Connecticut Department of
Energy & Environmental Protection
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

General Permit Registration Form for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 10/1/13 (electronic form)

Prior to completing this form, you **must** read the instructions for the subject general permit at **DEEP-WPED-INST-015**.
This form must be filled out electronically before being printed.
You must submit the registration fee along with this form.

The status of your registration can be checked on the DEEP's ezFile. Portal. Please note that DEEP will no longer mail certificates of registration.

CPPU USE ONLY

App #: _____

Doc #: _____

Check #: _____

Program: Stormwater

Part I: Registration Type

Select the appropriate boxes identifying the registration type and registration deadline.

Registration Type			Registration Timeline	
☐	**Re-registration** **Existing Permit No. GSN** _____		**On or before February 1, 2014*** *Note: Failure to renew a permit by this date will require submission of new registration. Re-registrants must only complete Parts I, II, III, IV - Question 1, VII and submit Attachment A.	
☑	**New Registration** (Refer to Section 2 of the permit for definitions of Locally Exempt and Locally Approvable Projects)	☑ **Locally Approvable** **Size of soil disturbance:** 3,92	**New registration - Sixty (60) days prior to the initiation of the construction activity for:** For sites with a total soil disturbance area of 5 or more acres	
		☐ **Locally Exempt** **Size of soil disturbance:** _____	☐	**New registration - Sixty (60) days prior to the initiation of the construction activity for:** Sites with a total disturbance area of one (1) to twenty (20) acres except those with discharges to impaired waters or tidal wetlands
			☐	**New registration - Ninety (90) days prior to the initiation of the construction activity for:** (i) Sites with a total soil disturbance area greater than twenty (20) acres, or (ii) Sites discharging to a tidal wetland (that is not fresh-tidal and is located within 500 feet), or (iii) Sites discharging to the impaired water listed in the "Impaired Waters Table for Construction Stormwater Discharges"

Part II: Fee Information

1. New Registrations

   a. Locally approvable projects (registration only):

☑ $625

   b. Locally exempt projects (registration and Plan):

☐ $3,000 total soil disturbance area ≥ one (1) and < twenty (20) acres.

☐ $4,000 total soil disturbance ≥ twenty (20) acres and < fifty (50) acres.

☐ $5,000 total soil disturbance ≥ fifty (50) acres.

2. Re-Registrations

☐ $625 (sites previously registered prior to September 1, 2012)

☐ $0 (sites previously registered between to September 1, 2012 and effective date of this permit)

Total Fee: $625.00

The fees for municipalities shall be half of those indicated in subsections (a), (b) and (c) above pursuant to Section 22a-6(b) of the Connecticut General Statutes. State and Federal agencies shall pay the full fees specified in this subsection. The registration will not be processed without the fee. The fee shall be non-refundable and shall be paid by certified check or money order payable to the Department of Energy and Environmental Protection.

Part III: Registrant Information

- If a registrant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of the State. If applicable, the registrant's name shall be stated **exactly** as it is registered with the Secretary of the State. This information can be accessed at **CONCORD**
- If a registrant 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.).

1. Registrant /Client Name: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

   Registrant Type: State Agency

   Secretary of the State business ID #:

   Mailing Address: 4 Brewery Street

   City/Town: New Haven State: CT Zip Code: 06511

   Business Phone: (203) 401-5160 ext.:

   Example:(xxx) xxx-xxxx

   Contact Person: Michael Mendick, PE, CCM Title : District Engineer

   E-Mail: michael.mendick@ct.gov

2. List billing contact:

   Name: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

   Mailing Address: 4 Brewery Street

   City/Town: New Haven State: CT Zip Code: 06511

   Business Phone: (203) 401-5160 ext.:

   Contact Person: Michael Mendick, PE, CCM Title : District Engineer

3. List primary contact for departmental correspondence and inquiries:
   Name: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION
   Mailing Address: 4 Brewery Street
   City/Town: New Haven State: CT Zip Code: 06511
   Business Phone: (203) 401-5160 ext.
   Contact Person: Michael Mendick, PE, CCM Title: District Engineer

4. List owner of the property on which the activity will take place:
   Name: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION
   Mailing Address: 4 Brewery Street
   City/Town: New Haven State: CT Zip Code: 06511
   Business Phone: (203) 401-5160 ext.
   Contact Person: Michael Mendick, PE, CCM
5. List preparer:
   Name: IMEG
   Mailing Address: 416 Asylum St
   City/Town: Hartford State: CT Zip Code: 06103
   Business Phone: (860)256-4918 ext.
   Contact Person: Shawn Callaghan Title: Senior Environmental Specialist/Scientist
6. List design professional:
   Name: STV INCORPORATED
   Mailing Address: 280 Trumbull St
   City/Town: Hartford State: CT Zip Code: 06103
   Business Phone: (203) 383-5133 ext.
   Contact Person: Robert Smoko Title: Civil Engineer
7. List Reviewing Qualified Professional (for locally approvable projects only):
   Name: STV INCORPORATED
   Mailing Address: 280 Trumbull St
   City/Town: Hartford State: CT Zip Code: 06103
   Business Phone: (203) 383-5133 ext.
   Contact Person: Robert Smoko Title: Civil Engineer

Part IV: Site Information

1. Site Name: 0301-0130 NHRY Car & Diesel Facility
   Street Address or Description of Location:
   City/Town: New Haven State: CT Zip Code: 06511
   Brief Description of construction activity:
   Rehabilitation of the Car & Diesel facility in the New Haven Rail Yard
   Project Start Date: 18 Aug 2025 Anticipated Completion Date: 6 Aug 2030
   Normal working hours: 7 AM to 4 PM

2. **MINING** : Is the activity on the site in question part of mining operations (i.e. sand and gravel)? ☐Yes ☑No

If yes, mining is not authorized by this general permit. You must submit the Registration Form for the General Permit for the Discharge of Stormwater Associated with Industrial Activity.

3. **COMBINED OR SANITARY SEWER:** Does all of the stormwater from the proposed activity discharge to a combined or sanitary sewer (i.e. a sewage treatment plant)? ☐ Yes ☑No

If yes, this activity is not regulated by this permit. Contact the Water Permitting & Enforcement Division at 860-424-3018.

4. **INDIAN LANDS:** Is or will the facility be located on federally recognized Indian lands? ☐ Yes ☑No

5. **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

The coastal boundaries fall within the following towns: Branford, Bridgeport, Chester, Clinton, Darien, Deep River, East Haven, East Lyme, Essex, Fairfield, Greenwich, Groton (City and Town), Old Lyme, Guilford, Hamden, Ledyard, Lyme, Madison, Milford, Montville, New London, New Haven, North Haven, Norwalk, Norwich, Old Saybrook, Orange, Preston, Shelton, Stamford, Stonington (Borough and Town), Stratford, Waterford, West Haven, Westbrook and Westport.

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 provide documentation to the DEEP Office of Long Island Sound Programs or the local governing authority has issued a coastal site plan approval or determined the project is exempt from coastal site plan review. Provide this documentation with your registration as Attachment B. See guidance in Appendix D of the general permit. Information on the coastal boundary is available at the local town hall or on the **Connecticut Coastal Resources Map** . Additional DEEP Maps and Publications are available by contacting DEEP Staff at 860-424-3555.

6. **ENDANGERED OR THREATENED SPECIES:**

In order to be eligible to register for this General permit, each registrant must either perform a self-assessment, obtain a limited one-year determination, or obtain a safe-harbor determination regarding threatened and endangered species. This may include the need to develop and implement a mitigation plan. While each alternative has different limitations, the alternatives are not mutually exclusive; a registrant may register for this General Permit using more than one alternative, See Appendix A of the general Permit. Each registrant must complete this AND Attachment C to this Registration form and a registrant who does not or cannot do so is not eligible to register under this General Permit.

Each registration must perform a review of the Department's Natural Diversity Database maps to determine if the site of the construction activity is located within or in proximity (within ¼ mile) to a shaded area.

a. Provide the date of the NDDB maps were reviewed: 28 Feb 2025 (Print a copy of the NDDB map you viewed since it must be submitted with this registration as part of Attachment C.)

b. For a registrant using a limited one-year determination or safe harbor determination to register for this General Permit, provide the Department's Wildlife Division NDDB identification number for any such determination:

_____ (The number is on the determination issued by the Department's Wildlife Division).

For more information on threatened and endangered species requirements, refer to Appendix A and section 3(b)(2) of this General Permit, Visit the DEEP website at **Natural Diversity Data Base** or call the NDDB at 860-424-3011.

c. I verify that I have completed Attachment C to this Registration Form. ☐ Yes

7. **WILD AND SCENIC RIVERS:** Is the proposed project within the watershed of a designated Wild and Scenic River? (See Appendix H for guidance) ☐ Yes ☑ No

8. **AQUIFER PROTECTION AREAS:** Is the site located within a mapped **Aquifer Protection Area** , as defined in Section 22a-354h of the CT General Statutes? (For additional guidance, please refer to Appendix C of the General Permit) ☐ Yes ☑ No

9. **Connecticut Guidelines for Soil Erosion and Sediment Control Guidelines:** Is the activity in accordance with Connecticut Guidelines for Soil Erosion and Sediment Control Guidelines and local erosion & sediment control ordinances, where applicable? ☑ Yes ☐ No

10. **HISTORIC AND/OR ARCHAEOLOGICAL RESOURCES:**

Has the site of the proposed activity been reviewed (using the process outlined in Appendix G of this permit) for historic and/or archaeological resources? ☑ Yes ☐ No

a. The review indicates the proposed site does not have the potential for historic/ archaeological resources, OR ☑ Yes ☐ No

b. The review indicated historic and/ or archaeological resource potential exists and the proposed activity is being or has been reviewed by the Offices of Culture and Tourism, OR ☐ NA ☐ Yes ☑ No

c. The proposed activity has been reviewed and authorized under an Army Corps of Engineers Section 404 wetland permit. ☐ NA ☐ Yes ☑ No

11. **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 this registration is in compliance with the terms of the restriction, must be submitted as Attachment D.

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO. A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015.		e) What method was used to obtain your latitude/longitude information?
				Longitude *(Format: -xx.xxxxx)*	Latitude *(Format: xx.xxxxx)*	
PO-01	Pipe	Plastic PVC	18"	-72.92807	41.29273	CT ECO
PO-02	Pipe	Plastic PVC	her (Please fill in belo 12"	-72.92717	41.29478	CT ECO
PO-03	Pipe	Plastic PVC	15"	-72.92870	41.29361	CT ECO
PO-04	Pipe	Plastic PVC	her (Please fill in belo 12"	-72.92691	41.29453	CT ECO
PO-05	Pipe	Plastic PVC	her (Please fill in belo 12"	-72.92856	41.29271	CT ECO

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	**Dates when this outfall will be active:**	**a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)**	**b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)**	**c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges"?**	***If you answered yes to question c.1, then answer the question below*** **c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?**	**For the drainage area associated with each outfall: Effective Impervious Area Before Construction (sq ft)**	**For the drainage area associated with each outfall: Effective Impervious Area After Construction (sq ft)**
PO-01	Start: 18 Aug 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	81000
PO-02	Start: 18 Aug 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	7400
PO-03	Start: 18 Aug 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	24000
PO-04	Start: 18 Aug 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	1750
PO-05	Start: 18 Aug 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	0	0
Provide the total effective impervious area for the entire site(sq ft):						62300	114150

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO. A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015.		e) What method was used to obtain your latitude/longitude information?
				Longitude *(Format: -xx.xxxxx)*	Latitude *(Format: xx.xxxxx)*	
EO-01	Pipe	Plastic	15"	-72.92856	41.29271	CT ECO

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	**Dates when this outfall will be active:**	**a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)**	**b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)**	**c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges"?**	***If you answered yes to question c.1, then answer the question below*** **c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?**	**For the drainage area associated with each outfall: Effective Impervious Area Before Construction (sq ft)**	**For the drainage area associated with each outfall: Effective Impervious Area After Construction (sq ft)**
EO-01	Start: 18 Aug 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☑ NA	☐ Y ☐ N ☑ NA	62300	0
	Start: End:	Select One		☐ Y ☐ N ☐ NA	☐ Y ☐ N ☐ NA		
	Start: End:	Select One		Y N NA	Y N NA		
	Start: End:	Select One		Y N NA	Y N NA		
	Start: End:	Select One		Y N NA	Y N NA		
Provide the total effective impervious area for the entire site(sq ft):						62300	114150

Part V: Stormwater Discharge Information (continued)

Impaired waters: If you answered "yes" to Table 2, question 2.c.1, **verify** that the project's Pollution Control Plan (Plan) addresses the control measures below in Question 1 or 2, as appropriate.

1. **If the impaired water does not have a TMDL,** confirm compliance by selecting 1.a. or 2.b. below:

a. No more than 3 acres is disturbed at any time; ☐ Yes

OR

b. Stormwater runoff from a 2 yr, 24 rain event is **retained.** ☐ Yes

2. **If the impaired water has a TMDL,** confirm compliance by selecting 2.a. and 2.b. below and either question 2.c.1. or 2.c.2. below:

a. The Plan documents there is sufficient remaining Waste Load Allocations (WLA) in the TMDL for the proposed discharge, ☐ Yes

AND

b. Control measures shall be implemented to assure the WLA will not be exceeded, ☐ Yes

AND

c. 1. Stormwater discharges will be monitored for the indicator pollutant identified in the TMDL, ☐ Yes

OR

2. The Plan documents specific requirements for stormwater discharges specified in the TMDL. ☐ Yes

Part VI: Pollution Control Plan Availability (check one of the following four categories)

☐ I am registering a Locally Exempt project and submitting the required electronic Plan (in Adobe™ PDF or similarly publically available format) pursuant to Section 3(c)(2)(E) of this permit.

- ☐ Plan is attached to this registration form
- ☐ Plan is available at the following Internet Address (URL):

_____

☐ I am registering a Locally Approvable project and have chosen not to submit the Plan with this registration pursuant to Section 3(c)(1) of this permit.

☑ I am registering a Locally Approvable project and have chosen to make my Plan electronically available pursuant to Section 4(c)(2)(N) of this permit.

- ☐ Plan is attached to this registration form
- ☑ Plan is available at the following Internet Address (URL):

https://fhiplan.sharepoint.com/sites/1831CTDOTNewHavenRailyard-CarandDieselShopRehabilitation/_layouts/15/guesta

☐ I am registering a Locally exempt project and do not have the capability to submit the Plan electronically. Therefore, I am submitting a paper copy with this registration as Attachment E.

Part VII: Registrant Certification

The registrant *and* the individual(s) responsible for actually preparing the registration must sign this part. A registration will be considered incomplete unless all required signatures are provided.

For New Registrants:

"I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by E OF CONNECTICUT DEPARTMENT OF TRANSPORTA for an activity located at , New Haven, CT 06511 and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(b) (8) (B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

For Re-registrants:

"I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by for an activity located at

and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that all designs and plans for such activity meet the current terms and conditions of the general permit in accordance with Section 5(b)(5)(C) of such general permit and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I verify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this verification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and an other applicable law."

Signature of Registrant	
Michael Mendick, PE, CCM	District Engineer
Name of Registrant (print or type)	Title (if applicable)
Signature of Preparer and Date (if different than above)	
Shawn Callaghan	Senior Environmental Specialist/Scientist
Name of Preparer (print or type)	Title (if applicable)

Part VIII: Professional Engineer (or Landscape Architect, where appropriate) Design Certification (for publically approvable and exempt projects)

The following certification must be signed by a Professional Engineer, or Landscape Architect where appropriate.

"I hereby certify that I am a licensed in the State of Connecticut. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION for an activity located at , New Haven, CT 06511 . I certify that I have thoroughly and completely reviewed the Stormwater Pollution Control Plan for the project or activity covered by this certification. I further certify, based on such review and on the standard of care for such projects, that the Stormwater Pollution Control Plan has been prepared in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, the Stormwater Quality Manual, as amended, and the conditions of the general permit, and that the controls required for such Plan are appropriate for the site. I further certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement in this certification may subject me to sanction by the Department and/or be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Design Professional and Date	
Robert Smoko	0024570
Name of Professional (print or type)	License Number

Affix P.E/L.A Stamp Here

Part IX: Reviewing Qualified Professional Certification

The following certification must be signed by a) a Conservation District reviewer OR, b) a qualified soil erosion and sediment control and/ or professional engineer

☐ **Review Certification by Conservation District:**

1.) District: _____

Date of Affirmative Determination: _____

" I am making this certification in connection with a registration under General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by _____ for an activity located at _____.

I have personally examined and am familiar with the information that provides the basis for this certification, and I affirm, based on the review described in Section 3(b)(11)(C) of this general permit and on the standard of care for such projects, that the Stormwater Pollution Control Plan is adequate to assure that the activity authorized under this general permit will comply with the terms and conditions of such general permit and that all stormwater management systems: (i) have been designed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable and that conform to those in the Guidelines and the Stormwater Quality Manual; (ii) will function properly as designed; (iii) are adequate to ensure compliance with the terms and conditions of this general permit; and (iv) will protect the waters of the state from pollution."

_____

Signature of District Professional and Date

_____ _____

Name of District Professional License Number (if applicable)

Or

☑ **Review Certification by Qualified Professional:**

Company Name: STV INCORPORATED

Name: Robert Smoko

License #: 0024570

Level of independency of professional:

Required for all projects disturbing over 1 acre:

1. I verify I am not an employee of the registrant. ☑ Yes

2. I verify I have no ownership interest of any kind in the project for which the registration is being submitted. ☑ Yes

Required for projects with 15 or more acres of site disturbance (in addition to questions 1&2):

3. I verify I did not engage in any activities associated with the preparation, planning, designing or engineering of the soil erosion and sediment control plan or stormwater management systems plan for this registrant. ☐ Yes

4. I verify I am not under the same employ as any person associated with the preparation, planning, designing or engineering of the soil erosion and sediment control plan or stormwater management systems plan for this registrant. ☐ Yes

Part IX: Reviewing Qualified Professional Certification (continued)

"I hereby certify that I am a qualified professional engineer or qualified soil erosion and sediment control professional, or both, as defined in the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and as further specified in Sections 3(b)(11)(A) and (B) of such general permit. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by ATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATI for an activity located at , New Haven, CT 06511 .
I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(11)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify, based on my review of all information described in Section 3(b)(11)(C) of such general permit and on the standard of care for such projects, that I have made an affirmative determination in accordance with Sections 3(b)(11)(D)(i) and (ii) of this general permit. I understand that this certification is part of a registration submitted in accordance with Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172, and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Reviewing Qualified Professional

STV INCORPORATED

Name of Reviewing Qualified Professional

0024570

License No.

Affix P.E./ L.A. Stamp Here

Note: Please submit the fee along with a completed, printed and signed Registration Form and all additional supporting documents to:

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

STORMWATER POLLUTION CONTROL PLAN
SWPCP

New Haven Rail Yard Rehabilitation of Existing Car and Diesel Shops
New Haven, CT

State Project No.: 0301-0130
ezFile No. 125224

Connecticut Department of Transportation

February 28, 2025

This Stormwater Pollution Control Plan (SWPCP) is prepared to comply with the requirements for the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and the Connecticut Guidelines for Soil Erosion and Sediment Control (E&S Guidelines) as amended.

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Development & Contents of Plan

The Plan will consist of site plan drawings and a narrative. The Plan will be prepared in accordance with sound engineering practices, and will be consistent with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, the Connecticut Stormwater Quality Manual, as amended, and any applicable requirements of the General Permit.

Site Description

Site Description

This project consists of the rehabilitation of the existing Car Shop and Diesel Shop in the New Haven Rail Yard (NHRY) to improve the efficiency of the operations and the working conditions for shop personnel.

Car Shop Rehabilitation:
The proposed improvements to the Car Shop portion of the facility will include the demolition of the entire facility except for the steel structure. Construction of the track area will include three new shop tracks embedded in a new concrete slab. New office space and employee areas and a new mezzanine for electrical and HVAC equipment will be located in the northeast portion of the shop. The primary change in concept for the Car Shop is its proposed use as a repair track with the substation of the in-floor car hoists for the pit/pedestal configuration.

Proposed Diesel Shop Rehabilitation:
The proposed revisions for the Diesel Shop will include demolition of the existing canopy at the east end of the shop, and the addition of a new canopy on both the east and west sides of the shop. A new train wash is included under the east side canopy. The canopies will also serve as equipment platforms for the HVAC equipment. Track 23 will be realigned. Additionally, all tracks east and west of the building will be replaced 100' from the building façade. A new boiler room will be constructed in the east portion of the facility.

Overall Site Improvements:
Other additions to the site will include four new generators (two for each side of the facility), a fire pump building, a vacuum pump/train wash reclamation system building, and a 25,000-gallon aboveground storage tank for the industrial waste. Utilities will be relocated or replaced to support the new points of service. The existing roadway to the south of the facility will be graded and repaved. There will be some reconstruction of the underground stormwater system to accommodate the improvements, but stormwater management will remain very similar to existing conditions and discharge to the existing stormwater collection system. Improvements include the installation of manholes, underdrains, and two new oil-water separators, one at the east end and one at the west end of the facility.

Environmental Considerations

- There are no direct discharges to impaired waters listed in the Impaired Waters Table for Construction Stormwater Discharges, as the project discharges to the existing stormwater management system in the NHRY. The stormwater management system ultimately discharges into Long Island Sound Central Basin Inner Estuary – New Haven Harbor, New Haven which is an impaired waterbody for dissolved oxygen, nutrients, oil and grease. That segment of the New Haven Harbor is listed on Connecticut Department of Energy and Environmental Protection (CT DEEP) (CT DEEP)'s 303 (d) Impaired Waters Table for Construction Stormwater Discharges and is not impaired by sediment or turbidity. New Haven Harbor is also a coastal water.

Furthermore, the project:

- Is not within an Aquifer Protection area (APA), or a public water supply watershed.
- Does not discharge to a river within the National Wild and Scenic Rivers System.
- Does not intersect a Connecticut Department of Energy and Environmental Protection (CT DEEP) Natural Diversity Database (NDDB) region.
- Does not discharge to any Cold-Water Stream Habitat watercourse.

The purpose of this project is to improve the efficiency of the operations and the working conditions for shop personnel within the NHRY Car and Diesel Shops.

Site work includes demolition and rehabilitation of existing structures (Car and Diesel Shops), installation of utilities, and construction of a fire pump building and a vacuum pump/train wash reclamation system building.

See Appendix G and Registration Form Part V: Stormwater Discharge Information – Table 1 & Table 2 in the ezFile registration for outfall details. The condition of each of the outfalls in the project is included in Appendix G.

Estimated Disturbed Area

The total area for this project site is 7.95 acres. Of this area, 3.92 acres will be disturbed by construction activities regardless of phasing.

Estimated Runoff Coefficient

The runoff coefficient assumed for pavement is 0.9 and for gravel roads is 0.7. For the pervious areas, a coefficient of 0.3 was assumed.

Pre-Construction

$$\frac{(4.30 \text{ ac. X } 0.9)+(3.65 \text{ ac. X } 0.7)}{4.30 \text{ ac.} + 3.65 \text{ ac.}} = \mathbf{0.81}$$

Post Construction

$$\frac{(4.91 \text{ ac. X } 0.9)+(3.04 \text{ ac. X } 0.7)}{4.91 \text{ ac.} + 3.04 \text{ ac.}} = \mathbf{0.82}$$

The estimated runoff coefficient for the project site is currently 0.81. After construction is completed the estimated runoff coefficient is 0.82.

Receiving Waters

The name of the receiving water is New Haven Harbor, which ultimately drains to Long Island Sound.

Extent of Wetlands on Site

There are no wetlands present on the project site.

The majority of the NHRY is within Special Flood Hazard Areas (SFHA), Zone AE (EL 11) and Zone AE (EL 12), according to the Flood Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Panel 09009C0441J, effective 7/8/2013. The Car and Diesel Shops project area is within the 100-year and 500-year flood zone boundaries and SHFA Zone AE (EL 11). The proposed work does not include significant floodplain modifications and existing access into the project area within the floodplain will be maintained.

A Flood Management Individual Certification for the project was submitted to CT DEEP in December 2024.

Construction Sequencing

The Contractor will be given approximately 60 months for the construction of all phases of the project, which will be revised as necessary to keep the Plan current.

The suggested sequence of construction is as follows:

1. Conduct a preconstruction meeting.
2. Verify the surveyed staked-out limits of the project and clearly identify the limits of disturbance (LOD).
3. Install erosion and sedimentation controls where soil will be exposed or susceptible to erosion (e.g., effected inlet/outlets, disturbed slopes, toe of slopes, etc.).
4. Conduct the plan implementation inspection.
5. Install permanent stormwater control measures (e.g., stormwater basins) in the early phase of construction.
6. Perform clearing and grubbing activities.
7. Apply temporary stabilization measures for disturbed areas in accordance with Temporary Stabilization Practices.

Phase 1 – Construction of Car Shop:

1. Demolish Car Shop (excluding foundations & structure).
2. Install UG Utilities (Gas, Water, Storm, Sanitary, Power).
3. Install Foundations, Floors Slabs, Platforms, Mezzanine.
4. Install Generator; Realign Track 23, Relocate Power (Partial).
5. Add additional structural elements to increase structural capacity.
6. Install Roof & Exterior Walls.
7. Expand Storeroom.
8. Install Partition Walls, MEP, Electrical, Comms/IT.
9. Install maintenance equipment.

Phase 2 – Exterior work on East End of Diesel Shop:

1. Demolish existing Canopy, Concrete Slab & Tracks 24/25.
2. Install UG Utilities (Water, Gas, Storm).
3. Install Foundations, Slabs, Canopy and HVAC.
4. Construct Toilet Service/Train Washer Equip Rooms.
5. Install Train Washer.
6. Install Pump House, Fire Pump Room.

Phase 3 – Exterior Work on West End of Diesel Shop:

1. Relocate OH Power.
2. Demolish Tracks 24 through 27A.
3. Install UG Utilities.
4. Install Concrete Slabs and Tracks 24 – 27.
5. Install Canopy and HVAC.

Phase 4 – Rehabilitate Diesel Shop/Construct Expansion:

1. Replace Roof, Exterior Walls and MEP.
2. Rehabilitate Offices/Welfare.
3. Expand Electrical Room and Storeroom; construct Boiler Room.
4. Resurface Platform and Ramps.
5. Install Fall Arrest System.

Phase 5 – All other Exterior/Civil Work:

1. Remove existing Shed and Trailers.
2. Construct Concrete Slab and Generator.
3. Install Grade Crossings, Paving and Striping.
4. Install Bollards.
5. Install Above Ground Wastewater Storage Tank.
6. Stabilize the disturbed areas.
7. Remove erosion and sedimentation controls when it has been determined that the disturbed areas have been stabilized. (This determination will be made by the Qualified Inspector).
8. All post-construction stormwater structures will be cleaned of construction sediment and any remaining sediment control systems (SCS) will be removed prior to the filing of the "Notice of Termination Form: Non-Solar Projects."
9. Ensure the project area is cleaned, free of debris, and catch basins have been cleaned, etc.

The requirement for sediment traps or basins will not apply to flows from off-site areas and flows from areas of the site that are either undisturbed or have undergone final stabilization.

If the areas of disturbance have a contributing drainage area that contains 2-5 acres of disturbed soils per discharge point, a temporary sedimentation trap must be provided. The Contractor must submit to the Qualified Inspector a revised SWPCP for review and approval.

If the areas of disturbance have a contributing drainage area that contains greater than five acres of disturbed soils per discharge point, a temporary engineered sedimentation basin must be provided. The Contractor must submit to the Qualified Inspector a revised SWPCP for review and approval. The SWPCP must include locations of the temporary engineered sedimentation basin designed and installed in accordance with the E&S Guidelines, as amended. The Contractor will provide an inspection and maintenance plan for the engineered sedimentation basin as part for the amended SWPCP.

Control Measures

Best Management Practices (BMPs) have been incorporated into the project design to minimize erosion and sedimentation (E&S) during construction activities (see the plans in Appendix C for erosion and sedimentation controls). All E&S controls will be installed prior to land disturbing activities, to minimize the discharge of pollutants in receiving waters and wetlands. E&S controls will remain in place for the entire duration of the work activities associated with that phase and any other applicable phases. Elements of the E&S Guidelines and the 2024 Stormwater Quality Manual (SWQ Manual) were incorporated into the design of this project. The E&S controls that will be utilized during the project will be determined in the field as appropriate for the situation and location. The controls will include, but will not be limited to:

- Soil stabilization practices (temporary and permanent): siltation fence, hay bales, geotextile fabric.
- Structural practices (temporary and permanent): anti-tracking pads, siltation sacks, storm drain inlet/outlet protection
- Maintenance practices: sweeping for dust control, water for dust control
- Long-term stormwater management and erosion control practices.

It is anticipated that hay bales, siltation fence made of geotextile fabric, and/or erosion control logs will be utilized for E&S controls throughout the project work areas. In addition, anti-tracking pads will be installed at construction entrances as needed to reduce the potential for tracking mud and dirt onto nearby public roadways. Existing drainage inlets will be protected with hay bales or silt sacks as needed throughout construction. Stone or straw wattles may be used to prevent runoff onto paved surfaces in cut locations.

Impaired Waters

The project does not discharge directly into impaired coastal waters. Rather the project discharges to the existing stormwater management system in the NHRY. The stormwater management system ultimately discharges into Long Island Sound Central Basin Inner Estuary - New Haven Harbor. This waterbody is listed on CT DEEP's 303 (d) Impaired Waters Table for Construction Stormwater Discharges for dissolved oxygen, nutrients, oil and grease. However, this outfall is not a new discharge to the New Haven Harbor and this waterbody is not impaired by sediment or turbidity.

Erosion and Sedimentation Controls

The Department of Transportation (Department) will have a Qualified Inspector assigned to the project to oversee the Contractor's operations and to ensure compliance with the provisions of the Contract. Further Department oversight is provided by the District 5 Environmental Coordinator and the Office of Environmental Planning.

The following timelines will be followed for the proposed construction activities:

- The Contractor will stabilize disturbed areas with temporary or permanent measures as quickly as possible after the land is disturbed.

- Areas that remain disturbed but inactive for at least 14 days will receive temporary seeding or soil protection within seven (7) days.

- Areas that will be disturbed past the planting season will be covered with a long-term, non-vegetative stabilization method that will provide protection through the winter.

- If construction activities are completed to final grade, permanent stabilization measures will take place within seven (7) days.

The Department projects are required to have Preconstruction Meetings with the Contractor. The Contractor is required to review and understand the Contract Plans and Specifications as well as to develop an E&S Plan for review and approval by the Engineer. The Contractor's E&S plan will demonstrate compliance with the Stormwater Permit requirement for a double row of sediment control barriers at all disturbed locations.

Double Row of Erosion and Sediment Control Barriers

- A double row of sediment control barrier will be utilized between any disturbed area and downgradient wetland or watercourse within 50 feet, unless there would be an adverse impact to adjacent wetlands/watercourses due to installation of a double row (i.e., would result in larger wetland/watercourse impact.)
- Additional erosion control barriers (double row of SCS) may also be required within the project area. Factors to be reviewed by the Engineer include but are not limited to: the contributing disturbed area, drainage area, slope, length of slope, and flow conditions to maintain sheet flow. If determined necessary, the Engineer will direct the Contractor to install and maintain additional rows of erosion control barrier (or equivalent).

Soil Stabilization and Protection

Temporary and permanent soil stabilization practices for managing disturbed areas on the project site are described in detail in the Temporary and Permanent Stabilization Practices sections below. Any disturbed portions of the site will be minimized and stabilized throughout the duration of the construction activity at the site.

Disturbed soils in the project area will generally be below railroad ballast. Soil disturbing construction activities are anticipated to be short in duration and these areas will be stabilized with railroad ballast immediately after work is completed.

Soil stockpile locations are not anticipated within the primary project area. Soil stockpiles outside the primary project area will be located the maximum distance from regulated resources and have a geotextile silt fence or hay bale barrier installed approximately 10 feet from the toe of slope. Side slopes of the stockpiles will be no steeper than 2:1. Stockpiles that will not be used for a period greater than one month, and less than 12 months will be protected with temporary seeding/mulch, matting, or other acceptable means to prevent soil migration. Permanent vegetated measures will be instituted if soil stockpiles will be dormant for more than 12 months.

Reverse Slope Benches

The project site does not contain slopes that are greater than 15' tall and steeper than 3H:1V, therefore reverse slope benches will not be incorporated into the project.

Temporary Stabilization Practices

- Sedimentation Control System (SCS): SCS will be placed at the toe of the slope or as directed by the Qualified Inspector.

- Anti-Tracking Pads: Construction entrances (gravel anti-tracking pads) will be constructed at truck access/exit points to off-road route. Access road(s) should grade away from the main roadway or waterbody.

- Dust Control: Routine sweeping and application of dust suppression agents, including but not limited to, water and calcium chloride, over exposed subbase will be completed for dust control. Additional measures may be necessary to minimize dust within the project limits and within staging and stockpile areas.

- Temporary Seeding: Areas that will remain disturbed but inactive for at least 14 calendar days will receive temporary seeding or soil protection within 7 days. The majority of the project area consists of building and railroad ballast therefore temporary seeding is not anticipated.

- Impaired Waters: The project discharges into the existing stormwater management system in the NHRY and not directly into an impaired water. Although the ultimate discharge is to the New Haven Harbor, which is an impaired waterbody, the impairment is not for sedimentation or turbidity.

- Catch Basin Inlet Protection: Catch basin inlet protection will be used to reduce the amount of sediment entering the storm drainage system during construction.

Stabilization practices will be implemented after completion, as final grades are reached, within seven (7) days.

Temporary seeding will be spread over any disturbed areas which will remain inactive for at least 14 days. Areas to remain disturbed through winter will be protected with non-vegetative stabilization measures. The Contractor must provide an Erosion and Sedimentation Control plan for each winter season during construction operations.

The Contractor may elect to utilize other controls in conformance with the E&S Guidelines as amended, as approved by the Qualified Inspector. The Contractor will be required to provide the necessary details for any erosion controls not specifically called for on the project plans.

During construction, all areas disturbed by the construction activity that have not been stabilized, structural control measures, and locations where vehicles enter or exit the site will be inspected at least once a week and within 24 hours of the end of a storm that generates a discharge. For storms that end on a weekend, holiday, or other time in which normal working hours will not commence within 24 hours, an inspection is required within 24 hours following any storm in which 0.5 inches or greater of rain occurs. For lesser storms, inspection will occur immediately upon the start of subsequent normal working hours.

Permanent Stabilization Practices

During construction, the following methods of permanent stabilization will be installed:

- Topsoiling: There is no topsoiling included in the project.

- Permanent Stabilization: Once soils have been brought to final grade; permanent stabilization will be used to stabilize the soil with a vegetative cover or, with crushed stone for slope protection or riprap, will be applied, if required. Disturbed areas below the wetland limit will be seeded with the appropriate seed mix. The Qualified Inspector will verify compliance with this requirement on the Notice of Termination Form: Non-Solar Projects.

- Landscaping: There is no landscaping included in the project.

All new embankments and unpaved areas that are graded or disturbed by construction will receive railroad ballast. The Contractor may use other permanent stabilization practices that have been accepted by the Qualified Inspector or CTDOT that are in conformance to the E&S Guidelines.

Structural Measures

The following structural measures will be used to divert flows away from exposed soils, store flows, limit runoff, and minimize the discharge of pollutants: Sumps in Catch Basins. Stormwater for the project discharges to the existing storm drainage system, therefore opportunities for structural measures are limited. Details on these structural measures are provided in the Post-Construction Stormwater Management section below.

Maintenance

All construction activities and related activities will conform to the requirements of Section 1.10 "Environmental Compliance" of the Department's Standard Specifications. In general, all construction activities will proceed in such a manner so as not to pollute any wetlands, watercourses, water body, and conduit carrying stormwater. The Contractor will limit, in so far as possible, the surface area of earthen materials exposed by construction activity and immediately provide temporary and permanent pollution control to prevent soil erosion and contamination on the site. Water pollution control provisions and Required Best Management Practices per Section 1.10, Environmental Compliance of the Standard Specifications will be administered during construction. Control measures will be inspected and maintained in accordance with the E&S Guidelines and as directed by the Qualified Inspector.

Dewatering Wastewaters

Dewatering Guidelines

Dewatering will be performed as required to maintain the construction areas on the site free from standing water for the duration of the project. Dewatering may be necessary for various excavations conducted during construction activities. In those cases, the dewatering system(s) will be of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of groundwater to allow excavation and construction to proceed on dry, stable subgrades. Ten dewatering locations have been included on Sheet C-500 in Appendix C.

During the Car and Diesel Shops project, an existing off-site groundwater treatment system will be in operation for this project and other Department projects to use. The groundwater treatment system is expected to have sufficient capacity to treat up to 300 gallons per minute of dewatering fluid from the Car and Diesel Shops project. The design, construction, operation, and maintenance of the treatment system from the project will remain the responsibility of the Department or their designee. The Contractor will be responsible for collection, temporary containment, and transportation of dewatering effluent from the Car and Diesel Shops project to the Department's off-site treatment plant.

The Contractor is responsible for designing, procuring, installing, operating, cleaning, decontaminating, and dismantling the temporary groundwater containment and transportation system, and for securing all necessary authorizations for the transportation and disposal of the contaminated groundwater. It is anticipated that this work may involve specialty services and/or proprietary products. The temporary containment will be leak-free containment tanks (e.g. Baker Tanks, Highland Tanks, or Manufacturing brand tanks). Such tanks will be emptied when the tank is two thirds full. If the sediment level in any tank or other containment vessel used to contain dewatering fluids exceeds 20 inches, the tank or containment vessel will be cleaned. The Contractor will bring such sediments to the WSA for characterization by the Engineer.

- Minimal Curbing: Curbing will be avoided wherever possible to maximize overland sheet flow and encourage infiltration.

- Outlet Protection: Riprap outlet protection will be used at the proposed outlet to decrease velocity and the potential for erosion (e.g., apron, splash pad, etc.).

- Catch Basins: Catch basins will be used, especially adjacent to outlets, to intercept pollutants and debris.

- MS4 Measures: List any permanent post construction water quality BMP's by including the completed CTDOT MS4 Maximum Extent Possible (MEP) sheet in Appendix D of the Plan.

Post-Construction Guidelines

- Sumps in Catch Basins: Sumps in catch basins (2-foot sump) will be used, especially adjacent to outlets, to intercept pollutants and debris.

After the project is complete, the Department will perform the following maintenance and restorative measures:

- Litter/debris and sweepings will be removed from the site, as needed.
- Mowing and maintenance of the seeded areas and vegetated areas will occur, as needed.
- Riprap outlet protection will be inspected and cleaned, as needed.
- Stormwater drainage system will be cleaned of sediment/debris, as needed.
- Identify, inspect, and maintain all stormwater quality BMPs included within the project, as per the MS4 or manufacturer recommendations.

Post Construction Performance Standards and Control Measure

Redevelopment:

The project area is more than 40% effective impervious cover in the existing condition; therefore, Redevelopment is applicable to this project. In order to comply with CTDOT's MS4 Permit Requirements, projects will seek to reduce the effective impervious cover (as defined in the Construction Stormwater General Permit effective 12/31/20; modification date 11/25/22 Permit) to the maximum extent practicable.

[Post-construction Impervious Area (4.91 ac.)] – [Pre-construction Impervious Area (4.30 ac.)] = [Change in Impervious Area (0.61 ac.)]

Overall, there will be an increase in effective impervious cover (shown above). There will also be an increase in Directly Connected Impervious Area (DCIA) of approximately 0.61 acres as part of this project. The DCIA calculation is included in the MS4 Maximum Extent Practical (MEP) worksheet in Appendix D.

Water quality volume was determined using the following equation:

$$WQV = \frac{(P)(R)(A)}{12}$$

where:

WQV = water quality volume (cubic feet)
P = 1.3 inches (90th percentile rainfall event)
R = volumetric runoff coefficient = 0.05+0.009(I)
I = post- development impervious area (percent) after application of non-structural LID site planning and design strategies and before application of structural stormwater BMPs
A = post-development total drainage area of site or design point (square feet)

Area (A) =	7.95	acres
Area (A) =	0.006844	square miles
Design Precipitation (P) =	1.3	inch
% Impervious Cover (I) =	61.75	
Volumetric Runoff Coefficient (R) =	0.61	
WQV =	**0.53**	**ac-ft**
1/2 WQV=	**0.27**	**ac-ft**
=	**11761.2**	**cu-ft**

The Car and Diesel Shops project site is located on the west side of the NHRY. With a pre-construction runoff coefficient of 0.80 and a post-construction runoff coefficient of 0.82, this site is characterized by *predominately impervious surfaces* including but not limited to the Car Shop/ Diesel Shop building including related architectural additions & canopies, concrete pads for electrical generators (and other surface utilities), paved vehicular parking lots, paved pedestrian walkways, and operating rail track. Located close to the New Haven Harbor, *shallow (3' to 4') surface to groundwater depths* are also prevalent, making on-site infiltration ineffective to reduce surface runoff. See Appendix A for soil borings. As is the case for the greater NHRY site, the Car and Diesel Shops project site is congested with various underground utilities that are necessary for daily Car and Diesel Shops operations including but not limited to: water, electrical, sanitary, and storm sewer connections. This results in very limited, usable space for any further site upgrades, outside the scope of operations, that would require excavation. Based on these site restrictions, methods to reduce runoff (reduce directly connected impervious areas) and/or other Low Impact Development practices necessary to retain ½ the Water Quality Volume (WQV) required to satisfy MS4 criterion would be infeasible and therefore are not included in the Car Shop and Diesel Shop project.

Other Development:

The project area is more than 40% effective impervious cover; therefore, Other Development is not applicable to this project.

Runoff Reduction and LID Practices

The project area is characterized by predominantly impervious surfaces with shallow (3' to 4') surface to groundwater depths (high water table) and congested underground utilities. Opportunities for runoff reduction and Low Impact Development (LID) practices are not feasible in the project area and therefore are not included in the Car and Diesel Shops project. See Appendix A for soil boring locations and data.

Suspended Solids and Floatable Removal

Since the project proposes to reconnect to the existing storm drainage systems, there is less opportunity to integrate stormwater management measures to capture suspended solids and remove floatables. The sumps in the catch basins will help to remove floatables and suspended solids from stormwater prior to entering the New Haven Harbor. The two oil water separators will help to remove oil and petroleum waste from wastewaters produced in the Car and Diesel Shops.

The General Permit suggests a goal of 80 percent removal of total suspended solids be used in design of stormwater management measures. This goal has been kept in mind in the design of stormwater and erosion control practices for the project. The effectiveness of many of the practices utilized is not easily quantified. Most measures are effective for small storms or at the beginning of storm events. Effectiveness varies with soil types, pollutant, and storm intensity/duration. Certainly, in optimal conditions, methods may attain and even exceed the 80% removal goal for total suspended solids. The Contractor and Qualified Inspector should also keep these goals in mind when installing, inspecting, and maintaining the proposed practices to prevent stormwater pollution.

Velocity Dissipation:

Velocity dissipation is an important long-term control to reduce the potential for erosion and sedimentation within the project area after construction. The project connects to the existing stormwater drainage system at the New Haven Rail Yard, so opportunities for velocity dissipation are limited. Inspections and maintenance of drainage structures will be conducted regularly, and riprap will be replaced as needed to maintain long-term control of erosion and sedimentation.

Other Controls (Non-Structural)

Waste Disposal

Construction site waste will be properly managed and disposed of during the entire construction period.

The following is applicable:

- A waste collection area will be designated. The selected area will minimize truck travel through the site and will not drain directly to the adjacent wetlands.
- Waste collection will be scheduled regularly to prevent the containers from overfilling.

- Spills will be cleaned up immediately.
- Defective containers that may cause leaks or spills will be identified through regular inspection. Any found to be defective will be repaired or replaced immediately.
- Any stockpiling of materials should be confined to the designated area as approved by the Qualified Inspector.

Washout Areas

Washout of applicators, containers, vehicles, and equipment for concrete will be conducted in a designated washout area. No surface discharge of washout wastewaters from the area will be allowed. All concrete wash water will be directed into a container or pit such that no overflows can occur. Washout will be conducted in an entirely self-contained system and will be clearly designed and flagged or signed where necessary. The washout area will be located outside of any buffers and at least 50 feet from any stream, wetland or other sensitive water or natural resources as determined or designated by the Department's Office of Environmental Planning or the project's Qualified Inspector.

Washout Area(s) will be site located by the Contractor, approved by the Qualified Inspector and the SWPCP revised, as appropriate. The "Concrete Washout Area" detail in Appendix C shows the recommended method of construction for the washout area. The designated area will be designed and maintained such that no overflows can occur during rainfall or after snowmelt.

Anti-tracking Pads and Dust Control

(Form 819- Sections 2.11, 9.39, 9.42, and 9.43)

Off –site vehicle tracking of sediments and the generation of dust will be minimized. Temporary anti-tracking pads from the active work site to the existing pavement will be installed and maintained at the locations shown on the plans.

The Contractor will:

- Maintain the entrance in a condition which will prevent tracking and washing of sediment onto paved surfaces.
- Provide periodic top dressing with additional stone or additional length as conditions demand.
- Repair any measures used to trap sediment, as needed.
- Immediately remove all sediment spilled, dropped, washed, or tracked onto paved surfaces.
- Ensure roads adjacent to a construction site are left clean at the end of each day.

If the construction entrance is being properly maintained and the action of a vehicle traveling over the stone pad is not sufficient to remove the majority of the sediment, then the contractor will either:

- Increase the length of the construction entrance,
- Modify the construction access road surface, or
- Install washing racks and associated settling area or similar devices before the vehicle enters a paved surface.

For construction activities which cause airborne particulates, wet dust suppression will be utilized. Construction site dust will be controlled by sprinkling the ground surface with water until it is moist on an as-needed basis. The volume of water sprayed will be such that it suppresses dust yet also prevents the runoff of water.

Maintaining and Storing Vehicles and Equipment- Storage of Chemicals & Petroleum Products

The Contractor will take measures to prevent any contamination to wetlands and watercourses while maintaining and storing construction equipment on the site. All chemical and petroleum containers stored on site will be provided with impermeable containment which will hold at least 110% of the volume of the largest container, or 10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. All chemicals and their containers will be stored under a roofed area except for those stored in containers of 100-gallon capacity or more, in which case double-walled tanks will suffice. Accumulation of rainwater within secondary containment must be visually inspected for sheen prior to being discharged. If any sheen is identified; the accumulated water must be removed by the Contractor to an appropriate off-site location.

Cold Water Stream Habitat

This project site is not located within a Cold-Water Stream Habitat watershed; therefore, the undisturbed buffer zone requirements are not applicable to this project. Coordination with CT DEEP Fisheries is not required.

Inspections

The Qualified Inspector will conduct site inspections once a week or after any rain event of 0.1 inches or greater during normal working hours. The Qualified Inspector conducting inspections will fill out a Construction Site Environmental Inspection Report (CSEIR) for each inspection described below.

Each report will be retained as a part of the SWPCP and will be uploaded to the COMPASS Environmental subfolder available for CT DEEP request. The report will include a statement that, in the judgment of the Qualified Inspector(s) conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the Plan and permit. If the site inspection indicates that the site is out of compliance, the inspection report will include a summary of the remedial actions required to bring the site back into compliance, review Keeping Plans Current.

Plan Implementation Inspections

For each phase of construction, the site will be inspected at least once within the first 30 days of construction activity and at least three times, with 7 or more days between inspections, within the first 90 days of construction activity to confirm compliance and proper initial implementation of all control measures.

Routine Inspections

The Permittee will maintain a rain gauge on-site to document rainfall amounts. During construction, all areas disturbed by the construction activity that have not been stabilized, all erosion and sediment control measures, structural control measures, soil stockpile areas, washout areas, and locations where vehicles enter or exit the site will be inspected for evidence of or the potential for pollutant entering the drainage systems and impacts to the receiving waters at least every seven (7) calendar days and within 24 hours of the end of a storm that generates a discharge.

For storms that end on a weekend, holiday, or other time in which normal working hours will not commence within 24 hours, an inspection is required within 24 hours following any storm in which 0.5 inches or greater of rain occurs. For lesser storms, inspection will occur immediately upon the start of subsequent normal working hours.

Where sites have been temporarily or finally stabilized, such inspection will be conducted at least weekly until final stabilization has been achieved.

Qualified Inspectors provided by the Department's District 5 Office will conduct inspections.

The following items will be inspected as described below:

Item	Procedure
Sedimentation Control System (SCS)	The SCS will be inspected to ensure that the fence line is intact with no breaks or tears. The fence will be firmly anchored to the ground. Areas where the fence is excessively sagging or where support posts are broken or uprooted will be noted. Depth of sediment behind the fence will be noted if sediment needs to be removed.
Concrete Washout Area	Containers or pits will be inspected at least once a week to ensure structural integrity, adequate holding capacity and will be repaired prior to future use if leaks are present. The contractor will remove hardened concrete waste when it accumulates to a height of ½ of the container or pit or as necessary to avoid overflows. All concrete waste will be disposed of in a manner consistent with all applicable laws, regulations and guidelines.
Catch Basin Protection	Protective measures will be inspected to ensure that sediment is not entering the catch basins. Catch basin sumps will be monitored for sediment deposition.
Anti-tracking Pad	Locations where vehicles enter or exit the site will be inspected for evidence of off-site tracking.

Dust Control	Measures will be taken for the purpose of allaying (diminishing) dust conditions. Measures may include the use of sweeping equipment and/or the application of water or calcium chloride.
General	Construction areas and the perimeter of the site will be inspected for any evidence of debris that may blow or wash off-site or that has blown or washed off site. Construction areas will be inspected for any spills or unsafe storage of materials that could pollute off site waters.

Post-Construction Inspection

Upon completion of construction activities and stabilization of the site, all post-construction stormwater structures, including sumps will be cleaned of construction sediment or debris and the site inspected to confirm compliance with all post-construction stormwater management requirements. Sediment will be properly disposed of in accordance with all applicable laws, regulations, and guidelines. Any remaining sediment control system(s) SCS will be removed prior to acceptance of the project by the Department.

Final Stabilization Inspection

Once CTDOT has made a determination that the site has achieved final stabilization, the site will be inspected, and photo documented by the District Environmental Coordinator (DEC) to confirm that no active erosion or sedimentation is present and site stabilization has been maintained.

Final stabilization is achieved when a full growing season is completed. A **full growing season** is defined as the timeframe encompassed by **two consecutive full seeding seasons**: April 1 through June 15, and August 15 through October 1. If final stabilization is achieved during a seeding season, the following seeding season will be considered the first full seeding season after final stabilization has been achieved, the DEC will verify compliance with this requirement on the Notice of Termination: Non-Solar Projects.

Keeping Plans Current

Revisions to Stormwater Pollution Control Plans

The Department will amend the Plan if the actions required by the Plan fail to prevent pollution or otherwise comply with provisions of the General Permit. The Plan will also be amended whenever there is a change in contractors or sub-contractors at the site, or a change in design, construction, operation, or maintenance at the site which has not otherwise been addressed in the plan.

If the results of the inspections require modifications to the Stormwater Pollution Control Plan, the plans will be revised as soon as practicable after the inspection. Such modifications will provide for a timely implementation of any changes to non-engineered controls on the site within 24 hours and implementation of any changes to the plan within 3 (three) calendar days following the inspection. For Engineered measures, corrective actions will be implemented on site within 7 (seven) days and incorporated into a revised Plan within 10 (ten) days of the date of inspection.

In no event will the requirements to keep the Plan current or update a Plan, relieve the permittee and their contactor(s) of the responsibility to properly implement any actions required to protect the waters of the State and to comply with all conditions of the General Permit.

Contractors

General

This section will identify all Contractors and Subcontractors who will perform on site actions which may reasonably be expected to cause or have the potential to cause pollution of the waters of the State.

Certification Statement

All contractors and subcontractors must sign the attached statement. All certifications will be included in the Stormwater Pollution Control Plan.

State Project No. 0301-0130

New Haven Rail Yard Rehabilitation of Existing Car and Diesel Shops
New Haven, CT

"I certify under penalty of law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as Contractor on the project, I am covered by this General Permit, and must comply with the terms and conditions of this permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for this project."

GENERAL CONTRACTOR

Signed:_____ Date:_____

Title:_____

Firm: _____ Telephone: _____

Address: _____

_____

SUBCONTRACTOR

Signed: _____ Date:_____

Title:_____

Firm:_____ Telephone:_____

Address:_____

General:

This Stormwater Pollution Control Plan (SWPCP) is prepared to comply with the requirements for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. Also, to be considered part of the SWPCP are the proposed construction plans, special provisions, and the Connecticut Department of Transportation's "Standard Specifications for Roads, Bridges, Facilities and Incidental Construction" (Form 819) including supplements thereto and the Connecticut Guidelines for Erosion and Sediment Control (E&S Guidelines) and Stormwater Quality Manual (SWQ Manual), as amended.

List of Applicable Figures / Plans:

Appendix A – Figures

- Disturbed Erodible Areas
- Site Drainage Patterns
- Soil Boring Plans

Appendix B – Drainage Calculations

- Velocity Dissipation(Not Applicable)
- Water Quality Computations

Appendix C – Plan Sheets

- Sedimentation and Erosion Control
- Site Plan/Staging
- Drainage Plans
- Grading Plans
- Applicable Stormwater details
    - Concrete Washout
    - Anti-Tracking Pad
    - Other Site-Specific Stormwater Details
- Landscape Design Plan/Planting Plan (Not Applicable)
- Mitigation Plan (Not Applicable)

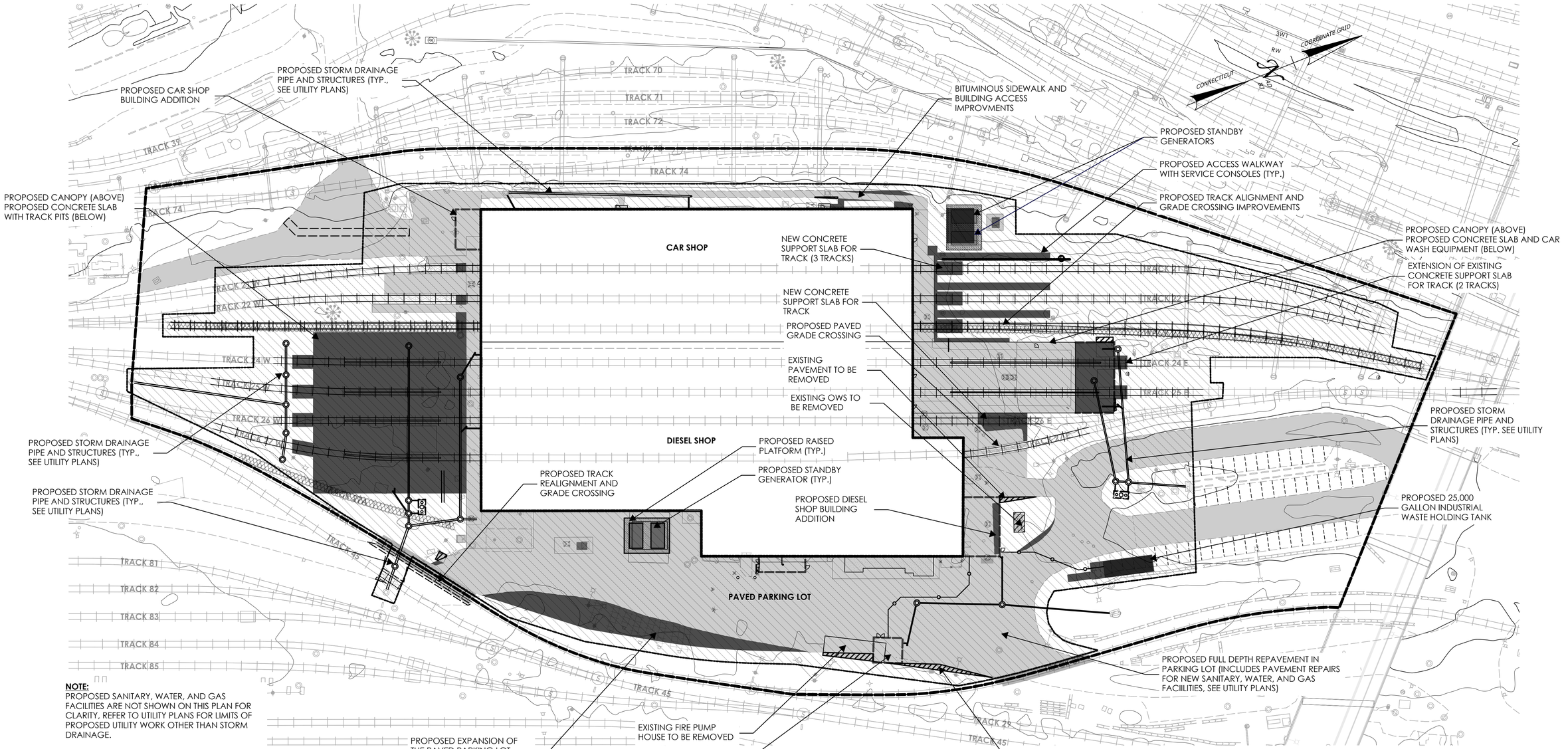
Appendix D - CTDOT MS4 Project Design Maximum Extent Practicable Worksheet

Appendix E - Construction Site Environmental Inspection Report (CSEIR)

Appendix F – Notice of Termination Form: Non-Solar Projects

Appendix G - CT DEEP Part V: Stormwater Discharge Information Table 1 & 2

Appendix A

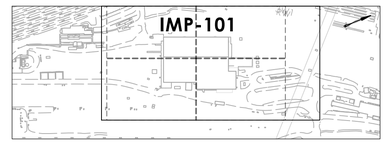


NOTE:
PROPOSED SANITARY, WATER, AND GAS FACILITIES ARE NOT SHOWN ON THIS PLAN FOR CLARITY, REFER TO UTILITY PLANS FOR LIMITS OF PROPOSED UTILITY WORK OTHER THAN STORM DRAINAGE.

KEY

- PROPOSED RAISED PLATFORM - UNDER THE STANDBY GENERATORS
- (1) APPROX. SITE AREA BOUNDARY
- (2) EXISTING IMPERVIOUS COVERAGE TO REMAIN
- (3) EXISTING IMPERVOUS COVERAGE TO BE REMOVED
- (4) PROPOSED IMPERVIOUS COVERAGE TO BE ADDED
- (5) APPROX. LIMIT OF DISTURBED ERODIBLE SOIL

TOTAL SITE AREA: 7.95 ACRES (1)
TOTAL PRE-CONSTRUCTION IMPERVIOUS COVERAGE: 4.30 ACRES (2 + 3)
TOTAL POST-CONSTRUCTION IMPERVIOUS COVERAGE: 4.91 ACRES (2 + 4)
AREA OF DISTURBED ERODIBLE SOIL: 3.92 ACRES (5)



REVISION DESCRIPTION | DATE | REV.

DESIGNER/DRAFTER: | CHECKED BY:

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HORIZONTAL SCALE
1" = 40'

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14th FLOOR
HARTFORD, CT 06103
(203) 375-0321

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: SITE IMPERVIOUS COVERAGE AREAS AND AREAS OF DISTURBED ERODIBLE SOILS

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SHEET NO.

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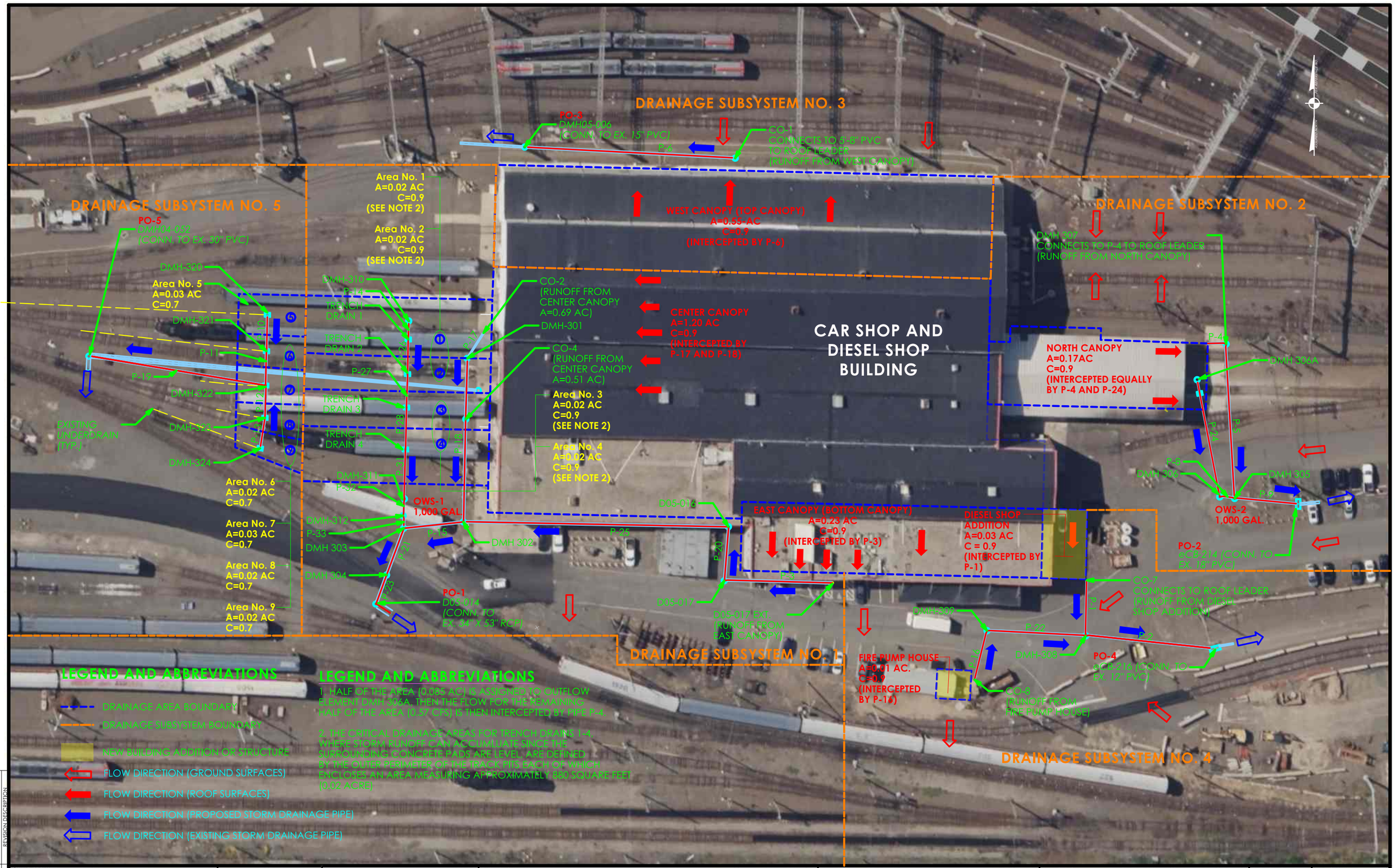

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PLOTTED DATE: 1/27/2025

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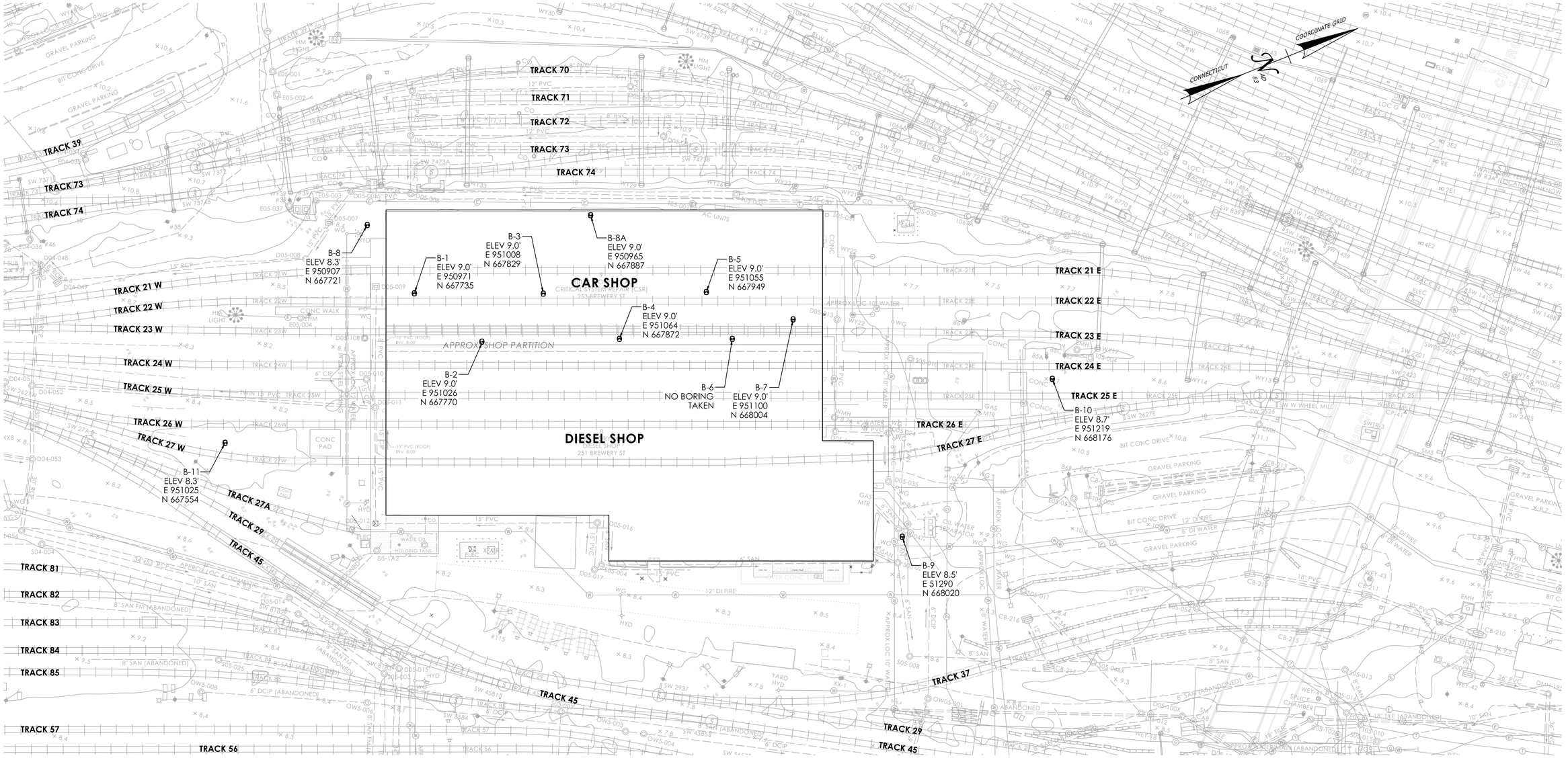

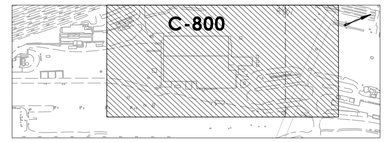

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: MK CHECKED BY: AB

0 40' 80'
HORIZONTAL SCALE
1" = 40'

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14th FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: BORING LOCATION PLAN

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SHEET NO. 04.30

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BOREHOLE NUMBER B-01

Page 1 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-29-2024 **COMPLETED** 04-30-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 857735 ft **EASTING :** 950971 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 67 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
						Concrete slab.
						Brown c-f SAND, some gravel, organics.
						Brown SAND.
4	5					Brown SAND, some c gravel, wet.
			1-2-4-4			Brown SAND, wet, petroleum smell.
			3-4-5-7			Red-brown SAND, some silt, petroleum smell.
-1	10		2-2-2-3			Red-brown f SAND, some silt, petroleum smell.
			4-6-8-11			Red-brown SAND, some silt.
-6	15		1-4-7-11			Red-brown f SAND, some silt.
			4-7-8-11			Red-brown SAND, some silt.
			8-7-8-10			Red-brown f SAND, some silt.
-11	20		4-5-4-6			Brown f SAND, some silt.
-16	25		1-2-2-5			Brown f SAND, some silt.

NOTES

BOREHOLE NUMBER B-01

Page 2 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-29-2024 **COMPLETED** 04-30-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 857735 ft **EASTING :** 950971 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 67 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			3-6-5-8			Brown f SAND, and silt.
-26	35		5-6-6-11			Brown f SAND, and silt.
-31	40		7-8-10-11			Brown SAND, and silt.
-36	45		5-7-8-10			Red-brown f SAND, some silt.
-41	50		8-15-15-18			Red-brown f SAND, some silt.
-46	55		12-17-18-26			Red-brown f SAND, some silt.

NOTES

BOREHOLE NUMBER B-01

Page 3 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-29-2024 **COMPLETED** 04-30-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 857735 ft **EASTING :** 950971 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 67 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-56	65		5-5-9-13			Red-brown f SAND, some silt.
			7-8-9-13			Red-brown f SAND, some silt.
						End of Boring at 67.00 ft.
-61	70		5-9-11-14			
-66	75		6-9-10-13			
-71	80		7-11-13-14			
-76	85		6-10-14-19			

NOTES

BOREHOLE NUMBER B-01

Page 4 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-29-2024 **COMPLETED** 04-30-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 857735 ft **EASTING :** 950971 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 67 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			4-10-14-18			
-86	95		8-10-14-19			
-91	100		14-16-19-22			
-96	105					
-101	110					
-106	115					

NOTES

BOREHOLE NUMBER B-02

Page 1 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-25-2024 **COMPLETED** 04-26-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 857770 ft **EASTING :** 951026 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
						Concrete slab.
						Brown c-f SAND, trace gravel, petroleum odor.
						Brown f SAND, petroleum odor.
4	5					Brown f SAND, petroleum odor.
			4-5-8-8			Red-brown f SAND, little silt.
-1	10		6-6-8-12			Red-brown f SAND, little silt.
			2-2-2-5			Red-brown f SAND, trace silt.
			2-2-2-3			Red-brown f SAND, trace silt.
-6	15		1-2-2-3			Red-brown f SAND, trace silt.
			2-3-3-7			Red-brown f SAND, trace silt.
			2-3-2-4			Red-brown f SAND, little silt.
-11	20		1-0-1-0			Red-brown f SAND, little silt.
-16	25		2-5-5-7			Red-brown f SAND, little silt.

NOTES

BOREHOLE NUMBER B-02

Page 2 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-25-2024 **COMPLETED** 04-26-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 857770 ft **EASTING :** 951026 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			2-4-4-6			Red-brown f SAND, little silt.
-26	35		3-6-10-14			Red-brown f SAND, little silt.
-31	40		4-4-8-11			Red-brown SILT, and f sand.
-36	45		3-4-8-12			Red-brown SILT, and f sand.
-41	50		4-10-17-18			Red-brown f SAND, and silt.
-46	55		5-7-15-16			Red-brown f SAND, and silt.

NOTES

REVISION DESCRIPTION | DATE | REV.

DESIGNER/DRAFTER: MK CHECKED BY: AB

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14th FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: BORING LOGS

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SHEET NO. 04.31

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BOREHOLE NUMBER B-02

Page 3 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-25-2024 COMPLETED 04-26-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657770 ft EASTING : 951026 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-56	65		6-8-9-14			Red-orown f SAND, and silt.
			5-7-9-13			Red-orown f SAND, and silt.
-61	70		7-8-10-13			Red-orown f SAND, and silt.
-66	75		4-8-13-14			Red-orown f SAND, and silt.
-71	80		5-6-12-14			Red-orown f SAND, and silt.
-76	85		6-8-12-18			Red-orown f SAND, and silt.

NOTES

BOREHOLE NUMBER B-02

Page 4 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-25-2024 COMPLETED 04-26-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657770 ft EASTING : 951026 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-86	95		6-10-13-19			Red-brown f SAND, and silt.
			7-8-11-16			Brown f SAND, and silt.
-91	100		7-11-14-18			Brown f SAND, and silt.
						End of Boring at 102.00 ft.
-96	105					
-101	110					
-106	115					

NOTES

BOREHOLE NUMBER B-03

Page 1 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-23-2024 COMPLETED 04-24-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657829 ft EASTING : 951008 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
						Brown c-f SAND, some silt, little c-f gravel.
						Brown c-f SAND, some silt, little c-f gravel.
4	5					Brown c-f SAND, and silt.
			1-2-3-5			Red-brown c-f SAND little silt.
			3-5-5-5			Red-brown c-f SAND little silt.
-1	10		0-1-3-8			Red-brown c-f SAND little silt.
			4-8-11-12			Red-brown c-f SAND little silt.
-6	15		3-4-5-7			Red-brown f SAND, trace silt.
			3-5-5-9			Red-brown f SAND, trace silt.
			5-5-7-9			Red-brown f SAND, little silt.
-11	20		3-5-8-11			Red-brown f SAND, little silt.
-16	25		14-17-20-21			Red-brown f SAND, little silt.

NOTES

BOREHOLE NUMBER B-03

Page 2 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-23-2024 COMPLETED 04-24-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657829 ft EASTING : 951008 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-26	35		4-11-14-13			Red-orown f SAND, little silt.
			6-11-12-13			Red-orown f SAND, little silt.
-31	40		7-10-13-15			Red-orown f SAND, little silt.
-36	45		6-8-10-12			Red-orown f SAND, little silt.
-41	50		8-17-21-23			Red-orown f SAND, little silt.
-46	55		15-19-24-30			Red-orown f SAND, little silt.

NOTES

BOREHOLE NUMBER B-03

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CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-23-2024 COMPLETED 04-24-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657829 ft EASTING : 951008 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-56	65		15-16-15-14			Red-orown f SAND, little silt.
			5-10-11-14			Red-orown f SAND, and silt.
-61	70		6-9-13-15			Red-orown f SAND, and silt.
-66	75		7-10-13-18			Red-brown SILT, trace f sand.
-71	80		6-6-14-19			Red-brown SILT, trace f sand.
-76	85		6-8-14-20			Red-brown F SAND, and silt.

NOTES

BOREHOLE NUMBER B-03

Page 4 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-23-2024 COMPLETED 04-24-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657829 ft EASTING : 951008 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-86	95		7-11-13-16			Red-brown F SAND, and silt.
			7-9-16-24			Red-brown F SAND, and silt.
-91	100		8-13-19-25			Red-brown F SAND, and silt.
						End of Boring at 102.00 ft.
-96	105					
-101	110					
-106	115					

NOTES

REVISION DESCRIPTION | DATE | REV.

DESIGNER/DRAFTER: MK CHECKED BY: AB

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14° FLOOR
HARTFORD, CT 06103
(203) 375-0321

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: BORING LOGS

DRAWING NO. C-802
SHEET NO. 04.32

LASTED SAVED BY: KowalcMS FILE NAME: C:\Users\kowalcms\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-801_BORING_LOGS.dgn
PLOTTED DATE: 1/6/2025

BOREHOLE NUMBER B-04

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CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-19-2024 **COMPLETED** 04-22-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657872 ft **EASTING :** 951064 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
						Concrete slab.
						Light-brown o-f SAND, some c gravel.
						Medium-brown o-f SAND, some c gravel, trace silt, moist petroleum odor.
4	5					Medium-brown o-f SAND, some c gravel, trace silt, moist petroleum odor, fully saturated.
			3-5-10-13			Red-brown f SAND, little silt, w/ Mica.
			8-11-12-15			Red-brown f SAND, little silt, w/ Mica.
-1	10		0-4-5-6			Red-brown m-f SAND, little silt.
			3-3-4-4			Red-brown o-f(+) SAND, trace silt.
-6	15		2-2-3-5			Red-brown o-f(+) SAND, trace silt.
			6-5-6-8			Red-brown f SAND, little silt.
			5-5-7-9			Red-brown f SAND, little silt.
-11	20		3-10-12-14			Red-brown f SAND, little silt.
-16	25		8-9-9-12			Red-brown f SAND, little silt.

NOTES

BOREHOLE NUMBER B-04

Page 2 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-19-2024 **COMPLETED** 04-22-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657872 ft **EASTING :** 951064 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			8-14-14-16			Red-brown f SAND, little silt.
-26	35		9-7-9-11			Red-brown f SAND, and silt.
-31	40		5-7-9-11			Red-brown f SAND, and silt.
-36	45		6-8-8-9			Red-brown f SAND, and silt.
-41	50		5-14-20-24			Red-brown f SAND, and silt.
-46	55		10-16-19-19			Red-brown f SAND, and silt.

NOTES

BOREHOLE NUMBER B-04

Page 3 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-19-2024 **COMPLETED** 04-22-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657872 ft **EASTING :** 951064 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			10-11-16-16			Red-brown f SAND, and silt.
-56	65		8-12-14-16			Red-brown f SAND, and silt.
-61	70		5-11-14-13			Red-brown f SAND, and silt.
-66	75		6-11-14-15			Red-brown f SAND, and silt.
-71	80		5-10-14-15			Red-brown f SAND, and silt.
-76	85		6-10-12-18			Red-brown f SAND, and silt.

NOTES

BOREHOLE NUMBER B-04

Page 4 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-19-2024 **COMPLETED** 04-22-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657872 ft **EASTING :** 951064 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			7-11-13-18			Red-brown f SAND, and silt.
-86	95		6-11-15-19			Red-brown f SAND, and silt.
-91	100		8-14-15-22			Red-brown f SAND, and silt.
						End of Boring at 102.00 ft.
-96	105					
-101	110					
-106	115					

NOTES

BOREHOLE NUMBER B-05

Page 1 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-17-2024 **COMPLETED** 04-18-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657949 ft **EASTING :** 951056 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 82 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
						Brown f SAND, c gravel, trace silt.
						Reddish-brown, c-f SAND, trace gravel.
						Red-brown f SAND, moist, slight petrol odor.
4	5					Red-brown f SAND, moist, slight petrol odor.
			3-2-3-5			Red-brown f SAND, and silt.
			2-3-5-6			Brown f SAND, and silt.
-1	10		2-3-3-4			Red-brown f SAND, little silt.
			2-3-5-8			Red-brown f SAND, little silt.
-6	15		3-5-5-4			Red-brown f SAND, little silt.
			2-4-4-6			Red-brown f SAND, and silt.
			2-2-5-5			Red-brown f SAND, and silt.
-11	20		8-10-14-20			Red-brown f SAND, little silt.
-16	25		6-9-12-16			Red-brown f SAND, little silt.

NOTES

BOREHOLE NUMBER B-05

Page 2 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-17-2024 **COMPLETED** 04-18-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657949 ft **EASTING :** 951055 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 82 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			3-3-9-12			Red-brown f SAND, little silt.
-26	35		4-5-7-9			Red-brown f SAND, and silt.
-31	40		4-5-7-9			Red-brown f SAND, and silt
-36	45		3-4-7-11			Red-brown f SAND, and silt.
-41	50		7-8-18-22			Red-brown f SAND, and silt.
-46	55		10-13-17-21			Red-brown SILT, some f sand.

NOTES

REVISION DESCRIPTION | DATE | REV.

DESIGNER/DRAFTER: MK CHECKED BY: AB

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14° FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: BORING LOGS

DRAWING NO. C-803
SHEET NO. 04.33

LASTED SAVED BY: KowalcMS **FILE NAME:** C:\Users\kowalcms\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-801_BORING_LOGS.dgn
PLOTTED DATE: 1/6/2025

BOREHOLE NUMBER B-05

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CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-17-2024 COMPLETED 04-18-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 557949 ft EASTING : 951055 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 62 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			11-19-11-16			Red-brown SILT, some f sand.
						End of Boring at 62.00 ft.
-56	65		7-9-11-16			
-61	70		5-10-12-16			
-66	75		6-12-14-17			
-71	80		5-7-11-19			
-76	85		5-8-13-18			

NOTES

BOREHOLE NUMBER B-05

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CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-17-2024 COMPLETED 04-18-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 557949 ft EASTING : 951055 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 62 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			8-15-15-19			
-86	95		9-11-15-23			
-91	100		9-14-17-24			
-96	105					
-101	110					
-106	115					

NOTES

BOREHOLE NUMBER B-07

Page 1 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-15-2024 COMPLETED 04-16-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 558804 ft EASTING : 951100 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
4	5					
-1	10		WOH-0-0-2			Brown o-f(+) SAND, some silt.
			4-5-4-4			Brown o-f(+) SAND, some silt.
-6	15		3-5-5-6			Brown o-f SAND, some silt, little o-f gravel.
			2-5-5-8			Brown o-f SAND, little o-f gravel.
			5-7-5-6			Brown o-f SAND, little o-f gravel.
-11	20		1-1-5-5			Brown SILT, little o-f sand.
-16	25		3-5-4-6			Brown f SAND, and silt.

NOTES

BOREHOLE NUMBER B-07

Page 2 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-15-2024 COMPLETED 04-16-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 558804 ft EASTING : 951100 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			2-2-4-5			Brown f SAND, and silt.
-26	30		3-5-7-8			Brown SILT, little o-f sand.
-31	40		2-3-5-7			Brown SILT, little o-f sand.
-36	45		3-5-7-7			Brown SILT, little o-f sand.
-41	50		3-5-8-12			Brown SILT, little o-f sand.
-46	55		3-5-6-8			Brown SILT, little o-f sand.

NOTES

BOREHOLE NUMBER B-07

Page 3 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-15-2024 COMPLETED 04-16-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 558804 ft EASTING : 951100 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			3-5-8-12			Brown f SAND, and silt.
-56	65		4-8-9-12			Brown SILT, little f sand.
-61	70		4-6-9-12			Brown SILT, little f sand.
-66	75		4-7-9-15			Brown SILT.
-71	80		5-8-11-15			Brown SILT.
-76	85		7-10-14-21			Brown SILT.

NOTES

BOREHOLE NUMBER B-07

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CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-15-2024 COMPLETED 04-16-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 558804 ft EASTING : 951100 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 102 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			4-6-10-15			Brown SILT.
-86	95		10-12-17-23			Brown f SAND, some silt.
-91	100		10-15-18-26			Brown f SAND, some silt.
						End of Boring at 102.00 ft.
-96	105					
-101	110					
-106	115					

NOTES

REVISION DESCRIPTION | DATE | REV.

DESIGNER/DRAFTER: MK CHECKED BY: AB

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14' FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: BORING LOGS

DRAWING NO. C-804
SHEET NO. 04.34

LASTED SAVED BY: KowalcMS **FILE NAME:** C:\Users\kowalcms\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-801_BORING_LOGS.dgn
PLOTTED DATE: 1/6/2025

BOREHOLE NUMBER B-08

Page 1 of 3

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-13-2024 **COMPLETED** 05-13-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657721 ft **EASTING :** 950907 ft
GROUND ELEVATION 8.30 ft **FINAL DEPTH** 62 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
4	5		2-4-4-5			
			4-4-4-5			
-1	10		2-2-6-8			
			4-3-5-10			
-6	15		4-5-7-6			
			3-2-5-5			
-11	20		5-4-5-7			
			1-2-2-3			
-16	25		2-3-4-6			
-21						

NOTES

BOREHOLE NUMBER B-08

Page 2 of 3

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-13-2024 **COMPLETED** 05-13-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657721 ft **EASTING :** 950907 ft
GROUND ELEVATION 8.30 ft **FINAL DEPTH** 62 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-26	35		4-6-7-9			
			5-8-8-8			
-31	40		3-5-5-7			
-36	45		4-5-5-9			
-41	50		2-4-8-9			
-46	55		4-6-7-11			
-51						

NOTES

BOREHOLE NUMBER B-08

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CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-13-2024 **COMPLETED** 05-13-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657721 ft **EASTING :** 950907 ft
GROUND ELEVATION 8.30 ft **FINAL DEPTH** 62 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-56	65		4-6-10-13			
-61	70					
-66	75					
-71	80					
-76	85					
-81						

NOTES

BOREHOLE NUMBER B-08A

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CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-01-2024 **COMPLETED** 05-02-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657887 ft **EASTING :** 950965 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 62 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
						Concrete slab.
						Wood/wood fibers.
						Brown c SAND, some gravel.
4	5					Brown SAND, saturated.
			1-1-1-2			Red-brown f SAND, little silt.
-1	10		3-4-4-6			Red-brown f SAND, little silt.
			2-2-2-3			Red-brown f SAND, little silt.
			4-5-6-9			Red-brown f SAND, little silt.
-6	15		3-5-5-3			Red-brown f SAND, little silt.
			5-6-7-8			Red-brown f SAND, little silt.
			6-7-16-22			Red-brown f SAND, little silt.
-11	20		6-10-15-18			Red-brown f SAND, little silt.
-16	25		10-12-12-14			Red-brown f SAND, little silt.

NOTES

BOREHOLE NUMBER B-08A

Page 2 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-01-2024 **COMPLETED** 05-02-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657887 ft **EASTING :** 950965 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 62 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-26	35		10-10-9-15			Red-brown f SAND, little silt.
			4-5-6-9			Red-brown SILT, and f sand.
-31	40		5-7-9-12			Red-brown SILT, and f sand.
-36	45		6-9-13-15			Red-brown f SAND, and silt.
-41	50		8-10-10-14			Red-brown f SAND, and silt.
-46	55		11-13-14-16			Red-brown f SAND, and silt.

NOTES

BOREHOLE NUMBER B-08A

Page 3 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-01-2024 **COMPLETED** 05-02-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 657887 ft **EASTING :** 950965 ft
GROUND ELEVATION 9.00 ft **FINAL DEPTH** 62 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY D. Freda (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-56	65		9-15-14-17			Red-brown f SAND, and silt.
			8-11-15-19			End of Boring at 62.00 ft.
-61	70		7-11-15-21			
-66	75		12-15-19-20			
-71	80		4-8-10-19			Red-brown SILT, some f sand.
-76	85		5-8-11-17			

NOTES

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: MK CHECKED BY: AB

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14th FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: BORING LOGS

DRAWING NO. C-805
SHEET NO. 04.35

LASTED SAVED BY: KowalcMS **FILE NAME:** C:\Users\kowalcms\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-801_BORING_LOGS.dgn
PLOTTED DATE: 1/6/2025

BOREHOLE NUMBER B-08A

Page 4 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-01-2024 COMPLETED 05-02-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 667887 ft EASTING : 950965 ft
GROUND ELEVATION 9.00 ft FINAL DEPTH 52 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY K. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-86	95		5-8-12-17			
-91	100		5-6-14-17			
-96	105		6-7-17-18			
-101	110					
-106	115					

NOTES

BOREHOLE NUMBER B-09

Page 1 of 2

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-03-2024 COMPLETED 05-03-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 666920 ft EASTING : 951290 ft
GROUND ELEVATION 8.50 ft FINAL DEPTH 52 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY K. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
						Bituminous Pavement.
4	5					Dark-brown c-f SAND, some c gravel, trace silt, petrol odor, damp.
						Dark-brown f SAND, trace gravel, trace silt, petrol odor.
						Dark-brown c SAND, c gravel, petrol odor.
			2-2-4-5			Red-brown-black c-f SAND, little silt, trace gravel.
-1	10		2-5-5-6			Red-brown c-f SAND, little silt, trace f gravel.
			1-1-2-4			Red-brown c-f SAND, some silt.
			3-5-5-6			Red-brown c-f SAND, some silt.
-6	15		4-4-5-8			Red-brown c-f SAND, some silt.
			4-6-9-12			Red-brown c-f SAND, some silt.
			4-5-8-10			Red-brown c-f SAND, some silt.
-11	20		1-1-2-4			Red-brown c-f SAND, some silt.
-16	25		4-6-6-7			Red-brown c-f SAND, some silt.
-21						

NOTES

BOREHOLE NUMBER B-09

Page 2 of 2

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-03-2024 COMPLETED 05-03-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 666920 ft EASTING : 951290 ft
GROUND ELEVATION 8.50 ft FINAL DEPTH 52 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY D. Freda (VN Engineers) CHECKED BY K. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-26	35		4-5-6-6			Red-brown c-f SAND, some silt.
			3-4-4-5			Red-brown c-f SAND, some silt.
-31	40		3-5-5-8			Red-brown SILT, some f sand.
-36	45		3-3-3-6			Red-brown SILT, some f sand.
-41	50		4-5-7-9			Red-brown SILT, some f sand.
						End of Boring at 52.00 ft.
-46	55					
-51						

NOTES

BOREHOLE NUMBER B-10

Page 1 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-07-2024 COMPLETED 05-10-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 665178 ft EASTING : 951219 ft
GROUND ELEVATION 8.70 ft FINAL DEPTH 22 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY A. Davis (VN Engineers) CHECKED BY K. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
4	5					
			1-1-2-3			Brown c-f SAND, little silt.
			3-2-6-6			Brown c-f SAND, little silt.
-1	10		0-0-0-0			Grey-brown-black SILT, little c sand, trace f gravel , roots and shells.
			0-0-1-1			Grey-brown-black SILT, little c sand, trace f gravel , roots and shells.
-6	15		0-0-1-2			Grey-brown-black SILT, little c sand, trace f gravel , roots and shells.
			0-2-2-2			Black c-f SAND, little silt, trace f gravel , root fibers.
			0-0-3-6			Gray c-f SAND, little silt, trace f gravel , trace root fibers.
-11	20		0-0-1-3			Brown c-f(+) SAND, trace silt.
						End of Boring at 22.00 ft.
-16	25		2-3-4-5			
-21						

NOTES

BOREHOLE NUMBER B-10

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CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-07-2024 COMPLETED 05-10-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 665178 ft EASTING : 951219 ft
GROUND ELEVATION 8.70 ft FINAL DEPTH 22 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY A. Davis (VN Engineers) CHECKED BY K. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			2-3-4-7			
-26	35		3-4-9-16			
-31	40		9-10-13-14			
-36	45		6-8-11-14			
-41	50		3-5-8-11			
-46	55		4-5-9-13			
-51						

NOTES

BOREHOLE NUMBER B-10

Page 3 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-07-2024 COMPLETED 05-10-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig HAMMER TYPE Automatic hammer
CASING SIZE 4.0 in. ENERGY RATIO 80%
PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 665178 ft EASTING : 951219 ft
GROUND ELEVATION 8.70 ft FINAL DEPTH 22 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB HAMMER DROP : 30 IN SPLIT SPOON SIZE : 2 IN
LOGGED BY A. Davis (VN Engineers) CHECKED BY K. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
			4-5-9-11			
-56	65		5-8-12-13			
-61	70		2-5-9-11			
-66	75		4-8-11-13			
-71	80		4-5-9-11			
-76	85		5-11-16-21			
-81						

NOTES

REVISION DESCRIPTION | DATE | REV.

DESIGNER/DRAFTER: MK CHECKED BY: AB

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14° FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: BORING LOGS

DRAWING NO. C-806
SHEET NO. 04.36

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PLOTTED DATE: 1/6/2025

BORELOCK NUMBER B-10

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CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 05-07-2024 **COMPLETED** 05-10-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Truck Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%

PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 668178 ft **EASTING :** 951219 ft
GROUND ELEVATION 8.70 ft **FINAL DEPTH** 22 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY A. Davis (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-86	95		3-6-14-15			
-91	100		5-7-10-14			
-96	105		3-8-13-16			
-101	110					
-106	115					
-111						

NOTES

BORELOCK NUMBER B-11

Page 1 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-10-2024 **COMPLETED** 04-11-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Track Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%

PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 667554 ft **EASTING :** 951026 ft
GROUND ELEVATION 8.30 ft **FINAL DEPTH** 94 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY A. Davis (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
4	5					
-1	10		2-2-2-1			Brown m-f SAND, little c sand, trace f gravel, petrol odor.
			1-1-2-2			Brown m-f SAND, little c sand, trace f gravel, petrol odor.
			7-8-8-8			Brown m-f SAND, little c sand, some f gravel, petrol odor.
-6	15		4-5-4-5			Brown m-f SAND, little c sand, some f gravel, petrol odor.
			2-2-4-4			Red-brown f SAND, and silt.
			3-6-7-6			Red-brown f SAND, some silt.
-11	20		1-2-4-5			Red-brown f SAND, and silt.
			2-3-3-5			Red-brown f SAND, and silt.
-16	25		2-3-4-4			Red-brown f SAND, and silt.
-21						

NOTES

BORELOCK NUMBER B-11

Page 2 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-10-2024 **COMPLETED** 04-11-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Track Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%

PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 667554 ft **EASTING :** 951026 ft
GROUND ELEVATION 8.30 ft **FINAL DEPTH** 94 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY A. Davis (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-26	35		5-7-7-9			Red-brown f SAND, and silt.
-31	40		7-8-10-10			Red-brown f SAND, some silt.
-36	45		14-18-17-18			Red-brown f SAND, some silt.
-41	50		4-8-12-12			Red-brown f SAND, some silt.
-46	55		8-13-17-24			Red-brown f SAND, some silt.
-51			8-12-14-20			Red-brown f SAND, and silt.

NOTES

BORELOCK NUMBER B-11

Page 3 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-10-2024 **COMPLETED** 04-11-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Track Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%

PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 667554 ft **EASTING :** 951025 ft
GROUND ELEVATION 8.30 ft **FINAL DEPTH** 94 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY A. Davis (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-56	65		9-14-17-18			Brown SILT, little f sand, wet.
-61	70		7-10-11-15			Brown SILT, little f sand, wet.
-66	75		15-12-21-21			Brown SILT, little f sand, wet.
-71	80		7-10-11-14			Brown SILT, little f sand, wet.
-76	85		5-8-11-11			Brown SILT, little f sand, wet.
-81			7-7-12-16			Brown SILT, little f sand, wet.

NOTES

BORELOCK NUMBER B-11

Page 4 of 4

CLIENT Connecticut Department of Transportation
PROJECT NUMBER 4021764
DATE STARTED 04-10-2024 **COMPLETED** 04-11-2024
DRILLING CONTRACTOR New England Boring Contractors
DRILLING METHOD Mud Rotary
EQUIPMENT Track Rig **HAMMER TYPE** Automatic hammer
CASING SIZE 4.0 in. **ENERGY RATIO** 80%

PROJECT NAME MNR, NHRY Car & Diesel Shop Rehabilitation
PROJECT LOCATION New Haven, Connecticut
NORTHING : 667554 ft **EASTING :** 951025 ft
GROUND ELEVATION 8.30 ft **FINAL DEPTH** 94 ft
GROUNDWATER DEPTH: N/A
HAMMER WEIGHT : 140 LB **HAMMER DROP :** 30 IN **SPLIT SPOON SIZE :** 2 IN
LOGGED BY A. Davis (VN Engineers) **CHECKED BY** R. Gomez (VN Engineers)

ELEVATION (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	RECOVERY (IN)	GRAPHIC LOG	MATERIAL DESCRIPTION
-86	95		8-13-12-15			Brown SILT, little f sand, wet.
-91	100		12-15-20-22			Brown SILT, little f sand, wet.
-96	105					End of Boring at 94.00 ft.
-101	110					
-106	115					
-111						

NOTES

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: MK CHECKED BY: AB

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14° FLOOR
HARTFORD, CT 06103
(203) 375-0021

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: BORING LOGS

DRAWING NO. C-807
SHEET NO. 04.37

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PLOTTED DATE: 1/6/2025

Appendix B

APPENDIX B - DRAINAGE CALCULATIONS
PART 1: RUNOFF COEFFICIENT COMPUTATIONS

A. Methodology:

The runoff coefficient assumed for pavement is 0.9 and for gravel roads is 0.7.

B. Notes

1. Surface areas were computed using the sequence described below.

    a. Delineate site area boundary and calculate total site area.
    b. Delineate and calculate impervious surfaces.
    c. Calculate pervious surfaces by subtracting impervious surface area from total site area (identified as grass areas).

1. Drainage calculations are based on the current design information.

C. Runoff Coefficient Calculations:

1. **Pre-Construction:**

Table 1 summarizes the pre-construction runoff coefficients and corresponding surface areas in square feet and acres for the Car & Diesel Shop site.

Table 1: Pre-Construction Runoff Coefficient and Surface Area Summary for the Car & Diesel Shop

Runoff Coefficient	Surface Area		Description
	Square Feet	Acres	
0.90	187,308	4.30	Buildings/Sidewalks/Railbed/Track bed (rails/ties)/Pavement
	187,308	***4.30***	***Subtotal (C=0.90)***
0.70	159,168	3.65	Gravel / Ballast
	159,168	**3.65**	***Subtotal (C=0.70)***

Impervious Area: 4.30 ac.
Gravel Area: 3.65 ac.

$$\frac{(4.30 \text{ ac.} \times 0.9)+(3.65 \text{ ac.} \times 0.7)}{4.30 \text{ ac.} + 3.65 \text{ ac.}} = \mathbf{0.81}$$

2. Post-Construction:

Table 2 summarizes the post-construction runoff coefficients and corresponding surface areas in square feet and acres for the Car and Diesel shop site.

Table 2: Post-Construction Runoff Coefficient and Surface Area Summary for the Car and Diesel shop

Runoff Coefficient	Surface Area		Description
	Square Feet	Acres	
0.90	213,836	4.91	Buildings/Sidewalks/Railbed/Track bed (rails/ties)/Pavement
	213,836	***4.91***	***Subtotal (C=0.90, west)***
0.70	132,640	3.04	Gravel / Ballast
	132,640	***3.04***	***Subtotal (C=0.70, west)***

Impervious Area: 4.91 ac.
Gravel Area: 3.04 ac.

$$\frac{(4.91 \text{ ac.} \times 0.9) + (3.04 \text{ ac.} \times 0.7)}{4.91 \text{ ac.} + 3.04 \text{ ac.}} = \mathbf{0.82}$$

APPENDIX B - DRAINAGE CALCULATIONS
PART 2: TOTAL IMPERVIOUS COVER

A. Methodology:

The total impervious cover is calculated from input used for the runoff coefficient calculations.

TOTAL IMPERVIOUS COVER = IMPERVIOUS SURFACE AREA / TOTAL SITE AREA

B. Notes:

Total Site Area = 7.95 acres.

C. Total Impervious Cover Calculations:

1. Pre-Construction:

TOTAL IMPERVIOUS COVER = 4.30 ac. / 7.95 ac. = 0.5409 = **54.09%**

2. Post-Construction:

TOTAL IMPERVIOUS COVER = 4.91 ac. / 7.95 ac. = 0.6175 = **61.75%**

APPENDIX B - DRAINAGE CALCULATIONS
PART 3: WATER QUALITY VOLUME

A. Methodology:

Compute Water Quality Volume (WQV) for the entire site area.

WQV = (1.3") x R x A / 12,

where,

R = Volumetric Runoff Coefficient = 0.05 + 0.009(I)
I = % impervious cover
A = Site area in acres

B. Notes:

1. Total site area = 7.95 acres
2. Pre-construction impervious cover (%) = 54.09%
3. Post-construction impervious cover (%) = 61.75%

C. WQV Calculations:

1. Pre-Construction:

I = 100.00 x 4.30 / 7.95 = 54.09%
R = 0.05+0.009 x 54.09 = 0.54
WQV = 1.3" x 0.54 x 7.95/12 = **0.46 ac-ft**

2. Post-Construction:

I = 100.00 x 4.91 / 7.95 = 61.75%
R = 0.05+0.009 x 61.75 = 0.61
WQV = 1.3" x 0.61 x 7.95/12 = **0.53 ac-ft**

APPENDIX B - DRAINAGE CALCULATIONS
PART 4: WATER QUALITY FLOW

A. Methodology:

The first 1.3 inches of runoff is used to compute WQF according to the theory summarized below.

a. CN is computed by the formula below.

CN = (1000) / (10 + 5P + 10Q – 10(Q^2 + 1.25QP)$^{1/2}$) where,

P = Design precipitation, inches (1.3" for water quality storm)

Q = runoff depth (watershed inches) = WQV x 12 / A

A is the drainage area in acres.

b. Tc (time of concentration) is determined from the drainage calculations.

c. Knowing CN, A, Tc, & Q, Initial Abstraction (Ia) and Unit Peak Discharge (qu) are determined from TR-55 charts and graphs.

d. WQF = qu x A x Q (A represented in square miles)

B. Notes:

1. Total site area = 7.95 acres = 0.01 square miles
2. Pre-Construction WQV = 0.46 ac-ft.
3. Post-Construction WQV = 0.53 ac-ft.

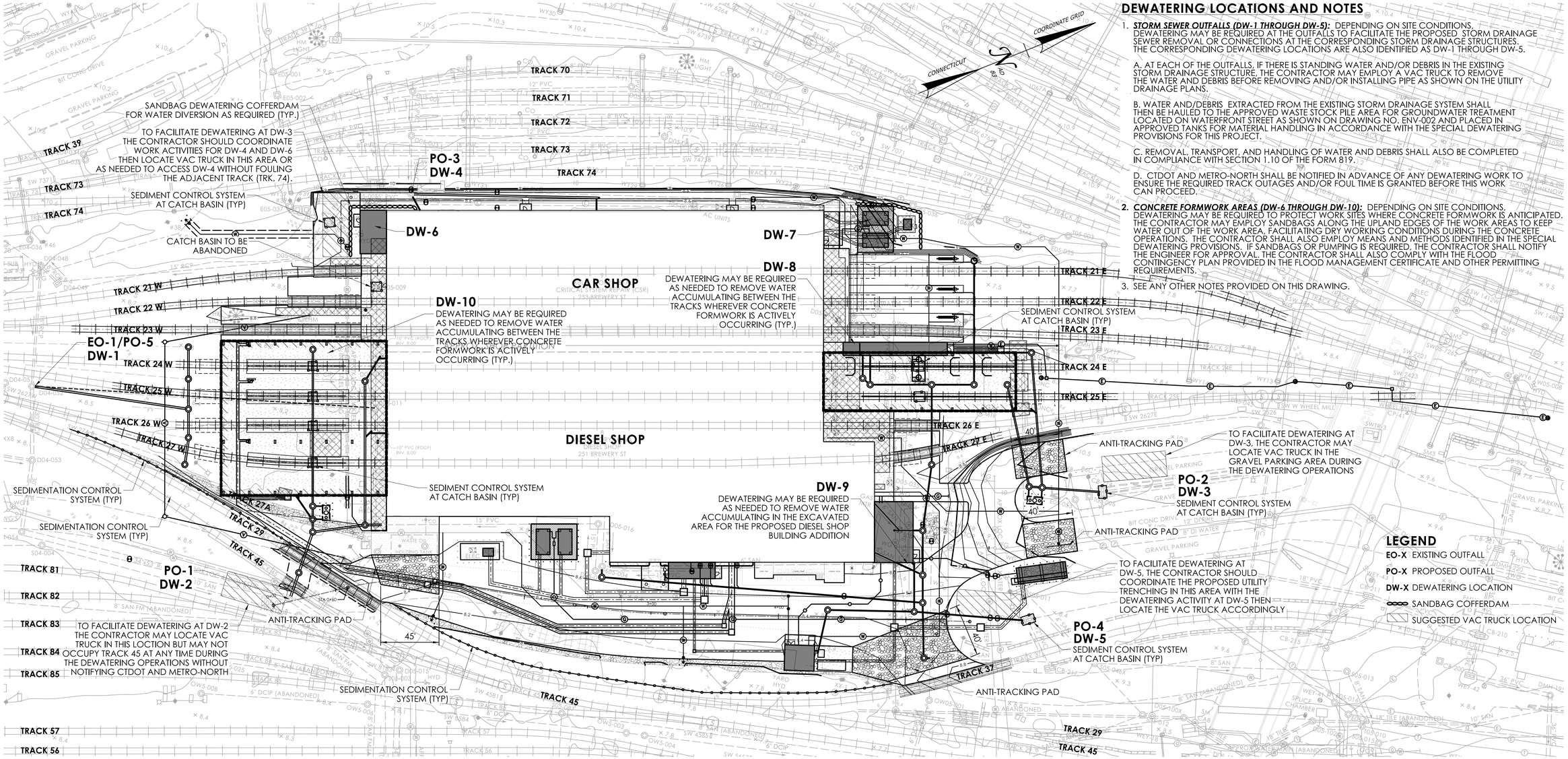
C. WQF Calculations:

1. Pre-Construction:

Q = 0.46 x 12 / 7.95 = 0.69 cfs
CN = (1000) / (10 + 5(1.3) + 10(0.69) – 10(0.69^2 + 1.25(0.69)(1.3))$^{1/2}$)= 92.92 (say 93)
Ia= 0.151 & P = 1.3 inches → Ia/P = 0.116
Tc = 10 min = 0.17 hr.
qu = 570 csm/in
WQF = 570 x (7.95/640) x 0.69 = **4.89 cfs**

2. Post-Construction:

Q = 0.53 x 12 / 7.95 = 0.80 cfs
CN = (1000) / (10 + 5(1.3) + 10(0.80) – 10(0.80^2 + 1.25(0.80)(1.3))$^{1/2}$ = 94.59 (say 95)
Ia = 0.08 & P =1.3 inches → Ia/P =0.105
Tc = 10 min = 0.17 hr.
qu = 590 csm/in
WQF = 590 x (7.95/640) x 0.80 = **5.86 cfs**



DEWATERING LOCATIONS AND NOTES

1. ***STORM SEWER OUTFALLS (DW-1 THROUGH DW-5):*** DEPENDING ON SITE CONDITIONS, DEWATERING MAY BE REQUIRED AT THE OUTFALLS TO FACILITATE THE PROPOSED STORM DRAINAGE SEWER REMOVAL OR CONNECTIONS AT THE CORRESPONDING STORM DRAINAGE STRUCTURES. THE CORRESPONDING DEWATERING LOCATIONS ARE ALSO IDENTIFIED AS DW-1 THROUGH DW-5.

   A. AT EACH OF THE OUTFALLS, IF THERE IS STANDING WATER AND/OR DEBRIS IN THE EXISTING STORM DRAINAGE STRUCTURE, THE CONTRACTOR MAY EMPLOY A VAC TRUCK TO REMOVE THE WATER AND DEBRIS BEFORE REMOVING AND/OR INSTALLING PIPE AS SHOWN ON THE UTILITY DRAINAGE PLANS.

   B. WATER AND/DEBRIS EXTRACTED FROM THE EXISTING STORM DRAINAGE SYSTEM SHALL THEN BE HAULED TO THE APPROVED WASTE STOCK PILE AREA FOR GROUNDWATER TREATMENT LOCATED ON WATERFRONT STREET AS SHOWN ON DRAWING NO. ENV-002 AND PLACED IN APPROVED TANKS FOR MATERIAL HANDLING IN ACCORDANCE WITH THE SPECIAL DEWATERING PROVISIONS FOR THIS PROJECT.

   C. REMOVAL, TRANSPORT, AND HANDLING OF WATER AND DEBRIS SHALL ALSO BE COMPLETED IN COMPLIANCE WITH SECTION 1.10 OF THE FORM 819.

   D. CTDOT AND METRO-NORTH SHALL BE NOTIFIED IN ADVANCE OF ANY DEWATERING WORK TO ENSURE THE REQUIRED TRACK OUTAGES AND/OR FOUL TIME IS GRANTED BEFORE THIS WORK CAN PROCEED.

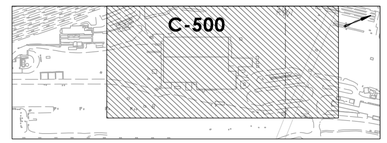
2. ***CONCRETE FORMWORK AREAS (DW-6 THROUGH DW-10):*** DEPENDING ON SITE CONDITIONS, DEWATERING MAY BE REQUIRED TO PROTECT WORK SITES WHERE CONCRETE FORMWORK IS ANTICIPATED. THE CONTRACTOR MAY EMPLOY SANDBAGS ALONG THE UPLAND EDGES OF THE WORK AREAS TO KEEP WATER OUT OF THE WORK AREA, FACILITATING DRY WORKING CONDITIONS DURING THE CONCRETE OPERATIONS. THE CONTRACTOR SHALL ALSO EMPLOY MEANS AND METHODS IDENTIFIED IN THE SPECIAL DEWATERING PROVISIONS. IF SANDBAGS OR PUMPING IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL ALSO COMPLY WITH THE FLOOD CONTINGENCY PLAN PROVIDED IN THE FLOOD MANAGEMENT CERTIFICATE AND OTHER PERMITTING REQUIREMENTS.
3. SEE ANY OTHER NOTES PROVIDED ON THIS DRAWING.

LEGEND

- **EO-X** EXISTING OUTFALL
- **PO-X** PROPOSED OUTFALL
- **DW-X** DEWATERING LOCATION
- SANDBAG COFFERDAM
- SUGGESTED VAC TRUCK LOCATION

NOTES

1. SEDIMENTATION CONTROL SYSTEMS MAY BE USED FOR CONSTRUCTION PERIMETER; WHERE APPLICABLE INSTALLATION SHALL PARALLEL ADJACENT ROADWAY OR TRACK AND BE COORDINATED WITH ENGINEER AND RAILROAD TO PREVENT DISTURBING TRACK;
2. SEDIMENT CONTROL SYSTEMS AT CATCH BASINS SHALL BE USED TO PROTECT ALL EXISTING AND NEWLY INSTALLED CATCH BASINS; PROTECTIVE MEASURES SHALL BE REMOVED AND REINSTALLED AS NECESSARY TO ACCOMMODATE CONSTRUCTION;
3. ANTI-TRACKING PADS SHALL BE 20' MINIMUM LENGTH IN DIRECTION OF TRAFFIC, AND BE INSTALLED ACROSS FULL WIDTH OF ROADWAY; WHERE SPACE IS AVAILABLE, LENGTH SHALL BE UP TO 50'; WHERE ANTI-TRACKING PADS ARE SHOWN IN BIT. CONC. PAVEMENT AREAS THEY ARE TO BE INSTALLED UPON PAVEMENT REMOVAL.
4. A DOUBLE ROW OF SEDIMENT CONTROL BARRIER SHALL BE UTILIZED BETWEEN ANY DISTURBED AREA AND DOWNGRADIENT WETLAND OR WATERCOURSE WITHIN 50 FEET, UNLESS THERE WOULD BE AN ADVERSE IMPACT TO ADJACENT WETLANDS/WATERCOURSES DUE TO INSTALLATION OF A DOUBLE ROW (I.E., WOULD RESULT IN LARGER WETLAND/WATERCOURSE IMPACT.)
5. ADDITIONAL EROSION CONTROL BARRIERS (DOUBLE ROW OF SCS) MAY ALSO BE REQUIRED WITHIN THE PROJECT AREA. FACTORS TO BE REVIEWED BY THE ENGINEER INCLUDE BUT ARE NOT LIMITED TO: THE CONTRIBUTING DISTURBED AREA, DRAINAGE AREA, SLOPE, LENGTH OF SLOPE, AND FLOW CONDITIONS TO MAINTAIN SHEET FLOW. IF DETERMINED NECESSARY, THE ENGINEER WILL DIRECT THE CONTRACTOR TO INSTALL AND MAINTAIN ADDITIONAL ROWS OF EROSION CONTROL BARRIER (OR EQUIVALENT).



REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: MK CHECKED BY: AB

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HORIZONTAL SCALE
1" = 40'

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14th FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: SEDIMENTATION AND EROSION CONTROL PLAN

DRAWING NO. C-500
SHEET NO.

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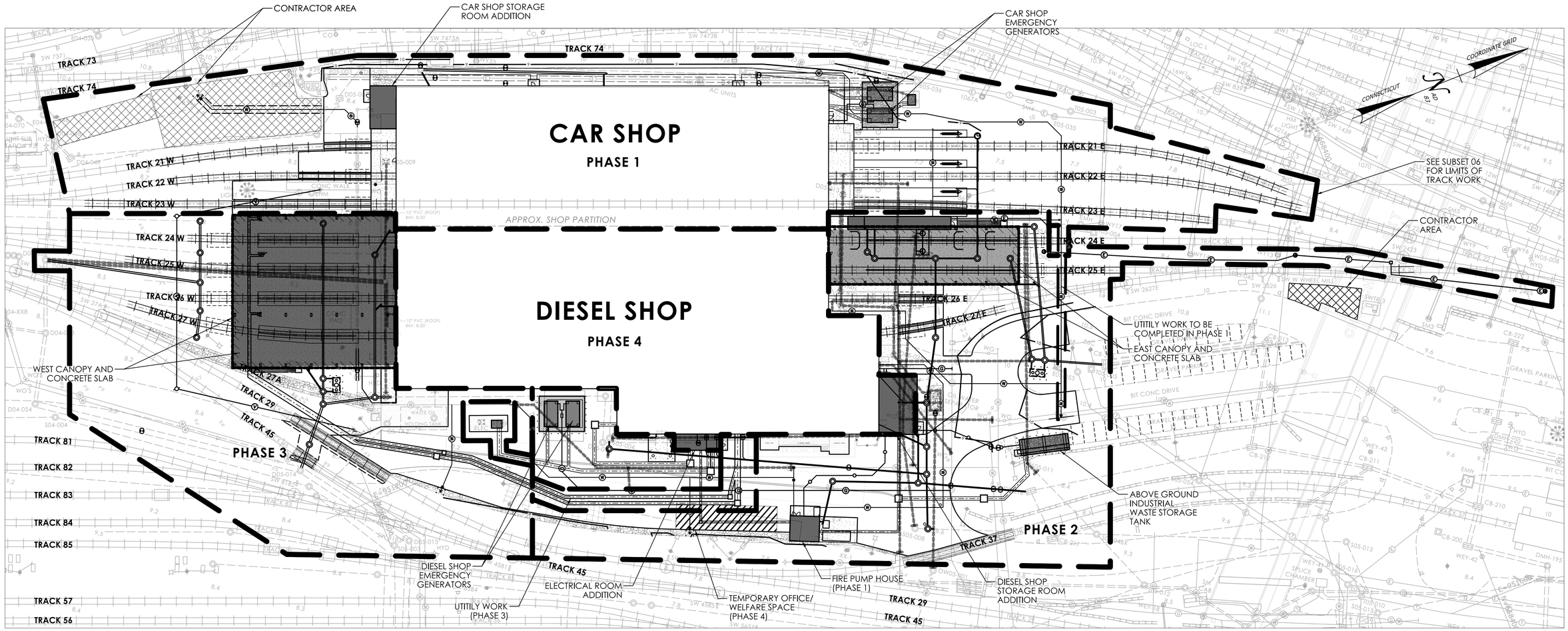
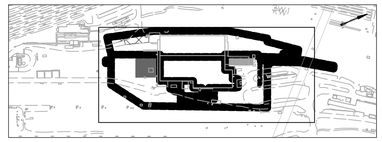
PLOTTED DATE: 2/18/2025



CAR SHOP AND DIESEL SHOP PHASING AND CONSTRUCTION

GENERAL PHASING NOTES:

1. CONSTRUCTION OF THIS PROJECT IS DIVIDED INTO FIVE PHASES TO MAINTAIN LIMITED OPERATION OF THE FACILITY. PHASE 1 INCLUDES DEMOLITION AND CONSTRUCTION OF THE CAR SHOP. PHASES 2 AND 3 INCLUDE CONSTRUCTION AT THE EAST AND WEST EXTERIOR OF THE DIESEL SHOP RESPECTIVELY AND WILL BE PERFORMED ONCE THE CAR SHOP IS OPERATIONAL AND WITH LIMITED OPERATION OF THE DIESEL SHOP. PHASE 4 IS DIVIDED INTO 5 SUBPHASES AND INCLUDES THE WORK WITHIN THE DIESEL SHOP FACILITY. WORK IN PHASE 4 MAY BE PERFORMED CONCURRENTLY WITH OTHER PHASES AT THE APPROVAL OF THE ENGINEER. PHASE 5 INCLUDES THE FINAL SITE WORK IN FRONT OF THE DIESEL SHOP.
2. THE DETAILED ITEMS OF WORK LISTED FOR THE VARIOUS PHASES MAY BE PERFORMED OUT OF SEQUENCE OR CONCURRENTLY IF IT EXPEDITES CONSTRUCTION AND IMPROVES THE CONTRACTOR'S CONSTRUCTION SCHEDULE AND IS APROVED BY CTDOT.
3. FOR UTILITY TYPE, SIZE, AND EXACT LOCATION REFER TO THE SUBSET DRAWINGS.
4. CONTRACTOR SHALL COORDINATE WITH METRO-NORTH AND AMTRAK FOR TRACK OUTAGES THAT WILL BE NEEEDED TO PERFORM THE CONTRACTED WORK.
5. WHEN INSTALLING UTILITIES IN THE EXISTING ROADWAYS, ONE VEHICULAR LANE (11 FT WIDE) MUST BE KEPT OPEN AT ALL TIMES. CONTRACTOR TO PROVIDE FLAGMEN TO DIRECT TRAFFIC. AT THE END OF WORK DAY, TWO LANES OF TRAFFIC MUST BE OPENED UNLESS CTDOT PROVIDES AUTHORIZATION FOR ONE LANE.
6. CONTRACTOR, SUBCONTRACTOR, DELIVERIES, AND ANY TRAFFIC ASSOCIATED WITH THE CAR AND DIESEL SHOP REHABILITATION SHALL ACCESS THE SITE VIA THE CONSTRUCTION ENTRANCE UNDER CHURCH ST BRIDGE AT THE END OF FOOD TERMINAL PLAZA ROAD. CONTRACTOR IS RESPONSIBLE TO PROVIDE AND MAINTAIN SECURITY AT THIS ENTRANCE AT ALL TIMES. METRO-NORTH AND AMTRAK WILL NOT BE USING THIS ENTRANCE.
7. RAIL OPERATIONS IN THE NEW HAVEN YARD MAY REQUIRE CONSTRUCTION OUTSIDE NORMAL BUSINESS HOURS INCLUDING WEEKENDS, HOLIDAYS AND NIGHT TIME.
8. APPROXIMATE LIMITS OF CONTRACTOR AREA TO INCLUDE BUT NOT BE LIMITED TO MATERIAL STORAGE, WORK TRAILERS, EMPLOYEE PARKING. ACTUAL AREA TO BE COORDINATED WITH CTDOT.
9. CONTRACTOR SHALL MAINTAIN AND PROTECT TRAFFIC ACCORDING TO THE SECTION 9.71 OF THE STANDARD PROVISIONS, AND THE MEASURES NOTED BELOW. CONTRACTOR SHALL SUBMIT AN MPT PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL A MINIMUM OF TWO WEEKS BEFORE EACH STAGE OF CONSTRUCTION. PREPARATION OF PLANS FOR EACH STAGE WILL NOT BE MEASURED SEPERATELY FOR PAYMENT, BUT BE INCLUDED IN THE LUMP SUM COST FOR MPT.
10. CONTRACTOR SHALL FURNISH TRAFFIC CONES, CONSTRUCTION BARRICADES, AND CONSTRUCTION SIGNS, TO BE PAID UNDER THE RESPECTIVE PAY ITEMS AS NEEDED TO IMPLEMENT THESE MEASURES.
11. CONTRACTOR TO MAINTAIN ACCESS TO THE CAR AND DIESEL SHOPS AT ALL TIMES, EXCEPT AS PROVIDED BY THE CONSTRUCTION SEQUENCE WHEN PORTIONS OF EITHER SHOP ARE CLOSED FOR WORK UNDER THIS PROJECT.
    A. CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE TRAVEL LANE WITH ALTERNATING TRAFFIC ON RAILYARD ROADWAYS WITHIN THE PROJECT VICINITY FOR ROADWAY AND UTILITY WORK DURING NORMAL CONSTRUCTION OPERATIONS.
    B. WHEN TRENCHING OR PAVING OPERATIONS REQUIRE FULL ROADWAY CLOSURE, ONLY THE PORTIONS OF ROAD UNDER ACTIVE CONSTRUCTION MAY BE CLOSED, AND TRAFFIC SHALL BE DETOURED THROUGH ALTERNATIVE ROUTES THROUGH THE RAILYARD TO MAINTAIN ACCESS TO THE RESPECTIVE SHOPS. FULL ROADWAY CLOSURES AND DETOURS SHALL BE APPROVED BY THE ENGINEER IN ADVANCE OF IMPLEMENTATION.
12. TRAFFIC SHALL BE MAINTAINED AROUND ACTIVE CONSTRUCTION USING TRAFFIC CONES SPACED A MAXIMUM 20', WITH CONES ON BOTH SIDES OF THE TRAVEL LANE, AND BETWEEN OPPOSING TRAVEL LANES WHEN APPLICABLE.
13. TRAVEL LANE CLOSURES SHALL BE MARKED WITH A MINIMUM TWO CONSTRUCTION BARRICADES PER LANES ON EACH END OF THE LANE CLOSURE.
14. CONSTRUCTION SIGNS PROVIDING NOTICE OF CONSTRUCTION AHEAD SHALL BE PLACED IN ADVANCE OF THE RAILROAD GRADE CROSSINGS OF TRACK 45 AND TRACK 37, AND ON ALL OTHER RAILYARD ROADWAYS APPROACHING THE CAR AND DIESEL SHOP SITE. CONSTRUCTION SIGNS SHALL BE SUPPLEMENTED AS NEEDED APPROACHING AND NAVIGATING THROUGH WORK SITE DURING EACH STAGE OF CONSTRUCTION.
15. DETOUR SIGNS, PAID UNDER CONSTRUCTION SIGNS, SHALL BE PLACED IN ADVANCE OF INTERSECTIONS WHERE A TURN IS REQUIRED, AT ALL INTERSECTIONS ALONG THE DETOUR, AND AT OTHER INTERVALS AS NEEDED FOR CLAIRITY. DETOUR SIGNS SHALL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION. SIGNAGE INDICATING THE DETOUR IS ACTIVE SHALL BE BAGGED WHEN NOT IN USE.



LEGEND:

- CONTRACTOR AREA
- BUILDING ADDITION/NEW BUILDINGS
- TEMPORARY OFFICE/WELFARE SPACE (PHASE 4)

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CG/KK CHECKED BY: KB

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SIGNATURE/ BLOCK:

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280 TRUMBULL STREET, 14TH FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: CONSTRUCTION PHASING PLAN - OVERVIEW

DRAWING NO. STG-101
SHEET NO. 03.03

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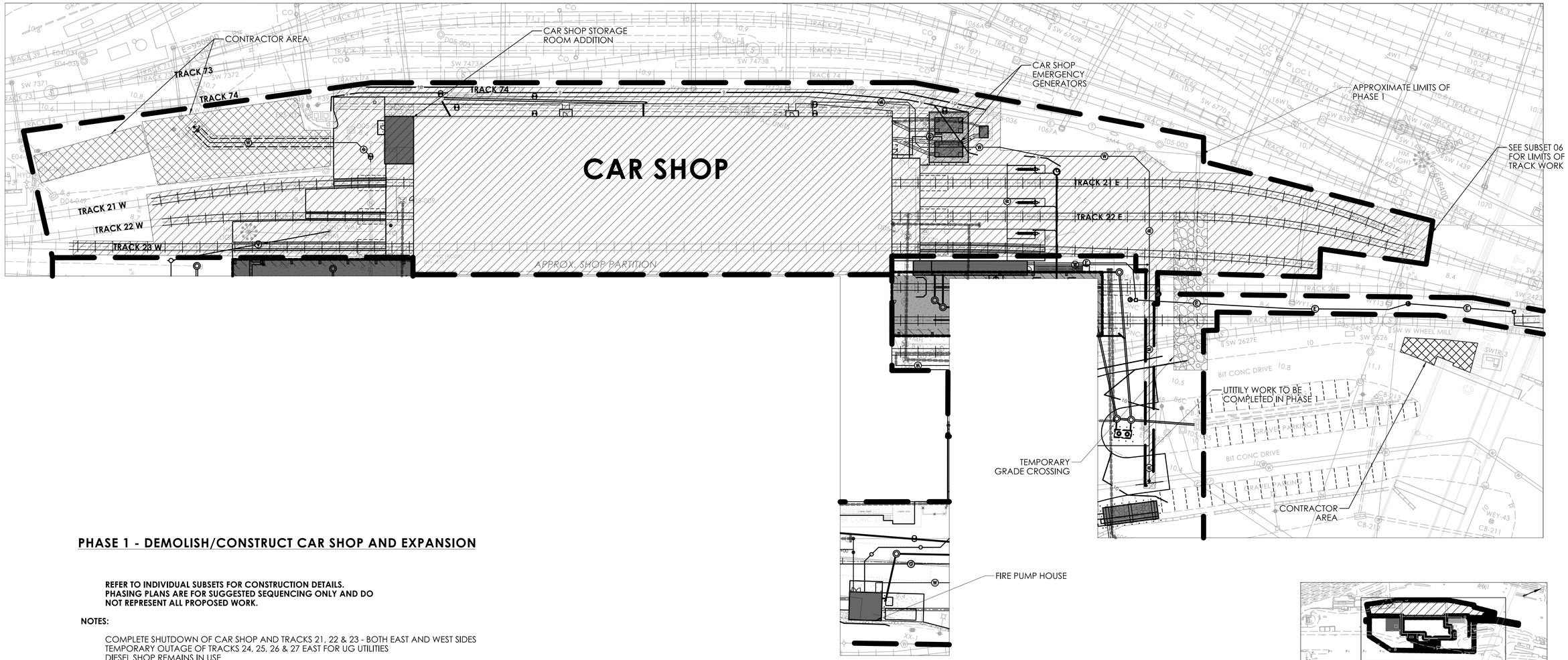


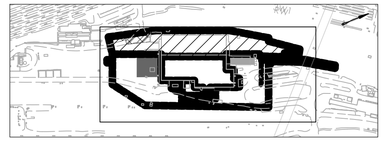
PHASE 1 - DEMOLISH/CONSTRUCT CAR SHOP AND EXPANSION

REFER TO INDIVIDUAL SUBSETS FOR CONSTRUCTION DETAILS.
PHASING PLANS ARE FOR SUGGESTED SEQUENCING ONLY AND DO NOT REPRESENT ALL PROPOSED WORK.

NOTES:

COMPLETE SHUTDOWN OF CAR SHOP AND TRACKS 21, 22 & 23 - BOTH EAST AND WEST SIDES
TEMPORARY OUTAGE OF TRACKS 24, 25, 26 & 27 EAST FOR UG UTILITIES
DIESEL SHOP REMAINS IN USE

1. DEMOLISH LEAD TRACKS 21, 22, & 23 - EAST AND WEST
2. DEMOLISH CAR SHOP (EXCLUDING FOUNDATIONS & STRUCTURE)
3. INSTALL UG UTILITIES (GAS, WATER, STORM, SANITARY, POWER)
4. INSTALL FOUNDATIONS, FLOORS SLAB, MEZZANINE, PLATFORMS
5. INSTALL GENERATORS; REALIGN TRACK 23, RELOCATE POWER (PARTIAL)
6. INSTALL FIRE PUMP HOUSE
7. ENHANCE STRUCTURE
8. INSTALL ROOF & EXTERIOR WALLS
9. EXPAND STOREROOM
10. INSTALL PARTITION WALLS, MEP, FIRE PROTECTION, FIRE ALARM & COMMS/IT
11. INSTALL APRONS, TRACKS 21,22 & 23
12. INSTALL MAINTENANCE EQUIPMENT
13. COMMISSION CAR SHOP



LEGEND:

- PHASE 1 CONSTRUCTION
- CONTRACTOR AREA
- TEMPORARY GRADE CROSSING
- BUILDING ADDITION/NEW BUILDINGS

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CG/KK/JP CHECKED BY: KB

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280 TRUMBULL STREET, 14TH FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: CONSTRUCTION PHASING PLAN - PHASE 1

DRAWING NO. STG-102
SHEET NO. 03.04

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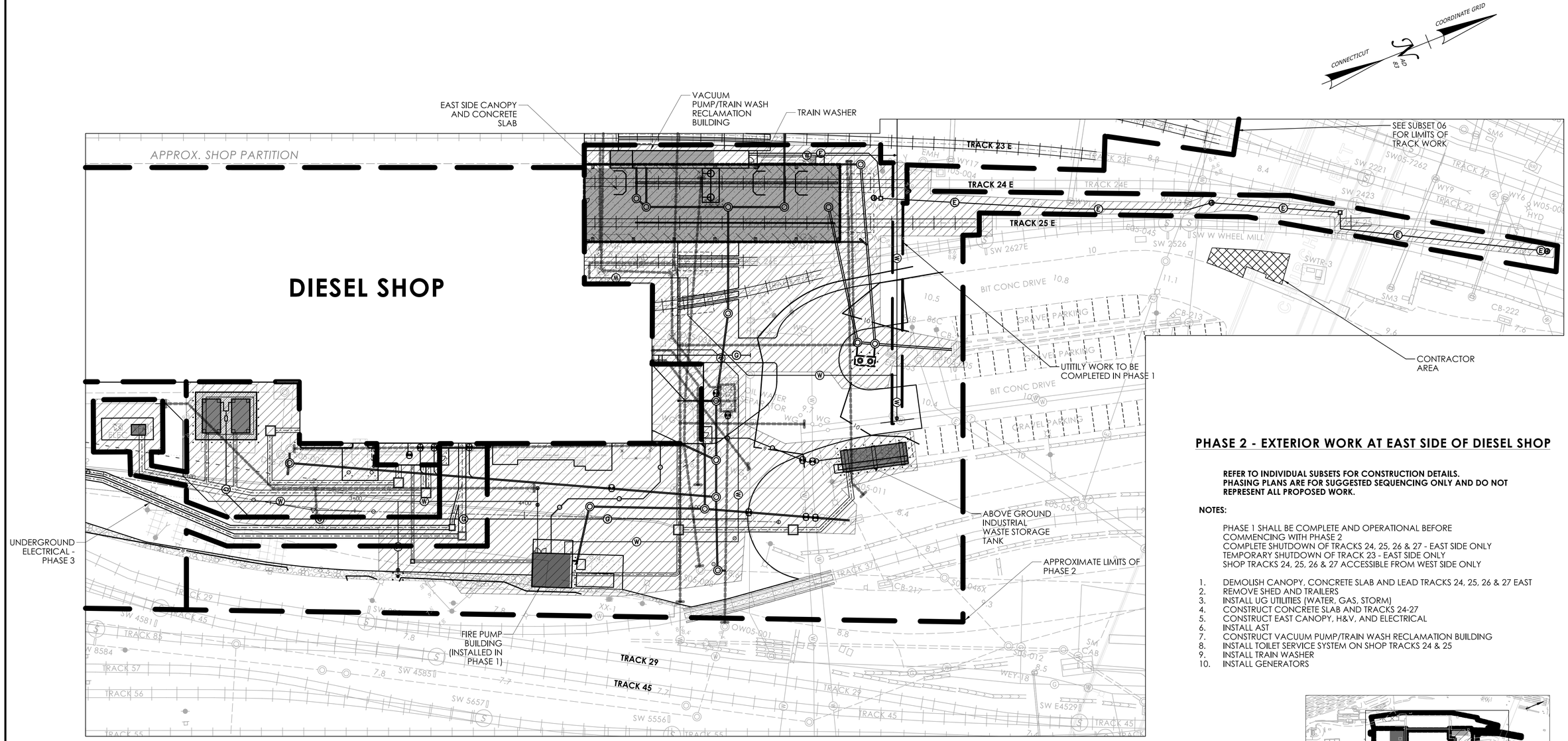


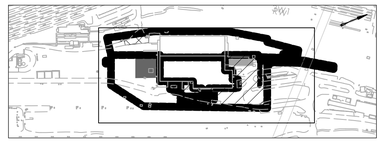
PHASE 2 - EXTERIOR WORK AT EAST SIDE OF DIESEL SHOP

REFER TO INDIVIDUAL SUBSETS FOR CONSTRUCTION DETAILS.
PHASING PLANS ARE FOR SUGGESTED SEQUENCING ONLY AND DO NOT REPRESENT ALL PROPOSED WORK.

NOTES:

PHASE 1 SHALL BE COMPLETE AND OPERATIONAL BEFORE COMMENCING WITH PHASE 2
COMPLETE SHUTDOWN OF TRACKS 24, 25, 26 & 27 - EAST SIDE ONLY
TEMPORARY SHUTDOWN OF TRACK 23 - EAST SIDE ONLY
SHOP TRACKS 24, 25, 26 & 27 ACCESSIBLE FROM WEST SIDE ONLY

1. DEMOLISH CANOPY, CONCRETE SLAB AND LEAD TRACKS 24, 25, 26 & 27 EAST
2. REMOVE SHED AND TRAILERS
3. INSTALL UG UTILITIES (WATER, GAS, STORM)
4. CONSTRUCT CONCRETE SLAB AND TRACKS 24-27
5. CONSTRUCT EAST CANOPY, H&V, AND ELECTRICAL
6. INSTALL AST
7. CONSTRUCT VACUUM PUMP/TRAIN WASH RECLAMATION BUILDING
8. INSTALL TOILET SERVICE SYSTEM ON SHOP TRACKS 24 & 25
9. INSTALL TRAIN WASHER
10. INSTALL GENERATORS



LEGEND:

PHASE 2 CONSTRUCTION

CONTRACTOR AREA

BUILDING ADDITION/NEW BUILDINGS

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CG/KK/JP CHECKED BY: KB

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280 TRUMBULL STREET, 14th FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: CONSTRUCTION PHASING PLAN - PHASE 2

DRAWING NO. STG-103
SHEET NO. 03.05

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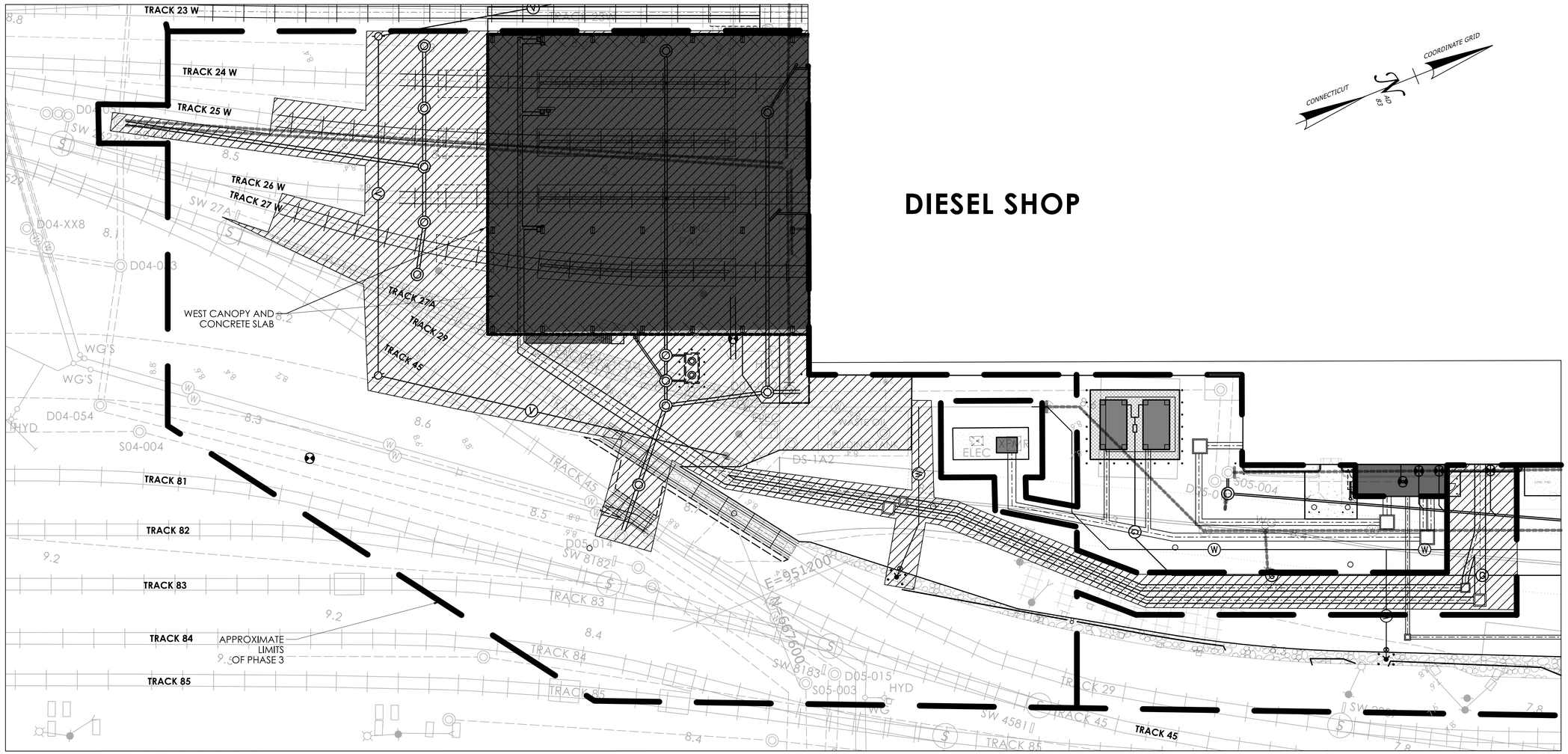


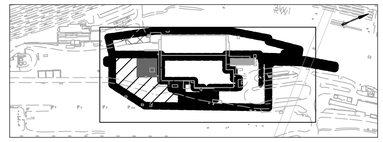
PHASE 3 - EXTERIOR WORK AT WEST SIDE OF DIESEL SHOP

REFER TO INDIVIDUAL SUBSETS FOR CONSTRUCTION DETAILS. PHASING PLANS ARE FOR SUGGESTED SEQUENCING ONLY AND DO NOT REPRESENT ALL PROPOSED WORK.

NOTES:

PHASE 2 SHALL BE COMPLETE AND OPERATIONAL BEFORE COMMENCING WITH PHASE 3
COMPLETE SHUTDOWN OF LEAD TRACKS 24, 25, 26 & 27 - WEST SIDE ONLY
TEMPORARY SHUTDOWN OF TRACKS 23, 29 & 45 - WEST SIDE
DEMOLITION OF LEAD TRACKS 24 - 27A - WEST SIDE ONLY
SHOP TRACKS 24, 25, 26, & 27 ACCESSIBLE FROM EAST SIDE ONLY

1. RELOCATE OH ELECTRIC
2. DEMOLISH LEAD TRACKS 24 - 27A
3. INSTALL PILES AND CAPS
4. INSTALL UG UTILITIES
5. CONSTRUCT FOUNDATIONS, CONCRETE SLAB, AND TRACKS 24 - 27
6. CONSTRUCT WEST CANOPY, HVAC AND ELECTRICAL
7. INSTALL WAYSIDE POWER CABINETS
8. INSTALL LEAD TRACKS 24, 25, 26 & 27



LEGEND:

PHASE 3 CONSTRUCTION

BUILDING ADDITION/NEW BUILDINGS

REV. | DATE | REVISION DESCRIPTION

DESIGNER/DRAFTER: CG/KK/JP CHECKED BY: KB

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280 TRUMBULL STREET, 14' FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: CONSTRUCTION PHASING PLAN - PHASE 3

DRAWING NO. STG-104
SHEET NO. 03.06

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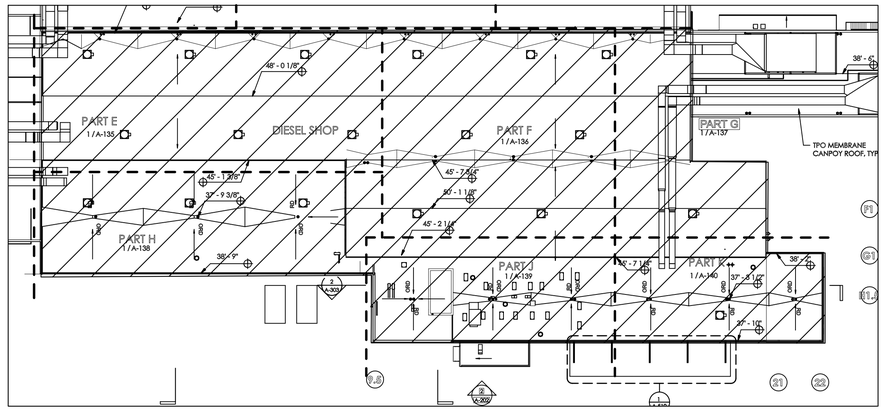
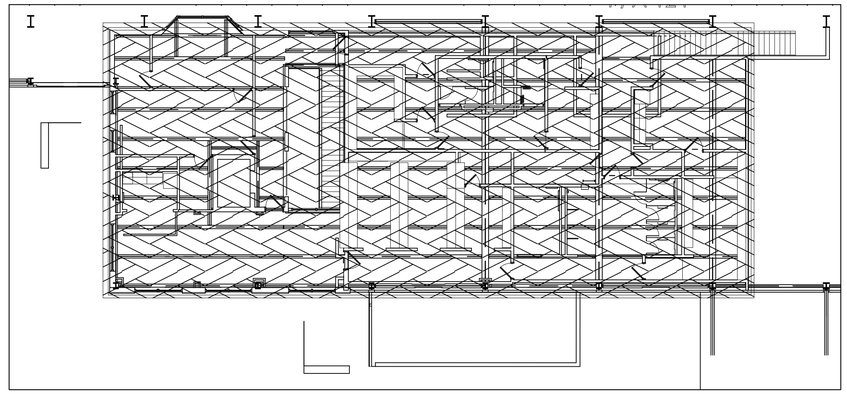
PLOTTED DATE: 1/3/2025



1 STG -105 **DIESEL SHOP ROOF**
N.T.S.



2 STG -105 **DIESEL SHOP - MEZZANINE**
N.T.S.

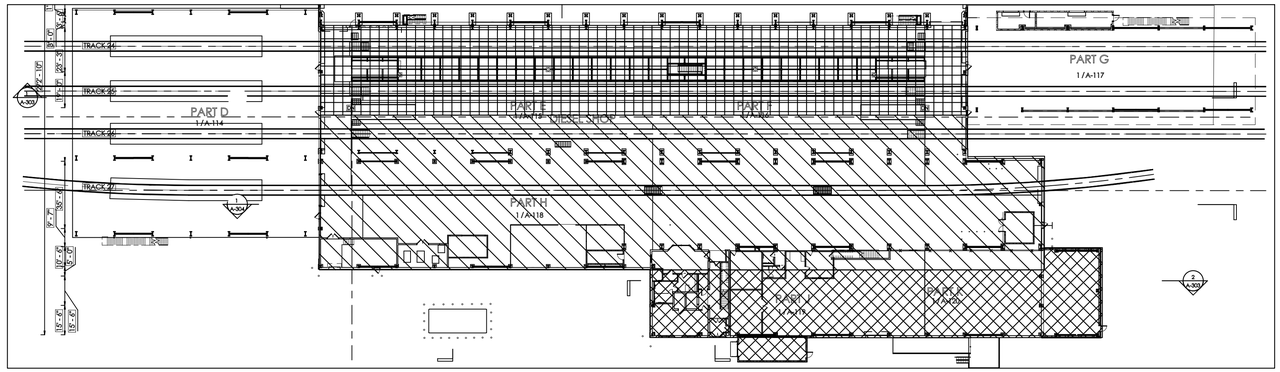
PHASE 4 - REHABILITATE DIESEL SHOP/CONSTRUCT EXPANSIONS

**REFER TO INDIVIDUAL SUBSETS FOR CONSTRUCTION DETAILS.
PHASING PLANS ARE FOR SUGGESTED SEQUENCING ONLY AND DO NOT REPRESENT ALL PROPOSED WORK.**

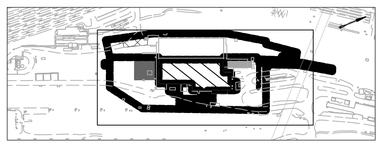
NOTES:

PHASES MAY BE CONSTRUCTED CONCURRENTLY PENDING CTDOT/AMTRAK APPROVAL.
TEMPORARY TRAILERS WILL BE PROVIDED TO ACCOMODATE MALE LOCKER ROOMS AND LUNCH ROOMS BEYOND THE CAPACITY OF THOSE IN THE CAR SHOP DURING WORK ON MEZZANINE LEVEL AND GROUND FLOOR. DIESEL SHOP TO REMAIN OPERATIONAL DURING CONSTRUCTION.

1. PARTIAL ROOF REPLACEMENT, EXTERIOR WALLS, MEP, COMMS/IT
2. REHABILITATE OFFICES/WELFARE
3. EXPAND ELECTRICAL ROOM AND STOREROOM; CONSTRUCT BOILER ROOM
4. RESURFACE PLATFORM AND RAMPS
5. INSTALL FALL ARREST SYSTEM
6. COMMISSION SELECT DIESEL SHOP SYSTEMS



3 STG -105 **DIESEL SHOP - WORKSHOP AND GROUND FLOOR ADMINISTRATIVE**
N.T.S.



LEGEND

- ROOF
- MEZZANINE
- GROUND FLOOR ADMINISTRATIVE
- WORKSHOP - NORTH
- WORKSHOP - SOUTH

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CG/KK/JP CHECKED BY: KB

NOT TO SCALE

SIGNATURE/ BLOCK:

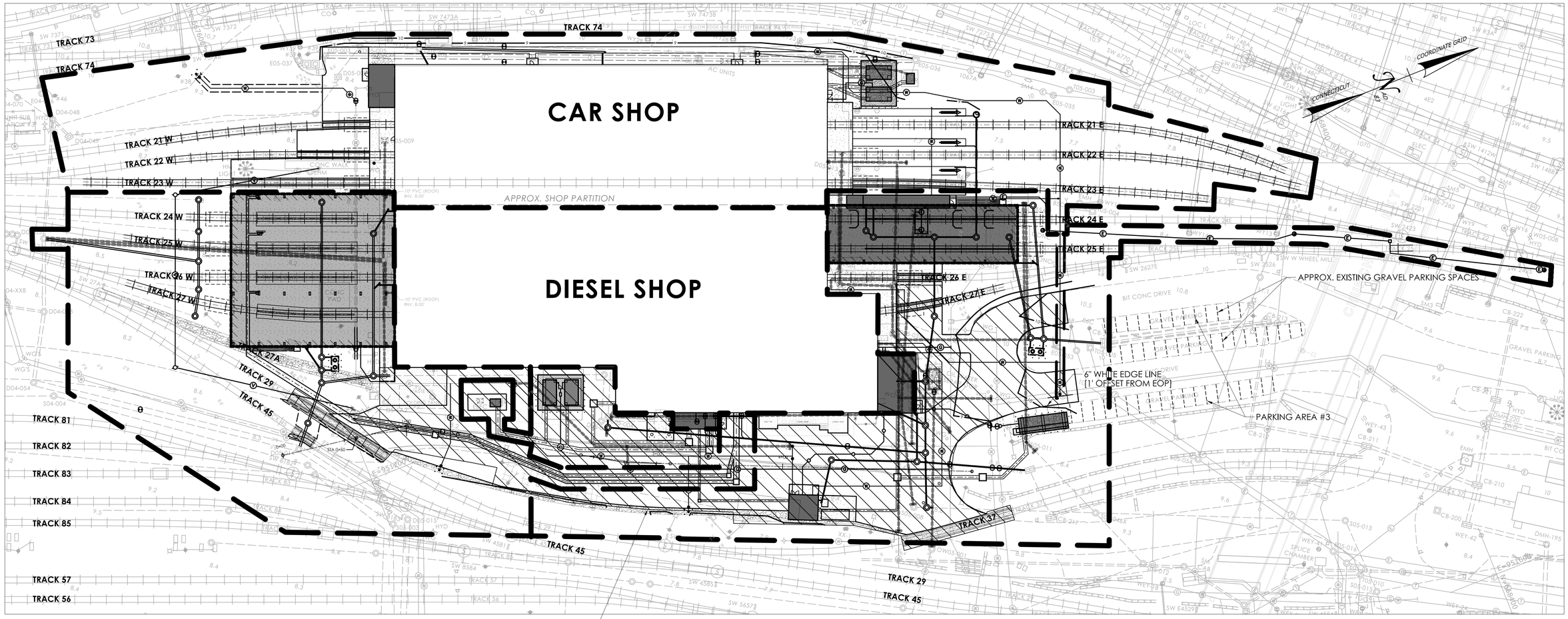
stv
280 TRUMBULL STREET, 14" FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: CONSTRUCTION PHASING PLAN - PHASE 4

DRAWING NO. STG-105
SHEET NO. 03.07

LASTED SAVED BY: PorrieJ **FILE NAME:** C:\Users\PorrieJ\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_STG_C-501_COPY_FOR_JOE.dgn
PLOTTED DATE: 1/3/2025



APPROXIMATE LIMITS OF PHASE 5

PHASE 5 - SITE FINISH

REFER TO INDIVIDUAL SUBSETS FOR CONSTRUCTION DETAILS. PHASING PLANS ARE FOR SUGGESTED SEQUENCING ONLY AND DO NOT REPRESENT ALL PROPOSED WORK.

NOTES:

TEMPORARY OUTAGE OF TRACKS 29 & 37 GRADE CROSSINGS

1. INSTALL TRACK GRADE CROSSINGS, PAVING AND STRIPING
2. INSTALL BOLLARDS

LEGEND:

PHASE 5 CONSTRUCTION

BUILDING ADDITION/NEW BUILDINGS

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CG/KK CHECKED BY: KB

NOT TO SCALE

SIGNATURE/ BLOCK:

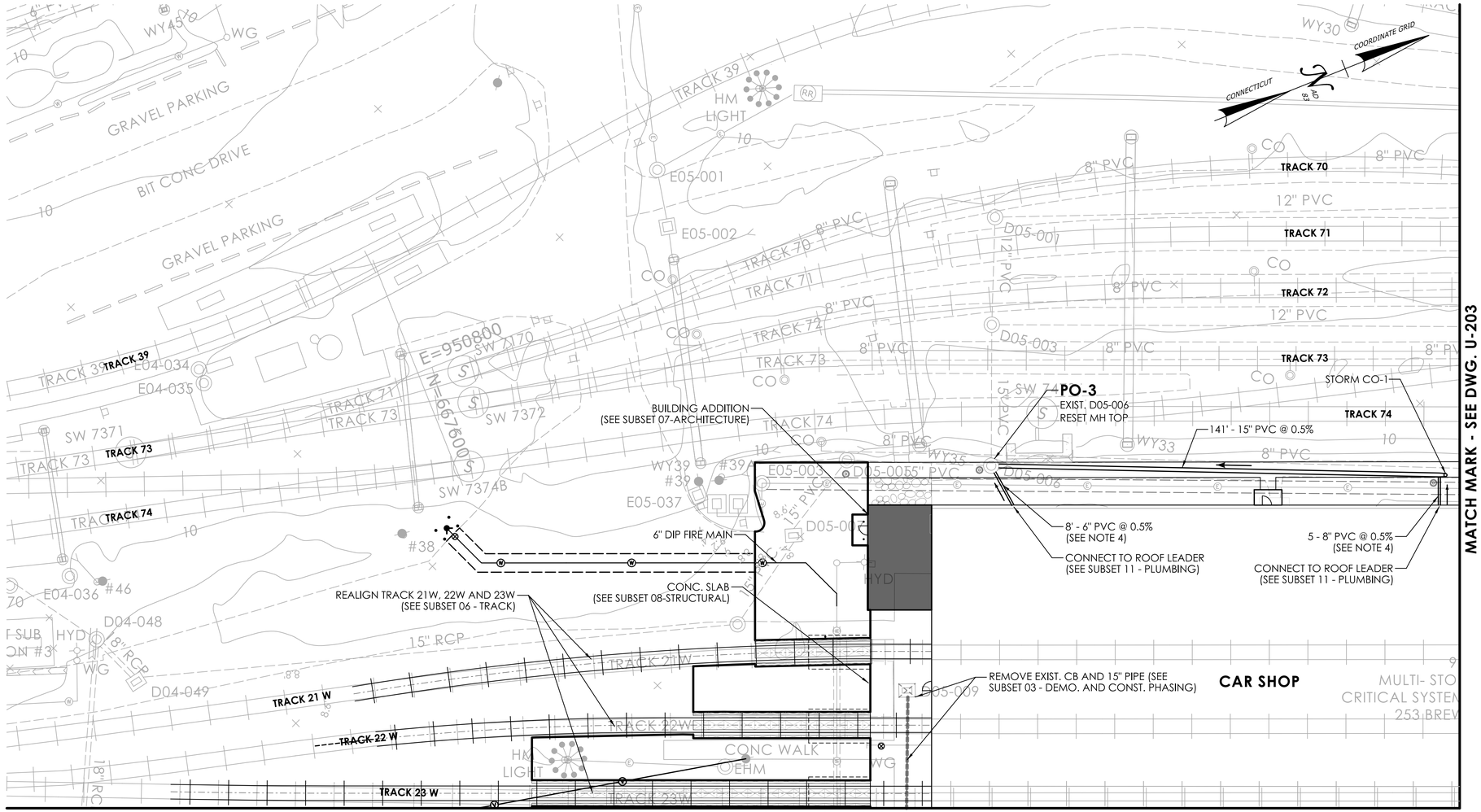
stv
280 TRUMBULL STREET, 14th FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: CONSTRUCTION PHASING PLAN - PHASE 5

DRAWING NO. STG-106
SHEET NO. 03.08

LASTED SAVED BY: PortieJ **FILE NAME:** C:\Users\PortieJ\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_STG_C-501_COPY_FOR_JOE.dgn
PLOTTED DATE: 1/3/2025



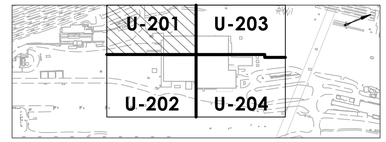
MATCH MARK - SEE DWG. U-202

GENERAL NOTES:

1. SANITARY, WATER, ELECTRIC AND TRACTION POWER ARE PROVIDED FOR INFORMATION ONLY. REFER TO INDIVIDUAL UTILITY PLANS FOR PROPOSED CONSTRUCTION.
2. REFER TO DRAWING U-102 FOR UTILITY GENERAL NOTES.
3. REFER TO SUBSET 03-DEMOLITION FOR REMOVAL OR ABANDONING OF DRAINAGE STRUCTURES AND PIPING.

NOTES:

1. SEE DRAINAGE PROFILE DWGS AND DATA TABLES FOR ADDITIONAL INFORMATION.
2. DRAINAGE MANHOLES, CATCH BASINS AND TRENCH DRAINS SHALL HAVE A WATERTIGHT SEALANT AT ALL JOINTS AND PIPE CONNECTIONS.
3. ALL PIPES UNDER RAILROAD TRACKS SHALL BE PROTECTED BY A CONCRETE CAP. SEE PROTECTION SLAB DETAIL , DWG U-103.
4. PROVIDE A TRANSITION COUPLING LOCATED 5 FT FROM BUILDING TO CONNECT PVC TO DIP BY PLUMBING.



REV. | DATE | REVISION DESCRIPTION

DESIGNER/DRAFTER: AB CHECKED BY: SM

0 20' 40'
HORIZONTAL SCALE
1" = 20'

SIGNATURE/
BLOCK:

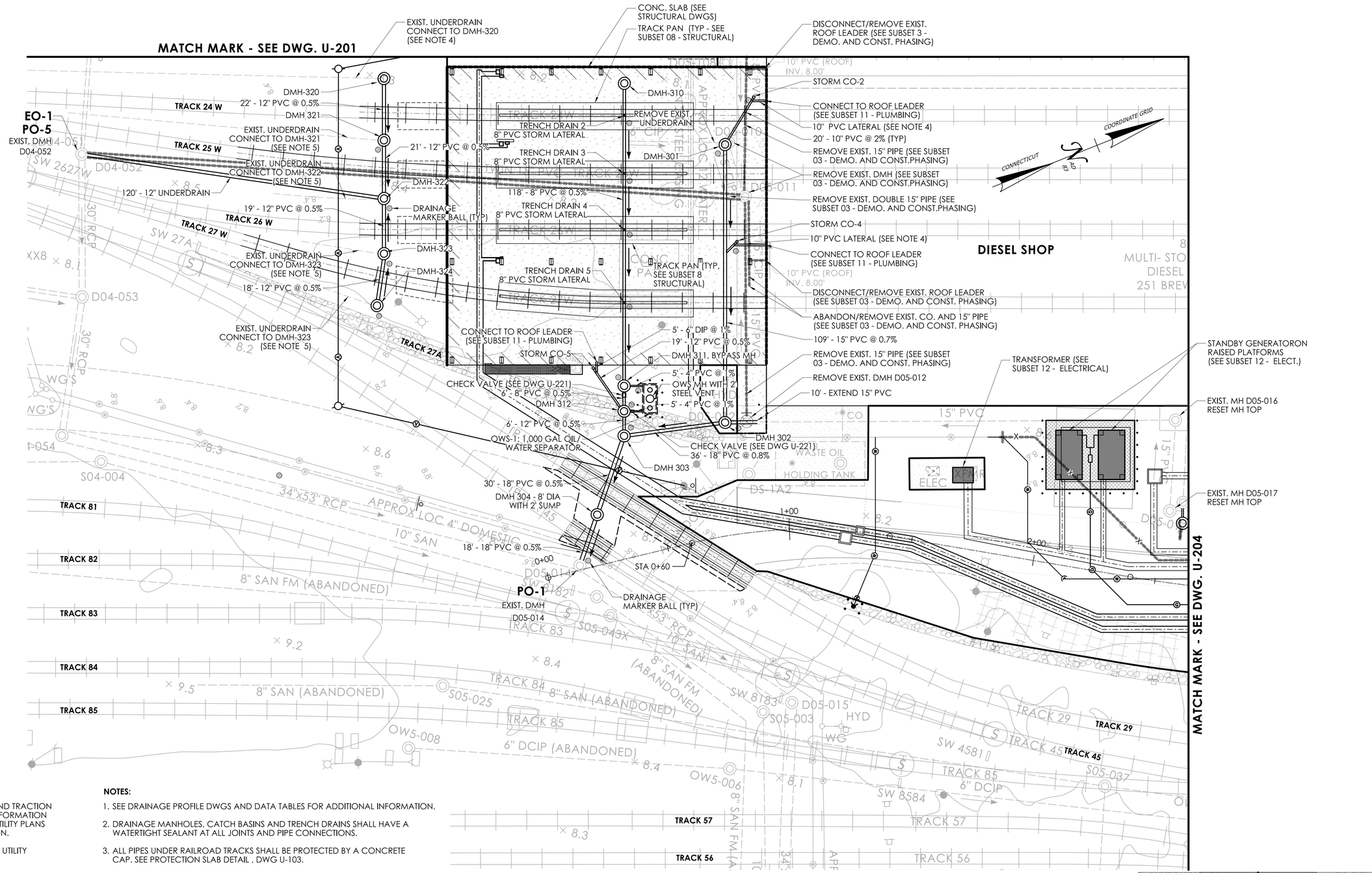
stv
280 TRUMBULL STREET, 14' FLOOR
HARTFORD, CT 06103
(203) 375-5021

STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: UTILITY PLAN - DRAINAGE

DRAWING NO. U-201
SHEET NO.

LAST SAVED BY: SmokoRF **FILE NAME:** C:\Users\smokorf\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\STORMWATER PERMIT SCRATCH\FC_PD_0301-0130_SHT_UTILITY_U-200_Drain_Grading_SWGP.dgn
PLOTTED DATE: 2/18/2025

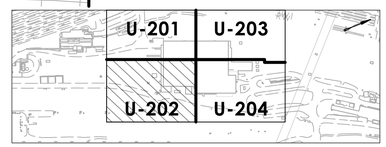


GENERAL NOTES:

1. SANITARY, WATER, ELECTRIC AND TRACTION POWER ARE PROVIDED FOR INFORMATION ONLY. REFER TO INDIVIDUAL UTILITY PLANS FOR PROPOSED CONSTRUCTION.
2. REFER TO DRAWING U-102 FOR UTILITY GENERAL NOTES.
3. REFER TO SUBSET 03-DEMOLITION FOR REMOVAL OR ABANDONING OF DRAINAGE STRUCTURES AND PIPING.

NOTES:

1. SEE DRAINAGE PROFILE DWGS AND DATA TABLES FOR ADDITIONAL INFORMATION.
2. DRAINAGE MANHOLES, CATCH BASINS AND TRENCH DRAINS SHALL HAVE A WATERTIGHT SEALANT AT ALL JOINTS AND PIPE CONNECTIONS.
3. ALL PIPES UNDER RAILROAD TRACKS SHALL BE PROTECTED BY A CONCRETE CAP. SEE PROTECTION SLAB DETAIL , DWG U-103.
4. PROVIDE A TRANSITION COUPLING LOCATED 5 FT FROM BUILDING TO CONNECT PVC TO DIP BY PLUMBING.
5. PROVIDE TEST PIT TO LOCATE EXISTING UNDERDRAIN.
6. ELECTRONIC MARKER SYSTEM (EMS) BALL MARKERS ARE TO BE PLACED ALONG ALL NEW AND RELOCATED UNDERGROUND UTILITIES AT A MINIMUM SPACING OF 6 FT AND MAXIMUM SPACING OF 400 FT PLUS 1-MARKER PER FOOT OF HORIZONTAL OR VERTICAL DEFLECTION.



REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: AB CHECKED BY: SM

0 20' 40'
HORIZONTAL SCALE 1" = 20'

SIGNATURE/ BLOCK:

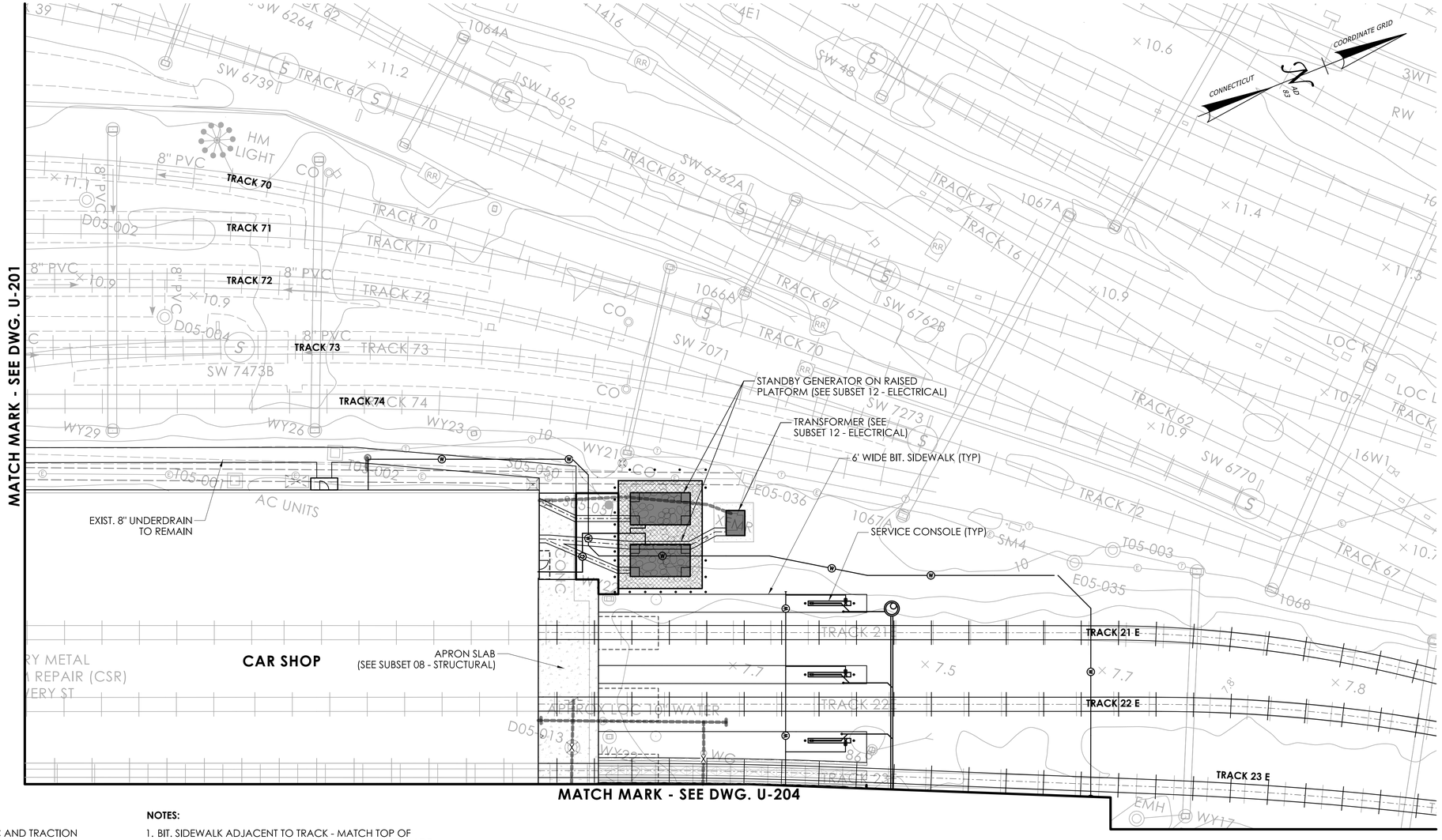
stv
280 TRUMBULL STREET, 14' FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: UTILITY PLAN - DRAINAGE

DRAWING NO. U-202
SHEET NO.

LAST SAVED BY: SmokoRF **FILE NAME:** C:\Users\smokorf\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\STORMWATER PERMIT SCRATCH\FC_PD_0301-0130_SHT_UTILITY_U-200_Drain_Grading_SWGP.dgn
PLOTTED DATE: 2/14/2025

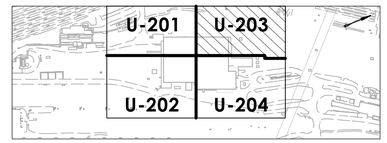


GENERAL NOTES:

1. SANITARY, WATER, ELECTRIC AND TRACTION POWER ARE PROVIDED FOR INFORMATION ONLY. REFER TO INDIVIDUAL UTILITY PLANS FOR PROPOSED CONSTRUCTION.
2. REFER TO DRAWING U-102 FOR UTILITY GENERAL NOTES.
3. REFER TO SUBSET 03-DEMOLITION FOR REMOVAL OR ABANDONING OF DRAINAGE STRUCTURES AND PIPING.

NOTES:

1. BIT. SIDEWALK ADJACENT TO TRACK - MATCH TOP OF SIDEWALK ELEVATION TO TOP OF ADJACENT TIE: PROVIDE 2% CROSS SLOPE AS DIRECTED BY THE ENGINEER.
2. SEE DRAINAGE PROFILE DWGS AND DATA TABLES FOR ADDITIONAL INFORMATION.
3. DRAINAGE MANHOLES, CATCH BASINS AND TRENCH DRAINS SHALL HAVE A WATERTIGHT SEALANT AT ALL JOINTS AND PIPE CONNECTIONS.
4. ALL PIPES UNDER RAILROAD TRACKS SHALL BE PROTECTED BY A CONCRETE CAP. SEE PROTECTION SLAB DETAIL , DWG U-103.



REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: AB CHECKED BY: SM

HORIZONTAL SCALE 1" = 20' (0, 20', 40')

SIGNATURE/ BLOCK:

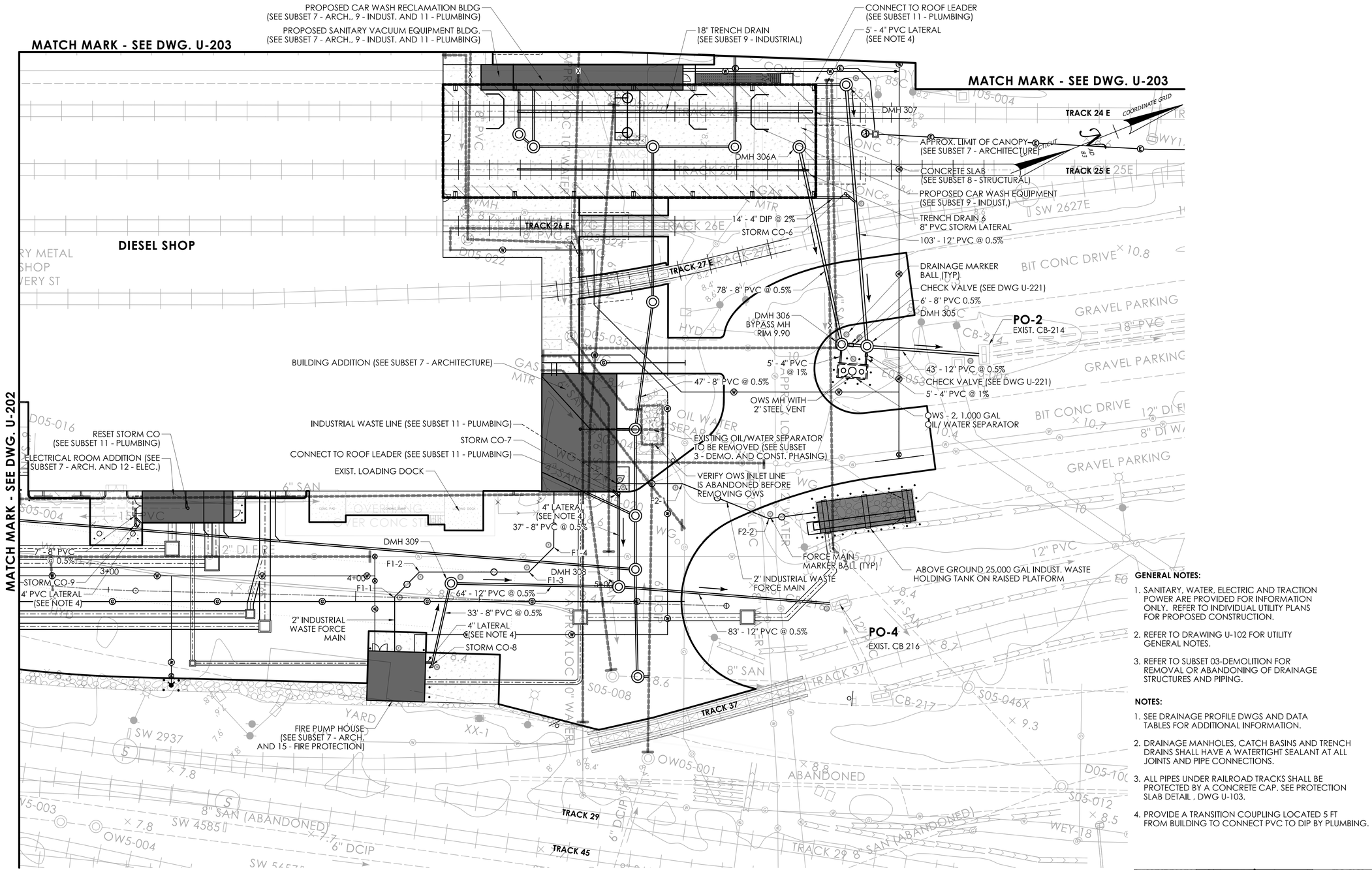
stv
280 TRUMBULL STREET, 14TH FLOOR
HARTFORD, CT 06103
(203) 375-0021

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: UTILITY PLAN - DRAINAGE

DRAWING NO. U-203
SHEET NO.

LAST SAVED BY: SmokoRF **FILE NAME:** C:\Users\smokorf\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\STORMWATER PERMIT SCRATCH\FC_PD_0301-0130_SHT_UTILITY_U-200_Drain_Grading_SWGP.dgn
PLOTTED DATE: 2/18/2025



REV. | DATE | REVISION DESCRIPTION

DESIGNER/DRAFTER: AB CHECKED BY: SM

HORIZONTAL SCALE 1" = 20'

SIGNATURE/ BLOCK:

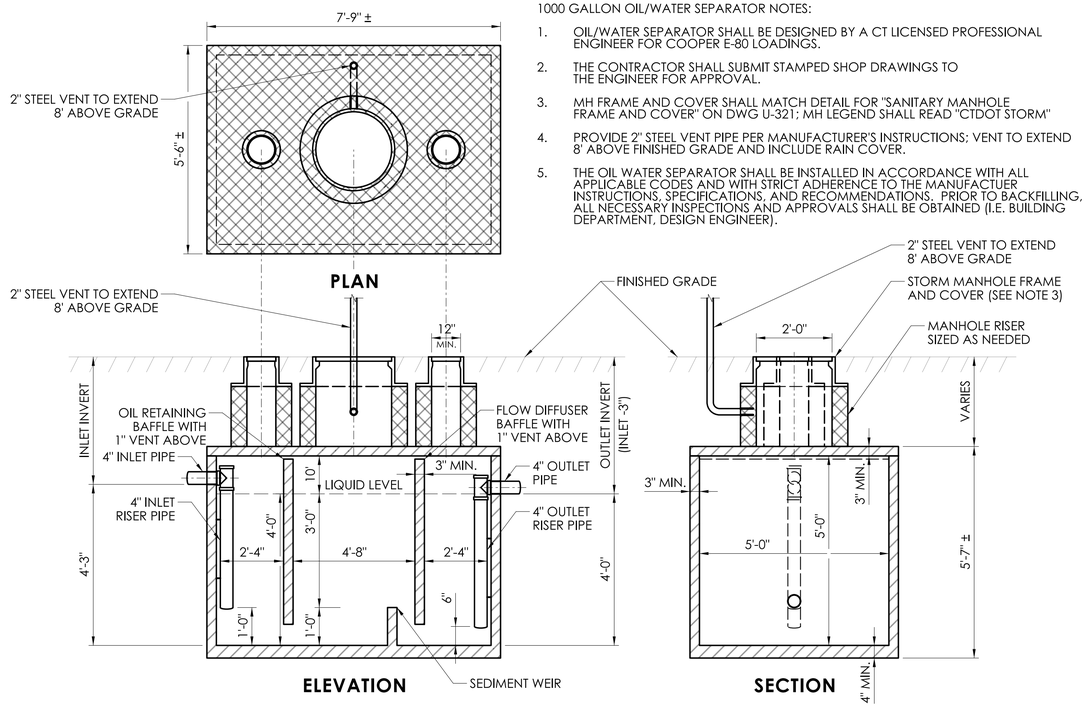
stv
280 TRUMBULL STREET, 14' FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: UTILITY PLAN - DRAINAGE

DRAWING NO. U-204
SHEET NO.

LAST SAVED BY: SmokoRF **FILE NAME:** C:\Users\smokorf\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\STORMWATER PERMIT SCRATCH\FC_PD_0301-0130_SHT_UTILITY_U-200_Drain_Grading_SWGP.dgn
PLOTTED DATE: 2/14/2025

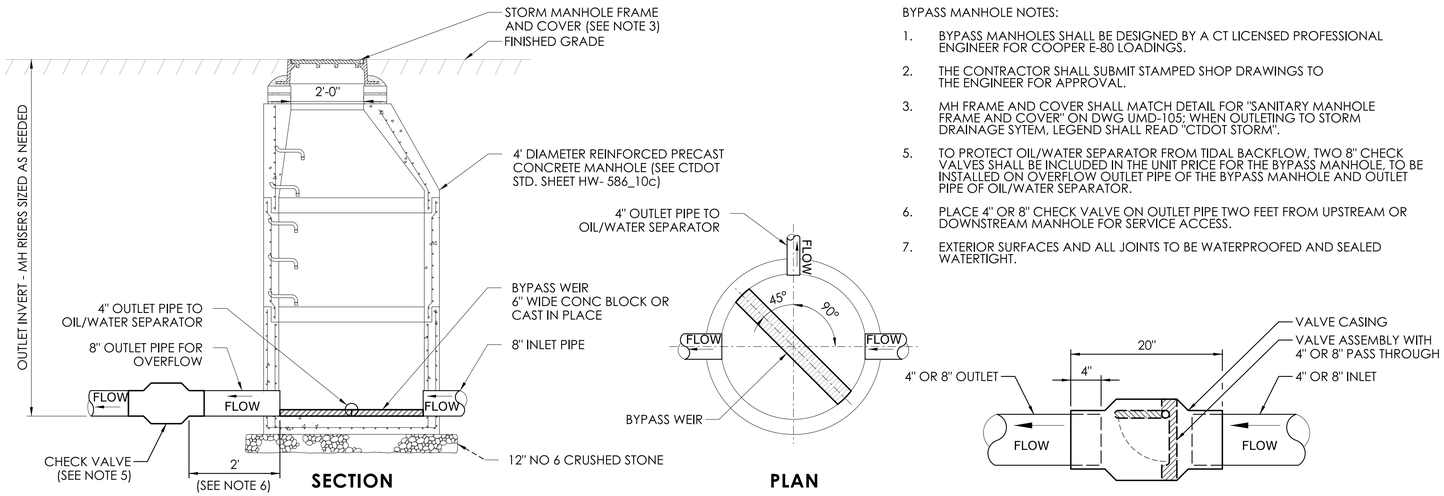


1000 GALLON OIL/WATER SEPARATOR

NTS.

1000 GALLON OIL/WATER SEPARATOR NOTES:

1. OIL/WATER SEPARATOR SHALL BE DESIGNED BY A CT LICENSED PROFESSIONAL ENGINEER FOR COOPER E-80 LOADINGS.
2. THE CONTRACTOR SHALL SUBMIT STAMPED SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.
3. MH FRAME AND COVER SHALL MATCH DETAIL FOR "SANITARY MANHOLE FRAME AND COVER" ON DWG U-321; MH LEGEND SHALL READ "CTDOT STORM"
4. PROVIDE 2" STEEL VENT PIPE PER MANUFACTURER'S INSTRUCTIONS; VENT TO EXTEND 8' ABOVE FINISHED GRADE AND INCLUDE RAIN COVER.
5. THE OIL WATER SEPARATOR SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND WITH STRICT ADHERENCE TO THE MANUFACTUER INSTRUCTIONS, SPECIFICATIONS, AND RECOMMENDATIONS. PRIOR TO BACKFILLING, ALL NECESSARY INSPECTIONS AND APPROVALS SHALL BE OBTAINED (I.E. BUILDING DEPARTMENT, DESIGN ENGINEER).



BYPASS MANHOLE

NTS.

BYPASS MANHOLE NOTES:

1. BYPASS MANHOLES SHALL BE DESIGNED BY A CT LICENSED PROFESSIONAL ENGINEER FOR COOPER E-80 LOADINGS.
2. THE CONTRACTOR SHALL SUBMIT STAMPED SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.
3. MH FRAME AND COVER SHALL MATCH DETAIL FOR "SANITARY MANHOLE FRAME AND COVER" ON DWG UMD-105; WHEN OUTLETING TO STORM DRAINAGE SYTEM, LEGEND SHALL READ "CTDOT STORM".
5. TO PROTECT OIL/WATER SEPARATOR FROM TIDAL BACKFLOW, TWO 8" CHECK VALVES SHALL BE INCLUDED IN THE UNIT PRICE FOR THE BYPASS MANHOLE, TO BE INSTALLED ON OVERFLOW OUTLET PIPE OF THE BYPASS MANHOLE AND OUTLET PIPE OF OIL/WATER SEPARATOR.
6. PLACE 4" OR 8" CHECK VALVE ON OUTLET PIPE TWO FEET FROM UPSTREAM OR DOWNSTREAM MANHOLE FOR SERVICE ACCESS.
7. EXTERIOR SURFACES AND ALL JOINTS TO BE WATERPROOFED AND SEALED WATERTIGHT.

CHECK VALVE

NTS.

REV. | DATE | REVISION DESCRIPTION

DESIGNER/DRAFTER: MK CHECKED BY: SM

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14" FLOOR
HARTFORD, CT 06103
(203) 375-0021

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

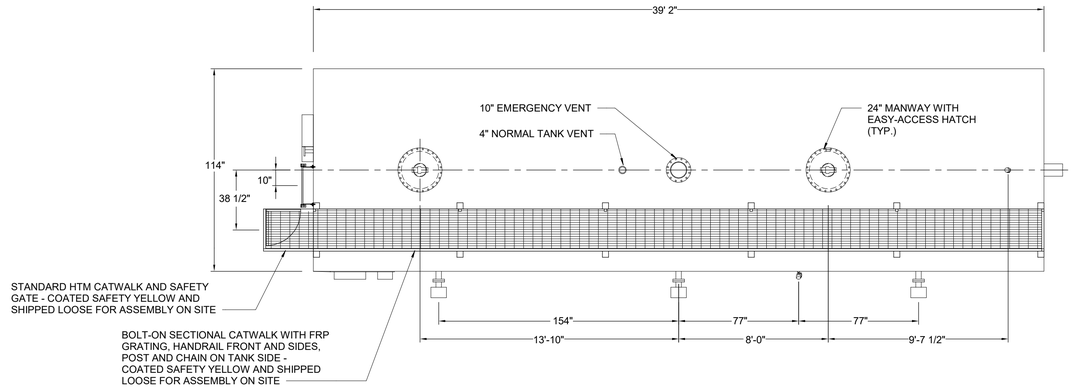
PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: UTILITY MISCELLANEOUS DETAILS - DRAINAGE

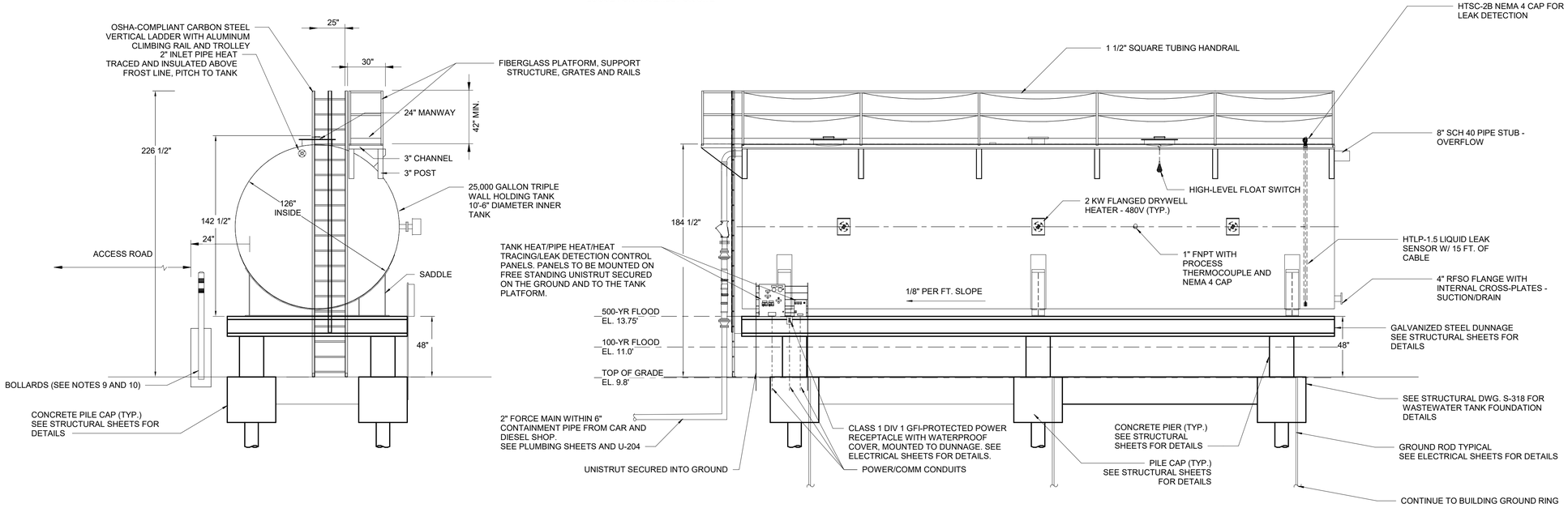
DRAWING NO. U-221
SHEET NO. 05.15

LAST SAVED BY: BonaguAL **FILE NAME:** C:\Users\bonagual\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_UTILITY_U-220-320-420_MD5.dgn
PLOTTED DATE: 1/6/2025

NOTES:

1. SADDLE ANCHOR BOLT SIZE AND LOCATIONS IN PILE CAPS TO BE COORDINATED WITH THE TANK SADDLE MANUFACTURER.
2. ELECTRICAL CONDUIT ON TANK NOT SHOWN FOR CLARITY.
3. SEE ELECTRICAL GROUNDING PLANS FOR SIMILAR DETAILS.
4. SEE DRAWING U-224 FOR ADDITIONAL TANK DETAILS.
5. STAIRS, STAIR SUPPORTS, PLATFORM, GRATING AND RAILING DETAILS TO BE COORDINATED BETWEEN THE STAIR AND TANK MANUFACTURERS.
6. CENTERLINE OF PILE CAPS LOCATED AT CENTERLINE OF SADDLES.
7. CONCRETE SLAB LOCATIONS TO BE DETERMINED BY STAIR MANUFACTURER.
8. SEE STRUCTURAL SHEETS FOR CONCRETE SLAB DETAILS.
9. SEE CIVIL SHEETS FOR BOLLARD DETAILS.
10. SEE CIVIL SHEETS FOR BOLLARD LOCATIONS.
11. PROVIDE TANK WITH ANTI-FLOTATION DEVICE PER MANUFACTURER RECOMMENDATION.
12. THE ENTIRE INLET PIPE ABOVE FROSTLINE SHALL BE HEAT TRACED AND PROVIDED WITH 2" OF CELLULAR GLASS INSULATION (BASIS OF DESIGN IS OWENS-CORNING FOAM-GLAS). SEE ELECTRICAL DRAWINGS FOR HEAT TRACE CABLING INFORMATION. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE HEAT TRACING SYSTEM WITH ALL REQUIRED COMPONENTS.





1 **INDUSTRIAL WASTEWATER HOLDING TANK DETAIL**
12" = 1'-0"

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER JM/BR CHECKED BY: JO

SIGNATURE/ BLOCK:

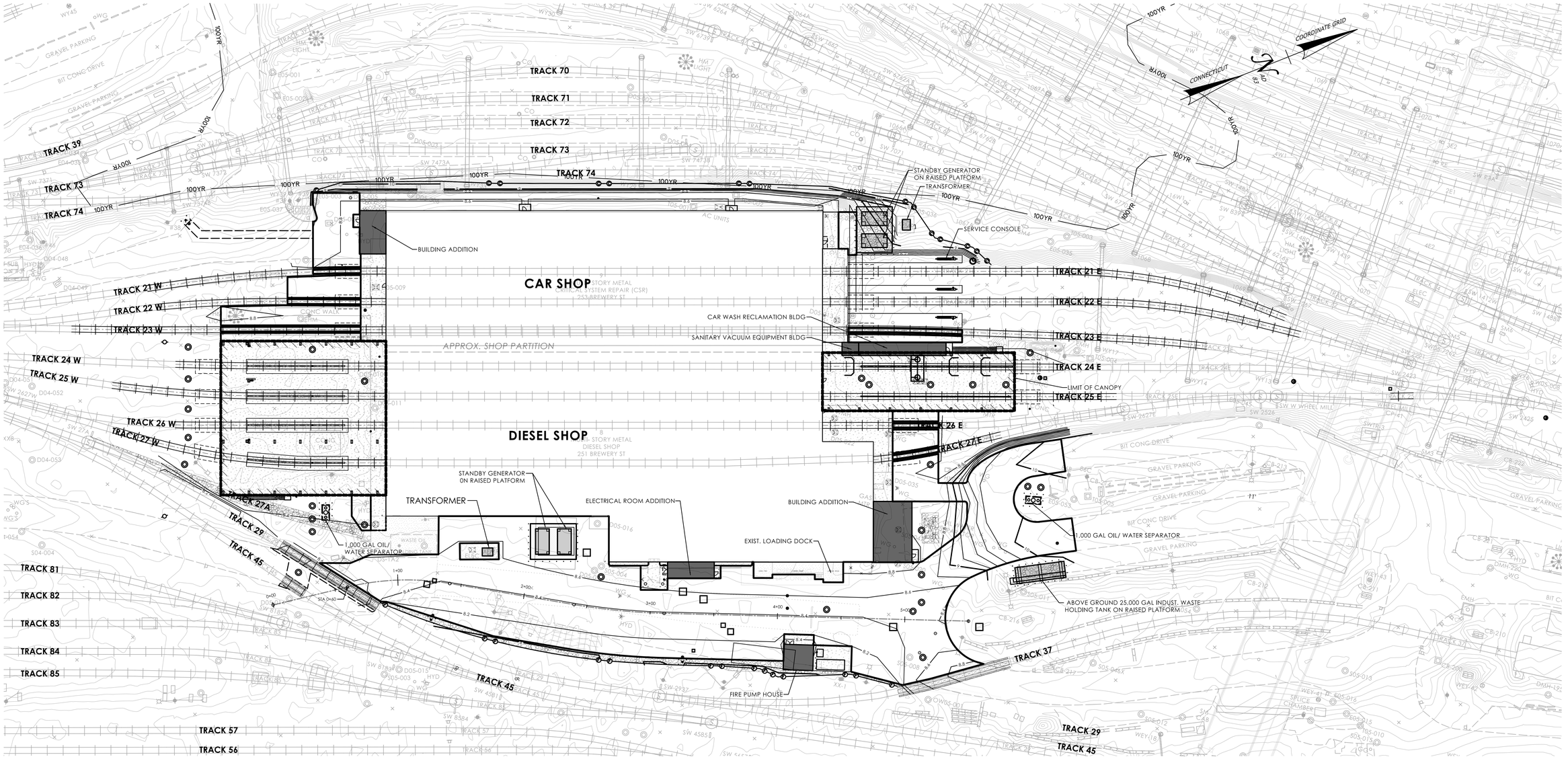
stv
280 TRUMBULL STREET, 14TH FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: UTILITY MISCELLANEOUS DETAILS - HOLDING TANK

DRAWING NO. **U-223**
SHEET NO. **05.17**

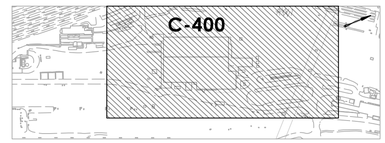
PLOTTED DATE: 12/30/2024 11:19:26 AM



FLOOD PLAIN NOTES:

1. 100 YEAR FEMA FLOOD LINE AND ZONE DESIGNATION – THE 100 YEAR FEMA FLOOD LINE AND ZONE DESIGNATION SHOWN ON THE SURVEY BASE INFORMTION, REPRESENTS THE FLOOD INSURANCE RATE MAP (FIRM) TITLED "NEW HAVEN COUNTY, CONNECTICUT (ALL JURISDICTIONS)" PANEL 441 OF 635, COMMUNITY – NEW HAVEN, CITY OF, NUMBER – 090084, PANEL – 0441, SUFFIX J.

2. 500 YEAR FEMA FLOODPLAIN ELEVATION – THE 500 YEAR FEMA FLOODPLAIN ELEVATION IS CALCULATED AS ELEVATION 13.75 AND IS BASED ON MULTIPLYING THE 100 YEAR FLOOD ELEVATION, SHOWN AS ELEVATION 11, BY 1.25 PER THE CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION (CT DEEP) MEMORANDUM TITLED "HOW TO CALCULATE THE 500 YEAR FLOOD ELEVATION IN A FEMA DESIGNATED COSTAL FLOOD HAZARD AREA FOR THE PURPOSES OF OBTAINING A FLOOD MANAGEMENT CERTIFICATE FROM DEEP, DATED 11/21/2013.



REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: AB CHECKED BY: SM

0 40' 80'
HORIZONTAL SCALE
1" = 40'

SIGNATURE/ BLOCK:

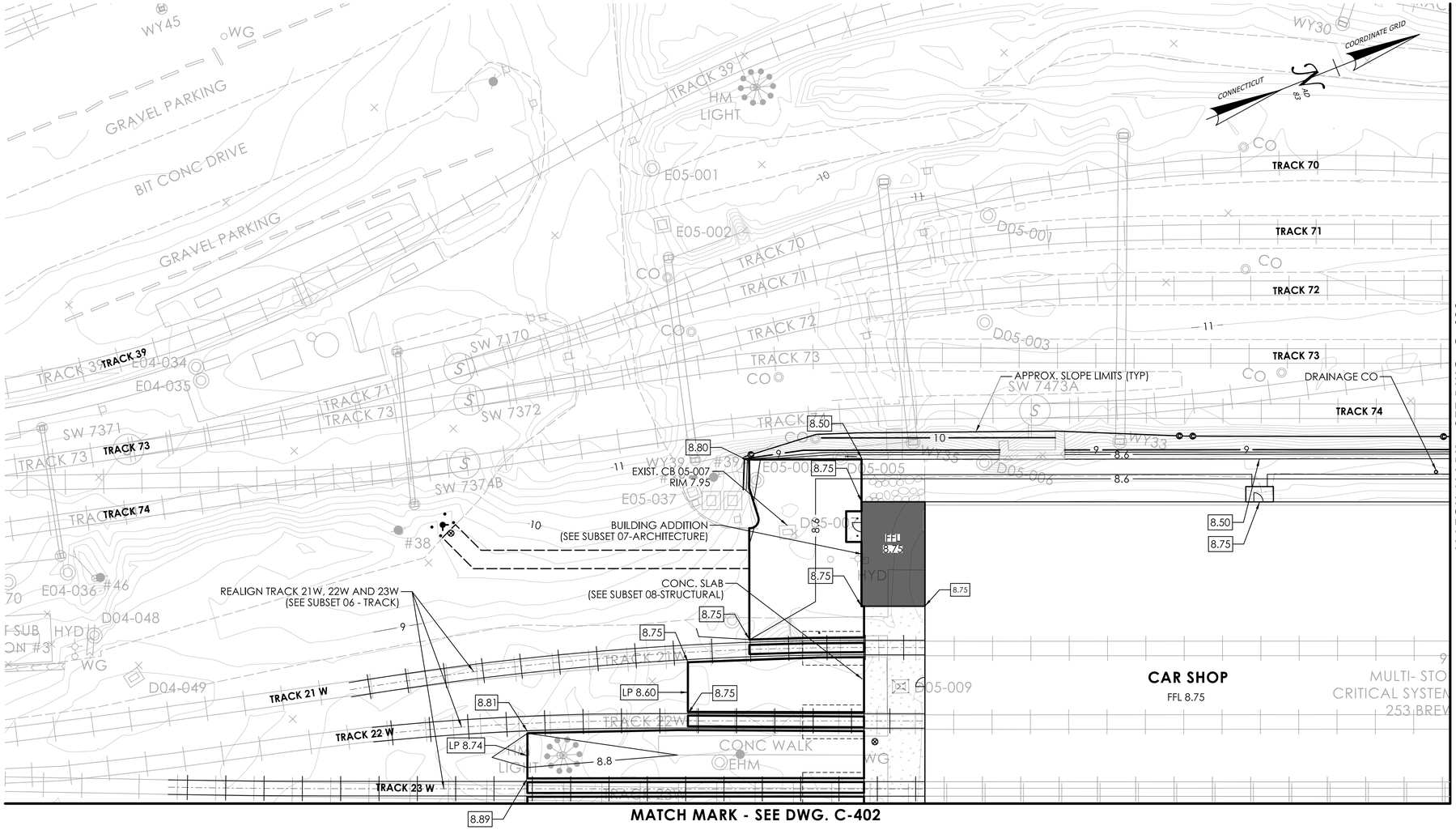
stv
280 TRUMBULL STREET, 14' FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: GRADING PLAN - OVERALL

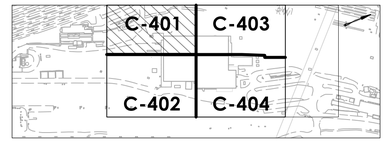
DRAWING NO. C-400
SHEET NO. 04.13

LASTED SAVED BY: BonaguAL **FILE NAME:** C:\Users\bonagual\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-400_GRADING_PLAN.dgn
PLOTTED DATE: 1/6/2025



NOTES:

1. BIT. SIDEWALK ADJACENT TO TRACK - MATCH TOP OF SIDEWALK ELEVATION TO TOP OF ADJACENT TIE: PROVIDE 2% CROSS SLOPE AS DIRECTED BY THE ENGINEER.
2. SEE DRAINAGE PROFILE DWGS AND DATA TABLES FOR ADDITIONAL INFORMATION.
3. REFER TO SUBSET 08 - STRUCTURAL FOR GRADING OF CONCRETE SLABS, PADS AND APRONS.
4. REFER TO SUBSET 06 - TRACK FOR TRACK PROFILE AND GRADING.



REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: AB CHECKED BY: SM

HORIZONTAL SCALE 1" = 20'

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14' FLOOR
HARTFORD, CT 06103
(203) 375-5021

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: GRADING PLAN

DRAWING NO. C-401
SHEET NO. 04.14

LAST SAVED BY: BonaguAL **FILE NAME:** C:\Users\bonagual\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-400_GRADING_PLAN.dgn
PLOTTED DATE: 1/6/2025

MATCH MARK - SEE DWG. C-401

CONC. SLAB (SEE STRUCTURAL DWGS)

8.67

8.40

DMH-320

EXIST. DMH D04-052

TRACK 24 W

DMH 321

8.65

TRACK 25 W

TRACK 26 W

TRACK 27 W

DMH-322

8.65

DMH-323

8.65

DMH-324

8.65

TRACK 27A

8.67

8.20

TRACK 81

TRACK 82

TRACK 83

TRACK 84

TRACK 85

TRACK 57

TRACK 56

DMH 310

STORM CO-2

TRENCH DRAIN 2

DMH 301

TRENCH DRAIN 3

TRENCH DRAIN 4

STORM CO-4

TRENCH DRAIN 5

DIESEL SHOP

STORM CO-5

DMH 311 BYPASS MH

8.67

OWS MH

DMH 312

8.6

OWS-1; 1,000 GAL OIL/ WATER SEPARATOR

DMH 303

DMH 304

MATCH PAVMT. EL

0+00

STA 0+60

EXIST. DMH D05-014

MATCH PAVMT EL

TRANSFORMER (SEE SUBSET 12 - ELECTRICAL)

STANDBY GENERATOR ON RAISED PLATFORMS (SEE SUBSET 12 - ELECT.)

8.70

MATCH PAVMT EL

MATCH PAVMT. EL

DMH 302

MATCH PAVMT. EL

1+00

2+00

8.4

8.2

8.6

SMH 309

APPROX. SLOPE LIMITS (TYP)

TRACK 29

TRACK 45

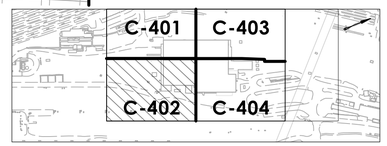
MATCH MARK - SEE DWG. C-404

CONNECTICUT

COORDINATE GRID

NOTES:

1. BIT. SIDEWALK ADJACENT TO TRACK - MATCH TOP OF SIDEWALK ELEVATION TO TOP OF ADJACENT TIE: PROVIDE 2% CROSS SLOPE AS DIRECTED BY THE ENGINEER.
2. SEE DRAINAGE PROFILE DWGS AND DATA TABLES FOR ADDITIONAL INFORMATION.
3. REFER TO SUBSET 08 - STRUCTURAL FOR GRADING OF CONCRETE SLABS, PADS AND APRONS.
4. REFER TO SUBSET 06 - TRACK FOR TRACK PROFILE AND GRADING.



REV. | DATE | REVISION DESCRIPTION

DESIGNER/DRAFTER: AB CHECKED BY: SM

0 20' 40'
HORIZONTAL SCALE 1" = 20'

SIGNATURE/ BLOCK:

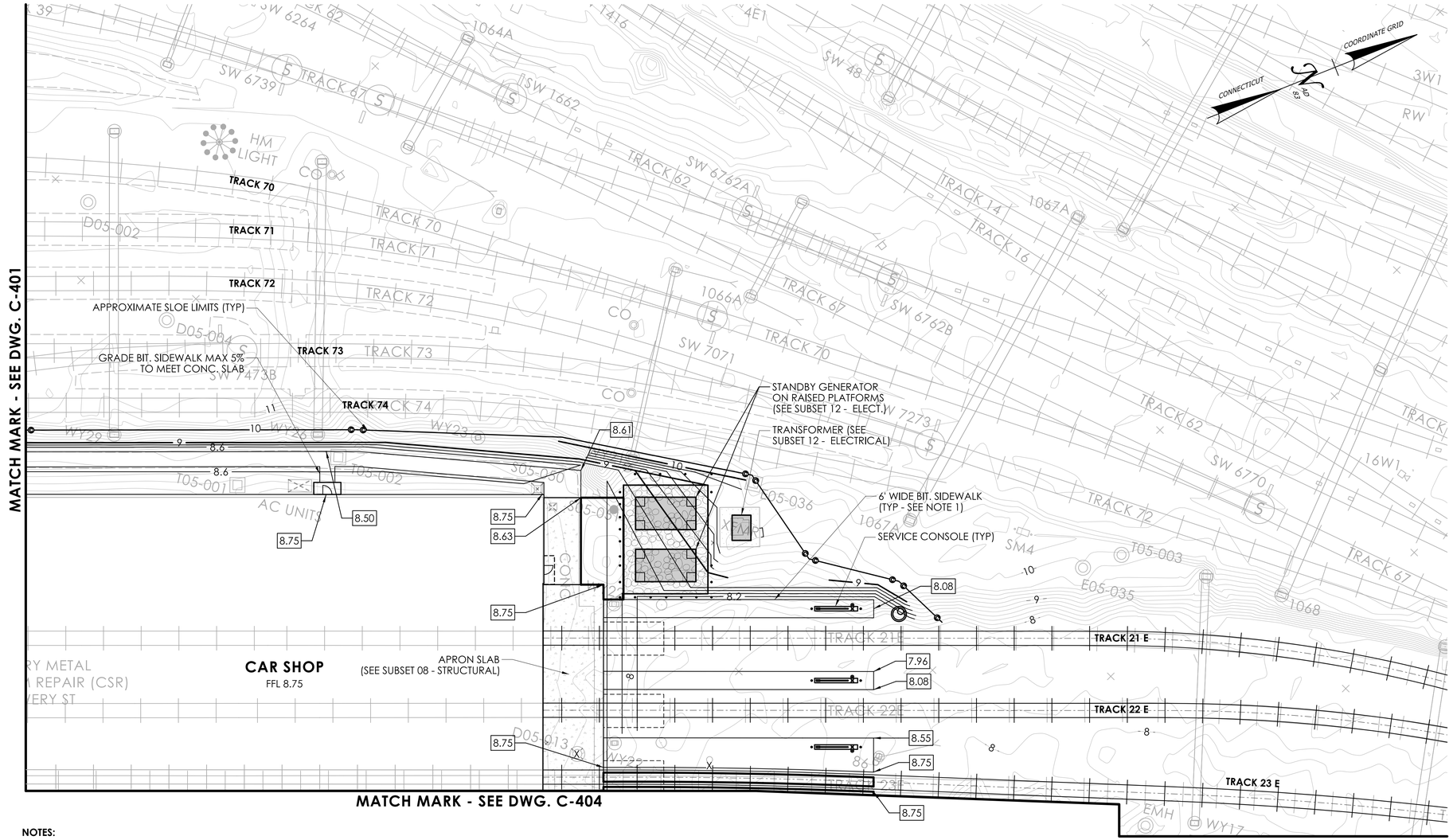
stv
280 TRUMBULL STREET, 14TH FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: GRADING PLAN

DRAWING NO. C-402
SHEET NO. 04.15

LAST SAVED BY: BonaguaL **FILE NAME:** C:\Users\bonagual\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-400_GRADING_PLAN.dgn
PLOTTED DATE: 1/6/2025



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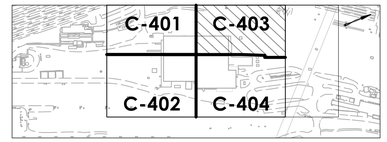

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DESIGNER/DRAFTER: AB CHECKED BY: SM

0 20' 40'
HORIZONTAL SCALE
1" = 20'

SIGNATURE/ BLOCK:

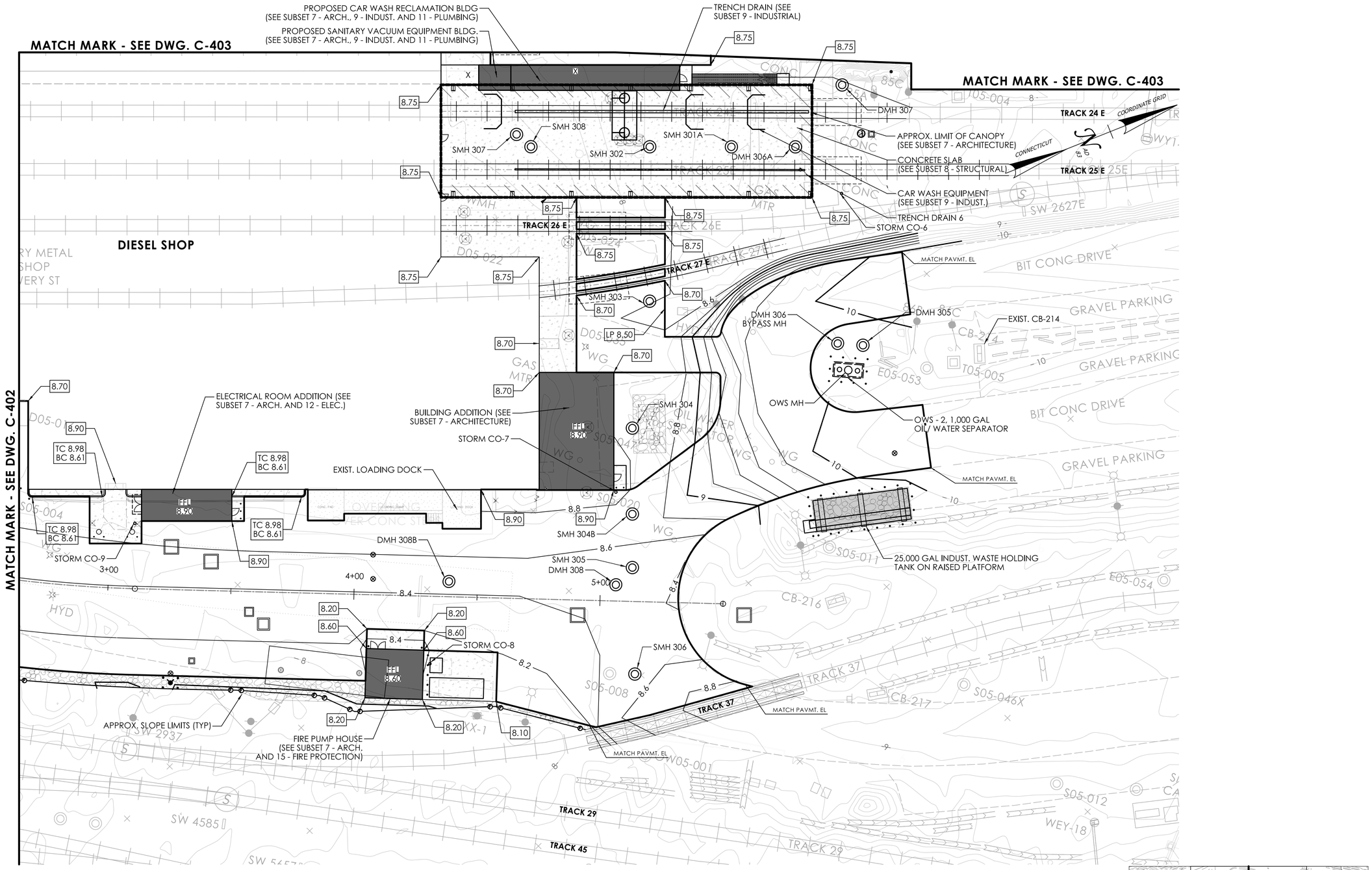
stv
280 TRUMBULL STREET, 14TH FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: GRADING PLAN

DRAWING NO. C-403
SHEET NO. 04.16

LAST SAVED BY: BonaguaL **FILE NAME:** C:\Users\bonagual\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-400_GRADING_PLAN.dgn
PLOTTED DATE: 1/6/2025



NOTES:

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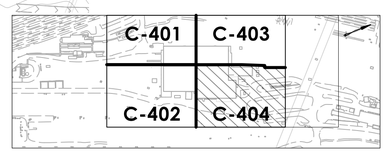


REVISION DESCRIPTION | DATE | REV.

DESIGNER/DRAFTER: AB CHECKED BY: SM

0 20' 40' HORIZONTAL SCALE 1" = 20'

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14TH FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

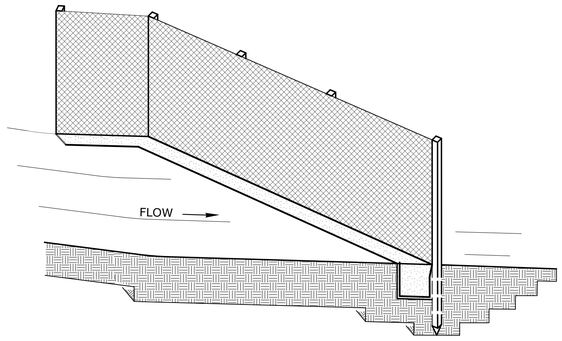
PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: GRADING PLAN

DRAWING NO. C-404
SHEET NO. 04.17

LAST SAVED BY: BonaguAL **FILE NAME:** C:\Users\bonagual\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-400_GRADING_PLAN.dgn
PLOTTED DATE: 1/6/2025

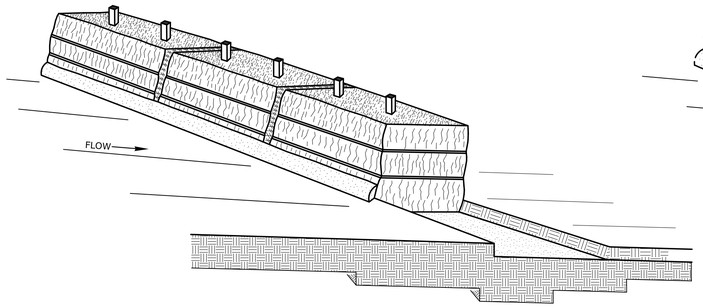
SEDIMENTATION GENERAL NOTES (C-701 TO C-703)

1. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL CONFORM TO THE REQUIREMENTS OF THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL", EFFECTIVE MARCH 2024 OR AS AMENDED.



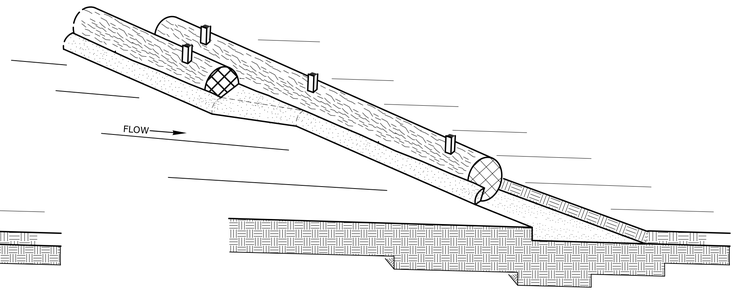
GEOTEXTILE SILT FENCE SYSTEM
N.T.S.

NOTE: THIS ITEM WILL BE MEASURED BY LINEAR FEET OF SEDIMENTATION CONTROL SYSTEM



HAY BALE SYSTEM
N.T.S.

NOTE: THIS ITEM WILL BE MEASURED BY LINEAR FEET OF SEDIMENTATION CONTROL SYSTEM

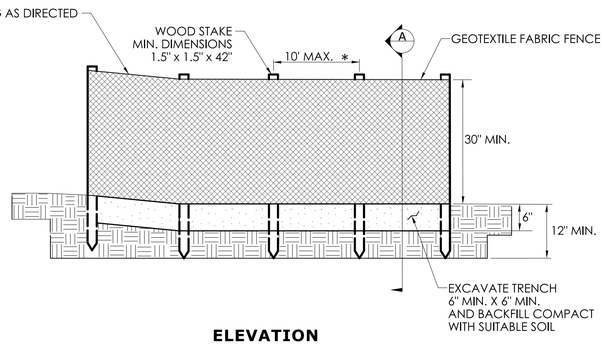


WATTLE FIBER ROLL SYSTEM
N.T.S.

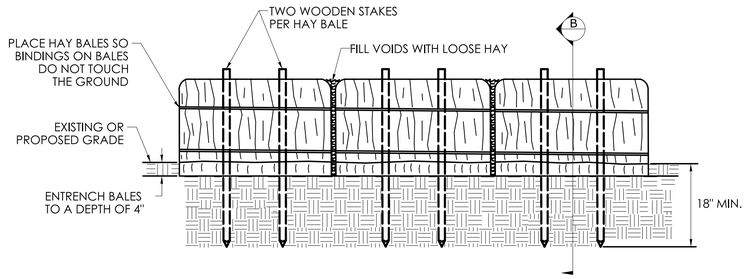
NOTE: THIS ITEM WILL BE MEASURED BY LINEAR FEET OF SEDIMENTATION CONTROL SYSTEM

SILT FENCE NOTES:

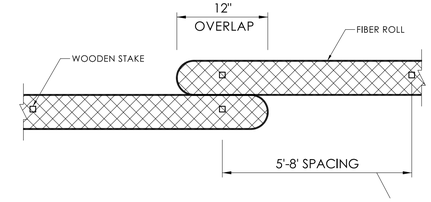
1. INSTALL THE WING WHEN THE FENCE IS MORE THAN 4' FROM THE TOE OF SLOPE AND THE FENCE LINE GRADIENT IS 5% OR MORE
2. FOR SLOPES STEEPER THAN 2:1 USE A 5' POST SPACING OR AS DIRECTED BY THE ENGINEER



ELEVATION

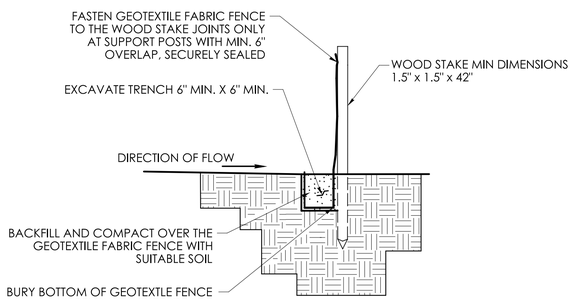


ELEVATION

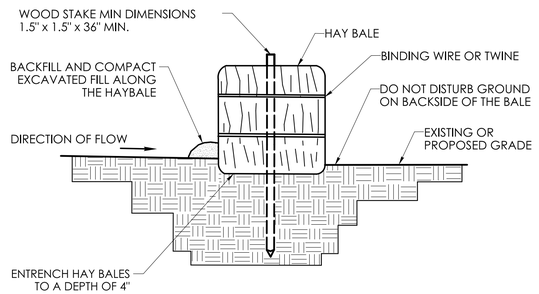


WATTLE NOTES

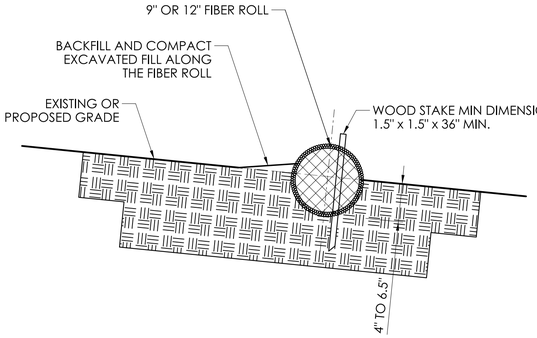
USE 9" OR 12" FIBER ROLL SIZE AND USE SINGLE ROW OR PARALLEL ROWS BASED AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER;



SECTION A



SECTION B



REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: MK CHECKED BY: SM

SIGNATURE/ BLOCK:

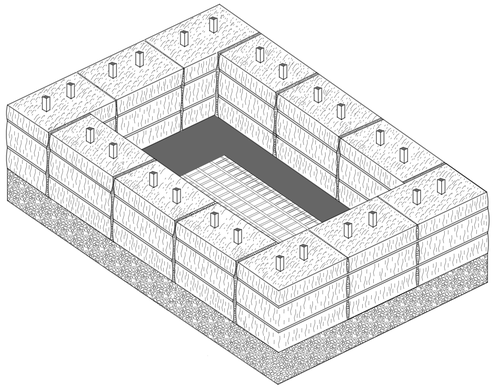
stv
280 TRUMBULL STREET, 14' FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: SEDIMENTATION CONTROL SYSTEM DETAILS

DRAWING NO. C-701
SHEET NO. 04.24

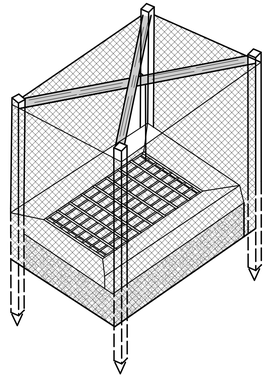
LASTED SAVED BY: KowalcMS **FILE NAME:** C:\Users\kowalcms\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-700_MISC_DETAILS.dgn
PLOTTED DATE: 1/6/2025



HAY BALES
AT TYPE "C-L" CATCH BASIN

N.T.S.

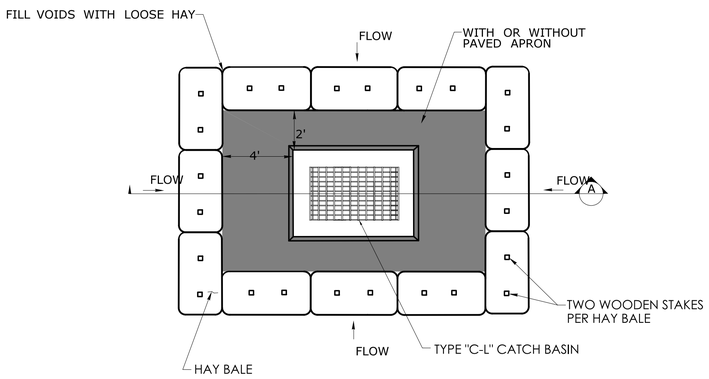
NOTE: THIS ITEM WILL BE MEASURED BY EACH SEDIMENT CONTROL SYSTEM AT CATCH BASIN



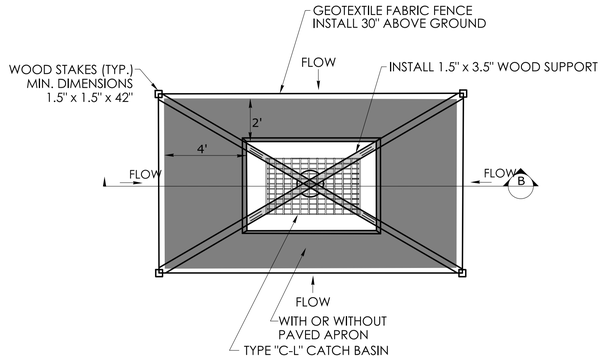
GEOTEXTILE SILT FENCE
AT TYPE "C-L" CATCH BASIN

N.T.S.

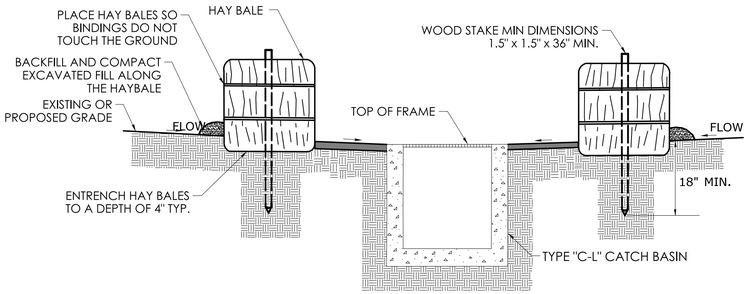
NOTE: THIS ITEM WILL BE MEASURED BY EACH SEDIMENT CONTROL SYSTEM AT CATCH BASIN



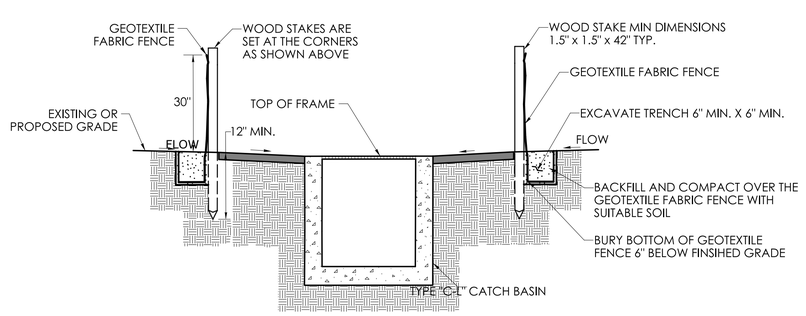
PLAN
THIS DETAIL APPLIES TO OFF ROAD LOCATIONS



PLAN
THIS DETAIL APPLIES TO OFF ROAD LOCATIONS



SECTION A



SECTION B

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: MK CHECKED BY: SM

SIGNATURE/ BLOCK:

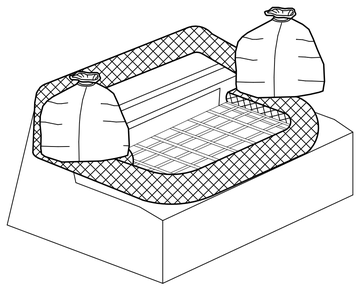
stv
280 TRUMBULL STREET, 14TH FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: SEDIMENT CONTROL SYSTEM AT CATCH BASIN DETAILS

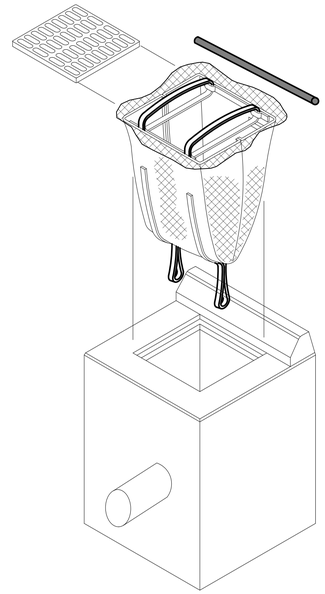
DRAWING NO. C-702
SHEET NO. 04.25

LASTED SAVED BY: KowalcMS **FILE NAME:** C:\Users\kowalcms\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-700_MISC_DETAILS.dgn
PLOTTED DATE: 1/6/2025



WATTLE FIBER ROLL AROUND
TYPE "C" OR "C-L" CATCH BASIN TOP
N.T.S.

NOTE: THIS ITEM WILL BE MEASURED BY EACH SEDIMENT CONTROL SYSTEM AT CATCH BASIN



SILT SACK UNDER INLET
OF TYPE "C" OR "C-L" CATCH BASIN
N.T.S.

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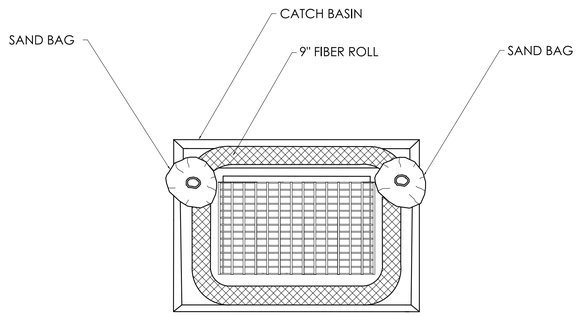
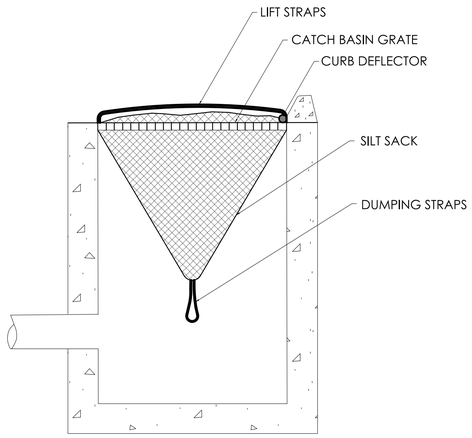


PLAN



SECTION

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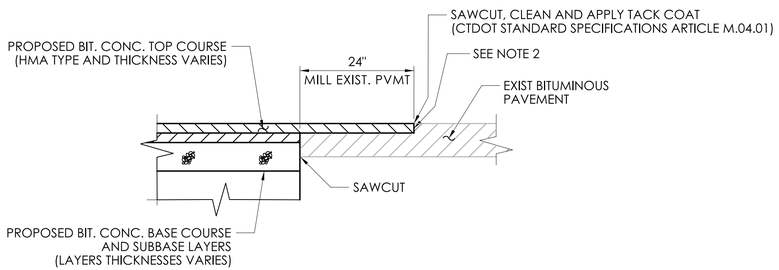
stv
280 TRUMBULL STREET, 14' FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: SEDIMENT CONTROL SYSTEM AT CATCH BASIN DETAILS

DRAWING NO. C-703
SHEET NO. 04.26

LASTED SAVED BY: KowalcMS **FILE NAME:** C:\Users\kowalcms\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-700_MISC_DETAILS.dgn
PLOTTED DATE: 1/6/2025

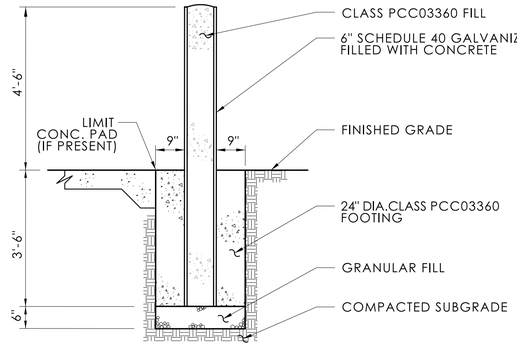


PAVEMENT MATCH NOTES:

1. THIS DETAIL IS TO BE USED AT ALL PAVEMENT TIE-INS WHERE "MATCH EXIST" IS CALLED FOR ON THE PLANS.
2. OVERLAP BIT. CONC. TOP COURSE OVER MILLED EXIST. PAVEMENT; MILLING DEPTH OF EXIST. PAVEMENT TO MATCH ADJACENT TOP COURSE THICKNESS.
3. MILLING TO BE PAID FOR UNDER "MILLING FOR PAVEMENT TRANSITIONS"; HMA AND TACKCOAT TO BE PAID UNDER RESPECTIVE PAY ITEMS.

PAVEMENT MATCH

N.T.S.

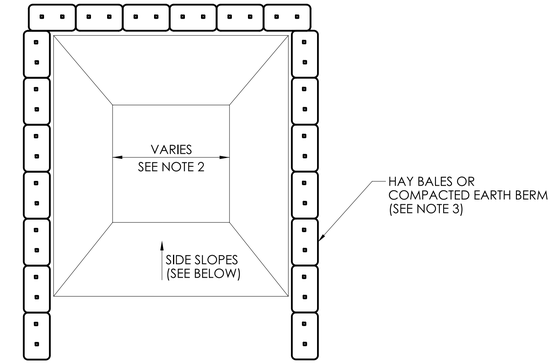


STEEL BOLLARD NOTES:

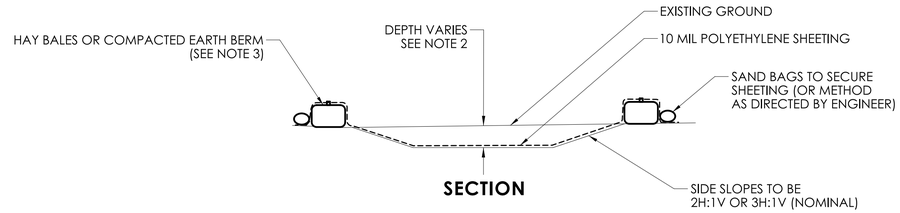
1. ALL STEEL BOLLARDS SHALL HAVE YELLOW PLASTIC BOLLARD COVERS. REFER TO SPECIFICATION FOR ADDITIONAL DETAILS.
2. FOR SERVICE CONSOLE BOLLARDS, SEE SUBSET 05, DWG. U-323.

STEEL BOLLARD

N.T.S.



PLAN



SECTION

CONCRETE WASH OUT NOTES

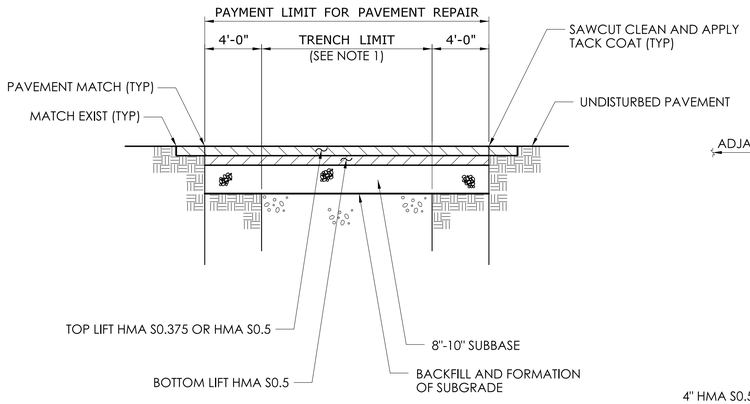
1. CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED.
2. THE CONTRACTOR SHALL SUBMIT THE DESIGN, LOCATION AND SIZING OF THE CONCRETE WASHOUT AREA(S) WITH THE PROJECT'S EROSION AND SEDIMENTATION CONTROL PLAN AND SHALL BE APPROVED BY THE ENGINEER.

   LOCATION: WASHOUT AREA(S) ARE TO BE LOCATED AT LEAST 50 FEET FROM ANY STREAM, WETLAND, STORM DRAINS, OR OTHER SENSITIVE RESOURCE. IF THE WASHOUT AREA IS LOCATED WITHIN A FLOODPLAIN, WASHOUT AREA SHALL BE INSPECTED PRIOR TO ANY SIGNIFICANT RAIN EVENTS AND HARDENED CONCRETE WASTE REMOVED.

   SIZE: THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING, BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.
3. SURFACE DISCHARGE IS UNACCEPTABLE. THEREFORE, HAY BALES OR OTHER CONTROL MEASURES, AS APPROVED BY THE ENGINEER, SHOULD BE USED AROUND THE PERIMETER OF THE CONCRETE WASHOUT AREA FOR CONTAINMENT.
4. SIGNS SHOULD BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CONCRETE AREA(S) AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS. WASHOUT AREA(S) SHOULD BE FLAGGED WITH SAFETY FENCING OR OTHER APPROVED METHOD.
5. WASHOUT AREA(S) ARE TO BE INSPECTED AT LEAST ONCE A WEEK FOR STRUCTURAL INTEGRITY, ADEQUATE HOLDING CAPACITY AND CHECKED FOR LEAKS, TEARS, OR OVERFLOWS. (AS REQUIRED BY THE CONSTRUCTION SITE ENVIRONMENTAL INSPECTION REPORT) WASHOUT AREA(S) SHOULD BE CHECKED AFTER HEAVY RAINS.
6. HARDENED CONCRETE WASTE SHOULD BE REMOVED AND DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO HALF OF THE CONCRETE WASHOUT'S DEPTH. THE WASTE CAN BE STORED AT AN UPLAND LOCATION, AS APPROVED BY THE ENGINEER. ALL CONCRETE WASTE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS, REGULATIONS, AND GUIDELINES.
7. PAYMENT FOR THIS ITEM IS TO BE INCLUDED UNDER THE GENERAL COST OF THE WORK FOR THE PROJECT, INCLUDING SITE RESTORATION.

CONCRETE WASHOUT AREA

N.T.S.



PAVEMENT REPAIR NOTES:

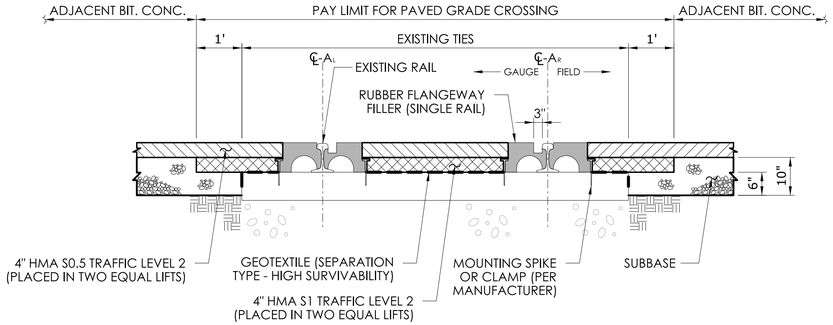
1. THE LIMIT OF THE TRENCH SHALL BE AS SHOWN IN TRENCH EXCAVATION DETAILS FOR EACH RESPECTIVE UTILITY OR AS DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHALL SAWCUT ALL EXISTING PAVEMENT AT THE LIMITS OF PAVEMENT REPAIR UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. SAWCUTTING, REMOVAL OF EXISTING PAVEMENT FROM TRENCH LIMITS TO LIMITS OF PAVEMENT REPAIR, HMA S0.375 AND HMA S0.5, PROCESSED AGGREGATE AND SUBBASE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR EACH RESPECTIVE ITEM. THE CLEANING AND APPLICATION OF TACK COAT TO THE EXISTING PAVEMENT SURFACES SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND NOT MEASURED FOR PAYMENT.
4. PAVEMENT MATCH DETAIL SHALL BE USED WHERE PAVEMENT REPAIR MATCHES EXISTING PAVEMENT UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
5. WHERE DIRECTED BY THE ENGINEER, MATCH THE THICKNESS OF ADJACENT ROADWAY HMA, PROCESSED AGGREGATE, AND SUBBASE LAYERS, TO BE PAID FOR AT THE RESPECTIVE UNIT COSTS. IN UTILITY TRENCHES WHERE ADEQUATE DEPTH IS NOT AVAILABLE TO CONSTRUCT PAVEMENT REPAIR SECTION AS SHOWN, REDUCE SUBBASE AS NECESSARY.

PAVEMENT REPAIR

N.T.S.

NOTES (C-704)

1. CLASS 'PCC03360' CONCRETE FORMERLY KNOWN AS CLASS 'C'
   CLASS 'PCC04460' CONCRETE FORMERLY KNOWN AS CLASS 'F'



SECTION

PAVED GRADE CROSSING NOTES:

1. ALL LABOR, RUBBER FLANGEWAY FILLERS, HMA, MOUNTING SPIKES, GEOTEXTILE, AND INCIDENTAL PARTS SHALL BE PAID FOR BASED ON LINEAR FEET INSTALLED ALONG THE CENTERLINE OF THE TRACK AT THE LOCATIONS SHOWN ON THE PLANS UNDER PAY ITEM "PAVED GRADE CROSSING".
2. INSTALL GEOTEXTILE ABOVE TIES TO PROTECT FROM BITUMINOUS CONCRETE PAVEMENT; PROVIDE MOUNTING SPIKES OR OTHER METHOD OF FASTENING AS NECESSARY THROUGH GEOXTILE TO PREVENT PAVEMENT FROM SHIFTING.
3. CONTRACTOR SHALL PROVIDE WORKING DRAWING SEALED BY A LICENSED CT. PROFESSIONAL ENGINEER DETAILING PROPOSED FLANGEWAY FILLER, MOUNTING SPIKE DETAILS, AND CONSTRUCTION METHODS.
4. WHEN INSTALLED ALONG A TRACK THROUGH A BITUMINOUS CONCRETE APRON, MATCH THE PROPOSED ADJACENT BITUMINOUS CONCRETE PAVEMENT STRUCTURE BEYOND THE PAY LIMITS.

PAVED GRADE CROSSING

N.T.S.

REV. | DATE | REVISION DESCRIPTION

DESIGNER/DRAFTER: MK CHECKED BY: AB

SIGNATURE/ BLOCK:

stv
280 TRUMBULL STREET, 14' FLOOR
HARTFORD, CT 06103
(203) 375-0521

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

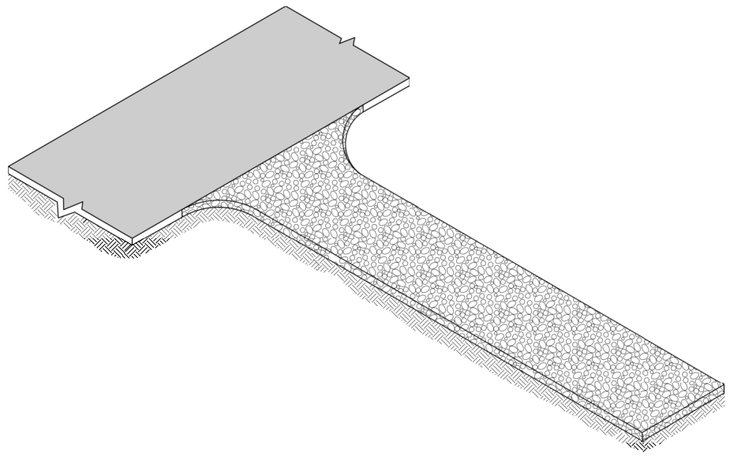
PROJECT NUMBER: 0301-0130
PROJECT DESCRIPTION: REHABILITATION OF EXISTING CAR AND DIESEL SHOPS
TOWN(S): NEW HAVEN
DRAWING TITLE: CIVIL MISCELLANEOUS DETAILS

DRAWING NO. C-704
SHEET NO. 04.27

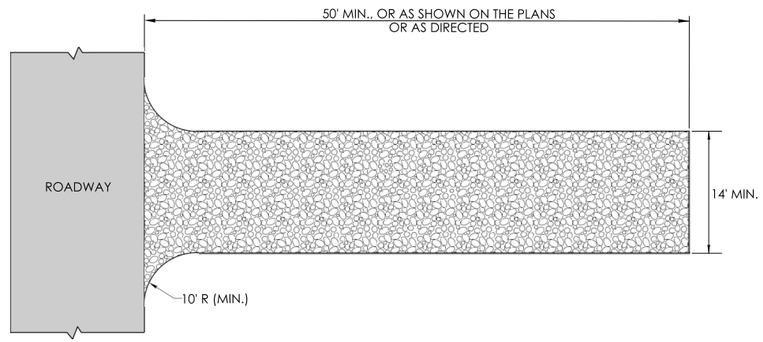
LASTED SAVED BY: KowalcMS **FILE NAME:** C:\Users\kowalcms\State of Connecticut\0301-0130 - Design\F_Civil\Contract_Plans\FC_PD_0301-0130_SHT_CIVIL_C-700_MISC_DETAILS.dgn
PLOTTED DATE: 1/6/2025

GENERAL NOTE:

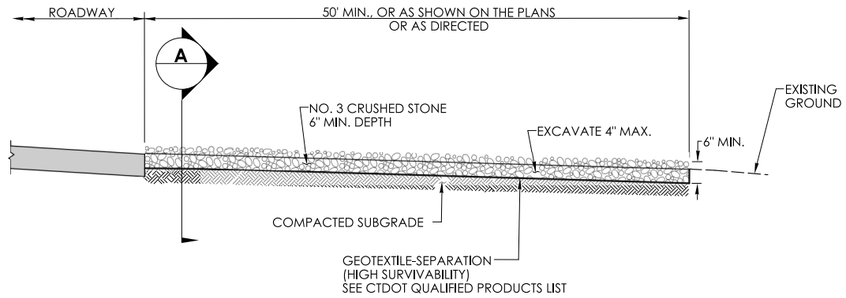
1. THE LENGTH OF THE ANTI-TRACKING PAD SHALL BE INCREASED AS DIRECTED FOR SITES COMPOSED OF CLAY OR SILTS.



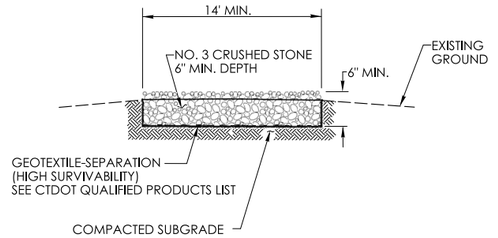
ANTI-TRACKING PAD



PLAN



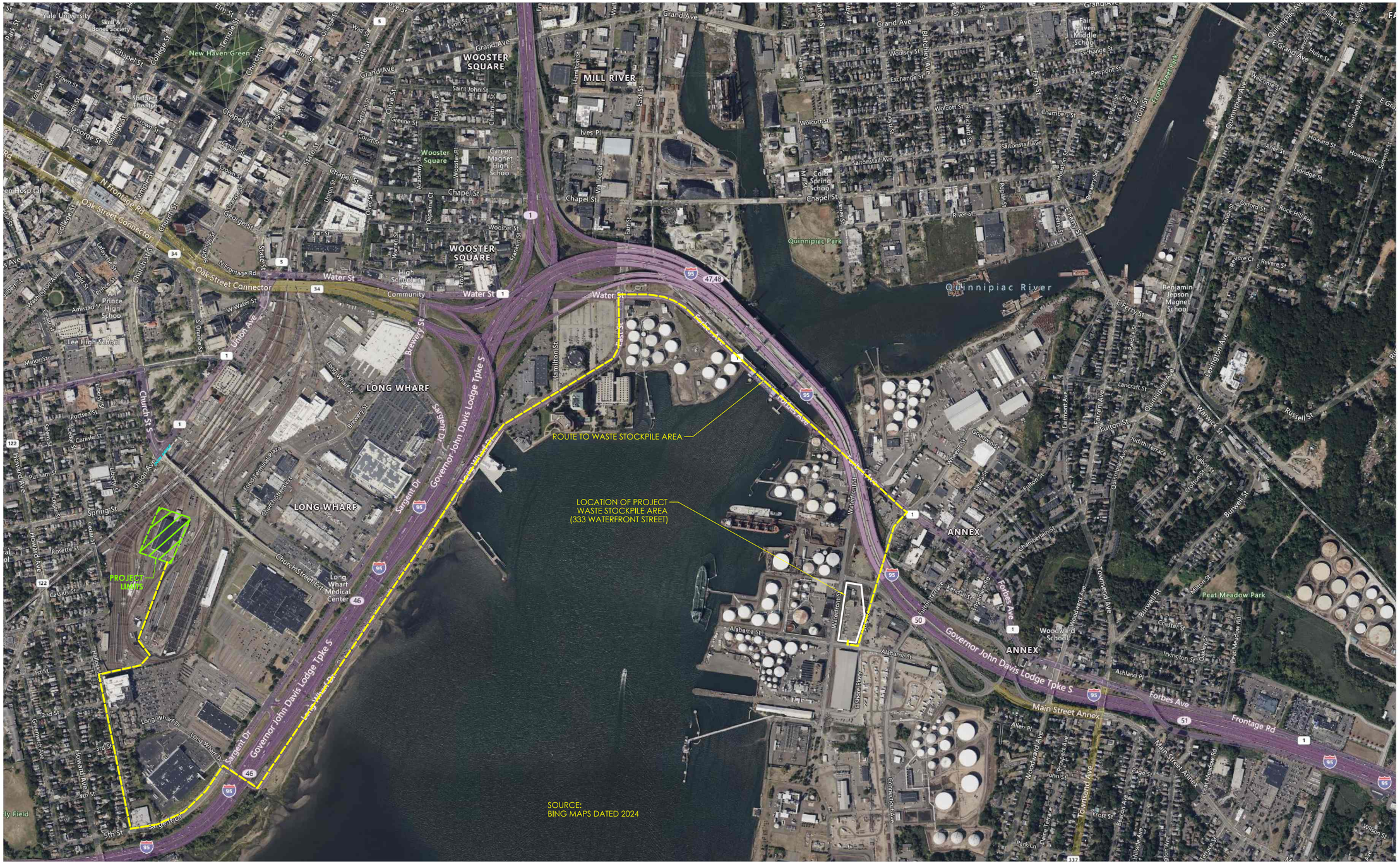
ELEVATION



SECTION A

	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: igitally signed by Leo Fontaine, P.E. Date: 2022.09.27 14:21:42-04'00'	APPROVED BY: igitally sig d by Calabrese, Michael Date: 2022.11.09 13:46:56-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	**CTDOT STANDARD SHEET**	STANDARD SHEET TITLE: **ANTI-TRACKING PAD**	STANDARD SHEET NO.: **HW-211_01**

PLOTTED DATE: 9/21/2022



REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:

DESIGNER/DRAFTER: R. HAMILTON CHECKED BY: D. MARTIN

0 500 1000
SCALE 1" = 500'

CTDOT CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: **CAR & DIESEL SHOP REHABILITATION**

TOWN(S): **NEW HAVEN**

DRAWING TITLE: **ROUTE TO WASTE STOCKPILE AREA (WSA)**

PROJECT NO.: **0301-0130**

DRAWING NO.: **ENV-002**

SHEET NO.: **18.02**

LASTED SAVED BY: RHamilton **FILE NAME:** J:\CAD\CT_CONNECT_DDE\CT_Projects\CT0301-0130\Envir\ENV-002.dgn
PLOTTED DATE: 1/7/2025

Appendix D

CTDOT MS4 Project Design
Maximum Extent Practicable (MEP) Worksheet

Section 1: Project Information	**Project #:**	0301-0130
	Title:	Car Shop & Diesel Shop Rehabilitation
	Location:	New Haven

Section 2: Existing Conditions

EC1	Total Project Area			7.95 acres		
EC2	Pre-construction Directly Connected Impervious Area (DCIA):			4.30 acres	54.09 %	
EC3	Soil Infiltration Potential	Data Source: ☐Existing Report / Soils Map ☐Field Verified		☐Good/Fair	☑Poor	☐Mixed
EC4	Depth to Maximum Groundwater		☐TBD	3.0 to 4.0 ft below grade		
EC5	Depth to Bedrock		☐TBD	N/A to N/A ft below grade		
EC6	Aquifer Protection Area? (from PNDF)			☐Yes	☑No	
EC7	MS4 Priority Area? (from PNDF)			☐Yes (See Below)	☑No	
	Check All That Apply	☐Urbanized Area	☑DCIA >11%	☐Impaired Waterbody (See Below)		
	Select All Impairments That Apply	Choose an Item	Choose an Item	Choose an Item		
EC8	Contamination known or suspected to be present? (From Environmental Compliance)			☐Yes	☑No	
EC9	Adjoining DOT ROW beyond project limits available for stormwater quality management			0.0 acres		

Section 3: Designed Conditions

	Water Quality Calculations		30% Design		60% Design	90% Design	FDP
DC1	WQV retention design goal	☐ Full ☑ 1/2"-WQV	ac-ft	☐ TBD	ac-ft	ac-ft	0.27 ac-ft
DC2	WQV goal ***retained*** (refer to page 2)		ac-ft		ac-ft	ac-ft	0 ac-ft
DC3	WQV goal ***treated*** (refer to page 2)		ac-ft		ac-ft	ac-ft	0 ac-ft
DC4	Total WQV *retained and treated*		0 **ac-ft**		0 **ac-ft**	0 **ac-ft**	0 **ac-ft**
DC5	Post-construction DCIA(acres)		ac.	☐ TBD	ac.	ac.	4.91 ac.
DC6	Pre-construction DCIA (refer to EC2 above)		0 ac.		ac.	ac.	4.30 ac.
DC7	Change in DCIA from pre- to post-construction *Can be positive (DCIA gained) or negative (DCIA lost)*		0 **ac.**	☐ **TBD**	0 **ac.**	0 **ac.**	0.61 **ac.**
	Date completed						12/17/24
	Completed by (initials)						RFS
	Reviewed by (initials)						

Notes:

Worksheet users should refer to the *CT DOT MS4 Project Design MEP Worksheet Instructions*

Section 4: Stormwater BMP Selection Summary						
Design Phase ☐30% ☐60% ☐90% ☑FDP	**WQV Retained (ac-ft)**	**WQV Treated (ac-ft)**	**DCIA Captured (Acres)**	**DCIA Disconnection Credit (%)**	**DCIA Disconnection Credit (acres)**	**Site Constraints**
Disconnection (Dispersion)						
						Insufficient Right-of-Way
						Choose an Item.
						Choose an Item.
Conveyance (Swales / Channels)						
						Insufficient Right-of-Way
						other - describe in comment sec
						Choose an Item.
Infiltration / Retention						
Track bed /Ballast/Subballast						Choose an Item.
						Choose an Item.
						Choose an Item.
						Choose an Item.
						Choose an Item.
						Choose an Item.
						Choose an Item.
Treatment						
						not applicable
						Choose an Item.
						Choose an Item.
TOTAL	0	0	0	0	0	

Notes:

Worksheet users should refer to the *CT DOT MS4 Project Design MEP Worksheet Instructions.* Refer to the 2004 CT Stormwater Quality Manual for more information on BMP criteria and limitations.

Appendix E

State of Connecticut
Department of Transportation
Construction Site Environmental Inspection Report

This Form Must Be Completed At Least Once a Week and within Twenty Four (24) Hours* Of the End of a Storm Event That Is 0.1 inches or Greater * Next Working Day as Directed by Engineer

General Information			
Project Number	0301-0130	**Date**	
Permit Number(s)		**Location**	New Haven
Contractor			
Project Engineer		**Phone No**	
Type of Inspection: Check all that apply ☐ Weekly ☐ Pre-storm event ☐ Post-storm event			
Weather at time of this inspection? ☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds Temperature:			
Start Date: _____ Time: _____ Duration (hrs): _____ Precipitation (in) ≈ _____			

Site-specific BMPs - *Number the structural and non-structural BMPs on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map for reference with you during your inspections. Note- If have additional locations add rows.* Site Map Attached ☐ **Yes** ☐ **No**

Location	BMPs Installed	BMP Maint. Required	Remedial Action Required	Remedial Action* If yes, provide description and date contractor notified	Date Fixed	Repeat Failure
	☐Yes ☐No	☐Yes ☐No				☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No				☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No				☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No				☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No				☐Yes ☐No
	☐Yes ☐No	☐Yes ☐No				☐Yes ☐No

Are there any sediment discharges to a regulated area or potential wetland occurring or have any occurred since the last inspection? ☐ **Yes** ☐ **No**

If yes, contact the District Environmental Coordinator immediately and submit project incident report (include description of the discharge including location, time identified, and the approximate amount of sediment)

Incident report attached to this CSEIR**?** ☐ **Yes** ☐ **No**

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

Prepared By: _____

Title: **Signature:** **Date:**

Review By: _____

Title: **Signature:** **Date:**

I acknowledge receipt of a copy of the CSEIR and will perform the required maintenance or remedial action indicated in the report.

Contractor: _____

Title: **Signature:** **Date:**

Appendix F

Connecticut Department of
Energy & Environmental Protection
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Notice of Termination Form: Non-Solar Projects

This Notice serves as a request to terminate the below listed permit as well as any applicable Letter(s) of Credit.

Part I: Permittee Information

The below information is required in accordance with Section 6(b) of the General Permit.

1. Permit Number: GSN
2. Registrant: **State of Connecticut Department of Transportation**
3. Site Address: **4 Brewery Street**

   City/Town: **New Haven** State: **CT** Zip Code: **06511**
4. Date of completion of construction:

   Date all storm drainage structures were cleared of construction sediment and debris:

   Beginning and Ending Dates of post-construction inspections:

   Date of final stabilization inspection(s)*:

   Qualified Inspector who conducted the Final Stabilization Inspection: (This person must sign Part III)
5. Check the post-construction activity(ies)** at the site (check all that apply):

   ☐ Industrial ☐ Residential ☐ Capped Landfill

   ☐ Commercial ☐ Solar Array ☐ Other:

* The Final Stabilization Inspection must occur at least one full growing season after final stabilization has been achieved. A full growing season is defined as the timeframe encompassed by two consecutive full seeding seasons: April 1 through June 15, and August 15 through October 1. If final stabilization is achieved during a seeding season, the following seeding season will be considered the first full seeding season after final stabilization has been achieved.

** If the post-construction activity involves solar arrays, the Department may require that the "Solar Projects: Notice of Termination Form" be used. Any questions regarding the necessity of such a form for the project can be sent via email to DEEP.StormwaterStaff@ct.gov.

Locally Approvable Projects Must Complete the following Part II - *(Attach additional sheets as needed)*

Part II: Locally Approvable Post-Construction Inspection Certification

The below information is required in accordance with Section 5(b)(4)(C)(i) of the General Permit.

Certification by a Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional / District Representative

"I hereby certify that I am a qualified professional engineer / a qualified soil erosion and sediment control professional / a representative of the District in which the site is located as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that all post-construction measures have been installed as specified in the permittee's Stormwater Pollution Control Plan and in accordance with Section 5(b)(2)(C) of the general permit and that all such measures have been cleaned of construction sediment and debris. I understand that this certification is part of a registration submitted in accordance with section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional / Representative of the District	Date
Printed Name of Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional / Representative of the District	Title

Check off the qualifications of the signatory of the above part:

☐ Qualified Professional Engineer ☐ Qualified Soil Erosion and Sediment Control Professional ☐ Representative of the District

Locally Exempt Projects Must Complete the following Part II - *(Attach additional sheets as needed)*

Part II: Locally Exempt Post-Construction Inspection Certification

The below information is required in accordance with Section 5(b)(4)(C)(ii) of the General Permit.

Certification by a Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional

"I hereby certify that I am a qualified professional engineer / a qualified soil erosion and sediment control professional as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that all post-construction measures have been installed as specified in the permittee's Stormwater Pollution Control Plan and in accordance with Section 5(b)(2)(C) of the general permit and that all such measures have been cleaned of construction sediment and debris. I understand that this certification is part of a registration submitted in accordance with section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional	Date
Printed Name of Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional	Title

Check off the qualifications of the signatory of the above part:

☐ Qualified Professional Engineer ☐ Qualified Soil Erosion and Sediment Control Professional

State Agency Projects Must Complete the following Part II - (Attach additional sheets as needed)

Part II: State Agency Post-Construction Inspection Certification

The below information is required in accordance with Section 5(b)(4)(C)(iii) of the General Permit.

Certification by a DOT District Engineer or his/her designee / a DOT District Environmental Coordinator / a designated employee of another state agency

"I hereby certify that I am a DOT District Engineer or his/her designee / a DOT District Environmental Coordinator / a designated employee of another state agency as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that all post-construction measures have been installed as specified in the permittee's Stormwater Pollution Control Plan and in accordance with Section 5(b)(2)(C) of the general permit and that all such measures have been cleaned of construction sediment and debris. I understand that this certification is part of a registration submitted in accordance with section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature	Date
Printed Name	Title

Check off the qualifications of the signatory of the above part:

☐ Qualified Professional Engineer ☐ Qualified Soil Erosion and Sediment Control Professional ☐ Representative of the District

All Projects Must Complete the following Part III - *(Attach additional sheets as needed)*

Part III: Final Stabilization Inspection Certification

The below information is required in accordance with Section 5(b)(4)(D) of the General Permit.

Certification by a Qualified Inspector

"I hereby certify that I am a qualified inspector as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that the site has been stabilized, as defined in Section 2 of the general permit, for a period of no less than one full growing season following the cessation of construction activities. I further certify that there is no active erosion or sedimentation present on site and no disturbed areas remain exposed. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Qualified Inspector	Date
Printed Name of Qualified Inspector	Title

All Projects Must Complete the following Part IV - *(Attach additional sheets as needed)*

Part IV: Permittee Certification

The below information is required in accordance with Section 5(b)(4)(D) of the General Permit.

Certification by the Permittee

"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 those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Signature of Permittee	Date
Printed Name of Permittee	Title

All Projects Must Complete the following Part V - *(Attach additional documentation as needed)*

Part V: Additional Submittals

The following attachments are required to be submitted along with the Notice of Termination Form:

☐ Post-Construction Inspection Report (must contain photos with time stamps)

☐ Final Stabilization Inspection Report (must contain photos with time stamps)

Complete and submit this form in accordance with the general permit (DEEP-WPED-GP-015) to ensure the proper handling of the termination. Print or type unless otherwise noted.

Submit this Notice of Termination Form to the address below, as well as via email to DEEP.StormwaterStaff@ct.gov:

WATER PERMITTING AND ENFORCEMENT DIVISION/STORMWATER GROUP
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Appendix G

Outfall #	Outfall Condition	Type	Pipe Material	Pipe Size (in)	Longitude (W/decimal degrees)	Latitude (N/decimal degrees)	Source of Latitude/Longitude	Dates outfall will be active (START)	Discharge to storm sewer/wetlands or waterbody	Watershed ID	Impaired water?	If impaired, TMDL?	For the drainage area associated with each outfall – effective impervious area before construction (sq.ft)	For the drainage area associated with each outfall – effective impervious area after construction (sq. ft)
PO-01	Serviceable	Pipe	PVC	18	-72.92807	41.29273	CTECO	8/18/2025	Storm Sewer	5 - South Central Coast	No	N/A	0	81000
PO-02	Serviceable	Pipe	PVC	12	-72.92717	41.29478	CTECO	8/18/2025	Storm Sewer	5 - South Central Coast	No	N/A	0	7400
PO-03	Serviceable	Pipe	PVC	15	-72.92870	41.29361	CTECO	8/18/2025	Storm Sewer	5 - South Central Coast	No	N/A	0	24000
PO-04	Serviceable	Pipe	PVC	12	-72.92691	41.29453	CTECO	8/18/2025	Storm Sewer	5 - South Central Coast	No	N/A	0	1750
PO-05	Serviceable	Pipe	PVC	12	-72.92856	41.29271	CTECO	8/18/2025	Storm Sewer	5 - South Central Coast	No	N/A	0	0
EO-01	Serviceable	Pipe	PVC	15	-72.92856	41.29271	CTECO	8/18/2025	Storm Sewer	5 - South Central Coast	No	N/A	62300	0