



PERMIT TO INSTALL A 24" PIPELINE  
CROSSING THE TEXAS CITY HURRICANE LEVEE  
(29.408063, -94.889108)

To Applicant: MBTC Pipeline LLC  
100 W. 5<sup>th</sup> Street  
Tulsa, Oklahoma 74103

PERMIT NUMBER: TCSW-26-386

Dear Applicant:

You are hereby granted authority to install one 24" pipeline to transport liquid petroleum gas (as part of the Mont Belvieu to Texas City route) over the Texas City Hurricane Levee as shown on MPH Inc. drawings dated March 8, 2026.

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-2025-0034 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, 409.770.5399, [michael.shannon@co.galveston.tx.us](mailto: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 24" liquid petroleum 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.

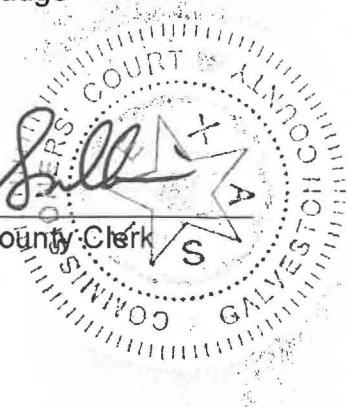
Dated this 8th day of June, 2026.

COUNTY OF GALVESTON,

By:   
Mark Henry, County Judge

ATTEST:

By:   
Dwight D. Sullivan, County Clerk



MBTC Pipeline


DocuSigned by:  
  
By: D9AC1DA0B5D742F  
Todd McKimney  
Vice President, Engineering & Construction

EXHIBIT A



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

MBTC Pipeline LLC  
Ms. Jennifer Smith  
100 W. 5<sup>th</sup> Street  
Tulsa, Oklahoma 74103

Dear Ms. Smith:

The Galveston District of the U.S. Army Corps of Engineers (USACE) has performed an evaluation of your Section 408 Application (408-SWG-2025-0034) dated June 12, 2025 that is associated with Regulatory Permit SWG-2025-00089, requesting Section 408 authorization to install approximately 45 miles of new 24-inch diameter pipeline to transport liquified petroleum gas from Mont Belvieu to Texas City, Texas. A portion of the proposed work would cross beneath the Houston Ship Channel and across the Texas City Hurricane Flood Protection Levee in Texas City, Galveston County, Texas. The pipeline will be installed by Horizontal Directional Drill (HDD) to cross the Houston Ship Channel at a depth of -130 MLLW and will cross over the Texas City Hurricane Flood Protection Levee via "camelback" under a minimum of 4 feet of fill. The Houston 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 Hurricane Flood Protection Levee or the Houston 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 and 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

### **Houston 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 pipeline corridor in Mean Lower Low Water (MLLW). The survey must document both pre- and post-work elevations of the Houston Ship Channel bottom along the proposed pipeline corridor.

- a. Surveys shall be conducted by a certified or trained operator.
  - b. The multi-beam survey should include a 100-foot-wide area on both sides of the pipeline corridor.
  - 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 approximately 1300 feet of 24-inch diameter natural gas pipeline beneath the Houston Ship Channel at a depth of -130 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-2025-00089, the requirements of which are incorporated herein by this reference that states that the subject pipeline must be placed beneath Galveston Bay and the Houston Ship Channel at a depth of -130 feet MLLW.
15. All pipelines crossing Federal project channels shall be identified by signs in accordance with the following minimum requirements: The signs shall be placed 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 Levee**

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](mailto: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-2025-0034-MBTC Pipeline 408 Final Permit Application", dated 05 September 2025.

12. Engineering Considerations for Construction: Personnel responsible for construction oversight should note the following:

- a. Review site restoration plan.
- b. Review contractor's work/construction plan.
- c. Review all Technical Review MFRs.
- d. Ensure fill type and compaction requirements are fulfilled.

If you have any questions or requests for additional information, please reference 408-SWG-2025-0034, and contact the Operations Acting Land Use Coordinator, Mr. Aron Edwards, at (409) 766-3028. For Flood Risk Management concerns Ms. Charlene Harry at (409) 766-3865. Thank you for your continued coordination of efforts that impact an important federal project.

Sincerely,

KINMAN,BELYND

A.MARIA

LUZ.1535155557

Belynda Kinman

Chief, Operations Division

Digitally signed by  
KINMAN,BELYNDA.MARIA  
LUZ.1535155557  
Date: 2026.05.01 12:10:07  
-05'00'

Cc: Nancy Baher, Galveston County

Path: <LINK>C:\Users\dpgreen\OneDrive\<LINK> - Burns & McDonnell\Texas GIS\Houston\174970\_Prop\_OMBS\_24S\_Pipeline\174970\_Prop\_OMBS\_24S\_Pipeline\174970\_Prop\_OMBS\_24S\_Pipeline.aprx dpgreen 8/29/2025  
Service Layer Credits: World Street Map - Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Proposed Pipeline Route

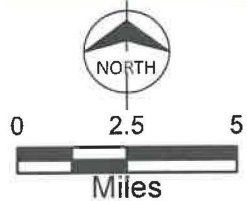
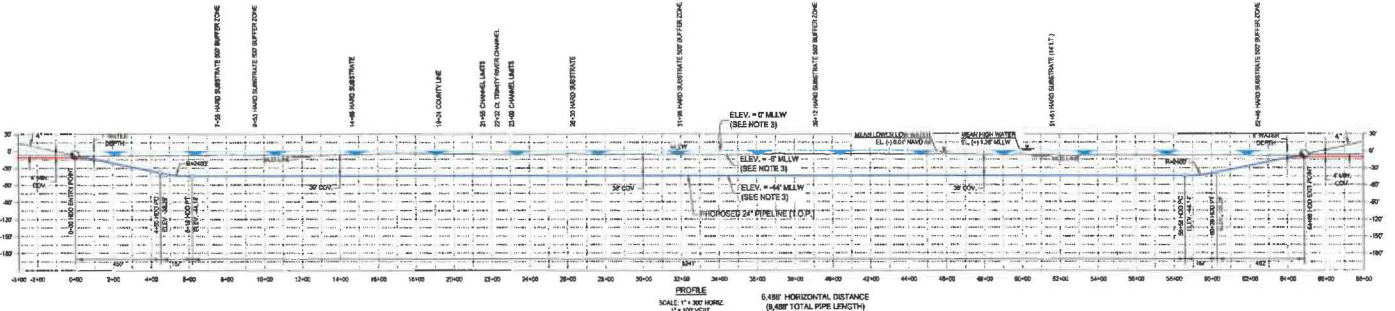
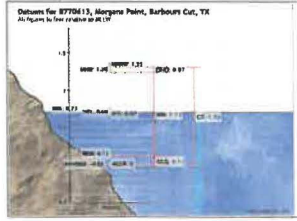
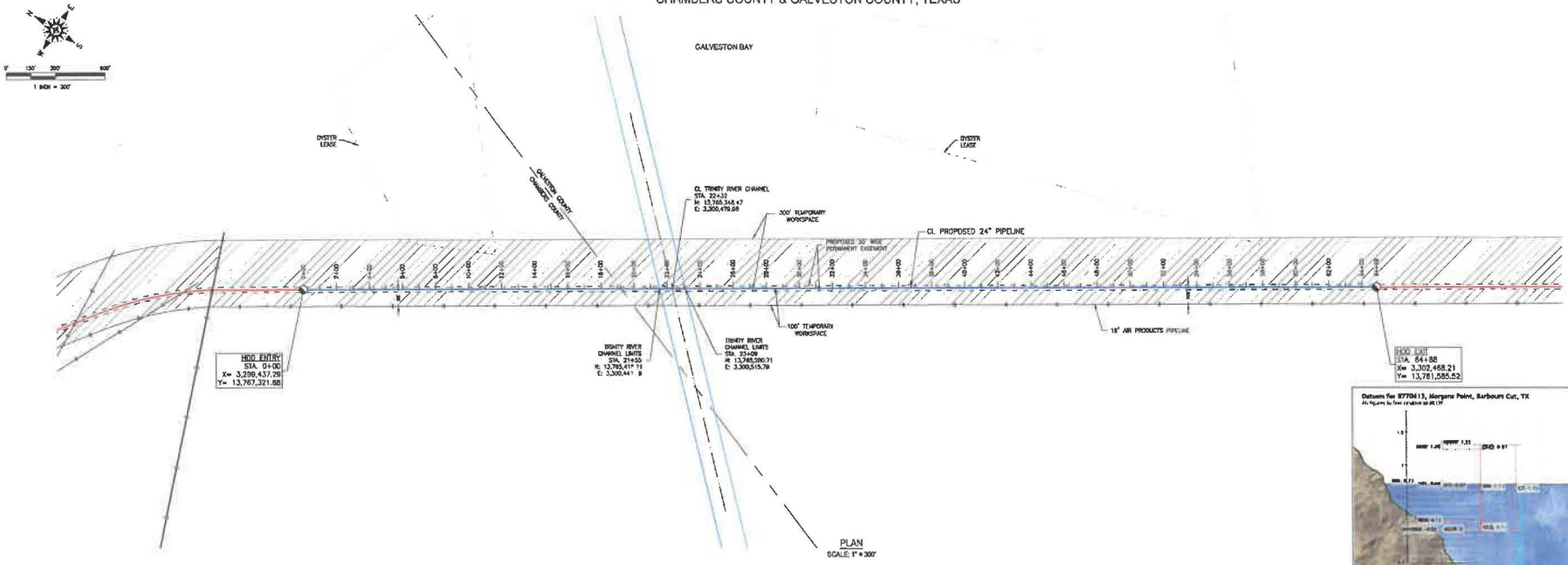


Figure A-1  
 Project Vicinity Map  
 MBTC Pipeline LLC  
 Chambers and Galveston  
 Counties, TX

CHAMBERS COUNTY & GALVESTON COUNTY, TEXAS



- NOTE:
- GRID COORDINATES ARE BASED ON NAD83 (2011) TEXAS SOUTH CENTRAL ZONE.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT APPROPRIATE UTILITY AGENCIES FOR LOCATIONS OF UNDERGROUND UTILITIES. THOSE SHOWN HEREON ARE APPROXIMATE LOCATIONS.
  - ELEVATIONS ARE BASED ON THE MEAN LOWER LOW WATER (MLLW), THE TIDE DIFFERENCE BETWEEN VERIFIED MEAN LOWER LOW WATER (MLLW) AND MEAN HIGH WATER (MHW) READINGS ARE 1.26 FEET PER NOAA TIDE GAUGE 8770613 (MORGAN'S POINT, TX)
  - SEE DRAWING NO. \_\_\_\_\_ FOR CORRESPONDING ALIGNMENT SHEET STATIONING.
  - THE HDD TEMPORARY WORKSPACE BETWEEN THE HDD ENTRY AND EXIT POINT SHALL BE USED FOR BARGE NAVIGATION ONLY. NO DREDGING SHALL BE PERFORMED IN THIS AREA.
  - THE HDD PIPE STRINGING WILL BE PERFORMED INSIDE THE TEMPORARY WORKSPACE CORRIDOR. ADDITIONAL WORKSPACE IS NOT REQUIRED AS THE ORIGINAL PIPELAY CORRIDOR IS USED FOR STRINGING. THE PIPE STRING WILL REMAIN IN THE TEMPORARY WORKSPACE CORRIDOR UNTIL WELDING, HYDROTEST, AND HDD PULLBACK IS COMPLETE. PIPE STRINGING WILL ONLY BE CONDUCTED WEST OF THE HDD EXIT POINT. PIPE STRINGING WILL REMAIN OUTSIDE OF THE HOUSTON SHIP CHANNEL CORRIDOR, AND CHANNEL CLOSURE WILL NOT BE REQUIRED.
  - HSC FUTURE P12 DREDGE CHANNEL WAS PROVIDED BY MOLLIE POWELL OF PORT HOUSTON. THE P12 DREDGE CHANNEL IS -65' MLLW AND THE USACE REQUIRES MINIMUM 20 FEET OF COVER BELOW AND 50 FEET ON EACH SIDE OF THE CHANNEL / BARGE LANE.
  - PIPELINE PROFILE AND ELEVATIONS INDICATED IN THIS DRAWING REFER TO PROPOSED TOP OF PIPE.
  - CONTRACTOR SHALL TARGET TOP OF PIPE CROSSING ELEVATION OF -130' MLLW UNDERNEATH THE ENTIRE LENGTH OF THE HOUSTON SHIP CHANNEL. IF PIPELINE AS-BUILT TOP OF PIPE CONDITIONS ARE SHALLOWER THAN -100' MLLW ELEVATION, CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL AS WELL AS REINSTALLMENT OF THE PIPELINE AT A TOP OF PIPE DEPTH GREATER THAN -100' MLLW.

**ISSUED FOR PERMIT**  
THIS DOCUMENT IS ISSUED FOR PERMIT AND IS NOT FOR CONSTRUCTION PURPOSES  
KEVIN MICHAEL COULTER  
PE # 135505

**LEGEND**

	PROPOSED PIPELINE
	PERCHED PIPELINE W/NO CONTING
	PERMANENT EASEMENT
	TEMPORARY WORKSPACE
	HDD ENTRY / EXIT
	EXISTING PIPELINE



**PERCHERON**  
PROFESSIONAL SERVICES, LLC  
1504 WEST GRAND PARKWAY N, SUITE 200  
KATY, TEXAS 77469  
(281) 300-0400  
TEXAS SURVEYING FIRM  
LICENSE #000791 TEXAS  
ENGINEERING FIRM LICENSE #0448

**REFERENCE DRAWINGS**

DRAWING NO.	TITLE

**REVISIONS**

NO.	DESCRIPTION	DATE	BY	CHK	APP
A	ISSUED FOR REVIEW	07/05/25	WT	-	-
B	ISSUED FOR PERMIT	05/12/25	WM	PAC	KMC

**APPROVALS**

ISSUE NO.	DATE	BY	CHK	APP
WT	06/10/25			
PAC				
ENG. APPROVAL	DATE			
KMC				
P. M. APPROVAL	DATE			
KMC				



**MBTC Pipeline**  
CROSSING DETAIL  
PROPOSED 24" PIPELINE MBTC  
HDD-B TRINITY RIVER CHANNEL  
CHAMBERS COUNTY & GALVESTON COUNTY, TEXAS

SCALE	DRAWING NO.	REV.
AS-SHOWN	10556-HDD-027	B





GALVESTON COUNTY, TEXAS



C:\Projects\2024\240000\240000.dwg - ONCE USED - Refer to 240000.dwg for details. 240000.dwg - 07/16/25 - 10:00 AM

NOTE:

- GRID COORDINATES ARE BASED ON NAD83 (2011) TEXAS SOUTH CENTRAL ZONE, GEOID2B DERIVED FROM GPS OBSERVATIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT APPROPRIATE UTILITY AGENCIES FOR LOCATIONS OF UNDERGROUND UTILITIES. THOSE SHOWN HEREON ARE APPROXIMATE LOCATIONS.
- ELEVATIONS ARE BASED ON THE MEAN LOWER LOW WATER (MLLW), THE TIDE DIFFERENCE BETWEEN VERIFIED MEAN LOWER LOW WATER (MLLW) AND MEAN HIGH WATER (MHW) READINGS ARE 1.26 FEET PER NOAA TIDE GAUGE 870613 (MORGAN'S POINT, TX).
- WALKWAY SHALL NOT BE MODIFIED NOR BE USED TO PLACE SPOILS, LIGHT EQUIPMENT AND VEHICLES MAY CROSS THE WALKWAY AS LONG AS THEY DO NOT INTERFERE WITH PEDESTRIAN USE.

- BACKFILL AND BEDDING ARE IMPERMEABLE LEAN CLAY (WITH HYDRAULIC CONDUCTIVITY LESS THAN 0.0001 CM/SEC) AS DEFINED IN ASTM 2488 - USCS CLASSIFICATION SYSTEM, FREE OF ORGANIC OR OTHER DELETERIOUS MATERIALS. MAXIMUM LUMP SIZE LESS THAN THREE INCHES. FOLLOWING CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL PROVIDE A 5" LAYER OF TOPSOIL ON TOP OF THE LEAN CLAY FILL AND ESTABLISH APPROPRIATE VEGETATION COVERAGE TO PREVENT ANY LEVEE SLOPE EROSION. CONTRACTOR TO REPLACE LIKE-FOR-LIKE ALL TEXAS CITY LEVEE ARMOR DISTURBED DURING CONSTRUCTION.
- FILL USED FOR THE CROSSING SHALL BE PLACED IN LOOSE LIFTS WITH THICKNESS NOT TO EXCEED 8-INCHES AND COMPACTED IN THE DISTURBED AREA TO A MINIMUM 95 PERCENT STANDARD PROCTOR DENSITY DETERMINED AT OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D-698. MOISTURE CONTROL LIMITS ARE TO BE WITHIN -1% TO +3% OF OPTIMUM.
- ONEOK CONTRACTOR WILL BE RESPONSIBLE FOR RESTORING AND RE-PAVEMENT OF THE ROAD ON THE CREST OF THE LEVEE (SKYLINE DR.), AS WELL AS RESTORING THE TWO TEXAS CITY SIDEWALKS (WALKWAYS) THAT WILL BE CUT DURING CONSTRUCTION. ALL RESTORATION WORK SHALL BE PERFORMED BY ONEOK CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE TEXAS CITY DEPARTMENT OF PUBLIC WORKS AND TO THE RECOMMENDED STANDARDS AS SET FORTH BY THE CITY ENGINEER.
- PIPELINE PROFILE AND ELEVATIONS INDICATED IN THIS DRAWING REFER TO PROPOSED TOP OF PIPE (T.O.P.).

**LEGEND**

- PROPOSED PIPELINE
- PROPOSED PIPELINE INSULATION
- PERMANENT BASEMENT
- PROPERTY LINE
- TEMPORARY WORKFACE
- ADDITIONAL TEMPORARY WORKSPACE
- NO INTERFERENCE
- EXISTING PIPELINE
- WETLAND
- POTENTIAL ALLIGATOR SNAPPING TURTLE HABITAT
- POTENTIAL FRODOLOGED BATHYBATS

**811**  
Call before you dig

**PERCHERON**  
PROFESSIONAL SERVICES, LLC

1804 WEST GRAND PARKWAY N. SUITE 200  
KATY, TEXAS 77485  
(281) 300-6400  
TEJAS SURVEYING FIRM  
LICENSE: 186789, TEXAS  
ENGINEERING FIRM LICENSE: 34443

REFERENCE DRAWINGS	
DRAWING NO.	TITLE

REVISIONS	
NO.	DESCRIPTION
1	ISSUED FOR CONSTRUCTION
2	ISSUED FOR CONSTRUCTION

APPROVALS	
DATE	DATE
07/16/25	

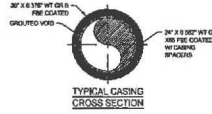
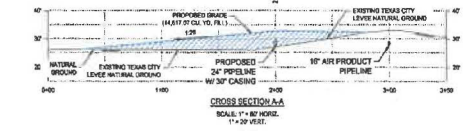
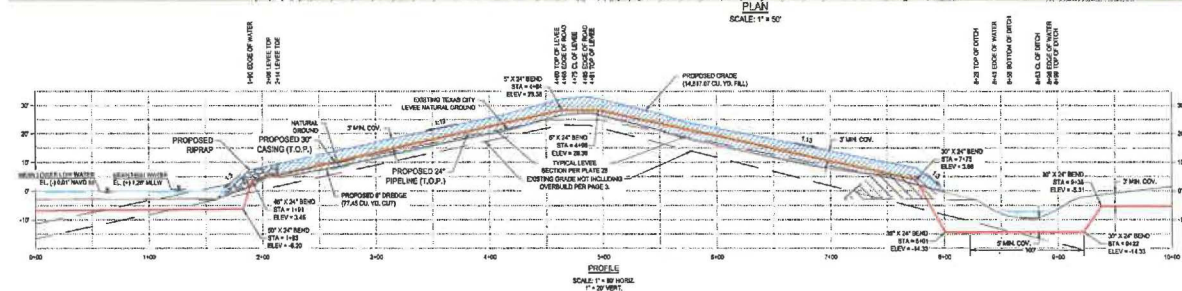
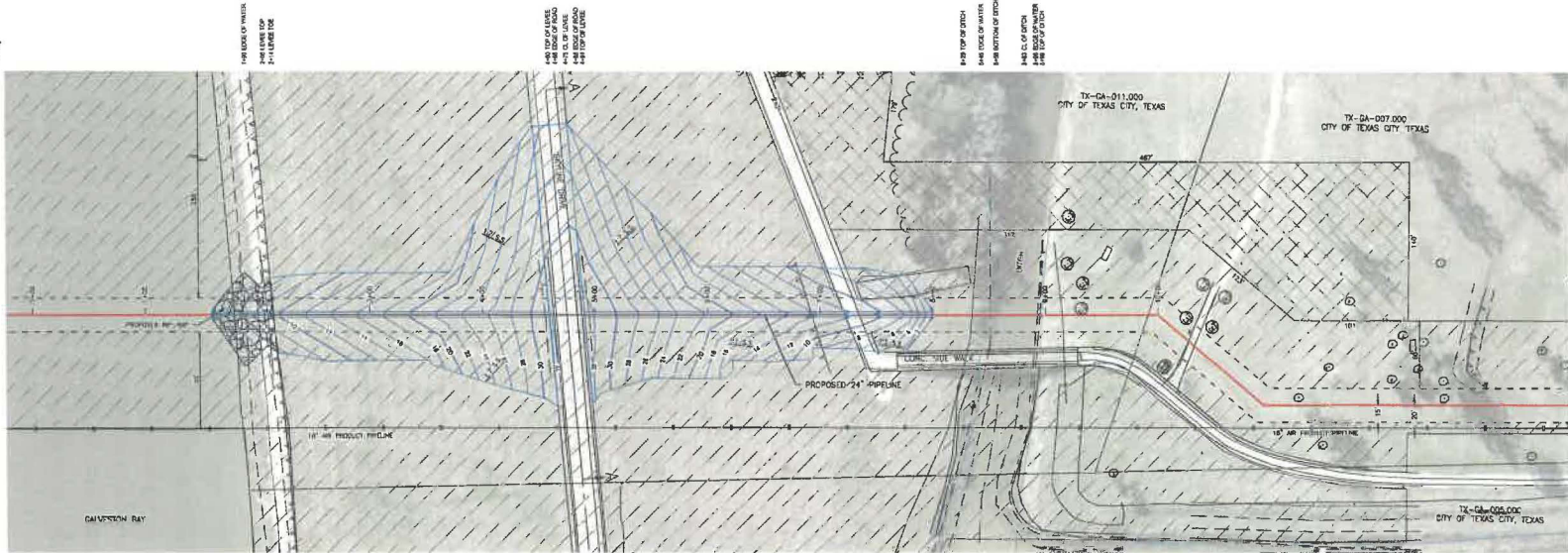
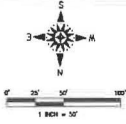
**ONEOK**  
NGL PIPELINE COMPANY, L.P.

**Morris P. Habert, Inc.**  
SUPERVISOR OF CONSTRUCTION

CROSSING DETAIL  
PROPOSED 24" PIPELINE MBTC  
TEXAS CITY LEVEE CROSS SECTIONS  
GALVESTON COUNTY, TEXAS

SCALE: AS-SHOWN  
DRAWING NO.: 10658-RDX-011  
REV.: 2

GALVESTON COUNTY, TEXAS



- NOTE:
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  - IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT APPROPRIATE UTILITY AGENCIES FOR LOCATIONS OF UNDERGROUND UTILITIES, THOSE SHOWN HEREON ARE APPROXIMATE LOCATIONS.
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  - WALKWAY SHALL NOT BE MODIFIED NOR BE USED TO PLACE SPILLS, LIGHT EQUIPMENT AND VEHICLES MAY CROSS THE WALKWAY AS LONG AS THEY DO NOT INTERFERE WITH PEDESTRIAN USE.

- BACKFILL AND BEDDING ARE IMPERMEABLE LEAN CLAY (WITH HYDRAULIC CONDUCTIVITY LESS THAN 0.00001 CM/SEC) AS DEFINED IN ASTM 2488 - USCS CLASSIFICATION SYSTEM, FREE OF ORGANIC OR OTHER DELETERIOUS MATERIALS; MAXIMUM LUMP SIZE LESS THAN THREE INCHES; FOLLOWING CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL PROVIDE A 6" LAYER OF TOPSOIL ON TOP OF THE LEAN CLAY FILL AND ESTABLISH APPROPRIATE VEGETATION COVERAGE TO PREVENT ANY LEVEE SLOPE EROSION. CONTRACTOR TO REPLACE LIKE-FOR-LIKE ALL TEXAS CITY LEVEE ARMOR DISTURBED DURING CONSTRUCTION.
- FILL USED FOR THE CROSSING SHALL BE PLACED IN LOOSE LIFTS WITH THICKNESS NOT TO EXCEED 6-INCHES AND COMPACTED IN THE DISTURBED AREA TO A MINIMUM 95 PERCENT STANDARD PROCTOR DENSITY DETERMINED AT OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D-698. MOISTURE CONTROL LIMITS ARE TO BE WITHIN -1% TO +3% OF OPTIMUM.
- ONEOK CONTRACTOR WILL BE RESPONSIBLE FOR RESTORING AND RE-PAVEMENT OF THE ROAD ON THE CREST OF THE LEVEE (SKYLINE DR.), AS WELL AS RESTORING THE TWO TEXAS CITY SIDEWALKS (WALKWAYS) THAT WILL BE CUT DURING CONSTRUCTION. ALL RESTORATION WORK SHALL BE PERFORMED BY ONEOK CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE TEXAS CITY DEPARTMENT OF PUBLIC WORKS AND TO THE RECOMMENDED STANDARDS AS SET FORTH BY THE CITY ENGINEER.
- PIPELINE PROFILE AND ELEVATIONS INDICATED IN THIS DRAWING REFER TO PROPOSED TOP OF PIPE (T.O.P.).

**ISSUED FOR CONSTRUCTION**



LEGEND

	PROPOSED PIPELINE		WETLAND
	PROPOSED PIPELINE MARKING		POTENTIAL ALLIGATOR
	RIGHT-OF-WAY BOUNDARY		SHADED TURTLE HABITAT
	POTENTIAL UNDEVELOPED PROPERTY LINE		POTENTIAL THICKETED SALT MARSH
	TEMPORARY WORKSPACE		
	ADDITIONAL TEMPORARY WORKSPACE		
	HOB ENTRANCE		
	EXISTING PIPELINE		

**811** logo

1904 WEST GRAND PARKWAY N, SUITE 200 KATY, TEXAS 77449 (832) 300-6400 TEXAS SURVEYING FIRM LICENSE: 1402994, TEXAS ENGINEERING FIRM LICENSE: 26441

**PERCHERON** PROFESSIONAL SERVICES, L.L.C.

REFERENCE DRAWINGS		REVISIONS		APPROVALS	
DRAWING NO.	TITLE	DATE	BY	CHK	DATE
10656-RDX-011	LEVEE DRAWING				
0	ISSUED FOR CONSTRUCTION	01/14/24	TR	PAC	07/18/25
1	ISSUED FOR CONSTRUCTION	01/15/25	TR	PAC	
2	ISSUED FOR CONSTRUCTION	03/06/25	TR	PAC	

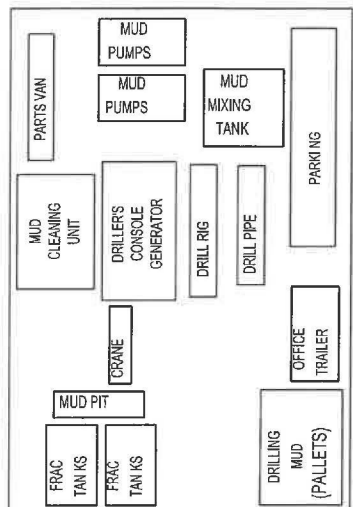
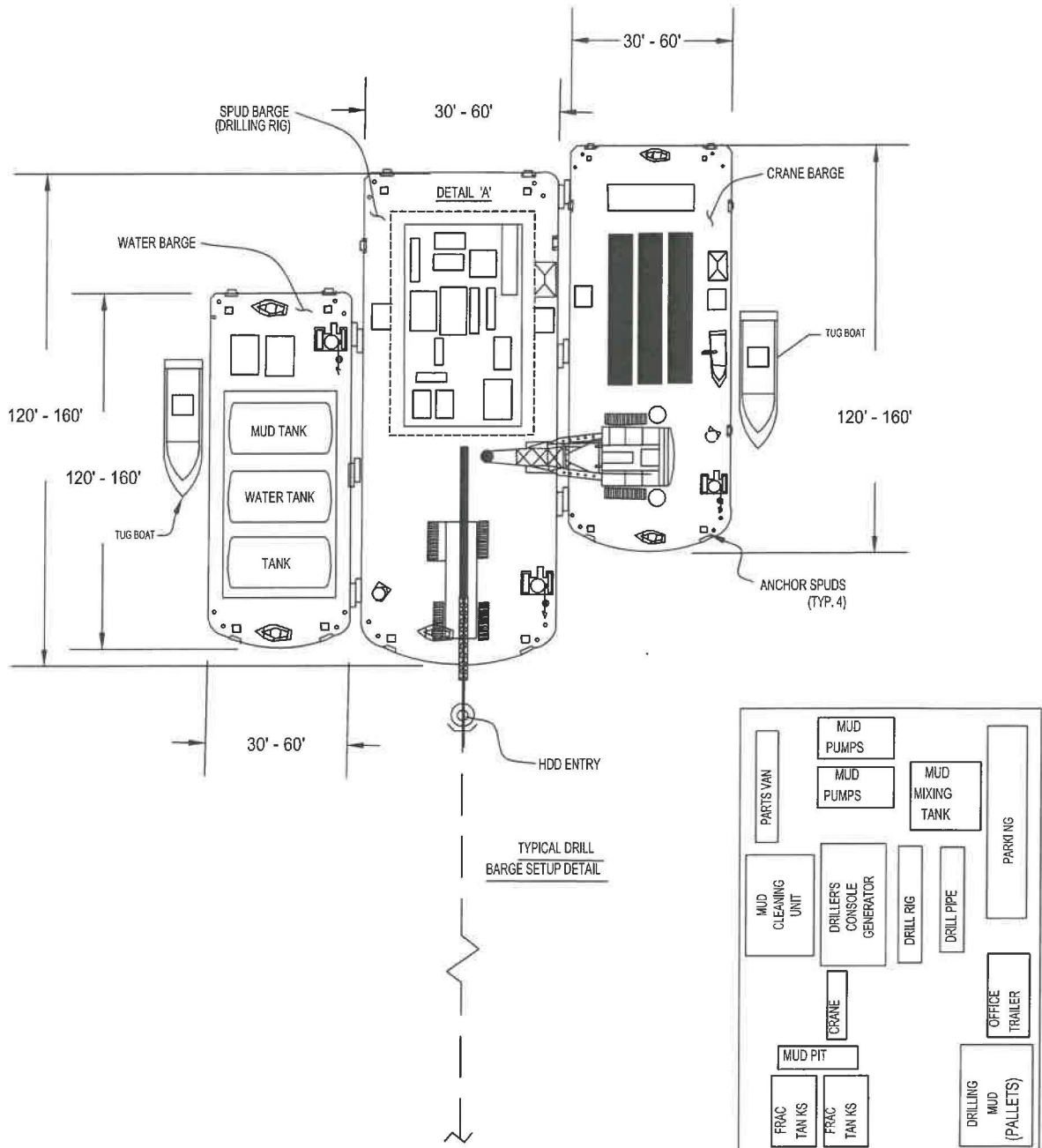
**MPH** Morris P. Hebert, Inc. REGISTERED PROFESSIONAL ENGINEER LICENSE NO. 138588 STATE OF TEXAS

**ONEOK** NSL PIPELINE COMPANY, L.P.

**MBTC** PIPELINE

CROSSING DETAIL  
PROPOSED 24" PIPELINE MBTC TEXAS CITY LEVEE CROSSING GALVESTON COUNTY, TEXAS

SCALE: AS-SHOWN DRAWING NO.: 10656-RDX-010 REV.: 2



SEE DRAWING NO.  
107461-TYP-0006-HDD EXIT  
TYPICAL SUPPORT BARGE  
SETUP DETAIL

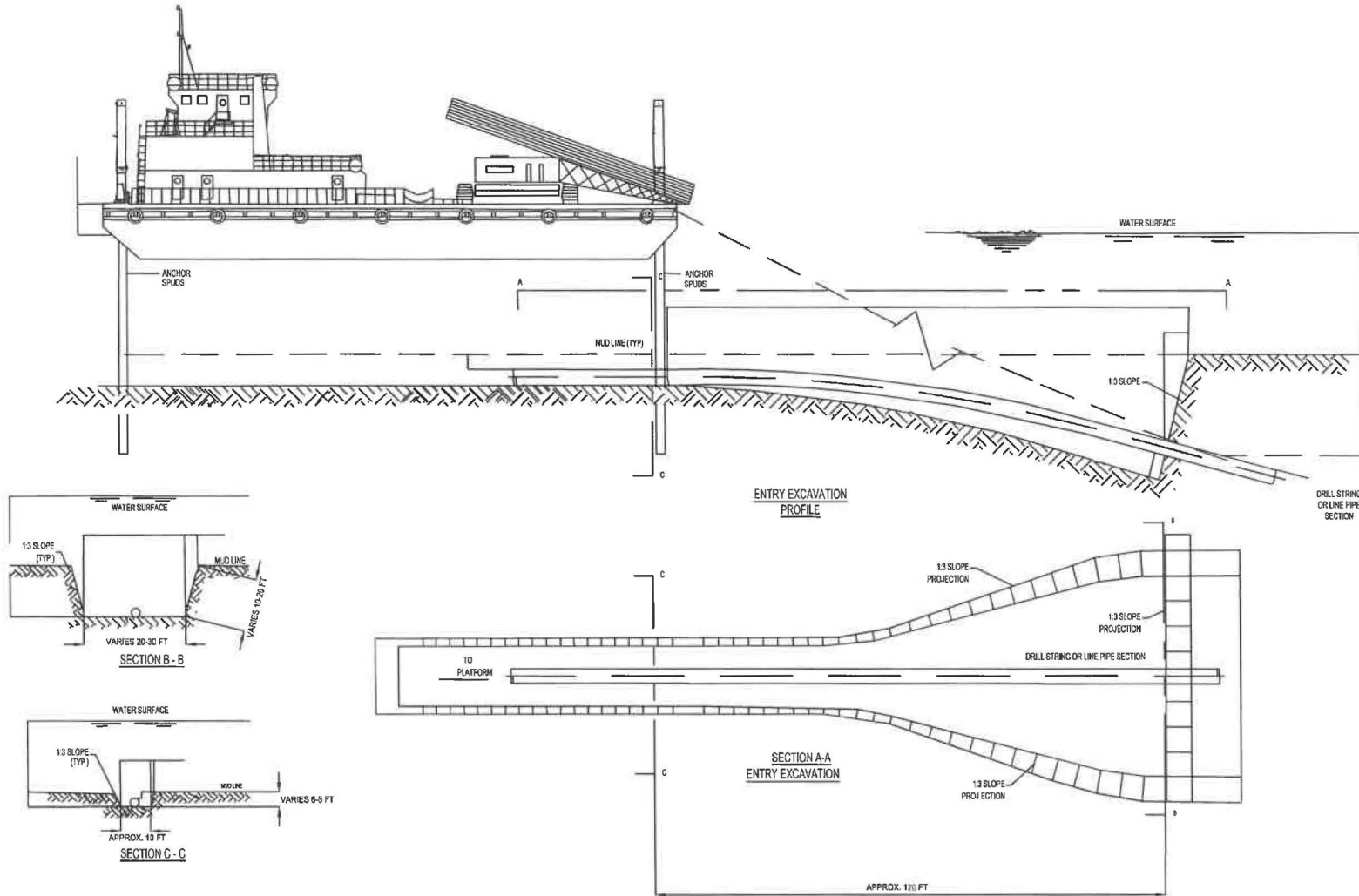
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△	ISSUED FOR PERMIT	08/22/25	WH	PAC	*						
△											
△											
△											
△											
△											

DRAWN BY:	JAT
CHECKED BY:	PAC
REVIEWED BY:	*
APPROVED BY:	*
PROJECT MANAGER:	*
SHEET	1 OF 2

**MBTC Pipeline**

OFFSHORE TO OFFSHORE  
TYPICAL HDD DETAIL

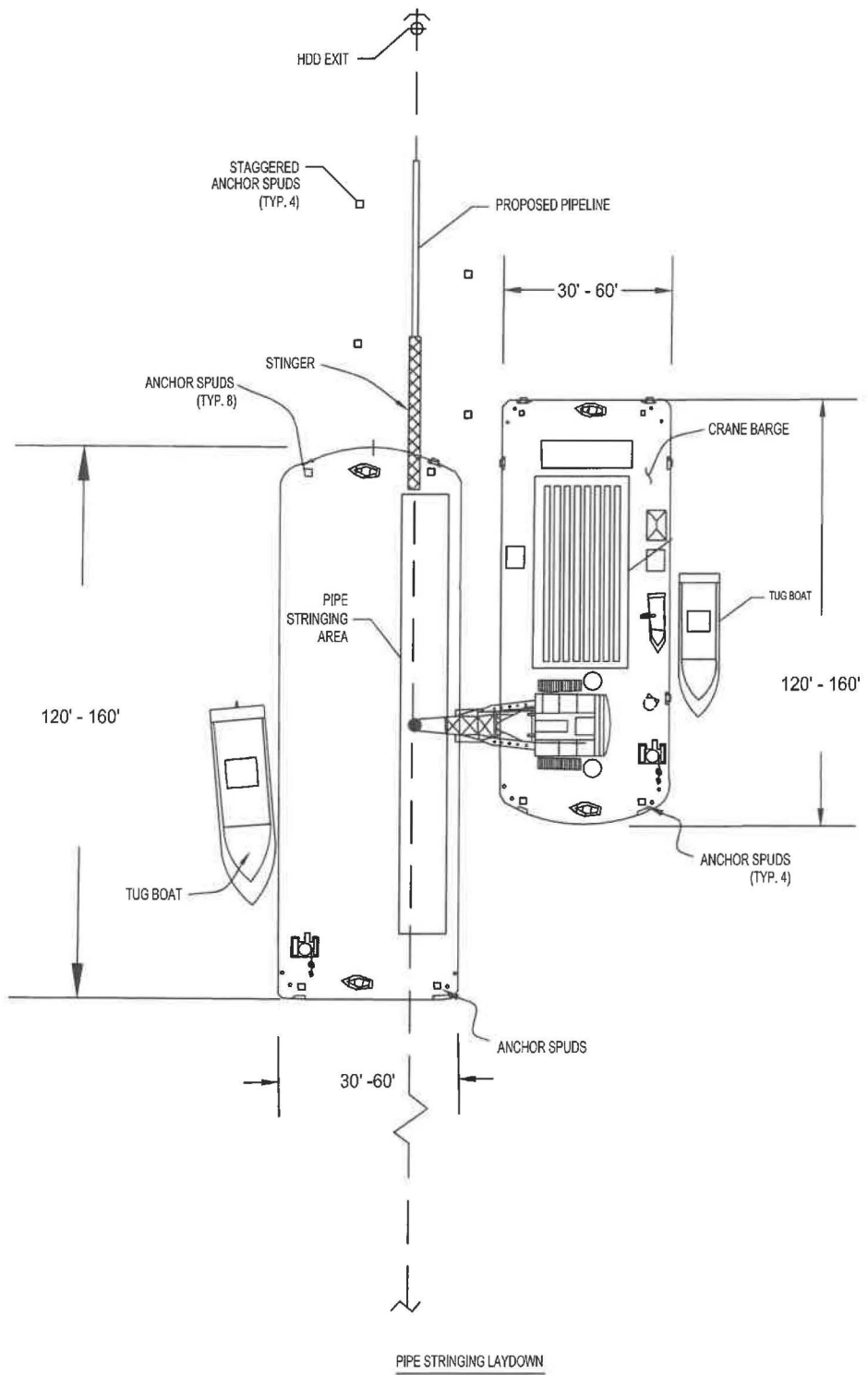
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REVISIONS					
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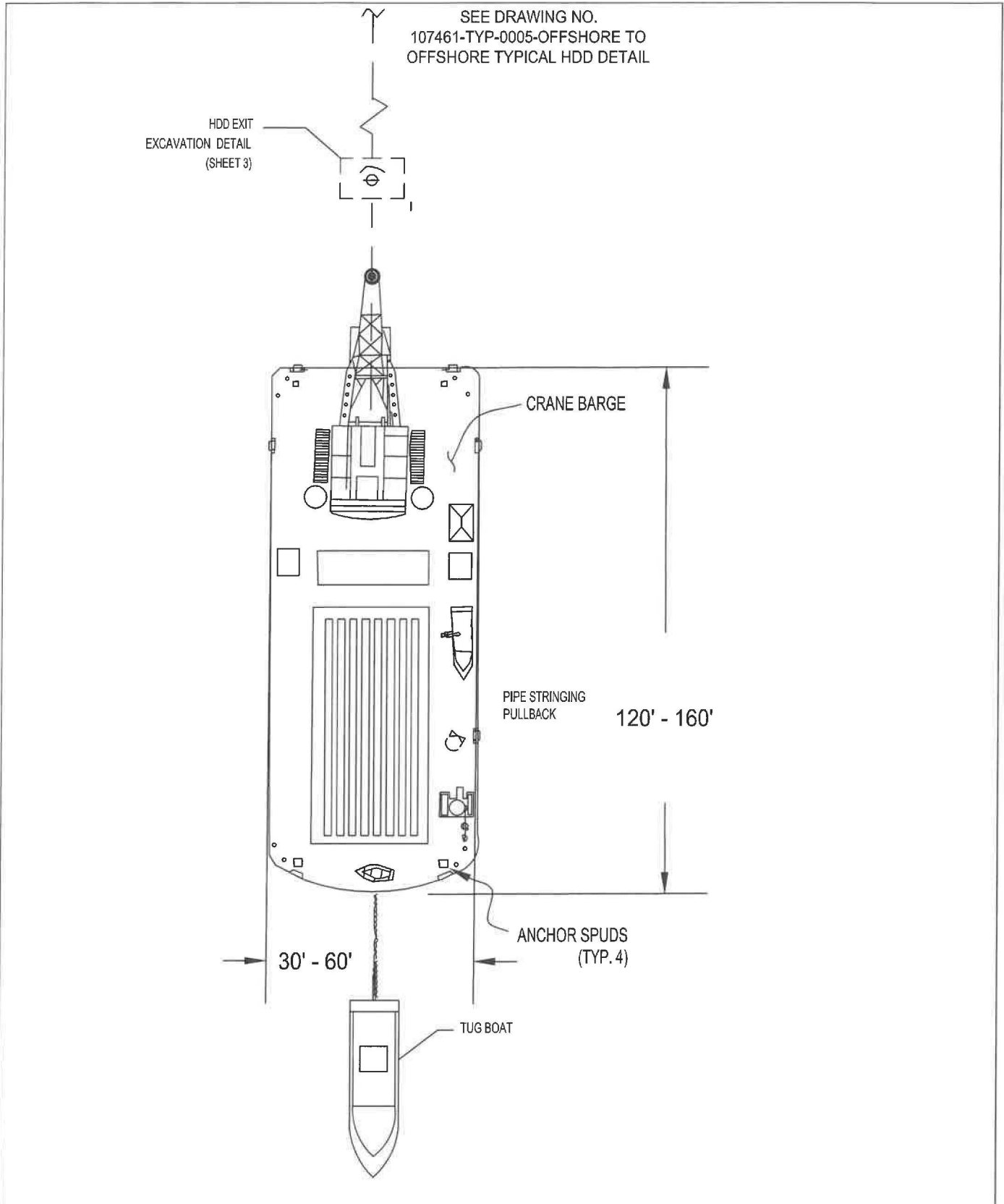
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APPROVED BY:	*
PROJECT MANAGER:	*
SHEET	2 OF 2

<h1>MBTC Pipeline</h1>			
		<h2>OFFSHORE TO OFFSHORE TYPICAL HDD DETAIL</h2>	
PROJECT NUMBER	05.104571.0000	DRAWING NUMBER	104571-TYP-0005
			REV. B

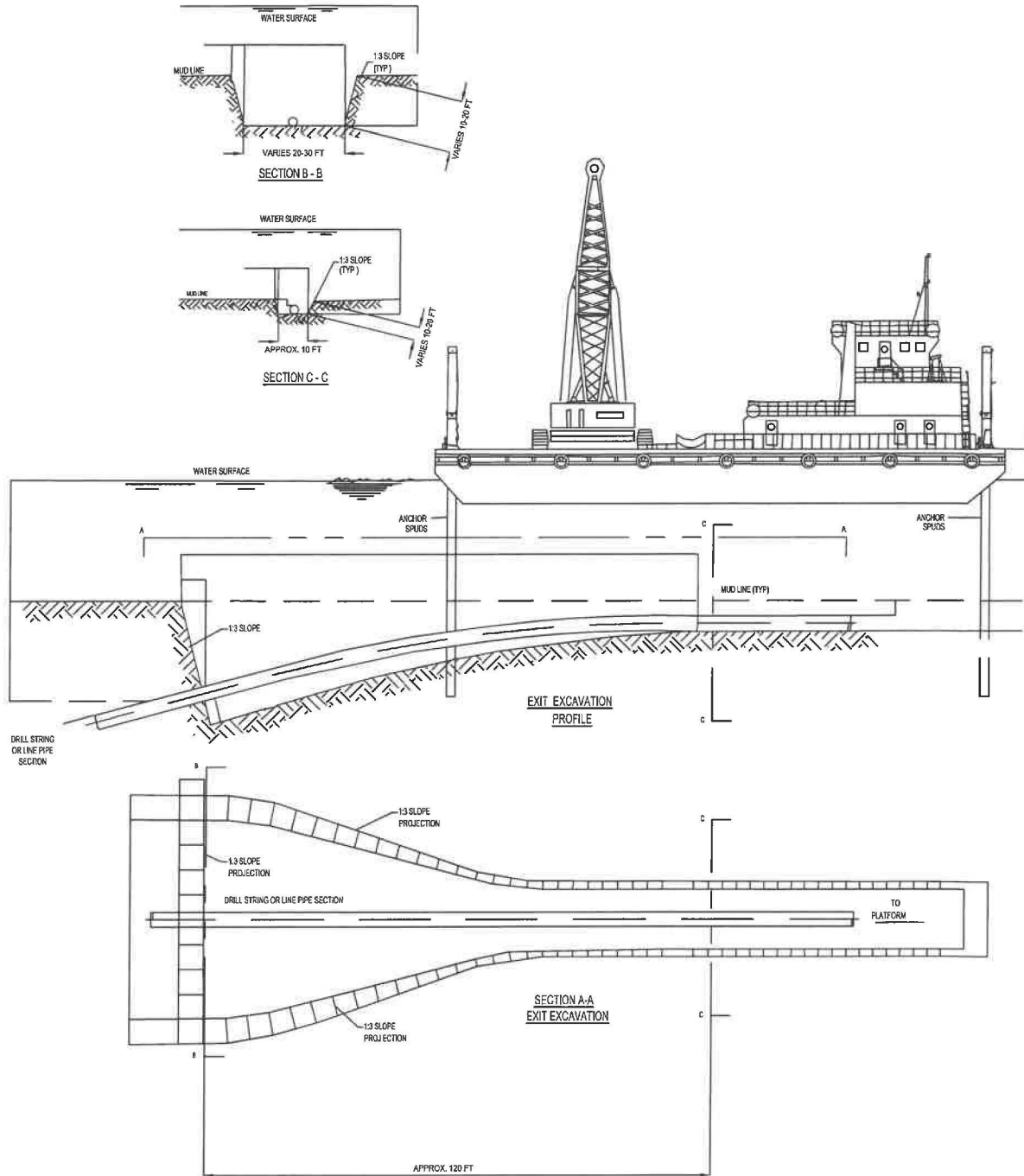


PIPE STRINGING LAYDOWN

REVISIONS						DRAWN BY:		<p style="text-align: center;"><b>MBTC Pipeline</b></p> <p style="text-align: center;">HDD TYPICAL SUPPORT BARGE SETUP DETAIL</p>					
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△	ISSUED FOR PERMIT	08/22/25	WH	PAC	*	PAC							
△						APPROVED BY: *							
△						PROJECT MANAGER: *							
△						SCALE: NTS *							
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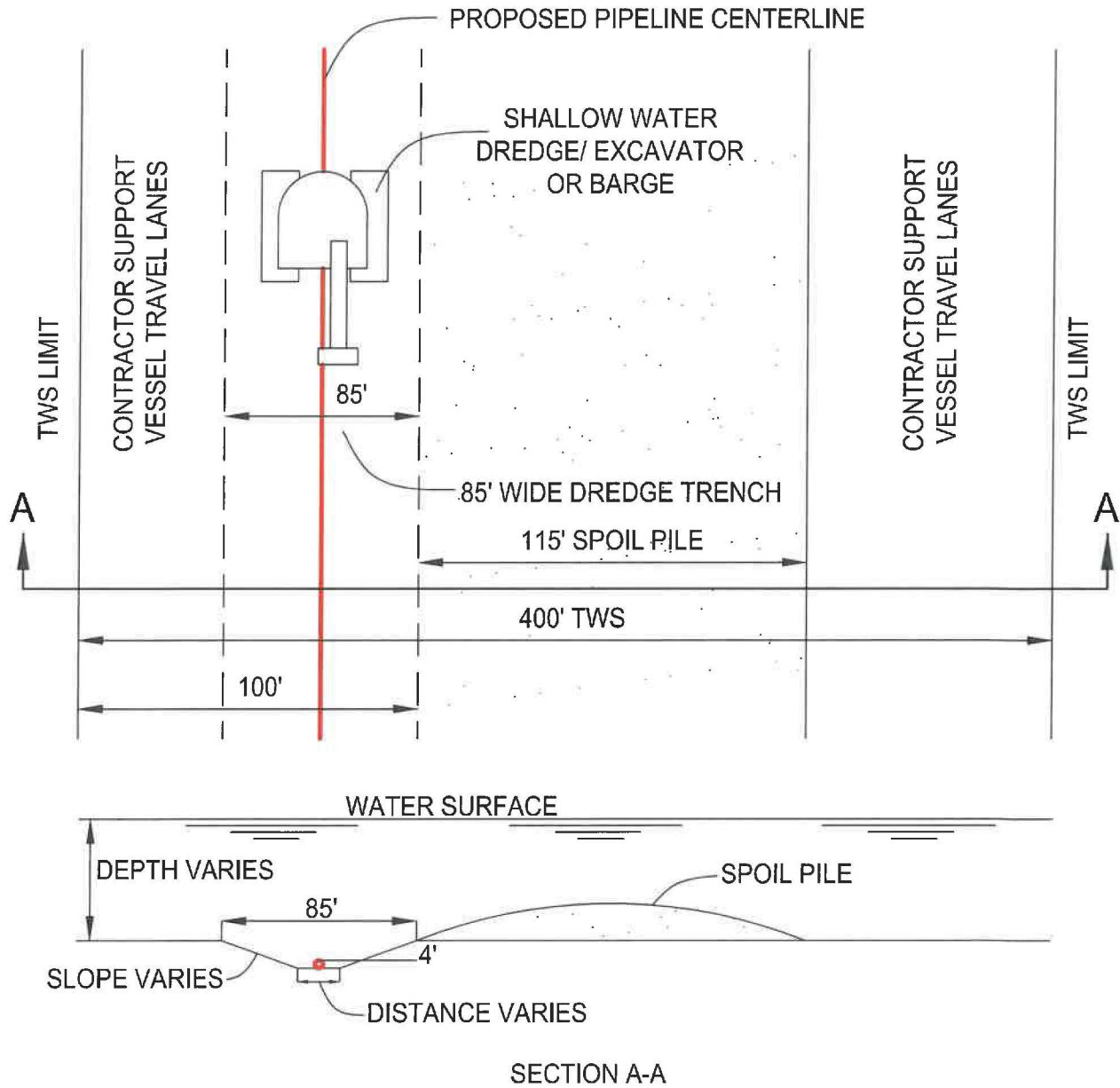


REVISIONS						DRAWN BY:		<p style="text-align: center;"><b>MBTC Pipeline</b></p> <p style="text-align: center;">HDD EXIT TYPICAL SUPPORT BARGE SETUP DETAIL</p>		
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NO.	DESCRIPTION	DATE	BY	CHK.	APPR.	PROJECT NUMBER	05.107461.0000	DRAWING NUMBER	107461-TYP-0006	REV. B



REVISIONS						DRAWN BY:	JAT	<h2 style="text-align: center;">MBTC Pipeline</h2> <h3 style="text-align: center;">HDD EXIT TYPICAL SUPPORT BARGE SETUP DETAIL</h3>			
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△						SHEET	3 OF 3				
NO.	DESCRIPTION	DATE	BY	CHK.	APPR.	PROJECT NUMBER	05.107461.0000	DRAWING NUMBER	107461-TYP-0006	REV.	B

### TYPICAL SHALLOW WATER DREDGE



**NOTES:**

- SHALLOW WATER DREDGE TO BE USED WHERE BARGE WITH JET SLED CANNOT TRAVERSE DUE TO SHALLOW WATER CONDITIONS.
- ANTICIPATED TO BE NEEDED FOR THE SHORE APPROACH TO TEXAS CITY LEVEE. TOTALING APPROXIMATELY 3000 LINEAR FEET SEAWARD FROM THE SHORELINE.

REVISIONS						DRAWN BY:		<div style="text-align: center; font-size: 24pt; font-weight: bold;">MBTC Pipeline</div> <div style="text-align: center; font-weight: bold;">SHALLOW WATER DREDGE DETAIL</div>			
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△						PROJECT MANAGER: *					
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