

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. 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 , Rebecca Snowden at rebecca.snowden@maine.gov or Diane Barnes at 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.

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

**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
Subcontractor Total >							
DBE Total >							

**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>**

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 "Bar Mills Bridge Replacement in the town of HOLLIS & BUXTON" and Canal Bridge Replacement in the town of HOLLIS 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 have completed, or successfully complete, a bridge, highway, or project specific prequalification 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-1928(000), WIN 019280.00 & BR-1928(100)X, WIN 019281.00

Location: In York County, project is located on Main Street/ route 4A/ Bar Mills road over the Saco River approximately 0.5 mile westerly of route 112/ River road intersection.

Scope of Work: Bar Mills Bridge and Canal Bridge replacement 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, and bid results. For Project-specific information fax all questions to **Project Manager Mark Parlin** at (207) 624-3431 or email questions to 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 \$148.00 (\$156.00 by mail). Half size plans \$74.00 (\$78.00 by mail), Bid Book \$10 (\$13 by mail), Single Sheets \$2, payment in advance, all non-refundable.

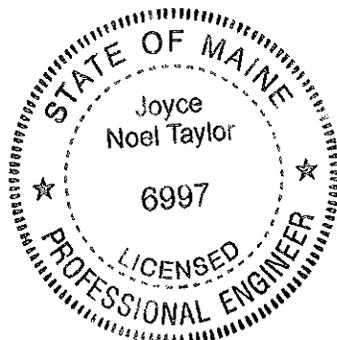
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$250,000.00 payable to Treasurer, 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, Revision of November 2014", price \$10 [\$15 by mail], and Standard Details, Revision of November 2014, 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
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: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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	202.15 REMOVING MANHOLE OR CATCH BASIN	1.000 EA	_____	 _____	_____	 _____
0020	202.19 REMOVING EXISTING BRIDGE CANAL	LUMP SUM	_____	 LUMP SUM	_____	 _____
0030	202.19 REMOVING EXISTING BRIDGE BAR MILLS	LUMP SUM	_____	 LUMP SUM	_____	 _____
0040	202.20 REMOVING BITUMINOUS CONCRETE PAVEMENT	233.000 SY	_____	 _____	_____	 _____
0050	203.20 COMMON EXCAVATION	2,521.000 CY	_____	 _____	_____	 _____
0060	203.21 ROCK EXCAVATION	141.000 CY	_____	 _____	_____	 _____
0070	203.24 COMMON BORROW	1,362.000 CY	_____	 _____	_____	 _____
0080	203.25 GRANULAR BORROW	7,141.000 CY	_____	 _____	_____	 _____
0090	203.35 CRUSHED STONE FILL	20.000 CY	_____	 _____	_____	 _____
0100	206.061 STRUCTURAL EARTH EXCAVATION - DRAINAGE AND MINOR STRUCTURES, BELOW GRADE	10.000 CY	_____	 _____	_____	 _____
0110	206.082 STRUCTURAL EARTH EXCAVATION - MAJOR STRUCTURES	1,778.000 CY	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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
0120	206.092 STRUCTURAL ROCK EXCAVATION - MAJOR STRUCTURES	700.000 CY	_____	 _____	_____	 _____
0130	206.10 STRUCTURAL EARTH EXCAVATION - PIERS	45.000 CY	_____	 _____	_____	 _____
0140	206.11 STRUCTURAL ROCK EXCAVATION - PIERS	180.000 CY	_____	 _____	_____	 _____
0150	304.10 AGGREGATE SUBBASE COURSE - GRAVEL	2,925.000 CY	_____	 _____	_____	 _____
0160	403.207 HOT MIX ASPHALT 19.0 MM HMA	290.000 T	_____	 _____	_____	 _____
0170	403.208 HOT MIX ASPHALT 12.5 MM HMA SURFACE	460.000 T	_____	 _____	_____	 _____
0180	403.209 HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS)	120.000 T	_____	 _____	_____	 _____
0190	403.213 HOT MIX ASPHALT 12.5 MM BASE	520.000 T	_____	 _____	_____	 _____
0200	409.15 BITUMINOUS TACK COAT - APPLIED	180.000 G	_____	 _____	_____	 _____
0210	501.220 MICRO PILES	24.000 EA	_____	 _____	_____	 _____
0220	501.804 DRILLING EQUIPMENT MOBILIZATION	LUMP SUM	LUMP SUM		_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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
0230	502.219 STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS	LUMP SUM		LUMP SUM	_____	_____
0240	502.22 STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS (PLACED UNDER WATER)	1,170.000 CY	_____	_____	_____	_____
0250	502.239 STRUCTURAL CONCRETE PIERS	LUMP SUM		LUMP SUM	_____	_____
0260	502.24 STRUCTURAL CONCRETE PIERS (PLACED UNDER WATER)	311.000 CY	_____	_____	_____	_____
0270	502.26 STRUCTURAL CONCRETE ROADWAY AND SIDEWALK SLABS ON STEEL BRIDGES CANAL	LUMP SUM		LUMP SUM	_____	_____
0280	502.26 STRUCTURAL CONCRETE ROADWAY AND SIDEWALK SLABS ON STEEL BRIDGES BAR MILLS	LUMP SUM		LUMP SUM	_____	_____
0290	502.31 STRUCTURAL CONCRETE APPROACH SLABS	LUMP SUM		LUMP SUM	_____	_____
0300	502.49 STRUCTURAL CONCRETE CURBS AND SIDEWALKS	LUMP SUM		LUMP SUM	_____	_____
0310	503.12 REINFORCING STEEL, FABRICATED AND DELIVERED	160,000.000 LB	_____	_____	_____	_____
0320	503.13 REINFORCING STEEL, PLACING	160,000.000 LB	_____	_____	_____	_____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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
0330	504.702 STRUCTURAL STEEL FABRICATED AND DELIVERED, WELDED CANAL	LUMP SUM	LUMP	SUM	_____	_____
0340	504.702 STRUCTURAL STEEL FABRICATED AND DELIVERED, WELDED BAR MILLS	LUMP SUM	LUMP	SUM	_____	_____
0350	504.71 STRUCTURAL STEEL ERECTION	LUMP SUM	LUMP	SUM	_____	_____
0360	505.08 SHEAR CONNECTORS	LUMP SUM	LUMP	SUM	_____	_____
0370	506.9104 THERMAL SPRAY COATING - SHOP APPLIED	LUMP SUM	LUMP	SUM	_____	_____
0380	507.0821 STEEL BRIDGE RAILING, 3 BAR	LUMP SUM	LUMP	SUM	_____	_____
0390	507.0831 STEEL BRIDGE RAILING, 4 BAR	LUMP SUM	LUMP	SUM	_____	_____
0400	508.14 HIGH PERFORMANCE WATERPROOFING MEMBRANE	LUMP SUM	LUMP	SUM	_____	_____
0410	511.07 COFFERDAM: CANAL ABUT NO.1	LUMP SUM	LUMP	SUM	_____	_____
0420	511.07 COFFERDAM: PIER NO. 1	LUMP SUM	LUMP	SUM	_____	_____
0430	511.07 COFFERDAM: PIER NO.2	LUMP SUM	LUMP	SUM	_____	_____
0440	511.07 COFFERDAM: BAR MILLS ABUT. NO. 1	LUMP SUM	LUMP	SUM	_____	_____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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
0450	511.07 COFFERDAM: BAR MILLS ABUT. NO. 2	LUMP SUM	LUMP	SUM	_____	_____
0460	512.081 FRENCH DRAINS	LUMP SUM	LUMP	SUM	_____	_____
0470	514.06 CURING BOX FOR CONCRETE CYLINDERS	2.000 EA	_____	_____	_____	_____
0480	515.21 PROTECTIVE COATING FOR CONCRETE SURFACES	LUMP SUM	LUMP	SUM	_____	_____
0490	518.52 REPAIR OF UPWARD FACING SURFACES > 7.9 IN.	47.000 CY	_____	_____	_____	_____
0500	518.60 REPAIR OF VERTICAL SURFACES < 7.9 IN.	300.000 SF	_____	_____	_____	_____
0510	521.23 EXPANSION DEVICE FINGER JOINT	1.000 EA	_____	_____	_____	_____
0520	523.52 BEARING INSTALLATION	30.000 EA	_____	_____	_____	_____
0530	523.5551 POT OR DISC BEARINGS, FIXED	10.000 EA	_____	_____	_____	_____
0540	523.5552 POT OR DISC BEARINGS, EXPANSION	20.000 EA	_____	_____	_____	_____
0550	526.301 TEMPORARY CONCRETE BARRIER TYPE I	LUMP SUM	LUMP	SUM	_____	_____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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
0560	526.34 PERMANENT CONCRETE TRANSITION BARRIER	7.000 EA	_____	 _____	_____	 _____
0570	526.3401 PERMANENT CONCRETE TRANSITION BARRIER - MODIFIED	1.000 EA	_____	 _____	_____	 _____
0580	603.169 15 INCH CULVERT PIPE OPTION III	98.000 LF	_____	 _____	_____	 _____
0590	603.17 18 INCH CULVERT PIPE OPTION I	38.000 LF	_____	 _____	_____	 _____
0600	603.179 18 INCH CULVERT PIPE OPTION III	48.000 LF	_____	 _____	_____	 _____
0610	603.43 36 INCH REINFORCED CONCRETE PIPE CLASS IV	88.000 LF	_____	 _____	_____	 _____
0620	604.072 CATCH BASIN TYPE A1-C	2.000 EA	_____	 _____	_____	 _____
0630	606.1721 BRIDGE TRANSITION - TYPE 1	8.000 EA	_____	 _____	_____	 _____
0640	606.23 GUARDRAIL TYPE 3C - SINGLE RAIL	538.000 LF	_____	 _____	_____	 _____
0650	606.231 GUARDRAIL TYPE 3C - 15 FOOT RADIUS AND LESS	50.000 LF	_____	 _____	_____	 _____
0660	606.232 GUARDRAIL TYPE 3C - OVER 15 FOOT RADIUS	219.000 LF	_____	 _____	_____	 _____
0670	606.265 TERMINAL END - SINGLE RAIL - GALVANIZED STEEL	6.000 EA	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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
0680	606.353 REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	12.000 EA	_____	 _____	_____	 _____
0690	607.17 CHAIN LINK FENCE - 6 FOOT	180.000 LF	_____	 _____	_____	 _____
0700	609.11 VERTICAL CURB TYPE 1	590.000 LF	_____	 _____	_____	 _____
0710	609.12 VERTICAL CURB TYPE 1 - CIRCULAR	50.000 LF	_____	 _____	_____	 _____
0720	609.234 TERMINAL CURB TYPE 1 - 4 FOOT	2.000 EA	_____	 _____	_____	 _____
0730	609.237 TERMINAL CURB TYPE 1 - 7 FOOT	4.000 EA	_____	 _____	_____	 _____
0740	609.2371 TERMINAL CURB TYPE 1- 7 FT - CIRCULAR	4.000 EA	_____	 _____	_____	 _____
0750	610.08 PLAIN RIPRAP	20.000 CY	_____	 _____	_____	 _____
0760	610.16 HEAVY RIPRAP	1,140.000 CY	_____	 _____	_____	 _____
0770	610.18 STONE DITCH PROTECTION	55.000 CY	_____	 _____	_____	 _____
0780	613.319 EROSION CONTROL BLANKET	375.000 SY	_____	 _____	_____	 _____
0790	615.07 LOAM	176.000 CY	_____	 _____	_____	 _____
0800	618.13 SEEDING METHOD NUMBER 1	4.000 UN	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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
0810	618.14 SEEDING METHOD NUMBER 2	23.000 UN	_____	_____	_____	_____
0820	619.1201 MULCH	28.000 UN	_____	_____	_____	_____
0830	619.1401 EROSION CONTROL MIX	350.000 CY	_____	_____	_____	_____
0840	620.58 EROSION CONTROL GEOTEXTILE	1,480.000 SY	_____	_____	_____	_____
0850	620.661 DRAINAGE GEOCOMPOSITE INSTALLATION	160.000 SY	_____	_____	_____	_____
0860	621.031 EVERGREEN TREES (4 FOOT - 5 FOOT) GROUP A	6.000 EA	_____	_____	_____	_____
0870	621.039 EVERGREEN TREES (5 FOOT - 6 FOOT) GROUP C	3.000 EA	_____	_____	_____	_____
0880	621.195 MEDIUM DECIDUOUS TREE (1.75 INCH - 2 INCH CALIPER) GROUP A	6.000 EA	_____	_____	_____	_____
0890	621.415 DWARF EVERGREENS (3 FOOT - 3.50 FOOT) GROUP C	5.000 EA	_____	_____	_____	_____
0900	621.54 DECIDUOUS SHRUBS (18 INCH - 24 INCH) GROUP A	6.000 EA	_____	_____	_____	_____
0910	621.71 HERBACEOUS PERENNIALS GROUP A	12.000 EA	_____	_____	_____	_____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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
0920	626.11 PRECAST CONCRETE JUNCTION BOX	2.000 EA	_____	 _____	_____	 _____
0930	626.21 METALLIC CONDUIT	40.000 LF	_____	 _____	_____	 _____
0940	626.22 NON-METALLIC CONDUIT	340.000 LF	_____	 _____	_____	 _____
0950	626.32 24 INCH FOUNDATION	2.000 EA	_____	 _____	_____	 _____
0960	626.35 CONTROLLER CABINET FOUNDATION	1.000 EA	_____	 _____	_____	 _____
0970	627.733 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	4,450.000 LF	_____	 _____	_____	 _____
0980	629.05 HAND LABOR, STRAIGHT TIME	100.000 HR	_____	 _____	_____	 _____
0990	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1000	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1010	631.22 FRONT END LOADER (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1020	631.32 CULVERT CLEANER (INCLUDING OPERATOR)	10.000 HR	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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
1030	634.16 HIGHWAY LIGHTING	LUMP SUM				
1040	634.2041 LUMINAIRES LED	7.000 EA				
1050	634.210 CONVENTIONAL LIGHT STANDARD	7.000 EA				
1060	637.071 DUST CONTROL	LUMP SUM				
1070	638.01 EMBEDDED WORK IN STRUCTURE	LUMP SUM				
1080	639.18 FIELD OFFICE TYPE A	1.000 EA				
1090	641.35 ALUMINUM FLAG POLE	1.000 EA				
1100	643.62 RECTANGULAR RAPID FLASHING BEACON	1.000 EA				
1110	643.72 TEMPORARY TRAFFIC SIGNAL	LUMP SUM				
1120	645.51 SPECIAL SIGNING	LUMP SUM				
1130	652.312 TYPE III BARRICADE	6.000 EA				
1140	652.33 DRUM	50.000 EA				
1150	652.34 CONE	50.000 EA				

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019280.00

Project(s): 019280.00, 019281.00

SECTION: 1 PROJECT ITEMS

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
1160	652.35 CONSTRUCTION SIGNS	510.000 SF	_____	 _____	_____	 _____
1170	652.361 MAINTENANCE OF TRAFFIC CONTROL DEVICES	LUMP SUM	LUMP SUM		_____	 _____
1180	652.38 FLAGGER	3,000.000 HR	_____	 _____	_____	 _____
1190	652.41 PORTABLE CHANGEABLE MESSAGE SIGN	3.000 EA	_____	 _____	_____	 _____
1200	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP SUM	LUMP SUM		_____	 _____
1210	659.10 MOBILIZATION	LUMP SUM	LUMP SUM		_____	 _____
1220	660.21 ON-THE-JOB TRAINING (BID)	3,000.000 HR	_____	 _____	_____	 _____
1230	910.301 SPECIAL WORK	LUMP SUM	LUMP SUM		_____	 _____
Section: 1			Total:		_____	 _____
			Total Bid:		_____	 _____

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 **019280.00**, for the **Bar Mills Bridge replacement** in the town of **Hollis & Buxton**, and WIN **019281.00**, for the **Canal Bridge replacement** in the town of **Hollis** County of **York**, 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 **June 30, 2017**. 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, November 2014 Edition 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, November 2014 Edition, Standard Details November 2014 Edition 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 November 2014 Edition, Standard Details November 2014 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **WIN 019280.00 Bar Mills Bridge Replacement and WIN 019281.00 Canal Bridge Replacement 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, November 2014 Edition, 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 November 2014 Edition 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 **019280.00**, for the **Bar Mills Bridge replacement** in the town of **Hollis & Buxton**, and WIN **019281.00**, for the **Canal Bridge replacement** in the town of **Hollis** County of **York**, 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 **June 30, 2017**. 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, November 2014 Edition 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, November 2014 Edition, Standard Details November 2014 Edition 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 November 2014 Edition, Standard Details November 2014 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **WIN 019280.00 Bar Mills Bridge Replacement and WIN 019281.00 Canal Bridge Replacement 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, November 2014 Edition, 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 November 2014 Edition 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

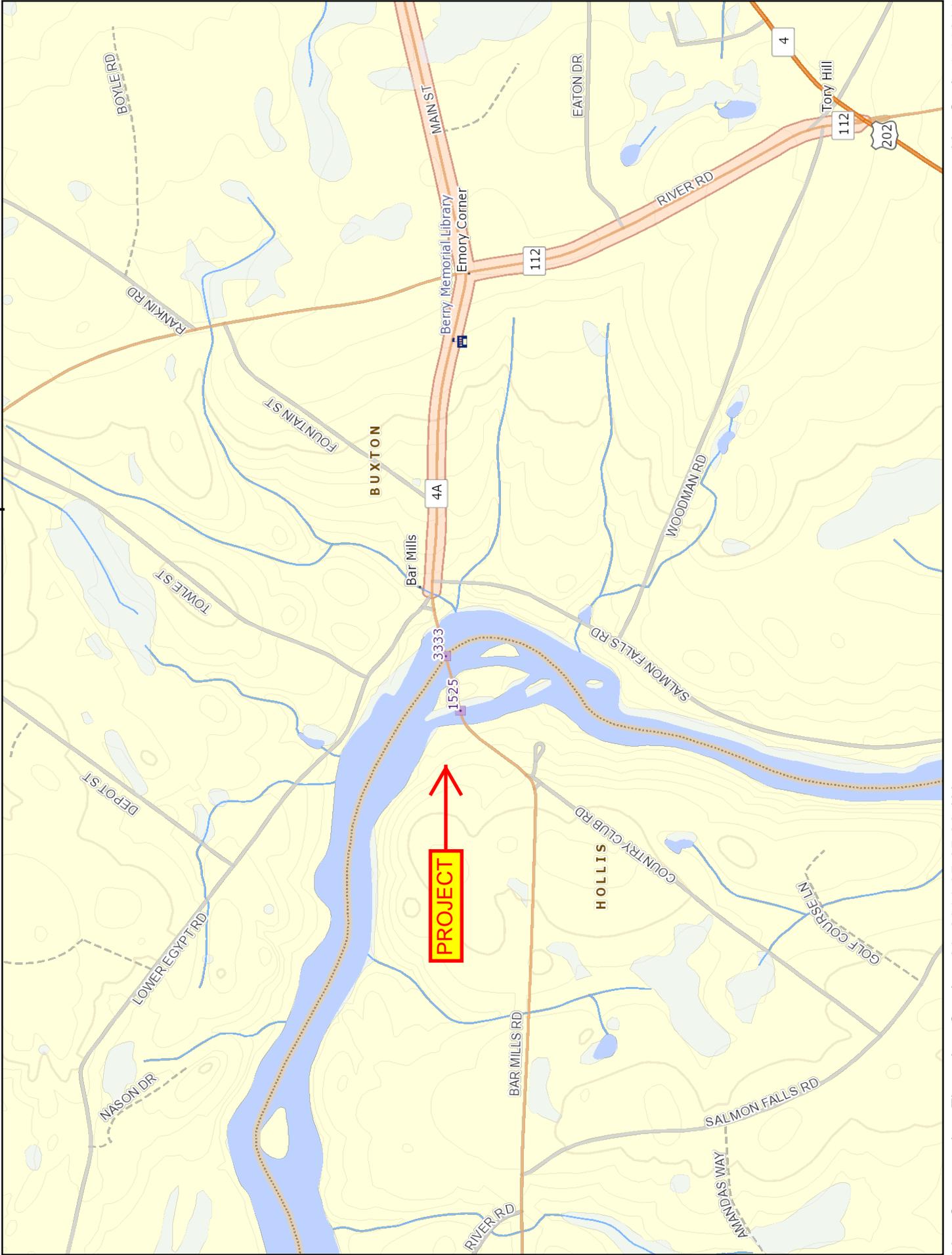
.....

.....

TELEPHONE

.....

Maine DOT Map



Map Scale 1:11266

Map Generated on Thursday, October 30, 2014 07:25:39 AM

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: ME150053 01/02/2015 ME53

Superseded General Decision Number: ME20140053

State: Maine

Construction Type: Highway

County: York 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.

Modification Number	Publication Date
0	01/02/2015

* ENGI0004-006 04/01/2014

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

IRON0007-008 03/16/2014

	Rates	Fringes
IRONWORKER, REINFORCING.....	\$ 22.65	20.17

SUME2011-048 09/14/2011

	Rates	Fringes
CARPENTER, Includes Form Work....	\$ 17.10	1.95
CEMENT MASON/CONCRETE FINISHER...	\$ 16.94	0.00
ELECTRICIAN.....	\$ 21.41	3.40

INSTALLER - GUARDRAIL.....	\$ 15.91	2.85
IRONWORKER, STRUCTURAL.....	\$ 18.75	4.56
LABORER: Asphalt Raker.....	\$ 15.43	1.09
LABORER: Common or General.....	\$ 11.81	1.38
LABORER: Flagger.....	\$ 12.10	0.00
LABORER: Landscape.....	\$ 15.43	2.09
LABORER: Wheel man.....	\$ 18.76	4.93
OPERATOR: Backhoe.....	\$ 17.92	2.44
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 16.98	4.65
OPERATOR: Broom/Sweeper.....	\$ 14.08	0.00
OPERATOR: Bulldozer.....	\$ 17.95	3.81
OPERATOR: Crane.....	\$ 21.28	0.00
OPERATOR: Excavator.....	\$ 18.54	3.57
OPERATOR: Grader/Blade.....	\$ 27.40	8.46
OPERATOR: Loader.....	\$ 16.81	4.32
OPERATOR: Mechanic.....	\$ 22.21	6.09
OPERATOR: Milling Machine Reclaimer Combo.....	\$ 24.77	8.39
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 18.08	4.89
OPERATOR: Roller excluding Asphalt.....	\$ 15.79	3.32
OPERATOR: Screed.....	\$ 19.58	5.95
PILEDRIVERMAN.....	\$ 19.95	5.26
TRUCK DRIVER, Includes all axles including Dump Trucks.....	\$ 16.57	6.38
TRUCK DRIVER: Lowboy Truck.....	\$ 15.15	5.62

WELDERS - Receive rate prescribed for craft performing

operation to which welding is incidental.

=====
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)).

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.

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.

=====

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.*).

MaineDOT DBE Project Attainment Target (PAT)
for this Project is .028 %

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 PROVISIONS
SECTION 104
Utilities

UTILITY COORDINATION

The contractor has primary responsibility for coordinating their work with utilities after contract award. The contractor shall communicate directly with the utilities regarding any utility work necessary to maintain the contractor’s schedule and prevent project construction delays. The contractor shall notify the resident of any issues.

THE CONTRACTOR SHALL PLAN AND CONDUCT WORK ACCORDINGLY.

MEETING

A Preconstruction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications is required.

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.

Utilities have been notified and will be furnished a project specification.

HOLLIS-BUXTON, ME

Overview

Utility/Railroad	Aerial	Underground	Railroad	Contact	Phone #
Central Maine Power Company	X	None	None	Tom Atwood	791-1022
OTT Communications	X	X	None	Jim Knight	688-8284
Time Warner Cable	X	None	None	Jamie Rogers	253-2271
Brookfield Renewable Energy Partners	X	None	None	Nate Stevens	629-1813

Temporary utility adjustments **are not** anticipated.

**Hollis-Buxton
Bar Mills & Canal Bridges
Project: STP-1928(000) & BR-1928(100)X
WINS: 019280.00 & 19281.00
November 13, 2014**

The approximate locations of major items of existing and proposed (permanent and temporary) utility facilities are shown on the bridge construction plans.

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.

Any times and dates mentioned are estimates only and are dependent upon favorable weather, working conditions, and freedom from emergencies. The Contractors shall have no claim against the Department if they are exceeded. Utility working days are Monday through Friday, conditions permitting. Times are estimated on the basis of a single crew for each utility.

In all cases, the utilities shall be advised well in advance (generally three weeks) before work in any particular area is to be commenced by them. This may also be dependent upon other work to be done by the Maine DOT contractor in the same area and should be coordinated with the bridge contractor.

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.

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 a minimum of 10 feet beyond the new pole line or to the right of way line whichever is closest. This will be discussed in greater detail at the preconstruction utility meeting.

HOLLIS - BUXTON
WINS: 019280.00 (Bar Mills) & 019281.00 (Canal)

AERIAL

Central Maine Power Company

They plan to set 21 new poles, estimated time of 15 working days. They then plan to run new conductors on the new poles with an estimated time of 10 working days. They plan the removal of the existing pole line, estimated time of 5 working days. The total estimated time is 30 working days.

TRANSMISSION

Central Maine Power Company will be reconstructing Section 172 of their existing transmission line from West Buxton to Bar Mills. This proposed work is scheduled for 2015. During this time there will be a scheduled outage of the existing transmission line, from September +/- 2015 to November +/- 2015, as dictated by the needs of the power company through their contractor. This will allow access for the Department's contractor for the construction of Canal Bridge.

The schedule of outages that may be requested by the Department's contractor for the 172 transmission line is as follows:

1. Driving of sheet piles - up to 2 weeks
2. Removal of sheet piles - up to 1 week
3. Installation of beams and deck panels - up to 2 weeks
4. Removal of existing bridge - up to 2 weeks

It shall be the responsibility of the Department's contractor to make arrangements with the power company for deactivation of Section 172 transmission line. The power company is going to require a minimum of 30 calendar days of advanced notice to be able to deactivate this line. There is no guarantee that the power company can deactivate this line as requested. The reasons are weather, time of year (seasons), availability of crews, etc. The deactivation is going to be incidental to 2, 3 or 4 of the above listed outages.

There shall be a pre-construction utility meeting where the following are invited: Central Maine Power Company's Contractor, the Department's Contractor, Central Maine Power Company's personnel and Department personnel assigned to this project.

Time Warner Cable has existing facilities only in the town of Hollis. They plan to run new cables on the new poles, estimated time is 2 working days.

OTT Communications plans to run new cables on the new poles, estimated time of 15 working days.

UNDERGROUND WORK

OTT Communications plans to install 2-4 inch conduit on the Buxton side from an existing manhole at the intersection of Rt. 4A and Salmon Falls Road to a new pole at 113+27 on the right. They plan to negotiate with the contractor for the installation of these 2 conduits. OTT Communication has to have these conduits installed prior to the installation of their new cables. This also means that their existing conduit system on the existing bridge has to remain active until the new system is activated.

**Hollis-Buxton
Bar Mills & Canal Bridges
Project: STP-1928(000) & BR-1928(100)X
WINS: 019280.00 & 19281.00
November 13, 2014**

Town of Hollis Fire Department has an existing dry hydrant at station 103+33 on the right. This dry hydrant will need to be relocated to clear the area for construction. It has yet to be determined where the location of the new dry hydrant will be. This location will be determined at an on-site meeting, which will be scheduled as part of the pre-construction meeting, and will require representatives from the Fire Department, the Bridge Contractor, and the Maine DOT. The Fire Department will work with the Bridge Contractor for the removal and relocation of this dry hydrant. The Fire Department will provide materials and specify the new location; the Bridge Contractor will be responsible for installation. Estimated working time for the new dry hydrant is 2 working days for installation, and 1 working day for removal of the existing dry hydrant. The total estimated time is 3 working days.

CONTRACTOR

The area from station 112+00 right to station 113+60 right is reserved for the construction of Central Maine Power Company and OTT Communications aerial distribution line that crosses the Saco River. This means that the contractor cannot use this area for storage of material and/or equipment or for any purpose that may impede Central Maine Power Company and/or OTT Communications from constructing their new line on the downstream side of the existing bridge. This will be discussed in greater detail at the pre-construction utility meeting.

Brookfield Renewable Energy (Brookfield) has power generating facilities both upstream and downstream of both the proposed bridge and the existing bridge. Brookfield plans to construct a new fish ladder adjacent to their existing power house downstream of Canal Bridge. This construction is not part of Maine DOT's project and will not interfere with the Contractors schedule for bridge construction. This will be discussed in greater detail at the pre-construction utility meeting.

The contractor shall remove any and all utility facilities that are attached to the existing bridges as part of the demolition of these two bridges.

NEW POLE LOCATIONS

HOLLIS-BUXTON		
STATION	OFFSET	REMARKS
102+32	39 ft. right	
103+39	103 ft. left	
104+99	135 ft. right	
105+78.5	117 ft. right	
105+78.9	127 ft. right	
105+79.4	137 ft. right	
105+79.8	147 ft. right	

**Hollis-Buxton
Bar Mills & Canal Bridges
Project: STP-1928(000) & BR-1928(100)X
WINS: 019280.00 & 19281.00
November 13, 2014**

112+22.5	62.7 ft. left	
112+48.8	41 ft. right	
112+51.2	50.7 ft. right	
112+53.6	60.5 ft. right	
112+56.1	70.2 ft. right	
10+35	37 ft. right	
113+27	41 ft. right	
113+61	17 ft. left	
113+70	67 ft. right	
114+04	107 ft. right	
114+20.3	16 ft. left	
114+23.3	14 ft. right	
114+50	16 ft. left	
114+53	14 ft. right	

RAILROAD

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.

MAINTAINING UTILITY LOCATION MARKINGS

The Contractor will be responsible for maintaining the buried utility location markings following the initial locating by the appropriate utility or their designated representative.

UTILITY SIGNING

Any utility working within the construction limits of this project shall ensure that the traveling public is adequately protected at all times. All work areas shall be signed, lighted, and traffic flaggers employed as determined by field conditions. All traffic controls shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, as issued by the Federal Highway Administration.

JQ

cc: Mark Parlin, Project Manager
Garrett Gustafson, Bridge Program
Coy Williams, Bridge Program
Devan Eaton, Bridge Program
Michael Moreau, Highway Program

SPECIAL PROVISION
SECTION 105
CONTROL OF WORK

(Cooperation between Contractors - Periodic Progress Coordination Meeting)

It is hereby brought to the Contractor's attention that Brookfield Renewable Energy Group and Central Maine Power have awarded and/or plan to award other contracts near or within the limits of this Contract, which may be in progress simultaneously.

The Contractor shall attend periodic meetings for the other project(s) in the vicinity of this project. The project(s) in the vicinity may include the following:

- **CMP Transmission Line Section 172 Rebuild**
Project Manager: Benjamin Shepard
Cell: 207-215-5810
Benjamin.shepard@cmpco.com
Description: Replacement of existing transmission line over Canal Bridge.

- **Brookfield Fish Ladder Construction**
Project Manager: Guy Senechal
Cell: 207-423-7691
Guy.senechal@brookfieldrenewable.com
Description: Construction of new fish ladder adjacent to existing power house downstream of Canal Bridge.

The periodic meetings will be held in the project vicinity as directed by the Resident. The intent of these meetings is to ensure coordination between projects with respect to safety, traffic control, and schedule. Emergencies or incidents shall be coordinated with the above referenced project(s) in accordance with the incident management plan/emergency plan developed for the projects.

The Contractor shall cooperate with other Contractors at all times and provide project access as necessary and as directed by the Resident.

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 associated with Canal Bridge is allowed anytime.

II. In-Water Work for Bar Mills Bridge shall be as follows:

1. In water work shall not be allowed between the dates of May 1 and June 15.
2. **In-water work is allowed June 16-April 30 provided that downstream fish passage is maintained**

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:

Wetland:

*Permanent: PFO 1,601
PEM 385*

Stream:

*Permanent: RUS-8,993
Temporary: RUS-4,223*

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.

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(Weight Restrictions)

These provisions are in addition to those in Section 105.5 - Hauling of Materials and Equipment.

The present load posting of 10 tons for the bridge corridor shall remain in place for the traveling public until the new bridges are open to traffic. This weight restriction is governed by the Canal Bridge. The Contractor shall abide by this 10 ton posting on the Canal Bridge. The Contractor shall be limited to 30 tons on the Bar Mills Bridge. The Load Rating Reports for both bridges may be accessed at the MaineDOT web address. Note that these bridge ratings are affected by steel corrosion and section loss in several members across each structure. These bridge ratings and weight restrictions are subject to change upon future inspection of either bridge by the Department throughout the duration of the project.

The Contractor may cross the Bar Mills Bridge with loads between 30 tons and legal loads if the truck crossing is limited to 5 mph or less and the truck in question is the only vehicle on the bridge during the crossing. In this scenario, the Contractor would be responsible for any traffic control during the truck crossing. The Contractor shall submit to the Department in writing at the time of the Preconstruction Meeting how this provision will be enforced. If the Contractor does not adhere to these weight restrictions and movement limitations, the Resident will issue a suspension of work effective immediately. Work shall not resume until the Contractor and the Department can reach a resolution for future truck movements.

The Contractor may strengthen either bridge up to legal loads for their use at their own expense. In this scenario, the strengthening shall be designed and load rated by a Professional Engineer licensed in the State of Maine. The design and load rating shall be in accordance with the latest editions of the AASHTO LRFD Bridge Design Specifications and Manual for Bridge Evaluation (LRFR method) as well as the MaineDOT Bridge Load Rating Guide. Gusset plates for steel trusses shall be load rated per the latest FHWA guidance.

The Contractor shall submit to the Department a formal design package detailing their strengthening approach. This package shall include strengthening plans, design and rating calculations, signed and sealed by the design engineer. The Department shall have up to ten business days to return comments on the design package. All comments by the Department shall be addressed by the Contractor and verified by written approval from the Department prior to construction of the strengthening.

The Department shall not be held responsible for any delay in the work associated with this special provision.

SPECIAL PROVISION 105
CONSTRUCTION AREA

A Construction Area located in the **Town of Buxton** and **Hollis** 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 Hollis and Buxton, York County on Route 4A over the Saco River and the Saco River Canal.
- (b) The section of highway under construction in the town of Buxton, York County on Depot Street.
- (c) (Bar Mills Road) over the Saco River and the Saco River Canal station 101+25.00 to station 114+50.00 of the construction plus approaches.
- (d) (Depot Street) station 10+00.00 to station 11+25.00 of the construction 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 Buxton** 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.

The maximum speed limits for trucks on any town way will be 25 mph (40 km per hour) unless a higher legal limit is specifically agreed upon in writing by the Municipal Officers concerned.

SPECIAL PROVISION 105
CONSTRUCTION AREA

A Construction Area located in the **Town of Hollis** and **Buxton** 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 Hollis and Buxton, York County on Route 4A over the Saco River and the Saco River Canal.
- (b) (Bar Mills Road) over the Saco River and the Saco River Canal station 101+25.00 to station 114+50.00 of the construction 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 Hollis** 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.

The maximum speed limits for trucks on any town way will be 25 mph (40 km per hour) unless a higher legal limit is specifically agreed upon in writing by the Municipal Officers concerned.

Hollis - Buxton
Bar Mills & Canal Bridges
WINs: 019280.00 & 019281.00
January 13, 2015

SPECIAL PROVISION
SECTION 107
PROSECUTION AND PROGRESS
(Contract Time)

The specified contract completion date is June 30, 2017.

SPECIAL PROVISION

SECTION 107

TIME

(Supplemental Liquidated Damages)

Route 4A may be closed to all through traffic for a maximum of 120 continuous Calendar Days, with traffic detoured as shown on the plans. The new structures shall be open to unrestricted traffic, as defined below, by the end of the 120 continuous Calendar Day traffic detour. The Contractor will be assessed Supplemental Liquidated Damages at the rate of two thousand dollars (\$2000) per Calendar Day for each Calendar Day that Route 4A and the new structures remain closed to unrestricted traffic, after the 120 continuous Calendar Days.

Open to unrestricted traffic is defined as having membrane, base and surface lifts of pavement, and bridge rail, with the approaches having base pavement and approach guardrail or temporary concrete barrier.

The Contractor shall maintain two lanes of traffic on the existing bridges at all times during construction, except as specified herein. Temporary lane closures may be allowed as approved by the Resident and controlled through work areas by properly certified Flaggers. Night time lane closures will not be allowed, unless otherwise specified herein. The Contractor shall provide a minimum roadway width of 22 feet for two way traffic and 11 feet for one way alternating traffic.

The existing Bar Mills Bridge shall not be closed to traffic until the new Canal Bridge structure can provide unrestricted access to the island between Canal and Bar Mills Bridges. Unrestricted access is defined as having backfilled approaches and installed bridge rail or temporary concrete barrier. This access shall be provided for Emergency Services and construction vehicles for other projects in the vicinity.

These assessments of supplemental liquidated damages will be in addition to the liquidated damages specified in Section 107 of the Standard Specifications.

SPECIAL PROVISION
SECTION 202
REMOVING STRUCTURES AND OBSTRUCTIONS
(Removing Existing Bridge)

Description

This work shall include the complete removal and satisfactory disposal of the existing Canal and Bar Mills Bridges, except such portions thereof as may be required or permitted to be left in place in accordance with the Plans. This provision neither amends nor modifies other provisions of Section 202 except as specified below.

Construction Requirements

The Contractor shall provide detailed demolition plans. The plans shall include, but shall not be limited to, the proposed method(s) of removal, all required falsework, protective structures, and equipment needed to safely accomplish the bridge removal. The Contractor shall proceed with demolition no earlier than 10 business days after the demolition plan has been submitted to the Resident.

All materials consisting of hazardous substances such as lead paint, asbestos, petroleum products, or other substances of potential harm to the public or the environment shall be handled, stored, treated and disposed of in accordance with local, state and federal environmental regulations. The Contractor shall hire an environmental specialist to prepare a materials handling plan to be followed during the demolition.

The Contractor shall contain all demolition debris (including debris from wearing surface removal, saw cut slurry, dust, etc.) and shall not allow it to discharge to any regulated resource. All demolition debris shall be disposed of in accordance with requirements of the Standard Specifications and of the Maine Solid Waste Law, Title 38 M.R.S.A., Section 1301 et seq. Containment and disposal of demolition debris shall be addressed in the Contractor's Soil Erosion and Water Pollution Control Plan (SEWPCP).

The Contractor shall dismantle the existing bridge structure in a manner that will not cause damage to persons or property. Strict adherence to the Special Provision 656 and other precautions, including protective structures as required or ordered, shall be taken to insure that no debris is allowed to fall into the river below.

The Contractor shall not disturb any utility or property carrying water, sewer, gas, communications, electric or similar service across or under the bridges unless permitted to do so by the Resident.

The existing Piers shall be removed to an elevation consistent with existing streambed. The existing abutments shall be removed as noted on the plans or as directed by the Resident.

Regrade behind each abutment with slopes no steeper than 3:1, unless otherwise noted on the plans. Areas disturbed during removal of the existing bridge abutments shall be loam and seeded.

The existing dry hydrant at Station 103+33, 21 feet right and referenced in Special Provision 104 – Utilities shall be removed in its entirety.

The Contractor should be aware of aerial high voltage transmission lines belonging to Central Maine Power Company (CMP), that span directly over the existing Canal Bridge, as shown on the General Plan. Removal of the existing Canal Bridge may require a power outage of these lines to complete the work. The Contractor shall coordinate with CMP to schedule said outage. Associated aerial utility work due to bridge removal shall be in accordance with Special Provision Section 104 - Utilities.

Method of Measurement

Removing Existing Bridge will be measured by the lump sum and will include the removal of the superstructure, including structural and incidental steel components, reinforced concrete, bridge lighting, rail, and substructure (abutments, piers and wing walls) to the extent specified on the plans and herein. It shall also include the removal of approach guardrail and installation and removal of cofferdams.

Basis of Payment

The accepted quantity of Removing Existing Bridge will be paid for at the contract lump sum price, which shall be full compensation for removing and disposing of the existing bridge and associated items to the extent specified on the plans and herein. Loam and seeding shall be paid for under appropriate contract items.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
202.19 Removing Existing Bridge	Lump Sum

SPECIAL PROVISION
SECTION 203
EXCAVATION AND EMBANKMENT
(Dredge Materials)

Description: Dredge Material (See MaineDOT Standard Specifications § 101.2) is regulated as a Special Waste. This material can be reused with a Beneficial Use Permit issued by the Maine Department of Environmental Protection (MDEP). Further, the Beneficial Use of Dredge Material from Class A, Class AA and Class SA water bodies is exempt from Beneficial Use Permits. Work associated with the Route 4A Bridge Replacement Projects in Hollis and Buxton will occur in a Class A water body; therefore, the Beneficial Use of Dredge Material from this initiative is exempt from Beneficial Use Permits.

CONSTRUCTION REQUIREMENTS

Management: The contractor shall ensure that all Dredge Material excavated from the Route 4A Bridge Replacement Projects in Hollis and Buxton is Beneficially Used in the area(s) specified by MaineDOT.

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 403
HOT MIX ASPHALT

Desc. Of Course	Grad Design.	Item Number	Bit Cont. % of Mix	Total Thick	No. Of Layers	Comp. Notes
<u>3" – Bar Mills & Canal Bridge Decks</u>						
Wearing	12.5 mm	403.208	N/A	1½"	1	2,4,8,12
Base	12.5 mm	403.213	N/A	1½"	1	2,4,8,12
<u>6" - Route 4A Travel Way and Approaches</u>						
Wearing	12.5 mm	403.208	N/A	1½"	1	4,8,12
Base	12.5 mm	403.213	N/A	1½"	1	4,8
Base	19.0 mm	403.207	N/A	3"	1	4,8,13
<u>3" - Route 4A Shoulders</u>						
Wearing	12.5 mm	403.208	N/A	1 ½"	1	4,8,12
Base	12.5 mm	403.213	N/A	1 ½"	1	4,8
<u>4" – Depot St.</u>						
Wearing	12.5 mm	403.208	N/A	1 ½"	1	4,8,12
Base	12.5 mm	403.213	N/A	2 ½"	1	4,8
<u>4" – Island Access Road</u>						
Wearing	12.5 mm	403.208	N/A	1 ½"	1	4,8,12
Base	12.5 mm	403.213	N/A	2 ½"	1	4,8
<u>2" - Sidewalks, Drives, Islands and Incidentals</u>						
Wearing	9.5 mm	403.209	N/A	2"	2/more	2,3,10,14

COMPLEMENTARY NOTES

2. The incentive/disincentive provisions for density shall not apply. Rollers shall meet the requirements of this special provision. The use of an oscillating steel roller shall be required to compact all mixtures pavements placed on bridge decks.
3. The design traffic level for mix placed shall be <0.3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **50 gyrations**.
4. The design traffic level for mix placed shall be 0.3 to <3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **50 gyrations**.
8. Section 106.6 Acceptance, (2) Method B. The Contractor may request a contract modification to change to testing method "A" prior to work starting on this item.
10. Section 106.6 Acceptance, (2) Method D.
12. The combined aggregate gradation required for this item shall be classified as a 12.5mm "**fine graded**" mixture, (using the Primary Control Sieve control point) as defined in 703.09.
13. A mixture meeting the gradation of 12.5 mm hot mix asphalt may be used at the option of the contractor.
14. The combined aggregate gradation required for this item shall be classified as a 9.5mm Thin Lift Mixture (TLM) mixture, using the Aggregate Gradation Control Points as defined in 703.09.

Hollis - Buxton
WINs: 019280.00 & 019281.00
Route 4A
Bridge Replacement
October 28, 2014

Tack Coat

A tack coat of emulsified asphalt, RS-1, Item 409.15 shall be applied to any existing pavement at a rate of approximately 0.025 gal/yd², and on milled pavement approximately 0.05 gal/yd², prior to placing a new course. A fog coat of emulsified asphalt shall be applied between shim / intermediate course and the surface course, at a rate not to exceed 0.025 gal/yd².

Tack used between layers of pavement will be paid for at the contract unit price for Item 409.15 Bituminous Tack Coat.

SPECIAL PROVISION
SECTION 501- FOUNDATION PILES
MICROPILES

Amend Standard Specification Section 501 – Foundation Piles to include the following:

501.01 Description. This work shall consist of furnishing, constructing and load testing a micropile foundation as shown in the Plans and as specified herein. The micropile Contractor is responsible for furnishing all materials, products, accessories, tools, equipment, services, transportation, labor and supervision, and manufacturing techniques required for installation and load testing of micropiles and micropile top attachments for this project as shown on the Plans, approved submittals and specified herein.

The micropile Contractor is advised that existing canal and auxiliary spillway retaining walls are located in close proximity to the Work. Micropile construction is capable of producing vibrations and vertical and horizontal deformations that may cause damage to the existing canal and auxiliary spillway retaining walls. The micropile Contractor shall be responsible for any and all damage to the retaining walls that is caused by micropile construction. Vibration monitoring and movement monitoring will be completed during installation of micropiles by the Department as specified in Special Provision 501 - Vibration and Movement Monitoring and Control. Micropile installation shall not begin until the Contractor has confirmed with the Department that the retaining wall instrumentation (seismographs and deformation monitoring points (DMPs)) have been installed and initialized. In addition, threshold and limiting vibration and horizontal and vertical deformation values are included in Special Provision 501 – Vibration and Movement Monitoring and Control. The Work performed in conformance with Special Provision 501 – Vibration and Movement Monitoring and Control may restrict micropile construction practices and means and methods. The micropile Contractor shall consider these limitations in preparing their bid.

The micropile Contractor shall coordinate the work so the micropiles are safely constructed. The micropile Contractor shall perform the micropile construction and related excavation in accordance with the Plans and approved submittals.

The micropile Contractor shall select the micropile installation means and methods to prevent damage to the existing canal and auxiliary spillway retaining walls and confirm the estimated bedrock-grout bond value by load testing. The minimum micropile lengths and casing diameters are shown on the Plans. The micropile load capacities shall be verified by verification and proof load testing and must meet the load test Acceptance Criteria specified herein.

The micropile Contractor shall install micropiles using means and methods that prevent ground loss or densification that could result in settlement or vibration induced damage to the existing canal and auxiliary spillway retaining walls. The micropile Contractor is responsible for removing and/or advancing through all underground obstructions that may interfere with the installation of micropiles.

The micropile Contractor shall monitor all aspects of micropile construction and load testing. The micropile Contractor shall perform material conformance load testing as required. The Contractor shall not install or load test micropiles unless the Department is present to monitor the work.

501.011 Definitions. Definitions that apply within this Special Provision are:

Bond Breaker - A device, sleeve or special treatment placed over the steel reinforcement that will prevent load transfer to the soil over that length. A bond breaker also provides full lateral support of the micropile over the length of the bond breaker. Grout placed in contact with the soil using gravity pressure only will not be considered to constitute a bond breaker.

Bond Zone - The gravity grouted, pressure grouted, and/or post grouted length of a micropile that is bonded to the bedrock and transfers the applied loads to the surrounding bedrock.

Factored Design Load (FDL) - The factored load designed for a micropile. The factored design load is indicated in the Contract Documents.

Drill Casing - Steel pipe of flush joint type used in the drilling process to stabilize the drill hole.

Extended Length - An additional micropile length resulting from a requirement that the micropile capacity be achieved below a given elevation. Typically, extended lengths are prompted by a conflict with subsurface elements (e.g., underground structure, utilities, etc.) or unreliable soil strata. Bond breakers may be required.

Micropile - A small diameter, bonded, cast-in-place friction pile formed by removing material using non-vibratory and non-displacement methods to create a cased open, cylindrical hole in the ground, which is subsequently filled with grout and steel reinforcement.

Mill Secondary - Mill rejected American Petroleum Institute (API) casing, a.k.a. "Mill Rejects," "Structural Grade," "Limited Service," or "Minimum Test Pipe".

Non-production pile - Non-production piles are micropiles that are not incorporated into the substructure.

Permanent Casing - A steel casing installed in the upper portion of a micropile to increase the micropile's moment capacity and lateral capacity against horizontal loads.

Positive circulation or flush - A method of progressing and cleaning out a hole for a micropile wherein drilling fluid is injected into the hole and returns upward along the outside of the drill casing.

Production micropile - A micropile which will be incorporated into the structure's foundation.

Recirculation - A method of handling drilling fluid where the fluid coming back out of the hole is captured in a pan and reused.

Reverse circulation - A method of cleaning the inside of the drill casing. Drilling fluid is circulated down through the drill rods and returns upwards through the inside of the drill casing to flush the drill casing clean.

Tremie grouting - A method used to place grout in a wet hole. A grout tube is placed to the bottom

of the drill hole. While keeping the grout tube opening submerged in the grout, grout is pumped into the hole, causing the drilling fluid to be displaced upward.

501.012 Micropile Contractor's Experience Requirements and Submittal. The micropile Contractor shall be fully experienced in all aspects of micropile construction and load testing. The micropile Contractor shall have proof of successfully constructed micropiles using non-displacement methods immediately adjacent to vibration sensitive structures at a minimum of three (3) projects in the previous five (5) years of similar scope and size. At least four (4) weeks prior to the start of installation of the micropiles, the micropile Contractor shall provide proof of completing a minimum of three (3) projects on which the micropile Contractor has successfully installed micropiles immediately adjacent to vibration sensitive structures. A brief description of each project and a reference shall be included for each project listed. As a minimum, the reference shall include an individual's name and current phone number.

At least two (2) weeks prior to the start of installation of the micropiles, the micropile Contractor shall submit a list identifying the engineer, drill rig operators and on-site supervisors who will be assigned to the project. The proposed on-site Supervisor for this work shall have supervised the successful installation of micropiles immediately adjacent to vibration sensitive structures on at least two (2) projects in the past two (2) years. The list shall contain a summary of each individual's experience and it shall be complete enough for the Resident to determine whether or not each individual has satisfied the qualifications. Drill rig operators shall have a minimum of one (1) year experience in construction of micropile foundations. Load testers shall have a minimum of one (1) year experience in load testing of micropile foundations.

The micropile Contractor shall assign an engineer to supervise the work with at least three (3) years of experience in the construction and load testing of micropiles. The use of consultants or manufacturer's representatives does not satisfy the requirements of this section. Drill operators and on-site supervisors shall have a minimum of one (1) year experience installing micropiles with the micropile Contractor's organization.

The Resident shall approve or reject the micropile Contractor's qualifications and staff within ten (10) working days after receipt of the submission. Work shall not be started on any micropile installation nor any materials ordered until approval of the micropile Contractor's qualifications is given. The Resident may suspend the micropile work if the micropile Contractor substitutes unqualified personnel for approved personnel; the micropile Contractor shall be fully liable for additional costs resulting from the suspension of work and no adjustment in contract time resulting from the suspension of work will be allowed.

501.013 Submittals. The micropile Contractor will not be allowed to begin work until all related submittal requirements are satisfied and found acceptable to the Resident and until baseline vibration and vertical and horizontal deformation measurements are taken by the Department along the existing canal and auxiliary spillway retaining walls. At least four (4) weeks prior to the start of installation of the micropiles the micropile Contractor shall prepare and submit the method-of-installation information outlined below and a micropile Quality Control Plan (QCP) to the Resident for approval. The Resident will require a minimum of 21 working days to review the initial submittal and ten (10) working days to review each subsequent revision as per Section 105.7. Approval of the installation method by the Resident does not constitute a guarantee of

acceptable micropile installations. Acceptable installations are the responsibility of the micropile Contractor.

Include in the submittal:

1. List and description of proposed equipment to be used for micropile installation, including drilling equipment, cleaning method, checking cleanliness of drill holes, centralizers, installing micropiles, tremie grouting, tensioning, load testing and load transfer.
2. Details of step-by-step description of proposed procedures for micropile installation including, but not limited to, installation sequence and the approximate time required for each sequence step.
3. Procedures for advancing through boulders and other obstructions.
4. Procedures for containment of drilling fluid and spoils, and disposal of spoils.
5. Procedures for preventing loss of ground and densification of in-situ soils, which could result in damage to the existing canal and auxiliary spillway retaining walls.
6. Procedures for limiting vibrations and horizontal and vertical deformations of the existing canal and auxiliary spillway retaining walls should the threshold and limiting values specified in Special Provision 501 – Vibration and Movement Monitoring and Control be approached or exceeded.
7. Procedures for removal of high-density corrugated polyethylene tubing and factory grout in advance and in preparation of anchor plate and nut placement.
8. Shop drawings for all structural steel, including the micropile components, corrosion protection system, micropile top attachment and bond length details to the Resident for review. Provide information on the length of the casing sections to be used, as dictated by the length of the drill mast and by the available overhead clearance, and the resulting location of joints. Shop drawings shall include a plan showing micropile designations and test micropile locations.
9. Procedures and equipment for placing grout.
 - a. Prepare the mix design for the grout and obtain documentation from an independent laboratory showing the following:
 - i. The mix design conforms to the submitted mix and meets the required strength.
 - ii. The compressive strength of the mix, tested at 3, 7, 14, and 28 days.
 - iii. The specific gravity of the mix.
 - b. Identify a method for monitoring quality control of the mix. At a minimum, the micropile Contractor shall use a Baroid Mud Balance per American Petroleum Institute (API) Recommended Practice (RP) 13B-1: Standard Procedure for Testing Water Based Drilling Fluids, to check the specific gravity of the mixed grout prior to placement of the grout into each micropile in addition to 3 cubes per day or per batch, whichever is greater.
 - c. Provide pressure gages capable of measuring the actual grout pressures used and such that actual pressure readings are within the middle third of the gage.
10. If proposed, details of post-grouting equipment and procedures, including the method, sequence of operations and equipment required.
11. Layout drawings showing the proposed sequence of micropile installation. Coordinate this sequence with the proposed phasing and scheduling. Provide material

certifications for the micropile components. The drawings shall provide details and dimensions of all micropile components. Shop drawings detailing the monitoring system for measuring movements during verification and proof load tests; detailed procedures for load testing and load transfer to micropiles including method for verifying lock-off loads; detail procedures for installation of micropiles, including method of drilling, installation, and grouting.

Control the procedures and operations so as to prevent mining, damage or settlement to adjacent structures (specifically the existing canal and auxiliary spillway retaining walls), tunnels, utilities or adjacent ground. If any mining, damage or settlement occurs, halt operations. Provide a written plan to the Resident for review with procedures to avoid reoccurrence. Resume work only after the Resident has approved the plan in writing. Repair all damage and settlement at no additional cost to the Department. In instances where vibration and/or horizontal and vertical deformation threshold or limiting values on the existing canal and auxiliary spillway retaining wall are approached or are exceeded the actions specified in Special Provision 501 – Vibration and Movement Monitoring and Control (specifically Section 501.013) shall be followed. Delays resulting from exceedances and the plan preparation and review process shall be the sole responsibility of the Contractor, at no additional cost to the Department.

The micropile Contractor shall submit certified mill test reports, properly marked, for the reinforcing steel, and coupon test results for API N-80 pipe casing, as the materials are delivered, to the Resident for record purposes. The ultimate strength, yield strength, elongation, and material properties composition shall be included. For API steel pipe used as permanent casing, the micropile Contractor shall submit a minimum of two representative coupon tests or mill certifications (if available) on each load delivered to the project.

The micropile Contractor shall submit the grout mix designs, details of all materials to be used in the grout, trial batch reports, certified lab test data, and the procedure for mixing and placing the grout to the Resident for approval. This submittal shall include certified test results and trial batch reports verifying the acceptability of the proposed mix designs.

The micropile Contractor shall submit detailed plans for the method proposed for load testing the micropiles to the Resident for review and acceptance prior to beginning load tests. This shall include all necessary drawings and details to clearly describe the load test method and equipment proposed and shall bear the seal of a Professional Engineer registered in the State of Maine.

The micropile Contractor shall submit to the Resident calibration reports for each test jack, pressure gauge, master pressure gauge and load cell to be used. The calibration tests shall have been performed by an independent testing laboratory and tests shall have been performed within sixty (60) days of the date submitted. The Resident shall approve or reject the calibration data within five (5) working days after receipt of the data. Testing shall not commence until the Resident has approved the jack, pressure gauge and master pressure gauge calibrations.

Micropile installation records shall be submitted to the Resident within 24 hours after each micropile installation is completed. At a minimum the records shall include: micropile drilling, duration and observations; description of soil and bedrock encountered; rate of advancement; micropile inclination; approximate final tip elevation; cut-off elevation; nominal resistance;

description of unusual behavior and/or conditions; deviations from planned parameters; grout volumes pumped; micropile materials and dimensions; micropile location; inspector name; drill method; drill rig operator.

Work shall not begin until the appropriate submittals have been received, reviewed, and accepted by the Resident and until baseline vibration and horizontal and vertical deformation measurements are taken by the Department along the existing canal and auxiliary spillway retaining walls. The micropile Contractor shall allow the Resident up to two (2) weeks to review, comment upon and return the submittal package after a complete set has been received. Note that any additional time required due to incomplete or unacceptable submittals shall not be cause for delay or impact claims. All costs associated with incomplete or unacceptable submittals shall be the responsibility of the micropile Contractor.

The micropile Contractor shall submit to the Resident within thirty (30) calendar days after completion of the micropile work a report containing:

1. As-built drawings showing the locations of the micropiles and the micropiles length.
2. Steel manufacturer's mill test reports for the steel micropile components incorporated in the installation.
3. Detailed drilling records including depth to bedrock quality.
4. Grouting records indicating the cement type, and quantity injected.
5. Micropile load test results and graphs.

501.02 Materials. For all steel remaining as a permanent part of the work, all Buy America provisions shall apply.

Admixture for Grout - Admixtures shall conform to the requirements of ASTM C494 or AASHTO M194. Expansive admixtures shall only be added to the grout used for filling sealed encapsulations and anchorage covers. Admixture shall be compatible with the grout and mixed in accordance with the manufacturer's recommendations. Their use will only be permitted after field tests on fluid and set grout properties. Admixtures containing chlorides are not permitted. Accelerators are not permitted. Admixtures that control bleed, improve flowability, reduce water content and retard set may be used in the grout, subject to the review and acceptance of the Resident.

Bar Tendon Hex Nuts and Couplers - Bar Tendon Hex Nuts and Couplers shall conform to ASTM A108 and develop the ultimate tensile strength of the bars without evidence of any failure.

Cement - All cement shall be Portland cement conforming to ASTM C150/AASHTO M85, Type II and shall be the product of one manufacturer. If the brand or type of cement is changed during the project, additional grout mix tests shall be conducted to ensure consistency of quality and performance.

Centralizers and Spacers - Centralizers and spacers shall be fabricated from schedule 40 PVC pipe or tube, steel, or material non-detrimental to the reinforcing steel. Wood shall not be used. Centralizers and spacers shall be securely attached to the reinforcement; sized to position the

reinforcement within 3/8 inch of plan location from center of micropile; sized to allow grout tremie pipe insertion to the bottom of the drill hole; and sized to allow grout to freely flow up the drill hole and casing without misalignment of the reinforcement.

Encapsulation - Double corrosion protection shall be fabricated using high-density, corrugated polyethylene tubing conforming to the requirement of ASTM D3350/AASHTO M252 with nominal wall thickness of 0.31 inch (0.8 mm). The inside annulus between the reinforcing bars and the encapsulating tube shall be a minimum of 0.197 inch (5 mm) and be fully grouted with non-shrink grout. Grouting shall be performed during fabrication by the manufacturer. Field grouting of corrosion protection will not be allowed.

Fine Aggregate - If sand-cement is used, sand shall conform to ASTM C144/AASHTO M45.

Grout - Neat cement or sand/cement mixture with a minimum 3-day compressive strength of 2,750 psi and a minimum 28-day compressive strength of 5000 psi per ASTM T106/ASTM C109. Limit water-soluble chloride-ion content in hardened concrete to 0.15 percent by weight of cement.

Grout Protection - Provide a minimum 1-inch grout cover over bars and ½ inch grout cover over couplers.

Permanent Steel Casing/Pipe Used As Reinforcement - Steel casing for micropiles shall have the minimum outside diameter shown on the approved Plans and shall conform to API 5CT N80 or ASTM A252 Grade 3 with a minimum yield strength (Fy) of 80 ksi, with the exception that spiral welded pipe shall not be allowed. Lap welded seams are not acceptable. Mill secondaries cannot be used for reinforcement. The steel shall be a Prequalified Base Metal from the AWS D1.1 Structural Welded Code - Steel.

Splices shall conform to the requirements of ASTM A148/A148M Grade 725-585, (Grade 105-85). Threaded casing joints shall develop at least the required compressive, tensile, and/or bending strength.

The casing shall be flush joint and the pipe joint shall be completely shouldered and with no stripped threads.

The manufacturer or fabricator of steel pipe piling shall furnish a certificate of compliance stating that the piling being supplied conforms to these specifications. The certificate of compliance shall include test reports for tensile and chemical tests. Samples for testing shall be taken from the base metal, steel or coil or from the manufactured or fabricated piling. The certificate of compliance shall be in English units.

Plates and Shapes - Structural steel plates and shapes for micropile tip attachment shall conform to ASTM A 572 Grade 50 (AASHTO M183)

Reinforcing Steel - Reinforcement steel shall be continuously threaded bar, Grade 75 ksi, conforming to ASTM A615, as manufactured by DSI or approved equal. When a bearing plate and nut are required to be threaded onto the top end of the reinforcing bars for micropile top to

footing anchorage, the threading may be continuous spiral deformed ribbing provided by the bar deformations or may be cut into the reinforcing bar. If threads are cut into a reinforcing bar, the next larger bar number designation from that shown on the Plans shall be provided at no additional cost.

Water - Water used in the grout mix shall conform to AASHTO T26 and shall be potable, clean and free from substances that may be injurious to cement and steel.

501.04 Construction Requirements. Progress all micropiles using steel drill casing. Install the permanent casing prior to or in conjunction with the micropile drillhole advancement. If replacement micropiles are needed because installed micropiles are unacceptable, location of the replacement micropile(s) shall be approved by the Resident. All installation techniques shall be determined and scheduled such that there will be no interconnection or damage to previously installed micropiles or damage to the existing canal and auxiliary spillway retaining walls. It is the Contractor's sole responsibility to prevent detrimental vibrations, horizontal and vertical deformations and damage to the existing canal and auxiliary spillway retaining walls. Any damage to the existing canal and auxiliary spillway retaining walls as a result of the micropile Contractor's Work shall be repaired at no additional cost to the Department.

Tolerances - Install the top of the permanent casing to the elevation indicated in the Contract Documents. Install the permanent casing so that the center of each casing does not vary from the plan location by more than 3 inches. Micropile-hole alignment of vertical micropiles shall be within 2% of design alignment. Micropile-hole alignment of micropiles inclined up to 1:6 shall be within 4% of design alignment. Micropile-hole alignment of micropiles inclined greater than 1:6 shall be within 7% of design alignment. Top elevation of the micropile shall be within plus 1 inch or minus 2 inches of the design vertical elevation. Centerline of reinforcing steel shall not be more than $\frac{3}{4}$ inch from centerline of piling.

Threshold/Limiting Values – Micropile construction shall produce vibrations and horizontal and vertical deformations on/of the existing canal and auxiliary spillway retaining walls less than the threshold and limiting values provided in Special Provision 501 – Vibration Movement and Monitoring Control Section 501.013.

Equipment Location Limitations – Equipment and material stockpiles used to construct the micropile foundation shall be located no closer than 15 ft from the back face (landside) of the existing canal and auxiliary spillway retaining walls to avoid loading the retaining walls.

Drilling, Soil Removal, and Permanent Casing Installation - The drilling equipment and methods shall be suitable for drilling through the conditions to be encountered, with minimal disturbance to these conditions or any overlying or adjacent structures (specifically the existing canal and auxiliary spillway retaining walls) or services. The drilling equipment shall be capable of installing micropiles to a depth and size shown on the Plans and to a depth of twenty (20) percent of the micropile length beyond the tip depths shown in the Contract Documents. Drill so that the micropile is not moved out of horizontal alignment or out of specified inclination. All micropile drillholes shall be constructed using drill casing from ground surface into bedrock per the requirements shown on the Plans. Casing shall be firmly seated into rock. Open/unsupported drillholes will not be permitted. The drillhole must be constructed to the

defined nominal diameter, full length, prior to placing grout and reinforcement. Do not drill or flush ahead of the drill casing by more than 6 inches at any time during micropile installation. Perform drilling and excavation in such a manner as to prevent the collapse of the hole. Use of bentonite slurry is not permitted. Use of polymer slurry to remove cuttings from the cased hole must be approved by the Resident. Install micropiles so that the permanent casing is tight against the surrounding soil.

If obstructions are encountered during drilling for a micropile, progress through them by means of coring or a tricone roller bit. Use of drop type impact hammers and blasting are not permitted. Use of a down-the-hole hammer shall be approved by the Resident.

Control the procedures and operations so as to prevent mining, damage or settlement to adjacent structures (specifically the existing canal and auxiliary spillway retaining walls), tunnels, utilities or adjacent ground. If any mining, damage or settlement occurs, halt operations. Provide a written plan to the Resident for review with procedures to avoid reoccurrence. Resume work only after the Resident has approved the plan in writing. Repair all damage and settlement at no additional cost to the Department. In instances where vibration and/or horizontal and vertical deformation threshold or limiting values on the existing canal and auxiliary spillway retaining wall are approached or are exceeded the actions specified in Special Provision 501 – Vibration and Movement Monitoring and Control (specifically Section 501.04) shall be followed. Delays resulting from exceedances, and the plan preparation and review process shall be the sole responsibility of the Contractor, at no additional cost to the Department.

Control the procedures and operations so as to prevent the soil at the bottom of the hole from flowing into the hole at all times during installation and cleaning out. Monitor the rate of fluid flow used to progress the holes.

Control drilling fluid and dispose of spoil in accordance with the approved procedure.

Do not progress a hole, pressure grout, or post-grout, within a radius of five (5) pile diameters or five (5) feet, whichever is greater, of a micropile until the grout for that micropile has set for 24 hours or longer if a retarder is used. The Resident will determine the wait time if a retarder is used based on the of the grout testing.

All installation techniques shall be determined and scheduled such that there will be no interconnection or damage to micropiles in which grout has not achieved final set.

Micropile Splices - Micropile splices shall be constructed to develop the required factored design strength of the micropile cross section. Lengths of pipe/casing to be spliced shall be secured in proper alignment and in such a manner that no eccentricity between the axis of the two lengths spliced or angle between them results.

Reinforcement, Centralizers, and Post Grout Tube Placement - Reinforcement shall be placed prior to tremie grouting. The reinforcement surface shall be free of all deleterious substances such as soil, mud, grease or oil that might contaminate the grout or coat the reinforcement and impair bond. Cutting of reinforcing bars with torches is not permitted.

Centralizers and spacers (if used) shall be sized to position the reinforcement within 3/4 inches of plan location from the center of the micropile; sized to allow grout tremie pipe insertion to the bottom of the drill hole; and sized to allow grout to freely flow up the drill hole and casing and between adjacent reinforcing bars. Centralizers, spaced not to exceed 10 feet, must be used to center the reinforcement for its entire length. The uppermost and lower most centralizers shall be located a maximum of 5 feet from the ends of the micropile. Securely attach the centralizers to withstand installation stresses.

The micropile Contractor shall check micropile top elevations and adjust all installed micropiles to the planned elevations.

Do not drop, but lower the steel reinforcement to its specified location in the hole. If a post grout tube is used, attach it to the steel reinforcement prior to lowering it. Partially inserted reinforcing bars shall not be driven or forced into the hole. The micropile Contractor shall redrill and reinsert steel when necessary to facilitate inserting at no additional cost to the Department. There will be no interconnection or damage to micropiles in which the grout has not achieved final set.

Threaded pipe casing joints shall not be used with 2 feet of the bottom of the pile cap.

Grout Placement - Fill annular space between the permanent casing and the micropile with grout meeting the requirements of the approved mix design. The micropile Contractor shall provide calibrated systems and equipment to measure the grout quality (including, at a minimum, compressive strength according to AASHTO T106/ASTM C109 and grout density), quantity, and pumping pressure during the grouting operations. Micropiles shall be grouted the same day the load transfer bond length is drilled.

After drilling, the hole shall be flushed with water and/or air to remove drill cuttings and/or other loose debris to the satisfaction of the Resident. The micropile Contractor shall provide a stable, homogenous neat cement grout or a sand cement grout with a minimum 28-day unconfined compressive strength of 5000 psi. The grout shall not contain lumps or any other evidence of poor or incomplete mixing. Admixtures, if used, shall be mixed in accordance with manufacturer's recommendations. The grouting equipment shall be sized to enable the grout to be pumped in one continuous operation. The grout should be kept in constant agitation prior to pumping. Fill annular space between the permanent casing and the micropile with the grout meeting the requirements of the approved mix design. Grout shall be placed within one (1) hour or less after mixing or within the time recommended by the manufacturer if admixtures are used, and shall be installed without significant interruption. If significant interruption occurs, the micropile Contractor shall replace the micropile or install a new replacement micropile at a location approved by the Resident at no additional cost to the Department. Grout not placed within the allowed time will be rejected.

Provide quality control of the mix by monitoring grout quality. Measure grout consistency by determining grout density per API Recommended Practice (RP) 13B-1 by the Baroid Mud Balance Test at a frequency, of at least one test per micropile, and provide the information to the Resident.

The grout shall be injected from the lowest point of the drill hole by means of a tremie pipe until clean, pure grout flows from the top of the micropile. The grout may be pumped through grout tubes, hollow stem augers or drill rods. Subsequent to tremie grouting, all grouting operations shall ensure complete continuity of the grout column. The use of compressed air to directly pressurize the fluid grout is not permissible. The entire micropile shall be grouted to the design cut-off level. Make provisions for checking the grout level in place at the end of each stage of grouting. Record the initial volume of grout required to fill the hole. Record grouting pressure and volume of grout being pumped into the micropile during pressure grouting. Upon completion, maintain the grout level at or above the micropile cut off elevation until the grout has set.

Upon completion of grouting, the grout tube may remain in the hole, but it shall be filled with grout.

Locate the grout volume measuring gages at the micropile installation site so that they are accessible and legible to the Resident.

Grout within the micropiles shall be allowed to attain the minimum 28-day unconfined compressive strength prior to load testing. Grout within the micropiles shall be allowed to attain the minimum design strength prior to being loaded.

Grout Testing - The Resident will perform quality assurance of the mix in accordance with Standard Specification Section 106. During production micropile grout shall be tested by the micropile Contractor for compressive strength in accordance with AASHTO T106/ASTM C109 at a frequency of no less than one set of three (3) 2-inch grout cubes each day of operation or per every ten (10) micropiles whichever occurs more frequently. The compressive strength shall be the average of the three (3) cubes tested.

Micropile Acceptance Criteria -

1. Micropile meets Construction Tolerance criteria.
2. Micropile was installed in accordance with the approved submittal.
3. Micropile is not damaged.
4. Micropile was installed using the same methods as the accepted test pile.

Unacceptable Micropiles - Unacceptable micropiles are micropiles which do not meet the Acceptance Criteria outlined above.

In the event that a Micropile is identified as unacceptable, the micropile Contractor shall submit to the Resident a written plan of remedial action showing how to correct the problem and prevent its reoccurrence. The micropile Contractor shall repair, augment, or replace the unacceptable micropile in accordance with the approved remedial plan at no additional cost to the Department. No repair shall be permitted until the written plan is approved by the Resident.

501.041 Verification Load Testing. One successful, pre-production verification axial load test shall be conducted on a sacrificial, plumb micropile installed within 50 feet of the proposed micropile locations at a location approved by the Resident. Verification load tests shall verify that the Contractor's installed micropile meets the required tension load capacity and the load

test acceptance criteria. The verification micropile(s) shall be installed and prior to production micropile installation. The drilling and grouting methods, pipe/casing and other reinforcement details, and depth of embedment for the successful verification test micropile shall be identical to the subsequent production micropile installation except where approved otherwise by the Resident. The verification load test will be conducted in tension. The verification micropile shall be loaded to 150% of the factored design load. The verification load testing shall be completed in the presence of the Department.

Micropile verification load testing shall be in general conformance with ASTM D-3689 (tension load test) except as modified herein. The micropile Contractor shall provide load testing equipment with a movement-measuring device with a sensitivity of 0.001 inches of displacement. Testing equipment shall include two (2) dial gauges, dial gauge support, jack and pressure gauge, electronic load cell and reference beam. A leveling plate shall be attached to the surface of the test pile and the jack shall be set in position with the load centered on the pile. The hydraulic jack and pressure gauge shall be calibrated by an independent testing laboratory as a unit with the pressure gauge graded to allow 10 kip increments.

The micropile Contractor shall position the jack at the beginning of the load test such that the unloading and repositioning of the jack during the load test will not be required. An Alignment Load (AL) may be applied to the micropile prior to setting the movement recording devices. The AL shall be no more than 0.04 times the Factored Design Load (FDL). Dial gauges shall be zeroed at the first setting of the AL.

The micropile Contractor shall perform the sacrificial verification micropile load test by incrementally loading the micropile in accordance with the following schedule and recording the micropile head movement at each step:

Load Steps for Verification Load Testing

AL = Alignment Load		FDL = Factored Design Load	
	LOAD	HOLD TIME	
1	AL(0.04 FDL)	-	
2	0.075 FDL	4 minutes	
3	0.15 FDL	4 minutes	
4	0.225 FDL	4 minutes	
5	0.30 FDL	4 minutes	
6	0.375 FDL	4 minutes	
7	AL(0.04 FDL)	1 minute	
8	0.15 FDL	1 minute	
9	0.30 FDL	1 minute	
10	0.375 FDL	1 minute	
11	0.45 FDL	4 minutes	
12	0.525 FDL	4 minutes	
13	0.60 FDL	4 minutes	
14	0.675 FDL	4 minutes	
15	0.75 FDL	4 minutes	
16	AL(0.04 FDL)	1 minute	
17	0.30 FDL	1 minute	
18	0.60 FDL	1 minute	
19	0.675 FDL	1 minute	
20	0.75 FDL	1 minute	
21	0.825 FDL	4 minutes	
22	0.90 FDL	4 minutes	
23	0.975 FDL	60 minute (Creep Test Load Hold)	
24	AL(0.04 FDL)	1 minute	
25	0.30 FDL	1 minute	
26	0.60 FDL	1 minute	
27	0.90 FDL	1 minute	
28	0.975 FDL	1 minute	
29	1.05 FDL	4 minutes	
30	1.125 FDL	4 minutes	
31	1.2 FDL	4 minutes	
32	1.275 FDL	4 minutes	
33	1.35 FDL	4 minutes	
34	1.425 FDL	4 minutes	
35	1.5 FDL	4 minutes	
36	1.2 FDL	4 minutes	
37	0.90 FDL	4 minutes	
38	0.60 FDL	4 minutes	
39	0.30 FDL	4 minutes	
40	AL (0.04 FDL)	15 minutes	

Micropile top movement shall be measured at each load increment. Micropile movement during the creep test shall be measured and recorded at 1, 2, 3, 4, 5, 6, 10, 20, 30, 50, and 60 minutes.

The Acceptance Criteria for micropile verification load tests shall be:

1. The micropile shall sustain the axial compression design load (0.75 FDL) in tension with no more than 0.33-inch total vertical movement at the top of the micropile as measured relative to the top of the micropile prior to the start of load testing. If an alignment load is used, then the allowable movement will be reduced by multiplying by a factor of $[(0.75 \text{ FDL} - \text{AL})/0.75 \text{ FDL}]$.
2. Test micropiles shall have a creep rate at the end of the 0.975 FDL increments which is not greater than 0.04 inches/log cycle time from 1 to 10 minutes or 0.08 inches/log cycle time from 6 to 60 minutes and has a linear or decreasing creep rate throughout the creep load hold period.
3. Failure does not occur by the 1.5 FDL test load. Failure is defined as a slope of the load versus deflection curve (at end of increment) exceeding 0.025 inch/kip.

If the micropile load test fails to meet the design requirements, the cause(s) shall be established, and the micropile design and/or installation methods shall be modified. These modifications include, but are not limited to, installing replacement micropiles, modifying the installation methods, increasing the bond length, regrouting via pre-placed re-grout tubes, or changing the micropile type. Any modification which requires changes to the structure shall have prior review and acceptance of the Resident. The cause for any modifications of design or construction procedures shall be decided in order to appropriately determine any additional cost implications. Any modifications of construction procedures shall be at the micropile Contractor's expense. Subsequent verification micropiles shall be installed at locations approved by the Resident using the approved modified construction procedures and retested, as detailed previously in this Subsection. If the verification test results meet the acceptance criteria, the Resident shall review and approve the modified design and/or installation methods proposed by the Contractor prior to beginning production micropile installation.

The micropile Contractor shall minimize disturbance to the ground surface when placing and removing blocking. The micropile Contractor shall also avoid loading the existing canal and auxiliary spillway retaining walls during any and all load testing.

The micropile Contractor will provide the Resident a written report confirming micropile details and construction procedures within 7 working days after the completion of the pre-production load tests. This written confirmation will either confirm the micropile construction methods initially proposed and bond lengths as shown in the drawings for micropiles or propose modifications based upon the results of the verification load tests.

At the completion of verification load testing, test micropiles shall be removed down to the elevation specified by the Resident.

501.042 Proof Load Testing. The micropile Contractor shall perform proof load tests a minimum of five (5) production micropiles. The micropiles to be load tested will be selected by the Resident. Proof load tests shall be conducted in tension and shall be conducted in the presence of the Department.

Axial micropile load tests shall be made by loading the micropiles in accordance with the following schedule and recording the micropile head movement at each step:

Load Steps for Proof Load Testing

AL = Alignment Load		FDL = Factored Design Load	
	LOAD	HOLD TIME	
1	AL(0.04 FDL)	4 minute	
2	0.10 FDL	4 minute	
3	0.20 FDL	4 minute	
4	0.30 FDL	4 minute	
5	0.40 FDL	4 minute	
6	0.50 FDL	4 minutes	
7	0.60 FDL	4 minutes	
8	0.70 FDL	4 minutes	
9	0.80 FDL	4 minutes	
10	0.90 FDL	4 minutes	
11	1.00 FDL	60 minutes	
		(Creep Test)	
12	0.75 FDL	4 minutes	
13	0.50 FDL	4 minutes	
14	0.25 FDL	4 minutes	
15	AL (0.04 FDL)	4 minutes	

The Acceptance Criteria for micropile proof load tests shall be:

1. The micropile shall sustain the design loads (0.75 FDL) with no more than 0.125 inch of total vertical movement at the top of the micropile as measured relative to the micropile prior to the start of load testing. If an AL is used, then the allowable movement will be reduced by multiplying by a factor of $[(0.75 \text{ FDL}-\text{AL})/0.75 \text{ FDL}]$.
2. Test micropiles shall have a creep rate at the end of the 1.00 FDL increment that is not greater than 0.04 inch/log cycle time from 1 to 10 minutes or 0.08 inch/log cycle time from 6 to 60 minutes and has a linear or decreasing creep rate.
3. Failure does not occur by 1.00 FDL test load.

If a production micropile that is proof load tested fails to meet the Acceptance Criteria, modifications shall be made to the design, the construction procedures or both. These modifications include, but are not limited to, installing replacement micropiles, incorporating micropiles of reduced load capacities, modifying the installation methods, increasing the bond length, or changing the micropile type. Any modification which requires changes to the structure shall have prior review and acceptance of the Resident. Any modifications of construction procedures shall be at the micropile Contractor's expense. The Resident may elect to proof test an additional micropile in consideration of a failed proof test and/or the circumstances of the modification.

501.05 Method of Measurement.

All work related to mobilization and demobilization of any equipment or temporary access and/or working platforms required to satisfactorily complete all micropile installation and load testing shall be measured on a lump sum basis.

Micropiles will be measured as the number of accepted micropiles installed including up to one (1) successful verification load test micropile. This measurement shall not include micropiles damaged prior to completion of the work unless remedied to the satisfaction of the Resident. This measurement shall not include verification micropiles that did not meet the acceptance criteria as outlined herein.

501.06 Basis of Payment.

Drilling Equipment Mobilization. The unit bid price for Drilling Equipment Mobilization - Micropiles shall be considered full compensation for providing all labor, equipment, and materials needed to complete micropile installation, all labor, equipment, and materials needed to perform verification and proof load tests and submit calibration reports as specified.

Micropiles. The unit bid price shall include cost of the micropiles (installed and accepted), development and execution of an approved QCP, furnishing all labor, materials and equipment necessary to complete the work, conduct verification and proof load tests and submit reports. All costs to repair all damage and settlement to adjacent ground and structures shall be incidental to the pay item for micropiles and at no additional cost to the Department. All costs to repair, augment and/or replace all rejected micropiles shall be incidental to the pay item for micropiles and at no additional cost to the Department. Micropiles that fail to meet the Acceptance Criteria will be rejected and no payment will be made for these micropiles. Separate payment will not be made for advancing through boulders and obstructions including all incidental costs under the pay item for micropiles. The micropile Contractor is responsible for estimating the grout take. There will be no extra payment for grout overruns. All costs associated with micropile installation include full compensation for any temporary or permanent casings, augers, grouting operations, drilling equipment, or specialty tools needed to micropiles shall be incidental to the contract pay item for micropiles.

Payment will be made under:

<u>Pay Item:</u>	<u>Pay Unit</u>
501.804 Drilling Equipment Mobilization - Micropiles	Lump Sum
501.220 Micropiles	Each

SPECIAL PROVISION
SECTION 501 - FOUNDATION PILES
Vibration and Movement Monitoring and Control

Amend Standard Specification Section 501 - Foundation Piles to include the following:

501.01 Description. The activities that are required for the construction of this project are capable of producing vibrations and vertical and horizontal deformations that may cause damage to the existing canal and auxiliary spillway retaining walls. The magnitude of the vibrations and deformations are dependent on the Contractor means and methods of construction. The Contractor is advised that existing structures (specifically the canal and auxiliary spillway retaining walls) are located in close proximity to the proposed work and that construction activities shall be conducted so as to preclude damage.

The Department will provide all equipment, materials, labor and services to install, monitor, report on, protect, maintain and replace if necessary, multiple vibration and movement monitoring points along portions of the existing canal and auxiliary spillway retaining walls during bridge construction and demolition activities. The Department will compare vibration and deformation monitoring results to the limiting levels set in this Special Provision. If limiting values are exceeded, the Resident will immediately report the occurrence to the Contractor and the work will be stopped until the situation is corrected. In the event of an exceedance, the Resident will perform a visual inspection of the canal and auxiliary spillway retaining walls and the Contractor shall evaluate the situation and submit a proposed revision to the construction means and methods as outlined in this Section.

The Contractor shall be responsible for all damage to the existing canal and auxiliary spillway retaining walls that is caused by construction activities. The Work performed in conformance with these specifications may restrict construction practices and means and methods. The Contractor shall consider these limitations in preparing their bid.

501.011 Purpose. The purpose of the vibration and movement monitoring program is to provide baseline data prior to construction as well as real-time data during bridge construction and demolition for comparison with specified limiting values to prevent damage to the existing canal and auxiliary spillway retaining walls. Construction means and methods that result in vibration levels or deformations in excess of the limiting values specified herein will not be allowed and shall be revised by the Contractor such that limiting values are not exceeded.

501.012 Execution.

- A. The Department will perform pre- and post-construction surveys/inspections of the existing canal and auxiliary spillway retaining walls to identify any existing damage prior to construction as well as any new damage that may have been caused as a result of bridge construction and demolition activities. The pre- and post-construction surveys/inspections will be made available to the Contractor, if requested. The Contractor may elect to conduct supplemental pre- and post-construction surveys/inspections at no additional cost to the Department.
- B. The Department will provide all equipment, materials, labor and services necessary to install, monitor, report on, protect, maintain and replace if necessary, multiple seismographs (for vibration monitoring) and deformation monitoring points (DMPs) along portions of the existing canal and auxiliary spillway retaining walls prior to and during bridge construction and demolition activities.

- C. The number, type, location and monitoring duration and frequency will be determined by the Department. A general plan showing the locations and designations of seismographs and DMPs will be provided to the Contractor by the Department. The general plan will be available during the pre-construction meeting.
- D. Vibration and horizontal and vertical deformation monitoring of the existing canal and auxiliary spillway retaining walls will be completed by the Department on a schedule and frequency based on the location and extent of bridge construction and demolition activities. The Contractor shall cooperate in every way with the Department to accomplish vibration and horizontal and vertical deformation monitoring of the retaining walls. The data collected by the Department will be made available to the Contractor in a timely manner, if requested. The Contractor shall provide and maintain safe means of access to all instrumentation locations as required for data collection for the duration of the project.
- E. The Contractor shall exercise caution during the progress of Work and shall prevent damage to all instrumentation devices (i.e., seismographs, DMPs). Any damage or loss of function caused by the Contractor's operations, or by any other cause, to new or existing instrumentation shall be repaired or the equipment replaced at no additional cost to the Department within two (2) working days of seismographs and/or DMPs becoming inoperable due to damage caused by the Contractor.
- F. The duration and frequency of instrumentation readings by the Department may be extended or increased, as determined by the Resident, if limiting values are approached or exceeded during the Work, or during periods of significant activity near the monitoring locations. Monitoring duration and frequency may also be shortened or reduced by the Department, if deemed appropriate by the Resident. At a minimum, the Department plans to conduct vibration monitoring throughout the duration of the project, including during new bridge construction and existing bridge demolition. The Department also plans to conduct optical monitoring of the DMPs when construction/demolition activities are on-going within 200 ft of the existing canal and auxiliary spillway retaining walls.

501.013 Limiting Values. Limiting values for vibration and horizontal and vertical deformations for the existing canal and auxiliary spillway retaining walls are summarized below. The criteria presented below are intended to establish a minimum basis for the Contractor's construction procedures, and in no way relieve the Contractor of its sole responsibility for preventing detrimental vibrations, movements and damage to the existing canal and auxiliary spillway retaining walls.

Instrumentation Type	Limiting Value
Seismograph (vibration monitoring of canal and auxiliary spillway retaining walls)	0.2 in./sec. between 1 and 10 Hz and increasing linearly (on a logarithmic scale) from 0.2 in./sec. at 10 Hz to 0.9 in./sec. at 100 Hz.
Deformation Monitoring Points (horizontal and vertical deformation of canal and auxiliary spillway retaining walls)	¼ in. (threshold) ½ in. (limiting)

If the threshold values are exceeded and/or limiting values are being approached, the Resident will notify the Contractor and the Contractor shall take all actions necessary to prevent exceedances of the limiting values, including but not limited to the following:

- A. Meet with the Resident within 2 hours of notification to discuss the status of Work activities, observations made, and need for mitigating measures to prevent exceedances of limiting values if it is judged by the Resident to be attributed to the Work of the Contractor.
- B. If the Resident judges that mitigating measures are needed or if limiting values are exceeded the Contractor shall:
 - i. Terminate further work activity determined to be causing the exceedances.
 - ii. Develop revised construction means and methods that the Contractor believes will result in acceptable vibration and deformation of the existing canal and auxiliary spillway retaining walls. The Contractor shall submit the plan in written form to the Department for review. The Contractor shall revise the plan if requested by the Department until a mutually agreed upon plan is developed. Delays resulting from exceedances and the plan preparation and review process shall be the sole responsibility of the Contractor, at no additional cost to the Department.
 - iii. Implement revised construction means and methods of performing activities that will allow Work to be completed without exceedances.
- C. The Department may install additional instrumentation and increase monitoring frequency if necessary.

Mitigating measures are subject to adjustment by the Department based on observed conditions and instrumentation monitoring data collected during bridge construction and demolition activities. Temporary work stoppages and execution of construction tasks using alternate means and methods necessary due to limiting value exceedances shall be completed by the Contractor at no additional cost to the Department.

501.05 Method of Measurement. This item will not be measured.

501.06 Basis of Payment. No payment shall be made for temporary work stoppages or additional work completed as a result of vibration and horizontal and vertical monitoring point limiting value exceedances.

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

CLASS OF CONCRETE	ITEM NUMBER	DESCRIPTION	P	METHOD
A	502.219	Structural Concrete Abut. & Retaining Walls	\$400	A
LP	502.219	Structural Concrete Abut. & Retaining Walls	\$425	A
A	502.22	Structural Concrete, Abut. & Retaining Walls (Placed under water)	\$400	A
S	502.22	Structural Concrete, Abut. & Retaining Walls (Placed under water)		C
A	502.239	Structural Concrete Piers	\$400	A
A	502.24	Structural Concrete Piers (Placed under water)	\$400	A
A	502.26	Structural Concrete Roadway & Sidewalk on Steel Bridges	\$400	A
LP	502.26	Structural Concrete Roadway & Sidewalk on Steel Bridges	\$425	A
A	502.31	Structural Concrete Approach Slab		C
LP	502.49	Structural Concrete Curbs & Sidewalks	\$425	A
LP	526.34	Permanent Concrete Transition Barrier	\$425	A
LP	526.3401	Permanent Concrete Transition Barrier - Modified	\$425	A
LP	626.32	24 Inch Foundation		C
LP	626.35	Controller Cabinet Foundation		C

P values listed above reflect the price per cubic yard (CY) for all pay adjustment purposes.

The quantity used for Pay Adjustment purposes shall be the actual quantity of cast in place concrete placed and accepted. This quantity shall be computed by the Contractor and submitted to the Resident for approval.

Bar Mills Bridge Abutment 1 backwall concrete placed above the approach slab seat shall be Class "LP" concrete and paid for under Item No. 502.219, Structural Concrete Abutments & Retaining Walls.

All semi-integral backwall concrete shall be Class "LP" concrete and paid for under Item No. 502.26, Structural Concrete Roadway & Sidewalk on Steel Bridges.

SPECIAL PROVISION
SECTION 502
STRUCTURAL CONCRETE
Composition and Proportioning

The following changes to Standard Specification Section 502, Structural Concrete Table 1 shall be made:

Class "A" concrete Compressive Strength shall be 4,350 psi.

The following note shall apply to Class "LP" concrete.

Calcium Nitrite shall be added at the rate of 3 gallons per cubic yard.

SPECIAL PROVISION
SECTION 526
CONCRETE BARRIER

The last paragraph of Subsection 526.05, Basis of Payment is revised by the addition of the following:

<u>Pay Item</u>		<u>Pay Unit</u>
526.3401	Permanent Concrete Transition Barrier - Modified	EA

SPECIAL PROVISION
SECTION 620
GEOTEXTILES
(Synthetic Compressible Inclusion)

Description:

This work shall consist of furnishing and installing Synthetic Compressible Inclusion (SCI) panels to the lines, grades and thickness' specified and where shown on the Plans or as directed by the Engineer.

Materials:

Synthetic Compressible Inclusion (SCI) panels shall be furnished in 3 inch thicknesses as shown on the Plans. The SCI panels shall have a size tolerance of +1/8 inch for each dimension and meet the physical properties given below.

PHYSICAL PROPERTIES:

ASTM D1622 Density (Nominal)	1.0 pcf
ASTM D1621 Strength at 10% Deformation	<5 psi
ASTM D1623 Tensile Strength	16 psi
ASTM D732 Shear Strength	55 psi
ASTM D1621 Modulus of Elasticity	<100 psi

PHYSICAL STANDARDS

ASTM D3345-74 Insect Resistance (ants, termites etc.)

The SCI panels shall be produced by a manufacturer with an in place, third party certification, Quality Control program which is monitored by an independent testing organization.

The SCI panels shall be labeled with the manufacturer's name and product type.

Adhesive for installing SCI panels shall be supplied by the SCI panel manufacturer.

The Contractor shall submit two copies of the third party certified test report showing that the SCI panels meet the physical properties and standards listed above.

GeoTech TerraFlex manufactured by licensees of GeoTech Systems Corporation, 9912 Georgetown Pike, Suite D-2, Great Falls, Virginia 22066, (703) 759-0300, is an approved material.

The Department may randomly test SCI panels delivered to the job site. If any panel does not conform to the specified physical properties, the sampled shipment will be rejected.

Construction:

Exercise care to prevent damage to the SCI panels during delivery, storage, and construction. Damaged panels shall not be used.

SCI panels shall be protected from: (1) Organic solvents such as acetone, benzene, and paint thinner; (2) Petroleum based solvents such as gasoline and diesel fuel; (3) Open flames; (4) Prolonged exposure to sunlight (no more than 90 days) during shipping and onsite storage.

Place walnut size daubs of adhesive spaced at 18 inches across the top of each panel and press the panel against the vertical surface. Stagger panel joints. Trim the panels as necessary to maintain proper coverage throughout the panel height. Trim or cut the panels using a handsaw or an alternative cutting method approved by the Resident.

Method of Measurement & Basis of Payment:

Synthetic compressible inclusion shall not be measured separately for payment, but will be considered incidental to related contract items.

SPECIAL PROVISION
SECTION 620
Drainage Geocomposite

Description. This work shall consist of furnishing and placing Drainage Geocomposite as specified in this Section and as shown on the plans or as directed by the Resident. Geocomposite Drainage shall consist of a formed polystyrene core covered on one side with a non-woven, needle-punched polypropylene filter fabric.

Material. Drainage Geocomposite must be a composite system consisting of permeable geotextile and three-dimensional polymeric core providing equal flow in two perpendicular directions.

The Contractor shall furnish and install a Drainage Geocomposite as a hydrostatic water relief system. The Drainage Geocomposite shall be tied in to a water discharge system or weep holes.

Drainage Geocomposite work shall consist of furnishing all materials and labor required for placing and securing Drainage Geocomposite material, connection pipes, footing drains, weep holes, and horizontal drains, as shown on the Plans or as directed by the Resident.

Preinstallation Conference. Prior to beginning installation of the prefabricated Drainage Geocomposite material, convene a meeting at the jobsite with a representative of the Drainage Geocomposite manufacturer and any other related subcontractors to clarify and coordinate installation procedure.

Quality Assurance Testing. Drainage Geocomposite must be backed by Letter of Certification from Manufacturer that the flow rate in the plane of the core meets or exceeds the specified flow given herein and determined by ASTM D4716.

Contractor's Experience Requirements. The Contractor performing this installation shall submit proof of at least three (3) projects successfully completed in the past three (3) years involving the installation of Drainage Geocomposite. A brief description of each project with the Owner's name and current phone number shall be included.

Submittals. The required submittals are as follows:

- A. Submit three (3) projects where prefabricated Drainage Geocomposite system has been used.
- B. Submit Letter of Certification that material meets or exceeds physical properties per the following table.
- C. The design layout of the Drainage Geocomposite including type, spacing, overlap, collection drainage, and other information.

Product Specification. The Drainage Geocomposite shall consist of Miradrain 6000XL, Amerdrain 500, or equal that meets or exceeds the following properties:

TYPICAL PROPERTIES	Typical Value	Test Method
Fabric Properties		
Material	Non-woven Polypropylene	
Grab tensile strength	100 lbs	ASTM D4632
Puncture strength	65 lbs	ASTM D4833
AOS	70 sieve	ASTM D4751
Permeability	0.3 cm/sec	ASTM D4491
Core properties		
Material	Polystyrene	
Compressive strength	15,000 psf	ASTM D1621 (Mod.)
Product properties		
Flow capacity per unit width ¹	16 gpm/ft	ASTM D4716

¹ In Plane Flow Rate, Gradient = 1.0

All numeric values in the above table, except AOS, represent minimum average roll values in the weakest principal direction (i.e., average test results of any roll in a lot sampled for conformance or quality assurance testing shall meet or exceed the minimum values). Values for AOS represent maximum average roll values.

Placement Requirements. The Drainage Geocomposite shall be installed by methods approved by the Manufacturer. The Drainage Geocomposite installer shall coordinate installation with the Manufacturer's representative.

The installer shall place the Drainage Geocomposite at the elevations and alignment shown on the Plans, as noted and as directed by the Resident. The Drainage Geocomposite shall be installed with the fabric side toward the soil.

When installing the Drainage Geocomposite:

- Start at the low point of the wall and attach the panel to the wall.
- Adjacent panels may be:
 - (1) Joined together with the lateral edge of the next/upper panel placed over the flanged edge of the lower panel;
 - (2) Overlap the dimples of the preceding panel onto the dimples of the previous panel by 2 inches.

The Drainage Geocomposite from the adjacent panels shall overlap the preceding panel. The overlap fabric can be adhered with the Manufacturers approved tape or duct tape. The Drainage Geocomposite shall be attached to non-waterproofed walls with contact adhesive, tape or concrete nails. The Drainage Geocomposite will be permanently secured upon completion of backfilling. Backfilling shall be placed within seven days of Drainage Geocomposite installation. Backfill to at least 6 inches above the top edge of the Drainage Geocomposite.

The top or terminal edge of the Drainage Geocomposite shall be covered by applying a piece of filter geotextile, meeting the requirements of MaineDOT Standard Specification Section 722.03, over the edge sufficient in width to prevent soil or other foreign construction materials from intruding into or behind the Drainage Geocomposite panels. The filter geotextile shall be placed to match finished grade.

If necessary, the Drainage Geocomposite and filter geotextile shall be positioned by hand to minimize wrinkles.

Unanticipated subsurface drainage features exposed in the excavation shall be drained independently of the Drainage Geocomposite.

Backfill Requirements. Structural backfill meeting the requirements of MaineDOT Standard Specification Section 703.06(a) Type C, shall be placed immediately against the Drainage Geocomposite. Care shall be taken during the backfill operation not to damage the geotextile surface of the drain. The backfill shall be placed and compacted in accordance with the project plans and specifications. Care shall also be taken to avoid excessive settlement of the backfill material. The Drainage Geocomposite, once installed, shall not be exposed for more than seven days prior to backfilling.

Storage Requirements. The Contractor shall check the Drainage Geocomposite upon delivery to ensure that the proper material has been delivered. The Contractor shall be responsible for the storage of the Drainage Geocomposite material at the site.

Drainage Geocomposite shall be provided in rolls wrapped with a protective covering and stored in a manner, which protects the material from temperatures greater than 140° F, mud, dirt, dust, and debris. Protective wrapping shall not be removed until immediately before the Drainage Geocomposite is installed.

Drainage Geocomposite material shall be delivered and stored in original packages bearing the Manufacturer's name. The fabric shall not be exposed to direct sunlight for more than seven days during its storage and installation. The Drainage Geocomposite material shall be stored in a clean, dry environment out of the pathway of construction equipment. Each roll of Drainage Geocomposite material shall be labeled to identify the production run.

Repair Requirements. Prior to the placement of the Drainage Geocomposite each roll shall be inspected for damage resulting from construction.

Any ripped, torn, or damaged areas of the Drainage Geocomposite material shall be removed and patched by placing a patch large enough to cover the damaged area and provide a sufficient overlap on all sides to fasten. The patch shall be secured to the original Drainage Geocomposite material using the Manufacturers approved methods. If the hole width or tear width across the panel is more than 50% of the width of the material, the damaged area shall be cut out and the

two portions of the Drainage Geocomposite material shall be joined in accordance with the placement requirement.

If the damage occurs to the Drainage Geocomposite material during shipping, handling, or installation, the damaged areas shall be cut out and a repair section of Drainage Geocomposite shall be installed at the Contractor's expense.

Method of Measurement. Drainage Geocomposite installation shall be measured by the square yard in place and accepted. Measurements will not be made for overlaps, patches, and repairs.

Basis of Payment. The accepted quantity of Drainage Geocomposite installed shall be paid for at the contract unit price per square yard, which shall be full compensation for off-loading, inspection, storage, materials, equipment, and any incidentals necessary to complete the installation.

The cost and placement of the drainage collection pipe will be incidental to the installation of the Drainage Geocomposite.

Payment will be made under:

<u>Pay Item</u>	<u>Measurement Unit</u>
620.661 Drainage Geocomposite	Square Yard

SPECIAL PROVISIONS
SECTION 621
LANDSCAPE
 (Plant Species Specification and Quantities List)

The following list of items provides the estimated quantities for use on this project. The scientific name of the plant material is provided along with the common name in parenthesis.

The Contractor shall follow MaineDOT Standard Specifications November, 2014 Section 621 for landscape materials and installation procedures.

The MaineDOT Landscape Architect or his designee will be available to inspect plant materials and stake the location of plant materials at the time of planting.

In accordance with Section 104.5.9, a separate Performance Bond will not be required for the Landscape portion of this contract. No maintenance bond will be required, however a two-year warrantee will be included incidental to the planting.

PLANT MATERIALS

ITEM NO.	Description	Unit	Quantity	Total
621.031	Evergreen Trees 4' – 5' Group A	Ea.		6
	<i>Thuja nigra</i> (American Arborvitae)		6	
621.039	Evergreen Trees 5' – 6' Group C	Ea.		3
	<i>Picea pungens glauca</i> (Colorado Blue Spruce)		3	
621.195	Deciduous Trees 1 3/4" – 2" Gr. A Cont.	Ea.		6
	<i>Acer rubrum</i> (Swamp Maple)		3	
	<i>Betula nigra</i> (River Birch)		3	
621.415	Dwarf Evergreens 3' – 3 1/2' Group C	Ea.		5
	<i>Taxus capitata</i> (Pyramidal Yew)		5	
621.54	Deciduous Shrubs 15" – 18" Gr. A Cont.	Ea.		6
	<i>Spiraea alpine</i> 'Little Princess' (DwarfSpiraea)		6	
621.71	Herbaceous Perennials Group A	Ea.		12
	<i>Hemerocallis flava</i> (Native Yellow Daylily)		12	

Highway Lighting Quality Control Checklist

Subsection 634.09 Field Testing

Project Pin # _____

Location (if multiple services, please be specific)- _____

Grounding Electrode Resistance at service _____

Number of Circuits _____

Hand-Off-Auto Switch? _____

Circuit #1

Open Circuit Resistance- (Ohm out both hot legs at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Megger Test- (Meg out both hot legs to ground at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Current draw- (during normal operation) Leg #1 _____ Leg #2 _____

Operating Voltage at last pole _____

Circuit #2

Open Circuit Resistance- (Ohm out both hot legs at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Megger Test- (Meg out both hot legs to ground at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Current draw- (during normal operation) Leg #1 _____ Leg #2 _____

Operating Voltage at last pole _____

I, _____, certify that this work was done in accordance with subsection 643.14 and current NEC _____ guidelines, and when tested, was functioning as intended. (YEAR)

Electrician's Signature _____

Electrician's License # _____

Highway Lighting Quality Control Checklist

Subsection 634.09 Field Testing

Project Pin # _____

Location (if multiple services, please be specific)- _____

Grounding Electrode Resistance at service _____

Number of Circuits _____

Hand-Off-Auto Switch? _____

Circuit #3

Open Circuit Resistance- (Ohm out both hot legs at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Megger Test- (Meg out both hot legs to ground at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Current draw- (during normal operation) Leg #1 _____ Leg #2 _____

Operating Voltage at last pole _____

Circuit #4

Open Circuit Resistance- (Ohm out both hot legs at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Megger Test- (Meg out both hot legs to ground at the cabinet while they are shorted together at the last pole and the fuse holders are disconnected at each pole) _____

Current draw- (during normal operation) Leg #1 _____ Leg #2 _____

Operating Voltage at last pole _____

I, _____, certify that this work was done in accordance with subsection 643.14 and current NEC _____ guidelines, and when tested, was functioning as intended. (YEAR)

Electrician's Signature _____

Electrician's License # _____

Traffic Signal Quality Control Checklist

Subsection 643.14 Field Testing

Project Pin # _____

Grounding Electrode Resistance at service _____

ID tags on loop amps / detector cards? _____

Location _____

Street Approach	_____		
Loop #	_____	Resistance	_____
Phase #	_____	Meg to ground	_____
L,C, or R Lane	_____	Amount of bondo covering loop	_____
Pulse or Presence	_____		

Street Approach	_____		
Loop #	_____	Resistance	_____
Phase #	_____	Meg to ground	_____
L,C, or R Lane	_____	Amount of bondo covering loop	_____
Pulse or Presence	_____		

Street Approach	_____		
Loop #	_____	Resistance	_____
Phase #	_____	Meg to ground	_____
L,C, or R Lane	_____	Amount of bondo covering loop	_____
Pulse or Presence	_____		

I, _____, certify that this work was done in accordance with subsection 643.14 and current NEC _____ guidelines, and when tested, was functioning as intended. (YEAR)

Electrician's Signature _____

Electrician's License # _____

SPECIAL PROVISIONS
SECTION 638
BRIDGE LIGHTING
(Embedded Work in Structure)

Description. This work shall consist of furnishing and installing all materials and equipment embedded in a bridge structure necessary for a bridge lighting system as shown on the plans and as directed.

MATERIALS

General. All material furnished by the Contractor shall be new unless otherwise specified. All electrical equipment shall conform to NEMA, UL or EIA standards, as applicable. All materials and workmanship shall conform to the requirements of the latest version of the National Electrical Code (NEC), of the local electrical utility company, and of local ordinances that may apply. Materials also shall meet the requirements of Section 700 of the Standard Specifications, as applicable.

Submittals. The Contractor shall submit for review a list of equipment and materials proposed to be embedded in the bridge structure for the bridge lighting system, including detail drawings of locations and methods of proposed embedment. The list shall include the name of the manufacturer, size and identifying number of each item and other necessary data, including detailed scale drawings and wiring diagrams of special equipment, as appropriate. If requested, the Contractor shall submit sample articles of materials proposed for use. Submittals, other than material samples, shall be provided in duplicate. Following checking, correction and approval, two sets of approved embedment detail drawings shall be submitted. The Department will not be liable for material purchased, labor performed, or work delayed before such review. Upon completion of the work, the Contractor shall submit a set of as-built drawings, in electronic format acceptable to the Department, detailing the materials and equipment embedded in the structure, locations within the structure, and methods of embedment.

CONSTRUCTION REQUIREMENTS

Conduit. Conduit to be embedded within a bridge structure shall be installed in accordance with requirements of Sections 626.031, 626.032 and 626.033 of the Standard Specifications. Conduit shall be sized to be no smaller than required by the NEC.

Cable Installation. Installation of electrical cable in conduit embedded in the bridge structure shall meet the applicable requirements of Section 634.04 of the Standard Specifications.

Bonding, Grounding and Testing. All metal conduit ends and exposed non-current-carrying metal parts of fixed hardware embedded in the structure shall be connected to the grounding conductor. All grounding and bonding shall conform to the requirements of the NEC. Testing of lighting circuits in embedded work shall meet the requirements of Section 634.09 of the Standard Specifications and Special Provision 634 of the contract.

Acceptance. All systems shall be complete and in operation to the satisfaction of the Resident at the time of acceptance of the work.

Method of Measurement. Embedded Work in Structure, satisfactorily installed and accepted, will be measured for payment by the lump sum.

Basis of Payment. The accepted quantity of Embedded Work in Structure will be paid for at the contract lump sum price, which payment will be full compensation for all labor, materials, equipment and incidentals necessary to complete the work, including but not limited to conduit, wiring, junction boxes, expansion connections, and other incidental materials, hardware and equipment embedded in the structure and connection of bridge light standards to the structure. Bonding and grounding of materials, hardware and equipment embedded in the structure will be incidental to this pay item.

Flexible conduit at Bar Mills Bridge Abutment 1 and all necessary connection hardware and materials to complete the work will be considered incidental to this pay item.

Portions of the lighting system external to the bridge structure are intended to be paid for under the Section 626 and Section 634 pay items of the contract.

Payment will be made under:

Pay Item	Pay Unit
638.01 Embedded Work in Structure	Lump Sum

SPECIAL PROVISION
SECTION 641
REST AREA FACILITIES
(Aluminum Flagpole)

Description: This work shall consist of the removal of the existing flag pole and the fabrication, delivery, storage and installation of an aluminum flagpole including all incidental hardware. The flagpole shall have an above ground height of 20 feet. The flagpole shall be installed as shown in the plans, in accordance with this special provision and according to shop drawings and the manufacturer's written instructions.

This work shall also include the design and construction of a flagpole foundation.

Material:

The flagpole shall be capable of withstanding the effects of wind loads as according to the American National Standards Institute and National Association of Architectural Metal Manufacturers (ANSI/NAAMM FP 1001-97), "Guide Specifications for Design of Metal Flagpoles" or to the specified wind speed, whichever is more stringent. The flagpole design shall be based on the maximum standard size nylon flag suitable for use with the pole or flag size indicated, whichever is more stringent.

The flagpole shall be provided complete with all fittings, top ornament, copper ground rod per manufacturer's published recommendations and specifications

The aluminum flagpole shall be fabricate from seamless, taper, extruded tubing complying with ASTM B 221, alloy 6063-T6, having a tensile strength not less than 30,000 psi with a yield point of 25,000 psi. Heat treat the aluminum flagpole after fabrication to comply with ASTM B 597, temper T6. Poles shall be shipped in one or two pieces at the option of the supplier. If more than one piece is necessary, provide snug fitting precision joints with self-aligning, internal splicing sleeve arrangements for weather tight, hairline field joints.

The aluminum flagpole shall have a natural directional-sanded satin finish AAM33 and seal aluminum surfaces with clear, hard-coat wax and buff complying with AA-M20 per National Association of Architectural Metal Manufacturers NAAMM's "Metal Finishes Manual for Architectural and Metal Products and per the Aluminum Association.

The flagpole shall have an internal halyard system. The internal halyard truck assembly for the cables shall use a cast aluminum non-fouling revolving with single pulley mounted inside the hood, stainless steel roller bearings, threaded spindle for attachment to top of pole, and bronze exit bushing for the cable. The internal halyard, winch system shall use 1/8" diameter stainless steel aircraft cable with plastic coated

counterweight and beaded sling assembly. Manually operated mechanical winch having automatic brake system and operated with a removable hand crank. The winch shall be concealed inside the flagpole behind a flush access door having a cylinder lock and continuous piano hinge. Two keys to the cylinder lock shall be provided to the Department. The halyard shall have 2 swivel snap hooks that are chrome plated bronze. The standard spun aluminum flash collar shall match the flagpole.

The flagpole shall be equipped with standard aluminum ball with an etched and anodized finish. The color of ball shall be gold. A flash collar shall be provided for the based of the flagpole.

The flagpole foundation shall be Class A reinforced concrete with a minimum of 2 inches of concrete cover and conforming to Standard Specification Sections 502 Structural Concrete and Section 503 Reinforcing Steel.

Construction Requirements:

Removal of existing pole:

Existing flag pole shall be removed, and become property of the Contractor.

Delivery, Storage, and Handling:

1. The flagpoles shall be spiral wrapped with heavy paper and enclosed in a hard fiber tube or other protective container.
2. Store bare flagpoles in a dry location, in manufacturer's unopened packaging, protected from the weather and moisture, as recommended by the manufacturer until ready for installation. Keep the flagpole and accessories covered and dry to prevent soiling or damage. If a pole needs to be stored outside in the weather, unwrap it first and block it up off of the ground.
3. Handle with protective gloves to prevent unwanted distortion.
4. The Contractor shall use nylon strap during installation.

Assembly: Do not use any kind of oil to aid the joining of the flag pole segments.

Installation: The flagpole shall be plumb after installation.

Foundation:

Prior to commencement of work, design computations and flagpole foundation plan shall be submitted by the Contractor and approved by the Resident. Both the flagpole foundation design computations and flagpole foundation plan shall be sealed by a Professional Engineer registered in the State of Maine. Foundation construction and flagpole installation shall be in conformance with the flagpole foundation plan.

The Department will review the flagpole foundation plan for completeness. No review or comment by the Department, or any failure to review or comment, shall operate to absolve the Contractor of its responsibility to design and implement the plan in accordance with the Contract, or to shift any responsibility to the Department. Nothing in this Section shall negate the contractor's obligations set forth in Standard Specification Section 110, Indemnification, Bonding, and Insurance.

Within 14 days of receipt, the Department will determine if the plan is in accordance with the Contract requirements and (1) notify the Contractor that the plan is approved or (2) return it for required revision. If returned for revision, the Contractor shall submit a revised plan within 7 days and the Department will have 7 days from receipt of the revised plan to notify the Contractor that the plan is approved or again require revision. Additional iterations will occur in a like manner until the Department approves the Contractor's plan. The Contractor must have the plan approved before flagpole foundation construction begins.

Method of Measurement: The aluminum flagpole shall be measured for payment by each, satisfactorily installed and accepted.

Basis of Payment: Payment will be made for the removal of existing pole and the fabrication, delivery, storage and installation of each new flagpole. Such payment shall include furnishing all material, labor and incidentals needed to complete the work. The foundation for the flagpole and all engineering, materials, labor, and incidentals required to complete the work shall be considered incidental.

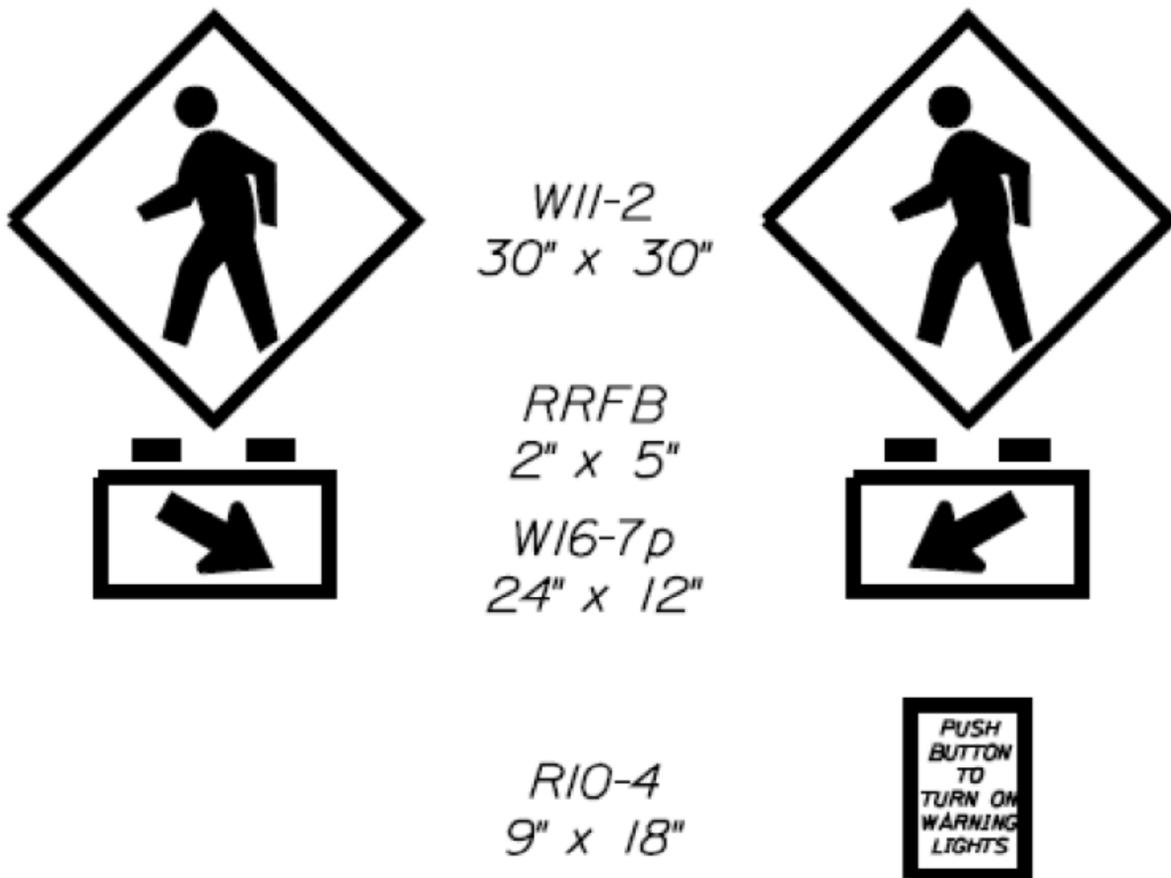
Payment will be under:

<u>Item No.</u>		<u>Unit</u>
641.35	Aluminum Flagpole	Each

SPECIAL PROVISION
SECTION 643
TRAFFIC SIGNALS
(Rectangular Rapid Flashing Beacon)

Standard Specification Section 643 Traffic Signals is supplemented with the following:

Description This work shall consist of the fabrication, delivery, storage, and installation of Rectangular Rapid Flashing Beacons (RRFB) for pedestrian crosswalks as shown on the Plans and specified herein. Following is the applicable sign/beacon designations, sizes, and relative arrangement per direction of traffic. Work shall include foundation preparation, poles, signs, and beacons.



Materials

1. Beacon dimensions and placement in sign assembly:
 - a. Each RRFB shall consist of two rectangular-shaped yellow indications, each with an LED-array based light source. Each RRFB indication shall be a minimum of approximately 5 inches wide by approximately 2 inches high.

- b. The two RRFB indications shall be aligned horizontally, with the longer dimension horizontal and with a minimum space between the two indications of approximately seven inches, measured from the inside edge of one indication to the inside edge of the other indication.
 - c. The outside edges of the RRFB indications, including any housing, shall not project beyond the outside edges of the W11-2.
 - d. As a specific exception to the 2009 MUTCD Section 4L.01 guidance, the RRFB shall be located between the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque, rather than 12 inches above or below the sign assembly.
2. Beacon flashing requirements:
- a. When activated, the two yellow indications in each RRFB shall flash in a rapidly alternating “wig-wag” flashing sequence (left light on, then right light on).
 - b. As a specific exception to the 2009 MUTCD Section 4L.01 requirements for the flash rate of beacons, RRFBs shall use a faster flash rate. Each of the two yellow indications of an RRFB shall have 70 to 80 periods of flashing per minute and shall have alternating, but approximately equal periods of rapid pulsing light emissions and dark operation. During each of its 70 to 80 flashing periods per minute, one of the yellow indications shall emit two rapid pulses of light and the other yellow indication shall emit three rapid pulses of light.
 - c. The flash rate of each individual yellow indication, as applied over the full on-off sequence of a flashing period of the indication, shall not be between 5 and 30 flashes per second, to avoid frequencies that might cause seizures.
 - d. The light intensity of the yellow indications shall meet the minimum specifications of the Society of Automotive Engineers (SAE) standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005.
3. Beacon operation:
- a. The RRFB, normally dark, shall initiate operation only upon pedestrian actuation, and shall cease operation at a predetermined time after the pedestrian actuation.
 - b. All RRFBs associated with a given crosswalk shall, when activated, simultaneously commence operation of their alternating rapid flashing indications and shall cease operation simultaneously.
 - c. A pedestrian instruction sign with the legend PUSH BUTTON TO TURN ON WARNING LIGHTS should be mounted adjacent to or integral with each pedestrian pushbutton.
 - d. The duration of a predetermined period of operation of the RRFBs following each actuation shall be 20 seconds.
 - e. Each pole will be outfitted with a 45 watt solar panel, a NEMA 4X aluminum pole mount cabinet and a 35 Ahr battery. A padlock with a 4 number tumbler resettable combination shall be provided for each cabinet.
 - f. Communication between the devices shall be via spread spectrum wireless.

4. Pole and Foundation:
 - a. Each pair of signs shall be mounted on a 20 foot long, 4 inch I.D. galvanized steel pole with a pole cap.
 - b. Each pole shall be installed 4 feet below grade and backfilled with concrete.

5. Signs:
 - a. Signs shall satisfy the requirements of item 645.292 - Regulatory, Warning, Confirmation and Route Marker Assembly Signs Type II.

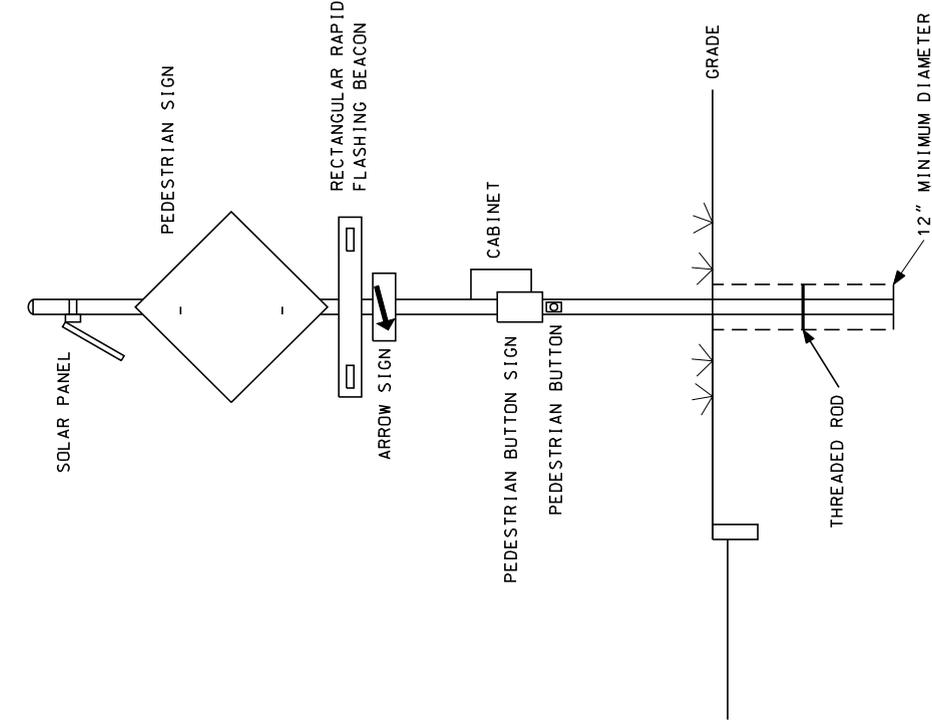
Construction Additional installation requirements are as specified on the attached detail sheet.

Method of Measurement All Rectangular Rapid Flashing Beacons installed on signs associated with a single crosswalk shall constitute a single installation. For a one-way street, the signage and RRFBs only need to be seen from one direction. For two-way traffic installations, the arrangement of signs and RRFBs shown above shall be on both sides of the pole. Each full crossing installation will be measured for payment by each, in-place and accepted.

Basis of Payment The Rectangular Rapid Flashing Beacons will be paid for at the Contract unit price per each full crosswalk installation. Such payment will be full compensation for furnishing all materials including, but not limited to, the RRFB LED-arrays, flasher, timer, controller cabinets, poles, pole foundation, wiring, pedestrian push buttons, signs, solar panels, batteries, padlocks, and all appurtenances, labor, and incidentals required for a complete and functional sign package.

<u>Pay Item</u>	<u>Unit</u>
643.60 Rectangular Rapid Flashing Beacon	EA

RECTANGULAR RAPID FLASHING BEACON



POLE 12" LONG- 3/8" THREADED ROD TO BE INSTALLED 18" TO 24" FROM BOTTOM OF POLE
 POLE SHALL BE INSTALLED 4' BELOW GRADE
 CONCRETE TO BE POURED IN HOLE FROM BOTTOM OF POLE TO GRADE

SOLAR PANEL SHOULD BE FACING TRUE SOUTH
 DRILL HOLE FOR WIRE TO ENTER POLE USE U-BOLT ATTACHMENT
 SHOULD BE INSTALLED 60 DEGREES FROM VERTICAL

PEDESTRIAN SIGN U-BOLT 12" UNISTRUT TO POLE WILL NEED 2 UNISTRUTS
 BOLT SIGN TO UNISTRUT

RECTANGULAR RAPID FLASHING BEACON DRILL HOLE FOR WIRE TO ENTER POLE USE 1 U-BOLT ATTACHMENT

ARROW SIGN SHOULD BE INSTALLED SO THERE IS 7' BETWEEN GRADE AND BOTTOM OF SIGN
 BAND OR BOLT TO POLE CABINET SHOULD BE POSITIONED ON SIDEWALK SIDE OF POLE
 DRILL HOLE IN POLE FOR 3/4" NIPPLE SHOULD BE INSTALLED SO THERE IS 4' BETWEEN GRADE AND BOTTOM OF CABINET

U-BOLT AT TOP AND BOTTOM
 PEDESTRIAN BUTTON SIGN BAND TO POLE

PEDESTRIAN BUTTON DRILL HOLE FOR WIRE TO ENTER POLE SHOULD BE INSTALLED SO THERE IS 42" BETWEEN GRADE AND CENTER OF BUTTON
 DRILLED AND TAPPED 1/4" x 20 x 3/4 STAINLESS STEEL BOLTS

NOTES WIRE FROM SOLAR PANEL TO CABINET SHALL BE #12 RED AND BLACK
 WIRE FROM LED TO CABINET WILL BE SUPPLIED
 WIRE FROM PED BUTTON SHALL BE 2 CONDUCTOR #16 AWG

SPECIAL PROVISION
SECTION 645
HIGHWAY SIGNING
(Special Signing)
(“Welcome to Hollis” & “Saco River Grange Hall” Signs)

Description

This work shall consist of removing, storing, transporting and resetting two existing signs, “Welcome to Hollis” located at station 102+45 Left and “Saco River Grange Hall” located at station 111+86 Right, as shown on the Contract Plans. Work shall be done in accordance with the Plans, these specifications and the Standard Specifications.

Construction

These signs shall be removed and reset carefully so as not to damage the existing sign. Only lift the signs using nylon straps or a method approved by the Resident. The exact final location of the sign shall be approved by the Resident.

Method of Measurement

Removing and resetting the special signing will be measured for payment as one lump sum.

Basis of Payment

The lump sum price bid for removing and resetting the special signing shall include the cost of removing, storing, transporting and resetting existing signs.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
645.51 Special Signage	LS

SPECIAL PROVISION
SECTION 910
SPECIAL WORK
(Relocate Memorial)

Description

This work shall consist of removing, storing and relocating a Memorial, and removing existing granite curb in the existing median island at the intersection of Route 4A and Depot Street in Buxton. This work shall include the installation of approved concrete or stone edging material around the new Memorial location. This work shall be done in accordance with the Standard Specifications, as specified herein and as directed by the Resident.

Materials

Memorial: Plaque mounted on stone (see Photo 1 below)



Photo 1: Intersection median island showing Memorial and granite curb

Construction Requirements

Prior to commencement of work, a removal and installation plan for the memorial shall be submitted by the Contractor and approved by the Resident. Installation shall also be in conformance with the plans.

The Department will review the plan for completeness. No review or comment by the Department, or any failure to review or comment, shall operate to absolve the Contractor of its responsibility to design and implement the plan in accordance with the Contract, or to shift any responsibility to the Department. Nothing in this Section shall negate the contractor's obligations set forth in Standard Specification Section 110, Indemnification, Bonding, and Insurance.

Within 14 days of receipt, the Department will determine if the plan is in accordance with the Contract requirements and (1) notify the Contractor that the plan is approved or (2) return it for any needed revision. If returned for revision, the Contractor must resubmit two copies of its revised plan as provided above within 7 days and the Department will have 7 days from receipt of the revised plan to notify the Contractor when it is approved or again require revision. Additional iterations will occur in a like manner until the Department approves the Contractor's plan. The Contractor must have the plan approved before starting removal.

Any damage to the monument as part of this work, including during removal, transportation, and installation, shall be repaired and paid for at the Contractor's expense.

The town of Buxton will allow the Contractor to store the Memorial at a town owned location on Depot Street, roughly 350 feet North of the intersection with Route 4A, during construction. For more details contact Buxton Selectperson Penny Booker at (207) 929-5191.

The Route 4A and Depot Street intersection median island granite curb shall be removed in its entirety and become the property of the Contractor.

Method of Measurement

Relocate Memorial will be measured as one lump sum, complete, in place and accepted.

Basis of Payment

Relocate Memorial will be paid for at the Contract lump sum price, complete in place. Payment shall be full compensation for furnishing all labor, equipment, materials, and incidentals necessary to complete the work. Payment for approved concrete or stone edging material around the new Memorial location shall be considered incidental to this item. Payment for the new flagpole, loam, aggregate subbase, and landscape items in the vicinity of the new Memorial location will be paid for under the appropriate Contract items.

Hollis-Buxton
Bar Mills & Canal Bridges
WINs: 019280.00 & 019281.00
October 28, 2014

Payment will be made under:

Pay Item

Pay Unit

910.301 Special Work – Relocate Memorial

Lump Sum

November 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/>

<u>Detail #</u>	<u>Description</u>	<u>Revision Date</u>
-----------------	--------------------	----------------------

	No Changes to the November 2014 Standard Detail Book	
--	--	--

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/yd² with uniform pressure and with an allowable variation from any specified rate not to exceed 0.01 gal/ yd². 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 inch², 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 15th and September 15th 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:

<u>Pay Item</u>	<u>Pay Unit</u>
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	LSL N/A	LSL N/A	USL 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**”



REPLY TO
ATTENTION OF

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

Regulatory Division
CENAE-R-51

November 19, 2014

Kristen Chamberlain
Office of Environmental Services
16 State House Station
Augusta, Maine 04333

Dear Ms. Chamberlain:

This concerns Department of the Army Maine General Permit, number NAE-2014-01850, which authorized the placement of temporary and permanent fill below the ordinary high water line of the Saco River and in adjacent freshwater wetlands between Hollis and Buxton, Maine in order to replace the existing deteriorated Route 4A bridges.

In accordance with your request, the general permit is hereby amended to authorize a modification of the instream work window referenced in Condition 7. Instream work within the canal (western bridge) may be conducted year round. Within the mainstem of the river (Bar Mills Bridge), no instream work may occur from May 1 to June 15 any time unless it is within cofferdams that were installed outside this window. Downstream fish passage within the mainstem must be maintained between June 16 and April 30 to minimize potential impacts to salmonids. All other conditions of the permit remain in full force and effect.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at <http://per2.nwp.usace.army.mil/survey.html>

BY AUTHORITY OF THE SECRETARY OF THE ARMY:


Frank J. Del Giudice
Chief, Permits & Enforcement Branch
Regulatory Division



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

REPLY TO
 ATTENTION OF

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-2014-01850
 CORPS PGP ID# 14-340
 STATE ID# PBR

DESCRIPTION OF WORK:

Place temporary and permanent fill below the ordinary high water line of the Saco River and in adjacent freshwater wetlands between Hollis and Buxton, Maine in order to replace the existing deteriorated Route 4A bridges. The project will result in approximately 8,993 s.f. of temporary river bed impact, 1986 s.f. of permanent wetland impact, and 4,223 s.f. of permanent river bed impact. This work is shown on the attached plans entitled "ROUTE 4A HOLLIS/BUXTON, YORK COUNTY" in eight sheets undated.
DOT WIN: 19280.00 & 19281.00

LAT/LONG COORDINATES : 43.6124944° N 70.5529018° W USGS QUAD: BAR MILLS, 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: 9/11/14 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

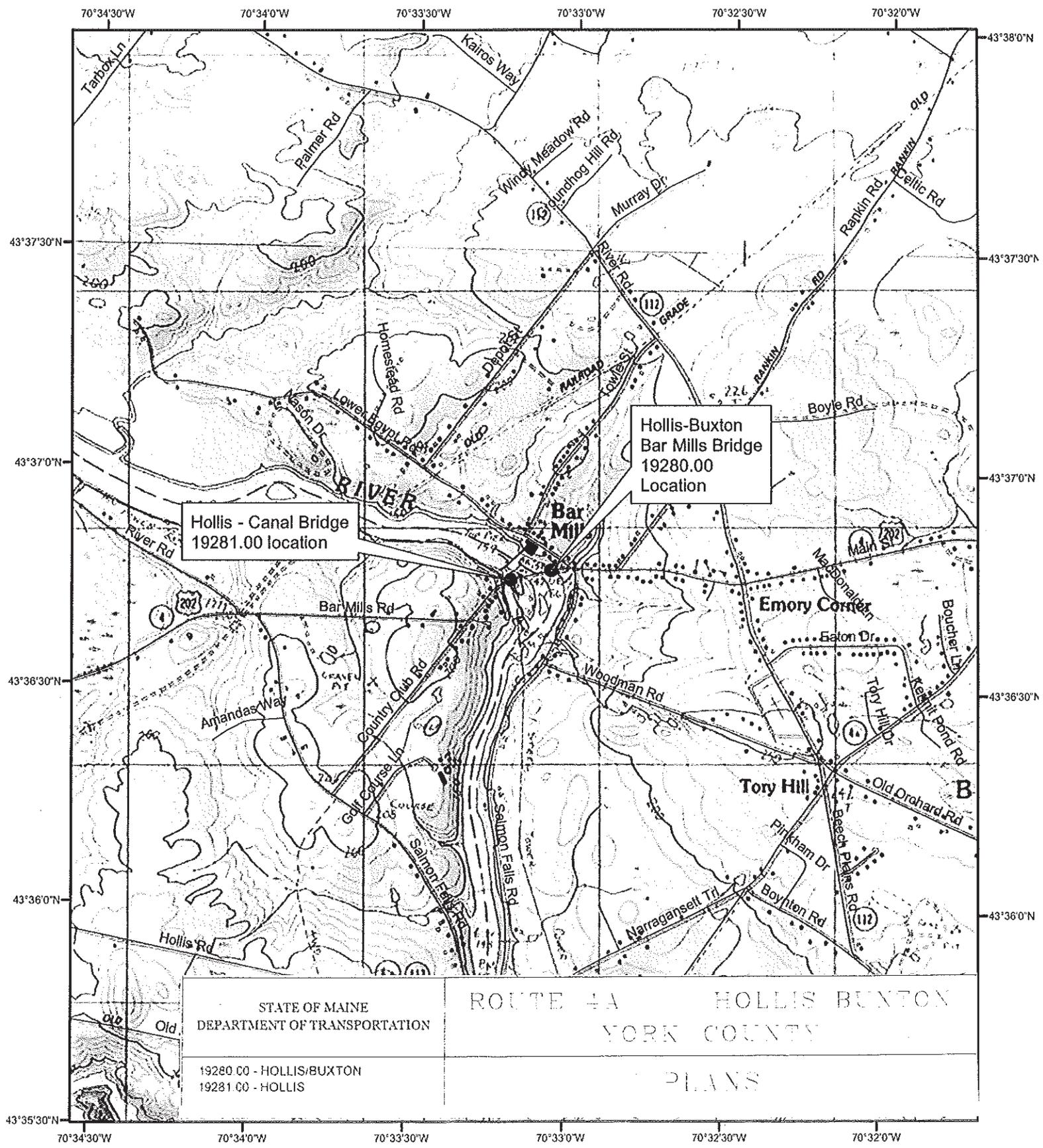
Frank J. Del Giudice 10/30/14
 FRANK J. DEL GIUDICE
 CHIEF, PERMITS & ENFORCEMENT BRANCH
 REGULATORY DIVISION



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

**PLEASE NOTE THE FOLLOWING GENERAL CONDITIONS FOR
DEPARTMENT OF THE ARMY
GENERAL PERMIT
NO. NAE-2014-01850**

1. 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).
2. 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.
3. 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.
4. All exposed soils resulting from the construction will be promptly seeded and mulched in order to achieve vegetative stabilization.
5. The permittee must still obtain any other Federal, State, or local permits as required by law before beginning work. This includes but is not limited to a Flood Hazard Development Permit issued by the town if necessary.
6. All areas of temporary fill shall be restored to their original contour and character upon completion of the project.
7. Instream work shall be conducted between July 1 and October 1, or any time within cofferdams that are installed/removed within the same window, to minimize potential adverse impacts to fisheries and local water quality.
8. In order to fulfill the requirements of Section 106 of the National Historic Preservation Act of 1966, the permittee shall implement the stipulations contained in the attached Memorandum of Agreement between the Federal Highway Administration, the Maine State Historic Preservation Officer, and the Maine Dept. of Transportation.



19280.00 -70.552, 43.613
 19281.00 -70.553, 43.612

MDOT WINs 19280.00 & 19281.00
 Route 4A over Saco River
 Bridge Replacements



0 290 580 1,160 1,740 2,320
 Feet

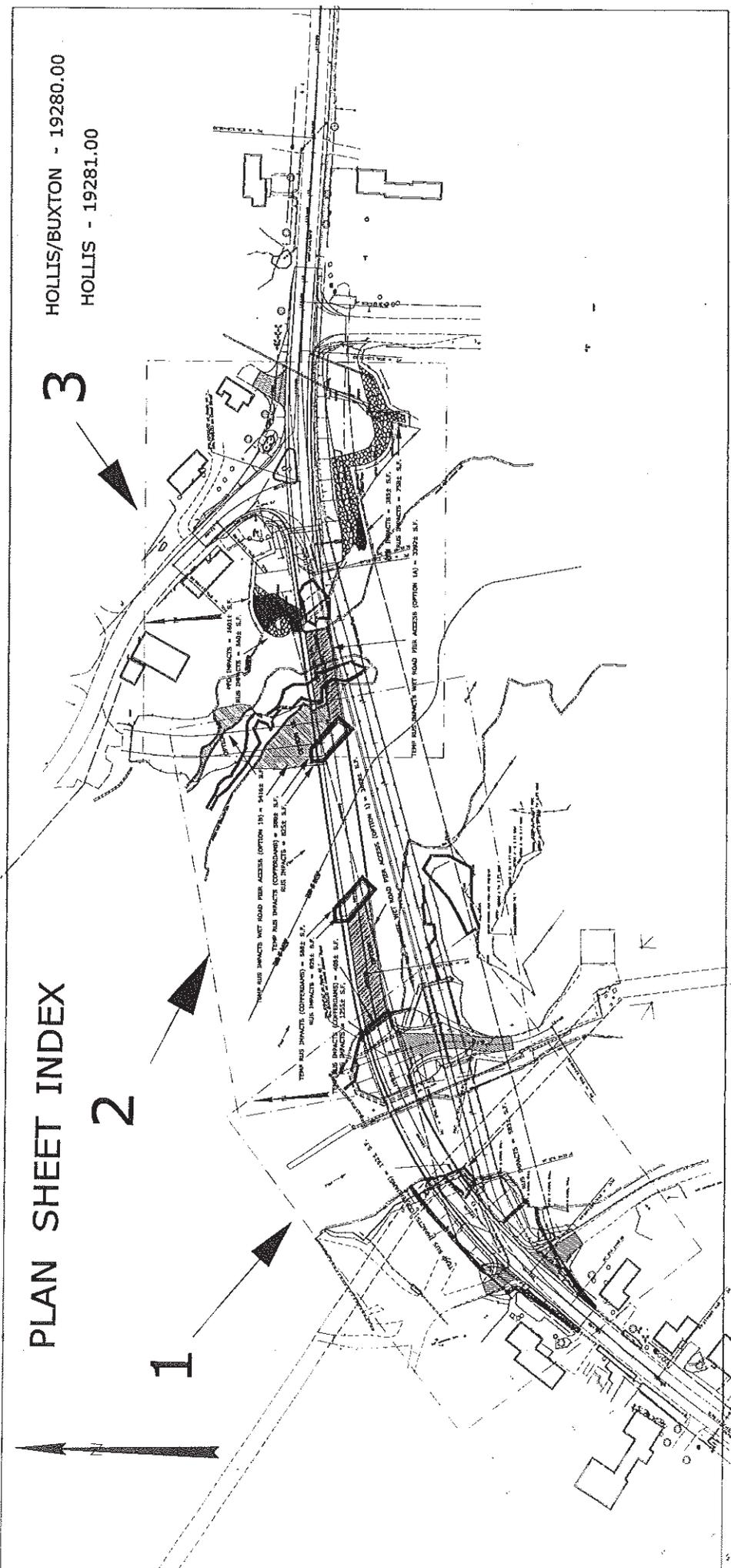
PLAN SHEET INDEX

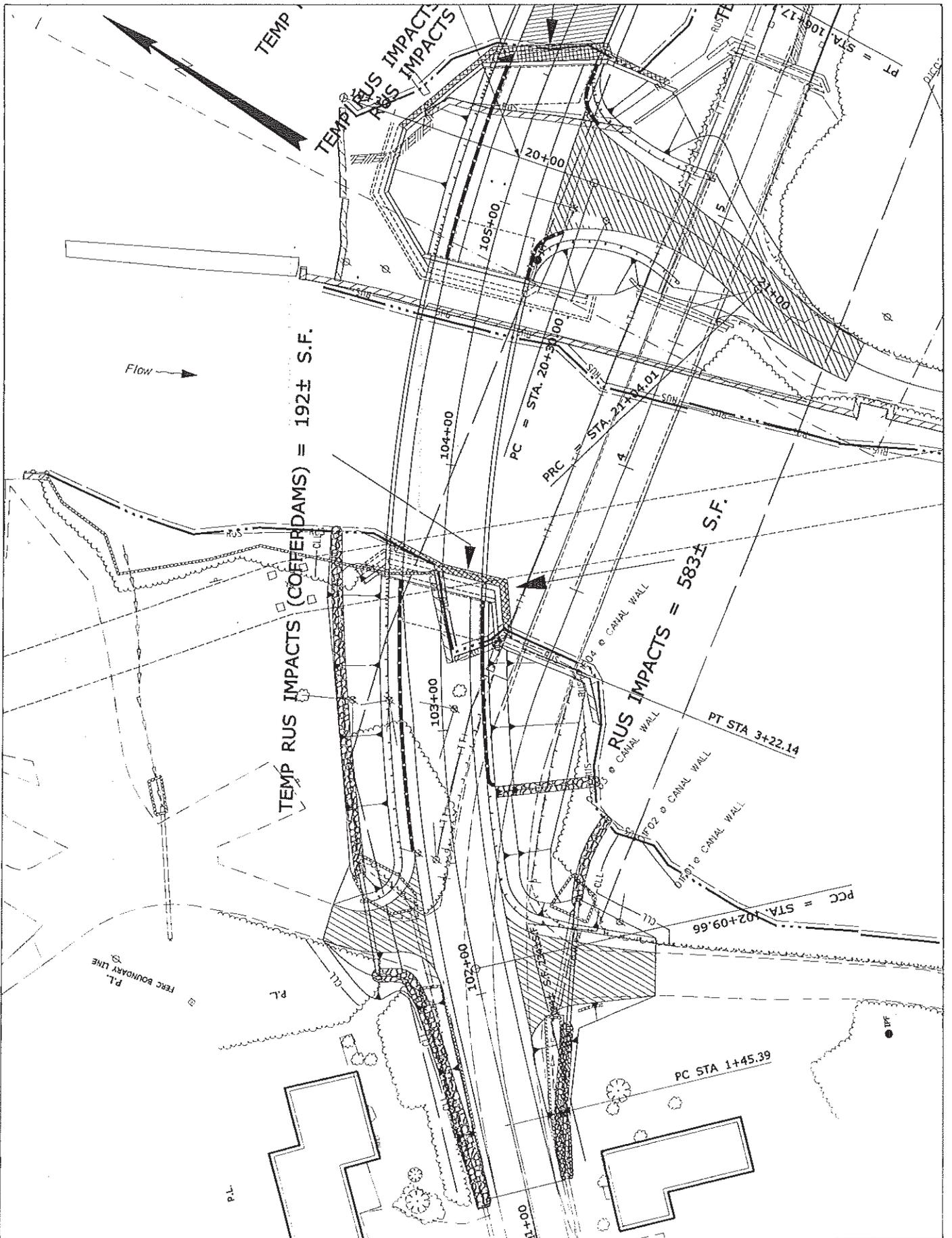
HOLLIS/BUXTON - 19280.00
 HOLLIS - 19281.00

3

2

1





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

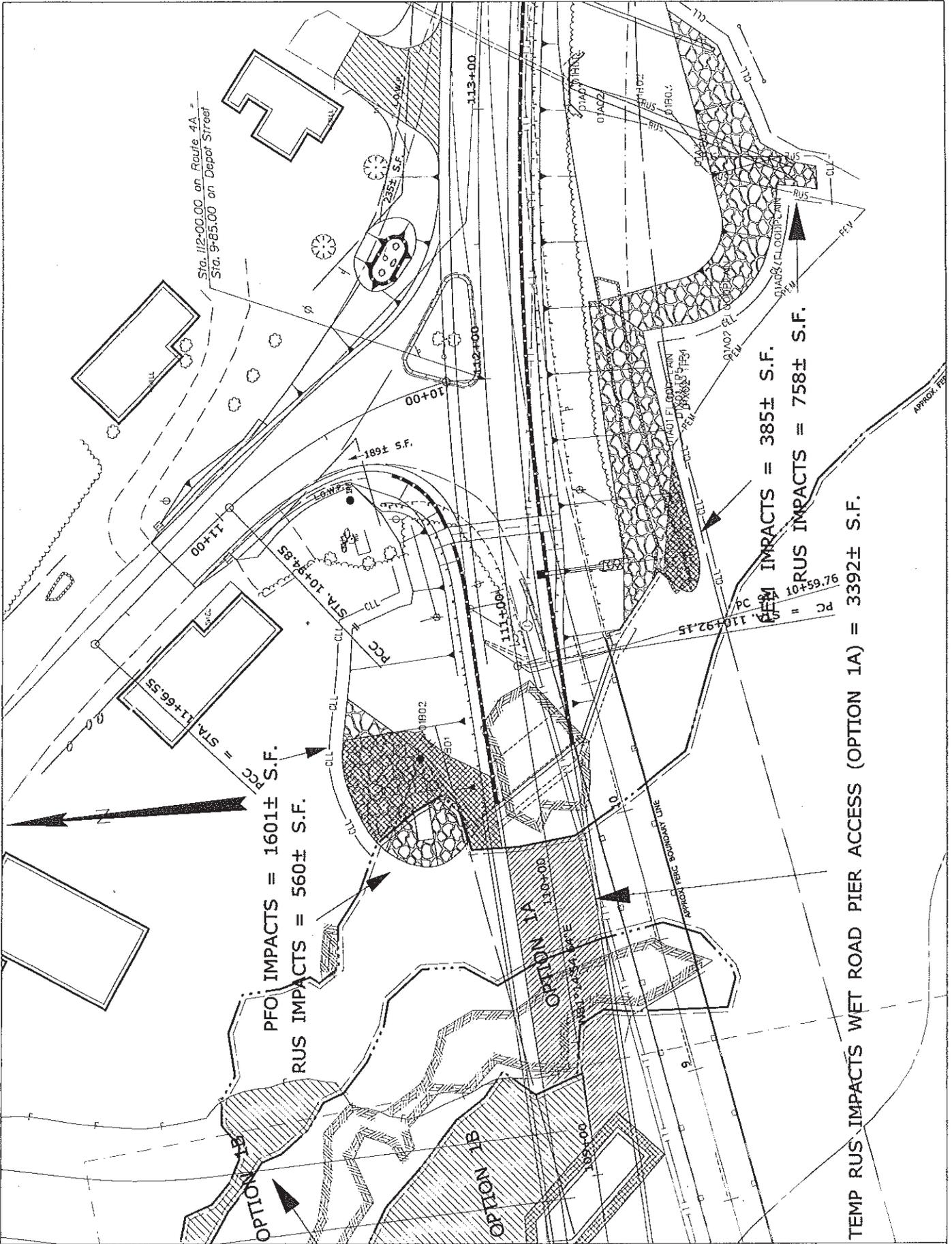
ROUTE 4A HOLLIS
YORK COUNTY

SHEET NUMBER
1

19281.00 - HOLLIS
19280.00 - HOLLIS/BUXTON

PLANS

OF 3



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

ROUTE 4A HOLLIS/BUXTON
YORK COUNTY

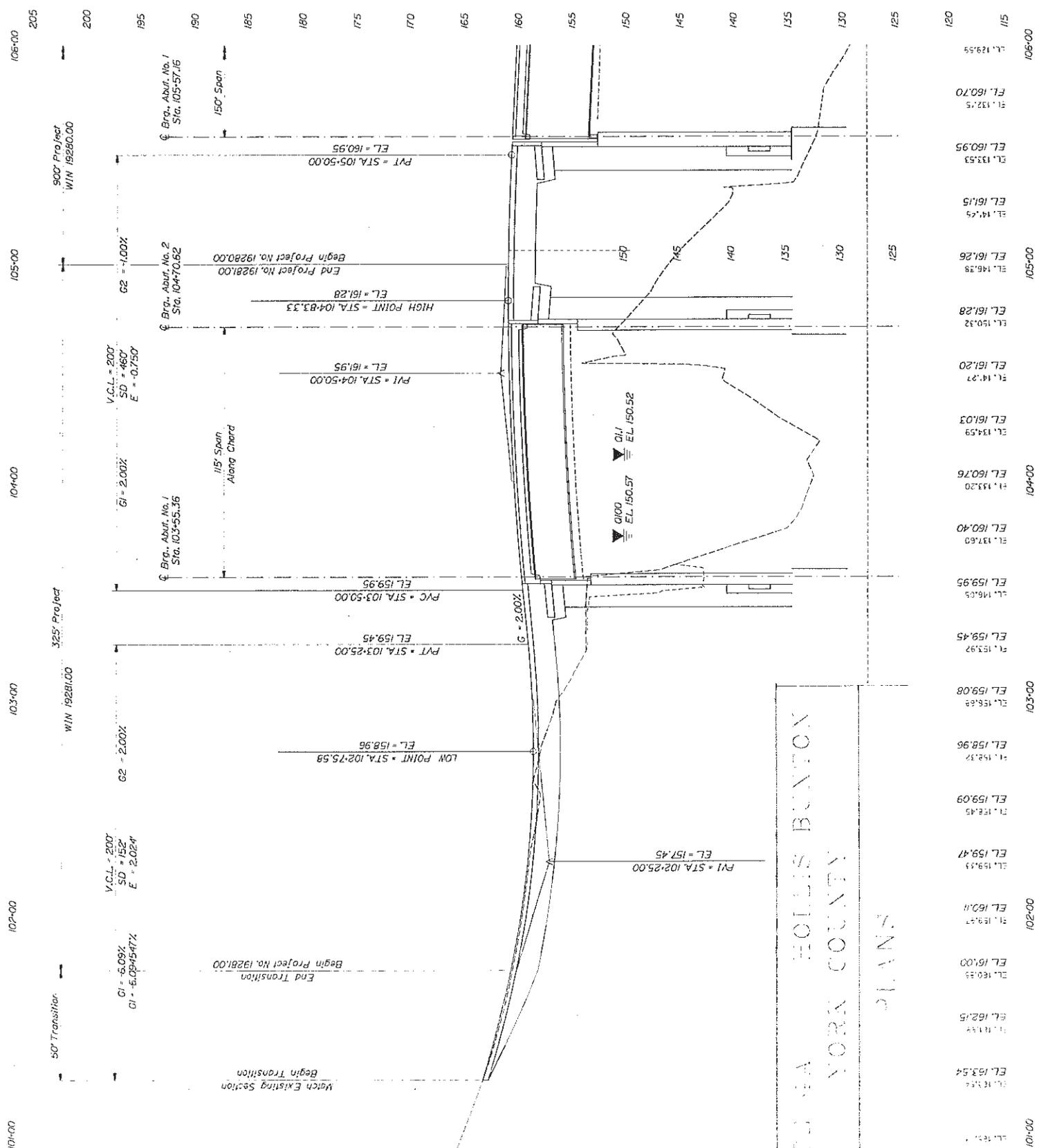
SHEET NUMBER

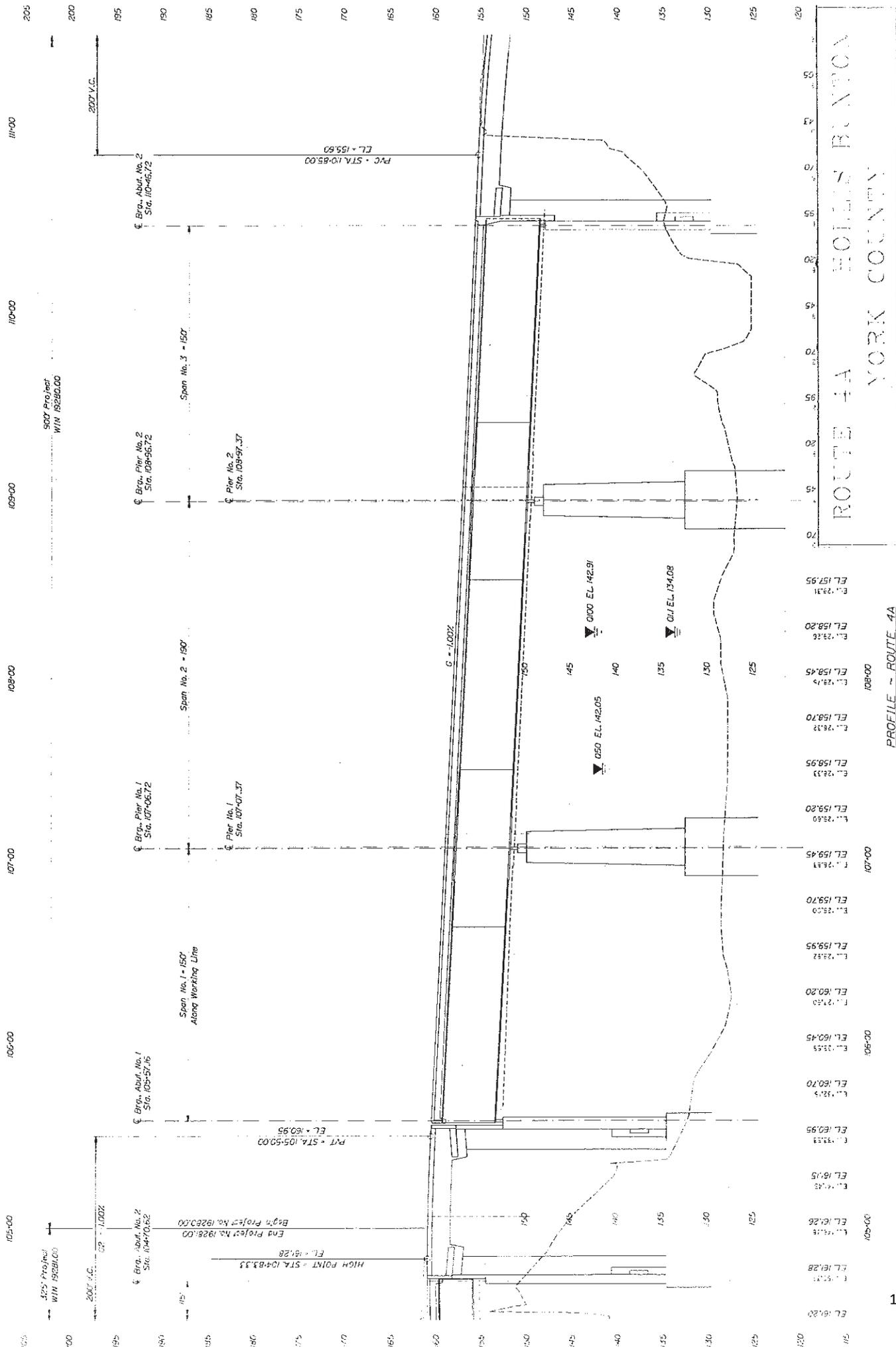
3

19280.00 - HOLLIS/BUXTON
19281.00 - HOLLIS

PLANS

OF3

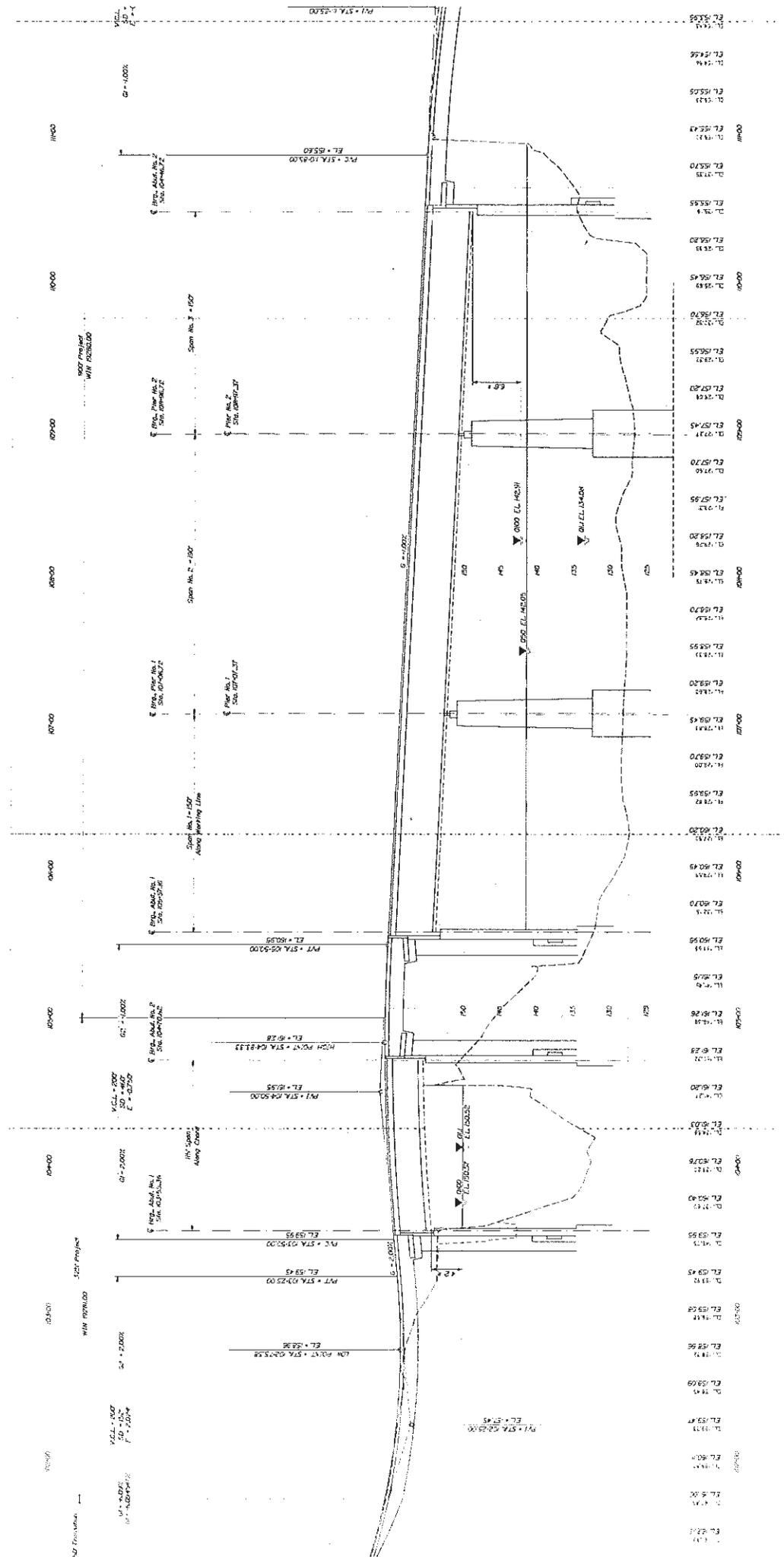




ROUTE 4A HOLTZ BUNTON
YORK COUNTY
PLANS

PROFILE - ROUTE 4A

ROUTE 44
 YORK COUNTY
 PLANS



MEMORANDUM OF AGREEMENT
BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION
AND THE MAINE STATE HISTORIC PRESERVATION OFFICER
REGARDING THE HOLLIS-BUXTON, CANAL AND BAR MILLS BRIDGE
REPLACEMENTS,
YORK COUNTY, MAINE

WHEREAS, the Federal Highway Administration (FHWA), Maine Division Office, in conjunction with the Maine Department of Transportation (MaineDOT), proposes to replace the Canal and Bar Mills bridge in Hollis-Buxton, Maine; and

WHEREAS, FHWA and MaineDOT have established an Area of Potential Effect (attached) for the Hollis-Buxton bridge replacements in accordance with 36 CFR Section 800.16(d); and

WHEREAS, FHWA has determined that the proposed undertaking will result in a finding of adverse effect to the National Register (NR) –eligible Bar Mills Historic District including the individually eligible Canal and Bar Mills bridges; and

WHEREAS FHWA has consulted with the Maine State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470(f)); and

WHEREAS, MaineDOT, acting on behalf of FHWA, has informed the Aroostook Band of Micmacs, the Houlton Band of Maliseet Indians, the Passamaquoddy Tribe, and the Penobscot Nation of the proposed action in accordance with 36 CFR Section 800.3 (f)(2) and will apprise them of any findings; and

WHEREAS, FHWA has consulted with Maine Department of Transportation (MaineDOT) regarding the effects of the undertaking on the National Register-eligible structures and has invited them to sign this MOA as a concurring party; and

WHEREAS, in accordance with 36 CFR Section 800.6(a)(1), FHWA has notified the Advisory Council on Historic Preservation (Council) of the potential for an adverse effect determination. FHWA has invited the Council to consult and the Council has chosen not to participate in the consultation pursuant to 36 CFR Section 800.6(a)(1)(iii);

NOW, THEREFORE, FHWA and the Maine SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

FHWA shall ensure that the following measures are carried out:

I. The Canal Bridge will be recorded using the "Outline Format" narrative of the Maine Historic Engineering Recordation (MHER) recordation standards.

II. The Bar Mills Bridge will be recorded using the "Outline Format" narrative of the Maine Historic Engineering Recordation (MHER) recordation standards.

III. In consultation with the Town of Buxton, the WWI Veteran Memorial will be relocated to Station 112+44 left.

IV. DURATION. This agreement will be null and void if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, FHWA may consult with the other signatories to reconsider the terms of the agreement and amend in accordance with Stipulation V below.

V. POST-REVIEW DISCOVERIES. If potential historic properties are discovered or unanticipated effects on historic properties found, FHWA shall consult in accordance with 36 CFR Section 800.6(c)(6).

VI. MONITORING AND REPORTING. Each year following the execution of this agreement until it expires or is terminated, MaineDOT shall provide all parties to this agreement a summary report detailing work undertaken pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in MaineDOT's efforts to carry out the terms of this agreement. Failure to provide such summary report may be considered noncompliance with the terms of this MOA pursuant to Stipulation VII, below.

VII. DISPUTE RESOLUTION. Should any party to this agreement object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FHWA shall consult with the objecting party(ies) to resolve the objection. If FHWA determines, within 30 days, that such objection(s) cannot be resolved, FHWA will:

A. Forward all documentation relevant to the dispute to the Council in accordance with 36 CFR Section 800.2(b)(2). Upon receipt of adequate documentation, the Council shall review and advise FHWA on the resolution of the objection within 30 days. Any comment provided by the Council, and all comments from the parties to the MOA, will be taken into account by FHWA in reaching a final decision regarding the dispute.

B. If the Council does not provide comments regarding the dispute within 30 days after receipt of adequate documentation, FHWA may render a decision regarding the dispute.

In reaching its decision, FHWA will take into account all comments regarding the dispute from the parties to the MOA.

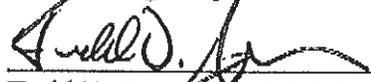
C. FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged. FHWA will notify all parties of its decision in writing before implementing that portion of the Undertaking subject to dispute under this stipulation. FHWA's decision will be final.

VIII. AMENDMENTS AND NONCOMPLIANCE. If any signatory to this MOA, including any invited signatory, determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that party shall immediately consult with the other parties to develop an amendment to this MOA pursuant to 36 CFR §§800.6(c)(7) and 800.6(c)(8). The amendment will be effective on the date a copy signed by all of the original signatories is filed with the Council. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation VII, below.

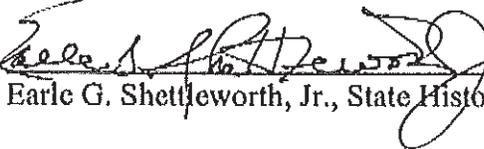
IX. TERMINATION. If an MOA is not amended following the consultation set out in Stipulation VI, it may be terminated by any signatory or invited signatory. Within 30 days following termination, FHWA shall notify the signatories if it will initiate consultation to execute an MOA with the signatories under 36 CFR §800.6(c)(1) or request the comments of the Council under 36 CFR §800.7(a) and proceed accordingly.

SIGNATORIES:

Federal Highway Administration

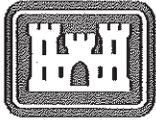
 Date 7/29/14
Todd D. Jorgensen, Division Administrator

Maine State Historic Preservation Officer

 Date 7/24/14
Earle G. Shettleworth, Jr., State Historic Preservation Officer

Maine Department of Transportation

 Date 7/28/14
David Bernhardt, Commissioner



**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 *

Corps of Engineers Permit No. NAE-2014-01850 was issued to the Maine Dept. of Transportation on 10/30/15. This work is located in the Saco River between Hollis and Buxton, Maine. The permit authorized the permittee to place fill in order to replace the existing deteriorated Route 4A bridges. The project will result in approximately 8,993 s.f. of temporary river bed impact, 1986 s.f. of permanent wetland impact, and 4,223 s.f. of permanent river bed impact.
MaineDOT WINs 19280.00 & 19281.00

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:** _____

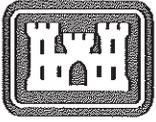
Printed Name: _____ **Title:** _____

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

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-2014-01850

MaineDOT WINs 19280.00 & 19281.00

Project Manager Clement

Name of Permittee: Maine Dept. of Transportation

Permit Issuance Date: 10/30/15

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.¹ 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.². The Corps regulates this under Section 404 of the Clean Water Act (CWA).³
- The transportation of dredged material for the purpose of disposal in the ocean. The Corps regulates this under Section 103 of the Marine Protection, Research and Sanctuaries Act.

¹ Defined at 33 CFR 329 and Appendix A, Page 4.

² Defined at 33 CFR 328

³ 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, “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 4345¹), 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 4345¹) 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).

¹ Located at 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.

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 projects¹. 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 utility¹.

(c) Unless the Corps determines the activity has independent utility¹:

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 project¹.

(d) For linear projects, such as power lines or pipelines with multiple crossings, the single and complete project¹ 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.

¹ 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 Wetlands¹ and the non-tidal portions of Navigable Waters² (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 Waters² 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	Sheepscoot 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.

¹ See Appendix A, Page 1 for definition.

² See Appendix A, Page 4 for definition.

³ 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. 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 (Mooring) 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 Crossings¹.

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 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 spans² (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:

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

² 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 methods¹.

(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.)

¹ 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:

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

(b) For new crossings, spans¹ 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 simulation² to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.

(c) For replacement crossings, spans¹ 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 simulation² 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)² 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 banks².

(e) Crossings must be designed and constructed² 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

¹ 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.

² 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 Areas¹ 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 regulations²:

1. No disturbance within the VP Depression or VP Envelope (area within 100 feet of the VP Depression's edge)³;
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 debris³;
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 passage².

(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 document². 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.

¹ 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.

² 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.

³ 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.

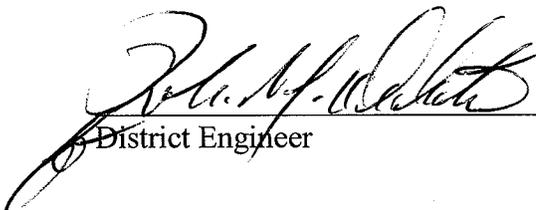
42. Previously Authorized Activities.

(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>A. INLAND WATERS AND WETLANDS</p>	<p>Inland Waters and Wetlands: 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 wetlands¹ to tidal waters are reviewed in the Navigable Waters section. (See II. Navigable Waters on page 4 below.)</p>
<p>ACTIVITY</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>(a) NEW FILL/ EXCAVATION DISCHARGES</p> <p>(You must reference (b) – (e) below for other thresholds that may be relevant to your project.)</p>	<p style="text-align: center;">CATEGORY 1</p> <p>1. <15,000 square feet (SF) (in LURC or DEP territories) of inland waterway and/or wetland fill and associated secondary impacts² (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"> • Historic fill + proposed impact area <15,000 SF and subdivision fill complies with GC 5, Single and Complete Projects. • No work in special aquatic sites (SAS)⁴ other than wetlands. <p>2. Construction mats⁴ 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 <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)⁵:</p> <ul style="list-style-type: none"> • See GC 2 and Appendix C for VP delineation requirements. • See GC 28 to determine if work qualifies for Category 1 or 2. • See Appendix E, Page 3 for VP documents providing mitigation guidance.
<p style="text-align: center;">CATEGORY 2</p> <p>1. ≥15,000 square feet (SF) (in LURC or DEP territories) to <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 >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 mats⁴) ≥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: right;">See GC 2 and Appendix C for wetland delineation requirements.</p>	<p style="text-align: center;">CATEGORY 2</p> <p>1. ≥15,000 square feet (SF) (in LURC or DEP territories) to <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 >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 mats⁴) ≥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: right;">See GC 2 and Appendix C for wetland delineation requirements.</p>

ACTIVITY	CATEGORY 1	CATEGORY 2
<p>(b) BANK STABILIZATION PROJECTS</p>	<p>1. Inland bank stabilization <500 FT long and <1 CY of fill per linear foot below OHW, provided:</p> <ul style="list-style-type: none"> • ≤1 cubic yard of fill per linear foot placed along the bank waterward of ordinary high water. • Work complies with the GCs (GC 20 in particular), including: <ul style="list-style-type: none"> ○ No structures angled steeper than 1H:1V allowed. Only rough-faced stone or fiber roll revetments allowed. ○ No in-stream work involving fill or excavation in flowing waters (see GC 22(h)). • In-stream work limited to Jul 15 - Oct 1 [see GC 22 (l)]. • No work in vernal pools⁵ or SAS³. • GC 10 Endangered Species and GC 11 Essential Fish Habitat are particularly relevant. 	<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>(c) RIVER/ STREAM/ BROOK WORK & CROSSINGS and WETLAND CROSSINGS</p>	<p>1. River, stream and brook work and crossings:</p> <ul style="list-style-type: none"> • Must comply with GC 22 in particular, including: <ul style="list-style-type: none"> ○ No slip lining [see GC 22 (g)]. ○ No in-stream work involving fill or excavation in flowing waters [see GC 22(h)]. ○ In-stream work limited to Jul 15 - Oct 1 [see GC 22 (l)]. • No work in riffles and pools³. • No stream relocations. • No dams or dikes⁶. • 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). • No work in EFH streams except for the activities stated in GC 11. <p>2. Wetland crossings must comply with the particularly relevant GC 23.</p>	<p>1. Work not qualifying for Category 1.</p>

ACTIVITY	CATEGORY 1	CATEGORY 2
(d) REPAIR, REPLACEMENT, & MAINTENANCE OF AUTHORIZED FILLS	<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"> • Conditions of the original authorization apply • Minor deviations in fill design allowed.⁷ • 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. 	<p>2. Replacement of non-serviceable fills, or repair/maintenance of serviceable fill, with expansion <3 acres, or with a change in use.</p>
(e) MISCELL-ANEOUS	<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. SAS³ 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 $\geq 15,000$ SF, provided those activities result in net increase in overall aquatic resource functions and services.⁸</p> <p>2. Projects where an EIS is required by the Corps are not eligible for Category 2.</p>

<p>II. NAVIGABLE WATERS</p>	<p>Navigable Waters of the United States: 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 wetlands¹ 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>ACTIVITY</p>	<p>CATEGORY 1</p>	<p>CATEGORY 2</p>
<p>(a) FILL</p>	<p>1. 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>2. Bank stabilization projects <200 linear feet:</p> <ul style="list-style-type: none"> • ≤1 cubic yard of fill per linear foot placed along the bank waterward of high tide line. No fill or equipment will occur in SAS³. • Work conducted in the intertidal zone must be conducted in-the-dry during low water, or between Nov. 8 – Apr. 9. • No structures angled steeper than 1H:1V and only rough-faced stone or fiber roll revetments allowed. • No driving of piles or sheeting. <p>3. For 1 and 2 above:</p> <ul style="list-style-type: none"> • 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]. 	<p>1. <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"> • Temporary or permanent fill in eelgrass¹⁴ <1000 SF. • Permanent fill in SAS (excluding eelgrass¹⁴) <4300 SF.
<p>(b) STREAM WORK & CROSSINGS, and WETLAND CROSSINGS</p>	<p>1. No new fill for crossings allowed.</p>	<p>1. New crossings or replacement crossings that do not fit the (c) Repair and Maintenance activity below.</p>

ACTIVITY	CATEGORY 1	CATEGORY 2
<p>(c) REPAIR AND MAINTENANCE WORK</p>	<p>1. Repair, replacement in-kind, or maintenance⁷ of existing, currently serviceable⁷, authorized structures or fills:</p> <ul style="list-style-type: none"> • Conditions of the original authorization apply. • No substantial expansion or change in use. • Must be rebuilt in same footprint, however minor deviations in structure design allowed⁷. • 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"> a. Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or b. Must be drilled and pinned to ledge, or c. Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or d. Impact hammers limited to one hammer and <50 piles installed/day with the following: wood piles of any size, concrete piles ≤18-inches diameter, steel piles <12-inches diameter if the hammer is ≤3000 lbs and a wood cushion is used between the hammer and steel pile, and <ul style="list-style-type: none"> • For b – d above: <ul style="list-style-type: none"> ○ In-water noise levels shall not exceed >187dB SEL re 1μPa or 206dB peak re 1μPa at a distance >10m from the pile being installed, and ○ In-water noise levels >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. • For a – d above: <ul style="list-style-type: none"> ○ 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. 	<p>CATEGORY 2</p> <p>1. Replacement of non-serviceable structures and fills or repair/maintenance of serviceable structures or fills, with fill, replacement or expansion <1 acre, or with a change in use.</p>

ACTIVITY	CATEGORY 1	CATEGORY 2
<p>(d) DREDGING AND ASSOCIATED DISPOSAL</p>	<p>1. Maintenance dredging¹⁰ for navigational purposes <1,000 CY with upland disposal. Includes return water from upland contained disposal area, provided:</p> <ul style="list-style-type: none"> • Proper siltation controls are used. • Dredging & disposal operation limited to Nov. 8 – Apr. 9. • No impact to SAS³. • No dredging in intertidal areas. • No dredging in areas considered occupied by listed Atlantic salmon [see GC 10(b)(ii)]. • 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. • 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)]. 	<p>1. Maintenance dredging¹⁰ ≥1,000 CY, new dredging <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"> • Upland. • Beach nourishment (above mean high water) of any area provided dredging's primary purpose is navigation or sand is from an upland source. • Open water & confined aquatic disposal, if Corps finds the material suitable. <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 dredging¹⁰ and/or disposal in or affecting a SAS³ requires an Individual Permit. See II(a) above for dredge disposal in wetlands or waters.</p>
<p>(e) MOORINGS</p>	<p>1. Private, non-commercial, non-rental, single-boat moorings, provided:</p> <ul style="list-style-type: none"> • Authorized by the local harbormaster/town. • Not associated with any boating facility.¹¹ • Boat or mooring not located in a Federal Navigation Project¹² other than a Federal Anchorage¹². Moorings in Federal Anchorage not associated with a boating facility¹¹ and are not for rent. • No interference with navigation. • No new moorings located in SAS³. Prior to installation of moorings, a site-specific eelgrass survey should be conducted to document that eelgrass is not present. • When existing, authorized moorings in SAS³ 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. <p>2. Minor relocation of previously authorized moorings and moored floats, provided:</p> <ul style="list-style-type: none"> • Authorized by the local harbormaster/town. • Not located in SAS³ • No interference with navigation. • Cannot be relocated into a Federal Navigation Project¹² other than a Federal Anchorage¹² 	<p>1. Moorings associated with a boating facility¹¹. An eelgrass¹⁴ 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 limits¹³ of a Federal Channel¹². (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 limits¹¹, or with moored vessels that extend, into the horizontal limits of a Federal Navigation Project¹², except those in Federal Anchorages¹².</p> <p>For 1-4 above, siting of new individual moorings in SAS³, including eelgrass¹⁴, should be avoided to the maximum extent practicable. If SAS³ 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	CATEGORY 1	CATEGORY 2
<p>(f) STRUCTURES AND FLOATS</p>	<p>1. Reconfiguration of existing, authorized structures or floats.</p> <p><u>Provided:</u></p> <p>a. Piles shall adhere to one of the 4 methods in (i) –(iv) below:</p> <ul style="list-style-type: none"> i. Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or ii. Must be drilled and pinned to ledge, or iii. Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or iv. Impact hammers limited to one hammer and <50 piles installed/day with the following: wood piles of any size, concrete piles ≤18-inches diameter, steel piles <12-inches diameter if the hammer is ≤3000 lbs and a wood cushion is used between the hammer and steel pile. <p>b. For (ii) – (iv) above:</p> <ul style="list-style-type: none"> i. In-water noise levels shall not exceed > 187dB SEL re 1µPa or 206dB peak re 1µPa at a distance >10m from the pile being installed, and ii. In-water noise levels >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. <p>c. For (i) –(iv) above:</p> <ul style="list-style-type: none"> i. 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. 	<p>CATEGORY 2</p> <p>1. Private structures or floats, including floatways/skidways, built to access waterway (seasonal and permanent)</p> <p>2. Expansions to existing boating facilities¹¹.</p> <p>For 1 & 2 above, compliance with the following design standards is not required but recommended:</p> <ul style="list-style-type: none"> • Pile-supported structures <400 SF, with attached floats totaling ≤200 SF. • Bottom anchored floats ≤200 SF. • Structures are ≤4’ wide and have at least a 1:1 height:width ratio¹¹. • Floats supported a minimum of 18” above the substrate during all tides. • Structures & floats not located within 25’ of any eelgrass⁸. • Moored vessels not positioned over SAS⁴. • No structure located within 25’ of the riparian property boundary without written approval from the abutter(s). • No structure extends across >25% of the waterway width at mean low water. • Not located within the buffer zone of the horizontal limits¹³ of a Corps Federal Navigation Project (FNP) (App. F). The buffer zone is equal to three times the authorized depth of that FNP. <p>3. 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 limits¹³ of a Corps Federal Navigation Project¹² (see App. F).</p> <p>4. An Individual Permit is required for structures & floats associated with a new or previously unauthorized boating facility¹¹.</p>

ACTIVITY	CATEGORY 1	CATEGORY 2
(g) MISCELL-ANEIOUS	<p>1. Temporary buoys, markers, floats, etc. for recreational use during specific events, provided they are removed within 30 days after use is discontinued.</p> <p>2. The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard. (See 33 CFR 66, Chapter I, subchapter C).”</p> <p>3. Activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS³ must typically be restored in place at the same elevation.</p> <p>4. Fish and wildlife harvesting, enhancement, and attraction devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, and clam and oyster digging, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). 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>5. Scientific measurement devices whose purpose is to measure and record scientific data, such as staff gages, water recording devices, water quality testing and improvement devices, and similar structures. Structures may not restrict movement of aquatic organisms. No activity results in a hazard to navigation.</p> <p>6. Survey activities such as exploratory drilling, surveying and sampling activities, excluding any biological sampling devices. Does not include oil and gas exploration and fill for roads or construction pads. No activity results in a hazard to navigation. Applicants must contact NMFS to ensure no impacts to listed species.</p>	<p>1. 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>2. 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: www.maine.gov/dmr/aquaculture/index.htm.</p> <p>3. 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>4. Aquatic habitat restoration, establishment and enhancement provided those activities are proactive and result in net increases in aquatic resource functions and services.⁸</p> <p>5. 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 flats⁹) projects.</p> <p>8. Marine railway work not eligible for maintenance⁷ (i.e. not currently serviceable⁷ or in non-compliance) may be replaced “in-kind” with minor deviations⁷ provided:</p> <ul style="list-style-type: none"> • Work is in the intertidal zone • No fill expansion below high tide line. • Work conducted in-the-dry during low water or in-water between Nov. 8 – Apr. 9. <p>9. Test plots <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

¹ **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.”

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

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

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

Cumulative Impacts: The 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.

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

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

⁵**Vernal Pools:** 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).

⁶**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.

⁷**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.

⁸**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.

⁹ **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*).

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

¹¹ **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.

¹² **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.

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

¹⁴ **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/ for eelgrass survey guidance.

¹⁵ **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.



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

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 “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 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)

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
www.usace.army.mil/CECW/Pages/cecwo_reg.aspx
www.epa.gov/owow/wetlands
www.nmfs.noaa.gov
www.fws.gov/mainefieldoffice
www.nps.gov/rivers/index.html
www.maine.gov
www.maine.gov/dep
www.maine.gov/doc/lurc
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 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).

The Natural Resources Conservation Service (NRCS) publishes the current hydric soil definition, criteria and lists: <http://soils.usda.gov/use/hydric>. For the Field Indicators for Identifying Hydric Soils in N.E., see www.neiwpcc.org/hydricsoils.asp.

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. 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 including the “Guide for EFH Descriptions” at 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 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, “Mitigation” and then “Maine,” or 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 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 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 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 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 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.

ii. Class A Waters or Class AA Waters:

www.mainelegislature.org/legis/statutes/38/title38sec465.html, and

www.mainelegislature.org/legis/statutes/38/title38sec467.html.

iii. Outstanding river segments 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 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.

(e) GC 22(f): The Skidder Bridge Fact Sheet at 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

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 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 and on Corps website*.)

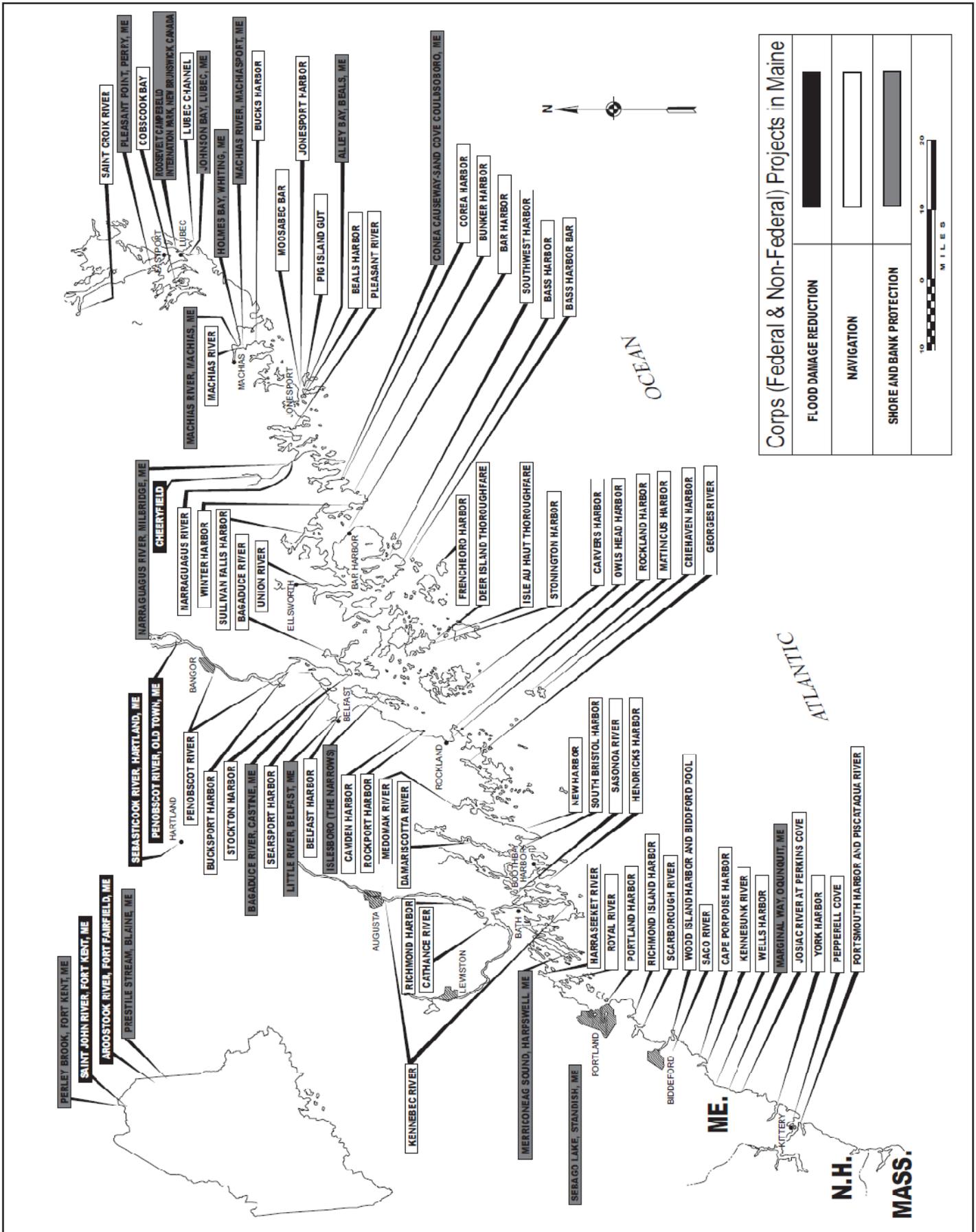
ii. Science and Conservation of Vernal Pools in Northeastern North America, Calhoun and deMaynadier, 2008. Chapter 12, Conservation Recommendations section, Page 241, is particularly relevant. (Available for purchase via the internet. Chapter 12 is available on Corps website*.)
* www.nae.usace.army.mil/reg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

Name of Applicant: (owner)	Maine Department of Transportation	Name of Agent:	Kristen Chamberlain		
Applicant Mailing Address:	16 State House Station	Agent Phone # (include area code):	(207) 557-5089		
Town/City:	Augusta	PROJECT Information Name of Town/City:	Hollis-Buxton		
		MaineDOT WIN:	19280.00 & 19281.00		
State and Zip code:	ME 04344	Name of Wetland or Waterbody:	Saco River		
Daytime Phone # (include area code):	(207) 624-3100	Map #:		Lot #:	
Detailed Directions to Site:	Route 4A over the Saco River at the Hollis-Buxton town line.				
		UTM Northing: (if known)		UTM Easting: (if known)	
Description of Project:	Replace Bar Mills and Canal Bridges				
Part of a larger project? (check one) →	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	After the Fact? (check one) →	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Check one → 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.

Signature of Agent or Applicant:	<i>Judy C. G. Kelpatrich</i>	Date:	9/10/14
----------------------------------	------------------------------	-------	---------

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.#		Staff	Staff	
PBR #	FP	Date	Acc. Date	Def. Date	After Photos

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.

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.

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.

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.

- (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.

NOTE: Guidance on the location of construction limits can be obtained from the on site Construction Manager.

- (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

