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

September 5, 2019

Regulatory Division
File No. NAE-2019-01002

Mr. James Brady
Vermont Agency of Transportation
One National Life Drive
Montpelier, Vermont 05633

Dear Mr. Brady**:**

Enclosed are two copies of a Department of the Army permit authorizing your project. **Please sign both copies of the permit and return one signed copy to this office at the address above.** The authorized work cannot start until we receive a complete, signed copy of the permit.

You are required to complete and return the enclosed forms to this office:

1. Preliminary Jurisdictional Determination Form to be submitted along with your signed copy of the permit
2. Work Start Notification Form at least two weeks before the anticipated work start date.
3. Compliance Certification Form within one month following the completion of the authorized work.

This permit is a limited authorization containing a specific set of conditions. Please read the permit thoroughly to familiarize yourself with those conditions. If a contractor does the work for you, both you and the contractor are responsible for ensuring that the work is done in compliance with the permit's terms and conditions, as any violations could result in civil or criminal penalties.

Our verification of this project's wetland delineation under the Corps of Engineers Wetlands Delineation Manual, and its applicable supplement, is valid for a period of five years from the date of this letter unless new information warrants revision of the determination before the expiration date.

A combined Notification of Administrative Appeal Options and Process (NAP) and Request for Appeal (RFA) form, and flow chart explaining the appeals process and your options, are enclosed. If you desire to appeal this proffered permit, you must submit a completed RFA form along with any supporting or clarifying information to James W. Haggerty; Administrative Appeals Review Officer; North Atlantic Division, Corps of Engineers; North Atlantic Fort Hamilton Military Community, Bldg. 301; General Lee Avenue; Brooklyn, NY 11252-6700. Contact info: (347) 370-4650 or james.w.haggerty@usace.army.mil.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP.

This authorization does not obviate the need to obtain other Federal, state, or local authorizations required by law.

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

If you have any questions regarding this correspondence, please contact Angela C. Repella at (802) 872-2893.

Sincerely,

DELGIUDICE.FRANK.J.1228916567 Digitally signed by DELGIUDICE.FRANK.J.1228916567 Date: 2019.09.05 14:11:17 -04'00'

Frank J. DelGiudice
Chief, Permits and Enforcement Branch
Regulatory Division

Enclosures

cc:
Beth Alafat, U.S. Environmental Protection Agency Region 1, alafat.beth@epa.gov
Zapata Courage, Vermont Dept. of Environmental Conservation, Zapata.courage@vermont.gov
Josh Carvajal, Vermont Dept. of Environmental Conservation, Joshua.Carvajal@vermont.gov
James Brady, Vermont Agency of Transportation, James.Brady@vermont.gov

DEPARTMENT OF THE ARMY PERMIT

Permittee: Vermont Agency of Transportation

Permit No: NAE-2019-01002

Issuing Office: New England District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Place fill within 1.17 acres of two unnamed tributaries and adjacent wetlands in conjunction with the reconstruction of approximately 1.36 miles of U.S. Route 7 from mile marker 1.35 to mile marker 2.755 in Pittsford, Vermont. The purpose of the project is to bring this section of roadway up to National Highway Standards. Improvements will include roadway widening and realignment to include two 12' wide travel lanes and two 8' wide shoulders, and replacement of three stream crossing structures.

The project will permanently impact approximately 3,085 sq. ft. (0.07 acre) of two unnamed tributaries and 16,086 sq. ft. (0.37 acre) of adjacent wetlands. The work will temporarily impact approximately 1,085 sq. ft. (0.02 acre) of two unnamed tributaries and 30,774 sq. ft. (0.71 acre) of adjacent wetlands. The project includes the replacement of Bridge No. 106, Bridge No. 107, and Bridge No. 107A along the two unnamed tributaries with improved stream crossing structures that meet hydraulic and aquatic organism passage standards. Temporary roadway relocation is planned to bypass traffic during construction and accounts for the majority of temporary wetland impacts associated with the project. The wetlands to be impacted are palustrine emergent, scrub-shrub and forested wetlands immediately adjacent to the highway and function primarily to maintain water quality.

The work is shown on the enclosed plans, in forty-six sheets, entitled "Project Location map for Pittsford NH 019-3 (491)" (dated "July 25, 2018", last revised "June 5, 2019") and "PITTSFORD NH 019-3 (491)" (dated "29-MAR-2019", "05-JUN-2019", "01-MAY-2019", and "12-APR-2019").

Project Location:

The work is located along two unnamed tributaries and adjacent wetlands for the reconstruction of approximately 1.36 miles of U.S. Route 7 from mile marker 1.35 to mile marker 2.755 in Pittsford, Vermont.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on September 5, 2024. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. The permittee shall ensure that a copy of this permit is at the work site (and the project office) authorized by this permit whenever work is being performed, and that all personnel with operational control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit shall be made a part of any and all contracts and sub-contracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this permit. This shall be achieved by including the entire permit in the specifications for work. The term "entire permit" means this permit (including its drawings, plans, appendices and other attachments) and also includes permit modifications.

If the permit is issued after the construction specifications, but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. If the permit is issued after receipt of bids or quotes, the entire permit shall be included in the contract or sub-contract. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

2. The permittee shall complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work.

3. In order to provide compensatory mitigation for the loss of aquatic habitat, the permittee shall make a payment of $72,077.81 to the Ducks Unlimited – Vermont In-Lieu Fee (ILF) Program. Checks must be payable to "Ducks Unlimited, Inc." and mailed to the attention of Michelle Burdick, Ducks Unlimited, 7322 Newman Boulevard, Building 1, Dexter, MI 48130. All checks must have the Corps permit number on the memo line. This is to secure 0.41 wetland credits. Work shall not begin until the Corps has received confirmation that the payment has been received. The ILF amount is only valid for a period of one year from the date on the authorization letter. After that time, the project would need to be reevaluated and a new amount determined.

4. Adequate sedimentation and erosion control devices, such as geotextile silt fences or other devices capable of filtering the fines involved, shall be implemented and properly maintained to minimize impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport into a waterway or wetland.

5. No temporary fill (e.g., access roads, cofferdams) may be placed in waters or wetlands unless specifically authorized by this permit. The slope of all temporary fills must be stabilized to prevent erosion, through such means as placing weighted geotextile fabric on the slope. The temporary fill shall be completely removed upon completion of the project, and shall be placed upland in a manner that will prevent its later erosion and transport to a waterway or wetland. The temporary fill area shall be restored to its approximate original contours (but not higher).

6. All excess material shall be disposed of at an upland, non-wetland site.

7. Only clean fill shall be used.

8. All contractors' equipment shall be cleaned so as to contain no observable soil or vegetation prior to work in wetlands and waterways to prevent the spread of invasive species.

9. Disposal site(s) for temporary fills and for any excess material shall not be used without prior written approval from the New England District Corps of Engineers, Vermont Project Office.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from Natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

September 5, 2019

(PERMITTEE) ***(DATE)***

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

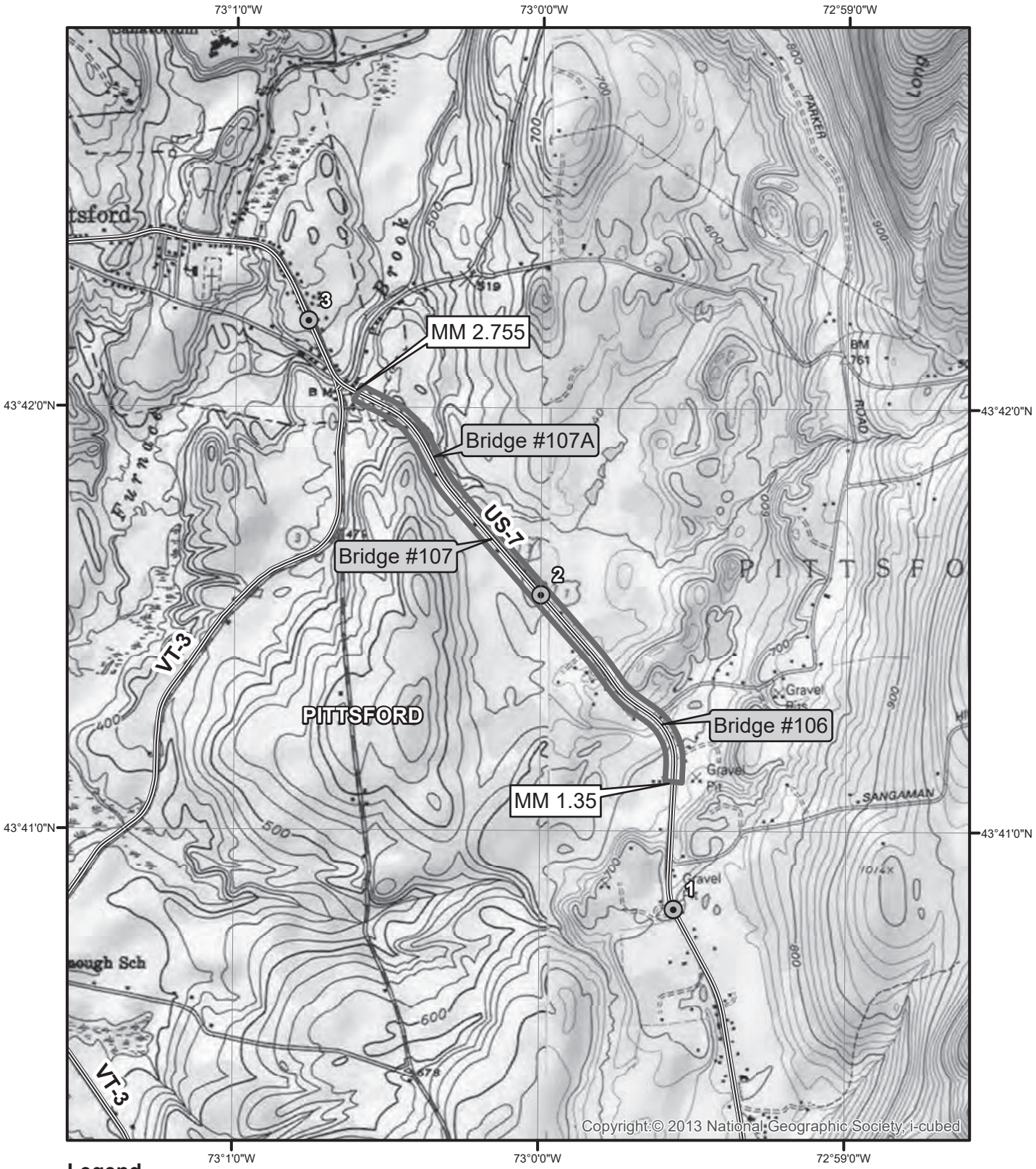
DELGIUDICE.FRANK.J.1228916567 Digitally signed by DELGIUDICE.FRANK.J.1228916567
Date: 2019.09.05 14:12:17 -04'00'

Frank J. DelGiudice, Chief, Permits & Enforcement Branch C ***(DATE)***
Chief, Permits and Enforcement Branch
Regulatory Division
For District Engineer

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE) ***(DATE)***

Project Location Map for Pittsford NH 019-3 (491)
US Route 7
Pittsford, Vermont



Legend

- Mile Marker
- Study Area
- Major Road

N

0 1,000 2,000 Feet

1 inch = 2,000 feet

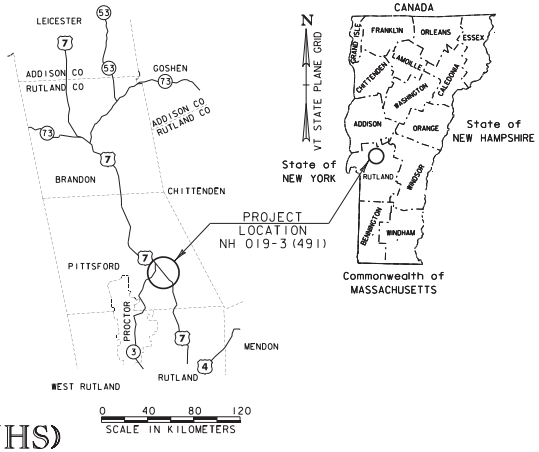
Study area includes 100 feet from the road edge on each side of US Route 7 for 1.405 linear miles.

Data sources include:
Vermont Center for Geographic Information (VCGI)
Vermont Agency of Natural Resources (ANR)
Vermont Agency of Transportation (VTrans)
Bear Creek Environmental (BCE)

Map composed on July 25, 2018. Revised June 5, 2019.

Bear Creek Environmental

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT

TOWN OF PITTSFORD
COUNTY OF RUTLAND
US ROUTE 7 (PRINCIPAL ARTERIAL - NHS)

BEGINNING AT A POINT IN THE TOWN OF PITTSFORD ON US ROUTE 7 AT STATION 5+380.00 (MM 1.350) EXTENDING NORTHERLY TO STATION 7+580.00 (MM 2.755)

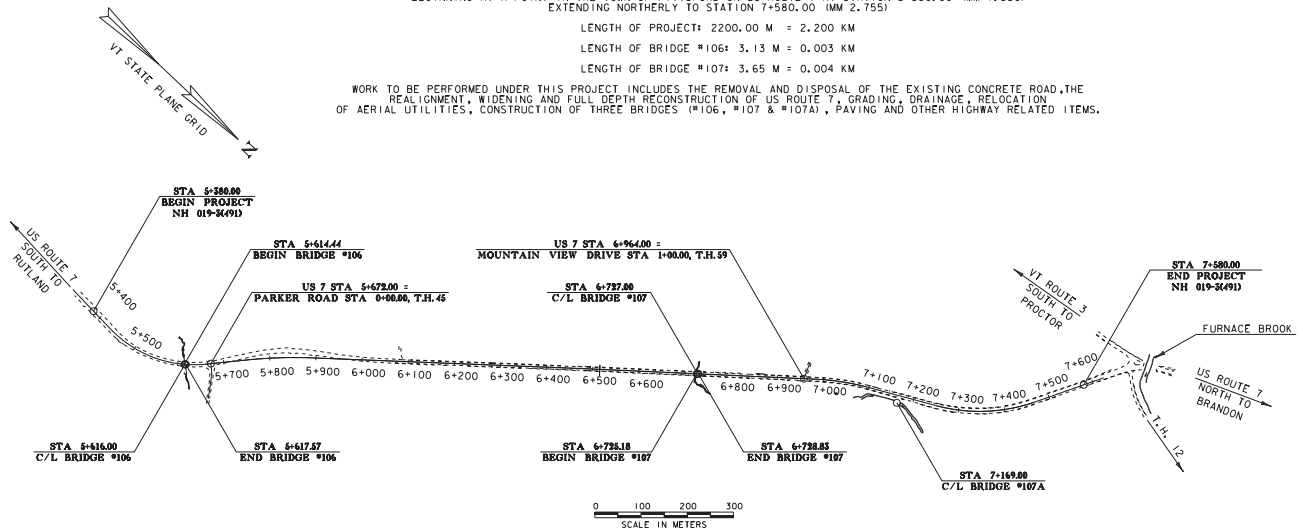
LENGTH OF PROJECT: 2200.00 M = 2.200 KM

LENGTH OF BRIDGE #106: 3.13 M = 0.003 KM

LENGTH OF BRIDGE #107: 3.65 M = 0.004 KM

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL AND DISPOSAL OF THE EXISTING CONCRETE ROAD, THE REALIGNMENT, WIDENING AND FULL DEPTH RECONSTRUCTION OF US ROUTE 7, GRADING, DRAINAGE, RELOCATION OF AERIAL UTILITIES, CONSTRUCTION OF THREE BRIDGES (#106, #107 & #107A), PAVING AND OTHER HIGHWAY RELATED ITEMS.

FINAL PLANS
29-MAR-2019



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON APRIL 13, 2018 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL I
SURVEYED BY : VAOT SURVEYED DATE : 5/99 (UPDATED 1/01)
DATUM VERTICAL NAVD 88 HORIZONTAL NAD 83 (1992)

TRAFFIC DATA

AADT		DHV		ADTT	
2018	2038	2018	2038	2018	2038
9,900	10,500	1100	1200	820	1200

%T		%D		ESALs	
2018	2038	2018	2038	2018-2038	2018-2058
4.5	6.3	55	55	7,128,000	16,407,000

BITUMINOUS CONCRETE PAVEMENT SUPERPAVE MIXTURE DESIGN CRITERIA

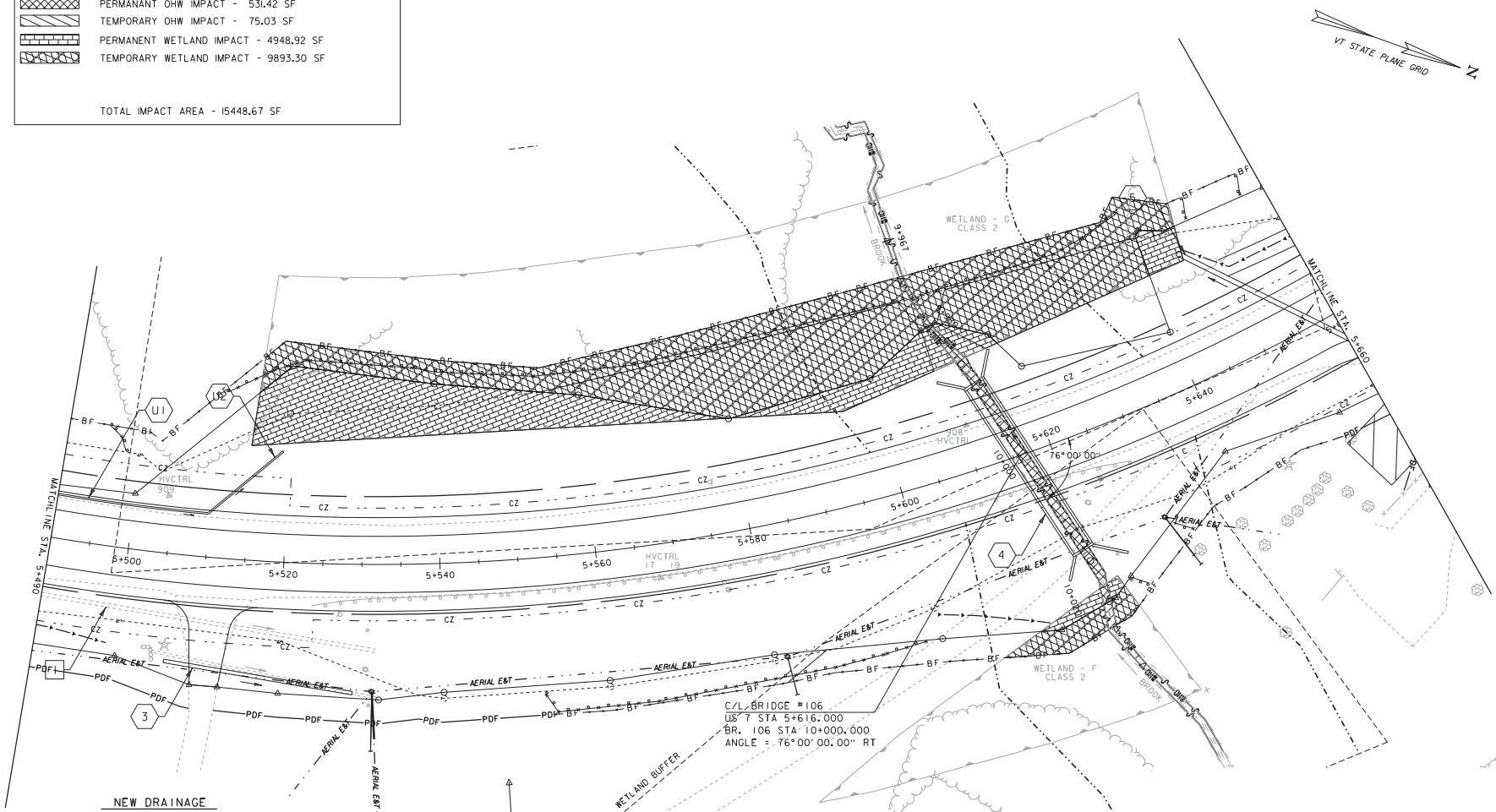
DESIGN LIFE ESALs (DESIGN LANE)	3,920,000
DESIGN NUMBER OF GYRATIONS	80
PERFORMANCE GRADED ASPHALT BINDER	SEE SECTION 490 GENERAL SPECIAL PROVISIONS

DESIGN SPEED = 80 KM/HR (STA 5+338 TO STA 7+185)
DESIGN SPEED = 56 KM/HR (STA 7+185 TO STA 7+622)

VAOT Metric

UNLESS NOTED OTHERWISE
STATIONS ARE IN KILOMETERS
ELEVATIONS ARE IN METERS
DIMENSIONS ARE IN MILLIMETERS

HIGHWAY DIVISION, CHIEF ENGINEER APPROVED _____ DATE _____
PROJECT MANAGER : BRUCE MARTIN, P.E.
PROJECT NAME : PITTSFORD PROJECT NUMBER : NH 019-3(491)
SHEET 1 OF 368 SHEETS



NEW DRAINAGE

(3) STA 5+506.0, 13.8M - STA 5+528.9, 16.5M RT
NEW 450 mm x 24.4 M CPEP
STONE FILL, TYPE I AT OUTLET
(L=1.5M, W=0.9M, D=0.3M)
REMOVE EXISTING 310 CGMP

(4) STA 5+616 C/L SKEWED 14°
NEW 2.44 M x 2.13 M PRECAST RCB
WITH WING WALLS (SEE BRIDGE DETAILS)
STONE FILL, (E-STONE, TYPE II) AT INLET AND OUTLET
REMOVE EXISTING 1.2 M x 1.2 M x 31.0 M
BOX CULVERT REMOVE EXISTING WWS AND HWS

(5) STA 5+641.9, 16.2M LT - STA 5+664.7, 10.6M RT
NEW 600 mm x 33.0 M CPEP
STONE FILL, TYPE II AT OUTLET
(L=4.7M, W=0.9M, D=0.6M)

EXISTING DRAINAGE

(1) STA 5+451.4 - STA 5+531.7 RT
REMOVE EXISTING 460 mm CGMP
AND DI

200 mm UNDERDRAIN

(U1) STA 5+380 - STA 5+509.8 LT
NEW 200 mm x 128 M UNDERDRAIN
W/FLUSHING BASIN AT STA 5+380

(U2) STA 5+509.8 - STA 5+519.3 LT
NEW 200 mm x 13 M UNDERDRAIN
CARRIER PIPE

STA. 5+490.0 – STA. 5+660.0

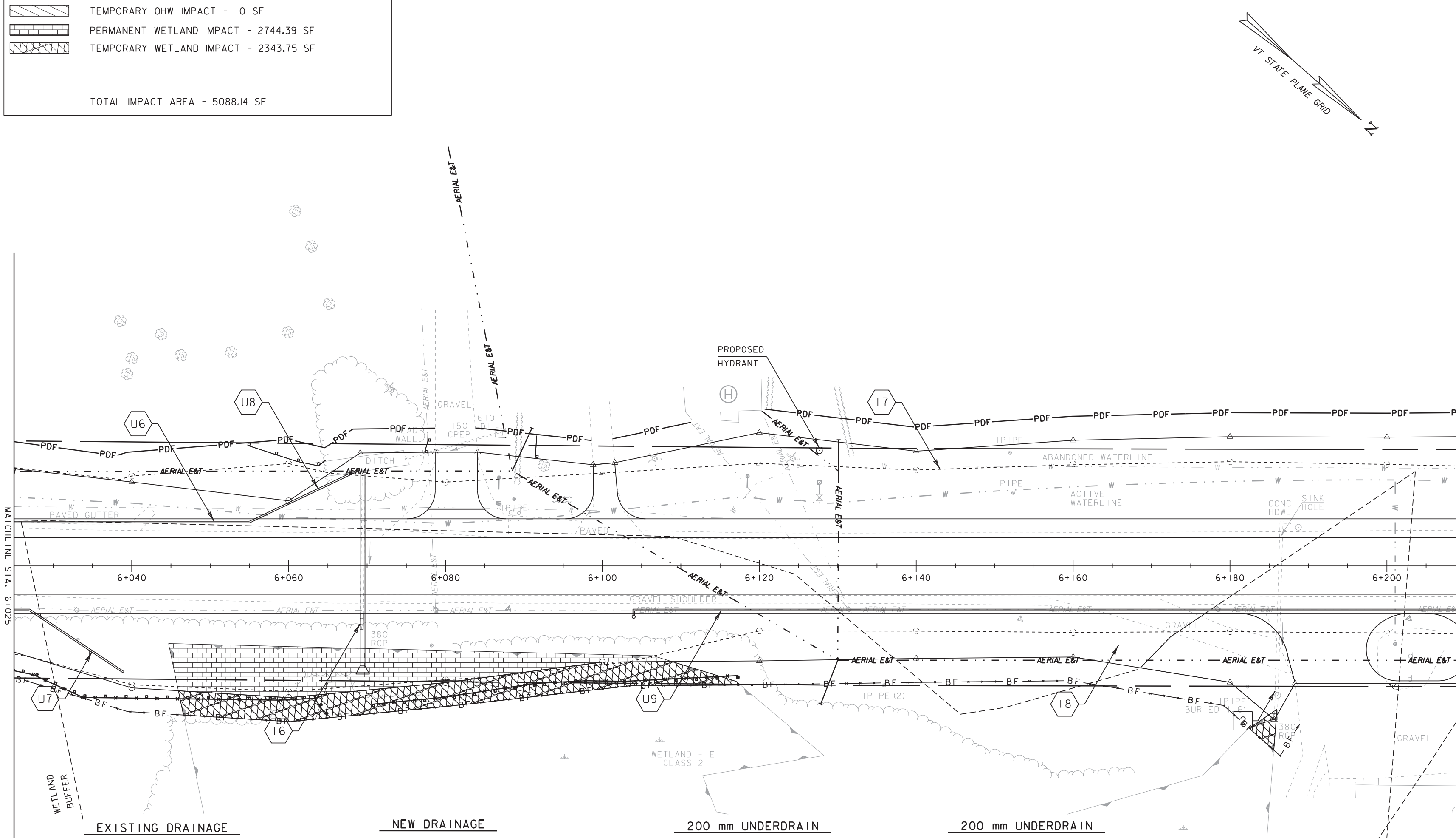
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_nul.dgn	PLOT DATE: 05-JUN-2019
PROJECT LEADER: B.MARTIN	DRAWN BY: A. KEMPTON
DESIGNED BY: A. KEMPTON	CHECKED BY: J. FLOOD
PLAN SHEET 2	SHEET 2 OF 44

VAOT Metric

LEGEND

- PERMANANT OHW IMPACT - 0 SF
- TEMPORARY OHW IMPACT - 0 SF
- PERMANENT WETLAND IMPACT - 2744.39 SF
- TEMPORARY WETLAND IMPACT - 2343.75 SF

TOTAL IMPACT AREA - 5088.14 SF



EXISTING DRAINAGE

2 STA 6+186.4 C/L
REMOVE EXISTING 380 mm RCP AND HEADWALL

NEW DRAINAGE

I6 STA 6+069.4, 11.7M LT - 12.7M RT
NEW 600 mm x 24.4 M CPEP WITH STONE FILL, TYPE II AT OUTLET (L=2.0M, W=0.9M, D=0.6M)
REMOVE EXISTING 380 mm RCP

I7 STA 6+102.0 - STA 6+312.0 LT
CONSTRUCT GRASS-TREATMENT SWALE
SEE DETAIL SHEETS (EXCLUDES DRIVE)

I8 STA 6+150.0 - STA 6+185.0 RT
CONSTRUCT GRASS-TREATMENT SWALE
SEE DETAIL SHEETS

200 mm UNDERDRAIN

U5 STA 5+925.0 - STA 6+027.0 RT
NEW 200 mm x 102 M UNDERDRAIN W/FLUSHING BASIN AT STA 5+925.0

U6 STA 5+980.0 - STA 6+055.0 LT
NEW 200 mm x 75 M UNDERDRAIN W/FLUSHING BASIN AT STA 5+980.0

U7 STA 6+027.0 - STA 6+039.0 RT
NEW 200 mm x 14 M UNDERDRAIN CARRIER PIPE

200 mm UNDERDRAIN

U8 STA 6+055.0 - STA 6+069.0 LT
NEW 200 mm x 16 M UNDERDRAIN CARRIER PIPE

U9 STA 6+104.0 - STA 6+228.1 RT
NEW 200 mm x 124 M UNDERDRAIN W/FLUSHING BASIN AT STA 6+104.0

0 10 20 30
SCALE IN METERS

STA. 6+025.0 – STA. 6+210.0

PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

FILE NAME: 85B008/DESIGN/d85b008_nul.dgn
PROJECT LEADER: B. MARTIN
DESIGNED BY: A. KEMPTON
PLAN SHEET 5

PLOT DATE: 01-MAY-2019
DRAWN BY: A. KEMPTON
CHECKED BY: J. FLOOD
SHEET 4 OF 44

5

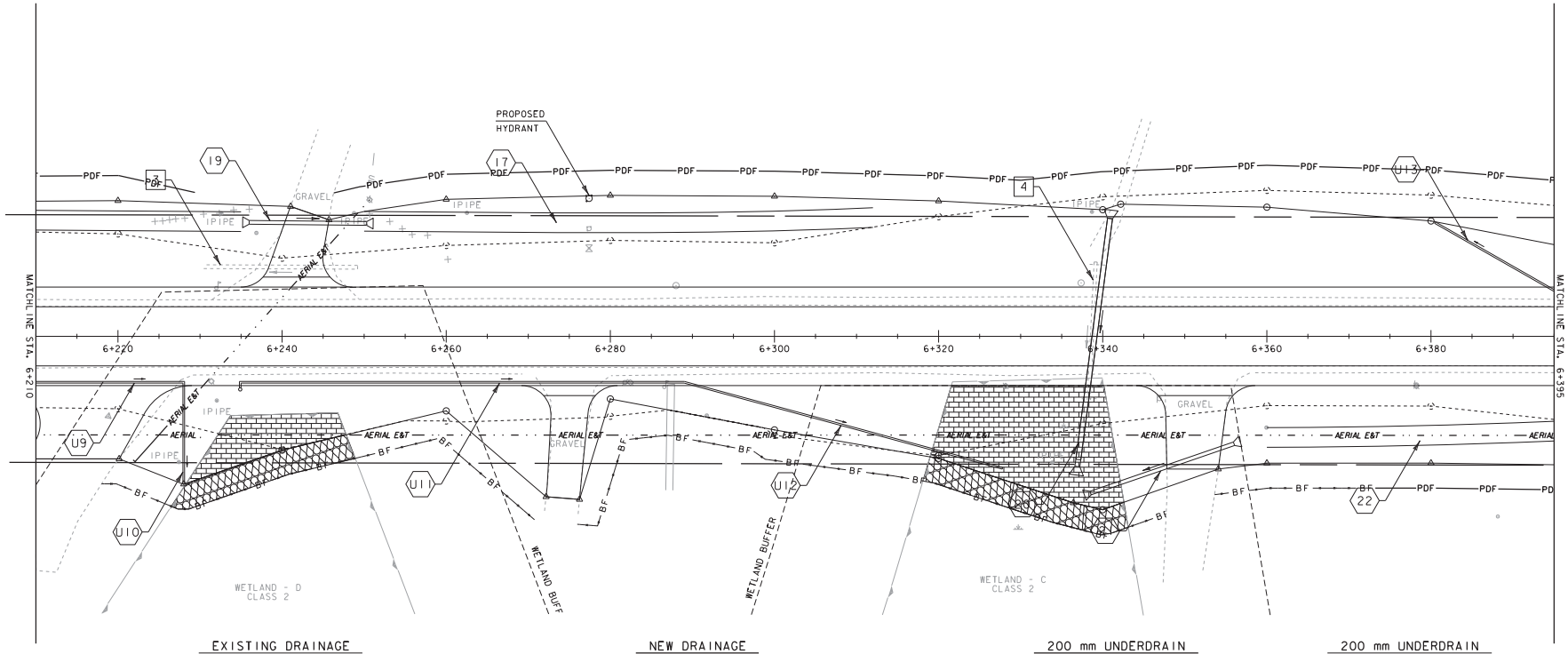
Metric

LEGEND

- PERMANANT OHW IMPACT - 0 SF
- TEMPORARY OHW IMPACT - 0 SF
- PERMANENT WETLAND IMPACT - 3643.29 SF
- TEMPORARY WETLAND IMPACT - 1551.42 SF

TOTAL IMPACT AREA - 5194.71 SF

VT STATE PLANE GRID N



EXISTING DRAINAGE

3 STA 6+230.4 - STA 6+249.2 LT
REMOVE EXISTING 460 mm CPEP

4 STA 6+338.7 C/L
REMOVE EXISTING 380 mm RCP AND HEADWALL

NEW DRAINAGE

I7 STA 6+102.0 - STA 6+312.0 LT
CONSTRUCT GRASS-TREATMENT SWALE
SEE DETAIL SHEETS (EXCLUDES DRIVE)

I9 STA 6+235.9, 13.9M - STA 6+250.3, 13.8M LT
NEW 450 mm x 14.3 M CPEP

NEW DRAINAGE

20 STA 6+336.9, 15.9M RT - STA 6+340.9, 14.4M LT
NEW 600 mm x 30.5 M CPEP
STONE FILL, TYPE II AT OUTLET
(L=2.6M, W=0.9M, D=0.6M)

21 STA 6+337.9, 19.1M - STA 6+356.1, 13.1M RT
NEW 450 mm x 18.5 M CPEP
STONE FILL, TYPE I AT OUTLET
(L=1.6M, W=0.9M, D=0.3M)

22 STA 6+360.0 - STA 6+400.0 RT
CONSTRUCT GRASS-TREATMENT SWALE
SEE DETAIL SHEETS

200 mm UNDERDRAIN

U9 STA 6+104.0 - STA 6+228.1 RT
NEW 200 mm x 124 M UNDERDRAIN
W/FLUSHING BASIN AT STA 6+104.0

U10 STA 6+228.1 - STA 6+228.1 RT
NEW 200 mm x 13 M UNDERDRAIN
CARRIER PIPE

U11 STA 6+235.0 - STA 6+289.0 RT
NEW 200 mm x 54 M UNDERDRAIN
W/FLUSHING BASIN AT STA 6+235.0

200 mm UNDERDRAIN

U12 STA 6+289.0 - STA 6+327.8 RT
NEW 200 mm x 40 M UNDERDRAIN
CARRIER PIPE

U13 STA 6+380.4 - STA 6+395.0 LT
NEW 200 mm x 17 M UNDERDRAIN
CARRIER PIPE

STA. 6+210.0 – STA. 6+395.0

0 10 20 30
SCALE IN METERS

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_nul.dgn	PLOT DATE: 01-MAY-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: A. KEMPTON
DESIGNED BY: A. KEMPTON	CHECKED BY: J. FLOOD
PLAN SHEET 6	SHEET 5 OF 44

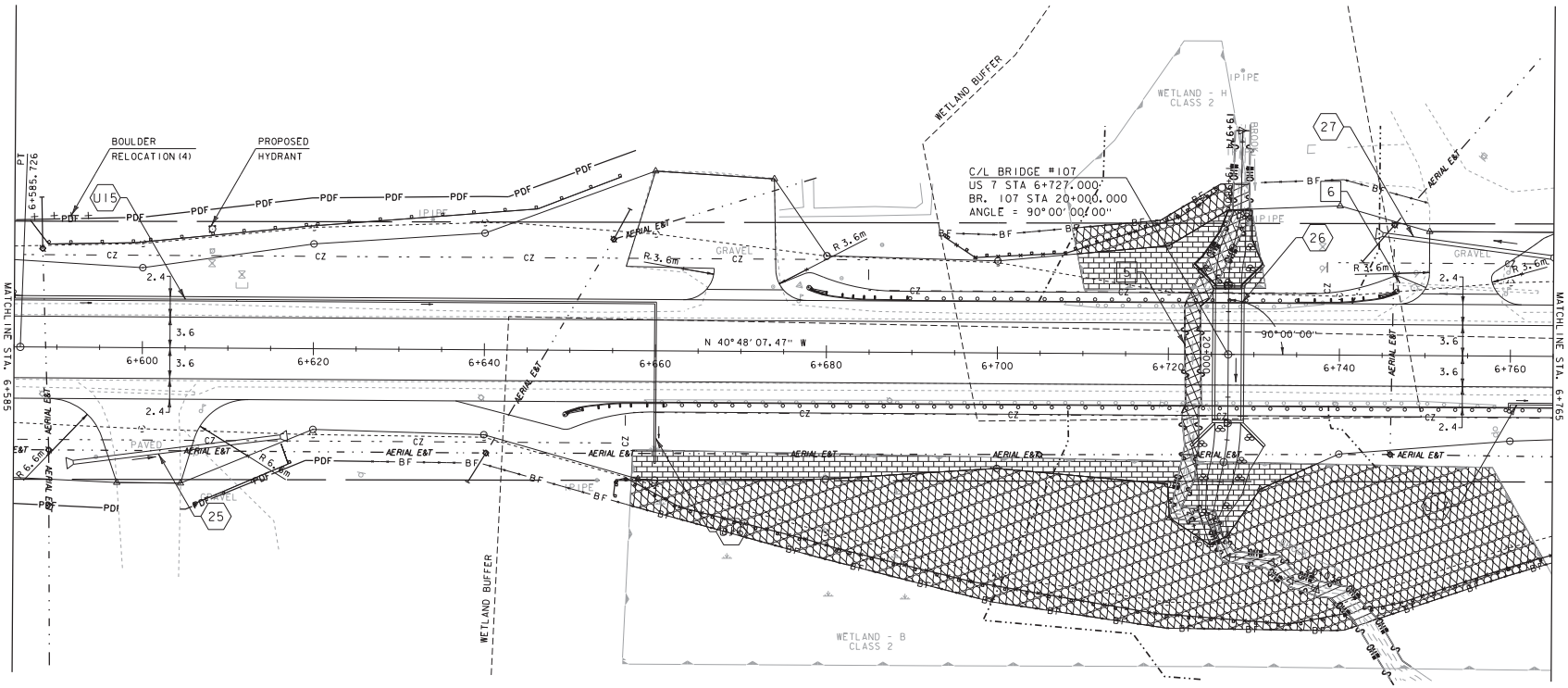
Metric

LEGEND

- PERMANANT OHW IMPACT - 842.07 SF
- TEMPORARY OHW IMPACT - 464.25 SF
- PERMANENT WETLAND IMPACT - 3637.34 SF
- TEMPORARY WETLAND IMPACT - 14822.78 SF

TOTAL IMPACT AREA - 19766.44 SF

VT STATE PLANE GRID



EXISTING DRAINAGE

5 STA 6+722.7 C/L
REMOVAL OF EXISTING STRUCTURE

6 STA 6+745.8 - STA 6+763.2 LT
REMOVE EXISTING 310 mm CGMP

NEW DRAINAGE

25 STA 6+591.9, 13.5M - STA 6+616.2, 10.3M RT
NEW 450 mm x 24.4 M CPEP
REMOVE EXISTING DRIVE PIPE

26 STA 6+727.0 C/L
NEW 3.05 M x 2.13 M PRECAST RCB
WITH WING WALLS (SEE BRIDGE DETAILS)
STONE FILL, TYPE E2 AT INLET
STONE FILL, TYPE E2 AT OUTLET

27 STA 6+745.0, 14.1M - STA 6+764.7, 11.6M LT
NEW 450 mm x 19.9 M CPEP

200 mm UNDERDRAIN

U15 STA 6+585.0 - STA 6+660.0 LT
NEW 200 mm x 75 M UNDERDRAIN
W/FLUSHING BASIN AT STA 6+585.0

U16 STA 6+660.0 LT - STA 6+660.0 RT
NEW 200 mm x 18 M UNDERDRAIN
CARRIER PIPE

U17 STA 6+760.0 - STA 6+945.0 RT
NEW 200 mm x 185 M UNDERDRAIN
W/FLUSHING BASIN AT STA 6+760.0

0 10 20 30
SCALE IN METERS

STA. 6+585.0 – STA. 6+765.0

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_nul.dgn	PLOT DATE: 05-JUN-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: A. KEMPTON
DESIGNED BY: A. KEMPTON	CHECKED BY: J. FLOOD
PLAN SHEET 8	SHEET 6 OF 44

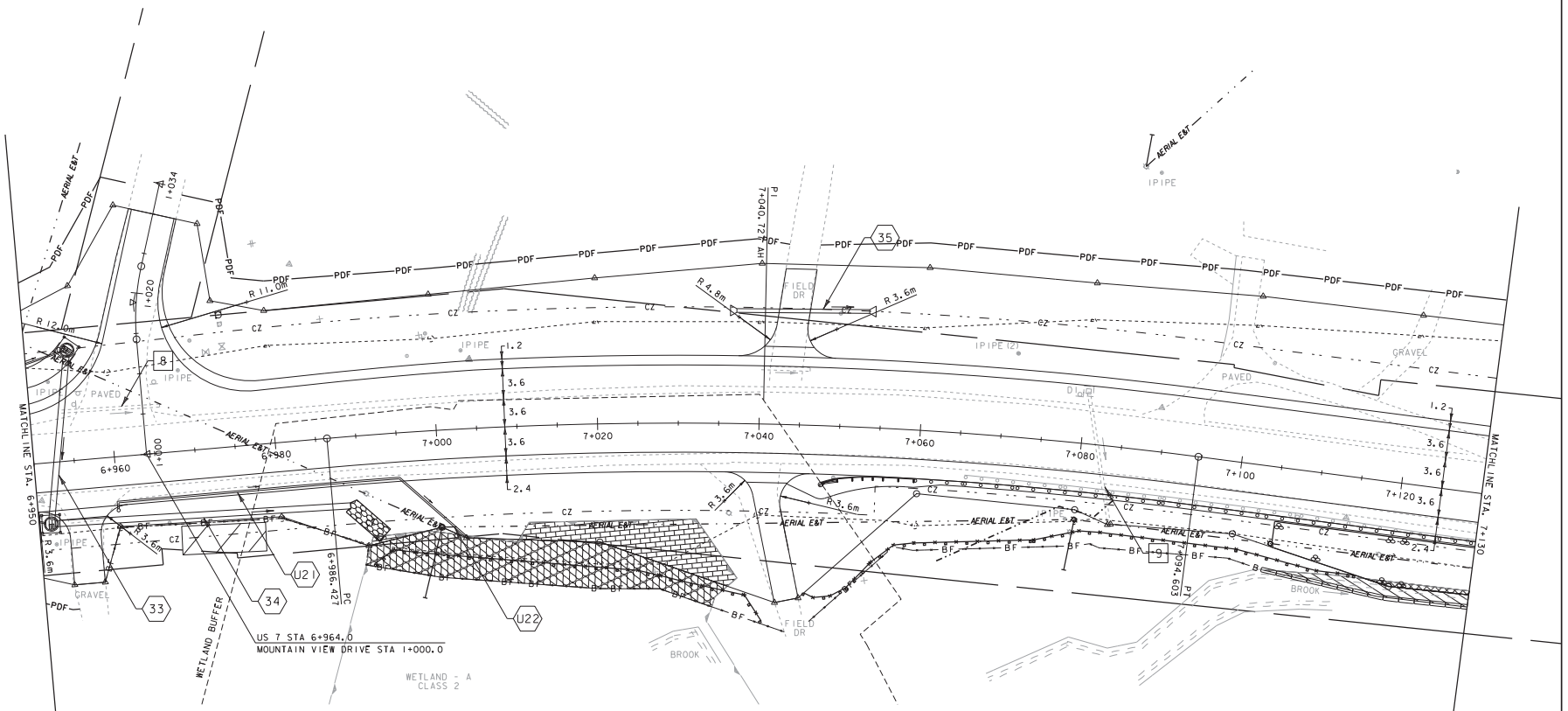
Metric

LEGEND

- PERMANANT OHW IMPACT - 66.09 SF
- TEMPORARY OHW IMPACT - 343.69 SF
- PERMANENT WETLAND IMPACT - 111.71 SF
- TEMPORARY WETLAND IMPACT - 2161.84 SF

TOTAL IMPACT AREA - 3683.33 SF

VT STATE PLANE GRID



EXISTING DRAINAGE

8 STA 6+953.9 - STA 6+966.1 LT
REMOVE EXISTING 310 mm CGMP

9 STA 7+080.2 LT - STA 7+084.3 RT
REMOVE EXISTING 380 mm RCP AND DI

NEW DRAINAGE

33 STA 6+951.6, 7.0M RT - STA 6+955.2, 13.1M LT
NEW 750 mm x 20.4 M CPEP WITH NEW CB & 2 GRATES TYPE A AT STA 6+955.3 LT

34 STA 6+952.0, 7.6M - STA 6+988.7, 8.6M RT
NEW 750 mm x 36.6 M CPEP WITH NEW CB GRATE TYPE A AT STA 6+951.5 RT
STONE FILL, TYPE II AT OUTLET
(L=5.5M, W=2.0M, D=0.6M)

35 STA 7+037.1, 14.0M - STA 7+053.1, 14.4M LT
NEW 450 mm x 16.5 M CPEP
REMOVE EXISTING DRIVE PIPE

200 mm UNDERDRAIN

U21 STA 6+960.0 - STA 6+995.0 RT
NEW 200 mm x 35 M UNDERDRAIN W/FLUSHING BASIN AT STA 6+960.0

U22 STA 6+995.0 - STA 7+003.2 RT
NEW 200 mm x 11 M UNDERDRAIN CARRIER PIPE

0 10 20 30
SCALE IN METERS

STA. 6+950.0 – STA. 7+130.0

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_nul.dgn	PLOT DATE: 01-MAY-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: A. KEMPTON
DESIGNED BY: A. KEMPTON	CHECKED BY: J. FLOOD
PLAN SHEET 10	SHEET 8 OF 44

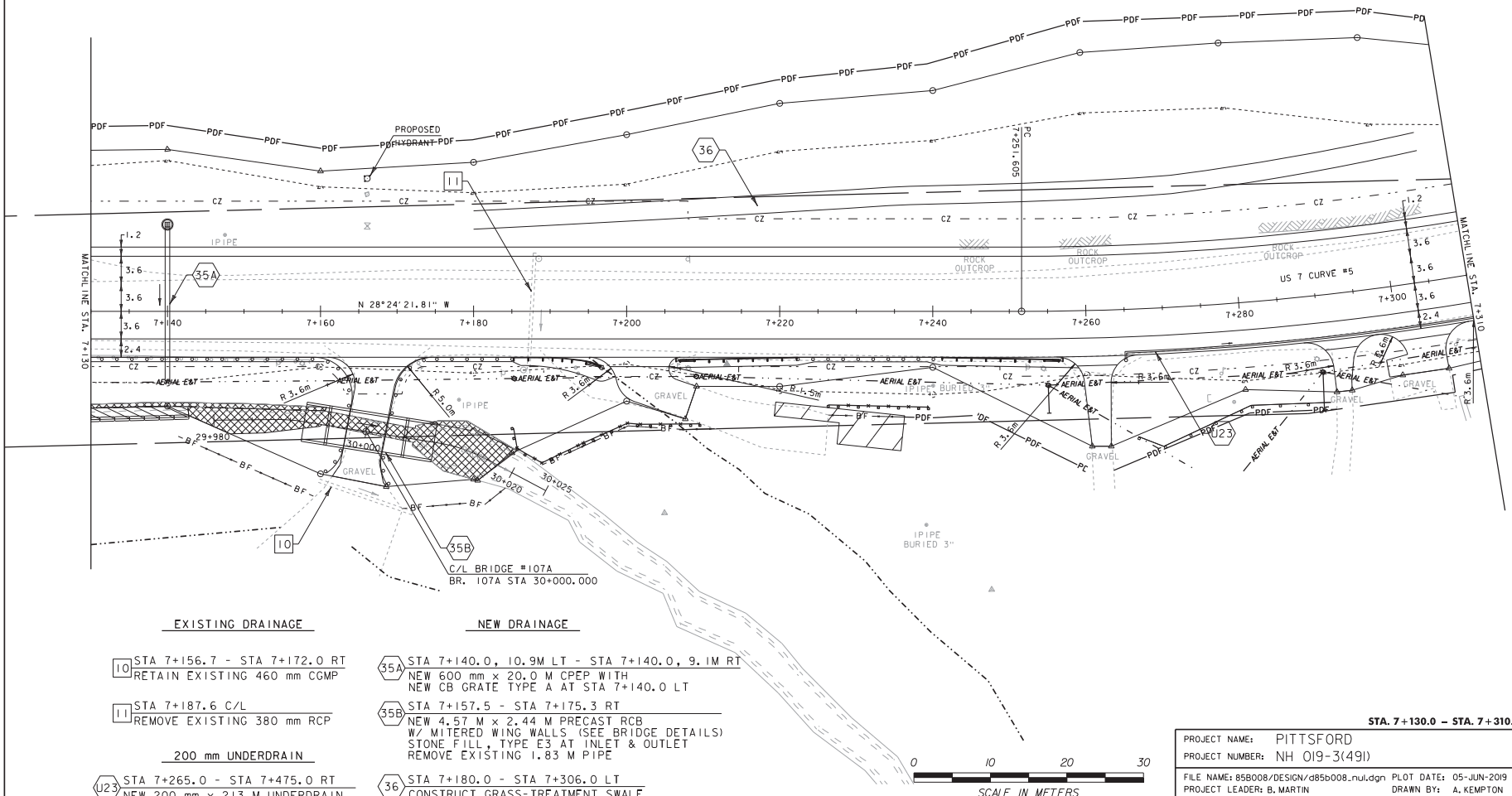
Metric

LEGEND

PERMANANT OHW IMPACT - 1644.95 SF	
TEMPORARY OHW IMPACT - 201.07 SF	
PERMANENT WETLAND IMPACT - 0 SF	
TEMPORARY WETLAND IMPACT - 0 SF	

TOTAL IMPACT AREA - 1846.02 SF

VT STATE PLANE GRID N



EXISTING DRAINAGE

10 — STA 7+156.7 - STA 7+172.0 RT
RETAIN EXISTING 460 mm CGMP

11 — STA 7+187.6 C/L
REMOVE EXISTING 380 mm RCP

200 mm UNDERDRAIN

U23 — STA 7+265.0 - STA 7+475.0 RT
NEW 200 mm x 213 M UNDERDRAIN W/FLUSHING BASIN AT STA 7+265.0

NEW DRAINAGE

35A — STA 7+140.0, 10.9M LT - STA 7+140.0, 9.1M RT
NEW 600 mm x 20.0 M CPEP WITH NEW CB GRATE TYPE A AT STA 7+140.0 LT

35B — STA 7+157.5 - STA 7+175.3 RT
NEW 4.57 M x 2.44 M PRECAST RCB W/ MITERED WING WALLS (SEE BRIDGE DETAILS)
STONE FILL, TYPE E3 AT INLET & OUTLET
REMOVE EXISTING 1.83 M PIPE

36 — STA 7+180.0 - STA 7+306.0 LT
CONSTRUCT GRASS-TREATMENT SWALE WITH BERM, SEE DETAIL SHEETS

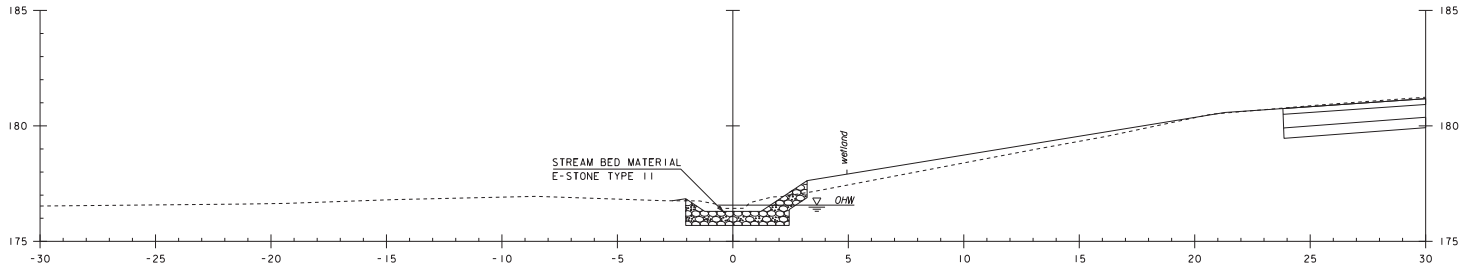
STA. 7+130.0 – STA. 7+310.0

PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

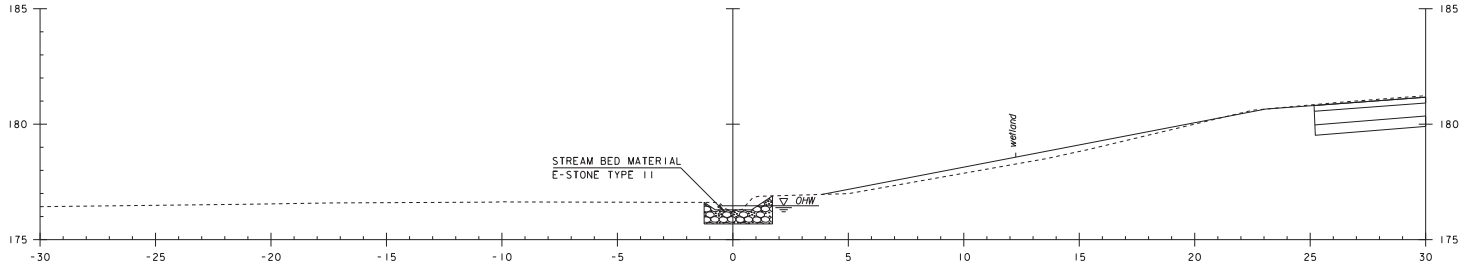
FILE NAME: 85B008/DESIGN/d85b008_nul.dgn PLOT DATE: 05-JUN-2019
PROJECT LEADER: B. MARTIN DRAWN BY: A. KEMPTON
DESIGNED BY: A. KEMPTON CHECKED BY: J. FLOOD
PLAN SHEET II SHEET 9 OF 44

Metric

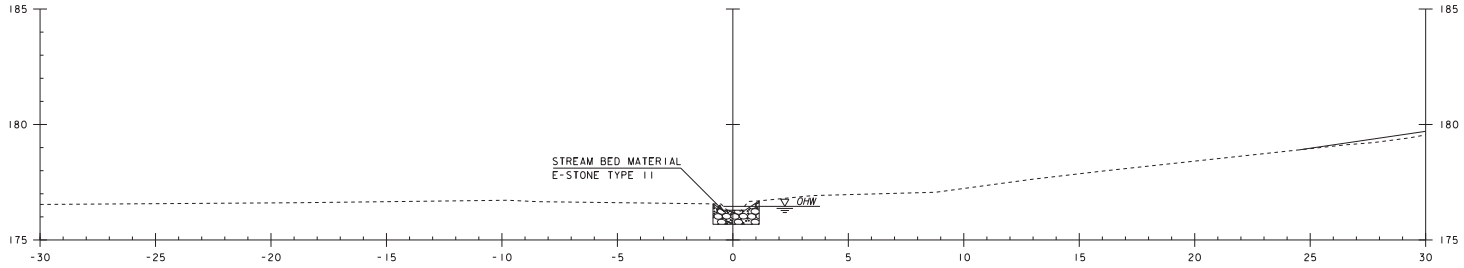
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS



9+984.00



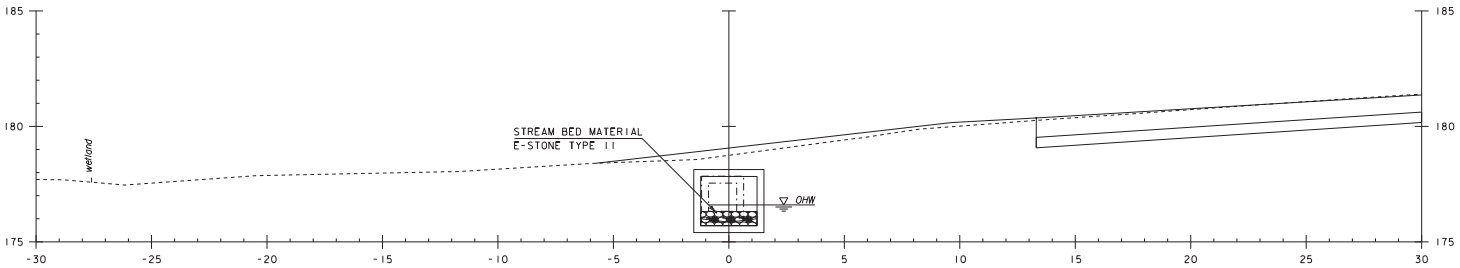
9+981.00



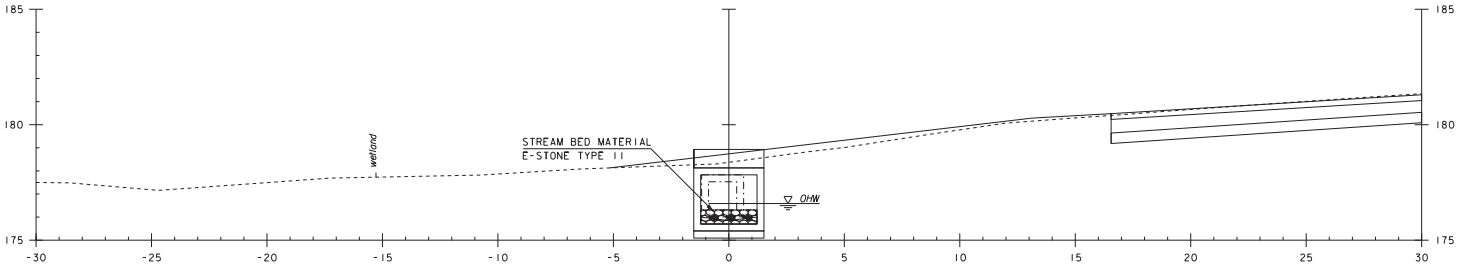
STA. 9+980 TO STA. 9+984

9+979.64
BEGIN CHANNEL EXCAVATION

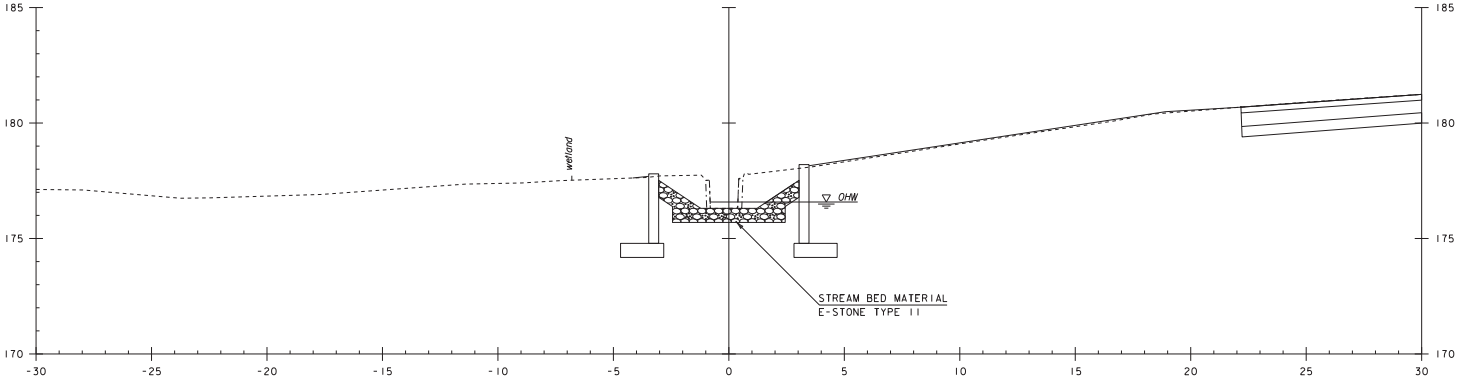
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 106 CHANNEL OHW SHEET 1	SHEET 1 OF 35



9+990.00



9+988.95
BEGIN BR 106



9+987.00

STA. 9+987 TO STA. 9+990

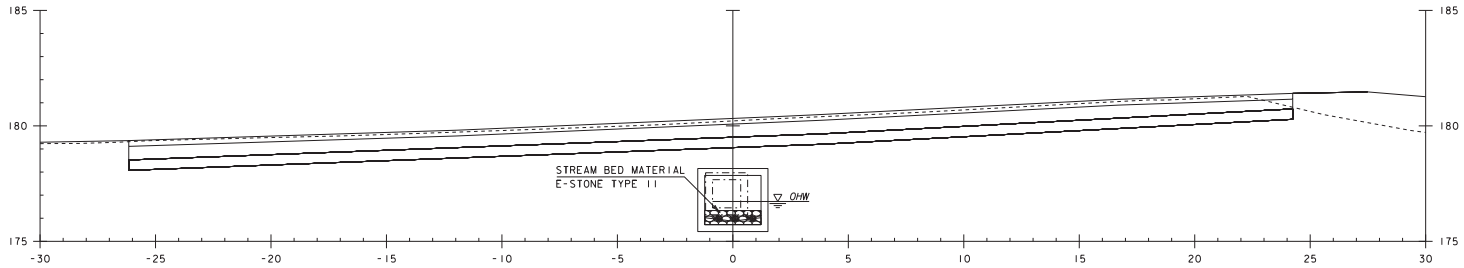
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS

PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

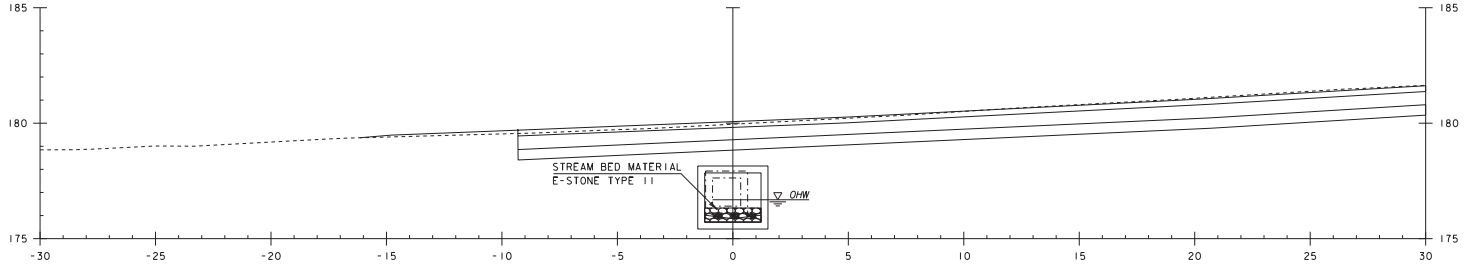
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH CHECKED BY: A. KEMPTON
BR 106 CHANNEL OHW SHEET 2 SHEET 2 OF 35

Metric

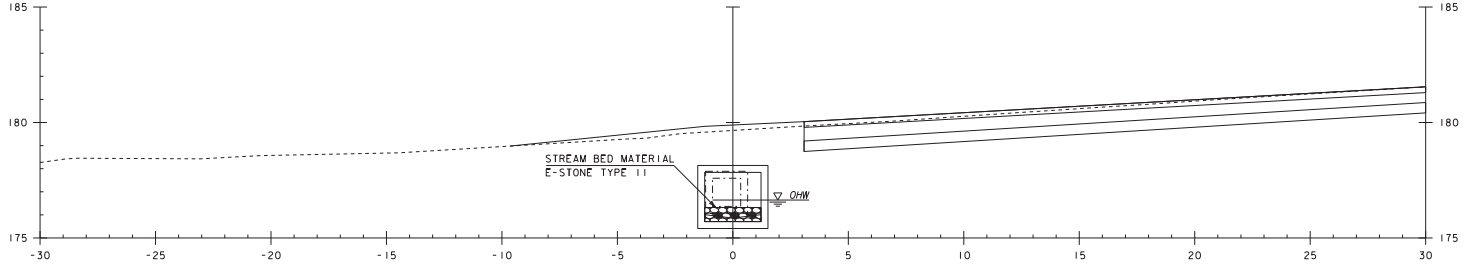
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS



9+999.00



9+996.00

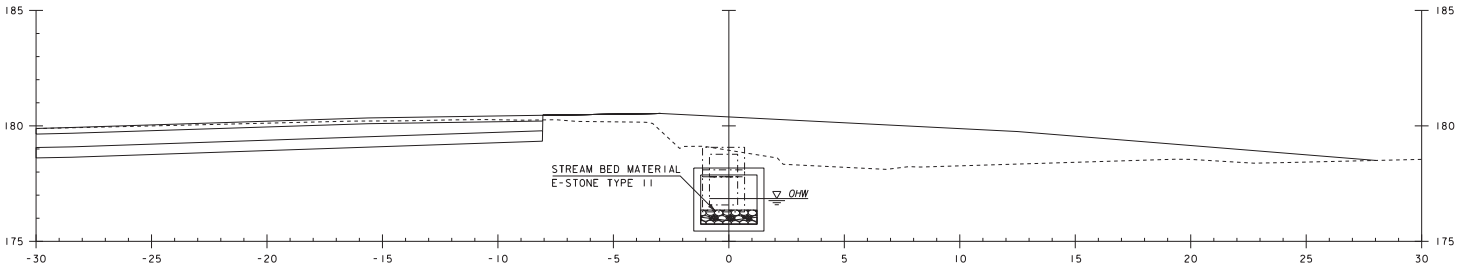


9+993.00

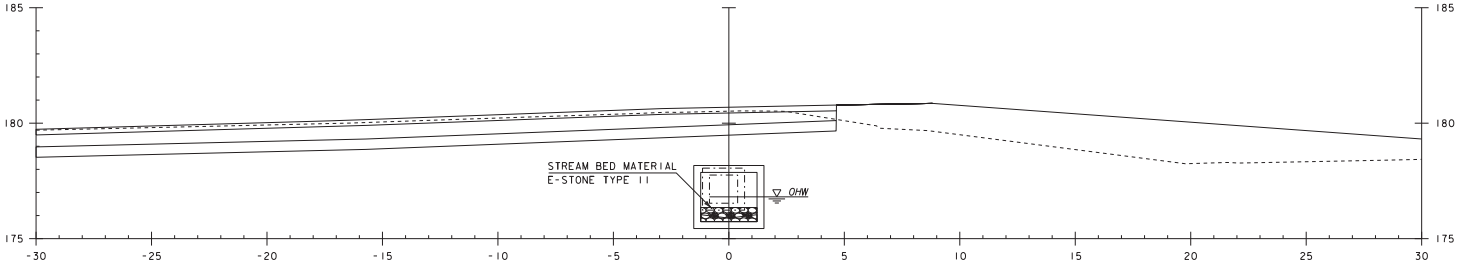
STA. 9+993 TO STA. 9+999

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 106 CHANNEL OHW SHEET 3	SHEET 3 OF 35

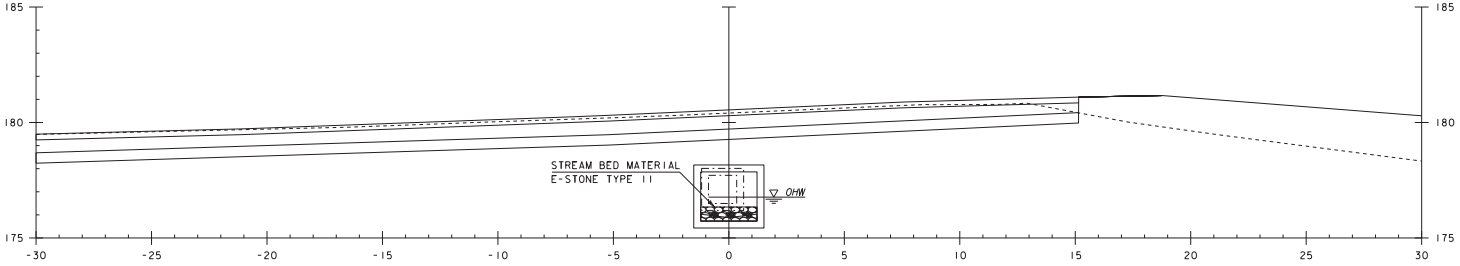
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS



10+008.00



10+005.00



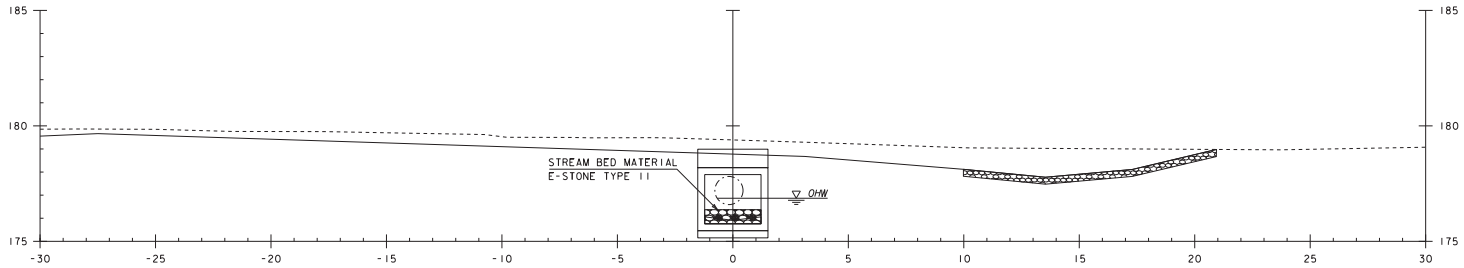
10+002.00

STA. 10+002 TO STA. 10+008

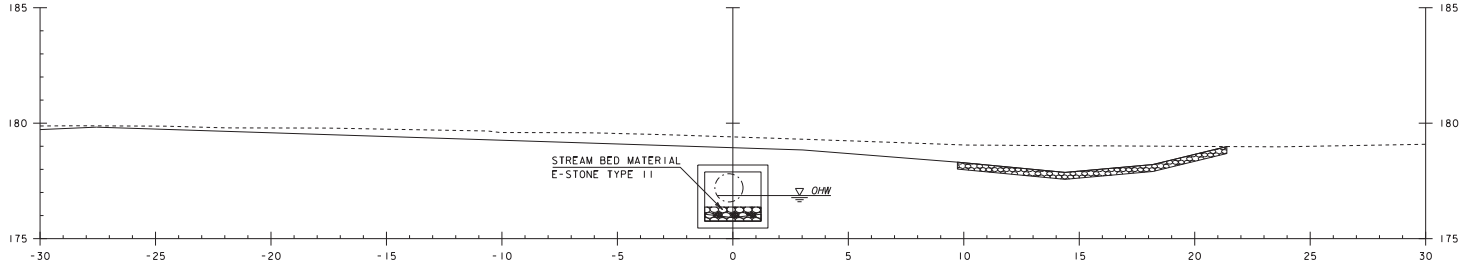
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 106 CHANNEL OHW SHEET 4	SHEET 4 OF 35

Metric

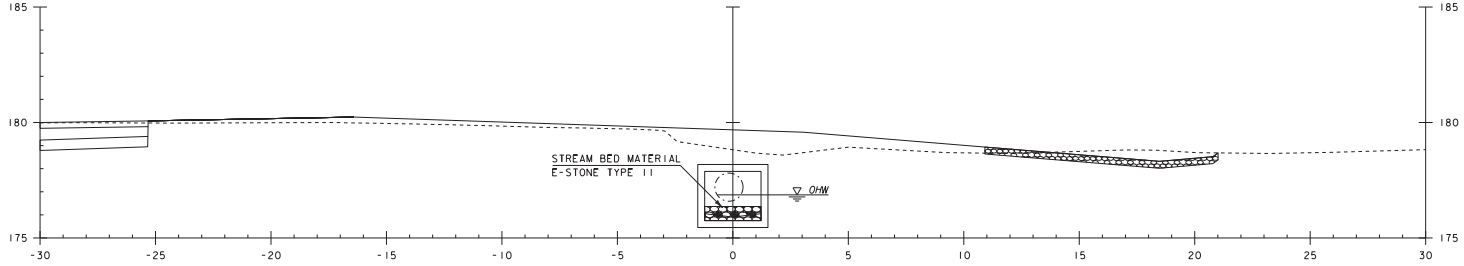
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS



10+014.65
END BR 106



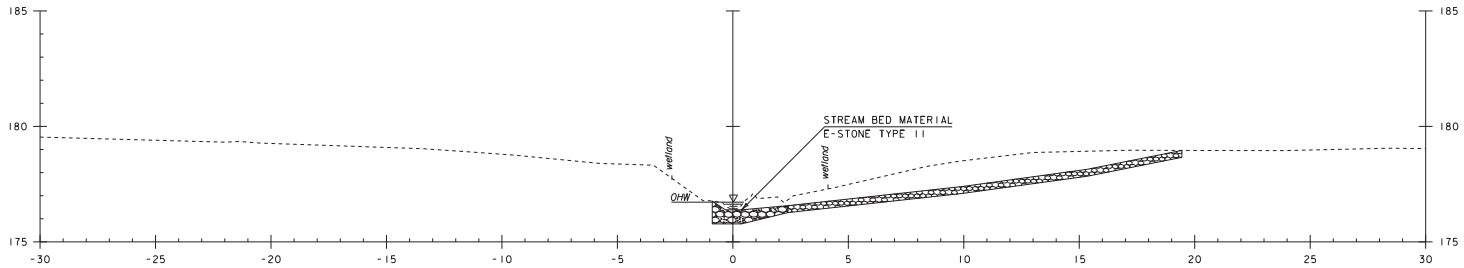
10+014.00



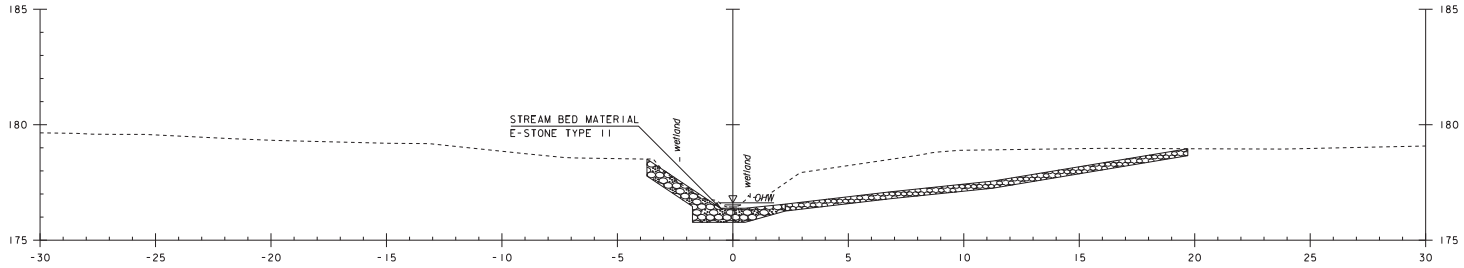
10+011.00

STA. 10+011 TO STA. 10+015

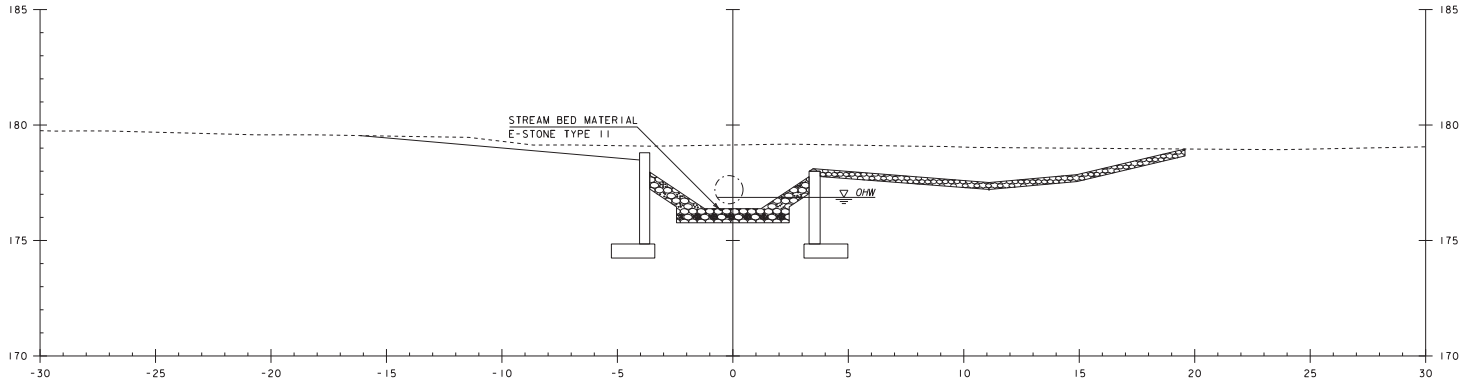
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 106 CHANNEL OHW SHEET 5	SHEET 5 OF 35



10+021.78
END CHANNEL EXCAVATION



10+020.00



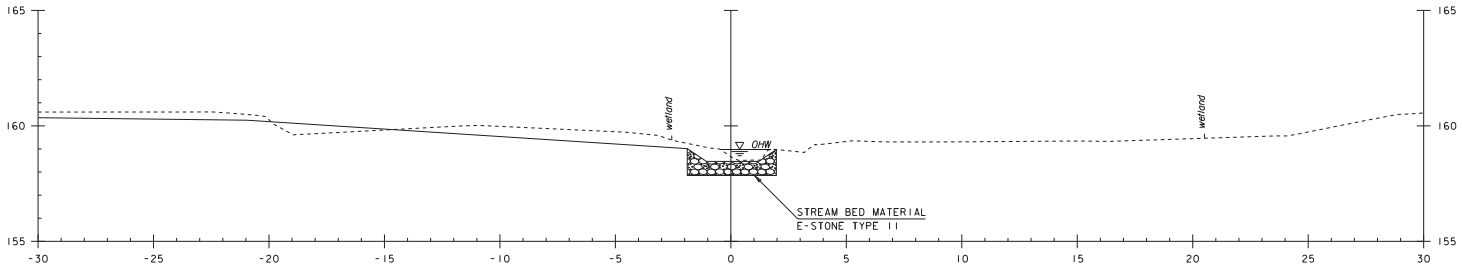
10+017.00

STA. 10+017 TO STA. 10+022

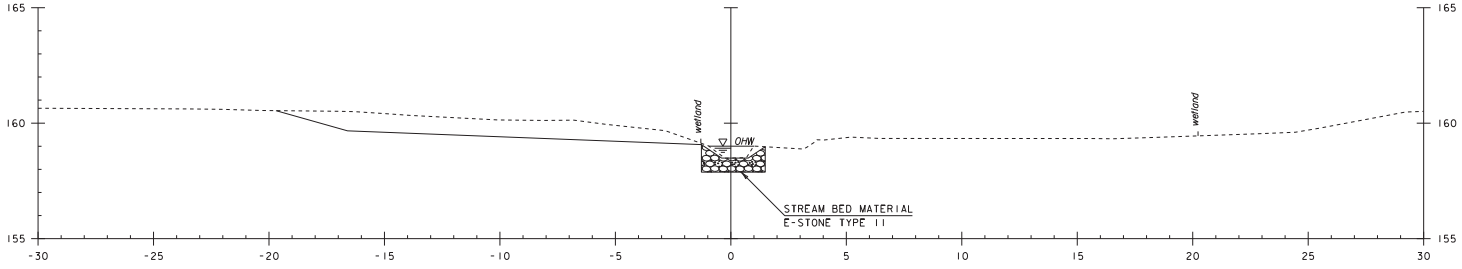
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 106 CHANNEL OHW SHEET 6	SHEET 6 OF 35

NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS



19+986.00

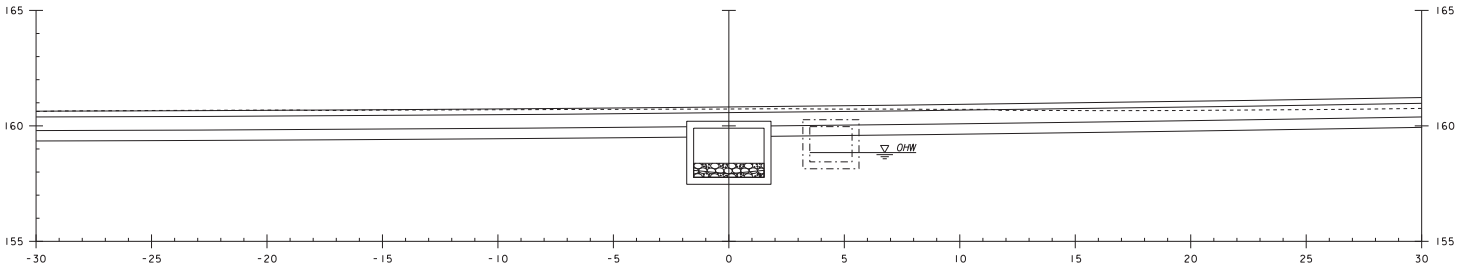


19+983.00
BEGIN CHANNEL WORK

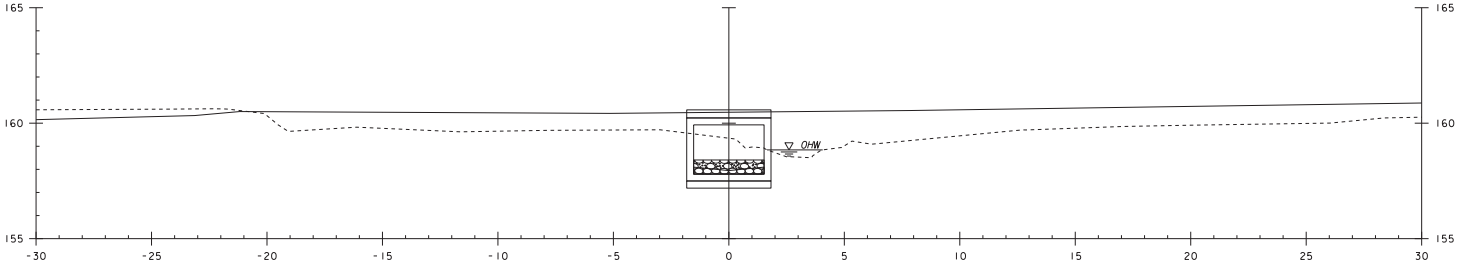
STA. 19+983 TO STA. 19+986

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 107 CHANNEL OHW SHEET 1	SHEET 7 OF 35

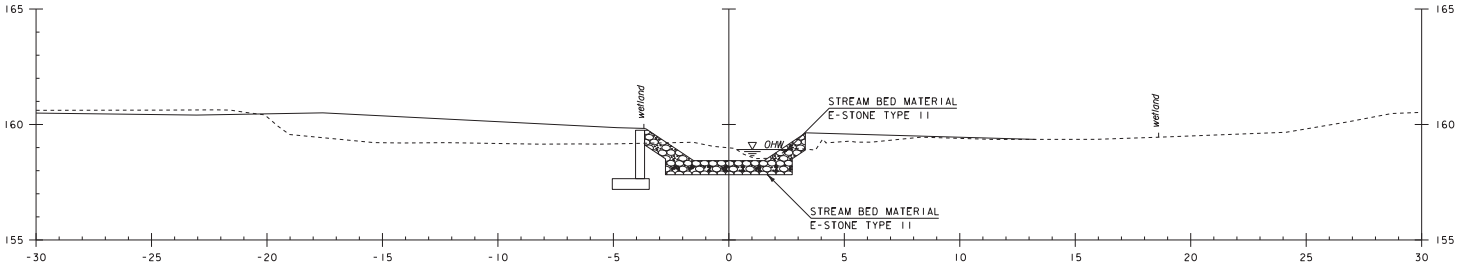
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS



19+995.00



19+992.00
BEGIN BR 107



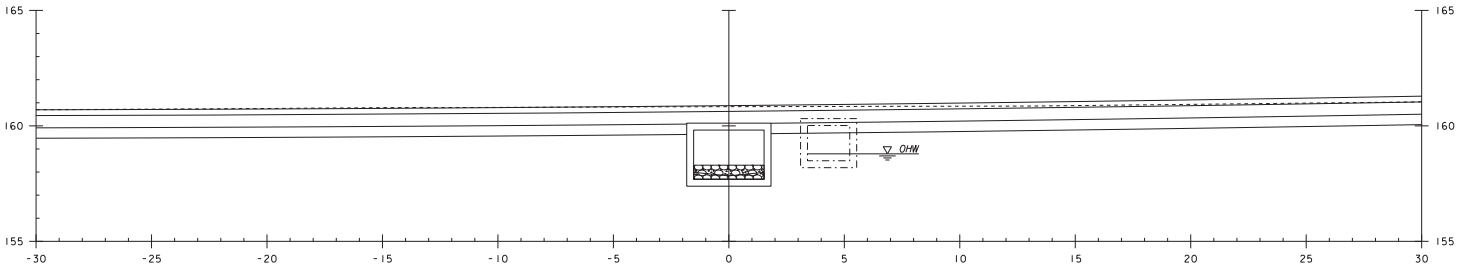
19+989.00

STA. 19+989 TO STA. 19+995

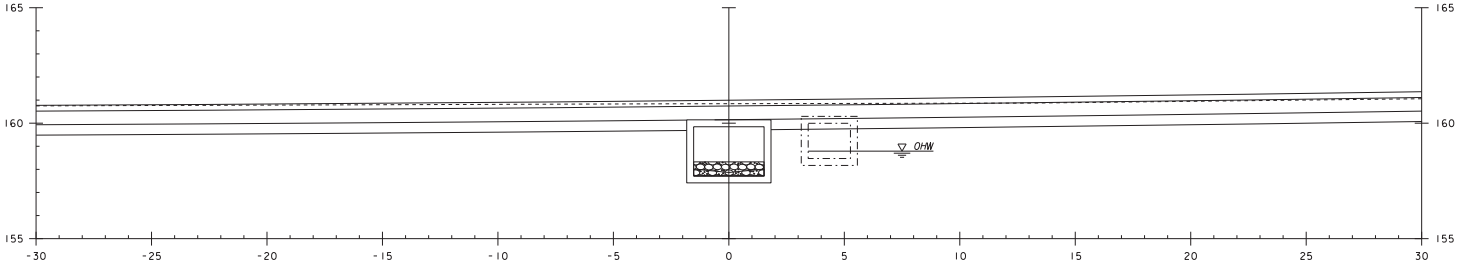
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 107 CHANNEL OHW SHEET 2	SHEET 8 OF 35

Metric

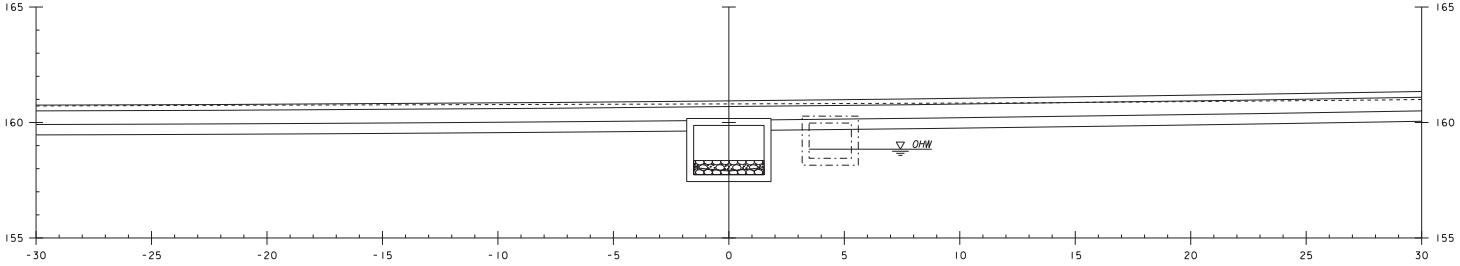
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS



20+004.00



20+001.00



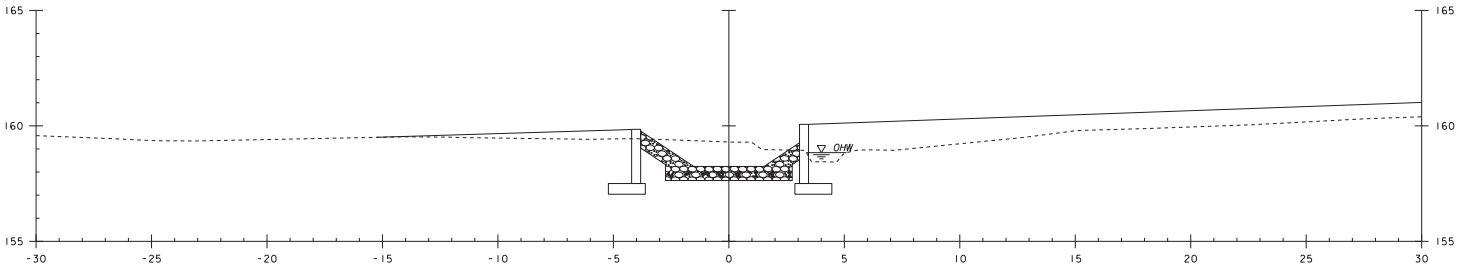
19+998.00

STA. 19+998 TO STA. 20+004

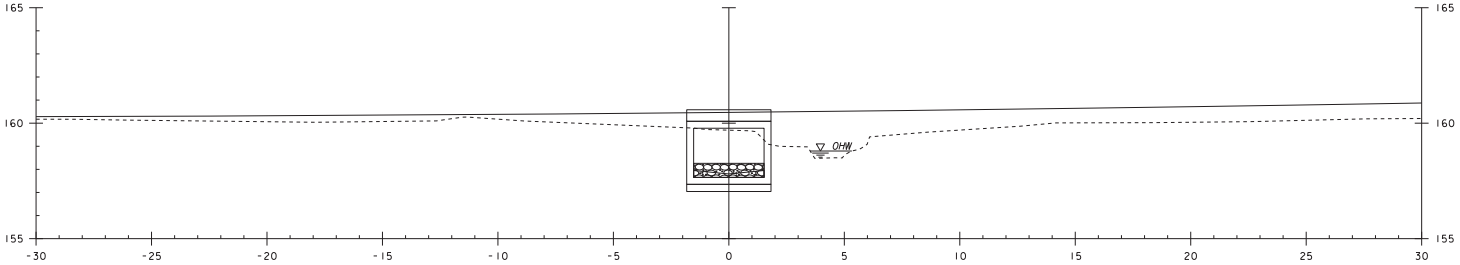
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 107 CHANNEL OHW SHEET 3	SHEET 9 OF 35

Metric

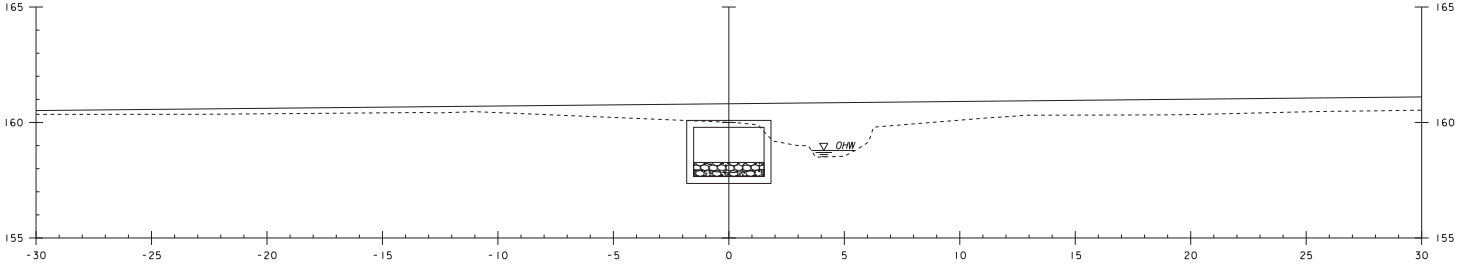
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS



20+010.00



20+008.00
END BR 107



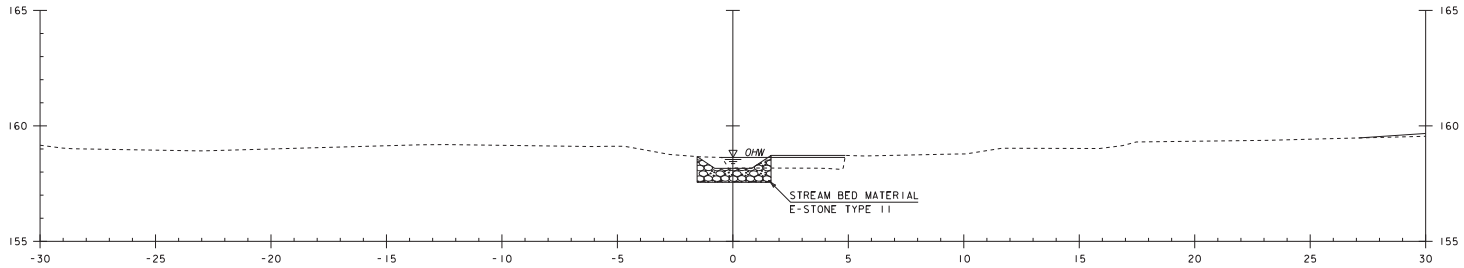
20+007.00

STA. 20+007 TO STA. 20+010

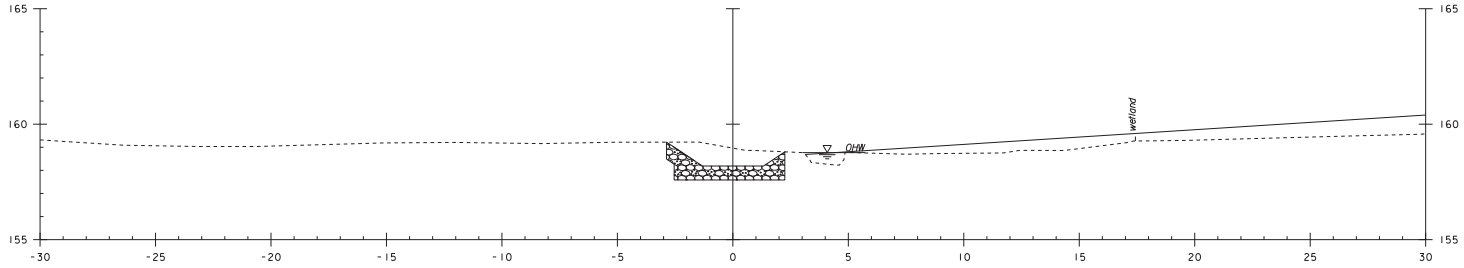
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 107 CHANNEL OHW SHEET 4	SHEET 10 OF 35

Metric

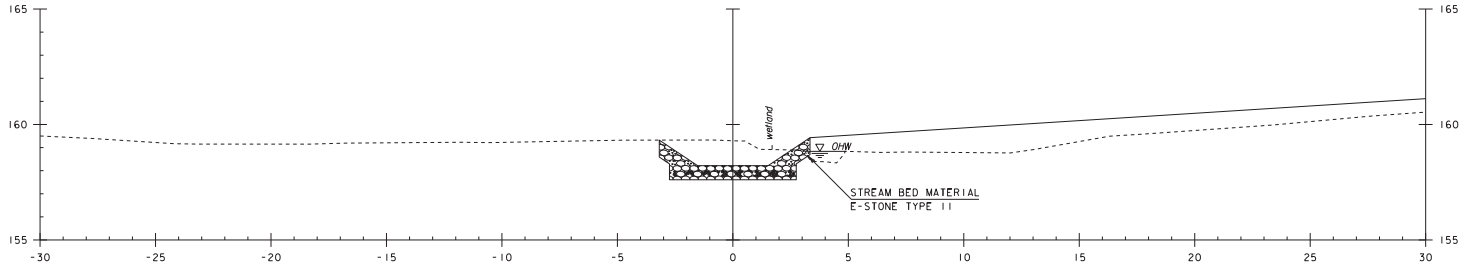
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS



20+019.00



20+016.00



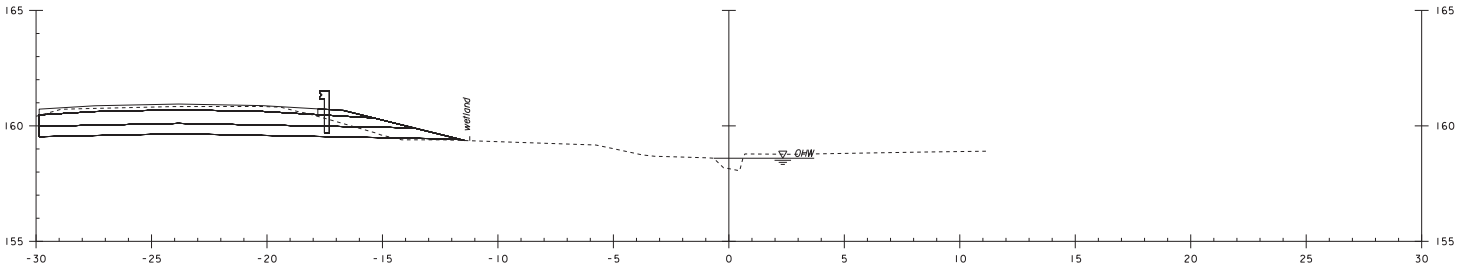
20+013.00

STA. 20+013 TO STA. 20+019

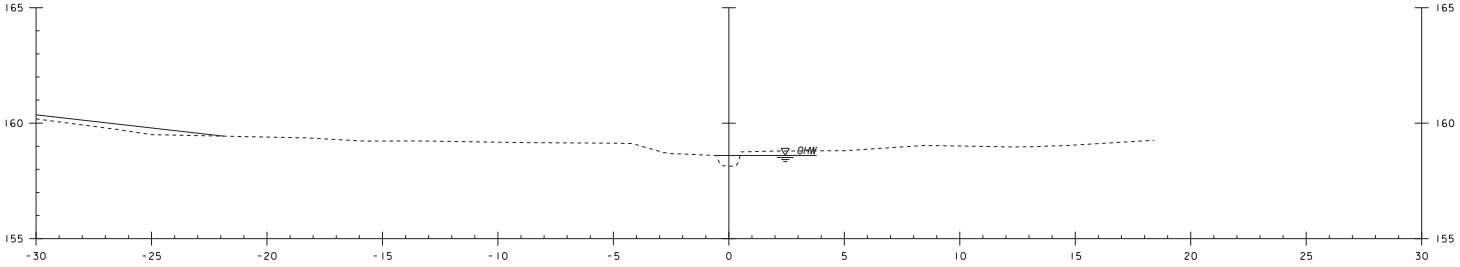
PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

FILE NAME: 85B008/DESIGN/d85b008_coe.dgn PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH CHECKED BY: A. KEMPTON
BR 107 CHANNEL OHW SHEET 5 SHEET 11 OF 35

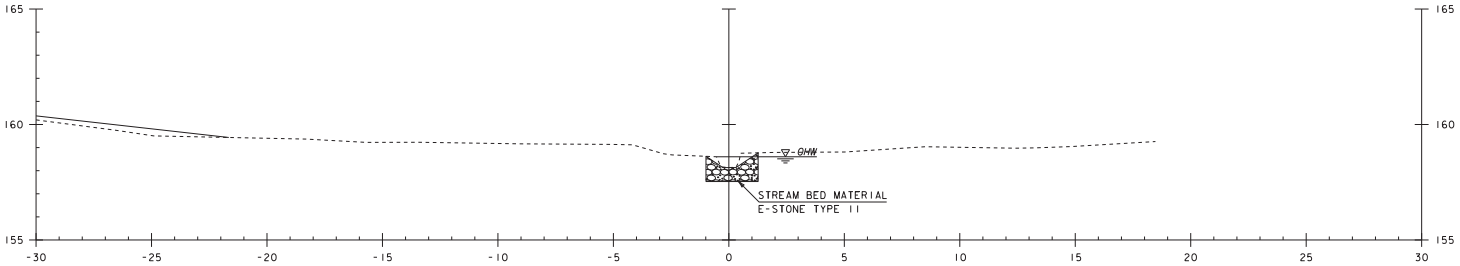
NOTE:
CHANNEL SECTIONS WERE TAKEN FROM THE CHANNEL ALIGNMENT, SEE DETAIL SHEETS



20+025.00



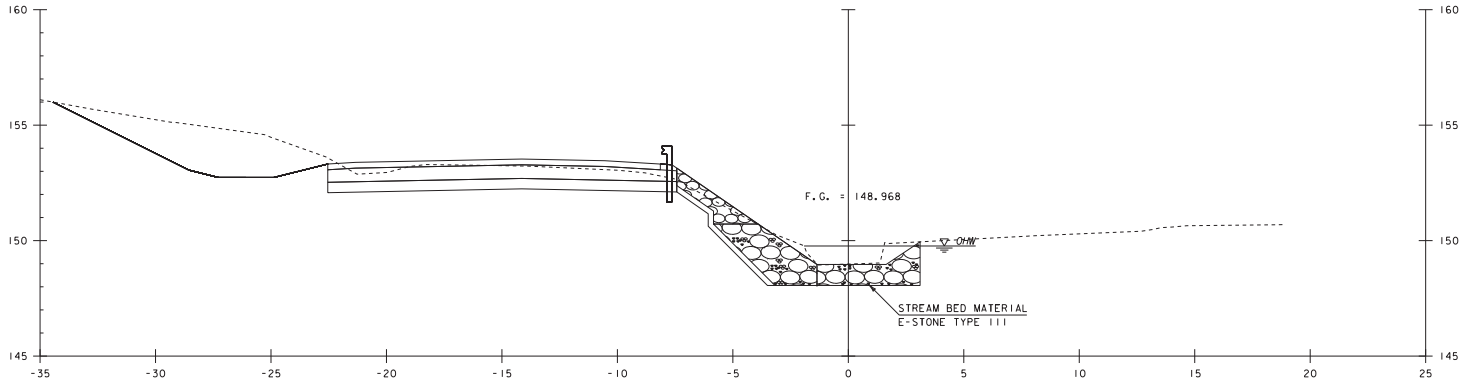
20+022.00



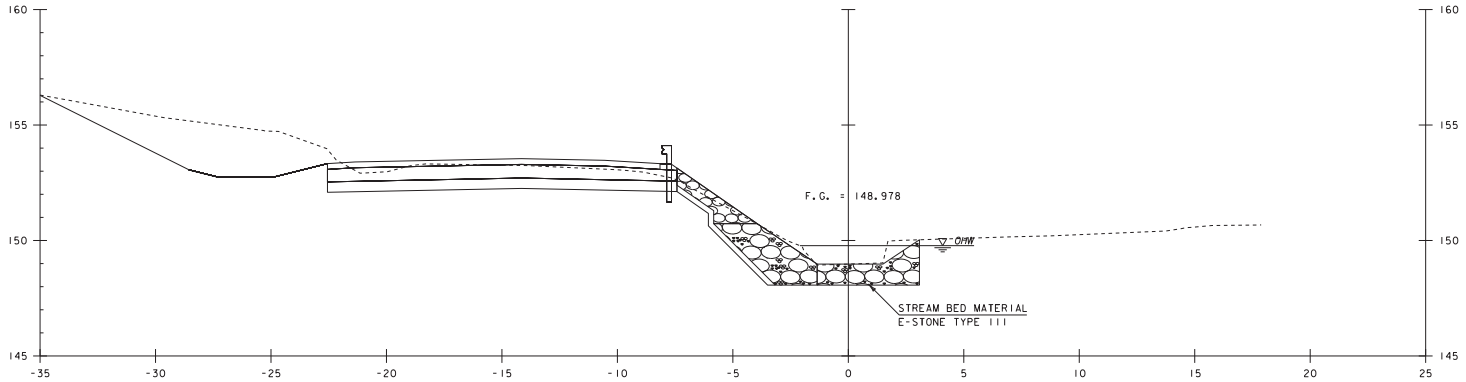
STA. 20+022 TO STA. 20+025

20+021.94
END CHANNEL EXCAVATION

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 107 CHANNEL OHW SHEET 6	SHEET 12 OF 35



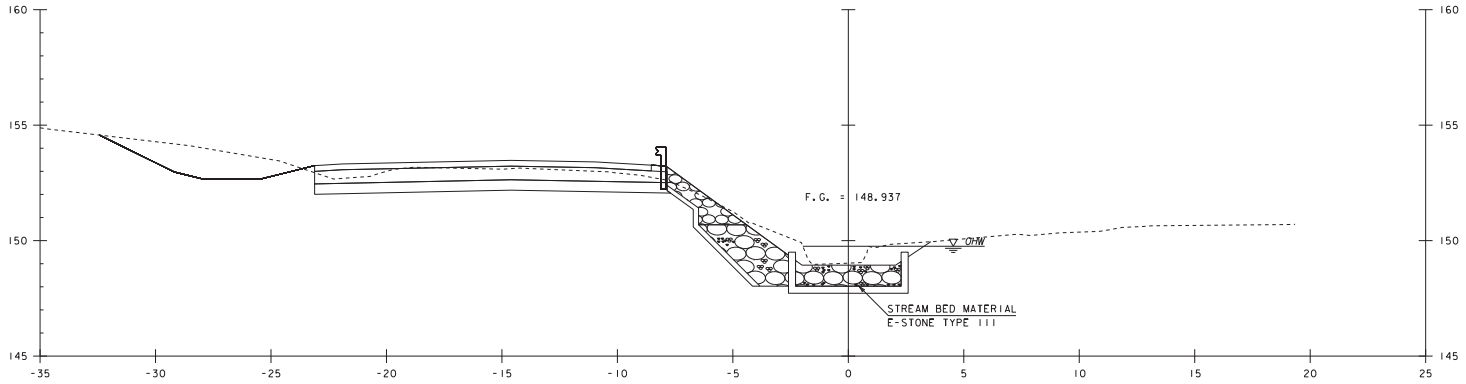
29+988.00



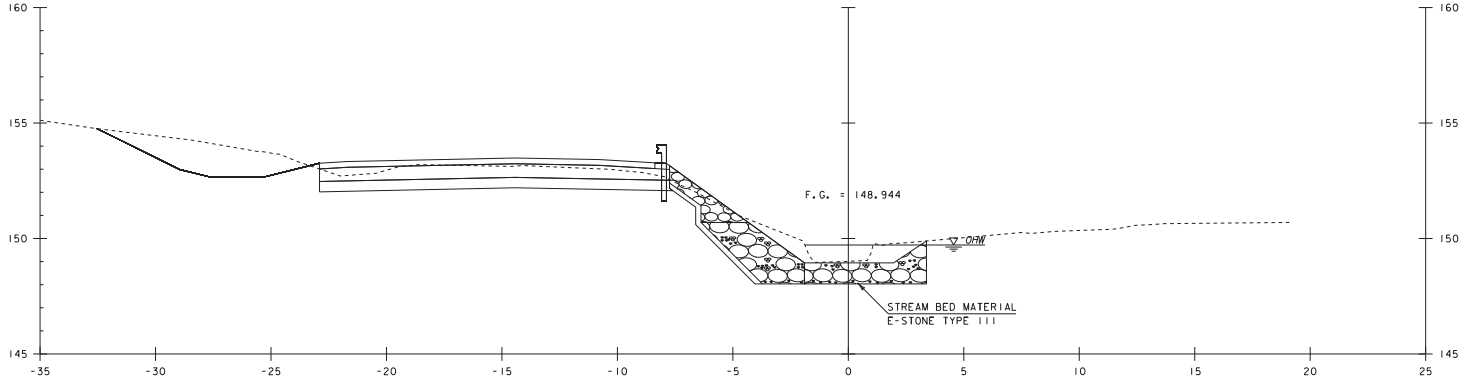
29+986.72
BEGIN CHANNEL WORK

STA. 29+987 TO STA. 29+988

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 107A CHANNEL OHW SHEET 1	SHEET 13 OF 35



29+991.82
BEGIN CULVERT 35B

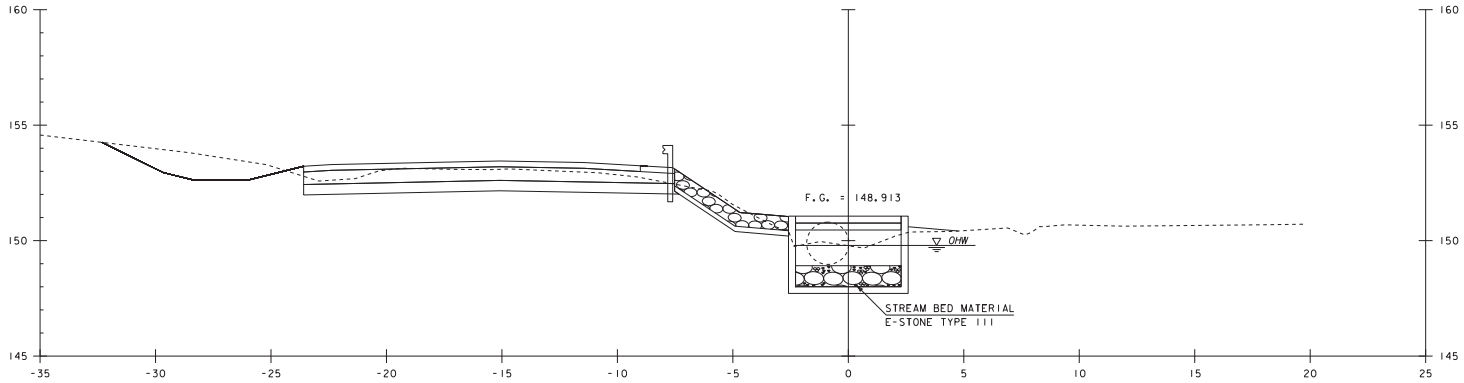


29+991.00

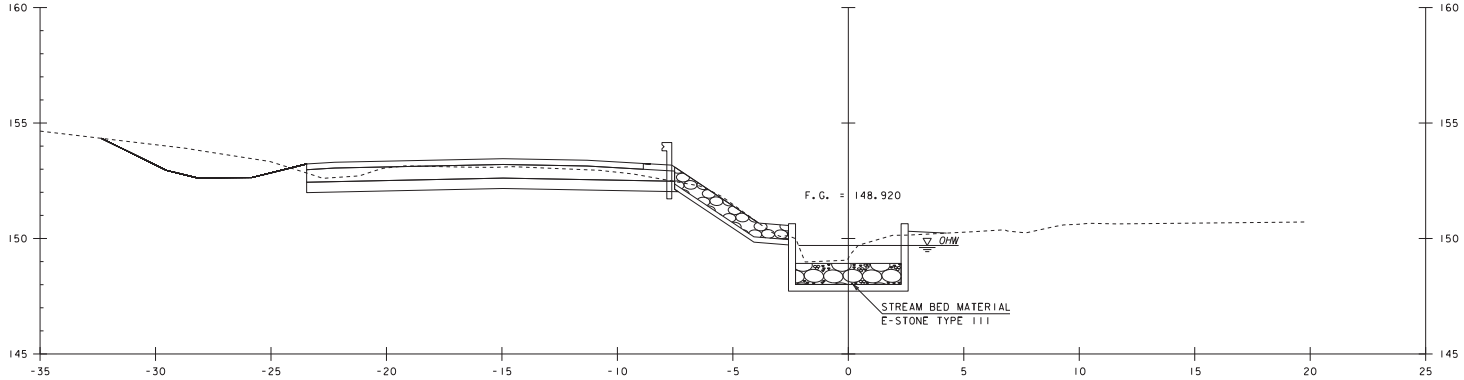
STA. 29+991 TO STA. 29+992

PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

FILE NAME: 85B008/DESIGN/d85b008_coe.dgn PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH CHECKED BY: A. KEMPTON
BR 107A CHANNEL OHW SHEET 2 SHEET 14 OF 35



29+994.82
CULVERT 35B INLET HEADWALL

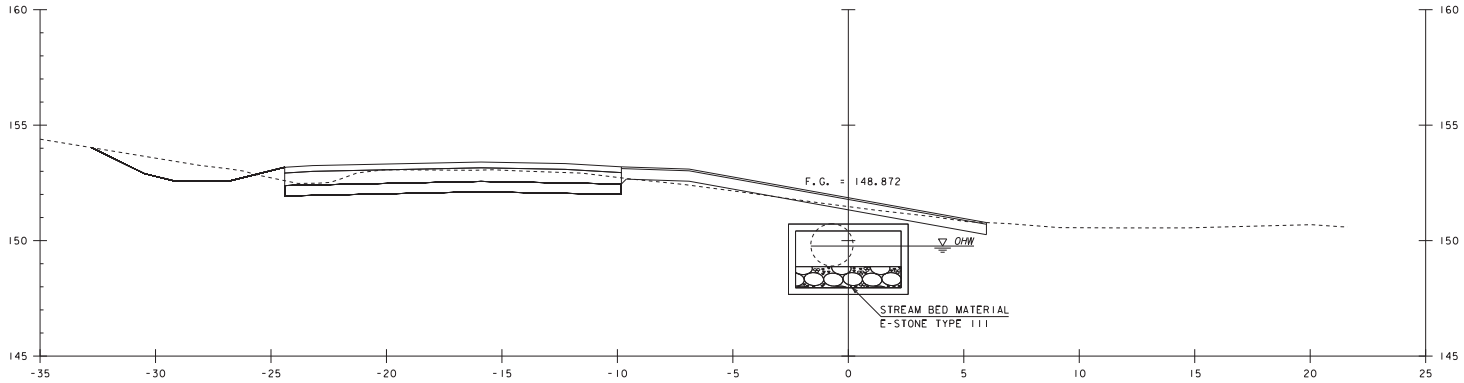


29+994.00

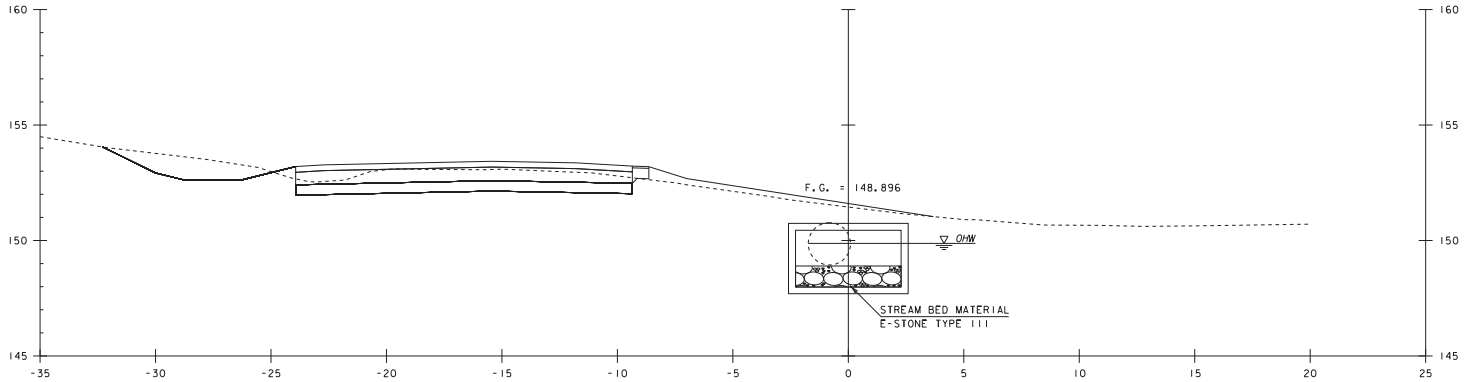
STA. 29+994 TO STA. 29+995

PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

FILE NAME: 85B008/DESIGN/d85b008_coe.dgn PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH CHECKED BY: A. KEMPTON
BR 107A CHANNEL OHW SHEET 3 SHEET 15 OF 35



30+000.00

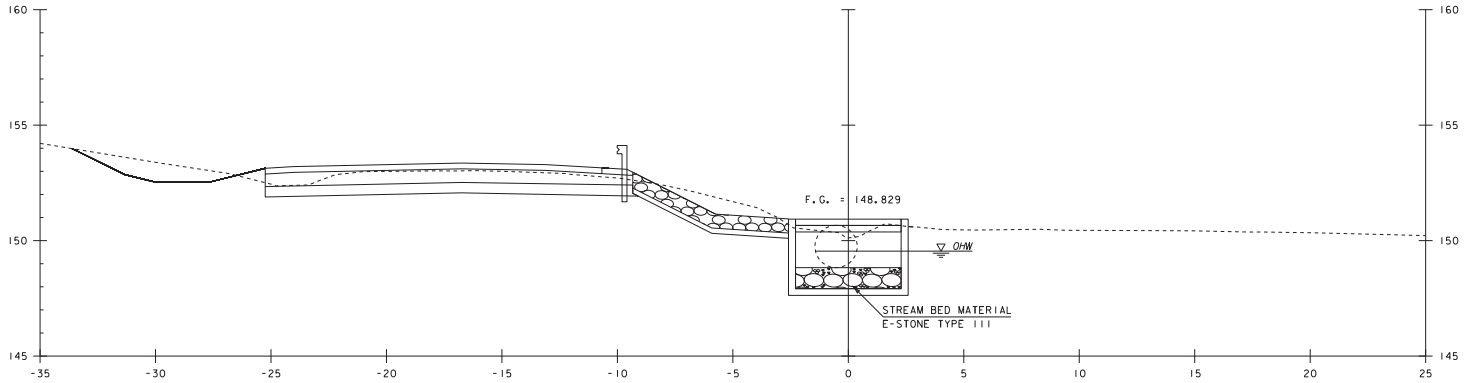


29+997.00

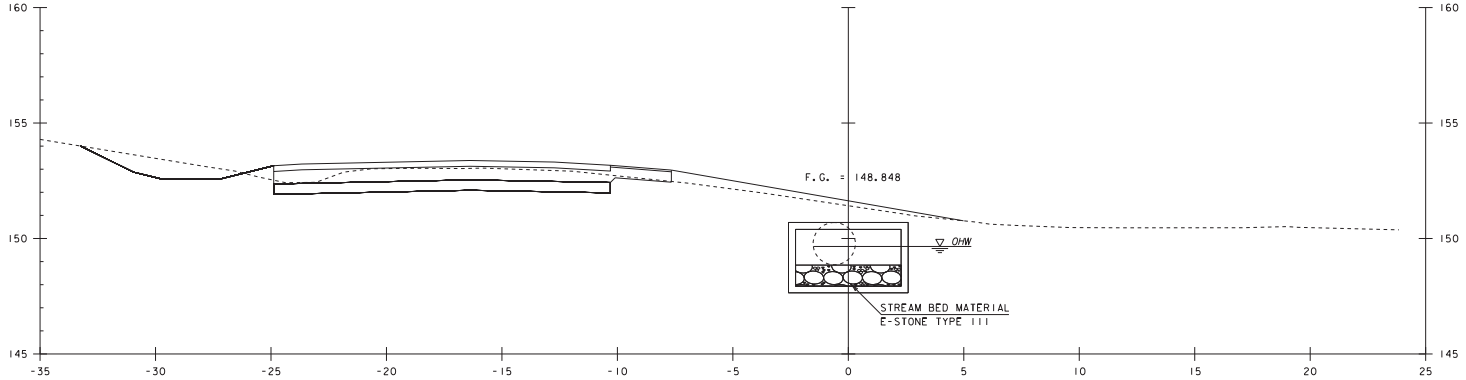
STA. 29+997 TO STA. 30+000

PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

FILE NAME: 85B008/DESIGN/d85b008_coe.dgn PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH CHECKED BY: A. KEMPTON
BR 107A CHANNEL OHW SHEET 4 SHEET 16 OF 35



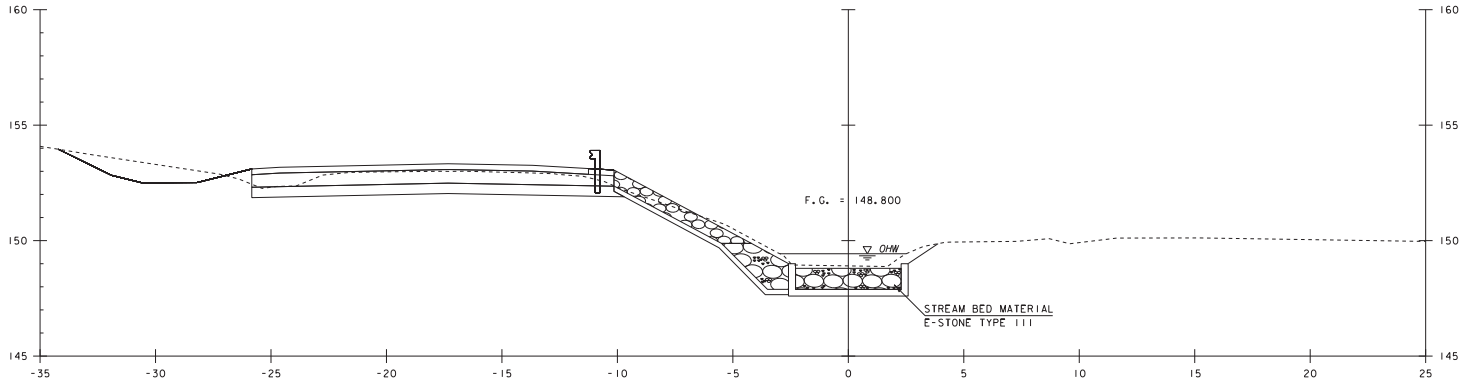
30+005.32
CULVERT 35B OUTLET HEADWALL



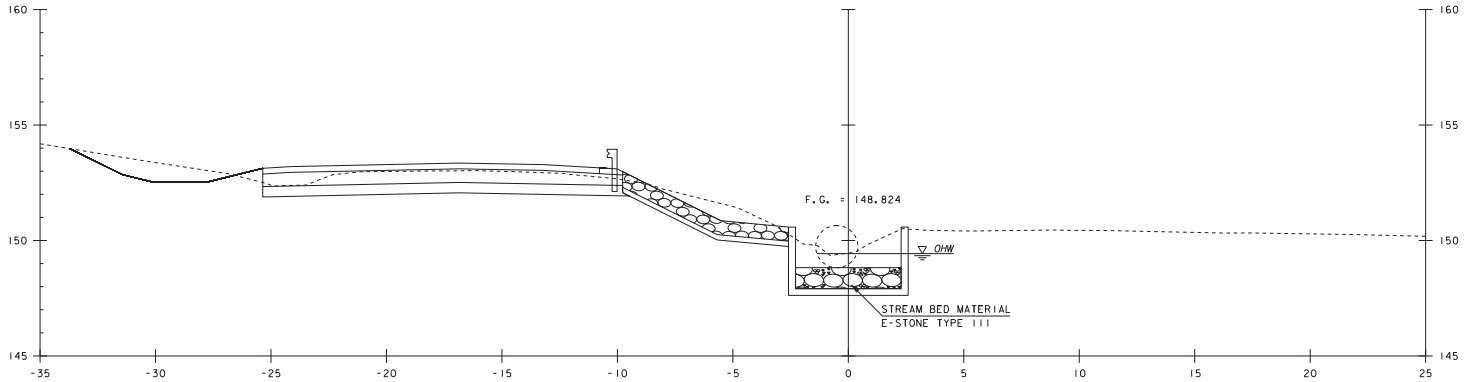
30+003.00

STA. 30+003 TO STA. 30+005

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 107A CHANNEL OHW SHEET 5	SHEET 17 OF 35



30+009.00



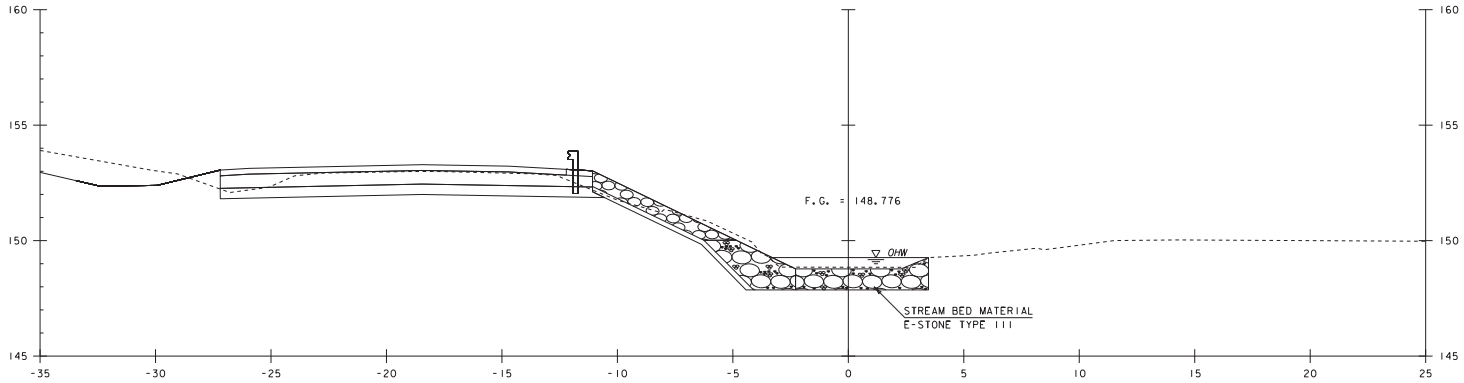
30+006.00

STA. 30+006 TO STA. 30+009

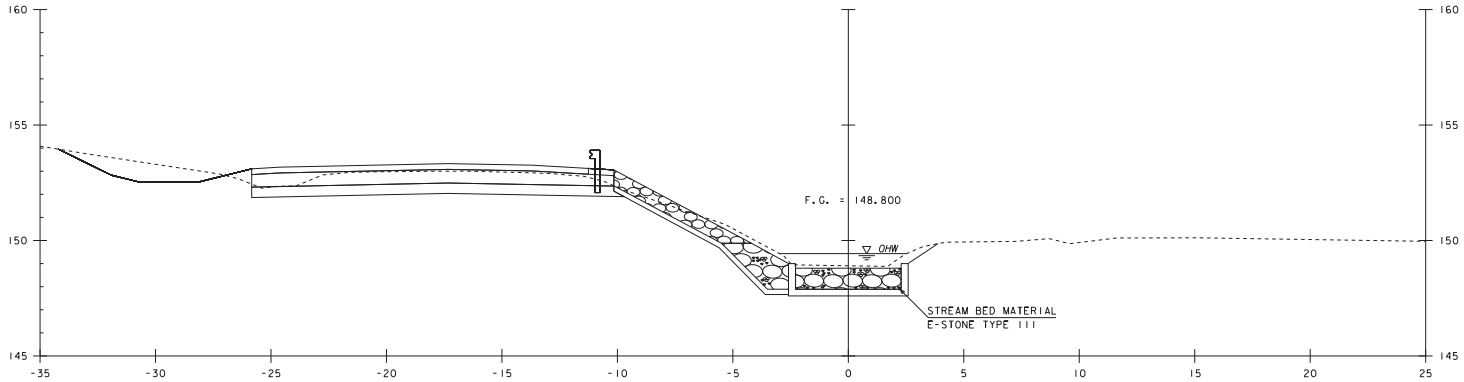
PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

FILE NAME: 85B008/DESIGN/d85b008_coe.dgn PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH CHECKED BY: A. KEMPTON
BR 107A CHANNEL OHW SHEET 6 SHEET 18 OF 35

Metric



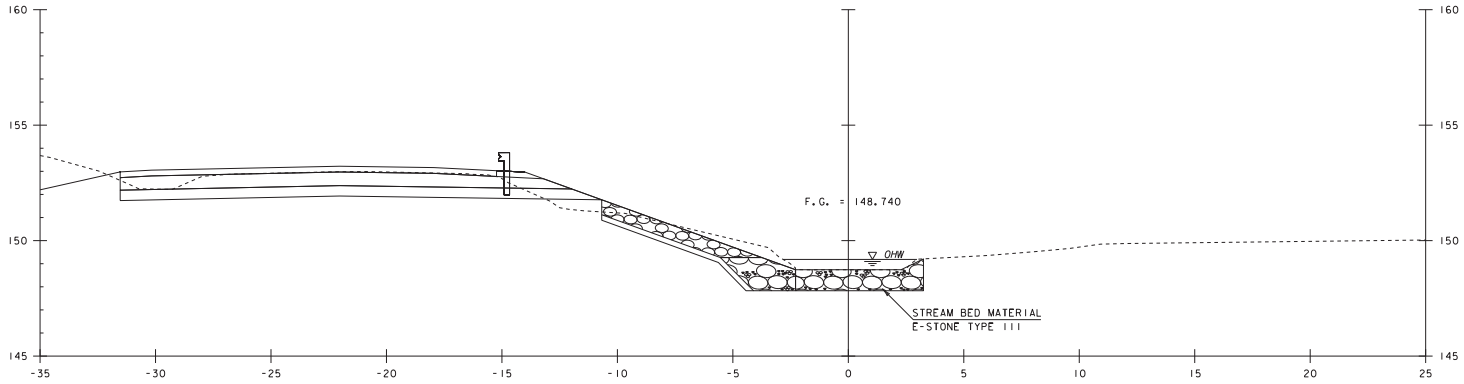
30+012.00



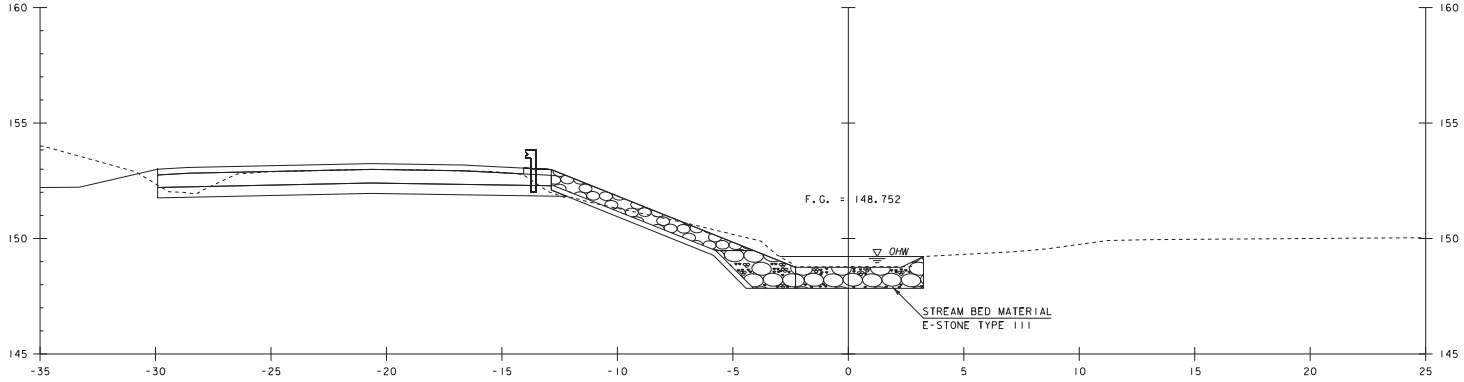
30+009.02
END CULVERT 35B

STA. 30+009 TO STA. 30+012

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 107A CHANNEL OHW SHEET 7	SHEET 19 OF 35



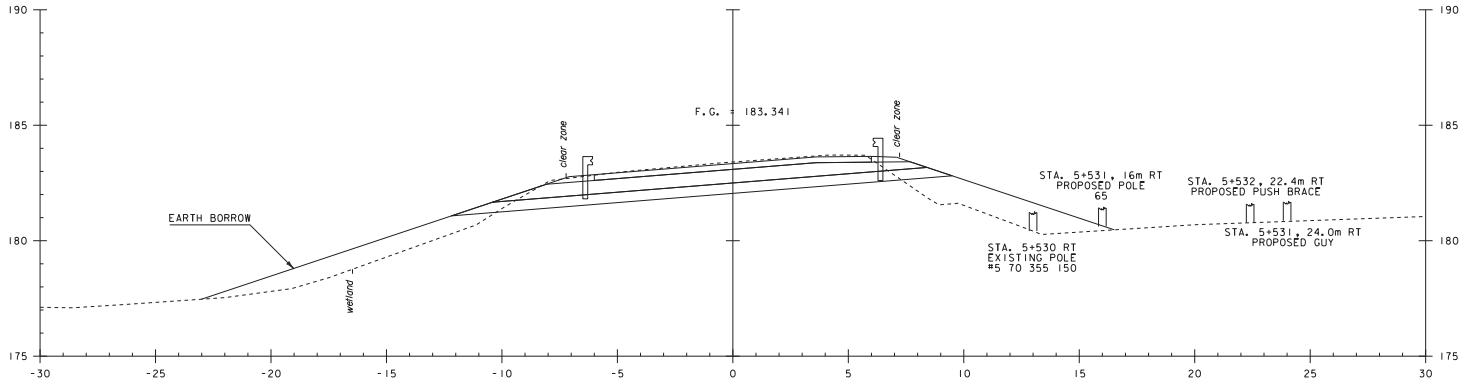
30+016.52
END CHANNEL WORK



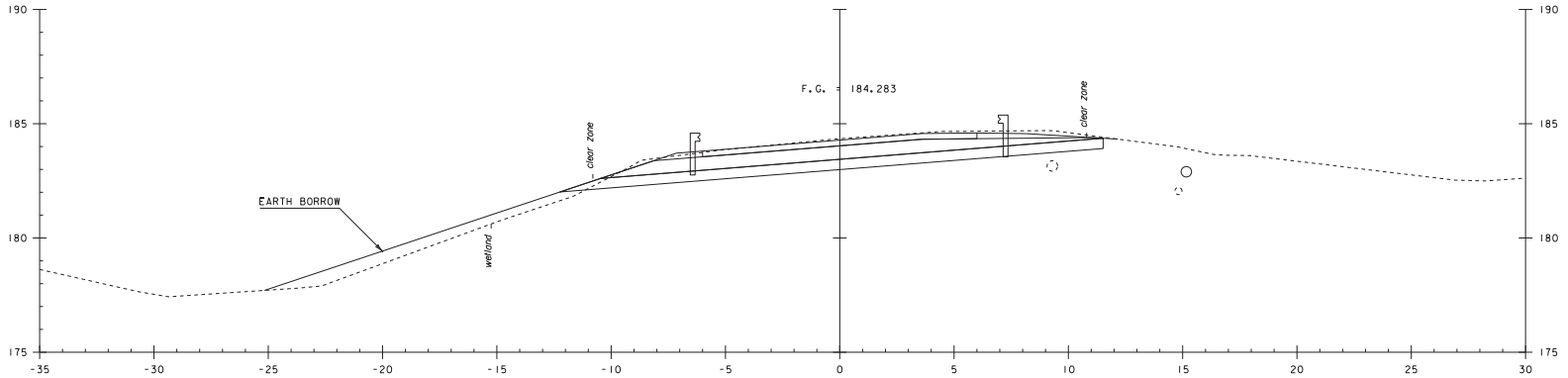
30+015.00

STA. 30+015 TO STA. 30+017

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
BR 107A CHANNEL OHW SHEET 8	SHEET 20 OF 35



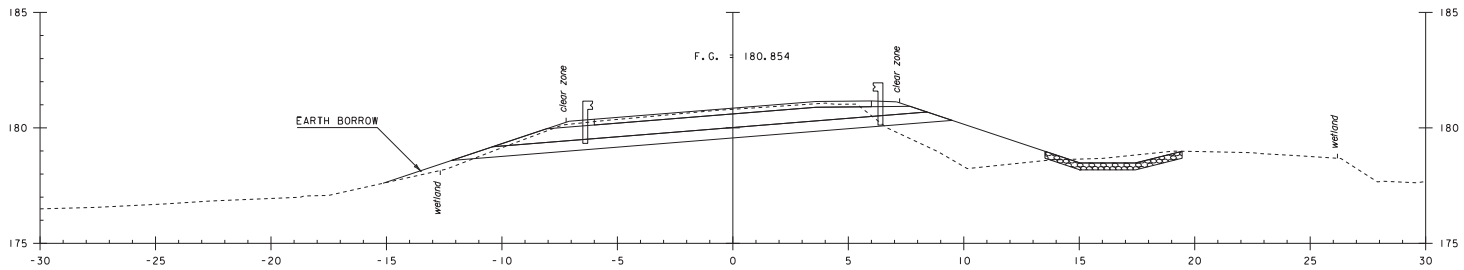
5+540.00



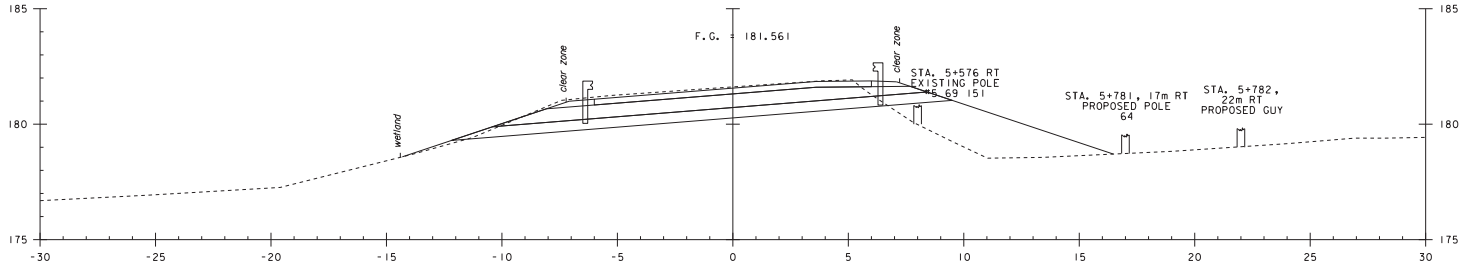
5+520.00

STA. 5+520 TO STA. 5+540

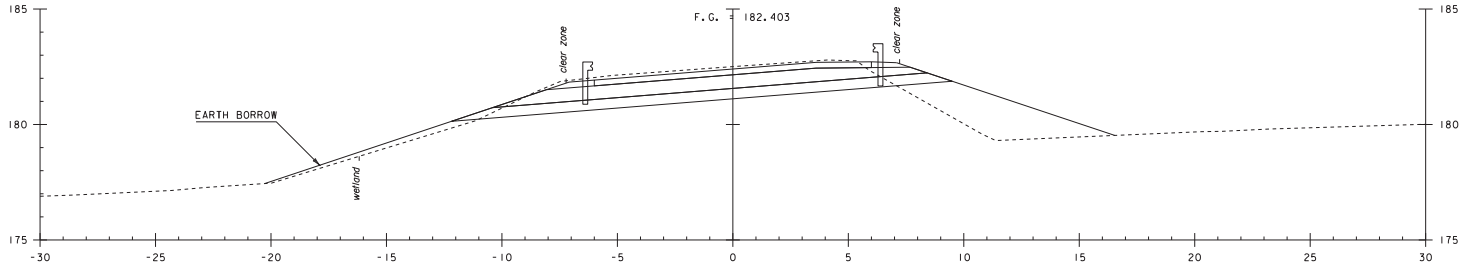
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 1	SHEET 21 OF 35



5+600.00



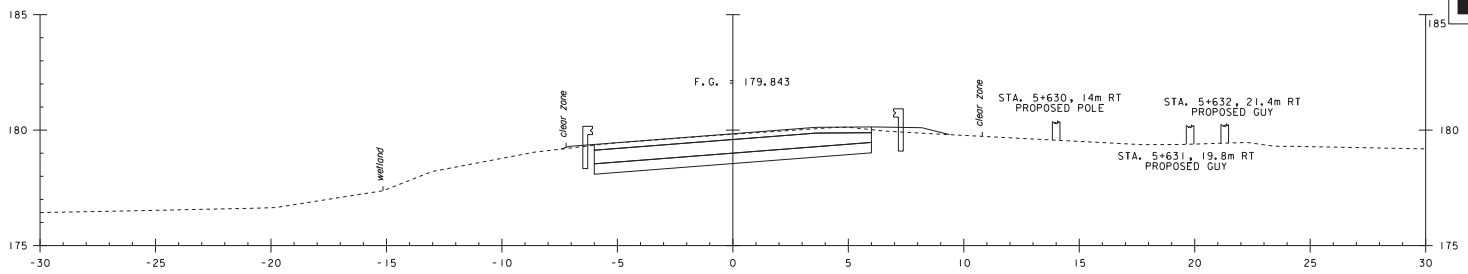
5+580.00



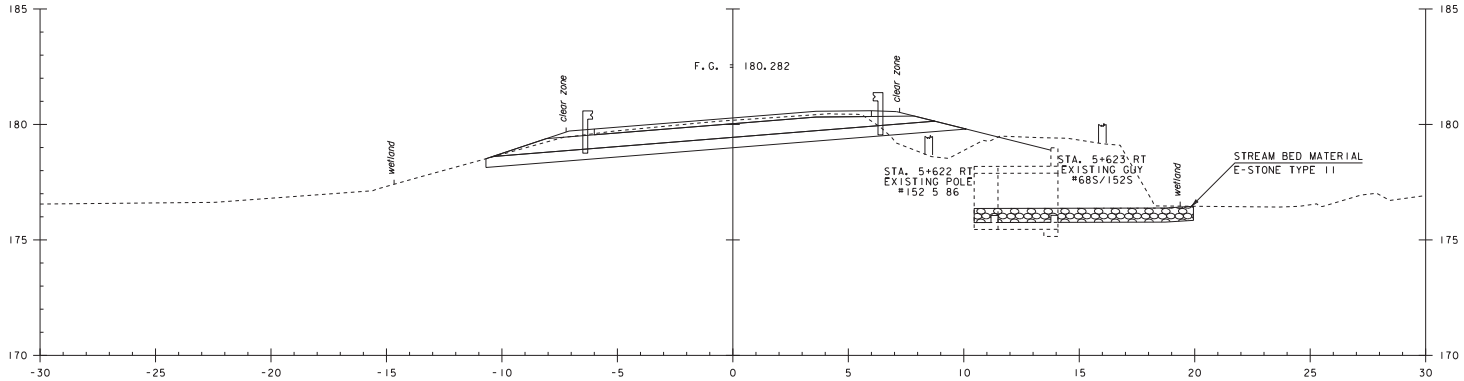
5+560.00

STA. 5+560 TO STA. 5+600

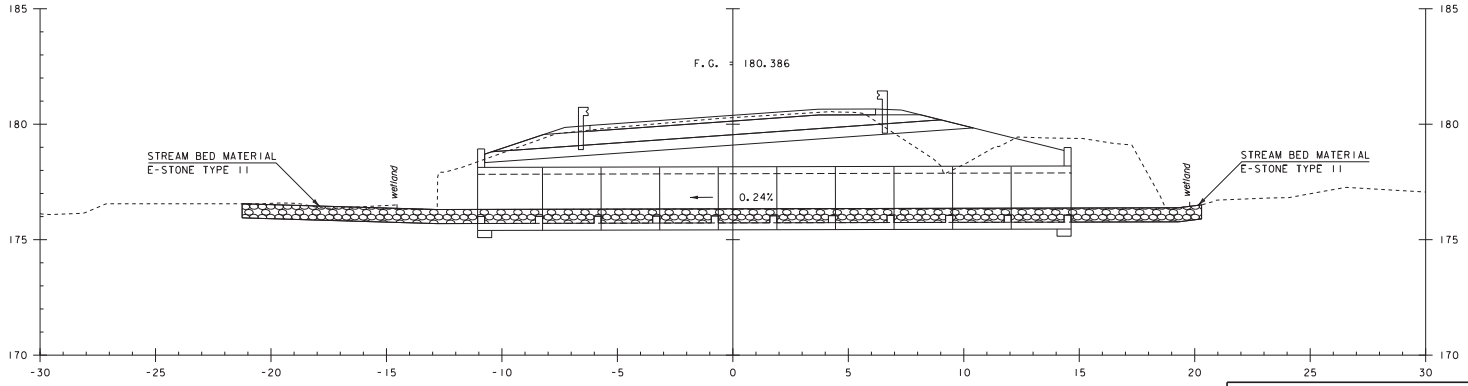
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 2	SHEET 22 OF 35



5+640.00



5+620.00



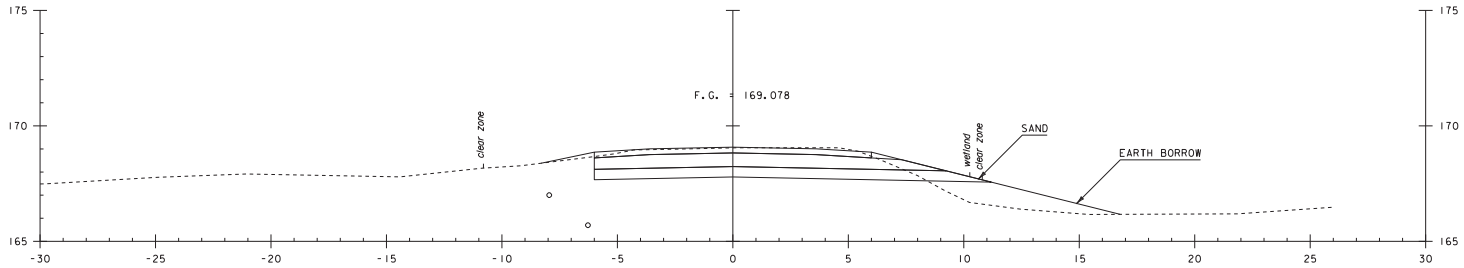
5+616.00 (BRIDGE #106)
SKEWED 14.0°

NOTE:
REFER TO DETAIL SHEETS AND CHANNEL CROSS SECTIONS FOR BRIDGE DETAILS

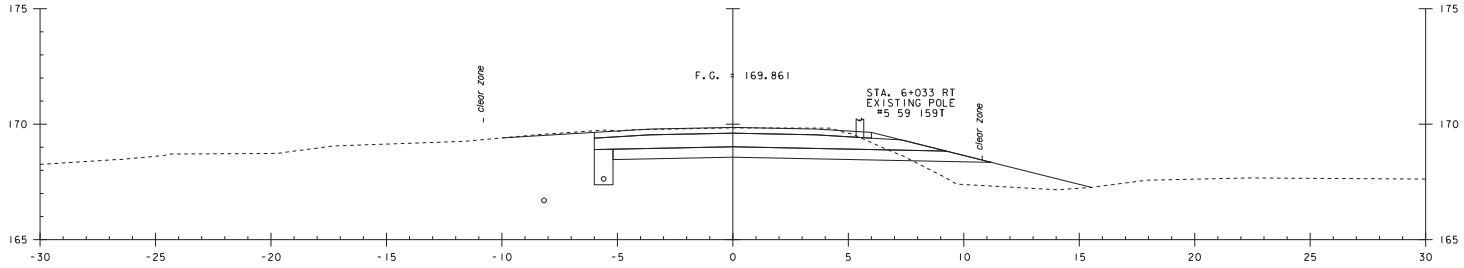
STA. 5+616 TO STA. 5+640

PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

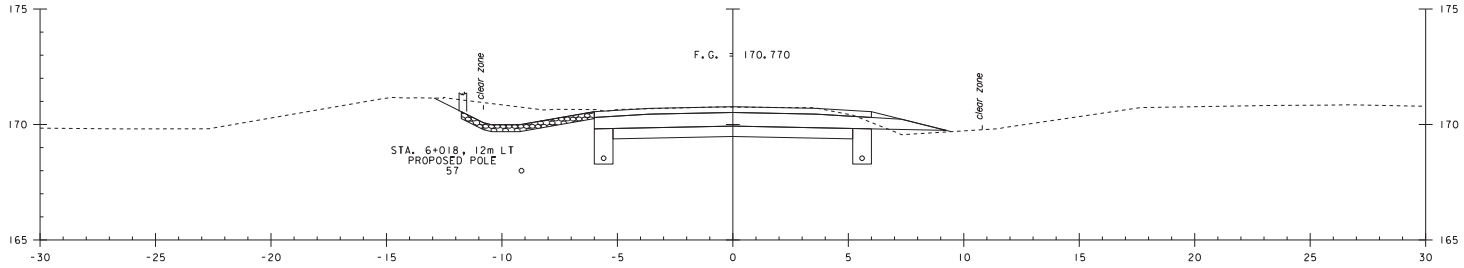
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 3 SHEET 23 OF 35



6+060.00



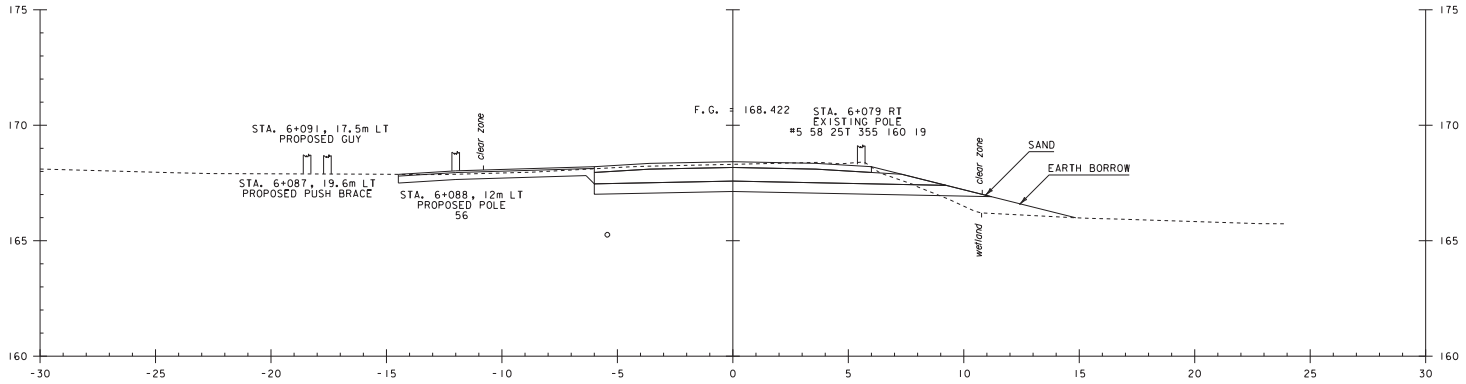
6+040.00



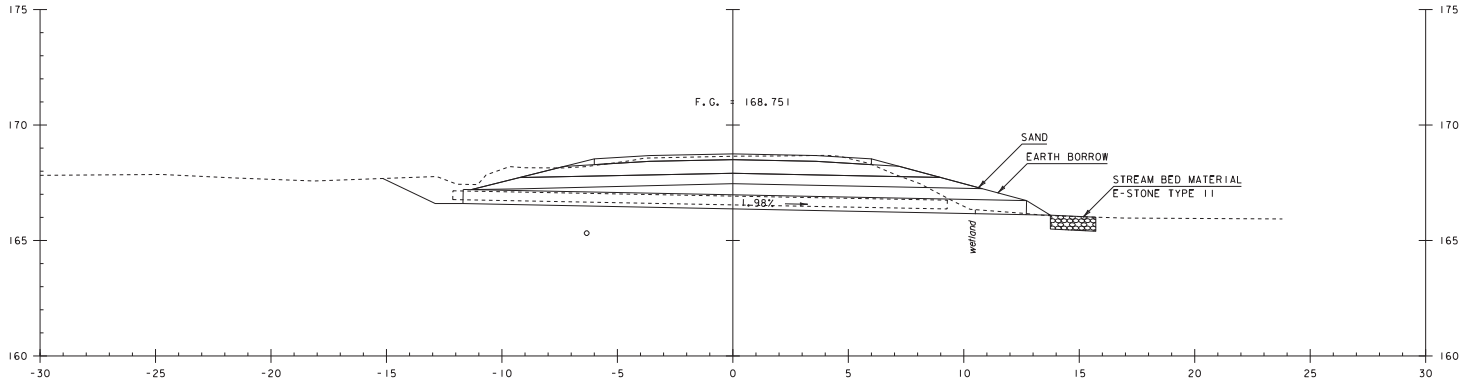
6+020.00

STA. 6+020 TO STA. 6+060

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 4	SHEET 24 OF 35



6+080.00

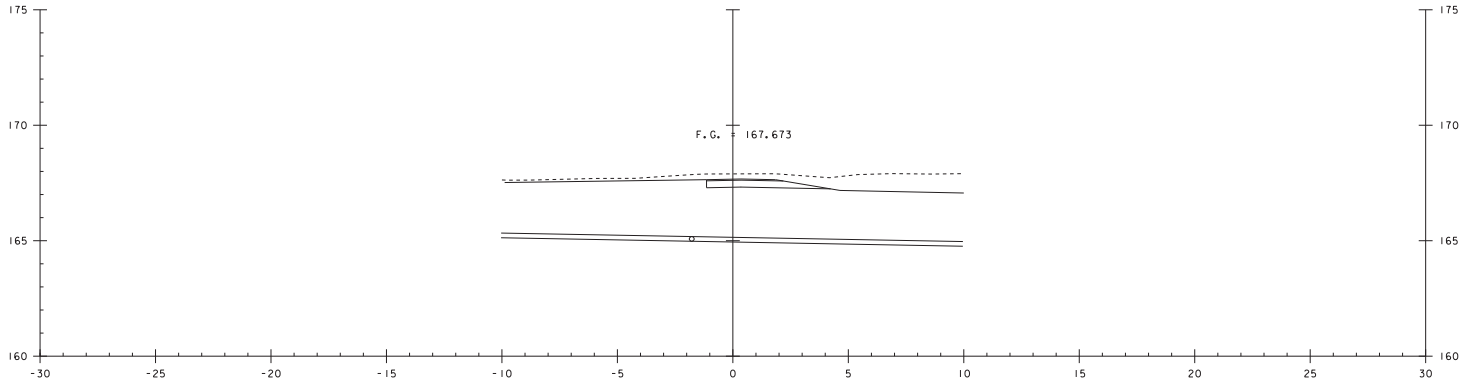


6+069.40 PIPE

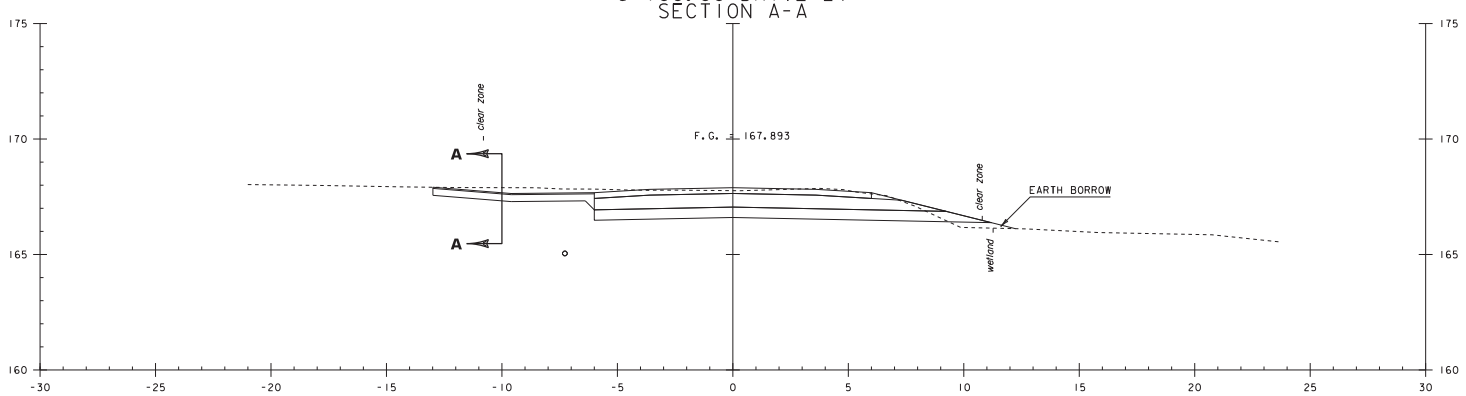
STA. 6+069 TO STA. 6+080

PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

FILE NAME: 85B008/DESIGN/d85b008_coe.dgn PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 5 SHEET 25 OF 35



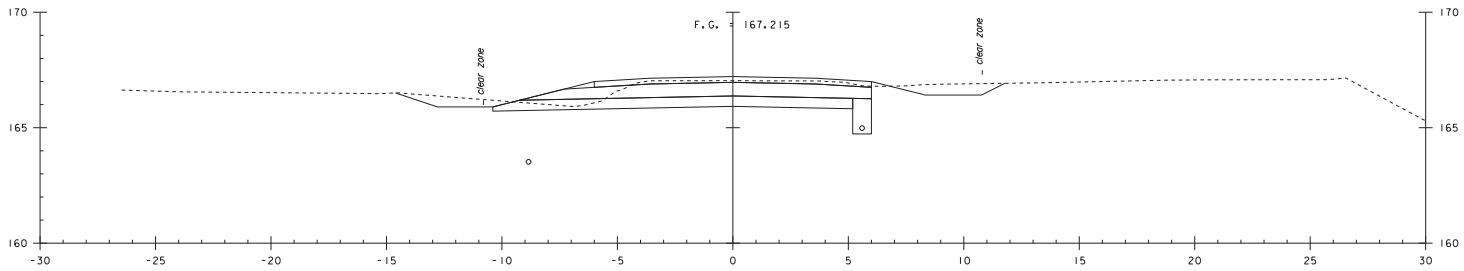
6+100.00 DRIVE LT
SECTION A-A



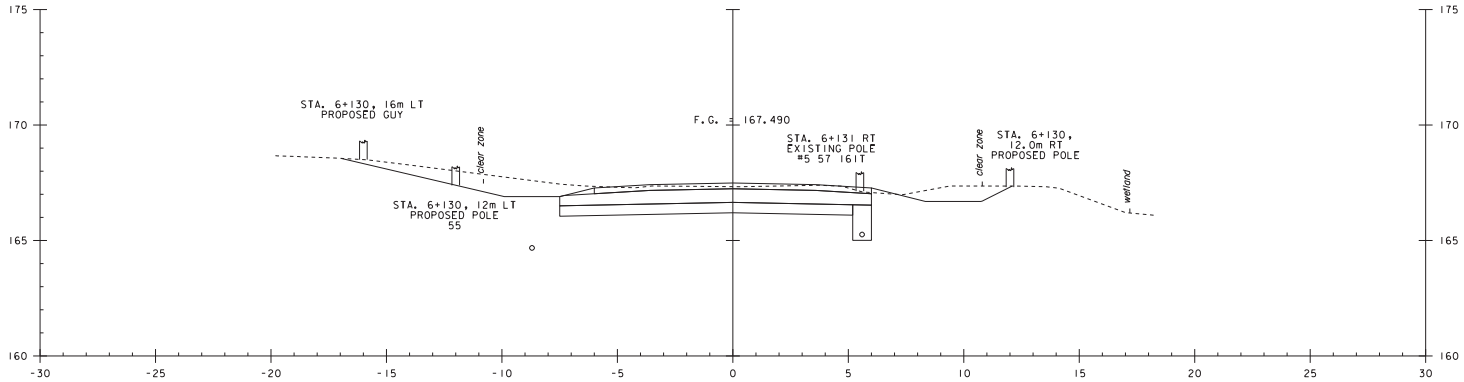
6+100.00 DRIVE LT (PAVED)

STA. 6+100 TO STA. 6+100

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 6	SHEET 26 OF 35



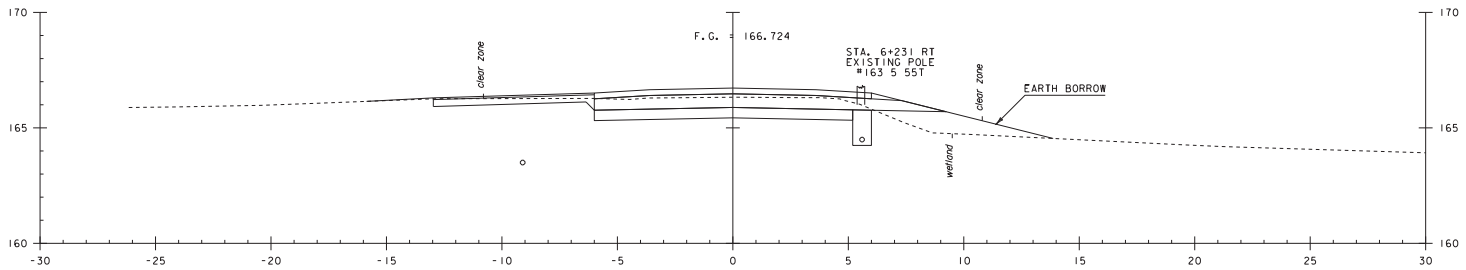
6+140.00



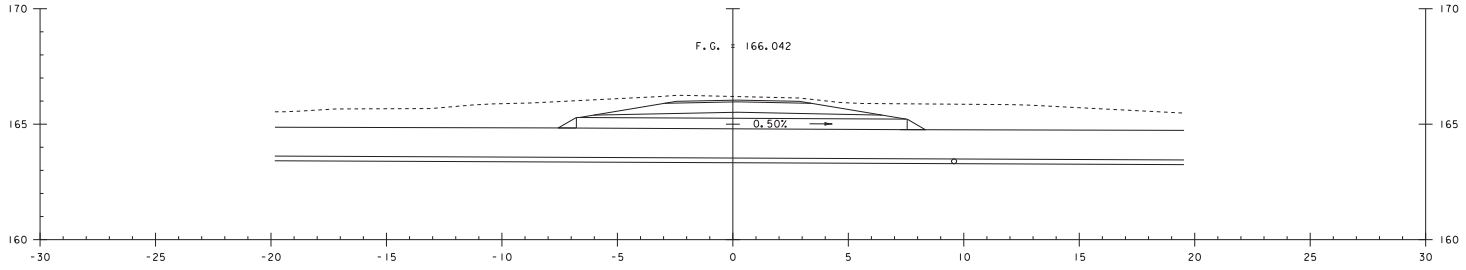
6+120.00

STA. 6+120 TO STA. 6+140

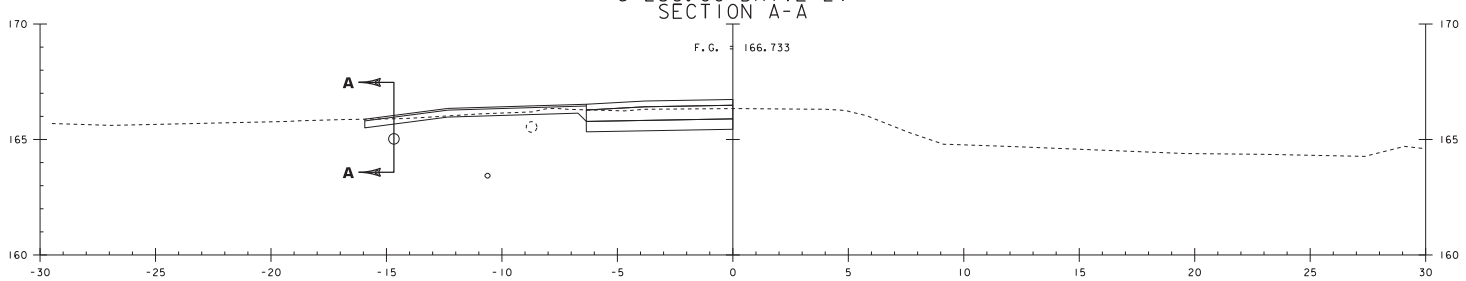
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 7	SHEET 27 OF 35



6+240.00



6+238.00 DRIVE LT
SECTION A-A



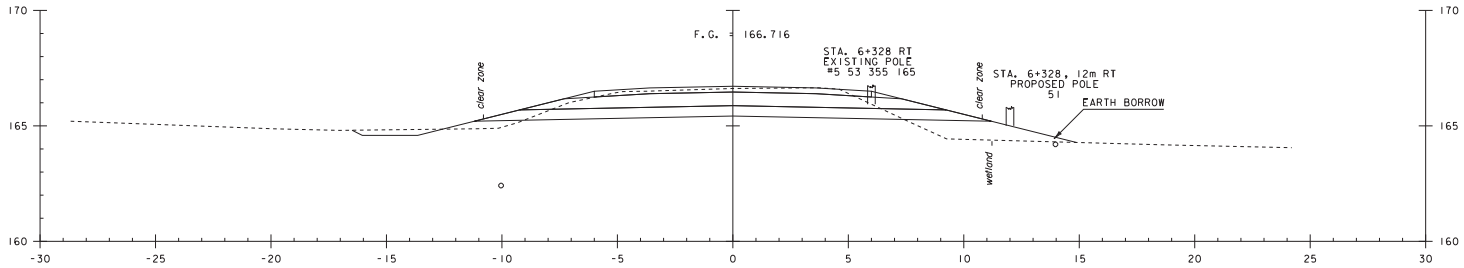
6+238.00 DRIVE LT (GRAVEL)
SKEWED 19.0°

STA. 6+238 TO STA. 6+240

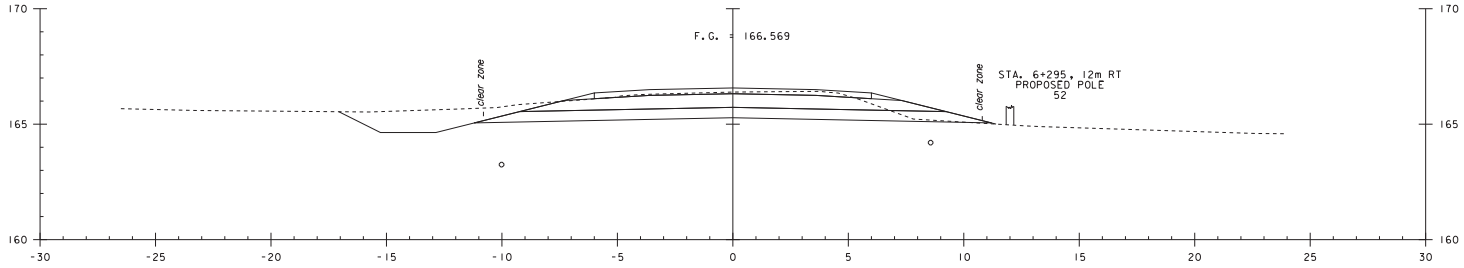
PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

FILE NAME: 85B008/DESIGN/d85b008_coe.dgn PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 8 SHEET 28 OF 35

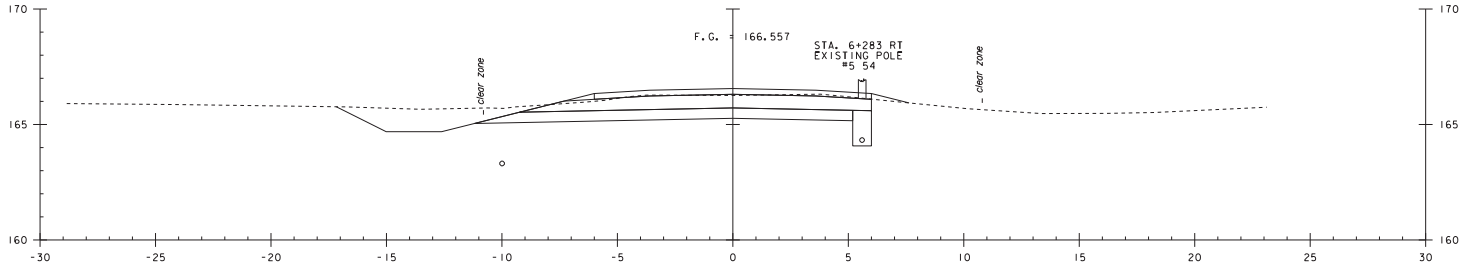
Metric



6+320.00



6+300.00

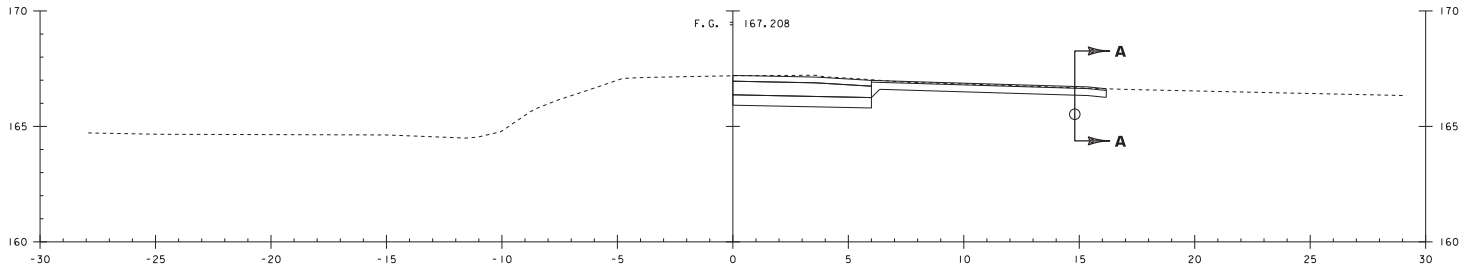


6+280.00

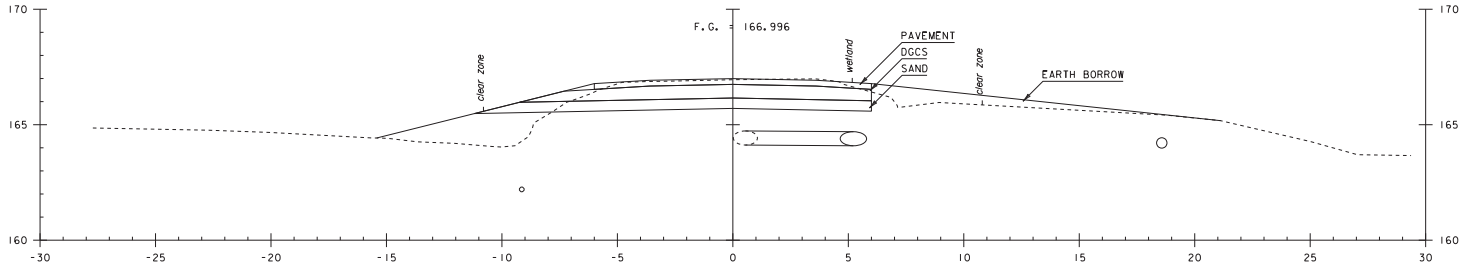
STA. 6+280 TO STA. 6+320

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 9	SHEET 29 OF 35

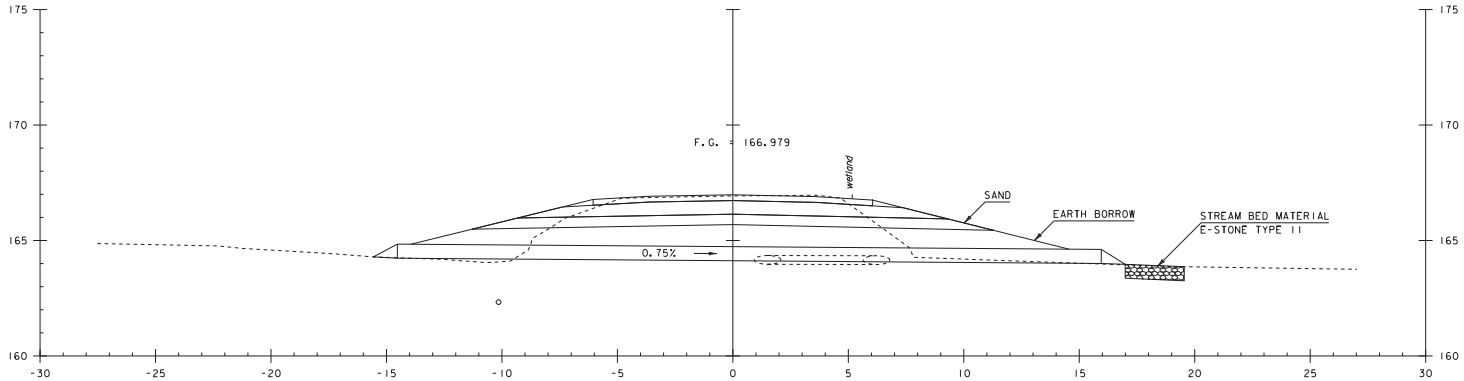
Metric



6+351.00 DRIVE RT (GRAVEL)



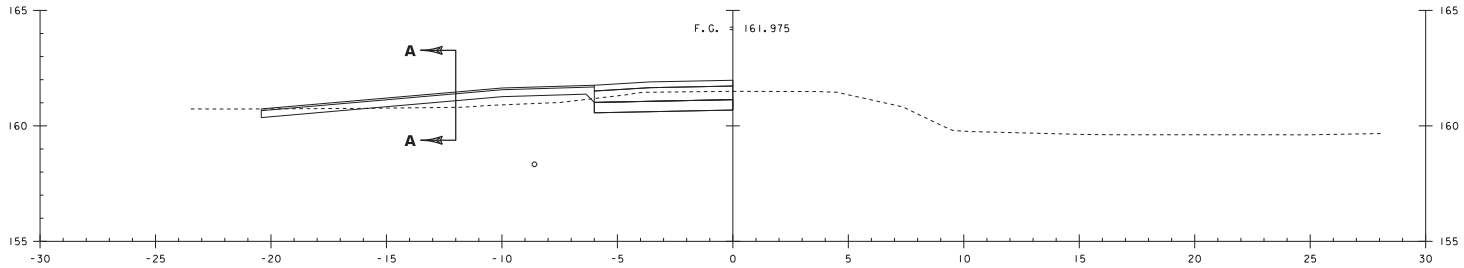
6+340.00



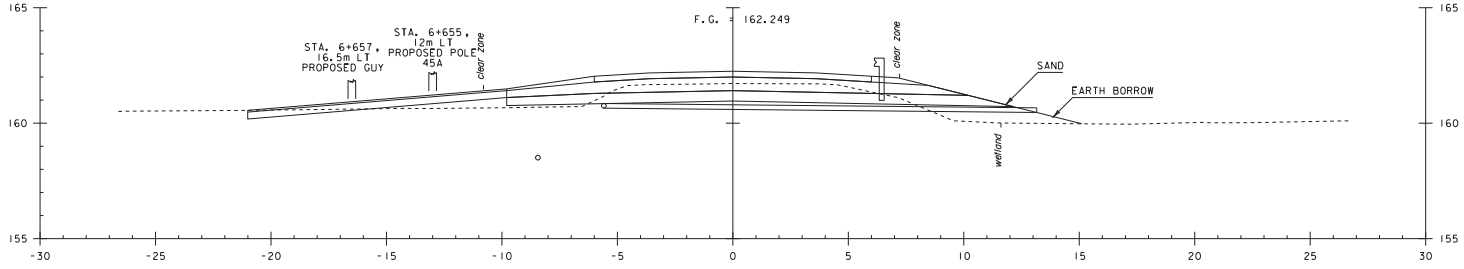
6+339.00
SKEWED 7.5°

STA. 6+340 TO STA. 6+351

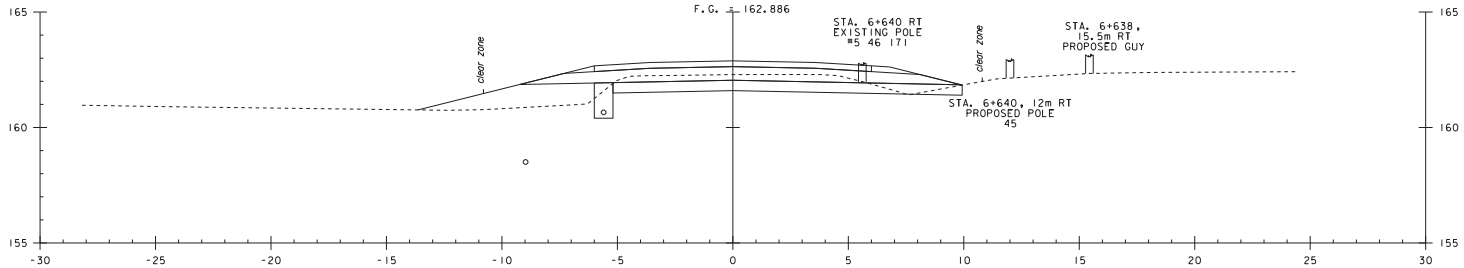
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 10	SHEET 30 OF 35



6+670.00 DRIVE LT (GRAVEL)



6+660.00

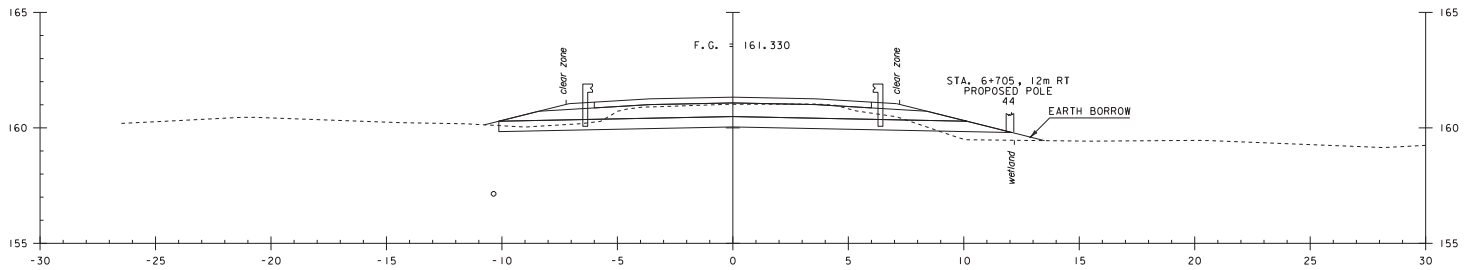


6+640.00

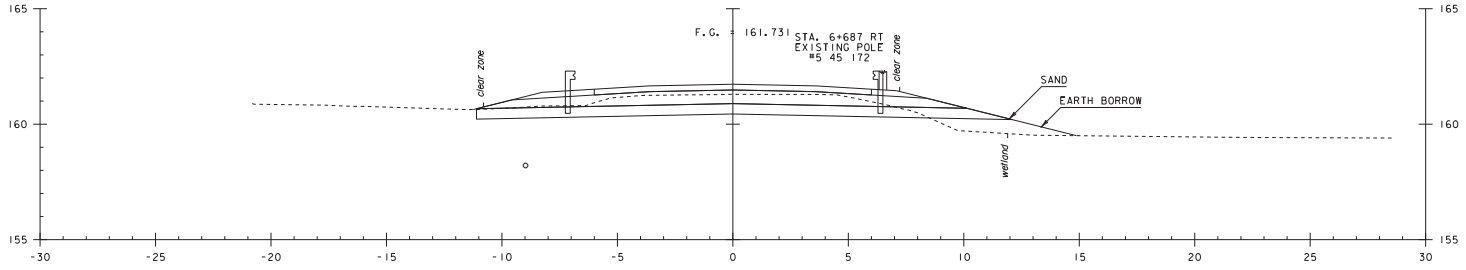
STA. 6+640 TO STA. 6+670

PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

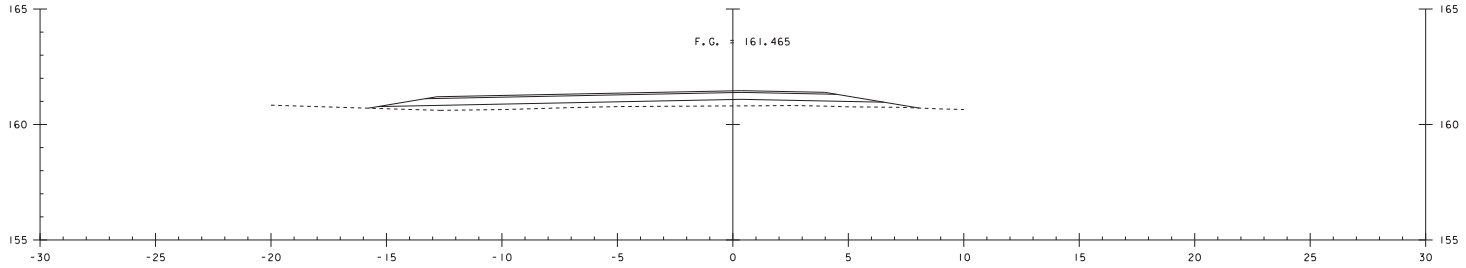
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 11 SHEET 31 OF 35



6+700.00



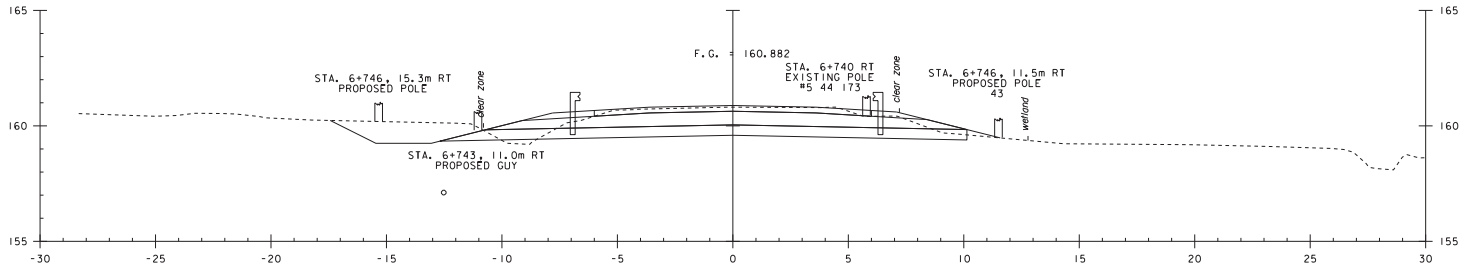
6+680.00



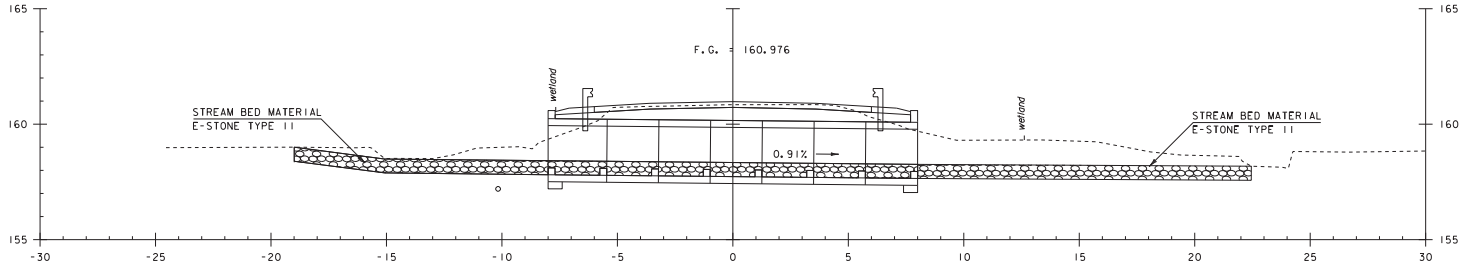
6+670.00 DRIVE RT
SECTION A-A

STA. 6+670 TO STA. 6+700

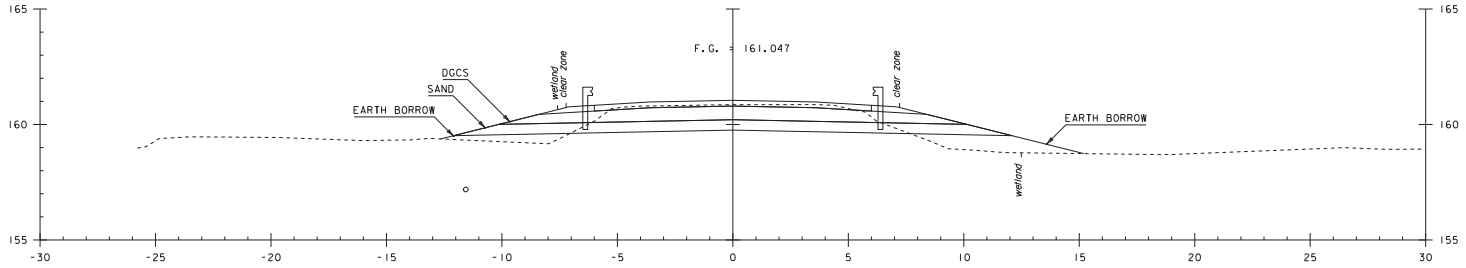
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 12	SHEET 32 OF 35



6+740.00



6+727.00 (BRIDGE #107)

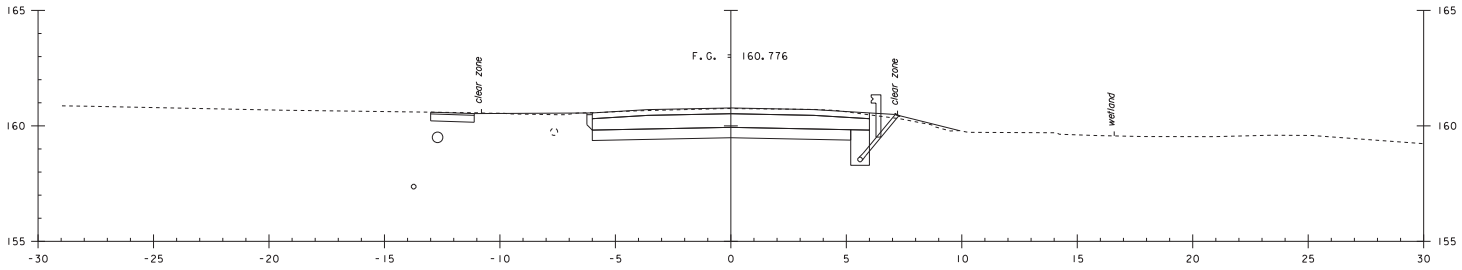


6+720.00

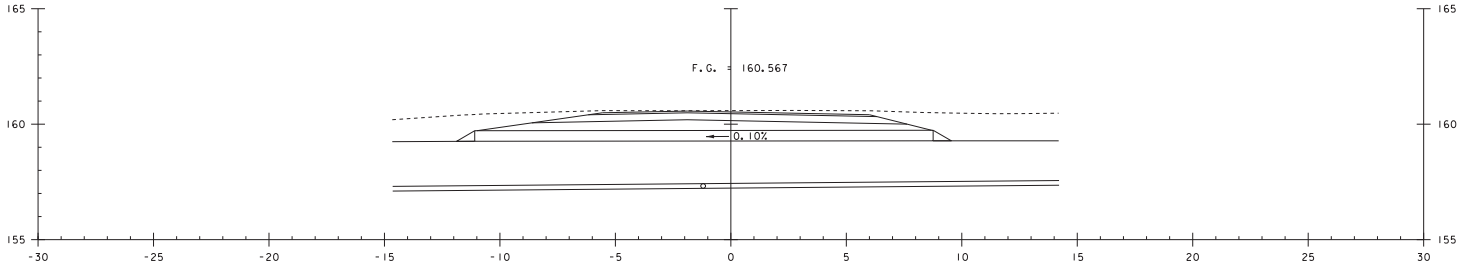
NOTE:
REFER TO DETAIL SHEETS AND CHANNEL CROSS SECTIONS FOR BRIDGE DETAILS

STA. 6+720 TO STA. 6+740

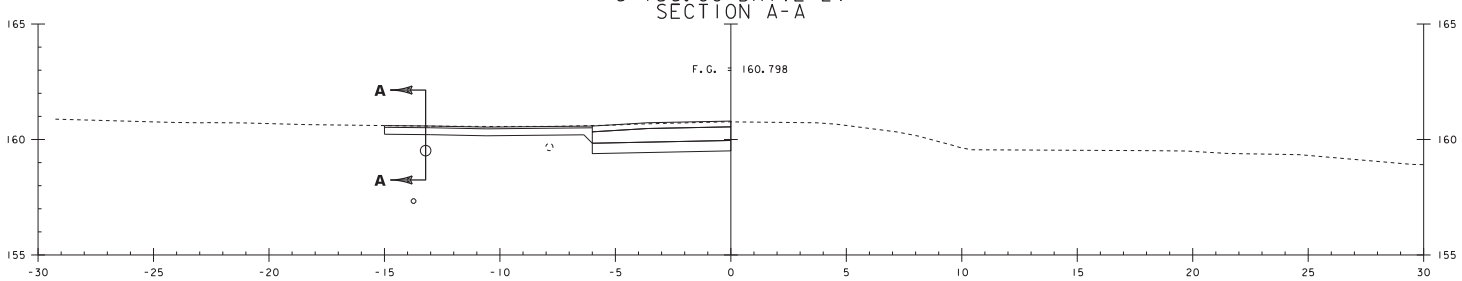
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 13	SHEET 33 OF 35



6+760.00



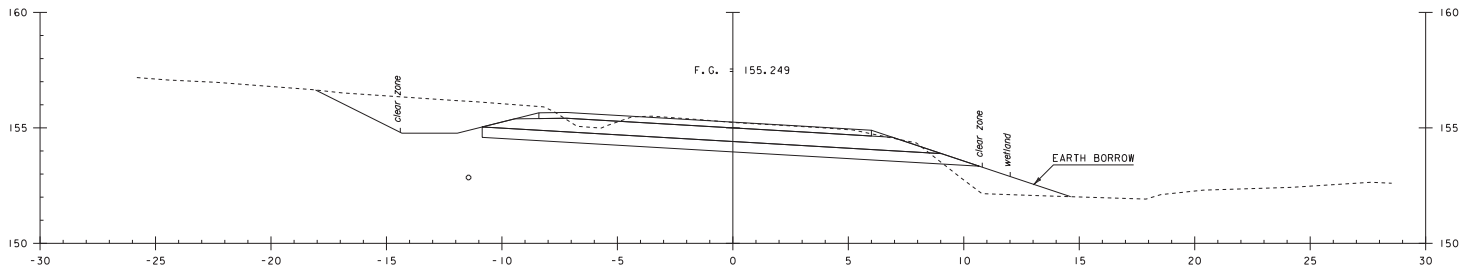
6+756.00 DRIVE LT
SECTION A-A



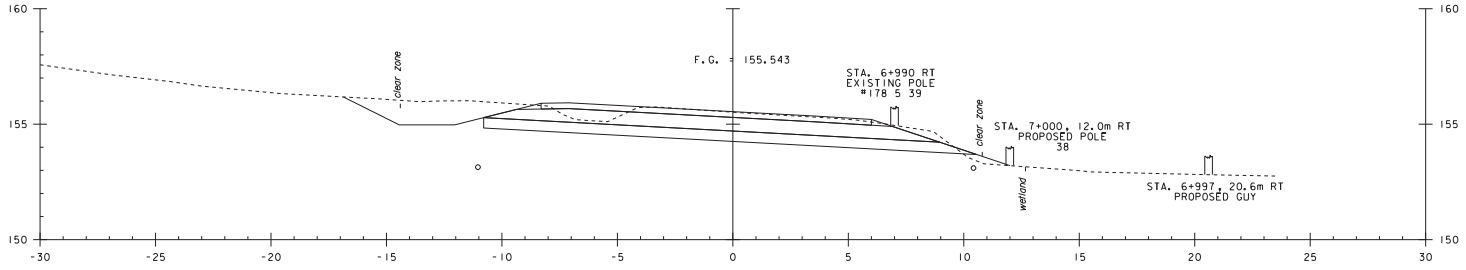
6+756.00 DRIVE LT (GRAVEL)

STA. 6+756 TO STA. 6+760

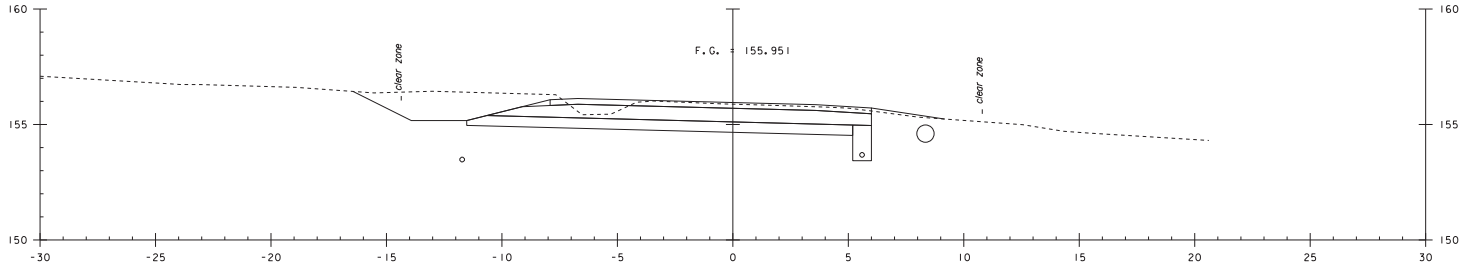
PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 14	SHEET 34 OF 35



7+020.00



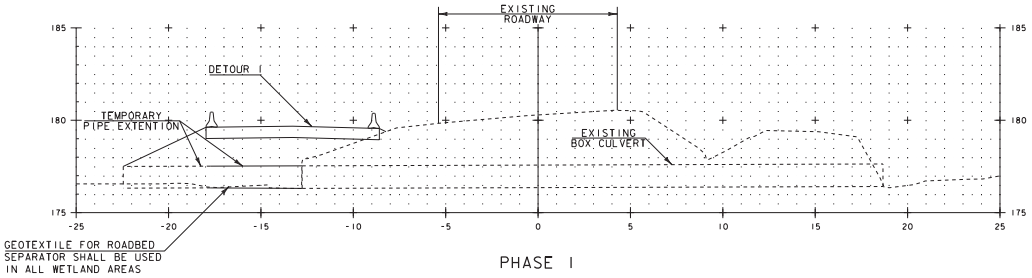
7+000.00



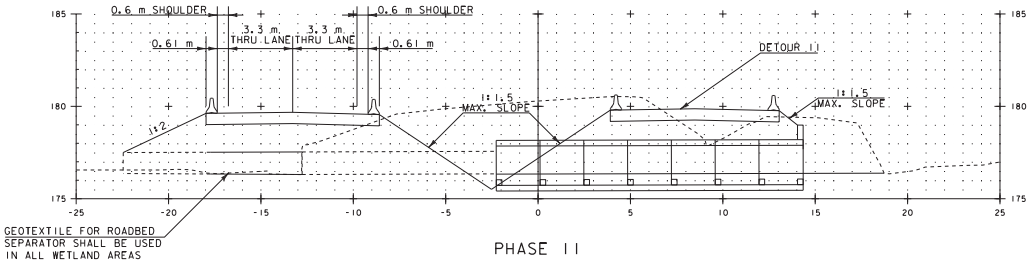
6+980.00

STA. 6+980 TO STA. 7+020

PROJECT NAME:	PITTSFORD
PROJECT NUMBER:	NH 019-3(491)
FILE NAME: 85B008/DESIGN/d85b008_coe.dgn	PLOT DATE: 12-APR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: J. MACKINTOSH
DESIGNED BY: J. MACKINTOSH	CHECKED BY: A. KEMPTON
MAINLINE OHW SHEET 15	SHEET 35 OF 35



PHASE I



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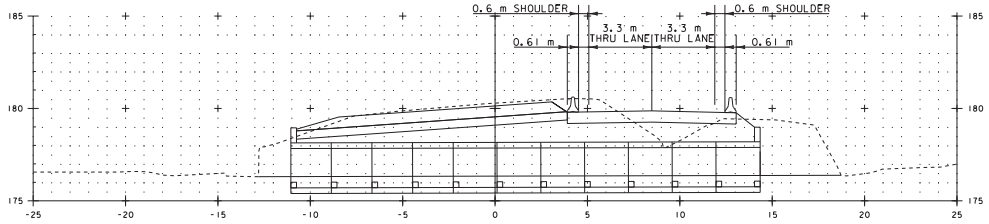

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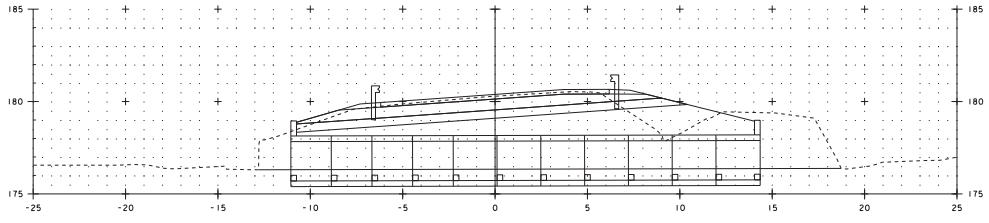


PHASE IV

TRAFFIC PHASE DESCRIPTION:

PHASE I:
ALL TRAFFIC SHALL REMAIN ON THE EXISTING ROADWAY, WHILE DETOUR I IS CONSTRUCTED. A TEMPORARY PIPE EXTENTION OR STREAM RELOCATION WILL BE REQUIRED TO CONSTRUCT DETOUR I.

PHASE II:
ALL TRAFFIC SHALL BE SHIFTED TO DETOUR I. THE INLET END OF THE EXISTING CULVERT SHALL BE REMOVED AND REPLACED WITH THE PROPOSED STRUCTURE. THE PROPOSED STRUCTURE SHALL BE BACKFILLED AND DETOUR II SHALL BE CONSTRUCTED.

PHASE III:
ALL TRAFFIC SHALL BE SHIFTED TO DETOUR II. DETOUR I SHALL BE REMOVED ALONG WITH THE REMAINING PORTION OF THE EXISTING STRUCTURE. THE REMAINING PROTION OF THE PROPOSED STRUCTURE SHALL BE INSTALLED AND BACKFILLED TO PROPOSED GRADE.

PHASE IV:
ALL TRAFFIC SHALL BE SHIFTED TO THE MAINLINE CORRIDOR. DETOUR II SHALL BE REMOVED AND THE REMAINING EARTHWORK SHALL BE COMPLETED FOR THE MAINLINE CORRIDOR.

NOTES:
THIS TRAFFIC CONTROL PHASING PLAN IS STRICTLY CONCEPTUAL AND IS NOT INTENDED TO LIMIT THE CONTRACTOR IN any WAY, BUT TO OUTLINE ONE WAY OF PROGRESSING. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PHASING PLAN AND NEED NOT USE THE PLAN SHOWN HERE.

ALL DEPTHS OF MATERIALS ARE SHOWN FOR ILLUSTRATION PURPOSES ONLY AND SHALL BE DETERMINED BY THE CONTRACTOR TO PROVIDE SAFE AND COMFORTABLE DRIVING CONDITIONS FOR THE TRAVELING PUBLIC. ALL TRAVELLED SURFACES SHALL BE PAVED. PAYMENT SHALL BE INCLUDED IN ITEM 641.11 TRAFFIC CONTROL, ALL-INCLUSIVE.

PROJECT NAME: PITTSFORD	
PROJECT NUMBER: NH 019-3(491)	
FILE NAME: d85b008_5+616box_wrk.dgn	PLOT DATE: 29-MAR-2019
PROJECT LEADER: B. MARTIN	DRAWN BY: A. KEMPTON
DESIGNED BY: A. KEMPTON	CHECKED BY: M .GAMELIN
BR 106 TRAFFIC CONTROL PHASING SHEET	SHEET 183 OF 368

Metric

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THE PITTSFORD NH 019-3(491) PROJECT CONSISTS OF THE CONSTRUCTION OF A NEW 2.200KM LIMITED ACCESS HIGHWAY IN PITTSFORD, VERMONT. BEGINNING AT A POINT ON US ROUTE 7 APPROXIMATELY 10.025 KM SOUTH OF THE PITTSFORD/BRANDON TWN LINE AND EXTENDING NORTHERLY 2.200 KM. WORK TO BE PERFORMED UNDER THIS CONTRACT NCLUDES THE REMOVAL AND DISPOSAL OF THE EXISTING ROAD, THE REALIGNMENT, WIDENING AND FULL DEPTH RECONSTRUCTION OF US ROUTE 7, GRADING, DRAINAGE, RELOCATION OF AERIAL UTILITIES, PAVING AND NECESSARY APPROACH WORK. THE PROJECT INCLUDES THREE (3) LARGE CULVERTS (#106, #107 & #107A), AND FIVE (5) SMALL CULVERT CROSSINGS LESS THAN 48" IN DIAMETER. THE LOCATION AND SIZE OF THESE CROSSINGS IS SHOWN IN THE TABLE BELOW:

STA 5+616 CL (BR #106)	2.44 M X 2.13 M X 25.70 M
STA 5+659 CL	610MM X 30.00 M
STA 6+069 CL	610MM X 25.50 M
STA 6+340 CL	610MM X 30.00 M
STA 6+727 CL (BR #107)	3.05 M X 2.13 M X 16.00 M
STA 6+953 CL	750MM X 22.50 M
STA 7+140 CL	600MM X 20.00 M
STA 7+169 RT (BR #107A)	4.57 M X 2.44 M X 17.2 M

THE TOTAL DISTURBANCE ASSOCIATED WITH CONSTRUCTION OF THIS PROJECT IS APPROX. 21.81 ACRES. SEE BREAKDOWN OF DISTURBANCE PER AREA IN #5 BELOW AS WELL AS THE ATTACHED MAP(S).

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THIS PROJECT IS BEING CONSTRUCTED THROUGH A RURAL AREA OF PITTSFORD. THE PROJECT LOCATION IS RELATIVELY FLAT WITH AN AVERAGE SLOPE OF 2.2%. THE MAJORITY OF THE GRADE DIFFERENCE IS AT THE NORTHERN MOST PORTION PROJECT. THE PROJECT HAS THREE DISCRETE DISCHARGE POINTS AND THREE INDISCRETE DISCHARGE POINTS. THE DISCHARGE POINTS WITHIN THE PROJECT ARE GENERALLY IN THE SAME LOCATION AS THE EXISTING DRAINAGE STRUCTURES. THERE ARE THREE SITES; EACH CORRESPONDS WITH DIFFERENT RECEIVING WATER.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES, VEGETATION, SOILS, AND SENSITIVE RESOURCE AREAS

THE STORMWATER RUNOFF IS COLLECTED BY ROADSIDE DRAINAGE SWALES OR IS CONVEYED FROM THE ROADWAY VIA OVERLAND FLOW. THE ROADWAY CORRIDOR IS LOCATED IN THE VALLEY OF A FAIRLY MOUNTAINOUS REGION; THEREFORE, CROSS-PIPES AND BOX CULVERTS ARE USED TO CONVEY RUNOFF FROM HIGHER ELEVATIONS TO LOWER ELEVATIONS AND PREVENT EXCESSIVE AMOUNTS OF RUNOFF FROM BEING DAMMED BY THE ROADWAY.

THE PROJECT DRAINS TO THE THREE CONNECTED RECEIVING WATERS: TWO UNNAMED TRIBUTARIES TO FURNACE BROOK, AND FURNACE BROOK.THERE ARE BOTH DISCRETE DISCHARGES FROM STORM WATER COLLECTED IN SWALES AND CULVERTS, AS WELL AS INDISCRETE DISCHARGES FROM STORMWATER FLOWING OVERLAND ALONG THE LENGTH OF THE PROJECT. DUE TO THE BANKING OF THE ROADWAY AND THE LOCATION OF THE RECEIVING WATERS SOME STATION LOCATIONS DRAIN HALF OF THE ROADWAY TO ONE RECEIVING WATER AND HALF TO ANOTHER.

THERE ARE THREE DISTINCT SITES, EACH OF WHICH DISCHARGE TO A DIFFERENT RECEIVING WATER THAT HAVE BEEN IDENTIFIED WITHIN THE PROJECT. THERE ARE SUB-DRAINAGE AREAS WITHIN EACH SITE WHICH DRAIN TO DIFFERENT SEGMENTS OF THE LARGER WATERSHED. E.G. MULTIPE SMALL WETLANDS ALONG EACH TRIBUTARY.

DRAINAGE AREA #1
DISTURBANCE AREA: 9.41 ACRES
SOILS: HINCKLEY GRAVELLY LOAMY FINE SAND, (K = 0.17), SUDBURY FINE SANDY LOAM, (K=0.24) SCARBORO MUCK, (K=0.36), WINDSOR LOAMY SAND, (K=0.17), GEORGIA AND AMENIA SOILS, (K=0.32), DEERFIELD LOAMY SAND, (K=0.17). AVERAGE SLOPE: 5-15% (6.97%).

DESCRIPTION:
THIS AREA INVOLVES DISTURBANCES BETWEEN STATIONS 5+338 AND 6+062. DRAINAGE AREA #1 ALSO INVOLVES A PORTION OF THE LEFT SIDE OF THE ROADWAY FROM STATION 6+444 AND 6+843. DRAINAGE AREA #1 HAS TWO DISCRETE DISCHARGE POINTS WHICH ARE LOCATED AT STATIONS 5+617 (S/N 01) AND 6+727 (S/N04). DRAINAGE AREA #1 INCLUDES 6 SUB DRAINAGE AREAS, SITES 1A - 1F.

A SMALL UNNAMED TRIBUTARY (UNNAMED TRIBUTARY #1) OF THE FURNACE BROOK INTERSECTS THE ROADWAY AT STATION 5+617 AND AGAIN AT STATION 6+727. THE WATERSHED AREA CONTRIBUTING TO UNNAMED TRIBUTARY #1 BEGINS APPROXIMATELY 500M SOUTH OF THE PROJECT AND ENDS AT STATION 6+842. JUST DOWNSTREAM OF DISCHARGE POINT S/N 04 UNNAMED TRIBUTARY #1 DISCHARGES INTO ANOTHER UNNAMED TRIBUTARY (UNNAMED TRIBUTARY #2) WHICH LEADS DIRECTLY TO THE FURNACE BROOK. AREAS OF THE ROADWAY NORTH OF STATION 6+842 CONTRIBUTE TO DRAINAGE AREA #2 AND #3.

THE TOTAL AREA CONTRIBUTING TO UNNAMED TRIBUTARY #1 IS APPROXIMATELY 1.50 SQUARE MILES, WHILE THE FURNACE BROOK SUB WATERSHED, WHICH UNNAMED TRIBUTARY #1 IS LOCATED IN, IS 28.6 SQUARE MILES. THE PEAK OF THIS SUB-WATERSHED IS AT APPROXIMATELY 1,290 FT. THE SLOPE OF THE SITE IS BETWEEN 1% AND 30% AND INCREASINGLY GETS FLATTER AS THE WATER IS CONVEYED CLOSER TO THE ROADWAY CORRIDOR. THE MAJORITY OF THE SUB-WATERSHED IS HEAVILY WOODED WITH ISOLATED AREAS OF GRASS, MEADOW, BRUSH AND OFFSITE IMPERVIOUS.

DRAINAGE AREA #2
DISTURBANCE AREA: 8.42 ACRES
SOILS: SCARBORO MUCK, (K=0.36), WINDSOR LOAMY SAND, (K=0.17), GEORGIA AND AMENIA SOILS, (K=0.32), DEERFIELD LOAMY SAND, (K=0.17), GALWAY-NELLIS-FARMINGTON COMPLEX (K=0.32), ENOSBURG LOAMY FINE SAND, (K=0.24). AVERAGE SLOPE: 5-15% (6.21%).

DESCRIPTION:
DRAINAGE AREA #2 HAS ONE DISCRETE DISCHARGE POINT AND TWO POINTS OF INTEREST. THE POINTS OF INTEREST ARE LOCATED AT STATIONS 6-070 (S/N 02) AND 6+341 (S/N 03). THE DISCHARGE POINT IS LOCATED AT STATION 6+955 (S/N 05) WHERE RUNOFF LEAVES DRAINAGE AREA #2 VIA OVERLAND SHEET FLOW AND DISCHARGES INTO UNNAMED TRIBUTARY #2. DRAINAGE AREA #2 INCLUDES 6 SUB-DRAINAGE AREAS, SITES 2A - 2F.

DRAINAGE AREA #2 IS A SUB-WATERSHED OF UNNAMED TRIBUTARY #2, WHICH FLOWS NORTHWEST ALONG THE EAST SIDE OF THE ROADWAY CORRIDOR. UNNAMED TRIBUTARY #2 COLLECTS RUNOFF FROM THE MAJORITY OF THE EAST SIDE OF THE CORRIDOR VIA OVERLAND SHEET FLOW AND EVENTUALLY DISCHARGES INTO THE FURNACE BROOK. POINTS OF INTEREST S/N 02, S/N 03 AND DISCHARGE POINT S/N 05 ARE ALL LOCATED AT THE CROSS PIPES WHICH TRANSPORT STORMWATER FROM THE WEST TO THE EAST SIDE OF THE ROADWAY CORRIDOR. THESE ARE THE ONLY AREAS IN WHICH STORMWATER FROM THE WEST SIDE OF THE ROADWAY CORRIDOR DISCHARGES INTO UNNAMED TRIBUTARY #2.

THE TOTAL AREA OF THIS WATERSHED OF UNNAMED TRIBUTARY #2 IS APPROXIMATELY 5.59 SQUARE MILES. THE ENTIRETY OF THE UNNAMED TRIBUTARY #2 WATERSHED IS LOCATED WITHIN THE FURNACE BROOK WATERSHED, WHICH ENCOMPASSES APPROXIMATELY 28.6 SQUARE MILES. THE PEAK OF THIS SUB-WATERSHED IS AT APPROXIMATELY 640FT. THE SLOPE OF THE SITE RANGES FROM 1% TO 30% AND INCREASINGLY GETS FLATTER AS THE WATER IS CONVEYED CLOSER TO THE ROADWAY CORRIDOR. THE MAJORITY OF THE SITE IS BRUSHY FOREST WITH SOME GRASS LAND AND ISOLATED OFFSITE IMPERVIOUS.

DRAINAGE AREA #3
DISTURBANCE AREA: 3.99 ACRES
SOILS: GEORGIA AND AMENIA SOILS, (K=0.32), GALWAY-NELLIS-FARMINGTON COMPLEX (K=0.32). AVERAGE SLOPE: 5-15% (12.05%).

DESCRIPTION:
DRAINAGE AREA #3 DOES NOT HAVE ANY DISCRETE DISCHARGE POINTS, BUT HAS ONE POINT OF INTEREST LOCATED AT THE END OF THE PROJECT, STATION 7+580 (S/N 06), AND DISCHARGES INTO THE FURNACE BROOK VIA OVERLAND SHEET FLOW. THERE ARE NO CROSS PIPES IN THE SITE, THEREFORE, ALL RUNOFF FROM THE EAST SIDE OF THE ROADWAY CORRIDOR REMAINS ON THE EAST AND ALL RUNOFF FROM THE WEST STAYS ON THE WEST SIDE OF THE ROADWAY CORRIDOR. DRAINAGE AREA #3 INCLUDES 3 SUB-DRAINAGE AREAS, SITES 3A - 3C.

DRAINAGE AREA #3 IS PART OF THE FURNACE BROOK WATERSHED AND THE ENTIRE SITE FLOWS TO THE FURNACE BROOK VIA OVERLAND SHEET FLOW. THE PORTION OF THE FURNACE BROOK SUB-WATERSHED IN WHICH DRAINAGE AREA #3 IS LOCATED IS APPROXIMATELY 28.6 SQUARE MILES. DRAINAGE AREA #3 IS COMPRISED OF GRASSED MEADOWS, BRUSHY WOODED AREAS AND IMPERVIOUS SURFACES.

SEE THE EPSC SUMMARY SHEETS FOR FURTHER DETAIL REGARDING DRAINAGE AREAS AND RELATED SLOPE AND SOIL ERODIBILTY.

1.2.3 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: YES
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: 2 UNNAMED TRIBS. TO FURNACE BROOK AND FURNACE BROOK
WETLANDS: YES. EXCAVATED WETLAND SOILS SHALL BE SAVED AND USED IN WETLAND FILL AREAS PRIOR TO FINAL STABILIZATION

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.

WHERE CHANNEL WORK OCCURS SAND BAGS, JERSEY BARRIER AND/OR OTHER ADEQUATE STREAM DIVERSION PRACTICES SHALL BE USED TO MINIMIZE EROSION AND CONTROL SEDIMENT TRANSPORT.

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 CONTRACTORS PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES WITH THE METHOD DESCRIBED ON DETAIL SHEET #03 UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

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 WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN. WOVEN WIRE REINFORCED SILT FENCE SHALL BE USED INSTEAD OF SILT FENCE WITHIN 100 FEET UPSLOPE OF RECEIVING WATERS. SILT FENCE SHALL BE INSTALLED IN ACCORDANCE WITH DETAIL SHEET #01 UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
FILTER DROP INLET PROTECTION AND/OR STONE AND BLOCK DROP INLET DEVICES WILL BE USED FOR ALL DROP STRUCTURES.

1.4.5 DVERT UPLAND RUNOFF

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

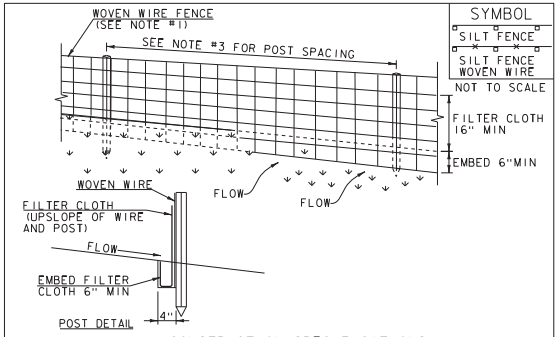
THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

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.

STONE CHECK DAMS WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN, AT A MINIMUM. STONE CHECK DAMS SHALL BE INSTALLED USING THE METHOD DESCRIBED ON THE DEATIL SHEETS UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
PIPE INLET PROTECTION WILL BE USED TO REDUCE VELOCITIES ENTERING CULVERTS.

Metric



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

Wet Area Mix

Wet areas are usually adjacent to rivers and waterways. Some examples of typical wet areas are: road ditches; retention basins that catch runoff water, pond areas and wetland edges. The soil will contain clay, a high amount of organic matter or saturated sands.

Wet Area Seed Mix

Common Name	Latin Name	% Mix
Virginia Wild Rye Grass	*Elymus virginicus*	20%
Fox Sedge	*Carex vulpinoidea*	10%
American Mannagrass	*Glyceria grandis*	20%
Giant Bur-Reed	*Sparganium eurycarpum*	10%

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	5	RED TOP	AGROSTIS GIGANTEA	90%	95%
15.0%	9	13	WHITE FIELD CLOVER	TRIFOLIUM REPENS	85%	98%
5.0%	3	5	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

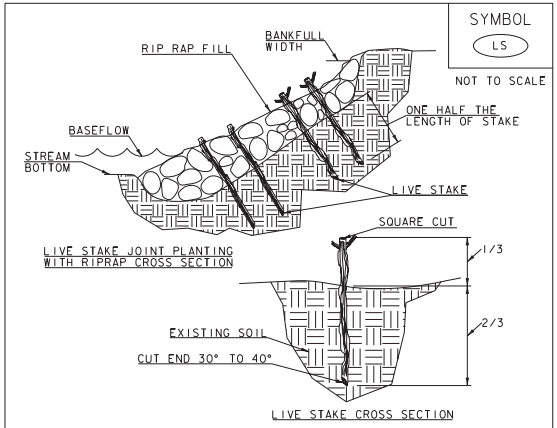
1. SEED MIX: THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER ON WHICH SEED MIX TO USE.
2. SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT 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 651 FOR SEED (PAY ITEM 651.15)

REVISIONS	
JANUARY 12, 2015	WHF



CONSTRUCTION SPECIFICATIONS

1. LENGTH OF STAKE DEPENDS UPON APPLICATION
2. LIVE STAKES SHALL BE CUT TO A POINT ON THE BASAL END FOR INSERTION IN THE GROUND.
3. A DIBBLE, IRON BAR, OR SIMILAR TOOL SHALL BE USED TO MAKE A PILOT HOLE PRIOR TO INSERTING STAKE IN GROUND.
4. A MINIMUM OF 2" TO 4" AS WELL AS 2 LIVE BUDS SHALL BE EXPOSED ABOVE THE GROUND OR RIP RAP.
5. TAMP SOIL AROUND STAKE.
6. CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO STAKE. ANY DAMAGE SHALL BE TRIMMED BACK TO AN UNDAMAGED CONDITION.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DECORIGINALLY DEVELOPED BY USDA-NRCSVERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

LIVE STAKE

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 LIVE STAKE (PAY ITEM 653.70)

REVISIONS	
MARCH 21, 2008	WHF
JANUARY 27, 2009	WHF

PROJECT NAME: PITTSFORD
PROJECT NUMBER: NH 019-3(491)

FILE NAME: d85008_epsc_det.dgn
PROJECT LEADER: B. MARTIN
DESIGNED BY: W. FARLEY
EPSC DETAIL SHEET 1

PLOT DATE: 29-MAR-2019
DRAWN BY: A. AGRAWAL
CHECKED BY: A. KEMPTON
SHEET 107 OF 368

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Vermont Agency of Transportation c/o Mr. James Brady	File Number: NAE-2019-01002	Date: September 5, 2019

Attached is:		See Section below
X	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
X	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

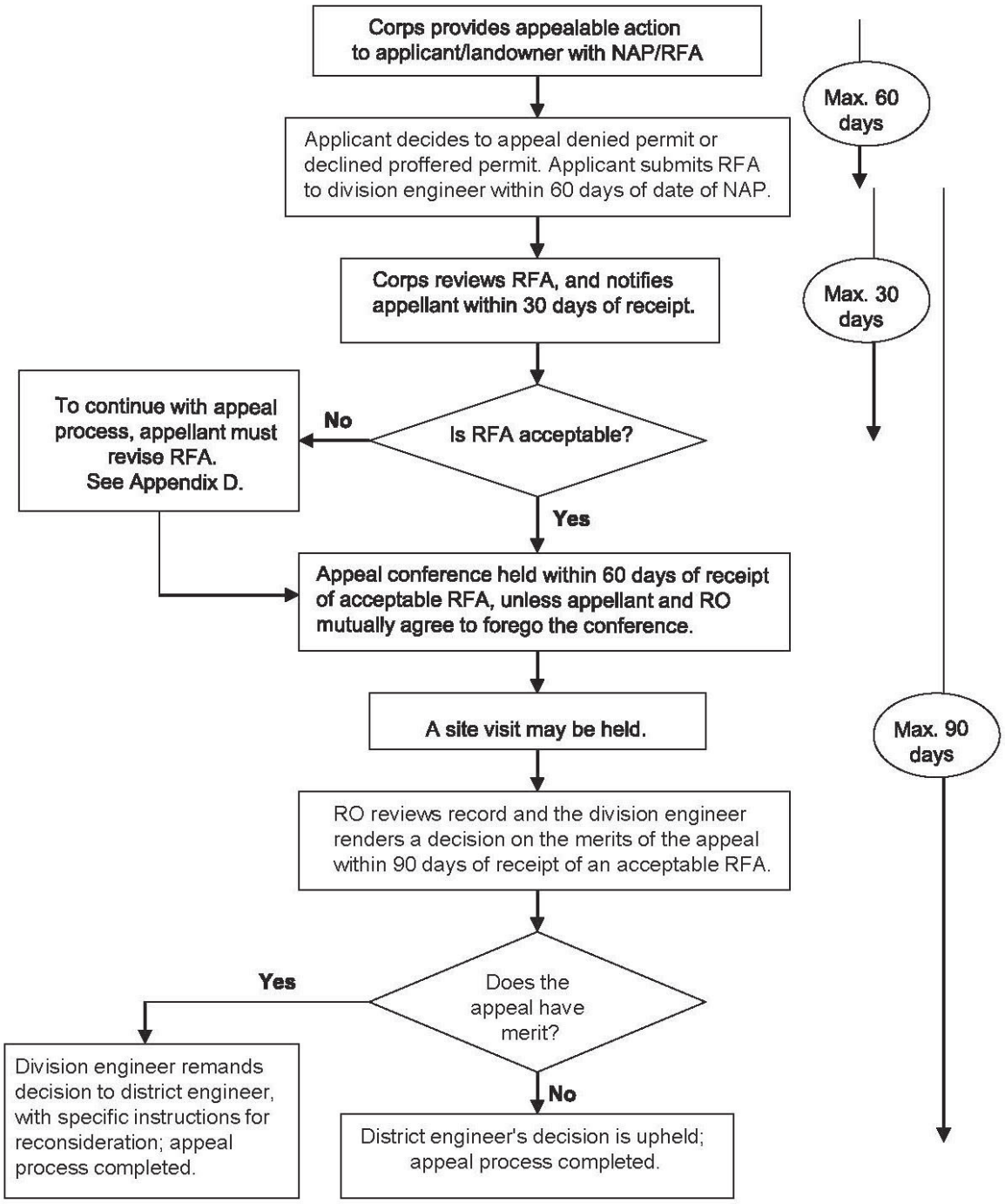
POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Mr. Robert J. DeSista Chief, Policy and Technical Analysis Branch U.S. Army Corps of Engineers (CENAE-RDC) 696 Virginia Road Concord, Massachusetts 01742-2751 Telephone: 978-318-8879 Email: Robert.J.Desista@usace.army.mil	Mr. James W. Haggerty Regulatory Program Manager (CENAD-PD-OR) U.S. Army Corps of Engineers Fort Hamilton Military Community 301 General Lee Avenue Brooklyn, New York 11252-6700 Telephone number: 347-370-4650

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

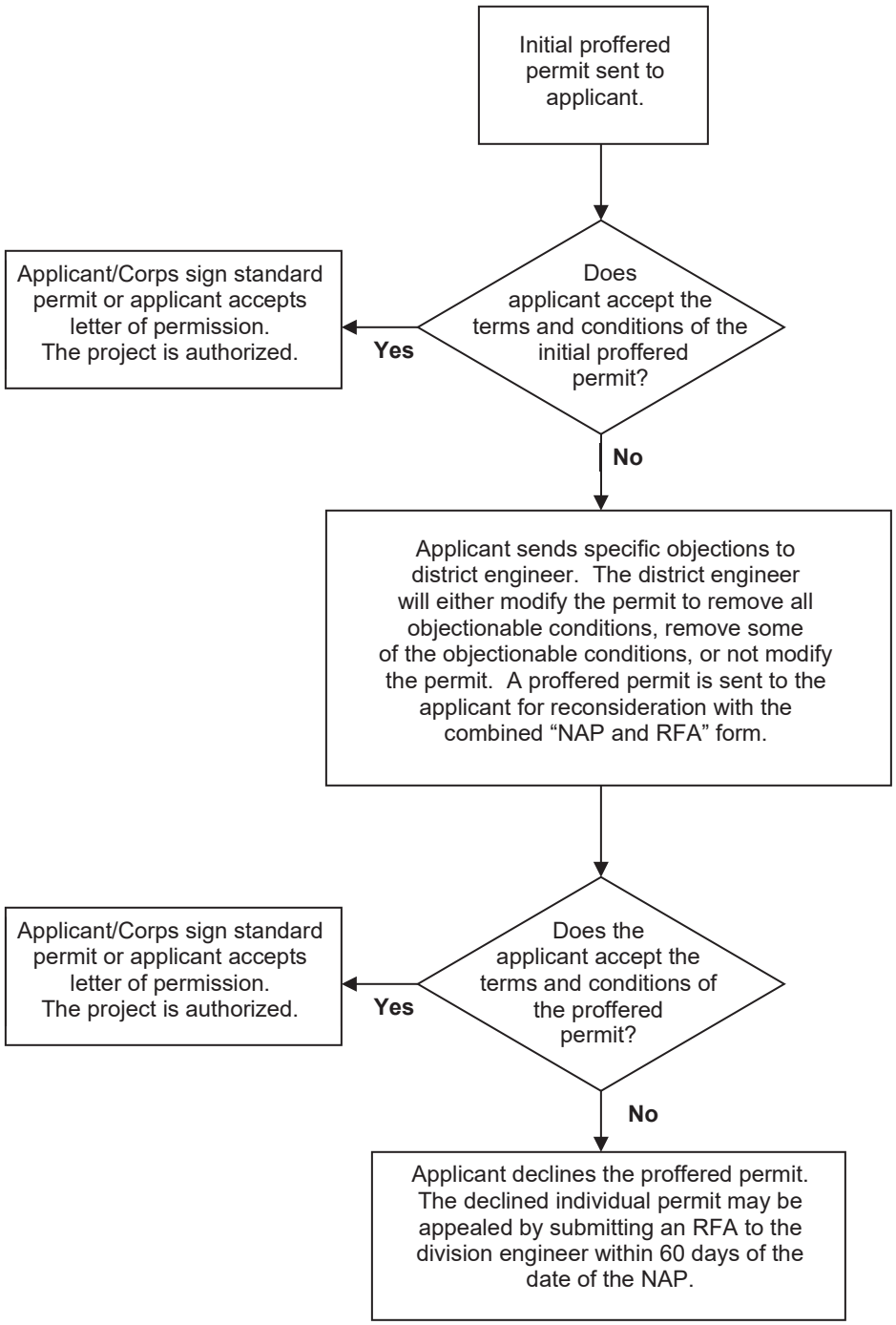
Administrative Appeal Process for Permit Denials and Proffered Permits



NOTE: If new information is provided to the Corps, the applicant will be asked if the applicant wishes to revise the project or record. If so, the appeal will be withdrawn and the case returned to the District for appropriate action. If not, then the Division Engineer will rule on the merits of the appeal based on the administrative record without consideration of the new information. However, the new information may cause the District Engineer to take action under 33 CFR 325.7, independent of the appeal process.

Appendix A

Applicant Options with Initial/Proffered Permit PPPPERMITPermit



Appendix B
B b B

US Army Corps of Engineers ®
New England District

INDIVIDUAL PERMIT
WORK-START NOTIFICATION FORM
(Minimum Notice: Two weeks before work begins)

****
* EMAIL TO: Angela.C.Repella@usace.army.mil *
*
* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Vermont Project Office *
* 11 Lincoln Street, Room 210 *
* Essex Junction, Vermont 05452 *
****

Corps of Engineers Permit No. NAE-2019-01002 was issued to the Vermont Agency of Transportation on September 5, 2019. This work involves the placement of fill within 1.17 acres of two unnamed tributaries and adjacent wetlands in conjunction with the reconstruction of approximately 1.36 miles of U.S. Route 7 from mile marker 1.35 to mile marker 2.755 in Pittsford, Vermont.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Contractor/Firm: _____

Business Address: _____

_____

Telephone Numbers: (___) _____ (___) _____

Proposed Work Dates: **Start:** _____ **Finish:** _____

Permittee/Agent Signature: _____ **Date:** _____

Printed Name: _____ **Title:** _____

Date Permit Issued: _____ **Date Permit Expires:**

_____

****

FOR USE BY THE CORPS OF ENGINEERS

PM: Angela C. Repella **Submittals Required:** Yes

Inspection Recommendation: _____

_____

_____

US Army Corps of Engineers ®
New England District

(Minimum Notice: Permittee must sign and return notification within one month of the completion of work.)

COMPLIANCE CERTIFICATION FORM

Permit Number: NAE-2019-01002

Project Manager Angela C. Repella

Name of Permittee: Vermont Agency of Transportation

Permit Issuance Date: September 5, 2019

Please sign this certification and return it to the following address upon completion of the activity and any mitigation required by the permit. You must submit this after the mitigation is complete, but not the mitigation monitoring, which requires separate submittals.

****
* EMAIL TO: Angela.C.Repella@usace.army.mil *
* *
* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Vermont Project Office *
* 11 Lincoln Street, Room 210 *
* Essex Junction, Vermont 05452 *
****

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

_____ _____

Signature of Permittee | Date

_____ _____

Printed Name | Date of Work Completion

(_____) _____ (_____) _____

Telephone Number | Telephone Number

US Army Corps of Engineers ®
New England District

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

1. **Report completion date for Preliminary Jurisdictional Determination (JD):** September 3, 2019

2. **Name and Address of Person Requesting Preliminary JD:** Mr. James Brady, Vermont Agency of Transportation, One National Life Drive, Montpelier, Vermont 05633

3. **District office, file name and number**: New England District, Vermont Agency of Transportation/Pittsford, NAE-2019-01002

4. **Project location(s) and background information:** The work involves the placement of fill within 1.17 acres of two unnamed tributaries and adjacent wetlands in conjunction with the reconstruction of 1.36 miles of U.S. Route 7 from mile marker 1.35 to mile marker 2.755 in Pittsford, Vermont. The purpose of the project is to bring this section of roadway up to National Highway Standards. Improvements will include roadway widening to include two 12' wide travel lanes and two 8' wide shoulders, and replacement of three stream crossing structures.

The project will permanently impact approximately 3,085 sq. ft. (0.07 acre) of two unnamed tributaries and 16,086 sq. ft. (0.37 acre) of adjacent wetlands. The work will temporarily impact approximately 1,085 sq. ft. (0.02 acre) of two unnamed tributaries and 30,774 sq. ft. (0.71 acre) of adjacent wetlands. The project includes the replacement of Bridge No. 106, Bridge No. 107, and Bridge No. 107A along the two unnamed tributaries with improved stream crossing structures that meet hydraulic and aquatic organism passage standards. Temporary roadway relocation is planned to bypass traffic during construction and accounts for the majority of temporary wetland impacts associated with the project. The wetlands to be impacted are emergent and scrub-shrub wetlands immediately adjacent to a heavily travelled highway and function primarily to maintain water quality.

See attached table of waters and wetlands

State: Vermont County: Rutland City: Pittsford
Coordinates of site (lat/long in degree decimal format):
Beginning Lat. 43.700587 ° N, Long. -73.010099 ° W
End Lat. 43.685291 ° N, Long. -72.992677 ° W
Universal Transverse Mercator: 18

Name of nearest waterbody: The project impacts wetlands and unnamed tributaries, which flow to Furnace Brook, then into Otter Creek, the nearest Traditional Navigable Waterway (TNW).

Identify (estimate) amount of waters in the review area:
Non-wetland waters: ___ linear feet: width (ft) and/or 0.09 acres.
Cowardin Class: R5
Stream Flow: Perennial

Wetlands: 46,860 sq. ft. (1.08 acres)
Cowardin Class: PEM, PSS, PFO

Name of any water bodies on the site that have been identified as Section 10 waters:
Tidal: NA
Non-Tidal: NA

5. Review performed for site evaluation (check all that apply):
☒ Office (Desk) Determination. Date: September 3, 2019
☒ Field Determination. Date(s): April 30, 2019

a. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

b. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

c. Supporting Data. Data reviewed for Preliminary JD - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: "Project Location Map for Pittsford NH 0019-3 (491)" (dated "July 25, 2018"), "Resource Map – Field Delineated Wetlands & Streams" (dated "7/24/18", last revised "9/27/18")

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant. Dated "6/12/18" completed by April Moulaert, PWS.

- ☒ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:
☐ Corps navigable waters' study:
☐ U.S. Geological Survey Hydrologic Atlas:
- ☐ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.

☐ U.S. Geological Survey map(s). Cite scale & quad name:
☐ USDA Natural Resources Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s):
☐ FEMA/FIRM maps:
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☐ Photographs: ☐ Aerial (Name & Date):
or ☐ Other (Name & Date):
☐ Previous determination(s). File no. and date of response letter:
☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

REPELLA.ANGELA.C.1387974934 Digitally signed by REPELLA.ANGELA.C.1387974934 Date: 2019.09.05 06:59:14 -04'00'

Angela C. Repella
Regulatory Project Manager

September 5, 2019
Date

James Brady
Vermont Agency of Transportation

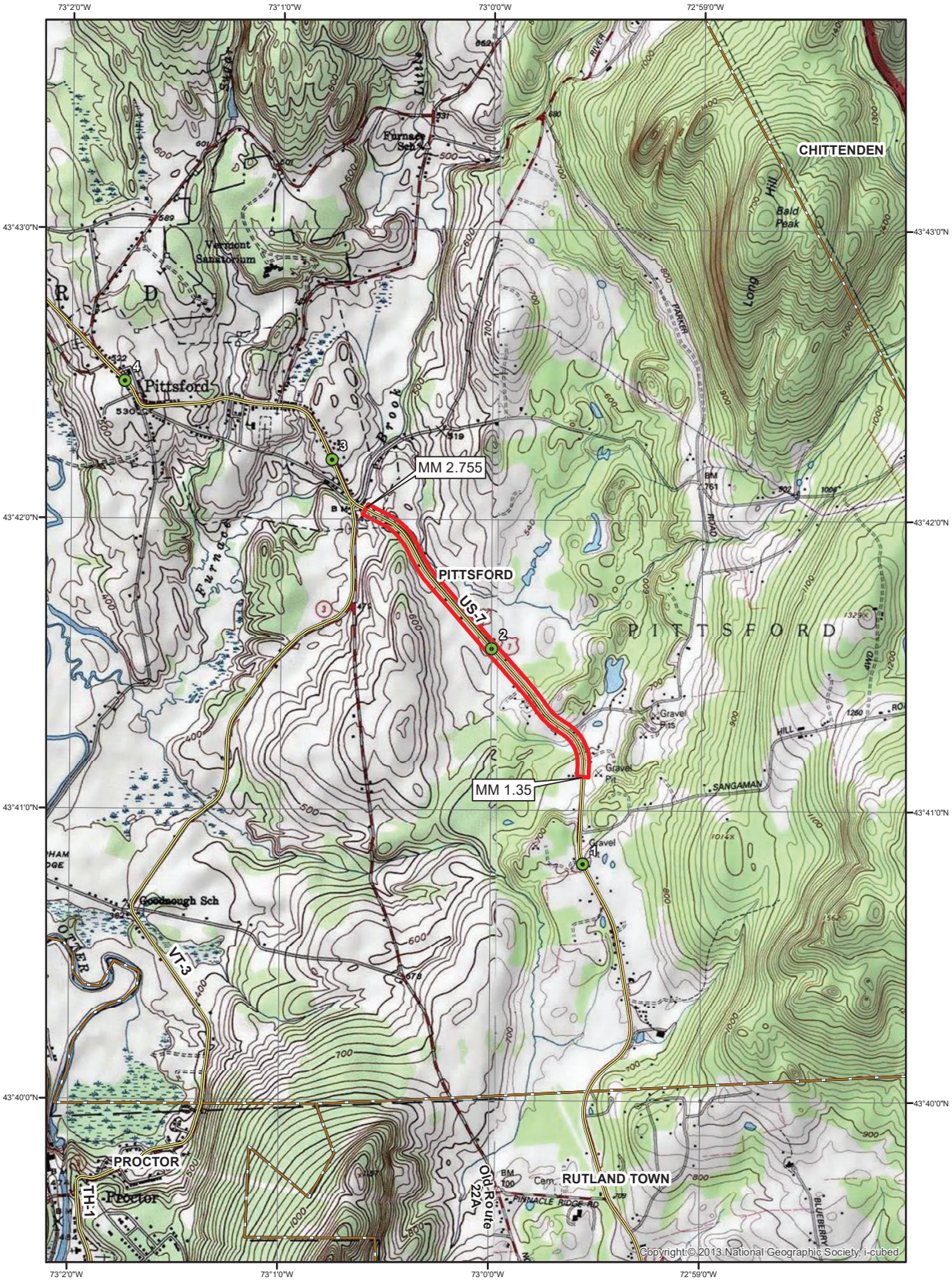
September 5, 2019
Date

WETLAND AND WATERS TABLE

Estimate aquatic resource in review area	Class of aquatic resource

Water #	Cowardin	Type (optional)	Lat.	Long.	SF	LF	
Wetland FG	PEM		43.687313	-72.993444	14842		Non-Sec 10 Wetland
Stream FG-1	R5		43.687313	-72.993444	606		Non-Sec 10 - Stream
Wetland CDE	PEM		43.691738	-72.998432	10284		Non-Sec 10 Wetland
Wetland BH	PEM		43.694911	-73.002444	18460		Non-Sec 10 Wetland
Stream FG-2	R5		43.694911	-73.002444	1306		Non-Sec 10 Stream
Wetland A	PEM		43.696945	-73.004771	3274		Non-Sec 10 Wetland
Stream A	R5		43.698053	-73.005857	2256		Non-Sec 10 Stream

Project Location Map for Pittsford NH 019-3 (491)
US Route 7
Pittsford, Vermont



Legend

- Mile Marker
- Study Area
- Major Road
- Town Boundary

0 1,000 2,000 4,000 Feet

1 inch = 2,000 feet

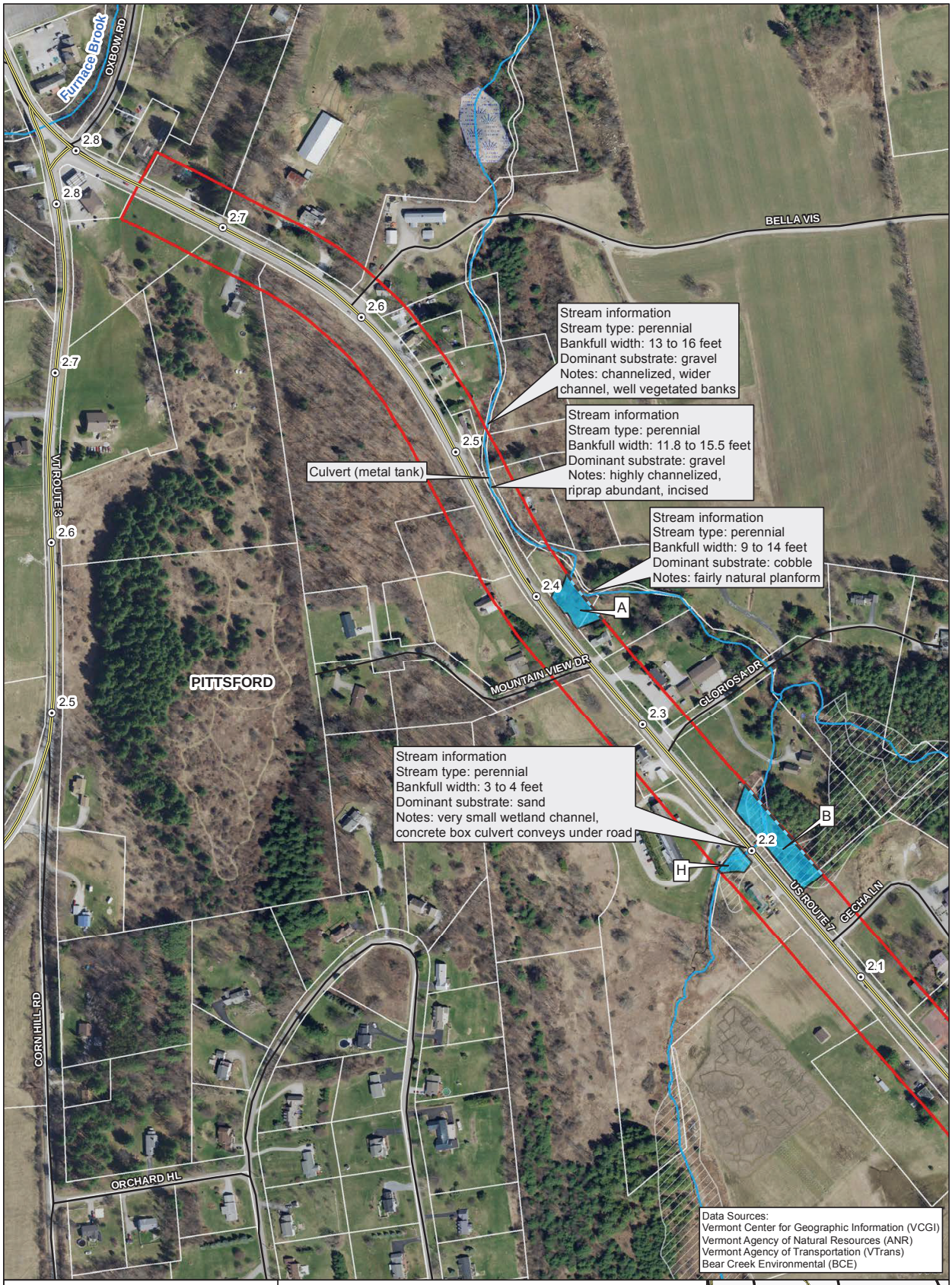
N

Study area includes 100 feet from the road edge on each side of US Route 7 for 1.405 linear miles.

Data sources include:
Vermont Center for Geographic Information (VCGI)
Vermont Agency of Natural Resources (ANR)
Vermont Agency of Transportation (VTrans)
Bear Creek Environmental (BCE)

Map composed on July 25, 2018.

Bear Creek Environmental



Resource Map - Field Delineated Wetlands & Streams

Vermont Agency of Transportation
Pittsford NH 019-3 (491) Segment 1
US Route 7
Pittsford, Vermont
Rutland County

Bear Creek Environmental

Legend

- Study Area
- Mile Marker - Tenths
- Major Road
- Road
- VHD Stream
- Hydric Soils

Field Delineated Wetland

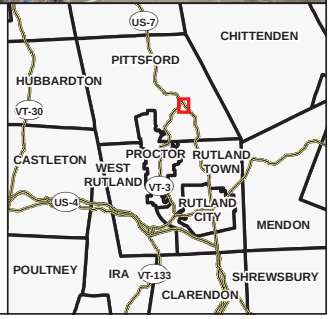
- Class II
- VT Sig. Wetland Inventory
- Parcel Boundary

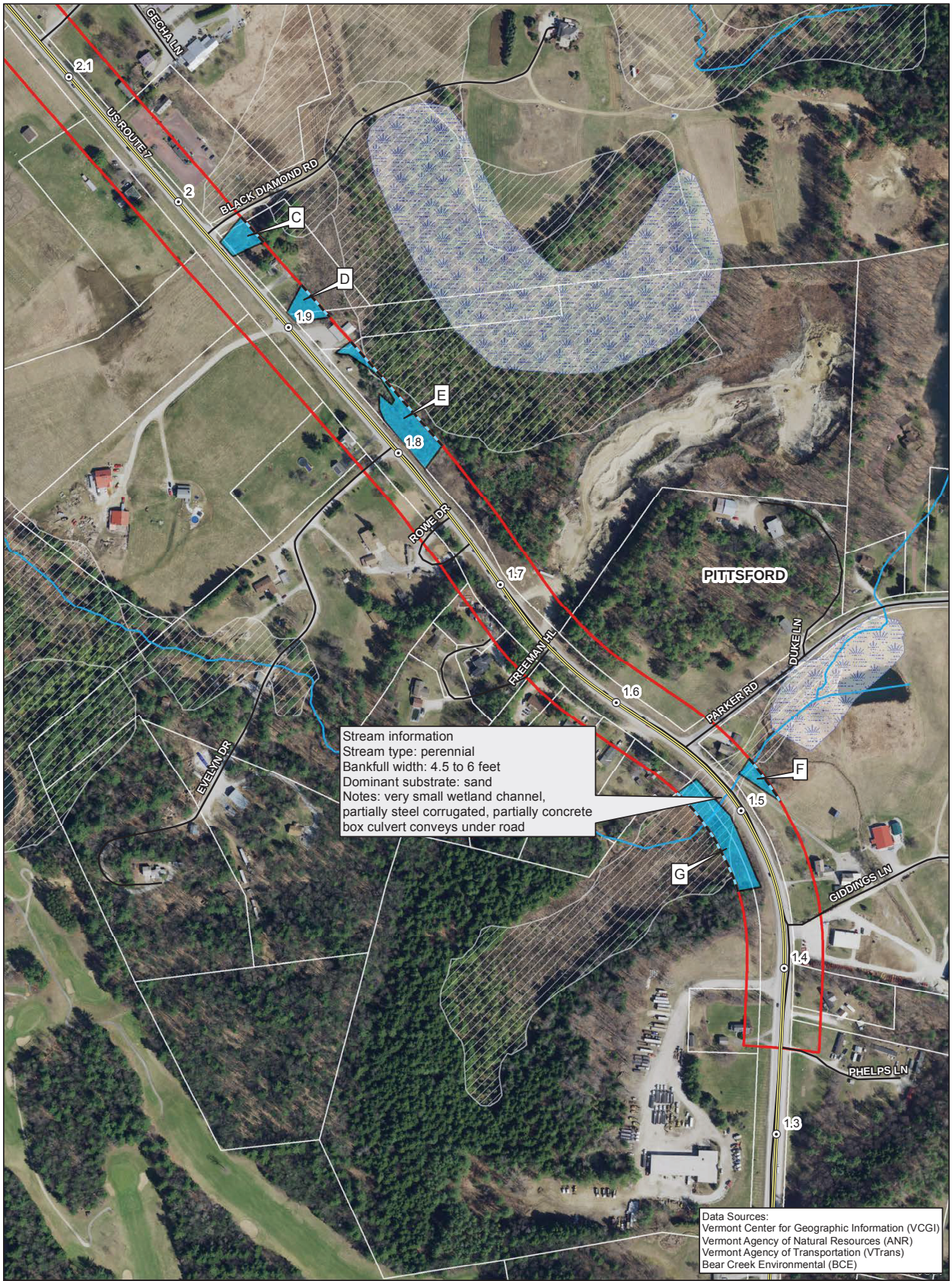
0 75 150 300 Feet

Map 1 of 2

N

A wetland delineation was performed in accordance with the methods described in the manual prepared by the US Army Corps of Engineers dated 2012 and titled "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region". Wetland classification has been confirmed by State of Vermont regulators. Functionally, all wetlands delineated within the study area are part of one large wetland complex that continues outside of the study area boundary. Wetlands that continue beyond the study area boundary are shown with dotted line boundaries. The total area of wetlands delineated within the study area is 2.76 acres. Map composed on 7/24/18. Revised on 9/27/18.





Resource Map - Field Delineated Wetlands & Streams

Vermont Agency of Transportation
Pittsford NH 019-3 (491) Segment 1
US Route 7
Pittsford, Vermont
Rutland County

Bear Creek Environmental

Legend

- Study Area
- Mile Marker - Tenths
- Major Road
- Road
- VHD Stream
- Hydric Soils

Field Delineated Wetland

- Class II
- VT Sig. Wetland Inventory
- Parcel Boundary

Map 2 of 2

N

0 75 150 300 Feet

A wetland delineation was performed in accordance with the methods described in the manual prepared by the US Army Corps of Engineers dated 2012 and titled "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region". Wetland classification has been confirmed by State of Vermont regulators. Functionally, all wetlands delineated within the study area are part of one large wetland complex that continues outside of the study area boundary. Wetlands that continue beyond the study area boundary are shown with dotted line boundaries. The total area of wetlands delineated within the study area is 2.76 acres. Map composed on 7/24/18. Revised on 9/27/18.