

October 20, 2016

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION
DEPARTMENT OF ADMINISTRATION

DIVISION OF PURCHASES BID NO. 7550985

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

RHODE ISLAND CONTRACT NO.2016-CB-039

FEDERAL-AID PROJECT NO. FAP Nos: BHO-0380(003)

Mussey Brook Bridge No. 380 (56C)

Mussey Brook Road to Desoto Way

CITY/TOWN OF Lincoln

COUNTY OF PROVIDENCE

NOTICE TO PROSPECTIVE BIDDERS

ADDENDUM NO. 1 Prospective bidders and all concerned are hereby notified of the following changes in the Plans, Specifications, Proposal and Distribution of Quantities for this contract. These changes shall be incorporated in the Plans, Specifications, Proposal and Distribution of Quantities, and shall become an integral part of the Contract Documents.

A. Clarification

1. Overhead Utilities

The overhead utility relocation is limited to a single pole relocation at Sta. 56+32 RT as shown on Sheet 9 "Drainage & Utility Plan." The remaining overhead utilities and poles will remain at their existing locations. The Contractor will be required to work with the existing overhead utilities in place as noted in Job Specific General Note 10 on Sheet 5 "Job Specific Plan Symbols, Legend, and Notes.

2. Item 401.9901 "Modified Class 9.5 HMA for Bridge Decks

The Specification corresponding to Item Code 401.9901 "Modified Class 9.5 HMA for Bridge Decks" shall be Section 401 "Dense Graded Hot Mix Asphalt (HMA) Pavements" in the Compilation of Approved Specifications dated April 2016.

B. General Provisions - Contract Specific

1. Utility and Municipal Notification and Coordination

Insert Page CS-3a attached to this Addendum No. 1. Subsections for Verizon and the Lincoln Water Commission have been added.

2. Environmental Permits

Replace Page CS-9 and Appendix D with Page CS-9(R-1) and Appendix D(R-1) attached to this Addendum No. 1. Section 20 "Environmental Permits" has been revised and the R.I. Department of Environmental Management (RIDEM) Insignificant Alteration Permit and U.S. Army Rhode Island General Permit have been added.

Bidders shall note that No. 12 of the Terms and Conditions of the RIDEM Permit includes an in-water work restriction. All in-water work must be performed during the low-flow period from July 1 to October 31. See the attached Permit for complete Terms and Conditions.

3. Transportation Management Plan (TMP)

Replace Appendix A with Appendix A(R-1) attached to this Addendum No. 1. Page 3 of 3 of the TMP has been signed, and Note 6 regarding the maximum allowable duration of the roadway closure has been added to the General Restrictions Chart.

C. Specifications - Job Specific

1. Masonry Special Provision

Replace Pages JS-26 to JS-31 of the Specifications - Job Specific with Pages JS-26(R-1) to JS-31(R-1) attached to this Addendum No. 1. Various changes have been made throughout this Special Provision.

D. Distribution of Quantities

1. Index

Replace Pages Index:1 and Index:2 with Pages Index:1(R-1) and Index:2(R-2) attached to this Addendum No. 1. The Index has been updated.

2. HMA Items

Replace Pages 5 and 18 of the Distribution of Quantities with Pages 5(R-1) and 18(R-1) and insert Page 5a, all attached to this Addendum No. 1.

The quantities previously included in Item 401.2100 "Modified Class 12.5 HMA have been moved to Item 401.3100 "Modified Class 9.5 HMA."

Item 401.2100 "Modified Class 12.5 HMA has been deleted.

The quantity previously included in Item 401.3100 "Modified Class 9.5 HMA" for HMA on the bridge deck and approach slabs has been moved to new Item 401.9901 "Modified Class 9.5 HMA for Bridge Decks."

3. Item 807.9905 "Supplemental Stones"

Replace Page 18 of the Distribution of Quantities with Page 18(R-1) and insert Page 19 attached to this Addendum No. 1. Item 807.9905 "Supplemental Stones" has been added.

E. Plans

1. Sheet No. 1: Cover Sheet

Replace Sheet No. 1 with Sheet No. 1(REV1) attached to this Addendum No. 1. The top pavement course has been changed to Modified Class 9.5 HMA in the Proposed Pavement Structure.

2. Sheet No. 5: Job Specific Plan Symbols, Legend, & Notes

Replace Sheet No. 5 with Sheet No. 5(REV1) attached to this Addendum No. 1. In the Job Specific Legend, the top pavement course has been changed to Modified Class 9.5 HMA in Full Depth Reconstruction (P). Micro-Mill and Overlay (MMO) has been added to the Job Specific Legend. Note 3 regarding sequencing of traffic and the partial arch demolition has been added to the Sequencing Notes and Suggested Sequence of Construction.

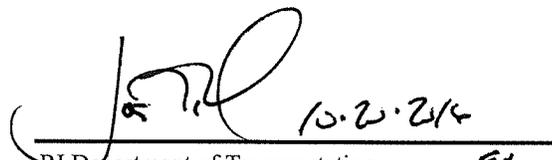
3. Sheet No. 6: Typical Sections

Replace Sheet No. 6 with Sheet No. 6(REV1) attached to this Addendum No. 1. In the Pavement Structure legend, the top pavement course has been changed to Modified Class 9.5 HMA in Full Depth Reconstruction (P) and Micro-Mill and Overlay (MMO).

4. Sheet No.25: Approach Slab Details

Replace Sheet No. 25 with Sheet No. 25(REV1) attached to this Addendum No. 1. Section 3/25 has been revised.

ADDENDUM NO. 1


R.L. Department of Transportation *RL*
Administrator, Division of Project Management

ATTACHMENTS

Verizon

Verizon requires 2 days on-site to perform the work associated with the proposed pole relocation.

Lincoln Water Commission

The 12-inch water main on the west side of Old River Road may be shut down in accordance with the following:

1. The Lincoln Water Commission shall be notified no later than 48 hours prior to any shutdown.
2. The water main may be shut down on a weekday between 9:00 AM and 3:00 PM for the purpose of installing the in-line butterfly valve at Sta. 58+63 LT.
3. Following installation of the butterfly valve at Sta. 58+63 LT, the main may remain shut down from this newly-installed valve to the existing valve at Sta. 56+42 LT for the duration of the remaining water-main work.

20. ENVIRONMENTAL PERMITS

Environmental Permits for the Rehabilitation of Mussey Brook Bridge No. 380 are included in Appendix D. It shall be the Contractor's responsibility to comply with all restrictions and stipulations stated or implied by the permits and orders. There will be no special payment for work done to comply with permits and orders unless an item is provided in the proposal for a specific requirement. The following permits are included in Appendix D:

- Rhode Island Department of Environmental Management, Insignificant Alteration Permit No. 16-0220
- Department of the Army, General Permit, State of Rhode Island, General Permit No. NAE-2011-2402

Any and all deviations from the approved permit operations or conditions shall be submitted for approval to the corresponding permitting agency or agencies. Work that deviates from approved permit operations or conditions shall not begin without receipt of the proper approvals.

21. STRUCTURAL SHOP DRAWINGS AND SUBMITTALS

The following list of bridge/structural items of work for which shop drawings and/or other submittals are required is provided for the convenience of the Contractor. This list includes only the major items of bridge/structural work; it does not itemize all submittals required by the Contract Documents. All submittals shall be in accordance with Section 105.02 of Standard Specifications for Road and Bridge Construction, amended May 2015. The Contractor is responsible for the timely submission of all shop drawings and other documents required by the Contract. No extra payment will be made, nor will any extension be made to the Contract completion date for making required submittals.

1. Construction Procedures: type, size, and placement of equipment, detailed sequence of work, methods, concrete falsework details, etc.
2. Control of Water: methods, equipment, and detailed sequence of work
3. Bridge Demolition: methods, equipment, shielding, and detailed sequence of work
4. Steel Micropiles: pipe, concrete fill, coatings, installation equipment and sequence, and load testing plan and results
5. Concrete and CLSM: mix designs, placing & pouring sequence, methods and equipment, curing plan including heat flow analyses and methods, personal resources, formliners, finishing methods
6. Waterstops
7. Joint Fillers
8. Precast Concrete
9. Non-Shrink Grout
10. Reinforcing Steel, Splicers, and Inserts
11. Elastomeric Bearings
12. Granite Curb for Bridges
13. Guardrail on Bridge
14. Filter Fabric
15. Gabion Wall

APPENDIX D

ENVIRONMENTAL PERMITS

Rhode Island Department of Environmental Management
Insignificant Alteration Permit No. 16-0220

Department of the Army - General Permit
State of Rhode Island
General Permit No. NAE-2011-2402



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

October 5, 2016

Rhode Island Department of Transportation
Meredith E. Brady, Administrator, Division of Planning
2 Capitol Hill
Providence, RI 02903

Insignificant Alteration – Permit

RE: Application No. 16-0220 in reference to the property and proposed project located:

At the Mussey Brook Bridge No. 380 on Old River Road (Route 126), approximately 165 feet north of its intersection with Mussey Brook Road, near Utility Pole No. 295, along the State Highway Right-of Way (SHL No. 2880) in Lincoln, RI.

Dear Ms. Brady:

Kindly be advised that the Department of Environmental Management's ("DEM") Freshwater Wetlands Program ("Program") has completed its review of your **Request for Preliminary Determination** application. This review included a site inspection of the above referenced property ("subject property") and an evaluation of the proposed rehabilitation of the Mussey Brook Bridge including a new bridge to be installed over the existing stone arch culvert, masonry repairs, stream bank armoring, new gabion wall, road reconstruction and associated site alterations as illustrated and detailed on site plans submitted with your application. These site plans were received by the DEM on August 25, 2016.

Our observations of the subject property, review of the site plans and evaluation of the proposed project reveals that alterations of freshwater wetlands are proposed. However, pursuant to Rule 9.00 of the Rules and Regulations Governing the Administration and Enforcement of the Fresh Water Wetlands Act (Rules), this project may be permitted as an **insignificant alteration** to freshwater wetlands under the following terms and conditions:

Terms and Conditions for Application No: 16-0220

1. This letter is the DEM's permit for this project under the R.I. Fresh Water Wetlands Act, Rhode Island General Laws (RIGL) Section 2-1-18 et seq.
2. This permit is specifically limited to the project, site alterations and limits of disturbance as detailed on the site plans submitted with your application and received by the DEM on August 25, 2016. A copy of the site plans stamped approved by the DEM is enclosed. Changes or revisions to the project that would alter freshwater wetlands are not authorized without a permit from the DEM.
3. Where the terms and conditions of the permit conflict with the approved site plans, these terms and conditions shall be deemed to supersede the site plans.
4. You must notify this Program in writing immediately prior to the commencement of site alterations and upon completion of the project.

5. A copy of the stamped approved site plans and a copy of this permit must be kept at the site at all times during site preparation, construction, and final stabilization. Copies of this permit and the stamped approved plans must be made available for review by any DEM representative upon request.
6. The effective date of this permit is the date this letter was issued. This permit expires four (4) years from the date of issue unless renewed pursuant to the Rules.
7. Any material utilized in this project must be clean and free of matter that could pollute any freshwater wetland.
8. Prior to commencement of site alterations, you shall erect or post a sign resistant to the weather and at least twelve (12) inches wide and eighteen (18) inches long, which boldly identifies the initials "DEM" and the application number of this permit. This sign must be maintained at the site in a conspicuous location until such time that the project is complete.
9. Temporary erosion and sediment controls detailed or described on the approved site plans shall be properly installed at the site prior to or commensurate with site alterations. Such controls shall be properly maintained, replaced, supplemented, or modified as necessary throughout the life of this project to minimize soil erosion and to prevent sediment from being deposited in any wetlands not subject to disturbance under this permit.
10. Upon permanent stabilization of all disturbed soils, temporary erosion and/or sediment controls consisting of straw bales and/or silt fence must be removed.
11. You are responsible for the proper operation, maintenance and stability of any mitigative features, facilities, and systems of treatment and control that are installed or used in compliance with this permit to prevent harm to adjacent wetlands.
12. You are obligated to install, utilize and follow all best management practices detailed or described on the approved site plans in the construction of the project to minimize or prevent adverse impacts to any adjacent freshwater wetlands and the functions and values provided by such wetlands.
13. All construction activities involving soil disturbances within watercourses must be limited to the low flow period (*i.e.*, the period from July 1 to October 31 of any calendar year). Soil disturbance in these watercourses must temporarily cease in the event of any abnormally high stormwater runoff event during the low flow period.
14. You must provide written certification from a registered land surveyor or registered professional engineer that the stormwater drainage system including any and all basins, piping systems, catch basins, culverts, swales and any other stormwater management control features have been constructed/installed in accordance with the site plans approved by this permit. This written certification must be submitted to this Program within twenty (20) days of its request or upon completion of the project.

Pursuant to the provisions in Rule 7.09 and Rule 11.04, as applicable, any properly recorded and valid permit is automatically transferred to the new owner upon sale of the property.

This Permit also constitutes your authorization from the U.S. Army Corps of Engineers ("Corps") under Section 404 of the Clean Water Act for the work proposed. Your project qualifies as a Category (1) activity under the Rhode Island General Permit (General Permit No. NAE-2011-2402), (RI GP). You can view this permit at http://www.nae.usace.army.mil/Regulatory/SGP/RI_PGP.pdf. You are, therefore, not required to file a separate application with the Corps.

Please note that the General Conditions within the RI GP apply to all activities authorized under the RI GP. Please review them carefully to thoroughly familiarize yourself with their contents. You may wish to discuss all permit conditions with your contractor to ensure that the work can be accomplished in a manner which conforms to all requirements.

You are required to comply with the terms and conditions of this permit and to carry out this project in compliance with the Rules at all times. Failure to do so may result in an enforcement action by this Department (and/or subject you to the enforcement provisions of the Corps' regulations.)

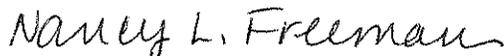
In permitting the proposed alterations, the DEM assumes no responsibility for damages resulting from faulty design or construction.

Kindly be advised that this permit is not equivalent to a verification of the type or extent of freshwater wetlands on site. Should you wish to have the types and extent of freshwater wetlands verified, you may submit the appropriate application in accordance with Rule 8.03.

This permit does not remove your obligation to obtain any local, state, or federal approvals or permits required by ordinance or law and does not relieve you from any duties owed to adjacent landowners with specific reference to any changes in drainage.

Please contact of this office (telephone: 401-222-6820 x 7408) should you have any questions regarding this letter.

Sincerely,



Nancy L. Freeman, Senior Environmental Scientist
Office of Water Resources
Freshwater Wetlands Program
NLF/nlf

Enclosure: Approved site plans

ec: Michael J. Elliott, U.S. Army Corps of Engineers
Nicholas A. Pisani, P.E., RIDEM
David J. Elwell, P.E., Pare Corp.
Briscoe Lang, PWS, Pare Corp.

xc: Michael Gagnon, Public Works Director, Town of Lincoln

Department of the Army General Permit State of Rhode Island

The New England District of the U.S. Army Corps of Engineers (Corps) hereby issues a General Permit (GP) for activities in waters of the United States (U.S.) that have no more than minimal individual, secondary, and cumulative impacts on the aquatic environment in waters of the U.S. within the boundaries of and off the coast of the State of Rhode Island.

I. GENERAL CRITERIA

Under this GP, projects may qualify for the following:

- **Category 1: Non-reporting**
Projects meeting Category 1 are eligible for authorization under this GP without notifying the Corps. (An application to the State is required, unless exempt from State regulation),
- **Category 2: Reporting/Application Required**
Submittal of an application to the State and subsequent written authorization from the Corps, either directly or within a State issued permit, is required for these projects.

II. ACTIVITIES COVERED

- Work and structures that are located in, or that effect navigable waters of the U.S.¹. The Corps regulates this under Section 10 of the Rivers and Harbors Act of 1899;
- The discharge of dredged or fill material into waters of the U.S.² The Corps regulates this under Section 404 of the Clean Water Act (CWA); and
- The transportation of dredged material for the purpose of disposal in the ocean. The Corps regulates this under Section 103 of the Marine Protection, Research and Sanctuaries Act.

1. State Approvals

Applicants are responsible for applying for and obtaining any of the required state or local approvals. Federal and state jurisdictions may differ in some instances. State permits may be required for specific projects regardless of the general permit category.

In order for authorizations under this GP to be valid and before commencing any work within Corps jurisdiction, applicants are responsible for applying for and obtaining any of the following required State approvals, as well as any required local approvals:

¹ Defined at 33 CFR 329

² Defined at 33 CFR 328

- RI Department of Environmental Management (DEM) approval under the Freshwater Wetland Act, Rhode Island General Laws (RIGL).
- RI DEM approval under RIGL Section 46-19 et seq. entitled “Inspection of Dams and Reservoirs” and regulations promulgated thereto.
- RI DEM approval under the “Water Quality Regulations for Water Pollution Control” pursuant to RIGL Chapter 42-17.1 and Section 46-12-1 et seq.
- RI DEM approval under the “Rules and Regulation for Dredging and the Management of Dredged Material” pursuant to RIGL Chapter 46-6.1.
- Water Quality Certification (WQC) under Section 401 of the CWA (33 USC 1341). The CWA requires applicants to obtain a WQC or waiver from the state water pollution control agency (DEM). The DEM has granted WQC for GP Category 1 activities provided that the applicant obtains the required approvals listed above. The DEM conditionally granted WQC for GP Category 2 activities provided that (a) the applicant obtains the required approvals listed above and (b) the DEM finds that the activity is likely to have minimal or no impact on water quality.
- RI Coastal Resources Management Council (CRMC) approval (“Assent”) pursuant to RIGL Chapter 23, Section 46-23-1 et seq, “Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast.” Category 1 projects require an application to CRMC for their review. Category 2 projects require an application to CRMC for review by CRMC and the Corps.
- Coastal Zone Management (CZM) Consistency under Sec. 307 of the Federal CZM Act of 1972, as amended. The CRMC administers the RI CZM program. The CRMC has determined that any project in the Coastal Area that is authorized under Category 1 or 2 of this GP is consistent with the RI CZM program and does not require any additional CZM review. The state’s Coastal Area is statutorily defined in RIGL Chapter 23, Section 46-23.

2. Corps Authorizations

A. Category 1 (Non-Reporting) - For projects meeting the Category 1 eligibility below, proponents may proceed without application to the Corps. See above for required State approvals.

Eligibility Criteria

Activities in Rhode Island that meet the following may proceed without application to the Corps:

1. Meet the definition of Category 1 in Appendix A,
2. Meet the terms of this General Permit (GP),
3. Meet the General Conditions (GCs) of this GP,
4. Regulated by the State and received one of the State approvals listed above,
5. Not located on the Narragansett Land Claim Settlement Area or sites that may influence this area (Areas of Influence). The Narragansett Land Claim Settlement Area is shown at Appendix B. Areas of Influence to this area are located outside of this Land Claim Settlement Area, but are in or adjacent to either the Wood or Pawcatuck River. These are areas of special concern and are not eligible for Category 1. They are as follows:
 - The Pawcatuck River from the Highway 112 crossing downstream to the confluence with the Wood River;
 - The Wood River, upstream of the confluence with the Pawcatuck River to the Highway 91 crossing;
 - Tributaries to the Wood and Pawcatuck Rivers within the segments described at the two bullets above and within .25 miles of the main stems of the Wood and Pawcatuck Rivers; and

- The adjacent wetlands (bordering, contiguous and neighboring) to the Wood and Pawcatuck Rivers and their above specified tributaries.

Consultation with the Corps and/or other agency experts may be necessary to ensure compliance with this GP's General Conditions (pages 4-16) and related federal laws such as the National Historic Preservation Act, the Endangered Species Act (ESA) and the Wild and Scenic Rivers Act. For example, experts on historic resources may include the agencies and Indian tribes or tribal agencies referenced in Appendix B, while experts on endangered species include the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS).

B. Category 2 (Application Required) Projects not meeting the Category 1 eligibility criteria may be eligible for Category 2. Proponents may not proceed with work within Corps jurisdiction until written authorization is received from the Corps.

Eligibility Criteria

Activities in Rhode Island that meet the following require written approval from the appropriate state permitting agency (Page 2) and the Corps:

1. Meet the definition of Category 2 in Appendix A,
2. Meet the terms and eligibility criteria of this GP,
3. Meet the GCs of this GP,
4. Regulated by one of the state authorities listed in State Approvals

Activities regulated by the state: For inland projects, if the Corps determines that the activity is eligible for the GP, the Corps will send an authorization memorandum to the DEM, and the DEM will notify the applicant in a joint Corps/DEM authorization letter. For coastal projects, the Corps, after consulting with Federal and state resource agencies, will determine if the activity is eligible for the GP and will send the authorization letter directly to the permittee. The CRMC will send their decision (Assent) directly to the permittee. For projects in the coastal zone that require dual state permitting, the CRMC and RIDEM will send their decision (Assent and WQC) directly to the permittee.

Activities not regulated by the state or exempt from state regulation: The Corps, not the state, will issue the written authorization for such projects if they are eligible for the GP and they cannot be legally undertaken until the Corps approves them in writing.

3. Applying for a General Permit

General Permit Application Procedures

- a. Applicants apply directly to the appropriate RI permitting agency (DEM or CRMC) for projects in Rhode Island. The Corps and Federal resource agencies will receive State Notices from CRMC and copies of complete applications from the DEM prior to the monthly interagency screening meetings.
- b. Applicants must apply directly to the Corps for activities exempt from State regulation.
- c. Applicants must apply directly to the Corps for activities located on the Narragansett Land Claim Settlement Area and Areas of Influence. These activities are not eligible for authorization under Category 1.

d. The Corps will forward copies of applications being reviewed under Category 2 of the GP to the RI Historic Preservation and Heritage Commission, and the Narragansett and Wampanoag Tribal Historic Preservation Offices, for projects in their areas of concern (Appendix B) early in the permit review process.

e. The Corps will coordinate review of all Category 2 activities with federal and state agencies, as appropriate. To be eligible and subsequently authorized, an activity must result in no more than minimal impacts to the aquatic environment as determined by the Corps and based on comments from the review team in accordance with the terms, general conditions and Appendix A thresholds of this GP. This may require project modifications involving avoidance, minimization or compensatory mitigation for unavoidable impacts to ensure net effects of a project are minimal.

Emergency Situations Procedures

Emergency situations are limited to sudden, unexpected occurrences that could potentially result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process an application under standard procedures. Contact the Corps and the State in the event of an emergency situation.

Individual Permit Procedures

Proponents of work that does not meet the terms and general conditions of this GP must submit ENG FORM 4345 and the appropriate application materials to the Corps at the earliest possible date in order to expedite the Individual Permit review process. General information and application forms can be obtained at our website at www.nae.usace.army.mil or by calling the Corps (see Appendix B). Individual 401 WQC and CZM consistency concurrence are required when applicable from the State of Rhode Island before Corps permit issuance. The Corps encourages applicants to concurrently apply for a Corps Individual Permit and state permits.

III. GENERAL CONDITIONS

The following General Conditions apply to activities authorized under this GP, unless otherwise specified, including all Category 1 (non-reporting) and Category 2 (requiring application review and written authorization) activities. The Corps may independently, or at the request of other resource agencies, impose special conditions on a project authorized pursuant to this GP that are determined necessary to minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all terms and general conditions of the authorization, including special conditions, constitutes a permit violation and may subject the permittee to criminal, civil or administrative penalties and/or an ordered restoration.

1. Other Permits. Authorization under this GP does not obviate the need to obtain other Federal, State, or local authorizations required by law.

2. Federal Jurisdictional Boundaries.

(a) Applicability of this GP shall be evaluated with reference to Federal jurisdictional boundaries. Applicants are responsible for ensuring that the boundaries used satisfy the Federal criteria defined at 33 CFR 328 “Waters of the U.S.” and 33 CFR 329 “Navigable Waters of the U.S.” Note: “Waters of the U.S.” generally and as used in this document include the subcategories “navigable waters of the U.S.” and “wetlands.”

(b) Proponents are required to delineate the waters of the U.S. that they plan to impact for Category 1

and Category 2 projects. Proponents shall delineate all waters of the U.S. that will be filled (direct impacts) in accordance with the Corps of Engineers Wetlands Delineation Manual and the most recent regional supplements. In addition, applicants shall approximately identify all waters of the U.S. on the property and known waters adjacent to the property in order for the Corps to evaluate secondary impacts. The waters of the U.S. shall be clearly shown on the project plans submitted with the application.

(c) For the purposes of this GP, the Corps will generally rely on the RI DEM's CWA jurisdictional recommendations. However, on a case-by-case basis, the Corps may modify/refine the above delineation and identification requirements for waters of the U.S. or may require additional documentation from the permit applicant to support the basis of federal jurisdiction.

Additional sources of information:

- Corps Wetlands Delineation Manual, regional supplements, and Corps Wetland Delineation Data Sheets: www.nae.usace.army.mil/regulatory and then "Jurisdictional Limits and Wetlands."
- The USFWS publishes the 1988 National List of Plant Species that Occur in Wetlands (www.nwi.fws.gov).
- The Natural Resources Conservation Service (NRCS) publishes the current hydric soil definition, criteria and lists: <http://soils.usda.gov/use/hydric>. For the Field Indicators for Identifying Hydric Soils in N.E., see www.neiwpcc.org/hydricsoils.asp.
- The applicant shall delineate all vernal pools within 200-feet of the proposed activity in accordance with Federal boundaries. The Corps may waive this requirement on a case-by-case basis.

3. Minimal Direct, Secondary and Cumulative Impacts.

(a) Activities authorized by this GP shall have no more than minimal direct, secondary and cumulative adverse environmental impacts. Category 2 applicants shall provide information on secondary and cumulative impacts.

(b) Secondary impacts to waters of the U.S. (e.g., areas drained, flooded, cleared, excavated or fragmented) shall be added to the total fill area when determining whether the project qualifies for Category 1 or 2.

(c) Cumulative impacts are the changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems

4. Mitigation (Avoidance, Minimization and Compensatory Mitigation).

(a) Activities must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the U.S. (includes wetlands) to the maximum extent practicable at the project site (i.e., on site) through consideration of alternatives.

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal. Compensatory mitigation of unavoidable direct and indirect impacts, including temporal losses, will generally be required for Category 2 activities to offset unavoidable impacts and to ensure that they are no more than minimal. Compensatory mitigation requirements will be determined on a case-by-case basis.

(c) Unless specifically authorized, no work shall drain a water of the U.S. by providing a conduit for water on or below the surface.

(d) Projects using creosote-treated materials in any water of the U.S. (includes wetlands) require an Individual Permit.

Additional sources of information:

- Direct, secondary and cumulative impacts are defined at Appendix A, Definition 2.
- See www.nae.usace.army.mil/Regulatory >> Mitigation >> Compensatory Mitigation Guidance to view the April 10, 2008 “Final Compensatory Mitigation Rule” (33 CFR 332) and related documents. The Q&A document states: “In order to reduce risk and uncertainty and help ensure that the required compensation is provided, the rule establishes a preference hierarchy for mitigation options. The most preferred options are mitigation bank and in-lieu fee program credits but these do not exist in RI. Permittee-responsible mitigation is the third and only option available in RI, with three possible circumstances (in order of preference): (1) conducted under a watershed approach, (2) on-site and in kind, and (3) off-site/out-of-kind.

5. Discretionary Authority. Notwithstanding compliance with the terms and general conditions of this GP, the Corps retains discretionary authority to require either a Category 2 or Individual Permit review (if the project originally qualified for Category 1) or an Individual Permit review (if the project originally qualified for a Category 2) based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR 320.4(a)]. This authority is invoked on a case-by-case basis whenever the Corps determines that the potential impacts of the proposal warrant a higher level of review (either a Category 2 or an Individual Permit) based on the concerns stated above. This authority may be invoked for projects with cumulative environmental impacts that are more than minimal or if there is a special resource or concern associated with a particular project that is not already covered by the remaining conditions of the GP and that warrants greater review. Whenever the Corps notifies an applicant that either a Category 2 or Individual Permit review is required, authorization under this GP is void and no work may be conducted until the Corps issues the required authorization and notifies the applicant in writing that work may proceed.

6. Single and Complete Projects

- (a) This GP shall not be used for piecemeal work and shall be applied to single and complete projects. All components of a single project and/or all planned phases of a multi-phased project (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be treated together as constituting one single and complete project.
- (b) A single and complete non-linear project, defined at 33 CFR 330.2(i), must have independent utility. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed, even if the other phases were not built, can be considered as separate single and complete projects with independent utility.
- (c) Unless the Corps determines that an activity is a single and complete project, this GP shall not be used for any activity that is part of an overall project for which an Individual Permit is required.
- (d) For linear projects such as power lines or pipelines with multiple crossings, a “single and complete project” is all crossings of a single water of the U.S. (i.e. single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately. If any crossing requires a Category 2 review or an individual permit, then the entire linear project shall be reviewed as one project under Category 2 or the individual permit procedures.

7. Permit On-Site. For Category 2 projects, the permittee shall ensure that a copy of this GP and the accompanying authorization letter are at the work site whenever work is being performed, and that all

personnel with operation control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit authorization 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 GP. This shall be achieved by including the entire permit authorization in the specifications for work. The term “entire permit authorization” means this GP and the authorization letter (including its drawings, plans, appendices and other attachments) and also includes permit modifications. If the authorization letter is issued after the construction specifications, but before receipt of bids or quotes, the entire permit authorization shall be included as an addendum to the specifications. If the authorization letter is issued after receipt of bids or quotes, the entire permit authorization 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 GP authorization, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

8. Historic Properties.

(a) Any activity authorized by this GP shall not result in effects [as that term is defined at 36 CFR 800.16(i)] on properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties, unless and until the Corps or another federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act.

(b) Work is not eligible for Category 1 and an application to the Corps is required if the activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing, or is potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. Work is eligible for Category 1 provided another federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act.

(c) Information on the location and existence of historic resources can be obtained from the RIHPHC, the National Register of Historic Places [see 33 CFR 330.4(g)], and the two Native American tribes listed in Appendix B, which contains contact information and geographic areas of interest for each tribe. Historic properties include those that are eligible for inclusion, but not necessarily listed on the National Register.

(d) If the permittee, either prior to construction or during construction of the work authorized herein, encounters a previously unidentified archaeological or other cultural resource within the area subject to Corps jurisdiction that might be eligible for listing in the National Register of Historic Places, he/she shall stop work and immediately notify the Corps, RIHPHC and applicable tribe(s).

9. National Lands. Any of the following work is not eligible as a Category 1 project:

(a) Activities that impinge upon the value of any National Wildlife Refuge, National Forest, National Estuarine Research Preserves, National Marine Sanctuary, National Park or any other area administered by the National Park Service, USFWS, U.S. Forest Service.

(b) Work on Corps properties and Corps-controlled easements. In addition to any authorization under this GP, proponents must contact the Corps, Real Estate Division at (978) 318-8585 to obtain real estate documents.

(c) Any proposed temporary or permanent modification or use of a federal project (including but not limited to a levee, dike, floodwall, channel, sea wall, bulkhead, jetty, wharf, pier, or other work built but not necessarily owned by the United States), which would obstruct or impair the usefulness of the federal project in any manner, and/or would involve changes to the authorized federal project’s scope, purpose, and/or functioning that go beyond minor modifications required for normal operation and maintenance requires review and approval by the Corps pursuant to 33 USC 408.

10. Federal Threatened and Endangered Species.

(a) No activity may be authorized under Category 1 of this GP which:

- i. “May affect” a threatened or endangered species, a species proposed for listing as threatened or endangered, or designated or proposed critical habitat (all herein referred to as “listed species or habitat”) as identified under the Federal Endangered Species Act (ESA) (unless specified in a programmatic agreement with NMFS or USFWS),
- ii. Results in a “take” of any Federally-listed threatened or endangered species of fish or wildlife, or
- iii. Results in any other violation of Section 9 of the ESA protecting threatened or endangered species of plants.

(b) No activity may be authorized under Category 1 if a listed species or critical habitat¹ is present in the action area². Project proponents must check the USFWS and NMFS websites¹ to ensure that listed species or critical habitat are not present in the action area or to provide information on federally-listed species or habitat as required in (c) below.

(c) Proponents must submit an application to the Corps if any of the activities in (a) or (b) above may occur and provide information on federally-listed species or habitat¹ to allow the Corps to conduct any required consultation under Section 7 of the ESA.

(d) Although some work is excluded from Category 1 as stated in (a) and (b) above, work may qualify for Category 1 if a “No Effect determination” has been made for that work by a federal action agency. The permittee must comply with any conditions that were imposed to avoid adverse effects to listed species or critical habitat.

Additional sources of information:

¹ USFWS: www.fws.gov/newengland/EndangeredSpec-Consultation_Project_Review.htm.

NMFS: www.nero.noaa.gov/prot_res/esp/ListE&Tspec.pdf.

² The “Endangered Species Act Consultation Handbook – Procedures for Conducting Section 7 Consultations and Conferences,” defines action area as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. [50 CFR 402.02].”

11. Essential Fish Habitat (EFH). As part of the GP review process, the Corps will coordinate with the NMFS in accordance with the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act (MSA) to protect and conserve the habitat of marine, estuarine and anadromous finfish, mollusks, and crustaceans. This habitat is termed “Essential Fish Habitat,” (EFH) and is broadly defined to include “those waters and substrate necessary to fish for spawning, breeding, feeding and growth to maturity.” All species managed under the MSA have had EFH designations. There are 61 species with EFH in the coastal waters of southern New England. Applicants may be required to describe and identify potential impacts to EFH. Conservation recommendations regarding the protection of EFH for species managed under the MSA made by NMFS will normally be included as special conditions to any permit issued by the Corps. Information on the location of EFH can be obtained from NMFS at www.nero.noaa.gov/hcd.webintro.html. The NMFS has established a web site at www.nero.noaa.gov/HCD/appguide1.html.

12. Wild and Scenic Rivers. Currently there are no designated Wild and Scenic Rivers or rivers designated as Study Rivers in the State of Rhode Island.

13. Federal Navigation Project. Any proposed structure or work that extends closer to the horizontal limits of any Corps Federal Navigation Project (FNP) than a distance of three times the FNP’s authorized depth shall be subject to removal at the owner’s expense prior to any future Corps dredging or the performance of hydrographic surveys.

14. Navigation.

(a) There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein, and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein.

(b) The permittee understands and agrees that if future U.S. operations require the removal, relocation or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

15. Federal Liability. In issuing this GP, 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 U.S. in the public interest;

(c) damages to persons, property or to other permitted or unpermitted activities or structures caused by the activity authorized by the GP;

(d) design or construction deficiencies associated with the permitted work; (e) damage claims associated with any future modification, suspension or revocation of this permit.

16. Heavy Equipment in Wetlands.

(a) Operating heavy equipment other than fixed equipment (drill rigs, fixed cranes, etc.) in wetlands shall be minimized, and such equipment shall not be stored, maintained or repaired in wetlands to the maximum extent practicable. Where construction requires heavy equipment operation in wetlands, the equipment shall either have low ground pressure (typically <3 psi), or it shall be placed on swamp/construction/timber mats (herein referred to as “construction mats” and defined at Appendix A, Definition 4.) that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation.

(b) Construction mats are to be placed in the wetland from the upland or from equipment positioned on swamp mats if working within a wetland. Dragging construction mats into position is prohibited.

(c) Other support structures that are capable of safely supporting equipment may be used with written Corps authorization (Category 2 authorization or Individual Permit). Similarly, the permittee may request written authorization for the Corps to waive use of mats during frozen, dry or other conditions. An adequate supply of spill containment equipment shall be maintained on site.

(d) In tidal wetlands, no dredge work shall have equipment traverse, be placed, or stored on the marsh vegetation unless specifically authorized in writing by the Corps.

17. Temporary Fill. Temporary fill that qualifies for Category 1 (e.g., <5,000 SF of combined temporary and permanent fill associated with the single and complete project) or is authorized in writing under Category 2, shall adhere to the following:

(a) All temporary fill shall be stabilized to prevent its eroding into portions of waters of the U.S. including wetlands.

(b) Unconfined temporary fill authorized for discharge into waters of the U.S. (includes wetlands) (e.g., temporary stream crossings) shall consist of material that minimizes impacts to water quality (e.g. sandbags, clean gravel, stone, etc.).

(c) Temporary fill authorized for discharge into wetlands should be placed on geotextile fabric or other

material (e.g., straw) laid on the pre-construction wetland grade where practicable to minimize impacts. Construction mats are excluded from this requirement.

(d) Temporary fill shall be removed as soon as it is no longer needed, disposed of at an upland site, and suitably contained to prevent its subsequent erosion into waters of the U.S. (includes wetlands).

(e) Waters of the U.S. (includes wetlands) where temporary fill was discharged shall be restored (see GC 18).

(f) Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must be placed in a manner that will not be eroded by expected high flows.

(g) Construction mats, corduroy roads and the like (see GC 16 above) are considered as temporary fill when they are removed immediately upon work completion. The area must be restored (see GC 18).

18. Restoration.

(a) Wetland areas where permanent disturbance is not authorized shall be restored to their original condition and elevation, which under no circumstances shall be higher than the pre-construction elevation unless otherwise authorized. Original condition means careful protection and/or removal of existing soil and vegetation, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same.

(b) Upon completion of construction, all disturbed wetland areas (the disturbance of these areas must be authorized) shall be properly stabilized. Any seed mix shall contain only plant species native to New England and shall not contain any species listed in the “Invasive and Other Unacceptable Plant Species” Appendix in the “New England District Compensatory Mitigation Guidance” (see GC 27). This list may be updated periodically.

(c) Unless otherwise authorized, in areas of authorized temporary disturbance, if trees are cut they shall be cut at ground level and not uprooted in order to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area.

19. Bank Stabilization.

(a) Projects involving construction or reconstruction/maintenance of bank stabilization structures within Corps jurisdiction shall be designed to minimize environmental effects, effects to neighboring properties, scour, etc. to the maximum extent practicable.

(b) Proponents must design and construct bank stabilization projects using this sequential minimization process: avoidance of aquatic resource impacts, diversion of overland flow, vegetative stabilization, stone-sloped surfaces, and walls/bulkheads. Vertical walls/bulkheads shall only be used in situations where reflected wave energy can be tolerated. This generally eliminates bodies of water where the reflected wave energy may interfere with or impact on harbors, marinas, or other developed shore areas. A revetment is sloped and is typically employed to absorb the direct impact of waves more effectively than a vertical seawall. It typically has a less adverse effect on the beach in front of it, abutting properties and wildlife. For more information, see the Corps Coastal Engineering Manual, located at <http://chl.erdc.usace.army.mil>. Select “Products/ Services” and then “Publications.” Part 5, Chapter 7-8, a(2)c is particularly relevant.

20. Soil Erosion and Sediment Controls.

(a) Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. These controls shall be capable of preventing erosion, of collecting sediment, suspended and

floating materials, and of filtering fine sediment. This is to reduce erosion and retain sediment on-site during and after construction.

(b) Temporary soil erosion and sediment controls shall be removed upon completion of work, but not until all disturbed areas are permanently stabilized. The sediment collected by these devices shall be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.

(c) All exposed soil and other fills shall be permanently stabilized at the earliest practicable date.

(d) Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

Additional sources of information:

Appropriate soil erosion and sediment controls are management measures, practices and devices, such as phased construction, installation of sediment control barriers (i.e., silt fence, vegetated filter strips, geotextile silt fences, erosion control mixes, hay bales or other devices) downhill of all exposed areas, retention of existing vegetated buffers, application of temporary mulching, etc.

21. Waterway Crossings and Work¹:

(a) All permanent crossings of rivers, streams, brooks, etc. (hereon referred to as “streams”) shall be suitably culverted, bridged or otherwise designed and constructed to i) withstand expected high flows, ii) not restrict or impede the passage of normal or high flows, or iii) not substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, beyond the actual duration of construction.

[NOTE: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts (see Appendix A, Page 1) to determine applicability of this GP.]

(b) New Stream Crossings. To ensure compliance with (a) above, new stream crossings are eligible for Category 1 provided:

i. Spans² are installed to avoid or cause minimal disruption to the streambed. Work in the stream shall be minimized, and design and construction shall allow the streambed’s natural structure and integrity to remain intact to the greatest extent practicable. Any fill or excavation of the streambed waterward of bankfull width other than footings, support pilings, and work specified in 21(f) and 21(h) below, requires Category 2 review and, unless demonstrated otherwise, stream simulation² as necessary to restore or establish substrate and banks in the span structure and work area to match the characteristics of the substrate and banks in the natural stream channel.

ii. The spans are designed and constructed to conform to the following:

- “RI DEM *Wetland BMP Manual: Techniques for Avoidance and Minimization*,” Chapter 9 “Wetland Crossings.” www.dem.ri.gov/programs/benviron/water/permits/fresh/pdfs/wetbmp.pdf.
- The most recent design and construction manual located on our website³.

(c) Replacement Stream Crossings. See Appendix A, Definition 8 for information on the replacement of serviceable stream crossings. To ensure compliance with (a) above, replacement of non-serviceable stream crossings are eligible for Category 1 provided:

¹This condition does not apply to 1) non-tidal drainage systems and 2) irrigation ditches excavated on dry land.

²For purposes of this GP, spans are bridges, 3-sided box culverts, open-bottom culverts or arches that span the stream with footings and abutments landward of bankfull width.

³See <http://www.nae.usace.army.mil/Regulatory> >> Stream & River Continuity >> Stream Simulation Design & Construction Manual, “Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road/Stream Crossings, USFS, 2008.” Section 5.3.3 is of particular importance. Sections 7.5.2.3 Construction Methods and 8.2.11 Stream-Simulation Bed Material Placement both show important steps in the project construction.

i. For replacement of spans, work in the stream shall be minimized, and design and construction shall allow the streambed's natural structure and integrity to remain intact, as applicable. Unless authorized in writing in a Category 2 authorization letter, for replacement of culverts and spans, stream simulation shall be performed as necessary to restore or establish substrate and banks in the span structure and work area to match the characteristics of the substrate and banks in the natural stream channel.

ii. The spans are designed and constructed to conform to the documents in 21(b)(ii) above.

(d) Culvert Extensions. Culvert extensions are eligible for Category 1 provided that after completion the entire culvert conforms to the documents in 21(b)(ii) above.

(e) Projects using slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), plastic pipes, High Density Polyethylene Pipes (HDPP), or retrofit methods increasing flow velocity, are not allowed as non-reporting Category 1 activities, either as new or maintenance work.

(f) Unless specifically authorized in a written Category 2 authorization letter, all Category 1 and 2 work must adhere to the following to prevent sediment input to the stream and to minimize turbidity and sedimentation impacts for sensitive life stages:

i. No unconfined fill or excavation in flowing waters is allowed except for that specified in GC 17(b).

ii. All work, including bank stabilization work, landward of the waterline shall utilize soil erosion and sediment controls (see GC 20) as appropriate.

iii. All work landward and waterward of the waterline must be isolated using appropriate management techniques to maintain continuity of flow. This may involve bypass pumping around barriers immediately up and downstream of the work footprint (e.g., "dam and pump"), cofferdams, etc. Even during periods of no flow in the stream, management techniques must still be employed due the potential for unexpected flows. The low flow channel shall remain unobstructed during periods of low flow except when it's necessary to perform the authorized work. The purpose is to avoid adverse impacts to fish.

iv. Management techniques used to isolate the work may be installed and removed outside of the time of year (TOY) restriction. Once the techniques are in place, the isolated activity may be conducted during the TOY restriction.

v. TOY restrictions coincide with the low flow period which is from July 1 to October 1.

vi. The above restrictions do not apply to exploratory drilling and borings for bridges, which qualify for Category 1 of this GP.

(g) Construction equipment shall not cross or access streams without the use of temporary bridges, culverts, or cofferdams. (Notes: 1. Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine applicability of this GP). 2. See GC 17(b) for more information.)

(h) Any work that temporarily or permanently impacts upstream or downstream flood conditions, or permanently impacts wetlands in excess of Category 1 thresholds, must be reviewed at least under Category 2.

22. Wetland Crossings.

(a) All temporary and permanent crossings of wetlands shall be suitably culverted, bridged, or otherwise designed to: **i)** withstand and prevent the restriction of high flows, **ii)** not obstruct the movement of or not substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the wetland, including those species that normally migrate through the area, beyond the actual duration of construction unless the activity's primary purpose is to impound water.

(b) To qualify for Category 1, new and replacement wetland crossings that are permanent shall be culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity between the wetlands on either side of the road. Closed bottom culverts shall be embedded with a natural bottom.

- (c) In the case of non-compliance, the permittee shall take necessary measures to correct wetland damage due to lack of hydraulic and ecological connectivity.
- (d) Any work that results in flooding, impacts to wetlands on either side of the wetland crossing in excess of Category 1 thresholds, or impacts wetland drainage from the upgradient side of the wetland crossing does not qualify for Category 1.

Additional sources of information:

See the RI DEM's BMP manual for information on properly constructed wetland crossings at: www.dem.ri.gov/programs/benvirom/water/permits/fresh/wetbmp.htm.

23. Discharge of Pollutants.

- (a) All projects authorized by this GP shall be designed, constructed and operated to minimize or eliminate the discharge of pollutants.
- (b) All activities involving any discharge of pollutants into waters of the U.S., including wetlands, authorized under this GP must comply with Section 402 [33 U.S.C. 1342] of the CWA and the requirements of the National Pollutant Discharge Elimination System (40 CFR 122).
- (c) All activities involving any discharge of pollutants into waters of the U.S. (includes wetlands) authorized under the GP shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 USC 1251) and applicable state and local laws. If applicable water quality standards, limitations, etc. are revised or modified during the term of this GP, the authorized work shall be modified to conform with these standards within six months of the effective date of such revision or modification, or within a longer period of time deemed reasonable by the Corps in consultation with the EPA. Applicants may presume that state water quality standards are met with issuance of the WQC (applicable only to Section 404 activities).

24. Spawning, Breeding and Migratory Areas. Activities and impacts such as excavations, discharges of dredged or fill material, and/or suspended sediment producing activities in fish migratory areas, fish and shellfish spawning or nursery areas, or amphibian and migratory bird breeding areas, during spawning or breeding seasons shall be avoided and minimized.

25. Storage of Seasonal Structures. Coastal structures such as pier sections and floats, that are removed from the waterway for a portion of the year (often referred to as seasonal structures) shall be stored in an upland location located landward of mean high water (MHW) and not in tidal wetlands or mudflats. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is seaward of MHW. This is intended to prevent structures from being stored on the marsh substrate, mudflats, or the substrate seaward of MHW. Moored, seasonal storage of structures in navigable waters, e.g., in a protected cove on a mooring, requires Corps and local harbormaster approval.

26. Environmental Functions and Values. The permittee shall make every reasonable effort to carry out the construction or operation of the work authorized herein in a manner that maintains as much as is practicable, and minimize any adverse impacts on existing fish, wildlife, and natural environmental values.

27. Invasive Species.

- (a) The introduction, spread, or the increased risk of invasion of invasive plant or animal species on the project site, into new or disturbed areas, or areas adjacent to the project site caused by the site work is prohibited.

(b) Unless otherwise directed by the Corps, all applications for Category 2 inland projects and Category 2 coastal projects proposing fill in Corps jurisdiction shall include an Invasive Species Control Plan (ISCP).

Additional sources of information:

(a) Information on what are considered as invasive species is provided in the New England District's "Compensatory Mitigation Guidance" document at www.nae.usace.army.mil/regulatory >> Mitigation >> Compensatory Mitigation Guidance. The Invasive Species section has a reference to our "Invasive Species Control Plan (ISCP) Guidance" document, located at www.nae.usace.army.mil/regulatory >> Invasive Species. This provides information on preparing an ISCP.

(b) The June 2009 "Corps of Engineers Invasive Species Policy" at www.nae.usace.army.mil/regulatory >> Invasive Species, provides policy, goals and objectives.

28. Inspections. The permittee shall allow the Corps to make periodic inspections at any time deemed necessary in order to ensure that the work is being or has been performed in accordance with the terms and conditions of this GP. The Corps may also require post-construction engineering drawings for completed work or post-dredging survey drawings for any dredging work. To facilitate these inspections, for Category 2 projects the permittee shall complete and return to the Corps the following when requested by the Corps 1) **Work-Start Notification Form** and 2) **Compliance Certification Form** whenever either is provided with a Category 2 authorization letter.

29. Maintenance.

(a) The permittee shall maintain the work authorized herein in good condition and in conformance with the terms and general conditions of this permit and any special conditions contained in the authorization letter.

(b) This does not include maintenance dredging projects. Each maintenance dredging event exceeding the Category 1 thresholds (see Appendix A, Page 5) requires a new written Corps authorization unless an unexpired, written Corps authorization specifies that the permittee may "dredge and maintain" an area for a particular time period. Category 1 or 2 maintenance dredging includes only those areas and depths previously authorized and dredged.

(c) Some maintenance activities may not be subject to regulation under Section 404 in accordance with 33 CFR 323.4(a)(2) (see Appendix A, end of note 8).

(d) See www.nae.usace.army.mil/regulatory >> Useful Links and Documents >> Other for inland mosquito ditching and maintenance information. See "Regulatory/Permitting," and then "Other."

30. Property Rights. This GP does not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of Federal, state, or local laws or regulations.

31. Transfer of GP Verifications. The permittee may transfer responsibilities and obligations under the GP verification to the new owner by submitting a letter to the Corps to validate the transfer. A copy of the GP verification must be attached to the letter and the letter must contain the following statement and signature: "When the structures or work authorized by this GP are still in existence at the time the property is transferred, the terms and conditions of this GP, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this GP and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

32. Modification, Suspension, and Revocation. This GP or any work authorize under Category 1 or 2 may be either modified, suspended, or revoked, in whole or in part, pursuant to the policies and procedures of 33 CFR 325.7. Any such action shall not be the basis for any claim for damages against the U.S.

33. Restoration Directive. The permittee, upon receipt of a notice of revocation of authorization under this GP, shall restore the wetland or waterway to its former conditions without expense to the United States and as directed by the Secretary of the Army or his authorized representative. If the permittee fails to comply with such a directive, the Secretary or his designee may restore the wetland or waterway to its former condition, by contract or otherwise, and recover the cost from the permittee.

34. False or Incomplete Information. If the Corps makes a determination regarding the eligibility of a project under this GP and subsequently discovers that it has relied on false, incomplete or inaccurate information provided by the permittee, the GP authorization shall not be valid and the U.S. Government may institute legal proceedings.

35. Abandonment. If the permittee decides to abandon the activity authorized under this GP, unless such abandonment is merely the transfer of property to a third party, he/she may be required to restore the area to the satisfaction of the Corps.

36. Enforcement cases. The GP does not apply to any existing or proposed activity in Corps jurisdiction associated with an ongoing Corps or EPA enforcement action, until such time as the enforcement action is resolved or the Corps or EPA as appropriate determines that the activity may proceed independently without compromising the enforcement action.

37. Environmental Impact Statement (EIS). Projects where an EIS has been required by the Corps are not eligible for this GP. Projects that are the subject of an EIS by another federal agency may be eligible for this GP.

38. Duration of Authorization. This GP expires on February 22, 2017, unless otherwise modified, suspended or revoked. Activities authorized under this GP that have commenced (i.e., are under construction) or are under contract to commence before this GP expires will have an additional year from this GP's expiration date to complete the work. The permittee must be able to document to the Corps' satisfaction that the project was under construction or under contract by the appropriate date. If work is not completed within the one year extended timeframe, the permittee must contact the Corps prior to commencing work. The Corps may issue a new authorization provided the project meets the terms and conditions of the RI GP current at the time.

39. Previously Authorized Activities:

(a) Projects that received authorization (Category 1 or 2) from the Corps and that were completed under previous GPs, nationwide permits, regional general permits or letters of permission, shall remain authorized.

(b) Activities authorized pursuant to 33 CFR 330.3 ("Activities occurring before certain dates") are not affected by this GP.

(c) Any work not commenced or completed that has written authorization from the Corps, DEM or CRMC under the GP in effect between February 13, 2007 and February 13, 2012 is considered authorized under Category 1 of this GP. The terms and general conditions of this GP apply along with any special conditions in the previous written authorization. The new expiration date for the work is the same as the state's expiration date unless the work is exempt or not regulated by the state, in which case the expiration date coincides with the expiration date of this GP.


Chief, Regulatory Division Date

APPENDIX A: DEFINITION OF CATEGORIES

I. INLAND WATERS & WETLANDS	Inland Waters and Wetlands: Waters that are regulated under Section 404 of the Clean Water Act, including rivers, streams, lakes, ponds and wetlands [33 CFR 328.4)(c)], excluding Section 10 Navigable Waters of the U.S. The jurisdictional limits are the ordinary high water (OHW) mark in the absence of adjacent wetlands, beyond the OHW mark to the limit of adjacent wetlands when adjacent wetlands are present, and the wetland limit when only wetlands are present. For the purposes of this GP, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands ¹ to tidal waters are reviewed in the Navigable Waters section (see Appendix A, Page 4).	
	Projects not meeting Category 1 must apply/report to the Corps as either a Category 2 or Individual Permit project. Projects not qualifying for Category 1 or 2 require an Individual Permit. See the Individual Permit Procedures on Page 4 . All Category 1 and 2 projects must comply with all of this GP's applicable terms (Pages 1 – 4) and general conditions (Pages 4 – 16).	
	CATEGORY 1	CATEGORY 2
(a) NEW FILL/ EXCAVATION DISCHARGES	<p><5,000 SF of inland waterway and/or wetland fill and associated secondary impacts², (e.g., waters of the U.S. that are drained, flooded, fragmented, mechanically cleared or excavated). Fill area includes all temporary and permanent fill areas³ and regulated discharges associated with excavation. Construction mats and corduroy roads⁴ are considered as fill [see General Condition (GC) 17].</p> <p><u>Work in this category excludes:</u></p> <ul style="list-style-type: none"> • Work in vernal pools⁵ (VPs) or within 100 FT of the VP's edge when Corps jurisdiction is triggered. • Work in special aquatic sites (SAS)⁶ other than wetlands. 	<ol style="list-style-type: none"> 1. 5,000 SF to 1 acre waterway and/or wetland fill and secondary impacts, (e.g., waters of the U.S. that are drained, flooded, fragmented, mechanically cleared or excavated). Fill area includes all temporary and permanent fill areas³. Construction mats and corduroy roads⁴ are considered as fill (see GC 17). 2. Projects with proactive restoration⁷ as a primary purpose with impacts of any area \geq5,000 SF. The Corps, in consultation with Federal and State agencies, must determine that net adverse effects are not more than minimal. 3. Specific activities with impacts \geq5,000 SF required to effect the containment, stabilization, or removal of hazardous or toxic waste materials performed, ordered or sponsored by a government agency with established legal or regulatory authority. Wetlands must be restored in place. 4. Work in VPs or within 100 FT of the VP's edge when Corps jurisdiction is triggered. Wetland fill and/or secondary impacts (e.g., site clearing, grading and construction activities) should be limited to <25% of the VP habitat⁵. Roads & driveways should be excluded from the VP envelope⁵. The applicant shall delineate all VPs on the property when any work (upland or wetland/waterway) will occur within 200' of the VP. 5. Temporary structures, work, and discharges (e.g., construction mats) \geq5000 SF necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps or not subject to Corps regulation.

	CATEGORY 1	CATEGORY 2
(b) BANK STABILIZATION PROJECTS	<p>Inland bank stabilization activities necessary for erosion prevention.</p> <p>Provided:</p> <ul style="list-style-type: none"> • Work complies with all GCs (GCs 19 & 21 in particular), • <100 FT long and <1 CY of fill per linear foot average along the bank below OHW, • No structures angled steeper than 3H:1V • Only angular or subangular stone or fiber roll revetments allowed. • No unconfined fill or excavation in flowing waters (see GC 21). Proper management techniques and water diversions are required. See GC 21(e). • In-stream work limited to Jul 1 – Oct 1 [See GC 21(e)]. • No discharges of dredged or fill material into SAS⁶ • No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any water of the U.S. • No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas). • No stream channelization activities. 	<p>Inland bank stabilization projects ≥ 100 FT long or ≥ 1 CY per linear foot below OHW.</p>
(c) RIVER/ STREAM/ BROOK WORK & CROSSINGS and WETLAND CROSSINGS	<ul style="list-style-type: none"> • River, stream and brook work and crossings must comply with the GCs (GC 21 in particular). • No open trench excavation in flowing waters • No slip lining. • Fill must be <5000 SF. 	<ol style="list-style-type: none"> 1. Work in riffles and pools. 2. Stream relocations. 3. Dams and dikes. 4. Dam removal projects with proactive restoration⁷ as a primary purpose with impacts of any area $\geq 5,000$ SF. The Corps, in consultation with Federal and State agencies, must determine that net adverse effects are not more than minimal.

	CATEGORY 1	CATEGORY 2
(d) REPAIR AND MAINTENANCE OF AUTHORIZED FILLS	<p>Repair/maintenance of existing, currently serviceable, authorized fills with no expansion or change in use.</p> <ul style="list-style-type: none"> • Conditions of the original authorization apply • Minor deviations in fill design allowed⁸. • Includes structures or fills destroyed or damaged by storms, floods, fire or other discrete events is authorized, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. 	<p>Repair/maintenance of existing, currently-serviceable, authorized fills; or replacement of non-serviceable authorized fills, <1 acre, including expansion or a change in use.</p>
(e) MISC.	<ol style="list-style-type: none"> 1. Activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS⁶ must typically be restored in place at the same elevation. 2. Scientific measurement devices whose purpose is to measure and record scientific data, such as staff gages, water recording devices, water quality testing and improvement devices, and similar structures. This excludes any biological sampling devices. Structures may not restrict movement of aquatic organisms. 3. Survey activities, such as core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes, exploratory trenching, soil surveys, sampling, and historic resources surveys (but not recovery). Exploratory trenches must be restored in accordance with GC 19. This doesn't authorize permanent structures or the drilling and the discharge of excavated material from test wells for oil and gas exploration (the plugging of such wells is authorized). 4. Maintenance, repair, and emergency repair of high, significant and low hazard dams performed in accordance with RI DEM Rules and Regulations for Dam Safety. Associated wetland impacts that don't meet the definition of maintenance above are limited to <5000 SF. 	<p>Maintenance, repair, and emergency repair of high, significant and low hazard dams performed in accordance with RI DEM Rules and Regulations for Dam Safety with associated wetland impacts ≥ 5000 SF and not meeting the terms of maintenance of Category 1.</p>

II. NAVIGABLE WATERS	Navigable Waters of the U.S.: Waters that are subject to the ebb and flow of the tide (Section 10 Rivers and Harbors Act of 1899) (33 CFR 329). The jurisdictional limits are the mean high water (MHW) line in tidal waters. For the purposes of this GP, fill placed in the area between MHW and the high tide line (HTL), and in the bordering and contiguous wetlands ¹ to tidal waters are also reviewed in this Navigable Waters section.	
	Projects not meeting Category 1 must apply/report to the Corps as either a Category 2 or Individual Permit project.	
	CATEGORY 1	CATEGORY 2
(a) FILL	<ul style="list-style-type: none"> No provisions for new or previously unauthorized fills in Category 1, other than: Discharges of dredged or fill material incidental to the construction of bridges across navigable waters of the U.S., including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills provided the U.S. Coast Guard authorizes such discharges as part of the bridge permit. Causeways and approach fills are not included in this category and require Category 2 or Individual Permit authorization. 	<ol style="list-style-type: none"> <1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, and temporary fills in special aquatic sites (SAS)⁶. Up to 4300 SF of permanent fill in SAS⁶ (excluding vegetated shallows) . State-approved mosquito control using open-marsh water management (OMWM) techniques. Fills with proactive restoration⁷ (SAS⁶, saltmarsh, vegetated shallows, anadromous fish run, etc.) as a primary purpose with any amount of impact. The Corps, in consultation with Federal & State agencies, must determine that net adverse effects are not more than minimal. Projects using creosote-treated materials in any water or wetland require an Individual Permit. <p><i>There are no areal limits to beach nourishment projects with compatible grain size</i></p>
(b) REPAIR AND MAINTENANCE WORK	<p>Repair or maintenance of:</p> <ul style="list-style-type: none"> Existing, currently serviceable, authorized structures and fills. Recreational docks authorized under RI Amnesty Program provided that they are outside Federal Navigation Projects (FNP)⁹ <p><u>Provided:</u></p> <ul style="list-style-type: none"> No expansion or change in use. Must be rebuilt in same footprint, however minor deviations in structure design allowed.⁸ 	<p>Repair/maintenance of currently serviceable authorized fills with expansion or a change in use <1 acre.</p> <p>Replacement of non-serviceable authorized fills, including expansion or a change in use, totaling <1 acre.</p> <p>Repair/maintenance of currently serviceable authorized structures w/expansion where the structure (existing + expansion) qualifies for Cat 2 under part (e) below.</p> <p>Replacement of non-serviceable authorized structures w/expansion where the structure (existing + expansion) qualifies for Cat 2 under part (e) below.</p>

	CATEGORY 1	CATEGORY 2
(c) DREDGING	<p>Maintenance dredging¹⁰ for navigational purposes <1,000 CY with upland disposal. Includes return water from upland contained disposal area.</p> <p><u>Provided:</u></p> <ul style="list-style-type: none"> • Dredging & disposal operation limited to Nov 1 - Jan 15. • No impact to SAS⁶. • No dredging in intertidal areas. • Proper siltation controls are used. 	<p>1. Maintenance dredging¹⁰ ≥1,000 CY and New/Improvement dredging¹⁰ <10,000 CY (unlimited volumes within existing marina perimeter limits) provided:</p> <ul style="list-style-type: none"> • No impacts to SAS⁶ • Disposal includes: 1. upland; 2. beach nourishment of any area provided the primary purpose of the dredging is navigation or the sand is from an upland source; or 3. open or ocean water & confined aquatic disposal, if Corps, in consultation with Federal and State agencies, finds the material suitable. • New dredging at marinas is within the existing CRMC-approved marina perimeter limit, does not result in detrimental changes to tidal circulation patterns within the project area, and side slopes are maintained so as to cause no detrimental impacts to nearby SAS⁶ or salt marsh. <p>2. Dredging projects with proactive restoration⁷ as a primary purpose with impacts of any area. The Corps, in consultation with State and Federal agencies, must determine that net adverse effects are not more than minimal.</p> <p>3. Dredging activities with impacts of any area or cubic yardage required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority may be reviewed as a Cat. 2. Wetlands must be restored in place.</p>
(d) MOORINGS	<p>1. Outhaul moorings permitted by a CRMC-approved municipal harbor management plan (HMP). See CRMC 300.4.B.7.</p> <p>2. All private, non-commercial, non-rental, single-boat moorings, provided:</p> <ul style="list-style-type: none"> • Authorized by the local harbormaster. • Within a CRMC-approved HMP area. • No interference with navigation. • Not located within the buffer zone of the horizontal limits of a Federal Channel⁹. • Not located in SAS⁶. Prior to installation of mooring, a site-specific vegetated shallow survey should be conducted to document that vegetated shallows are not present. 	<p>1. Moorings that don't meet the terms of Category 1.</p> <p>2. Moorings associated with a boating facility. <i>A boating facility charges a fee or rents or sells mooring space such as marinas, yacht clubs, boat clubs, municipal facilities, dockominiums, etc.</i></p> <p>3. Moorings located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits of a Federal Channel⁹. The buffer zone is equal to 3 times the authorized depth of that channel.</p> <p>4. Moorings such that they, and/or vessels docked or moored at them, extend into the horizontal limits of a Federal Channel⁹ require an Individual Permit.</p> <p>Placing new individual moorings in SAS⁶, including vegetated shallows, should be avoided to the maximum extent practicable. If SAS⁶ cannot be avoided, plans should show elastic mooring systems that prevent mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS⁶ protection systems, where practicable.</p>

	CATEGORY 1	CATEGORY 2
(d) MOORINGS (continued)	<p>3. Relocation of previously authorized moorings and moored floats provided:</p> <ul style="list-style-type: none"> • Cannot be relocated into a Federal Navigation Project⁹ other than a Federal Anchorage⁹ • Existing moorings may not be relocated to SAS⁶. <p>When existing moorings in SAS⁶ are replaced or upgraded, low impact mooring technology that eliminates contact with the bottom substrate at all tides, such as helical anchors and elastic or other floating mooring tackle (i.e., no dragging chains), shall be employed.</p>	
(e) PILE-SUPPORTED STRUCTURES AND FLOATS	<p>1. Reconfiguration of existing authorized docks.</p> <ul style="list-style-type: none"> • No additional slips and no expansion. • Includes reconfiguration within CRMC-approved perimeters. <p>2. Boat and float lifts at authorized residential docks.</p> <p>3. Private, bottom-anchored floats ≤400 SF, and private, pile-supported structures for navigational access to the waterway ≤400 SF with attached floats ≤150 SF.</p> <p><u>Provided:</u></p> <ul style="list-style-type: none"> • Floats supported at least 2' above the substrate during all tides. • Pile-supported structures & floats are not located within 25' of vegetated shallows and moored vessels are not positioned over SAS⁶. • Pile-supported structures are ≤4' wide and have at least a 1:1 height to width ratio. • Extend ≤75 FT waterward from MHW. • No structure extends across >25% of the waterway width at MLW. • Not located within the buffer zone of the horizontal limits of an FNP⁹. • State license issued. • Not associated with a boating facility. 	<p>1. Private structures and floats that do not meet the terms of Category 1.</p> <p>2. Structures or floats located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits of a FNP⁹.</p> <p>3. Structures or floats located such that they and/or vessels docked or moored at them are within the horizontal limits of an FNP⁹ require an Individual Permit.</p> <p>4. Structures or floats associated with a new or previously unauthorized boating facility.</p> <p>5. Expansions to existing boating facilities</p> <p>Projects using creosote-treated materials in any water or wetland requires an Individual Permit.</p> <p><i>A boating facility charges a fee or rents or sells mooring space such as marinas, yacht clubs, boat clubs, municipal facilities, dockominiums, etc.</i></p>

	CATEGORY 1	CATEGORY 2
(f) MISC.	<p>1. Temporary buoys, markers, floats, etc. for recreational use during specific events, provided that they are removed within 30 days after use is discontinued.</p> <p>2. The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard. (See 33 CFR 66, Chapter I, subchapter C).</p> <p>3. Activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS⁶ must typically be restored in place at the same elevation.</p> <p>4. Fish and wildlife harvesting, enhancement and attraction devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, and clam and oyster digging, and small fish attraction devices such as open-water fish concentrators (sea kites, etc.). Provided:</p> <ul style="list-style-type: none"> • No activity results in a hazard to navigation; • This does not authorize artificial reefs or impoundments and semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster, or the use of covered oyster trays or clam racks. <p>5. Scientific measurement devices whose purpose is to measure and record scientific data, such as staff gages, water recording devices, water quality testing and improvement devices, and similar structures. Structures may not restrict movement of aquatic organisms. No activity results in a hazard to navigation.</p> <p>6. Survey activities such as exploratory drilling, surveying and sampling activities, excluding any biological sampling devices. Does not include oil and gas exploration and fill for roads or construction pads. No activity results in a hazard to navigation.</p> <p>7. Research, educational, commercial-viability or experimental aquaculture projects that don't exceed 1,000 SF in area, culture indigenous species only, use only "transient gear" type cages or bottom culture with predator netting, are marked to inform mariners of the location of the gear, have a minimum clearance of 4 FT between the top of the gear and the elevation of MLW in areas where the elevation of the sea floor is above -15 FT MLW, have a minimum clearance of 10 FT between the top of the gear and the elevation of MLW in areas where the elevation of the sea floor is equal to or below -15 FT MLW, and have been reviewed and approved in writing by the RICRMC and the RIDEM Divisions of Water Quality and Fish and Wildlife.</p>	<p>1. Aquaculture projects that do not meet the terms of Category 1.</p> <p>2. Structures/work in or affecting tidal or navigable waters that are not defined under any other headings. Includes but is not limited to utility lines, aerial transmission lines, pipelines, outfalls, boat ramps, bridges, tunnels and horizontal directional drilling activities seaward of the MHW line.</p>

Appendix B: Definitions and Acronyms

¹ **Bordering and Contiguous Wetlands:** A bordering wetland is immediately next to its adjacent waterbody and may lie at, or below, the OHW mark (MHW in navigable waters) of that waterbody and is directly influenced by its hydrologic regime. Contiguous wetlands extend landward from their adjacent waterbody to a point where a natural or manmade discontinuity exists. Contiguous wetlands include bordering wetlands as well as wetlands that are situated immediately above the ordinary high water mark and above the normal hydrologic influence of their adjacent waterbody. Note, with respect to the Federally designated navigable rivers, the wetlands bordering and contiguous to the tidally influenced portions of those rivers are reviewed under “II. Navigable Waters.”

² **Direct, Secondary, and Cumulative Impacts/Effects:**

Direct Impacts: The immediate loss of aquatic ecosystem within the footprint of the fill.

Secondary Impacts: These are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final section 404 action is taken by permitting authorities. Some examples of secondary effects on an aquatic ecosystem are a) fluctuating water levels in all impoundment and downstream associated with the operation of a dam, b) septic tank leaching and surface runoff from residential or commercial developments on fill, and c) leachate and runoff from a sanitary landfill located in waters of the U.S. Put another way, secondary effects are those impacts outside the footprint of the fill that arise from and are associated with the discharge of dredged or fill material, including the operation of an activity or facility associated with the discharge. Examples may include habitat fragmentation; interruption of travel corridors for wildlife (for example, for amphibians that migrate to and from seasonal or vernal pools used as breeding habitat); hydrologic regime changes; and impacts from operation and maintenance activities for constructed facilities; such as noise/lighting, storm water runoff, and road kill of wetland dependent wildlife. Using the directions contained in the guidelines, we consider the circumstances of a proposed discharge and the project of which it is a part to evaluate the scope, extent, severity, and permanence of direct, secondary, and cumulative adverse effects upon the aquatic ecosystem.

Cumulative Impacts: The changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems.

³ **Fill:** Material placed in waters of the U.S. where the material has the effect of either replacing any portion of a water of the U.S. with dry land or changing the bottom elevation of any portion of a water. (33 CFR 323)

⁴ **Construction Mats:** Constructions, swamp and timber mats (herein referred to as “construction mats”) are generic terms used to describe structures that distribute equipment weight to prevent wetland damage while facilitating passage and providing work platforms for workers and equipment. They are comprised of sheets or mats made from a variety of materials in various sizes. A timber mat consists of large timbers bolted or cabled together. Corduroy roads, which are not considered to be construction mats, are cut trees and/or saplings with the crowns and branches removed, and the trunks lined up next to one another. Corduroy roads are typically installed as permanent structures. Like construction mats, they are considered as fill whether they’re installed temporarily or permanently.

⁵ **Vernal Pools and Habitat:** Vernal pools are confined basin depressions with water for two or more continuous months in the spring and/or summer, for which evidence of one of more of the following indicator vernal pools species: wood frogs (*Rana sylvatica*), mole salamanders (*Ambystoma* spp), and fairy shrimp (*Eubranchipus* spp) has been documented **OR** for which evidence of two or more of the following facultative organisms: caddisfly (*Trichoptera*) larvae casings, fingernail clams (*Sphaeriidae*), or amphibious snails (*Basammatophora*) and evidence that the pool does not contain an established reproducing fish population has been documented. Vernal pool habitat is the seasonal pool depression, seasonal pool envelope (100 FT radius from the pool edge) and seasonal pool terrestrial habitat (200 FT radius from the pool edge).

⁶ **Special Aquatic Sites:** Include inland & saltmarsh wetlands, mud flats, vegetated shallows, coral reefs, and riffle & pool complexes. (40 CFR 230)

⁷ **Proactive Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former wetland (called re-establishment) or a degraded wetland (called rehabilitation). Restoration means the result of actions which, in the opinion of the Federal and State resource agencies, reinstates, or will reinstate, insofar as possible, the functions and values of a wetland which has been altered. Restoration is the re-creation or rehabilitation of wetland ecosystems whose natural functions have been destroyed or impaired.

⁸ **Maintenance:** In accordance with 33 CFR 323.4(a)(2), any discharge of dredged or fill material that may result from any of the following activities is not prohibited by or otherwise subject to regulation under Section 404 of the CWA: “Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design.” (This could include replacement work if it meets this definition, and stream crossings typically must be an exact replica crossing in the same footprint to qualify.) Otherwise, the following work is regulated and subject to the Category 1 or 2 thresholds above in Appendix A. The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3 – “Activities occurring before certain dates,” provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure’s configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction. Only structures or fills that were previously authorized and are in compliance with the terms and condition of the original authorization can be maintained as a non-regulated activity under 33 CFR 323.4(a)(2), or in accordance with the Category 1 or 2 thresholds in Appendix A. Note: The State’s maintenance provisions may differ from the Corps and may require reporting and written authorization from the State. Maintenance and replacements of stream crossings: An existing stream crossing must be authorized, serviceable, and in compliance with all conditions of its authorization(s) to qualify for maintenance that is not prohibited by or otherwise subject to regulation under Section 404 of the CWA. See 33 CFR 323.4(a)(2). Proponents are encouraged to contact the Corps for guidance.

⁹ **Federal Navigation Projects (FNPs):** FNPs are comprised of Federal channels and Federal anchorages. Contact the Corps for their location and information.

Horizontal Limits: The outer edge of an FNP. **Buffer Zone:** Equal to three times the authorized depth of that channel.

¹⁰ **Maintenance Dredging.** Includes areas and depths previously dredged with Corps authorization. **New Dredging:** Includes dredging proposed in previously un-dredged areas and/or wider than previously authorized dredged excluding normal overdredge. **Improvement Dredging:** Includes dredging in areas exceeding previously authorized depths.

DEFINITIONS

Waters of the United States is a broader term than navigable waters of the United States defined above. This term includes navigable waters and all their tributaries, adjacent wetlands and other waters or wetlands where degradation or destruction could affect interstate or foreign commerce. Permits are required for the discharge of dredged or fill material in these waters pursuant to Section 404 of the Clean Water Act.

Navigable Waters of the United States are those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water line and/or those waters that are presently used, or have been used in the past or may be susceptible to use for interstate or foreign commerce. These are waters that are navigable in the traditional sense. Permits are required in these waters pursuant to Section 10 of the Rivers and Harbors Act. This term should not be confused with the term *waters of the United States* (above).

High Tide Line: The line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line or oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that would occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Ordinary High Water Line, with respect to non-tidal waters, is the line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Appendix B: Contacts and Tribal Areas of Interest

1. FEDERAL

U.S. Army Corps of Engineers

New England District, Regulatory Division
696 Virginia Road
Concord, Massachusetts 01742-2751
(800) 343-4789 or (978) 318-8335
(978) 318-8303 fax

U.S. Environmental Protection Agency

U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912
(617) 918-1397

Federal Endangered Species

U.S. Fish and Wildlife Service
50 Bend Road
Charlestown, Rhode Island 02813
(401) 364-9124

National Marine Fisheries Service
55 Great Republic Drive
Gloucester, Massachusetts 01930

Bridge Permits

Commander (obr)
First Coast Guard District
One South Street - Battery Bldg
New York, New York 10004
(212) 668-7021

2. STATE

RI Department of Environmental Management
Water Resources/Freshwater Wetlands
235 Promenade Street
Providence, Rhode Island 02908
(401) 222-6820
(401) 222-3564 (fax)

RI Coastal Resources Management Council
Oliver Stedman Government Center
4808 Tower Hill Road Wakefield, Rhode Island
Wakefield, Rhode Island 02879-1900
(401) 783-3370
(401) 783-3767 (fax)

State Endangered Species

RI Natural History Survey
P.O. Box 1858
Kingston, Rhode Island 02881
(401) 874-5800

3. HISTORIC RESOURCES

Rhode Island Historical Preservation & Heritage Commission
150 Benefit Street
Providence, Rhode Island 02908
(401) 222-2678
(401) 222-2968 (fax)

Tribal Historic Preservation Office
Narragansett Tribe
P.O. Box 700
Wyoming, Rhode Island 02898
(401) 539-1190
(401) 742-5048 (cell)
(401) 539-4217 (fax)

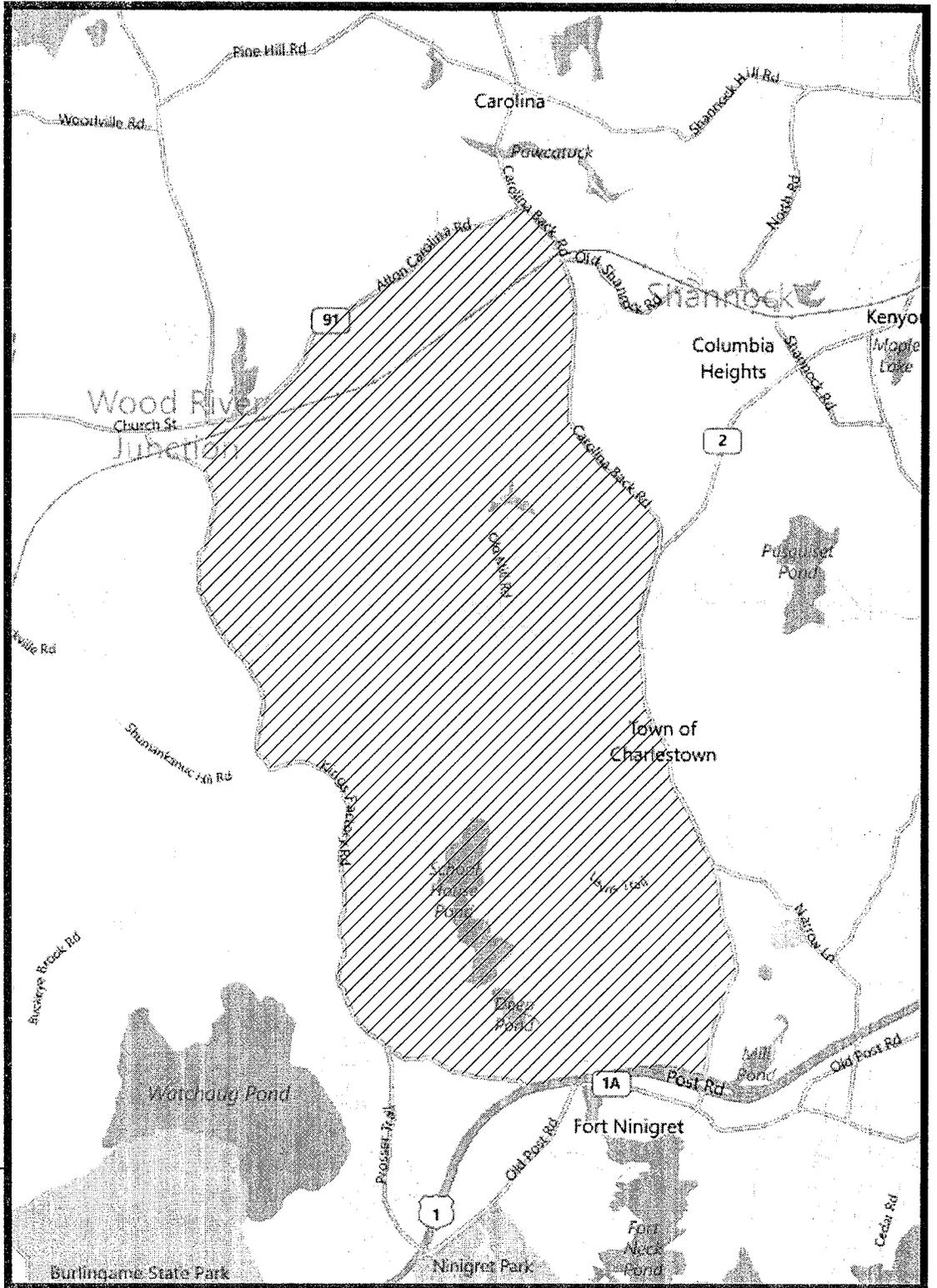
Tribal Historic Preservation Office
Wampanoag Tribe of Gay Head (Aquinnah)
20 Black Brook Road
Aquinnah, Massachusetts 02535-1546
(508) 645-9265 (phone); (508) 645-3790 (fax)
Area of Concern: Barrington, Bristol, Central Falls, Cumberland, East Providence, Lincoln, Little
Compton, Middletown, Newport, Pawtucket, Portsmouth, Tiverton, Warren, Woonsocket.

Tribal Resources

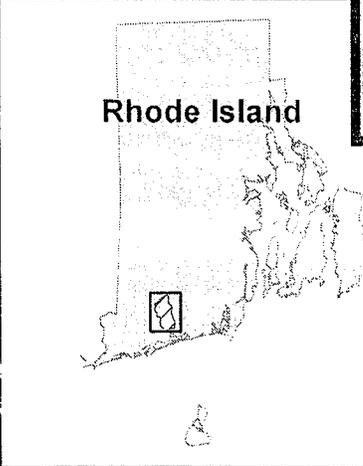
Narragansett Indian Land and Water Resource Commission
P.O. Box 700
Wyoming, Rhode Island 02898
(401) 539-1190 (phone); (401) 364-3977 (fax)

4. ORGANIZATIONAL WEBSITES:

Army Corps of Engineers	www.nae.usace.army.mil/reg/index.htm
Army Corps of Engineers Headquarters	www.usace.army.mil
Environmental Protection Agency	www.epa.gov/owow/wetlands/
National Marine Fisheries Service	www.nmfs.noaa.gov
U.S. Fish and Wildlife Service	www.fws.gov
National Park Service	www.nps.gov/rivers/index.html
RI Dept. of Environmental Management	www.dem.ri.gov
RI CRMC	www.crmc.ri.gov
RI Division of Fish and Wildlife	www.dem.ri.gov/programs/bnatres/fishwild/index.htm
RI Historic Preservation & Heritage Comm	www.rihphc.state.ri.us
RI GIS	www.planning.ri.gov/gis/gishome.htm
RI Natural History Survey	www.rinhs.org
Narragansett Tribe	www.narragansetttribe.com
Wampanoag Tribe	www.wampanoagtribe.net



Roadway Basemap Courtesy of BING Maps 2012



 Narragansett Indian Land Claim

APPENDIX A

TRANSPORTATION MANAGEMENT PLAN



Project Name: **Rehabilitation of Mussey Brook Bridge No.380**

RI Design Contract No(s): **2001-EB-006**

RI Construction Contract No(s): **2016-CB-039**

Submission: **ADV**

Date: **10/18/2016**

PROJECT INFORMATION

Brief Project Description: The work associated with the Rehabilitation of Mussey Brook Bridge No. 380 generally consists of, but is not limited to: a) installing a new bridge, including but not limited to concrete pile caps, steel micropiles, return walls, approach slabs, rehabilitation of existing stone masonry arch and walls, elastomeric bearings, prestressed concrete deck beams, an asphaltic wearing surface, granite curb, and relocation of existing utilities and b) installing stone riprap and bedding. The work will be conducted in a single phase with the bridge closed to traffic during construction. A detour will be posted when the bridge is closed to traffic.

Roadway work associated with the project generally consists of, but is not limited to: a) reconstruction and widening of the bridge approaches and intersections within the project limits, b) replacement of existing steel guardrail, c) adjustment and replacement of roadway utility structures (such as frame & cover, frames & grates, gate valve boxes, etc.), d) removal and replacement of curbing, and e) replacement of signs and new pavement markings.

Overhead utilities, gas, and water mains are present at Bridge No. 380. The gas main will be relocated under the bridge and new gate valves will be installed at the approaches by a National Grid Gas contractor. The water main on the east side of the bridge will be replaced. The overhead utilities will be relocated by others to the alignment as shown on the plans.

The project wide installation of erosion controls and maintenance and protection of traffic will be required during the construction period along with all other incidentals complete in place and accepted by the Resident Engineer.

General Work Limits: This project is for the Rehabilitation of Mussey Brook Bridge No. 380 on Old River Road over the Mussey Brook in the Town of Lincoln, Providence County, Rhode Island. Work will take place throughout the roadway cross-section.

WORK ZONE LOCATIONS			
ROADWAY NAME or INTERSECTION	FROM	TO	APPROX. LENGTH
Old River Road (Route 126)	Desoto Way	Mussey Brook Road	425 Feet
Desoto Way	At Old River Road Intersection		30 Feet
Mussey Brook Road	At Old River Road Intersection		30 Feet

General Project Schedule*: Construction for this project is expected to begin Spring 2017 and is expected to be completed in Fall 2017.

*The information in this section is not intended to and shall not supersede the approved schedule and milestone/completion dates for the project.

TRAFFIC-RELATED WORK RESTRICTIONS

General Restrictions: See attached General Restrictions chart (Attachment A).

Holiday Restrictions: See attached Holiday Restrictions chart (Attachment B).

TEMPORARY TRAFFIC CONTROL PLANS

These RIDOT- and/or Designer-Developed TTC Plans will be used during the work on this project

RIDOT TYPICAL TTC PLANS		Included in:		DESIGNER-DEVELOPED TTC PLANS		Included in:	
		TMP	Plan Set	TMP	Plan Set		
<input type="checkbox"/>	Mobile Operation	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Work Beyond the Shoulder	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Shoulder Closure - Two Lane Road	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Shoulder Closure - Limited Access	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	1-Side Lane Shift - Two Lane Road	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2-Side Lane Shift - Two Lane Road	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Lane Shift - Limited Access	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Lane Closure - Two Lane Road	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Lane Closure - Four Lane Road	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Lane Closure - Limited Access	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Double Lane Closure - Limited Access	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

PUBLIC INFORMATION PLAN

These strategies will be used to provide information concerning the project to road users and the community

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS
RIDOT travel advisories news releases	RIDOT TMP Imp. Mngr. to send RIDOT notification form to Communications min. 48 hrs. in advance of restrictions.
RIDOT travel advisories web site	RIDOT TMP Imp. Mngr. to send RIDOT notification form to Communications min. 48 hrs. in advance of restrictions.
RIDOT 511 traveler information system	RIDOT TMP Imp. Mngr. to send RIDOT notification form to RIDOT TMC min. 48 hrs. in advance of restrictions.
Changeable message signs (CMS)	Installed at project limits to notify drivers of upcoming road closures and construction operations.

TRANSPORTATION OPERATIONS PLAN

These strategies will be used to provide improved transportation operations/safety within project work zones

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS
Dedicated (paid) police enforcement	The Contractor shall request the use of police details operations to the Resident Engineer as needed.
Establish available local detour routes	Detour routes will be utilized to eliminate conflict between construction operations and traffic operations.

PERFORMANCE MONITORING, CHANGES TO TMP, & CONTINGENCIES

The **Contractor's TMP Implementation Manager (if identified below)** is responsible for keeping the portion of the project being used by public traffic in a condition that (1) safely and adequately accommodates such traffic and (2) is in accordance with the Traffic-Related Work Restrictions, the Temporary Traffic Control Plans, and where appropriate, the other transportation management strategies identified above. The **RIDOT TMP Implementation Manager** or his/her responsible designee should (1) inspect the project work zones at initial setup, at the start of each subsequent work day, and just prior to extended breaks in the work (e.g., weekends) for conformance with the Temporary Traffic Control Plans, the *ATSSA Quality Guidelines for Temporary Traffic Control Devices and Features*, and where applicable, the other transportation management strategies identified above and (2) document all work zone-related feedback and complaints that are received from the public.

If at any time (1) a significant deviation from any of the strategies included in the TMP (e.g., the use of an alternate construction sequence) is desired by one or more members of the project implementation team, (2) field observations and/or data suggest that impacts to road users are or will be unacceptable, or (3) one or more performance requirements established in the TMP are not being met in the field, the RIDOT TMP Implementation Manager shall report the situation to his/her supervisor or Division/Section/Unit manager. The supervisor / manager will coordinate with the State Traffic Engineer, the Deputy Chief Engineer, the TMP Implementation Manager(s), the Chief Engineer, and/or other interested parties as appropriate and/or necessary to consider and determine whether revised and/or alternate strategies should be implemented in an effort to lessen the adverse safety and/or mobility impacts of the project. If the supervisor / manager deems that strategy changes should be implemented, the changes shall be documented in a revised version of the TMP and the Deputy Chief Engineer, the State Traffic Engineer, and the Chief Engineer must approve of the revised TMP prior to their implementation.

If a significant deviation from any of the strategies included in the TMP is requested by the Contractor, unless directed otherwise by the RIDOT the Contractor is responsible for preparing and submitting to the RIDOT TMP Implementation Manager appropriate documentation (e.g., design calculations, analysis reports, Temporary Traffic Control Plans, etc.) showing that the requested change(s) are (1) feasible and (2) expected to result in safety and mobility impacts that are no more adverse than the impacts resulting from the strategies already included in the latest approved TMP. The RIDOT will review and consider the submittal(s) as described in the preceding paragraph and will determine whether the changes should be implemented. If the requested changes are approved by the RIDOT, unless otherwise directed by the RIDOT the Contractor shall prepare and submit to the RIDOT TMP Implementation Manager a revised version of the latest approved TMP in both printed and electronic (Microsoft® Excel) format that documents all of the approved changes. Work to implement the changes shall not begin until the Deputy Chief Engineer, the State Traffic Engineer, and the Chief Engineer have approved of the revised TMP.

When unexpected events (e.g., crashes, inclement weather, unforeseen traffic demands, etc.) occur in a project work zone where one or more lanes are closed, the RIDOT TMP Implementation Manager or his/her responsible designee should (1) determine whether or not the lane closure(s) can/should be removed in order to improve traffic operations and/or minimize delays and (2) if deemed appropriate, take action to remove the lane closure(s).

Other Requirements:

TMP APPROVALS

PM Marked *All approvals must be obtained prior to start of work*

DEPUTY CHIEF ENGINEER			STATE TRAFFIC ENGINEER			CHIEF ENGINEER		
Signature:			Signature:			Signature:		
Joseph Baker, P.E.			Robert Rocchip, P.E.			David W. Fish, P.E.		
Date: <u>10-19-2016</u>			Date: <u>10/18/16</u>			Date: <u>10/18/16</u>		
Revision #	Initials	Date	Revision #	Initials	Date	Revision #	Initials	Date

TMP IMPLEMENTATION MANAGERS

Project managers with the primary responsibility & authority for implementation of this TMP

RIDOT	CONTRACTOR (if contract work)
Name: _____	Name: _____
Title: _____	Title: _____
Unit: _____	Company/Unit: _____
Office Phone: _____	Office Phone: _____
Mobile Phone: _____	Mobile Phone: _____
E-Mail: _____	E-Mail: _____

**TRANSPORTATION MANAGEMENT PLAN
ATTACHMENT A:
GENERAL RESTRICTION CHART**

Location	MINIMUM NUMBER OF LANES & SHOULDERS TO REMAIN OPEN TO TRAFFIC ¹⁻⁵								
	Time of Day		Day of Week						
	From	To	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
DESOTO WAY AND MUSSEY BROOK ROAD	0:00	7:00	ALL						
	7:00	19:00	ALL	1 L (Alt.)					
	19:00	24:00	ALL						
OLD RIVER ROAD (ROUTE 126)	0:00	7:00	ALL						
	7:00	19:00	ALL	DET	DET	DET	DET	DET	DET
	19:00	24:00	ALL						
MUSSEY BRIDGE No. 380 ^{5, 6}	0:00	24:00	BRIDGE CLOSURE						

LEGEND

- ALL** All travel lanes and shoulders shall remain open to traffic.
- 1 L (alt)** A minimum of one 11-foot wide travel lane shall remain open to alternating traffic.
- DET** A full roadway closure with detour route, as provided on "TTCP No.2" is permitted. A one-lane alternating traffic setup, or shoulder closure setup, may also be utilized during this time period on all segments.⁵
- BRIDGE CLOSURE** Old River Road Bridge No. 380 may be closed with detour setup following "Bridge Closure and Detour Plan" as shown on "TTCP No.2".

NOTES

- ¹ The set-up and break-down of temporary traffic control devices within a traveled way shall be construed as a closure of that traveled way.
- ² The provisions noted herein shall not free the Contractor from his responsibility to conduct all work in such a manner that assures the least possible obstruction to traffic.
- ³ At locations with a sidewalk(s), a minimum of one sidewalk on one side of the roadway shall be open to pedestrian traffic at all times.
- ⁴ Access to and egress from all side streets, driveways, buildings, and other pedestrian pathways intersecting the Project work zones shall be maintained at all times unless otherwise noted or shown on Plans.
- ⁵ The general restrictions described at this location shall only pertain to construction work associated with the bridge work as detailed in Note 2 of the "Sequencing Notes" shown in the Job Specific Plan Symbols, Legend, and Notes. All other work performed at this location shall follow the general restrictions listed above.
- ⁶ The bridge closure with detour setup will be allowed for a maximum duration of 120 calendar days.

Attachment B

To Transportation Management Plan (TMP) for:
Rehabilitation of Mussey Brook Bridge No. 380
RI Construction Contract No.: 2016-CB-039

Holiday Restrictions

NOTE: IN CASE OF DISCREPANCY BETWEEN THESE HOLIDAY RESTRICTIONS AND THE GENERAL RESTRICTIONS (ATTACHMENT A), THESE HOLIDAY RESTRICTIONS SHALL GOVERN.

No lane and/or shoulder closures allowed after 13:00 on the Friday preceding a holiday weekend.

EASTER SUNDAY

No lane and/or shoulder closures allowed on Saturday.

No lane and/or shoulder closures allowed on Sunday until 19:00 (after 19:00, General Restrictions shall apply).

NEW YEAR'S DAY, INDEPENDENCE DAY, & CHRISTMAS DAY

No lane and/or shoulder closures allowed after 13:00 on the day before the holiday.

No lane and/or shoulder closures allowed on the holiday.

VETERANS DAY

No lane and/or shoulder closures allowed after 13:00 on the day before the holiday.

No lane and/or shoulder closures allowed on Veterans Day until 19:00 (after 19:00, General Restrictions shall apply).

DR. MARTIN LUTHER KING JR. DAY, MEMORIAL DAY, VICTORY DAY, LABOR DAY, & COLUMBUS DAY

No lane and/or shoulder closures allowed on Saturday and/or Sunday.

No lane and/or shoulder closures allowed on Monday until 19:00 (after 19:00, General Restrictions shall apply).

THANKSGIVING DAY

No lane and/or shoulder closures allowed after 13:00 on the Wednesday preceding Thanksgiving Day.

No lane and/or shoulder closures allowed on Thanksgiving Day, Friday, Saturday, and/or Sunday.

JOB SPECIFIC

**CODE 803.9901
PARTIAL REMOVAL AND DISPOSAL OF STONE MASONRY**

**CODE 807.9901
POINTING AND GROUTING MASONRY**

**CODE 807.9902
REBUILD STONE MASONRY**

**807.9904
STONE VENEER**

**807.9905
SUPPLEMENTAL STONES**

DESCRIPTION: The work covered by this section shall consist of partially removing and disposing stone masonry, stockpiling stone, pointing and grouting stone masonry, rebuilding stone masonry using stockpiles and/or supplemental stones, placing stone veneer on the exposed ends of concrete pile caps, and providing supplemental stones as necessary, all as shown on the Plans and in accordance with the Rhode Island Rhode Island Standard Specifications for Road and Bridge Construction, amended May 2016, with all revisions, and this Special Provision.

SUBMITTALS: The Contractor shall submit the following for approval by the Engineer and RIDOT Historic Preservation Specialist prior to beginning the work:

- A. Masonry Contractor Qualifications as described in this Special Provision (to be submitted within 30 days of receiving Notice to Proceed).
- B. A narrative description of how all stone work will be performed, covering all aspects of the work including but not limited to equipment to be used, stone removal and stockpiling methods and locations, stabilization methods, surface preparation, mortar preparation and application, and any other methods and equipment proposed to carry out the work under this Special Provision.
- C. Field Inspection/Verification Plans. These plans shall be ¼" scale elevation drawings of all exposed faces of masonry of all arch and wall elements showing actual field measured depths of any all voids in mortar joints, measured from the face of line of masonry. Details showing depth of voids shall be adequate to detail replacement stones, or verify fit of stones to be reset.
- D. The Masonry Contractor shall prepare a cured mortar sample approx. 6" × 6" × 1" to be reviewed by the Engineer in consultation with the RIDOT Historic Preservation Specialist. Once the mortar color and texture are approved, the Masonry Contractor shall point and grout an area designated by the Engineer as a sample. The sample area will not exceed six square feet in area.
- E. Samples of proposed supplemental stone.
- F. Cut sheets of the proposed galvanized masonry anchors.

QUALIFICATIONS: All work performed under this Special provision shall be performed by a qualified Masonry Contractor. The Masonry Contractor shall have stone masons with demonstrated proficiency in historic stone masonry construction/reconstruction practices. Documentation in the form of professional certifications and the location of at least three successfully completed stone walls or bridges of a similar type to the work to be performed shall be submitted to the Engineer for approval. The documentation must be approved by the Engineer in consultation with RIDOT Historic Preservation Specialist prior to the Masonry Contractor being permitted to begin the work. The approved masons are to complete the entire work item for which approval was given.

MATERIALS: All materials shall be in accordance with the Standard Specifications and the following:

A. Mortar: Mortar for pointing joints shall conform to the Standard Specifications, as amended, subsection M.04.03.5.

B. Grout:

Properties of the mixed Portland cement grout:

1. Time of Set (ASTM C-191)
 - a. Initial Set: 3.0 hours min.
 - b. Final Set: 6.5 hours max.
2. Flow (CRD C-621):100-124%
3. Color: concrete gray to match existing stone as much as possible
4. The grout shall not exhibit bleeding.
5. The grout shall not segregate.
6. The grout shall be pumpable through standard grout pumping equipment.

Properties of the cured Portland cement grout:

1. Compressive Strength
 - a. 1 day: 3,800 psi min.
 - b. 28 day: 7,600 psi min.
2. Splitting Tensile Strength (ASTM C-496) at 28 days: 500 psi min.
3. Flexural Strength (ASTM C-580) at 28 days: 1200 psi min.
4. Bond Strength (ASTM C-882 Modified) Plastic grout to hardened concrete at 28 days (moist cure): 1950 psi min.
5. Expansion (CRD C-621) at 28 days: +0.015% min.
6. The grout shall not produce a vapor barrier.
7. The grout shall exhibit positive expansion when tested in accordance to ASTM C-827.
8. The grout shall conform to ASTM C-1107.

C. Stones: To the extent possible, all stones shall be selected from stone salvaged from the existing structure. New (supplemental) stones shall match the existing stones with respect to shape, color, size, finish, grain and composition.

CONSTRUCTION METHODS: Construction shall be in accordance with the Standard Specifications and the following:

A. General

1. The Engineer shall be notified of the Contractor's intent to perform any masonry work no later than 24 hours prior to the work.
2. Contractor shall stabilize existing stones during stone work. This stone stabilization shall continue through the duration of the work to ensure a safe working environment and to avoid losing, dislodging and/or damage to stones and/or work already completed.
3. Any stones which become loose, or those stones surrounded by mortar joints which become cracked as a result of the Contractor's operation shall be removed, cleaned and reset at no extra cost to the State.
4. Deliver the specified products in original, unopened containers with the Manufacturer's name, labels, product identification, and batch numbers. Store and condition the specified product as recommended by the Manufacturer.
5. All work to be performed in the partial removal or rebuilding of the existing structure shall be done in such a manner that no debris falls into the river and/or onto adjacent properties. In the event that any materials fall into the water or beyond the work zone, the Contractor shall remove said materials immediately to the satisfaction of the Engineer.
6. Do not apply material if it is raining or snowing or if inclement weather is imminent, all in accordance with the Manufacturers requirements and the Standard Specifications. Precautions should be taken to avoid damage to any surface near the work zone due to mixing and handling of the specified repair material.
7. The surfaces shall be mechanically prepared. Areas to be grouted must be clean, sound and free of contaminants. All loose and deteriorated stone and debris shall be removed by mechanical means. Methods selected shall not damage the surfaces of the stones and shall be approved by the Engineer and the RIDOT Historic Preservation Specialist. Perform all other surface and joint preparation as per Manufacturer's requirements.
8. Contractor shall prevent excess grout from falling into the water or onto the ground below.
9. Grouting operations shall be done concurrently with the replacing/resetting of the new or re-used stones.
10. Any damage to the structure to remain resulting from the Contractor's operations shall be repaired by the Contractor to the satisfaction of the Engineer at no additional cost to the State.

B. Partial Removal and Disposal of Stone Masonry

1. The work of dismantling and rebuilding the stone masonry shall be carried out in accordance with Section 939 "Stone Walls in Historic, Scenic or Rural Areas" of the Standard Specifications as it applies to historic stone masonry. The limits of dismantling shall be only as required to reconstruct the stone masonry to conform to the specified finished elevations. The rebuilding of the stone masonry shall be carried out using the original stones removed from the structure, which shall be reset to match the appearance of the existing (intact) masonry. Drilling into or anchoring/attaching staging, netting, false work, etc. into the faces of the stone masonry that will remain when the project is complete is prohibited.
2. Dismantling of the masonry shall be carefully carried out in a workmanlike manner so as to prevent damage to the stones to be reused and the existing structure to remain. The stones are to be removed by hand when possible. Stones requiring machinery to move are to be lifted using suitable straps to protect the stones from damage. It may be necessary to dismantle the stone masonry beyond the limits depicted on the Plans in order to reconstruct the masonry up to the finished elevation using stones that match the overall size distribution of stones within the original stone masonry. Large stones that extend into the limits of removal shall be removed, cut and reset in their existing location, unless a single, appropriately sized stone is available.
3. Prior to disposal, stones that are intended to be reused in the final work shall be stockpiled in a secure area approved by the Engineer and protected from vandalism and theft. Stockpiled stones shall be covered with tarps.
4. Only those materials not incorporated in the final work shall be removed and legally disposed of in accordance with state and federal regulations. Storing or burying of material/debris on site shall not be permitted.

C. Rebuild Stone Masonry/Stone Veneer

1. To the extent possible, all stones visible in the final work shall be selected from stones salvaged from the existing structure. Should it be necessary to use supplemental stones in visible locations, deference shall be given to using the existing stones on the vertical wall faces and using supplemental stones in the arch.
2. The reconstructed stone masonry shall match the appearance, joint construction, and coursing of the existing historic masonry. All stones that are to be reused for rebuilding the masonry shall be carefully cleaned of all mortar, soil and any other deleterious materials without cracking, chipping or otherwise defacing them. The masonry shall be rebuilt as mortared stone masonry with the pointing set back 2 inches from the face line of the masonry as shown on the Plans. The masonry shall be rebuilt to the finished elevation shown on the Plans. The top of the masonry shall be left with a relatively even mortar surface ($\pm\frac{1}{2}$ inch). The use of or grouping of disproportionately small or thin stones at the top of the masonry will not be accepted.
3. Rebuilding of stone masonry shall be done in workmanlike manner so as to ensure proper selection, preparation, fabrication and installation of all stones so as to restore, to the maximum extent possible, the original stone construction.

4. Where stone walls are rebuilt around the proposed pile caps, they shall be rebuilt in accordance with R.I. Standard Detail 10.1.0.
5. Stone for veneer shall be cut and/or split as required for installation in a manner that presents a visually uniform face with the existing and rebuilt wall. Galvanized masonry anchors shall be installed in the ends of the pile caps at vertical and horizontal spacings not to exceed 8 inches.

D. Pointing and Grouting Stone Masonry

1. Grout the cavities and voids between the stones of the arch structure and walls. Place salvaged and supplemental stones within voids as described herein.
2. Pointing and grouting shall conform to Section 807 of the RI Standard Specification, except as modified by this specification and the material Manufacturer's recommendations.
3. Cleaning and prepare the bonding surfaces, ensure that the stones are clean and in saturated, surface dry condition at the time of grouting and pointing the masonry.
4. All openings along underside of stone arch shall be fully grouted. No more than a 24-inch depth of grout within 10' x 10' grid shall be placed in any opening larger than 10 square feet along the masonry. If it is evident that more depth must be placed due to the conditions of existing stones and stone placement encountered, the work shall stop at that location and the Engineer will be notified immediately to determine if alternative procedures are required. There shall be no additional compensation for the period of time while work is suspended.
5. All openings in the vertical walls shall be grouted to a depth of no less than 1 foot, not including a 2-inch setback of the pointed surface from the wall face line.
6. Actual stone dimensions shall be determined by the Contractor based on Field Inspection/Verification Plans, prior to fabrication of any replacement stones. Field Inspection/Verification Plans shall be submitted and approved prior to commencing this work. Upon approval of the Field Inspection/Verification Plan, the Contractor shall commence preparation of shop drawings for stones to be fabricated. If stones are to be retrieved from the job site and re-used, then the Field Inspection/Verifications Plan shall include detailed dimensions of each stone to be re-used. Additionally, these stones shall be removed from the work site, cleaned and stored an accessible location for inspection by the Engineer.
7. This work shall include all above-grade joints regardless of whether the joints are above or below water line.
8. All curing procedures and methods shall be completed according to the grout Manufacturer's recommendations and as specified in Section 601 of the R.I. Standard Specifications or as otherwise directed by the Engineer. Use of curing compounds is not permitted.
9. All exposed surfaces shall be hand tooled with a pointing tool before the grout sets as approved by the Engineer. Pointing shall be set back 2 inches from the face line of the masonry as shown on the Plans. Avoid smearing the masonry surfaces with excess mortar forced into or out of the joints.

METHOD OF MEASUREMENT: “Partial Removal and Disposal of Stone Masonry” will be measured for payment per “Cubic Yard” of stone masonry actually removed in accordance with the Plans and/or as directed by the Engineer.

“Pointing and Grouting Stone Masonry” will be measured for payment per “Square Foot” of masonry actually pointed and grouted in accordance with the Plans and/or as directed by the Engineer.

“Rebuild Stone Masonry” will be measured for payment per “Cubic Yard” of stone masonry actually rebuilt in accordance with the Plans and/or as directed by the Engineer.

“Stone Veneer” will be measured for payment per “Square Foot” of stone veneer actually installed in accordance with the Plans and/or as directed by the Engineer.

“Supplemental Stones for Walls” will be measured for payment per “Pound” of stone actually furnished in accordance with the Plans and/or as directed by the Engineer.

BASIS OF PAYMENT: “Partial Removal and Disposal of Stone Masonry” will be paid for at the contract unit price per “Cubic Yard” as listed in the Proposal. The price so stated shall constitute full and complete compensation for all labor, materials, tools, equipment, and all other incidentals required to complete the work as described in this Special Provisions and elsewhere in the Contract Documents, complete in place and accepted by the Engineer.

“Pointing and Grouting Stone Masonry” will be paid for at the contract unit price per “Square Foot” as listed in the Proposal. The price so stated shall constitute full and complete compensation for all labor, materials, tools, equipment, and all other incidentals required to complete the work as described in this Special Provisions and elsewhere in the Contract Documents, complete in place and accepted by the Engineer.

“Rebuild Stone Masonry” will be paid for at the contract unit price per “Cubic Yard” as listed in the Proposal. The price so stated shall constitute full and complete compensation for all labor, materials, tools, equipment, and all other incidentals required to complete the work as described in this Special Provisions and elsewhere in the Contract Documents, complete in place and accepted by the Engineer.

“Stone Veneer” will be paid for at the contract unit price per “Square Foot” as listed in the Proposal. The price so stated shall constitute full and complete compensation for all labor, materials (including the anchoring system), tools, equipment, and all other incidentals required to complete the work as described in this Special Provisions and elsewhere in the Contract Documents, complete in place and accepted by the Engineer.

“Supplemental Stones” will be paid for at the contract unit price per “Pound” as listed in the Proposal. The price so stated shall constitute full and complete compensation for all labor, materials, tools, equipment, and all other incidentals required to complete the work as described in this Special Provisions and elsewhere in the Contract Documents, complete in place and accepted by the Engineer.

Expenses associated with shop drawings, inspection reports and other submittals as well as cleaning, stockpiling stones, removal of stones from stockpile, protection, shielding, disposal of surplus materials/debris and other miscellaneous items are considered incidental to these items of work.

Table of Contents - Distribution of Quantities

Project Name - Mussey Brook Bridge No. 380 (56C)

Estimate Name - Addendum No. 1

R.I. Contract No. - 2016-CB-039

FAP Nos: BHO-0380(003)

ItemCode	Description	Page
201.0321	CLEARING AND GRUBBING	1
201.0401	REMOVE AND DISPOSE GRANITE CURB	1
201.0402	REMOVE AND DISPOSE CONCRETE CURB	1
201.0409	REMOVE AND DISPOSE FLEXIBLE PAVEMENT	1
201.0414	REMOVE AND DISPOSE PIPE - ALL SIZES	1
201.0415	REMOVE AND DISPOSE GUARDRAIL AND POST ALL TYPES	1
201.0610	REMOVE AND DISPOSE DIRECTIONAL, WARNING, REGULATORY, SERVICE, AND STREET SIGNS	2
201.9950	REMOVE AND DISPOSE CONTAMINATED PIPE	2
202.0100	EARTH EXCAVATION	2
202.0201	ROCK EXCAVATION MECHANICAL	2
202.0500	CHANNEL EXCAVATION EARTH	3
202.0700	COMMON BORROW	3
203.0100	STRUCTURAL EXCAVATION EARTH	3
203.0700	PERVIOUS FILL	3
204.0100	TRIMMING AND FINE GRADING	3
206.0301	COMPOST FILTER SOCK	3
208.0100	DEWATERING BASIN STANDARD 9.7.0	3
208.9901	CONTROL OF WATER	4
208.9902	CONSTRUCT AND REMOVE STOCKPILE BASIN AND RESTORE BASIN AREA	4
212.2000	CLEANING AND MAINTENANCE OF EROSION CONTROLS	4
213.0100	PLACEMENT OF MILLINGS BENEATH GUARDRAIL	4
302.0100	GRAVEL BORROW SUBBASE COURSE	4
401.1000	CLASS 19.0 HMA	5
401.2100	** ITEM DELETED **	5
401.3005	CLASS 9.5 HMA FOR MISCELLANEOUS WORK	5
401.3100	MODIFIED CLASS 9.5 HMA	5
403.0300	ASPHALT EMULSION TACK COAT	5
601.0300	CLASS A PORTLAND CEMENT CONCRETE	5
603.1000	CONTROLLED LOW STRENGTH MATERIAL	6
700.9901	10 INCH STEEL CASING PIPE FOR GAS MAIN	6
701.9901	12-INCH DUCTILE IRON WATER MAIN	6
701.9903	6-INCH DUCTILE IRON WATER MAIN	6
701.9904	6-INCH GATE VALVE	6
701.9906	12-INCH BUTTERFLY VALVE	6
701.9907	2-INCH BLOW-OFF ASSEMBLY	7
707.1000	ADJUST SANITARY MANHOLE	7
712.0100	WATER GATE BOX	7
712.0200	GAS GATE BOX	7
713.8300	ADJUST GAS GATE BOXES TO GRADE	7
800.9901	MUSSEY BROOK BRIDGE NO. 380	8
803.9901	PARTIAL REMOVAL AND DISPOSAL OF STONE MASONRY	8
804.1630	PILE LOAD TEST 60 TON	8
804.9902	STEEL MICROPILES	8
804.9903	PILE VERIFICATION LOAD TEST	8
807.9901	POINTING & GROUTING MASONRY	8
807.9902	REBUILD STONE MASONRY	9
807.9904	STONE VENEER	9
901.0191	GUARDRAIL STEEL BEAM ANCHORAGE TRAILING END SECTION STANDARD 34.3.4	9
901.0193	GUARDRAIL STEEL BEAM SINGLE FACE STANDARD 34.2.0	9
901.0199	GUARDRAIL END TREATMENT, ENERGY ABSORBING TERMINAL	10
903.0410	TEMPORARY CHAIN LINK FENCE	10
903.0411	TEMPORARY CHAIN LINK GATE	10
906.0110	GRANITE CURB, QUARRY SPLIT STRAIGHT, STANDARD 7.3.0	10

Table of Contents - Distribution of Quantities

Project Name - Mussey Brook Bridge No. 380 (56C)

Estimate Name - Addendum No. 1

R.I. Contract No. - 2016-CB-039

FAP Nos: BHO-0380(003)

ItemCode	Description	Page
906.0111	GRANITE CURB, QUARRY SPLIT CIRCULAR, STANDARD 7.3.0	11
906.0118	6' GRANITE TRANSITION CURB, QUARRY SPLIT SPECIAL TRANSITION STANDARD 7.3.2	11
906.0700	REMOVE, HANDLE, HAUL TRIM RESET CURB EDGING, STRAIGHT, CIRCULAR ALL TYPES	11
907.0100	WATER FOR DUST CONTROL	12
914.5010	FLAGPERSONS	12
914.5020	FLAGPERSONS - OVERTIME	12
919.0101	TEST PITS	12
920.0200	FILTER FABRIC FOR RIP-RAP	12
920.9901	DUMPED STONE RIPRAP R-5	12
920.9902	BEDDING FOR RIPRAP FS-2	12
920.9903	GABION WALL	13
922.0100	TEMPORARY CONSTRUCTION SIGNS STANDARD 29.1.0 AND 27.1.1	13
923.0105	DRUM BARRICADE STANDARD 26.2.0	13
923.0120	PLASTIC PIPE BARRICADE STANDARD 26.3.0	13
923.0200	FLUORESCENT TRAFFIC CONES STANDARD 26.1.0	14
925.0112	PORTABLE CHANGEABLE MESSAGE SIGN	14
926.0121	UNANCHORED PRECAST CONCRETE BARRIER FOR TEMPORARY TRAFFIC CONTROL STANDARD 40.5.0	14
929.0110	FIELD OFFICE	14
931.0110	CLEANING AND SWEEPING PAVEMENT	14
932.0100	CUTTING AND MATCHING ASPHALT	15
932.0110	TRANSVERSE PAVEMENT CUT AND MATCH STANDARD 47.1.1	15
932.0200	FULL-DEPTH SAWCUT OF BITUMINOUS PAVEMENT	15
935.0400	REMOVING BITUMINOUS PAVEMENT BY MICRO MILLING	15
936.0100	MOBILIZATION AND DEMOBILIZATION	15
937.0200	MAINTENANCE AND MOVEMENT TRAFFIC PROTECTION	16
943.0200	TRAINEE MAN-HOURS	16
L01.0102	LOAM BORROW 4 INCHES DEEP	16
L02.0102	RESIDENTIAL SEEDING (TYPE 2)	16
T15.0100	DIRECTIONAL REGULATORY AND WARNING SIGNS	16
T20.0006	6 INCH WHITE FAST - DRYING WATERBORNE PAVEMENT MARKING PAINT	16
T20.0012	12 INCH WHITE FAST - DRYING WATERBORNE PAVEMENT MARKING PAINT	17
T20.0104	4 INCH YELLOW FAST - DRYING WATERBORNE PAVEMENT MARKING PAINT	17
T20.1106	6 INCH TEMPORARY WATERBORNE PAINT PAVEMENT MARKINGS WHITE	17
T20.1112	12 INCH TEMPORARY WATERBORNE PAINT PAVEMENT MARKINGS WHITE	17
T20.1204	4 INCH TEMPORARY WATERBORNE PAINT PAVEMENT MARKINGS YELLOW	17
T20.2006	6 INCH EPOXY RESIN PAVEMENT MARKINGS WHITE	18
T20.2012	12 INCH EPOXY RESIN PAVEMENT MARKINGS WHITE	18
T20.2014	4 INCH EPOXY RESIN PAVEMENT MARKINGS YELLOW	18
401.9901	MODIFIED CLASS 9.5 HMA FOR BRIDGE DECKS	18
807.9905	SUPPLEMENTAL STONES	18

Distribution of Quantities

Project Name - Mussey Brook Bridge No. 380 (56C)

Estimate Name - Addendum No. 1

R.I. Contract No. - 2016-CB-039

FAP Nos: BHO-0380(003)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
022	302.0100	Cont.				
Item 302.0100 Total:				370.00		
023	401.1000	CLASS 19.0 HMA HIGHWAY	TON			
		55+00 - 57+17		122.00	0014	01
		57+37 - 59+25		192.00	0014	01
Item 401.1000 Total:				314.00		
024	401.2100	MODIFIED CLASS 12.5 HMA HIGHWAY	TON			
		55+00 - 57+17			0014	01
		57+37 - 59+25			0014	01
Item 401.2100 Total:				**DELETED**		
025	401.3005	CLASS 9.5 HMA FOR MISCELLANEOUS WORK HIGHWAY	TON			
		MISCELLANEOUS		20.00	0014	01
Item 401.3005 Total:				20.00		
026	401.3100	MODIFIED CLASS 9.5 HMA BRIDGE BRIDGE HIGHWAY	TON			
		55+00 - 57+17		107.00		
		57+37 - 59+25		77.00		
Item 401.3100 Total:				184.00		
027	403.0300	ASPHALT EMULSION TACK COAT BRIDGE BRIDGE HIGHWAY	SY			
		BRIDGE		180.00	0014	01
		55+00 - 59+25		3,500.00	0014	01

Distribution of Quantities

Project Name - Mussey Brook Bridge No. 380 (56C)

Estimate Name - Addendum No. 1

R.I. Contract No. - 2016-CB-039

FAP Nos: BHO-0380(003)

<u>Item No.</u>	<u>Item Code</u>	<u>Description</u>	<u>UM</u>	<u>Qty.</u>	<u>Pay Code</u>	<u>Seq. No.</u>
027	403.0300	Cont.				
					Item 403.0300 Total:	3,680.00
028	601.0300	CLASS A PORTLAND CEMENT CONCRETE	CY			

Distribution of Quantities

Project Name - Mussey Brook Bridge No. 380 (56C)

Estimate Name - Addendum No. 1

R.I. Contract No. - 2016-CB-039

FAP Nos: BHO-0380(003)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
S088	T20.1204 Cont.	Item T20.1204 Total:		590.00		
S089	T20.2006	6 INCH EPOXY RESIN PAVEMENT	LF			
		MARKINGS WHITE				
		HIGHWAY				
		55+00L - 58+69L		369.00	0014	01
		55+00R - 55+22R		22.00	0014	01
		55+99R - 59+25R		326.00	0014	01
		59+22L - 59+25L		3.00	0014	01
		Item T20.2006 Total:		720.00		
S090	T20.2012	12 INCH EPOXY RESIN PAVEMENT	LF			
		MARKINGS WHITE				
		HIGHWAY				
		55+64R - 55+85R		22.00	0014	01
		58+80L - 58+97L		17.00	0014	01
		Item T20.2012 Total:		39.00		
S091	T20.2014	4 INCH EPOXY RESIN PAVEMENT	LF			
		MARKINGS YELLOW				
		HIGHWAY				
		55+00 - 55+22		44.00	0014	01
		55+99 - 58+69		540.00	0014	01
		59+22 - 59+25		6.00	0014	01
		Item T20.2014 Total:		590.00		
092	401.9901	MODIFIED CLASS 9.5 HMA FOR BRIDGE DECKS	TON			
		BRIDGE				
		BRIDGE		60.00	0014	01
		Item 401.9901 Total:		60.00		
093	807.9905	SUPPLEMENTAL STONES	LBS			

Distribution of Quantities

Project Name - Mussey Brook Bridge No. 380 (56C)

Estimate Name - Addendum No. 1

R.I. Contract No. - 2016-CB-039

FAP Nos: BHO-0380(003)

<u>Item No.</u>	<u>Item Code</u>	<u>Description</u>	<u>UM</u>	<u>Qty.</u>	<u>Pay Code</u>	<u>Seq. No.</u>
093	807.9905 Cont.	BRDIGE				
		BRIDGE		4,000.00	0014	01
Item 807.9905 Total:				4,000.00		

INDEX OF DRAWINGS

Sheet Number	Sheet Title
01	COVER SHEET
02	STANDARD PLAN SYMBOLS & STANDARD LEGEND
03	STANDARD NOTES - 1
04	STANDARD NOTES - 2
05	JOB SPECIFIC PLAN SYMBOLS, LEGEND, & NOTES
06	TYPICAL SECTIONS
07	GENERAL PLAN
08	PROFILE
09	DRAINAGE & UTILITY PLAN
10	GRADING PLAN
11	CONTROL OF WATER PLAN
12	LOCATION PLAN
13	SIGNING & STRIPING PLAN
14	TEMPORARY TRAFFIC CONTROL PLAN No. 1
15	TEMPORARY TRAFFIC CONTROL PLAN No. 2
16	DETAILS
17	BRIDGE NOTES - 1
18	BRIDGE NOTES - 2
19	BRIDGE GENERAL PLAN
20	BRIDGE SECTIONS
21	PILE LAYOUT PLAN AND DETAILS
22	TYPICAL ABUTMENT PLAN, ELEVATION, AND SECTION
23	ABUTMENT SECTIONS AND DETAILS
24	GAS MAIN RELOCATION
25	APPROACH SLAB DETAILS
26	MOMENT SLAB PLAN, ELEVATION, AND SECTION
27	PRECAST TOLERANCES AND BEARING DETAILS
28	FRAMING PLAN AND DETAILS
29	BEAM SECTIONS AND DETAILS
30	SAFETY CURB JOINTS AT ABUTMENTS
31	CURB DETAILS
32	RAIL POST SPACING PLAN
33	RAIL DETAILS
34	MISCELLANEOUS DETAILS
35	BORING LOGS
36 - 39	CROSS SECTIONS No. 1 - 4

STATE OF RHODE ISLAND



DEPARTMENT OF TRANSPORTATION

PLAN, PROFILE AND SECTIONS OF PROPOSED

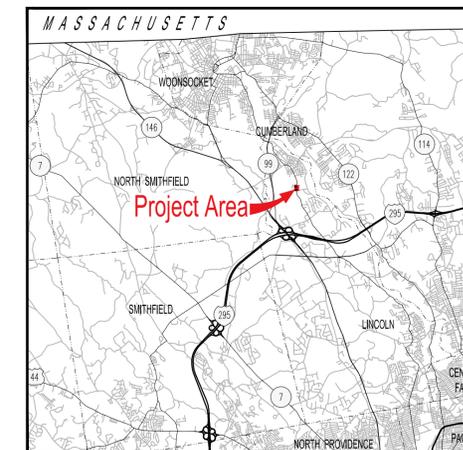
STATE HIGHWAY

MUSSEY BROOK BRIDGE NO. 380(56C)

LINCOLN, RHODE ISLAND
PROVIDENCE COUNTY

R.I. CONTRACT NO. 2016-CB-039 F.A. PROJECT NO. BHO-0380(003)

0.08 MILES



LOCATION MAP
NOT TO SCALE

DESIGN DESIGNATION

AADT (2015) = 4,200 VEH
 AADT (2035) = 5,200 VEH
 DHV (2035) = 540 VEH
 K = 10
 D = 50/50
 T = 4.4%
 DESIGN SPEED = 40 MPH
 FUNCTIONAL CLASSIFICATION - URBAN MINOR ARTERIAL

EXISTING PAVEMENT STRUCTURE

5" ASPHALT PAVEMENT
16" GRAVEL BASE

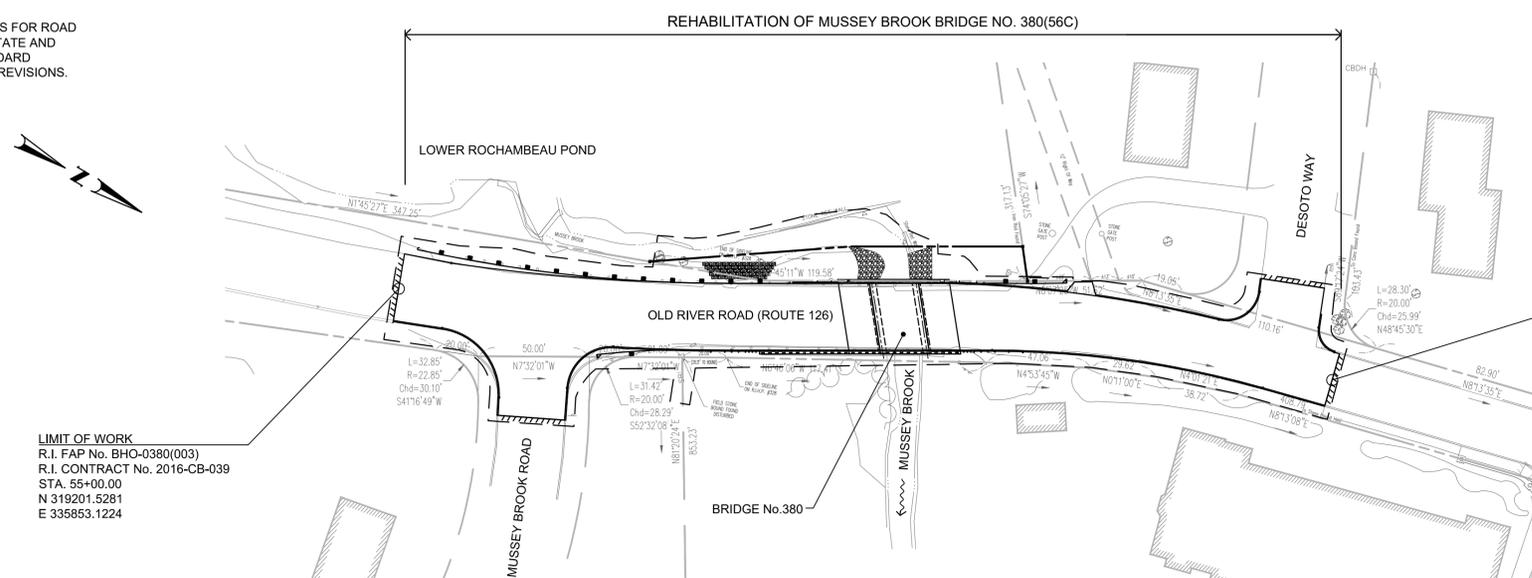
PROPOSED PAVEMENT STRUCTURE

2" MODIFIED CLASS 9.5 HMA
 5" CLASS 19.0 HMA (PLACED IN TWO 2.5" LIFTS)
 12" GRAVEL BORROW SUBBASE COURSE
 ASPHALT EMULSION TACK COAT BETWEEN HMA LAYERS

HYDRAULIC DATA

DRAINAGE AREA	0.927 SQ. MI.
100-YEAR FLOOD EL. UPSTREAM OF BRIDGE	178.2
100-YEAR FLOOD EL. DOWNSTREAM OF BRIDGE	172.9
100-YEAR FLOOD PEAK DISCHARGE	534 CFS
100-YEAR FLOOD FLOW VELOCITY	11.1 FT/SEC

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS
 SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED MAY 2016, WITH ALL REVISIONS AND THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS. STANDARD DETAILS FOR THIS PROJECT ARE R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL REVISIONS.



LIMIT OF WORK
 R.I. FAP No. BHO-0380(003)
 R.I. CONTRACT No. 2016-CB-039
 STA. 59+00.00
 N 319624.2098
 E 335836.2453

LIMIT OF WORK
 R.I. FAP No. BHO-0380(003)
 R.I. CONTRACT No. 2016-CB-039
 STA. 59+25.00
 N 319624.2098
 E 335836.2453

LAYOUT PLAN
SCALE: 1" = 40'

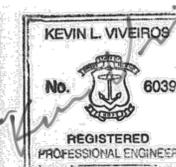
SCALES OF DRAWINGS

Plans	1 inch = 20 feet
Profiles	1 inch = 20 feet Horizontal
Profiles	1 inch = 4 feet Vertical
Cross Sections	1 inch = 4 feet Horizontal
Cross Sections	1 inch = 4 feet Vertical

BASE OF LEVELS

VERTICAL DATUM USED: NAVD 88

HORIZONTAL DATUM: RHODE ISLAND STATE PLANE, NAD 83 (2007)(2002.00)



R.I. DEPARTMENT OF TRANSPORTATION

APPROVED: *[Signature]* 9-23-2016
 MANAGER, DIVISION OF PROJECT MANAGEMENT DATE

APPROVED: *[Signature]* 9-23-16
 CHIEF ENGINEER OF INFRASTRUCTURE DATE

APPROVED: *[Signature]* 9/23/16
 DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

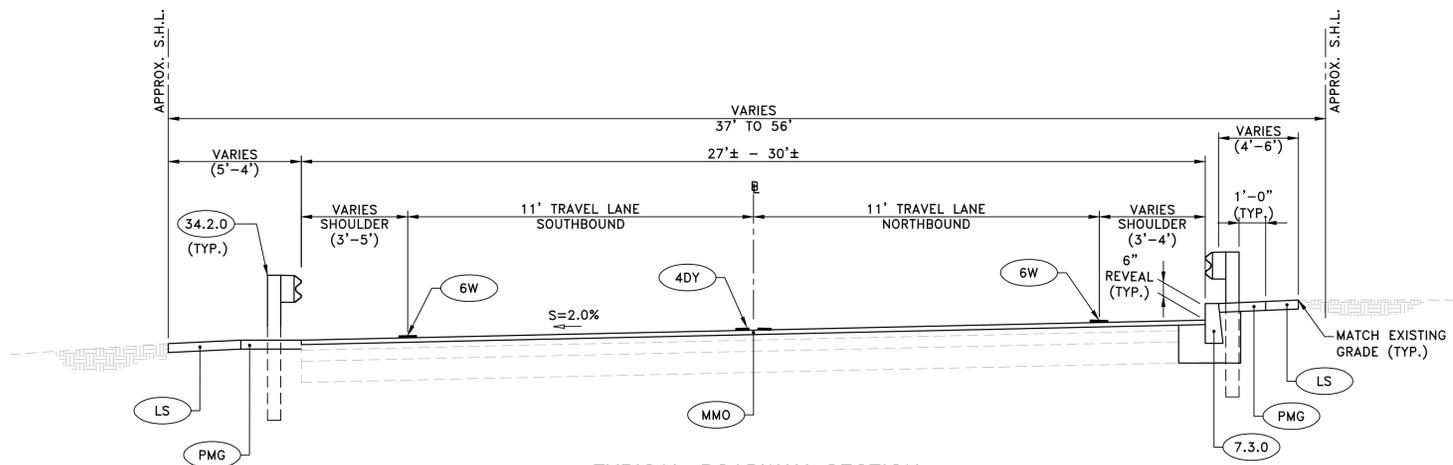
APPROVED: _____ DATE: _____
 DIVISION ADMINISTRATOR

Contract Number 2016-CB-039

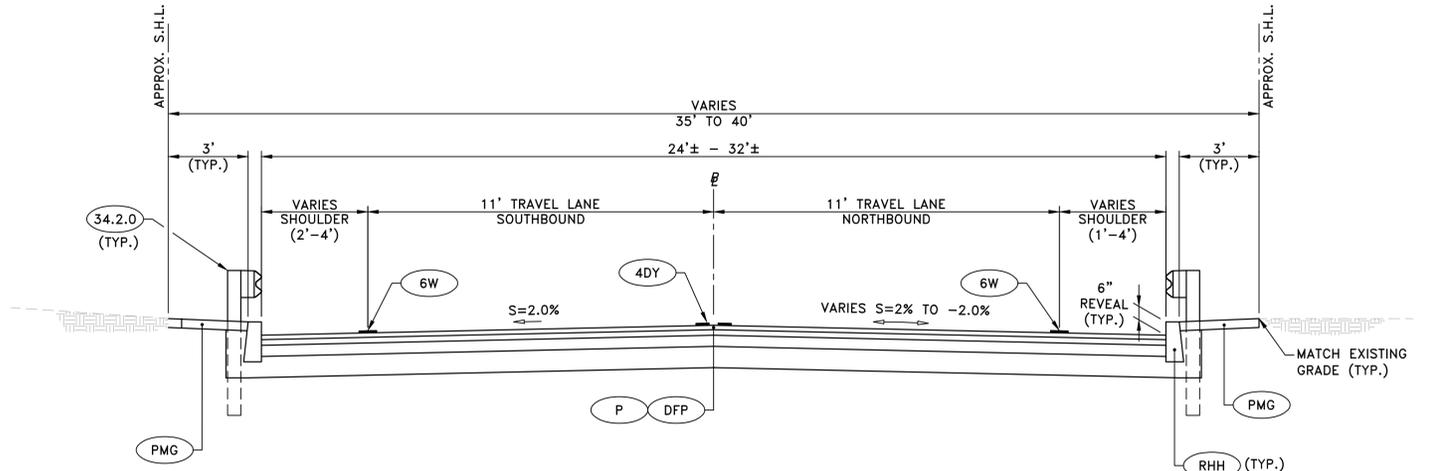
Number of Sheet 1

Total Sheets 39

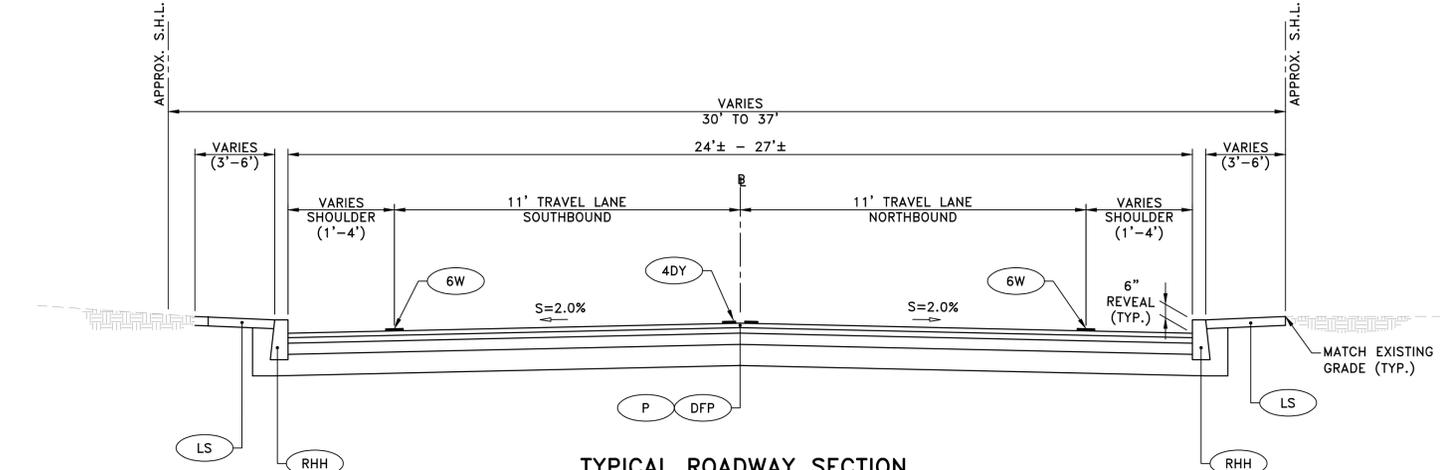




TYPICAL ROADWAY SECTION
STA. 55+00 TO STA. 56+00



TYPICAL ROADWAY SECTION
STA. 56+00 TO STA. 58+00



TYPICAL ROADWAY SECTION
STA. 58+00 TO STA. 59+25

(SEE "GENERAL PLAN" FOR LIMITS)

PAVEMENT STRUCTURE:

- P** FULL DEPTH CONSTRUCTION
2" MODIFIED CLASS 9.5 HMA
5" CLASS 19.0 HMA (PLACED IN TWO 2.5" LIFTS)
12" GRAVEL BORROW SUBBASE COURSE
ASPHALT EMULSION TACK COAT BETWEEN HMA LAYERS
- MMO** MICRO-MILL 2" OF EXISTING PAVEMENT
2" MODIFIED CLASS 9.5 HMA SURFACE COURSE
ASPHALT EMULSION TACK COAT BETWEEN HMA LAYERS

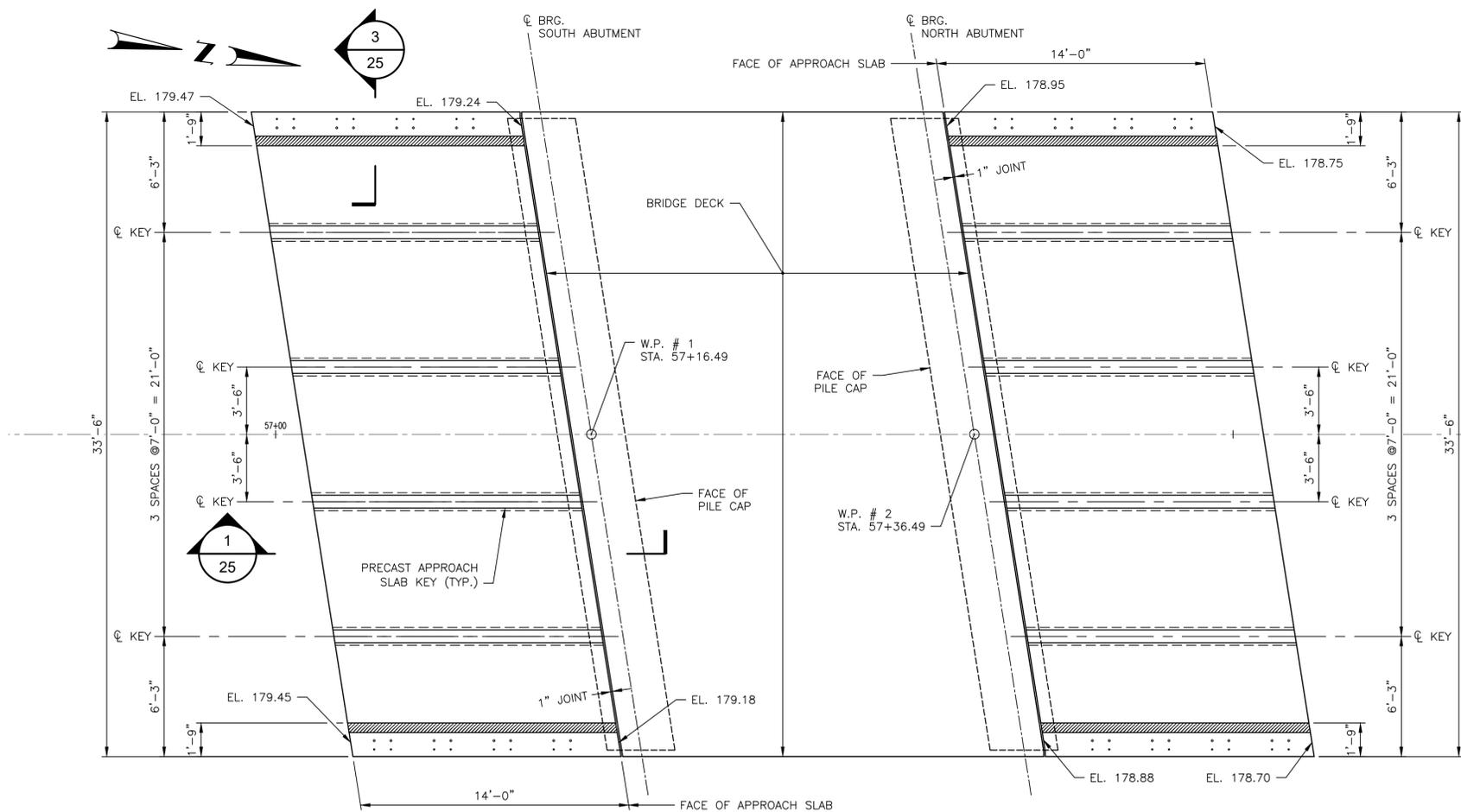
NOTES:

1. THE REMOVAL OF EXISTING CURB/CURBLOCK, IF PRESENT, SHALL BE CONSIDERED INCIDENTAL TO THE ITEM FOR REMOVE AND RESET CURB, AND NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.

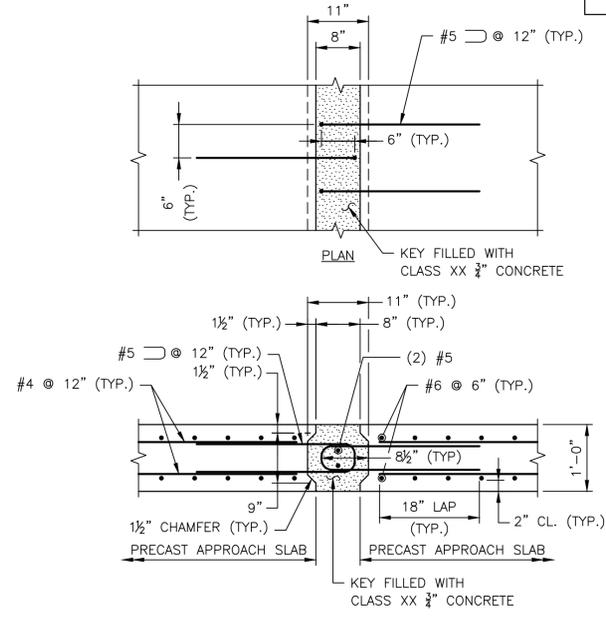
REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
1	10/17/16	RJK	REHABILITATION OF MUSSEY BROOK BRIDGE NO. 380(56C)	
			LINCOLN,	RHODE ISLAND
			TYPICAL SECTIONS	
			CHECKED BY _____	DATE _____ SCALE _____



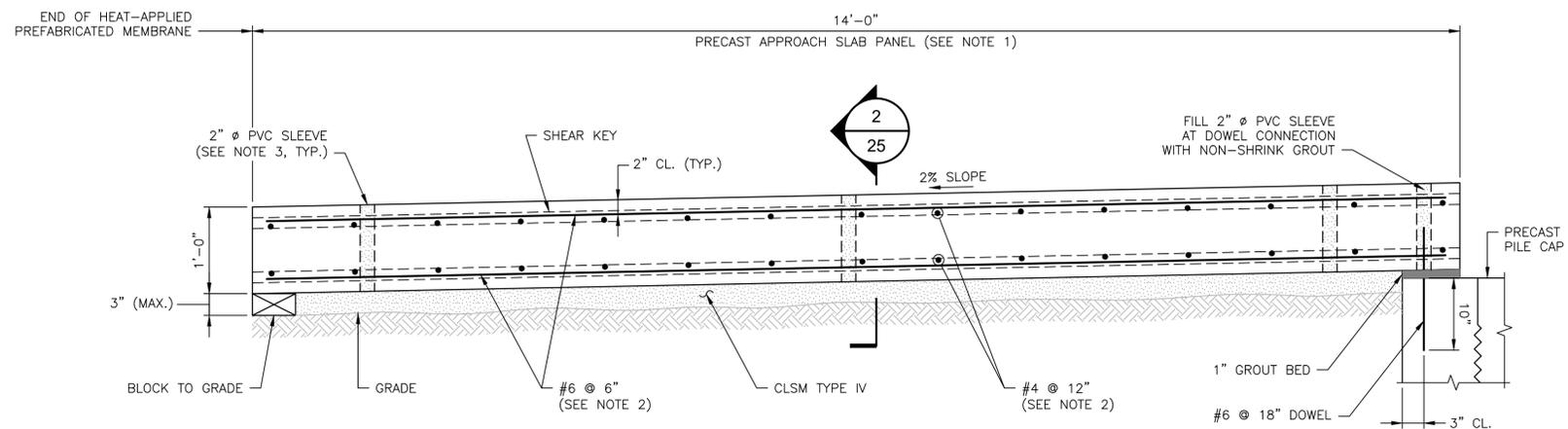
REV1



APPROACH SLAB PLAN
SCALE: 1/4" = 1'-0"

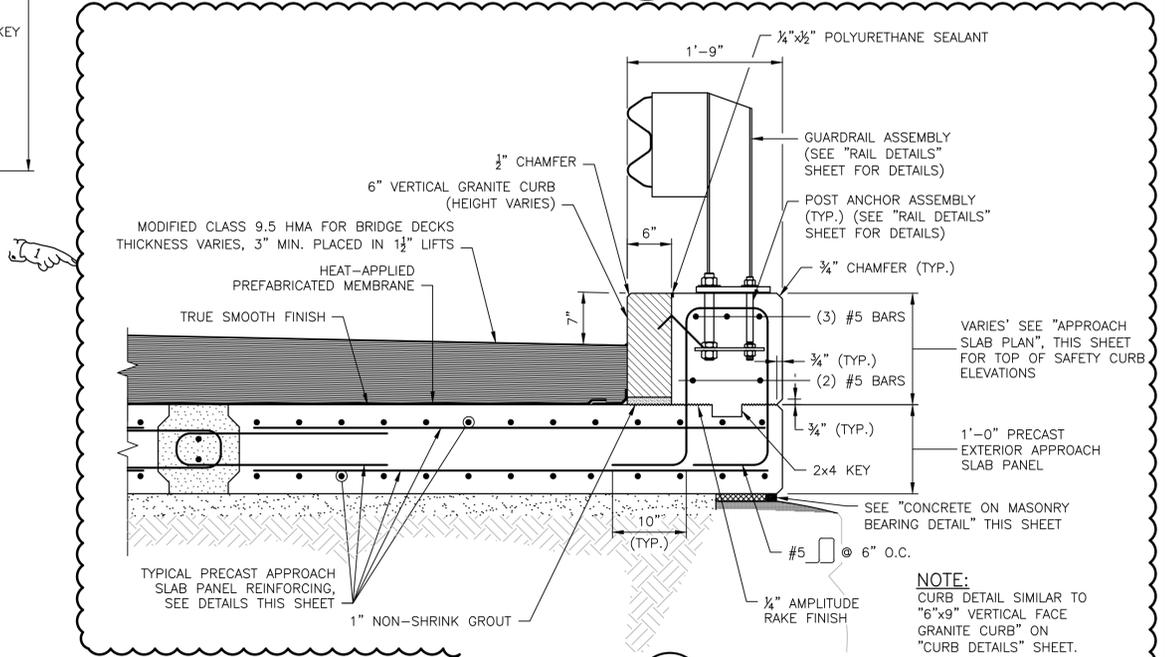


SECTION 2
SCALE: 3/4" = 1'-0"

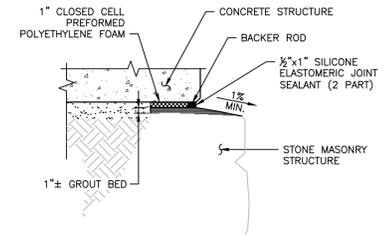


- NOTES:**
1. PRECAST PANEL TO BE CLASS XX 3/4" 4000 PSI CONCRETE. SUBSTITUTIONS WILL NOT BE PERMITTED.
 2. PLACE LONGITUDINAL REINFORCEMENT PERPENDICULAR TO ABUTMENT. PLACE TRANSVERSE REINFORCEMENT PARALLEL TO ABUTMENT.
 3. PVC SLEEVES TO BE INCLUDED IN PRECAST APPROACH SLABS TO FACILITATE PLACEMENT OF CLSM TYPE IV.

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



SECTION 3
SCALE: 1" = 1'-0"



CONCRETE ON MASONRY BEARING DETAIL
NOT TO SCALE

REVISIONS			RHODE ISLAND	
NO.	DATE	BY	DEPARTMENT OF TRANSPORTATION	
1	10/17/16	RJK	REHABILITATION OF MUSSEY BROOK BRIDGE NO. 380(56C)	
			LINCOLN,	RHODE ISLAND
			APPROACH SLAB DETAILS	
CHECKED BY _____ DATE _____			SCALE AS NOTED	

