

TOWN OF VERNON
Inland Wetlands Commission (IWC)
Meeting Notice
Tuesday, July 28, 2020, 7:00 PM
VIA Teleconference

Posted 7/28/20
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Join Zoom Meeting
<https://us02web.zoom.us/j/89414571733?pwd=ZnlkQjhtcEN1TWJHY2RFdUkzWXI6QT09>
Meeting ID: 894 1457 1733
Weblink Passcode: x3xPZp
Dial in 646 876 9923
Meeting ID: 894 1457 1733
Dial in Passcode: 798970

AGENDA

1. Call to Order & Roll Call
2. Administrative Actions
 - 2.1 Amendment/Adoption of Agenda - Additional business to be considered under agenda item #9 "Other Business" requires Commission vote
 - 2.2 Approval of the Minutes from the June 23, 2020 regular meeting
 - 2.3 Communications received NOT related to Agenda items, if any
 - 2.3.1-Information Only: DEEP Draft Permit-Upper Bolton Lake Dam Repair
 - 2.4 Call for filing(s) of Intervener petition(s) and determination of status
3. New Applications for Receipt and Determination of Significance
4. Action on New Application(s)
 - 4.1 IWC-2020-05, Application of the Town of Vernon for a Wetlands Permit by Commission, for the demolition and replacement of the existing vehicular bridge (bridge number 03936) on Dart Hill Rd., over the Hockanum River (no specific address or parcel id).
5. Status of Cease & Correct Orders, if any
6. Wetlands Enforcement Officer Report, if any
7. Inland Wetlands Agent Approvals, if any
8. Other Business
9. Adjournment

Rachel Stansel, Chairperson
Inland Wetlands Commission (IWC)

Minutes

Town of Vernon
Inland Wetlands Commission (IWC)
Tuesday, June 23, 2020, 7:00 p.m.
Teleconference Meeting

DRAFT MINUTES

1. Call to Order and Roll Call

Chairperson Rachel Stansel called the meeting to order at 7:23 p.m. Also in attendance were Commission Members Don Schubert, and Frank Galat. Staff members present were Craig Perry, Wetlands Agent, David Smith, Town Engineer, and George McGregor, Town Planner

2. Administrative Actions

2.1 Amendment/Adoption of Agenda – Additional business to be considered under agenda item #9 “Other Business” requires Commission vote
None

2.2 Approval of Minutes from the May 26, 2020, regular meeting
Don Schubert made a motion seconded by Frank Galat to approve the minutes from May 26, 2020. Motion carried unanimously.

2.3 Communications received NOT related to Agenda items, if any
DEEP Permit Application for the Use of Pesticides in State Waters at 19 Rosewood Drive, Durrschmidt Pond.

2.4 Call for filing(s) of Intervener petition(s) and determination of status
None

3. New Applications for Receipt and Determination of Significance

3.1 **Application [IWC-2020-05]** of the Town of Vernon for a Wetlands Permit by Commission, for the demolition and replacement of the existing vehicular bridge (bridge number 03936) on Dart Hill Road, over the Hockanum River (no specific address or parcel id).

Dave Smith explained the location and condition of the current bridge and discussed the work to be completed; work should begin in early April. A question was raised regarding Section Six and significant vs. non-significant activity being checked. Mr. McGregor explained the intention was to check non-significant activity on the application.

Kirshor Patel, Design Engineer, added comments regarding construction and structure, explaining the raise in the road and explained the debris shield that will be installed under the bridge during construction. He also confirmed that a full-time inspector is part of the project. Discussion took place.

*Don Schubert made a motion seconded by Frank Galat to accept **Application [IWC 2020-05]** of the Town of Vernon for a Wetlands Permit by Commission, for the demolition and replacement of the existing vehicular bridge (bridge number 03936) on Dart Hill Road, over the Hockanum River as non-significant activity. Motion carried unanimously.*

4. Action on New Applications

- 4.1 **Application [IWC-2020-03]** of the Town of Vernon for a Wetlands Permit by Commission, for the demolition and replacement of existing vehicular bridge (bridge number 04575) on Main Street, over the Tankerhoosen River (no specific address or parcel id).

Dave Smith explained the project and reiterated the need for preservation and replacement of the historical bridge.

Dennis Garceau, Project Engineer, also reiterated the need for preservation and rehabilitating the existing truss, the contractor will put in a containment system, replacing the bridge with the intention of minimizing impact to the wetlands, new abutments are needed, there will be minor impact to wetlands and river. A temporary access road will be used. Discussion took place.

*Don Schubert made a motion seconded by Frank Galat that the Vernon Inland Wetlands and Watercourses Commission does hereby **APPROVE Application [IWC-2020-03]** of the Town of Vernon for a Wetlands permit by Commission for the demolition and replacement of the Main St. Bridge over the Tankerhoosen River upon consideration of the decision criteria in Section 10.2 of the Town of Vernon Inland Wetland and Watercourse Regulations, and based upon the following findings:*

- 1. The application presents no adverse impact to wetlands and watercourses as evaluated by the criteria of Section 10.2 of the Vernon Inland Wetlands Regulations.*
- 2. No prudent or feasible alternative exists*

Motion carried unanimously.

- 4.2 **Application [IWC-2020-04]** of the Town of Vernon for a Wetlands Permit by Commission, for the construction of athletic fields on a 2.25-acre portion of property located on Windermere Ave. (no specific address) near the Ellington Town line (Assessor's ID: Map 22, Block 0039, Parcel 00003).

Dave Smith referenced a site plan showing the property in Ellington and Vernon and discussed the grading and surface, noting no materials will be brought in or leave the site and also noted both communities need to sign off on this project. Discussion took place.

*Chairperson Stansel made a motion seconded by Frank Galat that the Vernon Inland Wetlands and Watercourses Commission does hereby APPROVE **Application [IWC-2020-04]** of the Town of Vernon for a Wetlands permit by Commission for the construction of athletic fields upon consideration of the decision criteria in Section 10.2 of the Town of Vernon Inland Wetland and Watercourse Regulations, and based upon the following findings:*

1. *The application presents no adverse impact to wetlands and watercourses as evaluated by the criteria of Section 10.2 of the Vernon Inland Wetlands Regulations.*

Motion carried unanimously.

5. Status of Cease & Correct Orders, if any
None

6. Wetlands Enforcement Officer Report, if any

19 Grove Street **[IWC 2020-01]** - work has begun
133 Tunnel Road - project on hold
Storage facility behind Wendy's - on hold
2 Lakeview Drive - expiration date coming up
133 Washington Street - application expires 2021

7. Inland Wetlands Agent Approvals, if any
None

8. Other Business

- 8.1 **Application [IWC-2015-02]**, Mr. Ken Kaplan requests an extension of the Wetlands permit issued for non-significant activity at property located at 161 & 200 West Main Street (Assessor's ID: Map 22, Block 0058 & 0059, Parcels 13 & 1).

*Don Schubert made a motion seconded by Chairperson Stansel that the Vernon Inland Wetlands and Watercourses Commission does hereby **EXTEND Application [IWC 2015-02]** until June 9, 2025, upon a finding that there has been no substantial change to the circumstances or development plan associated with the original 5-year permit. Motion carried unanimously.*

9. Chairperson Stansel adjourned the meeting at 8:18 p.m.

Respectfully Submitted
Susan Hewett
Recording Secretary

Communications

PERMIT

Permittee: Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106

Permit No: DS-201806989

Town: Vernon

Project: Upper Bolton Lake Dam (DEEP ID #14628; Hazard Class BB, Moderate Hazard)

Waters: Upper Bolton Lake

Pursuant to Connecticut General Statutes Section 22a-403, the Commissioner of Energy and Environmental Protection (“Commissioner”) hereby grants a permit to the Connecticut Department of Energy and Environmental Protection (“the Permittee”) to conduct regulated activities associated with the repair of the Upper Bolton Lake dam. The purpose of said activities is to modify the existing dam.

AUTHORIZED ACTIVITY

Specifically, the permittee is authorized to do the following: constructing a new reinforced concrete spillway structure at the upstream end of the existing outlet pipes and constructing a chamber with a low level outlet at the left end of the spillway.

The activities will impact 2,800 square feet of the lake bottom on the upstream side of the earth embankment.

All activities shall be conducted in accordance with plans entitled: “Repairs and Modifications to Upper Bolton Lake Dam”, dated February 2018, prepared and stamped by William S. Andres, P.E. and submitted as a part of the application.

This authorization constitutes the licenses and approvals required by Section 22a-403 of the Connecticut General Statutes.

This authorization is subject to and does not derogate any present or future property rights or other rights or powers of the State of Connecticut, conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state, or local laws or regulations pertinent to the property or activity affected thereby.

The permittee's failure to comply with the terms and conditions of this permit shall subject the permittee, including the permittee's agents or contractor(s) to enforcement actions and penalties as provided by law.

This authorization is subject to the following conditions:

CONDITIONS:

1. **Expiration.** This permit shall expire three years following the date of issue unless this permit is specifically renewed.
2. **Construction Commencement and Completion.** If construction of any structures or facilities authorized herein is not completed within three years of issuance of this permit or within such other time as may be provided by this permit, or if any activity authorized herein is not commenced within three years of issuance of this permit or within such other time as may be provided by this permit, this permit shall expire three years after issuance or at the end of such time as may be authorized by the Commissioner.
3. **Notification of Project Initiation.**
 - a. The permittee shall notify the Commissioner in writing no less than seven (7) days prior to commencement of permitted activities and no less than seven (7) days following completion of permitted activities.
 - b. The Department of Energy and Environmental Protection shall be notified at least forty-eight (48) hours prior to drawdown of the impoundment, in accordance with Section 26-138 of the Connecticut General Statutes. Such notification shall be made to the Fisheries Division, 79 Elm Street, Hartford, CT 06106-5127, Telephone No. 860-424-3474.
4. **De minimis Alteration.** The permittee may not make any alterations, except de minimis alterations, to any structure, facility, or activity authorized by this permit unless the permittee applies for and receives a modification of this permit. A de minimis alteration means a change in the design, construction or operation authorized under this permit that does not increase environmental impacts or substantively alter the construction of the project as permitted.
5. **In-Water Work.** Confinement of a work area by cofferdam techniques using sand bag placement, sheet pile installation (vibratory method only), portadam, or similar confinement devices is allowed any time of the year unless specifically prohibited by a permit condition. The removal of such confinement devices is allowed any time of the year unless specifically prohibited by a permit condition. Once a work area has been confined, in-water work within the confined area is allowed any time of the year. The confinement technique used shall completely isolate and protect the confined area from

all flowing water. The use of silt boom/curtain or similar technique as a means for confinement is prohibited.

6. **Maintenance of Structures.** All structures, facilities, or activities constructed, maintained, or conducted pursuant hereto shall be consistent with the terms and conditions of this permit, and any structure, facility or activity not specifically authorized by this permit, or exempted pursuant to Section 22a-377 of the Connecticut General Statutes or Section 22a-377(b)-1 of the Regulations of Connecticut State Agencies, or otherwise exempt pursuant to other Connecticut General Statutes, shall constitute a violation hereof which may result in modification, revocation or suspension of this permit or in the institution of other legal proceedings to enforce its terms and conditions.
7. **Accuracy of Documentation.** In issuing this permit, the Commissioner has relied on information provided by the permittee. If such information was false, incomplete, or misleading, this permit may be modified, suspended or revoked and the permittee may be subject to any other remedies or penalties provided by law.
8. **Best Management Practices & Notification of Adverse Impact.** In constructing or maintaining any structure or facility or conducting any activity authorized herein, the permittee shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. Best Management Practices include, but are not limited, to practices identified in the *Connecticut Guidelines for Soil Erosion and Sediment Control* as revised, *2004 Connecticut Stormwater Quality Manual*, Department of Transportation's *ConnDOT Drainage Manual* as revised, and the Department of Transportation Standard Specifications as revised.

The permittee shall immediately inform the Commissioner of any adverse impact or hazard to the environment which occurs or is likely to occur as the direct result of the construction, maintenance, or conduct of structures, facilities, or activities authorized herein.

9. **Reporting of Violations.** The permittee shall, no later than 48 hours after the permittee learns of a violation of this permit, report same in writing to the Commissioner. Such report shall contain the following information:
 - a. the provision(s) of this permit that has been violated;
 - b. the date and time the violation(s) was first observed and by whom;
 - c. the cause of the violation(s), if known
 - d. if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;
 - e. if the violation(s) has not ceased, the anticipated date when it will be corrected;

- f. steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented;
- g. the signatures of the permittee and of the individual(s) responsible for actually preparing such report, each of whom shall certify said report in accordance with Condition 13 of this permit.

- 10. Material Storage in the Floodplain.** The storage of any materials at the site which are buoyant, hazardous, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life, below the elevation of the five-hundred (500) year flood is prohibited. Any other material or equipment stored at the site below said elevation by the permittee or the permittee's contractor must be firmly anchored, restrained or enclosed to prevent flotation. The quantity of fuel stored below such elevation for equipment used at the site shall not exceed the quantity of fuel that is expected to be used by such equipment in one day.
- 11. Permit Transfer.** This permit is not transferable without the prior written consent of the Commissioner.
- 12. Contractor Notification.** The permittee shall give a copy of this permit to the contractor(s) who will be carrying out the activities authorized herein prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The permittee's contractor(s) shall conduct all operations at the site in full compliance with this permit and, to the extent provided by law, may be held liable for any violation of the terms and conditions of this permit.
- 13. Certification of Documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this permit shall be signed by the permittee or a responsible corporate officer of the permittee, a general partner of the permittee, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:
- “I have personally examined and am familiar with the information submitted in this document and all attachments thereto and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-157b and in accordance with any other applicable statute.”
- 14.—Submission of Documents.** Any document or notice required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

~~Director, Water Planning & Management Division
Department of Energy and Environmental Protection
79 Elm Street~~

~~19.14.~~ Hartford, CT 06106 5127 DEEP.DamSafety@ct.gov.

The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit ~~, including but not limited to notice of approval or disapproval on any document or other action,~~ shall be the date such notice is ~~personally delivered or the date three days after it is mailed~~ emailed by the Commissioner. ~~;~~ whichever is earlier. Except as otherwise specified in this permit, the word "day" means any calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

20.15. Rights. This permit is subject to and does not derogate any rights or powers of the State of Connecticut, conveys no property rights or exclusive privileges, and is subject to all public and private rights and to all applicable federal, state, and local law. In constructing or maintaining any structure or facility or conducting any activity authorized herein, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this State. The issuance of this permit shall not create any presumption that this permit should be renewed.

21.16. Dam Safety Conditions.

- a. This permit and a copy of the approved plans and specifications shall be kept at the project site and made available to the Commissioner at any time during the construction of permitted activities.
- b. Permitted activities shall be performed under the supervision of an engineer who is licensed to practice in the State of Connecticut and who is familiar with dam construction. Said engineer shall, upon completion of the permitted activities, certify to the Commissioner in writing that the permitted activities have been completed according to the approved plans and specifications.
- c. Within thirty (30) days of completion of the permitted activities, permittee shall submit to the Commissioner record drawings depicting the dam construction as completed, including any deviations from the approved plans and specifications. Said drawings shall be prepared and sealed by the engineer who oversaw the construction. In addition, the permittee shall arrange for submission of an electronic copy of the final record drawings in Adobe Acrobat "pdf" format.
- d. Nothing in this chapter and no order, approval or advice of the Commissioner, shall relieve any owner or operator of this dam from his legal duties, obligations and liabilities resulting from such ownership or operation. No action for damages sustained through the partial or total failure of any structure or its maintenance

shall be brought or maintained against the state, the Commissioner of Energy and Environmental Protection, or his employees or agents.

- e. If during the process of construction, the permittee and their engineer determine that it would be appropriate to modify the design, then the permittee shall notify DEEP within 24 hours of any potential design changes. DEEP shall determine if the design modifications can be categorized as a de minimis activity when compared to the permitted design. No work shall take place which was not included as part of the permitted design until DEEP responds to this determination request.

22.17. Fisheries Conditions.

The proposed work must be done during normal Middle Lake drawdown periods and the cofferdam must be used to dewater the work area as Upper Lake should not be drawn down due to risk of fish kill.

Issued by the Commissioner of Energy and Environmental Protection on:

Date

Graham Stevens
Bureau Chief
Water Protection and Land Reuse

APPLICATION 1



TOWN OF VERNON

INLAND WETLANDS COMMISSION (IWC)

APPLICATION

This form is to be used to apply to the Vernon Inland Wetlands Commission (IWC) for approval for a redesignation of a wetlands area, a change to the Inland Wetlands and Watercourses Regulations, and/or a permit to conduct a regulated activity in a wetland, watercourse, or upland review area (URA), which are defined as areas within one hundred (100) feet from the boundary of a wetland, watercourse, or intermittent watercourse and areas within two hundred (200) feet from the boundary of Gage's Brook, Hockanum River, Ogden Brook, Railroad Brook, Tankerhoosen River, Valley Falls Pond, Walker Reservoir East, Walker Reservoir West. Any activity that the Commission determines is likely to impact or affect wetlands or watercourses may be considered a regulated activity. **Provide all the information requested.**

The Applicant must be the property owner, the property owner's agent, the Town of Vernon, or someone with a direct financial interest in the subject property. Said interest shall be explained. If the applicant is not the property owner, written permission for this Application must be obtained from the property owner and submitted by letter signed by the property owner authorizing submission of the Application.

The Applicant understands that the Application is complete only when all information and documents required by IWC have been submitted and that any approval by the IWC relies upon complete and accurate information being provided by the Applicant. Incorrect information provided by the Applicant may make the approval invalid. The IWC may require additional information to be provided by the Applicant.

I. APPLICANT (S)

Name: David Smith, P.E.

Title: Town Engineer

Company: Town of Vernon - Town Engineer's Office

Address: 14 Park Place, Vernon, Connecticut 06066

Telephone: 860-870-3690 Fax: _____

E-mail: dasmith@vernon-ct.gov

II. PROPERTY OWNERS

Name: Town Of Vernon

Title: _____

Company: Town of Vernon

Address: 14 Park Place, Vernon, Connecticut 06066

Telephone: 860-870-3690 Fax: _____

E-mail: dasmith@vernon-ct.gov

III. PROPERTY

Address: Dart Hill Road Bridge over Hockanum River, Vernon, Connecticut

Assessor ID Code: Map # 04 Block # 0004 Lot/Parcel # N/A

Land Record Reference to Deed Description: Volume: N/A Page N/A

USGA Location: Dart Hill Road Bridge over Hockanum River

Circle the Map Quadrangle Name: Manchester # 38 Rockville #39

Circle the Sub regional Drainage Basin #: 3108 4500 4502 4503

Zoning District: R-22

IV. PROJECT

Project Name: Replacement of Bridge No. 03936 Dart Hill Road over Hockanum River

Project Contact Person:

Name: Matthew Sanford

Title: Manager of Natural Resources Planning

Company: Milone and MacBroom, Inc.

Address: 99 Realty Drive, Cheshire, CT 06410

Telephone: 203-271-1773 Fax: _____

E-mail: msanford@mminc.com

V. PROJECT SUMMARY

Describe the project briefly in regard to the purpose of the project and the activities that will occur. Attach to this application a complete and detailed description with maps and documentation as required by the "**The Town of Vernon Inland Wetlands and Watercourses Regulations**".

Purpose: Replace a deteriorating bridge structure and incorporate a sidewalk to improve roadway safety and pedestrian access

General Activities: Replacement of Dart Hill Road Bridge. See attached project description for details.

Regulated Activities: _____
71 linear feet

Watercourse disturbance (linear feet): _____

Wetlands disturbance (acres or sq. ft.): 0 square feet

Upland Review Area (URA)disturbance: 32,155 square feet (0.74 acres)

Nonregulated activities & activities outside URA: _____

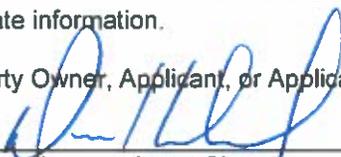
VI. APPLICATION

- Redesignation of Wetlands
- Amendment of Inland Wetlands and Watercourses Regulations
- Modification of a Wetlands Redesignation
- Wetlands Permit
 - Non-significant activity
 - Significant activity with less than 1/2 acre site disturbance
 - Significant activity with site disturbance from 1/2 acre to and including 2 acres
 - Significant activity with site disturbance greater than 2 acres
 - Commission modification of a wetland permit in effect
 - Modification of a wetland permit by ;the Wetlands Agent
- Approval of a license by the Wetlands Agent for activities in an upland
- Appeal of a decision by the Wetlands Agent
- Subdivision review per CGS Section 8-26
- Jurisdictional ruling regarding permitted and nonregulated uses
- Waiver, reduction, or delayed payment of fees (attach statement of justification)
 - Waiver
 - Reduction to \$ _____
 - Delay of payment to _____

VII. CERTIFICATION AND SIGNATURE

I, the undersigned Applicant or applicant's Agent, hereby certify that I have reviewed the "Town of Vernon Inland Wetlands and Watercourses Regulations" and have prepared this Application with complete and accurate information.

Property Owner, Applicant, or Applicant's Agent:

	David Smith	6/15/2020
Applicant or Agent Signature	Printed Name	Date
<i>Vernon Town Engineer</i>		
_____ Owner's Signature, if different	_____ Printed Name	_____ Date

TO BE FILLED IN BY THE PLANNING DEPARTMENT

DATE APPLICATION SUBMITTED _____

DATE APPLICATION RECEIVED BY COMMISSION _____

IWC FILE: _____

PROJECT DESCRIPTION

Replacement of Dart Hill Road over Hockanum River (Bridge No. 03936) | Vernon, Connecticut

June 2020

MMI #2405-19-04

Under the Connecticut Department of Transportation (CTDOT) Local Transportation Capital Improvement Program (LOTICIP), the Town of Vernon (the "Town") seeks to replace the Dart Hill Road bridge over the Hockanum River (Bridge No. 03936). Constructed in 1932, the existing bridge is comprised of a concrete slab superstructure on cast-in-place concrete abutments. A separate pedestrian bridge is supported by the northern wingwalls of the Dart Hill Road bridge, and the pedestrian bridge is comprised of steel girders and timber decking. According to the latest inspection report dated October 16, 2017, the superstructure and substructure of the Dart Hill Road bridge both received satisfactory ratings. The bridge is listed as scour critical with both abutment footings exposed up to 3 inches. The bridge geometry received a rating of "2," indicating the roadway width is substandard for the high traffic volume on Dart Hill Road (approximately 8,755 vehicles per day). Complete replacement of the Dart Hill Road bridge, inclusion of a pedestrian sidewalk along the north side of the bridge, and removal of the existing pedestrian bridge are proposed.

The proposed bridge replacement will include removal of the existing roadway and pedestrian bridges and installation of the new single structure. The bridge will include nine 40-foot-span prestressed box beams and a 6-inch-thick concrete bridge deck atop concrete abutments, three concrete wingwalls (east and west banks downstream and west bank upstream), and one concrete end block northwest of the bridge. The bridge will be widened and lengthened to accommodate a pedestrian sidewalk along the north side of the road and to improve sight lines, over which the Town has expressed concern. Improvements to Dart Hill Road and Thrall Road alignments and modification of associated driveways, sidewalks, and utilities are also proposed.

Bank protection is proposed along both banks of the Hockanum River to provide scour protection. Rounded riprap will be installed along the length of improvements on the east bank and upstream and downstream of the bridge on the west bank. Boulder toe protection will be installed below the existing tree root line on the east bank upstream of the bridge to correct existing scour. The east bank of the river will also be lowered to provide a riparian shelf and accommodate flood flows beneath the bridge. No riprap is proposed to be placed within the channel bottom. Four channel boulders will be placed downstream of the bridge to provide fish habitat. The proposed channel and bridge replacement will allow for year-round fish passage.

Best management practices, including sediment and erosion control measures and temporary dewatering, will be implemented to protect water quality and wildlife during construction, and stormwater management improvements will protect long-term water quality. Additional catch basins will be installed along Dart Hill Road to improve drainage on the site. Existing stormwater outfalls on the west bank downstream of the bridge and east bank upstream of the bridge will be replaced. Sediment and erosion control measures, including sediment filter fence, straw bales, erosion control matting, and inlet protection, will be implemented during construction.

Two types of cofferdams will be used to dewater the area during substructure removal and installation of bank protection and bridge abutments and wingwalls. Sandbag cofferdams and sheet piling cofferdams will isolate work areas from the remainder of the channel for dewatering as shown on proposed project plans. Downstream flow will be maintained within the channel throughout construction. Minor vegetation clearing is required to complete the bridge replacement.

2405-19-04-jn420-rpt-project descrip.docx



Inland Wetland Report
Replacement of Dart Hill Road Bridge
Dart Hill Road Bridge over Hockanum River
Vernon, Connecticut
June 8, 2020

Prepared for:
Town of Vernon
14 Park Place
Vernon, Connecticut 06066

MMI #2405-19-04

Prepared by:
MILONE & MACBROOM, INC.
99 Realty Drive
Cheshire, Connecticut 06410
(203) 271-1773
www.mminc.com



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1.0 INTRODUCTION

On September 11, 2019, Matthew J. Sanford, Professional Wetland Scientist (PWS) and Soil Scientist, and Alyse Oziolor, Wetland Professional in Training (WPIT), with Milone & MacBroom, Inc. (MMI), delineated inland wetlands and watercourses within the vicinity of the proposed Dart Hill Road bridge replacement project located on the Hockanum River in Vernon, Connecticut. The Dart Hill Road bridge is located in a densely settled mixed commercial and residential area of northwest Vernon, Connecticut (Appendix A, Figure 1). The project area includes the Dart Hill Road bridge over the Hockanum River and extends approximately 200 feet upstream and 100 feet downstream of the bridge. The purpose of this investigation was to determine the presence or absence of wetlands and/or watercourses, to demarcate (flag) the boundaries of wetlands and watercourses identified, and to identify on-site soil types.

2.0 METHODOLOGY

Inland wetlands and watercourses were delineated on September 11, 2019, in accordance with state and federal delineation standards. On the day of the review, weather conditions were sunny and dry, with an air temperature of approximately 75° F. The soils were frost free, and site conditions were suitable for wetland delineation work. Delineation methods followed the 1987 U.S. Army Corps of Engineers (USACE) *Wetlands Delineation Manual* (1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual for the Northcentral and Northeast Region* (2012). The classification system of the National Cooperative Soil Survey and *Field Indicators of Hydric Soils in the United States* (USDA, 2017) were used in this investigation. A second-order soil survey in accordance with the principles and practices noted in the United States Department of Agriculture (USDA) publication *Soil Survey Manual* (1993) was completed at the subject site. Soil types were identified by observation of soil morphology (soil texture, color, structure, etc.). To observe the morphology of the property's soils, hand auger borings (maximum depth of 2 feet) were completed at the site. Wetland determinations were completed based on the presence of poorly drained, very poorly drained, alluvial, or floodplain soils and submerged land (e.g., a pond). Intermittent watercourse determinations were made based on the presence of a defined permanent channel and bank and the occurrence of two or more of the following characteristics: A) evidence of scour or deposits of recent alluvium or detritus, B) the presence of standing or flowing water for a duration longer than a particular storm incident, and C) the presence of hydrophytic vegetation. Wetland boundaries were demarcated (flagged) with pink and blue surveyor's tape hung from sturdy vegetation and generally spaced a maximum of every 30 to 50 feet. Complete boundaries are located along the lines that connect these sequentially numbered flags. The wetland boundaries are subject to change until adopted by local, state, or federal regulatory agencies.

3.0 RESULTS

3.1 Soils

Geospatial data was accessed via the United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) web soil survey mapping. The soil survey mapping is appended (Appendix A). The survey identified the following soil mapping unit with associated NRCS map number in the project area:

- Saco silt loam (108)

Our field investigation indicated the presence of Saco silt loam poorly drained and alluvial floodplain soils in some areas adjacent to the channel as well as disturbed udorthent soils along other portions of the channel nearer to the roadway and residential lots. Udorthent soils are those soils that have been significantly impacted by anthropogenic activities. These soils have either been cut and/or filled by at least 2 feet and lack a natural soil profile. Drainage classes within Udorthent soils can vary from somewhat poorly drained to excessively drained soils dependent upon topographic position, soil texture, and compaction.

3.2 Wetlands and Watercourses

MMI delineated federal- and state-regulated jurisdictional wetlands and watercourses within the project area (Appendix A, Figure 2). The federal and state wetland boundaries are located adjacent to a federally regulated watercourse occupying the associated floodplain. For this site, no permits are being sought to impact federal wetlands; therefore, no Corps Wetland Determination Data Forms have been completed for this project.

Federal wetland and water resource areas on site consist of the Hockanum River and its associated floodplain wetlands. The Hockanum River, a perennial watercourse, flows southwest beneath Dart Hill Road and drains to the Connecticut River approximately 11 miles southwest of the project area. According to United States Geological Survey (USGS) *StreamStats* program, the local watershed to this portion of the Hockanum River is approximately 26.5 square miles. There is a mapped Federal Emergency Management Agency (FEMA) floodway and 100-year floodplain surrounding the Hockanum River. The Hockanum River supports a cold- and warm-water fishery resource and is classified by the Connecticut Department of Energy & Environmental Protection (CTDEEP) as a Class B watercourse. Class B watercourses are suitable for recreational use but not as a potential drinking water source.

The Hockanum River is characterized by riffle/run fluvial geomorphology in the vicinity of the project, and substrate consists of cobble, sand, and gravel. The banks of the Hockanum River are approximately 2 feet tall, well vegetated, and in generally stable condition. Some erosion was observed upstream of the bridge at the base of a stormwater outfall pipe located on the eastern bank. Downstream of the bridge, an additional stormwater outfall exists on the west bank, and old sidewalk slabs are located along the eastern bank abutting the southeast wingwall of the bridge structure. Dominant species found along the upland banks include red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), Norway maple (*Acer platanoides*), sugar maple (*Acer*

saccharum), white pine (*Pinus strobus*), American elm (*Ulmus americana*), and Black locust (*Robinia pseudoacacia*). The shrub stratum is dominated by multiflora rose (*Rosa multiflora*) and European privet (*Ligustrum vulgare*) entangled with Oriental bittersweet (*Celastrus orbiculatus*) vines. Groundcover consists of poison ivy (*Toxicodendron radicans*), common wood sorrel (*Oxalis stricta*), Japanese stiltgrass (*Microstegium vimineum*), and enchanter's nightshade (*Circaea lutetiana*).

Federal wetland areas that border the river are classified as palustrine forested wetlands. These wetland areas are hydrologically supported by groundwater, flood flows, and stormwater runoff. Federal wetlands abut the west bank of the Hockanum River approximately 160 feet upstream of Dart Hill Road. These wetlands contain a red maple and American elm canopy and a moderate shrub layer of silky dogwood (*Cornus amomum*) below. Jewelweed (*Impatiens capensis*) and skunk cabbage (*Symplocarpus foetidus*) cover the ground. Downstream of Dart Hill Road, a man-made vegetated earthen berm lines the eastern bank of the Hockanum River. A federal wetland was delineated east of this berm and has a surface water connection (i.e., channel) to the river approximately 100 feet downstream of the bridge. This wetland does not contain a shrub layer although a dense canopy includes red maple, sugar maple, black cherry (*Prunus serotina*), and Eastern hemlock (*Tsuga canadensis*) rooted at the perimeter of the wetland. Groundcover consists of jewelweed, sensitive fern (*Onoclea sensibilis*), skunk cabbage, and poison ivy. Runoff from Dart Hill Road is conveyed to this wetland via a bituminous concrete paved leakoff that slopes south and drains into the wetland.

A state wetland was delineated along the western bank of the river approximately 30 feet downstream of the bridge. This state wetland is supported by flood flows from the Hockanum River. The wetland contains large silver maple trees and has a moderate density shrub layer consisting of multiflora rose and European privet with dense groundcover of Japanese stiltgrass, jewelweed, poison ivy, enchanter's nightshade, and jack-in-the-pulpit (*Arisaema serratum*).

A Wetland Function-Value Evaluation Form from the Highway Methodology Workbook Supplement was completed for the Hockanum River riparian corridor (Appendix D). The principal functions and values of the Hockanum River riparian corridor include the following:

- Groundwater discharge
- Flood flow alteration and attenuation
- Fishery habitat (cold and warm water)
- Sediment/toxicant retention
- Wildlife habitat
- Bank stabilization
- Production export (allochthonous materials to downstream habitats)

An assessment of potential impacts to wetlands and watercourses associated with the proposed replacement of Dart Hill Road Bridge can be found in Appendix E.

2405-19-04-jn820-rpt.docx

APPENDIX A

SITE MAPS



MILONE & MACBROOM

99 Realty Drive
 Cheshire, Connecticut 06410
 (203) 271-1773
 www.mminc.com

SITE LOCATION

DART HILL ROAD BRIDGE REPLACEMENT

DART HILL ROAD AND THRALL ROAD
 VERNON, CONNECTICUT

SOURCE: 2013 TOOGRAPHIC MAP, NATIONAL GEOGRAPHIC SOCIETY

LEGEND

 Approximate Project Area

DATE: JANUARY 6, 2020

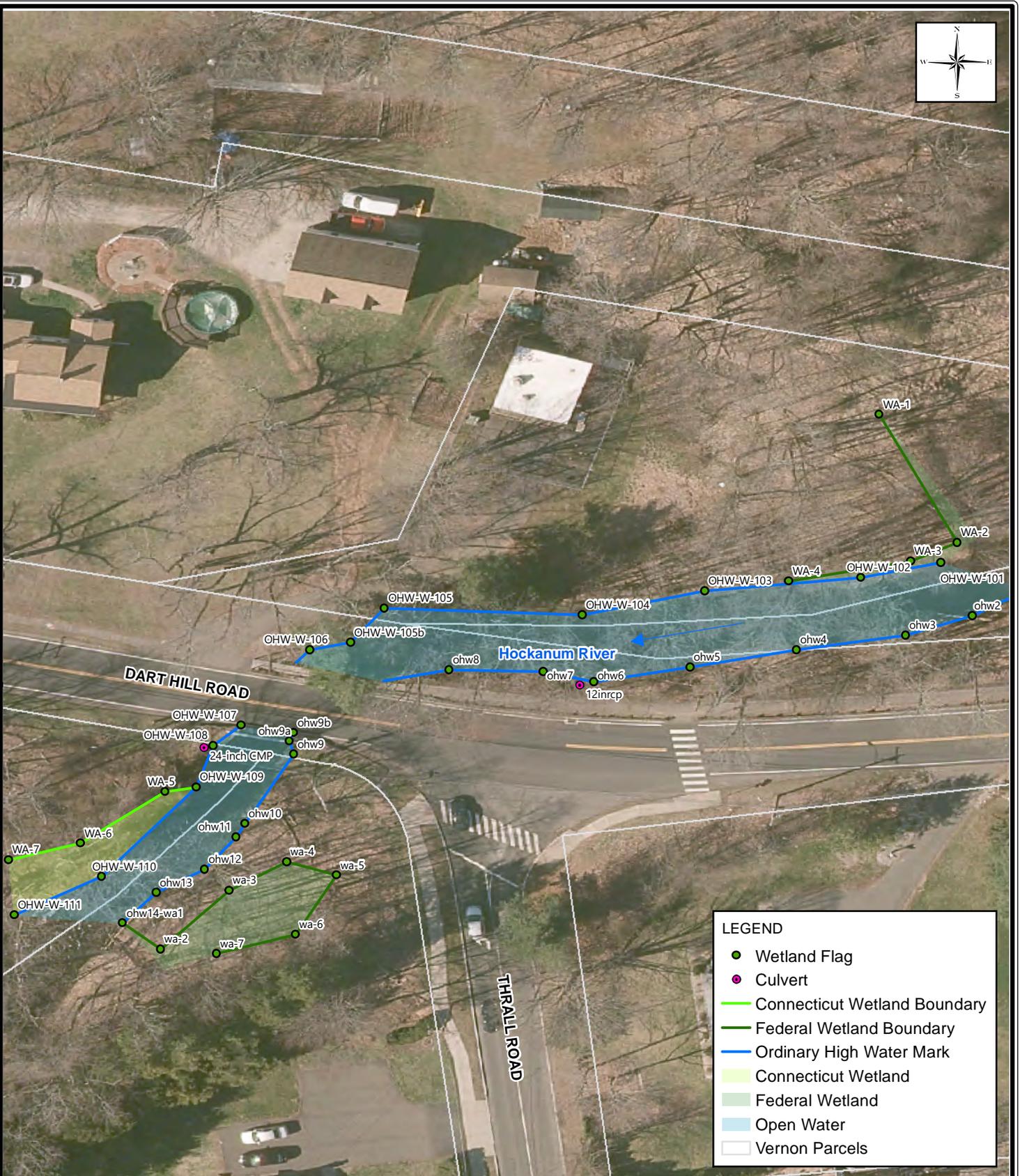
SCALE: 1" = 1,000'

PROJ. NO.: 2405-19

DESIGNED AYO	DRAWN AYO	CHECKED MJS
-----------------	--------------	----------------

DRAWING NAME:

FIG. 1



LEGEND

- Wetland Flag
- Culvert
- Connecticut Wetland Boundary
- Federal Wetland Boundary
- Ordinary High Water Mark
- Connecticut Wetland
- Federal Wetland
- Open Water
- Vernon Parcels



195 Church Street
 New Haven, Connecticut 06510
 (203) 344-7887
 www.mminc.com

WETLAND DELINEATION

DART HILL ROAD BRIDGE REPLACEMENT

DART HILL ROAD OVER HOCKANUM RIVER
 VERNON, CONNECTICUT

SOURCE: 2016 AERIAL PHOTO, CTDEEP

DATE: OCTOBER 14, 2019

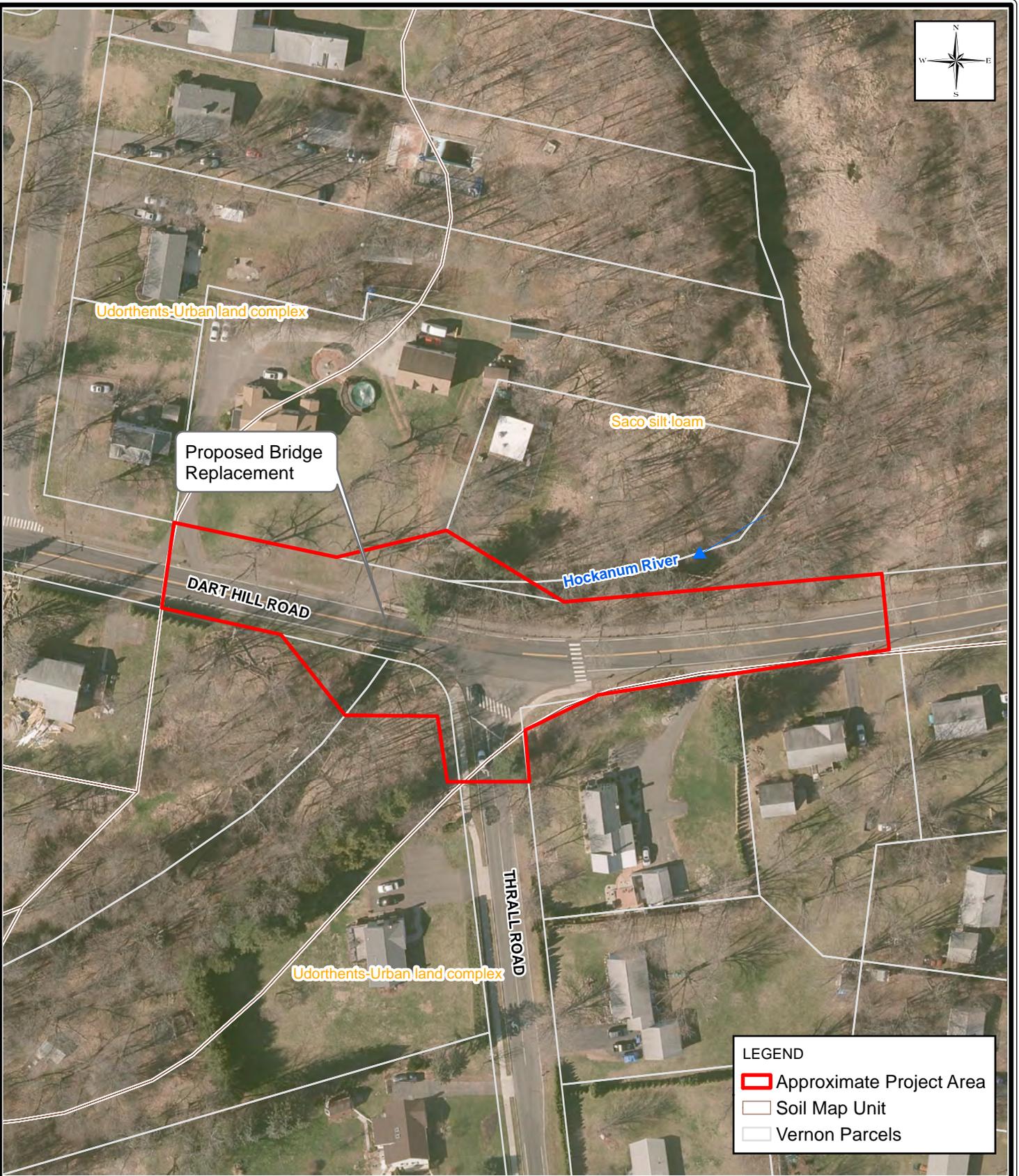
SCALE: 1" = 60'

PROJ. NO.: 2405-19

DESIGNED AYO	DRAWN AYO	CHECKED MJS
-----------------	--------------	----------------

DRAWING NAME:

FIG. 2



LEGEND

- Approximate Project Area
- Soil Map Unit
- Vernon Parcels



99 Realty Drive
 Cheshire, Connecticut 06410
 (203) 271-1773
 www.mminc.com

NRCS SOIL MAP UNITS

DART HILL ROAD BRIDGE REPLACEMENT

DART HILL ROAD AND THRALL ROAD
 VERNON, CONNECTICUT

SOURCE: 2016 AERIAL PHOTO, CTDEEP

DATE: JANUARY 6, 2020

SCALE: 1" = 100'

PROJ. NO.: 2405-19

DESIGNED AYO	DRAWN AYO	CHECKED MJS
-----------------	--------------	----------------

DRAWING NAME:

FIG. 3

APPENDIX B

CORPS WETLAND DETERMINATION DATA FORMS
(NOT INCLUDED- NO PERMIT IMPACTS ASSOCIATED WITH FEDERAL WETLANDS)

APPENDIX C

SITE PHOTOGRAPHS



Client Name:
Town of Vernon

Site Location:
Dart Hill Road Bridge over Hockanum River

Project No.
2405-19

Photo No.
1

Date:
8/05/2019

Direction Photo Taken:
Southwest

Description:
Downstream side of Dart Hill Road bridge over the Hockanum River. Concrete slabs stacked on east bank adjacent to abutment.



Photo No.
2

Date:
8/05/2019

Direction Photo Taken:
North

Description:
Upstream side of Dart Hill Road bridge over the Hockanum River.





Client Name:
Town of Vernon

Site Location:
Dart Hill Road Bridge over Hockanum River

Project No.
2405-19

Photo No.
3

Date:
9/11/2019

Direction Photo Taken:
Southwest

Description:
Hockanum River upstream
of Dart Hill Road bridge.



Photo No.
4

Date:
9/11/2019

Direction Photo Taken:
North

Description:
Hockanum River
downstream of Dart Hill
Road bridge, facing
upstream. State alluvial
floodplain wetlands visible
along west (left) bank.





Client Name:
Town of Vernon

Site Location:
Dart Hill Road Bridge over Hockanum River

Project No.
2405-19

Photo No.
5

Date:
9/11/2019

Direction Photo Taken:
South



Description:
Hockanum River downstream of Dart Hill Road bridge, facing downstream. State alluvial floodplain wetlands visible along west (right) bank.

Photo No.
6

Date:
9/11/2019

Direction Photo Taken:
South



Description:
Federal wetlands along east bank of Hockanum River, downstream of Dart Hill Road bridge. Manmade berm on the right separates this wetland from the river.

APPENDIX D

WETLAND FUNCTION-VALUE EVALUATION FORMS

Wetland Function-Value Evaluation Form

Wetland I.D. Hockanum River and state and federal wetlands
 Latitude 41.612416 N Longitude -73.11931 E
 Prepared by: AYO Date 9/11/2019
 Wetland Impact:
 Type _____ Area _____
 Evaluation based on: _____
 Office _____ Field X
 Corps manual wetland delineation completed? Y X N _____

Total area of wetland acres Human made? no Is wetland part of a wildlife corridor? yes or a "habitat island"? no
 Adjacent land use Residential Distance to nearest roadway or other development 0 ft
 Dominant wetland systems present riverine perennial unconsolidated bottom Contiguous undeveloped buffer zone present no
 Is the wetland a separate hydraulic system? no If not, where does the wetland lie in the drainage basin? mid
 How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	Y	4,5,7,11	N	No seeps or groundwater inputs observed in associated wetlands. However, Hockanum River provides groundwater discharge.
Floodflow Alteration	Y	5,6,7,8,9,10,13	Y	Wetlands are located within the Hockanum River FEMA floodplain.
Fish and Shellfish Habitat	Y	1,3,4,5,7,8,10,14,15,16,17	Y	Hockanum River provides suitable habitat for a cold and warm-water fishery. Wetlands do not provide fish or shellfish habitat.
Sediment/Toxicant Retention	Y	3,4,9,10	N	Wetlands do not provide significant sediment/toxicant retention.
Nutrient Removal	Y	3,7,14	N	Wetlands do not provide significant nutrient removal.
Production Export	Y	1,2,5,6,10	Y	Hockanum River provides perennial flow for export.
Sediment/Shoreline Stabilization	Y	1,6,9,14	Y	Trees exist along majority of banks, providing bank stabilization.
Wildlife Habitat	Y	2,6,7,8,12	Y	Hockanum River connects this wetland to other wetlands and uplands.
Recreation	N	6	N	The watercourse is surrounded by private residential properties, with the exception of the bridge.
Educational/Scientific Value	N	13	N	The watercourse is surrounded by private residential properties, with the exception of the bridge.
Uniqueness/Heritage	N	3,7,10,14,16,17,22	N	The wetland does not provide unique values.
Visual Quality/Aesthetics	N	3,11	N	The wetland does not provide significant aesthetic value.
ES Endangered Species Habitat	N		N	The wetland is located outside of NDDB mapping dating December 2019.
Other				

Notes: _____
 * Refer to backup list of numbered considerations.

APPENDIX E

IMPACT ASSESSMENT

APPENDIX E

WETLAND IMPACT ASSESSMENT

The following wetland impact assessment is based on project plans entitled "Replacement of Bridge No. 03936 Dart Hill Road over Hockanum River," prepared by Milone & MacBroom, Inc. The proposed project will replace the existing Dart Hill Road bridge with a new 40-foot clear-span bridge constructed of 24-inch-deep prestressed box beams and a 6-inch-thick concrete deck atop concrete abutments. This new bridge has been designed to provide a 1.2-times bankfull width opening and has a proposed critter crossing shelf beneath the bridge. In addition, the project includes the installation of random boulders within the Hockanum River per Connecticut Department of Energy & Environmental Protection fisheries biologist request to provide more habitat diversity for the fish community. Lastly, boulder revetments will provide bank stabilization along the east bank, and boulder toe protection will be installed on the west bank.

Alteration of on-site wetlands and watercourses has been minimized to the greatest extent practicable. The proposed project will result in 1,260 square feet of temporary disturbance within the Hockanum River and 73 square feet of permanent alteration of the Hockanum River. Best management practices, such as geotextile silt fence and cofferdams for dewatering during construction, have been incorporated into proposed project plans to protect water quality, wetland and watercourse resources, and wildlife during construction.

Based on our assessment of habitat restoration measures and the protection measures that are being implemented, it is our professional opinion that there will be no long-term significant adverse impacts to wetlands or watercourses within the project area. No significant adverse impacts to wetlands and/or watercourses are anticipated to result from the proposed project.

2405-19-04-jn820-app e.docx

REPLACEMENT OF BRIDGE NO. 03936 DART HILL ROAD OVER HOCKANUM RIVER

DART HILL ROAD
VERNON, CONNECTICUT

MMI PROJECT NO. 2405-19
STATE PROJECT NO. L146-0002
MAY 29, 2020

LIST OF DRAWINGS

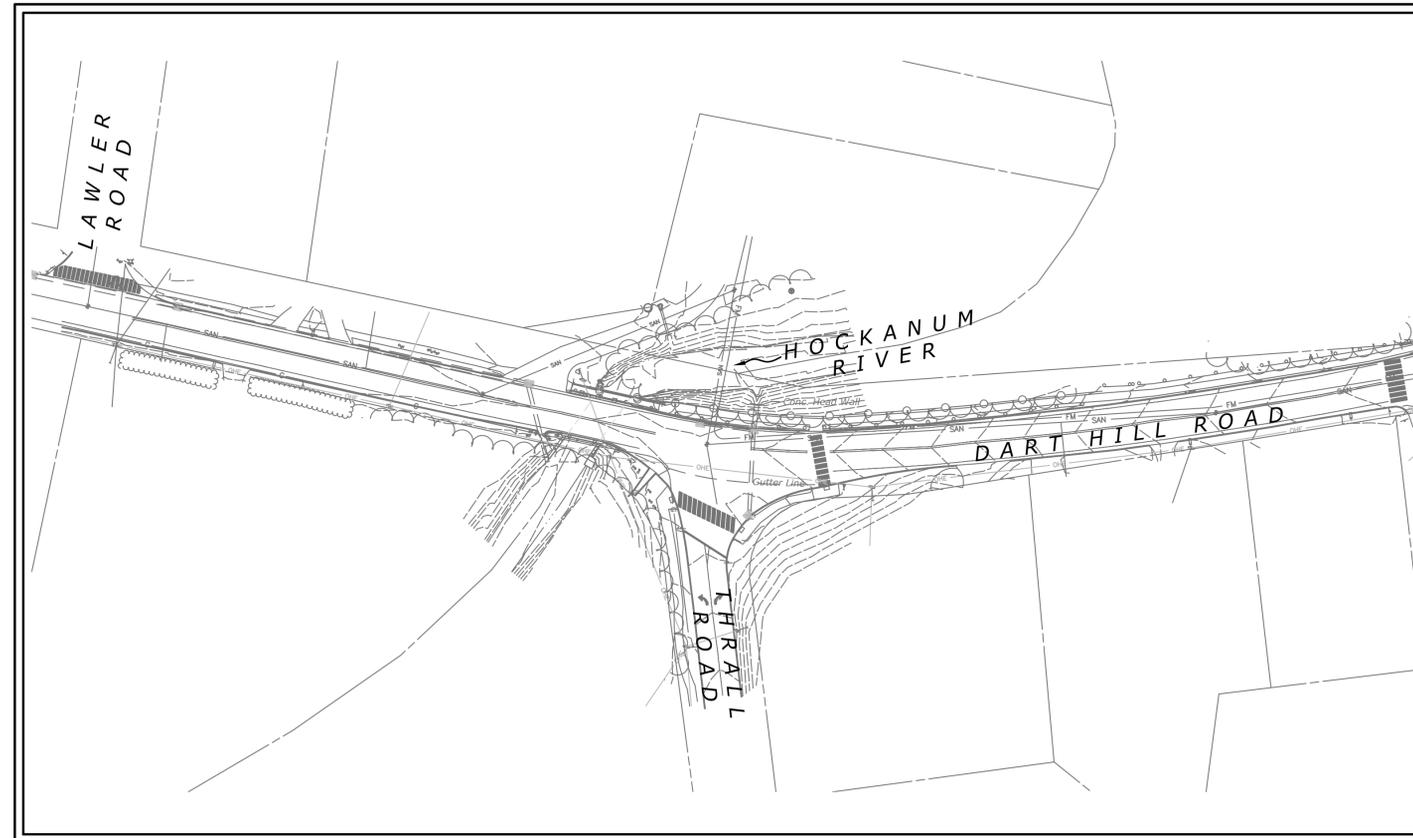
NO.	NAME	TITLE
01	TITLE	TITLE SHEET
02	N-01	NOTES, LEGEND & TYPICAL SECTION
03 - 04	EX-01 - EX-02	EXISTING CONDITIONS & PROPOSED BASELINE
05 - 06	PLN-01 - PLN-02	ROADWAY PLAN
07 - 08	PRO-01 - PRO-02	ROADWAY PROFILE
09	ROW-01	RIGHTS-OF-WAY PLAN
10	SE-01	SEDIMENT AND EROSION CONTROL PLAN
11 - 12	RES-01 - RES-02	RESTORATION PLAN
13	GRA-01	INTERSECTION GRADING PLAN
14	STR-01	BRIDGE PLAN, ELEVATION & SECTION
15	STR-02	BORING LOGS
16	STR-03	ABUTMENT NO. 1 - PLAN & ELEVATION
17	STR-04	ABUTMENT NO. 2 - PLAN & ELEVATION
18	STR-05	SUBSTRUCTURE DETAILS
19	STR-06	DECK PLAN
20	STR-07	FRAMING PLAN
21	STR-08	PRESTRESSED DECK UNITS DETAILS
22	STR-09	END BLOCK 1A, 1B, & 2B - PLAN & ELEVATION
23	STR-10	CURB WALL & END BLOCK 2A - PLAN & ELEVATION
24	STR-11	STRUCTURAL & MISCELLANEOUS DETAILS
25 - 26	STR-12 - STR-13	BRIDGE RAILING DETAILS
27	MPT-01	DETOUR PLAN
28 - 29	MPT-02 - MPT-03	CONSTRUCTION STAGING PLANS
30 - 35	XSC-01 - XSC-06	CROSS SECTIONS
36 - 40	MSD-01 - MSD-05	MISCELLANEOUS SITE DETAILS
41 - 43	TD-01 - TD-03	TRAFFIC SIGN DETAILS

CONDOT HIGHWAY STANDARD DRAWINGS

NAME	TITLE
HW_INX	HIGHWAY STANDARD SHEET INDEX (2 SHEETS)
HW-822_01	TEMPORARY PRECAST CONCRETE BARRIER CURB
HW-910_20	MASH W-BEAM HARDWARE
HW-910_21	METAL BEAM RAIL (R-B MASH) GUIDERAIL
HW-910_25	METAL BEAM RAIL TRANSITION 350 TO MASH
HW-911_01	R-B END ANCHORAGE TYPE I AND II

CONDOT TRAFFIC STANDARD DRAWINGS

NAME	TITLE
TR-STD-INDEX	TRAFFIC STANDARD SHEET INDEX
TR-1205_01	DELINEATION, DELINEATORS AND OBJECT MARKERS
TR-1208_01	SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS
TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAILS
TR-1210_04	PAVEMENT MARKING LINE AND SYMBOLS
TR-1220_01	SIGN FOR CONSTRUCTION AND PERMIT OPERATIONS
TR-1220_02	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES



PROJECT SITE VICINITY MAP:

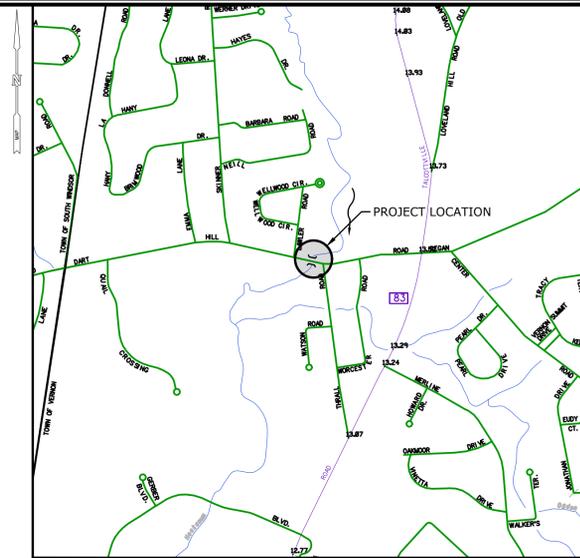


90% DESIGN SUBMISSION

PREPARED BY:



99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
WWW.MMINC.COM



LOCATION MAP:

PREPARED FOR:

TOWN OF VERNON
14 PARK PLACE
VERNON, CT 06066

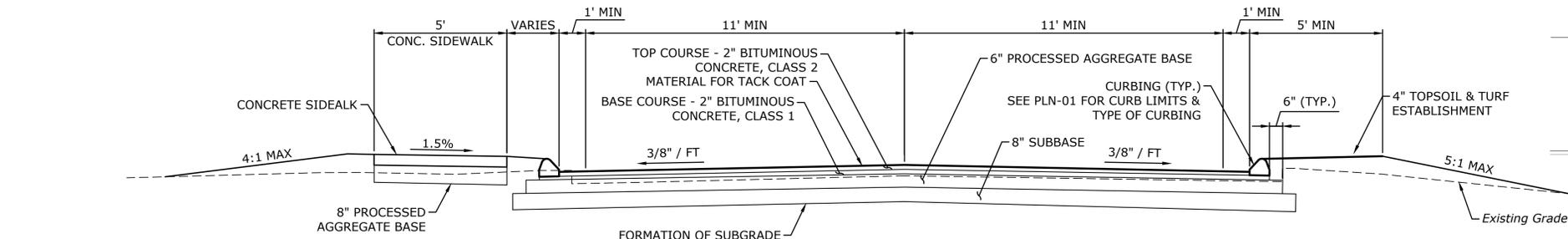


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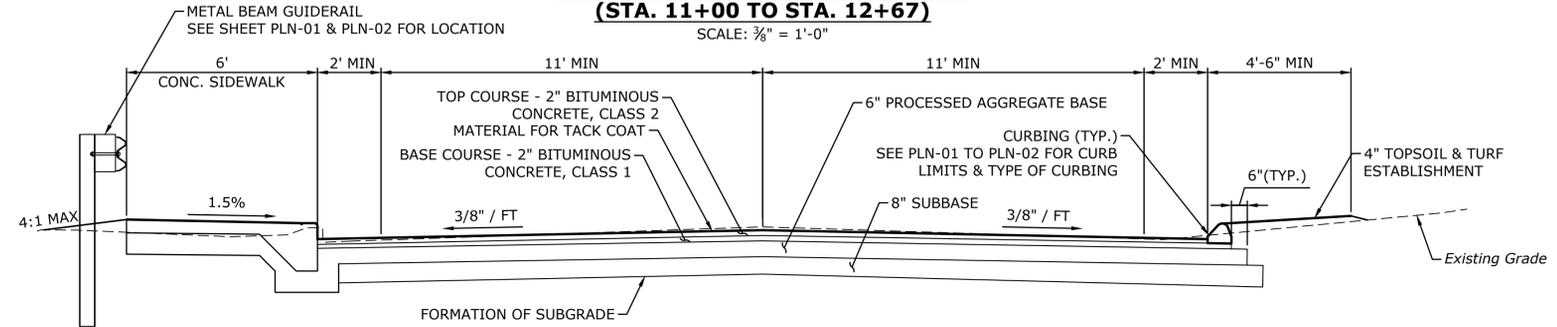
GENERAL NOTES

- MILONE AND MACBROOM INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
- THE PROPERTY LINES DEPICTED HAVE BEEN COMPILED FROM VARIOUS SOURCES INCLUDING TOWN OF VERNON LAND RECORDS AND ARE NOT TO BE CONSTRUED AS BEING OBTAINED AS THE RESULT OF A FIELD SURVEY, NOR DO THEY REPRESENT A PROPERTY/BOUNDARY OPINION.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH APPROPRIATE UTILITY COMPANIES REGARDING RELOCATION AND PROTECTION OF THEIR FACILITIES AND SCHEDULING OF SUCH WORK.
- ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES AND INCIDENTAL CONSTRUCTION, FORM 818 (2020), AND SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL BE AWARE OF THE WORK WHICH IS TO BE PERFORMED WITHIN AND ADJACENT TO PRIVATE PROPERTY RIGHT-OF-WAYS.
- SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT - REVISED 2002", AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.
- THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER AUTHORITY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODE.
- ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS.
- CONTRACTOR TO STAKE OUT WORK LIMITS AND COORDINATE SELECTIVE CLEARING WITH THE TOWN. NO SEPARATE PAYMENT.
- CONSTRUCTION EQUIPMENT SHALL BE STORED OUTSIDE OF AREAS SUBJECT TO FLOODING.

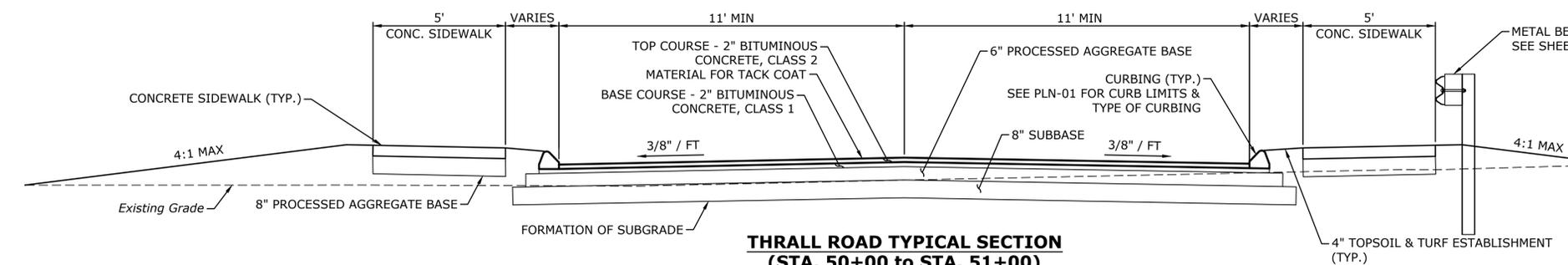
EXISTING		LEGEND		PROPOSED	
	PROPERTY LINE		STREET LINE		CONTOUR
	CONTOUR		SPOT GRADE		SPOT GRADE
	STATE WETLAND BOUNDARY		FEDERAL WETLAND BOUNDARY		FEDERAL WETLAND BOUNDARY
	WATERCOURSE LINE		ORDINARY HIGH WATER		ORDINARY HIGH WATER
	FEMA FLOODWAY		FEMA FLOODWAY & 100-YR FLOODPLAIN		FEMA FLOODWAY & 100-YR FLOODPLAIN
	FEMA 100-YEAR FLOODPLAIN		ADJUSTED 100-YEAR FLOODPLAIN		ADJUSTED 100-YEAR FLOODPLAIN
	TREE LINE		BRUSH LINE		BRUSH LINE
	TREE		WIRE FENCE		WIRE FENCE
	BARBWIRE FENCE		GUIDERAIL		GUIDERAIL
	STORM DRAIN W/ CATCH BASIN		MANHOLE		MANHOLE
	UTILITY POLE		GUY WIRE		GUY WIRE
	OVERHEAD UTILITY LINE		SIGN		SIGN
	IRON PIPE		MONUMENT		MONUMENT
	CURB		METAL BEAM GUIDERAIL		METAL BEAM GUIDERAIL
	TEMPORARY WORK EASEMENT		PERMANENT EASEMENT		PERMANENT EASEMENT
	SEDIMENT EROSION CONTROL SYSTEM		CUT LIMIT		CUT LIMIT
	FILL LIMIT		BORING		BORING



**DART HILL ROAD TYPICAL SECTION
(STA. 11+00 TO STA. 12+67)**
SCALE: 3/8" = 1'-0"



**DART HILL ROAD TYPICAL SECTION
(STA. 14+22 TO STA. 15+50)**
SCALE: 3/8" = 1'-0"



**THRALL ROAD TYPICAL SECTION
(STA. 50+00 TO STA. 51+00)**
SCALE: 3/8" = 1'-0"



DESCRIPTION	DATE	BY

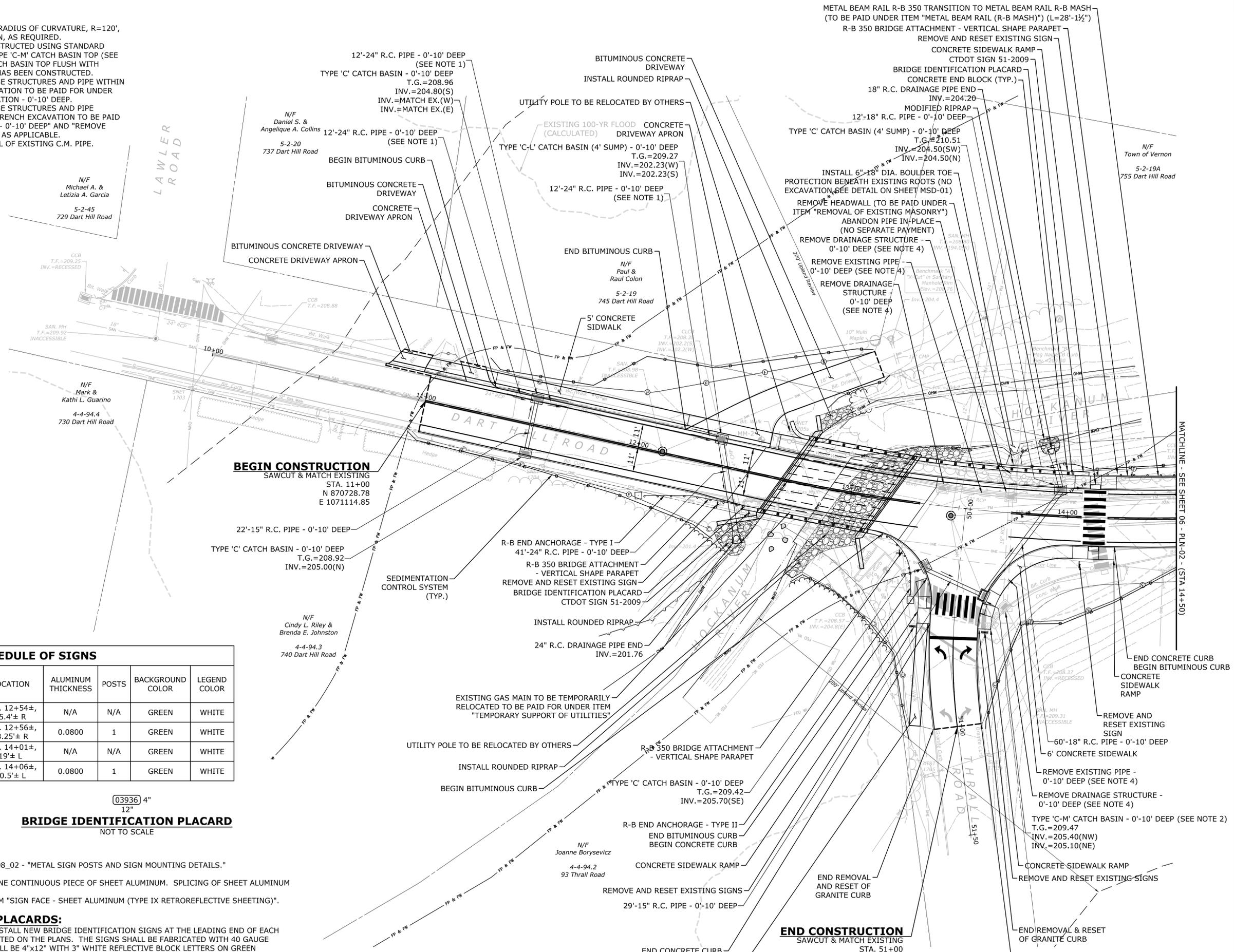
NOTES, LEGEND & TYPICAL SECTION
REPLACEMENT OF BRIDGE NO. 09336
DART HILL ROAD OVER HOCKANUM RIVER
DART HILL ROAD
VERNON, CONNECTICUT

DESIGNED	BY	DATE
KP	JMM	KP
DRAWN		CHECKED
SCALE	AS SHOWN	
DATE	MAY 29, 2020	
PROJECT NO.	2405-19	
DRAWING NO.	N-01	

02

NOTES

1. USE 4' PIPE LENGTHS AND MINIMUM RADIUS OF CURVATURE, R=120', TO RECONNECT PIPE TO CATCH BASIN, AS REQUIRED.
2. TYPE 'C-M' CATCH BASIN TO BE CONSTRUCTED USING STANDARD CATCH BASIN COMPONENTS WITH TYPE 'C-M' CATCH BASIN TOP (SEE DETAIL ON SHEET MSD-01). SET CATCH BASIN TOP FLUSH WITH SIDEWALK RAMP CURB AFTER RAMP HAS BEEN CONSTRUCTED.
3. REMOVAL OF EXISTING R.C. DRAINAGE STRUCTURES AND PIPE WITHIN LIMITS OF DRAINAGE TRENCH EXCAVATION TO BE PAID FOR UNDER "ROCK IN DRAINAGE TRENCH EXCAVATION - 0'-10' DEEP".
4. REMOVAL OF EXISTING R.C. DRAINAGE STRUCTURES AND PIPE OUTSIDE THE LIMITS OF DRAINAGE TRENCH EXCAVATION TO BE PAID FOR UNDER "REMOVE EXISTING PIPE - 0'-10' DEEP" AND "REMOVE EXISTING STRUCTURE - 0'-10' DEEP", AS APPLICABLE.
5. NO SEPARATE PAYMENT FOR REMOVAL OF EXISTING C.M. PIPE.



BEGIN CONSTRUCTION
SAWCUT & MATCH EXISTING
STA. 11+00
N 870728.78
E 1071114.85

END CONSTRUCTION
SAWCUT & MATCH EXISTING
STA. 51+00
N 870579.96
E 1071359.19

SCHEDULE OF SIGNS

CTDOT SIGN NO.	SIZE	LEGEND	LOCATION	ALUMINUM THICKNESS	POSTS	BACKGROUND COLOR	LEGEND COLOR
N/A	12"x4"	03936	STA. 12+54±, 15.4'± R	N/A	N/A	GREEN	WHITE
51-2009	18"x12"	HOCKANUM RIVER	STA. 12+56±, 18.25'± R	0.0800	1	GREEN	WHITE
N/A	12"x4"	03936	STA. 14+01±, 19'± L	N/A	N/A	GREEN	WHITE
51-2009	18"x12"	HOCKANUM RIVER	STA. 14+06±, 20.5'± L	0.0800	1	GREEN	WHITE



CTDOT SIGN NO. 51-2009
NOT TO SCALE

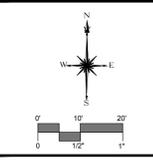
BRIDGE IDENTIFICATION PLACARD
NOT TO SCALE

SIGN NOTES:

1. POSTS - SEE STANDARD SHEET TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."
2. POSTS SHALL BE 4 LB/FT.
3. SIGNS SHALL BE FABRICATED FROM ONE CONTINUOUS PIECE OF SHEET ALUMINUM. SPLICING OF SHEET ALUMINUM WILL NOT BE ACCEPTED.
4. SIGNS SHALL BE PAID FOR UNDER ITEM "SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)".

BRIDGE IDENTIFICATION PLACARDS:

THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW BRIDGE IDENTIFICATION SIGNS AT THE LEADING END OF EACH BRIDGE END BLOCK/WINGWALL AS INDICATED ON THE PLANS. THE SIGNS SHALL BE FABRICATED WITH 40 GAUGE ALUMINUM SHEET METAL. THE SIGNS SHALL BE 4"x12" WITH 3" WHITE REFLECTIVE BLOCK LETTERS ON GREEN REFLECTIVE SHEETING. EACH SIGN SHALL READ: 03936. THE FINAL LOCATION AND ATTACHMENT METHOD FOR THE SIGN SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE BRIDGE IDENTIFICATION PLACARDS SHALL BE PAID UNDER THE ITEM #1208931 - SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING).



DATE	DESCRIPTION

ROADWAY PLAN
REPLACEMENT OF BRIDGE NO. 03936
DART HILL ROAD OVER HOCKANUM RIVER
VERNON, CONNECTICUT

DP/JDM	SEP	KP
DESIGNED	DRAWN	CHECKED
SCALE: 1"=20'		
DATE: MAY 29, 2020		
PROJECT NO.: 2405-19		
DRAWING NO.: PLN-01		
05		

SEDIMENT & EROSION CONTROL SPECIFICATIONS

GENERAL

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION, AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT.

IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INsofar AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT, INsofar AS POSSIBLE, EROSION ON THE SITE.

LAND GRADING

GENERAL

1. THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES, SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
 - a. THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
 - b. THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
 - c. THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1:4).
 - d. PROVISION SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM DRAINS TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
 - e. EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING, OR CRACKING.
 - f. NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS, WATERCOURSES, OR WATERBODIES.
 - g. PRIOR TO ANY REGRADING, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE. THE WORK SHALL BE PAID UNDER THE ITEM "ANTI-TRACKING PAD."

EROSION CHECKS

GENERAL

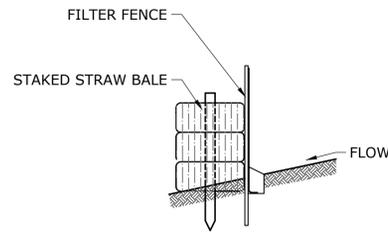
1. TEMPORARY PVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND OR GEOTEXTILE FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

CONSTRUCTION

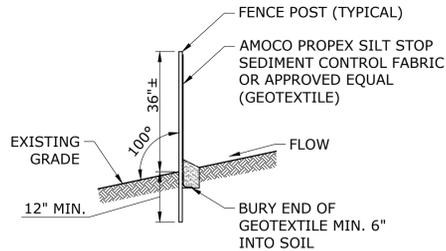
1. BALES SHOULD BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED INTO THE SOIL A MINIMUM OF FOUR INCHES (4").
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY WOOD STAKES OR REINFORCEMENT BARS DRIVEN THROUGH THE BALES AND INTO THE GROUND. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. GEOTEXTILE FABRIC SHALL BE SECURELY ANCHORED AT THE TOP OF A THREE FOOT (3') HIGH FENCE AND BURIED A MINIMUM OF FOUR INCHES (4") TO THE SOIL. SEAMS BETWEEN SECTIONS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF TWO FEET (2').

INSTALLATION AND MAINTENANCE

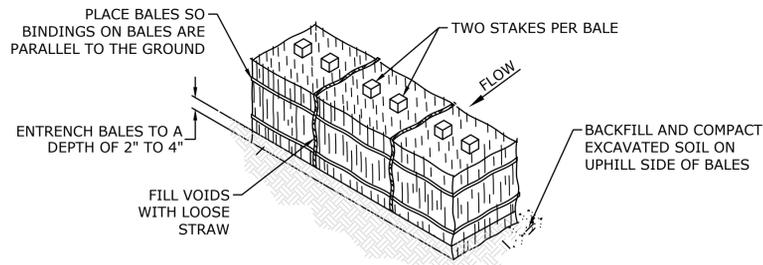
1. BALED HAY EROSION BARRIERS SHALL BE INSTALLED AT ALL STORM SEWER INLETS.
2. BALED HAY EROSION BARRIERS AND GEOTEXTILE FENCE SHALL BE INSTALLED AT THE LOCATION INDICATED ON THE PLAN AND IN ADDITIONAL AREAS AS MAY BE DEEMED APPROPRIATE DURING CONSTRUCTION.
3. ALL EROSION CHECKS SHALL BE MAINTAINED UNTIL ADJACENT AREAS ARE STABILIZED.
4. INSPECTION SHALL BE FREQUENT (AT MINIMUM MONTHLY AND BEFORE AND AFTER HEAVY RAIN) AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. EROSION CHECKS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE.



SEDIMENT FILTER FENCE AND HAY BALE
NOT TO SCALE

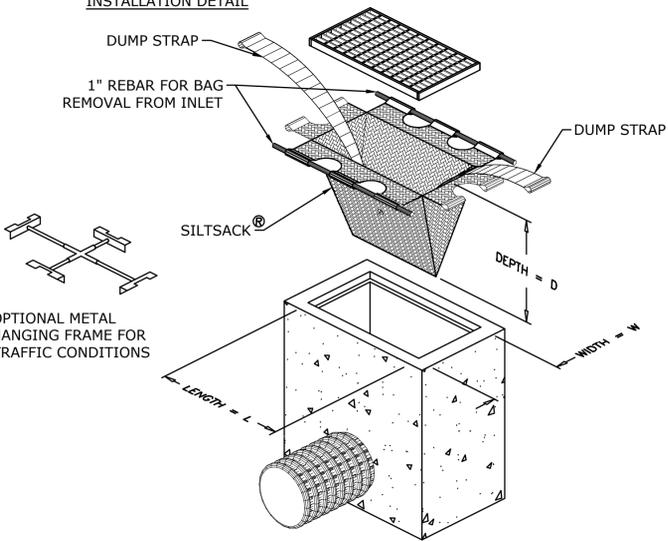
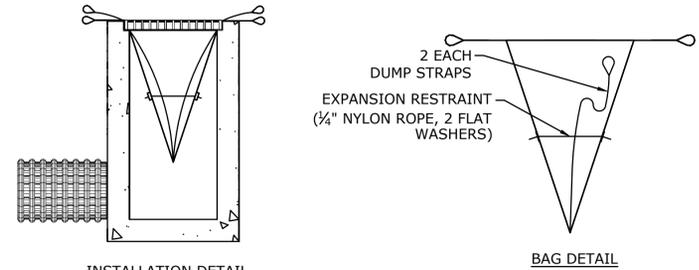


SEDIMENT FILTER FENCE
NOT TO SCALE



1. IDEALLY, BALES SHOULD BE ENTRENCHED 2 TO 4 INCHES AND TIGHTLY BUTTED TOGETHER. BALES CAN BE SUCCESSFULLY PLACED WITHOUT A TRENCH IF GOOD GROUND CONTACT IS MADE. REMOVE HEAVY BRUSH AND FILL ALL VOIDS WITH LOOSE STRAW.
2. BALES SHALL BE ONLY USED AS A TEMPORARY BARRIER AND FOR NO LONGER THAN 60 DAYS.
3. WHEN SEDIMENTATION DEPOSITS REACH WITHIN 3" OF THE TOP OF BALES, REMOVE SEDIMENTATION OR ADD ADDITIONAL BALES ON SEDIMENTATION DIRECTION BEHIND FIRST ROW OF BALES AS DIRECTED BY THE ENGINEER.
4. UPON ESTABLISHMENT OF GROUND COVER ON DISTURBED AREAS AND WHEN DIRECTED BY THE ENGINEER, HAY BALES WILL BE REMOVED AND USED AS MULCH. ANY SEDIMENTATION WILL BE THINLY SPREAD UPON ESTABLISHED GROUND COVER.

HAYBALE BARRIER PROTECTION
NOT TO SCALE



INLET PROTECTION DETAIL
NOT TO SCALE



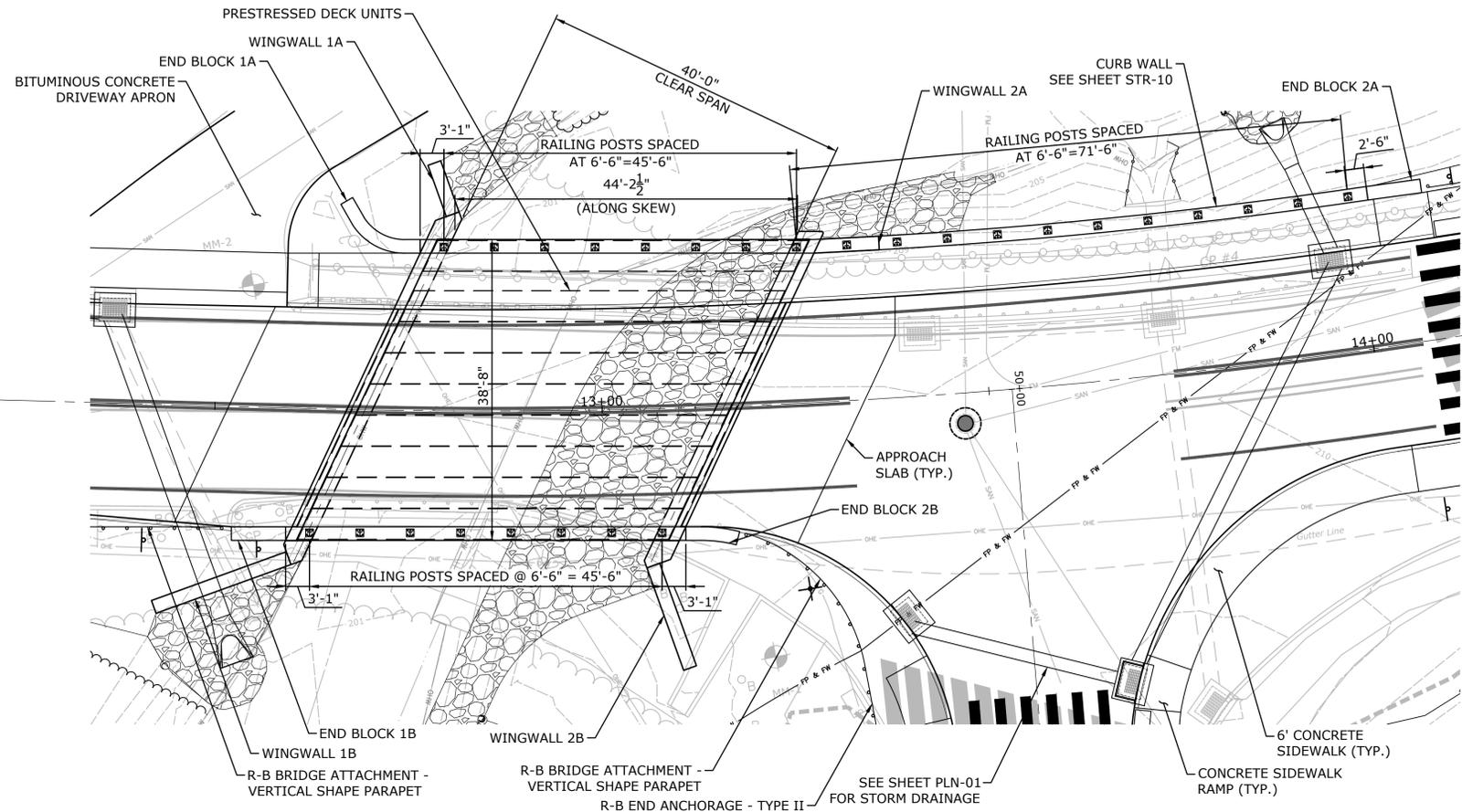
DESCRIPTION	DATE	BY

SEDIMENT AND EROSION CONTROL PLAN
REPLACEMENT OF BRIDGE NO. 09336
DART HILL ROAD OVER HOCKANUM RIVER
DART HILL ROAD
VERNON, CONNECTICUT

SEP DESIGNED	JMM DRAWN	KP CHECKED
SCALE AS SHOWN		
DATE MAY 29, 2020		
PROJECT NO. 2405-19		
DRAWING NO. SE-01		

10
SHEET NO.

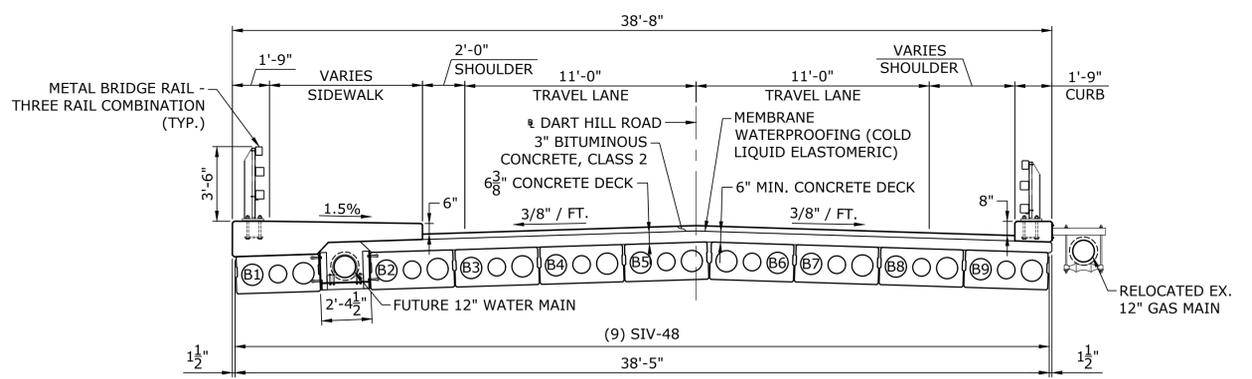
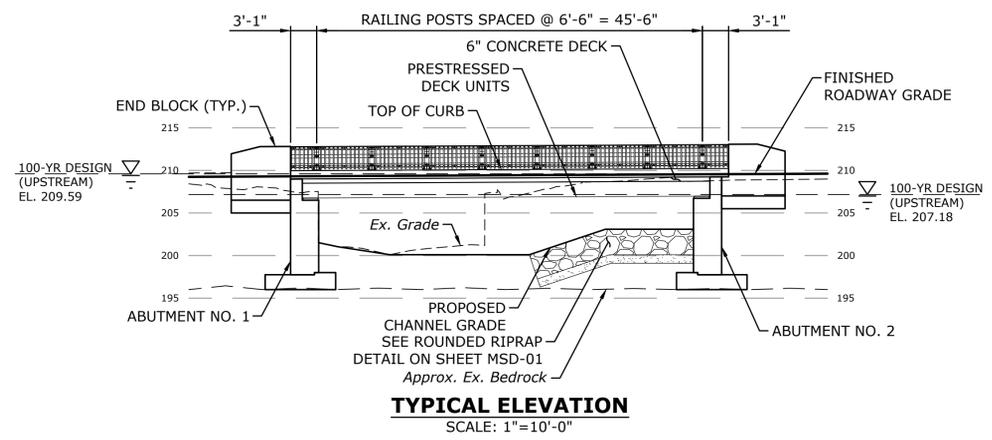
PROJECT NO. 2405-19, DATE 05/29/2020, DRAWING NO. STR-01, SHEET NO. 14
 PREPARED BY: MILONE & MACBROOM, INC.



PLAN
 SCALE: 1"=10'-0"

HYDRAULIC DATA	
DRAINAGE AREA	26.5 SQ. MI.
DESIGN FREQUENCY	100-YR
DESIGN DISCHARGE	2,100 CFS
UPSTREAM DESIGN WATER SURFACE EL.	209.59 FT
DOWNSTREAM DESIGN WATER SURFACE EL.	207.18 FT
OVERTOPPING FREQUENCY	60-YR
OVERTOPPING DISCHARGE	1,700 CFS
WORST CASE SCOUR SUB-STRUCTURE	EAST ABUTMENT
MAXIMUM SCOUR ELEVATION	188.8 FT
AVERAGE DAILY FLOW	46 CFS
AVERAGE SPRING FLOW	98 CFS

* ELEVATION WITHOUT CONSIDERATION OF PROPOSED ARMORING OR THE PRESENCE OF COMPETENT BEDROCK



TYPICAL PRESTRESSED BOX BEAMS SECTION
 SCALE 1/4"=1'-0"

GENERAL NOTES

- SPECIFICATIONS:** CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 818 (2020), AND SPECIAL PROVISIONS.
- DESIGN SPECIFICATIONS:** AASHTO LRFD DESIGN SPECIFICATIONS, 8TH EDITION, 2017, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003) WITH INTERIM REVISIONS UP TO AND INCLUDING 2019.
- MATERIAL STRENGTHS:**
 CONCRETE:
 CLASS PCC 03340 $f_c = 3,000$ PSI
 CLASS PCC 04460 $f_c = 4,000$ PSI
 CLASS PCC 04462 $f_c = 4,000$ PSI

 THE CONCRETE STRENGTH, (f_c), USED IN OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 6.01 - CONCRETE FOR STRUCTURES AND M.03 - PORTLAND CEMENT CONCRETE.

 REINFORCEMENT:
 ASTM A615 GRADE 60 $f_y = 60,000$ PSI
- LIVE LOAD:** HL-93, LEGAL, AND PERMIT VEHICLES
- FUTURE PAVING ALLOWANCE:** NONE
- BITUMINOUS CONCRETE OVERLAY:** THIS SHALL CONSIST OF 3" OF BITUMINOUS CONCRETE, CLASS 2.
- EXISTING DIMENSIONS:** DIMENSIONS AND ELEVATIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISH WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

CONCRETE NOTES

- REMAIN-IN-PLACE FORMS:** THE USE OF REMAIN-IN-PLACE FORMS ON THIS STRUCTURE IS NOT ALLOWED.
- THE FOLLOWING PAY ITEMS AND CONCRETE CLASSES ARE REQUIRED FOR CAST-IN-PLACE BRIDGE COMPONENTS:

ITEM	BRIDGE COMPONENTS	PCC CLASS
FOOTING CONCRETE	ABUTMENT FOOTINGS, WINGWALL FOOTINGS, END BLOCK FOOTINGS	PCC03340
ABUTMENT AND WALL CONCRETE	ABUTMENT STEMS, WINGWALL STEMS	PCC03340
APPROACH SLAB CONCRETE	APPROACH SLABS	PCC04460
BARRIER WALL CONCRETE	END BLOCK STEMS	PCC04462
BRIDGE DECK CONCRETE	BRIDGE DECK, BRIDGE CURB, AND CURB WALL	PCC04462
BRIDGE SIDEWALK CONCRETE	BRIDGE SIDEWALKS	PCC04462

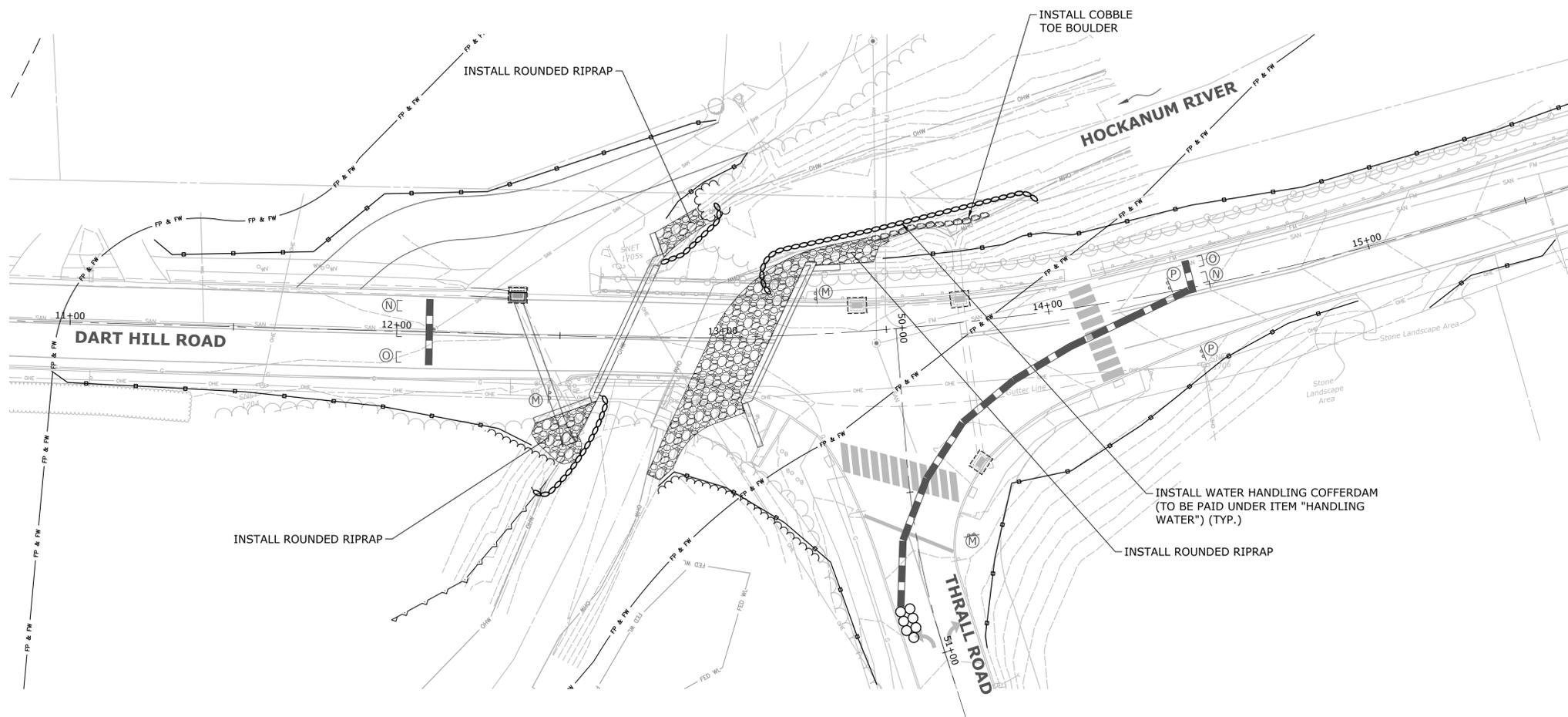
- EXPOSED EDGES:** EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1"x1" UNLESS DIMENSIONED OTHERWISE.
- CONCRETE COVER:** ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.
- REINFORCEMENT:** ALL REINFORCEMENT SHALL BE GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE. ALL REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS - GALVANIZED."
- PREFORMED EXPANSION JOINT FILLER:** THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE ITEM "1/2" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES."
- CONSTRUCTION JOINTS:** CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.



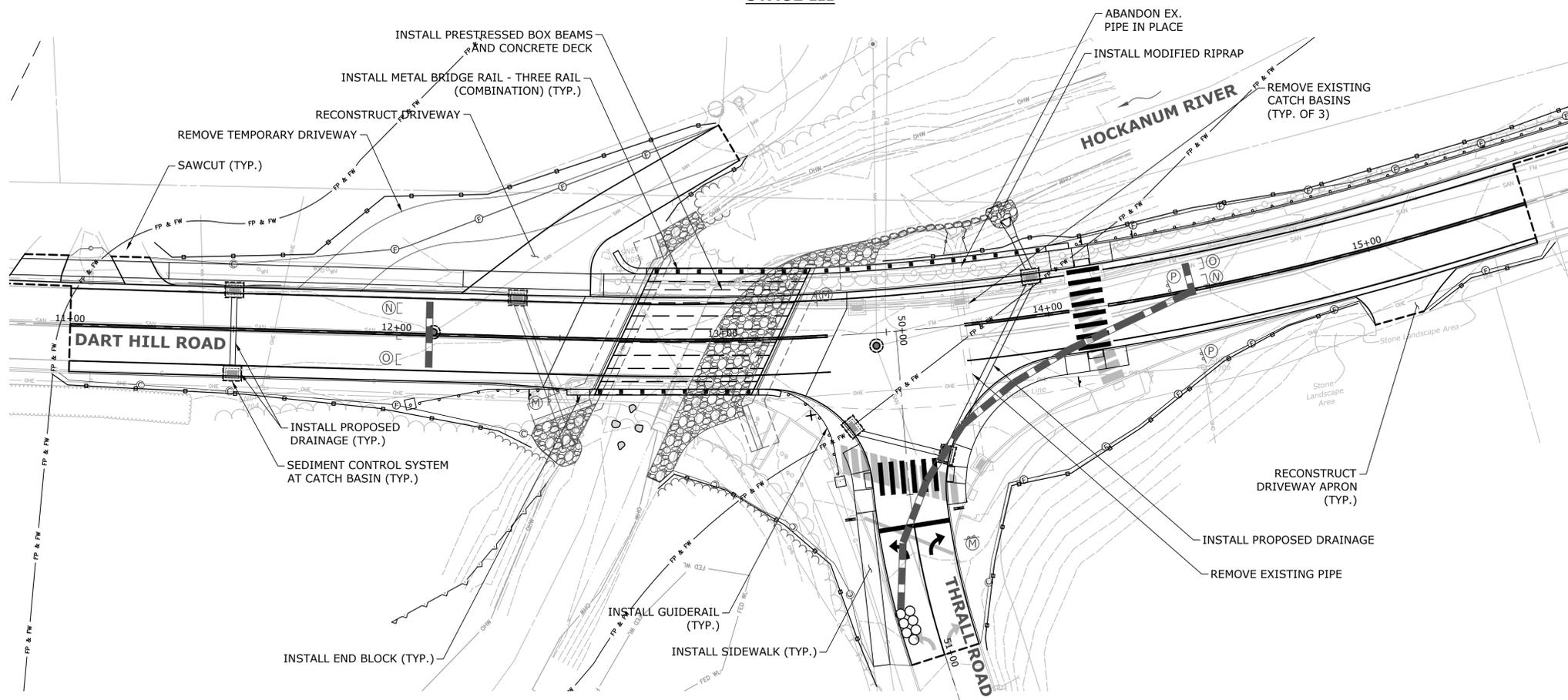
DESCRIPTION	DATE	BY

BRIDGE PLAN, ELEVATION & SECTION
 REPLACEMENT OF BRIDGE NO. 09396
 DART HILL ROAD OVER HOCKANUM RIVER
 DART HILL ROAD
 VERNON, CONNECTICUT

DESIGNED	DRAWN	CHECKED
KP	NP	KP
SCALE: 1"=10'		
DATE: MAY 29, 2020		
PROJECT NO.: 2405-19		
DRAWING NO.: STR-01		



STAGE III



STAGE IV

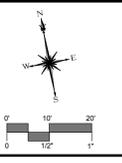
CONSTRUCTION SEQUENCE

STAGE III

1. INSTALL WATER HANDLING COFFERDAMS AS SHOWN.
2. INSTALL ROUNDED RIPRAP AS SHOWN AT WESTERN WINGWALLS AND WINGWALL 2A. PLACE ADDITIONAL RIPRAP ALONG FACE OF EASTERN ABUTMENT AND WINGWALL 2B AS NEEDED.
3. INSTALL BOULDER TOE PROTECTION ALONG THE NORTHERN ROADWAY EMBANKMENT.
4. REMOVE WATER HANDLING COFFERDAMS.

STAGE IV

1. INSTALL PRESTRESSED CONCRETE DECK UNITS, APPROACH SLABS, AND CONCRETE DECK.
2. INSTALL END BLOCKS 1A, 1,B AND 2B.
3. RECONSTRUCT ROADWAY APPROACHES AND COMPLETE DRAINAGE INSTALLATION.
4. CONSTRUCT SIDEWALK THICKENED SLAB, RECONSTRUCT SIDEWALK WITHIN PROJECT LIMITS.
5. RECONSTRUCT DRIVEWAYS AND DRIVEWAY APRONS WITHIN PROJECT LIMITS AS SHOWN.
6. INSTALL BRIDGE RAIL AND APPROACH GUIDERAIL.
7. FINALIZE GRADING, TURF ESTABLISHMENT & ROADWAY IMPROVEMENTS.
8. REMOVE SEDIMENT AND EROSION CONTROLS.
9. REMOVE DETOUR SIGNAGE AND REOPEN DART HILL ROAD TO TRAFFIC.



DESCRIPTION	DATE	BY

CONSTRUCTION STAGING PLANS
 REPLACEMENT OF BRIDGE NO. 09336
 DART HILL ROAD OVER HOCKANUM RIVER
 DART HILL ROAD
 VERNON, CONNECTICUT

NP DESIGNED	NP DRAWN	SEP CHECKED
SCALE 1"=20'		
DATE MAY 29, 2020		
PROJECT NO. 2405-19		
DRAWING NO. MPT-04		

STATEWIDE INLAND WETLANDS & WATERCOURSES ACTIVITY REPORTING FORM

Pursuant to section 22a-39(m) of the General Statutes of Connecticut and section 22a-39-14 of the Regulations of Connecticut State Agencies, inland wetlands agencies must complete the Statewide Inland Wetlands & Watercourses Activity Reporting Form for **each** action taken by such agency.

This form may be made part of a municipality's inland wetlands application package. If the municipality chooses to do this, it is recommended that a copy of the Town and Quadrangle Index of Connecticut and a copy of the municipality's subregional drainage basin map be included in the package.

Please remember, the inland wetlands agency is responsible for ensuring that the information provided is **accurate** and that it reflects the **final** action of the agency. Incomplete or incomprehensible forms will be mailed back to the agency. Instructions for completing the form are located on the following pages.

The inland wetlands agency shall mail completed forms for actions taken during a calendar month no later than the 15th day of the following month to the Department of Energy and Environmental Protection (DEEP). Do **not** mail this cover page or the instruction pages. Please mail **only** the **completed** reporting form to:

DEEP Land & Water Resources Division
Inland Wetlands Management Program
79 Elm Street, 3rd Floor
Hartford, CT 06106

Questions may be directed to the DEEP's Inland Wetlands Management Program at (860) 424-3019.

INSTRUCTIONS FOR COMPLETING THE STATEWIDE INLAND WETLANDS & WATERCOURSES ACTIVITY REPORTING FORM

Use a separate form to report EACH action taken by the Agency. Complete this electronic fill-in form as described below. If completing by hand please print and use the pdf version at www.ct.gov/deep/inlandwetlands (click the "status & trends" tab). Do NOT submit a reporting form for withdrawn actions.

PART I: Must Be Completed By The Inland Wetlands Agency

1. Choose the year and month the Inland Wetlands Agency took the action being reported. If multiple actions were taken regarding the same project or activity then multiple forms need to be completed.
2. Choose ONE code letter to describe the final action or decision taken by the Inland Wetlands Agency. Do NOT submit a reporting form for withdrawn actions. Do NOT enter multiple code letters (e.g.: if an enforcement notice was given and subsequent permit issued - two forms for the two separate actions are to be completed).
 - A** = A Permit Granted by the Inland Wetlands Agency (not including map amendments, see code D below)
 - B** = Any Permit Denied by the Inland Wetlands Agency
 - C** = A Permit Renewed or Amended by the Inland Wetlands Agency
 - D** = A Map Amendment to the Official Town Wetlands Map - or -
An Approved/Permitted Wetland or Watercourse Boundary Amendment to a Project Site Map
 - E** = An Enforcement Action: Permit Revocation, Citation, Notice of Violation, Order, Court Injunction, or Court Fines
 - F** = A Jurisdictional Ruling by the Inland Wetlands Agency (i.e.: activities "permitted as of right" or activities considered non-regulated)
 - G** = An Agent Approval pursuant to CGS 22a-42a(c)(2)
 - H** = An Appeal of Agent Approval Pursuant to 22a-42a(c)(2)
3. Check "yes" if a public hearing was held in regards to the action taken; otherwise check "no".
4. Enter the name of the Inland Wetlands Agency official verifying that the information provided on this form is accurate and that it reflects the FINAL action of the agency.

PART II: To Be Completed By The Inland Wetlands Agency Or The Applicant - If Part II is completed by the applicant, the applicant MUST return the form to the Inland Wetlands Agency. The Inland Wetlands Agency MUST ensure that the information provided is accurate and that it reflects the FINAL action of the Agency.

5. Enter the name of the municipality for which the Inland Wetlands Agency has jurisdiction and in which the action/project/activity is occurring.

Check "yes" if the action/project/activity crosses municipal boundaries and enter the name(s) of the other municipality(ies) where indicated. Check "no" if it does not cross municipal boundaries.
6. Enter the USGS Quad Map name or number (1 through 115) as found on the CT Town and Quadrangle Index Map that contains the location of the action/project/activity. USGS Quad Map information is available at: http://ct.gov/deep/lib/deep/gis/resources/Index_NamedQuadTown.pdf

ALSO enter the four-digit identification number of the corresponding Subregional Drainage Basin in which the action/project/activity is located. If located in more than one subregional drainage basin, enter the number of the basin in which the majority of the action/project/activity is located. Town subregional drainage basin maps available at UConn CLEAR's website: http://clear.uconn.edu/data/map_set/index.htm (no roads depicted) or at CTECO: http://www.cteco.uconn.edu/map_catalog.asp (depicts roads, choose town and a natural drainage basin map).
7. Enter the name of the individual applying for, petitioning, or receiving the action.
8. Enter the name and address or location of the action/project/activity. Check if the action/project/activity is TEMPORARY or PERMANENT in nature. Also provide a brief description of the action/project/activity. It is always best to provide as much information as possible (i.e., don't just state "forestry", provide details such as "20 acre forestry harvest, permit required for stream crossing".)

9. Carefully review the list below and enter ONLY ONE code letter which best characterizes the action/project/activity. All state agency projects must code "N."

- | | |
|--|--|
| A = Residential Improvement by Homeowner | I = Storm Water / Flood Control |
| B = New Residential Development for Single Family Units | J = Erosion / Sedimentation Control |
| C = New Residential Development for Multi-Family / Condos | K = Recreation / Boating / Navigation |
| D = Commercial / Industrial Uses | L = Routine Maintenance |
| E = Municipal Project | M = Map Amendment |
| F = Utility Company Project | N = State Agency Project |
| G = Agriculture, Forestry or Conservation | P = Other (this code includes the approval of |
| H = Wetland Restoration, Enhancement, Creation | concept plans with no-on-the-ground work) |

10. Enter between one and four code numbers to best characterize the project or activity being reported. Enter "NA" if this form is being completed for the action of map amendment. You MUST provide code 12 if the activity is located in an established upland review area. You MUST provide code 14 if the activity is located beyond the established upland review area or no established upland review area exists.

- | | |
|--|---|
| 1 = Filling | 8 = Underground Utilities Only (no other activities) |
| 2 = Excavation | 9 = Roadway / Driveway Construction |
| 3 = Land Clearing / Grubbing (no other activity) | 10 = Drainage Improvements |
| 4 = Stream Channelization | 11 = Pond, Lake Dredging / Dam Construction |
| 5 = Stream Stabilization (includes lakeshore stabilization) | 12 = Activity in an Established Upland Review Area |
| 6 = Stream Clearance (removal of debris only) | 14 = Activity in Upland |
| 7 = Culverting (not for roadways) | |

Examples: Jurisdictional ruling allowing construction of a parking lot in an upland where the municipality does not have an established upland review area must use code 14, other possible codes are 2 and 10. Permitted construction of a free standing garage (residential improvement by homeowner) partially in an established upland review area with the remainder in the upland must use code 12 and 14, other possible codes are 1 and 2.

11. Leave blank for TEMPORARY alterations but please indicate action/project/activity is temporary under question #8 on the form. For PERMANENT alterations, enter in acres the area of wetland soils or watercourses altered. Include areas that are permanently altered, or are proposed to be, for all agency permits, denials, amendments, renewals, jurisdictional rulings, and enforcement actions. For those activities that involve filling or dredging of lakes, ponds or similar open water bodies enter the acres filled or dredged under "open water body". For those activities that involve directly altering a linear reach of a brook, river, lakeshore or similar linear watercourse, enter the total linear feet altered under "stream". Remember that these figures represent only the acreage altered not the total acreage of wetlands or watercourses on the site. You MUST provide all information in ACRES (or linear feet as indicated) including those areas less than one acre. To convert from square feet to acres, divide square feet by the number 43,560. If this report is being completed for an agency jurisdictional ruling and detailed information is not available, provide an estimate. Enter zero if there is no alteration.
12. Enter in acres the area of upland altered as a result of an ACTIVITY REGULATED BY the inland wetlands agency, or as a result of an AGENT APPROVAL pursuant to CGS section 22a-42a(c)(2). Leave blank for TEMPORARY alterations but please indicate action/project/activity is temporary under question #8 on the form. Include areas that are permanently altered, or proposed to be permanently altered, for all agent approvals, agency permits, denials, amendments, renewals, jurisdictional rulings, and enforcement actions. You MUST provide all information in ACRES including those areas less than one acre. See directions above (#11) for conversion factor. If this report is being completed for an agent approval or an agency jurisdictional ruling and detailed information is not available, provide an estimate. Enter zero if there is no alteration.
13. Enter the acres that are, or are proposed to be, restored, enhanced or created for all agency permits, denials, amendments, renewals, jurisdictional rulings and enforcement actions. NOTE restored or enhanced applies to previously existing wetlands or watercourses. Created applies to a non-wetland or non-watercourse area which is converted into wetlands or watercourses (question #10 must provide 12 and/or 14 as an answer, and question #12 must also be answered). You MUST provide all information in ACRES including those areas less than one acre. See directions above (#11) for conversion factor. Enter zero if there is no restoration, enhancement or creation.

PART III: To Be Completed By The DEEP - Please leave this area blank. Incomplete or incomprehensible forms will be mailed back to the municipal inland wetlands agency.



Statewide Inland Wetlands & Watercourses Activity Reporting Form

*Please complete and mail this form in accordance with the instructions on pages 2 and 3 to:
DEEP Land & Water Resources Division, Inland Wetlands Management Program, 79 Elm Street, 3rd Floor, Hartford, CT 06106
Incomplete or incomprehensible forms will be mailed back to the municipal inland wetlands agency.*

PART I: Must Be Completed By The Inland Wetlands Agency

- DATE ACTION WAS TAKEN: year: Click Here for Year month: Click Here for Month
- CHOOSE ACTION TAKEN (see instructions for codes): Click Here to Choose a Code
- WAS A PUBLIC HEARING HELD (check one)? yes no
- NAME OF AGENCY OFFICIAL VERIFYING AND COMPLETING THIS FORM:
(type name) _____ (signature) _____

PART II: To Be Completed By The Inland Wetlands Agency Or The Applicant

- TOWN IN WHICH THE ACTION IS OCCURRING (type name): Vernon
does this project cross municipal boundaries (check one)? yes no
if yes, list the other town(s) in which the action is occurring (type name(s)): _____, _____
- LOCATION (click on hyperlinks for information): USGS quad map name: Rockville or quad number: 39
subregional drainage basin number: 4500
- NAME OF APPLICANT, VIOLATOR OR PETITIONER (type name): Town of Vernon
- NAME & ADDRESS / LOCATION OF PROJECT SITE (type information): Dart Hill Road Bridge over Hockanum River
briefly describe the action/project/activity (check and type information): temporary permanent description: _____
Replacement of Dart Hill Road Bridge
- ACTIVITY PURPOSE CODE (see instructions for codes): E
- ACTIVITY TYPE CODE(S) (see instructions for codes): 1, 9, 12, NA
- WETLAND / WATERCOURSE AREA ALTERED (type acres or linear feet as indicated):
wetlands: 0.00 acres open water body: 0.00 acres stream: 71.00 linear feet
- UPLAND AREA ALTERED (type acres as indicated): 0.74 acres
- AREA OF WETLANDS / WATERCOURSES RESTORED, ENHANCED OR CREATED (type acres as indicated): 0.00 acres

DATE RECEIVED:

PART III: To Be Completed By The DEEP

DATE RETURNED TO DEEP:

FORM COMPLETED: YES NO

FORM CORRECTED / COMPLETED: YES NO

**TOWN OF VERNON IWC APPLICATION
ABUTTING PROPERTY OWNERS
REPLACEMENT OF DART HILL ROAD OVER HOCKANUM RIVER (BRIDGE NO. 03936)
APPLICANT: TOWN OF VERNON**

Block Casey Reilly & Dulepski Cassandra L

740 Dart Hill Road

Vernon, CT 06066

Borysevicz Francis

93 Thrall Road

Vernon, CT 06066

Colon Paul Jr & Raul

745 Dart Hill Road

Vernon, CT 06066

Livermore Diane E

760 Dart Hill Road

Vernon, CT 06066-2301

Town of Vernon

14 Park Place

Vernon, CT 06066-3291