

NOVEMBER 15, 2018
REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER
UNNAMED STREAM
FEDERAL AID PROJECT NO. N/A
STATE PROJECT NO. 301-175
TOWN OF MILFORD

ADDENDUM NO. 2

This Addendum addresses the following questions and answers contained on the “CT DOT QUESTIONS AND ANSWERS WEBSITE FOR ADVERTISED CONSTRUCTION PROJECTS”:

Question and Answer Nos. 7 and 8

SPECIAL PROVISIONS
REVISED SPECIAL PROVISIONS

The following Special Provisions are hereby deleted in their entirety and replaced with the attached like-named Special Provisions:

ITEM NO. 0101000A – ENVIRONMENTAL HEALTH AND SAFETY
ITEM NO. 0202126A – ROCK EXCAVATION – JACKING PIPE
ITEM NO. 0204213A – HANDLING CONTAMINATED GROUNDWATER

The IW General Permit application uploaded to the Bid Portal is hereby included in this addendum.

The Bid Proposal Form and Detailed Estimate Sheet(s) are not affected by these changes.

There will be no change in the number of calendar days due to this Addendum.

The foregoing is hereby made a part of the contract.

ITEM #0101000A – ENVIRONMENTAL HEALTH AND SAFETY

Description:

Under this item, the Contractor shall establish protocols and provide procedures to protect the health and safety of its employees and subcontractors as related to the proposed construction activities performed within the Project limits. Work under this Item consists of the development and implementation of a written HASP that addresses the relative risk of exposure to documented hazards present within Project limits. The HASP shall establish health and safety protocols that address the relative risk of exposure to regulated substances in accordance with 29 CFR 1910.120 and 29 CFR 1926.65. Such protocols shall only address those potential concerns directly related to site conditions.

Note: The Engineer will prepare a site-specific HASP, which is compatible with the Contractor's HASP, and will be responsible for the health and safety of all Project Inspectors, Department employees and consulting engineers.

Materials:

The Contractor must provide chemical protective clothing (CPC) and personal protective equipment (PPE) as stipulated in the Contractor's HASP during the performance of work in areas identified as potentially posing a risk to worker health and safety for workers employed by the Contractor and all subcontractors.

Construction Methods:

1. Existing Information

The Contractor shall utilize all available information and existing records and data pertaining to chemical and physical hazards associated with any of the regulated substances identified in the environmental site investigation to develop the HASP. The documents containing this data are referenced in "Notice to Contractor – Environmental Investigations."

2. General

The requirements set forth herein pertain to the provision of workers' health and safety as it relates to proposed Project activities when performed in the presence of hazardous or regulated materials or otherwise environmentally sensitive conditions. THE PROVISION OF WORKER HEALTH AND SAFETY PROTOCOLS WHICH ADDRESS POTENTIAL AND/OR ACTUAL RISK OF EXPOSURE TO SITE SPECIFIC HAZARDS POSED TO CONTRACTOR EMPLOYEES IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

The Contractor shall be responsible for the development, implementation and oversight of the HASP throughout the performance of work within the limits of the Project, as identified in the Contract Documents, and in other areas identified by the Engineer or by the HASP where site conditions may pose a risk to worker health and safety and/or the environment. **No physical aspects of the work on the Project shall begin until the HASP is reviewed by the Engineer and is determined to meet the requirements of the specifications. However, the Contract time, in accordance with Article 1.03.08, will begin on the date stipulated in the Notice to Proceed.**

3. Regulatory Requirements

All construction related activities performed by the Contractor within the limits of the Project or in other areas where site conditions may pose a risk to worker health and safety and/or the environment shall be performed in conformance with 29 CFR 1926, Safety and Health Regulations for Construction and 29 CFR 1910, Safety and Health Regulations for General Industry. Conformance to 29 CFR 1910.120, Hazardous Waste Site Operations and Emergency Response (HAZWOPER) may also be required, where appropriate.

4. Submittals

Three copies of the HASP shall be submitted to the Engineer within four (4) weeks after the Award of Contract or four (4) weeks prior to the start of any work on the Project, whichever is first, but not before the Award of the Contract.

The HASP shall be developed by a qualified person designated by the Contractor. This qualified person shall be a Certified Industrial Hygienist (CIH), Certified Hazardous Material Manager (CHMM), or a Certified Safety Professional (CSP). He/she shall have review and approval authority over the HASP and be identified as the Health and Safety Manager (HSM). The HASP shall bear the signature of said HSM indicating that the HASP meets the minimum requirements of 29 CFR 1910.120 and 29 CFR 1926.65.

The Engineer will review the HASP within four (4) weeks of submittal and provide written comments as to deficiencies in and/or exceptions to the plan, if any, to assure consistency with the specifications, applicable standards, policies and practices and appropriateness given potential or known site conditions. Items identified in the HASP which do not conform to the specifications will be brought to the attention of the Contractor, and the Contractor shall revise the HASP to correct the deficiencies and resubmit it to the Engineer for determination of compliance with this item. The Contractor shall not be allowed to commence work activities on the Project, as shown on the Plans, or where site conditions exist which may pose a risk to worker health and safety and/or the environment, until the HASP has been reviewed and accepted by the Engineer. **No claim for delay in the progress of work will be considered for the Contractor's failure to submit a HASP that conforms to the requirements of the Contract.**

5. HASP Provisions

1. General Requirements

The Contractor shall prepare a HASP covering all Project site work regulated by 29 CFR 1910.120(b)/1926.65(b) to be performed by the Contractor and all subcontractors under this Contract. The HASP shall establish in detail, the protocols necessary for the recognition, evaluation, and control of all hazards associated with each task performed under this Contract. The HASP shall address site-specific safety and health hazards of each phase of site operation and include the requirements and procedures for employee protection. The level of detail provided in the HASP shall be tailored to the type of work, complexity of operations to be performed, and hazards anticipated. Details about some activities may not be available when the initial HASP is prepared and submitted. Therefore, the HASP shall address, in as much detail as possible, all anticipated tasks, their related hazards and anticipated control measures.

The HASP shall interface with the Contractor's Safety and Health Program. Any portions of the Safety and Health Program that are referenced in the HASP shall be included as appendices to the HASP. All topics regulated by the 29 CFR 1910.120(b)(4) and those listed below shall be addressed in the HASP. Where the use of a specific topic is not applicable to the Project, the HASP shall include a statement to justify its omission or reduced level of detail and establish that adequate consideration was given the topic.

2. Elements

a. Site Description and Contamination Characterization

The Contractor shall provide a site description and contaminant characterization in the HASP that meets the requirements of 29 CFR 1910.120/1926.65.

b. Safety and Health Risk Analysis/Activity Hazard Analysis

The HASP shall address the safety and health hazards on this site for every operation to be performed. The Contractor shall review existing records and data to identify potential chemical and physical hazards associated with the site and shall evaluate their impact on field operations. Sources, concentrations (if known), potential exposure pathways, and other factors as noted in CFR 1910.120/126.65, paragraph (c)(7) employed to assess risk shall be described. The Contractor shall develop and justify action levels for implementation of engineering controls and PPE upgrades and downgrades for controlling worker exposure to the identified hazards. If there is no permissible exposure limit (PEL) or published exposure level for an identified hazard, available information from other published studies may be used as guidance. Any modification of an established PEL must be fully documented.

The HASP shall include a comprehensive section that discusses the tasks and objectives of the site operations and logistics and resources required to complete each task. The hazards associated with each task shall be identified. Hazard prevention techniques, procedures and/or equipment shall be identified to mitigate each of the hazards identified.

c. Staff Organization, Qualifications and Responsibilities

The HASP shall include a list of personnel expected to be engaged in site activities and certify that said personnel have completed the educational requirements stipulated in 29 CFR 1910.120 and 29 CFR 1926.65, are currently monitored under a medical surveillance program in compliance with those regulations, and that they are fit for work under “Level C” conditions.

The Contractor shall assign responsibilities for safety activities and procedures. An outline or flow chart of the safety chain of command shall be provided in the HASP. Qualifications, including education, experience, certifications, and training in safety and health for all personnel engaged in safety and health functions shall be documented in the HASP. Specific duties of each on-site team member should be identified. Typical team members include but are not limited to Team Leader, Scientific Advisor, Site Safety Officer, Public Information Officer, Security Officer, Record Keeper, Financial Officer, Field Team Leader, and Field Team members.

The HASP shall also include the name and qualifications of the individual proposed to serve as Health and Safety Officer (HSO). The HSO shall have full authority to carry out and ensure compliance with the HASP. The Contractor shall provide a competent HSO onsite who is capable of identifying existing and potential hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees and who has authorization to take prompt corrective measures to eliminate or control them. The qualifications of the HSO shall include completion of OSHA 40-hour HAZWOPER training, including current 8-hour refresher training, and 8-hour HAZWOPER supervisory training; a minimum of one year of working experience with the regulated compounds that have been documented to exist within Project limits; a working knowledge of federal and state safety regulations; specialized training or documented experience (one year minimum) in personal and respiratory protective equipment program implementation; the proper use of air monitoring instruments, air sampling methods and procedures; and certification training in first aid and CPR by a recognized, approved organization such as the American Red Cross.

The primary duties of the HSO shall be those associated with worker health and safety. The Contractor’s HSO responsibilities shall be detailed in the written HASP and shall include, but not be limited to the following:

i. Directing and implementing the HASP.

- ii. Ensuring that all Project personnel have been adequately trained in the recognition and avoidance of unsafe conditions and the regulations applicable to the work environment to control or eliminate any hazards or other exposure to illness or injury (29 CFR 1926.21). All personnel shall be adequately trained in procedures outlined in the Contractor's written HASP.
 - iii. Authorizing Stop Work Orders, which shall be executed upon the determination of an imminent health and safety concern.
 - iv. Contacting the Contractor's HSM and the Engineer immediately upon the issuance of a Stop Work order when the HSO has made the determination of an imminent health and safety concern.
 - v. Authorizing work to resume, upon approval from the Contractor's HSM.
 - vi. Directing activities, as defined in the Contractor's written HASP, during emergency situations; and
 - vii. Providing personal monitoring where applicable, and as identified in the HASP.
- d. Employee Training Assignments
- The Contractor shall develop a training program to inform employees, supplier's representatives, and official visitors of the special hazards and procedures (including PPE, its uses and inspections) to control these hazards during field operations. Official visitors include but are not limited to, Federal Agency Representatives, State Agency Representatives, Municipal Agency Representatives, Contractors, subcontractors, etc. This program shall be consistent with the requirements of 29 CFR 1910.120 and 29 CFR 1926.65.
- e. Personal Protective Equipment
- The plan shall include the requirements and procedures for employee protection and should include a detailed section on respiratory protection. The Contractor shall describe in detail and provide appropriate PPE to insure that workers are not exposed to levels greater than the action level for identified hazards for each operation stated for each work zone. The level of protection shall be specific for each operation and shall be in compliance with all requirements of 29 CFR 1910 and 29 CFR 1926. The Contractor shall provide, maintain, and properly dispose of all PPE.
- f. Medical Surveillance Program

All on-site Contractor personnel engaged in 29 CFR 1910.120/1926.65 operations shall have medical examinations meeting the requirements of 29 CFR 1910.120(f) prior to commencement of work.

The HASP shall include certification of medical evaluation and clearance by the physician for each employee engaged in 29 CFR 1910.120/1926.65 operations at the site.

g. Exposure Monitoring / Air Sampling Program

The Contractor shall submit an Air Monitoring Plan as part of the HASP, which is consistent with 29 CFR 1910.120, paragraphs (b)(4)(ii)(E), (c)(6), and (h). The Contractor shall identify specific air sampling equipment, locations, and frequencies in the air-monitoring plan. Air and exposure monitoring requirements shall be specified in the Contractor's HASP. The Contractor's CIH shall specify exposure monitoring/air sampling requirements after a careful review of the contaminants of concern and planned site activities.

h. Site Layout and Control

The HASP shall include a map, work zone delineation (support, contamination, reduction and exclusion), on/off-site communications, site access controls, and security (physical and procedural).

i. Communications

Written procedures for routine and emergency communications procedures shall be included in the Contractor's HASP.

j. Personal Hygiene, Personal Decontamination and Equipment Decontamination

Decontamination facilities and procedures for PPE, sampling equipment, and heavy equipment shall be discussed in detail in the HASP.

k. Emergency Equipment and First Aid Requirements

The Contractor shall provide appropriate emergency first aid kits and equipment suitable to treat exposure to the hazards identified, including chemical agents. The Contractor will provide personnel that have certified first aid/CPR training onsite at all times during site operations.

l. Emergency Response Plan and Spill Containment Program

The Contractor shall establish procedures in order to take emergency action in the event of immediate hazards (i.e., a chemical agent leak or spill, fire or personal injury). Personnel and facilities supplying support in emergency procedures will be identified. The emergency equipment to be present on-site and the Emergency Response Plan procedures, as required 29 CFR 1910.120, paragraph (1)(1)(ii) shall be specified in the Emergency Response Plan. The Emergency Response Plan shall be included as part of the HASP. This Emergency Response Plan shall include written directions to the closest hospital as well as a map showing the route to the hospital.

m. Logs, Reports and Record Keeping

The Contractor shall maintain safety inspections, logs, and reports, accident/incident reports, medical certifications, training logs, monitoring results, etc. All exposure and medical monitoring records are to be maintained according to 29 CFR 1910 and 29 CFR 1926. The format of these logs and reports shall be developed by the Contractor to include training logs, daily logs, weekly reports, safety meetings, medical surveillance records, and a phase-out report. These logs, records, and reports shall be maintained by the Contractor and be made available to the Engineer.

The Contractor shall immediately notify the Engineer of any accident/incident. Within two working days of any reportable accident, the Contractor shall complete and submit to the Engineer an accident report.

n. Confined Space Entry Procedures

Confined space entry procedures, both permit required and non permit required, shall be discussed in detail.

o. Pre-Entry Briefings

The HASP shall provide for pre-entry briefings to be held prior to initiating any site activity and at such other times as necessary to ensure that employees are apprised of the HASP and that this plan is being followed.

p. Inspections/Audits

The HSM or HSO shall conduct Inspections or audits to determine the effectiveness of the HASP. The Contractor shall correct any deficiencies in the effectiveness of the HASP.

6. HASP Implementation

The Contractor shall implement and maintain the HASP throughout the performance of work. In areas identified as having a potential risk to worker health and safety, and in any other areas deemed appropriate by the HSO, the Contractor shall be prepared to immediately implement the appropriate health and safety measures, including but not limited to the use of PPE, and engineering and administrative controls.

If the Engineer observes deficiencies in the Contractor's operations with respect to the HASP, they shall be assembled in a written field directive and given to the Contractor. The Contractor shall immediately correct the deficiencies and respond, in writing, as to how each was corrected. Failure to bring the work area(s) and implementation procedures into compliance will result in a Stop Work Order and a written directive to discuss an appropriate resolution(s) to the matter. When the Contractor demonstrates compliance, the Engineer shall remove the Stop Work Order. If a Stop Work Order has been issued for cause, no delay claims on the part of the Contractor will be honored.

Disposable CPC/PPE (i.e. disposable coveralls, gloves, etc.) which come in direct contact with hazardous or potentially hazardous material shall be placed into 55 gallon USDOT 17-H drums and disposed of in accordance with federal, state, and local regulations. The drums shall be temporarily staged and secured within the Project Limits if deemed appropriate to do so and as approved by the Engineer until the material is appropriately disposed.

7. HASP Revisions

The HASP shall be maintained onsite by the Contractor and shall be kept current with construction activities and site conditions under this Contract. The HASP shall be recognized as a flexible document which shall be subject to revisions and amendments, as required, in response to actual site conditions, changes in work methods and/or alterations in the relative risk present. All changes and modifications shall be signed by the Contractor's HSM and shall require the review and acceptance by the Engineer prior to the implementation of such changes.

Should any unforeseen hazard become evident during the performance of the work, the HSO shall bring such hazard to the attention of the Contractor and the Engineer as soon as possible. In the interim, the Contractor shall take action, including Stop Work Orders and/or upgrading PPE as necessary to re-establish and maintain safe working conditions and to safeguard on-site personnel, visitors, the public and the environment. The HASP shall then be revised/amended to reflect the changed condition.

Method of Measurement:

1. Within thirty (30) calendar days of the award of the Contract, the Contractor shall submit to the Engineer for acceptance a breakdown of its lump sum bid price for this item detailing:
 - a) The development costs associated with preparing the HASP in accordance with these Specifications.

- b) The cost per month for the duration of the Project to implement the HASP and provide the services of the HSM and the HSO.
2. If the lump sum bid price breakdown is unacceptable to the Engineer, substantiation showing that the submitted costs are reasonable shall be required.
 3. Upon acceptance of the payment schedule by the Engineer, payments for work performed will be made as follows:
 - a) The lump sum development cost will be certified for payment.
 - b) The Contractor shall demonstrate to the Engineer monthly that the HASP has been kept current and is being implemented and the monthly cost will be certified for payment.
 - c) Any month where the HASP is found not to be current or is not being implemented, the monthly payment for the Environmental Health and Safety Item shall be deferred to the next monthly payment estimate. If the HASP is not current or being implemented for more than thirty calendar days, there will be no monthly payment.
 - d) Failure of the Contractor to implement the HASP in accordance with this Specification shall result in the withholding of all Contract payments.

Basis of Payment:

This work will be paid for at the Contract lump sum price for “ENVIRONMENTAL HEALTH AND SAFETY” which shall include all materials, tools, equipment and labor incidental to the completion of this item for the duration of the Project to maintain, revise, monitor and implement the HASP. Such costs include providing the services of the HSM and HSO, Contractor employee training, CPC, PPE, disposal of PPE and CPC, medical surveillance, decontamination facilities, engineering controls, monitoring and all other HASP protocols and procedures established to protect the Health and Safety for all on-site workers.

Pay Item

Pay Unit

Environmental Health and Safety

Lump Sum

ITEM #0202126A – ROCK EXCAVATION – JACKING PIPE

Work under this item shall conform to the requirements of Section 2.02, supplemented and amended as follows:

2.02.01-Description: Delete this section and replace with the following:

Rock excavation shall consist of the removal and satisfactory disposal, in the manner herein required, of all rock in definite ledge formation and boulders, or the portion of boulders, 1/2 c.y. or more in volume within the limits of the removal necessary for the installation of concrete pipes using a jacking operation.

2.02.03-Construction Methods: Add the following:

When rock is encountered during a pipe jacking operation, the Contractor shall notify the Engineer of its presence and allow for measurements necessary to identify its limits and the removal limits necessary for the pipe installation. The Contractor shall remove the rock to the limits required in a controlled manner acceptable to the Engineer. All such excavation shall be performed from within the bore without impact to railroad operations. Excavation methods by the use of drilling, splitting, wedging or other approved methods not involving the use of explosives shall be utilized.

2.02.05-Basis of Payment: Delete this section and replace with the following:

The removal of rock within the limits of excavation necessary for pipe installation using jacking methods shall be paid for at the Contract unit price per cubic yard for “Rock Excavation – Jacking Pipe”. The price shall include all equipment, tools and labor incidental to the completion of the excavation and the disposal of surplus or unsuitable material in accordance with the provisions of the plans and of these specifications.

ITEM #0204213A – HANDLING CONTAMINATED GROUNDWATER

Description:

Under this Item, the Contractor shall collect, manage, treat, and dispose of contaminated groundwater generated during dewatering operations within the Project limits.

Contaminated groundwater is defined as “groundwater which has been generated from excavations within the Project limits containing substances at concentrations that exceed the effluent limits for the CT DEEP General Permit for the Discharge of Groundwater Remediation Wastewater Directly to Surface Water”. The presence of contaminants removable through control of settleable solids does not constitute contaminated groundwater. Groundwater contamination caused by the Contractor’s activities or work practices is also not considered contaminated groundwater. Note that treatment of surface water encountered during construction activities is not required under this Item.

The contamination and groundwater depth at the time of the investigation is documented in the reports listed in the “Notice to Contractor – Environmental Investigations”. Contaminants and depth to groundwater is provided for the Contractor’s information and may be influenced by factors such as seasonal groundwater table changes, tidal changes, drought or flooding conditions, local withdrawals from the aquifer, local construction, etc. Additional information with regard to soil descriptions and groundwater observations may also be available if geotechnical investigations were conducted for the project. The Contractor shall contain contaminated groundwater and 1) treat it on-site prior to discharge to sanitary sewer; 2) treat it on-site prior to discharge to surface water; or 3) transport water to an off-site treatment/disposal facility.

This Item does not apply to the possible diversion of existing storm water flow around the construction site during Project activities. Diversion of existing storm water or surface flows shall be completed in accordance with the Contract and all applicable permits. This item also does not include process water or wastewater generated by the Contractor’s work activities.

Construction Methods:

A. General

It is the Contractor’s responsibility to determine the expected groundwater generation rate from construction activities, select the appropriate groundwater management method, and size its system capacity to meet those dewatering needs.

All equipment required as a part of this Item shall be installed in a location and manner acceptable to the Engineer and in accordance with the manufacturer’s recommendations. Equipment shall be decontaminated prior to arrival at the Project, decontaminated prior to

being moved to another area of the project, and then decontaminated before it leaves the Project, at no additional cost to the State. Solids (soil or sediment) generated by on-site dewatering activities shall be taken directly for disposal if contained within a vacuum truck, or if approved by the Engineer, drained of free-liquid then temporarily staged within the Project Limits for testing and characterization by the Engineer.

The Contractor is responsible for operating and maintaining the equipment at all times when dewatering occurs. This includes providing appropriate supervision during evenings, weekends, and holidays. If the system is intended to operate unattended, a remote alarm system acceptable to the Engineer shall be installed to monitor critical system operating parameters and the Contractor shall be responsible for providing rapid emergency response during non-working hours in the event a system malfunction occurs. A list of names and phone numbers shall be displayed in the immediate vicinity of the system for emergency contacts.

The Contractor shall report releases from the groundwater treatment system due to overflowing or equipment/piping failure to the CT DEEP Spill Response Unit in accordance with RCSA 22a-450 and provide the Engineer with all information, including the CT DEEP case number. All costs related to spill response associated with the Contractor's on-site containment or treatment system will be the responsibility of the Contractor.

The Contractor shall collect all samples related to permit compliance in the presence of the Engineer. The Contractor shall provide informational copies of all groundwater analytical results and discharge monitoring reports to the Engineer as they are generated.

The Contractor shall operate the dewatering equipment at a rate that removes the groundwater that naturally infiltrates the excavation. The Contractor shall not cause a hydraulic gradient that draws groundwater into the excavation at an excessive rate. Additional treatment required due to the mobilization of off-site contaminants caused by the Contractor dewatering at an excessive rate will be the responsibility of the Contractor.

Additional treatment related to the Contractor's work activities (i.e. treatment or increased charges due to changes in pH or introduction of different contaminants into the groundwater) and management and disposal of excess water related to the Contractor's process water or waste water will not be included under this item but will be considered a part of the Contractor's cost for the item under which the work is being performed.

B. Groundwater Management Methods

The Contractor shall use one or more of the following methods for the management and disposal of contaminated groundwater. Based on project specifics and site constraints, the Contractor may choose to use more than one of the following methods on a single project. All methods may not be possible at the site due to sanitary sewer or permitting restrictions.

1. On-Site Treatment System with Discharge to Sanitary Sewer

a. Contractor Submittals

At least 14 days prior to any submittal to the Publicly Owned Treatment Works (POTW) or CT DEEP, the Contractor shall submit the treatment system design, which has been sealed by a Professional Engineer licensed in the State of Connecticut to the Engineer for review and comment. Equipment shall prevent sediments and solids, as well as contaminants in excess of the permit allowable effluent concentrations, from entering the sanitary sewer. This submittal shall include a schematic or diagram that shows all treatment system equipment, well point locations, pump set-ups in excavations, sedimentation control methods, system location, method of conveyance, flow rates, pipe sizes, valve locations, sampling ports, discharge locations, electrical power connection, etc.

The Contractor shall submit the manufacturer's data sheets, assembly details and performance data on all treatment equipment. If dewatering equipment is to remain on site between October 15 and April 15, the Contractor shall include its method to prevent the treatment system equipment from freezing (heat tape, immersion heaters, etc.).

The Contractor shall detail its method to collect and contain water in its excavations. The Contractor shall also describe in detail its methods for limiting the quantity of water entering the excavation, including shoring, location of well points, limiting excavation size, preventing entry of surface water into the excavation, etc. The Contractor shall also include its assumptions and flow rate calculations related to the sizing of the system.

It is the Contractor's responsibility to design and properly size the system to accommodate the anticipated contaminants and dewatering rates based on its construction activities, POTW limitations, and permit requirements. The Contractor is alerted that construction activities may be limited based on permit restrictions or POTW limitations.

No claim for delay or request for additional time will be considered based upon the Contractor's failure to accommodate the review process.

b. Permits

Groundwater generated by construction activities within the project limits shall be appropriately treated and discharged to the sanitary sewer system within Project limits. Management and discharge of contaminated groundwater shall be accomplished in accordance with a CT DEEP General Permit and POTW requirements. The Contractor shall be responsible for registering under the General Permit, any other necessary State or local permits, and all associated fees.

The CT DEEP General Permit for the Discharge of Groundwater Remediation Wastewater to Sanitary Sewer is available at www.ct.gov/deep. The Contractor shall

submit the most current permit registration form to the CT DEEP. A minimum lead-time of six (6) weeks can be expected to process and submit the registration, in addition to coordination time with the POTW. **No claim for delay or request for additional time will be considered based upon the Contractor's failure to accommodate the permitting process.** The Contractor shall not submit the permit registration to the CT DEEP prior to the Engineer's review of and comment on the treatment system.

The Contractor shall submit a copy of the CT DEEP permit certificate of registration to the Engineer prior to initiating any discharge.

All testing required by the general permit shall be conducted by a laboratory certified by the Connecticut Department of Public Health (DPH) for the method specified in the permit. The Contractor shall submit copies of the analytical results to the all parties specified in the permit terms and conditions and to the Engineer.

No claim for delay or request for additional time will be considered based upon the Contractor's failure to design a system to meet this performance specification. It is the Contractor's responsibility to properly size the treatment system and temporary containment tanks based on its anticipated flow rates from construction activities and to determine the level of treatment required to meet permit discharge limits.

c. Treatment System Operation

The Contractor shall ensure that all personnel involved in the groundwater treatment operations understand the terms of the General Permit. In the event of a conflict between the requirements of the Contract and the permit, the more stringent will apply.

The Contractor shall not commence work activities below the groundwater table within the project limits until such time as:

- i. the temporary groundwater treatment system design is reviewed by the Engineer and comments are adequately addressed,
- ii. the system is installed in accordance with the accepted design and is completely operational, and
- iii. a copy of the Contractor's permit certificate of registration has been submitted to the Engineer.

The Contractor shall make any sanitary sewer tie-in modifications necessary to accommodate the treatment unit only after obtaining approval from the Engineer and the POTW.

The Contractor shall take all meter readings required by the permit and forward them to the appropriate parties.

The Contractor shall collect all samples related to permit compliance in the presence of the Engineer and shall submit copies of the analytical results and discharge monitoring reports to the appropriate agency(ies) as required by the General Permit terms and conditions. The Contractor shall provide informational copies of all analytical results and discharge monitoring reports to the Engineer as they are generated. In the event of an exceedance, the Contractor shall immediately comply with the “*Duty to Correct, Record, and Report Violations*” section of the General Permit. The Contractor shall provide the Engineer a copy of the required CT DEEP reporting and then document its review of the treatment system and all actions taken to correct the exceedance in writing to the Engineer within 48 hours of receiving laboratory data documenting the exceedance.

If the discharge must be suspended due to an effluent violation, the Contractor shall only restart the discharge after obtaining all necessary approvals from the CT DEEP/POTW and in full compliance with the General Permit and any amendments imposed thereto.

No claim for delay, request for additional time, or request for additional design/redesign costs for the system will be considered based upon the Contractor’s failure to design/redesign a system to meet this performance specification.

2. On-Site Treatment System with Discharge to Surface Water

a. Contractor Submittals

At least 14 days prior to any submittal to the CT DEEP, the Contractor shall submit the treatment system design, which has been sealed by a Professional Engineer licensed in the State of Connecticut, to the Engineer for review and comment. Equipment shall prevent sediments and solids, as well as contaminants in excess of the permit allowable effluent concentrations, from discharging. This submittal shall include a schematic or diagram that shows all treatment system equipment, well point locations, pump set-ups in excavations, sedimentation control methods, system location, method of conveyance, flow rates, pipe sizes, valve locations, sampling ports, discharge locations, electrical power connection, etc.

The Contractor shall submit the manufacturer’s data sheets, assembly details and performance data on all treatment equipment. If dewatering equipment is to remain on site between October 15 and April 15, the Contractor shall include its method to prevent the treatment system equipment from freezing (heat tape, immersion heaters, etc.).

The Contractor shall detail its method to collect and contain water in its excavations. The Contractor shall also describe in detail its methods for limiting the quantity of water entering the excavation, including shoring, location of well points, limiting excavation size, preventing entry of surface water into the excavation, etc. The Contractor shall also include its assumptions and flow rate calculations related to the sizing of the system.

It is the Contractor's responsibility to design and properly size the system to accommodate the anticipated contaminants and dewatering rates based on its construction activities and permit requirements. The Contractor is alerted that construction activities may be limited based on permit restrictions.

No claim for delay or request for additional time will be considered based upon the Contractor's failure to accommodate the review process.

b. Permits

Groundwater generated by construction activities within the project limits shall be appropriately treated and discharged to surface water within Project limits. Management and discharge of contaminated groundwater shall be accomplished in accordance with a CT DEEP General Permit. The Contractor shall be responsible for registering under the General Permit and all associated fees.

The CT DEEP General Permit for the Discharge of Groundwater Remediation Wastewater Directly to Surface Water is available at www.ct.gov/deep. The Contractor shall submit the most current permit registration form to the CT DEEP. A minimum lead-time of six (6) weeks can be expected to process and submit the registration. **No claim for delay or request for additional time will be considered based upon the Contractor's failure to accommodate the permitting process.** The Contractor shall not submit the permit registration to the CT DEEP prior to review of and comment on the treatment system by the Engineer.

The Contractor shall submit a copy of the CT DEEP permit certificate of registration to the Engineer prior to initiating any discharge.

All testing required by the General Permit shall be conducted by a laboratory certified by the Connecticut Department of Public Health (DPH) for the method specified in the permit. The Contractor shall submit copies of the analytical results to the all parties specified in the permit terms and conditions and to the Engineer.

No claim for delay or request for additional time will be considered based upon the Contractor's failure to design a system to meet this performance specification. It is the Contractor's responsibility to properly size the treatment system and temporary containment tanks based on its anticipated flow rates from construction activities and to determine the level of treatment required to meet permit discharge limits.

For sites where the receiving water body does not qualify the site for registration under the CT DEEP General Permit for the Discharge of Groundwater Remediation Wastewater Directly to Surface Water and the discharge is anticipated to continue for 30 days or less, the Contractor may qualify for a CT DEEP Temporary Authorization (TA) to discharge to surface water. The Contractor will be bound to the terms and conditions of the TA the same as if it were a permit. If the Contractor applies for, and receives, a TA from the CT

DEEP, all other requirements of this specification will apply, except that where the specification refers to a permit, the TA will be substituted.

c. Treatment System Operation

The Contractor shall ensure that all personnel involved in the groundwater treatment operations understand the terms of the General Permit. In the event of a conflict between the requirements of this Item and the permit, the more stringent will apply.

The Contractor shall not commence work activities below the groundwater table within the Project limits until such time as:

- i. the temporary groundwater treatment system design is reviewed by the Engineer and comments are adequately addressed,
- ii. the system is installed in accordance with the accepted design and is completely operational, and
- iii. a copy of the Contractor's permit certificate of registration has been submitted to the Engineer.

The Contractor shall take all meter readings required by the permit and forward them to the appropriate parties.

The Contractor shall submit copies of the analytical results and discharge monitoring reports to the appropriate agency(ies) as required by the General Permit terms and conditions. The Contractor shall provide informational copies of all analytical results and discharge monitoring reports to the Engineer as they are generated. In the event of an exceedance, the Contractor shall immediately comply with the "***Duty to Correct, Record, and Report Violations***" section of the General Permit. The Contractor shall provide the Engineer a copy of the required CT DEEP reporting and then document its review of the treatment system and all actions taken to correct the exceedance in writing to the Engineer within 48 hours of receiving laboratory data documenting the exceedance.

If the discharge must be suspended due to an effluent violation, the Contractor shall only restart the discharge after obtaining all necessary approvals from the CT DEEP and in full compliance with the General Permit and any amendments imposed thereto.

No claim for delay, request for additional time, or request for additional design/redesign costs for the system will be considered based upon the Contractor's failure to design/redesign a system to meet this performance specification.

3. Off-Site Treatment and Disposal

At least 14 days prior to any work involving the dewatering of contaminated groundwater, the Contractor shall submit for the Engineer's review and comment its proposed system to collect and contain the contaminated groundwater. This submittal shall include schematics of proposed pump set-ups in excavations; sedimentation control measures; probable location of temporary containment tanks; schematics of proposed method to transfer liquids from temporary containment tanks to transport vehicles; schematic of proposed method to off-load liquids at the off-site permitted treatment/disposal facility; documentation that transport vehicles hold a "Waste Transportation Permit" for contaminated liquids per CGS 22a-454; and the name of the disposal facility from the following list of Department-approved and CT DEEP-permitted treatment facilities for State-regulated liquid disposal:

Clean Harbors of CT
51 Broderick Rd.
Bristol, CT 06010
(860)224-7600

Tradebe Environmental Services, LLC
50 Cross St.
Bridgeport, CT 06610
(203)238-6754

Tradebe Environmental Services, LLC
Gracey Avenue
Meriden, CT 06450
(203)238-6754

All testing required to meet facility acceptance parameters shall be conducted by the Contractor in the presence of the Engineer. The Contractor is hereby notified that laboratory turnaround time is expected to be fifteen (15) working days. The Contractor shall provide informational copies of the laboratory results to the Engineer. **No delay claim will be considered based upon the Contractor's failure to accommodate the laboratory turnaround time as identified above or to design its system with sufficient holding capacity to accommodate this requirement.**

The Contractor shall obtain and complete all paperwork necessary to arrange for disposal of the contaminated groundwater (such as disposal facility waste profile sheets). It is solely the Contractor's responsibility to coordinate the disposal with its selected facility. Upon receipt of the final approval from the facility, the Contractor shall arrange for the loading, transport and disposal in accordance with all Federal and State regulations. **No claim will be considered based on the failure of the Contractor's selected disposal facility(s) to meet the Contractor's production rate or for the Contractor's failure to select sufficient facilities to meet its production rate.**

The Contractor will be responsible for the cleaning of the water treatment system and the disposal of the entire shipment as the Hazardous Waste Generator for water that undergoes a change in waste classification due to the Contractor's work activities or processes (i.e. contaminated groundwater being classified characteristically hazardous for pH due to grouting operations).

Method of Measurement:

Within fourteen (14) calendar days after addressing the Engineer's comments on the proposed system(s) for Handling Contaminated Groundwater, the Contractor shall submit to the Engineer for approval a cost breakdown of its lump sum bid price. The submission must include substantiation showing that the cost breakdown submitted is reasonable based on the Contractor's lump sum bid. The cost breakdown shall be in accordance with the following payment schedule:

- a. The cost to prepare the design for proposed system(s) for Handling Contaminated Groundwater, including preparation and submittal of all permit registration applications, in accordance with these specifications. Design costs shall not exceed 10% of the total cost of the item.
- b. The procurement and installation cost for the proposed system(s) for Handling Contaminated Groundwater in accordance with these specifications. Procurement and installation costs shall not exceed 20% of the total cost of the item.
- c. Equipment decontamination and demobilization and restoration of site. Decontamination and demobilization costs shall not exceed 10% of the total cost of the item.
- d. The remaining costs for operation, monitoring, permit compliance, sampling and analysis, disposal costs, and maintenance of the proposed system(s), including cleaning of the temporary containment tanks of settled solids, replacement of carbon filters, **transporting of solids to the WSA**, and transportation of the contaminated dewatering wastewater to an off-site permitted treatment/disposal facility in accordance with these specifications shall be divided evenly throughout the duration of the project work involving contaminated groundwater at the discretion of the Engineer.

Increased costs directly related to the Contractor's operation (i.e. treatment or increased charges due to changes in pH or additional contaminants, treatment and disposal of excess water related to process or waste water, etc.) will not be paid under this item but will be considered a part of the Contractor's cost for the item under which the work is being performed.

Basis of Payment:

This work will be paid for at the Contract lump sum price for "Handling Contaminated Groundwater" which price shall include: all work and materials involved with handling contaminated groundwater from within the project limits and shall include all equipment,

materials, tools and labor incidental to removal of the contaminated groundwater from the excavation; conveying contaminated groundwater from the dewatering point to the temporary containment tanks and groundwater treatment facility; treatment; conveying discharge of contaminated wastewater to a sanitary sewer, surface water or off-site disposal at a permitted treatment/disposal facility (including transportation); disposal or recycling of used treatment media (i.e. bag filters and spent carbon); permit applications; disposal and permit fees; POTW fees; electrical costs; sampling and documentation costs; laboratory costs; design and monitoring; mobilization, operation, and maintenance of the system; site work; all required equipment decontamination; **transportation of solids to the WSA**; and equipment demobilization.

Sedimentation control associated with work under this Item will be paid under the appropriate items of the Contract.

Pay Item	Pay Unit
Handling Contaminated Groundwater	Lump Sum

**INTERDEPARTMENTAL
MESSAGE**

STATE OF CONNECTICUT

To	NAME, TITLE Central Permit Processing	DATE 11/06/2018
	AGENCY, ADDRESS Department of Energy and Environmental Protection, 79 Elm Street, Hartford	
From	NAME, TITLE Ms. Kimberly C. Lesdy, Transportation Assistant Planning Director	TELEPHONE (860) 594-2931
	AGENCY, ADDRESS Department of Transportation, Bureau of Policy and Planning, Newington	

**Subject: State Project No. 301-175
New Haven Mainline MP 65.60 o/Unnamed Watercourse
Town of Milford**

Attached is an original copy of the General Permit for Water Resource Construction Activities permit application for the above referenced project.

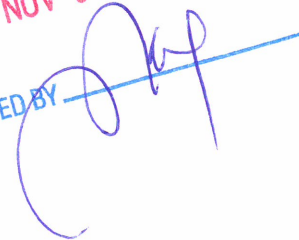
Copies of the application have been provided to the Conservation, Inland Wetland and Planning & Zoning Commissions of the Town.

Any questions pertaining to this application may be directed to Mr. Andrew H. Davis, Transportation Supervising Planner at 860-594-2157.

CT Dept of Energy & Environmental Protection
Central Permit Processing Unit

NOV 07 2018

RECEIVED BY



Attachments

Amanda M. Saul/ams

bcc: Andrew H. Davis – Amanda M. Saul
Jayantha Mather – Jay D. Young
Domenic LaRosa – District 3



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION



2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546
Phone: (860) 594-2931

November 6, 2018

TO: Inland Wetland Commission
City of Milford
70 West River Street
Milford, CT 06460

FROM: Kimberly C. Lesay
Transportation Assistant Planning Director
Bureau of Policy and Planning

SUBJECT: Notification of Submittal of Application to the Department of Energy and
Environmental Protection (DEEP) for a General Permit for Water Resource
Construction Activities

PROJECT: State Project No. 301-175
New Haven Mainline MP 65.60 o/Unnamed Watercourse
Town of Milford

Enclosed is a copy of our Request for Authorization under the State of Connecticut Department of Energy and Environmental Protection's General Permit for Water Resource Construction Activities. If your agency wishes to comment on the enclosed application, comments must be submitted to the State Department of Energy and Environmental Protection.

Comments should be directed to:

Inland Water Resources Division
Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

If we can provide additional information, please contact Mr. Andrew H Davis at 860-594-2157.

Enclosures

Amanda M. Saul/ams

cc: CTDEEP-LWRD

bcc: Andrew H. Davis – Amanda M. Saul
Jayantha Mather – Jay D. Young



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION



2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546
Phone: (860) 594-2931

November 6, 2018

TO: Planning & Zoning Commission
City of Milford
70 West River Street
Milford, CT 06460

FROM: Kimberly C. Lesay
Transportation Assistant Planning Director
Bureau of Policy and Planning

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Enclosures

Amanda M. Saul/ams

cc: CTDEEP-LWRD

bcc: Andrew H. Davis – Amanda M. Saul
Jayantha Mather – Jay D. Young



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION



2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546
Phone: (860) 594-2931

November 6, 2018

TO: Conservation Commission
City of Milford
70 West River Street
Milford, CT 06460

FROM: Kimberly C. Lesay
Transportation Assistant Planning Director
Bureau of Policy and Planning

SUBJECT: Notification of Submittal of Application to the Department of Energy and Environmental Protection (DEEP) for a General Permit for Water Resource Construction Activities

PROJECT: State Project No. 301-175
New Haven Mainline MP 65.60 o/Unnamed Watercourse
Town of Milford

Kimberly Lesay

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Inland Water Resources Division
Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

If we can provide additional information, please contact Mr. Andrew H Davis at 860-594-2157.

Enclosures

Amanda M. Saul/ams

cc: CTDEEP-LWRD

bcc: Andrew H. Davis – Amanda M. Saul
Jayantha Mather – Jay D. Young



**Connecticut Department of
Energy & Environmental Protection**

CPPU USE ONLY	
App #:	_____
Doc #:	_____
Check #:	_____

Permit Application Transmittal Form

Please complete this transmittal form in accordance with the instructions in order to ensure the proper handling of your application(s) and the associated fee(s). Print legibly or type.

Part I: Applicant Information:

- **If an applicant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, applicant's name shall be stated **exactly** as it is registered with the Secretary of State.*
- *If an applicant is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).*

Applicant: Connecticut Department of Transportation	
Mailing Address: 2800 Berlin Turnpike, P.O. Box 317546	
City/Town: Newington	State: CT Zip Code: 06131-7546
Business Phone: 860-594-2931	ext.:
Contact Person: Kimberly C. Lesay	Phone: 860-594-2931 ext.
E-Mail: kimberly.lesay@ct.gov	
Applicant (check one): <input type="checkbox"/> individual <input type="checkbox"/> *business entity <input type="checkbox"/> federal agency <input checked="" type="checkbox"/> state agency <input type="checkbox"/> municipality <input type="checkbox"/> tribal	
*If a business entity, list type (e.g., corporation, limited partnership, etc.):	
<input type="checkbox"/> Check if any co-applicants. If so, attach additional sheet(s) with the required information as supplied above.	
Please provide the following information to be used for <i>billing purposes only</i> , if different:	
Company/Individual Name:	
Mailing Address:	
City/Town:	State: Zip Code:
Contact Person:	Phone: ext.

Part II: Project Information

Brief Description of Project: <i>(Example: Development of a 50 slip marina on Long Island Sound)</i>					
State Project No. 301-175					
Replacement of an existing masonry box culvert with twin 48 inch diameter class V reinforced concrete pipes					
Location (City/Town): Milford					
Other Project Related Permits (<i>not</i> included with this form):					
Permit Description	Issuing Authority	Submittal Date	Issuance Date	Denial Date	Permit #
PGP Addendum	ACOE	5-11-18	10-30-18		NAE-2018-01179
ACOE PCN GP-19	ACOE	5-11-18	8-2-18		201807280-PCN

Part III: Individual Permit Application and Fee Information

New, Mod. or Renew	Individual Permit Applications	Initial Fees	No. of Permits Applied For	Total Initial Fees	Original + Required Copies
	AIR EMISSIONS				
	New Source Review <input type="checkbox"/> Revision <input type="checkbox"/> minor mod	\$940.00			1 + 0
	Title V Operating Permits <input type="checkbox"/> Revision <input type="checkbox"/> minor mod <input type="checkbox"/> non-minor mod	none			1 + 0
	Title IV	none			1 + 0
	Clean Air Interstate Rule (CAIR)	none			1 + 0
	WATER DISCHARGES				
	To Groundwater	\$1300.00			1 + 1
	To Sanitary Sewer (POTW)	\$1300.00			1 + 1
	To Surface Water (NPDES)	\$1300.00			1 + 1
	INLAND WATER RESOURCES-				
	Dam Safety	none			1 + 2
	Flood Management Certification	none			1 + 1
	Inland Wetlands and Watercourses	none			1 + 5
	Inland 401 Water Quality Certification	none			
	FERC- Hydropower Projects- 401 Water Quality Certification	none			1 + 1
	Water Diversion	★			1 + 5
	OFFICE OF LONG ISLAND SOUND PROGRAMS				
	Certificate of Permission	\$375.00			1 + 2
	Coastal 401 Water Quality Certification	none			1 + 2
	Structures and Dredging/and Fill/Tidal Wetlands	\$660.00			1 + 2
	WASTE MANAGEMENT				
	Aerial Pesticide Application	★			1 + 2
	Aquatic Pesticide Application	\$200.00			1 + 0
	CGS Section 22a-454 Waste Facilities	★			1 + 1
	Disruption of a Solid Waste Disposal Area	\$0			1 + 1
	Hazardous Waste Treatment, Storage and Disposal Facilities	★			1 + 1
	Marine Terminal License	\$100.00			1 + 0
	Stewardship	\$4000.00			1 + 1
	Solid Waste Facilities	★			1 + 1
	Waste Transportation	★			1 + 0
		Subtotal ➡	0	0	
GENERAL PERMITS and AUTHORIZATIONS		Subtotals Page 3 & 4 ➡	0	0	
Enter subtotals from Part IV, pages 3 - 6 of this form		Subtotals Page 5 ➡	1	0	
		Subtotals Page 6 ➡	0	0	
		TOTAL ➡	1	0	
<input type="checkbox"/> Indicate whether municipal discount or state waiver applies.		➡			
Less Applicable Discount					
		AMOUNT REMITTED ➡		0	
Check # ➡	<input type="text"/>	Check or money order should be made payable to: "Department of Energy and Environmental Protection"			

★ See fee schedule on individual application.

Part IV: General Permit Registrations and Requests for Other Authorizations
Application and Fee Information

<input checked="" type="checkbox"/> General Permits and Other Authorizations	Initial Fees	No. of Permits Applied For	Total Initial Fees	Original + Required Copies
AIR EMISSIONS				
<input type="checkbox"/> Limit Potential to Emit from Major Stationary Sources of Air Pollution	\$2760.00			1 + 0
<input type="checkbox"/> Diagnostic and Therapeutic X-Ray Devices (Medical X-Ray) Registration	\$190.00/Xray device			1 + 0
<input type="checkbox"/> Radioactive Materials and Industrial Device Registration (Ionizing Radiation)	\$200.00			1 + 0
<input type="checkbox"/> Emergency/Temporary Authorization	★★			★★
<input type="checkbox"/> License Revocation Request	\$0			★★
<input type="checkbox"/> Other, (please specify):				
WATER DISCHARGES				
<input type="checkbox"/> Boiler Blowdown Wastewater	Expired- wastewater discharge authorized under MISC GP			
<input type="checkbox"/> Categorical Industry User to a POTW Discharges > 10,000 gpd	\$6250.00			1 + 0
<input type="checkbox"/> Discharges < 10,000 gpd	\$3125.00			1 + 0
<input type="checkbox"/> Domestic Sewage	\$625.00			1 + 0
<input type="checkbox"/> Food Preparation Establishment Wastewater	No Registration			
<input type="checkbox"/> Food Processing Wastewater	\$500.00			1 + 0
<input type="checkbox"/> Groundwater Remediation Wastewater to a Sanitary Sewer	\$500.00			1 + 0
<input type="checkbox"/> Groundwater Remediation Wastewater to a Surface Water Registration Only	\$625.00			1 + 0
<input type="checkbox"/> Approval of Registration by DEEP	\$1250.00			
<input type="checkbox"/> Hydrostatic Pressure Testing Wastewater Registration Only	\$625.00			1 + 0
<input type="checkbox"/> Approval of Registration by DEEP (natural gas pipelines)	\$1250.00			
<input type="checkbox"/> Miscellaneous Discharges of Sewer Compatible Wastewater Registration Only	\$500.00			1 + 0
<input type="checkbox"/> Approval of Registration by DEEP	\$1000.00			
<input type="checkbox"/> Nitrogen Discharges	No Registration			
<input type="checkbox"/> Non-Contact Cooling and Heat Pump Water (Minor)	\$625.00			1 + 0
<input type="checkbox"/> Photographic Processing Wastewater (Minor)	Expired- wastewater discharge authorized under MISC GP			
<input type="checkbox"/> Point Source Discharges from Application of Pesticides	\$200.00			1 + 0
<input type="checkbox"/> Printing & Publishing Wastewater (Minor) Flow < 40 gpd	\$500.00 \$100.00			1 + 0
<input type="checkbox"/> Stormwater Associated with Commercial Activities	\$300.00			1 + 0
<input type="checkbox"/> Stormwater Associated with Industrial Activities <50 employees—see general permit for additional requirements >50 employees—see general permit for additional requirements	\$500.00 \$1000.00			1 + 0
<input type="checkbox"/> Stormwater & Dewatering Wastewaters-Construction Activities	★			1 + 0
<input type="checkbox"/> Stormwater from Small Municipal Separate Storm Sewer Systems (MS4)	\$250.00			1 + 0

★ See fee schedule on registration/application.

★★ Contact the specific permit program for this information.
 (Contact numbers are provided in the instructions)

Part IV: General Permit Registrations and Requests for Other Authorizations (continued)

WATER DISCHARGES (continued)				
<input type="checkbox"/> Subsurface Sewage Disposal Systems Serving Existing Facilities	★ ★			1 + 0
<input type="checkbox"/> Swimming Pool Wastewater - Public Pools and Contractors	\$500.00			1 + 0
<input type="checkbox"/> Tumbling or Cleaning of Parts Wastewater (Minor)	Expired- wastewater discharge authorized under MISC GP			
Vehicle Maintenance Wastewater				
<input type="checkbox"/> Registration Only	\$625.00			1 + 0
<input type="checkbox"/> Approval of Registration by DEEP	\$1250.00			
<input type="checkbox"/> Water Treatment Wastewater	\$625.00			1 + 0
<input type="checkbox"/> Emergency/Temporary Authorization - Discharge to POTW	\$1500.00			1 + 0
<input type="checkbox"/> Emergency/Temporary Authorization - Discharge to Surface Water	\$1500.00			1 + 0
<input type="checkbox"/> Emergency/Temporary Authorization - Discharge to Groundwater	\$1500.00			1 + 0
<input type="checkbox"/> Other, (please specify):				
Note: Carry subtotals over to Part III, page 2 of this form.	Subtotal →	0	0	

★ See fee schedule on registration/application.

★★ Contact the specific permit program for this information.
(Contact numbers are provided in the instructions)

Part IV: General Permit Registrations and Requests for Other Authorizations (continued)

<input checked="" type="checkbox"/> General Permits and Other Authorizations	Initial Fees	No. of Permits Applied For	Total Initial Fee	Original + Required Copies
AQUIFER PROTECTION PROGRAM				
<input type="checkbox"/> Registration for Regulated Activities	\$625.00			1 + 0
<input type="checkbox"/> Permit Application to Add a Regulated Activity	\$1250.00			1 + 0
<input type="checkbox"/> Exemption Application from Registration	\$1250.00			1 + 0
INLAND WATER RESOURCES				
<input type="checkbox"/> Diversion of Remediation Groundwater	No Registration			
<input type="checkbox"/> Diversion of Water for Consumptive Use: Reauthorization Categories	\$2500.00			1 + 0
<input type="checkbox"/> Diversion of Water for Consumptive Use: Authorization Required	\$2500.00			1 + 4
<input type="checkbox"/> Diversion of Water for Consumptive Use: Filing Only	\$1500.00			1 + 1
<input type="checkbox"/> Programmatic General Permit	★			1 + 3
<input checked="" type="checkbox"/> Water Resource Construction Activities	★	1	0	1 + 0
<input type="checkbox"/> Emergency/Temporary Authorization	★★			★★
<input type="checkbox"/> Notice of High Hazard Dam or a Significant Hazard Dam	\$0			1 + 0
<input type="checkbox"/> Other, (please specify):				
OFFICE OF LONG ISLAND SOUND PROGRAMS				
<input type="checkbox"/> 4/40 Docks	\$700.00			1 + 1
<input type="checkbox"/> Beach Grading	\$100.00			1 + 1
<input type="checkbox"/> Buoys or Markers	No Registration			
<input type="checkbox"/> Coastal Remedial Activities Required by Order	\$700.00			1 + 1
<input type="checkbox"/> Dock Reconstruction	\$300.00			1 + 1
<input type="checkbox"/> Harbor Moorings	No Registration			
<input type="checkbox"/> Maintenance of Catch Basins and Tide Gates	No Registration			
<input type="checkbox"/> Marina and Mooring Field Reconfiguration	\$700.00			1 + 1
<input type="checkbox"/> Minor Seawall Repair	No Registration			
<input type="checkbox"/> Non-harbor Moorings	\$100.00			1 + 1
<input type="checkbox"/> Osprey Platforms and Perch Poles	none			1 + 1
<input type="checkbox"/> Pump-out Facilities (no fee for Clean Vessel Act grant recipients)	\$100.00			1 + 1
<input type="checkbox"/> Programmatic General Permit	★			1 + 1
<input type="checkbox"/> Removal of Derelict Structures	\$100.00			1 + 1
<input type="checkbox"/> Residential Flood Hazard Mitigation	\$100.00			1 + 1
<input type="checkbox"/> Swim Floats	\$100.00			1 + 1
<input type="checkbox"/> Emergency/Temporary Authorization	★★			★★
<input type="checkbox"/> Other, (please specify):				
Note: Carry subtotals over to Part III, page 2 of this form.		Subtotal →	1	0

★ See fee schedule on registration/application.

★★ Contact the specific permit program for this information.
(Contact numbers are provided in the instructions)

Part IV: General Permit Registrations and Requests for Other Authorizations (continued)

<input checked="" type="checkbox"/> General Permits and Other Authorizations	Initial Fees	No. of Permits Applied For	Total Initial Fee	Original + Required Copies
WASTE MANAGEMENT				
<input type="checkbox"/> Addition of Grass Clippings at Registered Leaf Composting Facilities	\$500.00			1 + 0
<input type="checkbox"/> Beneficial Use Determination	★			1 + 0
Certain Recycling Facilities:				
<input type="checkbox"/> Drop-site Recycling Facility	\$200.00			1 + 0
<input type="checkbox"/> Limited Processing Recycling Facility	\$500.00			1 + 0
<input type="checkbox"/> Recyclables Transfer Facility	\$500.00			1 + 0
<input type="checkbox"/> Single Item Recycling Facility	\$500.00			1 + 0
<input type="checkbox"/> Collection and Storage of Post Consumer Paint	\$0			1 + 0
Contaminated Soil and/or Staging Management (Staging/Transfer)				
<input type="checkbox"/> New Registrations	\$250.00			1 + 0
<input type="checkbox"/> New Approval of Registrations	\$1500.00			1 + 0
<input type="checkbox"/> Renewal of Registrations	\$250.00			1 + 0
<input type="checkbox"/> Renewal of Approval of Registrations	\$750.00			1 + 0
<input type="checkbox"/> Connecticut Solid Waste Demonstration Project	\$1000.00			1 + 0
<input type="checkbox"/> Disassembling Used Electronics	\$2000.00			1 + 0
<input type="checkbox"/> Leaf Composting Facility	none			1 + 1
<input type="checkbox"/> Municipal Transfer Station	\$800.00			1 + 1
<input type="checkbox"/> One Day Collection of Certain Wastes and Household Hazardous Waste	\$1000.00			1 + 0
<input type="checkbox"/> Sheet leaf Composting Notification	\$0			★★
Special Waste Authorization				
<input type="checkbox"/> Landfill or RRF Disposal	\$660.00			1 + 0
<input type="checkbox"/> Asbestos Disposal	\$300.00			
<input type="checkbox"/> homeowner	\$0			
<input type="checkbox"/> Storage and Processing of Asphalt Roofing Shingle Waste	\$2500.00			1 + 0
<input type="checkbox"/> Storage and Processing of Scrap Tires for Beneficial Use	\$1250.00			1 + 0
<input type="checkbox"/> Emergency/Temporary Authorization	★★			★★
<input type="checkbox"/> Other, (please specify):				
REMEDIATION				
<input type="checkbox"/> In Situ Groundwater Remediation: Enhance Aerobic Biodegradation	★			1 + 2
<input type="checkbox"/> In Situ Groundwater Remediation: Chemical Oxidation	\$500.00			1 + 0
<input type="checkbox"/> Emergency/Temporary Authorization	★			★★
Note: Carry subtotals over to Part III, page 2 of this form.		Subtotal →	0	0

★ See fee schedule on registration/application.

★★ Contact the specific permit program for this information.

(Contact numbers are provided in the instructions)

Affirmative Action, Equal Employment Opportunity and Americans with Disabilities

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). Please contact us at (860) 418-5910 or deep.accommodations@ct.gov if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint.



Connecticut Department of
Energy & Environmental Protection
 Bureau of Water Protection & Land Reuse
 Inland Water Resources Division

Request for Authorization Form for the General Permit for Water Resource Construction Activities

Please complete this form in accordance with the general permit (DEEP-IWRD-GP-013) to ensure the proper handling of your request. Print or type unless otherwise noted. You must submit the fee along with this completed form.

CPPU USE ONLY
App #: _____
Doc #: _____
Check #: _____
Program: GP IWRD Construction Activities

Part I: Request and Fee Type

Check the appropriate box identifying the request type.

<input type="checkbox"/> \$5000 [#1757] for each Request for Authorization for Section 3(a)(1), (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), or (a)(7) activities under the subject general permit, unless you qualify as one of the following: <input type="checkbox"/> \$2500 for any municipality <input type="checkbox"/> \$2500 for electronic filing*	<input checked="" type="checkbox"/> \$2500 [#1758] for each Request for Authorization for Section 3(a)(8) or 3(a)(9) activities under the subject general permit, unless you qualify as one of the following: <input type="checkbox"/> \$1250 for any municipality <input type="checkbox"/> \$1250 for electronic filing*
--	---

In order to file electronically, **ALL supporting documents under Part VI of this application must be submitted in an electronic format on a CD, along with this original completed application in hard copy.*

The request will not be processed without the fee. The fee shall be non-refundable and shall be paid by check or money order to the Department of Energy and Environmental Protection.

Town where site is located: Milford

Brief Description of Project: State Project No. 301-175 consists of the replacement of a masonry culvert that carries the New Haven Mainline (Railroad) over an unnamed watercourse. The existing culvert located at mile post 65.60 is approximately 89 ft long and has an opening 2 ft wide by 2 ft high. The proposed replacement consists of twin 48 inch diameter class V reinforced concrete pipes. The pipes will be 101 ft long with flared wingwalls at both ends. A slide gate will be installed at the entrance of the primary pipe to limit its hydraulic capacity to match the existing culvert. The supplemental culvert will be blocked off. The proposed pipes will be jacked adjacent to the existing culvert. In the final condition the existing culvert will be filled in and abandoned.

Part II: Requestor Information

- If a requester is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, requester's name shall be stated **exactly** as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of State's database (CONCORD). (www.concord-sots.ct.gov/CONCORD/index.jsp)
- If a requester is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).
- If there are any changes or corrections to your company/facility or individual mailing or billing address or contact information, please complete and submit the Request to Change Company/Individual Information to the address indicated on the form. If there is a change in name of the entity holding a DEEP license or a change in ownership, contact the Office of Planning and Program Development (OPPD) at 860-424-3003. For any other changes you must contact the specific program from which you hold a current DEEP license.

1. Requester Name: Connecticut Department of Transportation

Mailing Address: 2800 Berlin Turnpike, P.O Box 317546

City/Town: Newington

State: CT

Zip Code: 06131-7546

Business Phone: 860-594-2931

ext.:

Contact Person: Kimberly C. Lesay

Phone: 860-594-2931 ext.

E-mail: kimberly.lesay@ct.gov

*By providing this e-mail address you are agreeing to receive official correspondence from the department, at this electronic address, concerning the subject request. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify the department if your e-mail address changes.

a) Requester Type (check one):

individual federal agency state agency municipality tribal

*business entity (*If a business entity complete i through iii):

i) check type: corporation limited liability company limited partnership
 limited liability partnership statutory trust Other: _____

ii) provide Secretary of the State business ID #: _____ This information can be accessed at database (CONCORD). (www.concord-sots.ct.gov/CONCORD/index.jsp)

iii) Check here if your business is **not** registered with the Secretary of State's office.

Check here if any co-registrants. If so, attach additional sheet(s) with the required information as requested above.

b) Requester's interest in property at which the proposed activity is to be located:

site owner option holder lessee easement holder operator

other (specify): _____

Part II: Requestor Information (continued)

2. Billing contact, if different than the requester.

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Contact Person:

Title:

Email:

3. Primary contact for departmental correspondence and inquiries, if different than the requester.

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Contact Person:

Title:

Email:

*By providing this e-mail address you are agreeing to receive official correspondence from the department, at this electronic address, concerning the subject request. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify the department if your e-mail address changes.

4. Attorney or other representative, if applicable:

Firm Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Attorney:

Email:

5. Site Owner, if different than the requester.

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Contact Person:

Title:

Email:

Part II: Requestor Information (continued)

6. Engineer(s) or other consultant(s) employed or retained to assist in preparing the request or in designing or constructing the activity.

Name: **H.W. Lochner**

Mailing Address: **55 Hartland Street, Suite 401**

City/Town: **East Hartford**

State: **CT**

Zip Code: **06108**

Business Phone: **860-760-5840**

ext. **30326**

Contact Person: **David Miroslaw**

Title: **Project Engineer**

Email: **dmiroslaw@hwlochner.com**

Service Provided: **Project Design, Permit Application Preparation**

Check here if additional sheets are necessary, and label and attach them to this sheet.

Part III: Site Information

1. SITE NAME AND LOCATION

Name of Site : **New Haven Mainline over unnamed watercourse**

Street Address or Location Description: **100 Eastern Steel Road for upstream side, 206 Pepes Farm Road for downstream side (Railroad Mile Post 65.60)**

City/Town: **Milford**

State: **CT**

Zip Code: **06460**

Tax Assessor's Reference: Map **N/A**

Block **N/A**

Lot **N/A**

Latitude and longitude of the exact location of the proposed activity in degrees, minutes, and seconds or in decimal degrees: Latitude: **41°-14'-0.46" N** Longitude: **73°-1'-8.10" W**

Method of determination (check one):

GPS USGS Map Other (please specify):

If a USGS Map was used, provide the quadrangle name: **Milford**

2. INDIAN LANDS: Is or will the facility be located on federally recognized Indian lands? Yes No

3. COASTAL BOUNDARY: Is the activity which is the subject of this registration located within the coastal boundary as delineated on DEEP approved coastal boundary maps? Yes No

If yes, and this registration is for a new authorization, or a modification of an existing authorization where the physical footprint of the subject activity is modified, you must submit a Coastal Consistency Review Form (DEEP-APP-004) with your registration as Attachment C.

Information on the coastal boundary is available at www.cteco.uconn.edu/map_catalog.asp (Select the town and then select coastal boundary. If the town is not within the coastal boundary you will not be able to select the coastal boundary map.) or the local town hall or on the "Coastal Boundary Map" available at DEEP Maps and Publications (860-424-3555).

Part III: Site Information (continued)

4. **ENDANGERED OR THREATENED SPECIES:** According to the most current "State and Federal Listed Species and Natural Communities Map", is the project site located within an area identified as a habitat for endangered, threatened or special concern species? Yes No Date of Map: **Dec 2017**

If yes, complete and submit a Request for NDDB State Listed Species Review Form (DEEP-APP-007) to the address specified on the form. **Please note NDDB review generally takes 4 to 6 weeks and may require additional documentation from the registrant.**

A **copy** of the completed Request for NDDB State Listed Species Review Form and the CT NDDB response **must** be submitted with this completed registration as Attachment D.

For more information visit the DEEP website at www.ct.gov/deep/nddbrequest or call the NDDB at 860-424-3011.

5. **AQUIFER PROTECTION AREAS:** Is the site located within a mapped Level A or Level B Aquifer Protection Area, as defined in CGS section 22a-354a through 22a-354bb?

Yes No If yes, check one: Level A or Level B

If **Level A**, are any of the regulated activities, as defined in RCSA section 22a-354i-1(34), conducted on this site? Yes No

If **yes**, and your business is **not** already registered with the Aquifer Protection Program, contact the local aquifer protection agent or DEEP to take appropriate actions.

For more information on the Aquifer Protection Area Program visit the DEEP website at www.ct.gov/deep/aquiferprotection or contact the program at 860-424-3020.

6. **CONSERVATION OR PRESERVATION RESTRICTION:** Is the property subject to a conservation or preservation restriction? Yes No

If Yes, proof of written notice of this registration to the holder of such restriction or a letter from the holder of such restriction verifying that this registration is in compliance with the terms of the restriction, must be submitted as Attachment E.

Part IV: Construction Activity Details

1. Proposed Date of Initiation of Activity: Spring 2019
2. Anticipated Date of Completion: Fall 2019
3. Name of the wetland or watercourse involved with or adjacent to the subject activity:
unnamed watercourse into the Indian River
4. Is the subject activity within a watercourse or floodplain? Yes No
5. Will the subject activity be within a FEMA floodway? Yes No
6. If the project requires a Flood Management Certification for the subject activity, provide the Flood Management Certification Number: Not Required

Part IV: Construction Activity Details (continued)

7. Disturbance to wetlands, watercourses and flood plains:

Wetlands (acres):

excavation: 0.214 ac fill: 0.148 ac total disturbance: 0.362 ac

Floodplain (cubic yards):

excavation: N/A fill: N/A net: N/A

Watercourse (linear feet): 260 l.f.

8. Describe the present and intended use(s) of the property at which the subject activity will be conducted and the reason for conducting or maintaining the activity.

The present and intended use of the subject property is the crossing of the New Haven Mainline over the unnamed watercourse. The existing culvert is 89 ft long with an opening 2 ft wide by 2 ft high. The culvert carries four tracks of the New Haven Mainline at mile post 65.60. The New Haven Mainline is a critical rail corridor with service from Metro-North Railroad, Amtrak and a moderate volume of freight traffic. The inlet and outlet of the existing structure have partially collapsed. In addition sediment and debris have accumulated within the culvert, as a result the hydraulic capacity has been reduced. An analysis of the the existing structure has shown that it is hydraulically inadequate. As a result of these deficiencies the culvert has been recommended for replacement. The proposed replacement consists of a twin 48 inch diameter Class V reinforced concrete pipes with flared endwalls. The structure will be 101 ft long. A slide gate will be installed over the primary culvert to limit its capacity to match that of the existing culvert. The supplemental culvert will be blocked off until downstream crossings are improved. The new structure will restore hydraulic capacity to the site and improve the safety for Railroad operations.

9. Describe all natural and manmade features impacted by the subject activity, including wetlands, watercourses, fish and wildlife habitat, floodplains, and structures and appurtenances thereto, and the impact of the subject activity on such features.

The project is not located within a FEMA floodway of floodplain. The existing culvert conveys an unnamed watercourse through the railroad embankment. Discharge from the culvert flows southwest parallel with the railroad and eventually feeds into the Indian River. The wetland at the project site is bisected by the railroad line into north and south sections. Both contain State and Federal wetlands. North of the railroad the wetland is confined between steep fill slopes associated with the industrial development to the north. The channel upstream is lined with thick soft sediments and carries sluggish flow to the culvert. Downstream of the culvert the soils are very soft with high groundwater. Red maple, multiflora rose, phragmites and tussock sedge are present in this wetland. Access to the downstream side of the culvert will be through the private property off of Pepes Farm Road. An access road will be constructed from the back of the parking lot to the site. In the final condition disturbed areas will be seeded with wetland seed mix. The access road is permanent to provide Metro-North Railroad forces with a way to access the site to perform maintenance activities. Due to the location of the project between highly developed industrial areas and the rail line embankments, the ordinary high water line has been determined to be either nearly coincident with the wetland limits (outlet) or just above the wetland limit (inlet). At the inlet in particular, localized frequent inundation occurs above the wetland line, however, due to the fact that waters pond on disturbed surfaces, no wetland conditions develop. The 'total impacts' as presented in the permit represent the footprint out-to-out, to the OHW limits; the 'wetland' impacts reported are the portion within the total that are strictly vegetated wetlands.

Check here if additional sheets are necessary, and label and attach them to this sheet.

Part V: Supporting Documents

Check the applicable box below for each attachment being submitted with this request. When submitting any supporting documents, please label the documents as indicated in this part (e.g., Attachment A, etc.) and be sure to include the requester's name as indicated on this request. ***In order to file electronically, ALL supporting documents must be submitted in an electronic format on a CD with this original completed application in hard copy.***

- | | | |
|-------------------------------------|---------------|--|
| <input checked="" type="checkbox"/> | Attachment A: | Location Map: A depiction, on an 8.5" x 11" copy of the relevant portion of the most recent version of the United States Geologic Survey topographic map (Scale 1:24,000), of the exact location of the property at which such activity will be conducted. |
| <input checked="" type="checkbox"/> | Attachment B: | Site plan pursuant Section 4(c) (2) (l) of the subject general permit. |
| <input type="checkbox"/> | Attachment C: | <u>Coastal Consistency Review Form</u> (DEEP-APP-004), if applicable. |
| <input type="checkbox"/> | Attachment D: | Copy of the completed <i>Request for NDDDB State Listed Species Review Form</i> (DEEP-APP-007) and the NDDDB response, if applicable. |
| <input type="checkbox"/> | Attachment E: | Conservation or Preservation Restriction Information, if applicable. |
| <input checked="" type="checkbox"/> | Attachment F: | A copy of the Category 2 approval letter from the Army Corps of Engineers, or a copy of the Appendix 1A: Category 1 Certification Form filed with the US Army Corps of Engineers, if applicable. |
| <input type="checkbox"/> | Attachment G: | Drainage Maintenance Plan, Trail Maintenance Plan, Boat Launch Maintenance Plan, or Beach Maintenance Plan for Inland Beaches as defined in Section 2 of the subject general permit, if applicable. |
| <input checked="" type="checkbox"/> | Attachment H: | Other information provided by requester (list): <u>Fisheries and SHPO Correspondence, Site Photographs</u> |

Part VI: Requester Certification

The requester *and* the individual(s) responsible for actually preparing the request must sign this part. A request will be considered incomplete unless all required signatures are provided. If the requester is the preparer, please mark N/A in the spaces provided for the preparer.

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

I certify that this general permit request for authorization is on complete and accurate forms as prescribed by the commissioner without alteration of the text.

I understand that the subject activity is authorized only on or after the date the commissioner issues a written approval of registration with respect to such activity.

I certify that a complete copy of this request for authorization, including all documents attached thereto, was sent by regular or certified mail or was hand delivered to the municipal wetlands agency, zoning commission, planning commission or combined planning and zoning commission, and conservation commission of each municipality which is or may be affected by the subject activity.

I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."



 Signature of Requester

11-7-2018

 Date

Thomas J. Maziarz

 Name of Requester (print or type)

Bureau Chief, Policy and Planning

 Title (if applicable)



 Signature of Preparer (if different than above)

11-5-18

 Date

David Miroslaw

 Name of Preparer (print or type)

Project Engineer

 Title (if applicable)

Check here if additional signatures are required. If so, please reproduce this sheet and attach signed copies to this sheet. You must include signatures of any person preparing any report or parts thereof required in this registration (i.e., professional engineers, surveyors, soil scientists, consultants, etc.)

Note: Please submit this completed Request for Authorization, Fee, and all Supporting Documents to:

CENTRAL PERMIT PROCESSING UNIT
 DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
 79 ELM STREET
 HARTFORD, CT 06106-5127

You must submit a complete copy of this completed request for authorization, including supporting documents, to the municipal wetlands agency, zoning commission, planning commission or combined planning and zoning commission, and conservation commission of each municipality which is or may be affected by the subject activity.

Attachment A: Location Map

General Permit for Water Resource Construction Activities

Applicant: State of Connecticut, Department of Transportation

Project No: 301-175

Description: New Haven Mainline – Mile Post 65.60, Milford, CT
Culvert Replacement over an unnamed watercourse

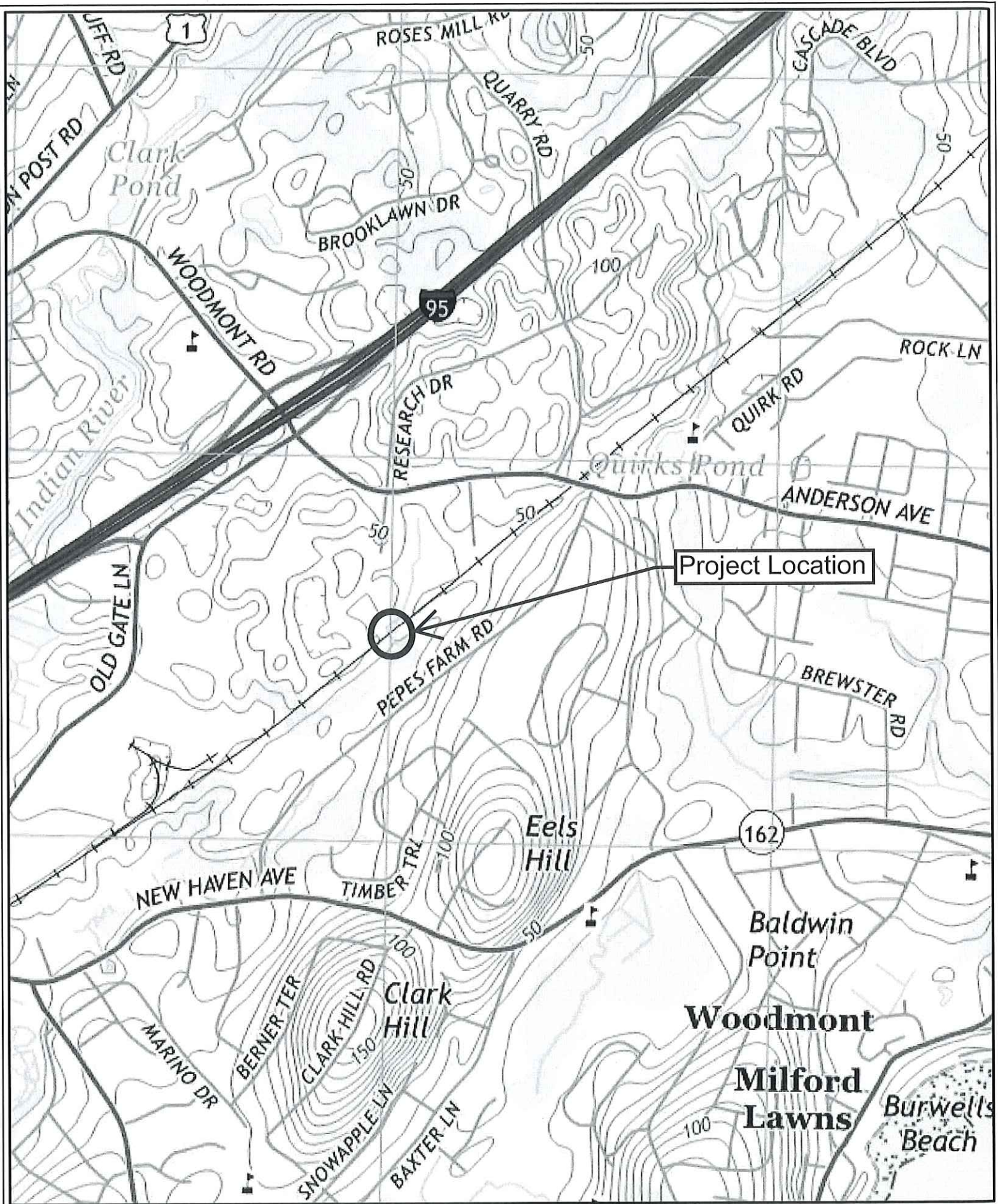
List of Attachments

USGS Topographic Quadrangle Map

QUAD: Milford

Scale: 1" = 1000'

Map Date: 2015



USGS Location Map
 Milford Quadrangle
 Scale 1" = 1000'

PROJECT NO. 0301-0175

State Project No. 301-175
 Culvert Replacement in Milford
 New Haven Mainline over unnamed brook

Attachment B: Site Plan

General Permit for Water Resource Construction Activities

Applicant: State of Connecticut, Department of Transportation

Project No: 301-175

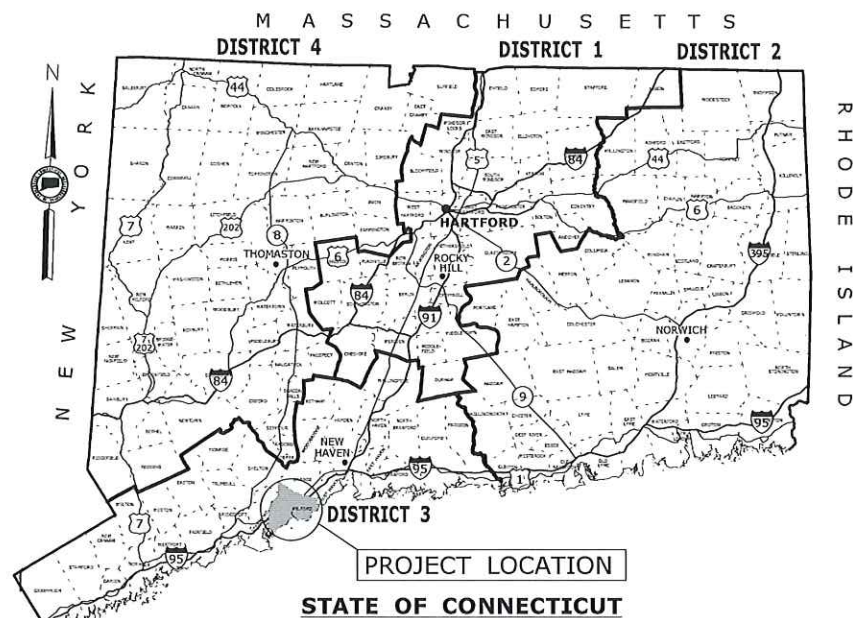
Description: New Haven Mainline – Mile Post 65.60, Milford, CT
Culvert Replacement over an unnamed watercourse

Sheet No.	Description	Date
1	Title Sheet	Mar 2018
2	Wetland Impact Plan	Mar 2018
3	Site Plan	Mar 2018
4	General Plan	Mar 2018
5	Construction Stage - 1	Mar 2018
6	Construction Stage - 2	Mar 2018
7	Access Road Details	Mar 2018
8	Precast Concrete Block Revetment Details	Mar 2018
9	Miscellaneous Details - 1	Mar 2018
10	Miscellaneous Details - 2	Mar 2018

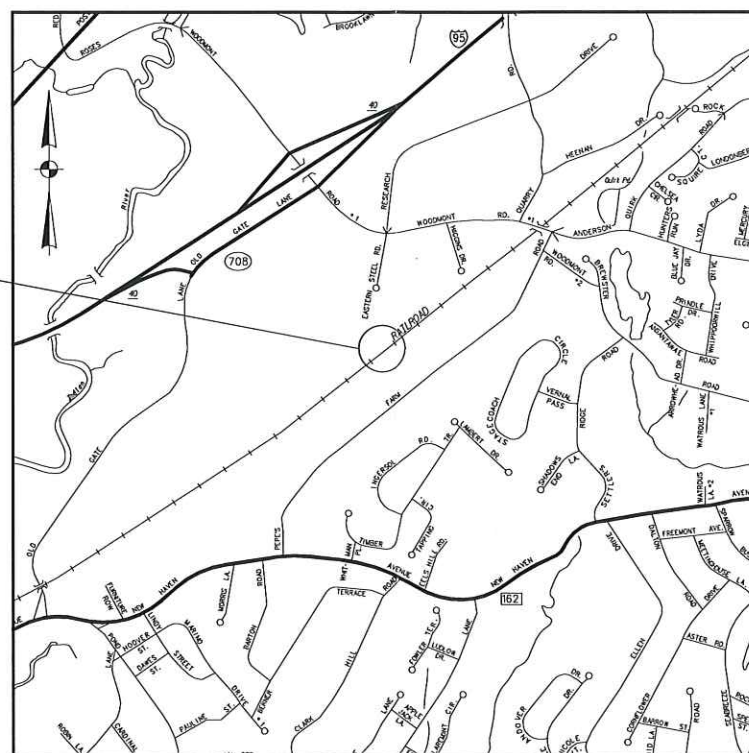
ENVIRONMENTAL PERMIT PLANS STATE PROJECT NO. 301-175 REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM

Town of
MILFORD

INDEX OF DRAWINGS	
TITLE	DRAWING NO.
TITLE SHEET	ENV-01
WETLAND IMPACT PLAN	ENV-02
SITE PLAN	ENV-03
GENERAL PLAN	ENV-04
CONSTRUCTION STAGE - 1	ENV-05
CONSTRUCTION STAGE - 2	ENV-06
ACCESS ROAD DETAILS	ENV-07
PRECAST CONCRETE BLOCK REVETMENT DETAILS	ENV-08
MISCELLANEOUS DETAILS - 1	ENV-09
MISCELLANEOUS DETAILS - 2	ENV-10

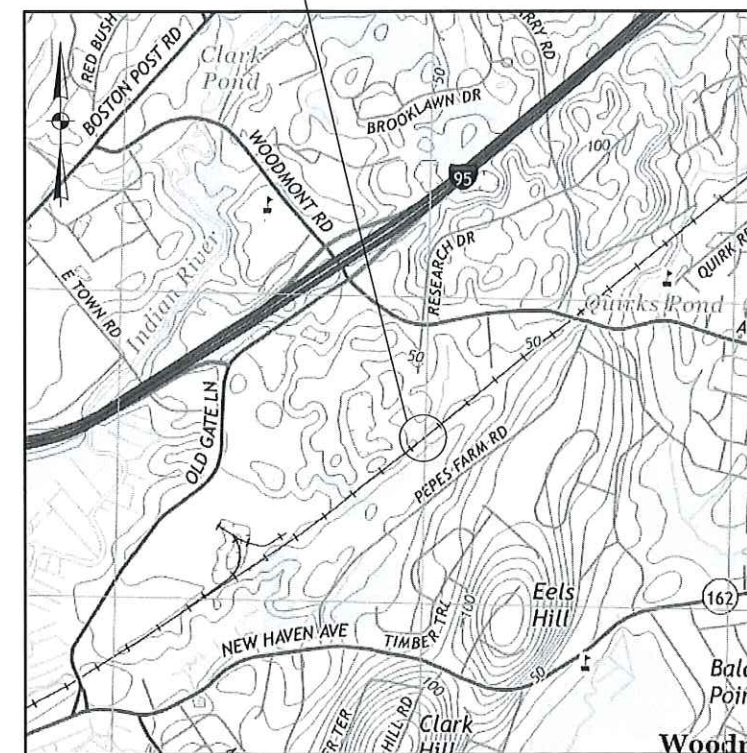


PROJECT LOCATION



LOCATION MAP
SCALE 1" = 1000'

PROJECT LOCATION

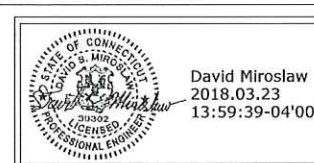


USGS QUADRANGLE TOPOGRAPHIC MAP
MILFORD QUADRANGLE
7.5 MINUTE SERIES
SCALE 1" = 1000'

GENERAL NOTES

1. THESE PLANS ARE INTENDED ONLY FOR ENVIRONMENTAL PERMITTING PURPOSES. THESE PLANS HOLD AUTHORITY FOR ALL ACTIVITIES CONCERNING THE REGULATED AREA. FOR DETAILED PLANIMETRIC INFORMATION AND PAYMENT REFER TO THE APPLICABLE CONTRACT DOCUMENTS.
2. FOR A DESCRIPTION OF THE WATERCOURSES, WETLANDS AND WETLAND SOILS SEE RELEVANT SECTIONS OF THE PERMIT APPLICATION.
3. ALL CONSTRUCTION ACTIVITIES WILL BE CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT'S STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 817, SECTION 1.10 AND WILL ALSO FOLLOW BEST MANAGEMENT PRACTICES (BMPs) AND SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH THE 2002 EROSION & SEDIMENTATION CONTROL GUIDELINES AND THE 2004 STORMWATER QUALITY MAUAL.
4. 400 FOOT GRID BASED ON CONNECTICUT COORDINATE SYSTEM N.A.D. 1927 VERTICAL DATUM BASED ON NAVD 1988.
5. WETLANDS DELINEATED BY CONNECTICUT ECOSYSTEMS LLC ON OCTOBER 20, 2015.

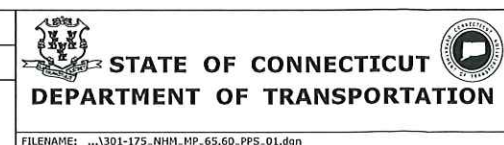
DESIGNED BY:
LOCHNER
H.W. LOCHNER, INC.
55 Hartland Street, Suite 401
East Hartford, CT 06108



REV.	DATE	REVISION DESCRIPTION	SHEET NO.
-	-	-	-
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-	-	-	-
-	-	-	-

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DESIGNER/DRAFTER:
D.M./C.R.
CHECKED BY:
R.B.
SCALE AS NOTED

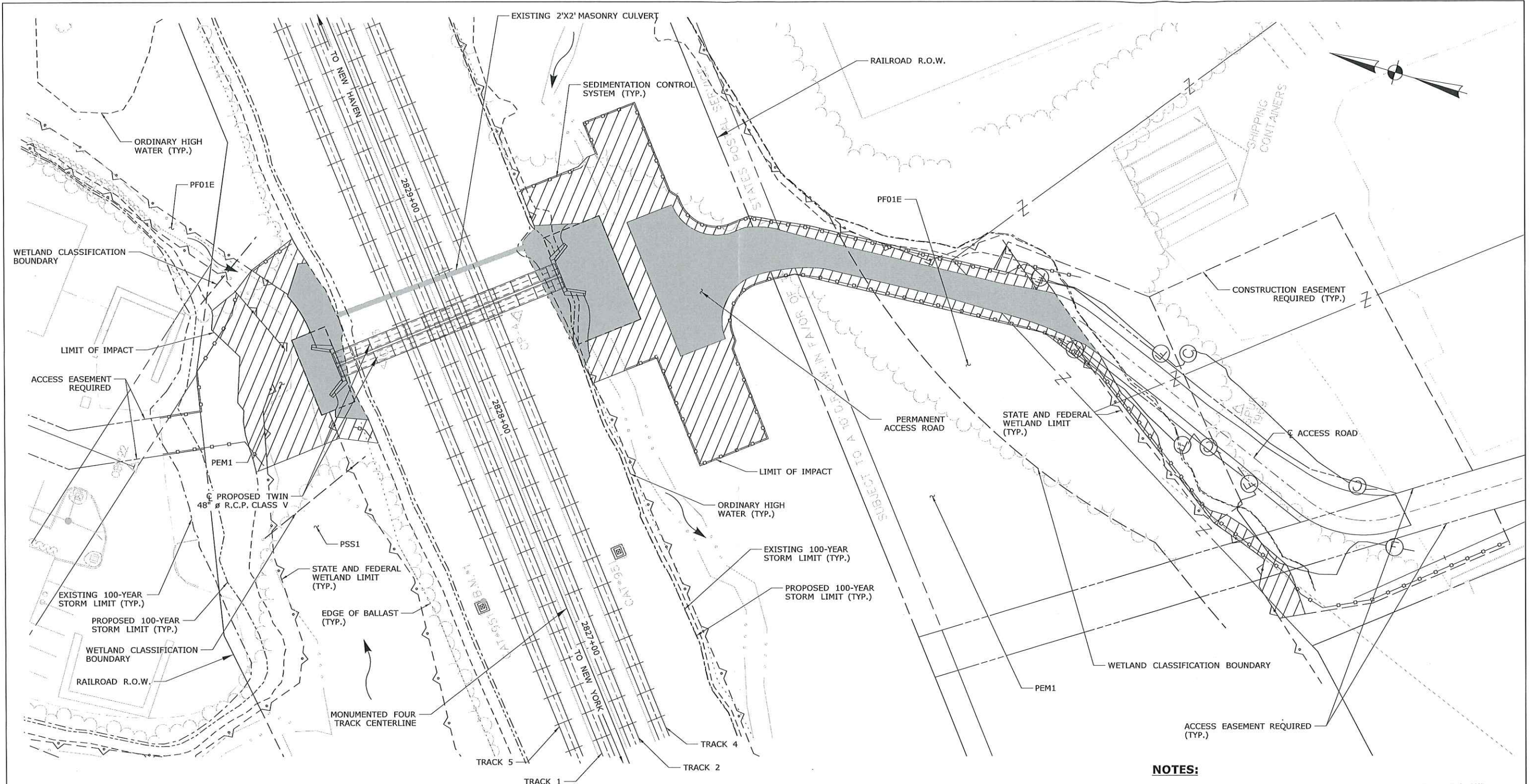


LOCHNER
H.W. LOCHNER, INC.
55 Hartland Street
East Hartford, CT 06108
APPROVED BY: DATE:
RB 3-23-18

PROJECT TITLE:
**REPLACEMENT OF CULVERT AT
MP 65.60 NEW HAVEN MAINLINE
OVER UNNAMED STREAM**

TOWN:
MILFORD
DRAWING TITLE:
TITLE SHEET

PROJECT NO.
301-175
DRAWING NO.
ENV-01
SHEET NO.
1 OF 10



WETLAND IMPACT TABLE				
	WETLAND SITE NO.	WATERWAY IMPACTS	WETLAND IMPACTS	TOTAL
PERMANENT IMPACTS	1	815 S.F. (0.018 AC.)	5,605 S.F. (0.129 AC.)	6,420 S.F. (0.148 AC.)
TEMPORARY IMPACTS	1	2,165 S.F. (0.050 AC.)	7,165 S.F. (0.164 AC.)	9,330 S.F. (0.214 AC.)
TOTAL IMPACTS		2,980 S.F. (0.068 AC.)	12,770 S.F. (0.293 AC.)	15,750 S.F. (0.362 AC.)

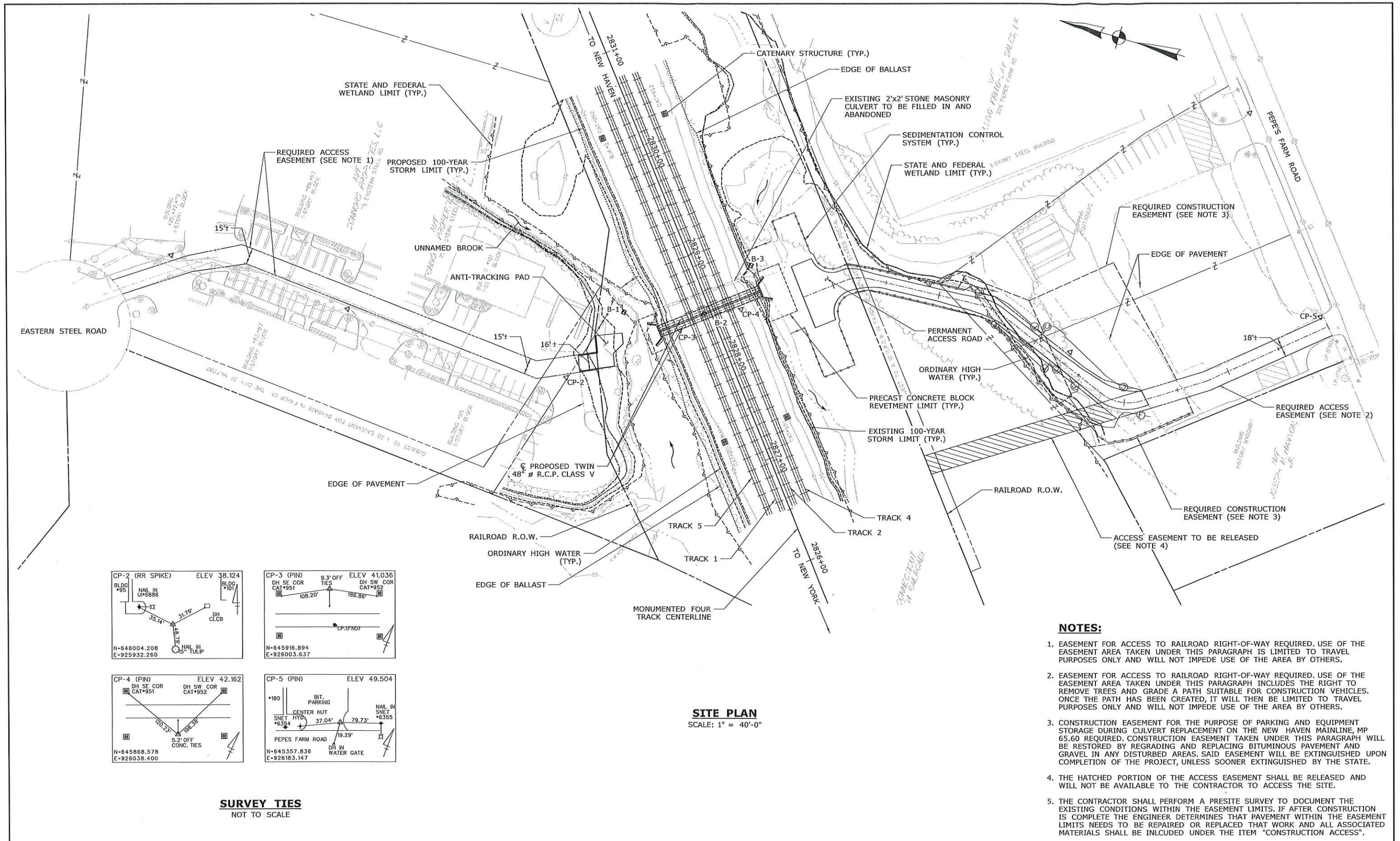
WETLAND IMPACT PLAN
SCALE: 1" = 20'-0"

LEGEND

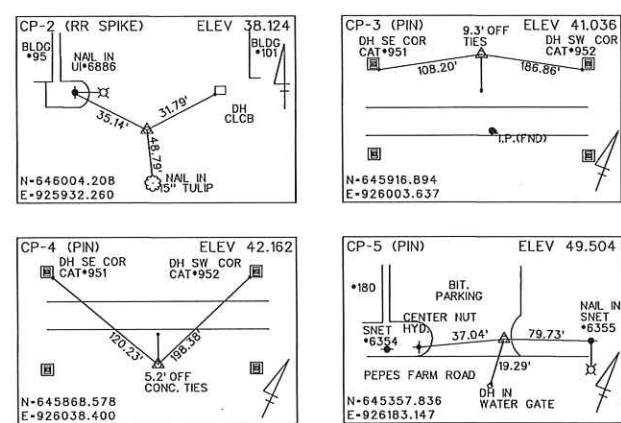
- PERMANENT IMPACT
- TEMPORARY IMPACT
- SEDIMENTATION CONTROL SYSTEM

- NOTES:**
- CONTRACTOR SHALL NOT WORK WITHIN THE LIMITS OF THE WETLANDS AND WATERCOURSE WITH THE EXCEPTION OF THOSE AREAS DELINEATED AS TEMPORARY OR PERMANENT IMPACTS TO THE WETLANDS AND WATERCOURSE. ALL DISTURBED AREAS SHALL BE RESTORED.
 - DUE TO THE LOCATION OF THE PROJECT BETWEEN HIGHLY DEVELOPED INDUSTRIAL AREAS AND THE RAIL LINE EMBANKMENTS, THE ORDINARY HIGH WATER (OHW) LINE HAS BEEN DETERMINED TO BE EITHER NEARLY COINCIDENT WITH THE WETLAND LIMITS (OUTLET) OR JUST ABOVE THE WETLAND LIMIT (INLET). AT THE INLET IN PARTICULAR, LOCALIZED FREQUENT INUNDATION OCCURS ABOVE THE WETLAND LINE, HOWEVER, DUE TO THE FACT THAT WATERS POND ON DISTURBED SURFACES, NO WETLAND CONDITIONS DEVELOP. THE 'TOTAL IMPACTS' AS PRESENTED IN THE PERMIT REPRESENT THE FOOTPRINT OUT-TO-OUT, TO THE OHW LIMITS; THE 'WETLAND' IMPACTS REPORTED ARE THE PORTION WITHIN THE TOTAL THAT ARE STRICTLY VEGETATED WETLANDS.

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>REV.</th> <th>DATE</th> <th>REVISION DESCRIPTION</th> <th>SHEET NO.</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	REV.	DATE	REVISION DESCRIPTION	SHEET NO.					<p style="font-size: small;">THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.</p>	<p style="font-size: x-small;">DESIGNER/DRAFTER: D.M. / C.R.</p> <p style="font-size: x-small;">CHECKED BY: R.B.</p> <p style="font-size: x-small;">SCALE AS NOTED</p>	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p> <p style="font-size: x-small;">FILENAME: ...\\SB.MSH.MP65.60.0301.0175.4.1 Wetland.dgn</p>	<p style="font-size: x-small;">LOCHNER H.W. LOCHNER, INC. 55 Hartland Street East Hartford, CT 06108</p> <p style="font-size: x-small;">APPROVED BY: DATE: R.B. 3-23-18</p>	<p style="font-size: x-small;">PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM</p>	<p style="font-size: x-small;">TOWN: MILFORD</p> <p style="font-size: x-small;">DRAWING TITLE: WETLAND IMPACT PLAN</p>	<p style="font-size: x-small;">PROJECT NO. 301-175</p> <p style="font-size: x-small;">DRAWING NO. ENV-02</p> <p style="font-size: x-small;">SHEET NO. 2 OF 10</p>
REV.	DATE	REVISION DESCRIPTION	SHEET NO.												



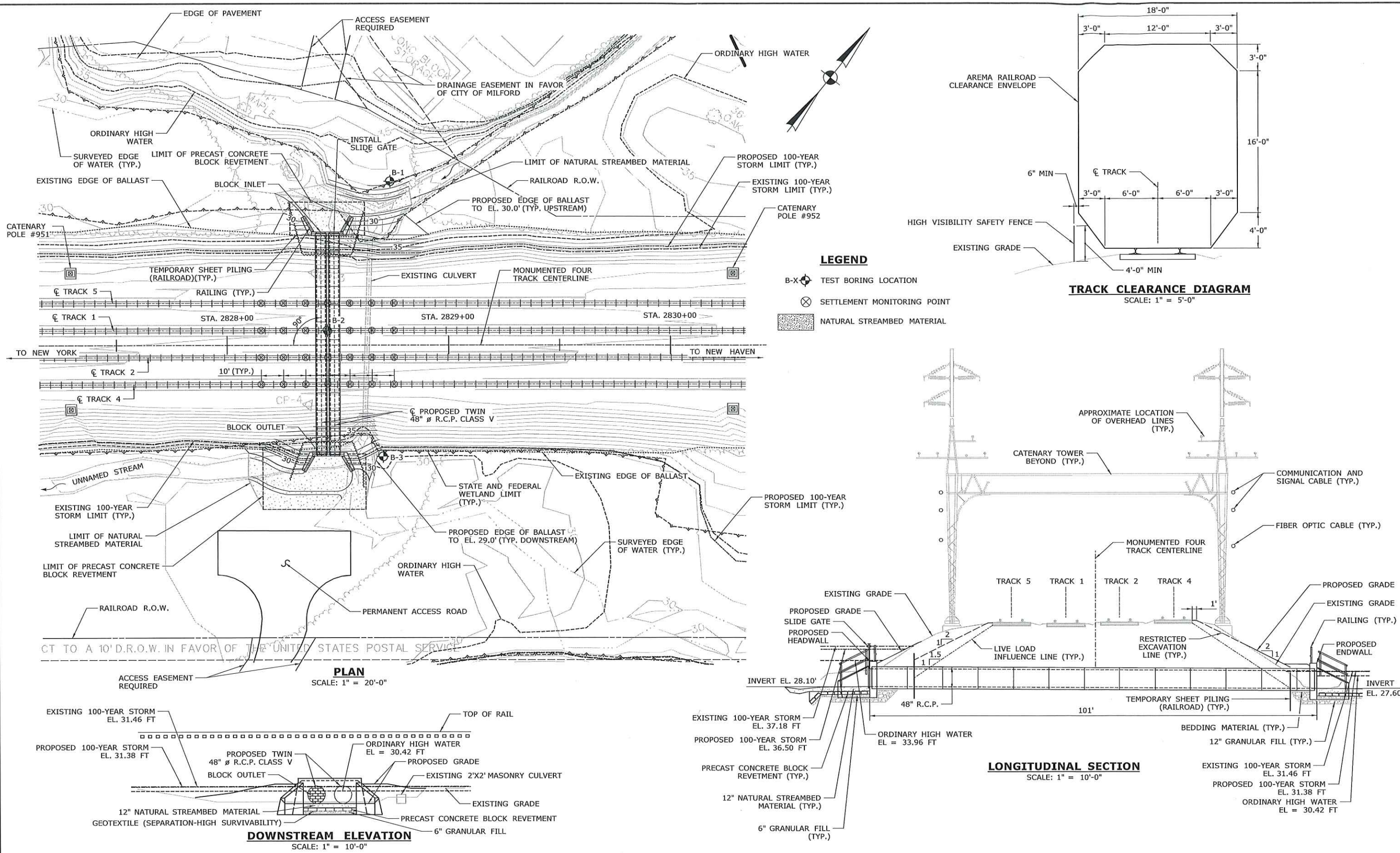
- NOTES:**
- EASEMENT FOR ACCESS TO RAILROAD RIGHT-OF-WAY REQUIRED. USE OF THE EASEMENT AREA TAKEN UNDER THIS PARAGRAPH IS LIMITED TO TRAVEL PURPOSES ONLY AND WILL NOT IMPEDE USE OF THE AREA BY OTHERS.
 - EASEMENT FOR ACCESS TO RAILROAD RIGHT-OF-WAY REQUIRED. USE OF THE EASEMENT AREA TAKEN UNDER THIS PARAGRAPH INCLUDES THE RIGHT TO REMOVE TREES AND GRADE A PATH SUITABLE FOR CONSTRUCTION VEHICLES. ONCE THE PATH HAS BEEN CREATED, IT WILL THEN BE LIMITED TO TRAVEL PURPOSES ONLY AND WILL NOT IMPEDE USE OF THE AREA BY OTHERS.
 - CONSTRUCTION EASEMENT FOR THE PURPOSE OF PARKING AND EQUIPMENT STORAGE DURING CULVERT REPLACEMENT ON THE NEW HAVEN MAINLINE, MP 65.60 REQUIRED. CONSTRUCTION EASEMENT TAKEN UNDER THIS PARAGRAPH WILL BE RESTORED BY REGRADING AND REPLACING BITUMINOUS PAVEMENT AND GRAVEL IN ANY DISTURBED AREAS. SAID EASEMENT WILL BE EXTINGUISHED UPON COMPLETION OF THE PROJECT, UNLESS SOONER EXTINGUISHED BY THE STATE.
 - THE HATCHED PORTION OF THE ACCESS EASEMENT SHALL BE RELEASED AND WILL NOT BE AVAILABLE TO THE CONTRACTOR TO ACCESS THE SITE.
 - THE CONTRACTOR SHALL PERFORM A PRESITE SURVEY TO DOCUMENT THE EXISTING CONDITIONS WITHIN THE EASEMENT LIMITS. IF AFTER CONSTRUCTION IS COMPLETE THE ENGINEER DETERMINES THAT PAVEMENT WITHIN THE EASEMENT LIMITS NEEDS TO BE REPAIRED OR REPLACED THAT WORK AND ALL ASSOCIATED MATERIALS SHALL BE INCLUDED UNDER THE ITEM "CONSTRUCTION ACCESS".



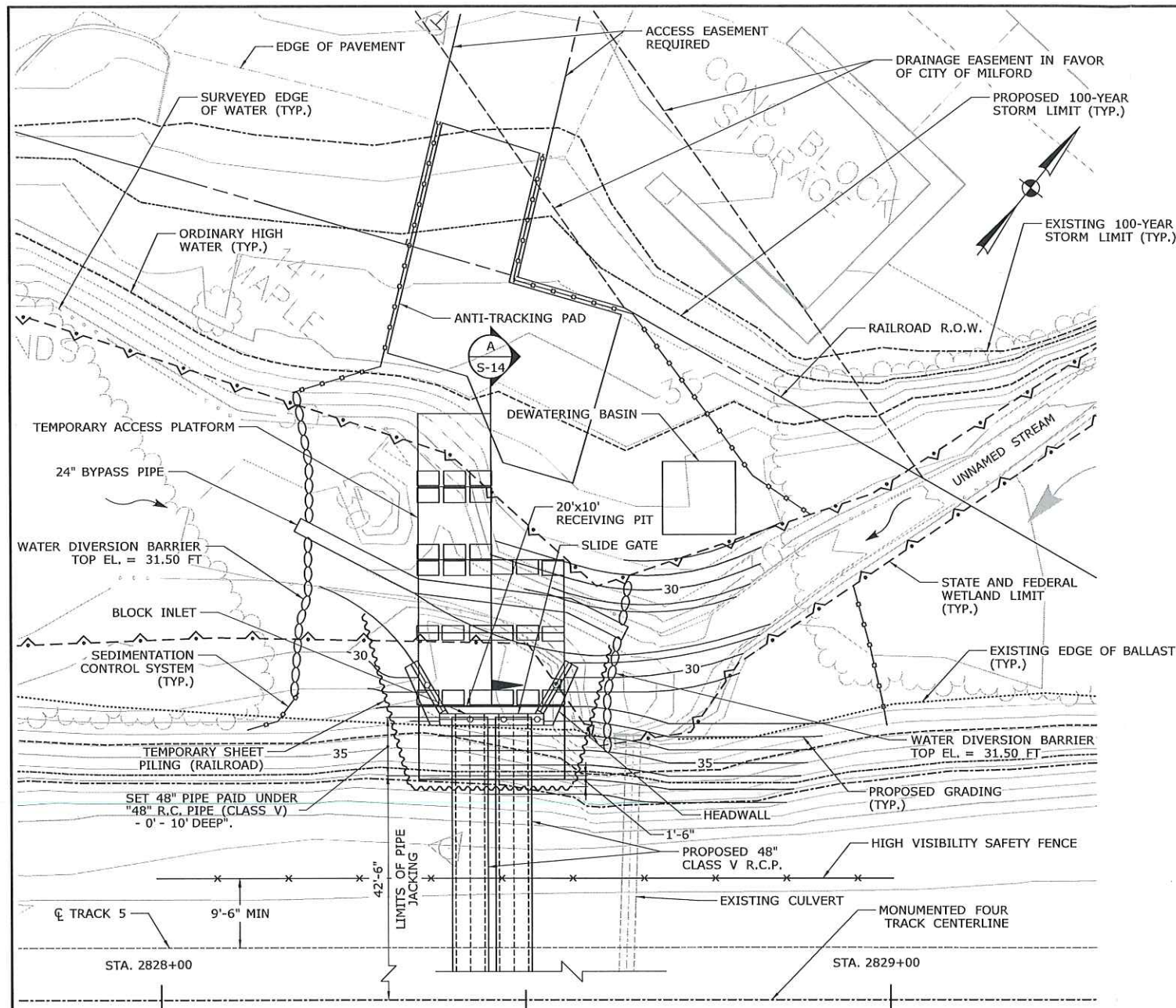
SURVEY TIES
 NOT TO SCALE

SITE PLAN
 SCALE: 1" = 40'-0"

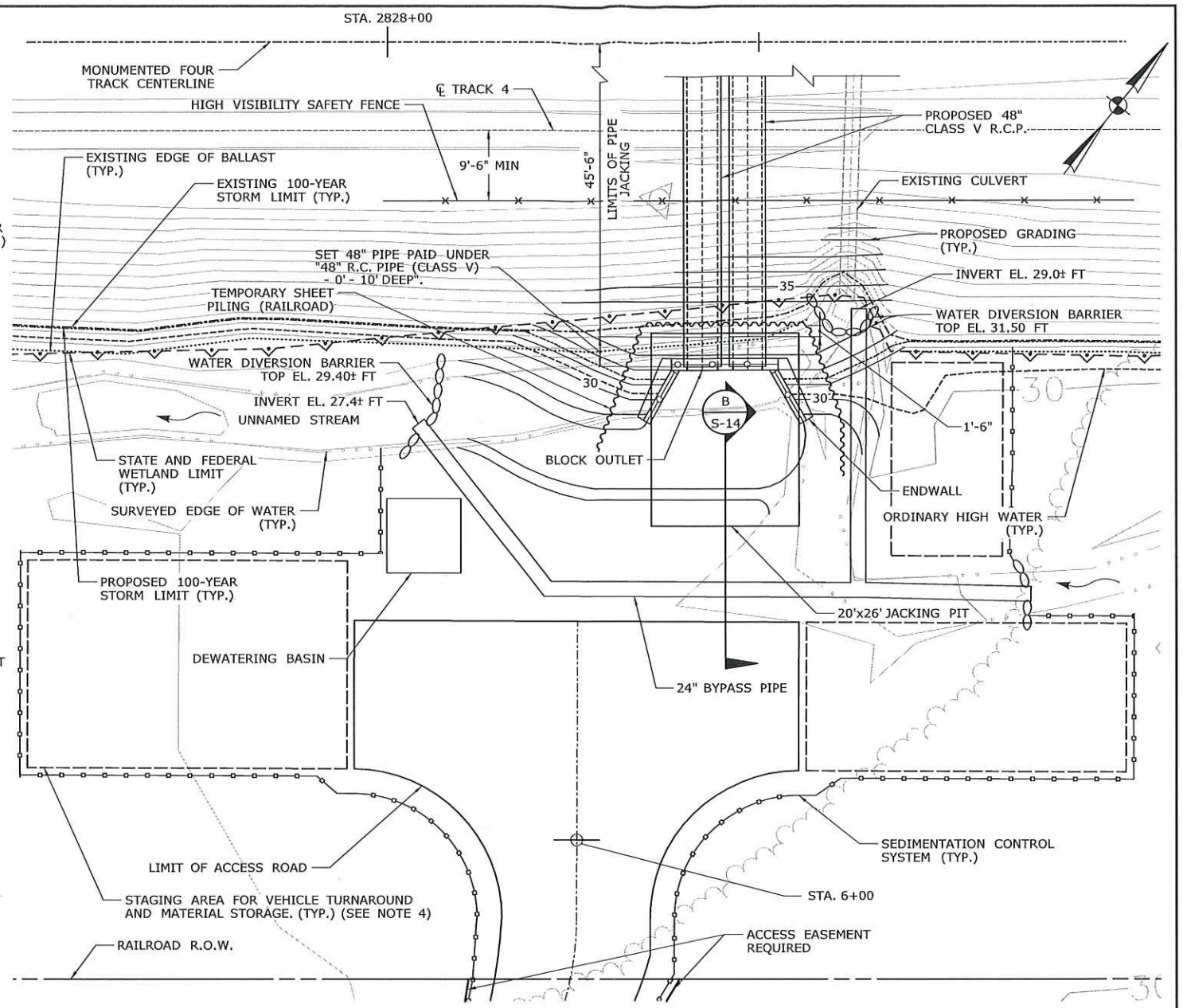
DESIGNER/DRAFTER: D.M./C.R.		LOCHNER H.W. LOCHNER, INC. 55 Hartland Street, Suite 401 East Hartford, CT 06108 APPROVED BY: R.B. DATE: 3-23-18	PROJECT TITLE:	TOWN:	PROJECT NO.
CHECKED BY: R.B.			REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	MILFORD	301-175
SCALE AS NOTED	FILENAME: ...\\SB_MSH_MP65.60_0301_0175_3.2 Site Plan.dgn		DRAWING TITLE:	SITE PLAN	ENV-03
REV. DATE REVISION DESCRIPTION SHEET NO. PLOTTED: 3/23/2018					3 OF 10



THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	DESIGNER/DRAFTER: D.M./C.R. CHECKED BY: R.B. SCALE AS NOTED	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION FILENAME: ...\\SB_MSH.MP65.60_0301_0175_3.3_GenPlan.dgn	PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	TOWN: MILFORD DRAWING TITLE: GENERAL PLAN	PROJECT NO. 301-175 DRAWING NO. ENV-04 SHEET NO. 4 OF 10
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PLAN AT INLET
SCALE: 1" = 10'-0"



PLAN AT OUTLET
SCALE: 1" = 10'-0"

SEQUENCE OF CONSTRUCTION NOTES STAGE - 1

1. INSTALL SEDIMENTATION CONTROL SYSTEM AND HIGH VISIBILITY SAFETY FENCE.
2. CONSTRUCT ANTI-TRACKING PADS AND ACCESS ROAD.
3. INSTALL WATER HANDLING SYSTEM
4. ESTABLISH SETTLEMENT MONITORING POINTS AT APPROVED LOCATIONS AND BEGIN TAKING MEASUREMENTS AS REQUIRED.
5. EXCAVATE EXISTING CHANNEL BOTTOM MATERIAL AND STORE AT APPROVED LOCATION.
6. INSTALL TEMPORARY SHEET PILING (RAILROAD), EXCAVATE AND INSTALL JACKING AND RECEIVING PITS.
7. JACK PIPES 1 AND 2 THROUGH THE RAILROAD EMBANKMENT
8. PLACE BEDDING MATERIAL AND SET REMAINING SECTIONS OF PIPE
9. CONSTRUCT HEADWALL AND ENDWALL.
10. INSTALL RAILING, SLIDE GATE AND BLOCK OFF PIPE 2.
11. INSTALL PRECAST CONCRETE BLOCK REVETMENT.

GENERAL NOTES:

1. THE SIZE OF THE JACKING AND RECEIVING PITS IS APPROXIMATE AND IS SHOWN HERE ONLY AS A REFERENCE. THE CONTRACTOR SHALL DETERMINE THE ACTUAL SIZE REQUIRED TO COMPLETE THE JACKING OPERATION. THE COST OF JACKING AND RECEIVING PITS SHALL BE PAID UNDER THE ITEM "JACKING 48" R.C. PIPE (CLASS V) - 0' - 20' DEEP".
2. THE COST OF FURNISHING AND INSTALLING THE BYPASS PIPES, WATER DIVERSION BARRIERS AND NECESSARY INCIDENTAL APPURTENANCES REQUIRED FOR BYPASSING THE STREAM AROUND THE SITE SHALL BE INCLUDED IN THE COST OF THE ITEM "HANDLING WATER".
3. ALL WATER PUMPED FROM CONSTRUCTION AREAS ISOLATED BY THE WATER DIVERSION BARRIER IS TO BE HANDLED THROUGH THE TEMPORARY DEWATERING BASIN. COST OF TEMPORARY DEWATERING BASIN SHALL BE INCLUDED IN THE COST OF THE ITEM "HANDLING WATER".
4. STAGING AREAS USED FOR CONSTRUCTION ACTIVITIES SHALL USE MATS TO SUPPORT ANY AND ALL OF THE CONTRACTORS EQUIPMENT. THE MATS SHALL BE APPROVED BY THE ENGINEER AND REMOVED UPON COMPLETION OF THE WORK. COST OF MATS TO BE INCLUDED IN THE PRICE OF THE ITEM "CONSTRUCTION ACCESS".

5. CONSTRUCTION MATS SHALL BE THOROUGHLY CLEANED BEFORE USE TO PREVENT THE SPREAD OF INVASIVE SPECIES.
6. THE ENDWALLS AND 48" R.C.P. SHALL BE FOUNDED ON GRANULAR FILL OR BEDDING MATERIAL AS SHOWN ON THE DETAIL DRAWINGS. IF THE OVERLYING ORGANIC CLAYEY SILT LAYER EXTENDS BELOW THE BOTTOM OF THE GRANULAR FILL OR BEDDING MATERIAL AT THESE LOCATIONS IT SHALL BE REMOVED AND REPLACED WITH THE BEARING MATERIAL SPECIFIED AT THAT LOCATION.
7. SUBGRADE PREPARATION SHALL BE CONDUCTED IN A WAY TO MINIMIZE DISTURBANCE. THE FINAL 6" OF EXCAVATION SHALL BE MADE WITH A SMOOTH-EDGE BLADE OR HAND SHOVELED.
8. NATURAL STREAMBED MATERIAL SHALL BE PAID FOR UNDER ITEM "EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL".

TEMPORARY HYDRAULIC DATA - UNNAMED STREAM	
AVERAGE DAILY FLOW	0.2 CFS
AVERAGE SPRING FLOW	0.4 CFS
2-YEAR FREQUENCY DISCHARGE	111 CFS
TEMPORARY DESIGN DISCHARGE	4 CFS
TEMPORARY DESIGN FREQUENCY	10X SPRING FLOW
TEMPORARY WATER SURFACE ELEVATION UPSTREAM	30.94 FT
TEMPORARY WATER SURFACE ELEVATION DOWNSTREAM	27.53 FT

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 3/23/2018

DESIGNER/DRAFTER: D.M./C.R.
 CHECKED BY: R.B.
 SCALE AS NOTED

STATE OF CONNECTICUT
 DEPARTMENT OF TRANSPORTATION

FILENAME: ...ISB_MSH_MP65.60_0301-0175-3.7_STG1.dgn

LOCHNER
 H.W. LOCHNER, INC.
 55 Hartland Street, Suite 401
 East Hartford, CT 06108

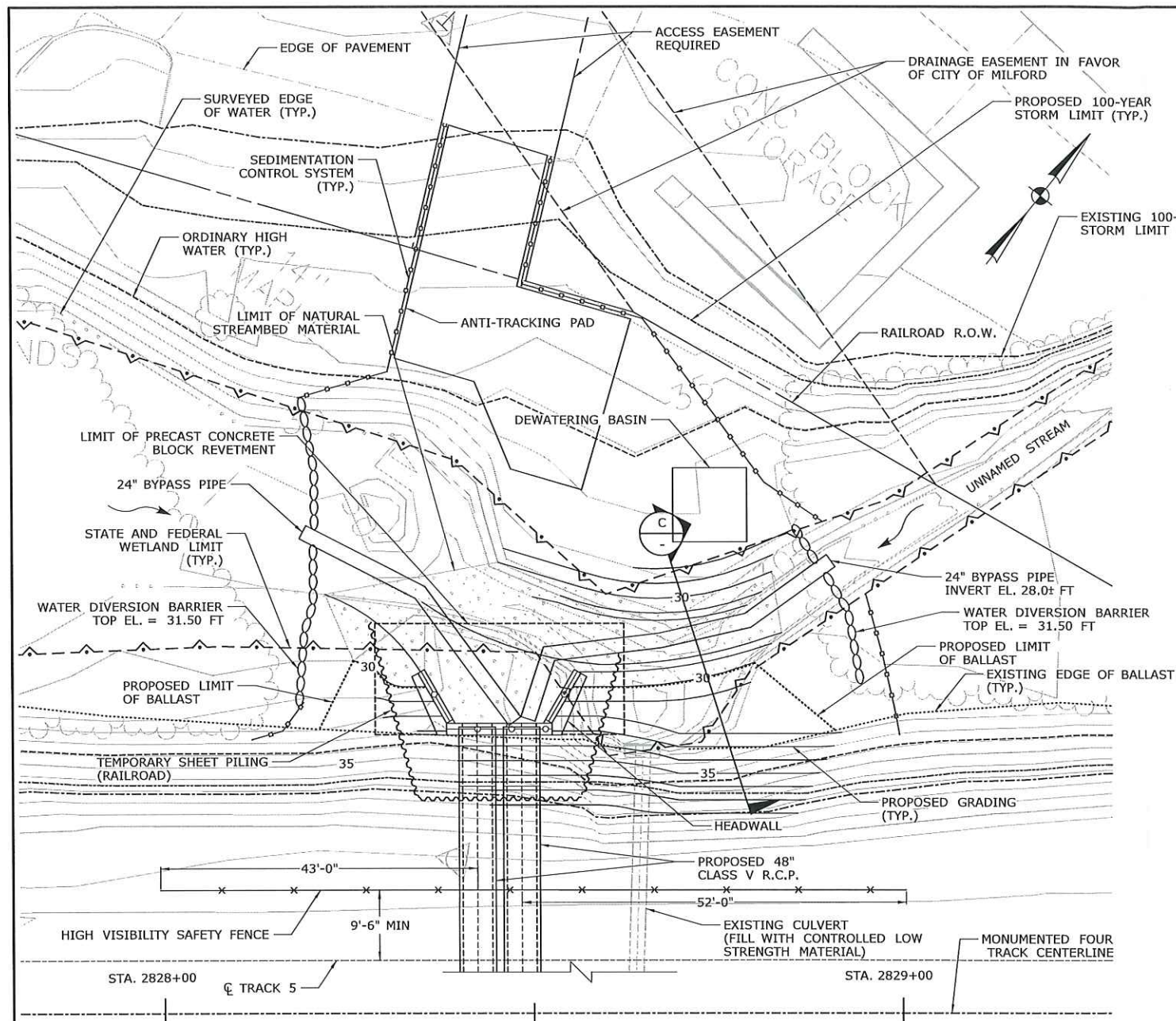
APPROVED BY: R.B. DATE: 3-23-18

PROJECT TITLE:
**REPLACEMENT OF CULVERT AT
 MP 65.60 NEW HAVEN MAINLINE
 OVER UNNAMED STREAM**

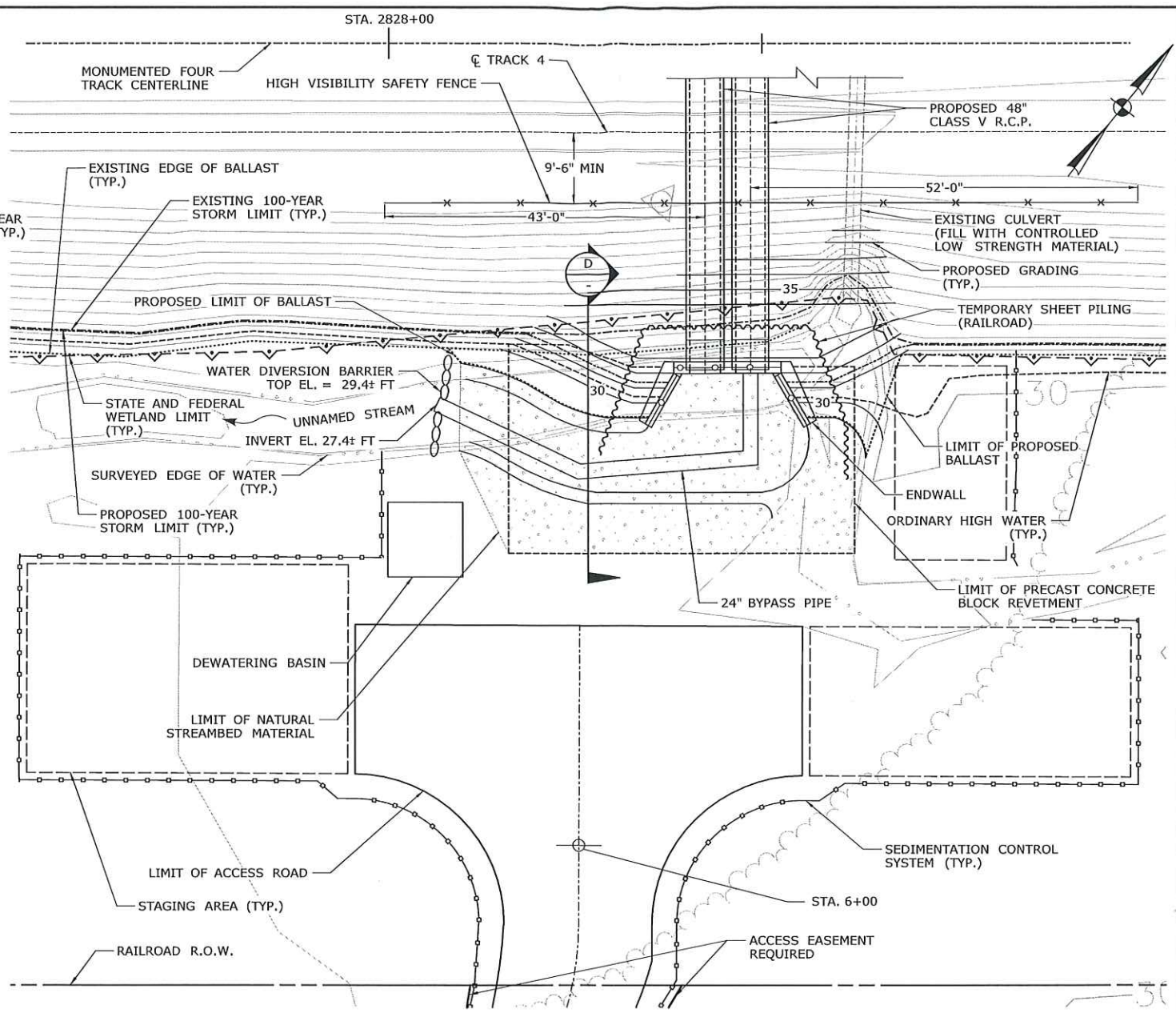
TOWN: **MILFORD**

DRAWING TITLE:
CONSTRUCTION STAGE-1

PROJECT NO.: **301-175**
 DRAWING NO.: **ENV-05**
 SHEET NO.: **5 OF 10**



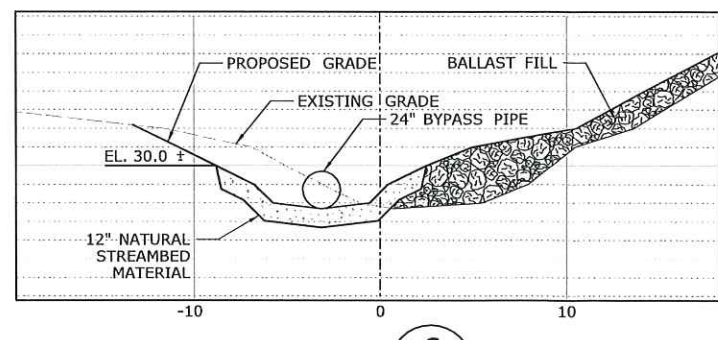
PLAN AT INLET
SCALE: 1" = 10'-0"



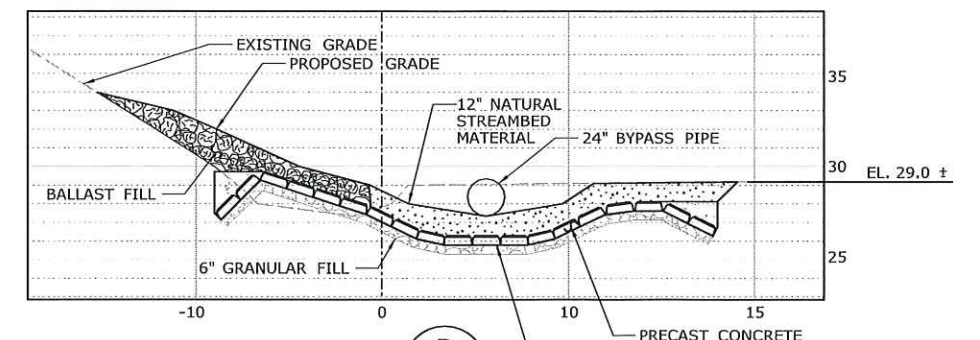
PLAN AT OUTLET
SCALE: 1" = 10'-0"

SEQUENCE OF CONSTRUCTION NOTES STAGE - 2

1. MODIFY WATER HANDLING TO ROUTE WATER THROUGH THE PROPOSED PIPE.
2. PLACE NATURAL STREAMBED MATERIAL. FILL EXISTING CULVERT WITH CONTROLLED LOW STRENGTH MATERIAL.
3. REGRADE RAILROAD EMBANKMENT SLOPES.
4. REMOVE WATER HANDLING SYSTEM, CONSTRUCTION MATS AND MATERIALS USED TO ACCESS THE SITE.
5. PLACE WETLAND SEED MIX ON DISTURBED AREAS WITHIN THE WETLAND LIMITS. WETLAND SEED MIX SHALL NOT BE PLACED OVER NATURAL STREAMBED MATERIAL, BALLAST OR THE PERMANENT ACCESS ROAD. TO BE PAID FOR UNDER ITEM "WETLAND GRASS ESTABLISHMENT".
6. PLACE TOPSOIL AND CONSERVATION SEEDING FOR SLOPES ON DISTURBED EMBANKMENT SLOPES ADJACENT TO THE ACCESS ROAD AND OUTSIDE THE WETLAND LIMITS.

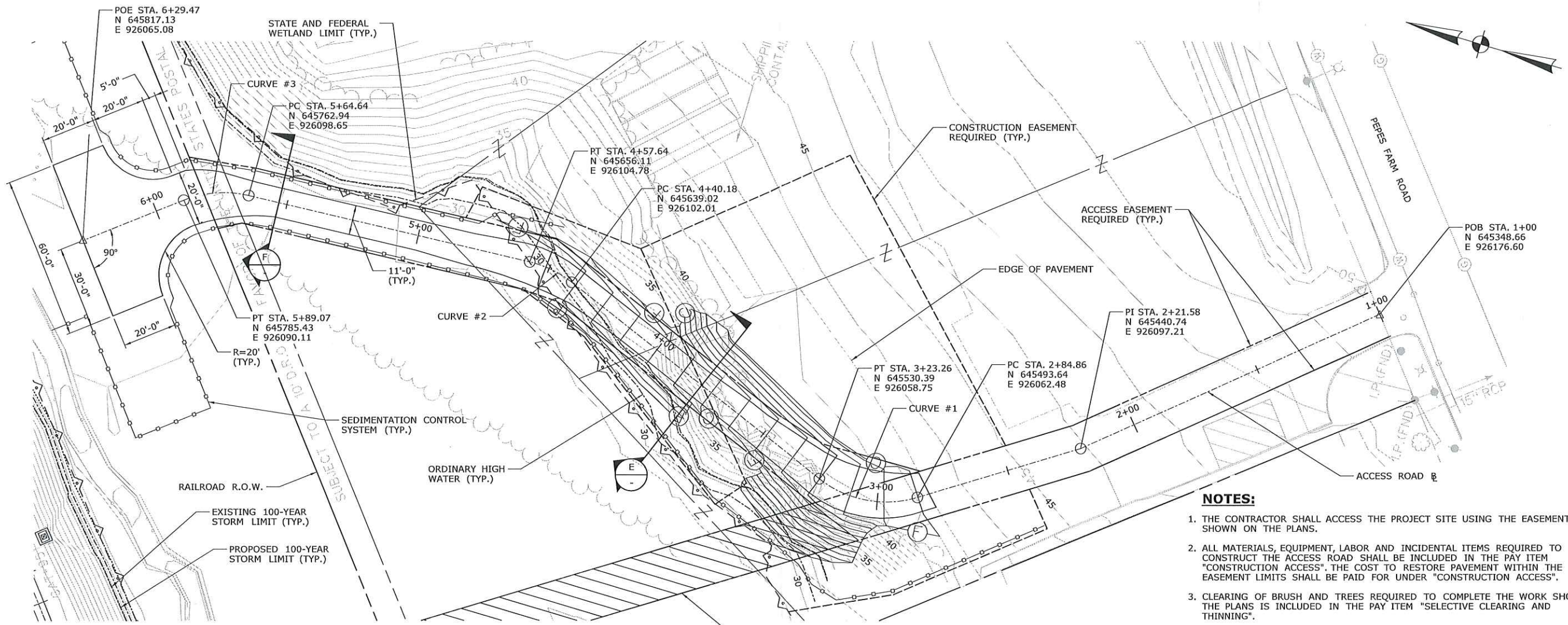


SECTION C
TYPICAL CHANNEL SECTION UPSTREAM
SCALE: 1" = 5'-0"



SECTION D
TYPICAL CHANNEL SECTION DOWNSTREAM
SCALE: 1" = 5'-0"

REV. DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 4/6/2018	DESIGNER/DRAFTER: D.M./C.R.	CHECKED BY: R.B.	SCALE AS NOTED	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	LOCHNER H.W. LOCHNER, INC. 55 Hartland Street, Suite 401 East Hartford, CT 06108	APPROVED BY: R.B.	DATE: 3-23-18	PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	TOWN: MILFORD	PROJECT NO. 301-175
												DRAWING TITLE: CONSTRUCTION STAGE-2	DRAWING NO. ENV-06
													SHEET NO. 6 OF 10



CURVE DATA

CURVE #1	CURVE #2	CURVE #3
Δ = 55°	Δ = 25°	Δ = 35°
T = 20.82'	T = 8.87'	T = 12.61'
L = 38.40'	L = 17.45'	L = 24.43'
R = 40'	R = 40'	R = 40'
PI N = 645511.05	PI N = 645647.26	PI N = 645775.53
PI E = 926051.05	PI E = 926105.29	PI E = 926097.92

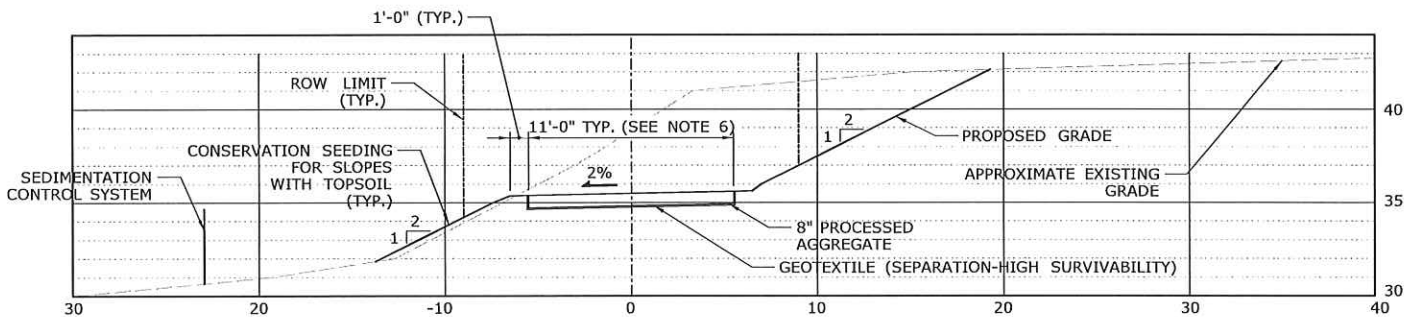
ACCESS ROAD PLAN

SCALE: 1" = 20'-0"

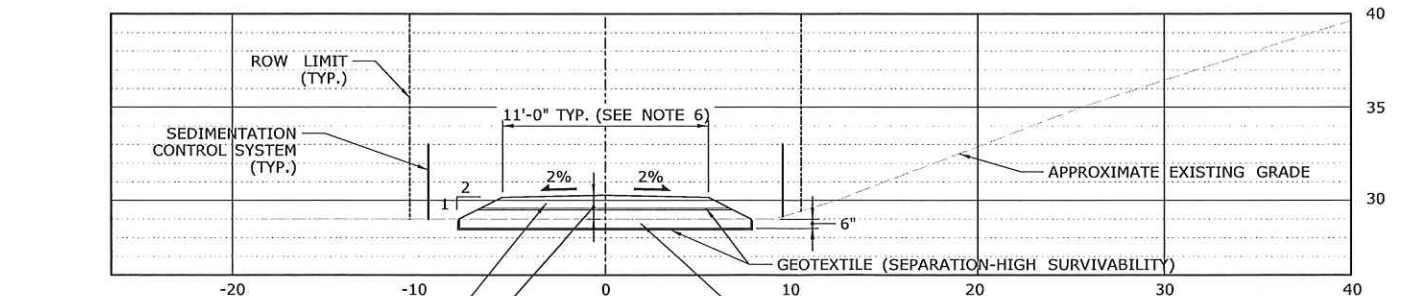
NOTES:

1. THE CONTRACTOR SHALL ACCESS THE PROJECT SITE USING THE EASEMENTS SHOWN ON THE PLANS.
2. ALL MATERIALS, EQUIPMENT, LABOR AND INCIDENTAL ITEMS REQUIRED TO CONSTRUCT THE ACCESS ROAD SHALL BE INCLUDED IN THE PAY ITEM "CONSTRUCTION ACCESS". THE COST TO RESTORE PAVEMENT WITHIN THE EASEMENT LIMITS SHALL BE PAID FOR UNDER "CONSTRUCTION ACCESS".
3. CLEARING OF BRUSH AND TREES REQUIRED TO COMPLETE THE WORK SHOWN ON THE PLANS IS INCLUDED IN THE PAY ITEM "SELECTIVE CLEARING AND THINNING".
4. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS UPON THE COMPLETION OF THE GRADING WORK. WETLAND SEED MIX SHALL BE USED WITHIN THE WETLAND LIMITS. THE RAILROAD EMBANKMENT ABOVE THE LIMIT OF BALLAST, AREAS OF NATURAL STREAMBED MATERIAL AND THE ACCESS ROAD SHALL NOT BE SEEDED. CONSERVATION SEED MIX SHALL BE USED ON EMBANKMENT SLOPES ADJACENT TO THE ACCESS ROAD AND OUTSIDE THE WETLANDS.
5. TOPSOIL SHALL BE PLACED ON EMBANKMENT SLOPES ADJACENT TO THE ACCESS ROAD AND OUTSIDE THE WETLAND LIMITS.
6. THE WIDTH OF THE ACCESS ROAD IN THE CURVES SHALL BE INCREASED AS NECESSARY TO PROVIDE SUFFICIENT ROOM FOR VEHICLE MOVEMENTS.

PORTION OF ACCESS EASEMENT TO BE RELEASED, SHALL NOT BE USED FOR ACCESS.

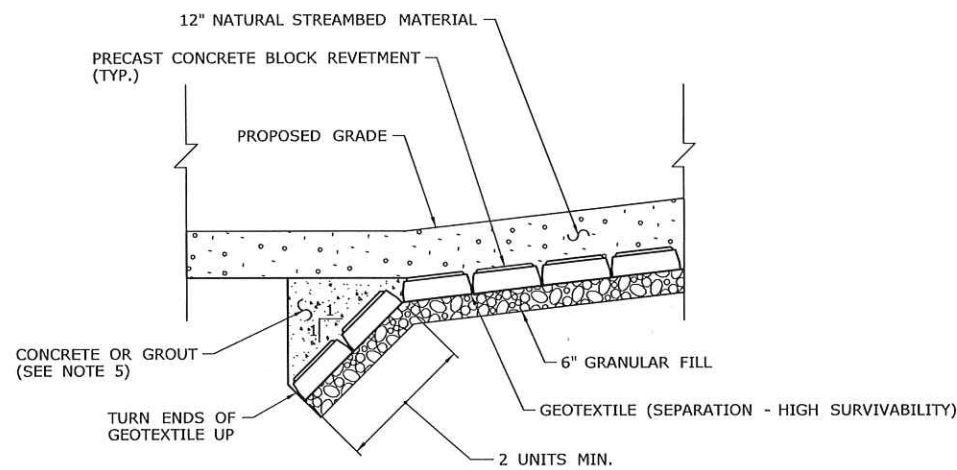


SECTION E
TYPICAL SLOPE SECTION
SCALE: 1" = 5'-0"



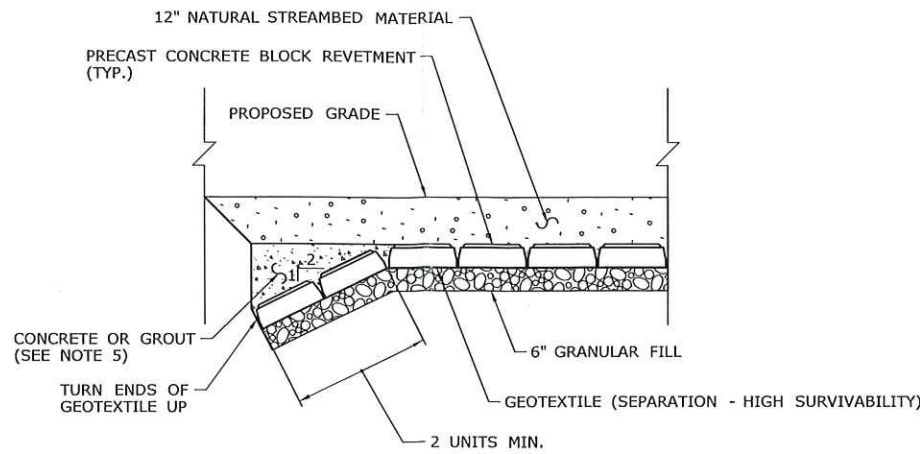
SECTION F
TYPICAL WETLAND SECTION
SCALE: 1" = 5'-0"

DESIGNER/DRAFTER: D.M./C.R.	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p>	<p>LOCHNER H.W. LOCHNER, INC. 55 Hartland Street East Hartford, CT 06108</p>	PROJECT TITLE:	TOWN:	PROJECT NO.
CHECKED BY: R.B.			REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	MILFORD	301-175
SCALE AS NOTED	APPROVED BY: R.B.	DATE: 3-23-18	DRAWING TITLE:		DRAWING NO.
			ACCESS ROAD DETAILS		ENV-07
REV. DATE	REVISION DESCRIPTION	SHEET NO.			SHEET NO.
					7 OF 10



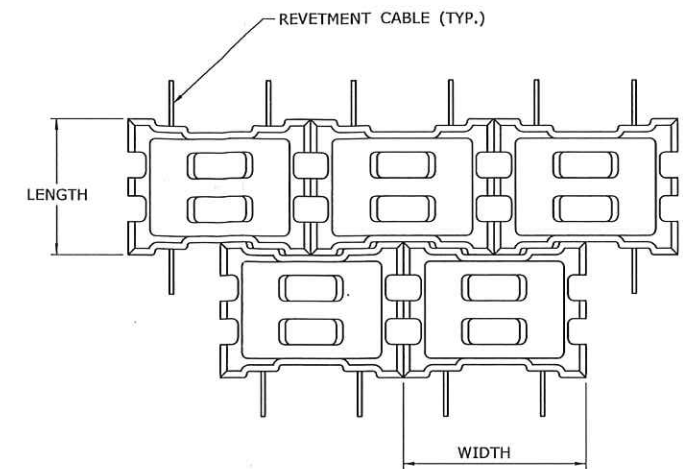
TOE TERMINATION DETAIL

N.T.S.



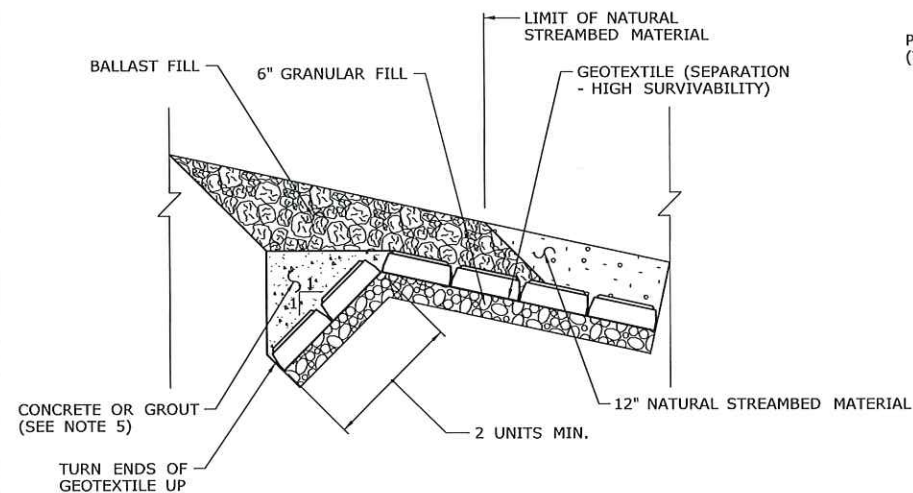
FLANK TERMINATION DETAIL

N.T.S.



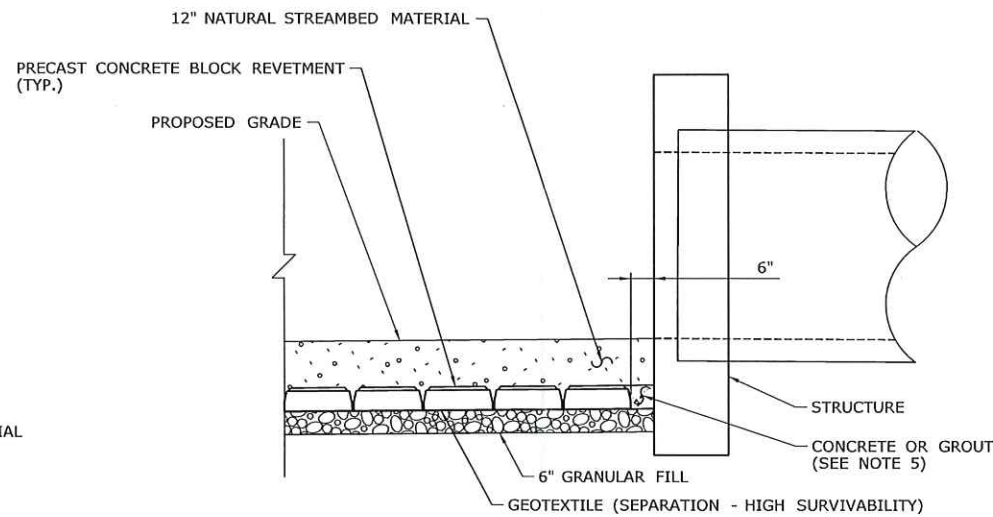
PRECAST CONCRETE BLOCK DETAIL

N.T.S.



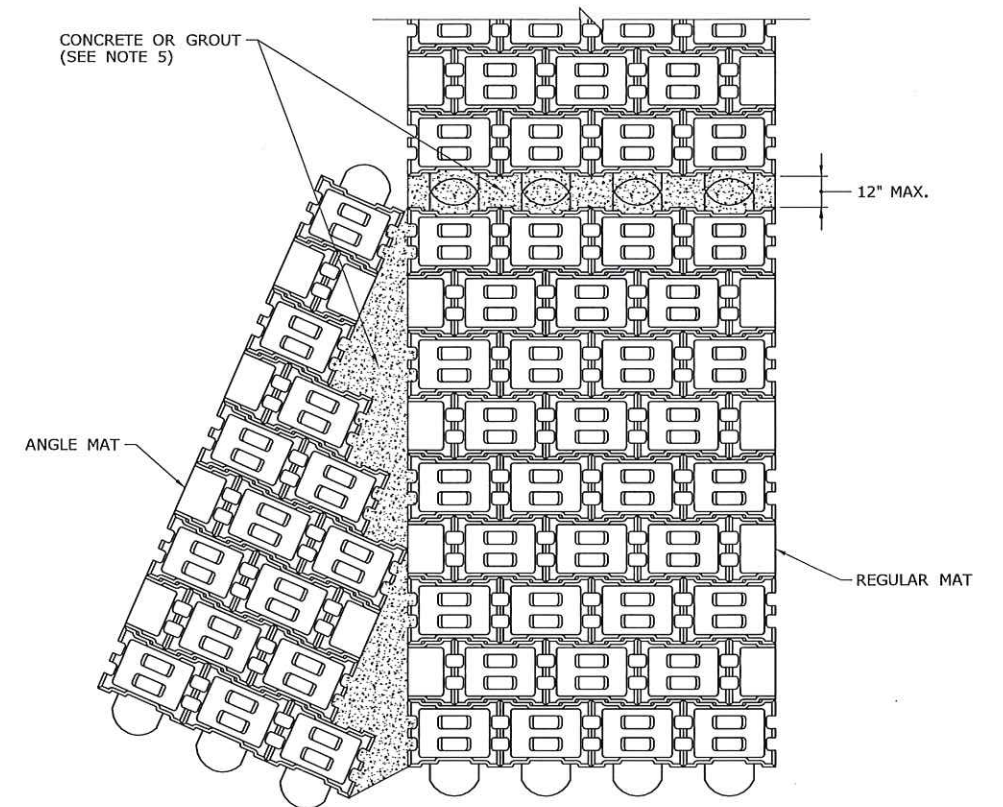
TOP TERMINATION DETAIL

N.T.S.



TERMINATION AT STRUCTURE DETAIL

N.T.S.



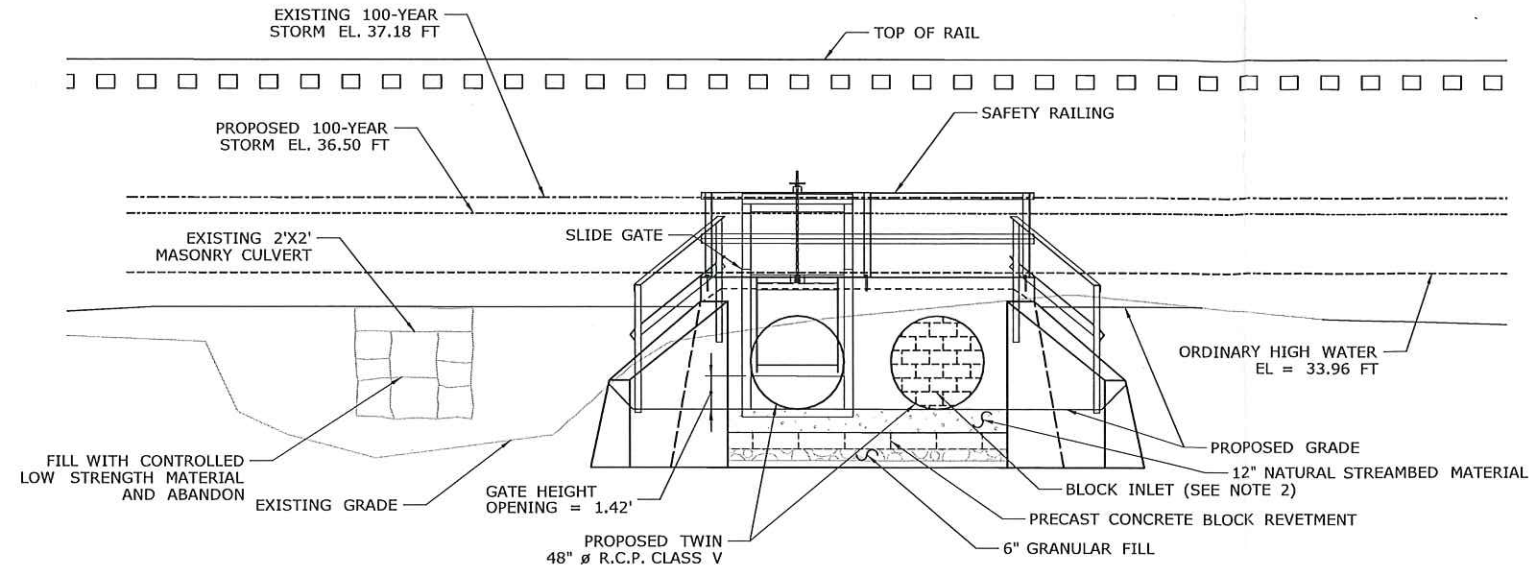
INSTALLATION DETAIL

N.T.S.

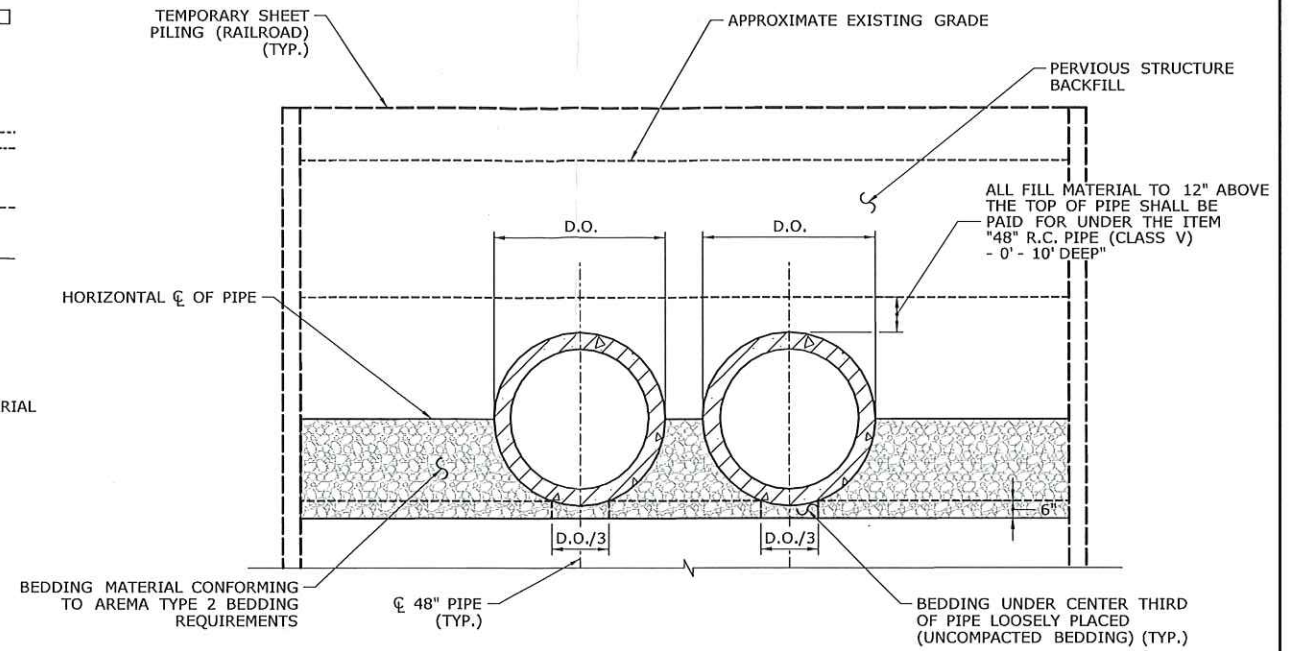
PRECAST CONCRETE BLOCK REVETMENT NOTES:

1. BLOCKS MUST BE OPEN CELL AND NON-TAPERED.
2. THE INSTALLATION OF THE PRECAST CONCRETE BLOCK REVETMENT SYSTEM SHALL BE IN ACCORDANCE WITH ASTM D6884 AND THE MANUFACTURER'S RECOMMENDATIONS.
3. THE 6" LAYER OF GRANULAR FILL, GEOTEXTILE (SEPARATION - HIGH SURVIVABILITY), GROUT OR CONCRETE AND PRECAST CONCRETE BLOCKS SHALL BE PAID FOR UNDER ITEM "PRECAST CONCRETE BLOCK REVETMENT".
4. IF PRECAST CONCRETE BLOCK MATS ARE USED THEY SHALL BE MATCHED UP TO THE GREATEST EXTENT POSSIBLE. GAPS GREATER THAN ONE BLOCK SIZE SHALL BE FILLED WITH A BLOCK. NO OVERLAPPING OF MATS WILL BE ACCEPTED.
5. 4,000 PSI NON SHRINK GROUT OR CONCRETE SHALL BE USED WHERE THE LOOP ENDS OF THE MATS MEET, AT TERMINATION ENDS AS SHOWN AND WHEREVER THERE IS GREATER THAN A 2 INCH GAP BETWEEN ADJACENT MATS OR STRUCTURES.
6. BACKFILLING OF THE REVETMENT SYSTEM WITH NATURAL STREAMBED MATERIAL SHALL BE COMPLETED AS SOON AS PRACTICABLE AFTER THE REVETMENT HAS BEEN INSTALLED.

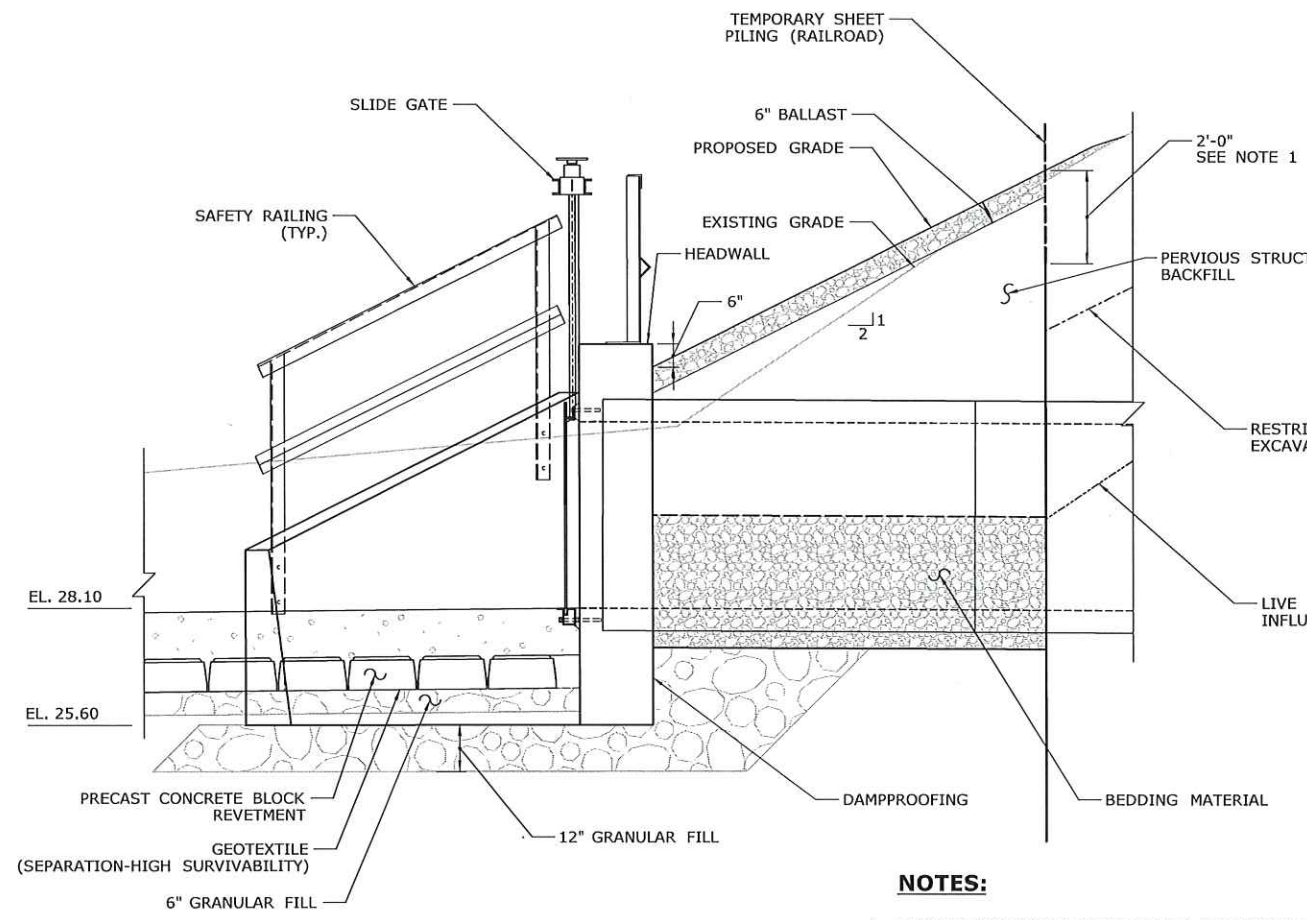
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.			DESIGNER/DRAFTER: D.M. CHECKED BY: R.B. SCALE AS NOTED	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION <small>FILENAME: ...\\SB_MSH_MP65.60_0301_0175_3.12 ACB Det.dgn</small>	LOCHNER H.W. LOCHNER, INC. 55 Hartland Street East Hartford, CT 06108 APPROVED BY: R.B. DATE: 3-23-18	PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	TOWN: MILFORD	PROJECT NO. 301-175 DRAWING NO. ENV-08 SHEET NO. 8 OF 10	
REV. DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 3/23/2018						



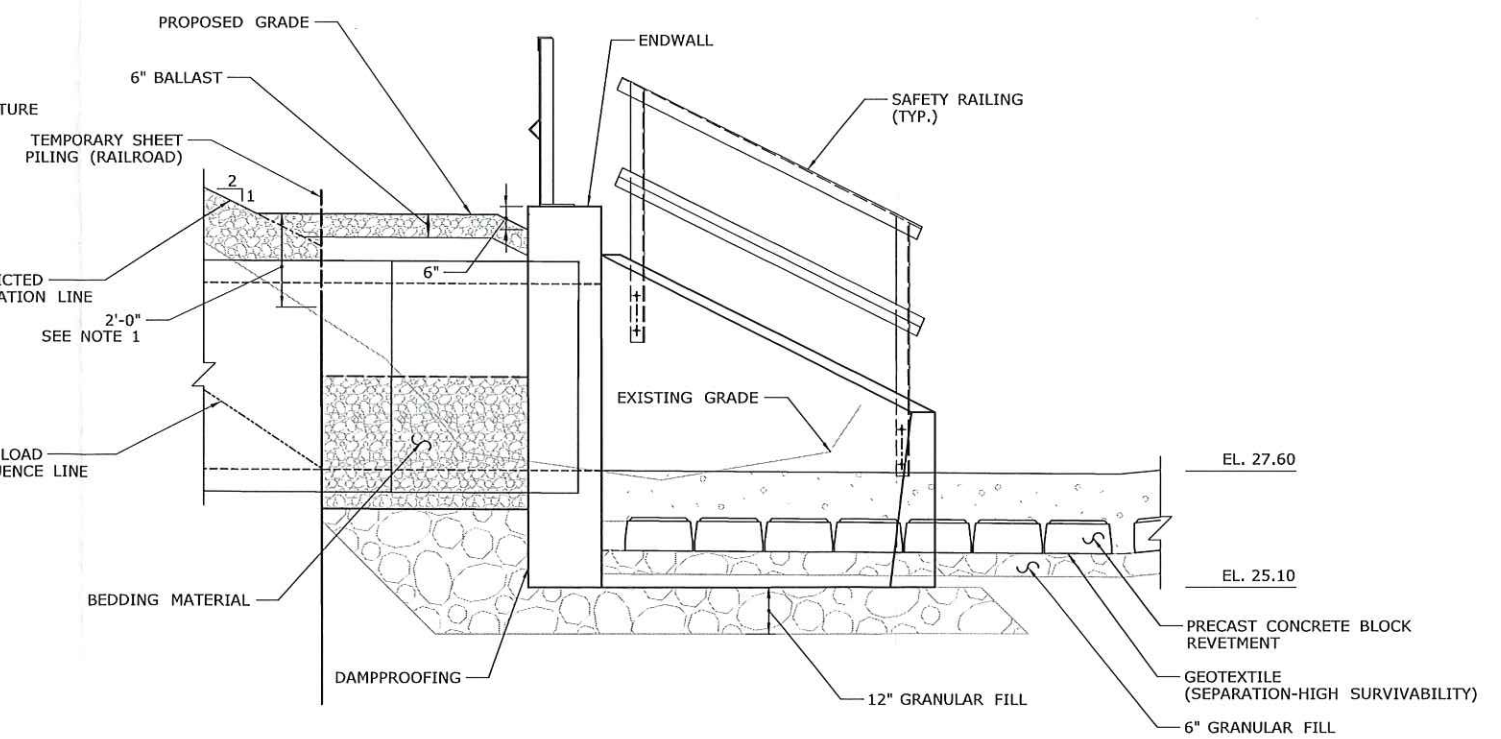
UPSTREAM ELEVATION
SCALE: 1/4"=1'-0"



PROPOSED ENDWALL ELEVATION
SCALE: 3/8"=1'-0"



PROPOSED HEADWALL ELEVATION
SCALE: 1/2"=1'-0"

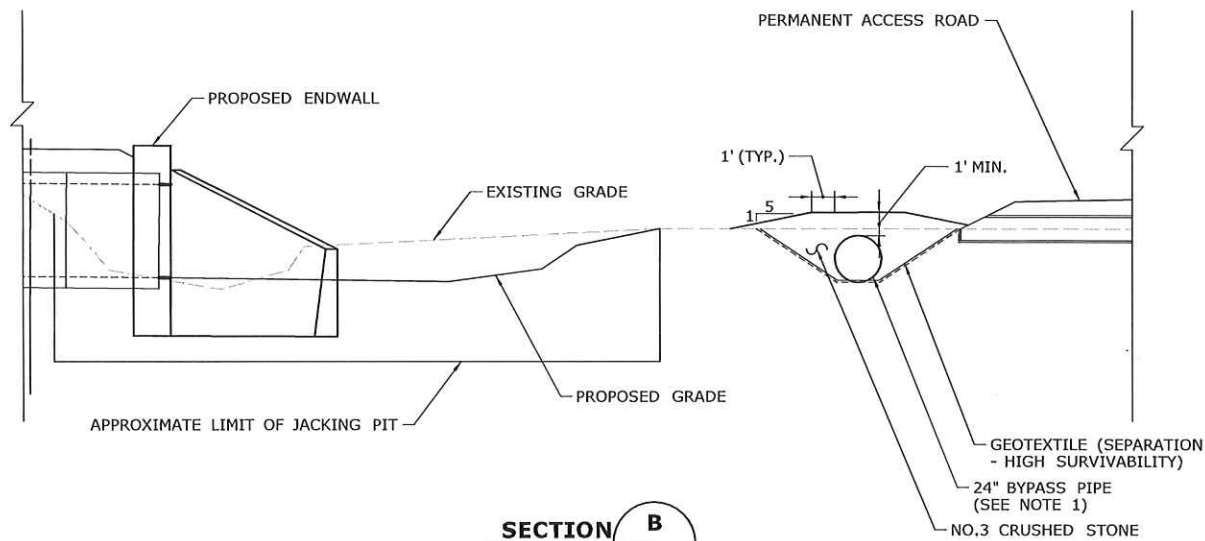


PROPOSED ENDWALL ELEVATION
SCALE: 1/2"=1'-0"

NOTES:

1. REMOVE TEMPORARY SHEET PILING (RAILROAD) 2'-0" BELOW THE PROPOSED GRADE AS SHOWN. THE REST OF THE TEMPORARY SHEET PILING (RAILROAD) SHALL REMAIN IN PLACE.
2. THE INLET AND OUTLET OF THE SUPPLEMENTAL (WESTERN) CULVERT SHALL BE BLOCKED OFF. THE MEANS FOR BLOCKING THE PIPE SHALL BE A MASONRY WALL OR OTHER SYSTEM SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER SUITABLE FOR BLOCKING OFF FLOW FROM THE CULVERT, CAPABLE OF WITHSTANDING PROLONGED EXPOSURE TO WATER AND CAPABLE OF BEING REMOVED WITH NEGLIGIBLE IMPACT ON THE HEADWALL/ENDWALL. THE COST OF BLOCKING OF THE PIPE SHALL BE INCLUDED IN THE ITEM "CLASS "A" CONCRETE".

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: D.M./C.R. CHECKED BY: R.B. SCALE IN FEET SCALE 1"=40' SCALE 1/2"=1'-0"	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION FILENAME: ...\\SB_MSH_MP65.60_0301.0175.3.13 Misc Det 1.dgn	LOCHNER H.W. LOCHNER, IIIC 55 Hartland Street East Hartford, CT 06108 APPROVED BY: R.B. DATE: 3-23-18	PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	TOWN: MILFORD	PROJECT NO. 301-175 DRAWING NO. ENV-09 SHEET NO. 9 OF 10
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 3/23/2018			



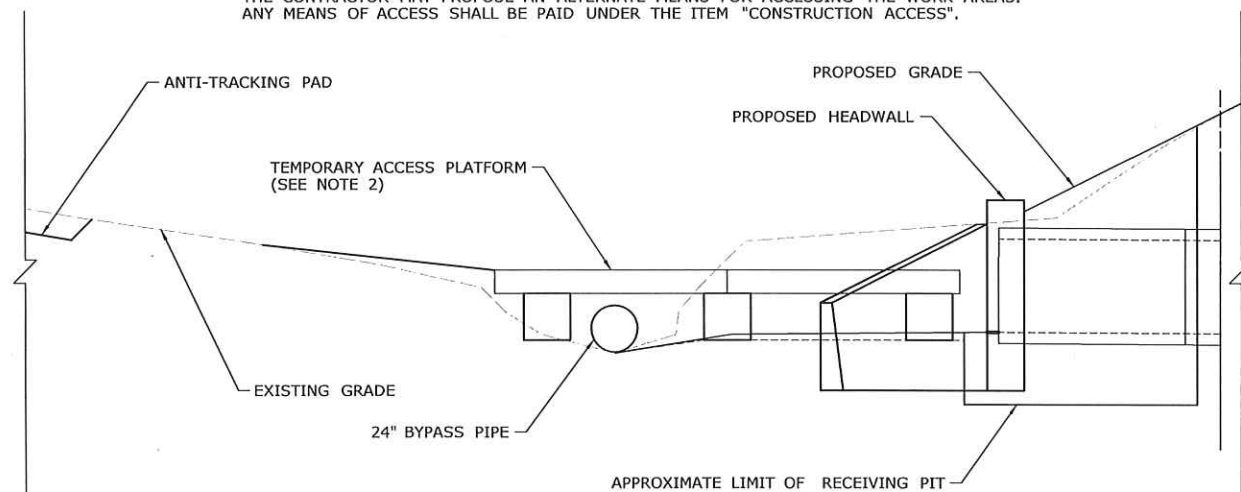
SECTION B
S-07

CONSTRUCTION STAGING ENDWALL ELEVATION

SCALE: 1/4"=1'-0"

NOTES:

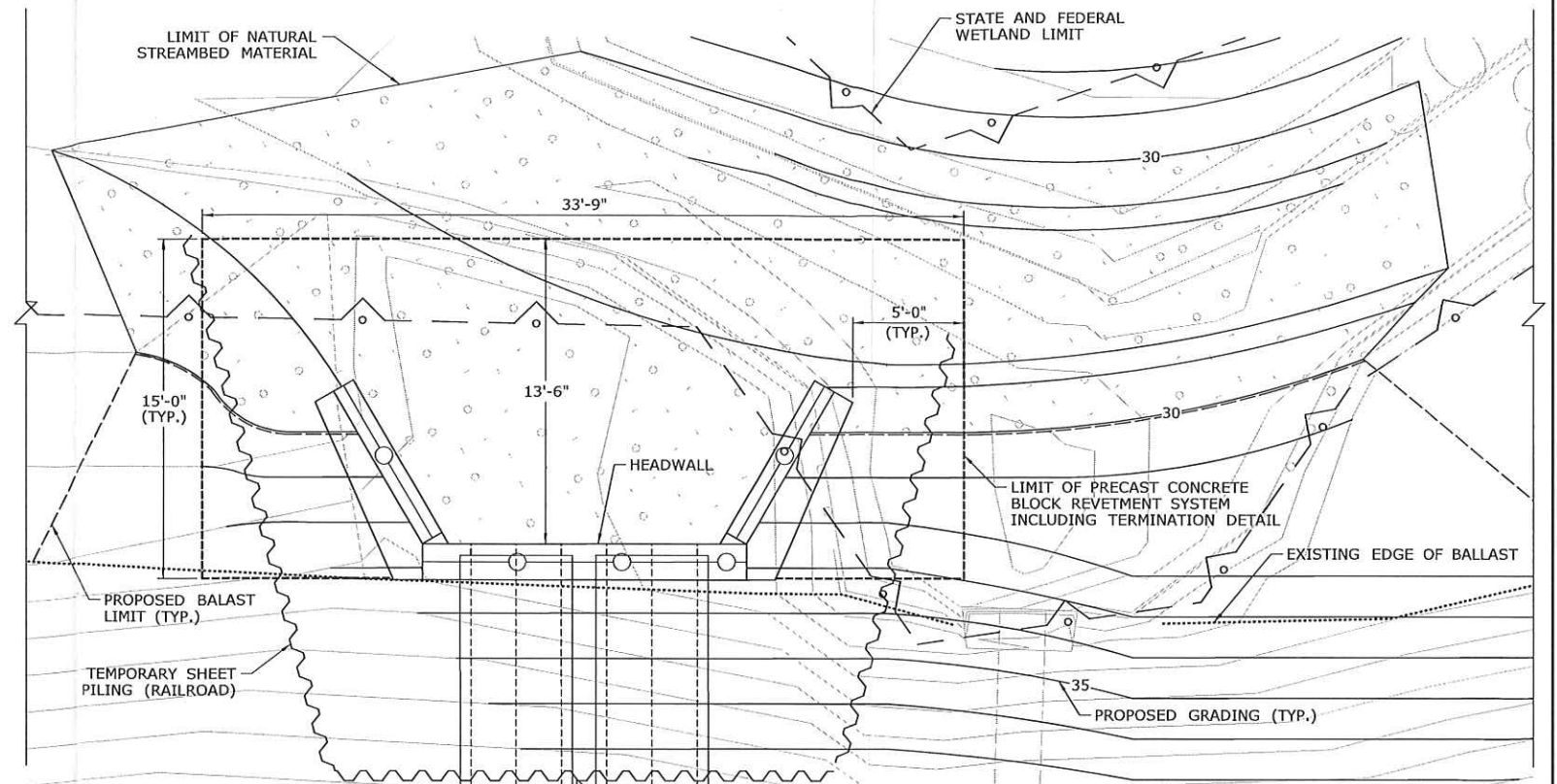
1. THE TEMPORARY BYPASS PIPE IS PROPOSED TO BE BURIED ON THE DOWNSTREAM SIDE TO PROVIDE WORK ACCESS AND A CONSTANT DOWN GRADIENT. THE FILL (CRUSHED STONE) AND GEOTEXTILE ASSOCIATED WITH THIS SHALL BE INCLUDED IN THE ITEM "HANDLING WATER". THE CONTRACTOR MAY PROPOSE AN ALTERNATE MEANS FOR THE BYPASS PIPE LAYOUT.
2. THE TEMPORARY ACCESS PLATFORM SHOWN IS A POSSIBLE MEANS OF ACCESSING THE SITE. THE CONTRACTOR MAY PROPOSE AN ALTERNATE MEANS FOR ACCESSING THE WORK AREAS. ANY MEANS OF ACCESS SHALL BE PAID UNDER THE ITEM "CONSTRUCTION ACCESS".



SECTION A
S-07

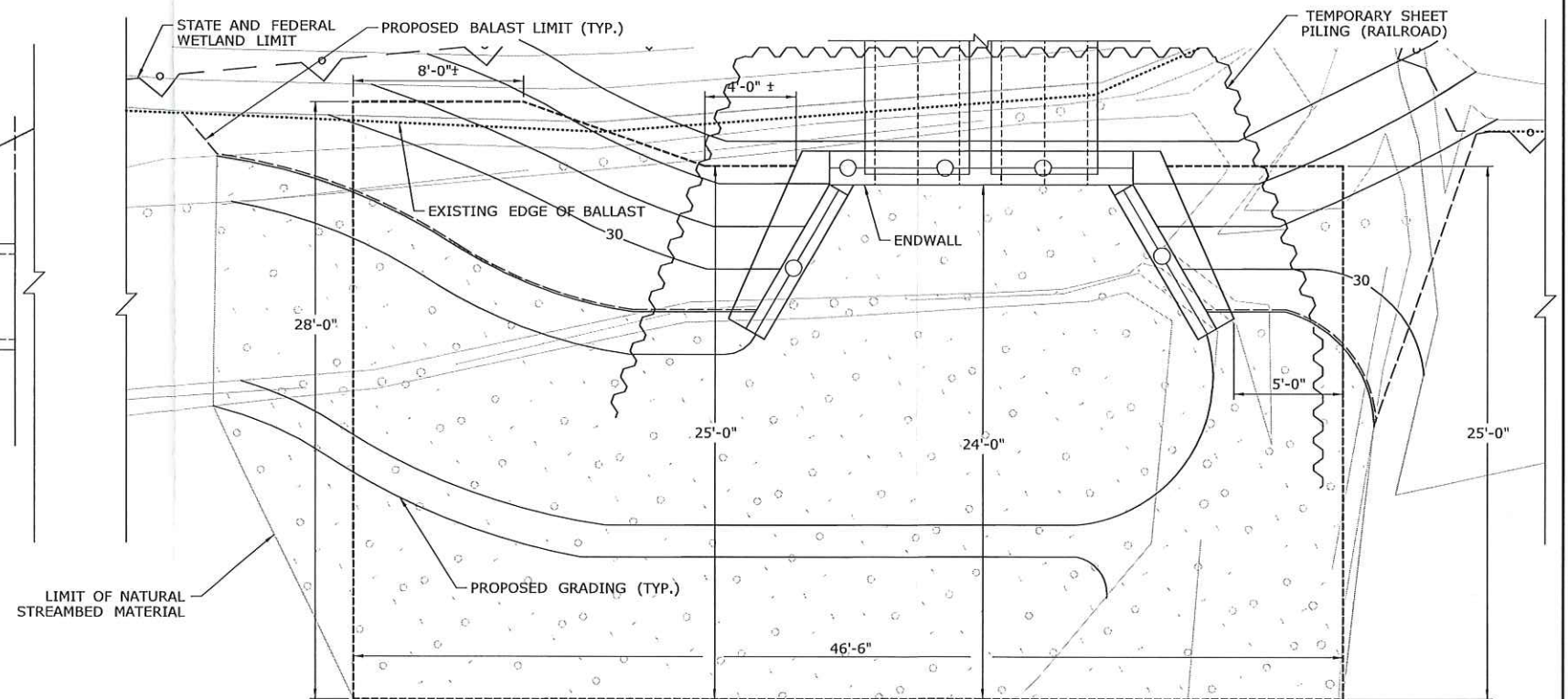
CONSTRUCTION STAGING HEADWALL ELEVATION

SCALE: 1/4"=1'-0"



UPSTREAM IN CHANNEL WORK LIMITS

SCALE: 1/4"=1'-0"



DOWNSTREAM IN CHANNEL WORK LIMITS

SCALE: 1/4"=1'-0"

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: D.M./C.R. CHECKED BY: R.B. SCALE AS NOTED	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION FILENAME: ...\\SB_MSH_MP65.60_0301_0175_3.14 MISC Det 2.dgn	LOCHNER H.W. LOCHNER, INC. 55 Hartland Street East Hartford, CT 06108 APPROVED BY: R.B. DATE: 3-23-18	PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	TOWN: MILFORD	DRAWING TITLE: MISCELLANEOUS DETAILS - 2	PROJECT NO. 301-175 DRAWING NO. ENV-10 SHEET NO. 10 OF 10
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 3/23/2018				

Attachment F: Category 2 Approval Letter

General Permit for Water Resource Construction Activities

Applicant: State of Connecticut, Department of Transportation

Project No: 301-175

Description: New Haven Mainline – Mile Post 65.60, Milford, CT
Culvert Replacement over an unnamed watercourse

List of Attachments

Category 2 Approval Letter



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

October 30, 2018

Regulatory Division
File Number: **NAE-2018-01179**
CT DEEP File Number: 201807280-PCN

Attn: Mr. Andrew Davis
Connecticut Department of Transportation
P.O. Box 317546
2800 Berlin Turnpike
Newington, CT 06131-7546

Dear Mr. Davis:

We have reviewed your application to place permanent and temporary fill in approximately 15,750 SF of wetlands/watercourse areas in association with the replacement of an existing culvert carrying an unnamed stream under the New Haven Mainline tracks @ MP 65.60 in Milford, CT. The work is described below and shown on the enclosed plans titled "REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM", on ten (10) sheets (Drawings ENV-01 through ENV-10), all sheets dated "3-23-18".

The existing masonry culvert will be replaced with twin 48" diameter 101' long RCPs, including pre-cast flared end walls at the inlet and outlet ends to retain/support the rail embankment. The RCPs will be jacked under the rail line embankment adjacent to the existing culvert, with rail traffic maintained during construction. The existing culvert will be used during construction for water handling, and then abandoned and filled in with controlled low strength material after project construction. Precast concrete block revetment will be placed below the channel bed at the inlet and outlet ends of the twin RCPs to stabilize the channel at these areas. The final treatment will be 12" of natural stream bed material placed on top of the block revetment layer.

Permanent fill is associated with flared end wall construction and embankment fill adjoining the culvert ends, stream bed revetment and backfill, the permanent access road for maintenance, and fill in the abandoned culvert. Temporary fill is required for stream/wetland disturbances/work zones associated with access for culvert construction, and temporary mat access, and sheet pile for retaining embankment during construction. Disturbed wetland resource areas will be revegetated with a wetland seed mix. ILF mitigation will be provided for permanent and temporary impacts.

Based on the information you have provided, we have determined that the proposed activity, which includes a discharge of dredged or fill material into waters or wetlands, will have

only minimal individual and cumulative impacts on waters of the United States, including wetlands. Therefore, this work is authorized under General Permit # 19 of the enclosed Federal permit known as the Connecticut General Permits (GPs). This work must be performed in accordance with the terms and conditions of the GPs, and also in compliance with the following special conditions:

1. You must complete and return the enclosed Work Start Notification Form to this office at least two weeks before the anticipated starting date.
2. Compensatory mitigation shall consist of the payment of \$58,255 to the Connecticut In-Lieu Fee program. The permittee must send a cashier's check or bank draft to: Executive Director, National Audubon-Society, Inc., Connecticut Chapter, Attn: ILF Program, 185 East Flat Hill Road, Southbury, CT 06488. The check shall be made out to "National Audubon Society, Inc." and include the Corps file number and the statement: "For ILF account only". The enclosed "Connecticut In-lieu Fee Project Impact Worksheet" must accompany the check to ensure proper crediting. This is to secure 0.18 credits for PEM wetlands. Work may not begin until the Corps has received a confirmation letter from the Audubon-CT to the permittee that the check has been received and deposited and that Audubon-CT accepts responsibility for mitigation.

You are responsible for complying with all of the GPs' requirements. Please review the enclosed GPs carefully, in particular the general conditions, to be sure that you understand its requirements. You should ensure that whoever does the work also fully understands the requirements and that a copy of the GPs and this authorization letter are at the project site throughout the time the work is underway.

This authorization expires on August 19, 2021, unless the GPs are modified, suspended, or revoked before then. You must commence or have under contract to commence the work authorized herein by August 19, 2021 and complete the work by August 19, 2022. If not, you must contact this office to determine the need for further authorization *before* beginning or continuing the activity. We recommend that you contact us before this authorization expires to discuss a permit reissuance. If you change the plans or construction methods for work within our jurisdiction, please contact us immediately to discuss modification of this authorization. This office must approve any changes before you undertake them.

This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law. Performing work not specifically authorized by this determination or failing to comply with any special condition(s) provided above and all the terms and conditions of the GPs may subject you to the enforcement provisions of our regulations.

The Connecticut Department of Energy & Environmental Protection (DEEP) has issued a Water Quality Certification (WQC) for this project, as required under Section 401 of the Clean Water Act, based on their review of the project. You must comply with all condition requirements contained in the WQC approval (enclosed) issued for this project.

This authorization presumes that the work as described above and as shown on your plans noted above is in waters of the U.S.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Please contact Susan Lee of my staff at (978) 318-8494 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Kevin R. Kotelly". The signature is written in a cursive style with a large, looped "K" at the beginning.

Kevin R. Kotelly, P.E.
Chief, Permits & Enforcement Branch
Regulatory Division

Enclosures

Copy Furnished (via email): Jeff Caiola/CT DEEP-LWRD; Nate Margason/US EPA;
Amanda Saul/CTDOT-OEP; Lisa Palladino/Audubon CT; Leslie Kane/Audubon CT

Attachment H: Other Information

General Permit for Water Resource Construction Activities

Applicant: State of Connecticut, Department of Transportation

Project No: 301-175

Description: New Haven Mainline – Mile Post 65.60, Milford, CT
Culvert Replacement over an unnamed watercourse

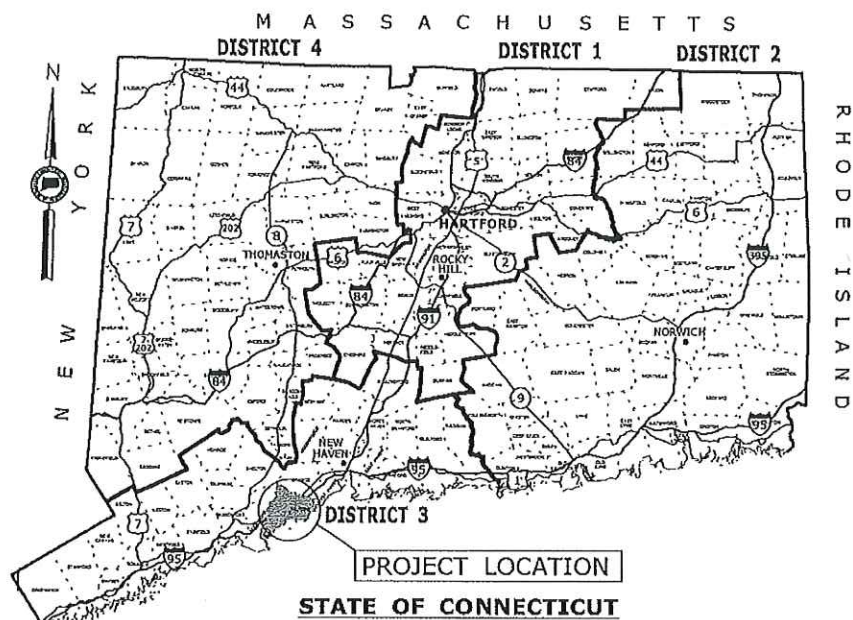
List of Attachments

- Signed Fisheries Plan Sheets
- SHPO Correspondence
- Site Photographs

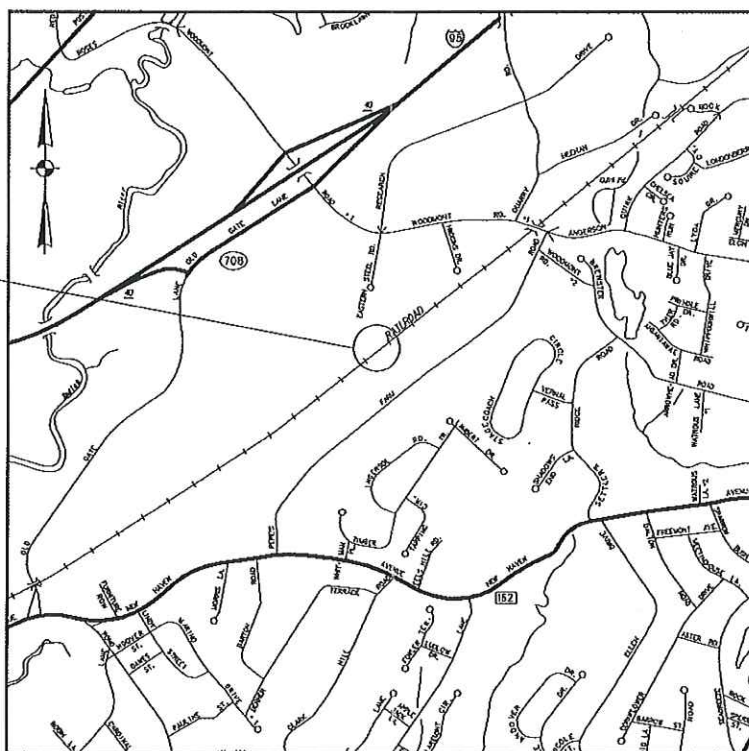
ENVIRONMENTAL PERMIT PLANS STATE PROJECT NO. 301-175 REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM

Town of
MILFORD

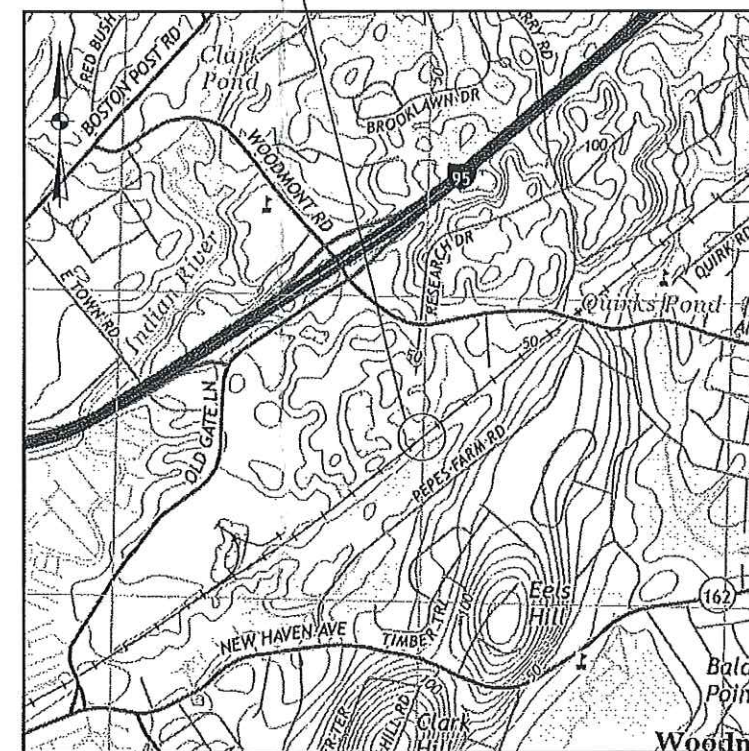
INDEX OF DRAWINGS	
TITLE	DRAWING NO.
TITLE SHEET	ENV-01
WETLAND IMPACT PLAN	ENV-02
SITE PLAN	ENV-03
GENERAL PLAN	ENV-04
CONSTRUCTION STAGE - 1	ENV-05
CONSTRUCTION STAGE - 2	ENV-06
ACCESS ROAD DETAILS	ENV-07
PRECAST CONCRETE BLOCK REVETMENT DETAILS	ENV-08
MISCELLANEOUS DETAILS - 1	ENV-09
MISCELLANEOUS DETAILS - 2	ENV-10



PROJECT LOCATION



PROJECT LOCATION



GENERAL NOTES

1. THESE PLANS ARE INTENDED ONLY FOR ENVIRONMENTAL PERMITTING PURPOSES. THESE PLANS HOLD AUTHORITY FOR ALL ACTIVITIES CONCERNING THE REGULATED AREA. FOR DETAILED PLANIMETRIC INFORMATION AND PAYMENT REFER TO THE APPLICABLE CONTRACT DOCUMENTS.
2. FOR A DESCRIPTION OF THE WATERCOURSES, WETLANDS AND WETLAND SOILS SEE RELEVANT SECTIONS OF THE PERMIT APPLICATION.
3. ALL CONSTRUCTION ACTIVITIES WILL BE CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT'S STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 817, SECTION 1.10 AND WILL ALSO FOLLOW BEST MANAGEMENT PRACTICES (BMPs) AND SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH THE 2002 EROSION & SEDIMENTATION CONTROL GUIDELINES AND THE 2004 STORMWATER QUALITY MAUAL.
4. 400 FOOT GRID BASED ON CONNECTICUT COORDINATE SYSTEM N.A.D. 1927 VERTICAL DATUM BASED ON NAVD 1988.
5. WETLANDS DELINEATED BY CONNECTICUT ECOSYSTEMS LLC ON OCTOBER 20, 2015.

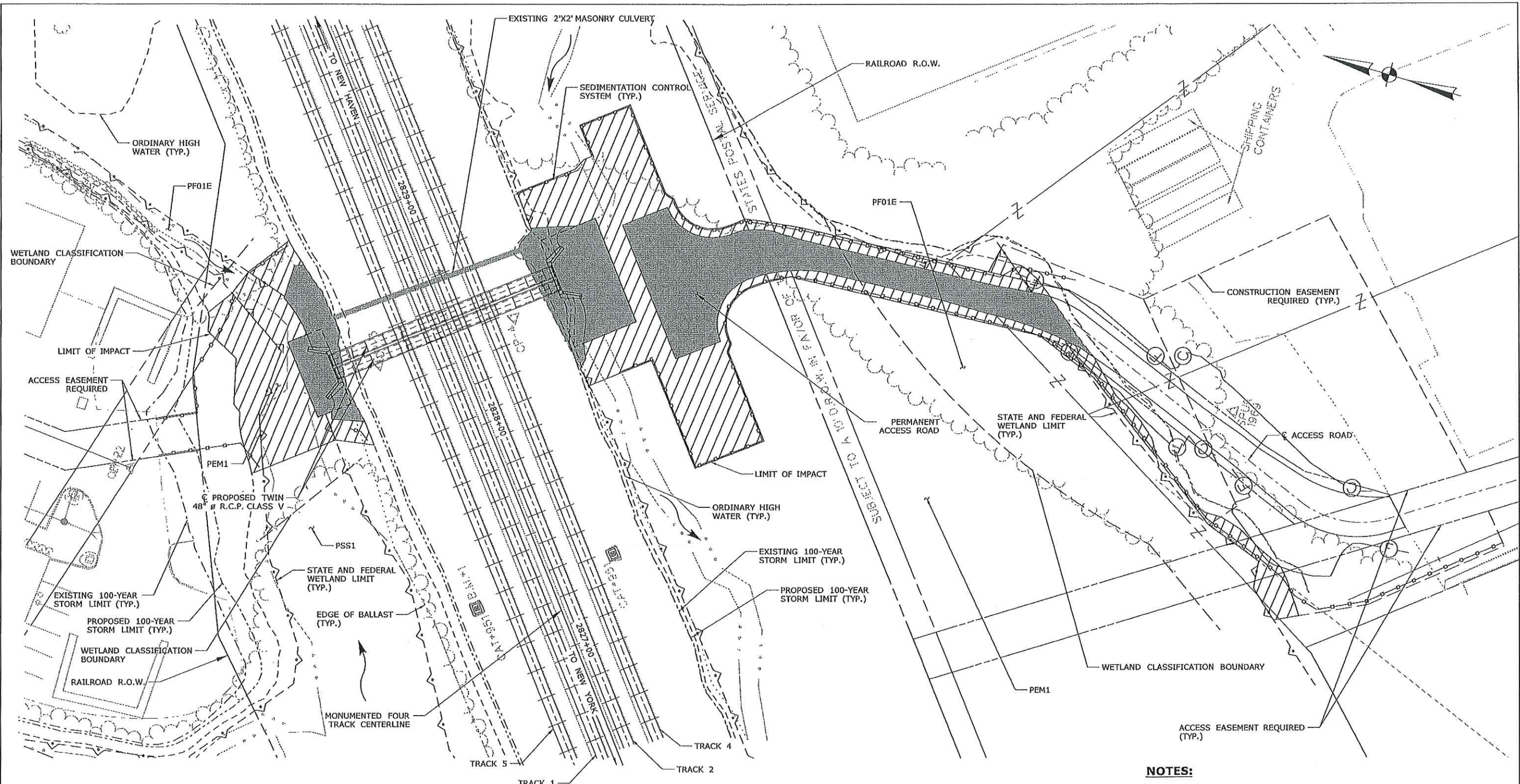
Steve Cephal

CTDEEP/Fisheries Division

DESIGNED BY:
LOCHNER
H.W. LOCHNER, INC.
55 Hartland Street, Suite 401
East Hartford, CT 06108

David Miroslaw
2018.03.23
13:59:39-04'00"

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	DESIGNER/DRAFTER: D.M./C.R. CHECKED BY: R.B. SCALE AS NOTED	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	DESIGNED BY: LOCHNER H.W. LOCHNER, INC. 55 Hartland Street East Hartford, CT 06108 APPROVED BY: RB DATE: 3-23-18	PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	TOWN: MILFORD DRAWING TITLE: TITLE SHEET	PROJECT NO. 301-175 DRAWING NO. ENV-01 SHEET NO. 1 OF 10	REV. DATE REVISION DESCRIPTION SHEET NO. PLOTTED: 3/23/2018 FILENAME: ...301-175.HHN.MP.65.60.PPS.01.dgn



WETLAND IMPACT TABLE				
	WETLAND SITE NO.	WATERWAY IMPACTS	WETLAND IMPACTS	TOTAL
PERMANENT IMPACTS	1	815 S.F. (0.018 AC.)	5,605 S.F. (0.129 AC.)	6,420 S.F. (0.148 AC.)
TEMPORARY IMPACTS	1	2,165 S.F. (0.050 AC.)	7,165 S.F. (0.164 AC.)	9,330 S.F. (0.214 AC.)
TOTAL IMPACTS		2,980 S.F. (0.068 AC.)	12,770 S.F. (0.293 AC.)	15,750 S.F. (0.362 AC.)

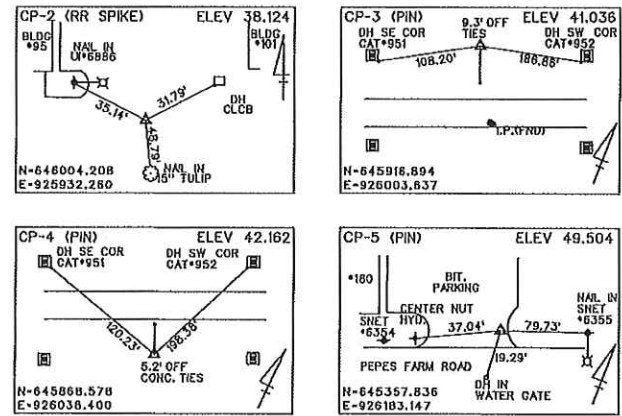
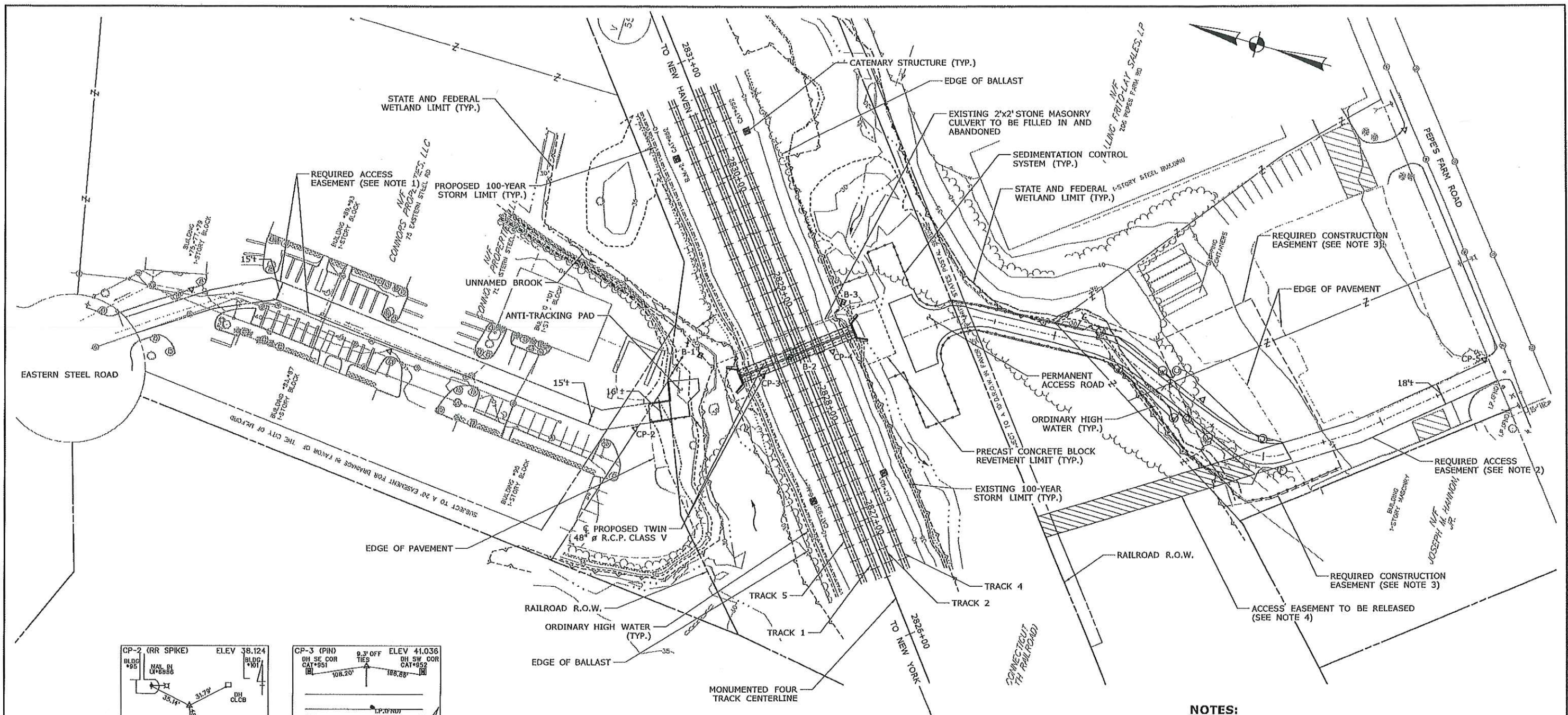
WETLAND IMPACT PLAN
SCALE: 1" = 20'-0"

LEGEND

- PERMANENT IMPACT
- TEMPORARY IMPACT
- SEDIMENTATION CONTROL SYSTEM

- NOTES:**
- CONTRACTOR SHALL NOT WORK WITHIN THE LIMITS OF THE WETLANDS AND WATERCOURSE WITH THE EXCEPTION OF THOSE AREAS DELINEATED AS TEMPORARY OR PERMANENT IMPACTS TO THE WETLANDS AND WATERCOURSE. ALL DISTURBED AREAS SHALL BE RESTORED.
 - DUE TO THE LOCATION OF THE PROJECT BETWEEN HIGHLY DEVELOPED INDUSTRIAL AREAS AND THE RAIL LINE EMBANKMENTS, THE ORDINARY HIGH WATER (OHW) LINE HAS BEEN DETERMINED TO BE EITHER NEARLY COINCIDENT WITH THE WETLAND LIMITS (OUTLET) OR JUST ABOVE THE WETLAND LIMIT (INLET). AT THE INLET IN PARTICULAR, LOCALIZED FREQUENT INUNDATION OCCURS ABOVE THE WETLAND LINE, HOWEVER, DUE TO THE FACT THAT WATERS POND ON DISTURBED SURFACES, NO WETLAND CONDITIONS DEVELOP. THE 'TOTAL IMPACTS' AS PRESENTED IN THE PERMIT REPRESENT THE FOOTPRINT OUT-TO-OUT, TO THE OHW LIMITS; THE 'WETLAND' IMPACTS REPORTED ARE THE PORTION WITHIN THE TOTAL THAT ARE STRICTLY VEGETATED WETLANDS.

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>REVISION DESCRIPTION</th> <th>SHEET NO.</th> <th>PLOTTED: 3/23/2018</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV.	DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 3/23/2018																																				THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	DESIGNER/DRAFTER: D.M. / C.R. CHECKED BY: R.B. SCALE AS NOTED	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION <small>FILENAME: ...\\SB.HSH.MP65.60.0301.0175-4.1 Wetland.dgn</small>	LOCHNER H.V. LOCHNER, INC. 55 Hartland Street East Hartford, CT 06108 APPROVED BY: R.B. DATE: 3-23-18	 PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	TOWN: MILFORD DRAWING TITLE: WETLAND IMPACT PLAN	PROJECT NO. 301-175 DRAWING NO. ENV-02 SHEET NO. 2 OF 10
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 3/23/2018																																											



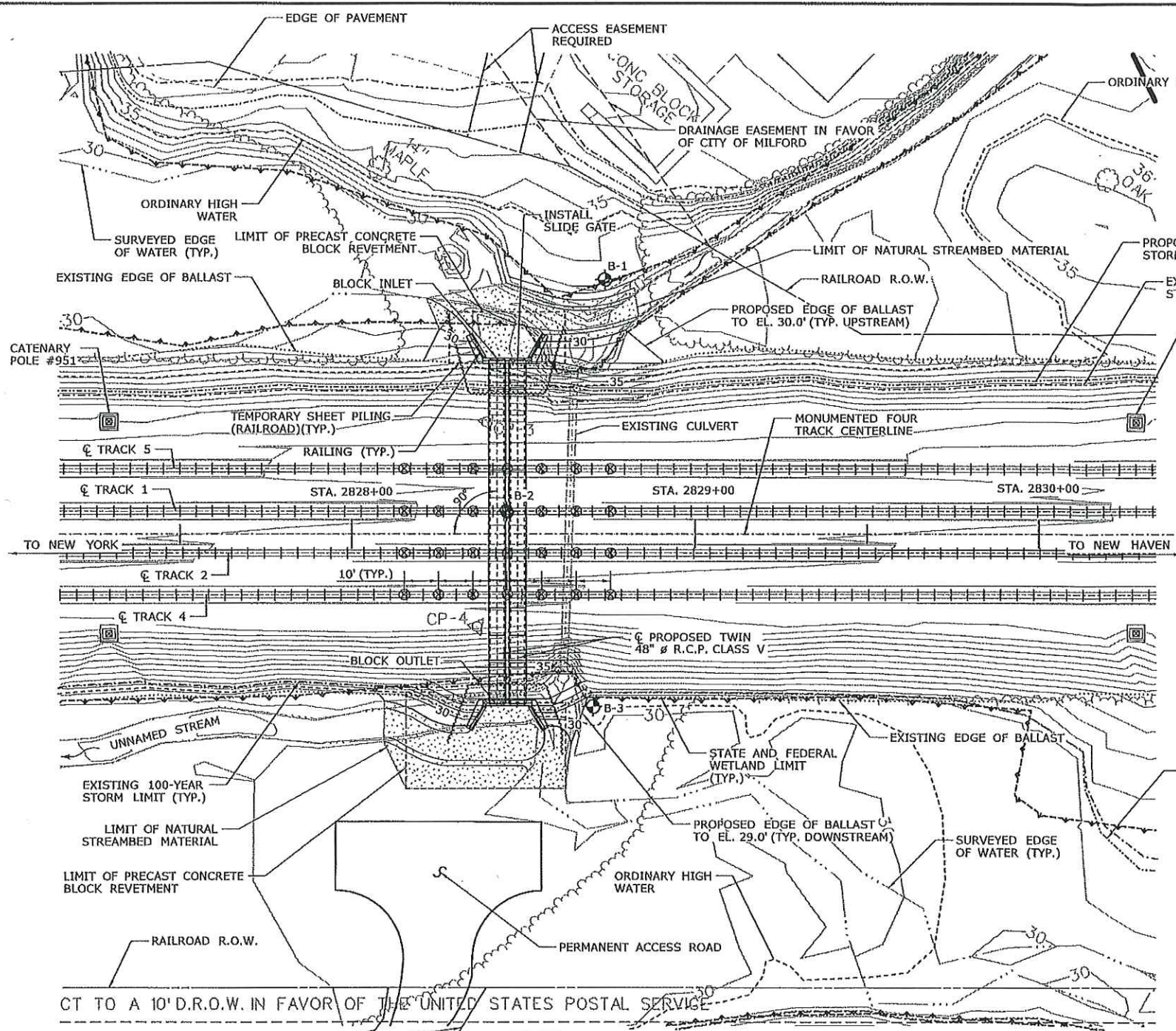
SITE PLAN
 SCALE: 1" = 40'-0"

SURVEY TIES
 NOT TO SCALE

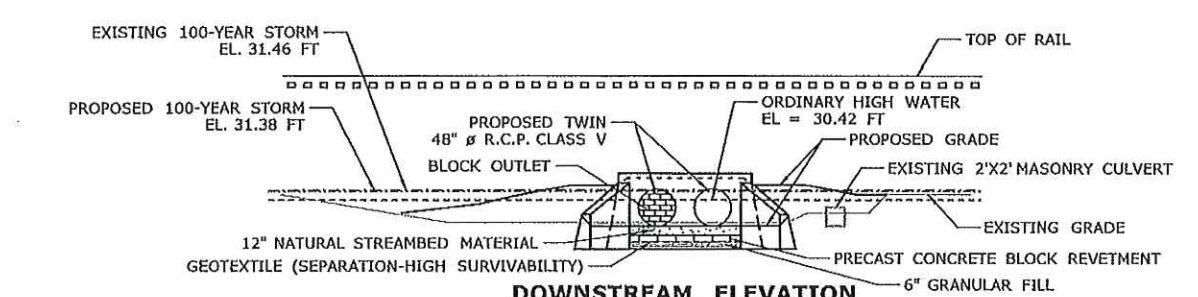
NOTES:

- EASEMENT FOR ACCESS TO RAILROAD RIGHT-OF-WAY REQUIRED. USE OF THE EASEMENT AREA TAKEN UNDER THIS PARAGRAPH IS LIMITED TO TRAVEL PURPOSES ONLY AND WILL NOT IMPEDE USE OF THE AREA BY OTHERS.
- EASEMENT FOR ACCESS TO RAILROAD RIGHT-OF-WAY REQUIRED. USE OF THE EASEMENT AREA TAKEN UNDER THIS PARAGRAPH INCLUDES THE RIGHT TO REMOVE TREES AND GRADE A PATH SUITABLE FOR CONSTRUCTION VEHICLES. ONCE THE PATH HAS BEEN CREATED, IT WILL THEN BE LIMITED TO TRAVEL PURPOSES ONLY AND WILL NOT IMPEDE USE OF THE AREA BY OTHERS.
- CONSTRUCTION EASEMENT FOR THE PURPOSE OF PARKING AND EQUIPMENT STORAGE DURING CULVERT REPLACEMENT ON THE NEW HAVEN MAINLINE, MP 65.60 REQUIRED. CONSTRUCTION EASEMENT TAKEN UNDER THIS PARAGRAPH WILL BE RESTORED BY REGRADING AND REPLACING BITUMINOUS PAVEMENT AND GRAVEL IN ANY DISTURBED AREAS. SAID EASEMENT WILL BE EXTINGUISHED UPON COMPLETION OF THE PROJECT, UNLESS SOONER EXTINGUISHED BY THE STATE.
- THE HATCHED PORTION OF THE ACCESS EASEMENT SHALL BE RELEASED AND WILL NOT BE AVAILABLE TO THE CONTRACTOR TO ACCESS THE SITE.
- THE CONTRACTOR SHALL PERFORM A PRESITE SURVEY TO DOCUMENT THE EXISTING CONDITIONS WITHIN THE EASEMENT LIMITS. IF AFTER CONSTRUCTION IS COMPLETE THE ENGINEER DETERMINES THAT PAVEMENT WITHIN THE EASEMENT LIMITS NEEDS TO BE REPAIRED OR REPLACED THAT WORK AND ALL ASSOCIATED MATERIALS SHALL BE INCLUDED UNDER THE ITEM "CONSTRUCTION ACCESS".

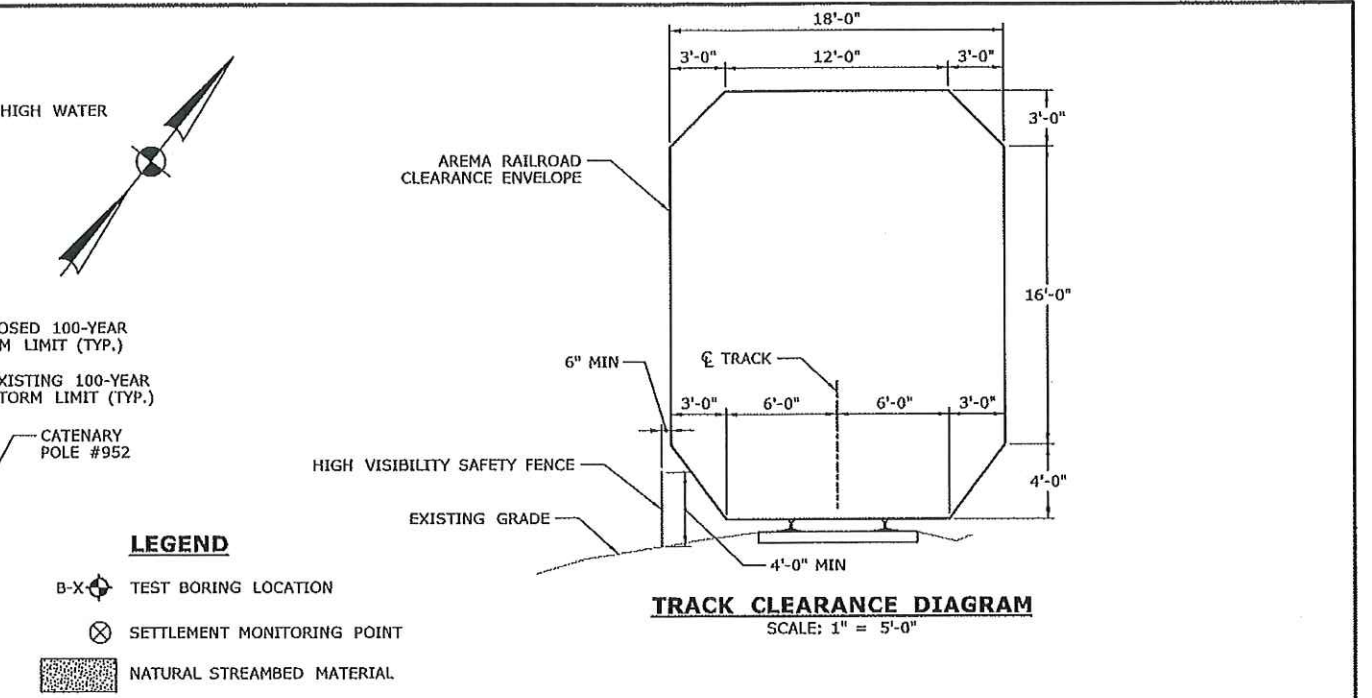
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DESIGNER/DRAFTER: D.M./C.R.				LOCHNER ILV. LOCHNER, INC. 55 Hartland Street, Suite 401 East Hartford, CT 06108 APPROVED BY: R.B. DATE: 3-23-18	PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	TOWN: MILFORD	PROJECT NO. 301-175					
CHECKED BY: R.B.		DRAWING TITLE: SITE PLAN	DRAWING NO. ENV-03									



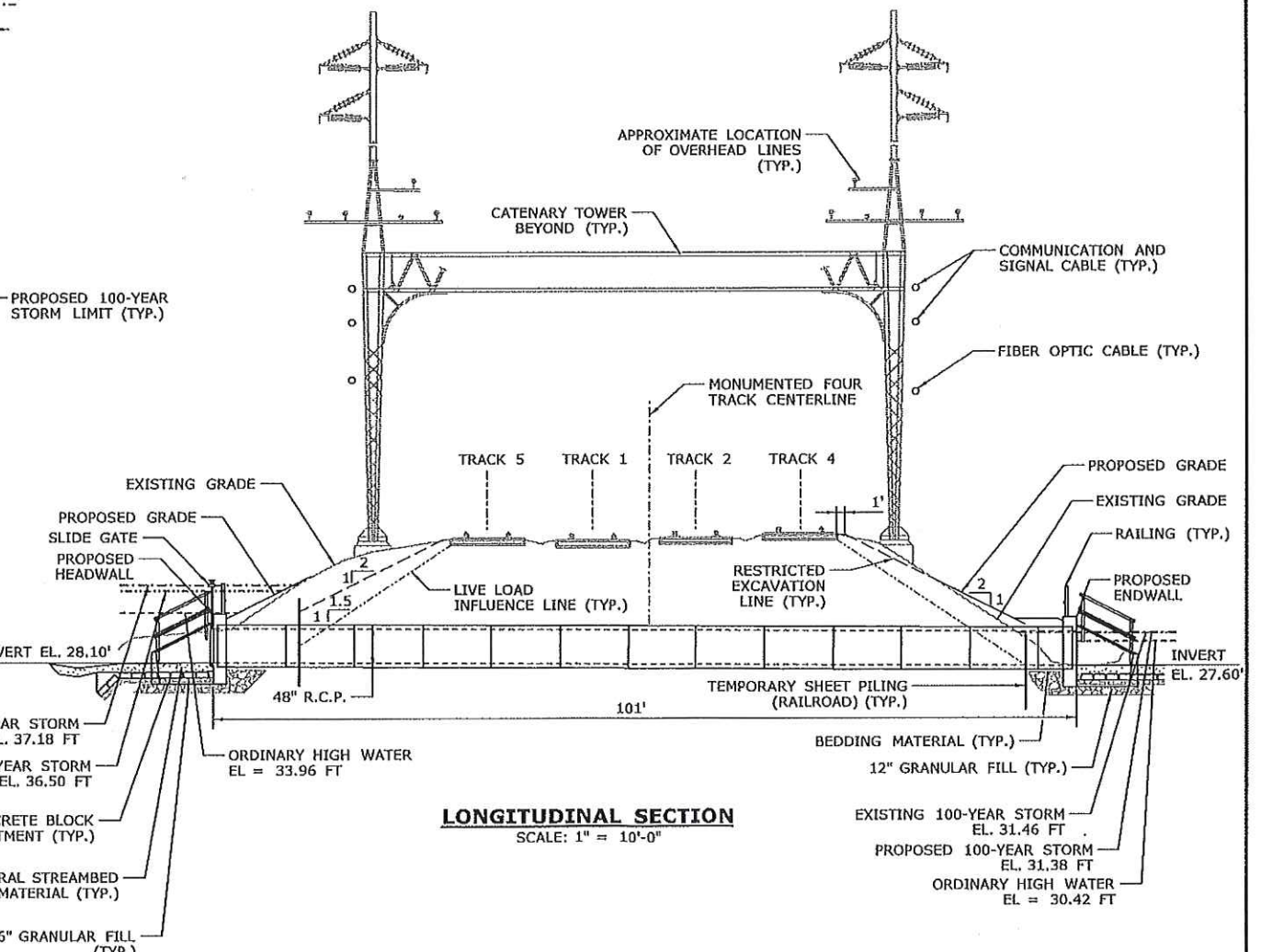
PLAN
SCALE: 1" = 20'-0"



DOWNSTREAM ELEVATION
SCALE: 1" = 10'-0"



TRACK CLEARANCE DIAGRAM
SCALE: 1" = 5'-0"



LONGITUDINAL SECTION
SCALE: 1" = 10'-0"

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DESIGNER/DRAFTER: D.M./C.R.
CHECKED BY: R.B.
SCALE AS NOTED

PLOTTED: 3/23/2018

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

LOCHNER
H.W. LOCHNER, LLC
55 Hartland Street, Suite 401
East Hartford, CT 06108

APPROVED BY: R.B. DATE: 3-23-18

FILENAME: ...SD_MSH_MP65.60_0301_0175_3.3_GenPlan.dgn

PROJECT TITLE:
REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM

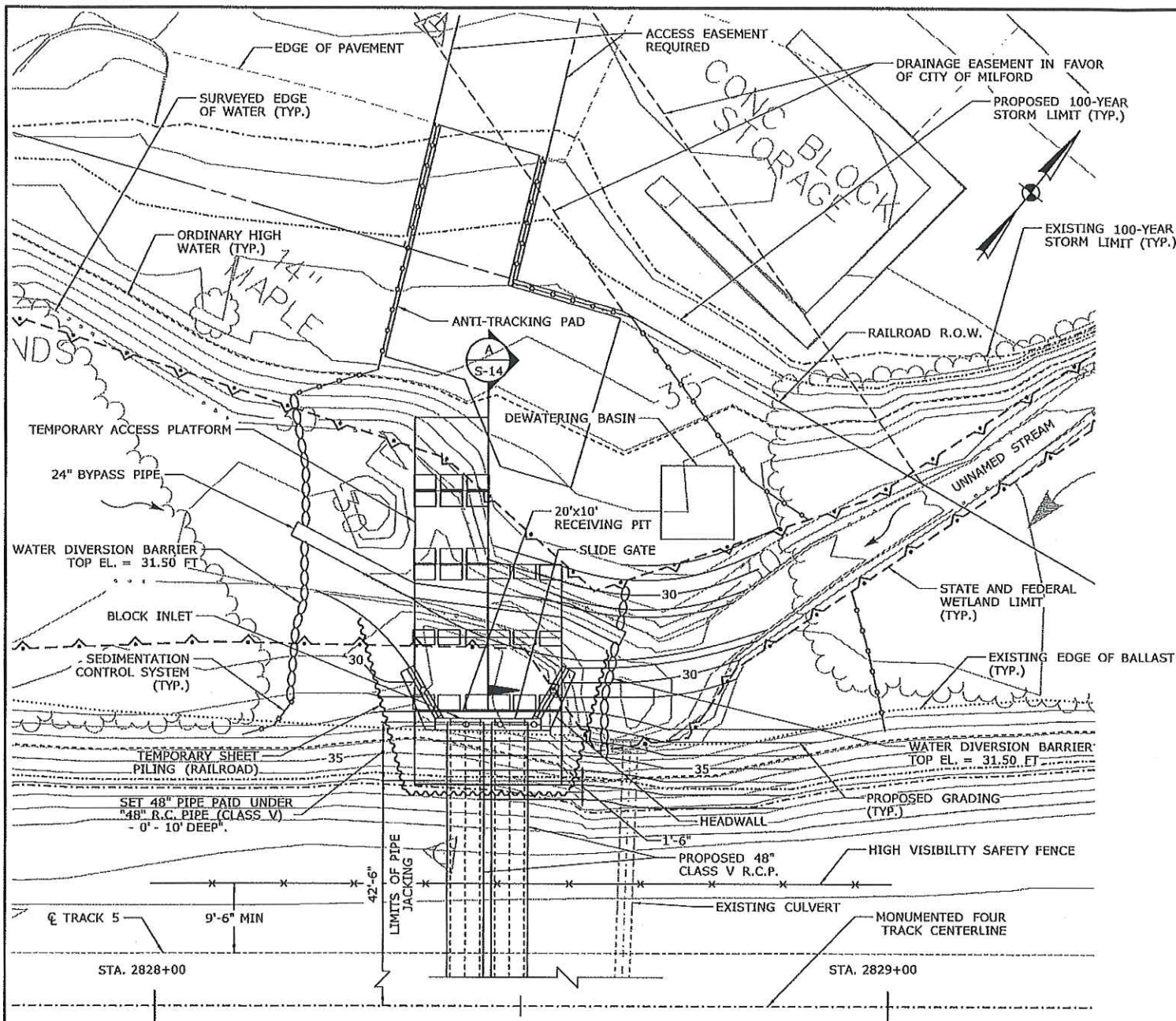
TOWN:
MILFORD

DRAWING TITLE:
GENERAL PLAN

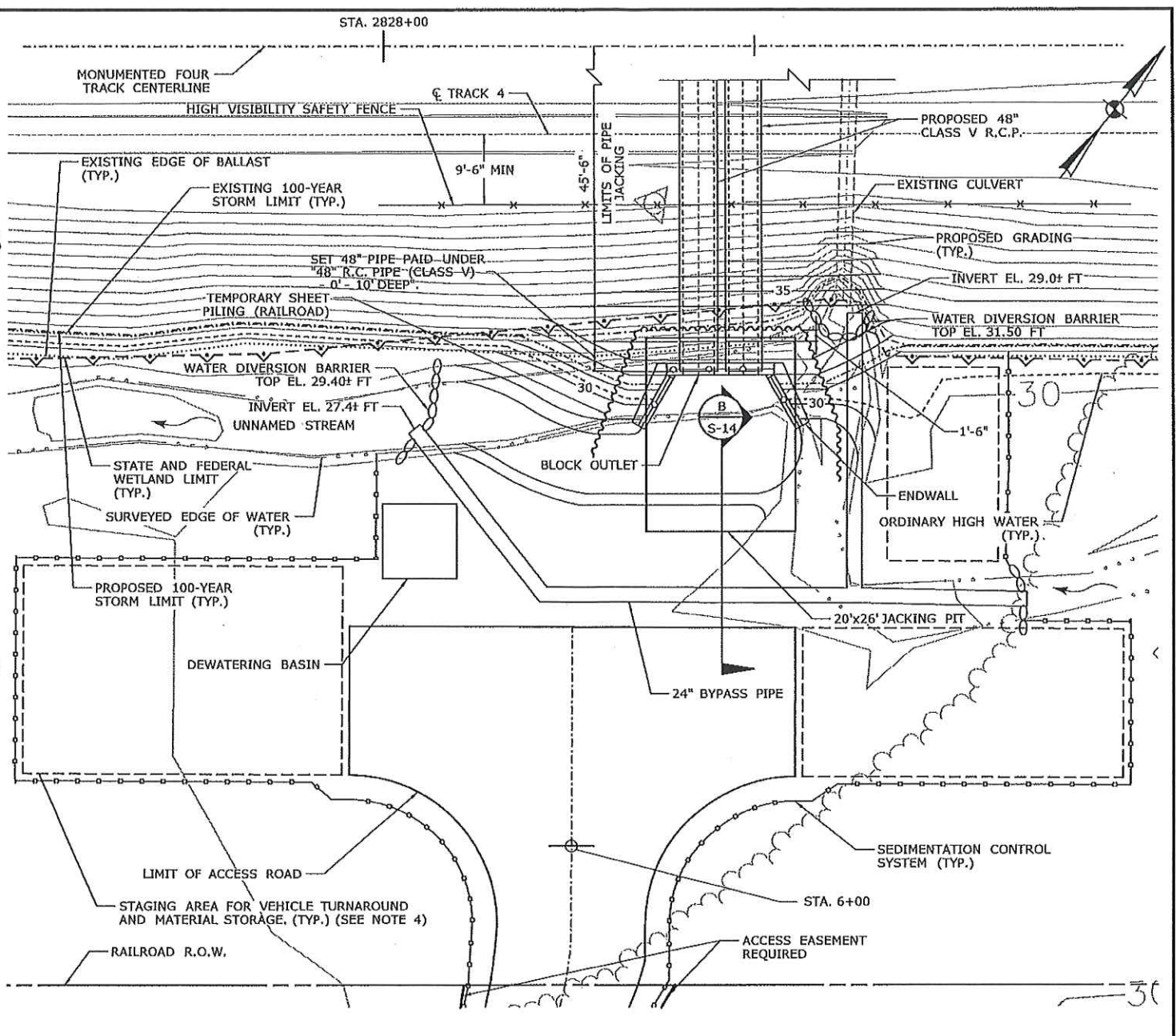
PROJECT NO.
301-175

DRAWING NO.
ENV-04

SHEET NO.
4 OF 10



PLAN AT INLET
SCALE: 1" = 10'-0"



PLAN AT OUTLET
SCALE: 1" = 10'-0"

SEQUENCE OF CONSTRUCTION NOTES STAGE - 1

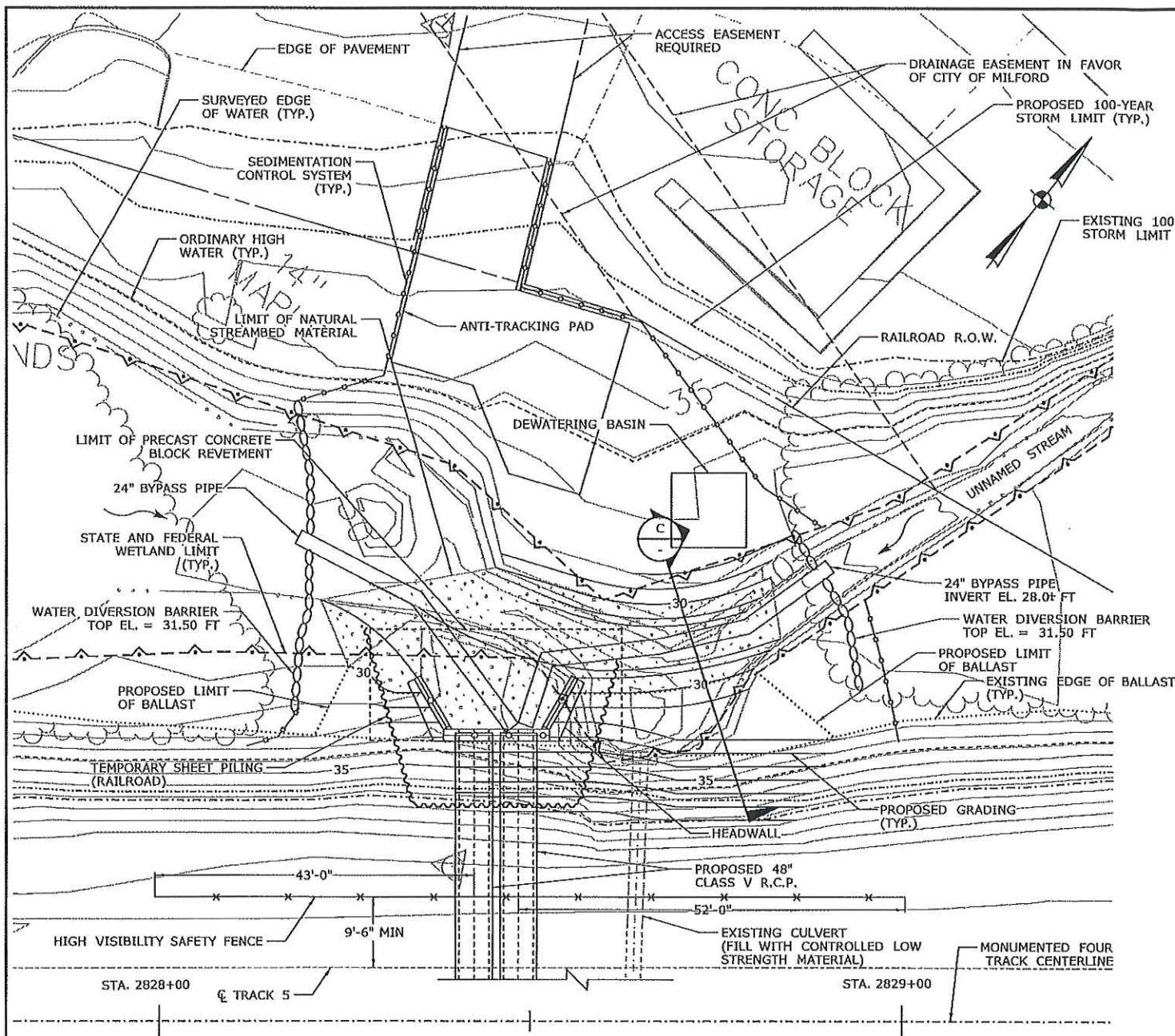
1. INSTALL SEDIMENTATION CONTROL SYSTEM AND HIGH VISIBILITY SAFETY FENCE.
2. CONSTRUCT ANTI-TRACKING PADS AND ACCESS ROAD.
3. INSTALL WATER HANDLING SYSTEM
4. ESTABLISH SETTLEMENT MONITORING POINTS AT APPROVED LOCATIONS AND BEGIN TAKING MEASUREMENTS AS REQUIRED.
5. EXCAVATE EXISTING CHANNEL BOTTOM MATERIAL AND STORE AT APPROVED LOCATION.
6. INSTALL TEMPORARY SHEET PILING (RAILROAD), EXCAVATE AND INSTALL JACKING AND RECEIVING PITS.
7. JACK PIPES 1 AND 2 THROUGH THE RAILROAD EMBANKMENT
8. PLACE BEDDING MATERIAL AND SET REMAINING SECTIONS OF PIPE
9. CONSTRUCT HEADWALL AND ENDWALL.
10. INSTALL RAILING, SLIDE GATE AND BLOCK OFF PIPE 2.
11. INSTALL PRECAST CONCRETE BLOCK RETEMENT.

GENERAL NOTES:

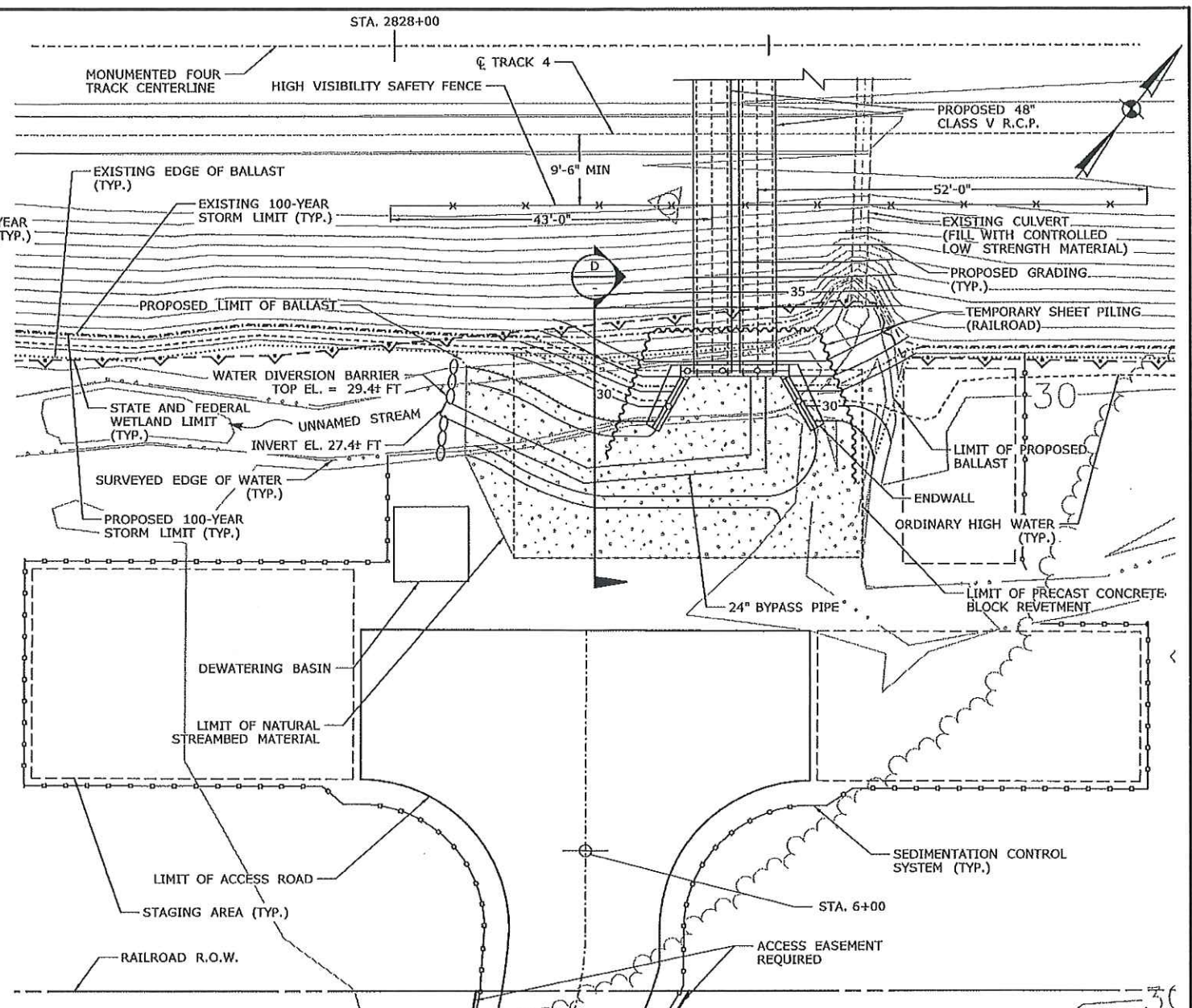
1. THE SIZE OF THE JACKING AND RECEIVING PITS IS APPROXIMATE AND IS SHOWN HERE ONLY AS A REFERENCE. THE CONTRACTOR SHALL DETERMINE THE ACTUAL SIZE REQUIRED TO COMPLETE THE JACKING OPERATION. THE COST OF JACKING AND RECEIVING PITS SHALL BE PAID UNDER THE ITEM "JACKING 48" R.C. PIPE (CLASS V) - 0' - 20' DEEP".
2. THE COST OF FURNISHING AND INSTALLING THE BYPASS PIPES, WATER DIVERSION BARRIERS AND NECESSARY INCIDENTAL APPURTENANCES REQUIRED FOR BYPASSING THE STREAM AROUND THE SITE SHALL BE INCLUDED IN THE COST OF THE ITEM "HANDLING WATER".
3. ALL WATER PUMPED FROM CONSTRUCTION AREAS ISOLATED BY THE WATER DIVERSION BARRIER IS TO BE HANDLED THROUGH THE TEMPORARY DEWATERING BASIN. COST OF TEMPORARY DEWATERING BASIN SHALL BE INCLUDED IN THE COST OF THE ITEM "HANDLING WATER".
4. STAGING AREAS USED FOR CONSTRUCTION ACTIVITIES SHALL USE MATS TO SUPPORT ANY AND ALL OF THE CONTRACTORS EQUIPMENT. THE MATS SHALL BE APPROVED BY THE ENGINEER AND REMOVED UPON COMPLETION OF THE WORK. COST OF MATS TO BE INCLUDED IN THE PRICE OF THE ITEM "CONSTRUCTION ACCESS".
5. CONSTRUCTION MATS SHALL BE THOROUGHLY CLEANED BEFORE USE TO PREVENT THE SPREAD OF INVASIVE SPECIES.
6. THE ENDWALLS AND 48" R.C.P. SHALL BE FOUNDED ON GRANULAR FILL OR BEDDING MATERIAL AS SHOWN ON THE DETAIL DRAWINGS. IF THE OVERLYING ORGANIC CLAYEY SILT LAYER EXTENDS BELOW THE BOTTOM OF THE GRANULAR FILL OR BEDDING MATERIAL AT THESE LOCATIONS IT SHALL BE REMOVED AND REPLACED WITH THE BEARING MATERIAL SPECIFIED AT THAT LOCATION.
7. SUBGRADE PREPARATION SHALL BE CONDUCTED IN A WAY TO MINIMIZE DISTURBANCE. THE FINAL 6" OF EXCAVATION SHALL BE MADE WITH A SMOOTH-EDGE BLADE OR HAND SHOVELED.
8. NATURAL STREAMBED MATERIAL SHALL BE PAID FOR UNDER ITEM "EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL".

TEMPORARY HYDRAULIC DATA - UNNAMED STREAM	
AVERAGE DAILY FLOW	0.2 CFS
AVERAGE SPRING FLOW	0.4 CFS
2-YEAR FREQUENCY DISCHARGE	111 CFS
TEMPORARY DESIGN DISCHARGE	4 CFS
TEMPORARY DESIGN FREQUENCY	10X SPRING FLOW
TEMPORARY WATER SURFACE ELEVATION UPSTREAM	30.94 FT
TEMPORARY WATER SURFACE ELEVATION DOWNSTREAM	27.53 FT

<p>THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.</p>	<p>DESIGNER/DRAFTER: D.M./C.R. CHECKED BY: R.B. SCALE AS NOTED</p>	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p> <p>FILENAME: \\S:\MSH.HP65.60.0301_0175_3.7 STG1.dgn</p>	<p>LOCHNER ILLV. LOCHNER, INC. 55 Hartland Street, Suite 401 East Hartford, CT 06108</p> <p>APPROVED BY: R.B. DATE: 3-23-18</p>	<p>PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM</p>	<p>TOWN: MILFORD</p> <p>DRAWING TITLE: CONSTRUCTION STAGE-1</p>	<p>PROJECT NO. 301-175</p> <p>DRAWING NO. ENV-05</p> <p>SHEET NO. 5 OF 10</p>
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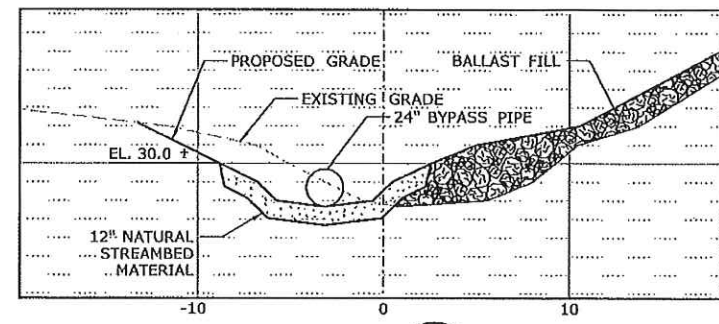
PLAN AT INLET
SCALE: 1" = 10'-0"



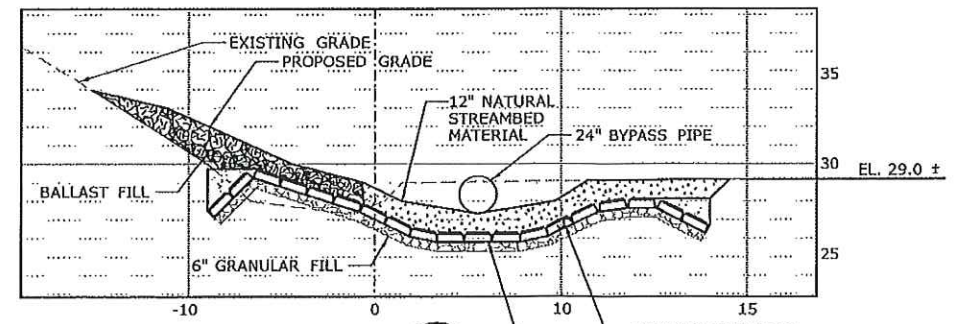
PLAN AT OUTLET
SCALE: 1" = 10'-0"

SEQUENCE OF CONSTRUCTION NOTES STAGE - 2

1. MODIFY WATER HANDLING TO ROUTE WATER THROUGH THE PROPOSED PIPE.
2. PLACE NATURAL STREAMBED MATERIAL. FILL EXISTING CULVERT WITH CONTROLLED LOW STRENGTH MATERIAL.
3. REGRADE RAILROAD EMBANKMENT SLOPES.
4. REMOVE WATER HANDLING SYSTEM, CONSTRUCTION MATS AND MATERIALS USED TO ACCESS THE SITE.
5. PLACE WETLAND SEED MIX ON DISTURBED AREAS WITHIN THE WETLAND LIMITS. WETLAND SEED MIX SHALL NOT BE PLACED OVER NATURAL STREAMBED MATERIAL, BALLAST OR THE PERMANENT ACCESS ROAD, TO BE PAID FOR UNDER ITEM "WETLAND GRASS ESTABLISHMENT".
6. PLACE TOPSOIL AND CONSERVATION SEEDING FOR SLOPES ON DISTURBED EMBANKMENT SLOPES ADJACENT TO THE ACCESS ROAD AND OUTSIDE THE WETLAND LIMITS.

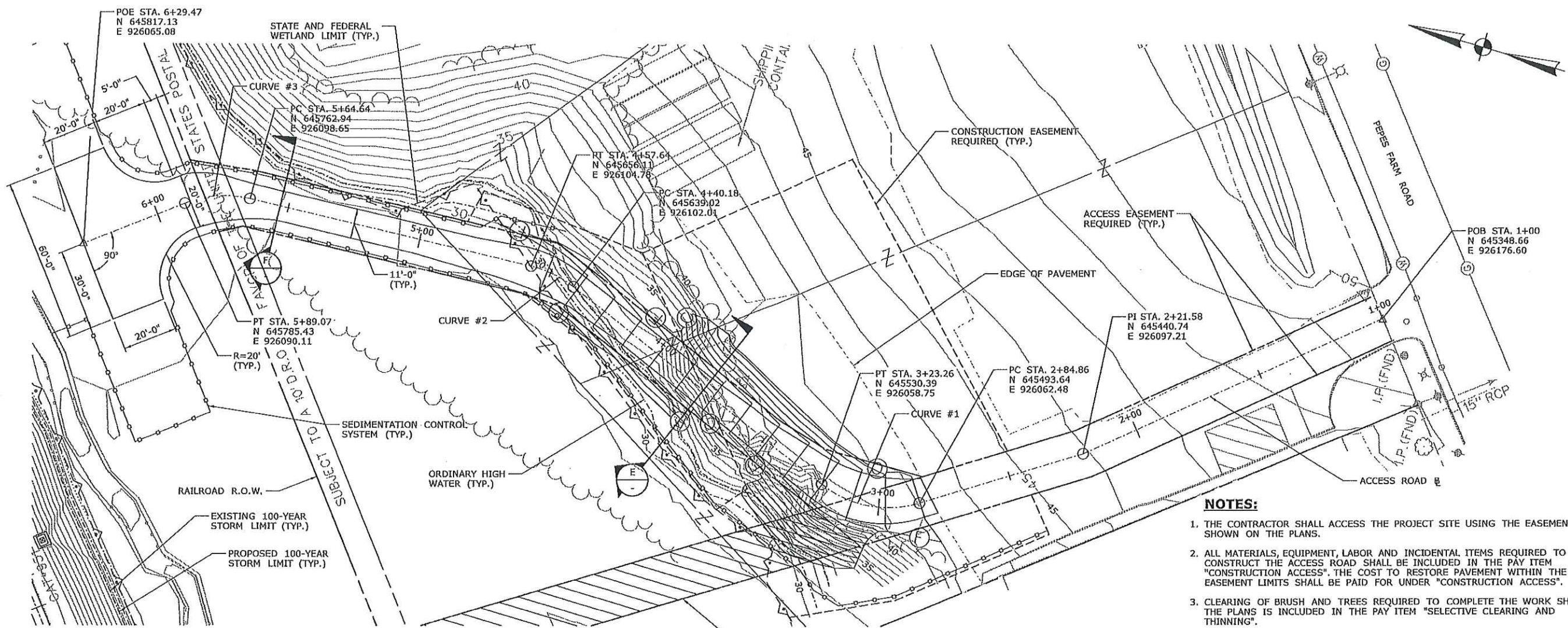


SECTION C
TYPICAL CHANNEL SECTION UPSTREAM
SCALE: 1" = 5'-0"



SECTION D
TYPICAL CHANNEL SECTION DOWNSTREAM
SCALE: 1" = 5'-0"

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: D.M./C.R. CHECKED BY: R.B. SCALE AS NOTED	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION FILENAME: ...VSD.MSH.HP65.60.0301.0175.3.8 STG2.dgn	LOCHNER ILV. LOCHNER, INC. 55 Harland Street, Suite 401 East Hartford, CT 06108 APPROVED BY: R.B. DATE: 3-23-18	PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	TOWN: MILFORD DRAWING TITLE: CONSTRUCTION STAGE-2	PROJECT NO. 301-175 DRAWING NO. ENV-06 SHEET NO. 6 OF 10
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 4/6/2018			



- NOTES:**
1. THE CONTRACTOR SHALL ACCESS THE PROJECT SITE USING THE EASEMENTS SHOWN ON THE PLANS.
 2. ALL MATERIALS, EQUIPMENT, LABOR AND INCIDENTAL ITEMS REQUIRED TO CONSTRUCT THE ACCESS ROAD SHALL BE INCLUDED IN THE PAY ITEM "CONSTRUCTION ACCESS". THE COST TO RESTORE PAVEMENT WITHIN THE EASEMENT LIMITS SHALL BE PAID FOR UNDER "CONSTRUCTION ACCESS".
 3. CLEARING OF BRUSH AND TREES REQUIRED TO COMPLETE THE WORK SHOWN ON THE PLANS IS INCLUDED IN THE PAY ITEM "SELECTIVE CLEARING AND THINNING".
 4. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS UPON THE COMPLETION OF THE GRADING WORK. WETLAND SEED MIX SHALL BE USED WITHIN THE WETLAND LIMITS. THE RAILROAD EMBANKMENT ABOVE THE LIMIT OF BALLAST, AREAS OF NATURAL STREAMBED MATERIAL AND THE ACCESS ROAD SHALL NOT BE SEEDED. CONSERVATION SEED MIX SHALL BE USED ON EMBANKMENT SLOPES ADJACENT TO THE ACCESS ROAD AND OUTSIDE THE WETLANDS.
 5. TOPSOIL SHALL BE PLACED ON EMBANKMENT SLOPES ADJACENT TO THE ACCESS ROAD AND OUTSIDE THE WETLANDS.
 6. THE WIDTH OF THE ACCESS ROAD IN THE CURVES SHALL BE INCREASED AS NECESSARY TO PROVIDE SUFFICIENT ROOM FOR VEHICLE MOVEMENTS.

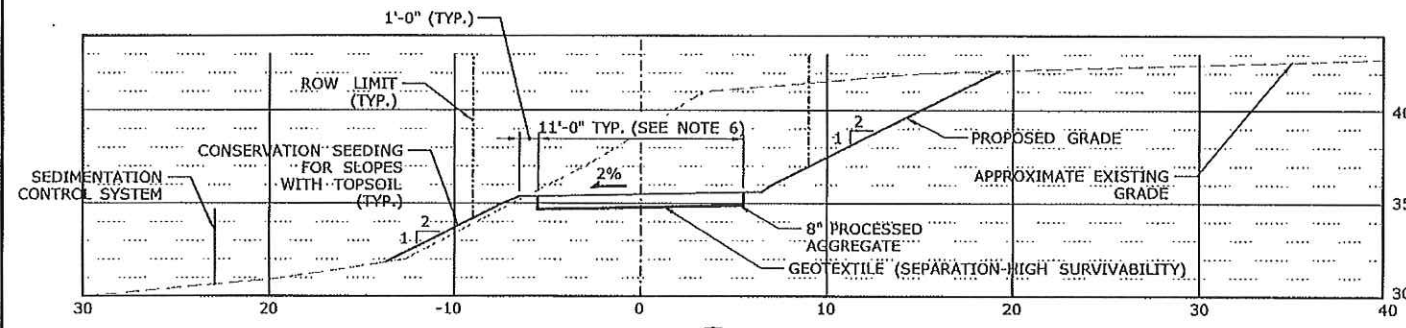
CURVE DATA

CURVE #1	CURVE #2	CURVE #3
$\Delta = 55^\circ$	$\Delta = 25^\circ$	$\Delta = 35^\circ$
$T = 20.82'$	$T = 8.87'$	$T = 12.61'$
$L = 38.40'$	$L = 17.45'$	$L = 24.43'$
$R = 40'$	$R = 40'$	$R = 40'$
PI N = 645511.05	PI N = 645647.26	PI N = 645775.53
PI E = 926051.05	PI E = 926105.29	PI E = 926097.92

ACCESS ROAD PLAN

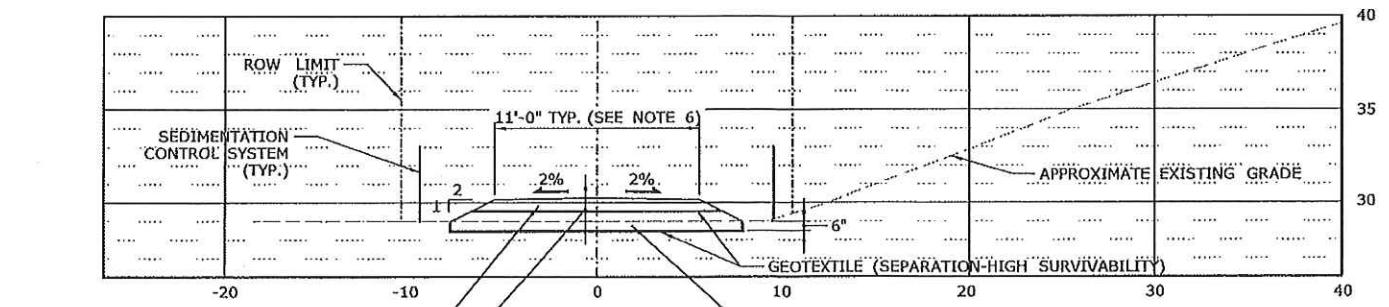
SCALE: 1" = 20'-0"

PORTION OF ACCESS EASEMENT TO BE RELEASED. SHALL NOT BE USED FOR ACCESS.



TYPICAL SLOPE SECTION

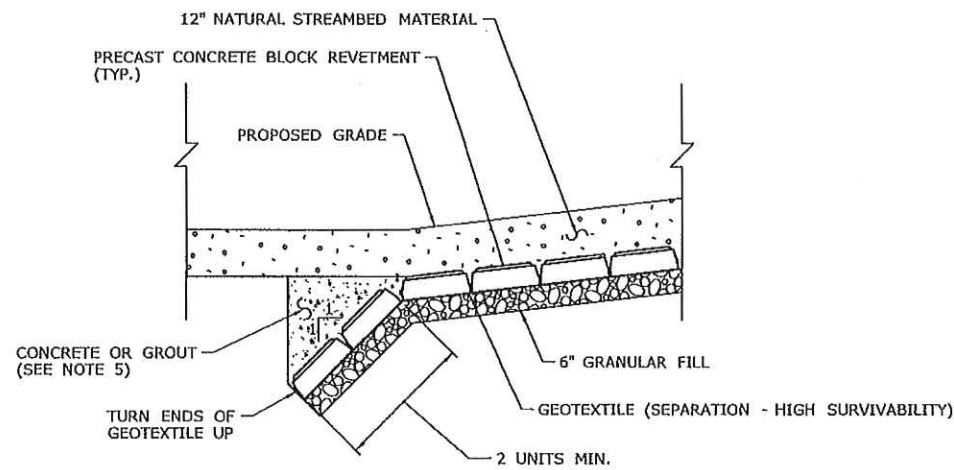
SCALE: 1" = 5'-0"



TYPICAL WETLAND SECTION

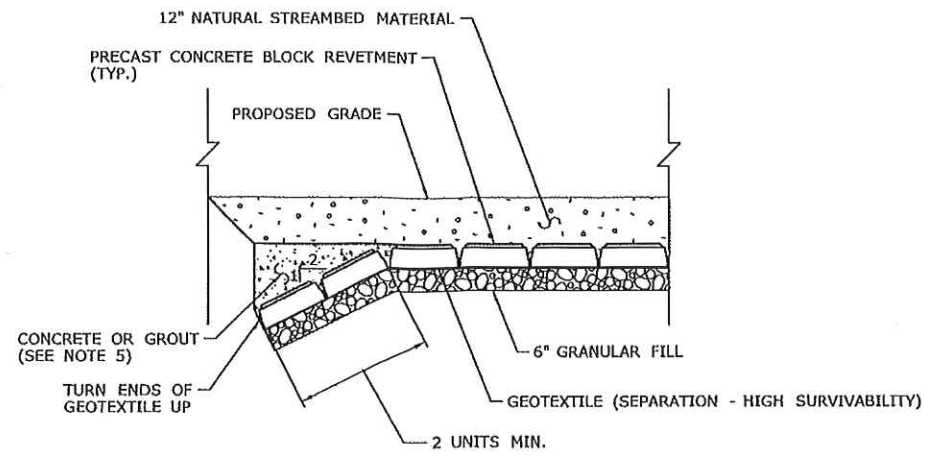
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DESIGNER/DRAFTER: D.M./C.R.	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p>	<p>LOCHNER H.W. LOCHNER, INC. 55 Hartland Street East Hartford, CT 06108</p>	PROJECT TITLE:	TOWN:	PROJECT NO.
CHECKED BY: R.B.			REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM	MILFORD	301-175
SCALE AS NOTED	FILENAME: ...USD_NSH_MP65.60_0301_0175_3.9_AccessPlan.dgn	APPROVED BY: R.B.	DATE: 3-23-18	DRAWING TITLE:	DRAWING NO.
REV. DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 3/23/2018	ACCESS ROAD DETAILS	ENV-07
					7 OF 10



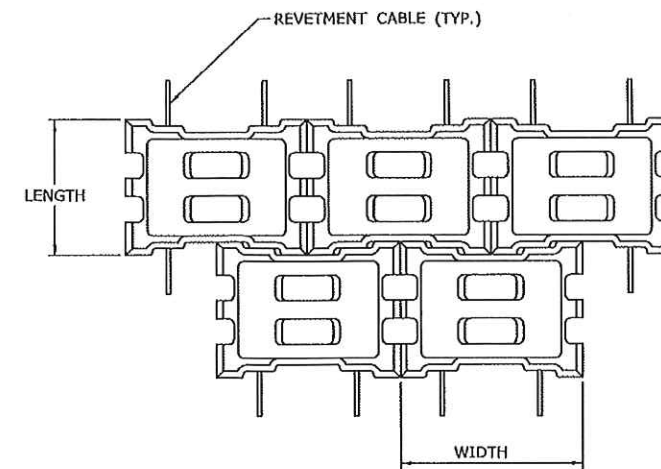
TOE TERMINATION DETAIL

N.T.S



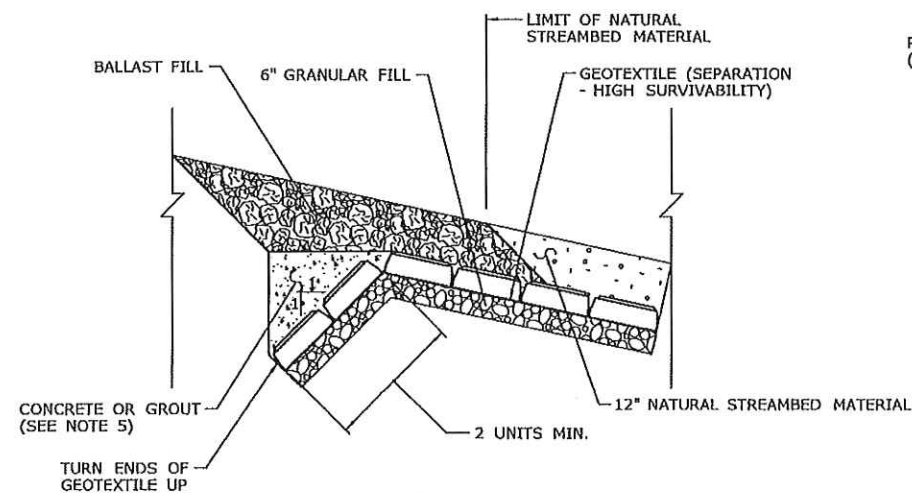
FLANK TERMINATION DETAIL

N.T.S



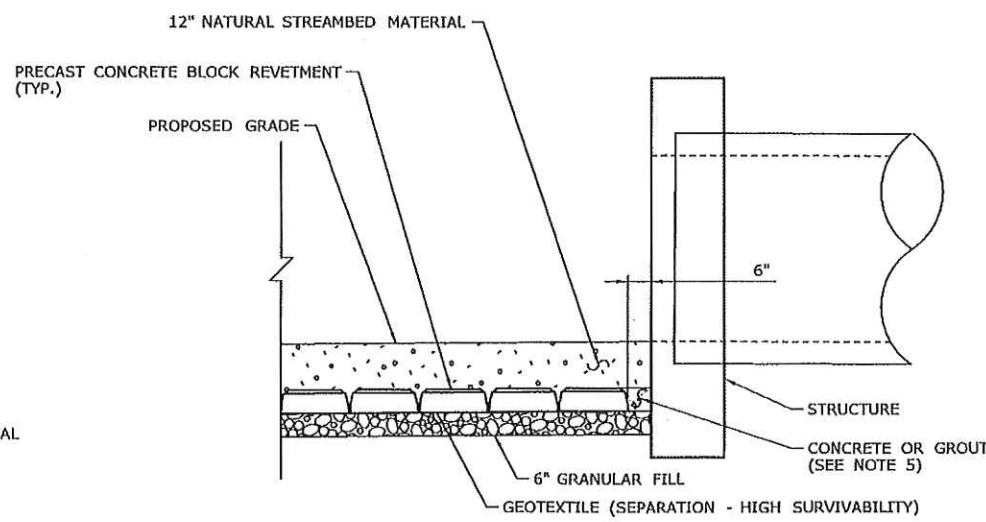
PRECAST CONCRETE BLOCK DETAIL

N.T.S



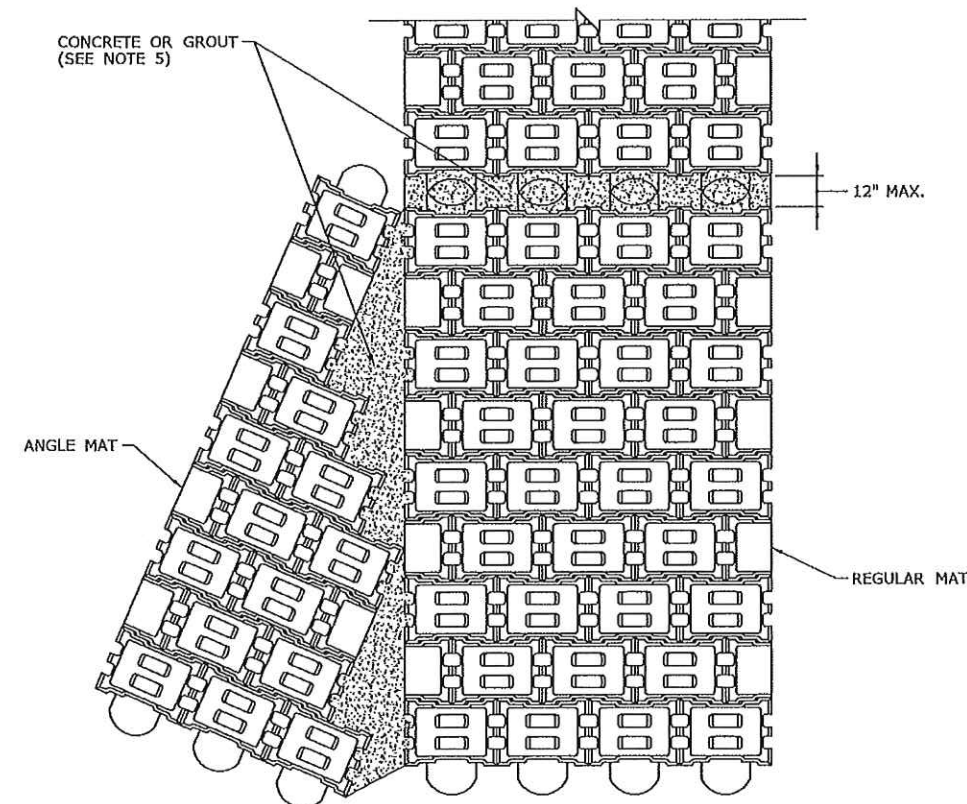
TOP TERMINATION DETAIL

N.T.S



TERMINATION AT STRUCTURE DETAIL

N.T.S



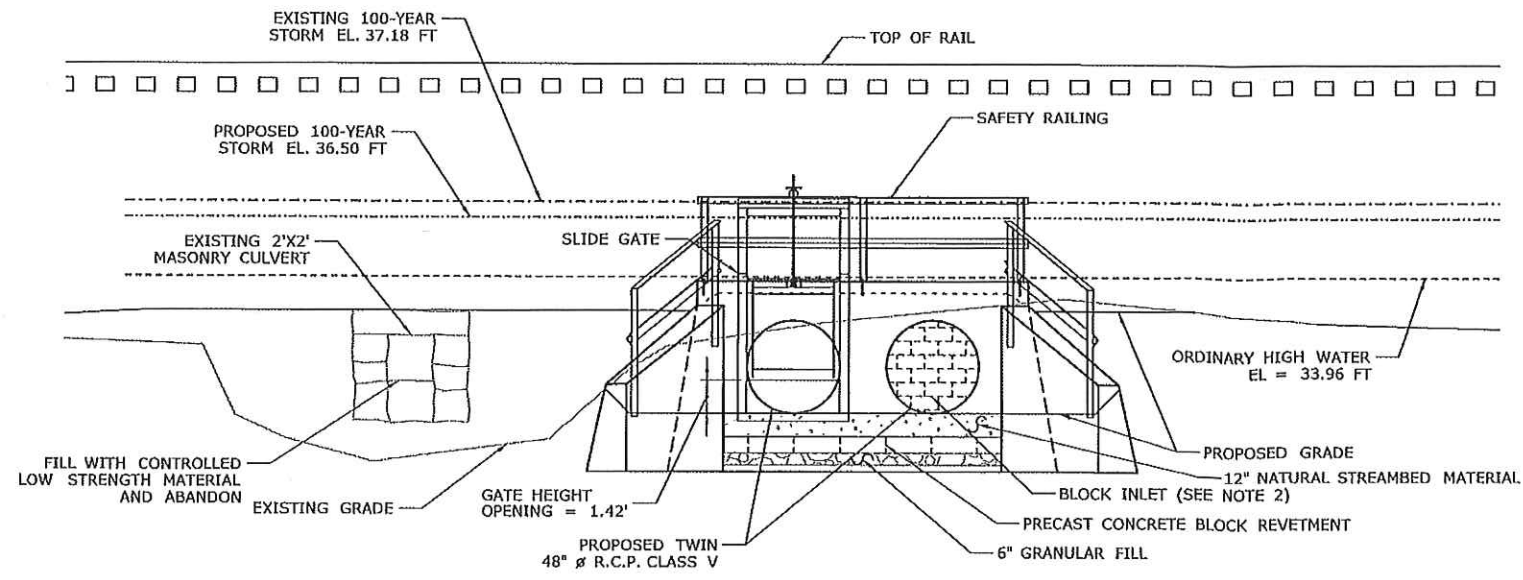
INSTALLATION DETAIL

N.T.S

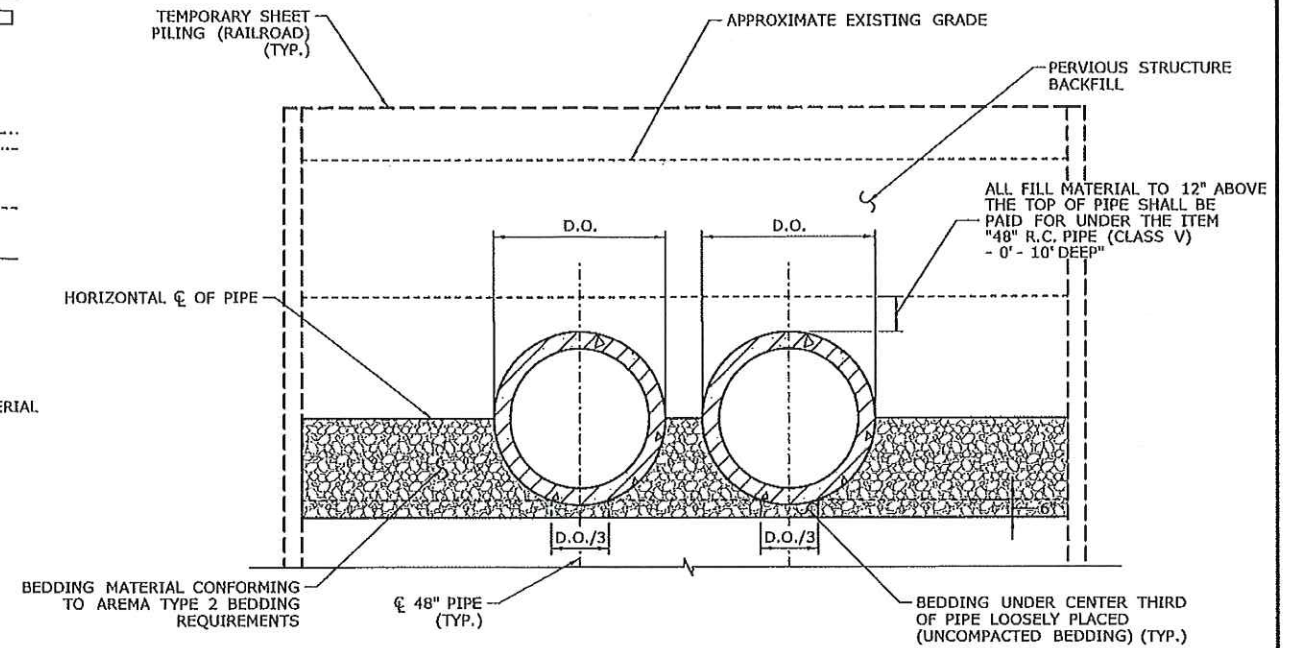
PRECAST CONCRETE BLOCK REVETMENT NOTES:

1. BLOCKS MUST BE OPEN CELL AND NON-TAPERED.
2. THE INSTALLATION OF THE PRECAST CONCRETE BLOCK REVETMENT SYSTEM SHALL BE IN ACCORDANCE WITH ASTM D6884 AND THE MANUFACTURER'S RECOMMENDATIONS.
3. THE 6" LAYER OF GRANULAR FILL, GEOTEXTILE (SEPARATION - HIGH SURVIVABILITY), GROUT OR CONCRETE AND PRECAST CONCRETE BLOCKS SHALL BE PAID FOR UNDER ITEM "PRECAST CONCRETE BLOCK REVETMENT".
4. IF PRECAST CONCRETE BLOCK MATS ARE USED THEY SHALL BE MATCHED UP TO THE GREATEST EXTENT POSSIBLE. GAPS GREATER THAN ONE BLOCK SIZE SHALL BE FILLED WITH A BLOCK. NO OVERLAPPING OF MATS WILL BE ACCEPTED.
5. 4,000 PSI NON SHRINK GROUT OR CONCRETE SHALL BE USED WHERE THE LOOP ENDS OF THE MATS MEET, AT TERMINATION ENDS AS SHOWN AND WHEREVER THERE IS GREATER THAN A 2 INCH GAP BETWEEN ADJACENT MATS OR STRUCTURES.
6. BACKFILLING OF THE REVETMENT SYSTEM WITH NATURAL STREAMBED MATERIAL SHALL BE COMPLETED AS SOON AS PRACTICABLE AFTER THE REVETMENT HAS BEEN INSTALLED.

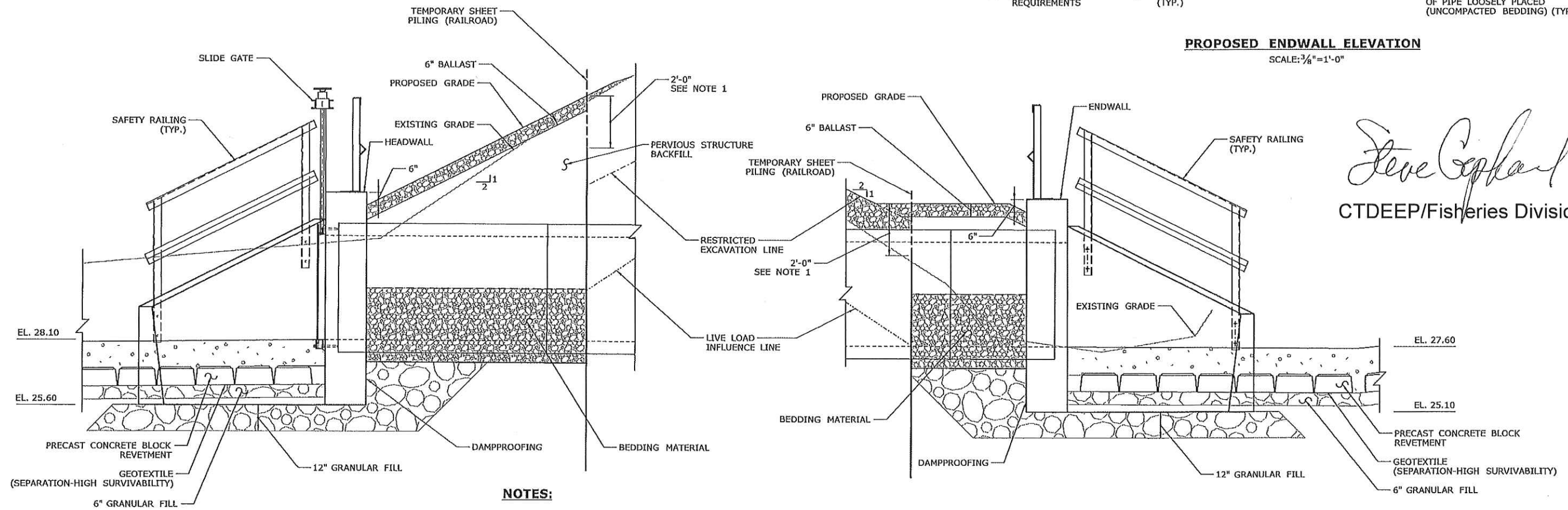
REV. DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 3/23/2018	DESIGNER/DRAFTER: D.M.	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p>	<p>LOCHNER H.W. LOCHNER, INC. 55 Hartland Street East Hartford, CT 06108</p>	<p>PROJECT TITLE: REPLACEMENT OF CULVERT AT MP 65.60 NEW HAVEN MAINLINE OVER UNNAMED STREAM</p>	<p>TOWN: MILFORD</p>	<p>PROJECT NO. 301-175</p>
				CHECKED BY: R.B.					



UPSTREAM ELEVATION
SCALE: 1/4"=1'-0"



PROPOSED ENDWALL ELEVATION
SCALE: 3/8"=1'-0"



PROPOSED HEADWALL ELEVATION
SCALE: 1/2"=1'-0"

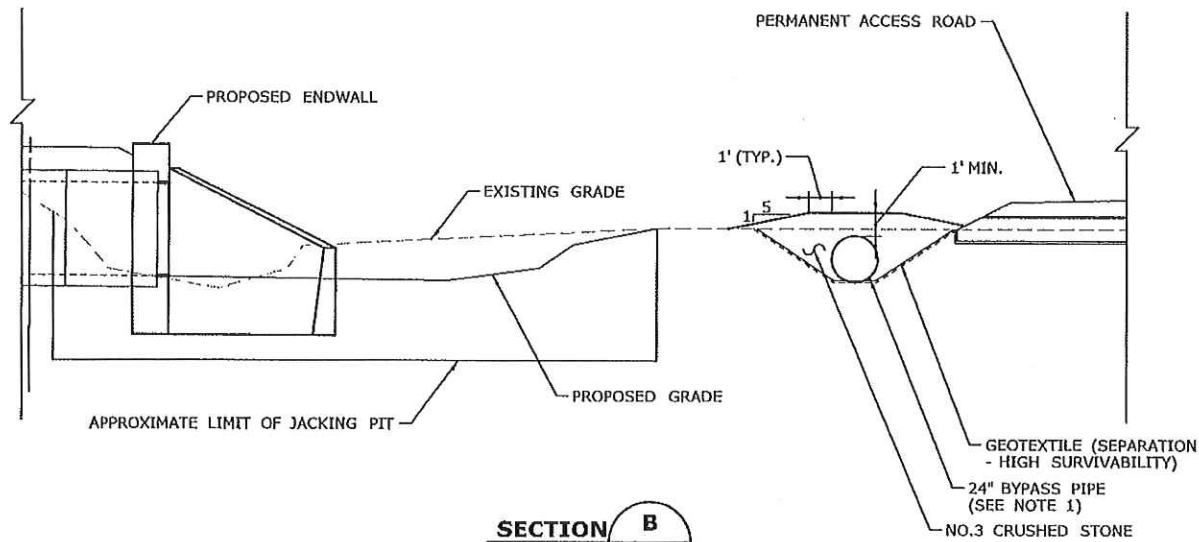
PROPOSED ENDWALL ELEVATION
SCALE: 1/2"=1'-0"

NOTES:

1. REMOVE TEMPORARY SHEET PILING (RAILROAD) 2'-0" BELOW THE PROPOSED GRADE AS SHOWN. THE REST OF THE TEMPORARY SHEET PILING (RAILROAD) SHALL REMAIN IN PLACE.
2. THE INLET AND OUTLET OF THE SUPPLEMENTAL (WESTERN) CULVERT SHALL BE BLOCKED OFF. THE MEANS FOR BLOCKING THE PIPE SHALL BE A MASONRY WALL OR OTHER SYSTEM SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER SUITABLE FOR BLOCKING OFF FLOW FROM THE CULVERT, CAPABLE OF WITHSTANDING PROLONGED EXPOSURE TO WATER AND CAPABLE OF BEING REMOVED WITH NEGLIGIBLE IMPACT ON THE HEADWALL/ENDWALL. THE COST OF BLOCKING OF THE PIPE SHALL BE INCLUDED IN THE ITEM "CLASS "A" CONCRETE".

Steve Cephal
CTDEEP/Fisheries Division

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 3/23/2018 FILENAME: ...158.HSH.HP65.60.0301.0175.3.13 Misc Det 1.dgn			

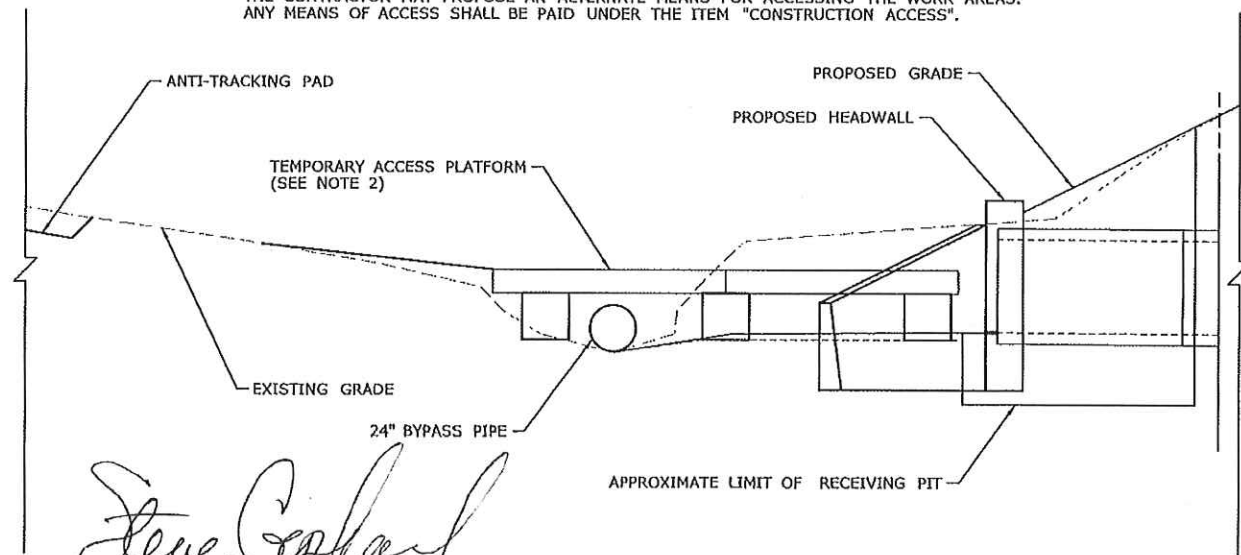


CONSTRUCTION STAGING ENDWALL ELEVATION

SCALE: 1/4"=1'-0"

NOTES:

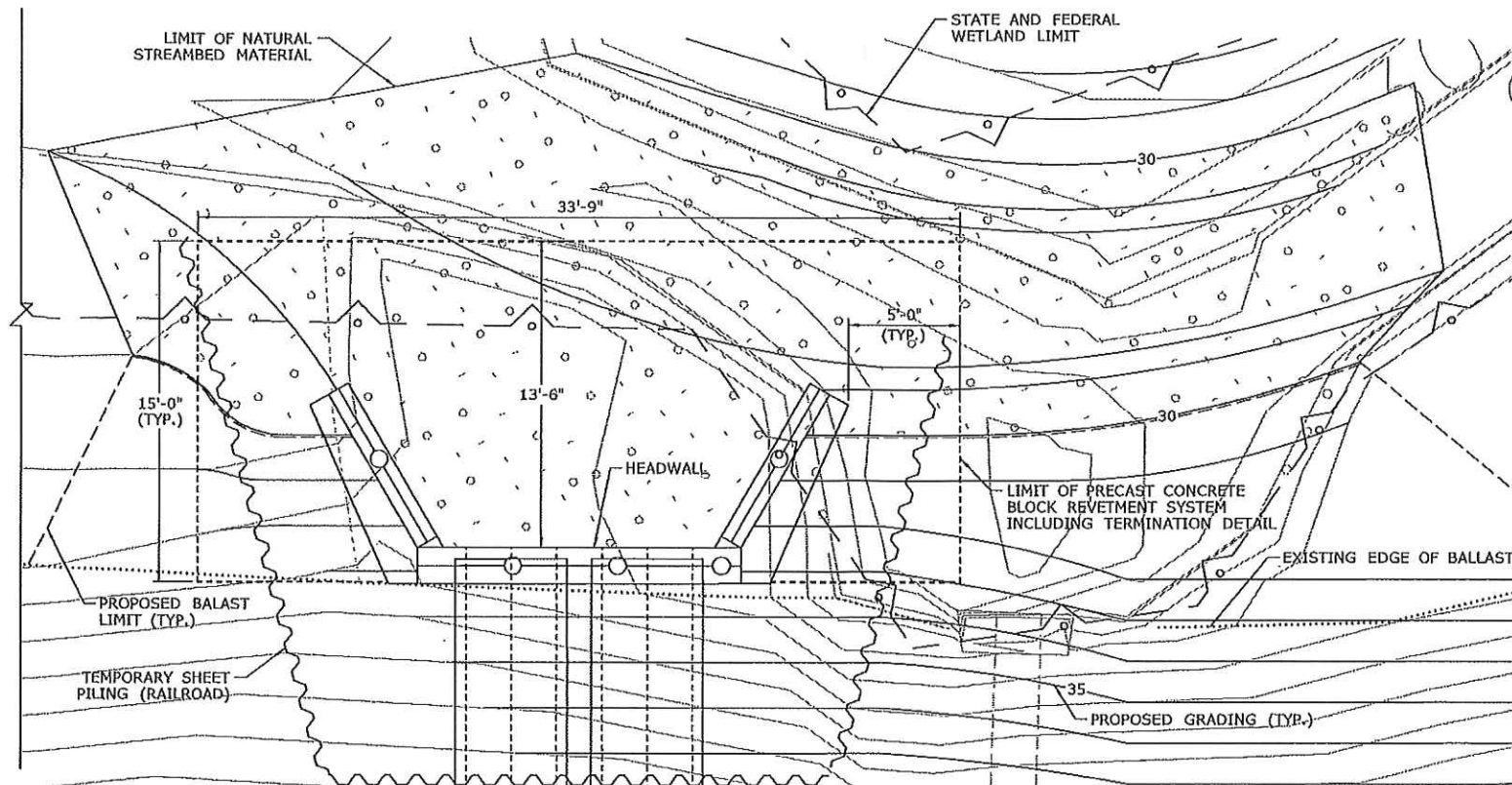
1. THE TEMPORARY BYPASS PIPE IS PROPOSED TO BE BURIED ON THE DOWNSTREAM SIDE TO PROVIDE WORK ACCESS AND A CONSTANT DOWN GRADIENT. THE FILL (CRUSHED STONE) AND GEOTEXTILE ASSOCIATED WITH THIS SHALL BE INCLUDED IN THE ITEM "HANDLING WATER". THE CONTRACTOR MAY PROPOSE AN ALTERNATE MEANS FOR THE BYPASS PIPE LAYOUT.
2. THE TEMPORARY ACCESS PLATFORM SHOWN IS A POSSIBLE MEANS OF ACCESSING THE SITE. THE CONTRACTOR MAY PROPOSE AN ALTERNATE MEANS FOR ACCESSING THE WORK AREAS. ANY MEANS OF ACCESS SHALL BE PAID UNDER THE ITEM "CONSTRUCTION ACCESS".



CONSTRUCTION STAGING HEADWALL ELEVATION

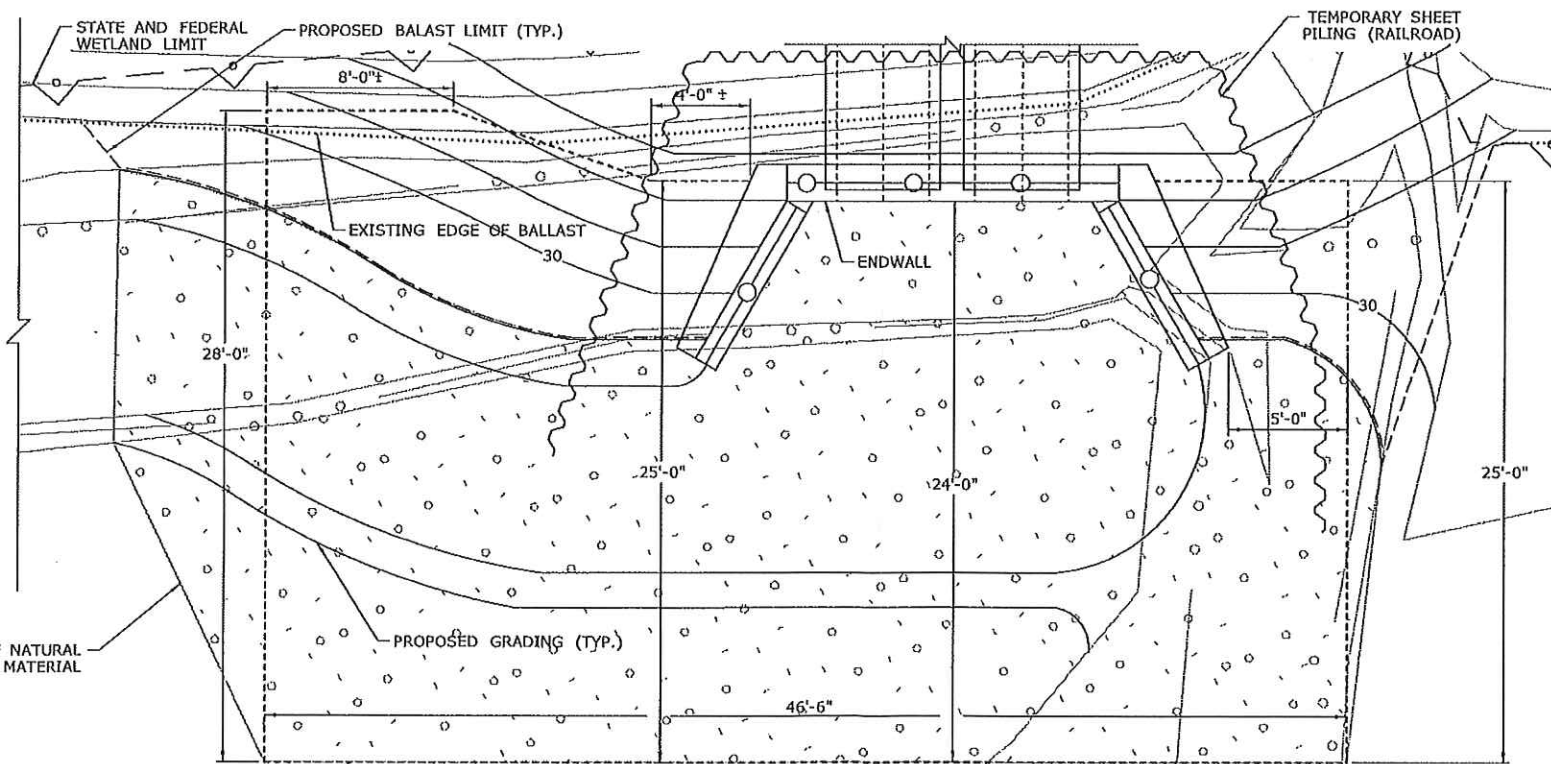
SCALE: 1/4"=1'-0"

CTDEEP/Fisheries Division



UPSTREAM IN CHANNEL WORK LIMITS

SCALE: 1/4"=1'-0"



DOWNSTREAM IN CHANNEL WORK LIMITS

SCALE: 1/4"=1'-0"

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	PLOTTED: 3/23/2018 FILENAME: ...158.HSH.MP65.60.0301.0175.3.14 Hloc Det 2.dgn					



STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546



Transmittal:

From: Mandy Ranslow, Transportation Planner
Date: February 2, 2018
To: M. Dunne & C. Labadia, Deputy State Historic Preservation Officers

Project: State No.: 301-175
F.A.P. No.: N/A
Project Title: Culvert Replacement on the New Haven Mainline
Town: Milford

Subject: SHPO Consultation Documentation

Description of Activity:

The Connecticut Department of Transportation (CTDOT) proposes to use state funds to replace a masonry culvert that carries the New Haven Mainline over an unnamed stream. The existing culvert is approximately 89 feet long and has an opening that is approximately two feet high by two feet wide. There is ten feet of embankment material between the top of the culvert and the bottom of the rail ties. The existing structure carries stormwater runoff from the Eastern Steel Road commercial and industrial area.

The inlet and the outlet of the existing structure have partially collapsed. In addition sediment and debris have accumulated within the culvert. The low-lying developed areas immediately upstream of the culvert have a history of flooding, which is exacerbated by the collapsed culvert. Due to the deteriorated condition of the existing masonry culvert, the increased risk of flooding and ongoing maintenance concerns, the structure has been recommended for replacement.

The proposed replacement consists of twin 48 inch diameter reinforced concrete pipes. Endwalls with flared wings will be installed up and downstream. The replacement pipes will be jacked through the railroad embankment. The existing culvert will be filled and abandoned in place.

Access to the site is limited to two easements through private property at the end of Eastern Steel Road and Pepes Farm Road. An access road will need to be constructed for the downstream easement. This will require cutting small trees, cleaning brush, and bringing in suitable fill.

Technical Review of Project:

The date of construction of the masonry culvert is unknown, however, it likely dates to the 1890s elevation and 4-track construction of the New Haven Mainline. Generally, historic bridges, culverts, and other railroad features are considered contributing elements to the potential National Register-eligible New Haven Line. The entire New Haven Line has not been inventoried and evaluated for historic significance, however, structures dating to the elevation and widening of the rail line are typically considered historic. The integrity of the subject culvert has been diminished due to its collapse, and the proposed project will eliminate its function as a culvert. However, the culvert will be left in place, and the new culvert will be at a new location.

Aside from the potentially eligible New Haven Line, the project is not within a listed historic district. The buildings in proximity to the culvert are modern and industrial in nature. No standing structures will be impacted by this project.

Soils in the project area are classified as Urban Land and have been disturbed by rail construction and industrial development. No known archaeological sites are located in proximity to the project. It is highly unlikely intact, eligible archaeological resources will be impacted by this project.

Recommendation:

CTDOT's Office of Environmental Planning recommends that the proposed project will have no adverse effect on historic properties. This project is subject to the Connecticut Environmental Policy Act.

Attached Documents:

- 0 SHPO Letter
- x Historic Review Maps
- x Photos (in Environmental Review Request)
- x Supporting Documents – Environmental Review Request

SHPO Use Only

Based on the information provided to the State Historic Preservation Office, we:

Concur Do Not Concur (additional comments attached)

with DOT's Office of Environmental Planning's opinion that no historic properties will be adversely affected by this undertaking (Project No. 301-175 in Milford).



3/9/18

Mary B. ~~Dunne~~/Catherine Labadia
Deputy State Historic Preservation Officer

Date



Department of Economic and
Community Development

Connecticut
still revolutionary



1. Channel Upstream



2. Upstream Elevation



3. Channel Downstream



4. Downstream Elevation



5. Typical Vegetation to be Removed Downstream.
(Building in background is warehouse at 206 Pepes Farm Road)



6. Downstream Elevation from Distance.

Interagency Coordination Meeting Notes

January 19, 2017

DOT Room 3130

158-214 Pier Inspection, Br. 01349; Route 136 o/Saugatuck River, Westport

1/19/2017 – Bridge 01349 is being studied for rehabilitation. In order to inform the decision process, inspections of the support pilings at Pier 2 need to be conducted. The piles consist of concrete encased H-piles with fiberglass jackets. The concrete must be removed between the high and low tide lines in order to evaluate the condition of the steel. It is anticipated that small barges or work boats will be used to access the piles at low tide from a boat launch to the south. A semi-circular section of 18” – 24” of the existing concrete will be removed from the 3 piles on the east side of Pier 2. The western support piles will not be investigated. There will be no chipping or removal of material below the low tide line. Debris control will be used to contain any concrete from entering the waterway.

Project Impacts: While there are no direct impacts to the channel, there will be activity below the high tide line, and the concrete backfill on the pier will be considered fill in the waterway by ACOE standards.

Permitting Requirements: The project will qualify for the OLISP Coastal Maintenance General Permit. This permit is subject to annual reporting by the district and has no separate application form. OEP will issue an ‘eligibility determination form’ to be included in the contract. The project will require NDDDB coordination, fisheries coordination and US Coast Guard coordination prior to the beginning of work. All coordination should take place through OEP. The project also qualifies as SV – GP #8 with ACOE. The Self Verification Notification Form will need to be submitted to ACOE along with project plans and a location map.

Agency Comments: Access needs to be spelled out in the contract documents to ensure that the barge/work boat used will at no time be founded on the river bottom. Any construction related conditions from the Coast Guard, DEEP fisheries, or DEEP Wildlife must be incorporated into the contract.

Action Items: Follow-up with OEP on resource coordination.

301-175 Culvert Replacement (via jacking) New Haven Rail Line mile post 65.60, Milford

11/22/2016 – The existing structure at this location is a 2x2 foot box that is 89 feet long. The structure has collapsed at both the inlet and outlet, significantly diminishing its hydraulic capacity and accelerating erosion. This watercourse has a history of flooding at this location. The proposed structure consists of twin 48 inch, 110 feet long RCPs jacked under the rail bed adjacent to the existing pipe. The pipes will have flared inlets and outlets. One pipe will be closed at the inlet and outlet. The other pipe will have a slide gate to control hydraulic capacity. An access road must be created on the downstream side of the structure to facilitate the jacking operation. Metro North seeks to have permanent access to the downstream culvert end for future maintenance purposes. The current proposal has a long haul road through the wetlands at the downstream end which follow an easement which has already been obtained from the property owner Frito-Lay.

Project Impacts: The drainage area of this stream crossing is 0.1 sq. mi. The total impact to regulated areas of the proposed project is 14500 sq. ft., 10200 sq. ft. are permanent impact, 4300 sq. ft. are temporary impact. Crane pads will also be placed in the wetlands during construction.

Permit Requirements: Permitting requirements were not discussed during the meeting.

Agency Comments: DEEP Staff stated that they would like to see alternatives that minimize the impact of the access road as it seems other feasible alternatives may exist which have less environmental impact. DOT Engineering staff commented that Rights of Way has already negotiated the location of the easement with Frito-Lay, however were advised that an existing agreement does not preclude the need to evaluate alternatives. The consultant asked if it was preferred to skirt the wetland area on its northern edge to minimize impact. DEEP staff replied that that alternative would be preferred over the currently

**DEEP /ACOE/ DOT
Interagency Coordination Meetings
Project Meeting Notes**

proposed design, or perhaps another route. The designer was asked to evaluate reasonable alternatives. DEEP would also like to see the road top dressed with soil and have vegetation planted on the access road after construction.

Action Items: Contact Frito-Lay to discuss moving the location of the proposed access road and evaluate other alternatives with less environmental impacts

1/19/2017 – The project returned to the Interagency meeting to discuss an alternative layout for the haul road at the outlet. The Designers altered the route of the haul road to parallel the northern edge of the wetlands along the embankment and then turn into the wetland to approach the outlet head on. This resulted in a decrease in the length of the haul road. The Designer has also reduced the post-construction footprint of the hammerhead turnaround area. The access road will have an approximate 7% grade across the embankment which is improved over the previous slope design of the haul road.

Project Impacts: Total impacts were reduced to 11,600sf (6090sf temporary, 5510sf permanent), a reduction of 2900sf.

Permit Requirements: The project qualifies as PCN for activities 18 & 19 with the ACOE. A 401 WQC is required via the PGP Addendum. An Inland Wetland General permit from DEEP is also required. No FMC is required as the drainage area to the culvert is < 1 square mile. In-Lieu fee is required as mitigation. All of the permanent impact is to be used to calculate the fee; it was agreed upon that 15% of the temporary impact area is also to be included in the fee calculation. OEP is to provide the Designer in-lieu fee calculation information.

Agency Comments: There was some discussion of the final elevation and extent of the final haul road. The final conclusion was that the elevation would stay as currently designed, and that the road would end as currently designed. The surface of the roadway will be top-soiled and seeded with a native seed mix.

Action Items: none

111-122 Bridge 02339, Route 44 over Bark Meadow Brook,

8/18/2016 - The Project Engineer presented an overview of the project. Bridge No. 02339 consists of a single span concrete slab on granite covered stone masonry abutments. The structure, built in 1932, conveys Bark Meadow Brook beneath 2 lanes of Route 44 traffic in Pomfret. Bridge 02339 has a 1.5 square mile drainage area. There is scour (grout bags in place) and deterioration of the existing bridge substructure and the project will involve full bridge replacement. Pichay Mar (DOT H&D) explained that various options were reviewed for the bridge replacement. A concern with the design was to avoid changing the inundation/headwater conditions of the large existing wetlands area upstream, as well as preventing scour issues with the new structure. Inundation maps were presented and reviewed for 3 design options showing the 10 year and 100 year storm events. The preferred option, and the option proposed for the project, is a 4-sided 10' x 7' box culvert. The proposed box culvert will be embedded and natural stream bottom material will be placed along the channel bottom. The 10' x 7' box culvert does not meet 1.2 times bank full width. It was explained that options which met the 1.2 bank full width requirement would lessen the inundation during larger storms (100-year) by 5 acres of the total 40 acre wetland, and that this would negatively impact the wetland over time. In addition, other options would cause a change in headwater over a large area. Bob Gilmore (DEEP) explained that he was more concerned about smaller storms. The DEEP concurred with proposal of the 10' x 7' box culvert based on review of the flood management issues. It was agreed that the project will need a USACE PCN 19 permit, PGP and DEEP IW Gen

**DEEP /ACOE/ DOT
Interagency Coordination Meetings
Project Meeting Notes**

1/19/2017 – This project was brought back to the Interagency meeting to address the reduced impact numbers and present the project to the Regulatory Agencies with the hope of meeting the criteria for Self-Verification under recently explained guidance by CTDEEP.

Project Impacts: Proposed impacts to regulated areas for this project are approximately 4,500 sq. ft.

Permitting Requirements: The state permitting requirement is a Flood Management General, Connecticut Addendum Army Corps of Engineers General Permit (PGP), and a General Water Resource Construction Activities. The federal permitting requirement is an ACOE PCN GP-19.

Agency Comments: DEEP Fisheries staff approved the design and has signed off on the plan set. CTDEEP stated that this project did meet the Self-Verification requirements to their standards. However, this project does not meet the ACOE standards for SV—a discussion was initiated on how to proceed with projects that fall into this permitting category. It was decided that this project would be an ACOE PCN and a CTDEEP PGP.

Action Items: ACOE and DEEP to discuss discrepancies between Regulators SV determination standards.

301-114 New Parking Garage at Union Station, New Haven

1/19/2017 – This project is the construction of a 7 story parking garage at Union Station in New Haven. This project is proposed to be constructed with the ground floor at a minimum elevation of 12 feet. This elevation is 1 foot above the base elevation meeting flood management requirements. There are three separate drainage systems that this facility will utilize for storm water. All three eventually flow out to New Haven Harbor. This project proposes a hydrodynamic separator out to the closed drainage system on Union Avenue.

Project Impacts: Entire project is in the 100YR floodplain zone AE base elevation 11 feet.

Permit Requirements: Flood Management Certification and a Coastal Consistency Form DEEP.

Agency Comments: This project will need a full FMC from DEEP and should talk with the analyst prior to submitting the application.

Action Items: Set-up a pre-application meeting with Colin Clark from DEEP to discuss the FMC issues.

Project Managers Meeting Notes

November 22, 2016

Room 3130

57-118 Norman Road over Pachuag River, Sheldon Road over Doanville Pond, Griswold

11/22/2016 – This project was previously presented at LEAN on 5/26/2016. Bridge Nos. 05568 and 05851 are both part of this project. Bridge 05568: is scour critical and experiences overtopping during 10 year frequency storm. The entire structure will be replaced with a larger clear span. The roadway profile will be raised, the resulting fill slopes will cause wetland impacts. The project area is adjacent to a NDDB area. Bridge 05851: Sheldon Road is currently closed. The abutments became undermined during a DEEP scheduled drawdown. The proposed project will fully replace the current structure and increase the clear span. The project will be scheduled to coincide with the 2 year pond drawdown cycle to minimize in water work. Substructure work will occur behind the abutments. There is a historical arch that is part of the current structure that will be removed and preserved.

Project Impacts: Bridge 05568: The project is located in FEMA floodplain zone AE. The project impacts to regulated areas depend on the steepness of fill slopes, 1.5:1 will result in 405 sq. ft. of impacts, 2:1 slopes will have a total impact of 1475 sq. ft. Bridge 05851: The project impacts to regulated areas depend on the steepness of fill slopes 1.5:1 will result in 1470 sq. ft. of impacts, 2:1 slopes will have a total impact of 3345 sq. ft.

Permitting Requirements: The federal permitting requirement for this project is an ACOE Self-Verification filed under GP-19. The Department will issue a FM MOU and the town will issue a wetland permit.

Agency Comments: Bridge 05568: DEEP staff asked how will slopes be stabilized? The consultant responded that if the fill slope is 1.5:1 rip rap will be used, if the slope is 2:1 other stabilization techniques can be utilized. DEEP Fisheries staff asked where the fill will encroach the pond and what are the current conditions there? They then requested that a plan sheet showing impact areas be sent to them. DEEP staff commented that they prefer a 2:1 slope pending fisheries approval. Bridge 05851: DEEP staff commented that the biannual drawdown is approximately 3 feet. A much more significant drawdown would be required to work in the dry without water handling in place. Also the drawdown period is normally during the winter. DOT OEP staff asked if rip rap will be placed in the channel. The consultant replied that scour protection will be needed. DOT OEP staff commented that removal of the stone arch should be included as a temporary impact, the consultant agreed. DEEP staff commented that they prefer a 1.5:1 slope pending Hydraulics & Drainage approval.

Action Items: Send plan sheets with impact areas to DEEP Fisheries. Explore using cofferdams instead of depending on the DEEP scheduled drawdown to decrease in water work. Subsequent to the Project Managers Meeting, plan sheets with the impact areas shown for both 2:1 and 1.5:1 slopes were provided to DEEP Fisheries. DEEP Fisheries Staff has provided the Department with additional comments/recommendations based on these plans.

73-177 Replacement of 202 Bridge over Bantam River, Litchfield

11/22/2016 – This project was previously presented at PMM on 6/18/2016. The consultant provided a brief overview of the project. Bridge No. 00908 is a 3 span structure. There is a large sediment deposit underneath the northern span that prevents water flow except during high flow events. The proposed 2 span structure is 89.7 feet wide and has a clear span of 86 feet. Rip rap will be placed along the eastern and western sides of the watercourse; the center pier will also be armored with rip rap.

Project Impacts: This stream crossing has a drainage area of 19.4 sq. mi. The total impacts to regulated areas of the proposed project are 4600 sq. ft., 2400 below OHW, and 2200 sq. ft. in wetlands.

Permitting Requirements: The federal permitting requirement for this job is an ACOE Pre-Construction Notice filed under GP-19 (unless comments below are incorporated). State permitting requirements are

**DEEP /ACOE/ DOT
Regulatory Coordination Meetings
Project Meeting Notes**

Flood Management Certification, 401 WQC via the addendum (unless comments below are incorporated), Inland Wetland General, and Stormwater Permit.

Agency Comments: DEEP staff commented that the rounded stone on the eastern bank must be top dressed to provide better terrestrial passage for wildlife. DOT Engineering staff stated sediment will be less likely to accumulate with the proposed design. DEEP Fisheries staff asked if sediment deposits will be removed by DOT Maintenance, Engineering replied that that is unlikely. DEEP staff requested that rip rap be minimized in the channel. If rip rap placement is sufficiently minimized this project may be eligible for Self-Verification instead of Pre-Construction Notice.

Action Items: Send a revised plan sheet with minimized rip rap placement to DEEP.

130-165 Spruce Brook Road over Transylvania Brook, Southbury

11/22/2016 – This project was previously presented at PMM on 6/16/2016. The consultant provided a brief description of the project. The proposed rip rap size has changed from intermediate to standard DEEP Fisheries Biologist signed-off on the previous plan sheets. The only rip rap that will not be top dressed is at the drainage outlet. The rip rap limits and depths have changed

Project Impacts:

Permitting Requirements:

Agency Comments:

Action Items: The revised plan sheets were given to the DEEP Fisheries Biologist.

301-175 Jacking Replacement Culvert NHL mile post 65.60, Milford

11/22/2016 – The existing structure at this location is a 2x2 foot box that is 89 feet long. The structure has collapsed at both the inlet and outlet, significantly diminishing its hydraulic capacity and accelerating erosion. This watercourse has a history of flooding at this location. The proposed structure consists of twin 48 inch, 110 feet long RCPs jacked under the rail bed adjacent to the existing pipe. The pipes will have flared inlets and outlets. One pipe will be closed at the inlet and outlet. The other pipe will have a slide gate to control hydraulic capacity. An access road must be created on the downstream side of the structure to facilitate the jacking operation. Metro North seeks to have permanent access to the downstream culvert end for future maintenance purposes. The current proposal has a long haul road through the wetlands at the downstream end which follow an easement which has already been obtained from the property owner Frito-Lay.

Project Impacts: The drainage area of this stream crossing is 0.1 sq. mi. The total impact to regulated areas of the proposed project is 14500 sq. ft., 10200 sq. ft. are permanent impact, 4300 sq. ft. are temporary impact. Crane pads will also be placed in the wetlands during construction.

Permit Requirements: Permitting requirements were not discussed during the meeting.

Agency Comments: DEEP Staff stated that they would like to see alternatives that minimize the impact of the access road as it seems other feasible alternatives may exist which have less environmental impact. DOT Engineering staff commented that Rights of Way has already negotiated the location of the easement with Frito-Lay, however were advised that an existing agreement does not preclude the need to evaluate alternatives. The consultant asked if it was preferred to skirt the wetland area on its northern edge to minimize impact. DEEP staff replied that that alternative would be preferred over the currently proposed design, or perhaps another route. The designer was asked to evaluate reasonable alternatives. DEEP would also like to see the road top dressed with soil and have vegetation planted on the access road after construction.

Action Items: Contact Frito-Lay to discuss moving the location of the proposed access road and evaluate other alternatives with less environmental impacts

**DEEP /ACOE/ DOT
Regulatory Coordination Meetings
Project Meeting Notes**

115-118 Recreation Park Road over Little River, Putnam

11/22/2016 – This project been presented at multiple PMMs, the last time was 5/26/2016. The consultant engineer presented a brief overview of the project. Bridge No. 03968 has one span of 36.8 feet. The deck has a curb to curb width of 23 feet. There is a gas main and a gravity fed sewer line present at this site. The project falls within a mapped FEMA Floodplain and Floodway, however, the hydraulic data, was insufficient or incorrect. The consultant performed calculations using data from a USGS stream gauge that is located slightly upstream from the site. Based upon flows obtained through regression analysis, a structure designed to meet the ACOE 1.2x bank full width requirement would result in a hydraulic jump downstream and would require a CLOMR.

Project Impacts: Project impacts were not discussed in detail in the presentation.

Permitting Requirements: The federal permitting requirement for this project is an ACOE Pre-Construction Notice. State permitting requirements are a Flood Management Certification, IWRD Construction GP, and PGP Addendum.

Agency Comments: DEEP staff requested that the permit include a justification in the PCN application as to why the 1.2x bank full width requirement could not be met. Obtain a new fisheries sign-off if there are any changes to in water work.

Action Items: Send permits to OEP to be reviewed once they are complete. Revised plans need to be submitted to DEEP Fisheries for final sign-off.

50-126 Valley Road over Horse Tavern Brook, Fairfield

11/22/2016 – The consultant provided a brief overview of the project. Bridge No. 04956 is currently a two span structure that is 44 feet long, 35 feet wide on its southern portion and 46.5 feet wide on its northern portion. The structure is in a FEMA floodplain with a floodway going through the project site. The brook is channelized due to stone walls on both banks. The proposed structure will be a single span 42.5 feet long and 38.67 wide out to out width. Valley Road will be closed during construction. Water handling will take place using the two spans of the current structure during staged construction. The DEEP Fisheries biologist has provided a sign-off for this project.

Project Impacts: The total impacts to regulated areas for this project are 3415 sq. ft. The project also falls within a NDDB mapped area.

Permitting Requirements: The federal permitting requirements for this project are ACOE Self-Verification GP-19. A Flood Management- MOU is also required.

Agency Comments: ACOE staff commented that it is not practical to match the upstream and downstream conditions. This project is eligible for Self-Verification GP-19.

Action Items: