

July 3, 2025

ERI Project No. 0004-0575

Mr. Matthew Jones, Program Manager
Department of Natural Resources & Environmental Control
Wetlands & Subaqueous Lands Section
89 Kings Highway
Dover, Delaware 19901-7305

Re: Subaqueous Lands Lease & Permit (Love Creek)
Chase Oaks to Welches Pond Water Main Installation
Tax Map Parcels: 234-6.00-28.00 & 334-12.00-16.00
Lewes & Rehoboth Hundred, Sussex County, Delaware
Applicant: Tidewater Utilities, Inc. Attn: Bruce Patrick

Dear Mr. Jones,

Environmental Resource Insights (ERI) is writing to you on behalf of the applicant, Tidewater Utilities, Inc., regarding the proposed installation of a 12 inch diameter water main under Love Creek using horizontal directional drilling (HDD) methods in the Baltimore Hundred, Lewes, Delaware. The site of the regulated portion of the project is within the public subaqueous lands of Love Creek. Entry and exit pits for the drilling operation are located on Sussex County Tax Map Parcels 234-6.00-228.00 and 334-12.00-16.00. The proposed utility line being installed with HDD methodology will be within a 20 foot wide permanent utility easement on each side of Love Creek.

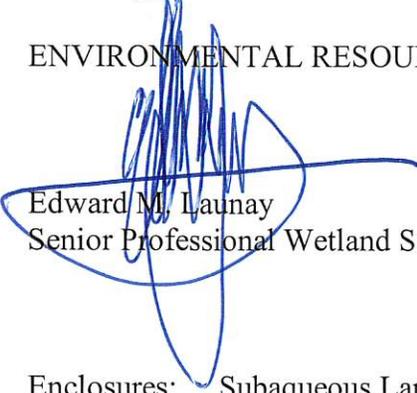
The total length of the proposed 12 inch diameter water main HDD installation is 644 linear feet. Of that amount, 291 linear feet lies between and beneath the mean low-water lines of Love Creek and an additional 88 linear feet lies below its state and federally regulated wetlands. The proposed water main will be installed at a minimum of 15.0 feet below the bottom of Love Creek.

The project purpose is to provide improved water quality and dependability for two residential developments within the local Tidewater Utilities, Inc. service area.

Upon your review of the enclosed materials, please let me know if you or your staff need any additional information in support of this request. On behalf of Tidewater Utilities, Inc., thank you in advance for your time and attention to this request.

Sincerely,

ENVIRONMENTAL RESOURCE INSIGHTS



Edward M. Launay
Senior Professional Wetland Scientist No. 875

Enclosures: Subaqueous Lands Permit Application
HDD Project Plans

Cc: Mr. Bruce Patrick, Tidewater Utilities, Inc.

WETLANDS AND SUBAQUEOUS LANDS SECTION PERMIT APPLICATION FORM

**For Subaqueous Lands, Wetlands, Marina and
401 Water Quality Certification Projects**

**State of Delaware
Department of Natural Resources and Environmental Control
Division of Water**

Wetlands and Subaqueous Lands Section



**APPLICATION FOR APPROVAL OF
SUBAQUEOUS LANDS, WETLANDS, MARINA
AND WATER QUALITY CERTIFICATION PROJECTS**

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY**Application Instructions:**

1. Complete each section of this basic application and appropriate appendices as thoroughly and accurately as possible. Incomplete or inaccurate applications will be returned.
2. All applications must be accompanied by a scaled plan view and cross-section view plans that show the location and design details for the proposed project. Full construction plans must be submitted for major projects.
3. All applications must have an original signature page and proof of ownership or permitted land use agreement.
4. Submit an original and two (2) additional copies of the application (total of 3) with the appropriate application fee and public notice fee* (prepared in separate checks) to:

**Department of Natural Resources and Environmental Control
Wetlands and Subaqueous Lands Section
89 Kings Highway
Dover, Delaware 19901**

*Application and public notice fees are non-refundable regardless of the Permit decision or application status.

5. No construction may begin at the project site before written approval has been received from this office.

Helpful Information:

1. Tax Parcel Information:

New Castle County	(302) 395-5400
Kent County	(302) 736-2010
Sussex County	(302) 855-7878
2. Recorder of Deeds:

New Castle County	(302) 571-7550
Kent County	(302) 744-2314
Sussex County	(302) 855-7785
3. A separate application and/or approval may be required through the Army Corps of Engineers. Applicants are strongly encouraged to contact the Corps for a determination of their permitting requirements. For more information, contact the Philadelphia District Regulator of the Day at (215) 656-6728 or visit their website at: <http://www.nap.usace.army.mil/Missions/Regulatory.aspx>.
4. For questions about this application or the Wetlands and Subaqueous Lands Section, contact us at (302) 739-9943 or visit our website at: <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>. Office hours are Monday through Friday 8:00 AM to 4:30 PM, except on State Holidays.

APPLICANT'S REVIEW BEFORE MAILING

DID YOU COMPLETE THE FOLLOWING?

<u> X </u>	Yes	BASIC APPLICATION
<u> X </u>	Yes	SIGNATURE PAGE (Page 3)
<u> X </u>	Yes	APPLICABLE APPENDICES
<u> X </u>	Yes	SCALED PLAN VIEW
<u> X </u>	Yes	SCALED CROSS-SECTION OR ELEVATION VIEW PLANS
<u> X </u>	Yes	VICINITY MAP
<u> X </u>	Yes	COPY OF THE PROPERTY DEED & SURVEY
<u> X </u>	Yes	THREE (3) COMPLETE COPIES OF THE APPLICATION PACKET
<u> X </u>	Yes	APPROPRIATE APPLICATION FEE & PUBLIC NOTICE FEE (Separate checks made payable to the State of Delaware)

Submit 3 complete copies of the application packet to:

**Department of Natural Resources and Environmental Control
Wetlands and Subaqueous Lands Section
89 Kings Highway
Dover, Delaware 19901**

Before signing and mailing your application packet, please read the following:

The Department requests that the contractor or party who will perform the construction of your proposed project, if other than the applicant, sign the application signature page along with the applicant in the spaces provided. When the application is signed by the contractor as well as the applicant, the Department will issue the Permit to both parties. For Leases, the contractor will receive a separate construction authorization that will make them subject to all of the terms and conditions of the Lease relating to the construction

Section 1: Applicant Identification

1. Applicant's Name: Tidewater Utilities, Inc. Telephone #: 302-218-9335
 Mailing Address: Attn. Bruce Patrick Fax #: _____
110 South Little Creek Road, Dover, Delaware 19901 E-mail: bpatrick@middlesexwater.com
2. Consultant's Name: Edward M. Launay Company Name: Environmental Resource Insights
 Mailing Address: 1 Park Ave. Milford, DE 19963 Telephone #: 302-236-3871
 Fax #: 302-424-0430 E-mail: elaunay@ericonsultants.com
3. Contractor's Name: Unknown Company Name: _____
 Mailing Address: _____ Telephone #: _____
 Fax #: _____ E-mail: _____

Section 2: Project Description

4. Check those that apply:
 New Project/addition to existing project? Repair/Replace existing structure? (If checked, must answer #16)

5. Project Purpose (attach additional sheets as necessary):
 The proposed project involves the installation of a 12 inch diameter water main using horizontal directional drilling (HDD) methodology to provide water service to residential developments within the local service area. The installation will be within a permanent easement for Tidewater Utilities. The proposed water main will be installed a minimum of 15.0 feet below the bottom of Love Creek. Entry and exit pits associated with the HDD utility installation are in upland locations distant from any wetland area. No permanent impacts to waters or wetlands are proposed. (See attached sheet)

6. Check each Appendix that is enclosed with this application:

<input type="checkbox"/>	A. Boat Docking Facilities	<input type="checkbox"/>	G. Bulkheads	<input type="checkbox"/>	N. Preliminary Marina Checklist
<input type="checkbox"/>	B. Boat Ramps	<input type="checkbox"/>	H. Fill	<input type="checkbox"/>	O. Marinas
<input type="checkbox"/>	C. Road Crossings	<input type="checkbox"/>	I. Rip-Rap Sills and Revetments	<input type="checkbox"/>	P. Stormwater Management
<input type="checkbox"/>	D. Channel Modifications/Dams	<input type="checkbox"/>	J. Vegetative Stabilization	<input type="checkbox"/>	Q. Ponds and Impoundments
<input checked="" type="checkbox"/>	E. Utility Crossings	<input type="checkbox"/>	K. Jetties, Groins, Breakwaters	<input type="checkbox"/>	R. Maintenance Dredging
<input type="checkbox"/>	F. Intake or Outfall Structures	<input type="checkbox"/>	M. Activities in State Wetlands	<input type="checkbox"/>	S. New Dredging

Section 3: Project Location

7. Project Site Address: Love Creek County: N.C. Kent Sussex
Webb's Landing Road, Lewes, Delaware 19958 Site owner name (if different from applicant): _____
 Address of site owner: Webb's Landing HOA Inc.
PO Box 463 Nassau, DE 19968
Welches Pond LP - 246 Rehoboth Avenue, Rehoboth Beach, DE 19971
8. Driving Directions: Heading North on DE-24 towards Angola Rd, turn left onto Robinsonville Rd. After 2.1 miles, turn right onto Webb's Landing Road.
At the terminus of Webb's Landing Road is the location of the HDD sending pit.
 (Attach a vicinity map identifying road names and the project location)
9. Tax Parcel ID Number: 234-6.00-228.00 & 334-12.00-16.00 Subdivision Name: Webb's Landing & Welches Pond

WSLS Use Only:		Permit #s: _____							
Type	SP <input type="checkbox"/>	SL <input type="checkbox"/>	SU <input type="checkbox"/>	WE <input type="checkbox"/>	WQ <input type="checkbox"/>	LA <input type="checkbox"/>	SA <input type="checkbox"/>	MP <input type="checkbox"/>	WA <input type="checkbox"/>
Corps Permit: SPGP 18 <input type="checkbox"/> 20 <input type="checkbox"/>		Nationwide Permit #: _____		Individual Permit # _____					
Received Date: _____		Project Scientist: _____							
Fee Received? Yes <input type="checkbox"/> No <input type="checkbox"/>		Amt: \$ _____		Receipt #: _____					
Public Notice #: _____		Public Notice Dates: ON _____ OFF _____							

Section 2, Item 5, Project Description

Tidewater Utilities, Inc. proposes to install a 12 inch diameter water main interconnecting the Chase Oak residential subdivision (southwest side of Love Creek) and the Welches Pond residential subdivision (northeast side of Love Creek) in order to improve the quality and dependability of water supply within their service area. A 525 foot portion of the project involves installing portions of the utility under the waters of Love Creek and adjacent wetlands using hydraulic directional drilling (HDD) methodology. The majority of this work occurs in uplands within the right of way on Webb Landing Road and a 20 foot wide dedicated utility easement on each side of Love Creek. Temporary disturbances at entry and exit pits for the HDD project are located on uplands.

The proposed project involves the installation of a 291 foot section of 12 inch diameter water main under Love Creek between mean low water lines. Outside of the public subaqueous lands of Love Creek, the water main will be located on Sussex County Tax Map Parcels 234-6.00-228.00 and 334-12.00-16.00 within a 20 foot wide permanent utility easement dedicated to Tidewater Utilities, Inc.

To avoid all impacts to waters of Love Creek and its adjacent tidal and non-tidal wetlands, the installation will be done by horizontal directional drilling (HDD) technology known as directional drilling methodology. The water main will be installed at a minimum of 15.0 feet below the bottom of Love Creek. Entry and exit drill pits associated with the HDD water main installation will be in upland locations. No physical impact to any wetlands will occur.

The total length of the proposed 12 inch diameter water main HDD installation is 644 linear feet. Of that amount, 291 linear feet lies between and beneath the mean low-water lines of Love Creek and 234 linear feet lies below state and federally regulated wetlands and intertidal area above the mean low-water lines.

The HDD installation will be conducted in accordance with best operational practices and a Frac-Out Contingency Plan. The date of installation will be guided by the receipt of required federal and state permits.

Section 3: Project Location (Continued)

10. Name of waterbody at Project Location: Love Creek waterbody is a tributary to: Rehoboth Bay

11. Is the waterbody: Tidal Non-tidal Waterbody width at mean low or ordinary high water +/- 291'

12. Is the project: On public subaqueous lands? On private subaqueous lands?*

In State-regulated wetlands? In Federally-regulated wetlands?

*If the project is on private subaqueous lands, provide the name of the subaqueous lands owner:
Webb's Landing Homeowners Association Inc. & Welches Pond LP

(Written permission from the private subaqueous lands owner must be included with this application)

13. Present Zoning: Agricultural Residential Commercial Industrial Other

Section 4: Miscellaneous

14. A. List the names and complete mailing addresses of the immediately adjoining property owners on all sides of the project (attach additional sheets as necessary):

- Deerfield Farm Inc. - 32740 Webb's Landing Road, Lewes, Delaware 19958
- Paul M Stortini TTEE RES TR - 1500 Hilltop Avenue, Wilmington, Delaware 19809
- Webb's Landing Homeowners Association Inc. - PO Box 463, Nassau, Delaware 19969
- Welches Pond LP - 246 Rehoboth Avenue, Rehoboth Beach, Delaware 19971

B. For wetlands and marina projects, list the names and complete mailing addresses of property owners within a 1,000 foot radius of the project (attach additional sheets as necessary):

Not Applicable

15. Provide the names of DNREC and/or Army Corps of Engineers representatives whom you have discussed the project with:

- A. Have you had a State Jurisdictional Determination performed on the property? Yes No
 - B. Has the project been reviewed in a monthly Joint Permit Processing Meeting? Yes No
- *If yes, what was the date of the meeting? _____

16. Are there existing structures or fill at the project site in subaqueous lands? Yes No

*If yes, provide the permit and/or lease number(s): _____

*If no, were structures and/or fill in place prior to 1969? Yes No

17. Have you applied for or obtained a Federal permit from the Army Corps of Engineers?

No Pending Issued Denied Date: _____

Type of Permit: Nationwide Permit Federal Permit or ID #: NWP-58 Utility Line Activities for Water and Other Substances

18. Have you applied for permits from other Sections within DNREC?

No Pending Issued Denied Date: _____ Permit or ID #: _____

Type of permit (circle all that apply): Septic Well NPDES Storm Water

Other: _____

Section 5: Signature Page

19. Agent Authorization:

If you choose to complete this section, all future correspondence to the Department may be signed by the duly authorized agent. In addition, the agent will become the primary point of contact for all correspondence from the Department.

I do not wish to authorize an agent to act on my behalf

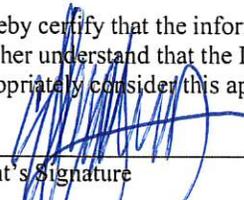
I wish to authorize an agent as indicated below

I, Tidewater Utilities, Inc. Attn: Bruce Patrick, hereby designate and authorize Environmental Resource Insights - Attn. Edward Launay
 (Name of Applicant) (Name of Agent)
 to act on my behalf in the processing of this application and to furnish any additional information requested by the Department.

Authorized Agent's Name: Edward M. Launay Telephone #: 302-424-1441
 Mailing Address: 1 Park Ave. Milford, DE 19963 Fax #: 302-424-0430
 E-mail: elaunay@ericonsultants.com

20. Agent's Signature:

I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application.



 Agent's Signature Date 9/7/2025

21. Applicant's Signature:

I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge and that I am required to inform the Department of any changes or updates to the information provided in this application. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application. I grant permission to authorized Department representatives to enter upon the premises for inspection purposes during working hours.

Bruce E. Patrick

 Applicant's Signature Date 7/1/25

Bruce Patrick

 Print Name

22. Contractor's Signature:

I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge, and that I am required to inform the Department of any changes or updates to the information provided in this application. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application.

 Contractor's Name Date

 Print Name

9. Will there be any permanent towers, poles, platforms or other structures (excluding submarine cables) on subaqueous land or in wetlands? _____ Yes No

If "yes", give the number of structures, and provide a description, including square footage and material (the location of all structures must be shown on the plans or the application cannot be processed).

10. At what depth will the subaqueous crossing be placed below the bottom of the waterbody? Min. 15 ft.
At what height will an aerial crossing be above MHW? _____ - _____ feet

11. Is the crossing in, on, over or under public (undeeded) or private subaqueous lands?

Public Private

If private, who is/are the property holder(s)? Webb's Landing HOA Inc. & Welches Pond L.P.

Provide a copy of any deed, ROW or easement granting access if the private property owner is other than the applicant.

12. Is the crossing adjacent to subaqueous lands on State-owned property? Yes No

If so, which State agency is the owner? Love Creek is public subaqueous lands from mean low-water to mean low-water

Is the crossing within a DeLDOT right of way? _____ Yes No

Tidewater Utilities, Inc. Permenant 20 foot wide Utility Easement Right of Way

13. Please include evidence of written permission from the private land owner above (if other than the applicant).

ACTIVITIES IN STATE WETLANDS

Please make sure that all answers in this appendix correspond to information on the application drawings.

1. Project description and explanation of need.

In order to improve the quality and dependability of water service in the local Tidewater Utilities, Inc. service area, installation of a 12 inch diameter water main under Love Creek using HDD methodology is required. See Section 2, Item 5, Basic Application.

2. What is area of impact for each activity in state wetlands?

Wetlands Walkways/Other Structures:

Length 88 ft. Width 1 ft.

Piles _____ Height -15.0 ft. over marsh

3. What is volume of fill or excavated material involved in this project?

Fill 0 cubic yards

Excavation 0 cubic yards

4. Map number of state wetland map where project is located: DNR # 084

ENVIRONMENTAL SUMMARY - PLEASE SUBMIT AN EVALUATION OF IMPACT OF THE PROPOSED ACTIVITY (ATTACH ADDITIONAL SHEETS AS NEEDED):

5. State reasons that structures cannot feasibly be located on lands other than wetlands.

Love Creek divides the Chase Oaks residential community on Webb's Landing Road from the Welches Pond residential community, so a crossing under that waterway is required to meet the project purpose.

6. Detail temporary and permanent changes which would be caused by the proposed project and the impact of these changes on the project area and adjacent areas.

The entry and exit pits for HDD operations are on uplands well away from wetlands and waters. No impacts to state or federally regulated wetlands will occur.

7. Describe alternatives to the proposed action which would reduce or avoid environmental damage.

Use of HDD methodology will avoid all impacts to wetlands and waters.

8. Describe all measures to be taken during and after the completion of the proposed project to reduce detrimental effects.

The proposed project will be conducted in accordance with a Frac-Out Contingency Plan.

9. Describe all permanent environmental impacts which cannot be avoided.

Environmental impacts are avoided by the use of HDD methodology.

10. Submit detailed evaluation of impact of the proposed project on the following:

a. Value of tidal ebb and flow

- i. Production Value: carrying organic matter to adjacent estuaries and coastal waters which serve as breeding areas for certain animal species (especially fish and shellfish).
- ii. Value as a natural protective system of absorption of storm wave energy, flood waters, and heavy rainfall, thereby decreasing flood and erosion damage.
- iii. The prevention of silting in certain harbors and inlets thereby reducing dredging.
- iv. Removal and recycling of inorganic nutrients.
- v. Effect on the estuarine waters.

The proposed water main will be installed at a minimum of 15.0 feet below state regulated wetlands using HDD methodology. No wetland impacts to estuarine waters will result. The wetlands in the project area are dominated by highly productive salt marsh.

b. Habitat Value

- i. Habitat for resident species of wildlife including furbearers, invertebrates, finfish.
- ii. Habitat for migratory wildlife species including waterfowl, wading birds, shorebirds, shorebirds, passerines, finfish, shrimp.
- iii. Rearing area, nesting area, breeding grounds for various species.
- iv. Habitat for rare or endangered plants.
- v. Presence of plants or animals known to be rare generally, or unique to the particular location.
- vi. Presence of plants or animals near the limits of their territorial range.
- vii. Presence of unique geological or wetland features.

The proposed water main will be installed at a minimum of 15.0 feet below state regulated wetlands using HDD methodology and will not impact habitat value.

c. Aesthetic Effect - Consideration of the aesthetic effect may include:

- i. Presence of plants or animals of a high visual quality.
- ii. The presence of an associated water body.
- iii. Wetland type of topographic diversity.

None, the water main will be a minimum of 15.0 feet below the surface.

d. Impact of Supporting Facilities

The supporting facilities to be considered include any public or private construction, whether or not the construction occurs in the wetlands, which would be required for construction or operation of the proposed wetlands activity, such as roads, sewage disposal facilities, electric lines, water supply systems, and schools. Effects shall be separately determined for the lands neighboring such facilities.

No impacts to wetlands and waters will occur. The project provides for improved water quality and dependability for Tidewater Utilities, Inc. customers.

e. Effect on Neighboring Land Uses

- i. The effects of the proposed wetland activity on neighboring land use are to be considered whether or not the neighboring lands are wetlands.
- ii. The environmental, aesthetic and economic effects of the proposed wetlands activity on land uses neighboring the lands on which supporting facilities will be located may be considered.

Wetlands are not impacted by the HDD water main installation, so there are no wetland related effects on neighboring land uses.

f. Federal, State, Regional, County and Municipal Comprehensive Plans.

Compliance of the proposed activities with the plans of the jurisdiction in which it is proposed to take place, and its impact on the plans of other affected jurisdictions.

Providing adequate public utility service is consistent with all government plans.

g. Economic Impact

Economic Impact shall include a short and long-term evaluation of the following factors to the extent the effect is directly attributable to the proposed activity:

- i. Jobs created or lost and the net income effect of jobs.
- ii. Increases in revenues to or increases in expenditure by State, County and local governments (e.g., increased taxes from an increased tax base and increased expenditure for maintaining supporting facilities).
- iii. Increases or decreases in the value attributable to the wetland as a source of nutrients to finfish, crustacea and shellfish and as habitats of such species or other flora or fauna of significant actual or potential economic value.
- iv. Increases or decreases in the value of the land as a recreational area.
- v. Increases or decreases in the cost of flood control or expected flood damage which might be caused by the effect of the activity on the natural capacity of the wetland to reduce flood damage.
- vi. Increases or decreases the costs of maintaining navigable harbors and waterways which would result from altering the capacity of the wetlands to absorb silt.
- vii. The net economic effect, both public and private, or any contemplated supporting facilities.
- viii. The net economic effect, both public and private, of the proposed activity on neighboring land uses.

The project has no economic impact specific to the topic of wetlands. Project implementation will result in temporary construction employment and improved infrastructure privately funded by Tidewater Utilities, Inc.

**FRAC-OUT CONTINGENCY PLAN FOR PROPOSED INSTALLATION
OF 12 INCH DIAMETER WATER MAIN BY HORIZONTAL
DIRECTIONAL DRILLING BENEATH THE LOVE CREEK

NORTHEAST OF TERMINUS OF WEBB'S LANDING ROAD
LEWES & REHOBOTH HUNDRED, SUSSEX COUNTY, DELAWARE**

ERI PROJECT NUMBER 0004# 0575

Dated: JULY 3, 2025

1.0 INTRODUCTION

This Frac-Out Contingency Plan has been developed on behalf of Tidewater Utilities, Inc. (permittee) to address the unlikely event of discharges of slurry or other pollutants associated with the proposed horizontal directional drilling (HDD) crossing of the Love Creek northeast of the terminus of Webb's Landing Road, Lewes & Rehoboth, Sussex County, Delaware. The site engineer will be Tidewater Utilities, Inc., Dover, Delaware. Mr. Edward Launay of Environmental Resource Insights (ERI) will serve as the environmental consultant for the project. The contractor conducting the HDD crossing is to be determined by Tidewater Utilities, Inc.

The proposed HDD crossing of the Love Creek will be 291 linear feet between the mean low water lines. The 12" inch diameter water main will be installed a minimum 15 feet below the Creek bottom. In addition, 234 linear feet of wetlands and intertidal flats above the mean low water line will be crossed under by the directional drilling. The total length of the HDD installation is approximately 644 linear feet. Entry and exit pits are located in uplands.

During construction, daily visual monitoring of the drilling route and surrounding area shall be conducted by the contractor and permittee's representatives. Should any evidence of a frac-out occur in State or Federally regulated waters or wetlands, the following plan will be followed.

2.0 RESPONSE TO INADVERTENT FRAC-OUTS

In the event a frac-out is observed during the horizontal directional drilling (HDD) crossing of Love Creek and adjacent wetlands, the frac-out will be assessed to determine the amount of slurry being released and potential for the frac-out to reach Love Creek and/or the associated wetlands. Response measures will vary based on the location of frac-out as described below.

A. Upland Locations

The permittee and contractor will evaluate the frac-out to determine if containment structures are warranted and if they will effectively contain the frac-out;

- The permittee and contractor will promptly notify the on-site supervisor, project engineer and environmental consultant and;
 - Implement appropriate containment measures as needed to contain and recover the frac-out slurry as feasible;
 - If the frac-out cannot be controlled, immediately suspend the drilling operation until appropriate containment is in place;
 - Depending on the volume of drilling mud lost through the frac-out, the slurry may be removed by vacuum truck, shovel or, in the case of small amounts, left in place; and
 - During all drilling operations remove excess drilling mud at a rate sufficient to prevent an uncontrollable frac-out.

B. Wetland Location

- In the event evidence of a frac-out is observed, the permittee and contractor shall temporarily suspend forward drilling and promptly notify the on-site supervisor, project engineer and environmental consultant;
- Notifications by the permittee and contractor will be made to Delaware Department of Natural Resources and Environmental Control (DNREC) and the United States Army Corps of Engineers Philadelphia District (Corps);

- The on-site supervisor, project engineer and environmental consultant will evaluate wetland frac-outs and implement appropriate response and cleanup measures. Frac-out slurries in wetlands or within a 25-foot buffer of wetlands will be removed to the extent practical. Efforts to contain and recover slurry in wetlands may result in further disturbance by equipment and personnel, and possibly offset the benefit gained in removing the slurry. Because it is difficult to predict the effect of a frac-out and attempts to recover the slurry, frac-out within a wetland will be evaluated on a case-by-case basis in consultation with DNREC and the Corps, and an appropriate level of response will be implemented;
- If the amount of the frac-out slurry is too small to allow the practical physical collection from the affected area, it will be diluted with fresh water and/or the fluid will be allowed to dry and dissipate naturally;
- If the amount of the slurry exceeds that which can be contained with hand-placed barriers, small collection sumps (less than 5 cubic yards) may be used to remove the slurry;
- If the amount of the slurry exceeds that which can be contained and collected using small sumps, drilling operations will be suspended until the frac-out can be brought under control; and
- Removed slurry will be stored in a temporary holding tank or other suitable structure, out of the wetland area, for reuse or disposal.
- Evaluate the current drill profile (e.g., drill pressures, pump volume rates, drilling mud consistency) to identify means to prevent further frac-out events. Once evaluation and regulatory agency coordination is complete and necessary mitigation measures have been undertaken, drilling operations may be resumed; and
- The environmental consultant or project engineer will prepare a report that summarizes the incident and provide a copy of the report to DNREC and the Corps.

C. In-Waterbody Locations

The permittee and their project engineer have designed the HDD to minimize the potential for frac-out into Love

Creek and it's adjacent wetlands. However, in the event evidence of a frac-out is observed, the permittee and contractor shall temporarily suspend forward drilling and promptly notify the on-site supervisor, project engineer and environmental consultant;

- The project supervisor or project engineer will monitor the extent of the frac-out slurry plume;
- Notifications by the permittee and contractor will be made to the DNREC and the Corps;
- Initiate containment measures and recovery of the frac-out slurry as appropriate. Containment is not always feasible for in-waterbody frac-outs. However, conditions will be assessed as to whether hand-placed containment recovery or other measures such as silt curtains and turbidity barriers would be effective and beneficial at the specific frac-out location;
- Evaluate the current drill profile (e.g., drill pressures, pump volume rates, drilling mud consistency) to identify means to prevent further frac-out events. Once evaluation and regulatory agency coordination is complete and necessary mitigation measures have been undertaken, drilling operations may be resumed; and
- The environmental consultant or project engineer will prepare a report that summarizes the incident and provide a copy of the report to DNREC and the Corps.

3.0 CONTAINMENT MATERIALS

At a minimum, the following containment, response, and clean-up equipment will be available at the HDD crossing location:

hay bales;

silt fence;

plastic sheeting;

turbidity barriers;

shovels, pails;

push brooms;

squeegees;

pumps and sufficient hose;
mud storage tanks;
boat(s);
vacuum truck on 24-hour call; and
light plant/generator.

4.0 CLEAN-UP

Site-specific clean-up measures in will be developed by the on-site supervisor, project engineer, environmental consultant, DNREC and the Corps following a frac-out. The following measures are considered appropriate:

- Drilling mud will be cleaned up by hand using hand shovels, buckets and soft-bristled brooms as much as possible without causing extensive damage to existing vegetation. Fresh water washes will be employed if deemed beneficial and feasible;
- Containment structures will be pumped out and the ground surface scraped to bare topsoil without causing undue loss of topsoil or ancillary damage to existing and adjacent vegetation;
- Material will be collected in containers for temporary storage prior to removal from the site;
- Potential for secondary impact from the clean-up process is to be evaluated and clean-up activities terminated if physical damage to the site may exceed the benefits of clean-up activities; and
- The need to restore disturbances to nontidal and tidal wetlands or waters will be determined in consultation with the Corps and DNREC.

5.0 RESPONSE CLOSE-OUT PROCEDURES

When the frac-out has been contained and cleaned up, response closeout activities will be conducted at the direction of the on-site supervisor and will include the following:

- The recovered drilling fluid will be recycled or disposed of at a stable upland location or commercial disposal facility. No recovered drilling mud will be disposed of in streams, waterbodies, or storm

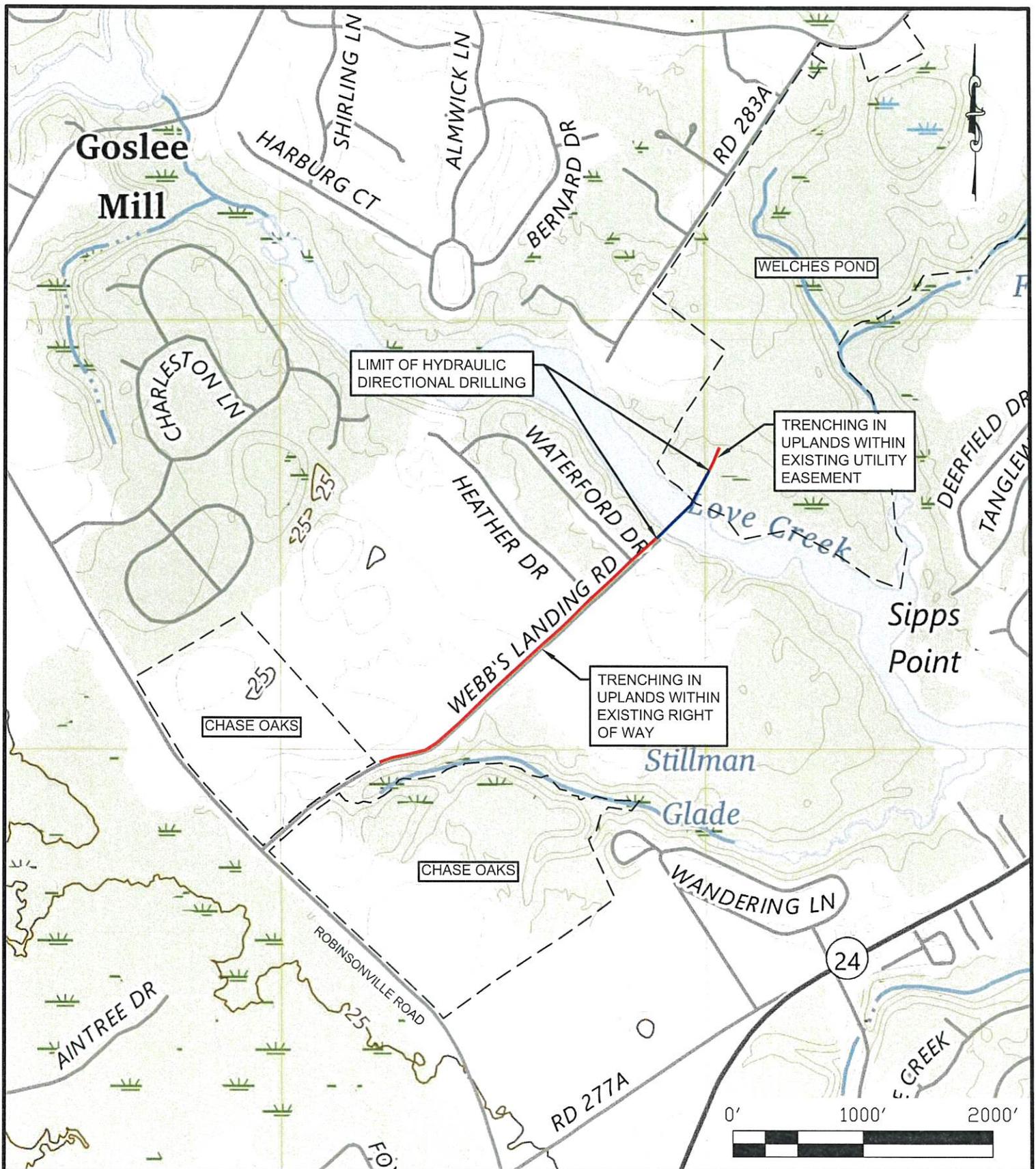
drains;

- All containment measures (e.g., fiber rolls, straw bale) will be removed, unless otherwise specified by the project engineer, and approved by the appropriate regulatory agencies

6.0 PROJECT COMPLETION REPORTING

In the event of any frac-out occurrences at the completion of the project, the permittee or their representatives shall submit a final completion report summarizing the impacts of the HDD project, if any, to DNREC and the Corps.

EXHIBIT A



Date:	JULY, 2025
Scale:	1" = 1000'
Dwn.By:	KWW
Proj.No.:	0004-0575
FAIRMOUNT QUAD.	
Dwg.No.:	SHEET 1

**CHASE OAKS WATER
MAIN INSTALLATION
USGS TOPO MAP**
 WEBB'S LANDING ROAD
 INDIAN RIVER/LEWES & REHOBOTH HUNDRED
 SUSSEX COUNTY, DELAWARE

ERI ENVIRONMENTAL
 RESOURCE
 INSIGHTS
 A DIVISION OF DAVIS, BOWEN & FRIEDEL, INC.

LEGEND	
FEATURE DESCRIPTION	EXISTING
BOUNDARY OF FEDERALLY REGULATED WETLANDS	— . —
BOUNDARY OF STATE AND FEDERALLY REGULATED WETLANDS (MAP DNR-084)	— . . —
MEAN LOW WATER LINE	— ··· — ··· — ··· —
20' WIDE UTILITY EASEMENT BOUNDARY FOR TIDEWATER UTILITIES INC.	— + + —

HDD 12" DIAMETER WATER MAIN IMPACT TABLE		
ACTIVITY	LINEAR FEET	SURVEY FEET
CROSSING UNDER PUBLIC SUBAQUEOUS LAND MEAN LOW WATER TO MEAN LOW WATER	291'	291'
CROSSING UNDER PRIVATE SUBAQUEOUS LAND MEAN LOW WATER TO MEAN HIGH WATER	17'	17'
CROSSING UNDER STATE & FEDERALLY REGULATED WETLAND	88'	88'
CROSSING UNDER FEDERALLY REGULATED WETLANDS	129'	129'
CROSSING UNDER UPLANDS	119'	119'

Date:	SEPT. 2025
Scale:	NONE
Dwn.By:	KWW
Proj.No.:	0004-0575
LEGEND & IMPACTS	
Dwg.No.:	SHEET 1

**CHASE OAKS WATER
MAIN INSTALLATION
LEGEND & IMPACTS TABLE**

WEBB'S LANDING ROAD
INDIAN RIVER/LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE

ERI ENVIRONMENTAL
RESOURCE
INSIGHTS

A DIVISION OF DAVIS, BOWEN & FRIEDEL, INC.



REVISIONS:

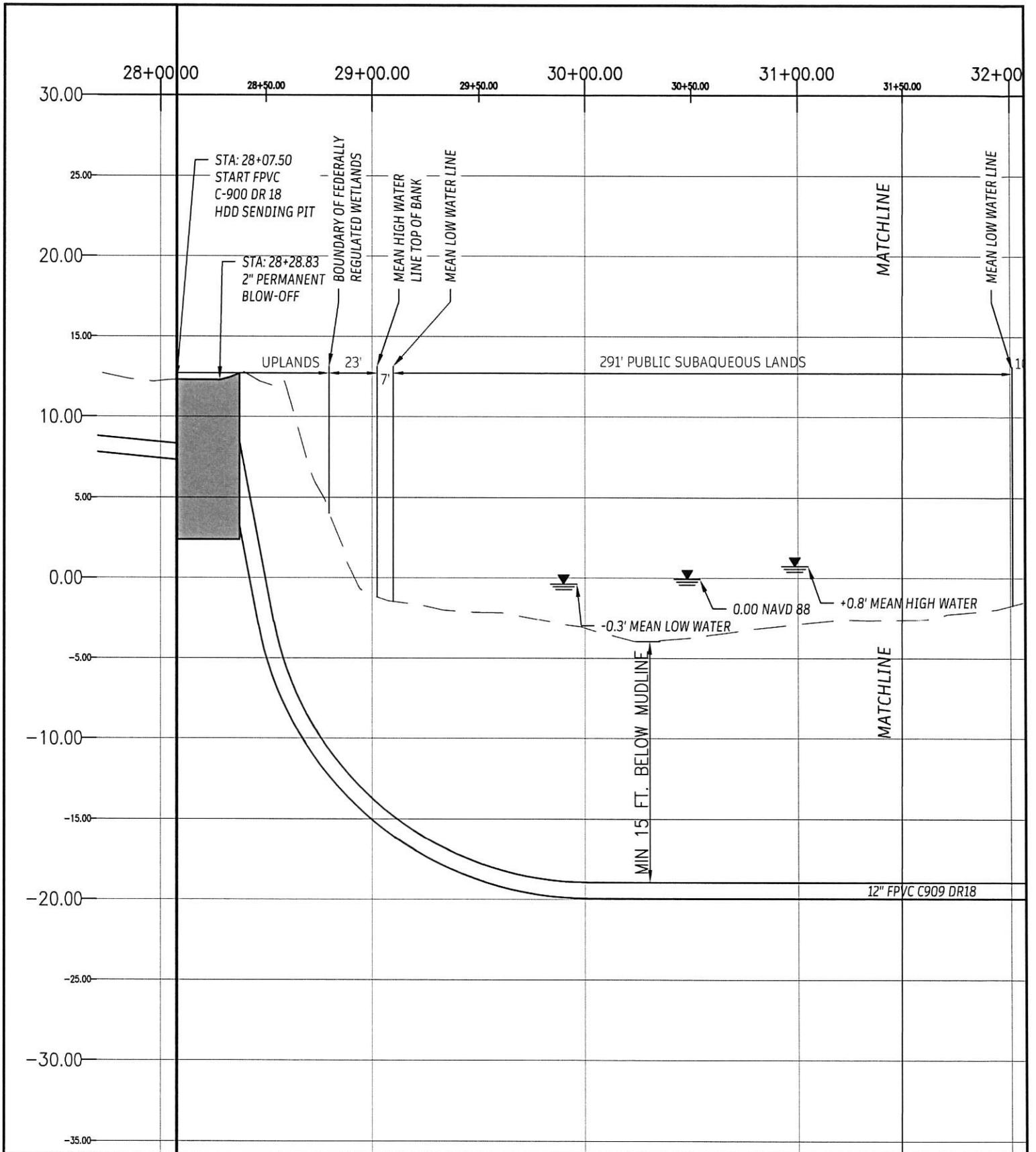
NO.	DATE	DESCRIPTION	BY



DESIGNED BY: AJ	DRAWN BY: MLB	DATE: MAY 2025	SCALE: 1' = 60"
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DRAWING NAME:
TIDEWATER – CHASE OAKS WATER INTERCONNECTION

12" WATER MAIN CROSSING
TAX MAP PARCELS
234-6.00-228.00 &
334-12.00-16.00
LEWES REHOBOTH HUNDRED
SUSSEX COUNTY DELAWARE



REVISIONS:

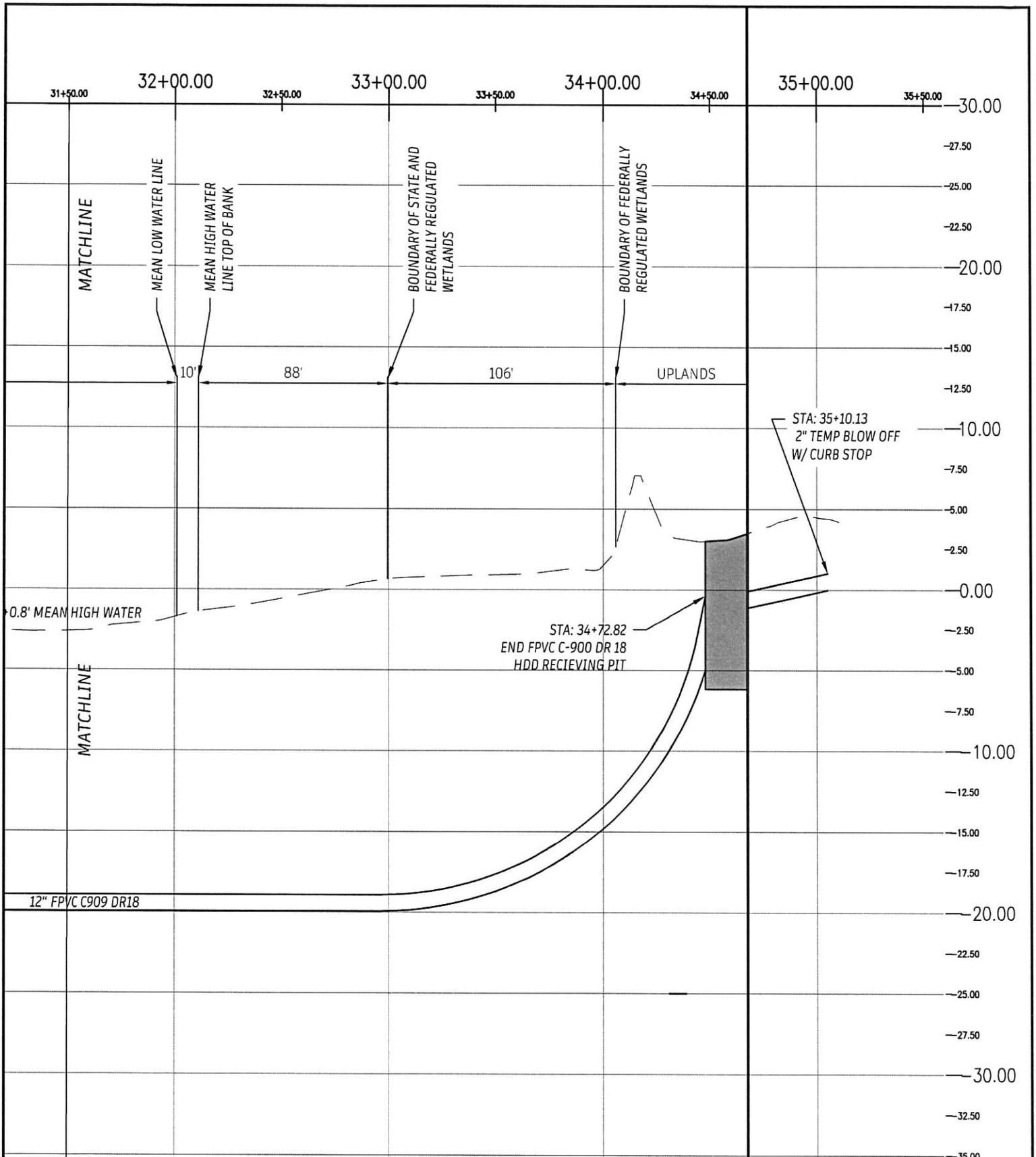
NO.	DATE	DESCRIPTION	BY



12" WATER MAIN CROSSING
 TAX MAP PARCELS
 234-6.00-228.00 &
 334-12.00-16.00
 LEWES REHOBOTH HUNDRED
 SUSSEX COUNTY DELAWARE

DESIGNED BY: AJ	DRAWN BY: MLB	DATE: MAY 2025	SCALE: 1' = 60"
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DESIGNED BY: AJ	DRAWN BY: MLB	DATE: MAY 2025	SCALE: 1' = 60"
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TIDEWATER - CHASE OAKS WATER INTERCONNECTION

12" WATER MAIN CROSSING
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