This plan, while very detailed, includes an abundance of information that is not necessarily applicable to this project, making it difficult to ascertain what the actual plan is for EPSC. Please update and revise plan with site-specific information, removing excess information that isn't relevant to this project.
(For guidance, refer to Contractor's checklist: https://outside.vermont.gov/agency/vtrans/external/docs/construction/02ConstrServ/EPSCPlanContractorChecklist.pdf)

DOCUMENT: 160201A

-

Erosion Prevention & Sediment Control Plan

-

For The Project:

Bridge Replacement Route TH 14 Class III Bridge No. 26
Stamford, VT
VTrans STP 1441(29)

-

for

<u>Northern Construction Service, LLC</u>

by

TAW ASSOCIATES

March 17, 2016

TABLE OF CONTENTS

TABLE OF CONTENTS ***2***

LOCUS PLAN: ***3***

PHOTOS: ***3***

HYDROLOGY DATA: ***4***

EXISTING BRIDGE INFORMATION: ***5***

EROSION PREVENTION AND SEDIMENT CONTROL NARRATIVE ***6***

Project Description **6**

Site Inventory **6**

Risk Evaluation **6**

Erosion Prevention and Sediment Control **6**

Sequence and Staging **7**

Construction Sequence: 7

The overall project work: 7

The intended general construction sequence: 8

Off-Site Activities: 11

EPSC Plan Updates: 11

Contact Information/Responsible Parties **12**

Responsibilities: **12**

Schedule **13**

Inspection Form **13**

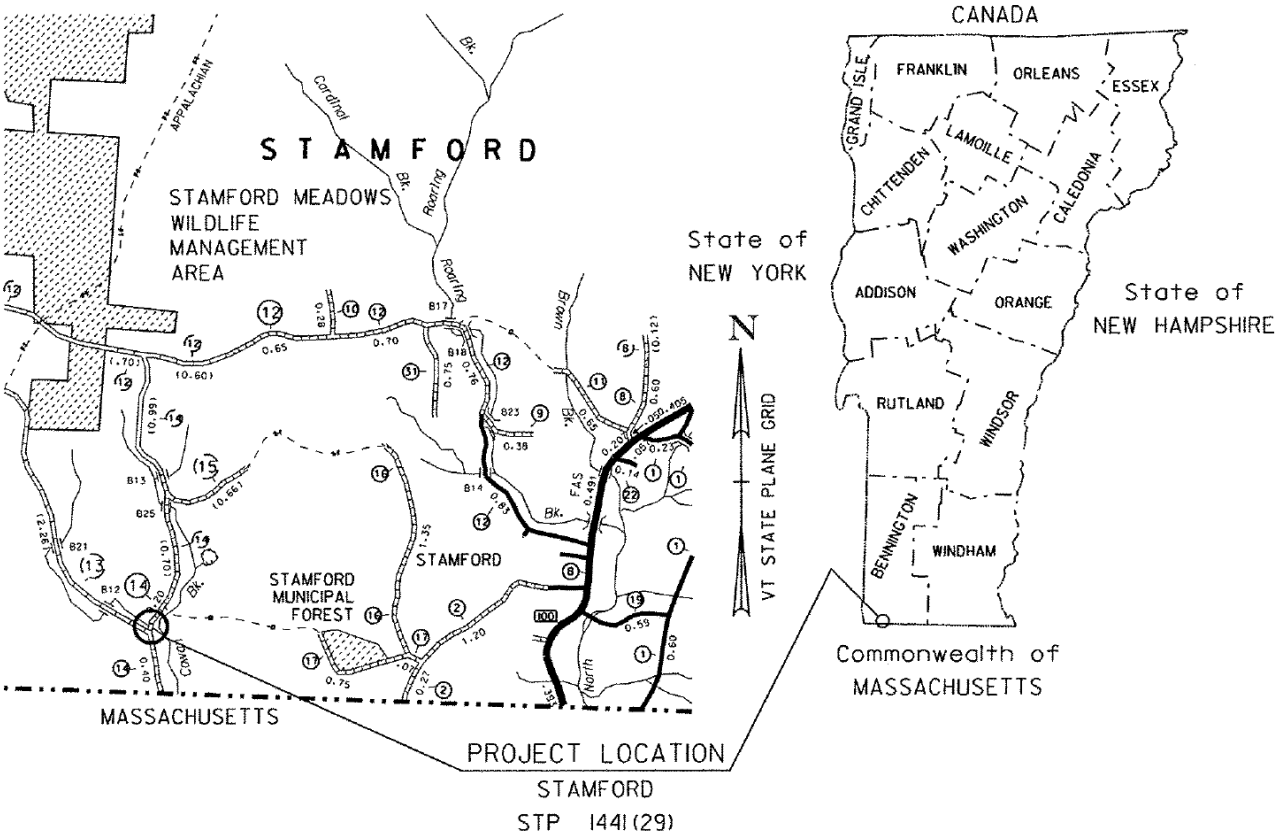
EROSION PREVENTION AND SEDIMENT CONTROL PLAN ***14***

EPSC Plans: **14**

EPSC Plan Inspection Report: **15**

EPSC Plan Revision Form: **17**

LOCUS PLAN:



PHOTOS:

HYDROLOGY DATA:

HYDROLOGIC DATA

Date: March 2014

DRAINAGE AREA : 1.6 sq. mi.
CHARACTER OF TERRAIN : Steep, mountainous, mostly forested
STREAM CHARACTERISTICS : Sinuous, alluvial
NATURE OF STREAMBED : Sand, gravel, cobbles

PEAK FLOW DATA

Q 2.33 =	100 cfs	Q 50 =	340 cfs
Q 10 =	225 cfs	Q 100 =	390 cfs
Q 25 =	290 cfs	Q 500 =	550 cfs

DATE OF FLOOD OF RECORD : Unknown
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown
NATURAL STREAM VELOCITY : @ Q25 = 7.9 fps
ICE CONDITIONS : Moderate
DEBRIS: Moderate
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? Yes
IS ORDINARY RISE RAPID? Yes
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
IF YES, DESCRIBE:

WATERSHED STORAGE: <1%

HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING BRIDGE INFORMATION:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Laid-up stone box
YEAR BUILT: Unknown
CLEAR SPAN(NORMAL TO STREAM): ~4.7'
VERTICAL CLEARANCE ABOVE STREAMBED: ~7.5'
WATERWAY OF FULL OPENING: 36.5 sq. ft.
DISPOSITION OF STRUCTURE: Remove and replace
TYPE OF MATERIAL UNDER SUBSTRUCTURE: See boring logs

WATER SURFACE ELEVATIONS AT:

Q2.33 =	1781.5'	VELOCITY =	11.6 fps
Q10 =	1786.4'	"	13.0 fps
Q25 =	1787.9	"	14.1 fps
Q50 =	1790.1'	"	15.0 fps
Q100 =	1791.2'	"	15.6 fps

LONG TERM STREAMBED CHANGES: None noted

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: N/A
RELIEF ELEVATION: 1794.1'
DISCHARGE OVER ROAD @Q100: N/A

PERMIT INFORMATION

		DEPTH OR ELEVATION:
AVERAGE DAILY FLOW:	3 cfs	
ORDINARY LOW WATER:	2 cfs	~0.5'
ORDINARY HIGH WATER:	45 cfs	~2.0'

EROSION PREVENTION AND SEDIMENT CONTROL NARRATIVE

Project Description

See Sheet 37 of the Contract Plans for information related to the project description prepared by the Vermont Agency of Transportation (VAOT) for this project.

Site Inventory

See Sheet 37 of the Contract Plans for information related to the site inventory, such as drainage characteristics, vegetation, soils, and sensitive areas, prepared by VAOT for this project.

Risk Evaluation

See Sheet 37 of the Contract Plans for information related to the risk evaluation prepared by VAOT for this project. The project is not expected to disturb one or more acres of area and does not require coverage under Vermont Agency of Natural Resources (VANR) Construction General Permit No. 3-9020; therefore, a Risk Evaluation is not required. In the event that changes are made prior to or during construction that result in the disturbance of one or more acres, the contractor shall be responsible for additional permitting with VANR.

Erosion Prevention and Sediment Control

See Sheets 37 through 42 of the Contract Plans for information related to general erosion prevention and sediment controls and typical details prepared by VAOT for this project. Refer to the VANR "Low Risk Site Handbook for Erosion Prevention and Sediment Control," dated August 2006, which is considered part of this EPSC Plan.

The following Section provides a detailed construction sequence that identifies the type of work activity to be performed, the specific earth disturbances to be addressed, and specific erosion control measures (relating to the typical measures discussed on Sheets 37 through 42 of the Contract Plans) that will be implemented during each respective stage of work to prevent erosion, control sediment transport, and achieve timely stabilization of disturbed areas.

See also EPSC plans that include detailed site-specific information provided by the contractor to supplement the general EPSC Plan information provided in the Contract Plans and documents and address construction activities and related erosion and sediment controls to be implemented during construction.

See "Cofferdam Plan" submitted by the Contractor providing details on the proposed cofferdam stream diversion design, and equipment and materials to be used for dewatering and treating flows from the area contained by the cofferdam.

Has this been submitted yet? Dewatering locations should be shown on the EPSC plan.

The EPSC plans were based on this submittal, and should be updated in the event that any changes are made to this approach.

Sequence and Staging

Construction Sequence:

It is anticipated that the construction activities at the site location, as depicted on the Site Location Map, will not be phased as the work area will be closed to traffic.

The work related to this project involves removal of the existing structure, riprap, stone fill, and roadway pavement. In order to provide a semi-dry working condition, sandbag dam and pipe by-pass system will be installed in the stream to create a contained flow through the work area which will be dewatered to a treatment area on the upland. Work will be sequenced in two stages; removal of the existing structure, and construction of the new bridge. Work will be performed from the approaches.

The overall project work:

1. Mobilization to the site, setup field office, and other facilities
2. Establish construction limits
3. Close the bridge to traffic
4. Establish perimeter erosion controls
5. Tree clearing, as needed
6. Install stream by-pass system
7. Remove existing bridge
8. Install cofferdams
9. Install cofferdam dewatering sump and pump system
10. Install dewatering treatment measures
11. Complete Contract Bridge substructure work
12. Complete stream channel excavation
13. Complete stone fill and riprap
14. Complete Contract Bridge superstructure work
15. Restoration of stream channel and banks
16. Removal of dewatering measures and stream by-pass system
17. Final stabilization, general site restoration and demobilization

Note: clearing (of >3" dia trees) needs to be done before Apr 15

Note: 529.15 Removal of Structure, requires preventing debris falling into water; if concrete saw-cutting is used, appropriate containment of concrete dust/slurry will be needed

As work progresses, the area of disturbance to places where construction activities are underway will be limited and stabilize them as quickly as possible. The construction activities will be sequenced according to the construction sequencing provided below to minimize the duration and area of exposed soils within the limits of disturbance and to allow for efficient completion of work. Some variation in the sequence of construction activities and erosion control measures may eventually be necessary at each work site, depending on the specific site conditions and progress of work. In this case, the EPSC Plans and narrative will be updated by the contractor as necessary to document these changes for the project site and specific activities.

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The intended general construction sequence:

1. Pre-Construction Meeting: Conduct a pre-construction meeting, which should include the contractor, VAOT resident engineer, and construction environmental engineer, and any other parties deemed necessary.
2. Clearing Limits: Flag all clearing limits with survey tape where tree or vegetation removal will be necessary.

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3. Wetland Limits: Flag all wetland areas, including top of stream bank, with survey tape within project limits.

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4. Limits of Construction: Install project demarcation fencing to delineate the limits of construction, which the contractor will access with vehicles or equipment, or disturb during completion of all required work. ~~This shall include clearly delineating jurisdictional wetland areas that are permitted for disturbance or to remain undisturbed.~~ Project demarcation fencing will generally be installed along the top of slopes above areas of excavation or to cordon off areas and to prevent access during unsafe working conditions.

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5. Traffic Controls: Install all necessary traffic controls per the contract plans and VAOT requirements.
6. Stabilized Construction Entrances: Grade and install stabilized construction entrances as shown on EPSC Plans.
7. Perimeter Controls: Install silt fence perimeter controls at limit of disturbance. This will include, at a minimum, a line of silt fence down-gradient of temporary access roads to work areas and staging areas, as shown on the EPSC Plans, since significant grading and surface disturbances are possible during access road and staging area setup and usage. Silt fence will also be installed along the top of the river banks, and as necessary, at the top of slopes above areas of excavation, at the toe of graded slopes, limits of work, or other areas to control erosion and prevent sediment from impacting adjacent undisturbed areas and surface waters. Silt fence will be installed parallel with the existing contours and where appropriate to protect downstream undisturbed areas.

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8. Tree Clearing: Clear all trees and significant vegetation, in accordance with the project clearing limits or as directed by resident engineer, within previously flagged or fenced construction limits and simultaneously install temporary stabilization measures, including temporary seed and mulch, wood chips, and/or crushed stone on disturbed areas. All disturbed slopes steeper than 3:1 will be protected with temporary erosion matting, where necessary.

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9. Temporary Construction Access Roads and Staging Areas: Temporary construction access roads and staging areas are anticipated. Clear and grub these areas, if necessary and as required by the resident engineer, prior to grading and placement of any stone fill or crushed stone leveling courses for temporary access road or staging areas. All necessary temporary stabilization, erosion controls, and surface runoff measures shall be installed simultaneously with clearing and grading activities to prevent erosion on disturbed areas, contain sediment, and convey stormwater through the disturbed areas, especially in any areas of concentrated drainage, such as existing catch basin outlets. This may include, in addition to perimeter controls already installed, diversion and stone-lined swales, stone check dams, temporary erosion matting on slopes, water bars, and temporary mulch. Where difficult or unsuitable soil conditions (wet, soft, etc.) are encountered within access roads or staging areas, temporary surface stabilization may

require an application of crushed stone placed on geotextile fabric, as directed by the resident engineer. Stone fill or existing stone materials from areas to be excavated may be utilized for creating level staging pads adjacent to the pier work areas, if approved by the resident engineer. Where temporary access roads have to be benched into the existing slopes, stormwater runoff from up-gradient areas may concentrate along the perimeter silt fence at the toe of slope, and a temporary diversion ditch may be necessary along this silt fence to convey drainage to a discharge point into the existing stream channel. Stone check dams and/or stone lining shall be installed along the silt fence as necessary to control flow velocity, contain sediment, and limit turbidity at the discharge point. Temporary erosion matting shall be installed on all cut and fill slopes steeper than 3:1 within 48 hours of slope grading and prior to any rain events. Water bars may be installed along the surface of the access road at 50-foot as necessary to control runoff. All related erosion controls shall be in place prior to utilizing access roads. Where additional staging areas are located outside immediate work areas, such as on level terrain within the right-of-way (ROW), within lane closures, or on off-site areas, additional surface water, or erosion controls are required as the specific field conditions dictate. Earth stockpiles shall be temporarily stabilized with seed and mulch if the duration of exposure is expected to be greater than 14 days. Silt fence shall be placed on the down-gradient side only if necessary to contain stockpiled materials and prevent sediment from being washed into the existing ditches, stream, or onto undisturbed areas. The contractor may utilize temporary lane closures along roads adjacent to the work areas for equipment or material delivery, such as concrete trucks, if approved by the resident engineer.

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10. Water Control System: Set up the water control system prior to any disturbances to the streambed or banks. This will include a stream by-pass system and a dewatering sump and primary pump system, a back-up pump system (as needed), and dewatering treatment measures, as detailed on the EPSC plans and separate "Water Control Plan" submittal. The sream by-pass system shall be installed directly in the undisturbed streambed and tied into the river banks at each end to prevent stream flow into the work areas. The dewatering sump is intended to limit the amount of sediment and turbid water conveyed from the dewatered areas to the dewatering treatment area, and prevent the discharge of sediment and turbidity to the downstream surface waters. It is critical that the contractor maintain the sump and pump system constantly to ensure that the suction intake is flowing clear, not clogged, and functioning as intended. The discharge hose extending to the dewatering treatment area should be adequately supported as necessary to prevent shifting or separation at the pipe joints, or any unexpected discharge outside of the contained areas. The dewatering treatment areas will consist of, at a minimum, a filter bag fitted to the end of the pump discharge hose, to remove sediment and turbidity prior to discharge back into the river. The locations of the dewatering areas may need to be adjusted in the field to ensure that discharge will flow away from the active work areas. Dewatering treatment measures shall be adequately sized to handle potential flow volumes expected from dewatering activities, and may require additional treatment measures if sediment and turbidity is not adequately removed. Additional erosion, sediment and turbidity control measures may be necessary to control the flow velocity, remove excess sediment not contained by the filter bag, and limit turbidity from being discharged into adjacent surface waters. Additional measures may include, a stone check dam, stone and fabric check dam, stone lining installed along the down-gradient silt fence, erosion control matting or a dewatering treatment basin (hay bale or stone berm lined with fabric) as necessary to contain sediment and turbidity at the discharge point.

The goal of the stream by-pass and dewatering systems is to provide a contained area within the stream channel to create a semi-dry working area during the work. During most stream flow conditions, these primary systems will be adequate to handle this flow. However, the contractor should provide a backup pump with discharge hose for immediate use in the event that the primary pump system fails, stream flows increase or are anticipated to exceed the capacity of the current pump system. Throughout the duration of dewatering, the contractor shall verify the weather forecast and anticipate stream flow conditions that could impact the integrity and functionality of the cofferdam and dewatering system. By-pass and dewatering measures shall remain in place and operational during the entire duration of the substructure and streambed work, until such time as this work is complete, disturbed streambed and banks below the ordinary high water line are fully restored and stabilized, and all potential sources of sediment or contamination have been eliminated. Once this condition is achieved, the by-pass and dewatering systems can be removed and stream flow will be allowed to continue through the work areas.

11. Stream Channel Excavation: Prior to any necessary excavation within the stream channel, stream by-pass and dewatering measures shall be in place and operating to limit water within the work area. Excavated soil and stone materials shall be stockpiled in the construction staging areas for re-use or disposal shall only be place in areas contained by adequate perimeter erosion and sediment controls.
12. Restoration of Water Control System Areas: The disturbed portion of streambed and banks will be re-established to finished grades in accordance with the contract plans. Water control measures shall remain in place and operating to limit water within the work area until finished grades have been achieved and all disturbed areas are stabilized. All disturbed surfaces in the stream and on banks below the ordinary high water line shall be stabilized, per the contract plans or as directed by the resident engineer, with stone fill, permanent seed and mulch, or erosion matting, where required for slopes steeper than 3:1 or where erosion, washout or scouring may be a concern. Once this condition is achieved, the water control system can be removed and stream flow will be allowed to continue through the work areas.

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13. Remove Temporary Access Roads and Staging Areas: Remove all temporary construction access roads, staging areas, and dewatering measures.
14. Final Stabilization: Install landscaping and final stabilization within 48 hours of final grading activities for all disturbed areas including topsoiling, permanent seeding, mulching, sodding (if deemed necessary), mulch netting, erosion matting, and stone fill.
15. Site Cleanup: Remove stabilized construction entrance and stabilize with permanent seed, mulch, and erosion matting as necessary. Remove all temporary erosion and sediment control measures, and perimeter controls once final stabilization has been achieved for all disturbed areas. Remove traffic controls and reestablish normal traffic patterns once work has been deemed complete, or as directly by the resident engineer.
16. On-going Maintenance: The contractor shall continuously inspect and maintain all erosion and sediment control measures. Additional inspections shall be required by the on-site Plan Coordinator and/or EPSC Plan Monitor on a weekly basis and after every rain event in which runoff is discharged from the site. Remove trapped sediment from erosion and sediment control measures as appropriate.
17. Site Completion: Upon completion of each site location, all disturbed areas must be stabilized.

If construction activities or design modifications are made to the site plan which could impact stormwater or the measures shown on the enclosed EPSC Plans, this EPSC Plan and this narrative will be amended appropriately, and include a description of the new activities, the impact on stormwater pollutant loading, and the planned erosion control measures to be implemented.

Off-Site Activities:

ivity required for side of tract limits, within W

All work related to this project is anticipated to be within the bounds of the VAOT ROW with the exception of temporary access roads, staging areas, portions of the water control measures, and minor perimeter controls where there is inadequate room for the necessary construction activities. It is the contractor's ~~and/or VAOT~~ responsibility to secure authorization for access on adjacent properties as necessary to allow work to be undertaken outside of the ROW.

The project will generate a limited amount of vegetation from tree clearing activities and typical construction related debris. Any debris that requires removal from the project site will be disposed of by the contractor in accordance with any applicable laws and regulations. All excavated soil materials (such as topsoil, soil, boulders, rock, etc.) will remain on-site and shall be utilized in final grading and stabilization of disturbed areas. It is anticipated that the contractor will need to import limited volumes of stone fill to establish finished grades within the work areas.

See note above.

The contractor does not intend to utilize off-site areas for construction activities at this time. If this becomes necessary during the course of work, the contractor will file the necessary exemption forms for these areas. Consequently, no erosion controls are anticipated for any off-site activities related to this project.

approval or

EPSC Plan Updates:

The EPSC Plan is a document that must be amended to reflect changes occurring at the site. Additions of new Best Management Practices (BMPs), replacement of failed BMPs, significant changes in the activities or their timing on the project, changes in personnel, changes in inspection and maintenance procedures, and updates to the site plans shall be reflected in this EPSC Plan. Document all revisions to the EPSC Plan on the revision form provided at the end of this Document.

Contact Information/Responsible Parties

rlson
048)

oisin,
CEE
02-498-5787
ax #)

VAOT PROJECT CONTACT	*PHONE/FAX/MOBILE*	*ADDRESS*
Ronald Lemaire, Resident Engineer VAOT Construction	Phone: (802) 828-2593 Fax: (802) 828-2795 Mobile: (802) 793-8163	One National Life Drive Montpelier, Vermont 05633-5001
Jennifer Fitch, Project Manager VAOT Structures	Phone: (802) 828-2593 Fax: (802) 828-2795	One National Life Drive Montpelier, Vermont 05633-5001
Andrea Wright, Construction Environmental Engineer VAOT Construction	Phone: (802) 828-3507 Fax: (802) 828-2795 Mobile: (802) 488-0392	One National Life Drive Montpelier, Vermont 05633-5001
CONTRACTOR & EPSC CONTACT		
John Eric Rahkonen, Project Manager Northern Construction Service, LLC	Phone: (413) 289-1230 x17 Fax: (413) 284-0170 Mobile: (413) 636-8411	1516 Park Street Palmer, Massachusetts 01069
ON-SITE PLAN COORDINATOR & EMERGENCY 24-HOUR CONTACT		
Mike Pelow, Superintendent Northern Construction Service, LLC	Phone: (413) 289-1230 Fax: (413) 284-0170 Mobile: (413) 335-2407	1516 Park Street Palmer, Massachusetts 01069
EPSC PLAN PREPARER &		
Terry A. Waite, P.E. TAW Associates	Phone: (603) 236-4247 Fax: n/a Mobile: (603) 236-4247	12 Sylvan Lane PO Box 256 Waterville Valley, NH 03215

Responsibilities:

The on-site Plan Coordinator shall be responsible for the following duties:

- Compliance with the approved EPSC Plan and other applicable documents.
- Implementin g the EPSC Plan and committing resources to implement the BMPs.
- Training of all staff and subcontractors as necessary to make them aware of the BMPs, control measures, and good-housekeeping procedures that must be implemented on the project site.
- Installing structural stormwater controls.
- Supervising and implementing good hous ekeeping programs, such as site cleanup and disposal of trash and debris, hazardous material management and disposal, and vehicle and equipment maintenance.
- Daily monitoring of the site conditions, erosion and stor mwater controls, and BMPs in accordance with the contract documents, VAOT Standard Specifications, and approved EPSC Plan requirements.
- Conducting routine inspections of the site to ensure all B MPs are being implemented and maintained, and follow-up reporting using the Inspecti on form provided in Appendix C
- Maintaining the BMPs.

- Documenting changes to the EPSC Plan using the form provided in Appendix D.
- Communicating changes in the EPSC Plan to people working on the site.
- Subcontractor compliance with the EPSC Plan.

The EPSC Plan Monitor shall be responsible for the following duties:

- Conducting periodic (as needed) monitoring of the site conditions, erosion and stormwater controls, and BMPs in accordance with the approved EPSC Plan requirements, and follow-up reporting using the Inspection form provided in Appendix C.
- Recommendations relating to E PSC Plan and BMPs.

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Schedule

The specific schedule for construction activities at the site location are not known at this time, but the contractor has provided a preliminary schedule of all project related activities. Once a more specific schedule is determined, dates should be added to this EPSC Plan, as appropriate.

Inspection Form

The site shall be monitored in accordance with the conditions of the approved EPSC Plan. The on-site Plan Coordinator and/or EPSC Plan Monitor shall visit the site on a weekly basis and after every rain event to observe the conditions of surface water and erosion controls. The Inspection Form has been provided at the end of this Document for use during all on-site inspections.
A maintenance inspection report will be made after each inspection by the on-site Plan Coordinator and/or EPSC Plan Monitor. A copy of the completed form shall be filed with VAOT, attached to this document for reference and tracking, and maintained on-site during the entire construction project. Following construction, the completed forms will be retained at the construction manager's office for a minimum of three (3) years.

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

EPSC Plans:

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EPSC Plans for this project are attached and include the following information:

- Direction(s) of stormwater flow and approximate slopes before and after major grading activities
- Areas of soil disturbance
- Areas that will not be disturbed
- Natural features to be preserved
- Locations of major structural and non-structural BMPs identified in the EPSC
- Locations and timing of stabilization measures
- Locations of storm drain inlets
- Standard Erosion Control Specifications
- Construction Sequencing
- Winter Construction Notes
- Erosion Control Details.

This EPSC Plan document shall be updated during construction activities in order to identify each type of erosion and sediment control BMP that will be utilized.

EPSC Plan Inspection Report:

VTrans Vermont Agency of Transportation			2015 EPSC Plan Inspection Report		(Non-Jurisdictional and Low Risk Projects)
Project Name:			**Date:**	**Time Since Last Storm:**	
Inspector:			**On-Site Coordinator:** (signature required)		
Measure Inspected	**Y**	**N**	**STA/Off**	**Corrective Action (CA) Required**	**Date CA Occurred**
Boundary Limits					
Site boundary markers are up and visible					
Disturbance is only occurring within marked boundaries					
Disturbance Area Limit					
Only acreage listed on *Authorization to Discharge* is disturbed at one time					
Stabilized Construction Entrance/Exit					
Off site tracking of sediment prevented					
Sediment Barriers					
Measure has been installed properly and is functioning as designed					
Accumulated sediment < ½ height of measure					
Diversion					
Upland stormwater is diverted around the work area					
Channelized Runoff					
Check structures are in place, extend the width of the channel, and have capacity to retain sediment in the next storm event					
Channels are stable with no erosion					
Exposed Soils Stabilization					
Seed and mulch, and/or matting placed in accordance w/ permit requirements and/or Specifications					
Soil is seeded and mulched or covered in erosion matting within 48 hours of final grade					
Winter Stabilization					
After Sept. 15 all disturbed areas are seeded & mulched to 3" deep or covered w/ matting					
For ongoing construction, exposed soil is mulched prior to forecasted events					
Dewatering Treatment					
Measure is preventing a discharge of turbid water from leaving the site					
Accumulated sediment is removed to allow sufficient treatment					

* Additional Measures and Discharges shall be reported on the back side of this form.

VTrans Vermont Agency of Transportation			EPSC Plan Inspection Report	(Non-Jurisdictional and Low Risk Projects)	
Measure Inspected	**Y**	**N**	**STA/Off**	**Corrective Action**	**Date Taken**
Additional Measures					
Discharges Noted					

* If there is a discharge of visibly discolored stormwater from the construction site to waters of the state, the On-Site Plan Coordinator shall inform the Resident Engineer and take corrective action and report the discharge in accordance with Section 6.1 of Permit 3-9020.

EPSC Plan Revision Form:

EPSC Plan Revision Documentation Form

This Erosion Prevention and Sediment Control Plan (EPSC Plan) should be revised and updated to address changes in site conditions, new or revised government regulations, and additional on-site stormwater and erosion controls.

All revisions to the EPSC Plan must be documented on the EPSC Plan Revision Documentation Form, which should include the information shown below. The authorized facility representative who approves the EPSC Plan should be an individual at or near the top of the facility's management organization, such as the president, vice president, construction manager or supervisor, on-site coordinator, or environmental manager. The signature of this representative attests that the EPSC Plan revision information is true and accurate. Previous authors and facility representatives are not responsible for the revisions.

Revision Number	Description of the Revision	Date	Revision Preparer	Company Representative Signature
Originally Issued				
1				
2				
3				
4				
5				

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

STAMFORD STP 1441 (29) INVOLVES THE REPLACEMENT OF THE EXISTING STRUCTURE. THE EXISTING STRUCTURE WILL BE REPLACED ON THE EXISTING ALIGNMENT WITH A CAST IN PLACE SLAB; SPANNING 32 FEET OVER AN UNNAMED BROOK, ON A NEW SUBSTRUCTURE. THE BRIDGE IS LOCATED IN THE TOWN OF STAMFORD ON TOWN HIGHWAY 14, APPROXIMATELY 650 FEET NORTH OF THE INTERSECTION OF TOWN HIGHWAY 13 AND TOWN HIGHWAY 14 AND EXTENDS NORTHERLY ALONG TH 14 FOR 225 FEET.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 0.37 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS A SADDLE THAT IS MOSTLY WELL ESTABLISHED FOREST WITH OCCASIONAL OPEN AREAS. KLONDIKE ROAD (TH 14), RISKY RANCH ROAD (TH13), AND A GRAVEL DRIVE IS WITHIN THE PROJECT LIMITS. THERE ARE NO BUILDINGS AROUND THE PROJECT SITE.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE COWAN BROOK, THE BROOK FEEDING INTO IT AND A POND ARE THE WATER SOURCES ON THE PROJECT SITE. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE RUNOFF WATER FROM A FEW NEARBY SLOPES.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF HARDWOOD TREES AND UNDERGROWTH. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF THE EXISTING STRUCTURE. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL TYPE IV AS SPECIFIED ON THE PLANS. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF BENNINGTON, VERMONT. SOILS ON THE PROJECT SITE ARE BERSHIRE, FINE SANDY LOAM, 25% TO 50% SLOPES, “K FACTOR” = 0.24. THE SOIL IS CONSIDERED HIGHLY ERODIBLE DUE TO SIGNIFICANT SLOPES.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
0.0-0.23 = LOW EROSION POTENTIAL
0.24-0.36 = MODERATE EROSION POTENTIAL
0.37 AND HIGHER = HIGH EROSION POTENTIAL

1.2.5 SENSITIVE RESOURCE AREAS
CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: YES ON SOUTHERNLY SIDE OF PROJECT
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: YES, NEWLY LISTED FEDERALLY AND STATE LISTED BAT SPECIES PRESENT STATE.
WATER RESOURCE: COWAN BROOK AND BROOK
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

1.4.2 LIMIT DISTURBANCE AREA
PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION
TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTOR’S PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

1.4.4 INSTALL SEDIMENT BARRIERS
SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE, WOVEN WIRE REINFORCED WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

1.4.5 DIVERT UPLAND RUNOFF
DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF
CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

1.4.7 CONSTRUCT PERMANENT CONTROLS
NOT USED

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION
ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION
VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

1.4.10 STABILIZE SOIL AT FINAL GRADE
EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES
DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

1.4.12 INSPECT YOUR SITE
INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

1.5.1 CONSTRUCTION SEQUENCE
NOT USED

1.5.2 OFF-SITE ACTIVITIES
IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS 105.25 - 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

SOIL INFORMATION:
BERKSHIRE FINE SANDY LOAM, VERY STONY
(HIGHLY ERODIBLE)
K-FACTOR = 0.24, 25%-50% SLOPES
HYDROLOGICAL SOIL GROUP: B

VT STATE PLANE GRID

1 BLUEGREEN CORPORATION

2 GIOVACCHINO, GENNARO

3 REMILLARD, PHILIP F.

4 DOLLE, WALLACE C.

RIPARIAN BUFFER ZONE

EXISTING R.O.W.

TH 14 KLONDIKE RD
TO MASS. BORDER

TH 14 KLONDIKE ROAD
TO COUNTY ROAD

COWAN BROOK

STONE WALL

GUIDE POST

GRAVEL DRIVE

POND

WOODS

DITCH

TEL POLE

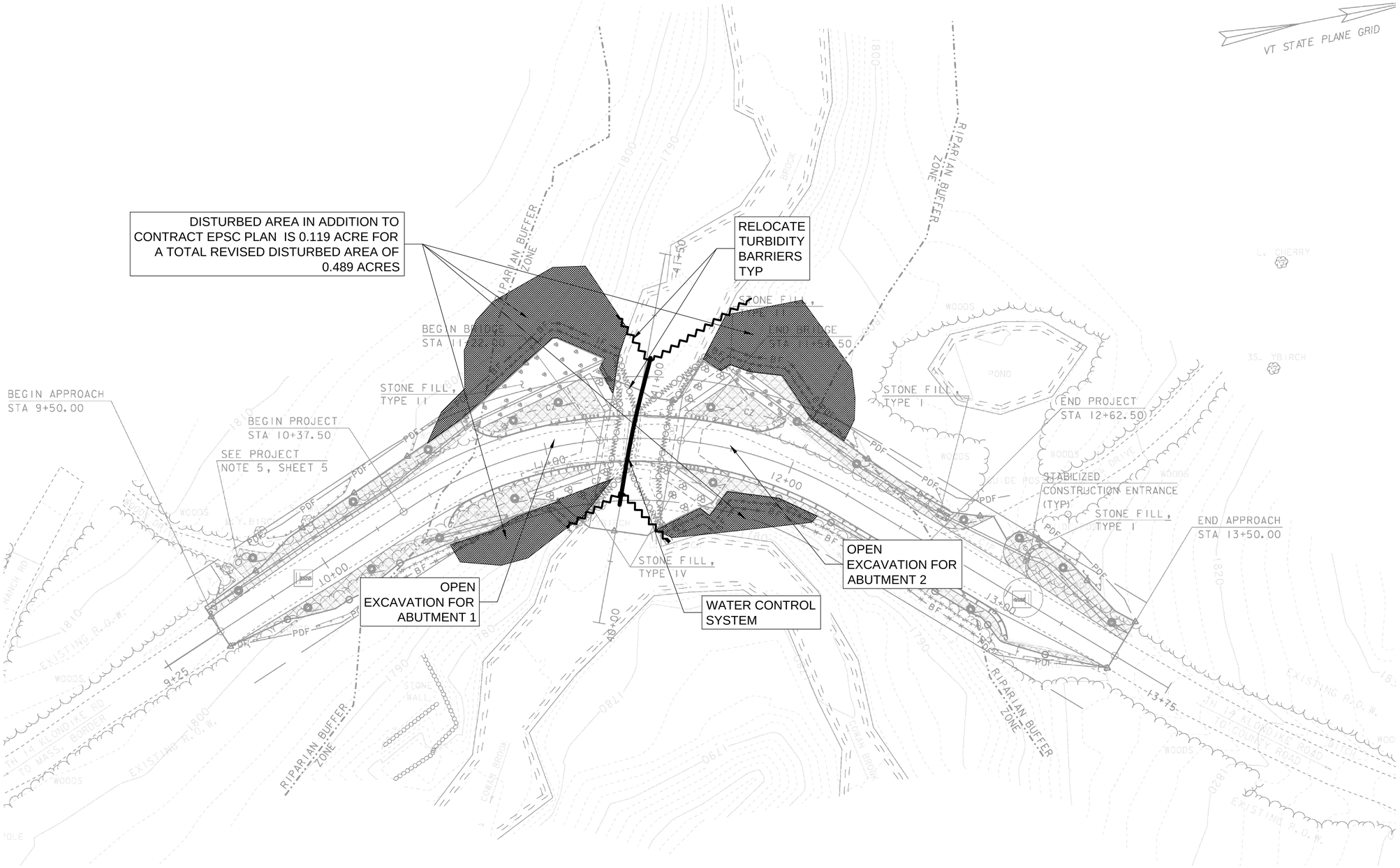
L. CHERRY
TIE=31.37

3S. YBIRCH
TIE=29.29

9+25
00+01
11+00
12+00
13+00
13+75

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: STAMFORD	
PROJECT NUMBER: STP 1441(29)	
FILE NAME: s96j226bdr_ero.dgn	PLOT DATE: 03-DEC-2015
PROJECT LEADER: C. W. CARLSON	DRAWN BY: D. KARABEGOVIC
DESIGNED BY: H. SALLS	CHECKED BY: H. SALLS
EPSC EXISTING SITE PLAN	SHEET 38 OF 44



PLAN EPSC
1" = 20'

General Notes

March 17, 2016

No.	Revision/Issue	Date

Firm Name and Address
TAW Associates
Waterville Valley, NH
603-236-4247 www.TAWAssociates.net

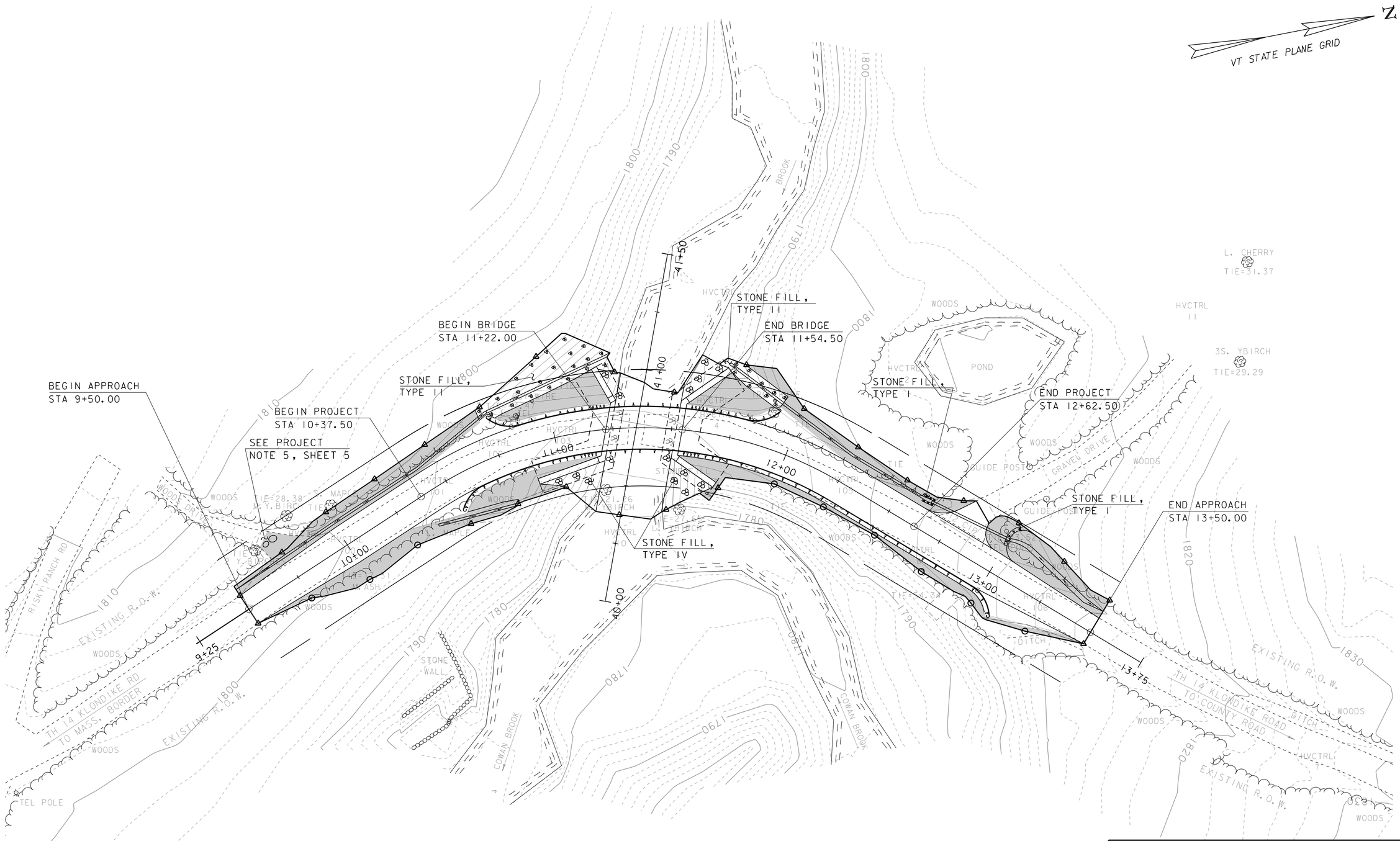
Bridge Replacement Route TH 14
Class III Bridge No. 26 -
Stamford, VT
VTrans STP 1441(29)

Project Name and Address
EROSION PREVENTION & SEDIMENT CONTROL

GENERAL PLAN

Project 160201A
Date March 17, 2016
Scale noted
Sheet 01

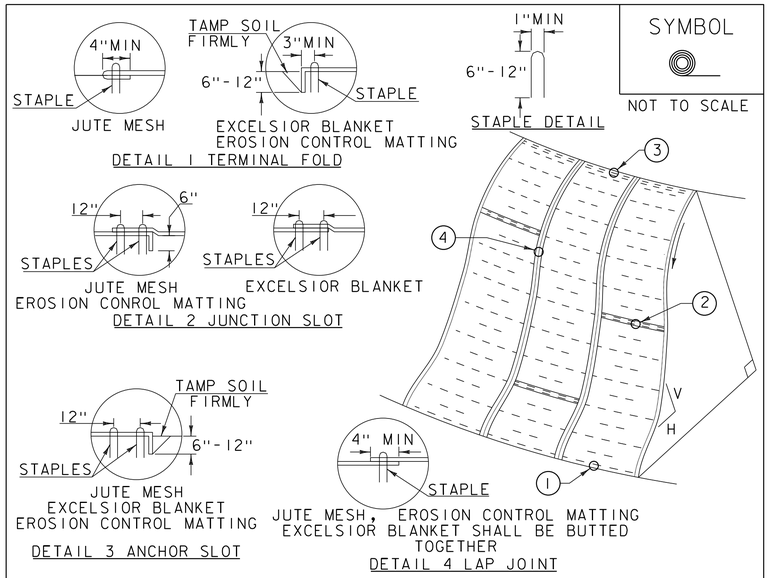
Northern Construction Service, Inc.



NOTE:
REFER TO CROSS SECTIONS FOR FINAL GROUND CONTOURS

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: STAMFORD	
PROJECT NUMBER: STP 1441(29)	
FILE NAME: s96j226bdr_ero.dgn	PLOT DATE: 03-DEC-2015
PROJECT LEADER: C. W. CARLSON	DRAWN BY: D. KARABEGOVIC
DESIGNED BY: H. SALLS	CHECKED BY: H. SALLS
EPSC FINAL SITE PLAN	SHEET 40 OF 44



CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.

2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.

3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.

4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.

5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) ~~OR PERMANENT EROSION MATTING (PAY ITEM 653.21).~~

REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF

VAOT LOW GROW/FINE FESCUE MIX

	LBS/AC					
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
38%	57	95	CREEPING RED FESCUE	FESTUCA RUBRA VAR. RUBRA	90%	98%
29%	43.5	72.5	HARD FESCUE	FESTUCA LONGIFOLIA	85%	95%
15%	22.5	37.5	CHEWINGS FESCUE	FESTUCA RUBRA VAR. COMMUTATA	87%	95%
15%	22.5	37.5	ANNUAL RYEGRASS	LOLIUM MULTIFLORUM	90%	95%
3%	4.5	7.5	INERTS			
100%	150	250				

VAOT RURAL AREA MIX

	LBS/AC					
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
37.5%	22.5	45	CREEPING RED FESCUE	FESTUCA RUBRA VAR. RUBRA	85%	98%
37.5%	22.5	45	TALL FESCUE	FESTUCA ARUNDINACEA	90%	95%
5.0%	3	6	RED TOP	AGROSTIS GIGANTEA	90%	95%
15.0%	9	18	WHITE FIELD CLOVER	TRIFOLIUM REPENS	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM	85%	95%
100%	60	120				

GENERAL AMENDMENT GUIDANCE

FERTILIZER	LIME	
10/20/10	AG LIME	PELLITIZED
500 LBS/AC	2 TONS/AC	1 TONS/AC

CONSTRUCTION GUIDANCE

1. SEED MIX: THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER ON WHICH SEED MIX TO USE.

2. SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.

3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.

5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.

6. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED PROPOSED FOR USE WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED.

7. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651FOR SEED (PAY ITEM 651.15)

REVISIONS	
JANUARY 12, 2015	WHF

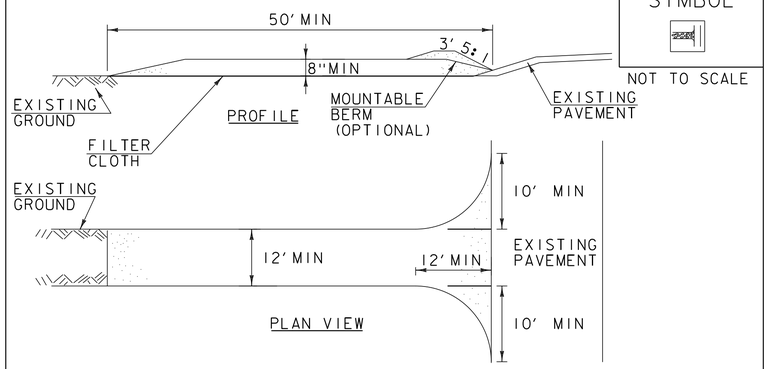
PROJECT NAME: STAMFORD
PROJECT NUMBER: STP 1441(29)

FILE NAME: s96j226ero_det.dgn
PROJECT LEADER: C. W. CARLSON
DESIGNED BY: H. SALLS
EPSC DETAILS 1

PLOT DATE: 03-DEC-2015
DRAWN BY: D. KARABEGOVIC
CHECKED BY: H. SALLS
SHEET 41 OF 44

SYMBOL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STABILIZED CONSTRUCTION ENTRANCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

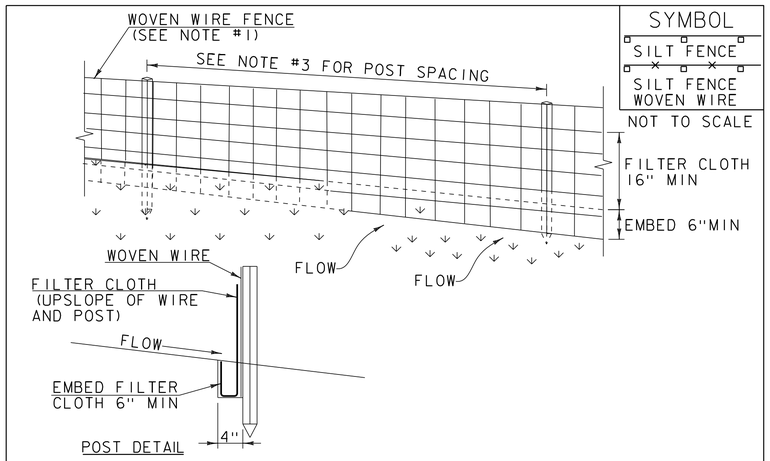
REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF

SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

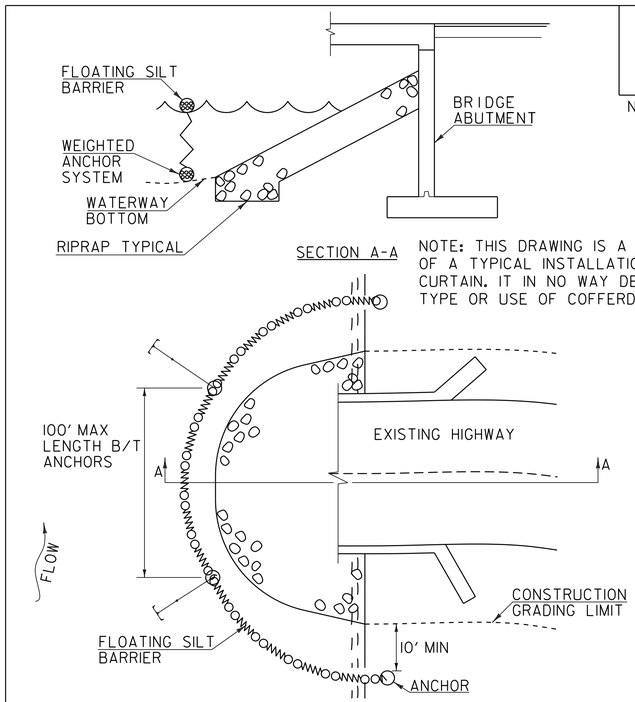
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF

SYMBOL

NOT TO SCALE



NOTE: THIS DRAWING IS A DEPICTION OF A TYPICAL INSTALLATION OF FILTER CURTAIN. IT IN NO WAY DEFINES THE TYPE OR USE OF COFFERDAM IF USED.

CONSTRUCTION SPECIFICATIONS

1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

FILTER CURTAIN

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF
SEPTEMBER 4, 2009	WHF

PROJECT NAME: STAMFORD
PROJECT NUMBER: STP 1441(29)

FILE NAME: s96j226ero_det.dgn
PROJECT LEADER: C. W. CARLSON
DESIGNED BY: H. SALLS
EPSC DETAILS 2

PLOT DATE: 03-DEC-2015
DRAWN BY: D. KARABEGOVIC
CHECKED BY: H. SALLS
SHEET 42 OF 44