AND PROFILE, SHOWING FOREIGN PIPELINES AND UTILITIES WITH FIELD VERIFIED ELEVATIONS, TOP OF BORE SEPARATION FROM UNDERGROUND UTILITIES, ROADS AND OTHER FEATURES, PLANNED MINIMUM DRILL RADIUS WITH PC AND PT POINTS
 • CONTRACTORS EQUIPMENT AND SITE LAYOUT
 • DRILLING PLAN AT A MINIMUM TO INCLUDE THE FOLLOWING: PILOT HOLE DRILL TOLERANCES, ANTICIPATED DOWN HOLE PRESSURE RANGE, EXPECTED PILOT AND REAMING PROCESS, EXPECTED PULL LOADS, SAFETY, GUIDANCE SYSTEM, CONTINGENCY PLANS, INADVERTENT RETURNS PLAN WITH NOTIFICATION PROCEDURES
 • DRILLING CONTRACTOR SHALL PERFORM HYDROFRACTURE ANALYSIS WITH THEIR MEANS AND METHODS TO ENSURE MINIMUM SAFETY FACTOR OF 2 FOR SURFACE RELEASES.
 • DRILLING FLUID AND POTENTIAL ADDITIVES (PROVIDE MSDS), MUST BE PROVIDED TO AND APPROVED BY COMPANY PRIOR TO MOBILIZATION. PROPOSED DISPOSAL OF DRILLING MUD LOCATION MUST BE APPROVED BY COMPANY PRIOR TO DISPOSAL. ALL PROPOSED FLUID ADDITIVES MUST BE COMPLIANT WITH THE NSF/ANSI 60 - DRINKING WATER TREATMENT CHEMICALS - HEALTH EFFECTS.
 • BREAKOVER PROFILE WITH MINIMUM RADIUS, PIPE SUPPORT EQUIPMENT LOCATION WITH PIPE ELEVATION (COMPANY WILL EVALUATE PIPE STRESS) AND MAXIMUM ROLLER SPACING
 • WATER SOURCE TO BE PROVIDED BY CONTRACTOR AND APPROVED BY COMPANY PRIOR TO MOBILIZATION.

PRELIMINARY DESIGN

REFERENCE DRAWINGS	
AP-02	ALIGNMENT SHEET
AP-03	ALIGNMENT SHEET
AP-04	ALIGNMENT SHEET

REV	DESCRIPTION	BY	DATE	CHK'D	APP'D	SCALE: 1" = 200'
E	ISSUED FOR REVIEW	KMA	02-12-25	JHR	JHR	
D	ISSUED FOR REVIEW	KMA	01-26-25	JHR	JHR	
C	ISSUED FOR REVIEW	KMA	01-14-25	JHR	JHR	
B	ISSUED FOR REVIEW	KMA	10-21-24	JHR	JHR	
A	ISSUED FOR REVIEW	KMA	10-04-24	NGR	JHR	

ENERGY TRANSFER

TEXAS CITY TO SHOAL POINT PIPELINE
 HORIZONTAL DIRECTIONAL DRILL
 TEXAS CITY TURNING BASIN CROSSING

WBS NO. C-24265-GL-21400001	
OLD DRAWING NO.	
DRAWING NO. 23173_C6000	REV. NO. E

PLOTTED BY: 2/10/2025 4:14:42 PM
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16 KMA 23173_C6000.DWG 16:08 02-10-25



DEPARTMENT OF THE ARMY
UNITED STATES ARMY CORPS OF ENGINEERS
GALVESTON DISTRICT
2000 FORT POINT ROAD
GALVESTON, TEXAS 77550

Mr. Stephen Ross
Project Manager
Houston Pipe Line, LP
1300 Main Street
Houston, Texas 77002

Dear Mr. Ross:

The Galveston District of the U.S. Army Corps of Engineers (USACE) has performed an evaluation of your Section 408 Application (408-SWG-2025-0040) dated June 12, 2025 that is associated with Regulatory Permit SWG-2024-00786, requesting Section 408 authorization to install 1.86 miles of 12-inch diameter natural gas pipeline beneath the Texas City Ship Channel from the intersection of Bay Street North and 3rd Avenue to 0.69-mile northeast of the intersection of Dock Road and Industrial Canal Road. The pipeline will be installed by horizontal directional drilling (HDD) at a depth of -138 feet Mean Lower Low Water (MLLW) beneath the Texas City Ship Channel and an Up and Over pipeline crossing of the Texas City Hurricane Flood Protection Levee. The project site is located in Texas City Ship Channel and across the Texas City Hurricane Flood Protection Levee, in Texas City, Galveston County, Texas. The Texas City Ship Channel and the Texas City Hurricane Flood Protection Levee are operated by the USACE. This evaluation has been performed pursuant to Section 14 of the Rivers and Harbors Act of 1899, 33 U.S.C. 408 (Section 408) and in accordance with Engineer Circular (EC) 1165-2-220.

Under Section 408, any proposed alteration of the Federal project must be evaluated for impacts to the project. Based on the review by my staff, I have determined that the proposed construction will not impair the usefulness of the Texas City Ship Channel, and is not injurious to the public interest, provided the Special Conditions listed below are utilized. The proposed work has been found to comply pursuant to my delegated authority under 33 U.S.C. 408 (Section 408).

My evaluation of the proposed work shall not be considered as an approval of the design features of any activity authorized, or an implication that such construction is considered adequate for the purpose intended. It does not authorize any damage to private property, invasion of private rights, or obviate the need for compliance with any federal, state, or local laws, regulations, or permitting requirements. This Section 408 evaluation, performed in accordance with Engineer Circular (EC) 1165-2-220, does not grant permission to begin construction on or access a Federal property. As the requestor, you shall be responsible for any damage or impacts to the Federal project resulting from this construction and will be required to expeditiously repair any damage according to USACE design.

This authorization for work under Section 408 is valid for five years from the date of this letter, unless the Galveston District determines new information warrants a revision prior to the expiration date.

The following site-specific conditions are made as limitations, restrictions, safety issues, or conditions to make the proposed use compatible with the operation of the project:

Texas City Ship Channel

1. Any United States Army Corps of Engineers (USACE) work or maintenance work will take precedence over the private activities authorized herein. Maintenance work information can be obtained from the Galveston Resident Office (409-908-5803).
2. Requestor shall notify the USACE thirty (30) days in advance and coordinate with John McLain, Area Engineer (409-370-3958) and Aron Edwards, Operations Acting Land Use Coordinator (409-766-3028), prior to commencement of work. Coordination to include, but is not limited to, scheduling pre-work and post-work on-site inspections. USACE may have personnel perform inspections during the construction to ensure compliance with this permission.
3. Requestor understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of any work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said remaining structures or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the grantee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
4. USACE personnel will have unrestricted access to the construction site.
5. It is understood that this permission is effective only insofar as it pertains to the property rights of the Government in the property.
6. USACE reserves the right to inspect the work at any time during the term of this authorization provided reasonable notice is given to Requestor.
7. If any previously unknown historic or archeological remains are discovered while accomplishing the activity authorized by this permit, you must immediately cease and desist and notify the USACE of what you have found. The USACE will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
8. Requestor shall notify the USACE thirty (30) days in advance and coordinate with the rights granted herein with John McLain, Area Engineer (281-464-1016) and Aron Edwards, Operations Acting Land Use Coordinator (409-766-3028), prior to commencement of activities. Coordination to include, but is not limited to, scheduling pre-work and post-work on-site inspections.
9. During installation of the pipeline, no work will be allowed to obstruct any navigation channels or impact any Federal properties. The Requestor shall be responsible for all damages that occur to the Federal project during work. The Requestor shall coordinate with the respective USCG office and Pilot organization to ensure project will not interfere with navigation.
 - a. Surveys shall be submitted within fourteen (14) days of completing the installation activities authorized herein.
 - b. Requestor shall provide pre- and post-work multi-beam bathymetric surveys of

the project site to John McLain, Area Engineer (281-464-1016 and Aron Edwards, Operations Acting Land Use Coordinator (409-766-3028).

10. After construction, the Requestor shall be responsible for ensuring that no material is left above pre-construction conditions.
11. The Requestor must perform a pre- and post-work multi-beam survey of the proposed construction area adjacent to the Texas City Ship Channel in Mean Lower Low Water (MLLW).
 - a. Surveys shall be conducted by a certified or trained operator.
 - b. The multi-beam survey shall extend from the entire project area to the centerline of the Texas City Ship Channel, between Stations 32+000 to 36+000.
 - c. Surveys shall be submitted within thirty (30) days of completing the construction activities authorized herein.
 - d. Requestor shall provide pre- and post-work multi-beam bathymetric surveys of the project site to John McLain, Area Engineer (281-464-1016) and Aron Edwards, Operations Acting Land Use Coordinator (409-766-3028).
12. After construction, the Requestor shall be responsible for ensuring that no material is left above pre-construction conditions.
13. The Requestor must submit to the Corps for its review and approval as-built drawings of the completed structures within ninety (90) days of project completion. The approved structure includes 737 feet of 12-inch diameter natural gas pipeline beneath the Texas City Ship Channel at a depth of -138 feet MLLW and an Up and Over pipeline crossing of the Texas City Hurricane Flood Protection Levee. Cadastral data and format requirements are as follows:
 - a. All GIS data submissions should be provided to USACE as a compressed (.zip) file containing a geodatabase (.gdb) and/or shapefile (.shp) components.
 - Dataset must be a 3D line feature(s) and include z-values, or heights, to correctly locate themselves in 3D space. These objects must be modeled as 3D line features.
 - Dataset must have a horizontal projection in the coordinate system of NAD1983 State Plane Texas South Central US feet.
 - Dataset must have a defined vertical coordinate system for the feature class's z-values on the containing feature dataset provided in MLLW.
 - b. The design data should consist of simple lines and polygons indicating the limits of the completed construction only. The coordinate system and datum that the drawing is currently in must be clearly shown.
 - c. For CADD drawings, please ensure that all layers are properly named to describe that specific feature. If the layers are named using acronyms, we need a legend or shoe boxes with leader lines, identifying each feature class within the drawing. All areas must be created in real-world (model space) with an assigned coordinate system. Please do not send drawings with XREFs or reference files, insert all needed files or feature layers into one design file. Cut-sheet or plate layouts in CADD are not needed, however PDFs of proposed project plans and/or as-built are required for further review.

d. For GIS drawings, assign a proper name sequence to describe that specific feature or it can also be defined in the spatial data within the shape file.

e. To help keep file sizes to the minimum, imagery and USGS Quads do not need to be provided.

f. The projected coordinate system is:

(i.) Datum: North American 1983 (Survey Feet)

(ii.) Projection: State Plane

(iii.) Zone: Texas South Central

14. Requestor must obtain and comply with all Regulatory Permit requirements including but not limited to: Department of the Army Permit SWG-2024-00786, the requirements of which are incorporated herein by this reference that states that the subject pipelines must be placed beneath Texas City Ship Channel at a depth of -138 feet MLLW.
15. Requestor must obtain City of Texas City Planning and Engineering Department pipeline permit prior to commencement of construction.
16. All pipelines crossing Federal project channels shall be identified by signs in accordance with the following minimum requirements: The signs shall be placed at a minimum of fifty (50) feet beyond the beacon lines in bays and landlocked channels. The signs shall be placed on both sides of the channel. The signs shall be placed parallel to the channel and supported on two single piles with at least 2-inch butts with one on each side of the pipeline, and the signs shall have lettering of sufficient size that can be read easily from the center of the channel by a person with normal vision. The letters shall identify the company and provide the company's contact information

Texas City Hurricane Flood Protection Project

1. Any project property damaged or repaired as a result of the Requestor's activities under this permission shall be repaired or restored by, and at the expense of the Requestor in accordance with USACE requirements. These efforts may include embankment repairs and additional seeding or turfing.
2. USACE and Galveston County (contact Ms. Nancy Baher, Assistant County Engineer at 409-770-5556 or nancy.baher@co.galveston.tx.us) shall be invited to attend the pre-construction meeting for the proposed work,
3. USACE reserves the right to inspect the work at any time during the term of this authorization provided reasonable notice is given to Requestor.
4. USACE and Galveston County personnel will have unrestricted access to the work site.
5. At the end of construction, the Requestor shall restore all surfaces used for haul roads and staging areas to their condition prior to construction. Such restoration shall be at the Requestor's expense and shall include regrading, turfing, landscape repair, existing facilities repair and other work required to restore these areas to existing conditions or better than prior to the start of construction.

6. Any changes to the design or construction should be stamped by a professional engineer and submitted to the Galveston District for approval before execution
7. USACE and Galveston County shall be invited to attend the pre-construction meeting for the proposed work.
8. The Requestor should notify the Galveston District and Galveston County a minimum of 14 days prior to beginning construction. The Galveston District and Galveston County may have personnel perform inspections during the construction to ensure compliance with this permission.
9. The Galveston District and Galveston County shall be invited for a final inspection within 30 days of construction completion.
10. The Galveston District and Galveston County shall be provided with as-built drawings in PDF format within 60 days of construction completion.
11. Requestor shall adhere to the document titled "408-SWG-2025-0040-Houston Pipeline 408 Permit Application", dated 12 June 2025.

If you have any questions or requests for additional information, please reference 408-SWG-2025-0040. For Navigation concerns contact the Operations Acting Land Use Coordinator, Mr. Aron Edwards, at (409) 766-3028. For Flood Risk Management concerns, please contact Ms. Charlene Harry at (409) 766-3865. Thank you for your continued coordination of efforts that impact an important federal project.

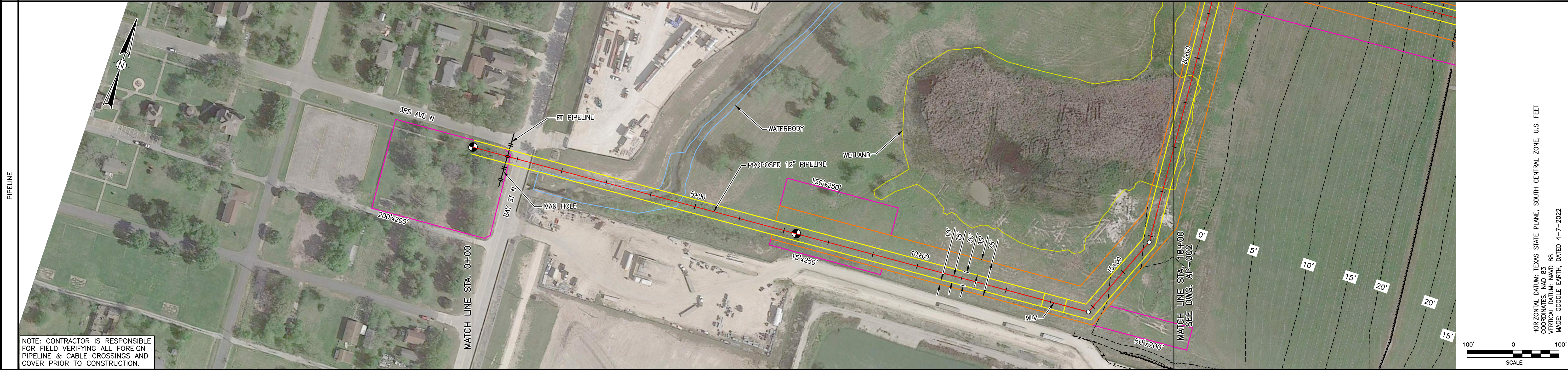
Sincerely,

KINMAN.BELYNDA.MARIA
MARIA
LUZ.1535155557
Belynda Kinman
Chief, Operations Division

Digitally signed by
KINMAN.BELYNDA.MARIA
LUZ.1535155557
Date: 2026.03.27 12:35:17 -05'00'

Cc: Nancy Baher, Galveston County

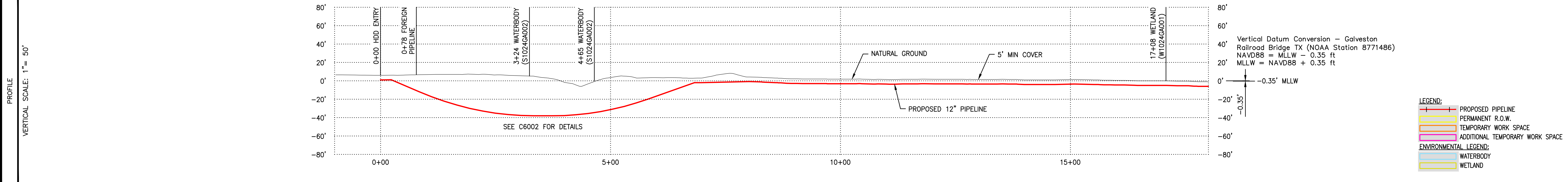
OWNERSHIP & TRACT NO.	
RODDAGE	
STATIONING	<p>0+00 BEGN STA. 0+00 HDD ENTRY</p> <p>0+77 MANHOLE, 33.7' RT. 0+78 FOREIGN PIPELINE</p> <p>3+24 WATERBODY (S1024GA002)</p> <p>4+65 WATERBODY (S1024GA002)</p> <p>7+28 HDD EXIT</p> <p>12+83 SURFACE SITE</p> <p>13+33 SURFACE SITE</p> <p>13+85 P.I. < 63°53'14" LT.</p> <p>15+86 P.I. < 26°28'59" LT.</p> <p>17+08 WETLAND (W1024GA001)</p> <p>18+00 MATCH LINE</p>



CLASS LOCATION/DESIGN FACTOR	1 / 0.72
M.A.O.P./HYDRO. TEST PRESS (P.S.I.G.)	1440 PSIG / TBD

PRELIMINARY DESIGN

CONSTRUCTION METHOD	HDD	OPEN CUT
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MATERIAL SUMMARY		CONSTRUCTION YEAR:		PROJECT NO.	
NO.	DESCRIPTION	QUANTITY	BY	DATE	PREVIOUS DWG. NO.
C6002	HORIZONTAL DIRECTIONAL DRILL, BAY ST. N AND WATERBODY CROSSING		JHR	12-16-24	SHEET 1 OF 1
DWG. NO.	REFERENCE DRAWING TITLE	NO.	BY	DATE	DWG. NO.
					23173_C0001
			CHK'D	APP'D	SHEET 1 OF 1

7 KMA 23173_ALIGN_BASEMAP.DWG 11-19-25 13:14

OWNERSHIP
&
TRACT NO.

RODDAGE

STATIONING

18+00 MATCH LINE
19+61 WETLAND (W1024GA001)
22+27 P.L. < 90'00"00" RT.
23+50 TOE OF SLOPE
27+57 TOP OF SLOPE (LEVEE)
27+79 TOP OF SLOPE (LEVEE)
30+33 TOE OF SLOPE
30+68 FENCE
30+68 TREE PALM, 10.4' RT.
30+96 TREE PALM, 75.4' LT.
31+06 TREE PALM, 16.6' RT.
31+53 GAZEBO, 59.4' LT.
31+62 TREE PALM, 11.5' LT.
31+62 TREE PALM, 5.8' LT.
31+64 CONCRETE, 53.8' LT.
31+77 GAZEBO, 58.5' LT.
32+43 P.L. < 81'28"23" RT.
32+43 HDD ENTRY (OFFLINE)
33+13 LEVEE ROCK
33+26 HPL TEXAS CITY MHWL
33+29 WATERBODY EDGE
36+00 MATCH LINE



NOTE: CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL FOREIGN PIPELINE & CABLE CROSSINGS AND COVER PRIOR TO CONSTRUCTION.

HORIZONTAL DATUM: TEXAS STATE PLANE, SOUTH CENTRAL ZONE, U.S. FEET
COORDINATES: NAD 83
VERTICAL DATUM: NAVD 88
IMAGE: GOOGLE EARTH, DATED 4-7-2022

CLASS LOCATION/DESIGN FACTOR
M.A.O.P./HYDRO. TEST PRESS (P.S.I.G.)

1 / 0.72
1440 PSIG / TBD

PIPE DETAIL

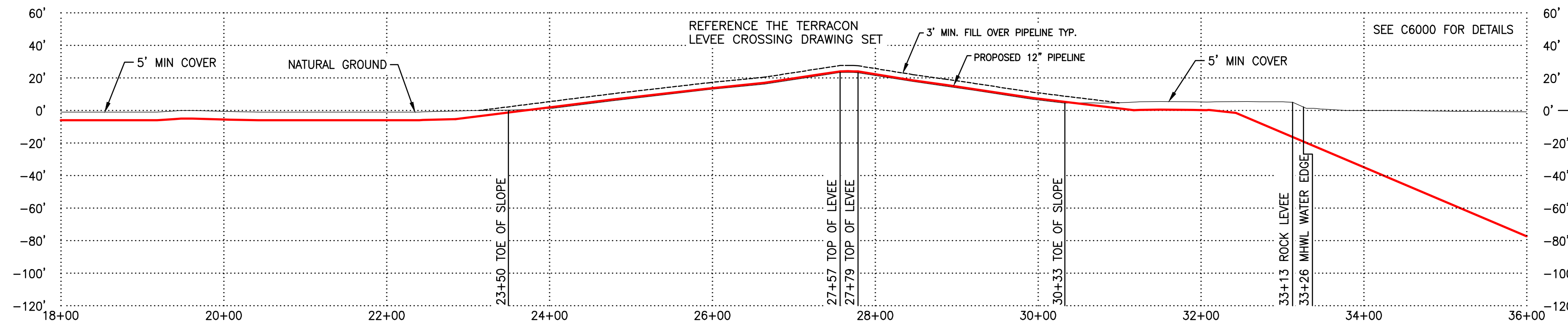
PRELIMINARY DESIGN

CONSTRUCTION METHOD

OPEN CUT

HDD

PROFILE



LEGEND:
 - PROPOSED PIPELINE
 - PERMANENT R.O.W.
 - TEMPORARY WORK SPACE
 - ADDITIONAL TEMPORARY WORK SPACE
ENVIRONMENTAL LEGEND:
 - WATERBODY
 - WETLAND

NO.	MATERIAL SUMMARY DESCRIPTION	QUANTITY
91245133	TEXAS CITY LEVEE CROSSING, TERRACON, SHT 1- 5	
C6000	HORIZONTAL DIRECTIONAL DRILL, TEXAS CITY	
	TURNING BASIN CROSSING	
DWG. NO.	REFERENCE DRAWING TITLE	

NO.	REVISION - DESCRIPTION	BY	DATE	CHK'D	APP'D
C	ISSUED FOR REVIEW	KMA	11-19-25	JHR	JHR
B	ISSUED FOR REVIEW	KMA	2-11-25	JHR	JHR
A	ISSUED FOR REVIEW	KMA	1-14-25	JHR	JHR

P.L./STA. NO.	
CONSTRUCTION YEAR:	
DESIGN	BY DATE
JHR	
DRAWN	KMA 12-16-24
APPROVE	
FILE NO.	
SCALE:	1" = 100'

TEXAS CITY TO SHOAL POINT PIPELINE ALIGNMENT SHEET MP 0.34 TO MP 0.68 STA. 18+00 TO STA. 36+00 GALVESTON, TEXAS		PROJECT NO. PREVIOUS DWG. NO. SHEET 1 OF 1 DWG. NO. 23173_C0002 SHEET 1 OF 1
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8 KMA 23173_ALIGN_BASEMAP.DWG 11-19-25 13:14

OWNERSHIP
&
TRACT NO.

RODDAGE

STATIONING

PIPELINE

PIPE DETAIL

CONSTRUCTION METHOD

PROFILE

MATERIAL SUMMARY

DESCRIPTION

QUANTITY

NO. DESCRIPTION NO. REVISION - DESCRIPTION BY DATE CHK'D APP'D

P.L./STA. NO.

CONSTRUCTION YEAR:

DESIGN BY DATE

DRAWN KMA 12-16-24

APPROVE

FILE NO.

SCALE: 1" = 100'

TEXAS CITY TO SHOAL POINT PIPELINE
ALIGNMENT SHEET
MP 0.68 TO MP 1.16
STA. 36+00 TO STA. 61+00
GALVESTON, TEXAS

PROJECT NO.

PREVIOUS DWG. NO.

SHEET 1 OF 1

DWG. NO.

23173_C0003

SHEET 1 OF 1



CLASS LOCATION/DESIGN FACTOR	1 / 0.72
M.A.O.P./HYDRO. TEST PRESS (P.S.I.G.)	1440 PSIG / TBD



NO.	MATERIAL SUMMARY DESCRIPTION	QUANTITY	NO.	REVISION - DESCRIPTION	BY	DATE	CHK'D	APP'D
			C	ISSUED FOR REVIEW	KMA	11-19-25	JHR	JHR
			B	ISSUED FOR REVIEW	KMA	2-11-25	JHR	JHR
			A	ISSUED FOR REVIEW	KMA	1-14-25	JHR	JHR

<p>Vertical Datum Conversion - Galveston Railroad Bridge TX (NOAA Station 8771486) NAVD88 = MLLW - 0.35 ft MLLW = NAVD88 + 0.35 ft</p>		<p>LEGEND:</p> <ul style="list-style-type: none"> PROPOSED PIPELINE PERMANENT R.O.W. TEMPORARY WORK SPACE ADDITIONAL TEMPORARY WORK SPACE <p>ENVIRONMENTAL LEGEND:</p> <ul style="list-style-type: none"> WATERBODY WETLAND
<p>PROJECT NO.</p> <p>PREVIOUS DWG. NO.</p> <p>SHEET 1 OF 1</p> <p>DWG. NO.</p> <p>23173_C0003</p> <p>SHEET 1 OF 1</p>		

7 KMA 23173_ALIGN_BASEMAP.DWG 11-19-25 13:14

OWNERSHIP
&
TRACT NO.

RODDAGE

STATIONING

PIPELINE

PIPE DETAIL

CONSTRUCTION METHOD

PROFILE

MATERIAL SUMMARY

DESCRIPTION

QUANTITY

NO. DESCRIPTION NO. REVISION - DESCRIPTION

P.L./STA. NO.

CONSTRUCTION YEAR:

DESIGN BY DATE

DRAWN JHR 12-16-24

APPROVE KMA

FILE NO.

SCALE: 1" = 100'

TEXAS CITY TO SHOAL POINT PIPELINE
ALIGNMENT SHEET
MP 1.15 TO MP 1.63
STA. 61+00 TO STA. 86+00
GALVESTON, TEXAS

PROJECT NO.

PREVIOUS DWG. NO.

SHEET 1 OF 1

DWG. NO.

23173_C0004

SHEET 1 OF 1



CLASS LOCATION/DESIGN FACTOR: M.A.O.P./HYDRO. TEST PRESS (P.S.I.G.) 1440 PSIG / TBD



CONSTRUCTION METHOD: HDD (61+00 to 76+00), OPEN CUT (76+00 to 86+00)

NO.	MATERIAL SUMMARY DESCRIPTION	QUANTITY	NO.	REVISION - DESCRIPTION	BY	DATE	CHK'D	APP'D
			C	ISSUED FOR REVIEW	KMA	11-19-25	JHR	JHR
			B	ISSUED FOR REVIEW	KMA	2-11-25	JHR	JHR
			A	ISSUED FOR REVIEW	KMA	1-14-25	JHR	JHR

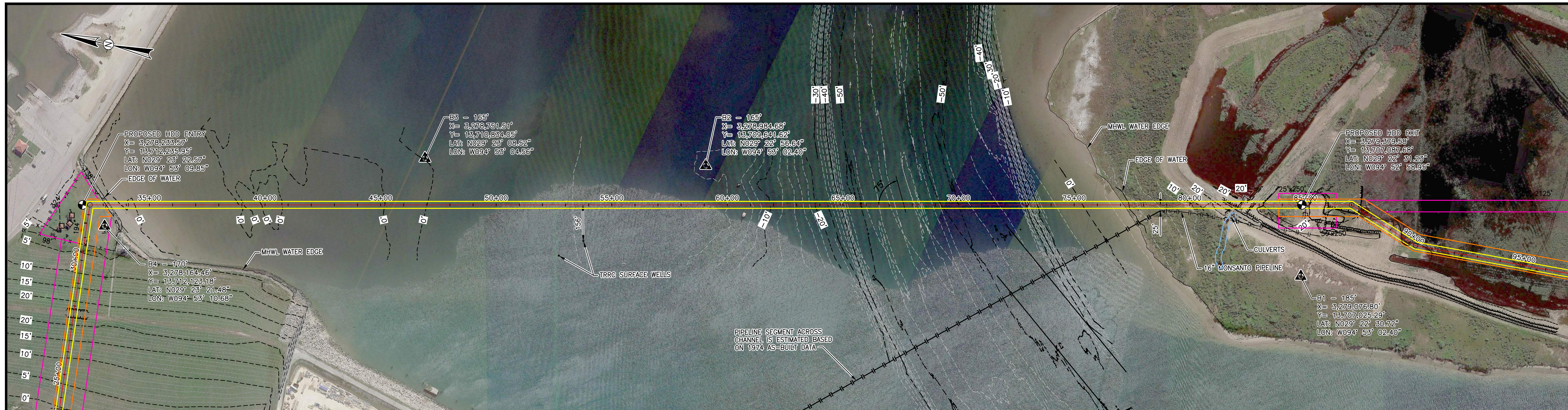
PROJECT NO. 23173_C0004

PREVIOUS DWG. NO. SHEET 1 OF 1

DWG. NO. 23173_C0004

SHEET 1 OF 1

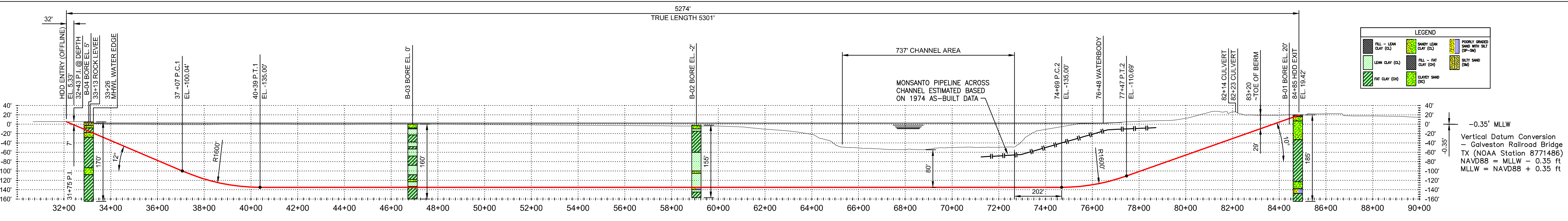
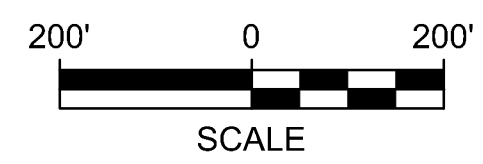
8 KMA 23173_ALIGN_BASEMAP.DWG 11-19-25 13:15



NOTES:
 1. SURVEY PROVIDED BY OPEN RANGE FIELD SERVICES, 10/14/2024
 2. BASIN CHANNEL DEPTHS FROM USACE HYDROGRAPHIC MAPS, NOVEMBER 2023.

NOTE: CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL FOREIGN PIPELINE & CABLE CROSSINGS AND COVER PRIOR TO CONSTRUCTION.

PLAN
 SCALE: 1" = 200'



PROFILE
 HORIZONTAL SCALE: 1" = 200'
 VERTICAL SCALE: 1" = 100'

SPECIFICATIONS:

- CARRIER PIPE: 12.75" O.D. X 0.438" W.T. X52, API 5L PSL 2 SMLS, W/ 14-16 MILS FBE AND 25-30 MILS ARO
- HYDROSTATIC 4 HOUR PRE-TEST PRESSURE: 1800 PSIG MIN. - 2000 PSIG MAX.
- DESIGN PRESSURE: MAOP 1440 PSIG
- DESIGN FACTOR: 0.50

TOLERANCES:

- MINIMUM ALLOWABLE RADIUS OF 1200 FT FOR 3 OR 4 JOINT AVERAGE (BETWEEN 75 TO 100 FT)
- ENTRY POINT - SHALL BE AT DESIGNED POSITION
- EXIT POINT - SHALL BE NO MORE THAN 10' FROM DESIGNED CENTERLINE
- LENGTH OF PILOT HOLE SHALL NOT BE SHORTER THAN DESIGNED
- VERTICAL POSITION OF BOREHOLE SHALL NOT BE SHALLOWER THAN DESIGN PROFILE WITHOUT PRIOR APPROVAL.
- HORIZONTAL POSITION OF BOREHOLE CENTERLINE SHALL BE WITHIN 10' OF PROPOSED CENTERLINE

GENERAL NOTES:

- GRID PROJECTION BASED UPON TEXAS STATE PLANE, SOUTH CENTRAL ZONE (GRID UNITS IN FEET) GEODETIC DATUM: NAD 1983.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL FOREIGN PIPELINE CROSSINGS AND COVER PRIOR TO CONSTRUCTION.
- CONTRACTOR TO PROVIDE PILOT HOLE INFORMATION TO COMPANY FOR APPROVAL PRIOR TO COMMENCEMENT OF REAMING.
- CONTRACTOR TO PROVIDE AS-BUILT DRAWING AND INFORMATION WITHIN 10 DAYS FROM BOREHOLE COMPLETION AND SHALL INCLUDE THE FOLLOWING AT A MINIMUM:
 - CAD (2017 OR HIGHER) AND PDF FILE OF PIPING PLAN AND PROFILE
 - TABLE OF PILOT HOLE DATA USED TO CREATE PLAN AND PROFILE DRAWINGS
- REFERENCE THE TERRACON GEOTECHNICAL REPORT FOR DETAILS, SOILS REPORT - 91245019 - BORING LOGS.
- SCALES DENOTED IN THIS DRAWING ARE BASED UPON AN ARCH D (36"x24") PAPER SIZE.

CONTRACTOR HDD PLAN NOTES:

CONTRACTOR'S PROPOSED HDD PLAN AND ANY OF ITS SUBCONTRACTORS, VENDORS, OR SUPPLIERS UTILIZED TO PERFORM HORIZONTAL DIRECTIONAL DRILLS SHALL BE SUBMITTED TO COMPANY FOR APPROVAL A MINIMUM OF 30 DAYS PRIOR TO START OF DRILLING OPERATIONS. PLAN SHALL INCLUDE AT MINIMUM AND SHALL MEET COMPANY HDD SPECIFICATION IF APPLICABLE:

- CONTRACTORS' SITE SPECIFIC BORE PLAN AND PROFILE, SHOWING FOREIGN PIPELINES AND UTILITIES WITH FIELD VERIFIED ELEVATIONS, TOP OF BORE SEPARATION FROM UNDERGROUND UTILITIES, ROADS AND OTHER FEATURES, PLANNED MINIMUM DRILL RADIUS WITH PC AND PT POINTS
- CONTRACTORS EQUIPMENT AND SITE LAYOUT
- DRILLING PLAN AT A MINIMUM TO INCLUDE THE FOLLOWING: PILOT HOLE DRILL TOLERANCES, ANTICIPATED DOWN HOLE PRESSURE RANGE, EXPECTED PILOT AND REAMING PROCESS, EXPECTED PULL LOADS, SAFETY, GUIDANCE SYSTEM, CONTINGENCY PLANS, INADVERTENT RETURNS PLAN WITH NOTIFICATION PROCEDURES
- DRILLING CONTRACTOR SHALL PERFORM HYDROFRACTURE ANALYSIS WITH THEIR MEANS AND METHODS TO ENSURE MINIMUM SAFETY FACTOR OF 2 FOR SURFACE RELEASES.
- DRILLING FLUID AND POTENTIAL ADDITIVES (PROVIDE MSDS), MUST BE PROVIDED TO AND APPROVED BY COMPANY PRIOR TO MOBILIZATION. PROPOSED DISPOSAL OF DRILLING MUD LOCATION MUST BE APPROVED BY COMPANY PRIOR TO DISPOSAL. ALL PROPOSED FLUID ADDITIVES MUST BE COMPLIANT WITH THE NSF/ANSI 60 - DRINKING WATER TREATMENT CHEMICALS - HEALTH EFFECTS.
- BREAKOVER PROFILE WITH MINIMUM RADIUS, PIPE SUPPORT EQUIPMENT LOCATION WITH PIPE ELEVATION (COMPANY WILL EVALUATE PIPE STRESS) AND MAXIMUM ROLLER SPACING
- WATER SOURCE TO BE PROVIDED BY CONTRACTOR AND APPROVED BY COMPANY PRIOR TO MOBILIZATION.

PRELIMINARY DESIGN

REV	DESCRIPTION
F	ISSUED FOR REVIEW
E	ISSUED FOR REVIEW
D	ISSUED FOR REVIEW
C	ISSUED FOR REVIEW
B	ISSUED FOR REVIEW
A	ISSUED FOR REVIEW

BY	DATE	CHK'D	APP'D	SCALE: 1" = 200'
KMA	11-19-25	JHR	JHR	
KMA	02-12-25	JHR	JHR	
KMA	01-26-25	JHR	JHR	
KMA	01-14-25	JHR	JHR	
KMA	10-21-24	JHR	JHR	
KMA	10-04-24	NGR	JHR	

ENERGY TRANSFER

TEXAS CITY TO SHOAL POINT PIPELINE
 HORIZONTAL DIRECTIONAL DRILL
 TEXAS CITY TURNING BASIN CROSSING

WBS NO. C-24265-GL-21400001	REV. NO. F
OLD DRAWING NO.	
DRAWING NO. 23173_C6000	

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