

**Updated 11/05/14**

# **FEDERAL PROJECT**

## BIDDING INSTRUCTIONS

### FOR ALL PROJECTS:

1. Use pen and ink to complete all paper Bids.
2. As a minimum, the following must be received prior to the time of Bid opening:

#### For a Paper Bid:

- a) a copy of the Notice to Contractors, b) the completed Acknowledgement of Bid Amendments form, c) the completed Schedule of Items, d) two copies of the completed and signed Contract Offer, Agreement & Award form, e) a Bid Guaranty, (if required), and f) any other certifications or Bid requirements listed in the Bid Documents as due by Bid opening.

#### For an Electronic Bid:

- a) a completed Bid using Expedite® software and submitted via the Bid Express™ web-based service, b) an electronic Bid Guaranty (if required) or a faxed copy of a Bid Bond (with original to be delivered within 72 hours), and c) any other Certifications or Bid requirements listed in the Bid Documents as due by Bid opening.
3. Include prices for all items in the Schedule of Items (excluding non-selected alternates).
4. Bid Guaranty acceptable forms are:
  - a) a properly completed and signed Bid Bond on the Department's prescribed form (or on a form that does not contain any significant variations from the Department's form as determined by the Department) for 5% of the Bid Amount or
  - b) an Official Bank Check, Cashier's Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors or
  - c) an electronic bid bond submitted with an electronic bid.
5. If a paper Bid is to be sent, "FedEx First Overnight" delivery is suggested as the package is delivered directly to the DOT Headquarters Building located at 16 Child Street in Augusta. Other means, such as U.S. Postal Service's Express Mail has proven not to be reliable.

### IN ADDITION, FOR FEDERAL AID PROJECTS:

6. Complete the DBE Proposed Utilization form, and submit with your bid. If you are submitting your bid electronically, you must FAX the form to (207) 624-3431. This is a curable defect.

*If you need further information regarding Bid preparation, call the DOT  
Contracts Section at (207) 624-3410.*

*For complete bidding requirements, refer to Section 102 of the Maine Department  
of Transportation, Standard Specifications, November 2014 Edition.*

# NOTICE

**The Maine Department of Transportation is attempting to improve the way Bid Amendments/Addendums are handled, and allow for an electronic downloading of bid packages from our website, while continuing to maintain an optional plan holders list.**

**Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments must fill out the on-line plan holder registration form and provide an email address to the MDOT Contracts mailbox at: [MDOT.contracts@maine.gov](mailto:MDOT.contracts@maine.gov). Each bid package will require a separate request.**

**Additionally, interested parties will be responsible for reviewing and retrieving the Bid Amendments from our web site, and acknowledging receipt and incorporating those Bid Amendments in their bids using the Acknowledgement of Bid Amendment Form.**

**The downloading of bid packages from the MDOT website is not the same as providing an electronic bid to the Department. Electronic bids must be submitted via <http://www.BIDX.com>. For information on electronic bidding contact Patrick Corum at [patrick.corum@maine.gov](mailto:patrick.corum@maine.gov) , Rebecca Snowden at [rebecca.snowden@maine.gov](mailto:rebecca.snowden@maine.gov) or Diane Barnes at [diane.barnes@maine.gov](mailto:diane.barnes@maine.gov).**

# NOTICE

For security and other reasons, all Bid Packages which are mailed, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open

PIN:

Town:

Date of Bid Opening:

Name of Contractor with mailing address and telephone number:

In Addition to the usual address information, the *Outer Envelope* should have written or typed on it:

Double Envelope: Bid Enclosed

PIN:

Town:

Date of Bid Opening:

Name of Contractor:

*This should not be much of a change for those of you who use Federal Express or similar services.*

Hand-carried Bids may be in one envelope as before, and should be marked with the following information:

Bid Enclosed: Do Not Open

PIN:

Town:

Name of Contractor:

October 16, 2001

**STATE OF MAINE DEPARTMENT OF TRANSPORTATION**  
Bid Guaranty-Bid Bond Form

**KNOW ALL MEN BY THESE PRESENTS THAT** \_\_\_\_\_

\_\_\_\_\_, of the City/Town of \_\_\_\_\_ and State of \_\_\_\_\_

as Principal, and \_\_\_\_\_ as Surety, a

Corporation duly organized under the laws of the State of \_\_\_\_\_ and having a usual place of

Business in \_\_\_\_\_ and hereby held and firmly bound unto the Treasurer of

the State of Maine in the sum of \_\_\_\_\_ for payment which Principal and Surety bind

themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

The condition of this obligation is that the Principal has submitted to the Maine Department of

Transportation, hereafter Department, a certain bid, attached hereto and incorporated as a

part herein, to enter into a written contract for the construction of \_\_\_\_\_

\_\_\_\_\_ and if the Department shall accept said bid

and the Principal shall execute and deliver a contract in the form attached hereto (properly

completed in accordance with said bid) and shall furnish bonds for this faithful performance of

said contract, and for the payment of all persons performing labor or furnishing material in

connection therewith, and shall in all other respects perform the agreement created by the

acceptance of said bid, then this obligation shall be null and void; otherwise it shall remain in full

force, and effect.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_

WITNESS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

WITNESS

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

PRINCIPAL:

By \_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

SURETY:

By \_\_\_\_\_

By: \_\_\_\_\_

Name of Local Agency: \_\_\_\_\_

# NOTICE

Bidders:

Please use the attached “Request for Information” form when submitting questions concerning specific Contracts that have been advertised for Bid, include additional numbered pages as required. RFI’s may be faxed to 207-624-3431, submitted electronically through the Departments web page of advertised projects by selecting the RFI tab on the project details page or via e-mail to [RFI-Contracts.MDOT@maine.gov](mailto:RFI-Contracts.MDOT@maine.gov).

These are the only allowable mechanisms for answering Project specific questions. Maine DOT will not be bound to any answers to Project specific questions received during the Bidding phase through other processes.

When submitting RFIs by Email please follow the same guidelines as stated on the “Request for Information” form and include the word “RFI” along with the Project name and Identification number in the subject line.



# NOTICE

## Disadvantaged Business Enterprise Proposed Utilization

The Apparent Low Bidder shall submit the Disadvantaged Business Enterprise Proposed Utilization form with their bid. This is a curable bid defect.

The Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form contains additional information that is required by USDOT.

The Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form should be used.

A copy of the new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan and instructions for completing it are attached.

Note: Questions about DBE firms, or to obtain a printed copy of the DBE Directory, contact The Office of Civil Rights at (207) 624-3066.

MDOT's DBE Directory of Certified firms can also be obtained at <http://www.maine.gov/mdot/civilrights/dbe.htm>

## INSTRUCTIONS FOR PREPARING THE MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR UTILIZATION FORM

The Contractor Shall Extend equal opportunity to MaineDOT certified DBE firms (as listed in MaineDOT's DBE Directory of Certified Businesses) in the selection and utilization of Subcontractors and Suppliers.

### SPECIFIC INSTRUCTIONS FOR COMPLETING THE FORM:

Insert Contractor name, the name of the person(s) preparing the form, and that person(s) telephone, fax number and e-mail address.

Calculate and provide percentage of your bid that will be allocated to DBE firms, Federal Project Identification Number, and location of the Project work.

In the columns, name each subcontractor, DBE and non-DBE firm to be used, provide the Unit/Item cost of the work/product to be provided by the subcontractor, give a brief description and the dollar value of the work.

Revised 1/12

**FHWA DBE GOAL NOTICE FFY 2013-15**  
**Maine Department of Transportation**  
**Disadvantaged Business Enterprise Program**

Notice is hereby given that in accordance with US DOT regulation 49 CFR Part 26, the Maine Department of Transportation has established a DBE Program for disadvantaged business participation in the federal-aid highway and bridge construction program; MaineDOT contracts covered by the program include consulting, construction, supplies, manufacturing, and service contracts.

For FFY 2013-15 (October 1, 2012 through September 30, 2015) MaineDOT has established an annual DBE participation goal of **4.0%** to be achieved through race/gender neutral means. This goal has been approved by the Federal Highway Administration and remains in effect through September 30, 2015. Maine DOT must meet this goal each federal fiscal year. If the goal is not met, MaineDOT must provide a justification for not meeting the goal and provide a plan to ensure the goal is met, which may include contract goals on certain projects that contractors will be required to meet.

MaineDOT asks all contractors, consultants and subcontractors to seek certified DBE firms for projects and to work to meet the determined 4.0% goal without the need to impose contract goals. DBE firms are listed on the MaineDOT website at:

<http://www.maine.gov/mdot/civilrights/dbe.htm>

Interested parties may view MaineDOT's DBE goal setting methodology also posted on this website. If you have questions regarding this goal or the DBE program you may contact Sherry Tompkins at the Maine Department of Transportation, Civil Rights Office by telephone at (207) 624-3066 or by e-mail at: [sherry.tompkins@maine.gov](mailto:sherry.tompkins@maine.gov)

**MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR  
PROPOSED UTILIZATION FORM**

**All Bidders must furnish this form with their bid on Bid Opening day**

**Contractor:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_ **Ext** \_\_\_\_\_

**Contact Person:** \_\_\_\_\_ **Fax:** \_\_\_\_\_

**E-mail:** \_\_\_\_\_

**BID DATE:** \_\_\_\_\_

**FEDERAL PROJECT PIN #** \_\_\_\_\_ **PROJECT LOCATION:** \_\_\_\_\_

**TOTAL ANTICIPATED DBE \_\_\_\_ % PARTICIPATION FOR THIS CONTRACT**

W B E	D B E	Non DBE	Firm Name	Item Number & Description of Work	Quantity	Cost Per Unit/Item	Anticipated \$ Value
<b>Subcontractor Total &gt;</b>							
<b>DBE Total &gt;</b>							

**NOTE: THIS INFORMATION IS USED TO TRACK AND REPORT ANTICIPATED DBE PARTICIPATION IN ALL  
FEDERALLY FUNDED MAINE DOT CONTRACTS. THE ANTICIPATED DBE AMOUNT IS VOLUNTARY AND WILL  
NOT BECOME A PART OF THE CONTRACTUAL TERMS.**

Equal Opportunity Use:

Form received: \_\_\_/\_\_\_/\_\_\_ Verified by: \_\_\_\_\_

FHWA                   FTA                   FAA

**For a complete list of certified firms and company designation (WBE/DBE) go to  
<http://www.maine.gov/mdot>**

Rev. 05/13

**Maine Department of Transportation Civil Rights Office**

**Directory of Certified Disadvantaged Business Enterprises**

**Listing can be found at:**

<http://www.maine.gov/mdot/civilrights/dbe.htm>

**For additional information and guidance contact:**

**Civil Rights Office at (207) 624-3066**

*It is the responsibility of the Contractor to access the DBE Directory at this site in order to have the most current listing.*

### **Vendor Registration**

Prospective Bidders must register as a vendor with the Department of Administrative & Financial Services if the vendor is awarded a contract. Vendors will not be able to receive payment without first being registered. Vendors/Contractors will find information and register through the following link –

<http://www.maine.gov/purchases/venbid/index.shtml>

**STATE OF MAINE DEPARTMENT OF TRANSPORTATION  
NOTICE TO CONTRACTORS**

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bids for Egypt Road Culvert Rehabilitation in the town of **GRAY**" will be received from contractors at the Reception Desk, Maine DOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on March 4, 2015 and at that time and place publicly opened and read. Bids will be accepted from all bidders. The lowest responsive bidder must demonstrate previous successful completion of projects of a similar size and scope to be considered for the award of this contract. **We now accept electronic bids for those bid packages posted on the bidx.com website. Electronic bids do not have to be accompanied by paper bids. Please note: the Department will accept a facsimile of the bid bond; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening.** Until further notice, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence

Description: Maine Federal Aid Project No. STP-2047(100), WIN 020471.00

Location: In Cumberland County, project is located on Egypt Road over Sucker Brook approximately 0.2 mile easterly of the town line.

Scope of Work: Egypt Road Culvert rehabilitation plus other incidental work.

For general information regarding Bidding and Contracting procedures, contact George Macdougall at (207) 624-3410. Our webpage at <http://www.maine.gov/mdot/contractors/> contains a copy of the Schedule of Items, Plan Holders List, written portions of bid amendments, drawings, bid results and an electronic form for RFI submittal. For Project-specific information fax all questions to **Project Manager Mark Parlin** at (207) 624-3431, use electronic RFI form or email questions to [RFI-Contracts.MDOT@maine.gov](mailto:RFI-Contracts.MDOT@maine.gov), project name and identification number should be in the subject line. Questions received after 12:00 noon of Monday prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. TTY users call Maine Relay 711.

Plans, specifications and bid forms may be seen at the Maine DOT Building in Augusta, Maine and at the Department of Transportation's Regional Office in Scarborough. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn.: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Full size plans \$9.00 (\$12.50 by mail). Half size plans \$4.50 (\$6.75 by mail), Bid Book \$10 (\$13 by mail), Single Sheets \$2, payment in advance, all non-refundable.

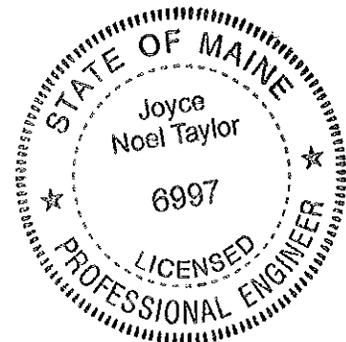
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$5,000.00 payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder.

This Contract is subject to all applicable Federal Laws. This contract is subject to compliance with the Disadvantaged Business Enterprise program requirements as set forth by the Maine Department of Transportation.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, November 2014 Edition", price \$10 [\$15 by mail], and Standard Details, November 2014 Edition, price \$20 [\$25 by mail]. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Standard Detail updates can be found at <http://www.maine.gov/mdot/contractors/publications/>.

The right is hereby reserved to the Maine DOT to reject any or all bids.

Augusta, Maine  
February 11, 2015



  
JOYCE NOEL TAYLOR P. E.  
CHIEF ENGINEER

**SPECIAL PROVISION 102.7.3  
ACKNOWLEDGMENT OF BID AMENDMENTS**

With this form, the Bidder acknowledges its responsibility to check for all Amendments to the Bid Package. For each Project under Advertisement, Amendments are located at <http://www.maine.gov/mdot/contractors/> . It is the responsibility of the Bidder to determine if there are Amendments to the Project, to download them, to incorporate them into their Bid Package, and to reference the Amendment number and the date on the form below. The Maine DOT will not post Bid Amendments any later than noon the day before Bid opening without individually notifying all the planholders.

Amendment Number	Date

The Contractor, for itself, its successors and assigns, hereby acknowledges that it has received all of the above referenced Amendments to the Bid Package.

CONTRACTOR

\_\_\_\_\_   
Date

\_\_\_\_\_   
Signature of authorized representative

\_\_\_\_\_   
(Name and Title Printed)

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 020471.00

Project(s): 020471.00

SECTION: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0010	502.325 STRUCTURAL CONCRETE CULVERT INVERT LINING	LUMP SUM	LUMP	SUM	_____	_____
0020	502.326 STRUCTURAL CONCRETE - FISH WEIRS	LUMP SUM	LUMP	SUM	_____	_____
0030	503.12 REINFORCING STEEL, FABRICATED AND DELIVERED	2,600.000 LB	_____	_____	_____	_____
0040	503.13 REINFORCING STEEL, PLACING	2,600.000 LB	_____	_____	_____	_____
0050	511.07 COFFERDAM: UPSTREAM	LUMP SUM	LUMP	SUM	_____	_____
0060	511.07 COFFERDAM: DOWNSTREAM	LUMP SUM	LUMP	SUM	_____	_____
0070	514.06 CURING BOX FOR CONCRETE CYLINDERS	1.000 EA	_____	_____	_____	_____
0080	606.366 GUARDRAIL, REMOVE & RESET TYPE 3C	50.000 LF	_____	_____	_____	_____
0090	606.367 REPLACE UNUSABLE EXISTING GUARDRAIL POSTS	2.000 EA	_____	_____	_____	_____
0100	610.08 PLAIN RIPRAP RAMP	30.000 CY	_____	_____	_____	_____
0110	610.16 HEAVY RIPRAP	50.000 CY	_____	_____	_____	_____
0120	610.18 STONE DITCH PROTECTION	5.000 CY	_____	_____	_____	_____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 020471.00

Project(s): 020471.00

SECTION: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0130	619.1401 EROSION CONTROL MIX	10.000 CY	_____	 _____	_____	 _____
0140	620.58 EROSION CONTROL GEOTEXTILE	10.000 SY	_____	 _____	_____	 _____
0150	629.05 HAND LABOR, STRAIGHT TIME	20.000 HR	_____	 _____	_____	 _____
0160	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10.000 HR	_____	 _____	_____	 _____
0170	631.133 SKID STEER (INCLUDING OPERATOR)	10.000 HR	_____	 _____	_____	 _____
0180	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	10.000 HR	_____	 _____	_____	 _____
0190	639.19 FIELD OFFICE TYPE B	1.000 EA	_____	 _____	_____	 _____
0200	652.33 DRUM	10.000 EA	_____	 _____	_____	 _____
0210	652.34 CONE	20.000 EA	_____	 _____	_____	 _____
0220	652.35 CONSTRUCTION SIGNS	150.000 SF	_____	 _____	_____	 _____
0230	652.361 MAINTENANCE OF TRAFFIC CONTROL DEVICES	LUMP SUM		 LUMP SUM	_____	 _____
0240	652.38 FLAGGER	100.000 HR	_____	 _____	_____	 _____

1/20/2015

Maine Department of Transportation

Proposal Schedule of Items

Page 3 of 3

Proposal ID: 020471.00

Project(s): 020471.00

SECTION: 1 INITIAL GROUP

Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0250	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP SUM	LUMP	SUM	_____	_____
0260	659.10 MOBILIZATION	LUMP SUM	LUMP	SUM	_____	_____
<b>Section: 1</b>			<b>Total:</b>		_____	_____
			<b>Total Bid:</b>		_____	_____

## **CONTRACT AGREEMENT, OFFER & AWARD**

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

\_\_\_\_\_ a corporation or other legal entity organized under the laws of the State of \_\_\_\_\_, with its principal place of business located at \_\_\_\_\_

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

### **A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, **WIN 020471.00**, for the **Egypt Road Culvert Rehabilitation** in the town of **Gray**, County of **Cumberland**, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

### **B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **October 9, 2015**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of November 2014 and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is \_\_\_\_\_

\$\_\_\_\_\_ Performance Bond and Payment Bond each being 100% of the amount of this Contract.

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of November 2014, Standard Details Revision of November 2014 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Federal Contract Provisions Supplement, and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of November 2014, Standard Details Revision of November 2014 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **WIN 020471.00 Egypt Road Culvert Rehabilitation plus other incidental work**, State of Maine, on which bids will be received until the time specified in the “Notice to Contractors” do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached “Schedule of Items”.

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached “Schedule of Items” in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached “Schedule of Items”, which may be ordered by the Resident, and to accept as full compensation the amount determined upon a “Force Account” basis as provided in the Standard Specifications, Revision of November 2014, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier’s check, certificate of deposit or U. S. Postal Money Order in the amount given in the “Notice to Contractors”, payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the Standard Specifications Revision of November 2014 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor’s Disadvantaged Business Enterprise Utilization Plan with their bid.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

\_\_\_\_\_  
Date

\_\_\_\_\_  
(Signature of Legally Authorized Representative  
of the Contractor)

\_\_\_\_\_  
Witness

\_\_\_\_\_  
(Name and Title Printed)

**G. Award.**

Your offer is hereby accepted.  
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

\_\_\_\_\_  
By: David Bernhardt, Commissioner

\_\_\_\_\_  
Witness

## **CONTRACT AGREEMENT, OFFER & AWARD**

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

\_\_\_\_\_ a corporation or other legal entity organized under the laws of the State of \_\_\_\_\_, with its principal place of business located at \_\_\_\_\_

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

### **A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, **WIN 020471.00**, for the **Egypt Road Culvert Rehabilitation** in the town of **Gray**, County of **Cumberland**, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

### **B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **October 9, 2015**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of November 2014 and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is \_\_\_\_\_

\$\_\_\_\_\_ Performance Bond and Payment Bond each being 100% of the amount of this Contract.

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of November 2014, Standard Details Revision of November 2014 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Federal Contract Provisions Supplement, and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of November 2014, Standard Details Revision of November 2014 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **WIN 020471.00 Egypt Road Culvert Rehabilitation plus other incidental work**, State of Maine, on which bids will be received until the time specified in the “Notice to Contractors” do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached “Schedule of Items”.

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached “Schedule of Items” in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached “Schedule of Items”, which may be ordered by the Resident, and to accept as full compensation the amount determined upon a “Force Account” basis as provided in the Standard Specifications, Revision of November 2014, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier’s check, certificate of deposit or U. S. Postal Money Order in the amount given in the “Notice to Contractors”, payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the Standard Specifications Revision of November 2014 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor’s Disadvantaged Business Enterprise Utilization Plan with their bid.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

\_\_\_\_\_

Date

\_\_\_\_\_  
(Signature of Legally Authorized Representative  
of the Contractor)

\_\_\_\_\_

Witness

\_\_\_\_\_  
(Name and Title Printed)

**G. Award.**

Your offer is hereby accepted.  
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_

Date

\_\_\_\_\_  
By: David Bernhardt, Commissioner

\_\_\_\_\_

Witness

## CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and (Name of the firm bidding the job) a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at (address of the firm bidding the job)

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

**A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. 1224.00, for the Hot Mix Asphalt Overlay in the town/city of South Nowhere, County of Washington, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

**B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before November 15, 2006. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of November 2014 and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is           (Place bid here in alphabetical form such as One Hundred and Two dollars and 10 cents)            
\$ (repeat bid here in numerical terms, such as \$102.10) Performance Bond and Payment Bond each being 100% of the amount of this Contract.

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of November 2014, Standard Details Revision of November 2014, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of November 2014 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications, Revision of November 2014, Standard Details Revision of November 2014, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

**PIN 1234.00 South Nowhere, Hot Mix Asphalt Overlay**,

State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of November 2014, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the Standard Specifications Revision of 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan with their bid.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

\_\_\_\_\_  
Date

\_\_\_\_\_  
**(Witness Sign Here)**  
Witness

\_\_\_\_\_  
**(Sign Here)**  
(Signature of Legally Authorized Representative of the Contractor)

\_\_\_\_\_  
**(Print Name Here)**  
(Name and Title Printed)

CONTRACTOR

**G. Award.**

Your offer is hereby accepted. documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

\_\_\_\_\_  
By: David Bernhardt, Commissioner

\_\_\_\_\_  
(Witness)

BOND # \_\_\_\_\_

CONTRACT PERFORMANCE BOND  
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_  
\_\_\_\_\_ in the State of \_\_\_\_\_, as principal,  
and.....  
a corporation duly organized under the laws of the State of ..... and having a  
usual place of business .....  
as Surety, are held and firmly bound unto the Treasurer of the State of Maine in the sum  
of \_\_\_\_\_ and 00/100 Dollars (\$ \_\_\_\_\_),  
to be paid said Treasurer of the State of Maine or his successors in office, for which  
payment well and truly to be made, Principal and Surety bind themselves, their heirs,  
executors and administrators, successors and assigns, jointly and severally by these  
presents.

The condition of this obligation is such that if the Principal designated as Contractor in  
the Contract to construct Project Number \_\_\_\_\_ in the Municipality of  
\_\_\_\_\_ promptly and faithfully performs the Contract, then this  
obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the State  
of Maine.

Signed and sealed this ..... day of ....., 20.....

WITNESSES:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly .....

Print Name Legibly .....

SURETY:

Signature .....

.....

Print Name Legibly .....

Print Name Legibly .....

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

.....  
.....  
.....

ADDRESS .....  
.....  
.....

TELEPHONE.....

.....

BOND # \_\_\_\_\_

CONTRACT PAYMENT BOND  
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_  
\_\_\_\_\_ **in the State of** \_\_\_\_\_, as principal,  
and.....  
a corporation duly organized under the laws of the State of ..... and having a  
usual place of business in .....  
as Surety, are held and firmly bound unto the Treasurer of the State of Maine for the use  
and benefit of claimants as herein below defined, in the sum of  
\_\_\_\_\_ **and 00/100 Dollars (\$** \_\_\_\_\_ **)**  
for the payment whereof Principal and Surety bind themselves, their heirs, executors and  
administrators, successors and assigns, jointly and severally by these presents.

The condition of this obligation is such that if the Principal designated as Contractor in  
the Contract to construct Project Number \_\_\_\_\_ in the Municipality of  
\_\_\_\_\_ promptly satisfies all claims and demands incurred for all  
labor and material, used or required by him in connection with the work contemplated by  
said Contract, and fully reimburses the obligee for all outlay and expense which the  
obligee may incur in making good any default of said Principal, then this obligation shall  
be null and void; otherwise it shall remain in full force and effect.

A claimant is defined as one having a direct contract with the Principal or with a  
Subcontractor of the Principal for labor, material or both, used or reasonably required for  
use in the performance of the contract.

Signed and sealed this ..... day of ....., 20 ... .

WITNESS:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly .....

Print Name Legibly .....

SURETY:

Signature.....

.....

Print Name Legibly .....

Print Name Legibly .....

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

.....

ADDRESS .....

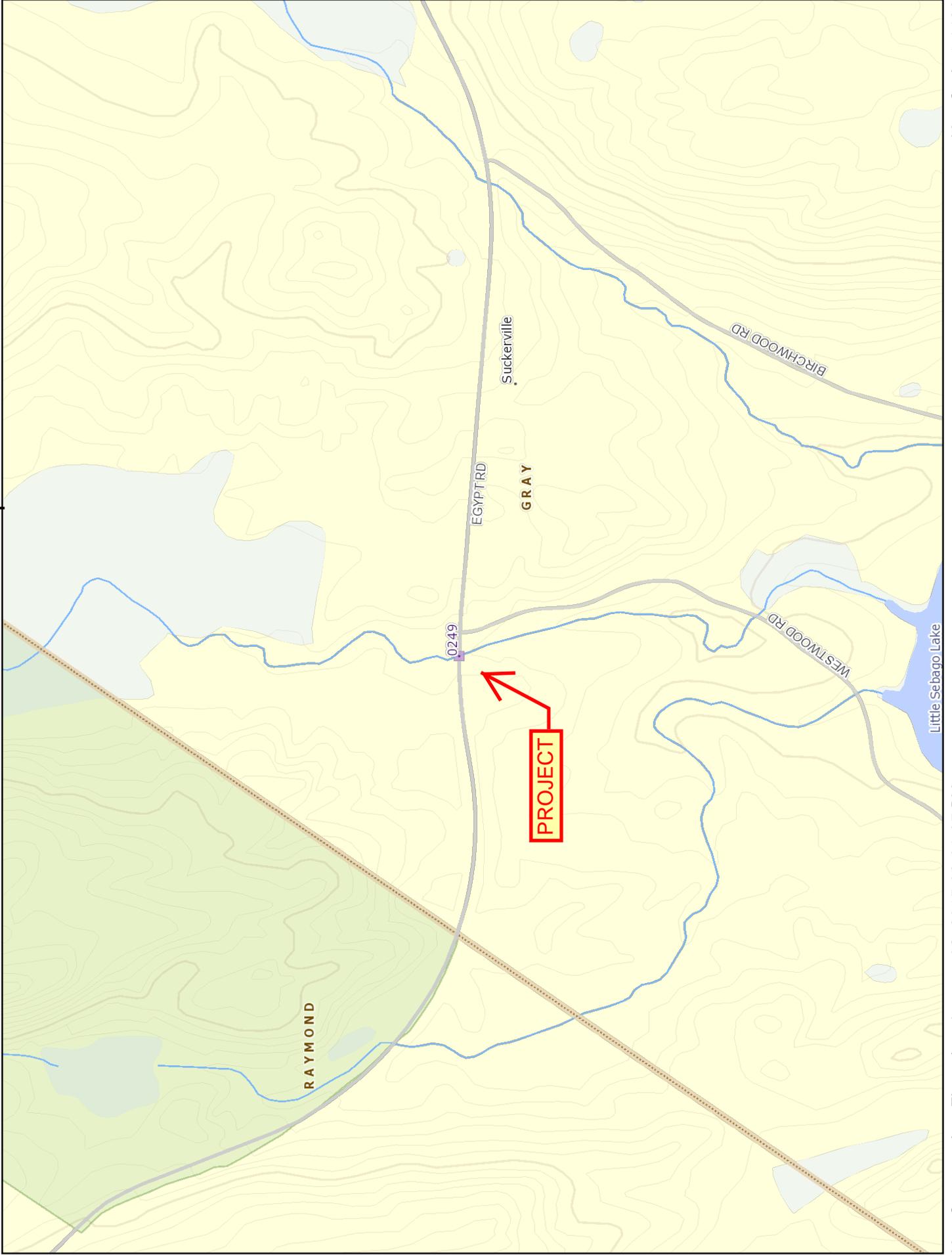
.....

.....

TELEPHONE .....

.....

# Maine DOT Map



The Maine Department of Transportation provides this publication for information only. Reliance upon this information is at user risk. It is subject to revision and may be incomplete, depending upon changing conditions. The Department assumes no liability if injuries or damages result from this information. This map is not intended to support emergency dispatch. Road names used on this map may not match official road names.

### General Roads

- Interstate
- US Routes
- State Routes
- Public Roads

### Bridges



### MaineDOT Regions



### State Urban



### Water Bodies



### Boundary Lines

- coastline
- county
- state
- town

### Wetlands



### Conserved Lands



General Decision Number: ME150050 01/02/2015 ME50

Superseded General Decision Number: ME20140050

State: Maine

Construction Type: Highway

County: Cumberland County in Maine.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/02/2015

\* ENGI 0004-006 04/01/2014

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Milling Machine.....	\$ 20.75	10.84

-----  
SUME2011-045 09/14/2011

	Rates	Fringes
CARPENTER, Includes Form Work....	\$ 17.10	1.95
CEMENT MASON/CONCRETE FINISHER...	\$ 16.94	0.00
ELECTRICIAN.....	\$ 17.90	3.69
INSTALLER - GUARDRAIL.....	\$ 16.47	1.85
IRONWORKER, REINFORCING.....	\$ 18.79	0.00
IRONWORKER, STRUCTURAL.....	\$ 18.75	4.56

LABORER: Asphalt Raker.....	\$ 15.79	1.45
LABORER: Common or General.....	\$ 13.15	1.08
LABORER: Flagger.....	\$ 9.00	0.00
LABORER: Landscape.....	\$ 14.92	2.30
LABORER: Wheel man.....	\$ 18.76	4.93
OPERATOR: Backhoe.....	\$ 19.38	2.52
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 17.64	4.50
OPERATOR: Broom/Sweeper.....	\$ 14.92	2.31
OPERATOR: Bulldozer.....	\$ 18.57	3.88
OPERATOR: Crane.....	\$ 21.15	0.00
OPERATOR: Excavator.....	\$ 18.81	1.31
OPERATOR: Grader/Blade.....	\$ 27.40	8.46
OPERATOR: Loader.....	\$ 16.40	3.39
OPERATOR: Mechanic.....	\$ 23.27	6.28
OPERATOR: Milling Machine Reclaimer Combo.....	\$ 24.77	8.39
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 18.16	4.74
OPERATOR: Roller excluding Asphalt.....	\$ 17.00	4.08
OPERATOR: Screed.....	\$ 19.98	5.46
PILEDRIVERMAN.....	\$ 19.95	5.26
TRUCK DRIVER, Includes all axles including Dump Trucks.....	\$ 14.65	2.87
TRUCK DRIVER: Lowboy Truck.....	\$ 15.15	5.62

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WELDERS - Receive rate prescribed for craft performing  
operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion

date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

## **The United States Department of Transportation (USDOT)**

### **FHWA STANDARD TITLE VI/NONDISCRIMINATION ASSURANCES**

#### **DOT Order No. 1050.2A**

The Maine Department of Transportation (herein referred to as the "Recipient"), **HEREBY AGREES THAT**, as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation (DOT), through The Federal Highway Administration (FHWA), is subject to and will comply with the following:

#### **Statutory/Regulatory Authorities**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 C.F.R. Part 21 (entitled *Nondiscrimination In Federally-Assisted Programs Of The Department Of Transportation—Effectuation Of Title VI Of The Civil Rights Act Of 1964*);
- 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);

***FHWA may include additional Statutory/Regulatory Authorities here.***

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

#### **General Assurances**

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

*No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity," for which the Recipient receives Federal financial assistance from DOT, including FHWA..*

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Nondiscrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these nondiscrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

***FHWA may include additional General Assurances in this section, or reference an addendum here.***

#### **Specific Assurances**

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its federally assisted programs:

1. The Recipient agrees that each "activity," "facility," or "program," as defined in §§ 21.23 (b) and 21.23 (e) of 49 C.F.R. § 21 will be (with regard to an "activity") facilitated, or will be (with regard to a "facility") operated, or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.
2. The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection with all Federal Highway Programs and, in adapted form, in all proposals for negotiated agreements regardless of funding source:

*The (Agency), in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively insure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.*

3. The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations.
4. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.
5. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.
6. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.
7. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:
  - a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
  - b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:

- a. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
  - b. the period during which the Recipient retains ownership or possession of the property.
9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.
10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

***FHWA may include additional Specific Assurances in this section.***

By signing this ASSURANCE, Maine Department of Transportation also agrees to comply (and require any subrecipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the FHWA access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by FHWA. You must keep records, reports, and submit the material for review upon request to FHWA, or their designees in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

Maine Department of Transportation gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation. This ASSURANCE is binding on Maine Department of Transportation, other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in it programs. . The person(s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

***Name of Recipient: Maine Department of Transportation***



***David Bernhardt, Commissioner***

DATED: 9/18/14

## APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations as set forth in Appendix E, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration**, to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration**, may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.

**Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration**, may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

**(APPENDIX C TO MAINEDOT TITLE VI ASSURANCE)**

**FEDERAL HIGHWAY ADMINISTRATION ASSISTED PROGRAMS**

The following clauses shall be included in all deeds, licenses, leases, permits, or similar instruments entered into

by the Maine Department of Transportation pursuant to the provisions of Assurance 7(a).

The (grantee, licensee, lessee, permittee, etc., as appropriate) for herself/himself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that in the event facilities are constructed, maintained, or otherwise operated on the said property described in this (deed, license, lease, permit, etc.) for a purpose for which a Department of Transportation program or activity is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee lessee, permittee, etc.) shall maintain and operate such facilities and services in compliance with all other requirements imposed pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination of Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.

[Include in licenses, leases, permits, etc.]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to terminate the [license, lease, permit, etc.] and to re-enter and repossess said land and the facilities thereon, and hold the same as if said [licenses, lease, permit, etc.] had never been made or issued.

[Include in deeds]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to re-enter said lands and facilities thereon, and the above described lands and facilities shall thereupon revert to and vest in and become the absolute property of Maine Department of Transportation and its assigns.

The following shall be included in all deeds, licenses, leases, permits, or similar agreements entered into by Maine Department of Transportation pursuant to the provisions of Assurance 7(b).

The (grantee, licensee, lessee, permittee, etc., as appropriate) for herself/himself, his/her personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in case of deeds, and leases add "as a covenant running with the land") that (1) no person on the grounds of race, color, or national origin shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over or under such land and the furnishing services thereon, no person on the grounds of race, color, or national origin shall be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination, and (3) that the (grantee, licensee, lessee, permittee, etc.) shall use the premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.

[Include in licenses, leases, permits, etc.]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to terminate the [license, lease, permit, etc.] and to re-enter and repossess said land and the facilities thereon, and hold the same as if said [license, lease, permit, etc.] had never been made or issued.

[Include in deeds]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to re-enter said land and facilities thereon, and the above described lands and facilities shall thereupon revert to and vest in and become the absolute property of Maine Department of Transportation and its assigns.

\* Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to effectuate the purpose of Title VI of the Civil Rights Act of 1964.

## APPENDIX D

### CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by The Maine Department of Transportation pursuant to the provisions of Assurance 7(b):

- A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, “as a covenant running with the land”) that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discriminations, (3) that the (grantee, licensees, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
- B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, (**The Maine Department of Transportation**) will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.\*
- C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, (**The Maine Department of Transportation**) will there upon revert to and vest in and become the absolute property of (**The Maine Department of Transportation**) and its assigns.\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

## APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

### **Pertinent Non-Discrimination Authorities:**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. §2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. §4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. §324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. §794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. §6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 U.S.C. §471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. Parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. §47123) (prohibits discrimination on the basis of race, color, national origin and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).

**SPECIAL PROVISIONS**  
**SECTION 104**  
**Utilities**

**UTILITY COORDINATION**

None

**MEETING**

A Preconstruction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications is thereby not called for.

**GENERAL INFORMATION**

These Special Provisions outline the arrangements that have been made by the Department for coordination of the work and for utility and/or railroad adjustments as defined in Subsection 104.4.6 and 104.4.8 of the Standard Specifications. The following list identifies all known utilities or railroads having facilities presently located within the limits of this project or intending to install facilities during project construction, unless otherwise provided.

**GRAY, ME**

**Overview**

<b>Utility/Railroad</b>	<b>Aerial</b>	<b>Underground</b>	<b>Railroad</b>
None	None	None	None

All utility crossings over highways will provide not less than 20 feet vertical clearance over existing ground in cut or over finished grade in fill, during construction of this project.

Unless otherwise provided, utilities will not be required to make underground installations in frozen ground.

Utility working days are Monday through Friday, conditions permitting. Times are estimated on the basis of a single crew for each utility.

Unless otherwise specified, any underground utility facilities shown on the project plans represent approximate locations gathered from available information. The Department cannot certify the level of accuracy of this data. Underground facilities indicated on the topographic sheets (plan views) have been collected from historical records and/or on-site designations provided by the respective utility companies. Underground facilities indicated on the cross-sections have been carried over from the plan view data and may also include further approximations of the elevations (depths) based upon straight-line interpolation from the nearest manholes, gate valves, or test pits.

**Town: Gray**  
**Project: STP-2047(100)**  
**WIN: 020471.00**  
**Date: October 1, 2014**

All clearing and tree removal which is a part of this contract in areas where utilities are involved must be completed by the Contractor before the utilities can relocate their facilities. The Contractor shall clear and remove all trees to the right-of-way limit on the left.

**AERIAL**

None.

**UNDERGROUND WORK**

None.

**RAILROAD**

None.

**PROPOSED POLES**

None

**UTILITY SPECIFIC ISSUES**

Any tree removal or tree trimming required within ten feet of the electrical conductors must be done by a qualified contractor. A list of tree removal contractors qualified to remove trees or limbs within ten feet of the electrical conductors may be obtained from the power company.

**DIG SAFE**

The Contractor shall be responsible for determining the presence of underground utility facilities prior to commencing any excavating work and shall notify utilities of proposed excavation in accordance with M.R.S.A. Title 23 §3360-A, Maine "Dig Safe" System.

JQ

cc: Mark Parlin, Project Manager  
Coy Williams, Bridge Program  
Jerry Quirion, Bridge Program

SPECIAL PROVISION  
SECTION 105  
General Scope of Work  
(Environmental Requirements)

In-Water work consists of any activity conducted below the normal high water mark of a river, stream, brook, lake, pond or “Coastal Wetland” areas that are subject to tidal action during the highest tide level for the year which an activity is proposed as identified in the tide tables published by the National Ocean Service.

<http://www.oceanservice.noaa.gov/> For the full definition of “Coastal Wetlands”, please refer to 38 MRSA 480-B(2)

I. In-Water Work shall not be allowed between the dates of October 2 and July 14.

**(In-Water work is allowed from July 15 to October 1)**

II. In-Water work window applies to the following water bodies at the following station #'s:

1. Sucker Brook at approximately Station 124+00

III. Special Conditions:

1. Special Conditions of Army Corps of Engineers (ACOE) Category II permit apply (see permit and conditions in contract documents).
2. Conditions of DEP Permit-By-Rule Section 11 apply (see permit and conditions in contract documents).

IV. Approvals:

1. Temporary Soil Erosion and Water Pollution Control Plan
2. Permitted Resource Impacts (square feet), see ACOE permit for locations:

*Stream:*

*Permanent: RUS-1,130*

*Temporary: RUS-850*

V. All activities are prohibited (including placement and removal of cofferdams unless otherwise permitted by Regulatory Agencies) below the normal high water mark if outside the prescribed in-water work window, except for the following:

1. Work within a cofferdam constructed according to MaineDOT’s Standard Specifications and in adherence with the contractors approved “Soil Erosion and Water Pollution Control Plan”.

VI. No work is allowed that completely blocks a river, stream, or brook without providing downstream flow.

NOTE: Regulatory Review and Approval is required to modify the existing In-Water work window. Requests for work window extensions must be submitted to the MaineDOT Environmental Office. Approval of requests for work window extensions is not guaranteed and may result in delays in construction schedule that are the sole responsibility of the contractor.

MaineDOT DBE Project Attainment Target (PAT)  
for this Project is .035 %

The MaineDOT seeks to meet the specified annual Disadvantaged Business Enterprise (DBE) usage goal set out by 49 CFR 26.45 through the efforts of contractors seeking to employ qualified DBE subcontractors. We seek to meet this goal by race neutral means and do not, at this time, use contract specific requirements for each project. We do however, understand the capacity of Maine's DBE community and the unique characteristics a project may have that would differ from the broad annual goal.

Taking this into consideration, the MaineDOT will review each project and develop an anticipated attainment or Project Attainment Target (PAT) based on several factors that are project specific. Those factors include:

- Scope of Work
- DBE availability according to Specification Item
- Geographic location
- DBE capacity

This PAT is developed to assist contractors to better understand the DBE participation that the MaineDOT can reasonably expect for a specific project. The PAT is NOT a mandate but an assessment of the DBE opportunities that this project could meet or exceed. MaineDOT anticipates that each contractor will make the best effort to reach or exceed the PAT for this project.

**SPECIAL PROVISION 105**  
**CONSTRUCTION AREA**

A Construction Area located in the **Town of Gray** has been established by the Maine Department of Transportation (MDOT) in accordance with provisions of 29-A § 2382 Maine Revised Statutes Annotated (MRSA).

- (a) The section of highway under construction in the town of Gray, Cumberland County on Egypt road over Sucker Brook.
- (b) The section of highway under construction in the town of Gray, Cumberland County on Westwood road adjacent to Sucker Brook.
- (c) (Egypt Road) over Sucker Brook station 122+50.00 to station 125+50.00 of the construction plus approaches.
- (d) (Westwood Road) adjacent to Egypt road intersection and extending southerly approximately 100 feet plus approaches.

Per 29-A § 2382 (7) MRSA, the MDOT may “*issue permits for stated periods of time for loads and equipment employed on public way construction projects, United States Government projects or construction of private ways, when within construction areas established by the Department of Transportation. The permit:*

*A. Must be procured from the municipal officers for a construction area within that municipality;*

*B. May require the contractor to be responsible for damage to ways used in the construction areas and may provide for:*

*(1) Withholding by the agency contracting the work of final payment under contract; or*

*(2) The furnishing of a bond by the contractor to guarantee suitable repair or payment of damages.*

*The suitability of repairs or the amount of damage is to be determined by the Department of Transportation on state-maintained ways and bridges, otherwise by the municipal officers;*

*C. May be granted by the Department of Transportation or by the state engineer in charge of the construction contract; and*

*D. For construction areas, carries no fee and does not come within the scope of this section.”*

The Municipal Officers for the **Town of Gray** agreed that an Overlimit Permit will be issued to the Contractor for the purpose of using loads and equipment on municipal ways in excess of the limits as specified in 29-A MRSA, on the municipal ways as described in the “Construction Area”.

As noted above, a bond may be required by the municipality, the exact amount of said bond to be determined prior to use of any municipal way. The MDOT will assist in determining the bond amount if requested by the municipality.

**SPECIAL PROVISION**  
**SECTION 107**  
TIME

The specified contract completion date is October 9, 2015.

**SPECIAL PROVISION**  
**SECTION 107**  
**TIME**  
(Limitation of Operations)

Egypt Road and Westwood Road may be reduced to one 11 foot (minimum) lane of flagger controlled alternating traffic. Lane closures shall be as approved by the Resident. At all other times, the Contractor shall maintain two 11 foot (minimum) lanes of traffic on both Egypt Road and Westwood Road.

SPECIAL PROVISION  
SECTION 109.5  
ADJUSTMENTS FOR DELAY  
(Delays due to Flooding)

Subsection 109.5.1, Definitions - Types of Delays, is replaced with the following:

109.5.1 Definitions - Types of Delays Delays are defined as follows and may be divided into more than one type depending upon cause:

A. Excusable Delay Except as expressly provided otherwise by this Contract, an "Excusable Delay" is a Delay to the Critical Path that is directly and solely caused by: (1) an Uncontrollable Event, or (2) a flooding event at the effected location of the Project that results in a headwater elevation of 337.25, or greater. Theoretical headwater elevations will be determined by the Department; actual headwater elevations will be determined by the Contractor and verified by the Department.

B. Compensable Delay A "Compensable Delay" is a Delay to the Critical Path that is directly and solely caused by: (1) a weather related Uncontrollable Event of such an unusually severe nature that a Federal Emergency Disaster is declared. The Contractor will only be entitled to an Equitable Adjustment if the Project falls within the geographic boundaries prescribed under the disaster declaration, (2) an Uncontrollable Event caused by a Utility Company or other third party (not Subcontractors) Working on Project-related Work within the Project Limits if, and only if, the Utility Company or such other third party offers the Department reimbursement for such Delay, (3) acts by the Department that are in violation of applicable laws or the Contract, or (4) a flooding event at the effected location of the Project that results in a headwater elevation of 339.25, or greater. Theoretical headwater elevations will be determined by the Department; actual headwater elevations will be determined by the Contractor and verified by the Department.

C. Inexcusable Delay "Inexcusable Delays" are all Delays that are not Excusable Delays or Compensable Delays.

For a related provision, see Section 101.2 - Definition of Uncontrollable Event.

SPECIAL PROVISION  
SECTION 203  
EXCAVATION AND EMBANKMENT  
(Dredge Materials)

**Description:** Dredge Material (See MaineDOT Standard Specifications § 101.2) is regulated as a Special Waste.

Work associated with the Gray Bridge Culvert Rehabilitation initiative will require the excavation of select Dredge Material. It is anticipated that less than 100-cubic yards of Dredge Material will be excavated. There is onsite Beneficial Use for all of the Dredge Materials.

It is acknowledged that the excavation of Dredge for this work may include some boulders. The Maine Department of Environmental Protection has determined that sound boulders (rock 12-inches or more in diameter), that are free of adhering sediment or other contaminants, shall be deemed to be Inert Fill material and shall not be included in the Dredge Material Quantities.

The contractor shall Beneficially Use all Dredge Material excavated at the Gray Bridge Culvert rehabilitation project in an area adjacent to and draining into the dredged water body. No more than 100-cubic yards of Dredge Material may be excavated.

CONSTRUCTION REQUIREMENTS

**Management:** The contractor shall Beneficially Use all Dredge Material excavated at the Gray Bridge Culvert Rehabilitation project in areas adjacent to and draining into the dredged water body. No more than 100-cubic yards of Dredge Material may be excavated at any of the individual Bridge sites.

**Method of Measurement:** Dredge Material will be measured by the cubic yard of material removed.

**Basis of Payment:** Payment for the Beneficial Use of Dredge Material will be incidental to the Contract Pay Items.

Payment shall be full compensation for excavation, dewatering, managing, transporting, and placement of the Dredge Materials.

SPECIAL PROVISION  
SECTION 502  
STRUCTURAL CONCRETE  
(QC/QA Acceptance Methods)

CLASS OF CONCRETE	ITEM NUMBER	DESCRIPTION	P	METHOD
A	All	All Class A concrete	-	C

**SPECIAL PROVISION**  
**SECTION 502**  
**STRUCTURAL CONCRETE CULVERT INVERT LINING**  
**(Cast-in-place Method)**

Description This work shall include preparation of existing surfaces, installation of machine bolts or studs, spot painting of corroded areas, placement of concrete, and the application of emulsified asphalt.

The Contractor has the option of using either a shotcrete lining method or a composite lining method for the culvert repair in lieu of this cast in place method. If the Contractor chooses a shotcrete or composite method, the appropriate Special Provision must be followed.

Materials Concrete for the culvert repair shall be Class "A" Concrete. The concrete mix shall include a chemical accelerator and shall be submitted to the Resident for prior approval.

Construction Requirements All work shall be in conformity with applicable requirements of Section 502.

Stud welded shear connectors or machine bolts meeting ASTM A307 shall be installed in accordance with Section 505 of the Standard Specifications with the following changes. Section 505.04 shall be ignored and the first paragraph of Section 505.05 is replaced with the following:

Studs shall be inspected for a full 360 degree weld. Any stud that is found not to have the full weld shall be marked for re-welding.

All reinforcement shall be secured in place to prevent displacement during the concrete placement.

Finish the entire length of the concrete invert with a broom surface finish.

The horizontal interfaces (joint between the top of the concrete invert lining and the corrugated metal culvert) shall be sealed with an asphalt emulsion (roofing tar) which extends onto the metal culvert at least 1 inch.

All areas of steel section loss above the concrete liner shall be sandblasted and painted with an MC Zinc Primer and an MC Urethane with Mox Tar Topcoat.

The Contractor shall sandblast all areas from 1 inch below the top of concrete lining to 6 inches below the lowest row of shear connectors. The Contractor shall remove all loose materials, rust, scale, oil and deleterious material from all remaining surfaces to receive concrete by methods acceptable to the Resident. In areas where the metal is non-existent, a preliminary concrete placement shall be made utilizing forms where required, to fill voids

and establish the former extremity lines of the metal. The final placement is to be made over this preliminary placement. No concrete shall be placed on frozen surfaces.

An approved curing cover (or compound) shall be applied within 18 hours after finishing. Finished concrete shall be cured for a minimum of 48 hours before flushed with water, unless otherwise directed by the Resident, and flush water must be collected as per Section 656.

Method of Measurement The structural concrete for the culvert invert lining, satisfactorily placed and accepted in accordance with the dimensions shown on the plans, will be measured as one lump sum unit.

Basis of Payment The accepted structural concrete for the culvert invert lining will be paid for at the contract lump sum price for Structural Concrete Culvert Invert Lining. The contract lump sum price shall be full compensation for preparing surfaces, installing machine bolts or studs, spot painting of corroded areas with an MC Zinc Primer and MC Urethane with a Mox Tar Topcoat, placing concrete, applying of asphalt emulsion and furnishing all materials, equipment, labor and incidentals necessary to complete the work. Reinforcing steel fabrication, delivery and placing shall be paid for under their respective pay items.

Concrete admixtures including silica fume will not be paid for directly, but shall be incidental to the related contract item.

The containment and disposal of pollutants during surface preparation will not be paid for directly, but shall be incidental to the related contract item and included in the Contractor's SEWPCP.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
502.325      Structural Concrete Culvert Invert Lining	Lump Sum

**SPECIAL PROVISION**  
**SECTION 502**  
**STRUCTURAL CONCRETE CULVERT INVERT LINING**  
**(Shotcrete Method)**

Description This work shall include preparation of existing surfaces, installation of machine bolts or studs, spot painting of corroded areas, application by pneumatic pressure of a shotcrete mix, furnishing test panels, extracting cores, and application of asphalt emulsion as indicated on the Plans, and in accordance with this specification.

The Contractor has the option of using either a cast-in-place lining method or a composite lining method for the culvert repair in lieu of this shotcrete method. If the Contractor chooses a cast-in-place or composite method, the appropriate Special Provision must be followed.

Shotcrete shall conform to all requirements of ACI 506.2 “Specifications for Materials, Proportioning, and Application of Shotcrete”, published by the American Concrete Institute, Detroit, Michigan, except as modified by the requirements of this project specification. Shotcrete shall consist of an application of one or more layers of mortar or concrete conveyed through a hose and pneumatically projected at a high velocity against a prepared surface.

Shotcrete shall be produced by either a dry-mix or a wet-mix process. The wet-mix process consists of thoroughly mixing all of the ingredients except accelerating admixtures, but including the mixing water, introducing the mixture into the delivery equipment and delivering it, by positive displacement, to the nozzle. The wet-mix shotcrete shall then be air jetted from the nozzle at high velocity onto the surface. The dry-mix process is shotcrete without mixing water which is conveyed through the hose pneumatically and the mixing water is introduced at the nozzle. For additional descriptive information, the Contractor’s attention is directed to the American Concrete Institute Standard “Guide to Shotcrete (ACI 506R-90)”.

Qualifications The work shall be performed by fully qualified personnel experienced in this type of work.

1. The foreman shall have at least five years of shotcrete experience and at least two years as a nozzleman.
2. The nozzleman shall have at least two years recent experience of satisfactory work as a nozzleman.
3. Evidence of the foreman and nozzleman’s experience of satisfactory work in similar capacities elsewhere shall be provided.

Materials All materials for shotcrete shall conform to the following requirements.

Cement	AASHTO M-85, ASTM C150, Type I, II, III or IV
Fine Aggregate	AASHTO M-6, ASTM C33 clean, natural

Coarse Aggregate	AASHTO M-80, Class B for quality
Water	Potable, clean, and free from substances deleterious to concrete and steel or elements that would stain
Chemical Admixtures	ASTM C1141 and the following:
Water-reducer	AASHTO M-194, Type A, D, F, G or
Superplasticizer	ASTM C494 Type A, D, F, G
Air-Entraining Agent	AASHTO M-194/ASTM C260
Plasticizers	AASHTO M-194 Type A, D, F, G or ASTM C494
Mineral Admixtures	
Fly Ash	AASHTO M-295, ASTM C618 Type F or C
Silica Fume	ASTM C1240, 90% minimum silicon dioxide solids content, not to exceed 12% by weight of cement. In addition, silica fume shall conform to the requirements of Section 502.
Polypropylene Fibers	ACI Standard, Polypropylene Fibers, 1 inch in length, 1½ lb/yd <sup>3</sup>
Steel Fibers	ASTM A820 Type I, II, or III, Deformed, Steel Fibers, 1 inch to 1 ⅜ inches in length, minimum aspect ratio of 60
Curing Compounds	AASHTO M-148 Type 1 D of Type 2
Pre-packaged Shotcrete	ASTM C928

The use of other admixtures shall not be used unless approved by the Resident. Admixtures used to entrain air, to reduce water-cement ratio, to retard or accelerate setting time, or to accelerate the development of strength, shall be thoroughly mixed into the shotcrete at the rate specified by the manufacturer unless specified otherwise. Accelerating additives shall be compatible with the cement used, be non-corrosive to steel and shall not promote other detrimental effects such as cracking or excessive shrinkage. The maximum allowable chloride ion content of all ingredients shall not exceed 0.10% when tested to AASHTO T260.

Premixed and pre-packaged concrete products specifically manufactured as a shotcrete product may be provided for on-site mixed shotcrete if approved by the Resident. The packages shall contain materials conforming to the materials portion of this specification.

Stud welded shear connectors or machine bolts meeting ASTM A307 shall be installed in accordance with Section 505 of the Standard Specifications with the following changes: Section 505.04 shall be ignored and the first paragraph of Section 505.05 is replaced with the following:

Studs shall be inspected for a full 360 degree weld. Any stud that is found not to have the full weld shall be marked for re-welding.

Materials Storage and Handling Materials shall be delivered, stored, and handled to prevent contamination, segregation, corrosion, or damage. Liquid admixtures shall be stored to prevent evaporation and freezing.

Cement shall be adequately stored to prevent moisture degradation and partial hydration. Cement that has become caked or lumpy shall not be used.

Aggregates shall be stored so that segregation and the inclusion of foreign materials are prevented. The bottom 6 inches of aggregate piles in contact with the ground shall not be used.

Submittals The following submittals shall be provided by the Contractor for the Resident's review and approval. The Contractor will not be allowed to begin culvert repairs until all submittal requirements are satisfied and found acceptable to the Resident. Changes or deviations from the approved submittals must be resubmitted for approval. Adjustments in contract time will not be allowed for incomplete submittals.

At least 21 calendar days prior to initiating the work, the Contractor shall submit to the Resident the following:

1. Written documentation of the foreman's and nozzleman's qualifications and the proposed method of shotcrete placement.
2. Shotcrete mix design including:
  - a) Brand and type of Portland Cement used
  - b) Source, gradation, and quality of aggregates as specified herein
  - c) Proportions of mix by weight
  - d) Proposed admixtures, manufacturer, dosage, technical literature (when admixture allowed)
  - e) Compressive strength test results from the manufacturer's records, no older than six months, verifying the 28 day compressive strength

Shotcrete Mix Design Aggregate for shotcrete shall meet the strength and durability requirement of AASHTO M-80 and M-43 and shall meet the following gradation requirements.

<u>Sieve Size</u>	<u>% Passing by Weight</u>
3/8 in	100
No. 4	95 – 100
No. 8	80 – 100
No. 16	50 – 85
No. 30	25 – 60
No. 50	10 – 30
No. 100	2 – 10
No. 200	0-5
FM	2.3 to 3.1

- A. Proportioning Shotcrete shall be proportioned and delivered with a minimum cement content of 650 lb/yd<sup>3</sup>.

- B. Strength Requirements Shotcrete shall be proportioned to produce a mix capable of attaining 5000 psi compressive strength in 28 days. The average compressive strength of each set of three cores extracted from the test panels shall equal or exceed the specified compressive strength, with no individual core less than 75 percent of the specified compressive strength, in accordance with ACI 506.2R-95.

Mixing and Batching Mixing equipment shall be capable of thoroughly mixing the materials in sufficient quantity to maintain the placing continuity. Shotcrete shall be batched, delivered and placed within 90 minutes of mixing.

Field Quality Control Production test panels shall be required. Qualified personnel shall perform shotcreting and coring of the test panels with the Department's personnel present. The Contractor shall provide equipment, materials, and personnel as necessary to obtain shotcrete cores for testing including construction of test panel boxes, field curing requirements and coring. The Department will perform compressive strength testing. Shotcrete final acceptance will be based on obtaining the specified 28 day compressive strength.

Shotcreting may commence upon initial approval of the design mix, foreman and nozzleman.

Production Test Panels At least one production test panel shall be furnished during each day of production of shotcrete. The production test panels shall be constructed simultaneously with the shotcrete facing installation at times designated by the Resident. Production test panels shall be made with the minimum dimensions of 18 x 18 inches and at least 6 inches thick.

Test Panel Curing, Test Specimen Extraction and Testing Immediately after shooting, the test panels shall be field moist cured by covering and tightly wrapping with a sheet of material meeting the requirements of ASTM C 171 until delivered to the testing lab or test specimens are extracted. The test panels shall not be immersed in water. The test panels for the first 24 hours after shooting shall not be disturbed.

At least three, 3 inch diameter core samples shall be cut from each unreinforced production test panel for compressive strength testing. The Contractor shall extract the test specimens from test panels in the field within 48 hours of shooting the panel. The panels shall be kept in their forms when transported.

Cores shall not be taken from the outer 6 inches of test panels measured in from the outside edges of the panel's form.

The cores and container shall be clearly marked to identify the core locations. For production testing, the production section of the unformed superstructure repair represented by the production test panel cores shall be marked on the cores and the container. Immediately wrap cores in wet burlap or material in accordance with the requirements of ASTM C 171

and seal in a plastic bag. The Department shall take possession of the cores immediately after extraction. The remainder of the panels shall become the property of the Contractor.

Upon delivery to the testing lab, samples will be placed in the moist room until the time of test. When the test length of a core is less than twice the diameter, the correction factors given in AASHTO T 24/ASTM C 42 will be applied to obtain the compressive strength of individual cores. Three cores will be tested at 28 days for compressive strength per AASHTO T 24/ASTM C 42.

#### Construction Requirements

The construction sequence shall be in accordance with the approved submittal, unless otherwise approved by the Resident.

##### A. Equipment

1. The shotcreting equipment selected must be capable of metering the mix through a hose to the nozzle for projecting at high velocity onto the surface to be shotcreted.
2. The gun shall be either the double chamber or the rotary type capable of continuous delivery of material. Gaskets in the equipment must be kept in good condition to avoid reduced pressure and consequent reduced velocity of material through the hose.
3. The air compressor may be any standard type capable of sufficient pressures and volume of air to convey the material through the longest hose delivery. The air compressor capacity must have allowance for air used in removing rebound and other incidental work. The air hose shall be equipped with filters to prevent any oil or grease from contaminating the shotcrete.
4. Water pressure shall be maintained at a minimum 15 psi higher than the highest air pressure required for placing the material. Both air and water pressure shall be uniformly steady.

B. Surface Preparation The Contractor shall remove all loose materials, rust, scale, oil, and deleterious material from all surfaces to receive shotcrete by methods acceptable to the Resident. The removal shall be accomplished in such a manner as not to loosen, crack, or shatter the surfaces to receive the shotcrete. Any surface material, which in the opinion of the Resident is so loosened or damaged, shall be removed to a sufficient depth to provide a base that is suitable to receive the shotcrete. The Contractor shall clean all surfaces to receive shotcrete by methods acceptable to the Resident. Material that loosens as the shotcrete is applied shall be removed. No shotcrete shall be placed on frozen surfaces.

All areas of section loss above the concrete liner shall be sandblasted and painted with an MC Zinc Primer and an MC Urethane with Mox Tar Topcoat.

- C. Shotcrete Alignment Control The Contractor shall ensure that the thickness of shotcrete satisfies the minimum thickness shown on the design drawings using alignment wires, thickness control pins, or other means acceptable to the Resident.
- D. Delivery and Application In areas of the culvert where the metal is non-existent and voids are present, a preliminary placement of shotcrete shall be made to fill all voids and establish the former extremity lines of the structure face. The final placement is to be made over this preliminary placement to full depth.

The shotcrete shall be applied from the lower part of the work area upwards to prevent accumulation of rebound on uncovered surfaces. Rebound shall not be worked back into the placement nor shall the rebound be salvaged. Rebound which does not fall clear of the working area shall be removed. The nozzle shall be held at an angle approximately perpendicular to the working face and at a distance so that rebound will be minimal and compaction will be maximized. Thickness, methods of support, air pressure, and rate of placement of shotcrete shall be controlled to prevent sagging or sloughing of freshly applied shotcrete.

The shotcreting procedure may be corrected by adjusting the nozzle distance and orientation perpendicular to the surface, adjusting the water content of the shotcrete mix or other means acceptable to the Resident. Retempering of the mix will not be permitted. The shotcreted surface shall be broomed and roughened to insure proper bond of subsequent layers.

All horizontal edges of exposed concrete (joint between the top of the concrete invert lining and the corrugated metal culvert) shall be sealed with an asphalt emulsion (roofing tar) which extends onto the culvert at least 1 inch.

- E. Defective Shotcrete Surface defects shall be repaired as soon as possible after initial placement of the shotcrete. All shotcrete that lacks uniformity, exhibits segregation, sagging, honeycombing, or lamination, or contains any voids or sand pockets shall be removed and replaced with fresh shotcrete by the Contractor in accordance with this specification and to the satisfaction of the Resident.

A clearly defined pattern of continuous horizontal or vertical ridges or depressions at the reinforcing elements after they are covered will be considered an indication of insufficient cover of reinforcement or poor application and probable void. In this case, the application of shotcrete shall be immediately suspended and the work carefully inspected by the Resident. The Contractor shall implement and complete corrective measures prior to resuming the shotcrete operations.

- F. Reinforcement All reinforcement shall be secured in place to prevent displacement during the shotcrete application.

- G. Finish Shotcrete finish shall be a natural gun finish. Scraping or cutting to remove high spots shall not be done until the shotcrete has become stiff enough to withstand the pull of the cutting device.
- H. Weather Limitations Shotcrete shall not be placed without cold weather protection when the ambient temperature is below 40° F and falling and/or when the shotcrete is likely to be subjected to freezing temperatures before a minimum strength of 700 psi. Cold weather protection shall be maintained until the strength of the in-place shotcrete is greater than 750 psi. Cold weather protection shall include heating under tents, blankets, or other means acceptable to the Resident. The temperature of the shotcrete, when deposited, shall be above 50° F but less than 90° F.

Shotcrete application shall also be suspended during high winds and heavy rains when, in the opinion of the Resident, the quality of the application is not acceptable. Newly placed shotcrete exposed to rain that washes out cement or otherwise makes the shotcrete unacceptable to the Resident shall be removed and replaced. The Contractor shall provide adequately secured polyethylene sheeting or equivalent when adverse exposure to weather is anticipated.

- I. Curing An approved curing cover (or compound) shall be applied within 18 hours after finishing. After surface water has evaporated from the finished surface, shotcrete exposed to sunlight shall be immediately treated for curing. Finished shotcrete shall be cured for a minimum of 48 hours before flushed with water, unless otherwise directed by the Resident, and flush water must be collected per Section 656.

Safety Requirements Appropriate eye and dust protection equipment shall be used during shotcrete application. Cement and other admixtures are caustic and may cause eye, skin, and respiratory irritation unless safety measures are taken. Adequate ventilation shall be required. Nozzlemen and helpers shall at a minimum be equipped with gloves, respirators, eye protection and adequate protective clothing during the application of shotcrete. The Contractor is responsible for meeting all Federal, State, and Local Safety Code Requirements.

Method of Measurement The shotcrete for the culvert invert lining, satisfactorily applied and accepted in accordance with the dimensions shown on the Plans, will be measured as one lump sum unit.

Basis of Payment The accepted shotcrete for the culvert invert lining will be paid for at the contract lump sum price for Structural Concrete Culvert Invert Lining. The contract lump sum price shall be full compensation for preparing surfaces, installing machine bolts or studs, spot painting of corroded areas with an MC Zinc primer and MC Urethane with a Mox Tar Topcoat, applying shotcrete, applying of asphalt emulsion, constructing test panels, extracting cores, and furnishing all materials, equipment, labor, and incidentals necessary to complete the work. Reinforcing steel fabrication, delivery and placing shall be paid for under their respective pay items.

Shotcrete admixtures including silica fume will not be paid for directly, but shall be incidental to the related contract item.

The containment and disposal of pollutants during surface preparation and during shotcrete application will not be paid for directly, but shall be incidental to the related contract item and included in the Contractor's SEWPCP.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
502.325      Structural Concrete Culvert Invert Lining	Lump Sum

**SPECIAL PROVISION**  
**SECTION 502**  
**STRUCTURAL CULVERT INVERT LINING**  
(Composites Method)

This specification covers the rehabilitation (invert lining) of and fish weirs for culvert structures through the use of glass fiber reinforced polymer (FRP) liner segments.

The Contractor has the option of using either a shotcrete lining method or a cast-in-place lining method for the culvert repair in lieu of this composites method. If the Contractor chooses a shotcrete or cast-in-place method, the appropriate Special Provision must be followed.

**DEFINITIONS**

For the purpose of this specification, the following definitions apply:

<b>E-glass</b>	Alumo-borosilicate glass with an alkali content of maximum one weight percent, when expressed as sodium oxide (Na <sub>2</sub> O)
<b>Effective length of unit</b>	The distance between planes normal to the unit axis and passing through the end points of the lining unit
<b>Liner segment</b>	A discrete length of culvert lining which may be either a single pipe lining unit or a combined pair of segmental lining units
<b>Vinyl ester resin</b>	A resin produced by the esterification of an epoxy resin with an unsaturated monocarboxylic acid – the reaction product is then dissolved in a reactive solvent, such as styrene, to a 35 - 50 percent content by weight

**MATERIALS**

**Glass Mat** A layer of E-glass fiber constructed as either chopped strand mat (CSM) or continuous filament mat (CFM) that provides a resin rich FRP layer near the corrosion/erosion exposed surface. All glass fiber reinforcement shall have a surface treatment (binder) compatible with the lining manufacturing process and the matrix resins. A stitched material laminate is also acceptable.

**Glass fiber Reinforcement** All glass fiber reinforcement shall be E-glass or better and have a surface treatment compatible with the lining manufacturing process and the matrix resins. Unidirectional (UD) reinforcement areal weight shall not exceed 55 oz/yd<sup>2</sup> in any single ply. A layer of CSM or CFM shall separate layers of UD fabric where applicable to maintain laminar shear strength. The E-glass material shall not contain more than 0.2% moisture by weight as supplied; it shall be uncontaminated and protected to the point of use.

**Grout** Grout having a 28-day compressive strength of at least 3,000 psi at the desired water content for optimum placement shall be used. The permissible mixing and placement temperature range per the manufacturer's recommendations shall not be lower than 40°F or

higher than 90°F. The non-shrink grout shall have a Hardened Height Change per ASTM C1090 of 0.0 to 0.3%.

Resin Vinyl ester or vinyl ester blend corrosion resistant resin shall be used with a catalyzation process applied in accordance with the resin manufacturer's instructions. The resin shall have a viscosity suitable for the manufacturing method. The gel time shall be adequate for the given environmental conditions present during the manufacturing process. The gel time must allow for the elimination of wedging within the part. Resin promotion should allow for adequate cure during manufacture. Resin must achieve 80+% of manufacturer's Barcol value without post curing.

Cured resins, as cast singly without reinforcement, shall have an elongation at break greater than 1.4% when tested in accordance with ASTM D790. In addition, the Barcol Hardness as determined by ASTM D2503 shall be at least 30. Resins "flexibilised" by the addition of plasticizers shall not be used.

Coating Dyes, pigments, or additives shall be introduced as necessary in the resin to provide resistance to ultra-violet light degradation and a uniform, muted appearance.

Fasteners Carbon steel fasteners and washers with a minimum 0.2 mil zinc coating or stainless steel fasteners and washers shall be used. Fasteners shall have a minimum shank diameter of 0.138 inches and washers shall have a diameter of between ¾ to 1 inch.

## CONSTRUCTION REQUIREMENTS

General All culvert linings shall be manufactured with the following elements:

- A corrosion and abrasion resistant barrier layer
- A reinforcement layer comprised of double bias and unidirectional fabric
- A rough backing to provide a bond between the lining and annular grout
- A nailing flange that is offset from the general liner radius

The manufacturing facility shall have a Certified Composites Technician (CCT) certified in Open Molding or Vacuum Infusion Process (VIP) on staff to supervise or perform the manufacturing of all composite components. The design of the composite liner shall be completed by a composites engineer and be verified by a Professional Engineer.

Barrier Layer (BL) The BL shall be manufactured from a vinyl ester resin system reinforced with E-glass CSM or CFM between 30-50% content by weight. The BL shall be a minimum of 0.10 inches thick.

Glass reinforcement The structural layer shall be made from a vinyl ester resin system impregnated layers of E-glass fiber. At least one ply shall be double bias ( $\pm 45$ ) stitched or woven fabric having an areal weight of at least 24 oz/yd<sup>2</sup>. At least one ply shall be made up of unidirectional (UD) E-glass with the fiber direction oriented in the circumferential (hoop)

direction of the liner. The areal weight of the UD plies shall be selected by analysis and/or tested to satisfy strength and stiffness requirements. The structural layer shall have a fiber content of between 50%-70% by weight.

Liner fabrication Each fabric layer comprising the FRP liner shall be placed in a mold having the same nominal inner radius as the culvert minus 1 inch to avoid contact with the culvert bolts. A nailing flange shall transition outward to the nominal inner radius of the culvert extending a minimum of 2 times the number of fastener rows plus 1 inch. A gradual transition shall exist between the two liner radii extending between 3 to 6 inches depending on liner radius. The extent of the liner in the circumferential dimension shall be as shown on the Plans.

Rough backing A clean, dry aggregate shall be bonded to the back of the FRP liner to promote a mechanical bond between the liner and grout filler. It shall consist of an angular, inert material, such as crushed granite, nominally 1/8 to 1/4 inch in size uniformly distributed over the external surface. A CSM layer with an areal weight at least 1.5 oz/ft<sup>2</sup> shall be hand laid on to the back of the liner using a vinyl ester resin system and rollers to provide a resin-rich embedment layer for the aggregate. Once the resin has cured, a stiff broom shall be passed over the surface to remove any loose or poorly bonded aggregate. The aggregate must uniformly cover 50% or more of the total surface area of the back of the panel.

Weir Fabrication Weirs shall be fabricated from E-glass fabric and a vinyl ester resin system using the materials described above. The size, shape, and elevation of the weir features shall be as shown on the Plans. Wall thickness shall be at least 1/2 inch. Wall thickness may need to increase based on panel radius. Allowable stresses as per RTP1-2011.

Edges and ends The edges and ends of all trimmed lining segments and sections shall be sealed with a vinyl ester resin system to prevent the exposure of glass fibers. The resin shall be pigmented to match the color and performance of the laminating resin.

## INSTALLATION

### General

Flow Diversion Flow shall be rerouted or dammed prior to culvert cleaning and until after the liner, grout, and weirs have been installed. The presence of some groundwater is acceptable as long as flow is prevented along the length of the culvert. Any water propagating through the corroded invert of the culvert must be contained prior to panel installation. No grout dilution is allowable.

Cleaning and Preparation Debris shall be removed from the culvert and disposed of in accordance with state and local environmental requirements. The invert shall be pressure washed to remove soil and loose, corroded material from the culvert. All debris should be removed by mechanical means. Any holes in the steel culvert shall be sealed with hydraulic cement. Bolts that protrude more than 1.25 inches above the crest of corrugations shall be

trimmed prior to placing the FRP liner. Bolts should be cut off flush with the top of the nut. The nut must not be compromised.

All areas of culvert section loss above the composite liner shall be sandblasted and painted with an MC Zinc Primer and an MC Urethane with a Mox Tar Topcoat.

## LINERS

Attachment The exact position of the first liner segment placed at one end of the culvert shall be determined based on the segment length and the overall length of the culvert such that the first and last liner segments shall be at least 5 feet long.

Liner segments shall be secured to sound steel using powder-actuated galvanized steel fasteners. The frequency and spacing of the fasteners shall be determined by engineering analysis of the seam strength requirements. Fasteners shall be driven with enough energy to ensure the head and washer are seated tight against the FRP and that contact is maintained between the FRP and steel while avoiding excess force that may cause cupping of the washer or damage to the FRP. Jacking poles may be used to hold the FRP against the steel in places where sudden geometry changes prevent contact under dead weight. The allowance of any gap between the FRP and steel is at the discretion of the engineer and shall be minimized.

Trimming Liner segments placed at the culvert ends shall be trimmed to match the taper of the existing steel culvert. The ends shall be sealed with a mixture of resin and fiber to contain the annular grout. The edges and ends of all trimmed lining segments and sections shall be sealed with a vinyl ester resin system to prevent the exposure of glass fibers. The resin shall be pigmented to match the color and performance of the laminating resin.

Joining All joining of panels shall be designed as per RTP1-2011 standards and specifications. Reference sections 3A-800 Secondary Bond Shear Stress and subpart 3B Design by Stress Analysis sections 3B-100 through 3B-700 to determine proper joint design. Refer to RTP1-2011 Mandatory Appendix M-5 Qualification of Laminators and Secondary Bonders for the required standards and practices. See section M-5 for required procedures to properly manufacture and test shear bond strength specimens.

## FISH WEIRS

Size and Location The number, size, geometry, and location/elevation of all fish weirs internal and external shall be as shown on the plans.

Fitting Each fish weir shall be fabricated oversized and trimmed to fit in the required location. All trimmed edges shall be treated in accordance with the Construction Requirements above. The final weir channel elevation of the trimmed part shall be verified by the Resident prior to attachment.

Attachment The internal weirs shall be attached to the liner through the use of a methacrylate adhesive capable of bridging a gap of at least 0.250". The weir must be 100% edge sealed with the adhesive. The adhesive must be allowed to completely cure prior to installing the final weld kit. The final weld kit shall be installed on the upstream side of the weir and across the top seams on both sides. The weld kit shall be in accordance with ASME RTP-1 specifications. Glass used shall be E-glass and consist of a combination of 1.5 oz CSM and 24 oz Woven Roving. All weld kits must be final coated and leave no exposed areas.

External Fish Weirs External fish weirs should be pre-assembled on a jig and placed as a complete unit in the prepared location. The Site should be excavated to a depth as shown on the Plans to allow for the installation of a Geotextile stabilization fabric followed by a minimum of 12" of ¾" stone. The entire stone bed must be leveled to within ¼" of an inch prior to placement. The top of the stone must allow for the critical surfaces of the weirs and spouts to be at the proper final elevation.

Forming of the weirs must allow for the complete encapsulation of the weirs and spouts. Installation and placement of rebar shall be in accordance with all plans and specifications. External edges must be softened to assure that there are no 90° drop offs.

#### QUALITY ASSURANCE

As part of the quality assurance procedures, the manufacturer shall keep records of the following against each batch of output product:

- raw material batch details, including source, acceptance test records, purchase dates and shelf-life at time of use
- resin mixing records
- initiator level
- mold pressure at commencement of infusion
- mold temperature
- resin temperature
- ambient temperature of the shop
- infusion start and stop time
- visual inspection results of the cured part
- final Barcol readings
- technician names and date of manufacture

Appearance and surface condition The surface of the lining material shall be free from tackiness and defects such as protruding fibers, air voids, crazes, cracks, blisters or foreign matter that might impair the performance in service. The internal surface of the lining shall be textured. The surface of the panels shall be finished with a pigmented UV resistant final coat. Pigment must be compatible with the resin system.

Joints The liner and joint shall be designed so that the resulting lap joint is flush with the interior surface of the liner segments. The flexible or rigid joints are required to provide a

permanent seal between liner segments to protect the integrity of the grout and prevent water ingress. Rigid setting or flexible compounds used to caulk or seal the gap between liner segments shall be resistant to the environment for which they are intended, and shall be suitable for installation within a confined space taking safety aspects into consideration. Upon complete cure of the sealing compound, the joint should be finished with a weld kit designed in accordance with ASME RTP-1 specifications and final coated.

Performance requirements A composites engineer shall determine the appropriate reinforcing ply thickness to satisfy all strength, stiffness, and seam strength requirements assuming the corroded invert does not provide any residual strength to the system. Mechanical testing performed by a certified (ISO 9000 or equivalent) testing laboratory shall be conducted to verify predicted material properties for final design and provide quality control data. All calculations supporting the design shall be submitted for approval by the Department prior to beginning construction.

Type tests Coupon tests to verify predicted mechanical properties used during preliminary design shall be performed before completing the detail design. These tests shall include flexural strength and modulus per ASTM D790 and compressive strength and modulus per ASTM D6641. Component level tests shall be performed to verify the predicted buckling strength of the FRP/grout system and the shear capacity of the connection. The acceptable design value for strength is the mean minus two standard deviations. The acceptable design value for modulus is the mean.

#### QUALITY CONTROL TESTS

General The following test requirements are necessary in order to demonstrate a continuing satisfactory level of production quality in day-to-day production. The manufacturer shall establish a quality system to meet the requirements of ISO 9001 or ASME RTP-1. Witness panels fabricated at the same time using the same materials as the liner or cut-outs from the liner segment shall be used to conduct verification tests for every tenth panel fabricated.

Dimensions Wall thickness and resin rich layer thickness shall be determined at a minimum of three locations in each test sample using a method of measurement accurate to the nearest 0.005 inches by measuring cut surfaces through the lining wall. The cut surfaces shall be smoothed sufficiently for the different layers to be delineated. Generally the locations of cores shall include:

- A point towards the center of the test sample and points near each end of the test sample, but not at a joint.

Resin cure The surfaces shall not be tacky to the touch. Each test specimen shall be tested in accordance with the method described in ASTM D2503 at a minimum of three points and shall have a hardness not less than the minimum declared in the material subsection for resin. Post curing is permissible if necessary to achieve the desired results.

Analysis of construction The disposition of the laminates or layers and the constituents within them shall correspond to those of the type tested liners. The percentage by weight of the constituents and the weight of glass per unit area shall not deviate from the declared control values by more than  $\pm 10\%$  (of each numerical value).

Appearance The internal and external surfaces of each lining unit shall be examined visually and be free from defects. Where practicable, this shall occur prior to application of any bed mat backing or pigmented, UV resistant final surface coating.

Mechanical Properties The coupon tests described above under Type tests shall be conducted on test samples. The Quality Control Test results are acceptable if the calculated design values are not less than 95% of the Type Test values.

### CONTROL OF TEST CONDITIONS

Test conditions Unless otherwise required by this specification, the test measurements shall be conducted at a temperature of  $72 \pm 10^\circ\text{F}$  and relative humidity of  $50 \pm 10\%$ .

Specimen conditioning For Type Testing, specimens shall be kept in air  $72 \pm 10^\circ\text{F}$  and  $50 \pm 10\%$  relative humidity for not less than 72 hours prior to testing.

For Quality Control Testing, specimens shall be kept in air at  $72 \pm 10^\circ\text{F}$  and  $50 \pm 10\%$  relative humidity for not less than 24 hours after they are considered to be cured.

**NOTE:** The preferred temperature for conditioning and testing composite materials is  $72^\circ\text{F}$  and 50% relative humidity.

Test specimen preparation Test specimens shall be prepared in accordance with the applicable ASTM standards.

### WORKMANSHIP, INSPECTION AND CERTIFICATION

Manufacturing Process FRP liners shall be manufactured using vacuum assisted resin transfer molding (VARTM) or open molding to ensure the production of high quality components and repeatability of physical and mechanical properties.

All raw materials shall be tested at a frequency sufficient to ensure consistency and compliance with this specification. The manufacturer shall adequately supervise all stages of production and keep records of the raw material batches used and products made each work shift or day. Manufacture shall be under environmental conditions compatible with producing satisfactory liners and raw materials shall be stored and used in compliance with the recommendations of their manufacturers.

Reinforcement materials shall be stored in dry conditions. The liner manufacturer shall be familiar with the changes in viscosity, gel times, etc., which may occur during storage of the

resin, and make appropriate allowances in the lining manufacturing process. Resin stored in original unopened containers shall not be used after the resin manufacturer's stated expiration date.

Inspection In addition to the manufacturer's own inspection and supervision, the Department shall have access at all reasonable times to inspect parts and all relevant test records.

Certification The manufacturer shall, on request, furnish the Department with copies of a signed certificate for each size of liner stating that the construction and testing of liner segments supplied comply with the requirements of this specification and given details of minimum performance parameters agreed with the Department. The quality control test results or a suitable summary shall be provided with the certificate.

#### PROTECTION OF LINING UNITS

Liner segments shall be handled, stored and transported in such a way as to prevent damage before receipt by the purchaser.

#### METHOD OF MEASUREMENT

Composite invert lining and/or fish weirs satisfactorily placed and accepted in accordance with the dimensions shown on the plans, will be measured as one lump sum unit.

#### BASIS OF PAYMENT

The accepted structural composite invert lining and/or composite fish weirs will be paid for at the contract lump sum price under the related Structural Concrete Culvert Invert Lining and Structural Concrete Fish Weir items. The contract lump sum price shall be full compensation for preparing surfaces, spot painting of corroded areas with an MC Zinc Primer and an MC Urethane with a Mox Tar Topcoat, placing composite segments and furnishing all other materials, equipment, labor and incidentals necessary to complete the work.

The containment and disposal of pollutants during surface preparation will not be paid for directly, but shall be incidental to the related contract item and included in the Contractor's SEWPCP.

Payment will be made under:

<u>Pay Items</u>	<u>Pay Unit</u>
502.325      Structural Concrete Culvert Invert Lining	Lump Sum

**SPECIAL PROVISION**  
**SECTION 502**  
**STRUCTURAL CONCRETE**  
**(Fish Weirs)**

Description This work shall consist of forming and placing reinforced concrete fish weirs inside the culvert and any incidental construction in accordance with these specifications, as called for on the plans, or as designated by the Resident. All work shall be in conformity with the Standard Specifications and other Special Provisions.

Materials Concrete shall be Class A.

Composites may be used for the internal fish weirs and may be placed at the same time as the invert lining, upon the Resident's approval. If the fish weirs are made from composite material, the requirements of Special Provision Section 502 - Structural Culvert Invert Lining - Composites Method, shall be followed.

**CONSTRUCTION REQUIREMENTS**

General The fish weirs shall be formed, cast, and stripped in the conventional manner; the use of shotcrete will not be allowed for construction of the fish weirs.

Method of Measurement Reinforced concrete fish weirs satisfactorily placed and accepted will be measured for payment as one lump sum unit acceptably covered in accordance with the plans and this special provision.

Basis of Payment Reinforced concrete fish weirs will be paid for at the contract lump sum price. Payment shall be full compensation for forming, placing and finishing the concrete, and all equipment, labor, and other incidentals necessary to complete the work.

Payment will be made under:

Pay Item	Pay Unit
502.326 Structural Concrete Fish Weirs	Lump Sum



REPLY TO  
ATTENTION OF

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

MAINE GENERAL PERMIT (GP)  
AUTHORIZATION LETTER AND SCREENING SUMMARY

OFFICE OF ENVIRONMENTAL SERVICES  
MAINE DEPT. OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE 04333

CORPS PERMIT # NAE-2014-02473  
CORPS PGP ID# 14-425  
STATE ID# PBR

DESCRIPTION OF WORK:

Place temporary and permanent fill below the ordinary high water line of Sucker Brook at Gray, Maine in order to rehabilitate an existing bridge culvert beneath Egypt Road. This work will include a 5" thick reinforced concrete invert lining with internal fish weirs in the bottom of the existing deteriorated structure as well as external weirs downstream. The project will result in approximately 1,130 s.f. of permanent and 850 s.f. of temporary stream bed impact. This work is shown on the attached plans entitled "EGYPT ROAD BRIDGE, SUCKER BROOK, GRAY, CUMBERLAND COUNTY" in 11 sheets undated. DOT WIN: 20471.00

LAT/LONG COORDINATES : 43.9266604° N -70.3987066° W USGS QUAD: RAYMOND, ME

I. CORPS DETERMINATION:

Based on our review of the information you provided, we have determined that your project will have only minimal individual and cumulative impacts on waters and wetlands of the United States. Your work is therefore authorized by the U.S. Army Corps of Engineers under the enclosed Federal Permit, the Maine General Permit (GP). Accordingly, we do not plan to take any further action on this project.

You must perform the activity authorized herein in compliance with all the terms and conditions of the GP [including any attached Additional Conditions and any conditions placed on the State 401 Water Quality Certification including any required mitigation]. Please review the enclosed GP carefully, including the GP conditions beginning on page 5, to familiarize yourself with its contents. You are responsible for complying with all of the GP requirements; therefore you should be certain that whoever does the work fully understands all of the conditions. You may wish to discuss the conditions of this authorization with your contractor to ensure the contractor can accomplish the work in a manner that conforms to all requirements.

If you change the plans or construction methods for work within our jurisdiction, please contact us immediately to discuss modification of this authorization. This office must approve any changes before you undertake them.

Condition 41 of the GP (page 18) provides one year for completion of work that has commenced or is under contract to commence prior to the expiration of the GP on October 12, 2015. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 12, 2016.

This authorization presumes the work shown on your plans noted above is in waters of the U.S. Should you desire to appeal our jurisdiction, please submit a request for an approved jurisdictional determination in writing to the undersigned.

No work may be started unless and until all other required local, State and Federal licenses and permits have been obtained. This includes but is not limited to a Flood Hazard Development Permit Issued by the town if necessary.

II. STATE ACTIONS: PENDING [ X ], ISSUED [ ], DENIED [ ] DATE \_\_\_\_\_

APPLICATION TYPE: PBR: X, TIER 1: \_\_\_\_\_, TIER 2: \_\_\_\_\_, TIER 3: \_\_\_\_\_, LURC: \_\_\_\_\_, DMR LEASE: \_\_\_\_\_, NA: \_\_\_\_\_

III. FEDERAL ACTIONS:

JOINT PROCESSING MEETING: 12/16/14 LEVEL OF REVIEW: CATEGORY 1: \_\_\_\_\_ CATEGORY 2: X

AUTHORITY (Based on a review of plans and/or State/Federal applications): SEC 10 \_\_\_\_\_, 404 X, 10/404 \_\_\_\_\_, 103 \_\_\_\_\_

EXCLUSIONS: The exclusionary criteria identified in the general permit do not apply to this project.

FEDERAL RESOURCE AGENCY OBJECTIONS: EPA\_NO \_\_\_\_\_, USF&WS\_NO \_\_\_\_\_, NMFS\_NO \_\_\_\_\_

If you have any questions on this matter, please contact my staff at 207-623-8367 at our Manchester, Maine Project Office. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at <http://per2.nwp.usace.army.mil/survey.html>

Jay L. Clement  
JAY L. CLEMENT  
SENIOR PROJECT MANAGER  
MAINE PROJECT OFFICE

Jay L. Clement 1/12/15  
FRANK J. DEL GIUDICE  
CHIEF, PERMITS & ENFORCEMENT BRANCH  
REGULATORY DIVISION

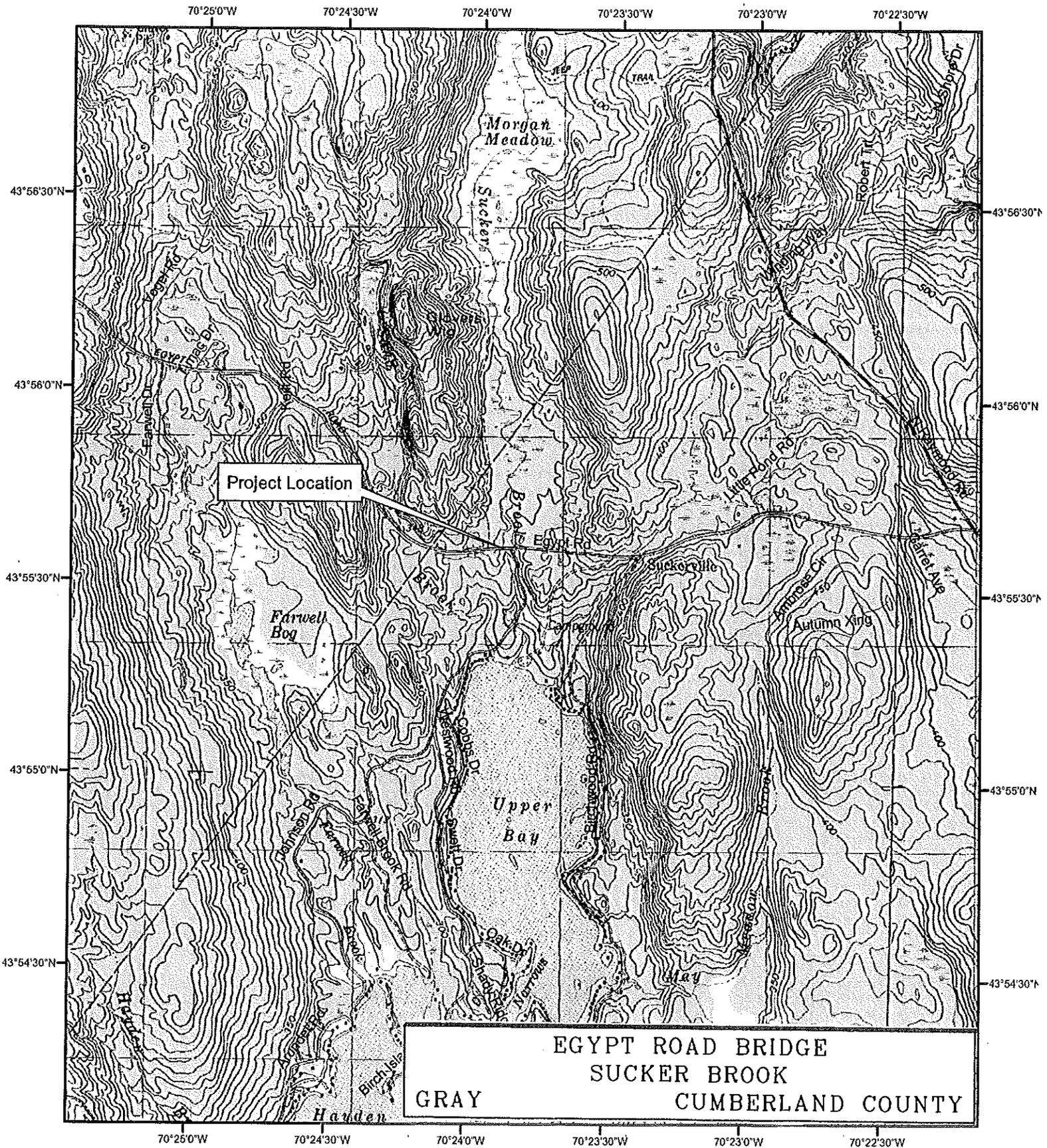


**US Army Corps  
of Engineers**  
New England District

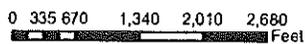
**PLEASE NOTE THE FOLLOWING GENERAL CONDITIONS FOR  
DEPARTMENT OF THE ARMY  
GENERAL PERMIT  
NO. NAE-2014-02473**

1. The permittee shall assure that a copy of this permit is at the work site whenever work is being performed and that all personnel performing work at the site of the work authorized by this permit are fully aware of the terms and conditions of the permit. This permit, including its drawings and any appendices and other attachments, shall be made a part of any and all contracts and sub-contracts for work which affects areas of Corps of Engineers' jurisdiction at the site of the work authorized by this permit. This shall be done by including the entire permit in the specifications for the work. If the permit is issued after construction specifications but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. The term "entire permit" includes permit amendments. 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 of the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps of Engineers jurisdiction.
2. This authorization requires you to 1) notify us before beginning work so we may inspect the project, and 2) submit a Compliance Certification Form. You must complete and return the enclosed Work Start Notification Form(s) to this office at least two weeks before the anticipated starting date. You must complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work and any required mitigation (but not mitigation monitoring, which requires separate submittals).
3. All areas of temporary waterway or wetland fill will be restored to their original contour and character upon completion of the project.
4. Adequate sedimentation and erosion control devices, such as geotextile silt fences or other devices capable of filtering the fines involved, shall be installed and properly maintained to minimize impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.
5. All exposed soils resulting from the construction will be promptly seeded and mulched in order to achieve vegetative stabilization.
6. In water work shall be conducted between July 15 and October 1 of any year in order to minimize impacts to fisheries and local water quality.
7. Maine DOT biologists shall monitor fish passage through the pipe during fall low flow conditions in years one, three, and five post construction. A report of the findings and any Maine DOT recommendations on the need for further remedial measures shall be submitted to the Corps and the resource agencies for review by December 31<sup>st</sup> of each year.

SECTION 3: Project Location Map



-70.39821  
43.92675

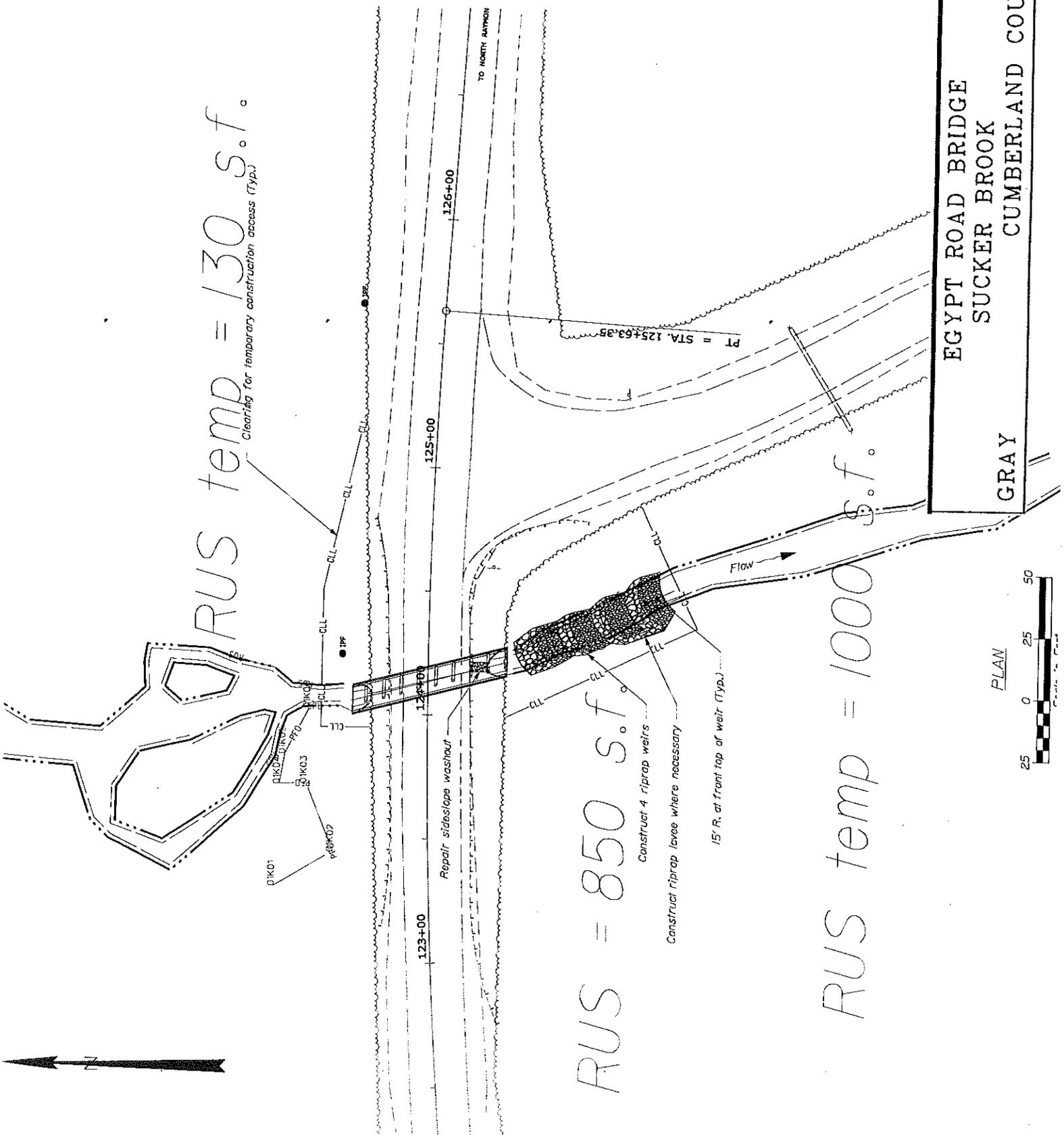


MDOT WIN 20471.00  
Gray- Egypt Road  
Bridge # 0249  
Bridge Culvert Rehabilitation





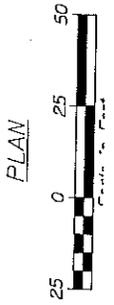
RUS temp = 130 s.f.  
Clearing for temporary construction access (Typ.)



RUS = 850 s.f.  
Construct 4 riprap weirs  
Construct riprap levee where necessary

RUS temp = 1000 s.f.

EGYPT ROAD BRIDGE  
SUCKER BROOK  
GRAY  
CUMBERLAND COUNTY



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION



**SPECIFICATIONS**

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Slab Edition, 2012 and Interim specifications 2013.

**DESIGN LOADING**

Live Load (Existing) ..... HS 20 - 44

**TRAFFIC DATA**

Current (2013) AADT ..... 3600  
 Future (2033) AADT ..... 4920  
 DHV - % of AADT ..... 12  
 Design Hour Volume ..... 518  
 Heavy Trucks (% of AADT) ..... 5  
 Heavy Trucks (% of DHV) ..... 4  
 Directional Distribution (% of DHV) ..... 71  
 18 kip Equivalent P 2.0 ..... 74  
 18 kip Equivalent P 2.5 ..... 71  
 Design Speed (mph) ..... 45

**HYDROLOGIC DATA (Existing)**

Drainage Area ..... 3.0 sq mi  
 Discharge (Q50) ..... 430 cfs  
 Discharge Velocity (Q50) ..... 6.0 ft/s  
 Headwater Elevation (Q10) ..... 339.0 ft  
 Headwater Elevation (Q50) ..... 340.0 ft

**MATERIALS**

Concrete ..... Class "A"  
 Reinforcing Steel ..... ASTM A 615/A 615M, Grade 60

**BASIC DESIGN STRESSES**

Concrete .....  $f'c = 4,350$  psi  
 Reinforcing Steel .....  $f_y = 60,000$  psi

**LIST OF DRAWINGS**

Title Sheet ..... 1  
 Estimated Quantities ..... 2  
 General Plan ..... 3  
 Pipe Arch Plan & Section ..... 4  
 Pipe Arch Details ..... 5  
 Brook Cross Section ..... 6-7  
 Retaining Wall Schedule ..... 8  
 Right of Way Map ..... 9

GRAY  
CUMBERLAND COUNTY  
EGYPT ROAD BRIDGE  
OVER  
SUCKER BROOK  
EGYPT ROAD  
PROJECT NO. STP-2047(100)  
PROJECT LENGTH 0.002 mi.  
BRIDGE NO. 0249

**MAINTENANCE OF TRAFFIC**

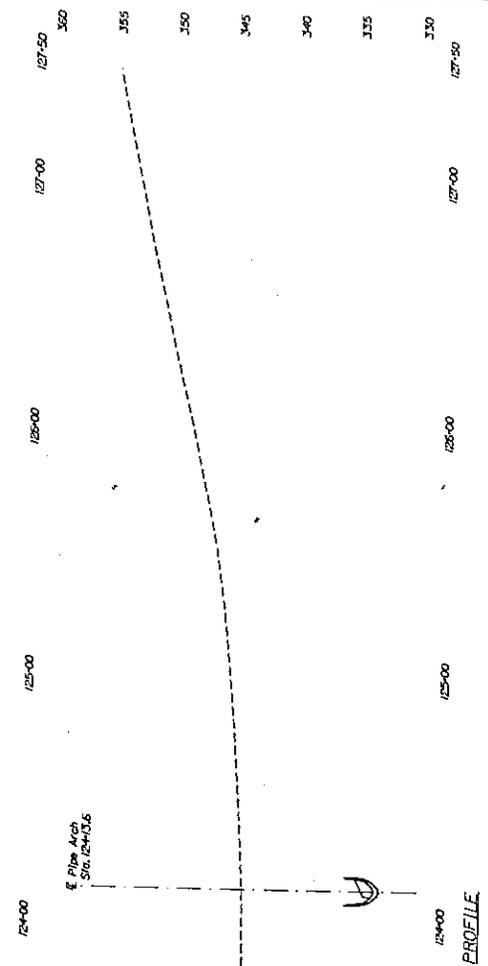
Maintain two lanes of two - way traffic with occasional periods of one - lane, two - way traffic using flaggers.

<b>PROJECT LOCATION:</b>	In Gray, on Egypt Road, 2.5 miles east of Webbs Mills Road (State Route 85) or 1.5 miles west of North Raymond Road. Lat. 43.9267° N / Long. 70.3981° W.
<b>PROGRAM AREA:</b>	Highway Bridges - Minor Spans
<b>OUTLINE OF WORK:</b>	Bridge Culvert Structural Concrete Invert Lining with internal concrete fish weirs and external rock fish weirs.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION APPROVED _____ DATE _____	PROJECT INFORMATION PROJECT NUMBER: _____ PROJECT NAME: _____ CONSISTENT: _____ PROJECT REGION: _____ COMMITTEE: _____ PROJECT LOCATION: _____ DATE: _____	EGYPT ROAD BRIDGE SUCKER BROOK GRAY CUMBERLAND COUNTY TITLE SHEET	SHEET NUMBER 1 OF 9
--	---	---	---------------------------

STP-2047(100) WIN 2047100

ITEM NO	DESCRIPTION	QUANTITY	UNIT
502.52A	STRUCTURAL CONCRETE, INVERT INVERT LINING (UB CY)	1	LS
502.52B	STRUCTURAL CONCRETE - FISH WEIRS (LS CY)	1	LS
503.12	REINFORCING STEEL FABRICATED AND DELIVERED	2800	LB
503.13	REINFORCING STEEL PLACING	2800	LB
504.01	COFFERDAM, UPSTREAM	1	LS
504.02	COFFERDAM, DOWNSTREAM	1	LS
504.03	PIPING BOX FOR CONCRETE COLUMNS	1	EA
505.50	GR REMOVE & RESET TYPE 3B	50	LF
506.50	REPLACE UNSERVICE EXISTING OR POSTS	2	EA
508.01	PLANK W/WRAP NAIL	30	CF
508.02	HEAVY W/WRAP NAIL	50	CF
508.03	STONE DITCH PROTECTION	5	CF
509.01	EROSION CONTROL MIX	10	CF
509.02	FROSTION CONTROL GEOTEXTILE	10	SF
509.03	HAND LAROP, STRAIGHT TIME	20	HR
510.01	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10	HR
510.02	SKID STEER (INCLUDING OPERATOR)	10	HR
510.03	TRUCK - LARGE (INCLUDING OPERATOR)	10	HR
510.04	FIELD OFFICE, TYPE B	1	EA
510.05	CONCRETE	10	EA
510.06	CONSTRUCTION SIGNS	20	EA
510.07	MAINTENANCE OF TRAFFIC CONTROL DEVICES (100 ECU)	100	SF
510.08	FLAGGER	100	HR
510.09	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
510.10	MOBILIZATION	1	LS



**GENERAL CONSTRUCTION NOTES**

- For easements, construction limits and right of way lines, refer to Right of Way Map.
- The clearing limits as shown on the plans are approximations. The exact limits will be established in the field by the fieldman. Payment for clearing will be considered necessary to Contract items.
- Project information referred to below may be accessed at the following: <http://www.maine.gov/mde/contractors/mde/mde.html>. Address: <http://www.maine.gov/mde/contractors/mde/mde.html>.
- The existing bridge plans may be accessed at the following: <http://www.maine.gov/mde/contractors/mde/mde.html>. Address: <http://www.maine.gov/mde/contractors/mde/mde.html>. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any discrepancies or any alterations which may have been made to the bridge during its life span.
- Quantities included for pay items measured and paid for by Lump Sum are approximate quantities provided by the contractor for informational purposes only. Lump Sum items are not subject to change. The contractor shall be responsible for any adjustments to the quantities. The contractor shall be responsible for any adjustments to the quantities. The contractor shall be responsible for any adjustments to the quantities.
- If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 105.2, Elimination of Items, will take precedence.
- If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
- If a design change results in changes to estimated quantities for any item, the contractor shall be responsible for any adjustments to the quantities. The contractor shall be responsible for any adjustments to the quantities. The contractor shall be responsible for any adjustments to the quantities.
- Excavation of excess material and debris along and under the existing structure will be paid for under the applicable equipment market items.
- The details shown for the builder walls are conceptual. The final design will be determined in the field.

EGYPT ROAD BRIDGE  
SUCKER BROOK  
CUMBERLAND COUNTY  
GRAY

ESTIMATED QUANTITIES

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STP-2047(100)

20471.00  
MM

BRIDGE PLANS

DATE: \_\_\_\_\_  
SHEET NUMBER: 2 OF 9

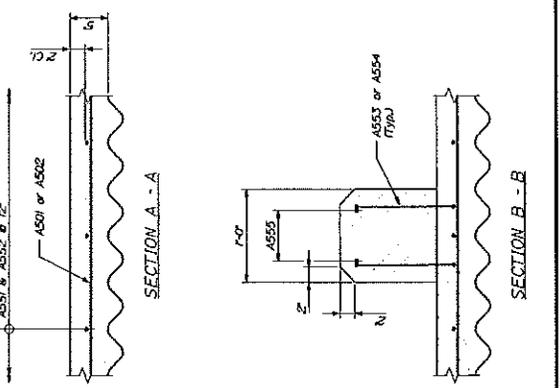
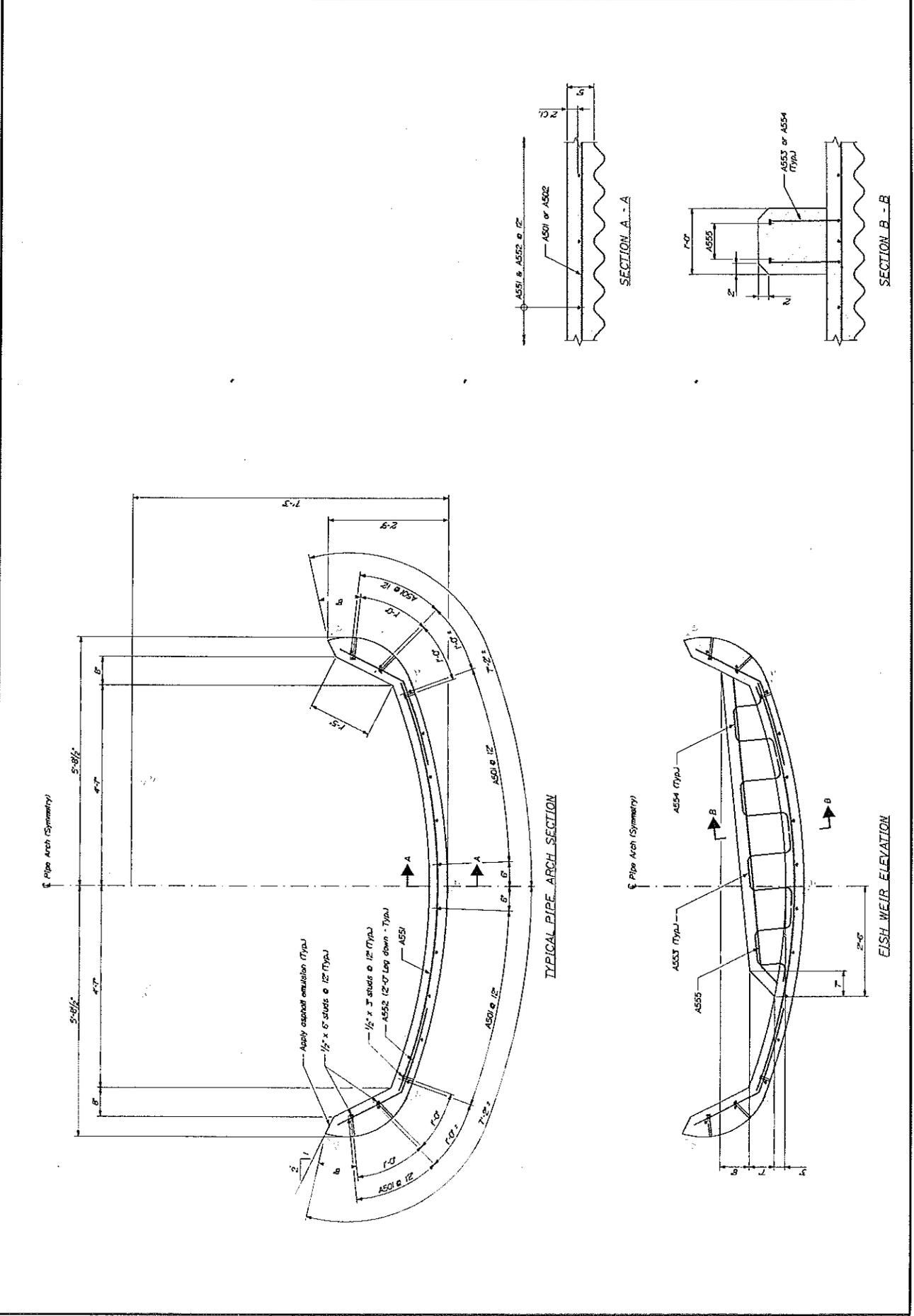




STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STP-2047(100)		WM 20471.00		SFD/DE PLANS	
SIGNATURE		P.R. NUMBER		DATE		FIELD CHECKS	
D. Green		A. Green		12/12/11		CHECKED BY	
A. Green		A. Green		12/12/11		DRAWN BY	
A. Green		A. Green		12/12/11		SCALE	
A. Green		A. Green		12/12/11		PROJECT NUMBER	
A. Green		A. Green		12/12/11		SHEET NUMBER	

EGYPT ROAD BRIDGE  
SUCKER BROOK  
CUMBERLAND COUNTY  
GRAY

SHEET NUMBER  
**5**  
OF 9

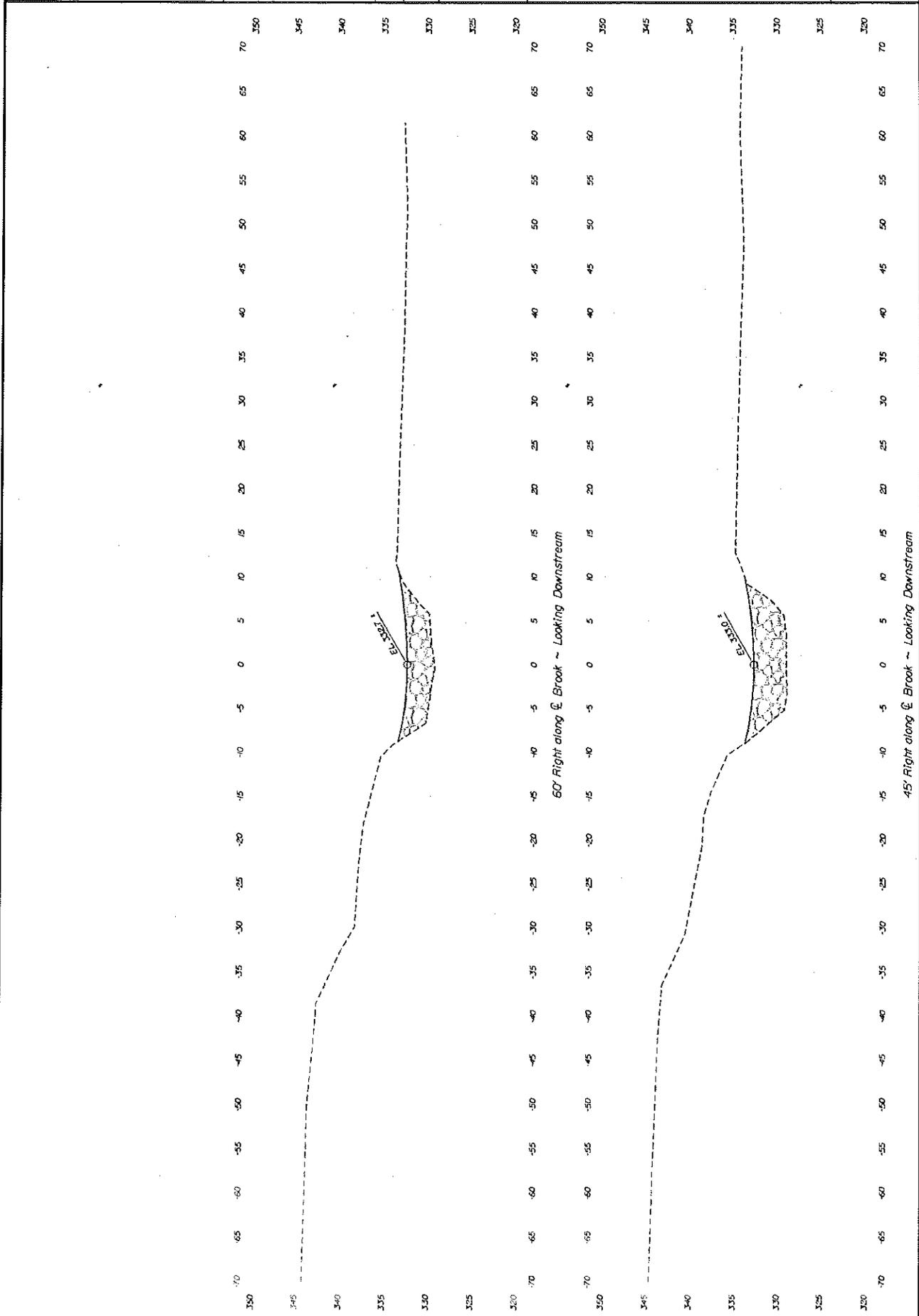


9  
OF 9  
SHEET NUMBER

GRAY  
EGYPT ROAD BRIDGE  
SUCKER BROOK  
CUMBERLAND COUNTY

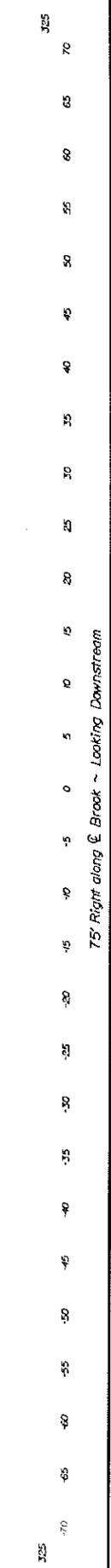
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STP-2047(100)  
WM  
2017.00  
BRIDGE NO 0249  
BRIDGE PLANS

REVISION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	
REVISION 7	
REVISION 8	
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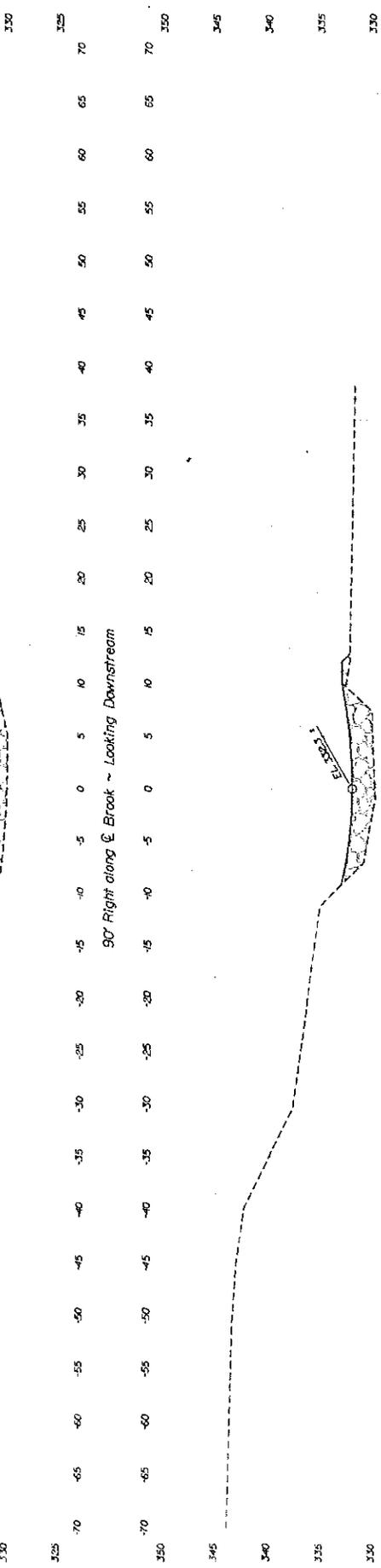
75' Right along @ Brook ~ Looking Downstream

EGYPT ROAD BRIDGE  
SUCKER BROOK  
CUMBERLAND COUNTY  
GRAY



90' Right along @ Brook ~ Looking Downstream

BROOK CROSS SECTIONS  
GRAY  
CUMBERLAND COUNTY



DATE	
P.F. NUMBER	
SIGNATURE	
DESIGNER	
CHECKER	
SCALE	

STATE OF MAINE	DEPARTMENT OF TRANSPORTATION
STP-2047(100)	
WM	20471.00
BRIDGE NO 0243	BRIDGE PLANS

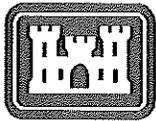
SHEET NUMBER

2

OF 8







**US Army Corps  
of Engineers®**  
New England District

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

\*\*\*\*\*  
\* MAIL TO: U.S. Army Corps of Engineers, New England District \*  
\* Permits and Enforcement Branch \*  
\* Regulatory Division \*  
\* 696 Virginia Road \*  
\* Concord, Massachusetts 01742-2751 \*  
\*\*\*\*\*

MaineDOT WIN 20471.00

Corps of Engineers Permit No. NAE-2014-02473 was issued to the Maine Dept. of Transportation on January 12, 2015. This work is located in Sucker Brook at Gray, Maine. The permit authorized the permittee to place temporary and permanent fill below the ordinary high water line in order to rehabilitate an existing bridge culvert beneath Egypt Road. This work will include a 5" thick reinforced concrete invert lining with internal fish weirs in the bottom of the existing deteriorated structure as well as external weirs downstream. The project will result in approximately 1,130 s.f. of permanent and 850 s.f. of temporary stream bed impact.

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

**PLEASE PRINT OR TYPE**

**Name of Person/Firm:** \_\_\_\_\_

**Business Address:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Telephone Numbers:** ( ) \_\_\_\_\_ ( ) \_\_\_\_\_

**Proposed Work Dates:** Start: \_\_\_\_\_ Finish: \_\_\_\_\_

**Permittee/Agent Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Printed Name:** \_\_\_\_\_ **Title:** \_\_\_\_\_

**Date Permit Issued:** 1/12/15 **Date Permit Expires:** 10/12/16

\*\*\*\*\*

**FOR USE BY THE CORPS OF ENGINEERS**

**PM:** Clement **Submittals Required:** No

**Inspection Recommendation:** Inspect as convenient

\_\_\_\_\_  
\_\_\_\_\_



**US Army Corps  
of Engineers** ®  
New England District

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

**COMPLIANCE CERTIFICATION FORM**

Permit Number: NAE-2014-02473

MaineDOT WIN 20471.00

Project Manager Clement

Name of Permittee: Maine Dept. of Transportation

Permit Issuance Date: 1/12/15

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

\*\*\*\*\*  
 \* MAIL TO: U.S. Army Corps of Engineers, New England District \*  
 \* Permits and Enforcement Branch C \*  
 \* Regulatory Division \*  
 \* 696 Virginia Road \*  
 \* Concord, Massachusetts 01742-2751 \*  
 \*\*\*\*\*

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

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

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date of Work Completion

( ) \_\_\_\_\_  
Telephone Number

( ) \_\_\_\_\_  
Telephone Number

**DEPARTMENT OF THE ARMY  
GENERAL PERMIT  
STATE OF MAINE**

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

**I. GENERAL CRITERIA**

In order for activities to qualify for this GP, they must meet the GP's terms and eligibility criteria (Pages 1 – 4), general conditions (GC) (Pages 5 – 18), and Appendix A - Definition of Categories.

Under this GP, projects may qualify for the following:

- Category 1: Category 1 Notification Form required.  
(Submittal of the Category 1 Notification Form at Appendix B to the Corps is required.)
- Category 2: Application required.  
(Submittal of an application to the Corps is required and written approval from the Corps must be received.)

If your project is ineligible for Category 1, it may qualify for Category 2 or an Individual Permit and you must submit an application (see Page 3). The thresholds for Categories 1 and 2 are defined in Appendix A. This GP does not affect the Corps Individual Permit review process or activities exempt from Corps regulation.

**II. ACTIVITIES COVERED:**

- Work and structures that are located in, under or over any navigable water of the U.S.<sup>1</sup> that affect the course, location, condition, or capacity of such waters; or the excavating from or depositing of material in such waters. 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.<sup>2</sup>. The Corps regulates this under Section 404 of the Clean Water Act (CWA).<sup>3</sup>
- 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.

---

<sup>1</sup> Defined at 33 CFR 329 and Appendix A, Page 4.

<sup>2</sup> Defined at 33 CFR 328

<sup>3</sup> When there is a regulated discharge of dredged or fill material into waters of the U.S., the Corps will also consider secondary impacts, which are defined at Appendix A, Endnote/Definition 2.

### III. PROCEDURES:

#### 1. State Approvals

Applicants are responsible for applying for and obtaining any of the required state or local approvals (see GC 1, Page 5). 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, when any of the following state approvals or statutorily-required reviews is also required, the approvals must be obtained prior to the commencement of work in Corps jurisdiction.

- Maine Department of Environmental Protection (DEP): Natural Resources Protection Act (NRPA) permit, including permit-by-rule and general permit authorizations; Site Location of Development Act permit; and Maine Waterway Development and Conservation Act permit.
- Maine Department of Conservation: Land Use Regulation Commission (LURC) permit.
- Maine Department of Marine Resources: Aquaculture Leases.
- Maine Department of Conservation, Bureau of Parks and Lands, Submerged Lands: Lease

NOTE: This GP may authorize projects that are not regulated by the State of Maine (e.g., seasonal floats or moorings).

#### 2. Corps Authorizations

##### a. Category 1 (Submission of Category 1 Notification Form required)

##### Eligibility Criteria

Activities in Maine that:

- Are subject to Corps jurisdiction (see GC 2, Page 5),
- Meet the terms and eligibility criteria of this GP (Pages 1 - 4),
- Meet all GCs of this GP (Pages 5 – 18), and
- Meet the definition of Category 1 in Appendix A - Definition of Categories,

##### **may proceed without application to the Corps provided:**

- The Category 1 Notification Form (Appendix B) is submitted to the Corps before starting the work authorized by this GP.

Consultation with the Corps and/or outside experts may be necessary to ensure compliance with this GP's general conditions (starting on Page 5) 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 tribes referenced in GC 8, while experts on endangered species include the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS). Project proponents are encouraged to contact the Corps with Category 1 eligibility questions.

Work that is not regulated by the State of Maine, but is subject to Corps jurisdiction, is eligible for Category 1 authorization under this GP. The Maine DEP and LURC have waived WQC for projects authorized under Categories 1 and 2 of this GP. The state has concurred with the determination that projects authorized under Categories 1 and 2 of this GP are consistent with the enforceable policies of the Maine CZM Program.

## **b. Category 2 (Application to and written approval from the Corps required)**

### **Eligibility Criteria**

Activities in Maine that:

- Are subject to Corps jurisdiction (see GC 2, Page 5),
- Meet the terms of this GP (Pages 1 - 4),
- Meet all GCs of this GP (Pages 5 - 18),
- Meet the definition of Category 2 in Appendix A - Definition of Categories,

**require an application to and written approval from the Corps.** The Corps will coordinate review of 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 based on comments from the review team and the criteria listed above. This may require project modifications involving avoidance, minimization or compensatory mitigation for unavoidable impacts to ensure the net effects of a project are minimal. Compensatory mitigation for waterway/wetland impacts may take the form of wetland preservation, restoration, enhancement, creation, and/or “in-lieu fee” for inclusion into the Natural Resources Mitigation Fund. See [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg), “Mitigation” and then “Maine” for more information.

Work that is not regulated by the State of Maine, but is subject to Corps jurisdiction, is eligible for Category 2 authorization under this GP. The Maine DEP and LURC have waived WQC for projects authorized under Categories 1 and 2 of this GP. The state has concurred with the determination that projects authorized under Categories 1 and 2 of this GP are consistent with the enforceable policies of the Maine CZM Program.

## **3. Applying for a Permit**

All applicants for Category 2 projects must:

- a.** Apply directly to the Corps using the state application form or the Corps application form (ENG Form 4345<sup>1</sup>), and apply directly to the state (DEP, LURC, BPL or DMR) as applicable using the appropriate state form, if the work is regulated by the Corps and the state.
- b.** Apply directly to the Corps using the Corps application form (ENG Form 4345<sup>1</sup>) if the work is regulated by the Corps but not the state (DEP, LURC, BPL or DMR).
- c.** Provide application information (see “Information Typically Required” in Appendix C) to help ensure the application is complete and to speed project review.
- d.** Submit a copy of their application materials to the Maine Historic Preservation Commission (MHPC) and the five Indian tribes listed at Appendix D, at the same time, or before, they apply to the state (DEP or LURC) or the Corps, to be reviewed for the presence of historic, archaeological or tribal resources in the permit area that the proposed work may affect. Submittals to the DEP or Corps shall include information to indicate that this has been done (a copy of the applicant’s cover letter to MHPC and tribes or a copy of the MHPC and tribal response letters is acceptable).

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<sup>1</sup> Located at [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) under “Forms.”

## 4. Review Procedures

The Corps will coordinate review of all Category 2 activities with federal and state agencies, as appropriate, to ensure that the work will result in no more than a minimal impact to the aquatic environment. Applicants are responsible for applying for the appropriate state and local approvals listed on Page 2.

**Emergency Procedures:** 33 CFR 325.2(e)4 states that an “emergency” is a situation which would 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 the application under standard procedures.” The Corps will work with all applicable agencies to expedite authorization according to established procedures in emergency situations.

**Individual Permit Procedures:** Proponents of work that does not meet the terms and general conditions of this GP must submit the Corps application form 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 or by calling us (see Appendix D). Individual WQC and CZM consistency concurrence are required when applicable from the State of Maine before Corps permit issuance. The Corps encourages applicants to concurrently apply for a Corps Individual Permit and state permits.

## 5. Approval Process

Applicants for Category 2 activities may not proceed with work in Corps jurisdiction until written authorization is received from the Corps. If the Corps determines that the Category 2 activity is eligible for the GP, the Corps will send an authorization letter directly to the applicant. The Corps will attempt to issue a written eligibility determination within the state’s review period. If the Corps determines that the activity is not eligible under the GP or that additional information is required, the Corps will notify the applicant in writing and send a copy to the DEP or LURC. Applicants are responsible for obtaining all applicable approvals listed on Page 2 from the appropriate state and local agencies before commencing work in Corps jurisdiction.

## V. GENERAL PERMIT CONDITIONS:

The following conditions apply to activities authorized under this Maine GP, unless otherwise specified, including all Category 1 (notification required) and Category 2 (application required) activities:

**1. Other Permits.** Authorization under this GP does not obviate the need to obtain other federal, state, or local authorizations required by law. This includes, but is not limited to, the project proponent obtaining a Flood Hazard Development Permit issued by the town, if necessary. Inquiries may be directed to the municipality or to the Maine Floodplain Management Coordinator at (207) 287-8063. See [www.maine.gov/spo/flood](http://www.maine.gov/spo/flood).

### **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. include the subcategories “navigable waters of the U.S.” and “wetlands.”

**(b)** For Category 1 projects, proponents are not required to delineate the waters of the U.S. that they plan to impact, but must approximate the square footage of impacts in order to determine the review category (1 or 2 or Individual Permit). For projects filling <15,000 SF of waters of the U.S. that do not qualify for Category 1 (e.g., vernal pool, secondary or endangered species impacts, etc.) and therefore require an application to the Corps, and for those filling  $\geq$ 15,000 SF, applicants 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 (see Appendix E). 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. This includes all waters of the U.S. in areas under DEP or LURC jurisdiction regardless of whether they’re shown on LURC zoning maps.

**(c)** On a case-by-case basis, the Corps may modify/refine the above delineation and identification requirements for waters of the U.S.

### **3. Minimal Direct, Secondary and Cumulative Impacts.**

**(a)** Projects authorized by this GP shall have no more than minimal direct, secondary and cumulative adverse environmental impacts. Category 2 applicants should provide information on secondary and cumulative impacts as stated in Appendix C. Compensatory mitigation may be required to offset unavoidable impacts (see GC 16) and to ensure that they are no more than minimal. Compensatory mitigation requirements will be determined on a case-by-case basis.

**(b)** Secondary impacts to waterway and/or wetland areas, (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. Direct, secondary and cumulative impacts are defined at Appendix A, Endnote 2.

**(c)** Site clearing, grading and construction activities in the upland habitat surrounding vernal pools (“Vernal Pool Management Areas”) are secondary impacts. See GC 28 for avoidance and minimization requirements and recommendations.

**4. Discretionary Authority.** Notwithstanding compliance with the terms and conditions of this permit, the Corps retains discretionary authority to require Category 2 or Individual Permit review 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 consequences of the proposal warrant a higher level of review based on the concerns stated above. This authority may be invoked for projects that may contribute to 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 an Individual Permit may be required, the project is not authorized under this GP and no work may be conducted until an Individual Permit is obtained or until the Corps notifies the applicant that further review has demonstrated that the work may proceed under this GP.

## **5. Single and Complete Projects.**

**(a)** This GP shall not be used to piecemeal work and shall be applied to single and complete projects<sup>1</sup>. When determining the review category in Appendix A (Category 1 or 2) for a single and complete project, proponents must include any permanent historic fill placed since October 1995 that is associated with that project and all currently proposed temporary and permanent impact areas.

**(b)** A single and complete project must have independent utility<sup>1</sup>.

**(c)** Unless the Corps determines the activity has independent utility<sup>1</sup>:

**i.** This GP shall not be used for any activity that is part of an overall project for which an Individual Permit is required,

**ii.** 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<sup>1</sup>.

**(d)** For linear projects, such as power lines or pipelines with multiple crossings, the single and complete project<sup>1</sup> 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 activity, then the entire linear project shall be reviewed as one project under Category 2.

**6. 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 (and the project office) authorized by this GP 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.

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<sup>1</sup> Single and Complete Project and Independent Utility are defined at Appendix E.

**7. St. John/St. Croix Rivers.** Work within the Saint John and Saint Croix River basins that requires approval of the International Joint Commission is not eligible for Category 1 and an application to the Corps is required if any temporary or permanent use, obstruction or diversion of international boundary waters could affect the natural flow or levels of waters on the Canadian side of the line; or if any construction or maintenance of remedial works, protective works, dams, or other obstructions in waters downstream from boundary waters could raise the natural level of water on the Canadian side of the boundary.

**8. Historic Properties.** No activity otherwise authorized by this GP shall result in effects (as that term is defined at 36 C.F.R. § 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 agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act. 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 on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. Work is eligible for Category 1 if a no effect or no adverse effect determination has been made for that work by another federal action agency in its Section 106 consultation with the Maine Historic Preservation Commission (MHPC) and the five federally recognized Indian tribes listed at Appendix D. Information on the location and existence of known historic resources can be obtained from the MHPC, the National Register of Historic Places, and the five tribes listed in Appendix D. Historic properties include those that are eligible for inclusion, but not necessarily listed on the National Register. 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 and the MHPC and/or applicable tribe(s).

**9. National Lands.** None of the following work is eligible as a Category 1 project:

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

(b) Work on Corps properties and Corps-controlled easements. Contact the Corps, Real Estate Division (978) 318-8585 to initiate reviews about both Corps holdings and permit requirements.

(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). Federal projects in Maine as of October 2010 are shown at Appendix F. This map may not be inclusive of all projects.

**10. 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) Work in Inland Waters and Wetlands<sup>1</sup> and the non-tidal portions of Navigable Waters<sup>2</sup> (e.g., the Penobscot River, Kennebec River) is not eligible for Category 1 if:

- i. The project action area occurs within a watershed occupied by listed Atlantic salmon or shortnose sturgeon. Project proponents must check the site in Footnote 3 below.
- ii. In areas outside these watersheds contact the USFWS (see Appendix D, Page 1 for contact information) to check for the presence of other listed species.

(c) Work in the tidal portions of Navigable Waters may be eligible for Category 1. Reference Appendix A, II. Navigable Waters, Pages 4 – 9, and the other terms and general conditions (GC 11 is particularly relevant) of this GP to determine Category 1 eligibility. Project proponents must contact the USFWS (see Appendix D, Page 1 for contact information) to ensure that work in all tidal portions of Navigable Waters<sup>2</sup> is not in critical habitat or areas occupied by listed species other than Atlantic salmon or shortnose sturgeon.

(d) Although some work is excluded from Category 1 as stated in (b) and (c) above, work may qualify for Category 1 if a no effect determination has been made for that work by a federal action agency such as the Corps.

(e) Proponents must submit an application to the Corps if any of the activities in 10(a)-10(c) that do not qualify for Category 1 may occur and provide information on federally-listed species or habitat to allow the Corps to conduct any required consultation under Section 7 of the ESA.

(f) The Corps review may consider species listed as endangered and threatened pursuant to Maine state law.

**11. Essential Fish Habitat.** Any work in the following rivers and streams, including all tributaries to the extent that they are currently or were historically accessible for salmon migration, shall not be authorized under Category 1 of the GP and must be screened for potential impacts to EFH (see Appendix E for more information).

Androscoggin River	Aroostook River	Boyden River	Dennys River
Ducktrap River	East Machias River	Hobart Stream	Kennebec River
Machias River	Narraguagus River	Orland River	Passagassawaukeag River
Patten Stream	Penobscot River	Pleasant River	Presumpscot River
Saco River	Sheepscot River	St. Croix River	Tunk Stream
			Union River

The above does not apply to the following activities which may qualify for Category 1 work:

- Exploratory drilling and borings for bridges.
- Moorings (see Appendix A, Page 6 for Category 1 thresholds and requirements)
- Structures and floats (see Appendix A, Page 7 for Category 1 thresholds and requirements)
- Other activities specified in a programmatic agreement with NMFS.

<sup>1</sup> See Appendix A, Page 1 for definition.

<sup>2</sup> See Appendix A, Page 4 for definition.

<sup>3</sup> For areas considered occupied by listed Atlantic salmon and/or shortnose sturgeon in Inland Waters and Wetlands, and in Navigable Waters, see: [www.nero.noaa.gov/prot\\_res/altsalmon/dpsmaps.html](http://www.nero.noaa.gov/prot_res/altsalmon/dpsmaps.html). Tidal portions of navigable waters occupied by listed Atlantic salmon are more specifically described as those waters from the Kennebec River to its mouth at Merrymeeting Bay, northeast to the Dennys River, including the Androscoggin River upstream to the Brunswick Dam, and other streams northeast of this line to the limit of their tidal reaches.

**12. Wild and Scenic Rivers.** Any activity that occurs in the designated main stem of, within 0.25 mile up or downstream of the designated main stem of, or in tributaries within .25 miles of the designated main stem of a National Wild and Scenic River, or in “bordering and contiguous wetlands” (see Appendix A, Endnote 1) that are adjacent to the designated main stem of a National Wild and Scenic River, or that has the potential to alter flows within a river within the National Wild and Scenic River System, is not eligible for Category 1 regardless of size of the impacts. This condition applies to both designated Wild and Scenic Rivers and rivers officially designated by Congress as study rivers for possible inclusion while such rivers are in an official study status. National Wild and Scenic Rivers System segments for Maine as of October 2010 include: Allagash River beginning at Telos Dam continuing to Allagash checkpoint at Eliza Hole Rapids, approximately 3 miles upstream of the confluence with the St. John River (length = 92 miles).

**13. Federal Navigation Project.** Any structure or work that extends closer to the horizontal limits of any Corps Federal Navigation Project (see Appendix F) than a distance of three times the project’s authorized depth shall be subject to removal at the owner’s expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. This is applicable to Category 1 and 2. Reference Appendix A, Page 6 (Moorings) and Page 7 (Structure and Floats).

**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 permit, the Federal Government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the 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 this permit; (d) design or construction deficiencies associated with the permitted work; (e) damage claims associated with any future modification, suspension, or revocation of this permit.

**16. Avoidance, Minimization and Compensatory Mitigation.**

Discharges of dredged or fill material into waters of the U.S., including wetlands, shall be avoided and minimized to the maximum extent practicable through consideration of alternatives. The Corps may require compensatory mitigation of unavoidable direct and secondary impacts associated with Category 2 projects on a case-by-case basis (see Appendix E).

**17. Heavy Equipment in Wetlands.** Operating heavy equipment other than fixed equipment (drill rigs, fixed cranes, etc.) within 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, Endnote 4) that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation. 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. 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 from 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.

### **18. Temporary Fill.**

Temporary fill that qualifies for Category 1 (e.g., <15,000 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, where it is not authorized.
- (b) Unconfined temporary fill authorized for discharge into waters of the U.S., including wetlands, shall consist of material that minimizes impacts to water quality (e.g. sandbags, clean gravel, stone, aggregate, 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.
- (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 subsequent erosion into waters of the U.S, including wetlands. To qualify for Category 1, temporary fill placed during the:
  - i. Growing season must be removed before the beginning of the next growing season.
  - ii. Non-growing season may remain throughout the following growing season, but must be removed before the beginning of the next growing season.
- (e) Waters of the U.S., including wetlands, where temporary fill was discharged shall be restored (see GC 19).
- (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 (see GC 21).
- (g) Construction mats and corduroy roads (see GC 17 above) are considered as temporary fill when they are removed immediately upon work completion. The area must be restored (see GC 19).

### **19. Work Site 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. 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, unless otherwise authorized.
- (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 Appendix E, Paragraph 6). This list may be updated periodically.
- (c) 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, unless otherwise authorized.

## **20. 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) Project 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. Refer to Appendix E for design guidance.

(c) Inland Water bank stabilization activities necessary for erosion prevention must meet all of the following criteria: (i) No material is placed in excess of the minimum needed for erosion protection; (ii) The activity is no more than 500 feet in length along the bank; (iii) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark; (iv) Structures angled steeper than 1H:1V and any material other than angular or subangular stone or fiber roll revetments require at least a Category 2 review. (v) The activity does not involve discharges of dredged or fill material into special aquatic sites; (vi) 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.; (vii) 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); and, (viii) The activity is not a stream channelization activity.

(d) Navigable Water bank stabilization activities are provided at Appendix A, Page 4.

## **21. Sedimentation and Erosion Control.**

(a) Adequate sedimentation and erosion control 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 during construction, and permanent seeding and stabilization shall be installed and properly maintained to reduce erosion and retain sediment on-site during and after construction. They shall be capable of preventing erosion, of collecting sediment, suspended and floating materials, and of filtering fine sediment.

(b) Temporary sediment control barriers shall be removed upon completion of work, but not until all disturbed areas are permanently stabilized. The sediment collected by these sediment barriers shall be removed and placed at an upland location and stabilized to 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 (see GC 19).

## 22. Stream Work and Crossings<sup>1</sup>.

### Notes:

(a) GC 22(a) and (b) apply to Inland Waters and Wetlands (see Appendix A, Page 1 for definition) and Navigable Waters (see Appendix A, Page 4 for definition). GC 22(c)-(l) only apply to Inland Waters and Wetlands that are streams. All new and replacement crossings in Navigable Waters require an application to the Corps and at least a Category 2 review.

(b) In-stream work in a watershed occupied by listed Atlantic salmon or shortnose sturgeon [see GC 10(b)] and some stream work such as crossings on EFH waters (see GC 11) is not eligible for Category 1.

(c) “High-Quality Stream Segments” are shown at [www.maine.gov/dep/gis/datamaps](http://www.maine.gov/dep/gis/datamaps) and may be useful in evaluating impacts to fisheries. GIS shape files are under “Other Google Earth Interactive Maps” and PDFs by county are under “DEP GIS Maps.” See Appendix E, 8(b) for more information.

### Conditions:

(a) All permanent crossings of rivers, streams, brooks, etc. (hereon referred to as “streams”) shall be suitably culverted, bridged, or otherwise designed to i) withstand and to prevent the restriction of high flows to qualify for Category 1, and ii) not obstruct the movement of or 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 unless the activity’s primary purpose is to impound water to qualify for Category 1 or 2. (NOTE: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine applicability of this GP).

(b) 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. See the documents referenced in Appendix E, 8(c) and (d) for guidance.

(c) New Stream Crossings. For new stream crossings to qualify for Category 1:

i. Must ensure compliance with GC 22(a) and GC 22(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 14 and the stream simulation document listed at Appendix E, 8(a).

(d) Replacement Stream Crossings. For replacement stream crossings to qualify for Category 1:

i. Must ensure compliance with GC 22(a) and GC 22(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 14 and the stream simulation document listed at Appendix E, 8(a).

(e) Culvert Extensions. Culvert extensions on culverts that do not meet the Corps General Stream Crossing Standards do not qualify for Category 1 and require an application to the Corps at least as a Category 2 project.

(f) Temporary Stream Crossings.

Note: The General Stream Crossing Standards don’t apply to temporary stream crossings.

i. Temporary stream crossings or cofferdams shall be used for equipment access across streams [see Appendix E, 8(e)]. Note: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine the review category in Appendix A.

ii. Temporary stream crossings shall be removed within 180 days to qualify for Category 1.

iii. Temporary stream crossings that are not spans<sup>2</sup> (typically culverts) must be designed in accordance with 1-6 below to qualify for Category 1. Category 2 applications should include information demonstrating 2-6 below:

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<sup>1</sup> This condition does not apply to non-tidal drainage systems and irrigation ditches excavated on dry land.

<sup>2</sup> For the purposes of this GP, spans are bridges, three-sided box culverts, open-bottom culverts or arches that span the stream with footings landward of bankfull width.

1. Installed and removed during the low flow period specified in GC 22(l) below.
2. Placed on geotextile fabric or other material where practicable to ensure restoration to the original grade. Soil may not be used to construct or stabilize these structures and rock must be large enough to allow for easy removal without disrupting the streambed.
3. Designed and maintained to withstand and pass high flows. Water height should be no higher than the top of the culvert's inlet. A minimum culvert diameter of two feet is required to pass debris. Culverts must be aligned to prevent bank erosion or streambed scour.
4. Equipped with energy dissipating devices installed downstream if necessary to prevent scour.
5. Designed and maintained to prevent soil from entering the waterbody.
6. Removed upon the completion of work. Impacts to the streambed or banks requires restoration to their original condition using stream simulation methods<sup>1</sup>.

**(g) Slip Lining.** Work using slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), invert lining, or resulting in decreased diameter, do not qualify for Category 1, either as new work or maintenance activities.

**(h) Work in Flowing Waters.** To qualify for Category 1, no unconfined fill [see GC 18(b)] or excavation in flowing waters is allowed. To accomplish this:

**i.** Bank stabilization work below ordinary high water (OHW) shall utilize erosion controls such as inflatable cofferdams, jersey barrier, silt screen, turbidity curtain, etc. where practicable to prevent sediment input to the stream and to minimize turbidity and sedimentation impacts for sensitive life stages. Bank stabilization above OHW must utilize erosion controls.

**ii.** Management techniques such as temporary flume pipes, culverts, cofferdams, etc. must be used to maintain normal flows within the stream boundary's confines, or water diversions may be used immediately up and downstream of the work footprint (see Appendix A, Endnote 6) or work must be performed in the dry under no flow conditions, or under very low flow conditions following the practices in GC 22(a).

**(i) Minimization.** In order to make the Category 2 review process more efficient and result in a faster decision, new and replacement stream crossings should be designed using the least intrusive and environmentally damaging method following this sequential minimization process: 1) spans with no stream impacts, 2) spans with stream impacts, and 3) embedded culverts with stream simulation or low-slope design.

**(j) Maintenance Requirements.** The permittee shall maintain the work authorized herein in good condition and in conformance with the terms and general conditions of this permit to facilitate aquatic life passage as stated in GC 22(a). Culverts that develop "hanging" inlets or outlets, result in bed washout, or a stream that doesn't match the characteristics of the substrate in the natural stream channel such as mobility, slope, stability confinement will require maintenance or repair to comply with this GC. This does not apply to GC 22(f) above.

**(k) Maintenance and Replacement Information.** An existing stream crossing must be authorized and in compliance with all conditions of its authorization(s) to qualify for maintenance not subject to regulation. See Appendix A, Endnote 7. A non-serviceable crossing is not eligible for maintenance and is therefore considered as a replacement crossing [see 22(d)].

**(l) Work Window.** For projects that otherwise meet the terms of Category 1, in-stream construction work shall be conducted during the low flow period July 15 - October 1 in any year. Projects that are not to be conducted during that time period are ineligible for Category 1 and shall be screened pursuant to Category 2, regardless of the waterway and wetland fill and/or impact area.

*(See next page for Corps General Stream Crossing Standards.)*

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<sup>1</sup> Design and construction shall be in accordance with the stream simulation document listed at Appendix E, 8(a).

Corps General Stream Crossing Standards (required for Category 1, recommended for Category 2):

**(a)** Culverts must be embedded:

- $\geq 2$  feet for box culverts and other culverts with smooth internal walls,
- $\geq 1$  foot for corrugated pipe arches
- $\geq 1$  foot and at least 25 percent for corrugated round pipe culverts

**(b)** For new crossings, spans<sup>1</sup> are required to avoid or cause minimal disruption to the streambed and to meet the requirements of General Condition 22(a) and 22(b). Footings and abutments must be landward of 1.2 times bankfull width. To the greatest extent practicable, work in the stream shall be minimized, and design and construction shall allow the streambed's natural structure and integrity to remain intact. Any fill or excavation of the streambed below bankfull width other than footings, support pilings, or work specified in 22(h)ii requires Category 2 review and, unless demonstrated otherwise, stream simulation<sup>2</sup> to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.

**(c)** For replacement crossings, spans<sup>1</sup> are required to meet the requirements of General Condition 22(a) and 22(b). Footings and abutments shall be landward of 1.2 times bankfull width. Unless demonstrated otherwise, stream simulation<sup>2</sup> is required to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.

**(d)** Crossings must have a natural bottom substrate within the structure matching the characteristics of the substrate in the natural stream channel and the banks (mobility, slope, stability, confinement, grain and rock size)<sup>2</sup> at the time of construction and over time as the structure has had the opportunity to pass significant flood events. To allow terrestrial passage for wildlife and prevent undermining the footings, crossings shall have a bank on both sides of the stream matching the horizontal profile of the existing stream and banks<sup>2</sup>.

**(e)** Crossings must be designed and constructed<sup>2</sup> with appropriate bed forms and streambed characteristics so that water depths and velocities are comparable to those found in the natural channel at a variety of flows. In order to provide appropriate water depths and velocities at a variety of flows and especially low flows, it is usually necessary to reconstruct the streambed or preserve the natural channel within the structure. Otherwise, the width of the structure needed to accommodate higher flows will create conditions that are too shallow at low flows. The grain and rock size, and arrangement of streambed materials within the structure should be in accordance with (d) above. Flows could go subsurface within the structure if only large material is used without smaller material filling the voids.

### **23. 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. See Appendix E for the Maine DEP's crossing standards.

**(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, at its present level, between the wetlands on either side of the road. To meet this requirement, we

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<sup>1</sup> For the purposes of this GP, spans are bridges, three-sided box culverts, open-bottom culverts or arches that span the stream with footings landward of bankfull width.

<sup>2</sup> Design and construction shall be in accordance with the stream simulation document listed at Appendix E, 8(a).

recommend that culverts, spans or bridges be placed at least every 50 feet with an opening at least 2 feet high and 3 feet wide at ground level where practicable. Closed bottom culverts shall be embedded at least 6 inches 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, results in 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.

#### **24. Discharge of Pollutants.**

(a) All activities involving any discharge of pollutants into waters of the U.S., including wetlands, authorized under this 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 Clean Water Act (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. Issuance of a LURC or DEP NRPA permit confirms that state water quality standards are met.

(b) All projects authorized by this GP shall be designed, constructed and operated to minimize or eliminate the discharge of pollutants.

(c) 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).

**25. 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 to the maximum extent practicable.

**26. 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 above 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. Seasonal storage of structures in navigable waters, e.g., in a protected cove on a mooring, requires Corps and local harbormaster approval.

**27. 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 functions and values.

## **28. Protection of Vernal Pools (VPs).**

(a) Impacts to VP Management Areas<sup>1</sup> for all VPs on, and known VPs surrounding, the project site shall be minimized to the maximum extent practicable.

(b) The following management practices must be followed for all work within the VP Management Area (750' of a VP's edge) of all VPs in order to qualify for Category 1 when there is fill placed in a water of the U.S., including wetlands:

i. Similar to the DEP's Significant Wildlife Habitat regulations<sup>2</sup>:

1. No disturbance within the VP Depression or VP Envelope (area within 100 feet of the VP Depression's edge)<sup>3</sup>;
2. Maintain a minimum of 75% of the Critical Terrestrial Habitat (area within 100-750 feet of the VP Depression's edge) as unfragmented forest with at least a partly-closed canopy of overstory trees to provide shade, deep litter and woody debris<sup>3</sup>;
3. Maintain or restore forest corridors connecting wetlands and significant vernal pools;
4. Minimize forest floor disturbance; and
5. Maintain native understory vegetation and downed woody debris.

ii. Cape Cod style-curbings or no curbing options shall be used on new roads to facilitate amphibian passage<sup>2</sup>.

(c) For work not complying with the requirements in (b) above, applicants shall submit an application to the Corps for at least Category 2 review with information on directional buffers in accordance with the VP Directional Buffer Guidance document<sup>2</sup>. Conservation of the unimpacted area within the VP Management Area will often be required.

(d) GC 2 requires applicants to delineate or approximately identify on the project plans all waters of the U.S., which include vernal pools. Appendix A, Page 1 lists VP Category 1 thresholds.

## **29. 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 (see Appendix E, Paragraph 6).

(b) Unless otherwise directed by the Corps, all applications for Category 2 inland projects and Category 2 coastal fill projects proposing fill in Corps jurisdiction shall include an Invasive Species Control Plan (ISCP) (see Appendix E, Paragraph 6).

**30. Cranberry Development Projects.** For cranberry development projects authorized under the GP, the following conditions apply:

(a) If a cranberry bog is abandoned for any reason, the area must be allowed to revert to natural wetlands unless an Individual Permit is obtained from the Corps allowing the discharge of fill for an alternate use.

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<sup>1</sup> The Corps VP Management Area, which includes the VP and a 750' radius from the VP's edge, is defined at Appendix A, Endnote 5.

<sup>2</sup> Appendix E, 10(a)-(d) provides links to the state's Significant Wildlife Habitat regulations and references that provide impact minimization measures to reference when designing projects.

<sup>3</sup> The no disturbance requirement in the VP envelope [see (b)(i)(1)], and (b)(i)(2), do not apply to temporary impacts associated with construction mats in previously disturbed areas of existing utility project (e.g., transmission lines, gas pipelines) or linear transportation project (e.g., roads, highways, railways, trails, airport runways and taxiways) right-of-ways provided there is a Vegetation Management Plan that avoids, minimizes and mitigates impacts to aquatic resources.

(b) No stream diversion shall be allowed under Category 1 of this GP.

(c) No impoundments of intermittent or perennial streams shall be allowed under Category 1 and an application to the Corps is required for at least Category 2 review.

(d) The project shall be designed and constructed to not cause flood damage on adjacent properties.

**31. 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, the permittee shall complete and return to the Corps:

- For Category 1 projects, the Category 1 Notification Form (Appendix B).
- For Category 2 projects, the 1) Work-Start Notification Form and 2) Compliance Certification Form whenever either is provided with a Category 2 authorization letter.

**32. 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.

(b) This does not include maintenance of dredging projects. Each maintenance dredging event exceeding the Category 1 thresholds (see Appendix A, Page 6) 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, Endnote 7).

**33. Property Rights.** This PGP 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.

**34. Transfer of GP Verifications.** 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 entity or individual who received the GP verification, as well as the new owner(s) of the property. The permittee may transfer responsibilities and obligations under the GP verification to the new owner by submitting a letter to the Corps (see Appendix D for address) 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.”

**35. Modification, Suspension, and Revocation.** This GP or any work authorized 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 United States.

**36. 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 condition 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.

**37. Special Conditions.** The Corps may independently, or at the request of the Federal resource agencies, impose other 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 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.

**38. 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 appropriate legal proceedings.

**39. 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.

**40. Enforcement Cases.** This GP does not apply to any existing or proposed activity in Corps jurisdiction associated with an on-going Corps or EPA enforcement action, until such time as the enforcement action is resolved or the Corps and/or EPA as appropriate determines that the activity may proceed independently without compromising the enforcement action.

**41. Duration of Authorization.** This GP expires on October 11, 2015. 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 until October 11, 2016 to complete the activity under the terms and conditions of the current GP.

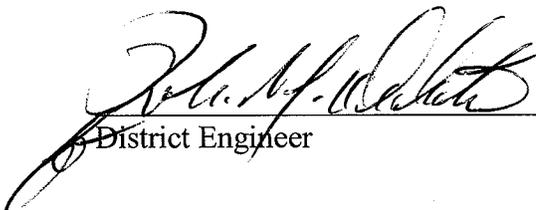
**42. Previously Authorized Activities.**

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

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

(c) Any work not commenced nor completed that was authorized in a written letter from the Corps under the PGP in effect between October 11, 2005 and October 11, 2010 remains authorized subject to the terms and general conditions of this GP along with any special conditions in the authorizing written letter.

**43. NEPA Compliance.** The Maine PGP was authorized in full compliance with Council for Environmental Quality (“CEQ”) NEPA regulations. The Corps has determined that individual permit actions taken under the terms and conditions of the PGP are not a major federal action significantly affecting the quality of the human environment.

  
District Engineer  
10/12/10  
Date

## APPENDIX A: DEFINITION OF CATEGORIES

<p><b>A. INLAND WATERS AND WETLANDS</b></p>	<p><b>Inland Waters and Wetlands:</b> Waters that are regulated under Section 404 of the Clean Water Act, including rivers, streams, lakes, ponds and wetlands, and 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<sup>1</sup> to tidal waters are reviewed in the Navigable Waters section. (See II. Navigable Waters on page 4 below.)</p>
<p><b>ACTIVITY</b></p>	<p>Projects not meeting Category 1 require an application for review as a Category 2 or Individual Permit project. All Category 1 and 2 projects must comply with all of this GP's applicable terms (Pages 1 – 4) and general conditions (Pages 5–18).</p>
<p><b>(a) NEW FILL/ EXCAVATION DISCHARGES</b></p> <p>(You must reference (b) – (e) below for other thresholds that may be relevant to your project.)</p>	<p style="text-align: center;"><b>CATEGORY 1</b></p> <p>1. &lt;15,000 square feet (SF) (in LURC or DEP territories) of inland waterway and/or wetland fill and associated secondary impacts<sup>2</sup> (e.g., areas drained, flooded, fragmented, mechanically cleared or excavated). Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Construction mats are considered as fill. [See General Condition (GC) 18(g.) <u>Provided:</u></p> <ul style="list-style-type: none"> <li>• Historic fill + proposed impact area &lt;15,000 SF and subdivision fill complies with GC 5, Single and Complete Projects.</li> <li>• No work in special aquatic sites (SAS)<sup>4</sup> other than wetlands.</li> </ul> <p>2. Construction mats<sup>4</sup> of any area necessary to conduct activities that were previously authorized, authorized under Category 1, or not subject to regulation (see Endnote 7). Authorized construction mats must be in place for &lt;3 months, removed immediately upon work completion, and the wetlands must be restored (see GC 19).</p> <p>3. For work in Vernal Pool (VP) Management Areas (includes VPs)<sup>5</sup>:</p> <ul style="list-style-type: none"> <li>• See GC 2 and Appendix C for VP delineation requirements.</li> <li>• See GC 28 to determine if work qualifies for Category 1 or 2.</li> <li>• See Appendix E, Page 3 for VP documents providing mitigation guidance.</li> </ul>
<p style="text-align: center;"><b>CATEGORY 2</b></p> <p>1. ≥15,000 square feet (SF) (in LURC or DEP territories) to &lt;3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Mechanical clearing without grubbing or other soil disturbance &gt;3 acres as a secondary impact may still be eligible for Category 2 at the discretion of the Corps.</p> <p>2. Specific activities with impacts of any area ≥15,000 SF required to affect 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. Wetlands must be restored in place.</p> <p>3. Temporary structures, work, and discharges (including construction mats)<sup>4</sup> ≥15,000 SF necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps, authorized under Category 1, or not subject to Corps regulation. GCs 16 -19 are particularly relevant.</p> <p style="text-align: center;">See GC 2 and Appendix C for wetland delineation requirements.</p>	<p style="text-align: center;"><b>CATEGORY 2</b></p> <p>1. ≥15,000 square feet (SF) (in LURC or DEP territories) to &lt;3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Mechanical clearing without grubbing or other soil disturbance &gt;3 acres as a secondary impact may still be eligible for Category 2 at the discretion of the Corps.</p> <p>2. Specific activities with impacts of any area ≥15,000 SF required to affect 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. Wetlands must be restored in place.</p> <p>3. Temporary structures, work, and discharges (including construction mats)<sup>4</sup> ≥15,000 SF necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps, authorized under Category 1, or not subject to Corps regulation. GCs 16 -19 are particularly relevant.</p> <p style="text-align: center;">See GC 2 and Appendix C for wetland delineation requirements.</p>

<b>ACTIVITY</b>	<b>CATEGORY 1</b>	<b>CATEGORY 2</b>
<p><b>(b) BANK STABILIZATION PROJECTS</b></p>	<p>1. Inland bank stabilization &lt;500 FT long and &lt;1 CY of fill per linear foot below OHW, provided:</p> <ul style="list-style-type: none"> <li>• ≤1 cubic yard of fill per linear foot placed along the bank waterward of ordinary high water.</li> <li>• Work complies with the GCs (GC 20 in particular), including: <ul style="list-style-type: none"> <li>○ No structures angled steeper than 1H:1V allowed. Only rough-faced stone or fiber roll revetments allowed.</li> <li>○ No in-stream work involving fill or excavation in flowing waters (see GC 22(h)).</li> </ul> </li> <li>• In-stream work limited to Jul 15 - Oct 1 [see GC 22 (l)].</li> <li>• No work in vernal pools<sup>5</sup> or SAS<sup>3</sup>.</li> <li>• GC 10 Endangered Species and GC 11 Essential Fish Habitat are particularly relevant.</li> </ul>	<p>1. Inland bank stabilization ≥500 FT long and/or ≥1 CY of fill per linear foot, or any amount with fill in wetlands.</p>
<p><b>(c) RIVER/ STREAM/ BROOK WORK &amp; CROSSINGS and WETLAND CROSSINGS</b></p>	<p>1. River, stream and brook work and crossings:</p> <ul style="list-style-type: none"> <li>• Must comply with GC 22 in particular, including: <ul style="list-style-type: none"> <li>○ No slip lining [see GC 22 (g)].</li> <li>○ No in-stream work involving fill or excavation in flowing waters [see GC 22(h)].</li> <li>○ In-stream work limited to Jul 15 - Oct 1 [see GC 22 (l)].</li> </ul> </li> <li>• No work in riffles and pools<sup>3</sup>.</li> <li>• No stream relocations.</li> <li>• No dams or dikes<sup>6</sup>.</li> <li>• Work in areas designated as Atlantic salmon critical habitat or occupied by listed Atlantic salmon, or any other area occupied by a listed species is not eligible for Category 1 (see GC 10).</li> <li>• No work in EFH streams except for the activities stated in GC 11.</li> </ul> <p>2. Wetland crossings must comply with the particularly relevant GC 23.</p>	<p>1. Work not qualifying for Category 1.</p>

<b>ACTIVITY</b>	<b>CATEGORY 1</b>	<b>CATEGORY 2</b>
<b>(d) REPAIR, REPLACEMENT, &amp; MAINTENANCE OF AUTHORIZED FILLS</b>	<p>1. Repair or maintenance of existing, currently serviceable, authorized fills with no expansion or change in use:</p> <ul style="list-style-type: none"> <li>• Conditions of the original authorization apply</li> <li>• Minor deviations in fill design allowed.<sup>7</sup></li> <li>• The repair, rehabilitation, or replacement of those 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.</li> </ul>	<p>2. Replacement of non-serviceable fills, or repair/maintenance of serviceable fill, with expansion &lt;3 acres, or with a change in use.</p>
<b>(e) MISCELL-ANEOUS</b>	<p>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. SAS<sup>3</sup> must typically be restored in place at the same elevation.</p> <p>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.</p> <p>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. The construction of temporary pads is authorized provided the discharge doesn't exceed 25 CY. 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).</p> <p>4. Any work not commenced nor completed that was authorized in a written letter from the Corps under the PGP in effect between October 11, 2005 and October 11, 2010. The terms and general conditions of this GP apply along with any special conditions in the written authorization.</p>	<p>1. Aquatic habitat restoration, establishment, and enhancement of wetlands and riparian areas and the restoration and enhancement of streams and other open waters with impacts of any area <math>\geq 15,000</math> SF, provided those activities result in net increase in overall aquatic resource functions and services.<sup>8</sup></p> <p>2. Projects where an EIS is required by the Corps are not eligible for Category 2.</p>

<p><b>II. NAVIGABLE WATERS</b></p>	<p><b>Navigable Waters of the United States:</b> Waters that are subject to the ebb and flow of the tide and/or the tidal and non-tidal portions of the Federally designated navigable waters (the Penobscot River, Kennebec River, and Lake Umbagog) (Section 10 Rivers and Harbors Act of 1899). The jurisdictional limits are the mean high water (MHW) line in tidal waters and the ordinary high water (OHW) mark in non-tidal portions of the federally designated navigable rivers. 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<sup>1</sup> to tidal waters are also reviewed in this Navigable Waters section.</p> <p>Projects not meeting Category 1 require an application for review as a Category 2 or Individual Permit project.</p> <p>All Category 1 and 2 projects must comply with all of this GP's applicable terms (Pages 1 - 4) and general conditions (Pages 5 - 18).</p>	
<p><b>ACTIVITY</b></p>	<p><b>CATEGORY 2</b></p>	
<p><b>(a) FILL</b></p>	<p><b>CATEGORY 1</b></p> <p><b>1.</b> 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 or appropriate approval. Causeways and approach fills are not included in this category and require Category 2 or Individual Permit authorization.</p> <p><b>2.</b> Bank stabilization projects &lt;200 linear feet:</p> <ul style="list-style-type: none"> <li>• ≤1 cubic yard of fill per linear foot placed along the bank waterward of high tide line. No fill or equipment will occur in SAS<sup>3</sup>.</li> <li>• Work conducted in the intertidal zone must be conducted in-the-dry during low water, or between Nov. 8 – Apr. 9.</li> <li>• No structures angled steeper than 1H:1V and only rough-faced stone or fiber roll revetments allowed.</li> <li>• No driving of piles or sheeting.</li> </ul> <p><b>3.</b> For 1 and 2 above:</p> <ul style="list-style-type: none"> <li>• Project proponents must contact the USFWS for work on coastal beaches to ensure no impacts to piping plovers, roseate terns or their habitat [see GC 10(b)iii].</li> </ul>	<p><b>1.</b> &lt;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, provided:</p> <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul>
<p><b>(b) STREAM WORK &amp; CROSSINGS, and WETLAND CROSSINGS</b></p>	<p><b>1.</b> No new fill for crossings allowed.</p>	<p><b>1.</b> New crossings or replacement crossings that do not fit the (c) Repair and Maintenance activity below.</p>

<b>ACTIVITY</b>	<b>CATEGORY 1</b>	<b>CATEGORY 2</b>
<p><b>(c) REPAIR AND MAINTENANCE WORK</b></p>	<p><b>1.</b> Repair, replacement in-kind, or maintenance<sup>7</sup> of existing, currently serviceable<sup>7</sup>, authorized structures or fills:</p> <ul style="list-style-type: none"> <li>• Conditions of the original authorization apply.</li> <li>• No substantial expansion or change in use.</li> <li>• Must be rebuilt in same footprint, however minor deviations in structure design allowed<sup>7</sup>.</li> <li>• The repair, rehabilitation, or replacement of those 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. Minor deviations for work involving piles shall adhere to one of the 4 methods in a - d below: <ul style="list-style-type: none"> <li><b>a.</b> Piles installed in-the-dry during low water or in-water between Nov. 8<sup>th</sup> - Apr. 9<sup>th</sup>, or</li> <li><b>b.</b> Must be drilled and pinned to ledge, or</li> <li><b>c.</b> Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or</li> <li><b>d.</b> Impact hammers limited to one hammer and &lt;50 piles installed/day with the following: wood piles of any size, concrete piles ≤18-inches diameter, steel piles &lt;12-inches diameter if the hammer is ≤3000 lbs and a wood cushion is used between the hammer and steel pile, and</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• For b – d above: <ul style="list-style-type: none"> <li>○ In-water noise levels shall not exceed &gt;187dB SEL re 1μPa or 206dB peak re 1μPa at a distance &gt;10m from the pile being installed, and</li> <li>○ In-water noise levels &gt;155dB peak re 1μPa shall not exceed 12 consecutive hours on any given day and a 12 hour recovery period (i.e., in-water noise below 155dB peak re 1μPa) must be provided between work days.</li> </ul> </li> <li>• For a – d above: <ul style="list-style-type: none"> <li>○ Work is not eligible for Category 1 if conducted in tidal portions of the Penobscot river upstream of a line extending from Turner point in Castine to Moose Point (formerly squaw point) on Cape Jellison in Stockton Springs or in tidal portions of the Kennebec or Androscoggin Rivers upstream of a line extending from Doubling point in Arrowsic to Hospital Point in West Bath.</li> </ul> </li> </ul>	<p><b>1.</b> Replacement of non-serviceable structures and fills or repair/maintenance of serviceable structures or fills, with fill, replacement or expansion &lt;1 acre, or with a change in use.</p>

ACTIVITY	CATEGORY 1	CATEGORY 2
<p><b>(d) DREDGING AND ASSOCIATED DISPOSAL</b></p>	<p>1. Maintenance dredging<sup>10</sup> for navigational purposes &lt;1,000 CY with upland disposal. Includes return water from upland contained disposal area, provided:</p> <ul style="list-style-type: none"> <li>• Proper siltation controls are used.</li> <li>• Dredging &amp; disposal operation limited to Nov. 8 – Apr. 9.</li> <li>• No impact to SAS<sup>3</sup>.</li> <li>• No dredging in intertidal areas.</li> <li>• No dredging in areas considered occupied by listed Atlantic salmon [see GC 10(b)(ii)].</li> <li>• For dredging in waters outside of Atlantic salmon critical habitat, applicants must contact NMFS (Appendix D) to ensure no impacts to listed species such as shortnose sturgeon.</li> <li>• Project proponents must contact the USFWS for work on coastal beaches to ensure no impacts to piping plovers, roseate terns or their habitat [see GC 10(c)].</li> </ul>	<p>1. Maintenance dredging<sup>10</sup> ≥1,000 CY, new dredging &lt;25,000 CY, or projects not meeting Category 1. Includes return water from upland contained disposal areas. Disposal includes:</p> <ul style="list-style-type: none"> <li>• Upland.</li> <li>• Beach nourishment (above mean high water) of any area provided dredging's primary purpose is navigation or sand is from an upland source.</li> <li>• Open water &amp; confined aquatic disposal, if Corps finds the material suitable.</li> </ul> <p>2. Beach nourishment associated with dredging when the primary purpose is not navigation requires at least a Category 2 review.</p> <p>3. Maintenance or new dredging<sup>10</sup> and/or disposal in or affecting a SAS<sup>3</sup> requires an Individual Permit. See II(a) above for dredge disposal in wetlands or waters.</p>
<p><b>(e) MOORINGS</b></p>	<p>1. Private, non-commercial, non-rental, single-boat moorings, provided:</p> <ul style="list-style-type: none"> <li>• Authorized by the local harbormaster/town.</li> <li>• Not associated with any boating facility.<sup>11</sup></li> <li>• Boat or mooring not located in a Federal Navigation Project<sup>12</sup> other than a Federal Anchorage<sup>12</sup>. Moorings in Federal Anchorage not associated with a boating facility<sup>11</sup> and are not for rent.</li> <li>• No interference with navigation.</li> <li>• No new moorings located in SAS<sup>3</sup>. Prior to installation of moorings, a site-specific eelgrass survey should be conducted to document that eelgrass is not present.</li> <li>• When existing, authorized moorings in SAS<sup>3</sup> are going to be replaced, they shall be replaced with elastic mooring systems that prevent mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS protection systems where practicable.</li> </ul> <p>2. Minor relocation of previously authorized moorings and moored floats, provided:</p> <ul style="list-style-type: none"> <li>• Authorized by the local harbormaster/town.</li> <li>• Not located in SAS<sup>3</sup></li> <li>• No interference with navigation.</li> <li>• Cannot be relocated into a Federal Navigation Project<sup>12</sup> other than a Federal Anchorage<sup>12</sup></li> </ul>	<p>1. Moorings associated with a boating facility<sup>11</sup>. An eelgrass<sup>14</sup> survey may be required.</p> <p>2. Moorings that don't meet the terms in Category 1 and don't require an Individual Permit. This includes private moorings with no harbormaster or means of local approval.</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<sup>13</sup> of a Federal Channel<sup>12</sup>. (See Appendix F.) The buffer zone is equal to 3 times the authorized depth of that channel.</p> <p>4. An IP is required for moorings within the horizontal limits<sup>11</sup>, or with moored vessels that extend, into the horizontal limits of a Federal Navigation Project<sup>12</sup>, except those in Federal Anchorages<sup>12</sup>.</p> <p>For 1-4 above, siting of new individual moorings in SAS<sup>3</sup>, including eelgrass<sup>14</sup>, should be avoided to the maximum extent practicable. If SAS<sup>3</sup> 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 SAS protection systems, where practicable.</p>

ACTIVITY (f) STRUCTURES AND FLOATS	CATEGORY 1	CATEGORY 2
	<p><b>1.</b> Reconfiguration of existing, authorized structures or floats.</p> <p><u>Provided:</u></p> <p><b>a.</b> Piles shall adhere to one of the 4 methods in (i) –(iv) below:</p> <ul style="list-style-type: none"> <li><b>i.</b> Piles installed in-the-dry during low water or in-water between Nov. 8<sup>th</sup> - Apr. 9<sup>th</sup>, or</li> <li><b>ii.</b> Must be drilled and pinned to ledge, or</li> <li><b>iii.</b> Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or</li> <li><b>iv.</b> Impact hammers limited to one hammer and &lt;50 piles installed/day with the following: wood piles of any size, concrete piles ≤18-inches diameter, steel piles &lt;12-inches diameter if the hammer is ≤3000 lbs and a wood cushion is used between the hammer and steel pile.</li> </ul> <p><b>b.</b> For (ii) – (iv) above:</p> <ul style="list-style-type: none"> <li><b>i.</b> In-water noise levels shall not exceed &gt;187dB SEL re 1μPa or 206dB peak re 1μPa at a distance &gt;10m from the pile being installed, and</li> <li><b>ii.</b> In-water noise levels &gt;155dB peak re 1μPa shall not exceed 12 consecutive hours on any given day and a 12 hour recovery period (i.e., in-water noise below 155dB peak re 1μPa) must be provided between work days.</li> </ul> <p><b>c.</b> For (i) –(iv) above:</p> <ul style="list-style-type: none"> <li><b>i.</b> Work is not eligible for Category 1 if conducted in tidal portions of the Penobscot river upstream of a line extending from Turner point in Castine to Moose Point (formerly squaw point) on Cape Jellison in Stockton Springs or in tidal portions of the Kennebec or Androscoggin Rivers upstream of a line extending from Doubling point in Arrowsic to Hospital Point in West Bath.</li> </ul>	<p><b>CATEGORY 2</b></p> <p><b>1.</b> Private structures or floats, including floatways/skidways, built to access waterway (seasonal and permanent)</p> <p><b>2.</b> Expansions to existing boating facilities<sup>11</sup>.</p> <p>For 1 &amp; 2 above, compliance with the following design standards is not required but recommended:</p> <ul style="list-style-type: none"> <li>● Pile-supported structures &lt;400 SF, with attached floats totaling ≤200 SF.</li> <li>● Bottom anchored floats ≤200 SF.</li> <li>● Structures are ≤4' wide and have at least a 1:1 height:width ratio<sup>11</sup>.</li> <li>● Floats supported a minimum of 18" above the substrate during all tides.</li> <li>● Structures &amp; floats not located within 25' of any eelgrass<sup>8</sup>.</li> <li>● Moored vessels not positioned over SAS<sup>4</sup>.</li> <li>● No structure located within 25' of the riparian property boundary without written approval from the abutter(s).</li> <li>● No structure extends across &gt;25% of the waterway width at mean low water.</li> <li>● Not located within the buffer zone of the horizontal limits<sup>13</sup> of a Corps Federal Navigation Project (FNP) (App. F). The buffer zone is equal to three times the authorized depth of that FNP.</li> </ul> <p><b>3.</b> An Individual Permit is required for structures or floats, including floatways/skidways, located such that they and/or vessels docked or moored at them are within the horizontal limits<sup>13</sup> of a Corps Federal Navigation Project<sup>12</sup> (see App. F).</p> <p><b>4.</b> An Individual Permit is required for structures &amp; floats associated with a new or previously unauthorized boating facility<sup>11</sup>.</p>

ACTIVITY	CATEGORY 1	CATEGORY 2
<b>(g) MISCELL-ANEIOUS</b>	<p><b>1.</b> Temporary buoys, markers, floats, etc. for recreational use during specific events, provided they are removed within 30 days after use is discontinued.</p> <p><b>2.</b> 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><b>3.</b> 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. SAS<sup>3</sup> must typically be restored in place at the same elevation.</p> <p><b>4.</b> 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.). 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. No activity that results in a hazard to navigation. Note: A Category 1 Notification Form is not required for these devices and activities.</p> <p><b>5.</b> 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><b>6.</b> 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. Applicants must contact NMFS to ensure no impacts to listed species.</p>	<p><b>1.</b> Structures or work in or affecting tidal or navigable waters, that are not defined under any of the previous headings listed above. Includes, but is not limited to, utility lines, aerial transmission lines, pipelines, outfalls, boat ramps, floatways/skidways, bridges, tunnels and horizontal directional drilling activities seaward of the mean high water line.</p> <p><b>2.</b> Shellfish/finfish (other than Atlantic salmon), or other aquaculture facilities with no more than minimal individual and cumulative impacts to environmental resources or navigation. –Aquaculture guidelines are provided at: <a href="http://www.maine.gov/dmr/aquaculture/index.htm">www.maine.gov/dmr/aquaculture/index.htm</a>.</p> <p><b>3.</b> Specific activities with impacts of any area required to affect 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. Wetlands must typically be restored in place at the same elevation to qualify.</p> <p><b>4.</b> Aquatic habitat restoration, establishment and enhancement provided those activities are proactive and result in net increases in aquatic resource functions and services.<sup>8</sup></p> <p><b>5.</b> Projects where an EIS is required by the Corps are not eligible for Category 2.</p>

ACTIVITY	CATEGORY 1	CATEGORY 2
(g) MISCELL-ANEIOUS (continued)	<p>7. Shellfish seeding (brushing the flats<sup>9</sup>) projects.</p> <p>8. Marine railway work not eligible for maintenance<sup>7</sup> (i.e. not currently serviceable<sup>7</sup> or in non-compliance) may be replaced “in-kind” with minor deviations<sup>7</sup> provided:</p> <ul style="list-style-type: none"> <li>• Work is in the intertidal zone</li> <li>• No fill expansion below high tide line.</li> <li>• Work conducted in-the-dry during low water or in-water between Nov. 8 – Apr. 9.</li> </ul> <p>9. Test plots &lt;100 SF for the planting of wetland species native to the area. No grading, no structures, no plant growing devices and no interference with navigation, which require at least Category 2 review.</p> <p>10. Any work not commenced nor completed that was authorized in a written letter from the Corps under the PGP in effect between October 11, 2005 and October 11, 2010. The terms and general conditions of this GP apply along with any special conditions in the written authorization</p>	

**Endnotes/Definitions**

<sup>1</sup> **Bordering and Contiguous Wetlands:** A bordering wetland is immediately next to its adjacent waterbody and may lie at, or below, the ordinary high water mark (mean high water 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 highwater 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.”

<sup>2</sup> **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 extent of past, present, and foreseeable developments in the area may be an important consideration in evaluating the significance of a particular project's impacts. Although the impacts associated with a particular discharge may be minor, the cumulative effect of numerous similar discharges can result in a large impact. Cumulative impacts should be estimated only to the extent that they are reasonable and practical.

<sup>3</sup>**Special Aquatic Sites:** Includes wetlands and saltmarsh, mudflats, riffles and pools, and vegetated shallows (predominantly comprised of eelgrass in Maine).

<sup>4</sup>**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.

<sup>5</sup>**Vernal Pools:** A vernal pool, also referred to as a seasonal forest pool, is a temporary to semi-permanent body of water occurring in a shallow depression that typically fills during the spring or fall and may dry during the summer. Vernal pools have no permanent inlet or outlet and no viable populations of predatory fish. A vernal pool may provide the primary breeding habitat for wood frogs (*Rana sylvatica*), spotted salamanders (*Ambystoma maculatum*), blue-spotted salamanders (*Ambystoma laterale*), and fairy shrimp (*Eubranchipus* sp.), as well as valuable habitat for other plants and wildlife, including several rare, threatened, and endangered species. A vernal pool intentionally created for the purposes of compensatory mitigation is included in this definition. For the purposes of this GP, the presence of any of the following species in any life stage in any abundance level/quantity would designate the waterbody as a vernal pool: fairy shrimp, blue spotted salamanders, spotted salamanders or wood frogs. The Corps may determine during a Category 2 review that a waterbody should not be regulated as a VP based on available evidence. For the purposes of this GP\*, the VP Management Areas are the: Vernal Pool Depression (includes the vernal pool depression up to the spring or fall high water mark, and includes any vegetation growing within the depression), Vernal Pool Envelope (area within 100 FT of the VP Depression's edge) and Critical Terrestrial Habitat (area within 100-750 FT of the Vernal Pool Depression's edge). [\*Note: Critical Terrestrial Habitat is defined as 100 -750 FT on page 243 of the document "Science and Conservation of Vernal Pools in Northeastern North America," Calhoun and deMaynadier, 2008, which is referenced in Appendix E, page 3, Paragraph 10(b).

<sup>6</sup>**Water Diversions:** Water diversions are activities such as bypass pumping or water withdrawals. Temporary flume pipes, culverts or cofferdams where normal flows are maintained within the stream boundary's confines aren't water diversions. "Normal flows" are defined as no change in flow from pre-project conditions.

<sup>7</sup>**Maintenance:** a) 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." Otherwise, the following work is regulated and subject to the Category 1 or 2 thresholds in Appendix A above: 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.

b) 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 repair, rehabilitation, or replacement are authorized. c) Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction. d) No seaward expansion for bulkheads or any other fill activity is considered Category 1 maintenance. e) 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. f) The state's maintenance provisions may differ from the Corps and may require reporting and written authorization from the state. g) Contact the Corps to determine whether stream crossing replacements require a written application to the Corps for at least a Category 2 review.

<sup>8</sup>**Aquatic Habitat Restoration, Establishment and Enhancement:** The Corps will decide if a project qualifies and must determine in consultation with federal and state agencies that the net effects are beneficial. The Corps may refer to Nationwide Permit 27 published in the 3/12/07 Federal Register. Activities authorized here may include, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms; the installation of current deflectors; the enhancement, restoration, or establishment of riffle and pool stream structure; the placement

of in-stream habitat structures; modifications of the stream bed and/or banks to restore or establish stream meanders; the backfilling of artificial channels and drainage ditches; the removal of existing drainage structures; the construction of small nesting islands in inland waters; the construction of open water areas; the construction of native shellfish species habitat over unvegetated bottom for the purpose of habitat protection or restoration in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

<sup>9</sup> **Brushing the Flats:** The placement of tree boughs, wooden lath structure, or small-mesh fencing on mudflats to enhance recruitment of soft-shell clams (*Mya arenaria*).

<sup>10</sup> **Maintenance Dredging:** This includes only those areas and depths previously authorized by the Corps and dredged.

<sup>11</sup> **Boating Facilities:** Facilities that provide for a fee, rent, or sell mooring space, such as marinas, yacht clubs, boat clubs, boat yards, town facilities, dockminiums, etc.

<sup>12</sup> **Federal Navigation Projects (FNPs):** FNPs are comprised of Federal Channels and Federal Anchorages. See Appendix F for their location and contact the Corps for more information. “Horizontal Limits” is the outer edge of an FNP. “Buffer Zone” is equal to three times the authorized depth of that channel.

<sup>13</sup> **Horizontal Limits:** The outer edge of a Federal Navigation Project (FNP). See Appendix F and contact the Corps for information on FNP’s.

<sup>14</sup> **Eelgrass (*Zostera marina*):** A type of rooted aquatic vegetation that exists in intertidal and shallow subtidal areas known as vegetated shallows. See [www.nero.noaa.gov/hcd/](http://www.nero.noaa.gov/hcd/) for eelgrass survey guidance.

<sup>15</sup> **Structures:** The height of structures shall at all points be equal to or exceed the width of the deck. For the purpose of this definition, height shall be measured from the marsh substrate to the bottom of the longitudinal support beam.



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## **Appendix C: Information Typically Required for Department of the Army Permits** (Category 2 & Individual Projects)

The following information may not be necessary for all projects. For a more comprehensive checklist, go to [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) “Forms” and then “Application and Plan Guideline Checklist.” Please check with our Maine office for project-specific requirements at (207) 623-8367.

### **All Projects:**

- Corps application form ([ENG Form 4345](#)) as appropriate.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible black and white (no color) plans no larger than 11”x17” with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show mean low water (MLW) and mean high water (MHW) elevations. Show the high tide line (HTL) elevations when fill is involved. In other waters, show ordinary high water (OHW) elevation.
- On each plan, show the following for the project:
  - Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. Don’t use local datum. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean low lower water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
  - Horizontal state plane coordinates in U.S. survey feet based on the [insert state grid system] for the [insert state] [insert zone] NAD 83.
- Show project limits with existing and proposed conditions.
- Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
- Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the ordinary high water in inland waters and below the high tide line in coastal waters.
- Delineation of all waterways and wetlands on the project site, including vernal pools:
  - Use federal delineation methods and include Corps wetland delineation data sheets. See GC 2; Endnotes 1, 3 and 14 in Appendix A; and [www.nero.noaa.gov/hcd](http://www.nero.noaa.gov/hcd) for eelgrass survey guidance.
  - Appendix A, (e) Moorings, contains eelgrass survey requirements for the placement of moorings.
  - Labels on the plans should indicate whether the federal wetland is also a ME DEP “Wetlands of Special Significance,” i.e, coastal wetland, great pond, or one of the eight “Freshwater Wetlands of Special Significance” such as “Critically imperiled or imperiled community,” “Significant wildlife habitat,” etc. [see Appendix E, 10(a)].
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact the Corps for guidance.

- Provide information on secondary and cumulative effects associated with the project (see GC 3).
- Indicate that application materials were submitted to the Maine Historic Preservation Commission (MHPC) and the appropriate tribes (see Section 3(d) on Page 4).
- The name(s) of federal endangered and threatened “listed species or habitat” present in the action area (see GC 10 and Appendix E).
- Identify and describe potential impacts to Essential Fish Habitat (see GC 11).
- Invasive Species Control Plan (see GC 29).

**Information typically required for dredging projects:**

- Sediment testing, including physical (e.g., grain-size analysis), chemical and biological testing. For projects proposing open water disposal, applicants are encouraged to contact the Corps as early as possible regarding sampling and testing protocols. Sampling and testing of sediments without such contact should not occur and if done, would be at the applicant’s risk.
- The area in square feet and volume of material to be dredged below mean high water.
- Existing and proposed water depths.
- Type of dredging equipment to be used.
- Nature of material (e.g., silty sand).
- Any existing sediment grain size and bulk sediment chemistry data for the proposed or any nearby projects.
- Information on the location and nature of municipal or industrial discharges and occurrence of any contaminant spills in or near the project area.
- Shellfish survey.
- Location of the disposal site (include locus sheet).
- Identify and describe potential impacts to Essential Fish Habitat (see GC 11).
- Delineation of submerged aquatic vegetation (e.g., eelgrass beds).

## Appendix D: Contacts and Tribal Areas of Interest

### 1. **FEDERAL**

#### U.S. Army Corps of Engineers

Maine Project Office  
675 Western Avenue #3  
Manchester, Maine 04351  
(207) 623-8367; (207) 623-8206 (fax)

#### Federal Endangered Species

U.S. Fish and Wildlife Service  
Maine Field Office  
17 Godfrey Drive, Suite 2  
Orono, Maine 04473  
(207) 866-3344; (207) 866-3351 (fax)

#### Wild and Scenic Rivers

National Park Service  
North Atlantic Region  
15 State Street  
Boston, Massachusetts 02109  
(617) 223-5203

#### Bridge Permits

Commander (obr)  
First Coast Guard District  
One South Street - Battery Bldg  
New York, New York 10004  
(212) 668-7021; (212) 668-7967 (fax)

#### Federal Endangered Species

National Marine Fisheries Service  
Maine Field Office  
17 Godfrey Drive Suite 1  
Orono, ME 04473  
(207) 866-7379; (978) 866-7342 (fax)

#### Federal Endangered Species & EFH

National Marine Fisheries Service  
55 Great Republic Drive  
Gloucester, Massachusetts 01930  
(978) 281-9102; (978) 281-9301 (fax)

### 2. **STATE OF MAINE**

#### Maine Department of Environmental Protection (for State Permits & Water Quality Certifications)

Division of Land Resource Regulation  
Bureau of Land and Water Quality  
17 State House Station  
Augusta, Maine 04333  
(207) 287-7688

Eastern Maine Regional Office  
106 Hogan Road  
Bangor, Maine 04401  
(207) 941-4570

Southern Maine Regional Office  
312 Canco Road  
Portland, Maine 04103  
(201) 822-6300

Northern Maine Regional Office  
1235 Central Drive - Skyway Park  
Presque Isle, Maine 04769  
(207) 764-0477

#### Maine Land Use Regulation Commission (LURC) ([www.maine.gov/doc/lurc/offices.html](http://www.maine.gov/doc/lurc/offices.html))

22 State House Station  
Augusta, Maine 04333-0022  
(207) 287-2631; (207) 287-7439 (fax)

106 Hogan Rd, Suite 7  
Bangor, Maine 04401  
(207) 941-4052; (207) 941-4222 (fax)

Lakeview Drive  
P.O. Box 1107  
Greenville, Maine 04441  
(207) 695-2466; (207) 695-2380 (fax)

45 Radar Road  
Ashland, ME 04732-3600  
(207) 435-7963; (207) 435-7184 (fax)

191 Main Street  
East Millinocket, ME 04430  
(207) 746-2244; (207) 746-2243 (fax)

(For CZM Determinations)

State Planning Office  
Coastal Program  
184 State Street  
State House Station 38  
Augusta, Maine 04333  
(207) 287-1009

(For Aquaculture Leases)

Maine Department of Marine Resources  
P.O. Box 8  
West Boothbay Harbor, Maine 04575  
(207) 633-9500

(For Submerged Lands Leases)

Maine Department of Conservation  
Bureau of Parks and Lands  
22 State House Station  
Augusta, Maine 04333  
(207) 287-3061

### **3. HISTORIC PROPERTIES**

Maine Historic Preservation Commission  
(MHPC)

State House Station 65  
Augusta, Maine 04333-0065  
(207) 287-2132; (207) 287-2335 (fax)

Aroostook Band of Micmacs

Attn: Victoria Higgins, Chief  
7 Northern Road  
Presque Isle, Maine 04769  
(207) 764-1972; (207) 764-7667 (fax)

Houlton Band of Maliseet Indians

Attn: Sharri Venno, Environmental Planner  
88 Bell Road  
Littleton, Maine 04730  
(207) 532-4273, x215; (207) 532-1883 (fax)  
envplanner@maliseets.com

Passamaquoddy Tribe of Indians

Indian Township Reservation  
Attn: Donald Soctomah, THPO  
P.O. Box 301  
Princeton, Maine 04668  
(207) 796-2301; (207) 796-5256 (fax)

Passamaquoddy Tribe of Indians

Pleasant Point Reservation  
Attn: Donald Soctomah, THPO  
P.O. Box 343  
Perry, Maine 04667  
(207) 853-2600; (207) 853-6039 (fax)

Penobscot Indian Nation

Indian Island Reservation  
Attn: Ms. Bonnie Newsom, THPO  
12 Wabanaki Way  
Indian Island, Maine 04468  
(207) 817-7471; (207) 817-7450 (fax)

### **4. ORGANIZATIONAL WEBSITES:**

Army Corps of Engineers, N.E. District  
Army Corps of Engineers, Headquarters  
Environmental Protection Agency  
National Marine Fisheries Service  
U.S. Fish and Wildlife Service  
National Park Service  
State of Maine  
Maine Department of Environmental Protection  
Maine Land Use Regulation Commission  
State of Maine -Aquaculture Guidelines

[www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg)  
[www.usace.army.mil/CECW/Pages/cecwo\\_reg.aspx](http://www.usace.army.mil/CECW/Pages/cecwo_reg.aspx)  
[www.epa.gov/owow/wetlands](http://www.epa.gov/owow/wetlands)  
[www.nmfs.noaa.gov](http://www.nmfs.noaa.gov)  
[www.fws.gov/mainefieldoffice](http://www.fws.gov/mainefieldoffice)  
[www.nps.gov/rivers/index.html](http://www.nps.gov/rivers/index.html)  
[www.maine.gov](http://www.maine.gov)  
[www.maine.gov/dep](http://www.maine.gov/dep)  
[www.maine.gov/doc/lurc](http://www.maine.gov/doc/lurc)  
[www.maine.gov/dmr/aquaculture/index.htm](http://www.maine.gov/dmr/aquaculture/index.htm)

## Appendix E: Additional References

### 1. GC 2: Federal Jurisdictional Boundaries.

(a) Corps Wetlands Delineation Manual, regional supplements, and Corps Wetland Delineation Data Sheets: [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) and then “Wetlands and Jurisdictional Limits.”

(b) The USFWS publishes the 1988 National List of Plant Species that Occur in Wetlands ([www.nwi.fws.gov](http://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.neiwpc.org/hydricsoils.asp](http://www.neiwpc.org/hydricsoils.asp).

### 2. GC 5:

*Single and complete project* means the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For example, if construction of a residential development affects several different areas of a headwater or isolated water, or several different headwaters or isolated waters, the cumulative total of all filled areas should be the basis for deciding whether or not the project will be covered by Category 1 or 2.

The *Independent utility* test is used to determine what constitutes a single and complete project in the Corps regulatory program. 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.

### 3. GC 10: Threatened and Endangered Species.

(a) The following NMFS site must be referenced to ensure that listed species or critical habitat are not present in the action area [GC 10(b)] or to provide information on federally-listed species or habitat [GC 10(e)]: [www.nero.noaa.gov/prot\\_res/esp/ListE&Tspec.pdf](http://www.nero.noaa.gov/prot_res/esp/ListE&Tspec.pdf). Contact the USFWS for information to check for the presence of listed species (see Appendix D for contact information).

(b) 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].”

### 4. GC 11: Essential Fish Habitat.

As part of the PGP screening process, the Corps may coordinate with NMFS in accordance with the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act 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, or growth to maturity.” There are EFH waters throughout inland and coastal waters in Maine. For additional information, see the EFH regulations 50 CFR 600 at [www.nero.noaa.gov/hcd](http://www.nero.noaa.gov/hcd) including the “Guide for EFH Descriptions” at [www.nero.noaa.gov/hcd/list.htm](http://www.nero.noaa.gov/hcd/list.htm). Additional information on the location of EFH can be obtained from NMFS (see Appendix D for contact information).

### 5. GC 16: Avoidance, Minimization and Compensatory Mitigation.

(a) See [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) and then “Mitigation” 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 option is mitigation

bank credits, which are usually in place before the activity is permitted. In-lieu fee program credits are second in the preference hierarchy, because they may involve larger, more ecologically valuable compensatory mitigation projects as compared to permittee-responsible mitigation. Permittee-responsible mitigation is the third option, with three possible circumstances: (1) conducted under a watershed approach, (2) on-site and in kind, and (3) off-site/out-of-kind.

(b) Compensatory mitigation may take the form of wetland preservation, restoration, enhancement, creation, and/or in lieu fee (ILF) for inclusion into the Natural Resources Mitigation Fund for projects in DEP and LURC territories. Avoidance of wetland impacts will reduce the ILF dollar total for applicants. The ILF compensation program was established to provide applicants with a flexible compensation option over and above traditional permittee responsible compensation projects. See the Maine ILF Agreement at [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg), “Mitigation” and then “Maine,” or [www.maine.gov/dep/blwq/docstand/nrpa/ILF\\_and\\_NRCP/index.htm](http://www.maine.gov/dep/blwq/docstand/nrpa/ILF_and_NRCP/index.htm).

## **6. GCs 19 and 29: Invasive Species.**

(a) Information on what are considered “invasive species” is provided in our “Compensatory Mitigation Guidance” document at [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) under “Mitigation.” The “Invasive Species” section has a reference to our “Invasive Species Control Plan (ISCP) Guidance” document, located at [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) under “Invasive Species,” which provides information on preparing an ISCP.

(b) The June 2009 “Corps of Engineers Invasive Species Policy” is at [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) under “Invasive Species” and provides policy, goals and objectives.

## **7. GC 20: Bank Stabilization.**

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. See the Corps Coastal Engineering Manual [EM 1110-2-1100](#) at [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) under “Useful Links and Documents” for design and construction guidance.

## **8. GC 22: Stream Crossings and Work.**

(a) Projects should be designed and constructed to ensure long-term success using the most recent manual located at [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) under “Stream and River Continuity,” currently “Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings, by the U.S. Forest Service.” 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.

(b) For more information on High-Quality Stream Segments and their components see:

i. High-Quality Stream Segments are shown at [www.maine.gov/dep/gis/datamaps](http://www.maine.gov/dep/gis/datamaps).

ii. Class A Waters or Class AA Waters:

[www.mainelegislature.org/legis/statutes/38/title38sec465.html](http://www.mainelegislature.org/legis/statutes/38/title38sec465.html), and

[www.mainelegislature.org/legis/statutes/38/title38sec467.html](http://www.mainelegislature.org/legis/statutes/38/title38sec467.html).

iii. Outstanding river segments [www.mainelegislature.org/legis/statutes/38/title38sec480-P.html](http://www.mainelegislature.org/legis/statutes/38/title38sec480-P.html).

(c) The Massachusetts Dam Removal and the Wetland Regulations guidance may be used to evaluate the positive and negative impacts of culvert replacement, including the loss of upstream wetlands, which may be offset by the overall benefits of the river restoration. See [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) and then “Stream and River Continuity.”

(d) The ME DOT’s document “Waterway and Wildlife Crossing Policy and Design Guide for Aquatic Organism, Wildlife Habitat, and Hydrologic Connectivity,” 3rd Edition, July 2008, may be used to

evaluate impacts to aquatic, wildlife and surface water resources when designing, constructing, repairing and maintaining stream crossings. Note: Adherence to this DOT document does not ensure compliance with this GP. Projects must comply with the requirements of this GP including GC 22 and the Corps General Stream Crossing Standards contained therein.

[www.maine.gov/mdot/environmental-office-homepage/fishpassage/3rd%20edition%20-%20merged%20final%20version%207-01-08a1.pdf](http://www.maine.gov/mdot/environmental-office-homepage/fishpassage/3rd%20edition%20-%20merged%20final%20version%207-01-08a1.pdf).

(e) GC 22(f): The Skidder Bridge Fact Sheet at [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) under “Stream and River Continuity” may be a useful temporary span construction method.

**9. GC 23: Wetland Crossings.** The Maine DEP’s crossing standards are at 06-096 DEP, Chapter 305: Permit by Rule, 9) Crossings (utility lines, pipes and cables).

[www.maine.gov/dep/blwq/rules/NRPA/2009/305/305\\_effective\\_2009.pdf](http://www.maine.gov/dep/blwq/rules/NRPA/2009/305/305_effective_2009.pdf)

**10. GC 28: Protection of Vernal Pools.**

(a) The state’s Significant Wildlife Habitat rules ([Chapter 335](#), Section 9(C) “Habitat management standards for significant vernal pool habitat”) are located at

[www.maine.gov/dep/blwq/docstand/nrpapage.htm#rule](http://www.maine.gov/dep/blwq/docstand/nrpapage.htm#rule) under “Rules.”

(b) The following documents provide conservation recommendations:

i. Best Development Practices: Conserving pool-breeding amphibians in residential and commercial development in the northeastern U.S., Calhoun and Klemens, 2002. Chapter III, Management Goals and Recommendations, Pages 15 – 26, is particularly relevant. (Available for purchase at [www.maineaudubon.org/resource/index.shtml](http://www.maineaudubon.org/resource/index.shtml) and on Corps website\*.)

ii. Science and Conservation of Vernal Pools in Northeastern North America, Calhoun and deMaynadier, 2008. Chapter 12, Conservation Recommendations section, Page 241, is particularly relevant. (Available for purchase via the internet. Chapter 12 is available on Corps website\*.)

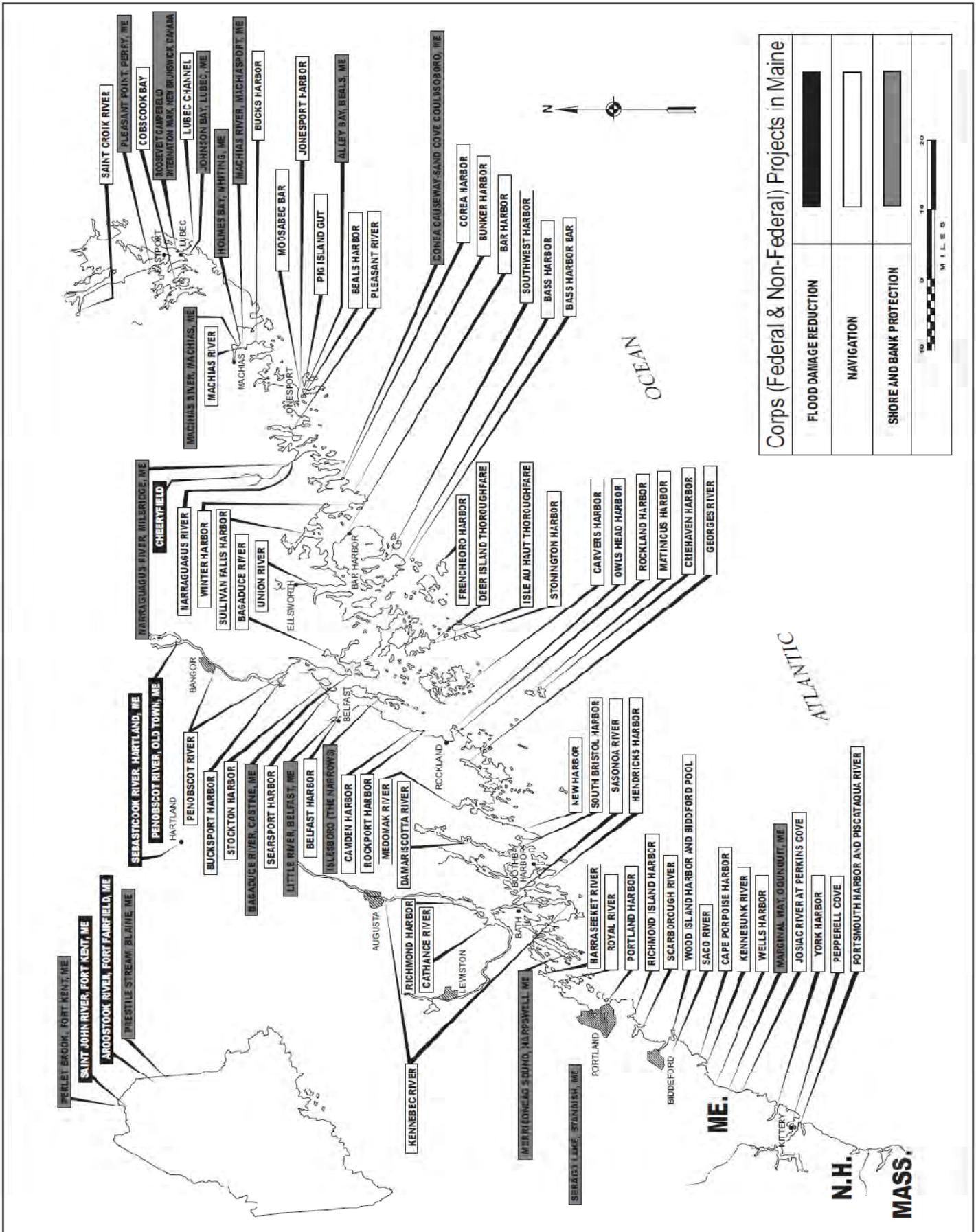
\* [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) under “Vernal Pools.”

(c) Cape Cod Curbing: For smaller roads and driveways, the most important design feature to consider is curbing. Granite curbs and some traditional curbing can act as a barrier to amphibian and hatchling turtle movements. Large numbers of salamanders have been intercepted in their migrations by curbs and catch basins. Use of Cape Cod curbs rather than traditional curbing may be one solution. Alternatively, where storm water management systems require more traditional curbing, it may be possible to design in escape ramps on either side of each catch basin. Cape Cod curbing is shown on Page 35 of the document cited in 10.b.i above. Bituminous material is not required; other materials such as granite are acceptable.

(d) The VP Directional Buffer Guidance document is located at [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) under: 1) “State General Permits” and then “Maine,” and 2) “Vernal Pools.”

**11. GC 32: Maintenance.** River restoration projects that are designed to accommodate the natural dynamic tendencies of the fluvial system are maintained in accordance with the project’s design objectives (Category 1) or the Corps authorization letter (Category 2). These projects are generally designed to support and implement channel assessment and management practices that recognize a stream’s natural dynamic tendencies.

# Appendix F: Corps Projects in Maine



**DEPARTMENT OF ENVIRONMENTAL PROTECTION  
PERMIT BY RULE NOTIFICATION FORM**

(For use with DEP Regulation, Chapter 305)

PLEASE TYPE OR PRINT IN **BLACK INK ONLY**

<b>Name of Applicant: (owner)</b>	Maine Department of Transportation	<b>Name of Agent:</b>	Kristen Chamberlain		
<b>Applicant Mailing Address:</b>	16 State House Station	<b>Agent Phone # (include area code):</b>	207-557-5089		
<b>Town/City:</b>	Augusta	<b>PROJECT Information Name of Town/City:</b>	Gray		
		<b>MaineDOT WIN:</b>	20471.00		
<b>State and Zip code:</b>	ME 04344	<b>Name of Wetland or Waterbody:</b>	Sucker Brook		
<b>Daytime Phone # (include area code):</b>	(207) 624-3100	<b>Map #:</b>		<b>Lot #:</b>	
<b>Detailed Directions to Site:</b>	On Egypt Road near Westwood Road in Gray				
		<b>UTM Northing: (if known)</b>		<b>UTM Easting: (if known)</b>	
<b>Description of Project:</b>	Bridge Culvert Rehabilitation				
<b>Part of a larger project? (check one)→</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>After the Fact? (check one)→</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>Check one</b> → This project <input checked="" type="checkbox"/> does (or) <input type="checkbox"/> does not involve work below mean low water (average low water).	

**PERMIT BY RULE (PBR) SECTIONS: (Check at least one)**

I am filing notice of my intent to carry out work which meets the requirements for Permit By Rule (PBR) under DEP Rules, Chapter 305. I and my agents, if any, **have read** and will comply with all of the standards in the Sections checked below.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Sec. (2) Act. Adj. to Protected Natural Res. | <input type="checkbox"/> Sec.(10) Stream Crossing                                 | <input type="checkbox"/> Sec. (17) Transfers/Permit Extension   |
| <input type="checkbox"/> Sec. (3) Intake Pipes                        | <input checked="" type="checkbox"/> Sec. (11) State Transportation Facil.         | <input type="checkbox"/> Sec. (18) Maintenance Dredging   |
| <input type="checkbox"/> Sec. (4) Replacement of Structures           | <input type="checkbox"/> Sec. (12) Restoration of Natural Areas                   | <input type="checkbox"/> Sec. (19) Activities in/on/over significant vernal pool habitat  |
| <input type="checkbox"/> Sec. (5) REPEALED                            | <input type="checkbox"/> Sec. (13) F&W Creation/Enhance/Water Quality Improvement | <input type="checkbox"/> Sec. (20) Activities in existing dev. areas located in/on/over high or moderate value inland waterfowl & wading bird habitat or shorebird nesting, feeding & staging areas |
| <input type="checkbox"/> Sec. (6) Movement of Rocks or Vegetation     | <input type="checkbox"/> Sec. (14) REPEALED                                       |   |
| <input type="checkbox"/> Sec. (7) Outfall Pipes                       | <input type="checkbox"/> Sec. (15) Public Boat Ramps                              |   |
| <input type="checkbox"/> Sec. (8) Shoreline stabilization             | <input type="checkbox"/> Sec. (16) Coastal Sand Dune Projects                     |   |
| <input type="checkbox"/> Sec. (9) Utility Crossing                    |   |   |

I have attached the following required submittals. **NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS:**

- Attach** a check for \$70 made payable to: "Treasurer, State of Maine". State Agency-Internal Bill
- Attach** a U.S.G.S. topo map or Maine Atlas & Gazetteer map with the project site clearly marked.
- Attach Proof of Legal Name.** If applicant is **not** an individual or municipality, provide a copy of Secretary of State's registration information (available at <http://icrs.informe.org/nei-sos-icrs/ICRS?MainPage=x> )
- Attach photos of the proposed site where activity will take place as outlined in PBR Sections checked above.**
- Attach** all other required submissions as outlined in the PBR Sections checked above.

I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules. I also understand that **this permit is not valid until approved by the Department or 14 days after receipt by the Department, whichever is less.**

**By signing this Notification Form, I represent that the project meets all applicability requirements and standards in the rule and that the applicant has sufficient title, right, or interest in the property where the activity takes place.**

<b>Signature of Agent or Applicant:</b>		<b>Date:</b>	
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Keep a copy as a record of permit. Send the form with attachments via certified mail or hand deliver to the Maine Dept. of Environmental Protection **at the appropriate regional office listed below.** The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. **Work carried out in violation of any standard is subject to enforcement action.**

OFFICE USE ONLY	Ck.#	Date	Staff	Staff	After Photos
PBR #	FP		Acc. Date	Def. Date	

DEPLW0310-N2012

## 11. State transportation facilities

### A. Applicability

- (1) This section applies to the maintenance, repair, reconstruction, rehabilitation, replacement or minor construction of a State Transportation Facility carried out by, or under the authority of, the Maine Department of Transportation (MaineDOT) or the Maine Turnpike Authority, including any testing or preconstruction engineering, and associated technical support services.
- (2) This section does not apply to an activity within a coastal sand dune system.

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NOTE: The construction of a transportation facility other than roads and associated facilities may be subject to the Storm Water Management Law, 38 M.R.S.A. Section 420-D.

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### B. Standards

- (1) Photographs of the area to be altered by the activity must be taken before work on the site begins. The photographs must be kept on file and be made available at the request of the DEP.
- (2) The activity must be reviewed by the Department of Inland Fisheries and Wildlife and the Department of Marine Resources, as applicable. The applicant must coordinate with the reviewing agencies and incorporate any recommendations from those agencies into the performance of the activity.
- (3) All construction activities undertaken must be detailed in a site-specific Soil Erosion and Water Pollution Control Plan and conducted in accordance with MaineDOT's Best Management Practices for Erosion and Sediment Control, dated January 2000, and Standard Specifications, dated December 2002.
- (4) Alignment changes may not exceed a distance of 200 feet between the old and new center lines in any natural resource.
- (5) The activity may not alter more than 300 feet of shoreline (both shores added together) within a mile stretch of any river, stream or brook, including any bridge width or length of culvert.
- (6) The activity may not alter more than 150 feet of shoreline (both shores added together) within a mile stretch of any outstanding river segment identified in 38 M.R.S.A. 480-P, including any bridge width or length of culvert.
- (7) The activity must minimize wetland intrusion. The activity is exempt from the provisions of Chapter 310, the Wetland and Waterbodies Protection Rules, if the activity alters less than 15,000 square feet of natural resources per mile of roadway (centerline measurement) provided that the following impacts are not exceeded within the 15,000 square foot area:
  - (a) 1,000 square feet of coastal wetland consisting of salt tolerant vegetation or shellfish habitat; or

- (b) 5,000 square feet of coastal wetland not containing salt tolerant vegetation or shellfish habitat; or
- (c) 1,000 square feet of a great pond.

All other activities must be performed in compliance with all sections of Chapter 310, the Wetland Protection Rules, except 310.2(C), 5(A), 9(A), 9(B) and 9(C).

- (8) The activity may not permanently block any fish passage in any watercourse containing fish. The applicant must coordinate with the reviewing agencies listed in paragraph 2 above to improve fish passage and incorporate any recommendations from those agencies into the performance of the activity.

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NOTE: For guidance on meeting the design objectives for fish passage, including peak flow, maximum velocity, mining depth and gradient, see the MaineDOT Waterbody and Wildlife Crossing Policy and Design Guide (July 2008), developed in conjunction with state and federal resource and regulatory agencies.

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- (9) Rocks may not be removed from below the normal high water line of any coastal wetland, freshwater wetland, great pond, river, stream or brook except to the minimum extent necessary for completion of work within the limits of construction.
- (10) If work is performed in a river, stream or brook that is less than three feet deep at the time and location of the activity, the applicant must isolate the work area from the resource and divert stream flows around the work area, maintaining downstream flows while work is in progress.
- (11) Wheeled or tracked equipment may not operate in the water. Equipment operating on the shore may reach into the water with a bucket or similar extension. Equipment may cross streams on rock, gravel or ledge bottom. If avoiding the operation of wheeled or tracked equipment in the water is not possible, the applicant must explain the need to operate in the water. Approval from the DEP to operate in the water must be in writing, and any recommendations from the DEP must be incorporated into the performance of the activity.
- (12) All wheeled or tracked equipment that must travel or work in a vegetated wetland area must travel and work on mats or platforms.
- (13) Any debris or excavated material must be stockpiled either outside the wetland or on mats or platforms. Erosion and sediment control best management practices must be used, where necessary, to prevent sedimentation. Any debris generated during the activity must be prevented from washing downstream and must be removed from the wetland or water body. Disposal of debris must be in conformance with the Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. Section 1301 *et seq.*
- (14) Work below the normal high water line of a great pond, river, stream or brook must be done at low water except for emergency work or work agreed to by the resource agencies listed in paragraph 2 above.
- (15) Perimeter controls must be installed before the work starts. Disturbance of natural resources beyond the construction limits shown on the plans is not allowed under this rule.

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NOTE: Guidance on the location of construction limits can be obtained from the on site Construction Manager.

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- (16) The use of untreated lumber is preferred. Lumber pressure treated with chromated copper arsenate (CCA) may be used only if necessary and only if use is allowed under federal law and not prohibited from sale under 38 M.R.S.A. 1682, and provided it is cured on dry land in a manner that exposes all surfaces to the air for a period of at least 21 days prior to construction. Wood treated with creosote or pentachlorophenol may not be used where it will contact water.
- (17) A temporary road for equipment access must be constructed of crushed stone, blasted ledge, or similar materials that will not cause sedimentation or restrict fish passage. Such roads must be completely removed at the completion of the activity. In addition, any such temporary roads which are in rivers, streams or brooks, must allow for a passage of stormwater flows associated with a 10-year storm.
- (18) Non-native species may not be planted in restored areas.
- (19) Disposal of debris must be in conformance with Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. Sections 1301 *et seq.*
- (20) Disturbance of vegetation must be avoided, if possible. Where vegetation is disturbed outside of the area covered by any road or structure construction, it must be reestablished immediately upon completion of the activity and must be maintained.
- (21) A vegetated area at least 25 feet wide must be established and maintained between any new stormwater outfall structure and the high water line of any open water body. A velocity reducing structure must be constructed at the outlet of the stormwater outfall that will create sheet flow of stormwater, and prevent erosion of soil within the vegetated buffer. If the 25 foot vegetated buffer is not practicable, the applicant must explain the reason for a lesser setback in writing. Approval from the DEP must be in writing and any recommendations must be incorporated into the activity.

**C. Definitions.** The following terms, as used in this chapter, have the following meanings, unless the context indicates otherwise:

- (1) Diversion. The rerouting of a river, stream or brook around a construction site and then back to the downstream channel.
- (2) Fill. a. (verb) To put into or upon, supply to, or allow to enter a water body or wetland any earth, rock, gravel, sand, silt, clay, peat, or debris; b. (noun) Material, other than structures, placed in or immediately adjacent to a wetland or water body.
- (3) Floodplain wetlands. Freshwater wetlands that are inundated with flood water during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Agency or other site specific information.
- (4) Riprap. Heavy, irregularly shaped rocks that are fit into place, without mortar, on a slope as defined in the MaineDOT Standard Specifications, dated November 2014

Novemebr 05, 2014  
Supersedes March 25, 2014

## STANDARD DETAIL UPDATES

Standard Details and Standard Detail updates are available at:

<http://maine.gov/mdot/contractors/publications/standarddetail/>

<b><u>Detail #</u></b>	<b><u>Description</u></b>	<b><u>Revision Date</u></b>
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	No Changes to the November 2014 Standard Detail Book	
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SUPPLEMENTAL SPECIFICATION  
(Corrections, Additions, & Revisions to Standard Specifications - November 2014)

**SECTION 101**  
**CONTRACT INTERPRETATION**

101.2 Definitions

Page 1-5 – Remove the definition of Bridge in its entirety and replace with:

**“Bridge A structure that is erected over a depression or an obstruction, such as water, a highway or a railway, and has an opening measured along the centerline of the Roadway of more than 20 feet between: The faces of abutments; spring line of arches; extreme ends of openings of box culverts, pipes or pipe arches; or the extreme ends of openings for multiple box culverts, pipes or pipe arches.”**

Page 1-12 – Remove the definition of Large Culvert in its entirety and replace with:

**“Large Culvert Any structure not defined as a Culvert or Bridge that provides a drainage or non-drainage opening under the Roadway or Approaches to the Roadway, with an opening that is 5 feet but less than 10 feet.”**

Remove the definition of Minor Span in its entirety and replace with:

**“Minor Span Same definition as Bridge, except having an opening of between 10 feet and 20 feet, inclusive.”**

**SECTION 104**  
**GENERAL RIGHTS AND RESPONSIBILITIES**

104.5.5 Prompt Payment of Subcontractors Add the following paragraph to this subsection:

**C. Payment Tracking Federal Projects On federally funded projects, the prime contractor, subcontractors and lower-tier subcontractors will track and confirm the delivery and receipt of all payments through the Elation System. They will be responsible for entering all payments to all sub and lower tier contractors. MaineDOT will run a query monthly to ensure that contractors are complying and generate an e-mail to contractors who have not responded to confirm receipt of MaineDOT payment or contractor payment to lower tier subcontractors.**

**SECTION 105**

## **GENERAL SCOPE OF WORK**

105.4.5 Special Detours Remove this subsection in its entirety and replace with:

**“105.4.5 Maintenance of Existing Structures** When a new Bridge or Minor Span is being installed on a new alignment and the existing structure is to remain in service, the Department will maintain the existing structure and the portions of the roadway required for maintaining traffic until such time that the new structure is opened to traffic and the existing structure is taken out of service. A similar situation exists when a new Bridge or Minor Span is being installed on the same alignment as the existing structure, requiring a temporary detour to be installed by the Contractor per Section 510, Special Detours, prior to removal of the existing structure. In this case, the Department will maintain the existing structure and the portions of the existing roadway required for maintaining traffic until such time that either the temporary detour is opened to traffic or the Contractor begins any work on the existing structure, including, but not limited to, repairs, modifications, moving, demolition or removal. In either case, once the new structure or temporary detour is opened to traffic, or the Contractor begins any work on the existing structure, the Contractor shall be solely responsible for all maintenance of the existing structure and the portions of the existing approaches that lie outside the new roadway or the temporary detour, respectively. This specification is not intended to supersede Standard Specification Section 104.3.11, Responsibility for Property of Others.”

### **APPENDIX A TO DIVISION 100**

Remove Section D in its entirety as this is now covered in Section 105.10 EQUAL OPPORTUNITY AND CIVIL RIGHTS.

### **SECTION 203** **EXCAVATION AND EMBANKMENT**

#### 203.02 Materials

At the bottom of page 2-12, add as the first item in the list:

**Crushed Stone, ¾ inch      703.13**

### **SECTION 304** **AGGREGATE BASE AND SUBBASE COURSE**

#### 304.02 Aggregate

Remove the sentence “Aggregate for base and subbase courses shall be material meeting the aggregate type requirements specified in the following table” in its entirety and the table that follows it with headings of ‘Material’ and ‘Aggregate Type’.

### **SECTION 307**

## **FULL DEPTH RECYCLED PAVEMENT**

Remove this Section in its entirety and replace with:

### **SECTION 307 FULL DEPTH RECYCLING (UNTREATED OR TREATED WITH EMULSIFIED ASPHALT STABILIZER)**

**307.01 Description** This work shall consist of pulverizing a portion of the existing roadway structure into a homogenous mass, adding an emulsified asphalt stabilizer (if required) to the depth of the pulverized material specified in the contract, placing and compacting this material to the lines, grades, and dimensions shown on the plans or established by the Resident.

#### **MATERIALS**

**307.02 Pulverized Material** Pulverized material shall consist of the existing asphalt pavement layers and one inch or more as specified of the underlying gravel, pulverized and blended into a homogenous mass. Pulverized material will be processed to 100% passing a 2 inch square mesh sieve.

**307.021 New Aggregate and Additional Recycled Material** New aggregate, if required by the contract, shall meet the requirements of Subsection 703.10 - Aggregate for Untreated Surface Course and Leveling Course, Type A. Aggregate Subbase Course Gravel Type D processed to 100 percent passing a 2 inch square mesh sieve and meeting the requirements of 703.06 – Aggregate for Base and Subbase may be used in areas requiring depths greater than 2 inches. New aggregate, will be measured and paid for under the appropriate item.

Recycled material, if required, shall consist of salvaged asphalt material from the project or from off-site stockpiles that has been processed before use to 100 percent passing a 2 inch square mesh sieve. Recycled material shall be conditionally accepted at the source by the Resident. It shall be free of winter sand, granular fill, construction debris, or other materials not generally considered asphalt pavement.

Recycled material generated and salvaged from the project shall be used within the roadway limits to the extent it is available as described in 307.09. No additional payment will be made for material salvaged from the project.

Recycled material supplied from off-site stockpiles shall be paid for as described in the contract, or by contract modification.

**307.022 Emulsified Asphalt Stabilizer.** If required, the emulsified asphalt stabilizer shall be grade MS-2, MS-4, SS-1, or CSS-1 meeting the requirements of Subsection 702.04 Emulsified Asphalt.

**307.023 Water** Water shall be clean and free from deleterious concentrations of acids, alkalis, salts or other organic or chemical substances.

**307.024 Portland Cement** If required, Portland Cement shall be Type I or II meeting the requirements of AASHTO M85.

**307.025 Hydrated Lime** If required, Hydrated Lime shall meet the requirements of AASHTO M216.

## EQUIPMENT

**307.03 Pulverizer** The pulverizer shall be a self-propelled machine, specifically manufactured for full-depth recycling work and capable of reducing the required existing materials to a size that will pass a 2 inch square mesh sieve. The machine shall be equipped with standard automatic depth controls and must maintain a consistent cutting depth and width. The machine also shall be equipped with a gauge to show depth of material being processed.

**307.04 Liquid Mixer Unit or Distributor.** If treatment of the recycled layer with emulsified asphalt is required by the contract, a liquid mixing unit or distributor shall be used to introduce the emulsified asphalt stabilizer into the pulverized material. The mixing unit shall contain a liquid distribution and mixing system which has been specifically manufactured for full-depth recycling work, capable of mixing the pulverized material with an evenly metered distribution of emulsified asphalt into a homogeneous mixture, to the depth and width required.

The mixing unit shall be designed, equipped, maintained, and operated so that emulsified asphalt stabilizer at constant temperature may be applied uniformly on variable widths of pulverized material up to 6 feet at readily determined and controlled rates from 0.01 to 1.06 gal/yd<sup>2</sup> with uniform pressure and with an allowable variation from any specified rate not to exceed 0.01 gal/ yd<sup>2</sup>. Mixing units shall include a tachometer, pressure gages, and accurate volume measuring devices or a calibrated tank and a thermometer for measuring temperatures of tank contents.

**307.041 Cement or Lime Spreader** If required by the contract, spreading of the Portland Cement or Hydrated Lime shall be done with a spreader truck designed to spread dry particulate (such as Portland Cement or Lime) or other approved means to insure a uniform distribution across the roadway and minimize fugitive dust. Pneumatic application, including through a slotted pipe, will not be permitted. Other systems that have been developed include fog systems, vacuum systems, etc. Slurry applications may also be accepted. The Department reserves the right to accept or reject the method of spreading cement. The Contractor shall provide a method for verifying that the correct amount of cement is being applied.

**307.05 Placement Equipment** Placement of the Full Depth recycled material to the required slope and grade shall be done with an approved highway grader or by another method approved by the Resident.

**307.06 Rollers** The full depth recycled material shall be rolled with a vibratory pad foot roller, a vibratory steel drum soil compactor and a pneumatic tire roller. The pad foot roller drum shall have a minimum of 112 tamping feet 3 inches in height, a minimum

contact area per foot of 17 inch<sup>2</sup>, and a minimum width of 84 inches. The vibratory steel drum roller shall have a minimum 84 inch width single drum. The pneumatic tire roller shall meet the requirements of Section 401.10 and the minimum allowable tire pressure shall be 85 psi.

### MIX DESIGN

If treatment of the recycled layer with emulsified asphalt is required by the contract, the Department will supply a mix design for the emulsified asphalt stabilized material based on test results from pavement and soil analysis taken to the design depth. The Department will provide the following information prior to construction:

1. Percent of emulsified asphalt to be used.
2. Quantity of lime or cement to be added.
3. Optimum moisture content for proper compaction.
4. Additional aggregate (if required).

After a test strip has been completed or as the work progresses, it may be necessary for the Resident to make necessary adjustments to the mix design. Changes to compensation will be in accordance with the Mix Design Special Provision.

### CONSTRUCTION REQUIREMENTS

**307.06 Pulverizing** The entire depth of existing pavement shall be pulverized together with 1 inch or more of the underlying gravel into a homogenous mass. All pulverizing shall be done with equipment that will provide a homogenous mass of pulverized material, processed in-place, which will pass a 2 inch square mesh sieve.

**307.07 Weather Limitations** Full depth recycled work shall be performed when;

- A. Recycling operations will be allowed between May 15<sup>th</sup> and September 15<sup>th</sup> inclusive in Zone 1 - Areas north of US Route 2 from Gilead to Bangor and north of Route 9 from Bangor to Calais.
- B. The atmospheric temperature, as determined by an approved thermometer placed in the shade at the recycling location, is 50°F and rising.
- C. When there is no standing water on the surface.
- D. During generally dry conditions, or when weather conditions are such that proper pulverizing, mixing, grading, finishing and curing can be obtained using proper procedures, and when compaction can be accomplished as determined by the Resident.
- E. When the surface is not frozen and when overnight temperatures are expected to be above 32°F.
- F. Wind conditions are such that the spreading of lime or cement on the roadway ahead of the recycling machine will not adversely affect the operation.

**307.08 Surface Tolerance** The complete surface of the Full Depth Recycled course shall be shaped and maintained to a tolerance, above or below the required cross sectional shape, of  $\frac{3}{8}$  inch.

**307.09 Full Depth Recycling Procedure** New aggregate or recycled material meeting the requirements of Section 307.021 - New Aggregate and Additional Recycled Material, shall be added as necessary to restore cross-slope and/or grade before pulverizing. Locations will be shown on the plans or described in the construction notes. The Resident may add other locations while construction of the project is in progress. The Contractor will use recycled material to the extent it is available, in lieu of new aggregate. The material shall then be pulverized, processed, and blended into a homogeneous mass passing a 2 inch square mesh sieve. Material found not pulverized down to a 2 inch size will be required to be reprocessed by the recycler with successive passes until approved by the Resident.

Should the Contractor be required to add new aggregate or recycled material to restore cross-slope and/or grade after the initial pulverizing process, those areas will require re-processing to blend into a homogenous mass passing a 2 in square mesh sieve.

Sufficient water shall be added during the recycling process to maintain optimum moisture for compaction.

The resultant material from the initial pulverizing processes shall be graded and compacted to the cross-slope and profile shown on the plans or as directed by the Resident. The Contractor will also be responsible for re-establishing the existing profile grade. The completed surface of the full depth recycled course shall be shaped and maintained to a tolerance, above or below the required cross sectional shape, of  $\frac{3}{8}$  inch. Areas not meeting this tolerance will be repaired as described in Section 307.091. The initial pulverizing process density requirements will be the same as Section 307.101 unless otherwise directed by the Resident.

Additives, if required, shall be introduced following completion of the initial pulverizing and blending process. Emulsified asphalt stabilizer shall be incorporated into the top of the processed material as specified in section 307.04 to the depth specified in the contract by use of the liquid mixer unit or a distributor, at the rate specified in the mix design. The emulsified asphalt shall then be uniformly blended into a homogeneous mass until an apparent uniform distribution has occurred. The rate of application may be adjusted as necessary by the Resident. Cement or lime shall be introduced as described in section 307.041. The resultant material shall be graded and compacted to the cross-slope and profile shown on the plans or as directed by the Resident. The Contractor will also be responsible for re-establishing the existing profile grade.

After final compaction, the roadway surface shall be treated with a light application of water, and rolled with pneumatic-tired rollers to create a close-knit texture. The finished layer shall be free from:

**A. Surface laminations.**

- B. Segregation of fine and coarse aggregate.**
- C. Corrugations, centerline differential, potholes, or any other defects that may adversely affect the performance of the layer, or any layers to be placed upon it.**

The Contractor shall protect and maintain the recycled layer until a lift of pavement is applied. Any damage or defects in the layer shall be repaired immediately. An even and uniform surface shall be maintained. The recycled surface shall be swept prior to hot mix asphalt overlay placement.

**307.091 Repairs** Repairs and maintenance of the recycled layers, resulting from damage caused by traffic, weather or environmental conditions, or resulting from damage caused by the Contractor's operations or equipment, shall be completed at no additional cost to the Department.

For recycled layers stabilized with emulsified asphalt, low areas will be repaired using a hot mix asphalt shim. Areas up to 1 inch high can be repaired by milling or shimming with hot mix asphalt. Areas greater than 1 inch high will be repaired using a hot mix asphalt shim. All repair work will be done with the Resident's approval at the Contractor's expense.

## **TESTING REQUIREMENTS**

**307.10 Quality Control** The Contractor shall operate in accordance with the approved Quality Control Plan (QCP) to assure a product meeting the contract requirements. The QCP shall meet the requirements of Section 106.4 - Quality Control and this Section. The Contractor shall not begin recycling operations until the Department approves the QCP in writing.

Prior to performing any recycling process, the Department and the Contractor shall hold a Pre-recycle conference to discuss the recycling schedule, type and amount of equipment to be used, sequence of operations, and traffic control. A copy of the QC random numbers to be used on the project shall be provided to the Resident. All field supervisors including the responsible onsite recycling process supervisor shall attend this meeting.

The QCP shall address any items that affect the quality of the Recycling Process including, but not limited to, the following:

- A. Sources for all materials, including New Aggregate and Additional Recycled Material.**
- B. Make and type of rollers including weight, weight per inch of steel wheels, and average contact pressure for pneumatic tired rollers.**
- C. Testing Plan.**
- D. Recycling operations including recycling speed, methods to ensure that segregation is minimized, grading and compacting operations.**
- E. Methods for protecting the finished product from damage and procedures for any necessary corrective action.**

- F. Method of grade checks.
- G. Examples of Quality Control forms.
- H. Name, responsibilities, and qualifications of the Responsible onsite Recycling Supervisor experienced and knowledgeable with the process.
- I. A note that all testing will be done in accordance with AASHTO and MDOT/ACM procedures.

The Project Superintendent shall be named in the QCP, and the responsibilities for successful implementation of the QCP shall be outlined.

The Contractor shall sample, test, and evaluate the full depth reclamation process in accordance with the following minimum frequencies:

**MINIMUM QUALITY CONTROL FREQUENCIES**

Test or Action	Frequency	Test Method
Density	1 per 1000 feet / lane	AASHTO T 310
Air Temperature	4 per day at even intervals	
Surface Temperature	At the beginning and end of each days operation	
Yield of all materials (Daily yield, yield since last test, and total project yield.)	1 per 1000 ft/lane	

The Department may view any QC test and request a QC test at any time. The Contractor shall submit all QC test reports and summaries in writing, signed by the appropriate technician, to the Department’s onsite representative by 1:00 P.M. on the next working day, except when otherwise noted in the QCP due to local restrictions. The Contractor shall make all test results, including randomly sampled densities, available to the Department onsite.

The Contractor shall cease recycling operations whenever one of the following occurs:

- A. The Contractor fails to follow the approved QCP.
- B. The Contractor fails to achieve 98 percent density after corrective action has been taken.
- C. The finished product is visually defective, as determined by the Resident.
- D. The computed yield differs from the mix design by 10 percent or more.

Recycling operations shall not resume until the Department approves the corrective action to be taken.

**307.101 Test Strip** The contractor shall assemble all items of equipment for the recycling operation on the first day of the recycling work. The Contractor shall construct a test

strip for the project at a location approved by the Resident. The Responsible onsite Recycling Supervisor will work with Department personnel to determine the suitability of the mixed material, moisture control within the mixed material, and compaction and surface finish. The test strip section is required to:

- A. Demonstrate that the equipment and processes can produce recycled layers to meet the requirements specified in these special provisions.
- B. Determine the effect on the gradation of the recycled material by varying the forward speed of the recycling machine and the rotation rate of the milling drum.
- C. Determine the optimum moisture necessary to achieve proper compaction of the recycled layer.
- D. Determine the sequence and manner of rolling necessary to obtain the compaction requirements and establish a target density. The Contractor and the Department will both conduct testing with their respective gauges at this time.

The test strip shall be at least 300 feet in length of a full lane-width (or a half-road width). Full recycling production will not start until a passing test strip has been accomplished. If a test strip fails to meet the requirements of this specification, the Contractor will be required to repair or replace the test strip to the satisfaction of the Resident. Any repairs, replacement, or duplication of the test strip will be at the Contractor's expense.

After the test strip has been pulverized, and the roadway brought to proper shape, the Contractor shall add water until it is determined that optimum moisture has been obtained. The test strip shall then be rolled using the specified compaction equipment as directed until the density readings show an increase in dry density of less than 1 pcf for the final four roller passes of each roller. The Contractor and Department will each determine a target density using their respective gauges by performing several additional density tests and averaging them. The average of these tests will be used as the target density of the recycled material for QC and Acceptance purposes.

Following completion of the test strip, compaction of the material shall continue until a density of not less than 98 percent of the test strip target density has been achieved for the full width and depth of the layer. During the construction and compaction of the Full Depth Recycled base, should three consecutive Acceptance test results for density fail to meet a minimum of 95 percent of the target density, or exceed 102 percent of target density, a new test strip shall be constructed.

#### ACCEPTANCE TEST FREQUENCY

Property	Frequency	Test Method
In-place Density	1 per 2000 ft / lane	AASHTO T 310

**308.102 Curing.** No new pavement shall be placed on the full depth recycled pavement until curing has reduced the moisture content to 1 percent or less by total weight of the mixture, or a curing period of 4 days has elapsed, whichever comes first.

**307.11 Method of Measurement** Full Depth Recycled Pavement (Untreated or Treated with Emulsified Asphalt Stabilizer) will be measured by the square yard.

**307.12 Basis of Payment** The accepted quantity of Full Depth Recycled Asphalt Pavement (Untreated or Treated with Emulsified Asphalt Stabilizer) will be paid for at the contract unit price per square yard, complete in-place which price will be full compensation for furnishing all equipment, materials and labor for pulverizing, blending, placing, grading, compacting, and for all incidentals necessary to complete the work.

The addition of materials to restore profile grade and/or cross-slope in areas shown on the plans or described in the construction notes will be paid separately under designated pay items within the contract. No additional payment will be made for materials salvaged from the project.

Payments will be made under:

<b><u>Pay Item</u></b>	<b><u>Pay Unit</u></b>
307.331 Full Depth Recycled Pavement (Untreated) Yard	Square
307.332 Full Depth Recycled Pavement (with Emulsified Asphalt Stabilizer) 5 in. depth Yard	Square
307.333 Full Depth Recycled Pavement (with Emulsified Asphalt Stabilizer) 6 in. depth Yard	Square

**SECTION 502**  
**STRUCTURAL CONCRETE**

**502.05 Composition and Proportioning**

Replace Table 1 with

TABLE 1

Concrete CLASS	Minimum Compressive Strength (PSI)	Permeability as indicated by Surface Resistivity (KOhm-cm)	Entrained Air (%)		Notes
			LSL	USL	
S	3,000	N/A	N/A	N/A	4,5
A	4,000	14	6.0	9.0	1,4,5
P	-----	-----	5.5	7.5	1,2,3,4
LP	5,000	17	6.0	9.0	1,4,5
Fill	3,000	N/A	6.0	9.0	4,5

In the list of information submitted by the contractor for a mix design:

Item J Replace “Target Coulomb Value.” with “Target KOhm-cm Value.”

502.1703 Acceptance Methods A and B

In the paragraph that starts with “The Department will take Acceptance...” Remove the word chloride from chloride permeability in the last sentence.

Replace the paragraph starting with “Rapid Chloride Permeability specimens...” With the following:

“Surface Resistivity specimens will be tested by the Department in accordance with AASHTO TP-95 at an age  $\geq$  56 days. Four 4 inch x 8 inch cylinders will be cast per subplot placed. The average of three concrete specimens per subplot will constitute a test result and this average will be used to determine the permeability for pay adjustment computations.”

502.1706 Acceptance Method C

Remove in its entirety and Replace with:

**502.1706 Acceptance Method C The Department will determine the acceptability of the concrete through Acceptance testing. Acceptance tests will include compressive strength, air content and permeability. Method C concrete with a failing permeability as indicated by the surface resistivity test may be tested for permeability in accordance with the Rapid Chloride Permeability Test AASHTO T-277 averaging the results from two specimens cut from the samples prepared for the surface resistivity test. Method C concrete not meeting the requirements listed in Table 1 or if the Rapid Chloride Permeability test results in values exceeding 2000 coulombs for Class LP or 2400 for Class A, shall be removed and replaced at no cost to the Department. At the Department’s sole discretion, material not meeting requirements may be left in place and paid for at a reduced price as described in Section 502.195.**

502.1707 Resolution of Disputed Acceptance Test Results

Section B

Remove “Rapid Chloride” from the section heading.  
In paragraph 4 replace T-277 with TP-95

502.192 Pay Adjustment for Chloride Permeability

Remove “Chloride” from the heading and from the first sentence.

Replace the sentence that starts with “values greater than...” and replace with “values less than 10 KOhms-cm for Class A concrete or 11 KOhms-cm for Class LP concrete shall be subject to rejection and replacement, at no additional cost to the Department.”

502.194 Pay Adjustments for Compressive Strength, Chloride Permeability and Air Content, Methods A and B

Remove the word “Chloride” from the section heading and from the equation for CPF.

502.195 Pay Adjustment Method C

Table 6: Method C Pay Reductions (page 5-53)

Under “Entrained Air” for “Class Fill”, in the first line,  
change from “< 4.0 (Removal)” to “< **4.5 (Removal)**”

In Table 6: Method C PAY REDUCTIONS remove the word ‘Chloride’ from ‘Chloride Permeability’.

**SECTION 619**  
**MULCH**

619.07 Basis of Payment

In the list of Pay Items add “**619.12 Mulch**” with a Pay Unit of “**Unit**”.

Change the description of 619.1201 from “Mulch” to “**Mulch – Plan Quantity**”

**SECTION 621**  
**LANDSCAPING**

621.0002 Materials - General

In the list of items change “Organic Humus” to “**Humus**”.

621.0019 Plant Pits and Beds

c Class A Planting

In the third paragraph beginning with “The plant pit...” change “½ inch” to “**1 inch**”

**SECTION 660**  
**ON-THE-JOB TRAINING**

660.06 Method of Measurement

Remove the first sentence in its entirety and replace with “ **The OJT item will be measured by the number of OJT hours by a trainee who has successfully completed an approved training program.**”

660.07 Basis of payment to the Contractor

Remove the last word in the first sentence so that the first sentence reads “ The OJT shall be paid for once successfully completed at the contract unit price per **hour.**”

Payment will be made under

Change the Pay Item from “660.22” to “**660.21**” and change the Pay Unit from “Each” to “**Hour**”.

**SECTION 703**  
**AGGREGATES**

703.06 Aggregate for Base and Subbase

Remove the first two paragraphs in their entirety and replace with these:

**“The following shall apply to Sections (a.) and (c.) below. The material shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro- Deval value exceeds 25.0, the Washington State Degradation DOT Test Method T113, Method of Test for Determination of Degradation Value (January 2009 version) shall be performed, except that the test shall be performed on the portion of the sample that passes the ½ in sieve and is retained on the No. 10 sieve. If the material has a Washington Degradation value of less than 15, the material shall be rejected.**

**The material used in Section (b.) below shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0 the material may be used if it does not exceed 25 percent loss on AASHTO T 96, Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine. “**

703.33 Stone Ballast

In the third paragraph, remove the words “ less than” before 2.60 and add the words “**or greater**” after 2.60.

**SECTION 717**  
**ROADSIDE IMPROVEMENT MATERIAL**

717.02 Agricultural Ground Limestone

In the table after the third paragraph which starts with “Liquid lime...” change the Specification for Nitrogen (N) from “15.5 percent of which 1% is from ammoniac nitrogen and 14.5 /5 is from Nitrate Nitrogen” to read “**15.5 % of which 1% is from Ammoniacal Nitrogen and 14.5 % is from Nitrate Nitrogen**”



### Environmental Summary Sheet

WIN: 20471.00  
Town: Gray  
CPD Team Leader: Kristen Chamberlain  
ENV Field Contact: Mike Clark

Date Submitted: 1/14/15

NEPA Complete: 10/8/14- Programmatic Categorical Exclusion

- Section 106**  
SHPO Concurrence- No Effect  
Section 106 Resources: None

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- Section 4(f) and 6(f)**  
Section 4(f)  
Review Complete-  
Section 6(f)  
Not Applicable

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- Maine Department of Inland Fisheries and Wildlife Essential Habitat**  
**Not Applicable**

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- Section 7**  
**Species of Concern: Northern Long-Eared Bat**  
No Jeopardy. In batch conference.

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- Maine Department of Conservation/Public Lands, Submerged Land Lease**  
Not Applicable

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- Maine Land Use Regulation Commission**  
Not Applicable

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- Maine Department of Environmental Protection**  
Permit by Rule (PBR)

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- Army Corps of Engineers, Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Category 2**  
-Work Start Notification Form and Compliance Certification Form must be completed by Resident/ENV Field Contact and submitted to ACOE with copy to David Gardner and Kristen Chamberlain.  
-In water work window: July 15-October 1  
**-Post construction monitoring required in years 1, 3, and 5 post construction**  
*\*Applicable Standards and Permits included in contract documents.*

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- Stormwater Review**  
N/A

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- Special Provisions Required**

<b>Special Provision 105-Timing of Work Restriction</b>	N/A <input type="checkbox"/>	<b>Applicable</b> <input checked="" type="checkbox"/>
<b>Special Provision 656-Erosion Control Plan –N/A if using November 2014 Standard Specifications</b>		
<b>Special Provision 203-Dredge Spec</b>	N/A <input type="checkbox"/>	<b>Applicable</b> <input checked="" type="checkbox"/>
<b>General Note for Hazardous Waste</b>	N/A <input checked="" type="checkbox"/>	Applicable <input type="checkbox"/>
<b>Special Provision 203-Hazardous Waste</b>	N/A <input type="checkbox"/>	Applicable <input type="checkbox"/>
<b>Special Provision 105.9</b>	N/A <input checked="" type="checkbox"/>	Applicable <input type="checkbox"/>

*\*All permits and approvals based on plans/scope as of: 1/14/15*