Updated 05/15/2020

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:

NOTE: Not all projects accept Electronic Bids. Please review the Notice to Contractors and see if it specifically states that Electronic Bids will be accepted.

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, March 2020 Edition.

April 28, 2017
Supersedes November 05, 2014

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 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, executers, 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: _____

SAMPLE

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.

State of Maine
Department of Transportation

RFI No: _____

REQUEST FOR INFORMATION

Date _____ Time _____

Information Requested for:

WIN(S): _____ Town(s):_____Bid Date: _____

Question(s):_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Request by:

Company Name:_____**Phone:(_____)_____**

Email:_____Fax: (_____)_____

Complete this form and fax to 207-624-3431, Attn: Project Manager (name listed on the "Notice to Contractors"), or Email questions to RFI-Contracts.MDOT@maine.gov, Please include the word "RFI" along with the Project Name and Identification Number in the Subject line, or electronically by using the RFI Tab located on the Individual Projects Detail page.

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.

MDOTs DBE Directory of Certified firms can also be obtained at https://www.maine.gov/mdot/civilrights/dbe/

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

DBE GOAL NOTICE FFY 2019-2021
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 (MaineDOT) has established a Disadvantaged Business Enterprise Program (DBE) for disadvantaged business participation in the federal-aid highway and bridge construction programs; MaineDOT contracts covered by the program include consulting, construction, supplies, manufacturing, and service contracts.

For FFY 2019-21 (October 1, 2018 through September 30, 2021) MaineDOT has established an annual DBE participation goal of **2.4%** 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, 2021. 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 placing 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 2.4% goal without the need to impose contract goals. DBE firms are listed on the MaineDOT website at:

https://www.maine.gov/mdot/civilrights/docs/dbe/WeeklyDBEVendorList.pdf

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

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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

WBE	DBE	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/civilrights/

Rev. 01/15

Maine Department of Transportation Civil Rights Office

Directory of Certified Disadvantaged Business Enterprises

Listing can be found at:

https://www.maine.gov/mdot/civilrights/dbe/

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

NOTICE

All bids for Federal Projects **shall** be accompanied by the DBE Proposed Utilization form. If you are submitting an electronic bid, the DBE Utilization Form may be faxed to 207-624-3431. Failure to submit the form with the bid will be considered a curable defect.

March 26, 2020

NOTICE

(COVID-19 Pandemic)

The Department considers the COVID-19 Pandemic an Uncontrollable Event as defined in Section 101.2 of the Department's Standard Specifications.

Accordingly, any documented delay to the project's Critical Path due to COVID-19 related issues, such as impacted workforce, subcontracts, or material supply, will be considered an Excusable Delay as defined in Section 109.5(A)(3) of the Department's Supplemental Specifications.

As an Excusable Delay, the Contractor is entitled to an extension of time provided that other associated notification, documentation, and procedural requirements set forth in the Contract are met.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
NOTICE TO CONTRACTORS

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bids for **Construction of Dolphins, Walkways, and Wave Fences** in the Towns of **Frenchboro, Bass Harbor, Swans Island**" will be received from contractors at the Reception Desk, MaineDOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on September 9, 2020 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 **(Heavy Construction prequalification),** to be considered for the award of this contract. **We now accept electronic bids for 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. 2220200, 2347600, and 2348000 WINS

Location: In Hancock County, projects are located at the following ferry terminals in : Frenchboro, Bass Harbor, and Swans Island.

Outline of Work: Construct Dolphins, Walkways, and Wave Fences and other incidental work.

For general information regarding Bidding and Contracting procedures, contact George Macdougall at (207) 624-3410. Our webpage at http://www.maine.gov/mdot/contractors/ contains a copy of the Schedule of Items, Plan Holders List, written portions of bid amendments, drawings, bid results and an electronic form for RFI submittal. For Project-specific information fax all questions to **Project Manager** Aurele Gorneau II at (207) 624-3431, use electronic RFI form 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 (or if that Monday is a state holiday, Friday) 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 MaineDOT Building in Augusta, Maine. 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 **$66.00 ($71.50** by mail). Half size plans **$33.00 ($36.25** by mail), Bid Book $10 ($13 by mail), Single Sheets $2, payment in advance, all non-refundable.

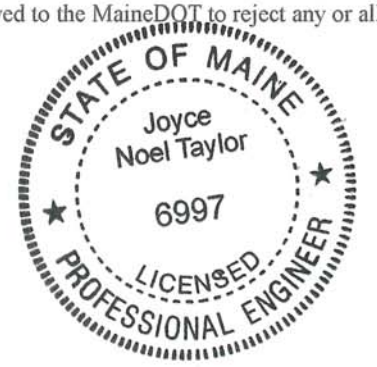
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of **$170,000.00** payable to Treasurer, 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, March 2020 Edition,* price $10 [$15 by mail], and *Standard Details, March 2020 Edition*, price $10 [$15 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 MaineDOT to reject any or all bids.

Augusta, Maine
August 19, 2020



Joyce Noel Taylor

JOYCE NOEL TAYLOR P. E.
CHIEF ENGINEER

Frenchboro, Bass Hbr.,
Swans Is.
22202.00, 23476.00,
23480.00
April 14, 2011 Supersedes
August 3, 2004

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: 022202.00 Project(s): 022202.00, 023476.00, 023480.00

SECTION: 1 Project Items

Alt Set ID: Alt Mbr ID:

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars Cents	Bid Amount Dollars Cents
0010	202.110 REMOVING, STORING, AND RESETTING STRUCTURES AND OBSTRUCTIONS - chock	12.000 EA	_____.____	_____.____
0020	202.1292 REMOVE EXISTING STRUCTURAL TIMBER	LUMP SUM	LUMP SUM	_____.____
0030	202.14 REMOVING EXISTING RAILINGS (PROPERTY OF CONTRACTOR)	4.000 LF	_____.____	_____.____
0040	202.4011 REMOVING EMBEDDED TIMBER PILE	19.000 EA	_____.____	_____.____
0050	501.201 TIMBER PILES, DELIVERED	980.000 LF	_____.____	_____.____
0060	501.202 TIMBER PILES, IN-PLACE	980.000 LF	_____.____	_____.____
0070	501.70 STEEL PIPE PILES, DELIVERED	2,785.000 LF	_____.____	_____.____
0080	501.701 STEEL PIPE PILES, IN PLACE	2,575.000 LF	_____.____	_____.____
0090	501.802 ROCK SOCKET	88.000 LF	_____.____	_____.____
0100	501.804 DRILLING EQUIPMENT MOBILIZATION Bass Hbr.	LUMP SUM	LUMP SUM	_____.____
0110	501.804 DRILLING EQUIPMENT MOBILIZATION Frenchboro	LUMP SUM	LUMP SUM	_____.____

Proposal ID: 022202.00 Project(s): 022202.00, 023476.00, 023480.00

SECTION: 1 Project Items

Alt Set ID: Alt Mbr ID:

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
0120	501.804 DRILLING EQUIPMENT MOBILIZATION Swans Is.	LUMP SUM	LUMP SUM		_____	.____
0130	501.90 PILE TIPS	44.000 EA	_____	.____	_____	.____
0140	501.903 PILE TIPS - ROCK INJECTOR POINT	20.000 EA	_____	.____	_____	.____
0150	501.91 PILE SPLICES	9.000 EA	_____	.____	_____	.____
0160	501.92 PILE DRIVING EQUIPMENT MOBILIZATION Bass Hbr.	LUMP SUM	LUMP SUM		_____	.____
0170	501.92 PILE DRIVING EQUIPMENT MOBILIZATION Swans Is.	LUMP SUM	LUMP SUM		_____	.____
0180	502.2351 STRUCTURAL CONCRETE, PILE CAP Bass Hbr.	141.000 CY	_____	.____	_____	.____
0190	502.2351 STRUCTURAL CONCRETE, PILE CAP Frenchboro	141.000 CY	_____	.____	_____	.____
0200	502.2351 STRUCTURAL CONCRETE, PILE CAP Swans Is.	281.000 CY	_____	.____	_____	.____
0210	503.14 EPOXY-COATED REINFORCING STEEL, FABRICATED AND DELIVERED Bass Hbr.	33,900.000 LB	_____	.____	_____	.____
0220	503.14 EPOXY-COATED REINFORCING STEEL, FABRICATED AND DELIVERED Frenchboro	33,900.000 LB	_____	.____	_____	.____

Proposal ID: 022202.00 Project(s): 022202.00, 023476.00, 023480.00

SECTION: 1 Project Items

Alt Set ID: Alt Mbr ID:

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
0230	503.14 EPOXY-COATED REINFORCING STEEL, FABRICATED AND DELIVERED Swans Is.	67,800.000 LB				
0240	503.15 EPOXY-COATED REINFORCING STEEL, PLACING Bass Hbr.	33,900.000 LB				
0250	503.15 EPOXY-COATED REINFORCING STEEL, PLACING Frenchboro	33,900.000 LB				
0260	503.15 EPOXY-COATED REINFORCING STEEL, PLACING Swans Is.	67,800.000 LB				
0270	504.510 MISC. FABRICATION Aluminum Gangway 29' (58 LF Total)	LUMP SUM	LUMP SUM			
0280	504.510 MISC. FABRICATION Aluminum Gangway 30'	LUMP SUM	LUMP SUM			
0290	504.510 MISC. FABRICATION Aluminum Gangway 38'	LUMP SUM	LUMP SUM			
0300	504.510 MISC. FABRICATION Bass Harbor	LUMP SUM	LUMP SUM			
0310	504.510 MISC. FABRICATION Swans Island	LUMP SUM	LUMP SUM			
0320	504.601 RUBBER FENDERS Leg Type 1 (4 EA) - Bass Hbr.	LUMP SUM	LUMP SUM			
0330	504.601 RUBBER FENDERS Leg Type 1 (8 EA) - Swans Is.	LUMP SUM	LUMP SUM			

Proposal ID: 022202.00 Project(s): 022202.00, 023476.00, 023480.00

SECTION: 1 Project Items

Alt Set ID: Alt Mbr ID:

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars Cents	Bid Amount Dollars Cents
0340	504.601 RUBBER FENDERS Leg Type 2 (2 EA) - Bass Hbr.	LUMP SUM	LUMP SUM	_____.____
0350	504.601 RUBBER FENDERS Leg Type 2 (4 EA) - Swans Is.	LUMP SUM	LUMP SUM	_____.____
0360	504.601 RUBBER FENDERS Swans Is. - Arch (3 EA)	LUMP SUM	LUMP SUM	_____.____
0370	504.601 RUBBER FENDERS Swans Is. - Conical (1 EA)	LUMP SUM	LUMP SUM	_____.____
0380	504.651 STEEL FENDER PANEL, CLOSED BOX, WITH UHMW WEARING SURFACE - TYPE 1	5.000 EA	_____.____	_____.____
0390	504.653 STEEL FENDER PANEL, CLOSED BOX, W/ UHMW WEARING SURFACE - EXTENSIONS	7.000 EA	_____.____	_____.____
0400	504.9051 ROCK ANCHOR	44.000 EA	_____.____	_____.____
0410	504.999 REMOVE AND DISPOSE FENDER PANEL	5.000 EA	_____.____	_____.____
0420	504.999 REMOVE AND DISPOSE FENDER PANEL Retrieve and install stored fender panel - Frenchboro	3.000 EA	_____.____	_____.____
0430	506.9106 FUSION BONDED EPOXY COATING Bass Hbr.	LUMP SUM	LUMP SUM	_____.____

Proposal ID: 022202.00 Project(s): 022202.00, 023476.00, 023480.00

SECTION: 1 Project Items

Alt Set ID: Alt Mbr ID:

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars Cents	Bid Amount Dollars Cents
0440	506.9106 FUSION BONDED EPOXY COATING Frenchboro	LUMP SUM	LUMP SUM	_____.____
0450	506.9106 FUSION BONDED EPOXY COATING Swans Is.	LUMP SUM	LUMP SUM	_____.____
0460	514.06 CURING BOX FOR CONCRETE CYLINDERS	3.000 EA	_____.____	_____.____
0470	515.20 PROTECTIVE COATING FOR CONCRETE SURFACES	670.000 SY	_____.____	_____.____
0480	518.50 REPAIR OF UPWARD FACING SURFACES - TO REINFORCING STEEL < 8 IN.	15.000 SF	_____.____	_____.____
0490	518.51 REPAIR OF UPWARD FACING SURFACES - BELOW REINFORCING STEEL < 8 IN.	15.000 SF	_____.____	_____.____
0500	518.60 REPAIR OF VERTICAL SURFACES < 8 IN.	30.000 SF	_____.____	_____.____
0510	528.08 STRUCTURAL TIMBER Fender Panels-Frenchboro	LUMP SUM	LUMP SUM	_____.____
0520	528.08 STRUCTURAL TIMBER Wave Screen - Bass Hbr.	LUMP SUM	LUMP SUM	_____.____
0530	528.08 STRUCTURAL TIMBER Wave Screens - Swans Is.	LUMP SUM	LUMP SUM	_____.____

Proposal ID: 022202.00 Project(s): 022202.00, 023476.00, 023480.00

SECTION: 1 Project Items

Alt Set ID: Alt Mbr ID:

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
0540	528.21 REPAIR TIMBER FENDER SYSTEM	1.000 LS				
0550	629.05 HAND LABOR, STRAIGHT TIME	180.000 HR				
0560	631.36 FOREPERSON	180.000 HR				
0570	634.1812 1" LIQUID-TIGHT FLEXIBLE CONDUIT	160.000 LF				
0580	634.189 1" PVC COATED RIGID STEEL CONDUIT	225.000 LF				
0590	634.2075 REMOVE AND RELOCATE NAVIGATION LIGHTING	3.000 EA				
0600	634.2076 DOLPHIN LIGHTING	9.000 EA				
0610	634.2077 SOLAR POWERED NAVIGATIONAL LIGHT Solar Powered Navigational Marker with Pole	1.000 EA				
0620	634.2311 STAINLESS STEEL EXTERIOR PULL BOX	17.000 EA				
0630	634.316 #10 AWG COPPER WIRE	770.000 LF				
0640	634.3161 #12 AWG COPPER WIRING	385.000 LF				
0650	634.730 REMOVE EXISTING ELECTRICAL COMPONENTS	LUMP SUM	LUMP SUM			

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 022202.00 Project(s): 022202.00, 023476.00, 023480.00

SECTION: 1 Project Items

Alt Set ID: Alt Mbr ID:

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price Dollars	 Cents	Bid Amount Dollars	 Cents
0660	639.20 FIELD OFFICE TYPE C	3.000 EA				
0670	645.265 NAVIGATION SIGN	3.000 EA				
0680	655.501 CATHODIC PROTECTION BY SACRIFICIAL ANODE	56.000 EA				
0690	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP SUM	LUMP SUM			
0700	659.10 MOBILIZATION	LUMP SUM	LUMP SUM			
0710	841.55 MOORING BOLLARD - double bitt - Frenchboro	1.000 EA				
0720	841.55 MOORING BOLLARD - double bitt - Bass Hbr.	1.000 EA				
0730	841.55 MOORING BOLLARD Double Bitt, Retrieve and Install	2.000 EA				
0740	841.56 MOORING CLEAT - chock	5.000 EA				
0750	841.56 MOORING CLEAT Chock, Retrieve and Install	6.000 EA				

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, **WINS. 022202.00, 023476.00, 023480.00** for **Construction of Dolphins, Walkways, and Wave Fences** in the towns of **Frenchboro, Bass Harbor, and Swans Island** County of **Hancock** 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 **September 10, 2021.** 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, March 2020 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, March 2020 Edition, Standard Details March 2020 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 March 2020 Edition, Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

WINS. 022202.00, 023476.00, 023480.00 - Construction of Dolphins, Walkways, and - in the towns of Frenchboro, Bass Harbor, and Swans Island

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, March 2020 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 March 2020 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. This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

_____	_____
Date	By: Bruce A. Van Note, 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, **WINS. 022202.00, 023476.00, 023480.00** for **Construction of Dolphins, Walkways, and Wave Fences** in the towns of **Frenchboro, Bass Harbor, and Swans Island** County of **Hancock** 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 **September 10, 2021.** 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, March 2020 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, March 2020 Edition, Standard Details March 2020 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 March 2020 Edition, Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

WINS. 022202.00, 023476.00, 023480.00 - Construction of Dolphins, Walkways, and - in the towns of Frenchboro, Bass Harbor, and Swans Island

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, March 2020 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 March 2020 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. This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

_____	_____
Date	By: Bruce A. Van Note, 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:

SAMPLE

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.01**12345.00**, 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, March 2020 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 **(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, March 2020 Edition, Standard Details March 2020 Edition*, 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 March 2020 Edition* (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.

SAMPLE

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, *Standard Specifications, March 2020 Edition, Standard Details March 2020 Edition*, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN 012345.00 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.

SAMPLE

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, March 2020 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 March 2020 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	**(Sign Here)** (Signature of Legally Authorized Representative of the Contractor)
(Witness Sign Here) Witness	**(Print Name Here)** (Name and Title Printed)

SAMPLE

G. Award.

Your offer is hereby accepted. This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

Date	By: Bruce A. Van Note, 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.....	.....…….....

SAMPLE

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	…….....….....

SAMPLE

"General Decision Number: ME20200021 01/03/2020

Superseded General Decision Number: ME20190021

State: Maine

Construction Type: Heavy

County: Hancock County in Maine.

HEAVY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was 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 $10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020

SUME2014-002 01/30/2017

	Rates	Fringes
CARPENTER, Includes Form Work	$ 15.15	3.99
ELECTRICIAN	$ 24.87	8.54
IRONWORKER, STRUCTURAL	$ 24.95	12.32
LABORER: Common or General	$ 12.37	4.37
LABORER: Pipelayer	$ 21.17	5.63
OPERATOR: Backhoe/Excavator/Trackhoe	$ 23.48	4.96
OPERATOR: Bulldozer	$ 22.91	6.04

OPERATOR: Crane.....$ 22.70 6.40

OPERATOR: Loader.....$ 14.62 4.24

TRUCK DRIVER: Dump Truck.....$ 15.91 3.78

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

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

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.

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END OF GENERAL DECISION
"

THIS DOCUMENT MUST BE CLEARLY POSTED AT ALL CONSTRUCTION SITES FUNDED IN PART WITH STATE FUNDS

State of Maine
Department of Labor
Bureau of Labor Standards
Augusta, Maine 04333-0045
Telephone (207) 623-7906

Wage Determination - In accordance with 26 MRS §1301 et. seq., this is a determination by the Bureau of Labor Standards, of the fair minimum wage rate to be paid to laborers and workers employed on the below titled project.

2020 Fair Minimum Wage Rates
Heavy & Bridge Hancock County

Occupation Title	Minimum Wage	Minimum Benefit	Total	Occupation Title	Minimum Wage	Minimum Benefit	Total
Asphalt Raker	$16.00	$0.00	$16.00	Laborers (Helpers & Tenders)	$16.50	$1.04	$17.54
Backhoe Loader Operator	$24.68	$7.89	$32.57	Laborer - Skilled	$21.00	$4.23	$25.23
Boom Truck (Truck Crane) Operator	$27.97	$7.25	$35.22	Line Erector Power/Cable Splicer	$35.00	$0.75	$35.75
Bricklayer	$24.50	$4.47	$28.97	Loader Operator - Front-End	$23.00	$3.76	$26.76
Bulldozer Operator	$22.00	$4.70	$26.70	Mechanic- Maintenance	$20.00	$4.77	$24.77
Carpenter	$25.48	$5.30	$30.78	Mechanic- Refrigeration	$27.00	$4.21	$31.21
Carpenter - Rough	$22.15	$4.09	$26.24	Millwright	$29.82	$8.18	$38.00
Cement Mason/Finisher	$18.00	$0.72	$18.72	Painter	$30.25	$9.95	$40.20
Communication Equip Installer	$23.00	$0.00	$23.00	Pipe/Steam/Sprinkler Fitter	$31.50	$17.36	$48.86
Comm Trans Microwave & Cell	$22.00	$2.19	$24.19	Pipelayer	$28.00	$6.71	$34.71
Crane Operator =>15 Tons)	$32.00	$8.46	$40.46	Plumber (Licensed)	$26.00	$4.50	$30.50
Diver	$24.00	$3.12	$27.12	Plumber Helper/Trainee	$19.00	$2.98	$21.98
Earth Auger Operator	$26.65	$6.12	$32.77	Propane/Natural Gas Serv/Install	$32.00	$9.23	$41.23
Electrician - Licensed	$30.82	$7.89	$38.71	Rigger	$23.00	$7.10	$30.10
Electrician Helper/Cable Puller	$19.00	$5.21	$24.21	Roller Operator - Earth	$16.43	$2.69	$19.12
Excavator Operator	$22.50	$3.13	$25.63	Roller Operator - Pavement	$20.25	$3.56	$23.81
Fence Setter	$18.00	$1.30	$19.30	Screed/Wheelman	$18.50	$2.45	$20.95
Flagger	$13.00	$0.00	$13.00	Sheet Metal Worker	$26.56	$6.03	$32.59
Grader/Scraper Operator	$22.00	$2.16	$24.16	Truck Driver - Light	$16.00	$0.44	$16.44
Industrial Truck (Forklift) Operator	$29.07	$6.63	$35.70	Truck Driver - Medium	$19.00	$1.97	$20.97
Ironworker - Ornamental	$22.30	$22.37	$44.67	Truck Driver - Heavy	$19.00	$0.95	$19.95
Ironworker - Reinforcing	$28.39	$6.22	$34.61	Truck Driver - Tractor Trailer	$26.78	$6.42	$33.20
Ironworker - Structural	$21.00	$4.55	$25.55				

The Laborer classifications include a wide range of work duties. Therefore, if any specific occupation to be employed on this project is not listed in this determination, call the Bureau of Labor Standards at the above number for further clarification.

Welders are classified in the trade to which the welding is incidental.

Apprentices – The minimum wage rate for registered apprentices are those set forth in the standards and policies of the Maine State Apprenticeship and Training Council for approved apprenticeship programs.

Title 26 §1310 requires that a clearly legible statement of all fair minimum wage and benefits rates to be paid the several classes of laborers, workers and mechanics employed on the construction on the public work must be kept posted in a prominent and easily accessible place at the site by each contractor and subcontractor subject to sections 1304 to 1313.

Appeal – Any person affected by the determination of these rates may appeal to the Commissioner of Labor by filing a written notice with the Commissioner stating the specific grounds of the objection within ten (10) days from the filing of these rates.

A true copy

Attest: Scott R. Cotnoir
Scott R. Cotnoir
Wage & Hour Director
Bureau of Labor Standards

Expiration Date: 12-31-2020

SPECIAL PROVISION
SECTION 104
(WAGE RATES)

When two or more wage rate schedules appear in the bid Book, the highest rate shall prevail for each classification.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

FRENCHBORO FERRY TERMINAL

FENDER SYSTEM MODIFICATIONS

Frenchboro, Maine
WIN 022202.00

PROJECT DESCRIPTION

All work shall be governed by the Maine Department of Transportation Standard Specifications, March 2020 Edition, except for the modifications, additions, and deletions contained herein.

General Description of Work

The Frenchboro ferry terminal project includes the installation of one turning dolphin to replace an existing timber dolphin within the existing pen complete with fender panel. The turning dolphin shall be of concrete construction supported by anchored and post-tensioned concrete-filled steel pipe piles. Associated with this work is the installation of navigational lighting, and installation of a fender access ladder. Modifications to fender systems are also necessary.

Plans

The Contract Drawings are hereby incorporated into this project and are referred to as the Plans. They bear the general title of "Frenchboro Ferry Terminal, Fender System Modifications, WIN 022202.00".

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

BASS HARBOR FERRY TERMINAL

FENDER SYSTEM MODIFICATIONS

Bass Harbor, Maine
WIN 023476.00

PROJECT DESCRIPTION

All work shall be governed by the Maine Department of Transportation Standard Specifications, March 2020 Edition, except for the modifications, additions, and deletions contained herein.

General Description of Work

The Bass Harbor ferry terminal project includes the installation of one turning dolphin outboard of the footprint of the existing pen complete with fender panels and site lighting. The turning dolphin shall be of concrete construction supported by anchored and post-tensioned concrete-filled steel pipe piles. Associated with this work is the installation of aluminum gangways, removal and storage of fender panels, modifications to navigational lighting, and installation of timber wave screens. Modifications to fender systems, hand railings, and head dolphins are also necessary.

Plans

The Contract Drawings are hereby incorporated into this project and are referred to as the Plans. They bear the general title of "Bass Harbor Ferry Terminal, Fender System Modifications, WIN 023476.00".

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

SWAN'S ISLAND FERRY TERMINAL

FENDER SYSTEM MODIFICATIONS

Swan's Island, Maine
WIN 023480.00

PROJECT DESCRIPTION

All work shall be governed by the Maine Department of Transportation Standard Specifications, March 2020 Edition, except for the modifications, additions, and deletions contained herein.

General Description of Work

The Swan's Island ferry terminal project includes the installation of two turning dolphins outboard of the footprint of the existing pen complete with fender panels and site lighting. The turning dolphins shall be of concrete construction supported by anchored and post-tensioned concrete-filled steel pipe piles. Associated with this work is the installation of aluminum gangways, removal, storage, and reinstallation of fender panels, modifications to navigational lighting, and installation of timber wave screens. Modifications to fender systems, hand railings, and head dolphins are also necessary.

Plans

The Contract Drawings are hereby incorporated into this project and are referred to as the Plans. They bear the general title of "Swan's Island Ferry Terminal, Fender System Modifications, WIN 023480.00".

SPECIAL PROVISION
SECTION 101
CONTRACT INTERPRETATION
(Definitions)

101.2 Definitions

This Subsection is added by inclusion of the following:

Terminal Manager:	The individual responsible for the ferry terminal and all terminal related coordination. Bass Harbor: Office Tel.: 207-244-3254 Swan's Island: Office Tel.: 207-526-4273 Frenchboro: Office Tel.: 207-244-3254
Pen:	The area within the fender system where the vessel berths. Generally, includes the region between the fender panels, the loading ramp on the shore side end, and the outboard turning dolphins. For this project, the pen includes the extended area where the proposed fenders will be installed.
Turning Dolphin:	The outboard breasting/mooring structure constructed of either timber or concrete which defines the outer end of the pen. This structure commonly includes a steel fender panel and mooring devices in the form of cleats or double bitts. Lighting typically includes site lighting and a navigational marker.
Timber Crib:	The timber stone-filled structure which currently forms the existing perimeter of the pen and is typically used to support a fender panel, walkways, and site lighting. The timber cribs also function as partial wave screens.

SPECIAL PROVISIONS
SECTION 104
Utilities

UTILITY COORDINATION

The contractor has primary responsibility for coordinating their work with utilities and/or railroad after contract award. The contractor shall communicate directly with the utilities and/or railroad 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 NOT REQUIRED**.

GENERAL INFORMATION

These Special Provisions outline the arrangements that have been made by the Department for utility and/or railroad work to be undertaken in conjunction with this project. 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.

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

Overview & Utility/Railroad Contact Information:

Utility/Railroad	Aerial	Underground	Contact Name	Contact Number
The Island Telephone Company (TDS of Maine)		**X**	**Jason Tibbetts**	**635-7249**
Town of Frenchboro	**X**	**X**	**Joe Lunt**	**460-0492**
Versant Power	**X**		**Dave Perkins**	**949-3918**

Temporary utility/railroad adjustments **ARE NOT** anticipated. If any unexpected utility relocations become necessary, they shall be scheduled in accordance with Section 104 of the Standard Specifications and shall be performed by the appropriate utility company in conjunction with the work by the Contractor. Should the Contractor choose to have any poles temporarily relocated, all work shall be done at the Contractor's request and expense, with no additional cost or schedule impacts to the Department.

All adjustments are to be made by the respective utility/railroad unless otherwise specified herein.

Fire hydrants shall not be disturbed until all necessary work has been accomplished to provide proper fire protection.

***** Specific information regarding the line voltage can be requested from Versant Power*****

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

AERIAL

Aerial utility adjustments are not anticipated as part of this project. Utilities have been notified and if utility relocations, though unexpected, become necessary, they will be scheduled in compliance with Section 104 of the Standard Specifications and will be done by the utilities in conjunction with the work by the Contractor.

UNDERGROUND

Underground utility adjustments are not anticipated as part of this project. Utilities have been notified and if utility relocations, though unexpected, become necessary, they will be scheduled in compliance with Section 104 of the Standard Specifications and will be done by the utilities in conjunction with the work by the Contractor.

Town of Frenchboro

Town of Frenchboro has a hoist/winch equipment that is mounted to the pier and buried electrical and hydraulic supply lines that serve the hoist/winch equipment. Caution shall be exercised when working near these facilities as to not cause damage. **No impacts are anticipated.**

PLEASE NOTE

All underground utilities require **3 working days' notice** for any/all excavation or any other subsurface work around any underground facilities to schedule an on-site representative to be present. The contractor shall hand dig around all the underground facilities.

MAINTAINING UTILITY LOCATION MARKINGS

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

UTILITY SIGNING

Any utility/railroad 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.

Town: **Tremont (Bass Harbor)**
Project: **23476.00**
Date: **July 21, 2020**

SPECIAL PROVISIONS
SECTION 104
Utilities

UTILITY COORDINATION

The contractor has primary responsibility for coordinating their work with utilities and/or railroad after contract award. The contractor shall communicate directly with the utilities and/or railroad 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 NOT REQUIRED**.

GENERAL INFORMATION

These Special Provisions outline the arrangements that have been made by the Department for utility and/or railroad work to be undertaken in conjunction with this project. 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.

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

Overview & Utility/Railroad Contact Information:

Utility/Railroad	Aerial	Underground	Contact Name	Contact Number
Charter Communications	**X**		**Harland Williamson**	**458-8084**
Consolidated Communications	**X**	**X**	**Emily Greaney**	**745-2750**
Versant Power	**X**	**X**	**Dave Perkins**	**949-3918**

Temporary utility/railroad adjustments **ARE NOT** anticipated. If any unexpected utility relocations become necessary, they shall be scheduled in accordance with Section 104 of the Standard Specifications and shall be performed by the appropriate utility company in conjunction with the work by the Contractor. Should the Contractor choose to have any poles temporarily relocated, all work shall be done at the Contractor's request and expense, with no additional cost or schedule impacts to the Department.

All adjustments are to be made by the respective utility/railroad unless otherwise specified herein.

Fire hydrants shall not be disturbed until all necessary work has been accomplished to provide proper fire protection.

***** Specific information regarding the line voltage can be requested from Versant Power*****

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

AERIAL

Aerial utility adjustments are not anticipated as part of this project. Utilities have been notified and if utility relocations, though unexpected, become necessary, they will be scheduled in compliance with Section 104 of the Standard Specifications and will be done by the utilities in conjunction with the work by the Contractor.

UNDERGROUND

Underground utility adjustments are not anticipated as part of this project. Utilities have been notified and if utility relocations, though unexpected, become necessary, they will be scheduled in compliance with Section 104 of the Standard Specifications and will be done by the utilities in conjunction with the work by the Contractor.

PLEASE NOTE

All underground utilities require **3 working days' notice** for any/all excavation or any other subsurface work around any underground facilities to schedule an on-site representative to be present. The contractor shall hand dig around all the underground facilities.

MAINTAINING UTILITY LOCATION MARKINGS

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

UTILITY SIGNING

Any utility/railroad 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.

Town: **Swans Island**
Project: **23480.00**
Date: **July 21, 2020**

SPECIAL PROVISIONS
SECTION 104
Utilities

UTILITY COORDINATION

The contractor has primary responsibility for coordinating their work with utilities and/or railroad after contract award. The contractor shall communicate directly with the utilities and/or railroad 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 NOT REQUIRED**.

GENERAL INFORMATION

These Special Provisions outline the arrangements that have been made by the Department for utility and/or railroad work to be undertaken in conjunction with this project. 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.

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

Overview & Utility/Railroad Contact Information:

Utility/Railroad	Aerial	Underground	Contact Name	Contact Number
The Island Telephone Company (TDS of Maine)		**X**	**Jason Tibbetts**	**635-7249**
Versant Power	**X**	**X**	**Dave Perkins**	**949-3918**

Temporary utility/railroad adjustments **ARE NOT** anticipated. If any unexpected utility relocations become necessary, they shall be scheduled in accordance with Section 104 of the Standard Specifications and shall be performed by the appropriate utility company in conjunction with the work by the Contractor. Should the Contractor choose to have any poles temporarily relocated, all work shall be done at the Contractor's request and expense, with no additional cost or schedule impacts to the Department.

All adjustments are to be made by the respective utility/railroad unless otherwise specified herein.

Fire hydrants shall not be disturbed until all necessary work has been accomplished to provide proper fire protection.

***** Specific information regarding the line voltage can be requested from Versant Power*****

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

AERIAL

Aerial utility adjustments are not anticipated as part of this project. Utilities have been notified and if utility relocations, though unexpected, become necessary, they will be scheduled in compliance with Section 104 of the Standard Specifications and will be done by the utilities in conjunction with the work by the Contractor.

UNDERGROUND

Underground utility adjustments are not anticipated as part of this project. Utilities have been notified and if utility relocations, though unexpected, become necessary, they will be scheduled in compliance with Section 104 of the Standard Specifications and will be done by the utilities in conjunction with the work by the Contractor.

PLEASE NOTE

All underground utilities require **3 working days' notice** for any/all excavation or any other subsurface work around any underground facilities to schedule an on-site representative to be present. The contractor shall hand dig around all the underground facilities.

MAINTAINING UTILITY LOCATION MARKINGS

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

UTILITY SIGNING

Any utility/railroad 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.

SPECIAL PROVISION
SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES
(As-Built Plans)

104.3.16 Contractor's Development of As-Built Plans

This Subsection is added by inclusion of the following:

The Contractor is required to maintain as-built drawings throughout the duration of the project and submit both hard-copy and one compiled electronic PDF file of the as-built drawing set within 30 days of project completion.

The Department retains the right to review the as-built drawings for a period of 10 days to confirm the accuracy and completeness of the drawing set. The Contractor will be notified of any revisions necessary within the 10 day period and is obligated to complete the revisions and resubmit both the hard copy and electronic file within 14 days of receipt of the comments.

SPECIAL PROVISION
SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES
(Coordination with Terminal Manger)

The following Subsection is added:

104.4.11 Coordination with Terminal Manager

The Ferry Terminal is an active passenger ferry terminal with scheduled transports on a daily basis. The schedule varies by season, but generally entails several vessel visits throughout the day Sunday through Saturday. Successful completion of the project will require coordination between the Contractor and the Terminal Manager on a daily basis, and on a weekly basis via project meetings to be held on-site with all stakeholders, including the local community representative. At these meetings, the Contractor will be required to provide an update on the progress of the project. In a similar manner, the Terminal Manager will provide notice of any changes to the vessel schedule to the Contractor and will advise when the pen is not available.

Construction Schedule:

The Contractor will be required to submit a detailed written construction schedule. This schedule will be monitored closely and shall be updated weekly during construction meetings. When the Contractor is prepared to commence work on site, in addition to the construction schedule, the Contractor shall provide on a regular basis a written day by day summary of the Construction activities that will occur for the upcoming three-week period. This summary will also highlight activities that will have an impact on the use of facilities in the construction and adjacent areas.

Pollution Control:

All operations carried out by the Contractor during the life of this Contract shall comply with provisions and regulations for the control of air and noise pollution. The contractor shall make all applications and notices and comply with all appropriate provisions of the rules and regulations of Federal, State, and Local Agencies. The Contractor will also closely monitor debris and trash that is generated on site and ensure that it is properly contained and maintained. Trash must be removed regularly and as a minimum, at least weekly.

SPECIAL PROVISION
SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES
(Progress Meetings)

104.4.3 Progress Meetings

This Subsection is amended by the addition of the following:

Progress meetings shall be held weekly or at an interval deemed necessary by the Resident. As the project progresses, the Resident may reduce the frequency of the meetings.

December 17, 2010
Supersedes December 30, 2009

SPECIAL PROVISION
SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES
(Electronic Payroll Submission)
(Payment Tracking)

104.3.8.1 Electronic Payroll Submission The prime contractor and all subcontractors and lower-tier subcontractors will submit their certified payrolls electronically on this contract utilizing the Elation System web based reporting. There is no charge to the contracting community for the use of this service. The submission of paper payrolls will not be allowed or accepted. Additional information can be found at http://www.maine.gov/mdot/contractors/ under the first "Notice".

104.3.8.2 Payment Tracking The prime contractor and all subcontractors and lower-tier subcontractors will track and confirm the delivery and receipt of all payments through the Elation System

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(Submittal Requirements)

105.7.4 Submittal Requirements

This Subsection is amended by the addition of the following:

At the onset of the project, the Contractor shall provide to the Resident a submittal log, which identifies the manner by which all submittals will be organized and referenced throughout the project. The Contractor shall update the submittal log on a weekly basis or to the satisfaction of the Resident. RFIs and other correspondence may be organized in a similar manner at the discretion of the Resident. The naming convention for submittals and RFIs shall be consistent and sequential.

The Contractor shall make all submittals including but not limited to RFIs, Designs, Shop Drawings, and Working Drawings in electronic PDF format via email. All submittals shall be accompanied by a cover sheet, which identifies the submittal number, subject, and date. Revisions to submittals shall maintain the original submittal number but receive a designation which indicates the submittal has been revised.

Submittals which require the review of the Engineer of Record will be reviewed in electronic format using red-line markups to easily identify comments, corrections, or revisions. Submittal reviews will be returned in electronic format only. If hardcopies are needed by the Contractor, it will be the responsibility of the Contractor to provide hardcopies to be marked-up by the Resident and/or Engineer of Record. Only one reviewed/red-lined hardcopy will be returned to the Contractor for its own use, regardless of the number of copies needed by the Contractor to complete the work.

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(Protection of Eelgrass)

The following subsection is added:

105.8.8 Protection of Eelgrass

The contractor shall be aware of the locations of the eelgrass and its limits as approximated in the Contract Drawings based on a dive survey by MaineDOT. Construction activities such as demolition, modification, and installation of any kind shall not damage any regions of the eelgrass.

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(Summary of Project Requirements)

The following Subsection is added:

105.11.2 Summary of Project Requirements

A summary of the project requirements is below:

Pen Accessibility:

- Contractor must maintain the facility for safe ferry service operations at all times and for overnight mooring. The Contractor's barge and equipment shall not hinder vessel operations at any time.
- Accessibility shall also include the underwater portion of the pen which shall remain free of debris or obstruction that could damage the ferry or impede operations.

Terminal Functionality

- Contractor must maintain as operational the terminal including the site lighting, vessel electrical hook-up, hoist tower, and terminal building. Short-term temporary disconnects will be permitted with coordination and approval by the Resident.

Harbor Channel Functionality

Contractor must maintain as operational the existing harbor channel for recreational boaters, fishermen, and general boating traffic. The Contractor's barge and equipment shall not go beyond footprint of the proposed pen limits, which includes the location of the proposed dolphin(s).

Special circumstances which may prevent fulfillment of this requirement shall be brought to the attention of the Resident, Harbor Master, and Terminal Manager for further discussion.

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 applies to Lunt Harbor, Frenchboro proposed ferry terminal improvement project.

II. In-water work below Highest Annual Tide (HAT) Elevation 13.69 (NAVD88) is allowed from August 1 to March 14 of any year. In-water work is prohibited between March 15 and July 31.

III. Special Conditions:

1. Special Conditions of Army Corps of Engineers Category 2 Permit (see permit and conditions in contract documents).
2. Special Conditions of Informal Endangered Species Act (Section 7) FHWA Programmatic Consultation and Essential Fish Habitat Consultation with National Marine Fisheries Service (summarized in this Special Provision 105 and ACOE permit).
3. The contractor shall hold a pre-construction meeting for each project with appropriate MaineDOT Environmental Office staff, other MaineDOT staff, and the MaineDOT construction crew or contractor(s) to review all procedures and requirements for avoiding and minimizing effects to protected species and to emphasize the importance of these measures for protecting these species and their habitat. ACOE (Jay Clement, Jay.l.clement@usace.army.mil), FHWA (Eva Birk, eva.birk@dot.gov), National Marine Fisheries Service staff (Zachary Jylkka, zachary.jylkka@noaa.gov), and NOAA Fisheries staff (Michael Johnson, mike.r.johnson@noaa.gov) shall be invited to attend these meetings.
4. Any project vessel shall maintain minimum approach distances to marine mammals and sea turtles: 1,500 feet for North Atlantic right whales, and 150 feet for sea turtles, dolphins/porpoises, seals, and other large whales (no intentional approach within 100 feet for large whales).
5. The use of blasting or explosives is prohibited.
6. Disturbance of subtidal substrate outside of the area shown on permit plans is prohibited. This prohibition includes but is not limited to use of heavy machinery and placement or storage of construction materials or equipment.
7. Prior to construction, MaineDOT will provide GPS locations of observed eelgrass beds in the vicinity of the work area where impacts are not permitted. The contractor shall mark the boundary so that boats and all other vessels are prohibited from anchor or spud-in within 50-feet of the marked eelgrass beds, this is the Eelgrass Exclusion Area. Any disturbance by project activity within the Eelgrass Exclusion Area shall be reported to the resident within 24 hours.
8. All pile driving and pile removal activity is required to employ a 20-minute "soft start" to allow animals an opportunity to leave the project vicinity before sound pressure increases.
9. If a marine mammal or sea turtle is incidentally observed by the resident or other staff approaching or entering within a 1,000-foot buffer of a pile driving site (shutdown zone) during pile driving activities, work shall be halted. If pile driving is halted due to the presence of a marine mammal or sea turtle, the activity may not resume or commence until either the animal has voluntarily left the shutdown zone and has been visually confirmed beyond the shutdown zone and 15 minutes have passed without re-detection of the animal. Pile driving activities

include the time to install or remove a single pile or series of piles, as long as the time elapsed between uses of the pile driving equipment is no more than thirty minutes.

10. Any in-water lines, ropes, or chains shall be made of materials and installed in a manner to minimize or avoid the risk of entanglement by using thick, heavy, and taut lines that do not loop or entangle. Where possible, lines shall be enclosed in a rigid sleeve.
13. As a component of the SEWPCP required for each project, the Contractor shall develop and implement a Spill Prevention Control and Countermeasure Plan (SPCCP) designed to avoid any impacts from hazardous chemicals, such as diesel fuel, oil, lubricants, and other hazardous materials. All refueling or equipment maintenance shall take place away from the water and in a careful manner that prohibits chemical or other hazardous materials from entering the water. These measures include the following:
    a. All vehicles (watercraft) carrying fuel shall have specific equipment and materials needed to contain or clean up any incidental spills at the Project site. Equipment and materials would include spill kits appropriately sized for specific quantities and type of fuel and/or material to be used, shovels, absorbent pads, straw bales, containment structures and liners, and/or booms.
    b. During use, all pumps and generators shall have appropriate spill containment structures and/or absorbent pads in place.
    c. All equipment used for in-water work shall be cleaned of external oil, grease, dirt, and mud.
    d. Any leaks or accumulations of these materials would be corrected before entering the water.
14. The contractor shall employ the minimum number of vessels required to complete the work.

IV. Approvals:

1. Temporary Soil Erosion and Water Pollution Control Plan
2. Permit-by-Rule
3. Permitted Coastal Wetland Impacts (square feet), see ACOE permit for locations:

	Permanent	**Temporary**
Direct Impacts	27	0
Indirect Impacts	256	0

V. All activities are <u>prohibited</u> (including placement and removal of cofferdams unless otherwise permitted by Regulatory Agencies) below the HAT elevation if outside the prescribed in-water work window, except for the following:

1. Work within a cofferdam constructed per MaineDOT's Standard Specifications and in adherence with the contractors approved "Soil Erosion and Water Pollution Control Plan".

VI. Reauthorization of the ACOE Permit is required for any work in jurisdictional resources that is not completed by October 13, 2021. The Contractor shall allow up to 2 weeks for MaineDOT to reauthorize the permit prior to beginning construction.

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
(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 applies to Bass Harbor proposed ferry terminal improvement project.

II. In-water work is allowed from August 1 to March 14 of any year. In-water work is prohibited between March 15 and July 31.

III. Special Conditions:

1. Special Conditions of Army Corps of Engineers Category 2 Permit (see permit and conditions in contract documents).
2. Special Conditions of Informal Endangered Species Act (Section 7) FHWA Programmatic Consultation and Essential Fish Habitat Consultation with National Marine Fisheries Service (summarized in this Special Provision 105 and ACOE permit).
3. The contractor shall hold a pre-construction meeting for each project with appropriate MaineDOT Environmental Office staff, other MaineDOT staff, and the MaineDOT construction crew or contractor(s) to review all procedures and requirements for avoiding and minimizing effects to protected species and to emphasize the importance of these measures for protecting these species and their habitat. ACOE (Jay Clement, Jay.l.clement@usace.army.mil), FHWA (Eva Birk, eva.birk@dot.gov), National Marine Fisheries Service staff (Zachary Jylkka, zachary.jylkka@noaa.gov), and NOAA Fisheries staff (Michael Johnson, mike.r.johnson@noaa.gov) shall be invited to attend these meetings.
4. Any project vessel shall maintain minimum approach distances to marine mammals and sea turtles: 1,500 feet for North Atlantic right whales, and 150 feet for sea turtles, dolphins/porpoises, seals, and other large whales (no intentional approach within 100 feet for large whales).
5. The use of blasting or explosives is prohibited.
6. Disturbance of subtidal substrate outside of the area shown on permit plans is prohibited. This prohibition includes but is not limited to use of heavy machinery and placement or storage of construction materials or equipment.
7. Boats and all other vessels are prohibited from anchor or spud-in within 25-feet of the eelgrass beds, this is the eelgrass exclusion area. The nearest proposed in-water work (pile driving for new wave screen between dolphins D6 and D7) to the observed northerly and southerly eelgrass patches is approximately 145 feet and 150 feet, respectively. The exclusion area begins 25-feet from the boundary of the eelgrass area as shown on the existing conditions plan sheet. Upon request, MaineDOT shall provide a GIS or other mapping file for the contractor to use in identifying this area in the field.
8. All pile driving and pile removal activity is required to employ a 20-minute "soft start" to allow animals an opportunity to leave the project vicinity before sound pressure increases.
9. If a marine mammal or sea turtle is incidentally observed by the resident or other staff approaching or entering within a 1,000-foot buffer of a pile driving site (shutdown zone) during pile driving activities, work shall be halted. If pile driving is halted due to the presence of a marine mammal or sea turtle, the activity may not resume or commence until either the animal

has voluntarily left the shutdown zone and has been visually confirmed beyond the shutdown zone and 15 minutes have passed without re-detection of the animal. Pile driving activities include the time to install or remove a single pile or series of piles, as long as the time elapsed between uses of the pile driving equipment is no more than thirty minutes.

10. For any required pumping operations, the contractor shall use a screen on each pump intake sufficiently large enough so that the approach velocity does not exceed 6.10 m sec-1 (0.20 ft sec-1). Square or round screen face openings are not to exceed 2.38 mm (3/32 in) on a diagonal. Criteria for slotted face openings must not exceed 1.75 mm (approximately 1/16 in) in the narrow direction.
11. Any in-water lines, ropes, or chains shall be made of materials and installed in a manner to minimize or avoid the risk of entanglement by using thick, heavy, and taut lines that do not loop or entangle. Where possible, lines shall be enclosed in a rigid sleeve.
11. As a component of the SEWPCP required for each project, the Contractor shall develop and implement a Spill Prevention Control and Countermeasure Plan (SPCCP) designed to avoid any impacts from hazardous chemicals, such as diesel fuel, oil, lubricants, and other hazardous materials. All refueling or equipment maintenance shall take place away from the stream and in a careful manner that prohibits chemical or other hazardous materials from entering the water. These measures include the following:
    a. All vehicles (watercraft) carrying fuel shall have specific equipment and materials needed to contain or clean up any incidental spills at the Project site. Equipment and materials would include spill kits appropriately sized for specific quantities of fuel, shovels, absorbent pads, straw bales, containment structures and liners, and/or booms.
    b. During use, all pumps and generators shall have appropriate spill containment structures and/or absorbent pads in place.
    c. All equipment used for in-water work shall be cleaned of external oil, grease, dirt, and mud.
    d. Any leaks or accumulations of these materials would be corrected before entering the water.
12. The contractor shall employ the minimum number of vessels required to complete the work.

IV. Approvals:
1. Temporary Soil Erosion and Water Pollution Control Plan
2. Permit-by-Rule
3. Permitted Coastal Wetland Impacts (square feet), see ACOE permit for locations:

	Permanent	**Temporary**
Direct Impacts	38	0
Indirect Impacts	401	0

V. All activities are <u>prohibited</u> (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 per MaineDOT's Standard Specifications and in adherence with the contractors approved "Soil Erosion and Water Pollution Control Plan".

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
(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 applies to Mackerel Cove, Swans Island proposed ferry terminal improvement project.

II. In-water work below Highest Annual Tide (HAT) Elevation 13.69 (NAVD88) is allowed from August 1 to March 14 of any year. In-water work is prohibited between March 15 and July 31.

III. Special Conditions:

1. Special Conditions of Army Corps of Engineers Category 2 Permit (see permit and conditions in contract documents).
2. Special Conditions of Informal Endangered Species Act (Section 7) FHWA Programmatic Consultation and Essential Fish Habitat Consultation with National Marine Fisheries Service (summarized in this Special Provision 105 and ACOE permit).
3. The contractor shall hold a pre-construction meeting for each project with appropriate MaineDOT Environmental Office staff, other MaineDOT staff, and the MaineDOT construction crew or contractor(s) to review all procedures and requirements for avoiding and minimizing effects to protected species and to emphasize the importance of these measures for protecting these species and their habitat. ACOE (Jay Clement, Jay.l.clement@usace.army.mil), FHWA (Eva Birk, eva.birk@dot.gov), National Marine Fisheries Service staff (Zachary Jylkka, zachary.jylkka@noaa.gov), and NOAA Fisheries staff (Michael Johnson, mike.r.johnson@noaa.gov) shall be invited to attend these meetings.
4. Any project vessel shall maintain minimum approach distances to marine mammals and sea turtles: 1,500 feet for North Atlantic right whales, and 150 feet for sea turtles, dolphins/porpoises, seals, and other large whales (no intentional approach within 100 feet for large whales).
5. The use of blasting or explosives is prohibited.
6. Disturbance of subtidal substrate outside of the area shown on permit plans is prohibited. This prohibition includes but is not limited to use of heavy machinery and placement or storage of construction materials or equipment.
7. Prior to construction, MaineDOT will provide GPS locations of observed eelgrass beds in the vicinity of the work area where impacts are not permitted. The contractor shall mark the boundary so that boats and all other vessels are prohibited from anchor or spud-in within 50-feet of the marked eelgrass beds, this is the Eelgrass Exclusion Area. Any disturbance by project activity within the Eelgrass Exclusion Area shall be reported to the resident within 24 hours.
8. All pile driving and pile removal activity is required to employ a 20-minute "soft start" to allow animals an opportunity to leave the project vicinity before sound pressure increases.
9. If a marine mammal or sea turtle is incidentally observed by the resident or other staff approaching or entering within a 1,000-foot buffer of a pile driving site (shutdown zone) during pile driving activities, work shall be halted. If pile driving is halted due to the presence of a marine mammal or sea turtle, the activity may not resume or commence until either the animal has voluntarily left the shutdown zone and has been visually confirmed beyond the shutdown zone and 15 minutes have passed without re-detection of the animal. Pile driving activities

include the time to install or remove a single pile or series of piles, as long as the time elapsed between uses of the pile driving equipment is no more than thirty minutes.

10. Any in-water lines, ropes, or chains shall be made of materials and installed in a manner to minimize or avoid the risk of entanglement by using thick, heavy, and taut lines that do not loop or entangle. Where possible, lines shall be enclosed in a rigid sleeve.
13. As a component of the SEWPCP required for each project, the Contractor shall develop and implement a Spill Prevention Control and Countermeasure Plan (SPCCP) designed to avoid any impacts from hazardous chemicals, such as diesel fuel, oil, lubricants, and other hazardous materials. All refueling or equipment maintenance shall take place away from the water and in a careful manner that prohibits chemical or other hazardous materials from entering the water. These measures include the following:
    a. All vehicles (watercraft) carrying fuel shall have specific equipment and materials needed to contain or clean up any incidental spills at the Project site. Equipment and materials would include spill kits appropriately sized for specific quantities and type of fuel and/or material to be used, shovels, absorbent pads, straw bales, containment structures and liners, and/or booms.
    b. During use, all pumps and generators shall have appropriate spill containment structures and/or absorbent pads in place.
    c. All equipment used for in-water work shall be cleaned of external oil, grease, dirt, and mud.
    d. Any leaks or accumulations of these materials would be corrected before entering the water.
14. The contractor shall employ the minimum number of vessels required to complete the work.

IV. Approvals:

1. Temporary Soil Erosion and Water Pollution Control Plan
2. Permit-by-Rule
3. Permitted Coastal Wetland Impacts (square feet), see ACOE permit for locations:

	Permanent	**Temporary**
Direct Impacts	69	0
Indirect Impacts	802	0

V. All activities are <u>prohibited</u> (including placement and removal of cofferdams unless otherwise permitted by Regulatory Agencies) below the HAT elevation if outside the prescribed in-water work window, except for the following:

1. Work within a cofferdam constructed per MaineDOT's Standard Specifications and in adherence with the contractors approved "Soil Erosion and Water Pollution Control Plan".

VI. Reauthorization of the ACOE Permit is required for any work in jurisdictional resources that is not completed by October 13, 2021. The Contractor shall allow up to 2 weeks for MaineDOT to reauthorize the permit prior to beginning construction.

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 105
GENERAL SCOPE OF WORK
Equal Opportunity and Civil Rights
(Disadvantaged Business Enterprises Program)

105.10.1.1 Disadvantaged Business Enterprises Program The Maine Department of Transportation (MaineDOT) has established a Disadvantaged Business Enterprise (DBE) program in accordance with regulations of the United States Department of Transportation (USDOT), 49 CFR Part 26. The MaineDOT receives federal financial assistance from USDOT, and as a condition of receiving this assistance, the Department has signed an assurance that it will comply with 49 CFR Part 26.The MaineDOT is responsible for determining the eligibility of and certifying DBE firms in Maine.

A DBE is defined as a for-profit business that is owned and controlled by one or more socially and economically disadvantaged person(s). For the purpose of this definition:

1. "Socially and economically disadvantaged person" means an individual who is a citizen or lawful permanent resident of the United States and who is Black, Hispanic, Native American, Asian, Female; or a member of another group or an individual found to be disadvantaged by the Small Business Administration pursuant to Section 3 of the Small Business Act.
2. "Owned and controlled" means a business which is:
    a. A sole proprietorship legitimately owned and controlled by an individual who is a disadvantaged person.
    b. A partnership or limited liability company in which at least 51% of the beneficial ownership interests legitimately are held by a disadvantaged person(s).
    c. A corporation or other entity in which at least 51% of the voting interest and 51% of the beneficial ownership interests legitimately are held by a disadvantaged person(s).

The disadvantaged group owner(s) or stockholder(s) must possess control over management, interest in capital, and interest in earnings commensurate with the percentage of ownership. If the disadvantaged group ownership interests are real, substantial and continuing and not created solely to meet the requirements of this program, a firm is considered a bona fide DBE.

105.10.1.2 Commercially Useful Function MaineDOT will count expenditures of a DBE contractor toward DBE goals only if the DBE is performing a commercially useful function on that contract. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. Credit will only be given when the DBE meets all conditions for a CUF. Credit for labor will be in accordance with the responsibilities outlined in the contract. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the Contract, for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, MaineDOT will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the Contract is commensurate with the work it is actually performing and DBE credit claimed for its performance of the work, and other relevant factors.

Rented equipment used by the DBE must not be rented from the Prime Contractor on a job that the DBE is subcontracted with that Prime Contractor for regular course of business.

A current listing of certified DBEs that may wish to participate in the highway construction program and the scope of work for which they are certified can be found at http://www.maine.gov/mdot/disadvantaged-business-enterprises/pdf/directory.pdf. Credit will be given for the value described by a DBE performing as:

A. A prime contractor; 100% of actual value of work performed by own workforces.
B. An approved subcontractor; 100% of work performed by own workforces.
C. An owner-operator of construction equipment; 100% of expenditures committed.
D. A manufacturer; 100% of expenditures committed. The manufacturer must be a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor. Brokers and packagers shall not be regarded as manufacturers.
E. A regular dealer; 60% of expenditures committed. A regular dealer is defined as a firm that owns, operates, or maintains a store, warehouse or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public. For purposes of this provision a "Broker" is a DBE that has entered into a legally binding relationship to provide goods or services delivered or performed by a third party. Brokers and packagers shall not be regarded as regular dealers.
F. A bona fide service provider; 100% of reasonable fees or commissions. Eligible services include professional, technical, consultant, or managerial, services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for the performance of the contract. Eligible services also include agencies providing bonding and insurance specifically required for the performance of the contract.
G. A trucking, hauling or delivery operation. 100% of expenditures committed when trucks are owned, operated, licensed and insured by the DBE and used on the contract and, if applicable, includes the cost of the self supplied materials and supplies.100% of expenditures committed when the DBE leases trucks from another DBE firm including an owner-operator. 100% of reasonable fees or commissions the DBE receives as a result of a lease arrangement for trucks from a non-DBE, including an owner-operator.
H. Any combination of the above.

105.10.1.3 Race-neutral Goals The Maine DOT is required to set an annual goal (approved on a three year basis) for DBE participation in Federal-aid projects. In order to fulfill that goal, bidders are encouraged to utilize DBE businesses certified by the MaineDOT. MaineDOT seeks to meet the established DBE goal solely through race-neutral means. *Race-neutral* DBE participation occurs when a DBE is awarded a prime contract through customary competitive procurement procedures, is awarded a subcontract on a contract that does not carry a DBE contract goal, or wins a subcontract from a prime contractor that did not consider its DBE status in making the award. A DBE/subcontractor Utilization Proposed Form is required to be included in bid documents.

MaineDOT will analyze each project and create a Project Availability Target (PAT), based on a number of factors including project scope, available DBE firms, firms certified in particular project work, etc. Each bid will request that the contractor attempt to meet the PAT. This PAT is developed to assist contractors to better understand what the MaineDOT expectations are for a

specific project. The PAT is NOT a mandate but an assessment of what this particular project can bear for DBE participation. The Department anticipates that each contractor will make the best effort to reach or exceed this PAT for the project.

105.10.1.4 Race-conscious Project Goals If it is determined by the Department that the annual DBE goal will not be met through *race-neutral* means, the Department may implement *race-conscious contract goals* on some projects. Race-conscious contract goals are goals that are enforceable by the Department and require that the prime contractor use good faith effort to achieve the goal set by the Department for that particular project. If race conscious means are implemented on a project, the Prime must comply with the requirements of 49 CFR.

At the time of the bid opening, all Bidders shall submit with their bid a Disadvantaged Business Enterprise (DBE) Commitment Form provided by the Department. This form will list the DBE and non-DBE firms that are proposed to be used during the execution of the Work. The list shall show the name of the firm, the item/material/type of work involved and the dollar amount of work to be performed. The dollar total of each commitment shall be totaled and a percentage determined.

If the project goal is not met, acceptable documentation showing all good faith efforts made to obtain participation may be required in order to award the project. Failure to provide the required listing with the dollar participation total or acceptable documentation of good faith efforts to obtain DBE participation within 3 days after the bid opening date will be considered a lack of responsiveness on the part of the low bidder. Rejection of the low bid under these circumstances will require the low bidder to surrender the Proposal Guaranty to the Department. The submission and approval of the above forms does not constitute a formal subcontract.

If for any reason during the progress of the Work the Contractor finds that DBEs included on the list are unable to perform the proposed work, the Contractor, with written release by the committed DBE or approval of the Department, may substitute other DBE firms for those named on the list. If the Contractor is able to clearly document their inability to find qualified substitute firms to meet the project goal, the Contractor may request in writing approval to substitute the DBE with a non-DBE firm. If at any time during the life of the Contract it is determined that the Contractor is not fulfilling the goal or commitment(s) and is not making a good faith effort to fulfill the DBE requirement, the Department may withhold progress payments. If good faith effort is determined by the Department, failure to meet the DBE contract goal will not be a detriment to the bid award. Fulfillment of the goal percentage shall be determined by dividing the dollars committed to the DBEs by the actual contract dollars. These requirements are in addition to all other Equal Employment Opportunity requirements on Federal-aid contracts.

105.10.1.5 Certification of DBE attainment on Contracts The MaineDOT must certify that it has conducted post-award monitoring of all contracts to ensure that DBEs had done the work for which credit was claimed. The certification is for the purpose of ensuring accountability for monitoring which the regulation already requires. The MaineDOT will certify these contracts through review of CUF forms, Elations sub-contract payment tracking as well as occasional on-site reviews of projects and through the project's final closeout documentation provided by our Contracts Section.

105.10.1.6 Bidders' List Survey Pursuant to 49 CFR 26.11 the MaineDOT is required to "create and maintain" a bidders list and gather bidder information on our construction/consultant projects, Contractors will maintain information on all subcontract bids submitted by DBE and Non-DBE firms and provide that information to the Department. The Following information is required:

Firm Name
Firm Address
Firm status (DBE or non-DBE)
Age of firm (years)
And the annual gross receipts amount as indicated by defined brackets, i.e. $500,000 to $800,000, rather than requesting exact figures.

Not only is this information critical in determining the availability of DBE businesses relative to other businesses that do similar work, but the Federal Highway Administration requires that we obtain this information.

Frenchboro, Bass Hbr.,
Swans Is. 22202.00
, 23476.00,
23480.00
April 28, 2020

MaineDOT DBE Project Attainment Target (PAT)
for this Project is N/A

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.

December 5, 2011
Supersedes December 1, 2010

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(Buy America Certification)

105.11 Federal Requirements Add the following as the third and subsequent paragraphs:

"Prior to payment by the Department, the Contractor shall provide a certification from the producer of steel or iron, or any product containing steel or iron as a component, stating that all steel or iron furnished or incorporated into the furnished product was manufactured in the United States in accordance with the requirements of the Buy America provisions of 23 CFR 635.410, as amended. Such certification shall also include (1) a statement that the iron or steel product or component was produced entirely within the United States, or (2) a statement that the iron or steel product or component was produced within the United States except for minimal quantities of foreign steel and iron valued at $ (actual value).

All manufacturing processes must take place domestically. Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size and shape, or the final finish is considered a manufacturing process. These processes include rolling, extruding, machining, bending, grinding, drilling, and coating. "Coating" includes epoxy coating, galvanizing, painting, or any other coating that protects or enhances the value of the material.

A Buy America Certification is required from each manufacturer, fabricator, supplier, subcontractor, etc. that meets the "manufacturing" definition above.

Buy America does not apply to raw materials (iron ore and alloys), scrap, pig iron, or processed, pelletized, and reduced iron ore."

SPECIAL PROVISION

SECTION 202
REMOVING STRUCTURES AND OBSTRUCTIONS (Removing, Storing, and Resetting Structures and Obstructions – Chock)

All work and materials shall conform to the Contract Drawings and provisions of the State of Maine, Department of Transportation, Standard Specifications, March 2020, SECTION 202, REMOVING STRUCTURES AND OBSTRUCTIONS, with the following changes:

202.01 Description

The following paragraphs are added:

Removing, Storing, and Resetting Structures and Obstructions – Chock shall include the removal of the chock, its temporary on-site storage, and resetting.

202.07 Method of Measurement

Add the following paragraphs:

Removing, Storing, and Resetting Structures and Obstructions – Chock shall be measured by the unit, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

202.08 Basis of Payment

Add the following paragraphs:

Removing, Storing, and Resetting Structures and Obstructions – Chock will be paid for at the Contract unit price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications. Payment shall include the removal of the chock, anchor bolts, and base grout. Bolts shall be removed below the concrete surface and filled with a non-shrink grout. The chock shall be cleaned and reset atop a new pad of grout and reset with new anchor bolts.

Payment will be made under:

Pay Item	Description	Pay Unit
202.110	Removing, Storing, and Resetting Structures and Obstructions – Chock	Each

SPECIAL PROVISION

SECTION 202
REMOVING STRUCTURES AND OBSTRUCTIONS
(Remove Existing Structural Timber)

All work and materials shall conform to the Contract Drawings and provisions of the State of Maine, Department of Transportation, Standard Specifications, March 2020, SECTION 202, REMOVING STRUCTURES AND OBSTRUCTIONS, with the following changes:

202.01 Description

The following paragraphs are added:

Remove Existing Structural Timber shall include all timber walkways, timber stairways, and timber handrails

The Contractor shall not let demolished material fall into the water and all materials that do enter the water shall be immediately retrieved by the Contractor.

202.07 Method of Measurement

Add the following paragraphs:

Remove Existing Structural Timber shall be measured by the lump sum, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

202.08 Basis of Payment

Add the following paragraphs:

Remove Existing Structural Timber will be paid for at the Contract lump sum price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, disposal, tipping fees, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Payment will be made under:

Pay Item	Description	Pay Unit
202.1292	Remove Existing Structural Timber	Lump Sum

SPECIAL PROVISION
SECTION 202
REMOVING STRUCTURES AND OBSTRUCTIONS
(Removing Embedded Timber Pile by Extraction)

All work and materials shall conform to the Contract Drawings and provisions of the State of Maine, Department of Transportation, Standard Specifications, March 2020, SECTION 202, REMOVING STRUCTURES AND OBSTRUCTIONS, with the following changes:

202.01 Description

The following paragraphs are added:

Removing Embedded Timber Pile by Extraction shall include the removal of the timber piles of existing timber pile dolphins, timber connections, and attached steel hardware. The Contractor shall take care to contain all debris created during pile dolphin removal.

202.07 Method of Measurement

Add the following paragraphs:

Removing Embedded Timber Pile by Extraction shall be measured by the unit, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

202.08 Basis of Payment

Add the following paragraphs:

Removing Embedded Timber Pile by Extraction will be paid for at the Contract unit price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications. Payment for timber pile removal shall include the removal of the timber pile via extraction using a vibratory hammer. Pile removal may also include wire strands and braces which are incidental to the pay item.

Payment will be made under:

Pay Item	Description	Pay Unit
202.4011	Removing Embedded Timber Pile by Extraction	Each

SPECIAL PROVISION
SECTION 501
FOUNDATION PILES
(Steel Pipe Piles)
(Rock Socket)
(Drilling Equipment Mobilization)
(Pile Tips)
(Pile Splices)

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 501 – FOUNDATION PILES, with the following modifications:

501.01 Description

This Subsection is replaced with the following:

This work shall consist of furnishing and installing pipe piles, including socketing the pipe piles into bedrock; cleaning out pipe piles; and furnishing concrete and filling pipe piles with concrete in accordance with the Contract Plans and Specifications. Pipe piles shall be installed open-ended, advanced into rock using an acceptable drilling method, and cleaned of overburden and rock spoils/ drill cuttings.

Drilling, furnishing, installing, testing, and tensioning rock anchors in pipe piles shall be in accordance with Special Provision 504, Rock Anchors.

501.013 Submittals

Add this Subsection:

A minimum of four (4) weeks prior to the start of installation of the rock socketed pipe piles, the Contractor performing the work set forth in this Special Provision shall submit a Quality Control Plan (QCP) that is prepared in accordance with Subsection 501.03 of this Special Provision for review by the Department.

501.02 Materials

This Subsection is amended with the following:

Pipe pile material shall meet the requirements of ASTM A252, Grade 3 with minimum yield strength of 45 ksi per MaineDOT Standard Specification 711.01.

Pipe pile shoes shall support installation by open-ended drilling operations and shall meet or exceed the strength requirements of ASTM A148, Grade 90-60 for steel casings.

Pipe pile splice backup ring material shall be any steel listed in AWS Structural Steel Welding Code D1.1, Table 3.1 with the exception of 100 ksi minimum yield strength steels.

Concrete for Steel Pile pipe shall be Class A and shall meet the requirements of Section 502 - Structural Concrete.

Steel pipe pile material shall be coated with a Fusion Bonded Epoxy Coating as specified in SECTION 506 – SHOP APPLIED PROTECTIVE COATING – STEEL. The limit of fusion bonded epoxy coating applied to the steel pipe piles shall be the entire length of the pile.

Turbidity control measures shall be designed to prevent entanglement or entrapment of ESA-listed species. Pile installation shall occur within a turbidity curtain.

501.03 Quality Control Plan

This Subsection is replaced with the following:

The Contractor shall control the quality of the foundation piles through practices and inspection, which shall be described in the Contractor-prepared Quality Control Plan (QCP), sufficient to assure a product meeting the Contract requirements. A QCP for socketed pipe pile foundations shall be prepared by the Contractor and submitted in accordance with Subsection 106.4.1 of the Standard Specifications. The QCP shall meet the requirements of Section 106, Quality, Section 501, Foundation Piles, and this Special Provision. The Department will use criteria established in the approved QCP to accept the work provided in this Special Provision.

No work under this item shall proceed until the QCP, or amendments to the QCP, is submitted to and approved by the Resident.

The QCP shall address all elements that affect the quality of the foundation piles, including but not limited to, the following:

A. Installation Equipment - List and description of proposed equipment to be used for pipe pile installation, including cranes, bit and/or shoe assemblies proposed for use on the pipe piles, and equipment for drilling through overburden and socketing the pipe piles into bedrock, cleaning, checking cleanliness, and concreting.

B. Installation Procedures - Details of overall socketed pipe pile and rock anchor construction sequence. Details of proposed procedures and sequence for pipe pile installation, including methods for drilling overburden and bedrock, methods for confirming the top of competent bedrock and for confirming adequate length of rock socket, cleaning, concreting and details of attachments for angles and anodes.

C. Details of template to be constructed to assure proper position and alignment/plumbness of the piles and proposed method for minimizing damage to the pipe pile coating.

D. Procedures for advancing through boulders and other obstructions.

A. Procedures for flushing drill spoils, containment of drilling fluid and spoils, and disposal of spoils.

B. Number of Pile Splices, locations and details.

C. Procedures for achieving and verifying the pipe piles meet the project tolerances.

D. Installation Log Form and an example installation record. The Contractor shall maintain a log during pipe pile installation through overburden and into bedrock, cleaning, and preparation for rock anchor installation activities. The log shall include, but is not limited to the following: drill rig operator, inspector name, bit and/or shoe assembly used, drilling method used, drill rig type and model, drill rig output (i.e., down pressure, torque, RPM) as appropriate for the rig being used, description of overburden and bedrock encountered, advancement rate per foot in overburden and bedrock, advancement observations, depth of any obstructions, description of unusual behavior and/or conditions, deviations from anticipated parameters/conditions, and cleaning methods. The log shall demonstrate the pipe pile achieves an acceptable rock socket and is cleaned of drill spoils. All methods to be used to identify the depth to the top of competent rock and subsequent depth of the rock socket shall be identified on the log. These should include, but not be limited to, visual examination of the drill spoils, and advancement rates and advancement observations over small enough depth increments (e.g. inches) to identify boulders and/or cobbles overlying bedrock or open fractures within bedrock.

E. Pipe Pile Contractor's Experience - Proof of the successful installation of drilled socketed pipe piles with similar diameter and length and using drilling methods similar to those required in the Contract Plans and this Special Provision for a minimum of three (3) prior projects.

F. Pipe Pile Contractor's Personnel - List identifying the following Contractor's personnel assigned to the project, together with their experience installing drilled socketed pipe piles of both the diameter and length similar to those required for the work covered in the Contract Plans and this Special Provision: on-site supervisor, QC personnel, and drill rig operators. On-site supervisors and QC personnel shall have supervised the successful installation of drilled socketed pipe piles on at least two (2) projects under similar site conditions. Drill rig operators shall have at least one (1) year experience in construction of socketed pipe pile foundations.

The Contractor's Schedule of Work shall allow time for the review of the QCP or amendments to the QCP, as noted in Section 106.4.1.B, Approval.

Submittals for drilling and installing rock anchors within pipe pile encasements shall be in accordance with Special Provision 504 - Rock Anchors.

The Department will evaluate the QCP / pipe pile installation plan, and all procedural approvals given by the Resident shall be subject to trial in the field and shall not relieve the Contractor of the responsibility to satisfactorily complete the work as detailed in the Plans and Specifications. Failure by the Contractor to demonstrate adequate methods and equipment shall be reason for the Resident to require alterations in equipment and/or method by the Contractor to eliminate unsatisfactory results. Any altered methods or construction equipment shall be at the Contractor's expense and incidental to the related Contract items.

501.042 Equipment for Installing Piles

This Subsection is replaced with the following:

Pipe piles shall be installed open-ended. The pipe piles shall be advanced through overburden and into rock to achieve the required rock socket using an acceptable drilling method. Acceptable drilling methods include rotary percussion with a down-the-hole (DTH) hammer, rotary drilling, and diamond drilling. The pipe pile shall be advanced with the bore; open / unsupported bores into which the pipe pile is subsequently placed will not be allowed. Installation of the pipe piles using traditional driving methods will not be allowed. Drill cuttings shall be removed from the bore as the pipe pile is advanced. Cuttings shall be contained to allow for visual examination.

Drilling equipment shall have adequate capacity, including power, torque and down thrust to drill a bore of both the diameter and to an overburden depth 20% beyond the depth indicated on the Plans and to 10 feet into competent rock of the type observed in the project test borings.

During pipe pile installation operations, the Contractor shall use the approved equipment. No variations in the equipment will be permitted without an amendment to the QCP.

Acceptance of the pipe pile installation equipment does not relieve the Contractor of the responsibility to properly install the piling.

501.043 Installation Procedures and Tolerances

This Subsection is replaced with the following:

Hours of Operation Pile installation shall be limited to the hours of 7:00 AM to 7:00 PM. Preparation for and clean-up of pile installation activities shall be limited to the hours of 6:00 AM to 8:00 PM in accordance with the Terminal Manager.

Installation General Pipe piles shall be installed open-ended using drilling methods. The pipe piles shall be socketed into bedrock to the depths indicated on the Plans, cleaned out, and their locations and rock socket accepted prior to installing grout plugs and rock anchors.

In accordance with the accepted QCP, the Contractor shall maintain a log during pipe pile installation through overburden and into bedrock, cleaning, and preparation for rock anchor installation activities. The log shall include, but is not limited to the following: bit and/or shoe assembly used, drilling method used, drill rig type and model, drill rig output (i.e., down pressure, torque, RPM) as appropriate for the rig being used, advancement rate per foot, or shorter intervals, in overburden and bedrock, advancement observations, depth of any obstructions, description of drill spoils from key depths, and cleaning methods. The log shall demonstrate the pipe pile achieves an acceptable rock socket and is cleaned of drill spoils.

The sequence for installing the pipe piles shall be as set forth in the accepted QCP. The Contractor shall furnish all assistance required by the Resident and/or inspectors to make any observations and measurements. Prior to commencing pile installation, elevation control shall be established. Elevation control shall be sufficient to allow observers to track installation elevations. If the reference elevation is subject to fluctuating with the tide, a tide board with its own reference elevation shall be established. Prior to placing any pile section in the leads, the Contractor shall make the pile section available for measurement and/or foot and inch marking by the Resident or inspector.

Drill spoils shall be removed from the bore as the pipe pile is advanced. If used, water may be recirculated. Cuttings shall be available for visual examination by the inspector. Upon completion of the drilling operations, the spoils which are removed and collected from pipe piles shall be disposed of by the Contractor in accordance with the applicable specifications for disposal of excavated materials.

The Contractor shall deploy the turbidity curtains prior to pile installation. Upon commencement of the pile installation activities, the Contractor shall begin with a “soft-start” to allow animals within the immediate vicinity an opportunity to leave the area before sound pressure increases.

The Contractor shall handle the coated piles in a manner that does not cause impact or abrasive damage by the pile leads, installation equipment, or pile installation template/frame. The installation frame shall be cushioned or coated to prevent damage to the coating during pile installation.

Coating damaged during installation due to pile installation, cutting, welding, or other operation shall be repaired as per the submitted and approved field repair plan or as directed by the Resident and the manufacturer’s representative. When necessary, coated pipe pile shall be cut in accordance with submitted and approved field process plan using an abrasive cut-off wheel suitable of cutting 5/8” minimum thickness ASTM A252, Grade 3 steel or other method approved by the Resident and the manufacturer’s representative. A heat sink comprised of wet fabric in contact with the coating or as required by the manufacturer, will be required adjacent to areas that will be thermal cut to minimize heat damage to the coating. The Contractor shall assure that repair personnel are available in a reasonable time period for any necessary repairs.

Do not continue advancing the repaired pile until the coating has cured. Coating that has been damaged by thermal cutting but will be embedded in the concrete pile cap need not be repaired.

The pipe piles shall first be drilled through overburden and to the top of competent bedrock, using methods that permit the pipe pile to subsequently be socketed to the required depth into competent bedrock. The pipe pile shall be advanced the required depth into competent bedrock using drilling methods to form the rock socket. Drill spoils shall be removed as the pipe pile is advanced. The Contractor shall perform the necessary cleaning/flushing of drill spoils such that the pipe pile is clean of debris and ready for rock anchor installation in an acceptable fashion. No separate payment will be made for either cleaning out of materials of different densities or employment of special tools or procedures necessary to accomplish the excavation. If after cleaning it is determined by the Resident that the pile is

not socketed the required depth into bedrock, the pile shall be advanced further by drilling and cleaned out again.

Surface and subsurface obstructions at the pipe pile locations, both internal and external, shall be removed or otherwise penetrated by the Contractor. Such obstructions may include, but are not limited to riprap, timbers, cobbles, and boulders. Jetting and/or air tool methods may not be used without the approval of the Resident. No additional compensation will be allowed for removing or penetrating obstructions.

Upon installation, all piles shall be inspected and any pipe piles showing bends, crushing, kinks or other deformations that would impair the strength, efficiency, or axial capacity of the completed piles shall be replaced or repaired in a manner satisfactory to the Resident. Repairing or replacing any such damaged pipe pile as ordered by the Resident will be at no additional expense to the Department.

Rock anchors shall not be constructed until the pipe piles have been checked for location/alignment/plumbness and cleanliness and the piles are accepted. During rock anchor installation, the Contractor shall maintain a positive seal of pipe pile in the bedrock socket to prevent entry of overburden, or piping in of overburden into the anchor drill hole or the pile. This shall be accomplished by installing a grout plug upon acceptance of the pipe piles by the Resident at no additional cost.

Rock anchor installation shall be in accordance with Special Provision 504 – Rock Anchors. During rock anchor drilling, overcutting of the bedrock surface into which the pipe pile is socketed will not be permitted. If it occurs, the pipe pile shall be drilled further into bedrock at no additional cost to the Department. The Contractor shall bear all costs associated with resetting the pipe pile if over-breakage occurs during flushing operations or rock anchor installation operations.

Pipe piles shall maintain intimate contact with bedrock after drilling the rock anchor hole to preserve the axial load carrying capacity achieved by end bearing on bedrock over the entire pile tip surface area (less the rock anchor drill hole). If the pile/bedrock contact is disturbed during rock anchor installation or cleanout, the bedrock socket for the pile shall be re-drilled and/or extended in accordance with project requirements at no additional cost to the Department.

Tolerances The following construction tolerances apply:

(a) The pipe pile shall be within 2 inches of the plan position in the horizontal plane at the plan elevation for the top of the pile. Pulling of pipe piles into position will not be permitted.

(b) Vertical alignment of a pipe pile shall not vary from the plan alignment by more than ¼ inch per foot of length. The alignment of a battered pile shall not vary by more than ½ inch per foot of length from the prescribed batter.

(c) The installation log maintained in accordance with the QCP shall demonstrate the minimum required bedrock socket length is achieved.

Pipe piles not constructed within the required tolerances are unacceptable. The Contractor shall be responsible for correcting all unacceptable pipe pile installations to the satisfaction of the Resident. Materials and work necessary, including work to correct pipe piles that are out of tolerance shall be furnished without either cost to the Department or an extension of the completion dates of the project.

501.044 Special Requirements for Steel Pipe Piles and Steel Casings

The first five paragraphs shall be deleted and replaced with the following paragraphs:

Pipe piles shall be installed open-ended using drilling methods. The pipe piles shall be socketed into bedrock to the depths indicated on the Plans, cleaned out, and their locations and rock socket accepted prior to installing rock anchors.

Concreting The rock anchor shall be installed/grouted, cured, tested, and accepted, the temporary casing for the anchor rod shall be removed and the pipe pile shall be flushed clean prior to concreting the

pipe pile. Deviation from this sequence shall only be allowed if set forth in the accepted QCP. Concreting the pipe pile prior to testing and acceptance of the rock anchor shall be at the Contractor's risk. Remediation of failing rock anchors will be at the Contractor's expense.

Concrete for Steel Pipe Piles shall be Class A and shall meet the requirements of Section 502 - Structural Concrete. Concrete shall be placed as soon as possible after reinforcement has been placed, if required. Concrete placement shall be continuous from the bottom to the top elevation of the pipe pile without causing water contamination. Concrete shall be placed through a tremie or concrete pump. The tremie discharge end shall be immersed at least 5 feet in concrete, at all times, after starting the flow of concrete. An internal type vibrator shall be used in the top 25 feet. Any voids occurring in the top portion of the pile concrete shall be filled with dry pack mortar. Pile heads shall be protected and cured in accordance with Section 502, Structural Concrete.

Prior to concreting, the temporary casing for the anchor rod installation shall be removed. The bond-break sheathing over the rock anchor threaded bar shall be protected from damage during concrete placement.

Inspection and Acceptance The Contractor shall keep a daily construction record, including detailed pipe pile installation logs, which shall be submitted to the Resident each day. Prior to rock anchor installation in accordance with Special Provision 504, the Contractor shall provide access and equipment for checking the location and alignment of each pipe pile and for checking the condition of the pipe pile to be free from rupture and undue deformation, and cleanliness of installation. Pipe pile cleanliness will be demonstrated by the Contractor to the satisfaction of the Resident prior to and again at the completion of rock anchor installation. Concrete placement shall not begin until the Resident's approval of the rock anchor and pipe pile has been obtained. The Resident shall be allowed unrestricted access.

501.046 Driven Pile Resistance, Pile Testing, and Acceptance

This Subsection is deleted in its entirety.

501.05 Method of Measurement

Add the following paragraphs to Paragraph (c):

Steel Pipe Piles, Delivered shall include full compensation for the delivery and on-site storage of the pipe pile prior to its installation.

Steel Pipe Piles, In-Place shall include full compensation for installing pipe pile to the top of competent bedrock, concrete pile fill, and pipe pile and hole cleaning, including temporary casings and centralizers (if used) augers, drilling equipment, air lifting equipment, jetting equipment, and special tools to clean the pipe pile to the depth indicated on the plans. The pay item shall also include removal and disposal of excavated materials, and furnishing all other labor, materials, and equipment necessary to complete this work.

Installation of rock anchors in pipe piles shall be paid under Pay Item 504.9051.

No separate payment shall be made for the removal of obstructions, such as cobbles, timbers, riprap, or boulders. No separate payment shall be paid for earth or rock excavation, drilling, pre-augering, or other methods to clean inside the pile.

Rock Socket shall include full compensation for drilling the rock socket to the required diameter and depth in competent bedrock and advancing the pipe pile to the bottom of the rock socket. Cleaning out of the pipe pile and the installation of a grout plug shall be incidental to the Rock Socketed Pipe Pile pay item.

Pile Tips shall consist of pipe pile bit and/or shoe assemblies and shall be measured under the Contract item unit.

No separate measurement will be made for pile splices which occur within the estimated length of the pile. Pile splices will only be measured for payment, at the Contract item unit, when said splices are required to achieve a pile length greater than the estimated pile length shown on the Plans due to unforeseen site conditions that warrant an additional length.

No separate measurement will be made for installation, maintenance, and removal of temporary turbidity curtains and debris booms. These items shall be incidental to the Contract.

No separate measurement will be made for surveys required to locate existing timber piles or cribs; layout the proposed piles; or monitor pile heave. Surveys shall be incidental to the Steel Pipe Pile, In-Place pay item.

501.06 Basis of Payment:

Add the following paragraphs:

The accepted quantities of Steel Pipe Piles, Delivered and In-Place will be paid for at the Contract price per linear foot, for the measure of work completed and accepted by the Resident. Such payment shall constitute full compensation for providing all labor, materials, and equipment and for all incidental items necessary for the completion of the work, as described in the paragraphs above.

Rock Socket shall be paid at the Contract unit price per linear foot of rock socket of the diameter specified. Such payment shall be full compensation for all labor, materials, equipment, tools, and drilling equipment.

Drilling Equipment Mobilization shall be paid at the lump sum price for the mobilization of all equipment, tools, and drilling equipment.

The accepted quantities of Pile Tips will be paid for at the Contract unit price for work completed and accepted by the Resident. Such payment shall constitute full compensation for providing all labor, materials, and equipment and for all incidental items necessary for the completion of the work, as described in the paragraphs above.

Pile splices which occur within the estimated pile length shown on the Plans will not be paid for separately, but shall be incidental to the Steel Pipe Pile, In-Place, and Rock Socket pay items. Pile splices required to achieve a pile length greater than the estimated pile length shown on the Plans, shall be paid for at the Contract unit price.

Fusion bonded epoxy coating shall be paid for separately under Pay Item 506.9106, Fusion Bonded Epoxy Coating.

Anodes will be paid for separately under Pay Item 655.501, Cathodic Protection by Sacrificial Anodes.

The last line and table of pay items shall be deleted and replaced with the following:

Payment will be made under:

Pay Items	Description	Pay Unit
501.70	Steel Pipe Piles (16” dia.), Delivered	Linear Foot
501.701	Steel Pipe Piles (16” dia.), In-Place	Linear Foot
501.802	Rock Socket	Linear Foot
501.804	Drilling Equipment Mobilization	Lump Sum
501.90	Pile Tips	Each
501.91	Pile Splices	Each

SPECIAL PROVISION
SECTION 501
FOUNDATION PILES
(Timber Pile, Delivered)
(Timber Pile, In-Place)
(Pile Point)

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 501 – FOUNDATION PILES, with the following modifications:

501.01 Description

Add the following paragraph:

The work also includes the following:

This section applies to all work necessary by the Contractor to comply with the timber pile requirements listed herein and in accordance with the drawings. Contractor shall be qualified in the field of timber pile driving and installation with a at least five years experience.

Timber piles shall be installed in conjunction with the wave screen located between dolphins.

501.011 General References

Add the following paragraph:

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
ASTM D 25 (1999e1) Round Timber Piles

B. AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA)
AWPA C1 (2000) All Timber- Products - Preservative Treatment by Pressure Processes
AWPA C3 (1999) Piles - Preservative Treatment by Pressure Processes
AWPA M4 (2001) Standard for the Care of Preservative-Treated Wood Products
AWPA P5 (2002) Standard for Waterborne Preservatives
AWPA M6 (1996) Brands Used on Forest Products

Except as otherwise indicated on the drawings or specified herein, the industry standards shall apply to all work under this section. Where requirements indicate on the drawings or specified herein differ from the industry standards, the more stringent requirements shall govern.

501.015 Submittals

This Subsection is added and shall include the following:

The Contractor shall provide the submittals listed below in accordance with Section 105.70 of the MaineDOT Standard Specification. Specific components of the submittals are listed in the referenced MaineDOT SECTION 501.

1. Pile Driving Equipment
    a. Manufacturer's literature, including technical and performance literature for pile driving hammer(s), cushions, hoses, and other equipment for the piles.

2. Documentation
   a. Pile number plan and layout with numbering
   b. Installation procedure for all piles.
   c. Pile as-built survey plan.

3. Product Data:
   a. Pile Driving Equipment - Submit complete descriptions of pile driving equipment, including hammers, leads, driving helmets, cushion blocks, driving blocks, collars, extractors, and other appurtenances for approval prior to commencement of work.
   b. Timber Piles

4. Records: Submit pile driving records within seven calendar days after completion of driving.

501.018 Delivery, Storage, and Handling

A. The Contractor shall inspect each pile, upon delivery, for surface damage, cracks, blemishes, scaring and straightness. The condition of each pile shall be recorded and the delivery inspection report shall be submitted to the Contracting Officer. The Contractor shall handle the piles with ropes or nylon slings without dropping, breaking, bruising or penetrating outer surface with tools. Do not use cant dogs, peaveys, hooks or pike-poles. Protect piles from damage.

B. Store piles above the ground on blocking which is shaped or padded and prevent scaring or sagging of the piles. Storage racks shall be arranged to permit air circulation and piles shall be covered from direct sunlight. Piles shall be lowered to dunnage with crane or fork lift. Piles are not to be rolled off tines of forklift.

501.02 Materials

This Subsection is amended with the following:

A. Provide Southern Yellow Pine timber piles, clean-peeled and treated as specified. Piles shall be in one piece. Splices will not be permitted. Each treated pile shall be branded by the producer, in accordance with AWPA M6. Wood piles shall be Southern Yellow Pine of minimum lengths required under Installation Section and shall comply with the requirements of ASTM D-25, current edition. Timber piling shall be fresh cut from sound live timber. Piles shall be cut above the ground swell. Diameters shall be measured under the bark. Piles shall taper gradually and uniformly from butt to tip, to be free of short kinks, and be straight so that a line stretched from the center of each end of the pile will fall wholly within the pile. Knots shall be sound and shall be trimmed close. No knot or knot cluster shall have an average diameter exceeding one-third (1/3) the diameter of the pile at the point where the knot occurs. Piles shall be otherwise free from defects impairing strength and durability. Piles shall be peeled. Piles are to receive pressure treatment and shall be peeled before pressure treatment, removing all the outer or rough bark and at least ninety percentum (90%) of the inner bark measured at any circumference. No strip of inner bark more than three quarters (3/4") wide or eight inches (8") long shall be left, and there shall be at least one inch (1") of clean wood between any two such strips. All piles shall be delivered in good condition. Piles shall have butt and tip sawed square with the axis of the pile, or the tip may be tapered to a point not less than eight inches (8") in diameter.

B. Splices will not be permitted.

C. Pile dimensions shall be as follows:
   1) Pile diameter at the butt shall be between 16 to 18 inches inclusive.
   2) Pile diameter at the tip shall be equal or greater than 8 inches.
   3) Pile length shall be equal to or greater than 40 ft.

D. Pile tops shall be covered with plastic caps which are nailed to the top of piles around the circumference of the pile. The PVC caps atop the timber piles shall be flat and white.

E. Preservative Treatment: Treat piles by the full-cell pressure process in accordance with AWPA C1 and AWPA C3 to the retention and penetration for marine piling, as follows:
   1) Southern Pine: Waterborne preservatives for marine use shall be CCA in accordance with AWPA P5 and with a minimum retention of 2.5 pounds per cubic foot for use UC5A in heavy industrial salt water marine application.

F. Pile Points: Steel welded-plate point shoe especially fabricated for pile driving. Provide size to fit pile tip. Fabricate boot of carbon steel fully welded.

501.043 Installation Procedures and Tolerances

The following paragraphs are added:

A. Inspect piles when delivered and when in the leads immediately before driving. Secure piles in their proper alignment.

B. Pile hammer shall be air, steam, or diesel powered, and of an approved type with a capacity at least equal to the hammer manufacturer's recommendation for the total weight of pile and character of subsurface material to be encountered. Driving shall be done with fixed leads which will hold the pile firmly in position and alignment and in axial alignment with the hammer. A suitable cushion block shall be used to prevent undue damage of the pile butts. Timber piles shall be driven to practicable refusal. The Contractor shall complete and submit a WEAP analysis based on the actual pile driving equipment beforehand to verify that proposed equipment will not overstress the piles. Driving of piles shall be continuous without interruption until pile has been driven to final resistance or tip elevation. Note boring logs provided in the plan set for approximate elevation of bedrock. The tops of piles shall be cut off true and beveled at elevations shown on drawings. All broomed, crushed, or otherwise damaged materials at the head of the pile shall be removed before capping.

C. Damaged and Mis-Driven Piles: Broken or shattered piles will not be accepted. Tolerances: If the axis of any pile is installed out of plumb by more than 2 percent of the pile length, the design of the wave screen shall be modified as may be necessary to resist the resulting vertical and lateral forces. A tolerance of 3 inches (3") from the designed location shall be permitted in the installation of each pile, without reduction in load capacity of the pile group. Where piles are installed out of position in excess of this amount, the true loading on such piles shall be analytically determined from a survey which defines the actual location of the piles as driven, and using the actual eccentricity in the pile group with respect to the line of action of the applied load. Should any pile be damaged by overdriving or not conform to the tolerance of the specification, an extra pile or piles shall be driven in its place at the contractor's expense, as directed by the engineer. Piles rejected after driving may remain in the ground and cut off as directed. When a rejected pile is withdrawn, the space, if another pile is not driven into it, shall be filled solid with gravel or broken stone without payment therefor.

D. Provide pile points and driving pads as recommended by the pile manufacturer for the timber piles. If a pile fails to reach the indicated tip elevation, notify Resident immediately, provide pile record with sufficient information, and perform corrective measures as directed.

E. Piles shall be driven in the location indicated. Piles may be manipulated a maximum of 0.25

inch per foot of pile length in a direction parallel to the wave screen and 0.25 inch per foot of pile length in a direction perpendicular to the wave screen. Remove and replace with new piles those damaged, dislocated, driven below the design cutoff, or driven out of alignment.

F. The cut-off elevation shall be determined from structural plans. Cut off piles with a smooth bevel cut using pneumatic tools or sawing. Use of explosives or burning for cutting is not permitted. Pile heads at cut-off shall be level and sound.

G. Jetting or spudding of piles shall not be permitted without the approval of the Resident.

H. The test boring represents information showing conditions on the dates indicated. This boring data is not guaranteed by the Department. It is only to be used by the Contractor to the extent desirable and is subject to the Contractor's verification.

FIELD TREATMENT

A. Field treat cuts, bevels, notches, refacing and abrasions made in the field in accordance with the manufacturer’s recommendations. The tops of the piles shall be covered with an approved pile top. The cover shall be applied per the manufacturer’s recommendations.

B. Given the nature and location of the wave screen, it is not necessary to counterbore holes for bolts. Drill holes for through bolts 1/16 inch larger than diameter of bolt shank. Drill holes for lag bolts not larger than body of bolt at base of tread. Piles shall have tops beveled outboard.

FIELD QUALITY CONTROL

A. When inspections result in product rejection, the Contractor shall promptly segregate and remove rejected material from the premises.

B. Each pile shall be measured for straightness prior to driving by placing a straight line from the center of the top to the center of the tip. The line shall lie entirely within the body of the pile. Piles not meeting this criteria shall be rejected.

C. Each pile shall be inspected for cracks prior to driving. Prior to final completion and acceptance of construction, each pile shall again be inspected for cracks. Cracking of the piles shall be cause for rejection. The Contractor shall be responsible for all costs incurred to replace the rejected piles.

FIELD DOCUMENTATION

A. For each driven pile, the pile driving inspector shall keep a record of the number of blows required for each foot of penetration and number of blows for the last 6 inches penetration or fraction thereof. Include in the record the pile location, the beginning and ending times of each operation during driving of the pile, model, type and size of hammer used, rate of operation, stroke or equivalent stroke for diesel hammer, including the initial stroke, final stroke and all other changes in stroke occurring during the pile driving, type and weight of driving helmet, and type and dimension of hammer cushion (capblock) and pile cushion used. Record retap data and unusual occurrences during pile driving.

B. Notify Resident 10 days prior to driving of piles. Make pile-driving records available to the Resident at the job site for a minimum of 48 hours after each day of driving.

C. The Contractor shall keep a record of each pile driven and shall furnish signed legible copies daily. The records shall give the size, length, location, type, safe load and penetration, and behavior during installation.

D. Obstructions: Contractor shall refer to the General Conditions in regard to his responsibility of obtaining all necessary information concerning actual site conditions. It is the Contractor's

responsibility to deliver a complete job.

501.05 Method of Measurement

Timber Pile, Delivered will be measured by the linear foot, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily deliver the timber piles to the job site. Measurement shall include pressure treatment and inspection.

Timber Pile, In-Place will be measured by the linear foot, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily install the timber piles in their design location. Measurement shall include all work associated with the installation of the piles.

Pile Points will be measured by the unit, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily manufacture and install the pile points to the timber piles.

501.06 Basis of Payment

Timber Pile, Delivered will be paid by the linear foot, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily deliver the timber piles to the job site. Payment shall include pressure treatment and inspection.

Timber Pile, In-Place will be paid by the linear foot measured after cut off, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily install the timber piles in their design location. Payment shall include all work associated with the installation of the piles.

Pile Points will be paid by the unit, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily manufacture and install the pile points to the timber piles.

Payment will be made under:

Pay Item	Description	Pay Unit
501.201	Timber Pile, Delivered	Linear Foot
501.202	Timber Pile, In-Place	Linear Foot
501.903	Pile Point	Each

SPECIAL PROVISION
SECTION 502
STRUCTURAL CONCRETE
(Structural Concrete, Pile Cap - Dolphin)

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 502 – STRUCTURAL CONCRETE, with the following modifications:

Section 502.01 Description

Add the following after the first paragraph:

This work shall consist of furnishing and placing Portland Cement Concrete for concrete waterfront structures including fill for steel pipe piles and dolphins in accordance with these Specifications and in conformity with the lines, grades, and dimensions shown on the Plans.

Section 502.05 Composition and Proportioning

Modify Table 1 in accordance with the following:

Concrete Class LP shall include Note 2: inclusion of Calcium Nitrite.

Modify Table 1, Note 2, in accordance with the following:

Calcium Nitrite shall be added at a rate of 5.0 gallons per cubic yard.

Section 502.18 Method of Measurement

Add the following before the first paragraph:

Measurement of concrete for the dolphins satisfactorily placed and accepted will be measured by the cubic yard in accordance with the dimensions shown on the Plans or authorized changes in the Plans. Fill for steel pipe piles will not be measured separately but shall be incidental to the Steel Pipe Pile In-Place Pay Item, 501.241.

Epoxy-coated steel reinforcement will be measured separately and shall be covered under Pay Items 503.14 and 503.15.

Concrete fill for mooring double bitts will not be measured separately but shall be incidental to Pay Item 841.55.

Section 502.19 Basis of Payment

Add the following before the first paragraph:

Structural Concrete, Pile Cap - Dolphin will be paid for at the Contract cubic yard price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Add the following Pay Items:

Pay Item	Description	Pay Unit
502.2351	Structural Concrete, Pile Cap - Dolphin	Cubic Yard

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

CLASS OF CONCRETE	ITEM NUMBER	DESCRIPTION	P	METHOD
LP	502.2351	Structural Concrete, Pile Cap - Dolphin	$450	A
A	501.241	Steel Pipe Piles (16” Dia.), In-Place	-	C
A	518.50	Repair of Upward Facing Surfaces – to Reinforcing Steel < 8 inches	-	C
A	518.51	Repair of Upward Facing Surfaces – below Reinforcing Steel	-	C
A	518.60	Repair of Upward Vertical Surfaces < 8 inches	-	C
A	841.55	Mooring Bollard - Double Bitt	-	C

P values listed above reflect the price per cubic yard (yd^3) for all pay adjustment purposes.

SPECIAL PROVISIONS
SECTION 504
STRUCTURAL STEEL
(Support Chain)
(Shear Chain)
(Tension Chain)
(1-Inch Dia. Shackle)
(U-Bolt Dogbone)
(Steel Fender Panel, Closed-Box, UHMW Wearing Surface (Type 1)
(Steel Fender Panel, Closed-Box, UHMW Wearing Surface (Extensions))
(Remove and Dispose Fender Panel)
(Remove and Dispose Fender Panel (Remove and Store))
(Remove and Dispose Fender Panel (Reset Stored Fender Panel))

All work and materials shall conform to the Contract Drawings and provisions of the State of Maine, Department of Transportation, Standard Specifications, March 2020, SECTION 504, STRUCTURAL STEEL, with the following changes:

504.01 Description

The following paragraphs are added:

This work shall consist of installing, modifying, and/or replacing the specified number of steel fender panels with a steel closed-box fender panel faced with a UHMW low-friction wearing surface.

Steel fender panels will be installed at the locations shown on the Contract Plans, which shall include chains and miscellaneous hardware.

Steel fender panels identified to be removed and stored shall be removed in their entirety complete with the rubber buckling fenders, the chains, and any miscellaneous hardware. The assembly shall be stored at Swan's Island terminal building. Exact location to be determined.

With respect to the above work elements, the Contractor shall coordinate the work contained within this special provision with the Terminal Manager to prevent conflicts with vessel schedules. See Section 104 of the Special Provisions for more information.

504.02 Materials

The following paragraphs are added:

The steel fender panels shall have a minimum yield strength of 50 ksi and all welding shall be in accordance with AWS D1.1 latest edition standards. The steel fender panels shall be manufactured by Maritime International of Broussard, LA or an approved equal.

The steel fender panels shall have a high chemical-resistant coating suitable for severe marine exposure such as a coating comprised of a cycloaliphatic amine epoxy topped with a coat of aliphatic acrylic polyurethane. Coatings shall be manufactured by Carboline of St. Louis, MO or an approved equal.

All steel chains, pad eyes, U-bolts, and shackles shall be hot dipped galvanized grade GR 3. The socket type embedment hardware must have a 316 stainless steel female socket and an ASTM A153 hot dipped galvanized ASTM A325 embedment bolt behind the socket. All bolts shall be ASTM A325 hot dipped galvanized. Panel side female mounting sockets shall be ASTM A304 stainless steel. All

hardware for mounting the fender panel including, chains, bolts, nuts, and washers shall be supplied by the fender manufacture to ensure a proper fit.

The UHMW wearing surface for the fender panels shall be made of 100% virgin material and cover the face of the panel including the faces of the bevels. The wearing surface shall be a minimum of 2.0-inches thick and black in color. The UHMW must be 2.5% UV stabilized. The UHMW materials must meet the following minimum standards as outlined in Table 1.

TABLE 1

Property	**Test Method**	**English Unit**	**English Value**
Density	ASTM D-792	lbs/ft^3	58
Molecular Weight	Viscosimetric	g/mol	4,200,000
Yield Strength	ASTM D-638	psi	3050
Ultimate Strength	ASTM D-638	psi	5800
Elongation at Break	ASTM D-638	%	250
Hardness	ASTM D-2240	Type D	68
IZOD Impact Strength	ASTM D-4020	$ft\text{-}lbs/in^2$	34
Tensile Impact	DIN 53448	$ft\text{-}lbs/in^2$	1050
Sand Wheel Wear	ASTM G-65	AR-01 Steel=100	90
Static Friction	ASTM D-1894	Unitless	0.15
Dynamic Friction	ASTM D-184	Unitless	0.12
Coefficient of Thermal Exp.	ASTM D-696	$°F^{-1}$	0.00011
Melting Point	ASTM D-3417	°F	278-289
Water Absorption	ASTM D-570	%	nil

504.031 Submittals

The following paragraphs are added:

The steel fender panel shop drawings and associated material specifications shall be submitted for review and approval. The following is a general list of the components to be included in the fender panel submittal:

- Detailed shop drawings illustrating the arrangement and dimensions of the proposed steel closed-box fender panel, wearing surface, chains, anchorages, and hardware;
- Calculations for the proposed design of the steel closed-box fender panel and the chains;
- Welding procedures and individual qualifications and certifications;
- Catalog data sheets for the proposed paint system;
- Product liability insurance certificate;
- A list of five completed projects with the same or similar steel closed-box fender panel;
- UHMW material data sheet;
- Packing and delivery procedures;
- Pressure test report of the steel closed-box fender panel;
- Test certificates for the rubber material properties; and
- Detailed installation and handling procedures for the supplied steel closed-box fender panel.

Information regarding the miscellaneous connections shall be submitted for review and approval. The following is a general list of the components to be included in the miscellaneous connections submittal:

- Material specifications and dimensions for chains;
- Material specifications and dimensions for shackles;
- Material specifications and dimensions for U-Bolt Dogbones;
- Material specifications and dimensions for pad eyes including installation procedures and epoxy resin materials; and
- Testing procedure for performing pull-out tests of existing anchorages.

504.032 General Requirements

The following paragraphs are added:

Removal and Disposal of Existing Fender Systems

At Bass Harbor, one existing fender panel shall be removed, transported, and stored as an assembly by the Contractor. Removal of the assembly shall also include the existing buckling fenders, chains, and shackles. The Resident shall determine the re-usability of these components based on a visual assessment of corrosion and deterioration, and notify the Engineer of Record of the condition. Future reuse of these elements shall be determined prior to the Contractor's relocations and storage of these materials to Swan's Island, ME.

Removal and Storage of Existing Fender Systems

At Swan's Island, the existing fender panels shall be removed, transported, and stored as an assembly by the Contractor. Removal of the assembly shall also include the existing buckling fenders, chains, and shackles. The Resident shall determine the re-usability of these components based on a visual assessment of corrosion and deterioration, and notify the Engineer of Record of the condition. Future reuse of these elements shall be determined prior to the Contractor's relocation and installation on Dolphins D7 and D8.

Retrieve and Install of Existing Fender Systems

At Frenchboro, the existing fender panels from Vinalhaven and Bass Harbor stored at Swan's Island, ME shall be retrieved and transported to the Frenchboro ferry terminal. The Resident shall determine the re-usability of these components based on a visual assessment of corrosion and deterioration and notify the Engineer of Record of the condition. Use of these elements shall be determined prior to the Contractor's installation on Dolphin D4.

Steel Closed-Box Fender Panel

The proposed fender panel shall be of the closed-box type and be rectangular in shape with a narrower top as shown on the Contract plans. The vertical length and horizontal width of the panel shall be as called out in the project drawings. Only the flat area of the panel that contacts the vessel shall be considered when calculating the hull pressure. The panel shall be designed and constructed according to the AISC Steel Construction Manual Specifications15th edition.

The panel shall be designed to include all possible loads imparted by the vessel onto the fender and shall include, but not be limited to, horizontal line loads at the extreme top and bottom of the flat portion of the panel. Each line load shall represent vessel impact and shall be applied independently of each other. The weight of the panel with the UHMW wearing surface shall not exceed 15,000 lbs.

All external fillet welds shall be seal welds to prevent corrosion. Pressure testing shall be performed to ensure an air and water tight seal. Pressure test results must be provided to the approval engineer prior to delivery of the panels.

All bolt holes shall be drilled or punched. The manufacturer is to supply current welding procedures as well as individual welder qualifications and certifications as part of their submittal documentation.

Steel Closed-Box Fender Panel Coating System

The proposed steel closed-box panel shall receive a surface preparation in accordance with SSPC-SP10 with an anchor profile of 2.5 mils. The minimum DFT of the coating shall be 16 mils nominal and inspected per SSPC-PA2. One manufacturer shall provide the coating system to ensure compatibility between coats and quality control of the final product. The specified coating thickness of the three-coat system shall be as follows:

1st Coat: 7-8 mils of Carboguard 890 (or approved equal)
2nd Coat: 7-8 mils of Carboguard 890 (or approved equal)
3rd Coat: 2-3 mils of Carbothane 134 HG, black (or approved equal)

Chains and Hardware

The proposed chains, shackles, U-Bolt Dogbones, and hardware shall prevent excessive shear and weight-induced deflection of the existing fenders. The proposed chains are identified by the anticipated minimum link-counts, and the Contractor shall field verify the actual number of chain links (length) required prior to ordering and purchase. All hardware such as shackles, pad eyes, and dogbones shall be hot dipped galvanized. All chains are mandatory and must be included in the design. Chain capacities shall have a minimum factor of safety of 2.

All anchorages and pad eyes for attaching the proposed chains to mounting surface are to be included and supplied by the fender manufacturer. Holes for pad eyes shall be drilled (not flame cut). All pad eyes and mounting hardware to be hot dipped galvanized.

Dolphin Pad Eyes

Pad eyes shall be of the prescribed strength and size and installed to the depths shown on the Contract Plans. The hole diameter for the pad eye shall be in accordance with the epoxy manufacturer's recommendation so as to achieve 125% of the design tensile strength of the bolt.

When installing the pad eyes, the Contractor shall be aware of the possibility that steel reinforcement may interrupt the drilling process. Layout of the pad eyes has been determined by review of the as-built steel reinforcement drawings and the locations of the anchor rods for the mooring hardware. When normal steel reinforcement is encountered within the first 3-inches of the concrete surface, then drilling shall stop and the Contractor shall relocate the hole 2-inches to either side of the first hole attempted. Normal steel reinforcement encountered beyond 3 inches of the concrete surface can be drilled through. The objective is to achieve the prescribed depth of the pad eye hole and not encounter steel reinforcement.

When pad eyes are tested for pull-out strength, any pad eyes that fracture shall be replaced by drilling and installing a new pad eye approximately 6-inches away laterally from the broken one. Pad eyes that pullout due to debondment between the bolt shaft and the concrete hole, may be replaced by a new pad eye using the same hole, provided depth and diameter requirements for the hole are met or achieved.

UHMW Wearing Surface

The UHMW wearing pads on the front face of the fender panels shall be drilled and counter bored for the studs or mounting bolts. The counter bored hole shall leave a minimum of 1/2-inch of material between the panel and the washer. The wear surface shall be a minimum of 1/2-inch. All mounting studs (or bolts) shall be a minimum of 5/8-inch diameter. All studs, bolts, washers and nuts shall be Alloy 316 stainless steel. All exposed edges of the UHMW shall include ¾-inch by 3/4-inch chamfers.

504.033 Performance Requirements

The following paragraphs are added:

The manufacturer of the steel closed-box fender panels shall review the design criteria shown on the Contract Plans regarding the vessel characteristics, berthing requirements, and minimum standoff requirements prior to designing and submitting the panel shop drawings and material specifications.

The thickness of the steel closed-box panel system shall be approximately 13 inches (+/- 2 inches) when considering the thickness of the steel box and the UHMW wearing surface.

The Contractor shall utilize steel shim plates or fender blocks as needed to make final adjustments of the standoff distance of the fender panel with relationship to the other fender panels along the pen.

504.65 Method of Measurement

The following paragraphs are added:

Support Chains, Shear Chains, Tension Chains, Shackles, U-Bolt Dogbones, and Pad Eyes shall will not be paid for separately but shall be incidental to the respective Fender Panel item. Installation of Pad Eyes (estimated quantity of 165) shall include drilling of the concrete hole (which shall include abandoning a drilled hole attempt if rebar is encountered within the first 3 inches), hole cleaning, and epoxy resin, and shall be incidental to the respective items.

Steel Fender Panel, Closed-Box, UHMW Wearing Surface shall be measured by the unit and shall include coatings, threaded inserts, UHMW wearing surfaces, and any offsetting steel or UHMW pieces. Installation of the steel backing pipes, hardware, and contoured/beveled plates will be included in this item (whether the materials are new or salvaged).

At Bass Harbor, Remove and Dispose Fender Panel shall be measured by the unit removed, transported, and stored in accordance with the Plans. Removal of the existing rubber fenders, chains, and miscellaneous hardware will not be measured separately, but rather shall be incidental to this pay item. The assembly shall be transported and stored at the Swan's Island Ferry Terminal. The Contractor shall not dispose of the fender panel or its components unless deemed unusable by the Resident and Engineer of Record. If components of the fender panel assembly are deemed to be unusable, they shall be disposed by the Contractor at no additional charge.

At Swan's Island, Remove and Dispose Fender Panel shall be measured by the unit, and the specific work to be completed is identified in parentheses. Fender Panel (Remove and Store) shall be each unit removed, transported, stored, and re-used in accordance with the Plans. Removal of the existing rubber fenders, chains, and miscellaneous hardware will not be measured separately, but rather shall be incidental to this pay item. The Contractor shall not dispose of the fender panel or its components unless deemed unusable by the Resident and Engineer of Record. If components of the fender panel assembly are deemed to be unusable, they shall be disposed by the Contractor at no additional charge. The assembly shall be stored on the Contractor's barge until which time it is re-installed. Fender Panel (Reset Stored Fender Panel) shall be each unit re-installed at Swan's Island on the new dolphins complete with all components aforementioned.

At Frenchboro, Remove and Dispose Fender Panel (Reset Stored Fender Panel) shall be measured by the unit, and the specific work to be complete is identified in parentheses. Fender Panel (Reset Stored Fender Panel) shall be each unit retrieved, transported, and installed in accordance with the Plans. Retrieval of the existing rubber fenders, chains, and miscellaneous hardware will not be measured separately, but rather shall be incidental to this pay item. The assembly shall be retrieved from the Swan's Island Ferry Terminal. The Contractor shall not dispose of the fender panel or its components unless deemed unusable by the Resident and Engineer of Record. If components of the fender panel assembly are deemed to be unusable, they shall be disposed by the Contractor at no additional charge. The measurement of this item shall include the replacement of components of the fender assembly deemed unusable, which shall meet the requirements specified above.

504.66 Basis of Payment

The following paragraphs are added:

Support Chains, Shear Chains, Tension Chains, Shackles, U-Bolt Dogbones, and Pad Eyes will not be paid for separately but shall be incidental to the respective Fender Panel item, which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Steel Fender Panel, Closed-Box, UHMW Wearing Surface will be paid for at the Contract unit price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Remove and Dispose Fender Panel will be paid for at the Contract unit price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Remove and Dispose Fender Panel (Remove and Store) will be paid for at the Contract unit price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Remove and Dispose Fender Panel (Reset Stored Fender Panel) will be paid for at the Contract unit price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Payment will be made under:

Pay Item	Description	Pay Unit
504.651	Steel Fender Panel, Closed Box, UHMW Wearing Surface (Type 1)	Each
504.653	Steel Fender Panel, Closed Box, UHMW Wearing Surface (Extensions)	Each
504.999	Remove and Dispose Fender Panel	Each
504.999	Remove and Dispose Fender Panel (Remove and Store)	Each
504.999	Remove and Dispose Fender Panel (Reset Stored Fender Panel)	Each

SPECIAL PROVISIONS
SECTION 504
STRUCTURAL STEEL
(Miscellaneous Fabrication - Aluminum Gangway 29')
(Miscellaneous Fabrication - Aluminum Gangway 30')
(Miscellaneous Fabrication - Aluminum Gangway 38')

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 504 – STRUCTURAL STEEL, with the following modifications:

504.01 Description

This work shall consist of furnishing all labor, materials, equipment, transportation and incidentals required to assemble and install aluminum gangways, complete, as shown on the Contract Plans to include anchor bolts, nuts, washers, transition plates, shims, and any and all other hardware required to construct gangways in accordance with these Specifications and shown on the Contract drawings.

504.011 General Requirements

A. Submit four copies of manufacturer's product data and shop drawings for review.

504.012 Design Requirements

A. The aluminum lightweight gangway shall be designed to meet the following criteria:

1. Live Load - The gangway shall be capable of sustaining a uniformly disturbed live load of 85 pounds per square foot.

2. Handrail Horizontal Load - Handrails shall be capable of withstanding a 200-pound concentrated horizontal load applied at the top of the railing.

3. Handrail Vertical Load - Handrails shall be capable of withstanding a 50-pound per-foot vertical loading applied at the top of the railing.

B. Provisions shall be made for the carriage of utilities beneath or alongside the gangway. Hangers shall be the sizes, shapes and lengths sufficient for their intended use and hot-dip galvanized in accordance with ASTM A123. Protection from galvanized action of dissimilar metals shall be provided.

504.02 Materials

A. Ramps shall be fabricated of 6000-series aluminum compatible with a marine environment. Fasteners shall be stainless steel or other material compatible with aluminum in a marine environment.

B. The walkway surface shall be of open type grating with integral non-skid properties; without, affixed cross-cleats or other mechanical devices to achieve non-skid capacity.

C. Handrail height to be 42 inches, with a horizontal safety rail installed at mid-height.

D. Transition plates shall be installed at the ends of the gangway using piano-style hinges.

E. All bolts, nuts, and washers shall be as indicated on the shop drawings, or if not so indicated, shall be of sizes, shapes and lengths sufficient for their intended uses and shall be stainless steel.

504.65 Method of Measurement

Aluminum Gangways will be measured by the lump sum, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications. Measurement shall include furnishing and installing the gangways including transport to the terminal. Installation shall include all hardware to fasten, secure, and level the gangway(s) into place.

504.66 Basis of Payment

Aluminum Gangways will be paid for at the Contract lump sum price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Payment will be made under:

Pay Item	Description	Pay Unit
504.510	Miscellaneous Fabrication - Aluminum Gangway 29’	Lump Sum
504.510	Miscellaneous Fabrication - Aluminum Gangway 30’	Lump Sum
504.510	Miscellaneous Fabrication - Aluminum Gangway 38’	Lump Sum

SPECIAL PROVISIONS
SECTION 504
STRUCTURAL STEEL
(Miscellaneous Fabrication)

All work and materials shall conform to the Contract Drawings and provisions of the State of Maine, Department of Transportation, Standard Specifications, March 2020, SECTION 504, STRUCTURAL STEEL, with the following changes:

504.01 Description

This work shall consist of providing all labor, materials, equipment and supervision necessary for furnishing and installing or removing fabricated steel members including:

Miscellaneous Fabrication Item	FB	BH	SI
Dolphin Access Ladder, EA	1	1	2
Fender Access Ladder, EA	2	0	0
Shim, EA	0	3	6
Spacer Plate, EA	1	1	2
Fender Block, EA	1	1	2
Remove Line Guard, LF	0	0	72
Remove, Modify, and Reset Pipe Extensions, EA	0	0	8
Steel Pipe Hand Railing, LF	27	22	45
Steel Pipe Hand Railing, Modify and Reset, LF	0	16	16

Remove Line Guard shall include the removal of the metal line guards along the top edges of the concrete dolphins as noted on the drawings. Removal shall include the removal of the anchor bolt to a depth shown on the drawings and filling the void with a non-shrink grout.

Remove, Modify, and Reset Pipe Extensions shall include the removal, modification, and re-installation of the steel pipe extensions between the steel fender panels and rubber buckling fenders as specified on the Plans. Removal shall include the pipe extensions and fender panels. The pipe extensions will then be modified as specified on the Plans, and the fender panels and pipe extensions re-installed. This work shall include the replacement of broken or missing bolts and the modification of existing chains to accommodate the change in length of the pipe extensions. Existing chains and connectors shall be reused unless damaged or corroded. The Engineer shall determine if replacement is required and the Contractor shall replace in kind.

This work shall conform to the requirement of the Standard Specifications Section 504 – Structural Steel.

504.02 Materials

All materials shall be delivered, stored and handled so that they are not damaged.

Miscellaneous steel fabrication, including rolled shapes and plates, shall conform to the following unless noted otherwise:

ASTM A36 (F_y = 36 KSI) for angles & plates
ASTM 572 Grade 50 (F_y = 50 KSI) for rolled S and HP shapes, channels & bars ASTM A992 (F_y = 50 KSI) for rolled W-shapes
ASTM A500 Grade B (F_y= 46 KSI) for rectangular HSS ASTM A500 Grade B (F_y= 42 KSI) for round HSS ASTM A53 Grade B (F_y= 35 KSI) for pipe

All steel hardware items, except stainless steel under this Section shall be hot-dip galvanized unless noted. Galvanizing shall be by the hot dip method according to ASTM A 123 and A 153. Welding rods shall conform to AWS E70XX grade. Sizes shall be as indicated on the Contract Drawings.

504.03 Quality Assurance and Submittals

All work shall conform to the following codes and standards, except as noted:

(1) American Society for Testing and Materials (ASTM), latest edition.
(2) American Institute for Steel Construction (AISC) Specification for the Design, Fabrication and Erection of Structural Steel for Buildings, latest edition.
(3) American Welding Society (AWS).
(4) Maine State Building Code

The Contractor shall submit for approval all shop drawings prior to fabrication. Shop drawings shall include all information necessary for the fabrication of the component parts. Indicate size and weight of members, type and location of shop and field connections, the type, size and extent of all welds, and welding sequences. Use American Welding Society welding symbols. Approval of shop drawings will be for size and arrangement of principal and auxiliary members and strength of connections. Any errors in dimensions shown on shop drawings shall be the responsibility of the Contractor.

The Contractor shall submit for approval manufacturer's specifications on all connectors, hardware, chain, bolts and certificates of compliance with applicable ASTM specification for galvanized items.

The Contractor shall use only certified welders for all welding performed in connection with the work of this Section. Each welder shall be certified for the particular work, prior to commencing the work, which must be accomplished.

Completed welds will be subject to inspection and approval of an independent testing agency. Faulty welds shall be cut out and replaced at no cost to the Owner.

Upon completion of this portion of the work, and as a condition of its acceptance, the Contractor shall deliver to the Engineer a letter signed by and an official of the miscellaneous metal fabricating firm or firms, certifying that all fabricated metal has been fabricated in complete accordance with this Section.

504.04 General

The following paragraph is added:

Steel pipe hand rails are used throughout the decks of the dolphins and provide safety for terminal operators and deck hands. The proposed modifications to the existing dolphins including changes to fender panels and chocks requires that hand rails be modified to permit mooring line arrangements and safe usage by workers.

The work shall consist of modifying existing steel hand railing by removing sections of hand rail; making modifications to those sections; and resetting those sections as shown on the plans.

Modifications to the hand rails will consist of some if not all of the following for each section of rail that is removed and scheduled to be modified and reset:

- Shortening the rail and placing end-caps on open-ended railings;
- Welding rail pieces together and grinding welds to provide a burr-free surface;
- Cutting anchor bolts flush with (or slightly below) the top of the concrete deck and applying a cold galvanizing paint to exposed steel rods;
- Applying galvanizing coating to modified or spliced areas; and
- Drilling, grouting, and modifying anchorages.

504.40 Fabrication

All products from this Section shall be fabricated in an AISC or MaineDOT certified facility. All work shall be straight and true, free from warpage and other defects. Joints, covers, copes and miters shall be accurately and neatly cut, machined, filed and fitted. All steel will be free from imperfections, dirt, loose scale, paint, oil or other foreign substances during fabrication. All material shall be fabricated to within + or – 1/16 inch of their theoretical dimensions as shown on the plans. Holes for bolts shall be located as shown on the plans and shall be drilled 1/16 inch in diameter larger than the (galvanized) bolt.

All welding shall be in accordance with AWS D1.1, Structural Welding Code – Steel (most recent edition); all bolting shall be in accordance with AISC Manual of Steel Construction (most recent edition).

All ladders, plates, and shim fabrication under this Section shall be galvanized.

504.50 Installation

Fabrication shall be stored on skids, not on ground, in such a fashion as to prevent bending, twisting, or similar damage. Fabrications shall not be dumped

off a truck. Any parts damaged or improperly fabricated shall be removed and replaced or corrected as directed by the Engineer and at no additional cost to the Owner.

Prior to installation work shall be cleaned of weld splatter, dirt and other foreign materials. Protect installed work as required from damage by subsequent building operations.

504.65 Method of Measurement

Miscellaneous steel fabrication will be measured as a lump sum.

504.66 Basis of Payment

Miscellaneous steel fabrications will be paid for at the respective Contract lump sum price. This price will be full compensation for the materials, labor and equipment required to produce, coat, erect, removal of elements to allow for erection and install the miscellaneous steel fabrications shown in the contract drawings including, but not limited to, ladders, shims, spacer plates, fender blocks, and railings.

Any steel fabrications required for the tie rod system or mooring hardware shall be considered incidental to those items and will not be paid for under miscellaneous steel fabrication.

Add to Payment will be made under:

Pay Item	Description	Pay Unit
	Misc. Fabrication (Bass Harbor)	
504.510	Misc. Fabrication (Swan's	LS
504.510	Island)	LS

SPECIAL PROVISIONS
SECTION 504
STRUCTURAL STEEL
(Rubber Fender Leg Type 1)
(Rubber Fender Leg Type 2)
(Conical)
(Arch)

All work and materials shall conform to the Contract Drawings and provisions of the State of Maine, Department of Transportation, Standard Specifications, March 2020, SECTION 504, STRUCTURAL STEEL, with the following changes:

504.01 Description

The following paragraphs are added:

This work shall consist of installing rubber buckling fenders at the locations shown on the Contract Plans, complete with stainless steel hardware. Rubber buckling fenders are in the form of "leg" style fenders and used behind proposed steel fender panels. Conical fenders are individual circular elements that will replace existing deteriorated pieces in kind. Arch fenders are trapezoidal elements intended to protect dolphin corners from direct contact with vessels.

504.015 Handling

Fenders shall be undamaged when delivered and shall be handled and stored to prevent damage, such as bending or abrading end fittings, cutting of rubber, or damage to coating of hardware. Protect fenders from exposure to damaging liquids, oils, greases and extended exposure to sunlight.

504.016 References

REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

A. ASTM INTERNATIONAL (ASTM)

ASTM A 240/A 240M (2005a)	Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels for General Applications
ASTM D 1171 (1999)	Rubber Deterioration - Surface Ozone Cracking Outdoors or Chamber (Triangular Specimens)
ASTM D 2000 (2006)	Rubber Products in Automotive Applications
ASTM D 395 (2003)	Rubber Property - Compression Set
ASTM D 412 (2002)	Vulcanized Rubber and Thermoplastic Elastomers - Tension
ASTM D 471 (1998)	Rubber Property - Effect of Liquids
ASTM D 573 (2004)	Rubber - Deterioration in an Air Oven

ASTM D 575 (2001)	Rubber Properties in Compression
ASTM D 624 (2000)	Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
ASTM D 746 (2004)	Brittleness Temperature of Plastics and Elastomers by Impact

B. U.S. DEPARTMENT OF DEFENSE (DOD)

MIL-PRF-907 (2004)	Antiseize Thread Compound, High Temperature

504.02 Materials

The following paragraphs are added:

FENDER CONFIGURATION:

Leg Fenders shall be extruded and shall be continuous in the length indicated. The fenders shall be attached to the structure as indicated on the drawing.

Conical Fenders shall be manufactured as one single unit. The fenders shall be attached to the structure as indicated on the drawing.

Arch Fenders shall be extruded and shall be continuous in the length indicated. The fenders shall be attached to the structure as indicated on the drawing.

ELASTOMER:

The elastomer shall be black ethylene propylene dimonomer (EPDM), as specified in ASTM D 2000, with the following properties:

A.	Minimum Tensile Strength (original) (ASTM D 412)	2000 psi
B.	Shore Hardness (Durometer) (ASTM D 412)	60 +/- 5 Shore A
C.	Modulus at 400 Percent Elongation (ASTM D 412)	900 psi
D.	Maximum Compression Set (ASTM D 395 Method B, Maximum Percent 22 Hr. at 158 Degrees F)	25 Percent (max.)
E.	Tear Resistance (ASTM D 624; DIE B Min. 150 lb/in)	200 lb/in.
F.	Minimum Elongation (ASTM D 412)	400 Percent
G.	Ozone Resistance (ASTM D 1171 Exposure Method B; 70h Bent Loop at 100 Degrees F; 50pphm)	No Cracks
H.	Low Temperature Impact Resistance (ASTM D 746 Procedure B; Non-Brittle at -67 Degrees F)	-40 Degrees F
I.	Water Absorption (ASTM D 471 Method B; 70h at 212 Degrees F.; Volume Change +5 Percent)	5 % (max.)

J. Heat Resistance — Shall exceed requirements
(ASTM D 573; 70h at 212 Degrees F, Ch Tensile, Elong. -25 Percent, Hardness +10)

K. Compression Defl. Resistance — Shall exceed requirements
(ASTM D 575 Method B; 3 S Dwell at 73 Degrees F)

CONNECTION HARDWARE:

Fender anchor bolts shall be stainless steel type 316 conforming to ASTM A 240/A 240M set into predrilled, epoxy filled holes, as shown on the contract drawings.

ANTI-SEIZE COMPOUND:

Anti-seize compound shall be in accordance with MIL-PRF-907.

504.031 Submittals

The following paragraphs are added:

Shop drawings and associated material specifications shall be submitted for review and approval. The following is a general list of the components to be included in the submittal:

A. Product Data:
1) Fender Configuration

B. Test Reports: Tests shall have been performed on the specified fender within 5 years of submittal of the reports for approval. Test reports shall be accompanied by notarized certificates from the manufacturer certifying that the tested material is of the same type, quality, manufacture and make as that proposed to be supplied.

1) Minimum Tensile Strength
2) Shore Hardness (Durometer)
3) Modulus at 400 Percent Elongation
4) Maximum Compression Set
5) Tear Resistance
6) Minimum Elongation
7) Ozone Resistance
8) Low Temperature Impact Resistance
9) Water Absorption
10) Heat Resistance
11) Compression Deflection Resistance

504.032 General Requirements

The following paragraphs are added:

ENERGY ABSORPTION:

The leg type fenders shall have the following minimum energy absorption values:

1. Leg Type 1 — 381 kip-ft (516 kN-m)

2. Leg Type 2 — 283 kip-ft (383 kN-m)

INSTALLATION:

Install the rubber fenders in the position indicated on the drawings.

For proposed leg fenders, attach the fender to the back of the steel fender panel and position the assembly in the location shown on the drawings. Mark the hole locations on the dolphin and then reposition the assembly to the side of the dolphin to enable clean drilling. Drill holes into the dolphin and fill the holes with epoxy as shown on the drawings. See the drawings for drill depth estimates.

For proposed arch fenders, attach the steel support plate assembly to the dolphin, where applicable, in the location shown on the drawings. Mark the hole locations on the dolphin or steel support place and then reposition the assembly to the side to enable clean drilling. Drill holes into the dolphin or steel support plate and fill the concrete holes with epoxy as shown on the drawings. See the drawings for concrete drill depth estimates.

For proposed conical fender replacements, remove the existing fender by first removing the existing steel fender panel and chains as necessary to allow the conical fender to slide off of its anchorages. Do not damage the anchorages as they are intended to be reused. Slide the new conical fender into place and reattach the fender.

Use an anti-seize compound to coat threads of bolts prior to installing all hardware.

504.65 Method of Measurement

The following paragraphs are added:

Rubber Fenders shall be measured as a lump sum. Removal and reinstallation of the existing fender panel and chains where necessary will not be measured separately, but rather shall be incidental to this pay item. Full compensation for furnishing, all labor, materials and equipment necessary to complete the work for steel plate assemblies to support the rubber fenders, where applicable, shall be incidental to this pay item. Miscellaneous hardware such as nuts and washers may be required.

504.66 Basis of Payment

The following paragraphs are added:

Payment for Rubber Fenders shall be paid for at the Contract lump sum price and shall include removal and disposal of the existing fender where applicable, and full compensation for furnishing, all labor, materials and equipment necessary to complete the work, including applicable steel plate assemblies.

Payment will be made under:

Pay Item	Description	Pay Unit
504.601	Rubber Fender (Leg Type 1)	Lump Sum
504.601	Rubber Fender (Leg Type 2)	Lump Sum
504.601	Rubber Fender (Conical)	Lump Sum
504.601	Rubber Fender (Arch)	Lump Sum

END OF SECTION

SPECIAL PROVISIONS
SECTION 504
STRUCTURAL STEEL
(Rock Anchors)

All work and materials shall conform to the Contract Drawings and provisions of the State of Maine, Department of Transportation, Standard Specifications, March 2020, SECTION 504, STRUCTURAL STEEL, with the following changes:

504.1 Description

This work shall include all labor, materials, equipment and supervision necessary to install rock anchors at pile locations specified and indicated on the Contract Drawings. Post-tensioned rock anchors shall conform to and be installed as detailed in these specifications and as shown on the Contract Drawings in conjunction with associated steel pipe piles or as authorized by the Resident. Post-tensioned rock anchors shall have an ultimate capacity as shown on the Contract Drawings. Installation of rock anchors shall conform to Recommendations for Prestressed Rock and Soil Anchors of the Post Tensioning Institute.

Furnishing, installing, cleaning out and filling the steel pipe piles with concrete is included under Section 501-Foundation Piles and Special Provision 501.

504.2 Qualifications

The Contractor shall submit evidence of at least three (3) successful installations within the last three (3) years of work comparable to that shown in the Contract Documents and specified herein. This evidence shall include the owners, names and phone numbers related to the installations. The Contractor shall employ labor and supervisory personnel who are experienced in this type of work. The drilling operator and foremen shall have a minimum of one (1) year experience with installing permanent rock anchors in accordance with MaineDOT & AASHTO requirements. The Contractor shall submit resumes and work experience of the technical personnel.

504.3 Submittals

At least three (3) weeks prior to the proposed date for beginning the rock anchor work the Contractor shall submit the following information to the Department for review. The Contractor will not be allowed to begin work until all related submittal requirements are satisfied.

a) Shop drawings and material certifications of the complete rock anchor assembly. The drawings shall provide details and dimensions of the threadbar, triple corrosion protection systems, anchor head, bond breaker, grout sleeve, couplings, centralizers, lengths of smooth and corrugated sheathing and their relations to the steel pipe pile, length of unbonded zone, total anchor length, design, test and lock-off loads, grout type, grout admixture, and grouting procedures. For installation of the rock anchors, Certified copies of chemical analyses, unconfined compressive strength of grout mixture, and tensile strength of steel, shall also be provided.

b) List and description of proposed equipment and methods to be used for rock

anchor installation, including drilling rock anchor holes, cleaning, and checking cleanliness of drill holes, centralizing anchors, installing anchors, tremie grouting, tensioning, testing and load transfer/lock-off.

c) Sequence of installation of pipe piles, rock anchors, grouting, testing, concreting, tensioning, load transfer, and method to verify that the anchored piles are socketed into bedrock.

d) Plan for advancing the rock anchor and for controlling and mitigating overbreakage of bedrock surface; methods to ensure seal of pipe pile/bedrock interface is maintained during rock anchor installation.

e) Shop drawings detailing the monitoring system for measuring movements during performance and proof load tests; temporary structural testing frame to resist jacking forces; detailed procedures for testing anchors and procedures for load transfer to anchors including method for verifying lock-off loads. Calibration data for the load cell and/ or jacks to be used to measure the applied test loads. Certificates for calibration shall indicate the calibrations were completed within the last 12 months.

f) During installation of the rock anchor systems, provide as-built tabulations of data for each unit, to include: identification, location, dates, depths of initial drilling and grouting, grouting pressures, anchor lengths, and any unusual events.

g) Drawing showing layout and location jacks on temporary testing frame and remote reference beam for monitoring of anchor deformation during load tests.

h) Certificate of Compliance of Conformance for anchor threadbar and plastic sheathing.

i) Submittal for anchored pipe pile installation and cleaning in accordance with Special Provision 501.

At least two (2) weeks prior to the proposed date for beginning the rock anchor proof or performance testing, the Contractor shall submit calibration documentation for jacks and pressure gages or other equipment to be used in testing and stressing. All pressure gages and jacks used shall be calibrated by a certified and approved testing laboratory which shall submit a certificate of calibration which was performed within 12 months of the start of testing. Proof and performance testing and tensioning will not be permitted until the calibration certificates are submitted. All jacks and gages shall be field calibrated monthly.

504.4 Inspection and Record Keeping

Field inspection shall be provided as follows:

1) The Contractor shall provide personnel, qualified by training and experience, to perform the required rock anchor installation and anchor tests and to monitor, record and plot the data.

2) The Resident and Engineer shall be allowed unrestricted access to observe and independently document Contractor’s rock anchor work. Contractor shall provide sufficient notice of upcoming rock anchor installation, testing,

and lock off operations for Resident and Engineer to be in attendance.

3) The Contractor's qualified rock anchor installation personnel shall keep a daily construction record during rock anchor installation. The daily record shall be submitted to the Resident each day.

4) The Contractor's qualified rock testing technician shall conduct performance tests and proof tests as specified in Section 504.7 and submit a tabulation of loads, elongations and rebound reading, indicating times involved, to the Resident.

5) The Contractor shall be responsible for making prompt evaluations of the test data and, whenever necessary, taking immediate steps to prepare and submit a remedial plan to the Resident to correct any deficiencies in the capacities of individual members and to provide approved remedial measures at no additional cost to the Department.

Within one (1) week of completion of the installation of the rock anchors provide as-built information of data for each unit including: identification, location, dates and depths of initial drilling, grouting, tensioning, testing, and final lock-off loads, observed loads and threadbar elongation, grouting pressures, bonded and unbonded anchor lengths and any unusual events.

504.5 Materials

a) *Anchor Rods* shall consist of continuously threaded bars, Grade 150 ksi conforming to ASTM A722, Type II, cold stretched and stress relieved after the threading process, as manufactured by Dywidag Systems International, or approved equal. The diameter of the threaded bars shall be as shown on the Plans and the threaded bars shall be epoxy coated (do not hot-dip galvanize high-strength steel). Anchorages and all exposed steel components including anchor head assembly (nuts, bearing plates, wedge plates, etc.) shall be hot dipped galvanized in accordance with ASTM A123 and A153. Exposed ends of the threadbar shall have field applied epoxy coating. Continuously threaded bar shall have triple corrosion protection and a smooth sheathing over the unbonded length. The rock anchor assembly shall be assembled by the rock anchor manufacturer.

b) *Anchor Nuts* shall be hexagonal head, heavy duty type, galvanized, conforming to ASTM A325, A29, or to bar manufacturer's specifications.

c) *Anchor Plates*, sealing caps and sealing nuts shall conform to threadbar manufacturer's recommendation. Anchor heads shall be installed with mastic corrosion inhibitor in accordance with manufacturer's specifications.

d) *Bearing Plates* shall be fabricated of steel conforming to ASTM A572 Grade 50 and be hot dipped galvanized.

e) *Welding* shall conform to the American Welding Society Standard AWS D1.1.

f) *Couplings* shall be capable of developing 100% of the ultimate tensile strength of the threadbar and shall be fully protected within the corrosion protection system.

g) *Cement Grout* for grouting the rock anchors shall be neat cement with a non-shrink additive, with a water-cement ratio no-more than 0.45 by weight. Expansion agents shall not be used. Minimum unconfined compressive strength of grout shall be 4,000 psi at time of anchor testing or stressing, or 5,000 psi 28 days. Admixtures shall be submitted to the Resident for approval. Materials for cement grout shall be in accordance with Section 502.

h) *Sheathing* shall act as the bond breaker and shall be polyvinylchloride material with a minimum compressive strength of 7,000 psi and a minimum tensile strength of 7,000 psi. Material shall be free of water-soluble chlorides and other ingredients which might enhance corrosion, hydrogen embrittlement or stress corrosion on the prestressing steel. The plastic shall be non-reactive with the grout and its ingredients. The plastic sheathing shall be gas and watertight, and resistant against chemical attacks and aging.

i) Other materials shall be those recommended by the threadbar manufacturer for the intended use.

504.6 Rock Anchors

a) The Contractor shall provide a stable, level working platform or surface to support the rock anchor drilling equipment and operation to complete the work in this Section. The Contractor shall conduct rock anchor installation in a manner that does not cause impact or damage to the pipe pile and its coating, or shall cushion or isolate the pile coating to prevent damage to the pile and its coating.

b) The rock anchor drilling equipment shall have adequate capacity. The Contractor shall provide drilling equipment including but not limited to percussive rock drills, rock core barrels, rock tools, air tools, grout pumps and other equipment necessary to install rock anchors to the size and depth shown on the plans.

c) The Contractor shall provide sufficient length of grouted anchor such that the anchor will develop the test load capacity indicated on the plans, but in no case shall the length of anchor be less than the minimum bonded length indicated on the plans. Each rock anchor shall be verified by performance or proof tests.

   Anchors shall consist of a grouted anchor zone (bonded length) within the drill hole in bedrock, and a bond- free zone (unbonded length where the threadbar is prevented from bonding to rock or pile) and an anchor head assembly.

d) Pipe Pile Encasement: The rock anchor shall be installed within an open ended pipe pile encasement which will be installed in accordance with Special Provision 501 and Section 501 of the Standard Specifications. The rock anchors shall be installed below the bottom of the pile encasement as shown on the plans. If, after cleaning, it is determined by the Resident that the pile is not socketed into bedrock, the pile shall be reinstalled and socketed into bedrock such that the entire tip surface area is bearing on bedrock and cleaned again, at no- additional cost, in accordance with

Special Provision 501. Piles shall be cleaned of soil and rock to the bottom of the rock socket prior to drilling the holes for receiving the rock anchors. A grout plug shall be installed, at no additional cost in accordance with Special Provision 501, to aid in drilling the rock anchor hole.

e) Drill Holes: After piles are socketed into bedrock, and cleaned, install temporary steel drill casing by spinning, centering the casing as needed using internal pile guides (centralizers). Then drill the holes into bedrock for the rock anchors. All drill holes shall be made with the temporary steel drill casing spun into the grout plug/bedrock before rock coring.

   Drill holes for installation of rock anchors shall not be less than the dimension shown on the drawings. Anchors shall be fully grouted in bedrock drill holes that extend not less than 12 inches below the bottom of the anchor tendon, or as shown on plans.

   Drill holes shall have vertical tolerances in accordance with Special Provision 501 Subsection 501.043. Drill holes shall be true to permit installation of rock anchors without bending the anchors in any direction.

f) Cleaning the Drill Hole. Drilled holes shall be cleaned of all drill cuttings, sludge and debris, in accordance with Special Provision 501. The cleanliness of the drill hole shall be approved by the Resident.

g) Rock Anchor Placement and Grouting: The rock anchor assembly shall be completely ready for immediate installation prior to beginning the grout operation. The cleanliness of the final drill hole shall be approved by the Resident. Rock anchors shall be centered in the drill holes with centralizers. Grout placement shall not begin until the Resident's approval is obtained. The grout for the rock anchor shall be tremie placed by injection at the lowest point of the rock anchor. The discharge hose end shall be completely submerged in grout at all times. Grout volume shall be sufficient to return neat grout to the top of the grout plug above the bedrock once the anchor is installed.

h) Grouting tubes shall be connected to and lowered with the rock anchor. All equipment used for placing rock anchors shall be such that it will not damage the corrugated sheathing or casing.

i) Rock anchor and bond lengths shall be tremie grouted by injecting grout approximately 6 inches above the lowest point of the anchor. Grouting shall continue within the drill casing until the grout level inside the casing is 24 inches above the top of the bedrock surface and at least 120 percent of the calculated annular volume of the borehole is installed. Retract the temporary drill casing to approximately 12 inches above the top of the bedrock surface and pump an additional volume of grout sufficient to create an additional 6 inches average thickness grout plug above the bedrock surface.

j) Grouting shall be performed with sufficient pressure and flow volume to produce a grouted rock anchor zone capable of developing the load capacity indicated on the plans. Approved materials and continuous mixing and pumping equipment shall be able to produce a homogeneous in-place

cement grout of the desired consistency. All oil and other rust inhibitors shall be removed from the mixing drums and pumps. Once started, grouting shall be continuous until the rock anchor bond length is completely grouted, unless approved by the Resident. Grout not placed within one (1) hour of mixing shall be wasted in an approved manner.

k) Grout Testing: 2-inch test cubes shall be made of each grout mix design used. Six (6) cubes shall be made of each mix design for every 4 anchors installed or per day of grout placement, whichever results in more cubes. At a minimum three (3) cubes shall be tested at 7 days and three (3) cubes shall be tested at 28 days. Testing shall be done in accordance with ASTM C 109.

l) During testing and tensioning, the rock anchor shall be free to move relative to the pile encasement. At no time during tensioning shall the pile compressive load exceed the ultimate pile capacity in compression, except during testing at which time the pile compressive load shall not exceed the factored design load of the piling or 0.80 times the Guaranteed Ultimate Tensile Strength of the anchor bar, whichever is smaller.

m) The rock anchor head assembly shall be installed with mastic corrosion inhibitor in accordance with the manufacturer's recommendations. All exposed surfaces of the rock anchor and head assembly shall be protected with corrosion inhibitor at all times after installation.

n) Each rock anchor head assembly shall be fully encased by the concrete pile cap in accordance with the plans.

o) If rock anchor thread bars must be cut, no torch cutting is permitted. Rock anchor bars shall be sawcut, if necessary, with an abrasive wheel saw, in accordance with manufacturer's recommendations. Torch cutting of anchors before or after installation shall be grounds for rejection of the anchor and will require replacement by the Contractor at no additional cost to the Department.

p) Any voids occurring in the top portion of pile concrete shall be filled with dry pack mortar.

504.7 Rock Anchor Testing Procedures and Criteria

a) Each rock anchor installed shall be tested, as called for on the Plans, to verify and establish its capacity. The Contractor shall be responsible for maintaining the structures during testing, and shall provide adequate shoring and bracing as required. Concrete fill will not be installed in pipe piles at the time of performance and proof testing. The Contractor shall provide a temporary testing frame to resist jacking forces and to prevent damage to pipe piles during rock anchor testing.

b) Performance and Proof Test shall be conducted in accordance with the project plans and herein:

c) The maximum test load shall be 1.33 times the design load of the rock anchor shown on the plans and shall not exceed 0.80 times the Guaranteed Ultimate Tensile Strength of the threadbar.

d) Deformation measurements shall be made to the nearest 0.001 inch using a

dial indicator mounted independent of the stressing system and referenced to a remotely supported reference beam. Vertical movement of the pipe pile encasement and batter pipe piles with respect to the reference beam shall be similarly monitored.

e) Dial gages shall be used to record the movement of the rock anchor. The dial shall be capable of reading movement to 0.001 inch accuracy.

f) In order for proper execution of the test, the hydraulic system should be equipped with needle valve control.

g) The Contractor shall maintain test records in accordance with Subsection 504.4 – Inspection and Recordkeeping.

h) Acceptance of rock anchors shall be at the discretion of the Resident and/or Engineer. Each rock anchor which is rejected shall be removed and replaced. Removal and replacement of rock anchors which are rejected shall be at no additional cost to the Department. Removal and replacement of anchors shall consist of all work necessary to remove concrete, reinforcement, and additional bedrock as required to complete the rework.

i) If at any time during testing a failure of any element (jack, rock anchor, bearing pile, etc.) occurs which results in a non-symmetrical loading condition, the load in the jacks shall be reduced to zero as soon as practicable. The cause of the failure shall be rectified by the Contractor prior to restarting the load test.

j) No performance or proof test shall be conducted unless the Resident or Engineer is present. Resident shall be given a minimum of 72 hour's notice of rock anchor testing.

k) Testing Procedure:

    1) The magnitude of applied test loads shall be determined with a calibrated pressure gauge or a load cell. Movements of the anchor, relative to an independent fixed reference point, shall be measured and recorded to the nearest 0.001-inch at each load increment during the load tests. The Contractor shall perform the measuring and an independent inspector appointed by the engineer or the owner representative will do recording. Field test records will be furnished to the Engineer for his review and approval.

    2) A minimum of one (1) anchor per dolphin shall be performance tested. The Resident shall determine the location of the anchor to be performance tested. The remaining anchors shall be proof tested. The loading sequence for performance and proof testing shall be as provided herein. The test load (TL) shall be 1.33 times the design load.

    3) The test load for both the performance and proof tests shall be held constant for 10 minutes. During the load hold, the movement of the end of the threadbar shall be measured at 1, 2, 3, 4, 5, 6, and 10 minutes. If the total movement between one minute and 10 minutes exceeds 0.04 inch, the test load shall be held for additional 50 minutes. During the load hold, the movement of the end of the threadbar shall be measured at 15, 20, 25, 30, 45, and 60 minutes. If the load is held for 60 minutes,

a creep curve showing the creep movement between one minute and 60 minutes shall be plotted as a function of the logarithm of time.

4) For performance and proof tests, each increment of load shall be applied in less than one minute and held for at least one minute but not more than 2 minutes or as specified above. The observation period for the load shall start when the pump begins to apply the last increment of load. The jacking equipment, including the threadbar movement measuring system, shall be stable during all phases of the rock anchor loading operations.

5) All anchors not performance tested shall be proof tested. If 1.33 times the design load cannot be obtained, the anchor shall be replaced and retested.

6) A performance tested anchor is acceptable if:

a) The measured elastic movement exceeds 0.80 of the theoretical elongation of the unbonded length at the maximum test load; and

b) The creep movement between one and ten minutes is less than 0.04-inch.

7) A proof tested anchor is acceptable if:

a) The pattern of elastic movements is similar to that of adjacent performance tested anchors (i.e. measured elastic movement exceeds 0.80 of the theoretical elongation of the unbonded length), and

b) The creep movement between one and ten minutes is less than 0.04-inch.

7) Performance tested or proof tested anchors which fail to meet the acceptance criterion (b) will be considered acceptable if the maximum load is held for 60 minutes and the creep curve plotted from the movement data indicates a creep rate of less than 0.08-inch for the last log cycle of time.

TESTING SCHEDULES	
PERFORMANCE TEST	PROOF TEST
(AL) 0. 05T	
0.25T	
(AL) 0.05T	
0.25T	
0.50T	
(AL) 0.05T	
0.25T	
0.50T	
0.75T	
(AL) 0.05T	
0.25T	
0.50T	
0.75T	
1.00T	
(AL) 0.05T	(AL) 0.05T
0.25T	0.25T
0.50T	0.50T
0.75T	0.75T
1.00T	1.00T
1.20T	1.20T
(TL) 1.33T	(TL) 1.33T
1.00T	1.00T

T = Design force for the anchor shown on the plans
AL = Alignment load = 0.05T
TL = Test Load = 1.33T

504.8 Lock-Off Procedures

a) After acceptance of the tested anchors, install the pile reinforcing (if prescribed) and fill the piles with concrete to within 1/2" of the top of the pipe pile.

b) Dry pack grout under the anchor bar to provide uniform bearing against the concrete fill.

c) Final stressing of the rock anchors (lock off) shall be started only after installation of rebar cages (if prescribed) and concreting the pipe piles and once the grout has obtained sufficient strength. Do not tension rock anchors until the concrete and dry pack grout in the pile has attained a minimum compressive strength of 4,000 psi, as shown by cube or cylinder samples taken during filling operations.

d) The lock-off load shall be applied by the same calibrated jack used for performing the performance and proof tests with the lock-off load maintained while the anchor nuts on the rock anchors are permanently set.

e) One lift off test shall be performed on one anchor per dolphin immediately after all the anchors in that dolphin have been tensioned.

504.9 Method of Measurement

Rock anchors will be measured by the unit for anchors satisfactorily placed and remaining in the completed structure. Additional length required for tensioning or for replacement of unacceptable rock anchors shall be provided at the Contractor's expense.

504.10 Basis of Payment

Rock Anchors will be paid for at the Contract unit price for the respective Contract items which shall be full compensation for furnishing, all labor, materials and equipment necessary to complete the work, including but not limited to furnishing equipment for drilling bedrock, installing, testing and tensioning rock anchors. Pay Item 504.9051 shall include full compensation for any temporary casings, augers, grouting operations, drilling equipment, or specialty tools needed to install anchors and to maintain pipe pile end bearing capacity.

Payment will be made under:

Pay Item	Description	Pay Unit
504.9051	Rock Anchors	Each

SPECIAL PROVISION
SECTION 506
SHOP APPLIED PROTECTIVE COATING – STEEL

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 506 – SHOP APPLIED PROTECTIVE COATING – STEEL, with the following modifications:

FUSION BONDED EPOXY COATINGS

506.40 Description

The following paragraph is added:

Fusion Bonded Epoxy Coating shall be applied to the full length of the steel pipe piles.

506.41 Materials

The following paragraph is added:

A. Fusion Bonded Epoxy Coating – Shop Applied:
   1) Fusion Bonded Epoxy Coating shall be Scotchkote 6233 Fusion Bonded Epoxy Coating as manufactured by 3M Company, or an approved equal. Any product submitted as an "approved equal" must have a Repair Coating counterpart which satisfies the Coating Materials requirement. Coating color shall be green.

B. Fusion Bonded Epoxy Repair Coating – Field Applied:
   1) Fusion Bonded Epoxy Coating shall be Scotchkote, Liquid Epoxy Coating as manufactured by 3M Company, or an approved equal, and compatible with the primary shop-applied coating system noted above and with similar color. Coating color shall be green.

506.42 Surface Preparation

The following paragraph is added:

A. Surfaces to be coated shall be prepared in accordance with ASTM A972, except as modified herein.

B. All oil, grease, and other contaminants shall be removed by SSPC SP1 (steam or solvent cleaning) prior to blasting. Remove all sharp edges, burrs, weld splatter, and gouges.

C. Surfaces to be coated shall be blast cleaned by SSPC SP10 (near white metal).
   1) Blasting material shall be a Class 1, steel abrasive angular metallic grit meeting the requirements of SSPC-AB3. Silica sand, shot, or spherical shaped abrasives shall not be permitted.
   2) The grit used for blasting shall be of proper gradation to create a profile of 2 to 4 mills. The metal shall be cleaned after blasting with clean, dry compressed air. Use of rags to remove residual dust after sandblasting shall not be permitted.

506.43 Inspection

The following paragraph is added:

Dry film thickness shall be 18 mils, which shall be achieved by no less than two coatings performed over a period of time that allows for sufficient drying of the previous coating

506.61 Basis of Payment

Add the following paragraph:

Fusion Bonded Epoxy Coating will be paid for at the lump sum price for the respective item. Payment will be full compensation for all labor, materials and equipment required to complete the surface preparation and coating work, including, but not limited to, coating and cleaning materials, staging or accessing, testing, surface preparation, cleaning, application, curing and repairs.

Payment will be made under:

Pay Item	Description	Pay Unit
506.9106	Fusion Bonded Epoxy Coating (Frenchboro)	LS
506.9106	Fusion Bonded Epoxy Coating (Bass Harbor)	LS
506.9106	Fusion Bonded Epoxy Coating (Swan's Island)	LS

SPECIAL PROVISION
SECTION 515
PROTECTIVE COATING FOR CONCRETE SURFACES
(Protective Coating for Concrete Surfaces)

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 515 – PROTECTIVE COATING FOR CONCRETE SURFACES, with the following modifications:

Section 515.01 Description

Add the following paragraph:

The concrete vertical faces and top face of the proposed dolphin concrete surfaces shall be coated with a clear protective coating. The bottom concrete surface does not require coating.

Section 515.02 Materials

Add the following paragraph:

Materials for Protective Coating for vertical concrete surfaces shall be a Type 1C – Sealer, Penetrating Silane, as listed on the MaineDOT's Qualified Products List for Concrete Sealers and Coatings.

Materials for Protective Coating for horizontal concrete surfaces shall be a low-viscosity, high molecular weight methyl methacrylate resin, crack healer/penetrating sealer such as the following:

1. Sealate T-70, by Transpo; or
2. KBP 204 P Seal, by KwikBond; or
3. Duraguard 401, by ChemMasters

The top dolphin surface where the methacrylate resin is applied shall become a skid-resistant surface by the addition of silica or aluminum oxide evenly broadcasted over the wet top of dolphin coatings. Follow the manufacturer's material recommendations and installation procedures for the skid resistant materials.

Maximize drying time to the greatest extent by "chasing-down" the tide during application.

Apply protective coating prior to installation of fender anchorages and dolphin accessories, and after concrete repairs have been performed.

Section 515.06 Basis of Payment

Add the following paragraph:

Protective Coatings will be paid for at the contract unit price per square yard. Equipment used to safely access the perimeter of the wharf and its vertical surfaces shall be incidental to the Protective Coating pay item.

Payment will be made under:

Pay Item	Description	Pay Unit
515.20	Protective Coating for Concrete Surfaces	SY

SPECIAL PROVISION
SECTION 528
STRUCTURAL TIMBER
(Repair Timber Fender System)

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 528 – STRUCTURAL TIMBER with the following additions:

528.01 Description

The following paragraph is added:

This section applies to the timber fender system to be repaired by the Contractor.

528.02 General

The following paragraph is added:

The timber fender system repair shall be completed in accordance with the Plans and ensure that the timber fender system is secure to the crib. Countersunk rod locations may be shifted in order to avoid timber crib rock fill. The Contractor shall not remove sections of rock fill from the crib, but may move rocks in order to gain access to the rod end inside the timber crib.

528.021 Materials

The timber fender system repair rods shall be ASTM A307 hot-dip galvanized. Washers and nuts shall be hot-dip galvanized.

528.022 Submittals

The Contractor shall submit a shop drawing which illustrates the timber fender system repair, list of the materials for fabrication, and details the repair procedure for review and approval.

528.08 Method of Measurement

Repair Timber Fender System will be measured by the lump sum, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications. Measurement shall include furnishing and installing all connection hardware.

528.09 Basis of Payment

Repair Timber Fender System will be paid for at the Contract lump sum price, which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Payment will be made under the following Pay Item:

Pay Item	Description	Pay Unit
528.21	Repair Timber Fender System	Lump Sum

SPECIAL PROVISION
SECTION 528
STRUCTURAL TIMBER
(Structural Timber (Fender Panels))

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, with the following additions:

528.01 Description

Add the following paragraph:

The work also includes the following:

This section applies to all work necessary by the Contractor to construct the timber fender panels and all requirements listed herein and in accordance with the drawings. Contractor shall be qualified in the field of timber work and installation with a at least five years experience.

528.011 General References

Add the following paragraph:

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

A. AMERICAN WOOD-PROTECTION ASSOCIATION (AWPA) – Use current Standard

AWPA U1	User Specification for Treated Wood
AWPA T1	Processing and Treatment Standard
AWPA M4	Standard for the Care of Preservative-Treated Wood Products
AWPA M6	Brands Used on Forest Products
AWPA P5	Standard for Waterborne Preservatives

B. ASTM INTERNATIONAL (ASTM) – Use current Standard

ASTM A 123	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A 153/A 153M	Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A 307	Carbon Steel Threaded Rod, 36,000 psi Tensile Strength

Except as otherwise indicated on the drawings or specified herein, the industry standards shall apply to all work under this section. Where requirements indicate on the drawings or specified herein differ from the industry standards, the more stringent requirements shall govern.

528.015 Submittals

This Subsection is added and shall include the following:

The Contractor shall provide the submittals listed below in accordance with Section 105.70 of the MaineDOT Standard Specification. Specific components of the submittals are listed in the referenced MaineDOT SECTION 501.

A. Timber preservative inspection test report. Submit the inspection report of an independent inspection agency, for approval by the Owner, that offered products complying with applicable AWPA Standards. Identify treatment on each piece by the quality mark of an agency accredited by the Board of Review of the American Lumber Standard Committee.

B. Delivery inspection list test report.

C. Provide Safety Data Sheets (SDS) associated with timber preservative treatment. Contractor shall comply with all safety precautions indicated on SDS.

D. Product Data:
1) Timber Materials: Submit drawings of treated timber showing dimensions of cut, framed, or bored timbers

528.018 Delivery, Storage, and Handling

A. Open-stack untreated timber and lumber material on skids at least 12 in. aboveground, in a manner that will prevent warping and allow shedding of water. Close-stack treated timber and lumber material in a manner that will prevent long timbers from sagging or becoming crooked. Protect materials from weather. Handle treated timber with ropes or chain slings without dropping, breaking outer fibers, bruising, or penetrating surface with tools. Do not use cant dogs, peaveys, hooks, or pike poles. Protect timber and hardware from damage.

528.02 Materials

This Subsection is deleted and replaced with the following:

A. Timber Wave Screens

1) Solid Sawn: Provide solid rough sawn timber of Southern Yellow Pine, Structural Grade or better with a minimum allowable flexural strength (Fb) of 1200 psi, and identified by the grade mark of a recognized association or independent inspection agency using the specific grading requirements of an association recognized as covering the species used. The association or independent inspection agency shall be certified by the Board of Review, American Lumber Standards Committee, to grade the species used.

2) Preservative Treatment: Fabricate timber before administering preservative treatment. Treated timber shall be branded, by the producer, in accordance with AWPA M6. Treat wood to be used in contact with salt water or salt water splash in accordance with AWPA U1 and AWPA T1 with water-borne preservative (CCA). The Use Category shall be UC5A for commodity specification G, Marine (Salt Water) Applications. Preservative retention shall be no less than 2.5 pcf. The Contractor shall be responsible for the quality of treated wood products.

B. Hardware: Bolts with necessary nuts and washers shall conform to ASTM A307. Rods, nuts, and washers shall be galvanized in accordance with ASTM A123 or ASTM A153 as applicable. Provide rods with washers under nut and head.

528.043 Installation Procedures and Tolerances

The following paragraphs are added:

CONSTRUCTION

Use timber members that have been cut, beveled, and faced prior to plant preservative treatment. In addition to the contract clause entitled "Accident Prevention" provide protective equipment for personnel fabricating, field treating, or handling materials treated with creosote or water-borne salts.

PANEL FRAMING

Cut and frame lumber and timber so that joints will fit over contact surface. Open joints are unacceptable. Make lead hole for shank the same diameter as shank. Make lead hole for the threaded portion approximately two-thirds of the shank diameter. Bore holes in small timbers for boat or wire spikes with a bit of the same diameter or smallest dimension of the spike to prevent splitting. Counterbore for countersinking wherever smooth faces are indicated or specified.

Where threaded rods are used to fasten timber to timber, join members together and retighten immediately prior to final acceptance of Contract. Provide rods having sufficient additional threading to provide at least 3/8 inch per foot thickness of timber for future retightening. Provide timber connectors of types indicated.

FIELD TREATMENT

A. Timberwork

1. Field treat cuts, bevels, notches, refacing and abrasions made in the field in treated timbers in accordance with AWPA M4 and SDS. Wood preservatives are restricted use pesticides and shall be applied according to applicable standards. Trim cuts and abrasions before field treatment. Paint depressions or openings around holes, joints, or gaps including recesses formed by counterboring after fastener is in place.

B. Galvanized Surfaces

1. Repair and recoat zinc coating which has been field or shop cut, burned by welding, abraded, or otherwise damaged to such an extent as to expose the base metal. Thoroughly clean the damaged area by wire brushing and remove traces of welding flux and loose or cracked zinc coating prior to painting. Paint cleaned area with two coats of zinc oxide-zinc dust paint. Compound paint with a suitable vehicle in a ratio of one part zinc oxide to four parts zinc dust by weight.

528.08 Method of Measurement

Structural Timber (Fender Panels) will be measured by the lump sum, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily install the two timber fender panels as shown on the Plans. Measurement shall include pressure treatment, hardware connections, and inspection.

528.09 Basis of Payment

Structural Timber (Fender Panels) will be paid for at the Contract Lump Sum price, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily install the timber Fender Panel at the job site. Payment shall include pressure treatment and inspection.

Payment will be made under:

Pay Item	Description	Pay Unit
528.08	Structural Timber (Fender Panels)	Lump Sum

SPECIAL PROVISION
SECTION 528
STRUCTURAL TIMBER
(Wave Screens)

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, with the following additions:

528.01 Description

Add the following paragraph:

The work also includes the following:

This section applies to all work necessary by the Contractor to construct the timber wave screens and all requirements listed herein and in accordance with the drawings. Contractor shall be qualified in the field of timber work and installation with a at least five years experience.

528.011 General References

Add the following paragraph:

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

A. AMERICAN WOOD-PROTECTION ASSOCIATION (AWPA) – Use current Standard

AWPA U1	User Specification for Treated Wood
AWPA T1	Processing and Treatment Standard
AWPA M4	Standard for the Care of Preservative-Treated Wood Products
AWPA M6	Brands Used on Forest Products
AWPA P5	Standard for Waterborne Preservatives
AWPA U1	Lumber, Timbers, Bridge Ties and Mine Ties – Pressure Treatment
AWPA M4	Care of Preservative-Treated Wood Products
AWPA M6	Brands Used on Forest Products
AWPA P2	Creosote Solutions
AWPA P5	Waterborne Preservatives

B. ASTM INTERNATIONAL (ASTM) – Use current Standard

ASTM A 123	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A 153/A 153M	Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A 307	Carbon Steel Threaded Rod, 36,000 psi Tensile Strength

Except as otherwise indicated on the drawings or specified herein, the industry standards shall apply to all work under this section. Where requirements indicate on the drawings or specified herein differ from the industry standards, the more stringent requirements shall govern.

528.015 Submittals

This Subsection is added and shall include the following:

The Contractor shall provide the submittals listed below in accordance with Section 105.70 of the MaineDOT Standard Specification. Specific components of the submittals are listed in the referenced MaineDOT SECTION 501.

A. Timber preservative inspection test report. Submit the inspection report of an independent inspection agency, for approval by the Owner, that offered products complying with applicable AWPA Standards. Identify treatment on each piece by the quality mark of an agency accredited by the Board of Review of the American Lumber Standard Committee.

B. Delivery inspection list test report.

C. Provide Safety Data Sheets (SDS) associated with timber preservative treatment. Contractor shall comply with all safety precautions indicated on SDS.

D. Product Data:
   1) Timber Materials: Submit drawings of treated timber showing dimensions of cut, framed, or bored timbers

528.018 Delivery, Storage, and Handling

A. Open-stack untreated timber and lumber material on skids at least 12 in. aboveground, in a manner that will prevent warping and allow shedding of water. Close-stack treated timber and lumber material in a manner that will prevent long timbers from sagging or becoming crooked. Protect materials from weather. Handle treated timber with ropes or chain slings without dropping, breaking outer fibers, bruising, or penetrating surface with tools. Do not use cantdogs, peaveys, hooks, or pike poles. Protect timber and hardware from damage.

528.02 Materials

This Subsection is deleted and replaced with the following:

A. Timber Wave Screens

   1) Solid Sawn: Provide solid rough sawn timber of Southern Yellow Pine, Structural Grade or better with a minimum allowable flexural strength (Fb) of 1200 psi and identified by the grade mark of a recognized association or independent inspection agency using the specific grading requirements of an association recognized as covering the species used. The association or independent inspection agency shall be certified by the Board of Review, American Lumber Standards Committee, to grade the species used.

   2) Preservative Treatment: Fabricate timber before administering preservative treatment. Treated timber shall be branded, by the producer, in accordance with AWPA M6. Treat wood to be used in contact with salt water or salt water splash in accordance with AWPA U1 and AWPA T1 with water-borne preservative (CCA). The Use Category shall be UC5A for commodity specification G, Marine

(Salt Water) Applications. Preservative retention shall be no less than 2.5 pcf. The Contractor shall be responsible for the quality of treated wood products.

B. Hardware: Threaded rods with necessary nuts and washers shall conform to ASTM A307. Rods, nuts, and washers shall be galvanized in accordance with ASTM A123 or ASTM A153 as applicable. Provide rods with washers under nut and head.

528.043 Installation Procedures and Tolerances

The following paragraphs are added:

CONSTRUCTION

Use timber members that have been cut, beveled, and faced prior to plant preservative treatment. In addition to the contract clause entitled "Accident Prevention" provide protective equipment for personnel fabricating, field treating, or handling materials treated with creosote or water-borne salts.

FRAMING

Cut and frame lumber and timber so that joints will fit over contact surface. Secure timbers and piles in alignment. Open joints are unacceptable. Make lead hole for shank the same diameter as shank. Make lead hole for the threaded portion approximately two-thirds of the shank diameter. Bore holes in small timbers for boat or wire spikes with a bit of the same diameter or smallest dimension of the spike to prevent splitting. Counterbore for countersinking wherever smooth faces are indicated or specified.

FRAMED BENTS

A. Cross Bracing, Wales, and Vertical Timbers

1. Align bents before bracing is placed. Provide bracing of sufficient length to provide a minimum distance of 8 inches between outside bolt and end of brace. Bracing and girts shall bear firmly against piles or timber to which secured. Place fillers to avoid bending the bracing more than one inch out of line when bracing bolts or other fastenings are drawn up tight. Built-up fillers will not be permitted. Make filler a single piece of the same treated lumber as that in the brace, with a width of at least 6 inches and a length of at least 12 inches. Bolt ends of bracing through pile, post, or cap with a bolt of at least one inch diameter, unless otherwise shown on the drawings.

B. Fastening

1. Vertical rods shall have nuts on the lower end. Where rods are used to fasten timber to timber, timber to concrete, or timber to steel, bolt members together when they are installed and retighten immediately prior to final acceptance of contract. Provide rods having sufficient additional threading to provide at least 3/8 inch per foot thickness of timber for future retightening. Provide timber connectors of types indicated. Force toothed-ring and spike-grid connectors and clamping plates into the contact surfaces of timbers joined by means of proper pressure tools; at joints, embed connectors of these types simultaneously and uniformly.

FIELD TREATMENT

A. Timberwork

1. Field treat cuts, bevels, notches, refacing and abrasions made in the field in treated timber in accordance with AWPA M4 and SDS. Wood preservatives are restricted use pesticides and shall be applied according to applicable standards. Trim cuts and abrasions before field treatment.

B. Galvanized Surfaces

1. Repair and recoat zinc coating which has been field or shop cut, burned by welding, abraded, or otherwise damaged to such an extent as to expose the base metal. Thoroughly clean the damaged area by wire brushing and remove traces of welding flux and loose or cracked zinc coating prior to painting. Paint cleaned area with two coats of zinc oxide-zinc dust paint. Compound paint with a suitable vehicle in a ratio of one part zinc oxide to four parts zinc dust by weight.

528.08 Method of Measurement

Structural Timber – Wave Screens will be measured by the lump sum, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily install the timber wave screen. Measurement shall include pressure treatment, hardware connections, and inspection.

528.09 Basis of Payment

Structural Timber – Wave Screens will be paid for at the Contract Lump Sum price, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily install the timber wave screen at the job site. Payment shall include pressure treatment and inspection.

Timber piles will be paid for separately under Pay Item 501.202, Timber Pile, In-Place.

Payment will be made under:

Pay Item	Description	Pay Unit
528.08	Structural Timber – Wave Screens (Bass Harbor)	Lump Sum
528.08	Structural Timber – Wave Screens (Swan's Island)	Lump Sum

SPECIAL PROVISION
SECTION 533
NON-SHRINK GROUT

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 533 – NON-SHRINK GROUT with the following additions:

533.01 Description

The work covered by this document consists of furnishing all equipment, materials, labor and performing all operations required for the installation of fluid, high strength, non-shrink grouts as directed by the engineer or owner. The non-shrink grout shall be used under chocks, double bitts, and light and navigational light posts.

533.02 Quality Assurance

The manufacturer shall have been in the business of manufacturing similar products for over ten years, maintain a strict quality assurance program, offer technical services and provide representative at the jobsite for product training, prior to product installation, upon written request.

The contractor shall submit to the engineer or owner, at least three job references where the contractor has successfully completed similar applications.

533.03 Materials

Non-shrink grout cementitious grout shall be a fluid consistency, pre-packaged, cement-based grout requiring only the addition of potable water. The manufacturer shall be ISO 9001 certified and have at least 10 years experience in the manufacture of precision cement-based grouts. The manufacturer shall offer technical services and provide a representative at the jobsite for product training prior to product installation upon five days advance notice.

The grout material shall meet the following typical performance criteria when cured at 73°F (23°C):

1. Grout shall not contain metallic aggregate, expansive cement, or gas generating additives such as aluminum powder.
2. Grout shall contain air release aggregate to generate positive expansion.
3. Early Height Change, ASTM C 827 0.0 to 4.0%
4. Hardened Height Change, ASTM C 1090 0.0 to 0.3%
5. Effective Bearing Area 95%
6. Compressive Strength, ASTM C 942
   - 1 Day 3500 psi
   - 7 Days 6500 psi
   - 28 Days 8000 psi
7. Bond Strength, ASTM C 882 28 Days 2000 psi (13.8 MPa)
8. Consistency, ASTM C 939 20 – 30 seconds
9. Working Time 30 minutes
10. Application Temperature 40°F to 90°F (4°C to 32°C)

11. Material Temperature 40°F to 90°F (4°C to 32°C)
12. Meets performance requirements of ASTM C 1107-02, Grades A, B and C for 30 minutes at 40°F to 90°F (4°C to 32°C).

Three references of successfully completed projects of similar nature and scope of the work detailed in this specification shall be provided, as well as a minimum ten-year history of use in the industry. The testing laboratory shall certify to any modifications made to tests performed and provide details of modifications.

533.04 Delivery, Storage, and Handling

All materials shall be delivered to the jobsite in their original, unopened packages, clearly labeled with the manufacturer's identification, printed instructions and batch code.

Store and condition the specified product in accordance with the appropriate product data sheet.

For handling instructions, refer to the Material Safety Data Sheet.

533.05 Concrete Surfaces

Completely remove all oil, grease, laitance and other contaminants. Blow surfaces free of dust and debris using oil-free compressed air.

Prior to placement, soak concrete surfaces thoroughly for a minimum of eight hours to an optimum 24 hours with potable water. Concrete shall be saturated and free of standing water at time of placement.

533.06 Metal Surfaces

Surface shall be clean, free of oil, grease, rust and other contaminants.

533.07 Environmental Conditions

Condition and maintain all materials and surfaces that contact grout to between 40°F to 90°F (4°C to 32°C). Shade from direct sunlight as necessary.

533.071 Cold Weather Grouting

Low temperatures delay the set, increase working time and delay the strength development of cement-based products. The procedures below may compensate for these conditions.

A. Materials shall be conditioned as necessary so that the mixed grout is between 40°F to 80°F (4°C to 27°C). Due to the mass of palletized material. up to 72 hours of conditioning may be required. Store grout in an indoor or tarped and heated area when required.
B. All surfaces in contact with grout must be preconditioned and maintained at a temperature between 40°F to 90°F (4°C to 32°C) for at least 24 hours.

C. Heating shall be accomplished by indirect exposure. Heated enclosures must be windproof and weatherproof. Combustion heaters must be vented and shall not be permitted to heat and dry the concrete locally.
D. Grout temperature shall be maintained above 40°F (4°C) until the grout reaches 1000 psi (6.9 MPa).
E. Gradually reduce temperature of grout to ambient temperature to avoid thermal shock.

533.072 Hot Weather Grouting

High temperatures accelerate the set, decrease working time, and accelerate the strength gain of cement-based products. The procedures below may compensate for these conditions.

A. Materials should be pre-conditioned so that the grout mix temperature is between 50°F (10°C) and 95°F (35°C). Due to the mass of palletized material, up to 72 hours of pre-conditioning may be required. Store grout in a shaded area out of direct sunlight.
B. All surfaces in contact with cement based grout shall be pre-conditioned and maintained below 95°F (35°C) for a minimum of 24 hours. Pre soaking of surfaces, mixing of equipment and wheelbarrows with cold or iced water will facilitate cooling of surfaces.
C. Mix grout using cold or iced water. Do not put ice directly in with grout during mixing.
D. Provide shading during grout placement and where feasible, place grout when temperatures are decreasing, at night or early morning. Provide protection from excessive wind to reduce rapid drying and evaporation of water from exposed grout surfaces.
E. Begin wet cure immediately after grout takes initial set and continuously wet cure all exposed grout surfaces using wet rags, burlap or burlene. Place plastic sheeting over material used for wet cure to ensure continuous wet cure. Monitor condition of material used for wet cure to ensure drying does not occur.
F. After a minimum 24 hour continuous wet cure, continue wet cure for an additional 48 hours or coat all exposed grout surfaces with an approved curing compound meeting the water retention requirements of ASTM C 309.

533.08 Equipment

All necessary tools, equipment and materials shall be as close as possible to the area being grouted, such as mortar mixers, measuring containers, trowels and grout.

Appropriate clothing and safety equipment shall be worn to avoid breathing dust and prevent eye and skin contact with both dry and mixed grout.

Wheelbarrows, buckets, shovels and pumps shall be clean, dampened and readily available for transporting mixed grout.

Provide headbox and plunger when pouring grout. Provide backboard, ram and hammer when dry-pack grouting.

An ample source of potable water shall be available for preconditioning, mixing, cleaning and curing.

533.09 Mixing

Mortar Mixer (Stationary Barrel with Moving Paddles)

A. Provide an adequate number of mortar mixers in good operating condition for uninterrupted placement. Do not exceed one-half the maximum capacity of the mortar mixer.
B. Pre-wet mortar mixer, empty excess water.
C. Start by adding the minimum amount of premeasured potable water to mixer. While mixing, slowly add grout and mix to a uniform consistency.
D. Mix thoroughly for approximately five minutes. To achieve desired consistency, add remaining water as necessary. Do not exceed maximum water content as stated on product packaging or add an amount that will cause segregation.
E. Do not mix more material than can be placed within the working time of the grout. Do not retemper the mix by adding additional water.
F. Transport mixed material by wheelbarrow or buckets, taking care not to allow material to segregate.
G. For puts requiring aggregate extension, add clean, damp coarse aggregate meeting the requirements of ASTM C 33 before final water adjustment.

533.10 Pumping Procedures

The type and size of pump discharge line used are dependent on the parameters of each installation. Contact the pump and group manufacturers for recommendations. The proposed pumping equipment and procedures shall be submitted for approval. Pump grout at less than fluid consistency.

Pumping raises the grout temperature and shortens the working time while reducing its consistency. Keep mix temperature as cool as necessary, except in cold weather.

The grout shall be mixed to a consistency that will not segregate while pumping.

The grout shall be passed through a #4 screen prior to placement into the pump hopper.

Before pumping, determine the working time under jobsite conditions. Pumpability shall be determined by field testing.

The pump shall be positioned to minimize the pumping distance. Keep the discharge line as close to horizontal as possible. All hose connections must be watertight.

Immediately prior to pumping, the pump and lines shall be primed with a priming slurry leaving hopper empty to prevent overwatering.

Once the pumping has begun, it is important not to use any of the priming slurry from the discharge lines. Grout shall not be used until a uniform consistency is obtained at the discharge nozzle.

Provide an adequate volume of mixed grout to keep the pump hopper at least half full. The grout shall be placed into pump hopper in a manner to prevent air entrapment.

The discharge nozzle shall be withdrawn only while pumping, keeping it submerged within the grout at all times.

533.11 Curing

Grout shall be wet cured for a minimum of three days, or coated with an approved curing compound after a minimum 24 hour wet cure. Grout shall be protected from excessive evaporation with wet rags prior to set.

The grout shall be protected from wind, rain, freezing and vibration until a minimum compressive strength of 1000 psi (6.9 MPa) is achieved.

533.12 Basis of Payment

Any grout work shall be considered incidental to the work being performed.

SPECIAL SPECIFICATIONS
SECTION 634
HIGHWAY LIGHTING

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 634 – HIGHWAY LIGHTING with the following additions:

634.01 Description

This work shall consist of furnishing and installing the following in accordance with these specifications and plans.

1. Relocation of existing navigation lights and support structures.
2. Provision of new support structure for relocated existing navigation lights.
3. Provision of replacement lamps and lenses for existing navigation lights.
4. Provision of new dolphin lighting poles and luminaires.
5. Provision of NEMA 4X stainless steel wiring boxes.
6. Provision of rigid PVC coated steel conduit.
7. Provision of flexible PVC coated steel conduit.
8. Provision of wiring conductors to serve dolphin lighting luminaires, and to serve navigation lights.
9. Ground of new electrical systems.
10. Removals of existing wiring boxes, conduit, and wiring conductors.

634.02 General

Where the Contract documents permit the selection from several product options, and where it becomes necessary to authorize a substitution, the Contractor shall not proceed with purchases until coordination of all interface requirements has been checked and satisfactorily established. Substitutions are subject to approval by the Authority or designated representative per the requirements of the Contract documents.

Refer to Supplemental Specification Section 100 for required construction sequencing.

Refer to the Structural Contract Plans for the exact routing of conduits to be installed under the pier deck. The Electrical Contract Plans show schematic arrangements only.

634.021 Materials

Materials shall meet the requirements specified in the following Subsection of Division 700 - Materials:

Steel Conduit	715.02
Non-Metallic Conduit	715.03
Metallic Junction and Fuse Box	715.05
Secondary Wiring	715.07
Service Equipment	715.11
Anchor Bolts	720.07

634.022 Equipment List and Drawings

Provide scale drawings and details for anchor bolt installation methods.

634.03 General

Coordinate conduit locations with existing conditions and other utilities. Where conflicts are found make all practical efforts to install new work to produce a minimum impact on existing conditions.

634.04 Cable Installation

Provide factory-fabricated wire of the size, rating, material and type as required for each branch circuit. Where not indicated, provide proper selection as determined by installer to comply with installation requirements and with NEC standards. Building wire in conduit shall be 600 volt class Type THWN-2 or Type XHHW-2, as manufactured by *Southwire* or approved equal. Conductors shall be rated 90º C with moisture and heat-resistant thermoset cross-linked polyethylene insulation.

634.041 Conduit

Conduit shall be PVC coated rigid steel. Exposed conduit threads shall be entirely coated with PVC to prevent corrosion.

Box and equipment connections at exterior locations shall be made with liquid-tight flexible steel conduit comprised of single strip, continuous, flexible interlocked, double-wrapped steel, galvanized inside and outside; forming smooth internal wiring channel; with liquid-tight jacket of flexible polyvinyl chloride (PVC), and with liquid-tight connectors.

Provide corrosion-resistant stainless steel strut members as manufactured by *Unistrut*, series P1001 SS, or approved equal for conduit support where exposed on concrete piers. Provide stainless steel hardware and stainless steel conduit clamps for all exposed conduit mounting applications.

634.042 Metallic Conduit Installation

Install conduit and tubing products as required, in accordance with manufacturer's written instructions, applicable requirements of NEC and National Electrical Contractors Association's "Standard of Installation", and in accordance with recognized industry practices to ensure that products serve intended function.

634.044 Pull Boxes:

Exterior pull boxes installed exposed at dolphins shall be UL listed NEMA 4X 316 stainless steel with stainless steel hardware. Provide size per NEC for the given number of entrance/exit conduits, but shall not be smaller in size than 16” x 16” x 8”.

634.053 Re-Installation of Existing Navigation Lights:

The Contractor shall install relocated existing navigation light support structures, with attached existing navigation lights, to make them fully operational. The Contractor will be required to:

a. Remove the existing navigation light support structure with the attached navigation light.
b. Install the relocated navigation light with its support structure with new anchor bolts and nuts as specified on the plans.
c. Provide replacement lenses for the navigation lights as specified on the plans.
d. Provide circuit wiring to the relocated navigation lights.

634.054 Re-Installation of Existing Dolphin Lights:

The Contractor shall install relocated existing dolphin light poles, with attached existing luminaires, to make them fully operational. The Contractor will be required to:

a. Remove the existing dolphin light poles with the attached luminaires.
b. Install the relocated dolphin light poles new anchor bolts and nuts as specified on the plans.
c. Provide circuit wiring to the relocated dolphin lights.

634.055 New Dolphin Lighting Poles:

The Contractor shall dolphin lighting poles with attached luminaires. The Contractor will be required to:

a. Provide 10-foot tall, 4-inch square, aluminum lighting poles with bronze anodized finish. Provide anchor bolts in sizes as recommended by the pole manufacturer. Lighting poles shall be provided in conformance with EPA and weight ratings for luminaires as specified in the MDOT Standard Specifications. Lighting poles shall be as manufactured by *Valmont,* or approved equal.
b. Provide a single luminaire per each dolphin lighting pole. Luminaires shall utilize LED lamp sources, with 4000K color temperature. Luminaire optical distribution pattern shall be IESNA Type IV. Luminaires shall be UL listed for wet locations with an IP66 rating, and shall have been tested according to IESNA LM-79 and IESNA LM-80. Luminaires shall be provided with a die-cast aluminum housing with bronze finish color. Provide an integral non-dimming universal voltage LED driver rated for 120-240 volts. Provide a twistlock photocell control. Luminaires shall be as manufactured by *RAB Lighting*, model # WPLED-4T-78-N/PCT, or approved equal.
c. Provide circuit wiring to the relocated navigation lights.

634.081 Grounding and Bonding:

Furnish labor and material to provide grounding facilities for the electrical installation as required by all inspecting and jurisdictional authorities as herein specified. The following are included, but not limited to, as items requiring grounding:

- Conduits, boxes and other conductor enclosures. Neutral or identified conductor of interior wiring system.
- Metallic cabinets and auxiliary systems cabinets.

Conduit Grounding: All grounding bushings within all enclosures, including equipment enclosures, shall be wired together and connected internally to the enclosure grounding lug or grounding bus with bare copper conductor. Grounding conductors sized in accordance with NEC shall be used with all grounding bushings.

Equipment Grounding: All electrical equipment shall be grounded. Most other equipment will be furnished with grounding pads or grounding lugs. All ground connections shall be cleaned immediately prior to connection. The Contractor shall provide all grounding material required but not furnished with the equipment.

No grounding conductor shall be smaller than 12 AWG wire unless it is a part of an acceptable cable assembly.

634.092 Method of Measurement:

Measurement for work associated with the installation of the relocated navigation lights and supporting structures as shown on the Plan drawings and described herein will be per each item.

Measurement for work associated with the relocation of existing dolphin lighting poles as shown on the Plan drawings and described herein will be per each item.

Measurement for work associated with the provision of new dolphin lighting poles as shown on the Plan drawings and described herein will be per each item.

Measurement for work associated all work associated with the provision of new NEMA 4X wiring boxes as shown on the Plan drawings and described herein will be per each item.

Measurement for work associated with the existing transformers as shown on the Plan drawings and described herein will be made as lump sum.

Measurement for the installation of the wire as described herein will be per foot, to the nearest 10 foot interval per run.

Measurement for the installation of PVC coated rigid conduit as shown on the Plan drawings and described herein will be per linear foot actually furnished, installed, and accepted at the Contract price per linear foot.

Measurement for installing the Liquid Tight Metallic Flexible Conduit as shown on the Plan drawings and described herein will be per foot actually furnished, installed, and accepted at the Contract price per linear foot.

Measurement for work associated all work associated with removals of existing electrical boxes, conduit, and wiring as shown on the Plan drawings and described herein will be made as lump sum.

634.093 Basis of Payment:

Payment for the accepted quantity of Liquid Tight Flexible Metallic Conduit as shown on the Plan drawings and described herein will be per linear foot actually furnished, installed, and accepted at the Contract price per linear foot. This price shall include the cost of: furnishing and installing the conduit; and fittings; grounding and bonding connections, and all materials, labor, equipment and incidentals necessary to complete the work.

Payment for the accepted quantity of PVC coated rigid steel conduit as shown on the Plan drawings and described herein will be per linear foot actually furnished, installed, and accepted at the Contract price per linear foot. This price shall include the cost of: furnishing and installing the conduit; pull string, fittings, grounding and bonding connections, test cleaning interiors of conduits and all materials, labor, equipment and incidentals necessary to complete the work.

Payment for the accepted quantity of relocated navigation lighting poles will be per each item. This payment shall include installation of the relocated support structure and anchor base, reinstallation of the existing luminaire, replacement of the luminaire lenses, replacement of the luminaire lamps, grounding and bonding connections, and all materials, labor, equipment and incidentals necessary to complete the work.

Payment for the accepted quantity of relocated dolphin lighting poles will be per each item. This payment shall include installation of the relocated lighting pole and anchor base, reinstallation of the existing luminaire, grounding and bonding connections, and all materials, labor, equipment and incidentals necessary to complete the work.

Payment for the accepted quantity of new dolphin lighting poles will be paid per each item. This payment shall include the installation of the new lighting pole and foundation base, installation of the new luminaire, grounding and bonding connections, and all materials, labor, equipment and incidentals necessary to complete the work.

Payment for installing the NEMA 4X wiring pull boxes as shown on the Plan drawings and described herein will be per each item. It shall include the furnishing, installation, mounting of the boxes, and the drilling of holes into the box for conduits, grounding and bonding connections, and all materials, labor, equipment and incidentals necessary to complete the work.

Payment for work associated with transformers as shown on the Plan drawings and described herein will be per lump sum. It shall include the replacement of the existing 15kVA, single-phase transformer, modifying the existing primary and secondary wiring to accommodate floor mounting of the transformer on the deck, as well as grounding and bonding connections. The work shall also include cleaning and painting the existing 45kVA 3-phase transformer enclosure. The work shall include all materials, labor, equipment and incidentals necessary to complete the work.

Payment for the accepted quantity of wire as described herein will be per foot, to the nearest 10 foot interval per run. It shall include the furnishing, installation, routing, termination, splices and connection of the wire per the wiring schedule, and all materials, labor, equipment and incidentals necessary to complete the work.

Payment for work associated with system grounding as shown on the Plan drawings and described herein will be per lump sum. It shall include grounding connections for conduit, boxes, dolphin lighting poles, navigation lighting support structures and luminaires, and all materials, labor, equipment and incidentals necessary to complete the work.

Payment for work associated with electrical removals as shown on the Plan drawings and described herein will be per lump sum. It shall include the removal of conduits, boxes, and associated wiring, and all materials, labor, equipment and incidentals necessary to complete the work.

Payments will be made under:

Pay Item	Description	Pay Unit
634.1812	1” Liquid Tight Flexible Conduit	Linear Foot
634.189	1” PVC Coated Rigid Steel Conduit	Linear Foot
634.2075	Remove and Relocate Navigation Lighting	Each
634.2076	Dolphin Lighting	Each
634.2311	Stainless Steel Exterior Wiring Pull Box	Each
634.316	#10 AWG Copper Wiring	Linear Foot
634.3161	#12 AWG Copper Wiring	Linear Foot
634.730	Remove Existing Electrical Components	Lump Sum

SPECIAL PROVISION
SECTION 634
HIGHWAY LIGHTING
(Solar Powered Navigational Light (with Pole))

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 634 – HIGHWAY LIGHTING with the following additions:

634.01 Description

The following paragraph is added:

This section applies to the solar powered lanterns and poles to be installed on each dolphin by the Contractor.

634.02 General

The following paragraph is added:

The solar powered lanterns shall meet the specifications shown on the plans.

634.021 Materials

The following paragraph is added:

Materials shall meet the following requirements:

- The solar lantern shall be a Carmanah 860 lantern or approved equal.
- The solar lantern shall be self-contained.
- The solar lantern shall have an optical performance of 230 cd or more for the red lens.
- The solar lantern shall have an ingress protection of 68 or better.
- The solar lantern light shall be LED.
- The solar modules of the lantern shall be high-efficiency cells with embedded MPPT.

634.028 Submittals

The following paragraph is added:

The Contractor shall submit the solar powered lantern specifications and list of materials for fabrication for review and approval.

634.092 Method of Measurement

The following paragraph is added:

Solar Powered Navigational Light (with Pole) will be measured by the unit, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications. Measurement shall include furnishing and installing the marker, including the all connection hardware, supporting pole, and anchorage.

634.093 Basis of Payment

The following paragraph is added:

Solar Powered Navigational Light (with Pole) will be paid for at the Contract unit price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Payment will be made under the following Pay Item:

Pay Item	Description	Pay Unit
634.2077	Solar Powered Navigational Light (with Pole)	Each

SPECIAL PROVISION
SECTION 645
HIGHWAY SIGNING
(Navigation Sign)

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 645 – HIGHWAY SIGNING with the following additions:

645.01 Description

The following paragraph is added:

This section applies to the navigation sign to be installed on the outer-most turning dolphin by the Contractor. The sign material shall be an aluminum sheet.

645.02 General

The following paragraph is added:

The navigation sign shall be fabricated to the dimensions shown on the plans using black lettering on a reflective white background.

645.021 Materials

The navigation sign shall be fabricated of aluminum sheet in accordance with MaineDOT Material Specification 719.04, supported in accordance with Specification Section 720.08, and fastened in accordance with Specification 719.075, with the exception that hardware shall be fastened to the back of the steel fender panel. Background and lettering shall be of high-intensity material reflectorized material in accordance with MaineDOT Specification 719.02.

645.022 Submittals

The Contractor shall submit a shop drawing which illustrates the sign dimensions and lists the materials for fabrication for review and approval.

645.08 Method of Measurement

Navigation Sign will be measured by the unit, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications. Measurement shall include furnishing and installing the sign including the all connection hardware.

645.09 Basis of Payment

Navigation Sign will be paid for at the Contract unit price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Payment will be made under the following Pay Item:

Pay Item	Description	Pay Unit
645.265	Navigation Sign	Each

SPECIAL PROVISION
SECTION 652
MAINTENANCE OF TRAFFIC

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 652 – MAINTENANCE OF TRAFFIC with the following additions:

652.3.2 Responsibility of the Contractor

The contractor shall provide continuous and effective traffic control and management for the Project that is appropriate to the construction while following the United States Coast Guard (USCG) requirements.

652.3.3 Submittal of Traffic Control Plan

The contractor shall submit to the Department, at or before the Preconstruction Meeting, a Traffic Control Plan (TCP) that follows USCG requirements. The Department will transmit the TCP to the local harbor master. The local harbor master review shall be concurrent with the Department review. The TCP shall comprise the following information in addition to the Standard Specification:

a. The name, telephone and mobile phone numbers of the Contractor's Traffic Control Supervisor (TCS). The TCS should be familiar with USCG requirements and maintain communication with the local harbor master and the vessel captains.

b. The Contractor shall provide proposed construction phasing or sequencing that reasonably minimizes impact. Where applicable, Contractor shall identify, in its construction schedule, specific activities which may impact the operation of the ferry service. The Contractor shall always maintain the facility for safe ferry service operations and overnight mooring. The Contractor's barge and equipment shall not present any safety hazards for vessel operations and other boating activities.

c. The Contractor shall ensure the normal operation of the ferry service and all other boating activities. The Contractor shall maintain all utilizes as operational, including but not limited to the site lighting, vessel electrical hook-up, hoist tower, terminal building, and harbor channel.

d. The Contractor shall coordinate with the terminal manager or the Ferry Vessels on all ferry traffic impacts.

SPECIAL PROVISION
SECTION 655
ELECTRICAL WORK
(Cathodic Protection by Sacrificial Anodes)

All work and materials shall conform to the Contract Drawings and the provisions of the State of Maine Department of Transportation Standard Specifications, March 2020, SECTION 655 – ELECTRICAL WORK, with the following additions:

655.01 Description

This section applies to all necessary steps taken by the Contractor to comply with the cathodic protection requirements listed herein and in accordance with the Plans. Contractor shall be qualified in the field of cathodic protection with a successful track record of at least five years.

Anodes shall be placed on all proposed steel pipe piles at the dolphin(s), as well as upon the proposed steel fender panel(s). The anodes shall be located on the backside of these elements away from the pen so as to prevent damage by vessels.

655.02 References

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)
- ASTM A 36 (1992) Carbon Structural Steel
- ASTM A 307 (2004) Carbon Steel Bolts and Studs
- ASTM A 563 (2007) Carbons and Alloy Steel Nuts
- ASTM F 436 (2010) HardenedSteel Washers

AMERICAN WELDING SOCIETY (AWS)
- AWS D3.6M (1999) Specifications for Underwater Welding

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
- NFPA 70 (2005) National Electrical Code

655.03 Related Requirements

The Cathodic Protection System installation shall conform to the applicable rules of NFPA 70 and all applicable Federal, State, and local codes. The Cathodic Protection System shall be constructed in accordance with the design requirements set forth in the referenced NACE International and ASTM documents. All materials shall be installed and used in accordance with the recommendations of the manufacturer and safety procedures.

655.04 Submittals

Submit the following in accordance with Section 105.7, Working Drawings, of the State of Maine Department of Transportation Standard Specifications, March 2020:

Anode Data. Submit the following components as part of this submittal package:

A. Product Data: Manufacturer's data, catalog cuts, and other descriptive data shall be

submitted for approval, which shall include the following:

1) Anode dimensions and weight, including core details, illustrated in a shop drawing, and

2) Anode chemical composition

655.05 Materials

All materials shall conform to the requirements set forth herein or as designated on the Plans, unless otherwise specified. All materials must be new, free from defects and shall be of the best commercial quality for the purpose specified. All necessary items and accessories not shown on the Plans or specified herein, but which are required to fully carry out the specified intent of the work, shall be furnished without additional cost to the Department.

Anodes for Steel Pipe Piles and Fender Panels:

This project utilizes Type III Aluminum anodes. Aluminum anodes shall not contain any mercury. The location of the anodes is illustrated in the Plans.

A. Anode Dimensions and Weight

Anode Weight: 80 lbs
Anode Length: 3 ft (max.)
Anode Width: 4 in. (max., either direction)

B. Anode Chemical Composition

1) The aluminum alloy shall have the following composition (% by weight)

Zinc	2.80% to 5.75%
Indium	0.01% to 0.02%
Silicon	0.08% to 0.20% (max)
Aluminum	Remainder

2) Test efficiency of the aluminum alloy in seawater shall not be less than 85% on a 100% efficiency of 1150 ampere-hours per pound. The aluminum alloy shall have an open circuit potential in seawater of not less than -1.15 volts versus a copper-copper sulfate reference electrode.

C. Anode Core

1) The anodes shall have a continuous 1/4-inch flat-bar core with 90 degree bends as shown on the plans. The core member shall be dimensioned to allow a minimum stand-off from the pile 3 in. after its installation. The steel shall comply with ASTM A 36

2) The core of the anode shall be located in the center of the anode casting along the anode longitudinal axis.

3) To facilitate proper bonding of the aluminum alloy to the steel core during casting, the surface of the steel shall be prepared by a dry blast cleaning process. Rust discoloration and/or visible surface contamination shall not be permitted. Surface preparation shall be SSPC SP6 (commercial blast) or better.

D. Anode Surface Irregularities

1) Shrinkage depressions on the anode surface shall not exceed 10 percent of the nominal height of the anode as measured from the uppermost corner to the bottom of the depression.

2) Not more than 1 percent of the total surface of the anode casting shall be contaminated with nonmetallic inclusions visible to the naked eye.

3) The straightness of the anode shall not deviate more than 2 percent of the anode nominal length from the longitudinal axis of the anode.

4) Within the aluminum section transverse cracks of unlimited length and depth are permitted if width does not exceed 5 mm and there are not more than 10 cracks per anode. Small dense cracks shall be considered one crack and cracks of 0.5 mm width or less shall be ignored. Longitudinal cracks are not permitted in any length except in the final "topping-up" metal at shrinkage depressions.

Steel Hardware:

A. Threaded Rod: Shall be ASTM A307, course thread

B. Nuts: Shall be ASTM A563, to match threaded rod

C. Washers: Shall be ASTM F436

655.06 Installation

Unless otherwise indicated, all materials shall be installed in accordance with the manufacturer's recommendations, safety procedures and as directed by the Resident. Installation shall conform to NFPA 70.

A. Anode Connections

1) The anodes shall be installed vertically via bolted connections, at the depths and locations indicated on the drawing set. The threaded studs shall be welded to the wall of the pipe pile per AWS D3.6M.

2) The area on each pile where the anode is to be welded shall be cleaned to bare metal just prior to welding the anode. The weld for each anode shall be capable of fully supporting the anode weight.

3) The anode shall be maintained free of oils, chemicals, paint, petroleum products and other foreign chemicals or coatings. All coatings, wrapping and protective shipping material shall be removed from the anode prior to installation.

4) The State may perform a visual underwater inspection of the anode installations. A written report will be submitted indicating which anodes were inspected and the approval of the workmanship. Unacceptable workmanship shall be reworked to the approval of the Resident at no additional cost to the Government before final payment shall be made.

B. Anode Attachment

1) Anodes shall be attached to the piles via bolted connections. A system of double-nutted connections shall be used to attach the anodes to the piles. The diver shall hand-tighten the double-nuts using a wrench to prevent back-off. Do not use power tools.

655.07 Field Quality Control

Field tests shall be witnessed by the Resident. Advise the Resident at least five days prior to performing field tests.

655.08 Method of Measurement

Cathodic Protection by Sacrificial Anodes will be measured by the unit, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications. Measurement shall include furnishing and installing the anodes including the threaded rod connection and all hardware.

655.09 Basis of Payment

Cathodic Protection by Sacrificial Anodes will be paid for at the Contract unit price for the respective Contract items which shall be full compensation for all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications.

Payment will be made under the following Pay Item:

Pay Item	Description	Pay Unit
655.501	Cathodic Protection by Sacrificial Anodes	Each

SPECIAL PROVISIONS
SECTION 841
MOORING HARDWARE
(Mooring Bollard - Double Bitt)
(Mooring Cleat - Chock)
(Mooring Cleat – Chock, Retrieve and Install)

841.01 Description

Provide all labor, materials, equipment and supervision necessary for the retrieval and installation of double bitts and chocks from Vinalhaven (or Rockland) storage area, as well as the purchase and installation of new chocks.

841.02 Materials

Mooring double bitts and chocks located dolphins shall be cast steel manufactured by J.C. MacElroy Co., Inc. of New York or approved equal. Mooring hardware shall be cast carbon steel in compliance with ASTM A27/A27M, Grade 65-35.

Removal and resetting chocks shall comply with Section 202 – Demolition.

Mooring hardware shall be stored in a secure area as necessary to prevent loss and damage to protective coating. All existing bollards shall be inspected by the Owner and/or Engineer after removal due to demolition for acceptance for reuse. The Contractor shall take all precautions not to damage the existing hardware during demolition.

Anchor bolts and hardware shall conform to Section 504 – Structural Steel. Concrete work shall conform to Section 502 – Structural Concrete.

Grout work shall conform to Section 533 – Grout.

New mooring hardware shall be shop coated and shall receive a surface preparation in accordance with SSPC-SP10 with an anchor profile of 2.5 mils. The minimum DFT of the coating shall be 16 mils nominal and inspected per SSPC-PA2. One manufacturer shall provide the coating system to ensure compatibility between coats and quality control of the final product. The specified coating thickness of the three-coat system shall be as follows:

1st Coat:	7-8 mils of Carboguard 890 (or approved equal)
2nd Coat:	7-8 mils of Carboguard 890 (or approved equal)
3rd Coat:	2-3 mils of Carbothane 134 HG, black (or approved equal)

841.03 Submittals

Manufacturer's literature on all new mooring double bitts and chocks with make, model, and certified load capacity with directions of load indicated, method and orientation of installation, and size, type and location of fasteners.

841.04 Installation

Anchor bolts shall be of the size, type and location as recommended by the mooring item manufacturer. Where existing mooring items are to be used, the size and location of the anchor bolts shall be as determined from the anchor bolt holes. Embedment of anchor bolts shall be as detailed on the Drawings. Contractor shall verify bolt spacing for new and existing mooring hardware.

Prior to placement of concrete, areas of mooring hardware shall be formed out of concrete pour. Contractor shall verify orientation. Just prior to setting of mooring hardware, a bed of high-strength, non-shrink grout shall be placed to seal mooring hardware into position. Contractor is to ensure no voids are created beneath the mooring hardware. After mooring hardware is set and tightened down, excess grout shall be cleaned off immediately.

The heads of all bolts or ends of threaded rods which anchor the mooring hardware to the dolphin shall be recessed within the anchorage socket, and the socket filled with the self-leveling sealant. The Contractor shall verify through the submittal process that the anchor socket is sufficiently deep to allow for the recessed anchorage hardware.

841.05 Method of Measurement

Mooring Bollard - Double Bitts will be measured by the unit, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications. Measurement shall include furnishing and installing the cast steel double bitt, protective coating, fastening hardware, and grout bed.

Mooring Cleat - Chocks will be measured by the unit, and shall include all labor, materials, incidentals, and equipment necessary to satisfactorily complete the work in accordance with the Plans and Specifications. Measurement shall include furnishing and installing the cast steel chock, protective coating, fastening hardware, and grout bed.

Where retrieve and install is noted, the mooring device shall be transported from a storage area in Vinalhaven (or Rockland) to the project site.

841.06 Basis of Payment

The accepted quantity of Mooring Bollard – Double Bitts and Mooring Cleat – Chocks shall be paid for at the Contract unit price each, which shall be full compensation for all materials, equipment, labor and incidentals necessary for furnishing and installing the mooring hardware as shown on the contract drawings.

Payment will be made under:

Pay Item	Description	Pay Unit
841.55	Mooring Bollard - Double Bitt	Each
841.55	Mooring Bollard - Double Bitt, Retrieve and Install	Each
841.56	Mooring Cleat - Chock	Each
841.56	Mooring Cleat – Chock, Retrieve and Install	Each

SUPPLEMENTAL SPECIFICATIONS

(Corrections, Additions, & Revisions to Standard Specifications – March 2020)

SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES

104.2.1 Furnishing of Right-of-Way Revise the last sentence in the first paragraph by removing "105.4.5 – Special Detours" and replacing it with "**105.4.5 – Maintenance of Existing Structures**.".

SECTION 401
HOT MIX ASPHALT PAVEMENT

401.19 Contractor Quality Control Amend this Section by adding the following to the end:
"Failure to comply with the approved QCP will result in work suspension and pay reductions as outlined in Section 106.4.6. The Quality Control Plan Value shall be the total bid value for all items covered by the QCP as identified in Special Provision 403."

SECTION 502
STRUCTURAL CONCRETE

502.09 Forms and Falsework Amend this subsection by adding the subsection title "**502.10 Placing Concrete**" after section "D" Removal of Forms and False work" and after the paragraph beginning with "2. Forms and False work, including blocking…". So that a new subsection starts and reads:

"**502.10 Placing Concrete**

A. **General Concrete shall not be placed until forms** …."

502.1701 Quality Control, Method A and B Revise this Section so that the first paragraph and the first sentence of the second paragraph read:

"**502.17 Quality Control The Contractor shall control the quality of the concrete through testing, inspection, and practices which shall be described in the QCP, sufficient to assure a product meeting the Contract requirements. The QCP shall meet the requirements of Section 106, Quality, and this specification. No work under this item shall proceed until the QCP is submitted to and approved by the Department. Failure to comply with the approved QCP will result in work suspension and pay reductions as outlined in Section 106.4.6. The Quality Control Plan Value shall be the total bid value for all cast-in-place items covered by the QCP, using the P value listed in Special Provision 502. If no P value is listed, a value of $350, or bid value per cubic yard, whichever is less, shall be used.**

502.1701 Quality Control, Method A and B The QCP shall address all elements that affect the quality of the structural concrete including, but not limited to, the following: "

SECTION 606
GUARDRAIL

Amend this section by replacing it with the following:

606.01 Description This work shall consist of furnishing and installing guardrail components in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans or as established. Guardrail is designated as:

31" W-Beam Guardrail - Mid-Way Splice
Galvanized steel w-beam, 8" wood or composite offset blocks, galvanized steel posts

Thrie Beam
Galvanized steel thrie beam, 8" wood or composite offset blocks, galvanized steel posts

Median guardrail shall consist of two beams of the above types, mounted on single posts.

Bridge mounted guardrail shall consist of furnishing all labor, materials, and equipment necessary to install guardrail as shown on the plans. This work shall also include drilling for and installation of offset blocks if specified, and incidental hardware necessary for satisfactory completion of the work.

Remove and Reset and Remove, Modify, and Reset guardrail shall consist of removing the existing designated guardrail and resetting in a new location as shown on the plans or directed by the Resident. Remove, Modify, and Reset guardrail and Modify guardrail include the following guardrail modifications: Removing plate washers at all posts, except at anchorage assemblies as noted on the Standard Details, adding offset blocks, and other modifications as listed in the Construction Notes or General Notes. Modifications shall conform to the guardrail Standard Details.

Bridge Connection shall consist of the installation and attachment of beam guardrail to the existing bridge. This work shall consist of constructing a concrete end post or modifying an existing end post as required, furnishing, and installing a terminal connector, necessary hardware, and incidentals required to complete the work as shown on the plans. Bridge Transition shall consist of a bridge connection and furnishing and installing guardrail components as shown in the Standard Details.

606.02 Materials Materials shall meet the requirements specified in the following Sections of Division 700 - Materials:

Timber Preservative	708.05
Metal Beam Rail	710.04
Guardrail Posts	710.07
Guardrail Hardware	710.08

Guardrail components shall meet the applicable standards of "A Guide to Standardized Highway Barrier Hardware" prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee, Task Force 13 Report.

Posts for underdrain delineators shall be "U" channel steel, 8 ft long, 2 ½ lb/ft minimum and have 3/8-inch round holes, 1-inch center to center for a minimum distance of 2 ft from the top of the post.

Reflectorized Flexible Guardrail Markers shall be mounted on all guardrails. A marker shall be mounted onto guardrail posts at the flared guardrail terminal end point and tangent point, both at the leading and trailing ends of each run of guardrail. The marker's flexible posts shall be gray with either silver-white or yellow reflectors (to match the edge line striping) at the tangents, red at leading ends, and green at trailing ends. Whenever the guardrail terminal is not flared, markers will only be required at the terminal end point. These shall be red or green as appropriate. Markers shall be installed on the protected side of guardrail posts unless otherwise approved by the Resident. Reflectorized flexible guardrail markers shall be from the Department's Qualified Products List of Delineators. The marker shall be gray, flexible, durable, and of a non-discoloring material to which 3-inch by 9-inch reflectors shall be applied, and capable of recovering from repeated impacts and meeting MASH 16 requirements. Reflective material shall meet the requirements of Section 719.01 for ASTM D 4956 Type III reflective sheeting. The marker shall be secured to the guardrail post with two fasteners, as shown in the Standard Details.

Reflectorized beam guardrail ("butterfly"-type) delineators shall be mounted on all "w"-beam guardrail. The delineators shall be mounted within the guardrail beam at guardrail posts. Delineators shall be fabricated from high-impact, ultraviolet & weather resistant thermoplastic. Reflectorized beam guardrail delineators shall be placed at approximately 62.5 ft intervals or every tenth post on tangents and at approximately 31.25 ft intervals or every fifth post on curves. Exact locations of the delineators shall be as directed by the Resident. On divided highways, the left-hand delineators shall be yellow, and the right-hand delineators shall be silver/white. On two directional highways, the right-hand side shall be silver/white, and no reflectorized delineator used on the left. All reflectors shall have reflective sheeting applied to only one side of the delineator facing the direction of traffic as shown in the Standard Details. Reflectorized sheeting for guardrail delineators shall meet the requirements of Section 719.01.

Single wood post shall be of cedar, white oak, or tamarack, well-seasoned, straight, and sound and have been cut from live trees. The outer and inner bark shall be removed, and all knots trimmed flush with the surface of the post. Posts shall be uniform taper and free of kinks and bends.

Single steel post shall conform to the requirements of Section 710.07 b.

Single steel pipe post shall be galvanized, seamless steel pipe conforming to the requirements of ASTM A120, Schedule No. 40, Standard Weight.

Acceptable multiple mailbox assemblies shall be listed on the Department's Qualified Products List and shall be MASH 16 tested and approved.

Flared and Tangent w-beam guardrail terminals and guardrail offset blocks shall be from the Department's Qualified Products List. Flared terminals shall be installed with a 4 ft offset as shown in the Manufacturer's installation instructions.

Anchorage assemblies used to anchor trailing ends, radius guardrail, or other ends not exposed to traffic shall meet the applicable standards of "A Guide to Standardized Highway Barrier Hardware" prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee, Task Force 13 Report, Drawing SEW02a.

Existing materials damaged or lost during adjusting, removing and resetting, or removing, modifying, and resetting, shall be replaced by the Contractor without additional compensation. Existing guardrail posts and guardrail beams found to be unfit for reuse shall be replaced when directed by the Resident.

606.03 Posts Posts for guardrail shall be set plumb in holes or they may be driven if suitable driving equipment is used to prevent battering and distorting the post. When posts are driven through pavement, the damaged area around the post shall be repaired with approved bituminous patching. Damage to lighting and signal conduit and conductors shall be repaired by the Contractor.

When set in holes, posts shall be on a stable foundation and the space around the posts, backfilled in layers with suitable material, thoroughly tamped.

The reflectorized flexible guardrail markers shall be set plumb with the reflective surface facing the oncoming traffic. Markers shall be installed on the protected side of guardrail posts. Markers, which become bent or otherwise damaged, shall be removed and replaced with new markers.

Single wood posts shall be set plumb in holes and backfilled in layers with suitable material, thoroughly tamped. The Resident will designate the elevation and shape of the top. The posts, that are not pressure treated, shall be painted two coats of good quality oil base exterior house paint.

Single steel posts shall be set plumb in holes as specified for single wood posts or they may be driven if suitable driving equipment is used to prevent battering and distorting the post.

Additional bolt holes required in existing posts shall be drilled or punched, but the size of the holes shall not exceed the dimensions given in the Standard Details. Metal around the holes shall be thoroughly cleaned and painted with two coats of approved aluminum rust resistant paint. Holes shall not be burned.

606.04 Rails Brackets and fittings shall be placed and fastened as shown on the plans. Rail beams shall be erected and aligned to provide a smooth, continuous barrier. Beams shall be lapped with the exposed end away from approaching traffic.

End assemblies shall be installed as shown on the plans and shall be securely attached to the rail section and end post.

All bolts shall be of sufficient length to extend beyond the nuts but not more than ½ inch. Nuts shall be drawn tight.

Additional bolt holes required in existing beams shall be drilled or punched, but the size of the holes shall not exceed the dimensions given in the Standard Details. Metal around the holes shall be thoroughly cleaned and painted with two coats of approved aluminum rust resistant paint. Holes shall not be burned.

606.045 Offset Blocks The same offset block material is to be provided for the entire project unless otherwise specified.

606.05 Shoulder Widening At designated locations the existing shoulder of the roadway shall be widened as shown on the plans. All grading, paving, seeding, and other necessary work shall be in accordance with the Specifications for the type work being done.

606.06 Mail Box Post Single wood post shall be installed at the designated location for the support of the mailbox. The multiple mailbox assemblies shall be installed at the designated location in accordance with the Standard Details and as recommended by the Manufacturer. Attachment of the mailbox to the post will be the responsibility of the home or business owner.

606.07 Abraded Surfaces All galvanized surfaces of new guardrail and posts, which have been abraded so that the base metal is exposed, and the threaded portions of all fittings and fasteners and cut ends of bolts shall be cleaned and painted with two coats of approved rust resistant paint.

606.08 Method of Measurement Guardrail will be measured by the linear foot from center to center of end posts along the gradient of the rail except where end connections are made to masonry or steel structures, in which case measurement will be as shown on the plans. When connected to radius rail, measurement will be to the end of the last tangent beam.

Guardrail terminal, reflectorized flexible guardrail marker, terminal end, anchorage assembly, bridge transition, bridge connection, multiple mailbox post, and single post will be measured by each unit of the kind specified and installed.

Widened shoulder will be measured as a unit of grading within the limits shown on the plans.

Excavation in solid rock for placement of posts will be paid under force account unless otherwise indicated in the Bid Documents.

606.09 Basis of Payment The accepted quantities of guardrail will be paid for at the contract unit price per linear foot for the type specified, complete in place. Reflectorized beam guardrail (“butterfly”-type) delineators will not be paid for directly but will be considered incidental to guardrail items. Reflectorized flexible guardrail marker, terminal end, anchorage assembly, bridge transition, bridge connection, multiple mailbox post, and single post will be paid for at the contract unit price each for the kind specified complete in place.

Guardrail terminals will be paid for at the contract price each, complete in place which price shall be full payment for furnishing and installing all components including the terminal section, posts, offset blocks, "w" beam, cable foundation posts, plates and for all incidentals necessary to complete the installation within the limits as shown on the Standard Details or the Manufacturer's installation instructions. Pay limits for a flared terminal will be 37.5 feet. Pay limits for a tangent terminal will be 50 feet. Each guardrail terminal will be clearly marked with the Manufacturer's name and model number to facilitate any future needed repair. Such payment shall also be full compensation for furnishing all material, excavating, backfilling holes, assembling, and all incidentals necessary to complete the work, except that for excavation for posts or anchorages in solid ledge rock, payment will be made under 109.7.5 – Force Account. Type III Retroreflective Adhesive Sheeting shall be applied to the approach buffer end sections and sized to substantially cover the end section. On all roadways, the ends shall be marked with alternating black and retroreflective yellow stripes. The stripes shall be 3 in wide and sloped down at an angle of 45 degrees toward the side on which traffic is to pass the end section. Guardrail terminals shall also include a set of installation drawings supplied to the Resident.

Anchorages to bridge end posts will be part of the bridge work. Connections thereto will be considered included in the unit bid price for guardrail.

Guardrail to be placed on a radius of curvature of 150 ft or less will be paid for under the designated radius pay item for the type guardrail being placed.

Widened shoulder will be paid for at the contract unit price each complete in place and will be full compensation for furnishing and placing, grading and compaction of aggregate subbase and any required fill material.

Adjust guardrail will be paid for at the contract unit price per linear foot and will be full compensation for adjusting to grade. Payment shall also include adjusting guardrail terminals where required.

Modify guardrail will be paid for at the contract unit price per linear foot and will be full compensation for furnishing and installing offset blocks, additional posts, and other specified modifications; removing, modifying, installing, and adjusting to grade existing posts and beams; removing plate washers and backup plates, and all incidentals necessary to complete the work. Payment shall also include removing and resetting guardrail terminals where required.

Remove and Reset guardrail will be paid for at the contract unit price per linear foot and will be full compensation for removing, transporting, storing, reassembling all parts, necessary cutting, furnishing new parts when necessary, reinstalling at the new location, and all other incidentals necessary to complete the work. Payment shall also include removing and resetting guardrail terminals when required.

Remove, Modify, and Reset guardrail will be paid for at the contract unit price per foot and will be full compensation for the requirements listed in Modify guardrail and Remove and Reset guardrail.

Bridge Connections will be paid for at the contract unit price each. Payment shall include, attaching the connection to the endpost including furnishing and placing concrete and reinforcing steel necessary to construct new endposts if required, furnishing and installing the terminal connector, and all miscellaneous hardware, labor, equipment, and incidentals necessary to complete the work.

Bridge Transitions will be paid for at the contract unit price each. Payment shall include furnishing and installing the thrie beam or "w"-beam terminal connector, doubled beam section, and transition section, where called for, posts, hardware, precast concrete transition curb, and any other necessary materials and labor, including the bridge connection as stated in the previous paragraph.

No payment will be made for guardrail removed, but not reset and all costs for such removal shall be considered incidental to the various contract pay items.

Payment will be made under:

Pay Item		Pay Unit
606.1301	31" W-Beam Guardrail - Mid-Way Splice – Single Faced	Linear Foot
606.1302	31" W-Beam Guardrail - Mid-Way Splice – Double Faced	Linear Foot
606.1303	31" W-Beam Guardrail - Mid-Way Splice, 15' Radius and Less	Linear Foot
606.1304	31" W-Beam Guardrail - Mid-Way Splice, Over 15' Radius	Linear Foot
606.1305	31" W-Beam Guardrail - Mid-Way Splice Flared Terminal	Each
606.1306	31" W-Beam Guardrail - Mid-Way Splice Tangent Terminal	Each
606.1307	Bridge Transition (Asymmetrical) – Type IA	Each
606.1721	Bridge Transition - Type I	Each
606.1722	Bridge Transition - Type II	Each
606.1731	Bridge Connection - Type I	Each
606.1732	Bridge Connection - Type II	Each
606.178	Guardrail Beam	Linear Foot
606.25	Terminal Connector	Each
606.257	Terminal Connector - Thrie Beam	Each
606.259	Anchorage Assembly	Each
606.265	Terminal End-Single Rail - Galvanized Steel	Each
606.266	Terminal End-Single Rail - Corrosion Resistant Steel	Each
606.275	Terminal End-Double Rail - Galvanized Steel	Each
606.276	Terminal End-Double Rail - Corrosion Resistant Steel	Each
606.353	Reflectorized Flexible Guardrail Marker	Each
606.354	Remove and Reset Reflectorized Flexible Guardrail Marker	Each
606.356	Underdrain Delineator Post	Each
606.358	Guardrail, Modify	Linear Foot
606.362	Guardrail, Adjust	Linear Foot
606.365	Guardrail, Remove, Modify, and Reset	Linear Foot
606.366	Guardrail, Remove and Reset	Linear Foot

606.367	Replace Unusable Existing Guardrail Posts	Each
606.47	Single Wood Post	Each
606.48	Single Galvanized Steel Post	Each
606.50	Single Steel Pipe Post	Each
606.51	Multiple Mailbox Support	Each
606.568	Guardrail, Modify - Double Rail	Linear Foot
606.63	Thrie Beam Rail Beam	Linear Foot
606.64	Guardrail Thrie Beam - Double Rail	Linear Foot
606.65	Guardrail Thrie Beam - Single Rail	Linear Foot
606.66	Terminal End Thrie Beam	Each
606.70	Transition Section - Thrie Beam	Each
606.71	Guardrail Thrie Beam - 15 ft radius and less	Linear Foot
606.72	Guardrail Thrie Beam - over 15 ft radius	Linear Foot
606.73	Guardrail Thrie Beam - Single Rail Bridge Mounted	Linear Foot
606.74	Guardrail - Single Rail Bridge Mounted	Linear Foot
606.753	Widen Shoulder for Low Volume Guardrail End	Each
606.754	Widen Shoulder for Flared Guardrail Terminal	Each
606.78	Low Volume Guardrail End	Each
606.80	Buried-in-Slope Guardrail End	Each

SECTION 618
SEEDING

618.08 Mulching Revise this Section so that the third sentence reads: "Mulch for Seeding Method Number 1 shall only be cellulous fiber mulch Section 619.04 **(b)** or straw mulch Section 619.04 (**a**)."

SECTION 626
FOUNDATIONS, CONDUIT, AND JUNCTION BOXES FOR HIGHWAY SIGNING, LIGHTING, AND SIGNALS

626.034 Concrete Foundations Revise this Section by changing '626.037' to '**626.036**' in the Second Paragraph which begins with "Foundations shall consist of cast-in-place…".

Revise the 10th paragraph beginning with "Before placing concrete, the required elbows…" by removing "…**in accordance with Standard Specification 633**."

SECTION 645
HIGHWAY SIGNING

Section 645.023 Sign Support Structures. Under letter "c.", revise the fifth paragraph beginning with "In addition to the required details…" by removing the words "**and foundation**" from the 5th sentence.

Section 645.08 Method of Measurement. Revise the second paragraph beginning with "Bridge-type, cantilever and…" by removing the words "**including the foundation**" .

Section 645.09 Basis of Payment. Revise the third paragraph beginning with "The accepted bridge-type, cantilever and…" by removing the word "**foundation**" from the second sentence. Add the following sentence to the end of the paragraph "**Conduits, Junction Boxes, and Foundations will be paid for under Section 626.**"

SECTION 681
PRECAST AGGREGATE-FILLED, CONCRETE BLOCK GRAVITY WALL

681.08 Basis of Payment Amend this section by adding the Item Number "**681.10**' in front of the item "Precast Aggregate-Filled Concrete Block Gravity Wall" at the end of the section.

SECTION 703
AGGREGATES

Add the following to the beginning of Section 703 - Aggregates

703.01 Fine Aggregate for Concrete Fine aggregate for concrete shall consist of natural sand or, when approved by the Resident, other inert materials with similar characteristics or combinations thereof, having strong, durable particles. Fine aggregate from different sources of supply shall not be mixed or stored in the same pile nor used alternately in the same class of construction or mix without permission of the Resident.

All fine aggregate shall be free from injurious amounts of organic impurities. Should the fine aggregate, when subjected to the colorimetric test for organic impurities, AASHTO T 21, produce a color darker than the reference standard color solution (laboratory designation Plate III), the fine aggregate shall be rejected.

Fine aggregate shall have a sand equivalent value of not less than 75 when tested in accordance with AASHTO T 176.
Fine aggregate sources shall meet the Alkali Silica Reactivity (ASR) requirements of Section 703.0201.

The fineness modulus shall not be less than 2.26 or more than 3.14. If this value is exceeded, the fine aggregate will be rejected unless suitable adjustments are made in proportions of coarse and fine aggregate. The fineness modulus of fine aggregate shall be determined by adding the cumulative percentages of material by weight retained on the following sieves: Nos. 4, 8, 16, 30, 50, 100 and dividing by 100.

Fine aggregate, from an individual source when tested for absorption as specified in AASHTO T 84, shall show an absorption of not more than 2.3 percent.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
⅜ inch	100
No. 4	95-100
No. 8	80-100
No. 16	50-85
No. 30	25-60
No. 50	10-30
No. 100	2-10
No. 200	0-5.0

703.02 Coarse Aggregate for Concrete Coarse aggregate for concrete shall consist of crushed stone or gravel having hard, strong, durable pieces, free from adherent coatings and of which the composite blend retained on the ⅜ inch sieve shall contain no more than 15 percent, by weight of flat and elongated particles when performed in accordance with test method ASTM D 4791, Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate, using a dimensional ratio of 1:5.

The coarse aggregate from an individual source shall have an absorption no greater than 2.0 percent by weight determined in accordance with AASHTO T 85 modified for weight of sample.

The composite blend shall have a Micro-Deval value of 18.0 percent or less as determined by AASHTO T 327 or not exceed 40 percent loss as determined by AASHTO T 96.

Coarse aggregate sources shall meet the Alkali Silica Reactivity (ASR) requirements of Section 703.0201.

Coarse aggregate shall conform to the requirements of the following table for the size or sizes designated and shall be well graded between the limits specified.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves			
Grading	A	AA	S	LATEX
Aggregate Size	1 inch	¾ inch	1½ inch	½ inch
2 inch			100	
1½ inch	100		95-100	
1 inch	95-100	100	-	
¾ inch	-	90-100	35-70	100
½ inch	25-60	-	-	90-100
⅜ inch	-	20-55	10-30	40-70
No. 4	0-10	0-10	0-5	0-15
No. 8	0-5	0-5	-	0-5
No. 16	-	-	-	-
No. 50	-	-	-	-
No. 200	0 - 1.5	0 - 1.5	0 - 1.5	0 - 1.5

703.0201 Alkali Silica Reactive Aggregates. All coarse and fine aggregates proposed for use in concrete shall be tested for Alkali Silica Reactivity (ASR) potential under AASHTO T 303 (ASTM C 1260), Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, prior to being accepted for use. Acceptance will be based on testing performed by the Department. Sampling will be performed by the Department from stockpiles located at the Contractor's/supplier's ready mixed concrete plants. Aggregate approvals will be performed on a 3-year cycle, unless the source or character of the aggregate in question has changed within 3 years from the last test date.

A list of pre-approved coarse aggregate and aggregate-cement/pozzolan blends is maintained by the Department and will determine the acceptability of concrete mix designs proposed for use.

As per AASHTO T 303 (ASTM C 1260): Use of a particular coarse or fine aggregate will be allowed with no restrictions when the mortar bars made with this aggregate expand less than or equal to 0.10 percent at 30 days from casting. Use of a particular coarse or fine aggregate will be classified as potentially reactive when the mortar bars made with this aggregate expand greater than 0.10 percent at 30 days from casting. Use of this aggregate will only be allowed with the use of cement-pozzolan blends and/or chemical admixtures that result in mortar bar expansion of less than 0.10 percent at 30 days from casting.

Acceptable pozzolans and chemical admixtures that may be used when an aggregate is classified as potentially reactive include the following:

a. Class F Coal Fly Ash meeting the requirements of AASHTO M 295.

b. Ground Granulated Blast Furnace Slag (Grade 100 or 120) meeting the requirements of AASHTO M 302.
c. Densified Silica Fume meeting the requirements of AASHTO M 307.
d. Lithium Hydroxide Monohydrate ($LiOH-H_2O$).

Pozzolans or chemical admixtures required to offset the effects of potentially reactive aggregates will be incorporated into the concrete at no additional cost to the Department.

Aggregates classified as potentially reactive by the requirements of this specification may be used if certified test results from an accredited independent laboratory utilizing the current AASHTO T 303 (ASTM C 1260) Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, indicating an acceptable alkali-aggregate combination, are submitted to the Department.

703.05 Aggregate for Sand Leveling Aggregate for sand leveling shall be sand of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The aggregate shall meet the grading requirements of the following table.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
⅜ inch	85-100
No. 200	0-5.0

703.06 Aggregate for Base and Subbase The following shall apply to Sections (a.) and (c.) below. The material shall have a Micro-Deval…" and replace with "The material shall have a minimum degradation value of 25.0 or less15 as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0, the Washington State Degradation DOT Test Method T 113T113, Method of Test for Determination of Degradation Value (January 2009 version) shall be performed), except that the test shall be performed on the reported degradation value will be the result of testing a single specimen from that 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, minus any reclaimed asphalt pavement 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. If AASHTO T 96 is used for acceptance of the material, the material shall be retested at intervals of 25%, 50% and 75% completion of the course.

Recycled Asphalt Pavement (RAP) shall not be used for or blended with aggregate base or subbase.

a. Aggregate for base, Type A and B shall be crushed ledge or crushed gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a 3 inch sieve shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves	
	Type A	Type B
½ inch	45-70	35-75
¼ inch	30-55	25-60
No. 40	0-20	0-25
No. 200	0-6.0	0-6.0

At least 50 percent by weight of the material retained on the No. 4 sieve shall have at least one fractured face as tested by AASHTO T 335.

Type A aggregate for base shall only contain particles of rock that will pass the 2 inch square mesh sieve.

Type B aggregate for base shall only contain particles of rock that will pass the 4 inch square mesh sieve.

b. Aggregate for base, Type C shall be crushed ledge or crushed gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The material shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
	Type C
4 inches	100
3 inches	90-100
2 inches	75-100
1 inch	50-80
½ inch	30-60
No. 4	15-40
No. 200	0-6.0

At least 50 percent by weight of the material coarser than the No. 4 sieve shall have at least one fractured face as tested by AASHTO T 335.

c. Aggregate for subbase shall be sand or gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a 3 inch sieve shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves	
	Type D	Type E
½ in	35-80	
¼ inch	25-65	25-100
No. 40	0-30	0-50
No. 200	0-7.0	0-7.0

Type D aggregate for subbase gravel may contain up to 50 percent by weight Recycled Concrete Aggregate (RCA). When RCA is used, the portion of the resulting blend of gravel and RCA retained on a ½" square mesh sieve shall contain a total of no more than 5 percent by weight of other recycled materials such as brick, concrete masonry block, or asphalt pavement as determined by visual inspection.

RCA shall be substantially free of wood, metal, plaster, and gypsum board as defined in Note 9 in Section 7.4 of AASHTO M 319. RCA shall also be free of all substances that fall under the category of solid waste or hazardous materials.

Aggregate for subbase shall not contain particles of rock which will not pass the 6 inch square mesh sieve.

APPENDIX A TO DIVISION 100

SECTION 1 - BIDDING PROVISIONS

A. Federally Required Certifications By signing and delivering a Bid, the Bidder certifies as provided in all certifications set forth in this Appendix A - Federal Contract Provisions Supplement including:

- Certification Regarding No Kickbacks to Procure Contract as provided on this page 1 below.
- Certification Regarding Non-collusion as provided on page 1 below.
- Certification Regarding Non-segregated Facilities as provided by FHWA Form 1273, section III set forth on page 21 below.
- "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion" as provided by FHWA Form 1273, section XI set forth on page 32 below.
- "Certification Regarding Use of Contract Funds for Lobbying" as provided by FHWA Form 1273, section XII set forth on page 35 below.

Unless otherwise provided below, the term "Bidder", for the purposes of these certifications, includes the Bidder, its principals, and the person(s) signing the Bid. Upon execution of the Contract, the Bidder (then called the Contractor) will again make all the certifications indicated in this paragraph above.

CERTIFICATION REGARDING NO KICKBACKS TO PROCURE CONTRACT Except expressly stated by the Bidder on sheets submitted with the Bid (if any), the Bidder hereby certifies, to the best of its knowledge and belief, that it has not:

(A) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other then a bona fide employee working solely for me) to solicit or secure this contract;

(B) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the contract, or;

C) paid, or agreed to pay, to any firm, organization, or person (other than a bona fide employee working solely for me) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the contract;

By signing and submitting a Bid, the Bidder acknowledges that this certification is to be furnished to the Maine Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation in connection with this contract in anticipation of federal aid highway funds and is subject to applicable state and federal laws, both criminal and civil.

CERTIFICATION REGARDING NONCOLLUSION Under penalty of perjury as provided by federal law (28 U.S.C. §1746), 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 the Contract.

For a related provisions, see Section 102.7.2 (C) of the Standard Specifications - "Effects of Signing and Delivery of Bids" - "Certifications", Section 3 of this Appendix A entitled "Other Federal Requirements" including section XI - "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion" and section XII. - "Certification Regarding Use of Contract Funds for Lobbying."

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B. Bid Rigging Hotline To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

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SECTION 2 - FEDERAL EEO AND CIVIL RIGHTS REQUIREMENTS

Unless expressly otherwise provided in the Bid Documents, the provisions contained in this Section 2 of this "Federal Contract Provisions Supplement" are hereby incorporated into the Bid Documents and Contract.

A. Nondiscrimination & Civil Rights - Title VI The Contractor and its subcontractors shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Department deems appropriate. The Contractor and subcontractors shall comply with Title VI of the Civil Rights Act of 1964, as amended, and with all State of Maine and other Federal Civil Rights laws.

For related provisions, see Subsection B - "Nondiscrimination and Affirmative Action - Executive Order 11246" of this Section 2 and Section 3 - Other Federal Requirements of this "Federal Contract Provisions Supplement" including section II - "Nondiscrimination" of the "Required Contract Provisions, Federal Aid Construction Contracts", FHWA-1273.

B. Nondiscrimination and Affirmative Action - Executive Order 11246 Pursuant to Executive Order 11246, which was issued by President Johnson in 1965 and amended in 1967 and 1978, this Contract provides as follows.

The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its efforts to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

Ensure and maintain a working environment free of harassment, intimidations, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all forepersons, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its union have employment opportunities available, and to maintain a record of the organization's responses.

Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.

Provide immediate written notification to the Department's Civil Rights Office when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Design-Builder's efforts to meet its obligations.

Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under B above.

Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligation; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Forepersons, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractor's and Subcontractors with whom the Contractor does or anticipates doing business.

Direct its recruitment efforts, both orally and written to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later that one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above describing the openings, screenings, procedures, and test to be used in the selection process.

Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth, both on the site and in other areas of a Contractor's workforce.

Validate all tests and other selection requirements.

Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractor's and suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.

Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

C. Goals for Employment of Women and Minorities Per Executive Order 11246, craft tradesperson goals are 6.9% women and .5% minorities employed. However, goals may be adjusted upward at the mutual agreement of the Contractor and the Department. Calculation of these percentages shall not include On-the-Job Training Program trainees, and shall not include clerical or field clerk position employees.

For a more complete presentation of requirements for such Goals, see the federally required document "Goals for Employment of Females and Minorities" set forth in the next 6 pages below.

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Start of GOALS FOR EMPLOYMENT OF FEMALES AND MINORITIES
Federally Required Contract Document

§60-4.2 Solicitations

(d) The following notice shall be included in, and shall be part of, all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of $10,000 to be performed in geographical areas designated by the Director pursuant to §60-4.6 of this part (see 41 CFR 60-4.2(a)):

Notice of Requirement for Affirmative Action to Ensure Equal Opportunity (Executive Order 11246)

1. The Offeror's or bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Goals for female participation in each trade 6.9%

Goals for minority participation for each trade
Maine
001 Bangor, ME 0.8%
Non-SMSA Counties (Aroostook, Hancock, Penobscot, Piscataquis, Waldo, Washington)

002 Portland-Lewiston, ME
SMSA Counties: 4243 Lewiston-Auburn, ME 0.5%
(Androscoggin)

6403 Portland, ME 0.6%
(Cumberland, Sagadahoc)

Non-SMSA Counties: 0.5%
(Franklin, Kennebec, Knox, Lincoln, Oxford, Somerset, York)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non federally involved construction.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be in violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract; estimated started and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the Contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed giving the state, county and city, if any).

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:

   a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

   b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

   c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department form 941;

   d. "Minority" includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
(iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of the North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the contractor, is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors for Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a. through p. of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical areas where the work is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specific.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant, thereto.

6. In order for the non working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as expensive as the following:

   a. Ensure and maintain a working environment free of harassment, intimidation, coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, when possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

   b. Establish and maintain a current list of minority and female recruitment sources provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.

   c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment sources or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.

   d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

   e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources complied under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment, efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing prior to the date for the acceptance of applications for apprenticeship or the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on site and in other areas of a Contractor's work force.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitation to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7 a through p.). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7 a through p. of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program and reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions take on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both make and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, specific minority group of women is underutilized.)

10. The Contractor shall not use the goals and timetables or affirmative action even through the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementation regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.6.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and location sat which the work was performed. Records be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

End of GOALS FOR EMPLOYMENT OF FEMALES AND MINORITIES
Federally Required Contract Document

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D. Section '**D Disadvantaged Business Enterprise (DBE) Requirements**' is removed in its entirety. The DBE material is in:

Section 105.10 EQUAL OPPORTUNITY AND CIVIL RIGHTS.

SECTION 3 - OTHER FEDERAL REQUIREMENTS

Unless expressly otherwise provided in the Bid Documents, the provisions contained in this Section 3 of this "Federal Contract Provisions Supplement" are hereby incorporated into the Bid Documents and Contract.

A. Buy America

If the cost of products purchased for permanent use in this project which are manufactured of steel, iron or the application of any coating to products of these materials exceeds 0.1 percent of the contract amount, or $2,500.00, whichever is greater, the products shall have been manufactured and the coating applied in the United States. The coating materials are not subject to this clause, only the application of the coating. In computing that amount, only the cost of the product and coating application cost will be included.

Ore, for the manufacture of steel or iron, may be from outside the United States; however, all other manufacturing processes of steel or iron must be in the United States to qualify as having been manufactured in the United States.

United States includes the 50 United States and any place subject to the jurisdiction thereof.

Products of steel include, but are not limited to, such products as structural steel, piles, guardrail, steel culverts, reinforcing steel, structural plate and steel supports for signs, luminaries and signals.

Products of iron include, but are not limited to, such products as cast iron grates.

Application of coatings include, but are not limited to, such applications as epoxy, galvanized and paint.

To assure compliance with this section, the Contractor shall submit a certification letter on its letterhead to the Department stating the following:

> "This is to certify that products made of steel, iron or the application of any coating to products of these materials whose costs are in excess of $2,500.00 or 0.1 percent of the original contract amount, whichever is greater, were manufactured and the coating, if one was required, was applied in the United States."

B. Materials

a. Convict Produced Materials References: 23 U.S.C. 114(b)(2), 23 CFR 635.417
Applicability: FHWA's prohibition against the use of convict material only applies to Federal-aid highways. Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if: 1) such materials have been produced by convicts who are on parole, supervised release, or probation from a prison; or
2) such material has been produced in a qualified prison facility, e.g., prison industry, with the amount produced during any 12-month period, for use in Federal-aid projects, not exceeding the amount produced, for such use, during the 12-month period ending July 1, 1987.

Materials obtained from prison facilities (e.g., prison industries) are subject to the same requirements for Federal-aid participation that are imposed upon materials acquired from other sources. Materials manufactured or produced by convict labor will be given no preferential treatment.

The preferred method of obtaining materials for a project is through normal contracting procedures which require the contractor to furnish all materials to be incorporated in the work. The contractor selects the source, public or private, from which the materials are to be obtained (23 CFR 635.407). Prison industries are prohibited from bidding on projects directly (23 CFR 635.112e), but may act as material supplier to construction contractors.

Prison materials may also be approved as State-furnished material. However, since public agencies may not bid in competition with private firms, direct acquisition of materials from a

prison industry for use as State-furnished material is subject to a public interest finding with the Division Administrator's concurrence (23 CFR 635.407d). Selection of materials produced by convict labor as State-furnished materials for mandatory use should be cleared prior to the submittal of the Plans Specifications & Estimates (PS&E).

b. Patented/Proprietary Products References: 23 U.S.C. 112, 23 CFR 635.411

FHWA will not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:

- the item is purchased or obtained through competitive bidding with equally suitable unpatented items,
- the STA certifies either that the proprietary or patented item is essential for synchronization with the existing highway facilities or that no equally suitable alternative exists, or
- the item is used for research or for a special type of construction on relatively short sections of road for experimental purposes. States should follow FHWA's procedures for "Construction Projects Incorporating Experimental Features" (expermnt.htm) for the submittal of work plans and evaluations.

The primary purpose of the policy is to have competition in selection of materials and allow for development of new materials and products. The policy further permits materials and products that are judged equal may be bid under generic specifications. If only patented or proprietary products are acceptable, they shall be bid as alternatives with all, or at least a reasonable number of, acceptable materials or products listed; and the Division Administrator may approve a single source if it can be found that its utilization is in the public interest.

Trade names are generally the key to identifying patented or proprietary materials. Trade name examples include 3M, Corten, etc. Generally, products identified by their brand or trade name are not to be specified without an "or equal" phrase, and, if trade names are used, all, or at least a reasonable number of acceptable "equal" materials or products should be listed. The licensing of several suppliers to produce a product does not change the fact that it is a single product and should not be specified to the exclusion of other equally suitable products.

c. State Preference References: 23 U.S.C. 112, 23 CFR 635.409

Materials produced within Maine shall not be favored to the exclusion of comparable materials produced outside of Maine. State preference clauses give particular advantage to the designated source and thus restrict competition. Therefore, State preference provisions shall not be used on any Federal-aid construction projects.

This policy also applies to State preference actions against materials of foreign origin, except as otherwise permitted by Federal law. Thus, States cannot give preference to in-State material sources over foreign material sources. Under the Buy America provisions, the States are

permitted to expand the Buy America restrictions provided that the STA is legally authorized under State law to impose more stringent requirements.

d. State Owned/Furnished/Designated Materials References: 23 U.S.C. 112, 23 CFR 635.407

Current FHWA policy requires that the contractor must furnish all materials to be incorporated in the work, and the contractor shall be permitted to select the sources from which the materials are to be obtained. Exceptions to this requirement may be made when there is a definite finding, by MaineDOT and concurred in by Federal Highway Administration's (FHWA) Division Administrator, that it is in the public interest to require the contractor to use materials furnished by the MaineDOT or from sources designated by MaineDOT. The exception policy can best be understood by separating State-furnished materials into the categories of manufactured materials and local natural materials.

Manufactured Materials When the use of State-furnished manufactured materials is approved based on a public interest finding, such use must be made mandatory. The optional use of State-furnished manufactured materials is in violation of our policy prohibiting public agencies from competing with private firms. Manufactured materials to be furnished by MaineDOT must be acquired through competitive bidding, unless there is a public interest finding for another method, and concurred in by FHWA's Division Administrator.

Local Natural Materials When MaineDOT owns or controls a local natural materials source such as a borrow pit or a stockpile of salvaged pavement material, etc., the materials may be designated for either optional or mandatory use; however, mandatory use will require a public interest finding (PIF) and FHWA's Division Administrator's concurrence.

In order to permit prospective bidders to properly prepare their bids, the location, cost, and any conditions to be met for obtaining materials that are made available to the contractor shall be stated in the bidding documents.

Mandatory Disposal Sites Normally, the disposal site for surplus excavated materials is to be of the contractor's choosing; although, an optional site(s) may be shown in the contract provisions. A mandatory site shall be specified when there is a finding by MaineDOT, with the concurrence of the Division Administrator, that such placement is the most economical or that the environment would be substantially enhanced without excessive cost. Discussion of the mandatory use of a disposal site in the environmental document may serve as the basis for the public interest finding.

Summarizing FHWA policy for the mandatory use of borrow or disposal sites:

- mandatory use of either requires a public interest finding and FHWA's Division Administrator's concurrence,
- mandatory use of either may be based on environmental consideration where the environment will be substantially enhanced without excessive additional cost, and
- where the use is based on environmental considerations, the discussion in the environmental document may be used as the basis for the public interest finding.

Factors to justify a public interest finding should include such items as cost effectiveness, system integrity, and local shortages of material.

C. Standard FHWA Contract Provisions - FHWA 1273

Unless expressly otherwise provided in the Bid Documents, the following "Required Contract Provisions, Federal Aid Construction Contracts", FHWA-1273, are hereby incorporated into the Bid Documents and Contract.

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Cargo Preference Act : Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees—"(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels."(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."(Reorganization Plans No. 21 of 1950 (64 Stat. 1273) and No. 7 of 1961 (75 Stat. 840) as amended by Pub. L. 91-469 (84 Stat. 1036) and Department of Commerce Organization Order 10-8 (38 FR 19707, July 23, 1973)) [42 FR 57126, Nov. 1, 1977]

The Cargo Preference Act requirements apply to materials or equipment that are acquired for a specific Federal-aid highway project. In general, the requirements are not applicable to goods or materials that come into inventories independent of an FHWA funded-contract. For example, the requirements would not apply to shipments of Portland cement, asphalt cement, or aggregates, as industry suppliers and contractors use these materials to replenish existing inventories. In general, most of the materials used for highway construction originate from existing inventories and are not acquired solely for a specific Federal-aid project. However, if materials or equipment are acquired solely for a Federal-aid project, then the Cargo Preference Act requirements apply."

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Start of FHWA 1273 REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS (As revised through May 1, 2012)

FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Nonsegregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Compliance with Governmentwide Suspension and Debarment Requirements
XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment,

termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability.

The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women.

Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even

though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act),

daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a

different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

End of FHWA 1273

The United States Department of Transportation (USDOT) Standard Title VI/Non-Discrimination 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 Non-discrimination 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);

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 the* ***FHWA****.*

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Non-discrimination 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 non-discrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

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 ***Highway Program***:

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-Aid Highway Program activities*** and, in adapted form, in all proposals for negotiated agreements regardless of funding source:

> "The ***Maine Department of Transportation***, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 US.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair 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.

By signing this ASSURANCE, the ***Maine Department of Transportation*** also agrees to comply (and require any sub-recipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the ***FHWA and USDOT*** 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 the ***FHWA and USDOT***. You must keep records, reports, and submit the material for review upon request to ***FHWA and USDOT***, or its designee 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.

The ***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 under the ***Federal Aid Highway Program***. This ASSURANCE is binding on [***insert State***], other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the ***Federal Aid Highway Program***. The person(s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

MAINE DEPARTMENT OF TRANSPORTATION
(***Name of Recipient***)

by _____
Bruce A. Van Note, Commissioner

DATED 2/13/19

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 Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, ***Federal Highway Administration (FWHA)***, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Non-discrimination**: 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, 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 ***FHWA*** 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 ***FHWA***, 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 ***FHWA*** 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.

6. **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 ***FHWA*** 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 B

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the ***Maine Department of Transportation*** will accept title to the lands and maintain the project constructed thereon in accordance with ***23 U.S. Code § 107***, the Regulations for the Administration of ***the Federal Aid Highway Program***, and the policies and procedures prescribed by the ***FHWA*** of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the ***Maine Department of Transportation*** all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto ***Maine Department of Transportation*** and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the ***Maine Department of Transportation***, its successors and assigns.

The ***Maine Department of Transportation***, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will 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 with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the ***Maine Department of Transportation*** will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended [, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

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

APPENDIX C

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

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

A. The (grantee, lessee, 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. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds 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.

B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Non-discrimination covenants, ***Maine Department of Transportation*** will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*

C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the ***Maine Department of Transportation*** will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities 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 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 discrimination, (3) that the (grantee, licensee, 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 USC § 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 Non-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 because of sex in education programs or activities (20 U.S.C. 1681 et seq).

Environmental Summary Sheet

WIN: 22202.00 **Date Submitted: 6/29/2020**
Town: Frenchboro
CPD Team Leader: Danielle Tetreau
ENV Field Contact: Ryan Annis

NEPA Complete: Programmatic Categorical Exclusion (CE) 23 CFR 771.117.c.23.i issued on 3/23/2020

☐ **Section 106**
Review Complete: PA-C 8/3/2018
Section 106 Resources: none

☐ **Section 4(f) and 6(f)**

Section 4(f)	Section 6(f)
Review Complete - No use	Not Applicable - No takes

☐ **Maine Department of Inland Fisheries and Wildlife Essential Habitat**
Not Applicable **Timing Window:** Not Applicable

☒ **Section 7**
Informal Consultation Complete – May affect, not likely to adversely affect
Species of Concern: **Atlantic salmon DPS**
Atlantic sturgeon DPS
Shortnose sturgeon
Green sea turtle (NA DPS)
Kemp's Ridley sea turtle
Loggerhead sea turtle (NWA DPS)
Leatherback sea turtle
Northern long-eared bat: No Effect, no clearing

☒ **Essential Fish Habitat**
Adverse Effect, not substantial
Species of Concern: multi-species, coastal EFH

☒ **Maine Department of Conservation/Public Lands, Submerged Land Lease**
Not Applicable
*To be completed by MaineDOT Legal Office

☐ **Maine Land Use Regulation Commission**
Not Applicable

☒ **Maine Department of Environmental Protection**
Permit-By-Rule – Permit #69329
**Applicable Standards and Permits are included with the contract*

☒ **Army Corps of Engineers: Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.**
Category 2 - Corps Permit #NAE-2020-00315
-Work Start Notification form to be completed by ENV Field Contact and submitted to ACOE with copy to Team Leader.
-Compliance Certification Form to be completed by ENV Field Contact and submitted to ACOE with copy to Team Leader.
**Applicable Standards and Permits are included with the contract*

☐ **Stormwater Review**
Not Applicable

☒ **Special Provisions Required**

Special Provision 105-Timing of Work Restriction	N/A☐	Applicable☒
Standard Specification 656-Erosion Control Plan	N/A☐	Applicable☒

**All permits and approvals based on plans/scope as of: 10/21/2019*

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

ENVIRONMENTAL OFFICE
MAINE DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333

CORPS PERMIT # NAE-2020-00315
CORPS GP ID# 20-076
STATE ID# PBR

DESCRIPTION OF WORK:
Upgrade the existing state ferry terminal facility in Lunt Harbor at Frenchboro, Maine. Regulated work includes the addition of a turning dolphin and minor upgrades of hardware on the existing terminal components. New piling installations will result in a cumulative total of 27 s.f. of permanent tidal bottom impact. This work is shown on the attached plans entitled "PROPOSED FERRY TERMINAL IMPROVEMENTS/MODIFICATIONS, FRENCHBORO FERRY TERMINAL" in two sheets revised "APR 10, 2020"
Project Description Continued on Page 2

LAT/LONG COORDINATES : 44.121091° N -68.362218° W **USGS QUAD:** FRENCHBORO, 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 Federal Permit, the Maine General Permit (GP).** http://www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/ME/Maine_General_Permit_2015.pdf

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 38 of the GP (page 16) 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 13, 2020. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 13, 2021.

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: 1/31/20 LEVEL OF REVIEW: CATEGORY 1: ____ CATEGORY 2: X

AUTHORITY (Based on a review of plans and/or State/Federal applications): SEC 10 X , 404 ____ 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 Augusta, Maine Project Office. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0

JAY L. CLEMENT
SENIOR PROJECT MANAGER
MAINE PROJECT OFFICE

FRANK J. DEL GIUDICE **DATE**
CHIEF, PERMITS & ENFORCEMENT BRANCH
REGULATORY DIVISION

US Army Corps
of Engineers
New England District

Project Description Continued from Page 1

"FRENCHBORO FERRY TERMINAL, FENDER SYSTEM MODIFICATIONS, FRENCHBORO, HANCOCK COUNTY" in one sheet dated "11/22/19", and "FRENCHBORO FERRY TERMINAL" in 16 sheets dated "09/19".

PLEASE NOTE THE FOLLOWING GENERAL AND SPECIAL CONDITIONS FOR DEPARTMENT OF THE ARMY GENERAL PERMIT NO. NAE-2020-00315

GENERAL CONDITIONS

26. 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.

10c. The permittee understands and agrees that, if future operations by the United States 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 of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

SPECIAL CONDITIONS

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. In water work shall be conducted between August 1 and April 9 of any year in order to minimize potential impacts to fisheries and local water quality.

3. In accordance with the Project Verification Form supporting the work described in this permit (countersigned by National Marine Fisheries Service on January 28, 2020), the permittee shall comply with all designated Project Design Criteria (PDCs).

4. The permittee is required to mark the ferry terminal facility in accordance with appropriate US Coast Guard Regulations and to contact 1st Coast Guard District, Aids to Navigation Office at (617) 223-8347.

5. In order to minimize potential impacts to Essential Fish Habitat (EFH), the permittee shall conduct a pre-construction survey during the normal eelgrass growing season between May and September at the Frenchboro ferry terminal per the Submerged Aquatic Vegetation Survey Guidance for the New England Region (2016). The survey will identify and map the extent and edges of any existing eelgrass beds. Maps showing the location of delineated eelgrass beds shall be provided to all contractors. Project vessels will be prohibited from anchoring or contacting the bottom within 50 feet of the eelgrass beds. Project impacts to coastal resources, including eelgrass, will be monitored by the Project resident and Maine DOT Environmental staff. Any impacts to eelgrass will be reported to NOAA in writing. Point of contact at NMFS is Mike Johnson at mike.r.johnson@noaa.gov; 978-281-9130.

6. In order to comply with the permission to alter the Lunts Harbor (Frenchboro) Federal Navigation project under 33 USC § 408, the permittee shall comply with all the terms and conditions and special conditions outlined in the attached document entitled "Appendix K".

APPENDIX K

The following Statement, General Conditions and Special Conditions to be included in the DOA Permit

Statement

"…*It has been determined that the activities authorized do not impair the usefulness of the USACE Navigation project and is not injurious to the Public Interest*…"

LIMITS OF THE AUTHORIZATION

1. This permission only authorizes you, the requester, to undertake the activity described herein under the authority provided in Section 14 of the Rivers and Harbors Act of 1899, as amended (33 USC 408). This permission does not obviate the need to obtain other federal, state, or local authorizations required by law. This permission does not grant any property rights or exclusive privileges, and you must have appropriate real estate instruments in place prior to construction and/or installation.

2. The time limit for completing the work authorized ends concurrently with the Department of the Army General Permit for the State of Maine (October 13, 2020) or with any extension(s) granted by the USACE Regulatory Division. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

3. Without prior written approval of the USACE, you must neither transfer nor assign this permission nor sublet the premises or any part thereof, nor grant any interest, privilege or license whatsoever in connection with this permission. Failure to comply with this condition will constitute noncompliance for which the permission may be revoked immediately by USACE.

4. The requester understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the work herein authorized, or if, in the opinion of the Secretary of the Army or an authorized representative, said work will cause unreasonable conditions and/or obstruction of USACE project authorized design, the requester will be required upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim can be made against the United States on account of any such removal or alteration.

INDEMNIFICATION AND HOLD HARMLESS

5. The United States will in no case be liable for:

a. any damage or injury to the structures or work authorized by this permission that may be caused or result from future operations undertaken by the United States, and no claim or right to compensation will accrue from any damage; or

b. damage claims associated with any future modification, suspension, or revocation of this permission.

6. The United States will not be responsible for damages or injuries which may arise from or be incident to the construction, maintenance, and use of the project requested by you, nor for damages to the property or injuries to your officers, agents, servants, or employees, or others who may be on your premises or project work areas or the federal project(s) rights-of-way. By accepting this permission, you hereby agree to fully defend, indemnify, and hold harmless the United States and USACE from any and all such claims, subject to any limitations in law.

7. Any damage to the water resources development project or other portions of any federal project(s) resulting from your activities must be repaired at your expense.

REEVALUATION OF PERMISSION

8. The determination that the activity authorized by this permission would not impair the usefulness of the federal project and would not be injurious to the public interest was made in reliance on the information you provided.

9. This office, at its sole discretion, may reevaluate its decision to issue this permission at any time circumstances warrant, which may result in a determination that it is appropriate or necessary to modify or revoke this permission. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. you fail to comply with the terms and conditions of this permission;

b. the information provided in support of your application for permission proves to have been inaccurate or incomplete; or

c. significant new information surfaces which this office did not consider in reaching the original decision that the activity would not impair the usefulness of the water resources development project and would not be injurious to the public interest.

10. You are responsible for implementing any requirements for mitigation, reasonable and prudent alternatives, or other conditions or requirements imposed as a result of environmental compliance.

11. Work/usage allowed under this permission must proceed in a manner that avoids interference with the inspection, operation, and maintenance of the federal project.

12. In the event of any deficiency in the design or construction of the requested activity, you are solely responsible for taking remedial action to correct the deficiency.

13. The right is reserved to the USACE to enter upon the premises at any time and for any purpose necessary or convenient in connection with government purposes, to make inspections, to operate and/or to make any other use of the lands as may be necessary in connection with government purposes, and you will have no claim for damages on account thereof against the United States or any officer, agent or employee thereof.

14. You must provide copies of pertinent design, construction, and/or usage submittals/documents. USACE may request that survey and photographic documentation of the alteration work and the impacted project area be provided before, during, and after construction and/or installation.

15. You may be required to perform an inspection of the federal project with the USACE, prior to your use of the structure, to document existing conditions.

16. USACE shall not be responsible for the technical sufficiency of the alteration design nor for the construction and/or installation work.

SPECIAL CONDITIONS
Navigation – Structures near FNPs
1. As-built drawings for the completed work shall be submitted to the Corps no later than 60 days after completion of construction. The as-built drawing(s) shall also include:

a. The structure's horizontal location relative to the closest FNP and the waterway, horizontal coordinates, the FNP limits, bar (graphic) scale, north arrow, and the dates of the survey and drawings.

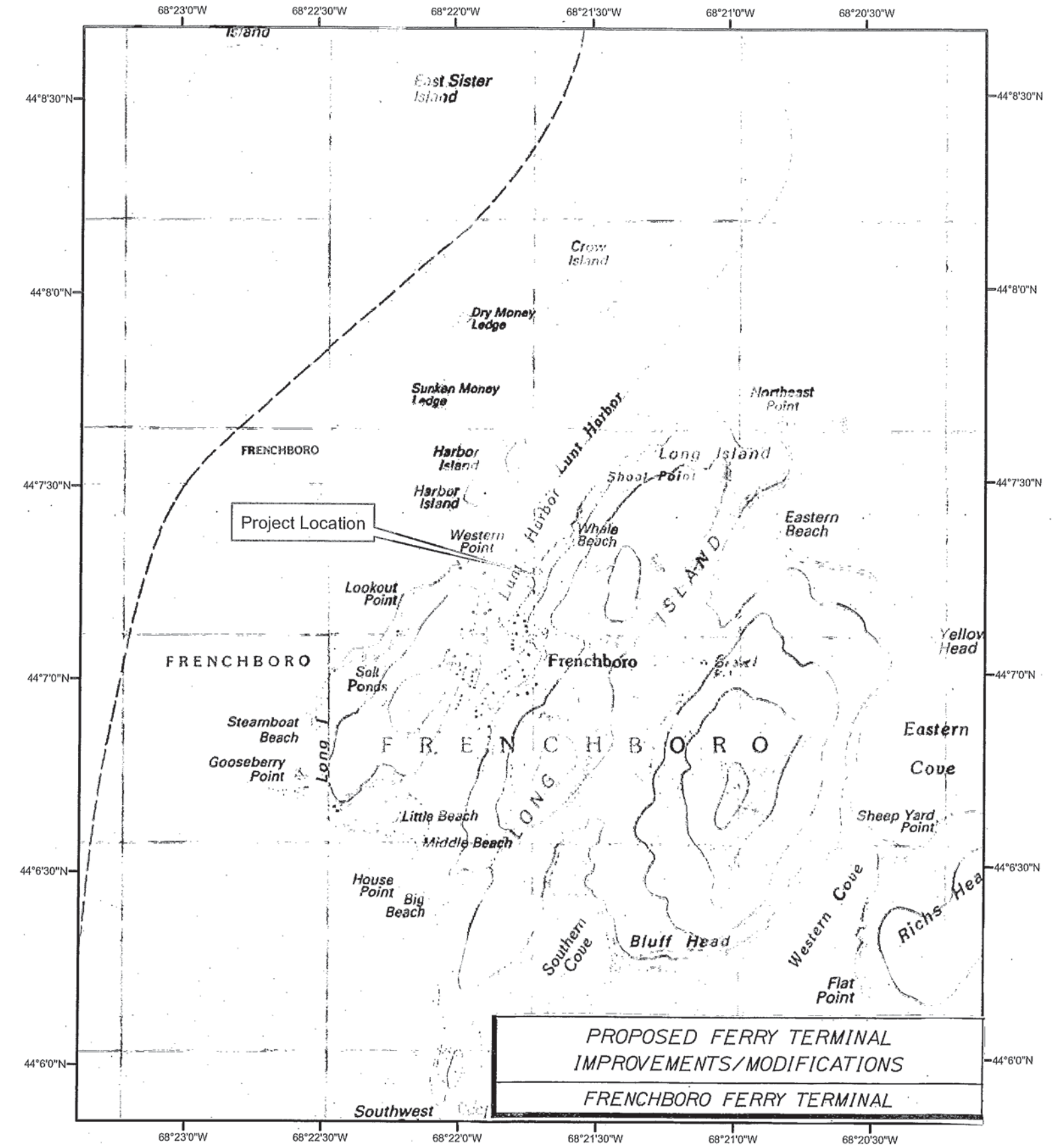
b. The structure's horizontal state plane coordinates in U.S. survey feet based on the correct state grid system and zone for the State of Maine, NAVD 1983.

2. All survey data, plan data and as-built drawings shall be submitted to: U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751: c/o Jenifer Thalhauser, Programs and Project Management Division, Navigation Section. Alternatively, the permittee may submit the aforementioned data via email: Jenifer.E.Thalhauser@usace.army.mil. Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit.

3. Insofar as possible, the permittee shall locate all structures (including vessels and floats) far enough outside the Federal Navigation Project (FNP) limits so neither the structures, nor any vessels tied to these structures, encroach into the FNP at any time.

4. The permittee shall not interfere with Corps of Engineers personnel or its contractors engaged in hydrographic surveys, maintenance or improvement of the existing FNP. The requester understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the work herein authorized, . . . the requester will be required upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States

5. The United States will in no case be liable for any damage or injury to the structures or work authorized by this permission that may be caused or result from future operations undertaken by the United States, and no claim or right to compensation will accrue from any damage.

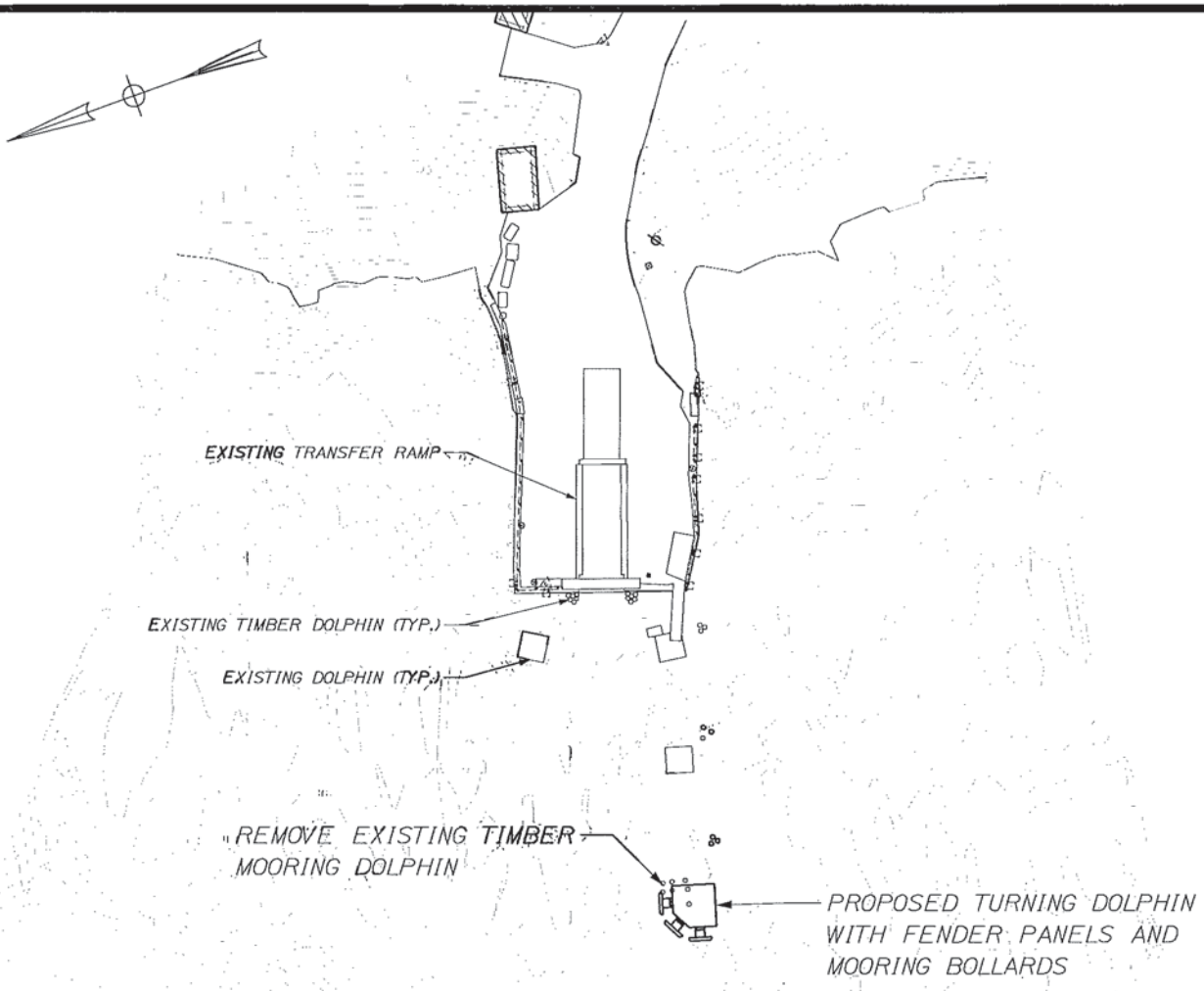


Ferry Terminal Improvements
WIN 22202.00
Frenchboro, ME (Hancock County)

0 0.5 1 Miles

N W E S

Project Location: 44.121091, -68.362218



NOTES:

1. TIDAL DATUM IS MLLW.

2. FENDER PANELS ON EXISTING DOLPHINS NOT SHOWN FOR CLARITY.

3. BATHYMETRIC AND TOPOGRAPHIC SURVEY BY OWEN HASKELL, JUNE 5, 2018 USING A SEAFLOOR HYDROLITE - TM SONARMITE SINGLE BEAM ECHO SOUNDER, AND A CARLSON RTK GPS.

ENVIRONMENTAL IMPACT AREAS:

1. AERIAL FOOTPRINT AREA (NON-MUDLINE):

ITEM	SIZE	AREA
DOLPHIN (TURNING)	16' x 16'	256 sq. ft.
	TOTAL AREA	256 sq. ft.

2. MUDLINE FOOTPRINT AREA:

ITEM	SIZE	AREA
DOLPHIN PILES	15 x 18"ϕ	27 sq. ft.
	TOTAL AREA	27 sq. ft.

PLAN

SCALE: 1" = 30'-0"

30 0 30 60

Scale of Feet

HNTB

MaineDOT

WIN: 022202.00

PROPOSED FERRY TERMINAL IMPROVEMENTS/MODIFICATIONS	WATERFRONT GENERAL PLAN	FIGURE 1
FRENCHBORO FERRY TERMINAL	DESIGNER: CRAIG R. MORIN, P.E. DATE: OCTOBER 9, 2018	

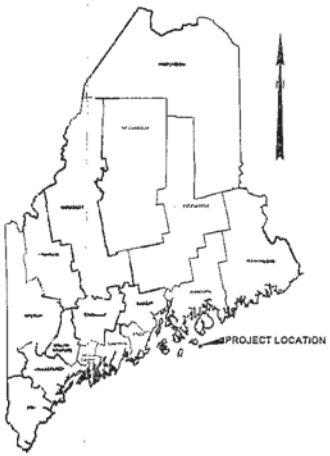
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

TOWN OF FRENCHBORO
HANCOCK COUNTY

FRENCHBORO FERRY TERMINAL

FENDER SYSTEM MODIFICATIONS

FEDERAL PROJECT NO. 02220200
MAINEDOT WIN: 022202.00



INDEX OF SHEETS

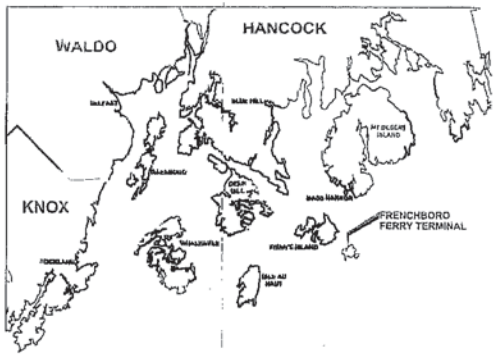
SHEET NO.		TITLE
GENERAL		
G01	1	TITLE SHEET
G02	2	GENERAL NOTES AND DESIGN CRITERIA
G03	3	EXISTING CONDITIONS
G04	4	BORING LOGS I
G05	5	BORING LOGS II
MARINE PLANS		
S01	6	SITE PLAN
S02	7	BERTH PLAN
S03	8	DOLPHIN FOUNDATION PLAN
S04	9	DOLPHIN FOUNDATION DETAILS
S05	10	DOLPHIN PLAN, ELEVATION AND DETAILS
S06	11	DOLPHIN DETAILS MOORING HARDWARE
S07	12	DOLPHIN DETAILS FENDER SYSTEM I
S08	13	DOLPHIN DETAILS FENDER SYSTEM II
S09	14	DOLPHIN DETAILS MISCELLANEOUS
S10	15	DOLPHIN DETAILS LADDERS I
S11	16	DOLPHIN DETAILS LADDERS II
S12	17	DOLPHIN DETAILS LADDERS III



LOCATION MAP

1/2 0 1/2 1

Scale in Miles



THE PROFESSIONAL ENGINEER WHOSE STAMP APPEARS ON THIS COVER SHEET BEARS RESPONSIBILITY FOR THE FOLLOWING SHEETS WITHIN THIS DRAWING SET:

GENERAL PLANS	G01-G03
STRUCTURAL PLANS	S01-S12

ADDITIONAL WORK APPEARS WITHIN THIS DRAWING SET AND IS THE RESPONSIBILITY OF THE FOLLOWING ORGANIZATIONS, WHOSE STAMP APPEARS ON THOSE INDIVIDUAL SHEETS:

GENERAL PLANS	G04-G05	GEOTECHNICAL BORING LOGS	SCHNEWALD ENGINEERING

HNTB

WIN 022202.00 FEDERAL PROJECT NO. 02220200

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE

COMMISSIONER:

CHIEF ENGINEER:

PROJECT INFORMATION

FED.PROJ.	
FED.AID NUMBER	
ESTAB.	
CONTRACT	
CONTRACTOR	
PROJECT ENGINEER	

SIGNATURE: G.R.M.
P.E. NUMBER 8353
DATE: 11/22/19

FRENCHBORO FERRY TERMINAL
FENDER SYSTEM MODIFICATIONS
HANCOCK COUNTY
FRENCHBORO

TITLE SHEET

SHEET NUMBER
G01
1 OF 17

Date:11/22/2019 Username: Division: Filename: 001_Title.dgn

GENERAL NOTES

1. These notes contain general information and are not complete for construction purposes. Contractor shall verify information given here with specifications and other drawings and bring any conflicts to the Engineer's attention before beginning work.

2. All geotechnical notes may be found on Sheets G04 and G05.

3. All dimensions and details shall be verified by the Contractor prior to construction.

4. Contractor shall provide and maintain horizontal and vertical controls in the Maine state plane coordinate system.

5. The MaineDOT field office shall be placed on terminal property at a location approved/determined by the Resident. The Contractor shall make accomodations off-site for their field office, lay down area, restroom facilities, etc.

SPECIFICATIONS AND CODES

1. Project specifications titled, "Special Provisions For: Frenchboro Ferry Terminal Fender System Modifications", dated May 31, 2019.

2. State of Maine, Department of Transportation, Standard Specifications, November 2014. Including all supplemental specifications and special provisions.

3. Codes and other references
   - A. Unified Facilities Criteria Manuals:
     - UFC 4-150-06 Military Harbors and Coastal Facilities, with Change 1
     - UFC 4-150-07 Maintenance and Operation: Maintenance of Waterfront Facilities, with Change 1
     - UFC 4-150-08 Inspection of Mooring Hardware
     - UFC 4-151-10 General Criteria for Waterfront Construction, with Change 1
     - UFC 4-152-01 Design: Piers and Wharves
     - UFC 4-159-03 Design: Moorings, with Change 2
   - B. US Army Corps of Engineers: Coastal Engineering Manual, current edition
   - C. AASHTO LRFD specifications, 8th edition, 2017 with Interims
   - D. AWS, D1.1, "Structural Welding Code Steel", current edition
   - E. AWS, D1.2, "Structural Welding Code Aluminum", current edition

SURVEY CONTROL

1. Vertical control for marine structures is in reference to MLLW (Mean Lower Low Water). To convert to National Geodetic Vertical Datum (NGVD), use the following formula:
   El. (NGVD) = El. (MLLW) - 9.28 ft

2. Horizontal control is the Maine state plane coordinate system (east zone), NAD 27.

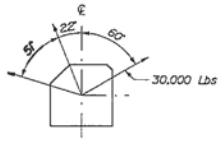
BERTHING LOADS

Dolphin	Berthing Velocity: Ship Velocity (Vs)	Berthing Velocity: ⊥ to Fender	App. Angle	Energy to Fender	Minimum Fender Design Energy	Max. Reaction on Dolphin*
Turning Dolphins: Normal	2.0 Knots	1.41 Knots	45°	112,000 Ft Lbs	380,000 Ft Lbs	244,000 Lb
Turning Dolphins: Extreme	3.0 Knots	2.60 Knots	60°	378,000 Ft Lbs	380,000 Ft Lbs	244,000 Lb

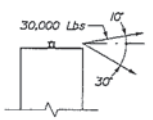
* Includes 1.4 load factor

MOORING LOADS

Dolphin D4
Mooring line pull: Single line in each direction.



PLAN



PLAN

DOLPHIN/FENDER DESIGN LOADS

Design Vessel: MV Margaret Chase Smith*
- Length = 166'-6"
- Beam = 40'-0"
- Max. Displacement = 633 long tons

* This vessel was chosen as the design vessel since it envelopes the existing vessel fleet as well as the new ferry currently in design (LOA = 154 ft).

Current Vessel: MV Captain Henry Lee
- Length = 130'-0"
- Beam = 36'-0"
- Max. Displacement = 500 long tons (est.)

New Vessel: New Ferry (TBD)
- Length = 154'-0"
- Beam = 38'-0"
- Max. Displacement = 600 long tons (est.)

FENDER NOTES

1. All dimensions, details and existing conditions shall be verified by the Contractor prior to construction.

2. Contractor's steel manufacturer shall design the fender panels for the indicated loads.

3. Embedded anchors for chains shall be set by chemical/adhesive material with 9 inch minimum edge distance and a minimum embedment of 12 times the diameter of the anchor. Strength of existing concrete is 3,000 psi.

4. Anchors shall be set by template.

STEEL PIPE PILES

1. Steel pipe piles shall conform to ASTM A252, Grade 3, Fy = 45 ksi minimum. Per standard specification 711.01, Concrete fill shall be MaineDOT class "A".

2. Piles shall be coated with fusion bonded epoxy in accordance with the specifications.

3. Pile splices shall not be allowed without prior approval of the Engineer of record.

4. Any portion of pile cracked, deformed, or otherwise damaged by pile driving shall be replaced.

5. Piles shall not be out of position shown by more than 2" longitudinally along the pile cap, and 2" transversely across the width of the pile cap.

6. The distance from the side of any pile to the nearest edge of concrete shall not be less than 9".

7. Piles shall be 16"ϕ, ⅝" wall steel pipe piles with concrete fill. Piles shall be fabricated of seamless or straight-seamed material. Spiral welded pipe pile is not permitted.

DEMOLITION NOTES

1. Demolition shall be conducted to prevent debris from falling into the ocean. To the maximum extent practicable, all construction debris, including any liquids or slurries that are produced as part of the demolition, shall be captured and disposed of properly. The Contractor shall comply with applicable permit conditions and environmental regulations listed in the specifications. Work shall include removal of any construction debris from the river and installation and maintenance of appropriate turbidity controls during demolition and construction such that no turbidity escapes the immediate work area. Underwater inspections may be conducted by the Owner's representative to ensure all demolition and construction debris is removed from the ocean.

ENVIRONMENTAL CONDITIONS

1. Wind:
   - Transverse 50 plf
   - Longitudinal 12 plf
   - Wind on Live Load: Transverse 100 plf
   - Wind on Structure: 40 psf
   - Thermal: Temp. Range for Concrete Structure = 80°F
2. Railings:
   - Aluminum Pedestrian: Vertical 50 plf; Horizontal 50 plf (acting simultaneously)
3. Tidal ranges (elevations in feet):

Frenchboro***	Tidal Datums: NGVD29	MSL	MLW	MLLW	STND
Top of Dolphin*	6.93	10.75	15.85	16.21	17.12
Highest Observed Tide	6.72	10.54	15.64	16.00	16.91
MHHW	1.64	5.46	10.56	10.92	11.83
MHW	1.23	5.05	10.15	10.51	11.42
NGVD29**	0.00	3.82	8.92	9.28	10.19
MSL	-3.82	0.00	5.10	5.46	6.37
MLW	-8.92	-5.10	0.00	0.36	1.27
MLLW	-9.28	-5.46	-0.36	0.00	0.91
Lowest Observed Tide	-10.19	-6.37	-1.27	-0.91	0.00
STND (Station Datum)	-12.19	-8.37	-3.27	-2.91	-2.00

* Along top edge of dolphin at corner nearest pen.
** NGVD29 conversion taken from archive project drawings.
*** No values recorded. Values estimated from Swart's Island.

Station ID: 8413825, Swans Island, ME
Tidal Epoch: 1983-2001

LEGEND:

- Baseline
- Plate
- Centerline
- XX-XX-XX Washboring
- Flood Light
- Navigation Marker Light
- Site Light - Existing
- Site Light - Proposed
- Solar Lantern
- Curbing
- ϕ Diameter
- Double Bitt
- Chock
- Ladder

ABBREVIATIONS:

CY	Cubic Yard
EA	Each
EL	Elevation In Feet
HSS	Hollow Structural Sections
ID	Inside Diameter
K (KIP)	1000 Pounds
LBS	Pounds
LF	Linear Feet
MAX.	Maximum
MIN.	Minimum
NA	Not Applicable
N.T.S.	Not To Scale
OC	On Center
PSF	Pounds Per Square Foot
R	Radius
REF	Reference
SCHD.	Schedule
SF	Square Feet
TYP.	Typical
UON	Unless Otherwise Noted
USACOE	United States Army Corps of Engineers

STRUCTURAL STEEL AND MISCELLANEOUS STEEL FABRICATIONS

1. Steel shapes and plates shall be ASTM A709, Grade 36 typical, ASTM A709 Grade 50 where noted.

2. Steel pipes shall be ASTM A53, Grade B.

3. Steel tubing shall be ASTM A500, Grade B.

4. All bolts and nuts for steel connections shall conform to ASTM A325 and be hot-dip galvanized in accordance with ASTM A153. Set anchor bolts by template only. All bolts and nuts for timber connections shall conform to ASTM A307 and be hot-dip galvanized.

5. All miscellaneous steel, including all fasteners, chains, shackles, and u-bolts unless noted otherwise, shall be hot-dip galvanized. Galvanize items after fabrication. Stress relieve bends before galvanizing. Galvanizing damaged accidentally or due to field welding shall be restored with a field applied galvanizing compound.

6. Welding Electrodes: E70XX, Low Hydrogen

7. All welding shall be in accordance with the requirements of the structural welding code, D1.1 and D3.6, of the American Welding Association (AWS).

ALUMINUM ANODES

1. Cathodic protection for steel pipe piles and fender panels shall be 80 lb aluminum alloy. Dimensions shall conform to the general configuration shown on the Plans.

ALUMINUM GANGWAYS

1. The design and construction of the aluminum gangways shall be in accordance with the special provisions for the item "Aluminum Gangway". The Contractor's manufacturer shall design the gangways in accordance with the plans, specifications, and loads shown below.

2. Vertical Loads: Uniform Live Load 85 psf; Additional Dead Load 50 plf

3. Horizontal Loads: Wind - Transverse 50 plf; Wind - Longitudinal 12 plf

4. The minimum support seat width, measured perpendicular to the edge of the concrete support shall be 18 inches.

5. Handrail shall be designed for a concentrated horizontal load of 200 pounds acting at the top of the railing.

CONCRETE

1. Concrete basic design stresses shall be:
   - Fill for Pipe Piles: Class "A"
   - Fill for Double Bitts: Class "A"
   - Cast-in-place (non): Class "LP"

2. Concrete shall contain 5.0 gal/cy of calcium corrosion inhibitor admixture.

3. Clearances for reinforcement shall be 3" unless otherwise noted.

4. Chamfer all concrete edges 1" @ 45° unless otherwise noted.

5. All reinforcing shall be fully supported on non-metallic approved chairs. Reinforcing shall not be supported on timber blocks, bricks, concrete blocks, miscellaneous rebar, etc.

6. Construction joints shall be made only as shown unless approved otherwise.

7. All existing concrete surfaces to receive concrete shall be roughened to a minimum amplitude of ¼" and coated with a product listed on the MaineDOT pre-qualified list of concrete bonding agents.

8. Wet curing of concrete is to begin within 30 minutes after concrete finishing, or as soon as possible without damaging finished surface.

9. All formwork for concrete shall be left in place and concrete surfaces shall be covered and kept moist for a period of not less than seven (7) full days after concrete placements.

10. Contractor shall submit detailed reinforcing drawings including bar and bending schedules to the Engineer for review and approval prior to delivery of any reinforcing steel.

11. All ferrous metal handling/lifting devices and existing embedded metals/anchors no longer in use shall be recessed or removed to a depth of one inch below the surface of the concrete and patched with an approved polymer-modified cementitious mortar. Devices located in areas to be totally encased in cast-in-place concrete shall be galvanized. Devices located in areas not to be encased in cast-in-place concrete shall be stainless steel, unless otherwise noted.

STEEL REINFORCEMENT

1. Reinforcing Steel: ASTM A775 Grade 60, deformed, epoxy coated, unless noted otherwise

2. Rock Anchors: ASTM A722, Grade 150, deformed, with triple corrosion protection

3. Splicing of reinforcing steel is permitted. Stagger splices one splice length minimum. No more than 50 percent of the reinforcing steel shall be spliced at any location. Provide a minimum splice length of 50 bar diameters, unless noted otherwise on the drawings.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 022202.00

PROJ. MANAGER	N. Kelly	P. Bishop	03/19
DESIGN-DETAILED	N. Kelly	P. Bishop	03/19
CHECKED-DETAILED	C. Wurth	C. Wurth	03/19
DESIGNED-DETAILED			
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REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

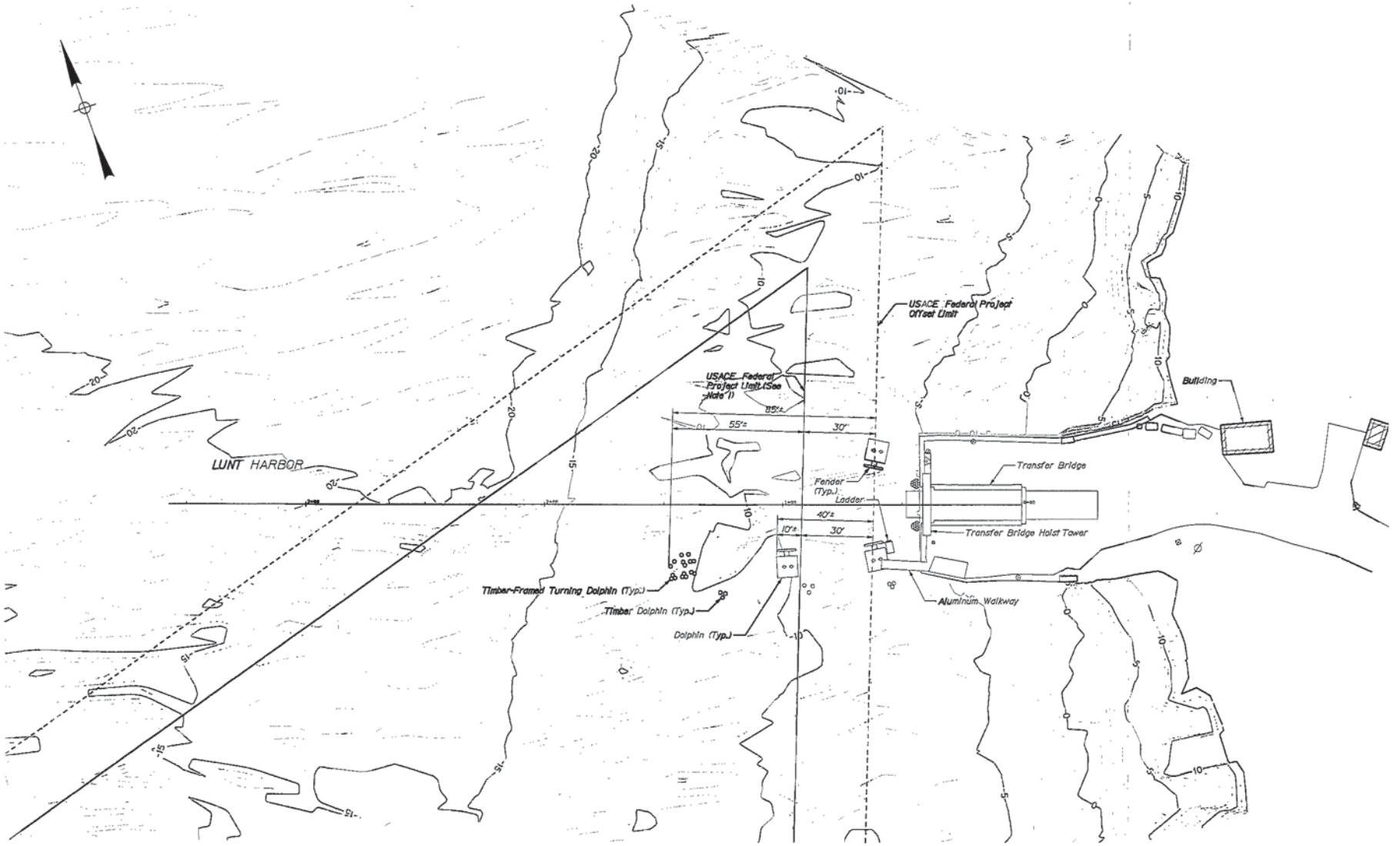
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DATE

FRENCHBORO
FERRY TERMINAL

GENERAL NOTES AND DESIGN CRITERIA

SHEET NUMBER
G02
2 OF 17

Date: 11/22/2019
Username:
Division:
Filename: 102_GeneralNotes.dgn



PLAN
1" = 20'-0"

20 0 20 40
Scale of Feet

NOTES:
1. USACE project limit per https://www.nae.usace.army.mil/Missions/Navigation/Maine-Projects/. Offset limit dimension determined by 3x water depth (MLLW).

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DEPARTMENT OF TRANSPORTATION

WIN
022202.00

		BY	DATE
PROJ. MANAGER			
DESIGN DETAILED	R. Kirby	P. Bosco	03/19
DESIGN REVIEWED	C. Work	C. Work	03/19
DESIGN DETAILED			
DESIGN CHECKED			
REVISION 1			
REVISION 2			
REVISION 3			
REVISION 4			
FIELD CHANGES			

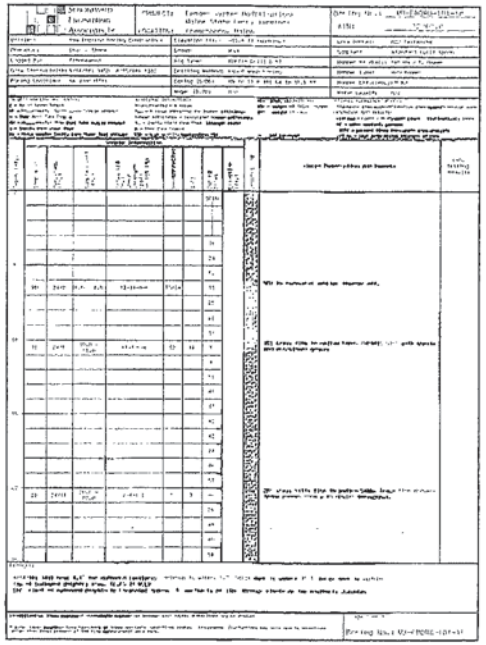
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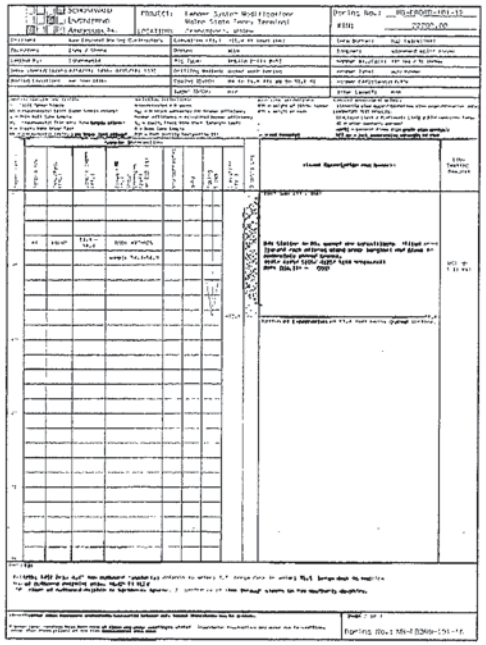
FRENCHBORO
FERRY TERMINAL

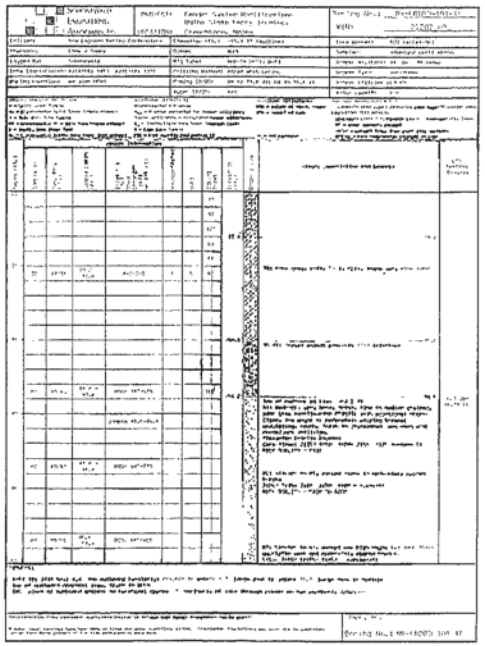
EXISTING CONDITIONS

SHEET NUMBER
G03
3 OF 17

Filename: G03_Existing Conditions.dgn Division: Username: Date: 11/22/2019







GEOTECHNICAL NOTES:

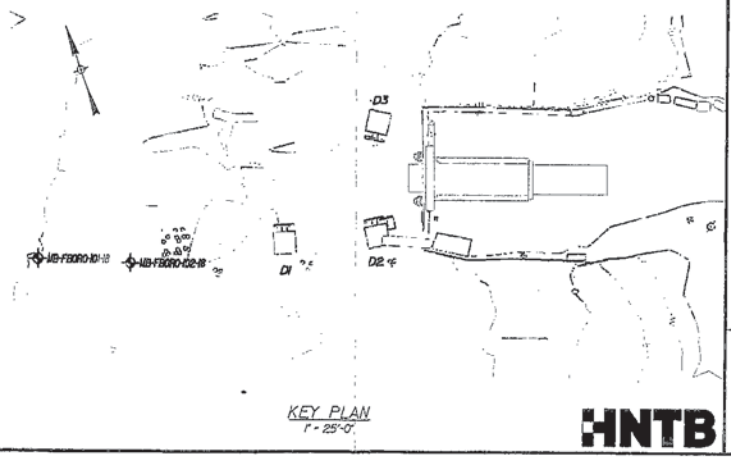
1. The geotechnical report for the project is entitled "Geotechnical Design Report, Fender System Modifications, Maine State Ferry Terminal, Frenchboro, Maine, MaineDOT WIN 022202.00," dated May 2019 and prepared by Schnepwald Engineering Associates, Inc. The report is available on the MaineDOT website.

2. Geotechnical information furnished or referenced in this plan set is for the Bidders' and Contractors' use. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the time of construction. The Department shall not be responsible for the Bidders' and Contractors' interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set and the referenced report present interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between widely-spaced boring locations.

3. Grid north on the North American Datum 1983 (NAD83).

4. Tidal datum is Mean Lower Low Water (MLLW).

BORING COORDINATES		
Location	Northing	Easting
MB-FBORO-101-18	165811.17	1020262.14
MB-FBORO-102-18	165797.35	1020296.81



KEY PLAN
1" = 25'-0"

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 022202.00

ISAIAH V. SCHNEPWALD ME 7529 REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

P.E. NUMBER 5429

DATE

DATE	BY	DESCRIPTION
05/03	P.R.H.	PROJECT 1
05/03	C. MAIN	REVISED 2
		SUBMISSION 3
		SUBMISSION 4
		FINAL SUBMISSION

FRENCHBORO FERRY TERMINAL

BORING LOGS I

SHEET NUMBER

G04

4 OF 17

Date:5/29/2019 Username: Division: Filename:004_Boring Logs I.dgn

FRENCHBORO
FERRY TERMINAL

BORING LOGS II

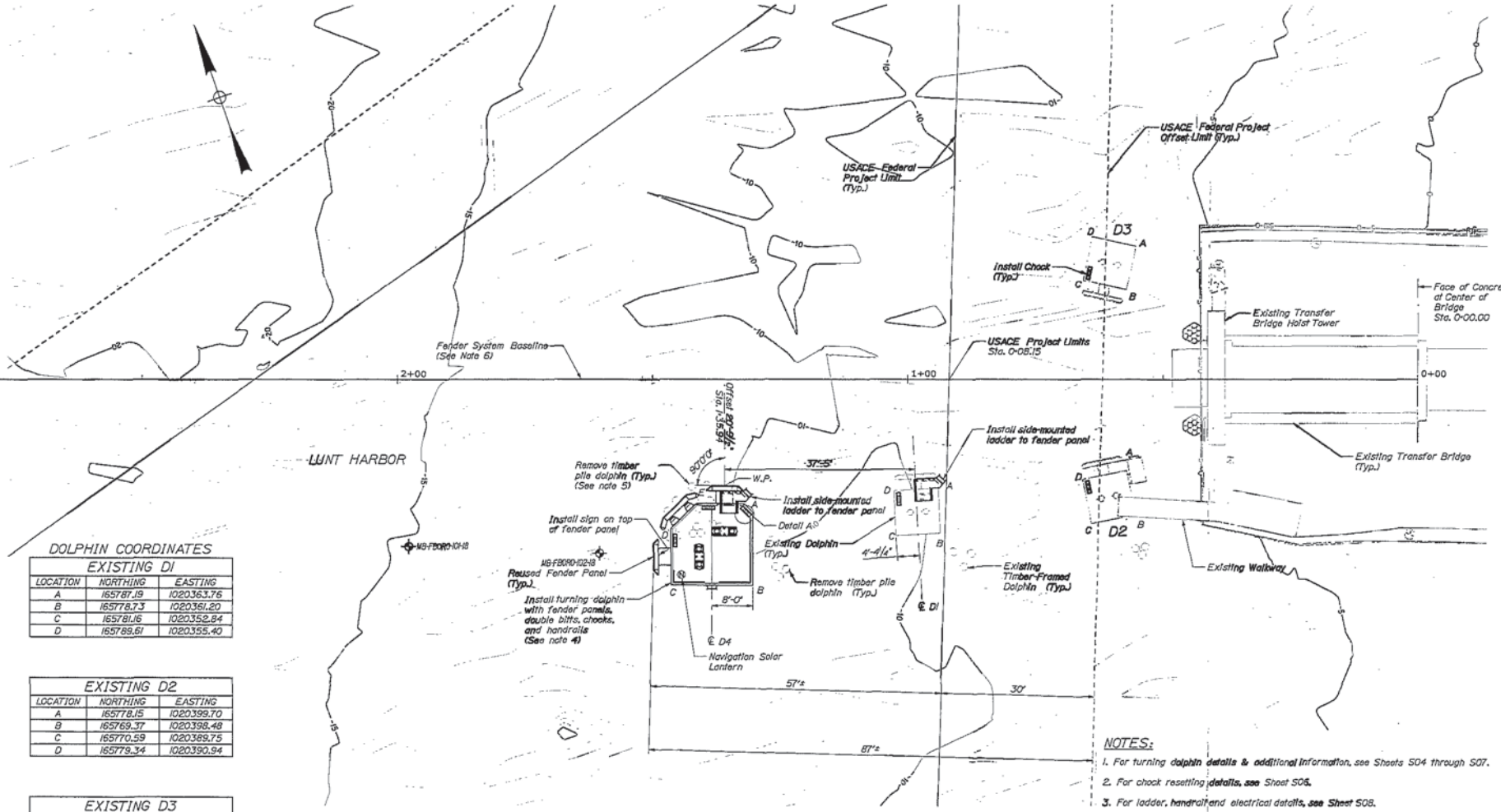
SHEET NUMBER G05 5 OF 17

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 022202.00

Filename: 005_Boring Logs II.dgn Division: Username: Date/s:5/29/2019



DOLPHIN COORDINATES

EXISTING D1

LOCATION	NORTHING	EASTING
A	165787.19	1020363.76
B	165778.73	1020361.20
C	165781.16	1020352.84
D	165789.61	1020355.40

EXISTING D2

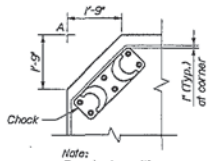
LOCATION	NORTHING	EASTING
A	165778.15	1020399.70
B	165769.37	1020398.48
C	165770.59	1020389.75
D	165779.34	1020390.94

EXISTING D3

LOCATION	NORTHING	EASTING
A	165819.17	1020416.13
B	165811.63	1020411.50
C	165816.21	1020404.10
D	165823.76	1020408.65

PROPOSED D4

LOCATION	NORTHING	EASTING
A	165795.90	1020328.33
B	165780.53	1020323.87
C	165784.98	1020308.50
D	165795.55	1020311.57
E	165798.96	1020317.76



Note: For chock position, see Sheet S05.

DETAIL A
1/2" = 1'-0"

SITE PLAN
1" = 10'-0"
10 0 10 20
Scale of Feet

NOTES:

1. For turning dolphin details & additional information, see Sheets S04 through S07.
2. For chock resetting details, see Sheet S06.
3. For ladder, handrail and electrical details, see Sheet S08.
4. Fender panels, rubber buckling fenders, and chains shall be owner-supplied. These elements are currently stored at the Swan's Island Ferry Terminal, exact location to be determined, and shall be picked up and transported to the site by the Contractor.
5. Timber piles to be removed which lie outside the footprint of the proposed dolphin shall be cut 1 ft above the mudline. Piles which lie inside the footprint of the proposed dolphin may either be extracted to facilitate new pile installation or temporarily left in place during dolphin construction. Upon completion of the dolphin, timber piles shall be cut 1 ft above mudline.
6. Baseline was developed using information from 2013 As-built plans, Sheet S-3.
7. The Contractor shall repair existing concrete as directed by the Resident. Concrete repairs shall be measured for payment under pay items, 518.50, 518.51, and 518.60, Repair of Upward Facing Surfaces - Reinforcing Steel < 8 Inches, Repair of Upward Facing Surfaces - below Reinforcing Steel, and Repair of Vertical Surfaces < 8 Inches, respectively.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 022202.00

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	M. Kelly	09/19
CHECKED-DETAILED	C. Burch	09/19
DESIGN-DETAILED		
REVISION 1		
REVISION 2		
REVISION 3		
REVISION 4		
FIELD CHANGES		

SIGNATURE
9209
P.E. NUMBER
DATE

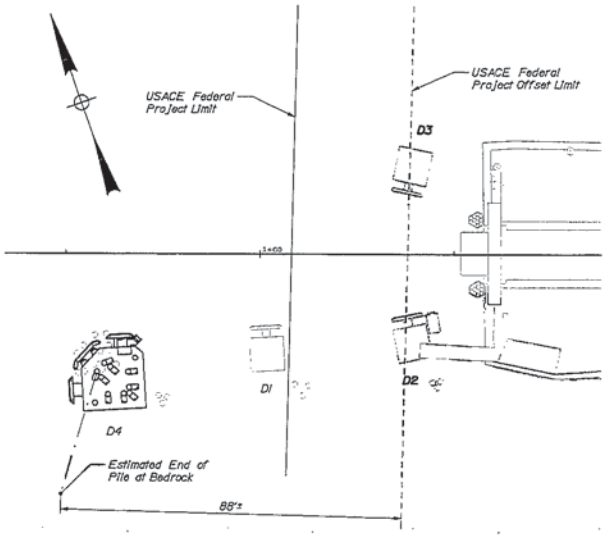
FRENCHBORO
FERRY TERMINAL

SITE PLAN

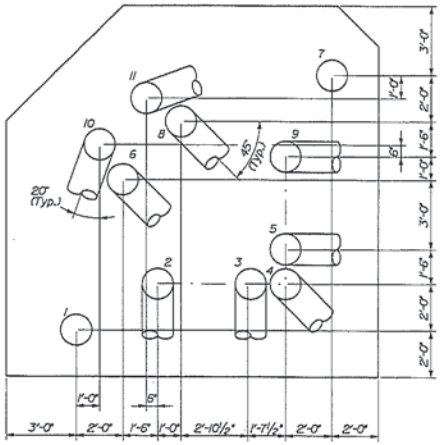
SHEET NUMBER
S01
6 OF 17

Date: 11/22/2019 Username: Division: Filename: 006_Site Plan.dgn

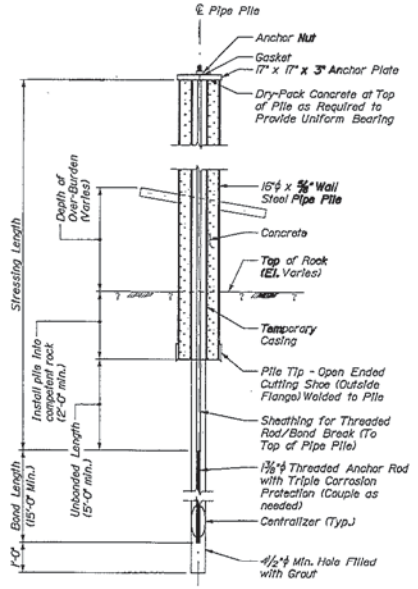
BERTH PLAN
FRENCHBORO
FERRY TERMINAL
SHEET NUMBER
S02
7 OF 17
HNTB
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WIN
022202.00
NOTES:
1. MV Captain Henry Lee is currently in operation. New ferry is proposed.
2. MV Margaret Chase Smith not shown. Ferry is too wide for the pen and does not use this terminal.
3. Offset dimensions shown for new ferry are provided for future planning purposes. Modifications to the fender panels at dolphins D3 and D4 should be considered for new ferry operations.
USACE Federal Project Offset Limit (Typ.)
USACE Federal Project Limit (Typ.)
Ferry Hull/Rim Outline (Typ.)
Fender System Basalina
D1
D2
D3
D4
0+00
1+00
2+00
0'-4"±
3'-0½"±
PLAN
1" = 10'-0"
Scale of Feet
10
0
10
20



PLAN
1/16" = 1'-0"



D4 FOUNDATION PLAN
(Dimensions shown at pile cut-off elevation)
⅜" = 1'-0"



ROCK ANCHOR DETAIL
½" = 1'-0"

STEEL PILE TABLE			
	Pile No.	Estimated Pile Length	Vertical or Batter (Rise/Run)
Turning Dolphin D4	1	65	Vert.
	2	69	Batter 4:12
	3	69	Batter 4:12
	4	69	Batter 4:12
	5	69	Batter 4:12
	6	69	Batter 4:12
	7	66	Vert.
	8	69	Batter 4:12
	9	69	Batter 4:12
	10	67	Batter 2:12
	11	67	Batter 2:12

NOTES:

1. A length of 5' has been included for contingency to each estimated pile length to determine order length.
2. All steel pipe piles shall have rock anchors. For rock anchors, see detail.
3. All steel pipe piles shall have aluminum anodes.
4. For anode details, see Sheet S04.
5. Pile splices shall not be allowed without prior approval of the Engineer of Record (EOR). Pile splices approved by the EOR and installed by the Contractor to achieve the installed pile length as noted herein shall be incidental to pay Item 501.241, Steel Pipe Piles In-Place.

PILE AND ROCK ANCHOR SUGGESTED CONSTRUCTION SEQUENCE:

1. Advance pipe pile open ended using drilling methods to top of competent rock and socketed into competent rock per detail.
2. Pile shall be cut off at final top elevation to perform anchor load test. Refer to structural drawings for top of pile elevations.
3. Clean and flush rock cuttings and soil from inside the pile and socket. Confirm pile socketed into bedrock per detail. Check tolerances. Inspect integrity of pipe pile. Resident shall accept pipe pile prior to optional grout plug installation and/or to rock anchor installation. Install grout plug (Contractor's option).
4. Install temporary casing with centralizers as needed until it is seated into the grout plug or into bedrock at the bottom of pile.
5. Insert rock anchor drill casing and drill bit into temporary casing and drill anchor hole. Minimum length of anchor hole per the detail.
6. Clean and flush rock cuttings from anchor hole. Do not allow drill cuttings to enter the pipe pile.
7. Install triple corrosion protected anchor, sheathing and centralizers, preassembled to the required dimensions.
8. Using tremie methods, fill the annular space between the anchor rod / sheathing and the anchor hole with 5,000 psi cement grout to above the top of the bedrock surface.
9. Install anchor plate at top of anchor with hex nut and hardened washer.
10. Verify that pile head is restrained from moving laterally by fixing the pile head to the pile template, falsework or other appropriate means.
11. Perform rock anchor proof and performance tests to 133% of the max. pile tension load (See pile schedule). Release proof load and remove anchor plate.
12. Place concrete in the annular space between the anchor rod sheathing and the pipe pile as the temporary casing is withdrawn, maintaining the concrete surface above the bottom of the temporary casing at all times.
13. Re-install anchor plate at top of anchor with hex nut and hardened washer. Apply 110% of the max. pile tension load (see pile schedule). Lock off rock anchor.
14. Proceed with dolphin construction.

Pile Load Schedule	
Max. Factored Applied Pile Compression Load (LRFD):	345 kips
Max. Factored Applied Pile Tension Load (LRFD):	217 kips
Max. Applied Pile Tension Load (ASD):	112 kips
Min. Pile Compression Resistance (LRFD):	390 kips
Min. Rock Anchor Tension Capacity (ASD):	361 kips
Rock Anchor Test Load:	150 kips
Rock Anchor Lock Off Load:	124 kips

NOTES:

1. In the absence of definitive guidance in AASHTO's LRFD Bridge Design Specifications (LRFD Manual), Article 10.7.3.2.3 "Point Bearing Piles on Rock - Piles Driven to Hard Rock," the geotechnical axial capacity of pipe piles end-bearing on rock was determined using established ASD methods with a Factor of Safety of 2.0, equivalent to a resistance factor of 0.5 as required per the LRFD Manual.
2. The tensile capacity of rock anchors was determined using established ASD methods in the absence of definitive guidance in the LRFD Manual, Article 11.9.4.2 - "Anchor Pullout Capacity." A resistance factor equal to 1.0 is allowed per the LRFD Manual since all the rock anchors will be tested.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 022202.00

PROJ. MANAGER
DESIGN DETAILED
CHECKED/REVIEWED
DESIGN DETAILED
CHECKED/REVIEWED

	BY	DATE
REVISION 1		
REVISION 2		
REVISION 3		
REVISION 4		
FIELD CHANGES		

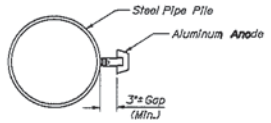
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FRENCHBORO
FERRY TERMINAL

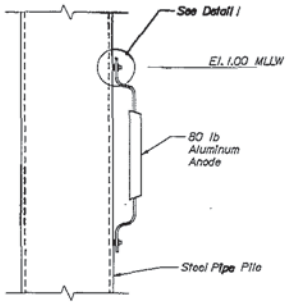
DOLPHIN
FOUNDATION PLAN

SHEET NUMBER
S03
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Date: 11/22/2019 Username: Division: Filename: 008_Dolphin Foundation Plan.dgn



PLAN

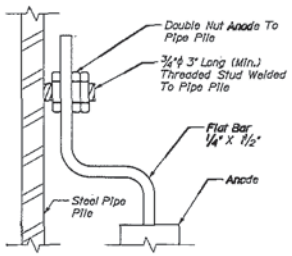


ELEVATION

Note: Anode shall be positioned along the inshore face of piles. Set top of Anode at +1.00 MLLW

ANODE DETAIL

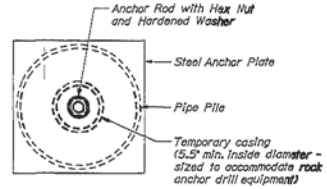
N.T.S.



DETAIL I

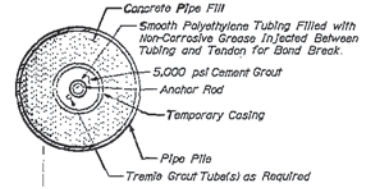
N.T.S.

NOTE:
1. Studs and hardware shall be stainless steel.



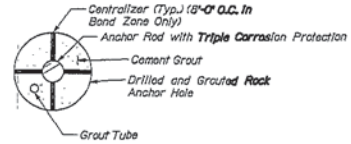
TOP OF PILE DETAIL

N.T.S.



ROCK ANCHOR SECTION
(UNBONDED ZONE)

N.T.S.



ROCK ANCHOR SECTION
(BOND ZONE)

N.T.S.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
022202.00

PROJ MANAGER		BY	DATE
DESIGN-DETAILED	R. Riley	P. Bundy	6/19
CHECKED-REVIEWED	C. Wish	C. Wish	6/19
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISION 1			
REVISION 2			
REVISION 3			
REVISION 4			
FIELD CHANGES			

SIGNATURE

10309
P.E. NUMBER

DATE

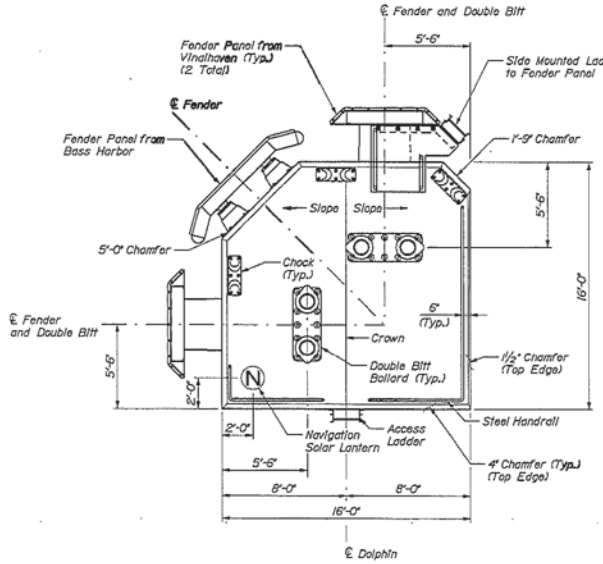
FRENCHBORO
FERRY TERMINAL

DOLPHIN FOUNDATION
DETAILS

SHEET NUMBER
S04
9 OF 17

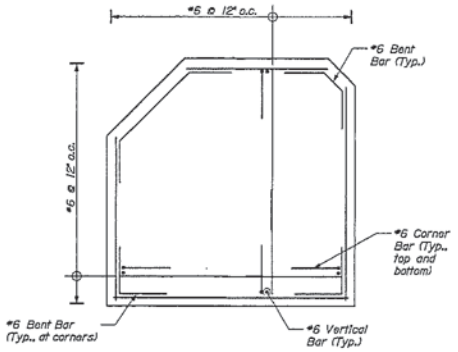
HNTB

Filename: 009_Dolphin Foundation Details.dgn Division: Username: Date: 11/22/2019



TURNING DOLPHIN PLAN

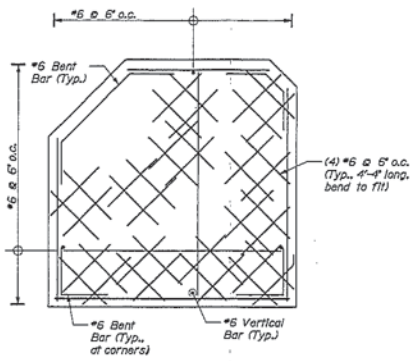
1/4" = 1'-0"



SECTION A-A

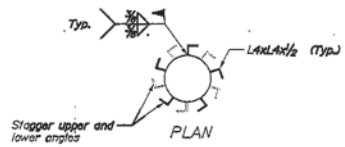
(Same as shown for El. 9.50 - 11.00, but with pile cutouts)

1/4" = 1'-0"

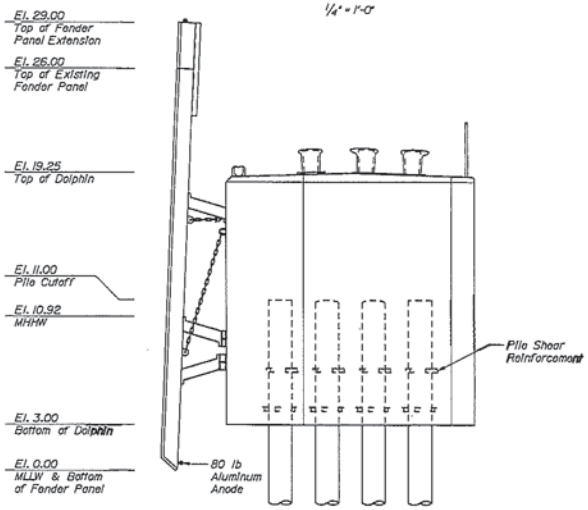


SECTION B-B

1/4" = 1'-0"



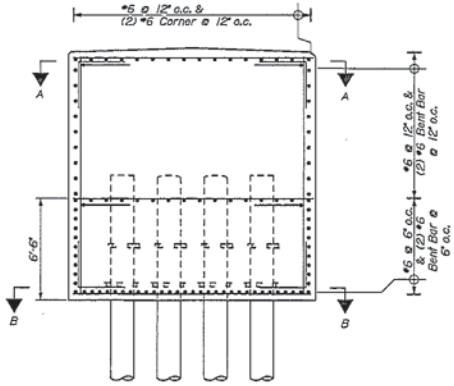
PLAN



TURNING DOLPHIN ELEVATION

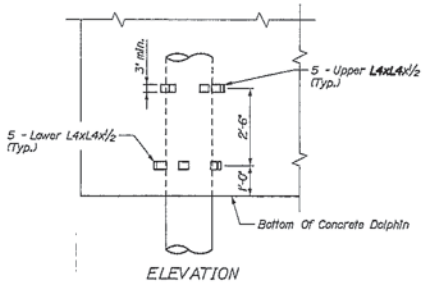
(Select fenders and chocks not shown for clarity)

1/4" = 1'-0"



TURNING DOLPHIN REINFORCING TYPICAL SECTION

1/4" = 1'-0"



ELEVATION

PILE SHEAR REINFORCEMENT

½" = 1'-0"

NOTES:

1. For anode details, see Sheet S04.
2. For double bitt and chock details, see Sheet S06.
3. For handrail details, see Sheet S09.
4. For access ladder details, see Sheet S10 through S12.
5. All reinforcing shall be cut to maintain 2" clear from piles and 3" clear of concrete surfaces.
6. Reinforcing bars shall be adjusted to maintain 1" clear from anchor rods.
7. Crown slope at top of dolphin shall be ¼" per foot and pitched as shown.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 022202.00

PROJ. MANAGER		BY	DATE
DESIGN DETAILED	N. Kay	P. Bilyn	03/19
DESIGN DETAILED	C. Wynn	C. Wynn	03/19
DESIGN DETAILED			
DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER 10259

DATE

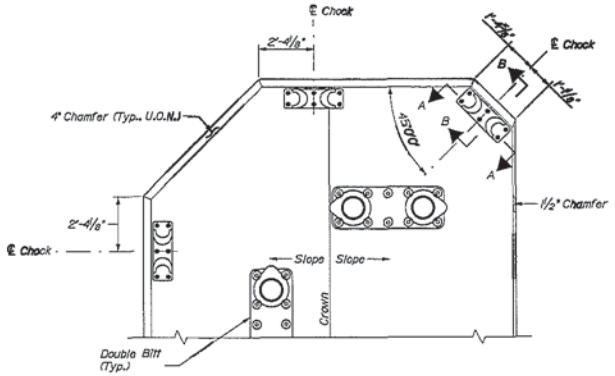
FRENCHBORO FERRY TERMINAL

DOLPHIN PLAN, ELEVATION, AND DETAILS

SHEET NUMBER S05

10 OF 17

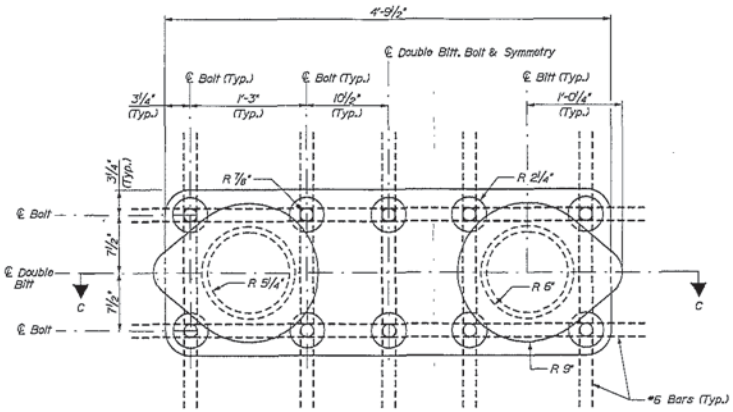
Filename: 010_Dolphin Plan and Elevation.dgn Division: Username: Date: 11/22/2019



PLAN VIEW OF PROPOSED DOLPHIN

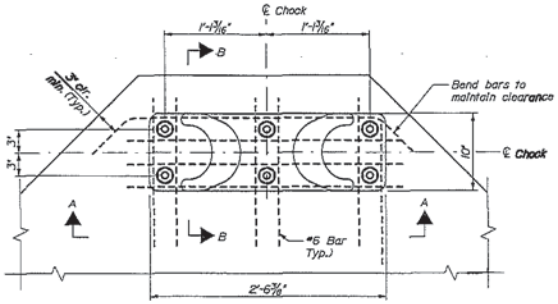
(Hand rails, lights, and fenders not shown for clarity)

3/8" = 1'-0"



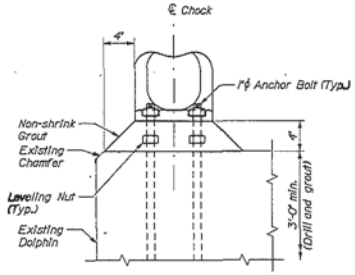
DOUBLE BITT PLAN

1 1/2" = 1'-0"



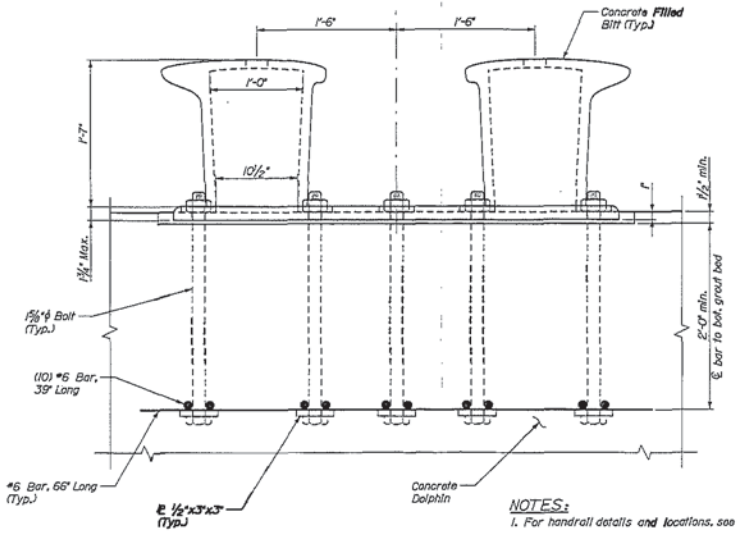
CHOCK PLAN AT CHAMFER

1 1/2" = 1'-0"



EXISTING CONCRETE CHOCK DETAIL

1 1/2" = 1'-0"

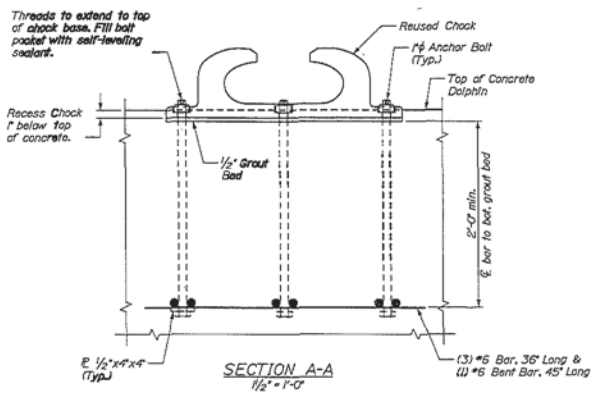


NOTES:

1. For handrail details and locations, see Sheet S09.

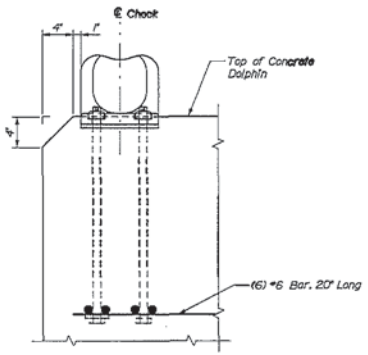
SECTION C-C

1 1/2" = 1'-0"



SECTION A-A

1 1/2" = 1'-0"



SECTION B-B

1 1/2" = 1'-0"

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 022202.00

FRENCHBORO
FERRY TERMINAL

DOLPHIN DETAILS
MOORING HARDWARE

PROJ. MANAGER	DESIGN-DETAILED	N. Bittel
	CHECKED-DETAILED	C. Wirth
	DESIGN-REVIEW (S)	
	DESIGN-REVIEW (D)	

	BY	DATE
REVISION 1		
REVISION 2		
REVISION 3		
REVISION 4		
FIELD CHANGES		

P.E. NUMBER

SIGNATURE

DATE

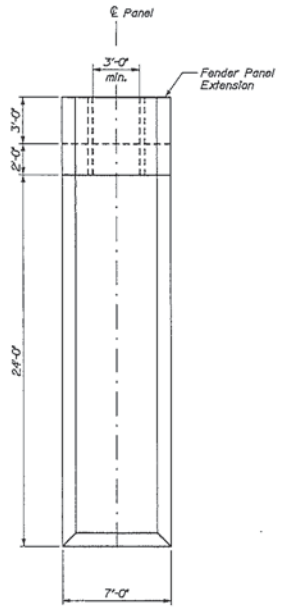
SHEET NUMBER

S06

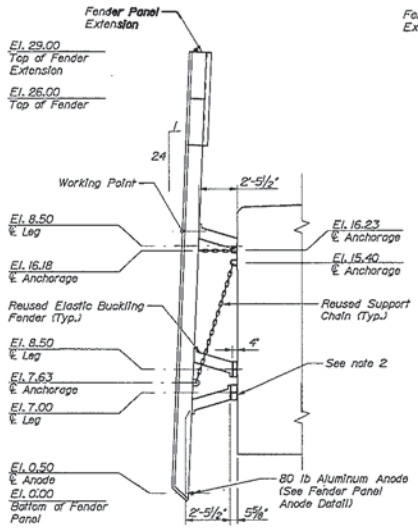
11 OF 17

HNTB

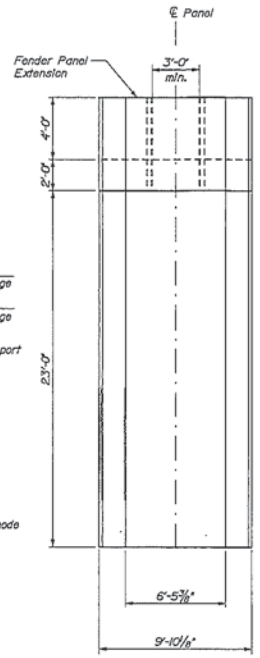
Date: 11/22/2019 Username: Division: Filename: 01L_Mooring Hardware.dgn



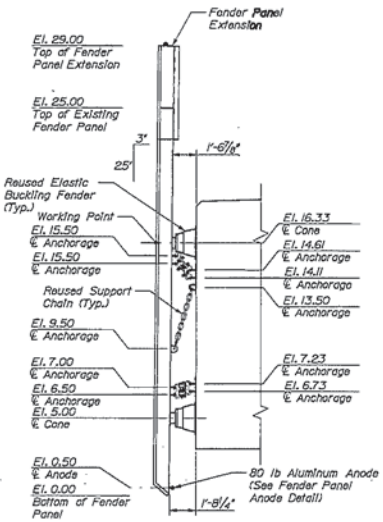
VINALHAVEN PANEL
1/4" = 1'-0"



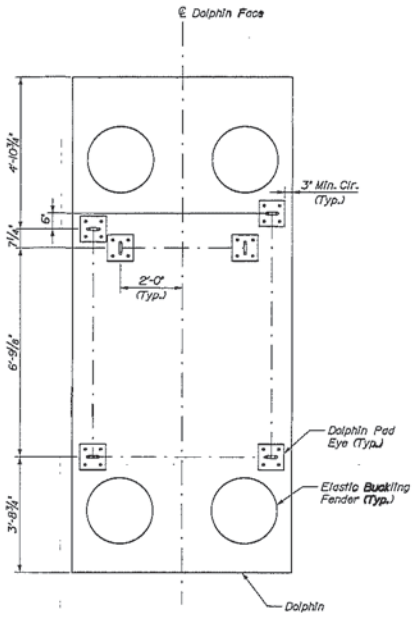
VINALHAVEN PANEL ELEVATION
(Foundation piles and hardware not shown for clarity)
1/4" = 1'-0"



BASS HARBOR PANEL
1/4" = 1'-0"



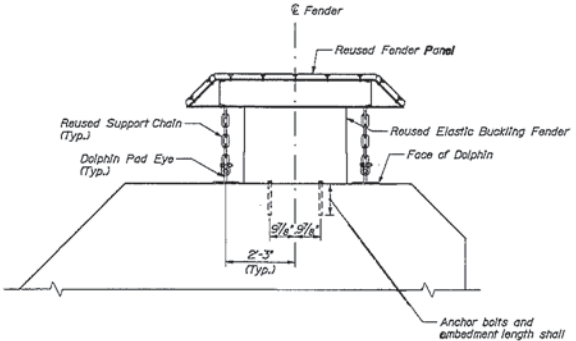
BASS HARBOR
FENDER PANEL ELEVATION
(Foundation piles and hardware not shown for clarity)
1/4" = 1'-0"



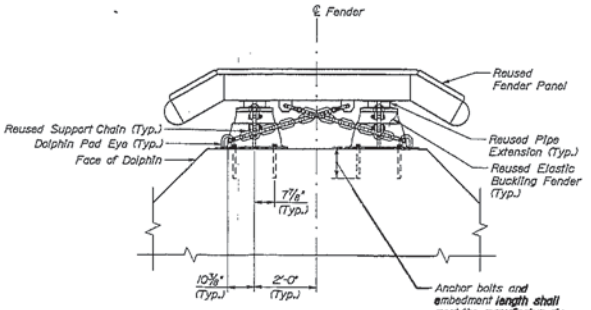
BASS HARBOR
DOLPHIN PAD EYE LOCATIONS
1/2" = 1'-0"

NOTES

1. Existing chains, dog bones, and connectors shall be reused unless damaged or corroded. The Resident shall determine if replacement is required and the Contractor shall replace in kind.
2. Existing steel fender blocks from Vinalhaven dolphin DI shall not be used.
3. Contractor shall use fender plate or fender block detail to maintain proposed fender panel alignment.
4. For dolphin pad eye, panel anode and steel fender block details, see Sheet S08.
5. Contractor to replace broken or bent chain links, dog bones, or chain tensioner in kind.
6. Contractor shall remove obstructions or modify detail for panel extension.



VINALHAVEN
FENDER PANEL SECTION
(2 Panels Total)
1/2" = 1'-0"



BASS HARBOR
FENDER PANEL SECTION
1/2" = 1'-0"

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
022202.00

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	N. Wiley	09/19
CHECKED-DETAILED	C. Work	09/19
QUANTITIES		
DESIGN-DETAILED		
REVISION 1		
REVISION 2		
REVISION 3		
REVISION 4		
FOR BIDDING		

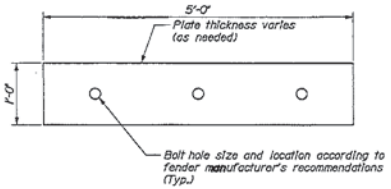
SIGNATURE
0209
P.E. NUMBER
DATE

FRENCHBORO
FERRY TERMINAL

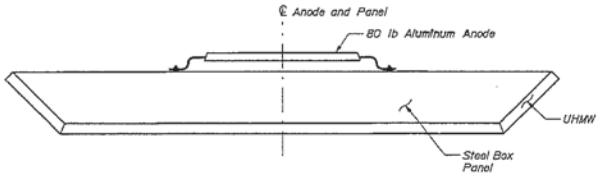
DOLPHIN DETAILS
FENDER SYSTEM I

SHEET NUMBER
S07
12 OF 17

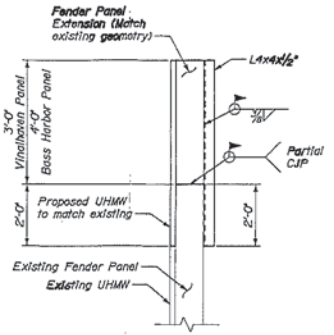
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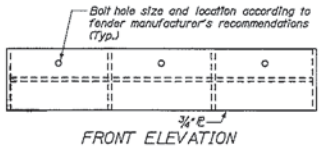
PANEL SPACER PLATE DETAIL
1" = 1'-0"



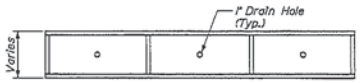
FENDER PANEL ANODE DETAIL
1" = 1'-0"



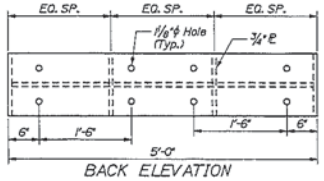
TYPICAL PANEL EXTENSION DETAIL
1/2" = 1'-0"



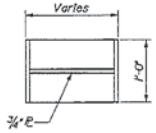
FRONT ELEVATION



PLAN

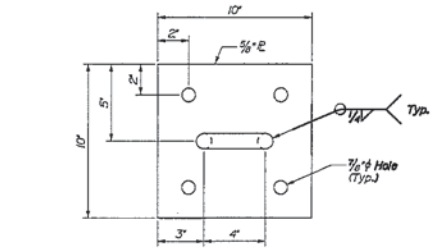


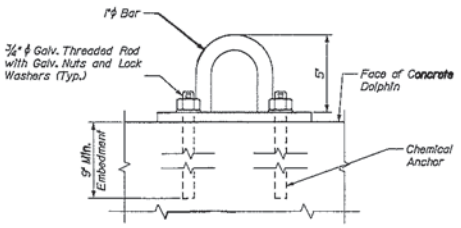
BACK ELEVATION



SECTION

STEEL FENDER BLOCK
1" = 1'-0"





DOLPHIN PAD EYE DETAIL
3" = 1'-0"

NOTES:

1. For anode attachment details, see Sheet S04.
2. All steel hardware shall be hot-dip galvanized.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 022202.00

PROJ MANAGER		BY	DATE
DESIGNED/DETAILED	N. Wyatt	P. Bipps	09/19
CHECKED/REVIEWED	C. Bush	C. Bush	09/19
DESIGN OVERSIGHT			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

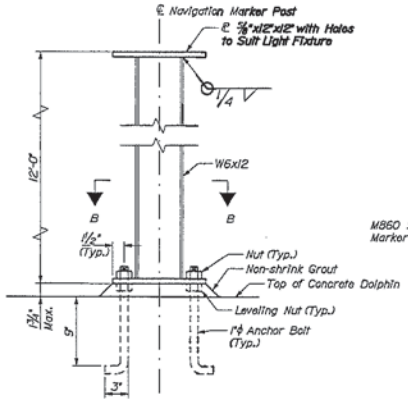
SIGNATURE
10209
P.E. NUMBER
DATE

FRENCHBORO
FERRY TERMINAL

DOLPHIN DETAILS
FENDER SYSTEM II

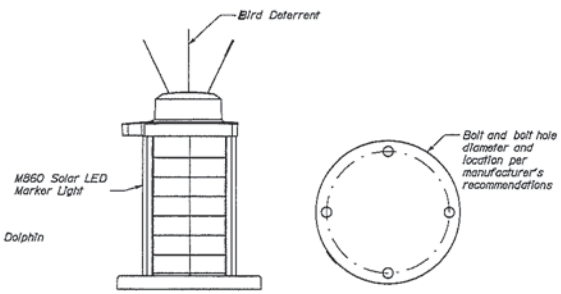
SHEET NUMBER
S08
13 OF 17

Filename: 013_Fender System 2.dgn Division: Username: Date: 11/22/2019



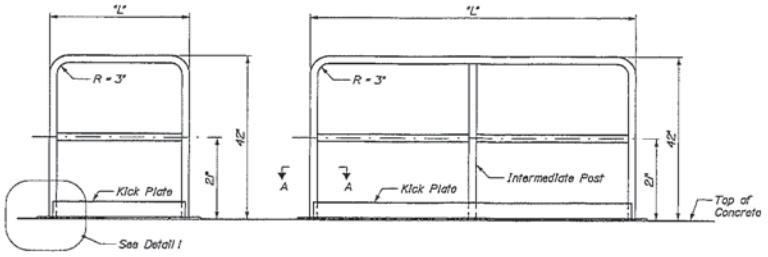
NAVIGATION MARKER INSTALLATION DETAIL

1½" = 1'-0"



SOLAR LANTERN DETAIL

3" = 1'-0"



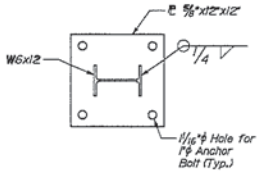
HANDRAIL DETAIL

¾" = 1'-0"

TABLE 1
HANDRAIL SUMMARY TABLE

Dolphin	Location	Identification
D4	S	T2 - 8'-2" - 1
D4	S	T2 - 18'-6" - 3

Railing Identification: T2 - L - X
Type — Length — Inter. Post Quantity

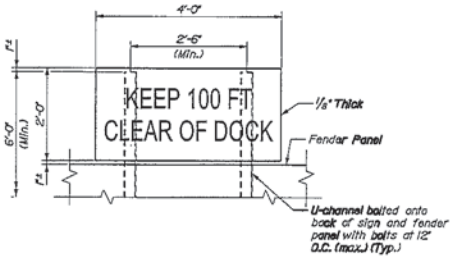


SECTION B-B

1½" = 1'-0"

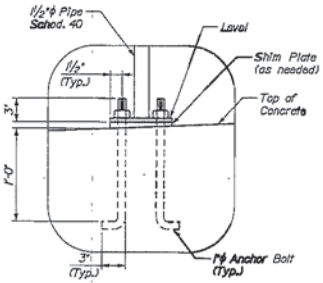
TABLE 1
LANTERN SUMMARY TABLE

Location	Model	Range (Nm)	Lens
Dolphin D4	M860	4-7	Red



SIGN DETAIL

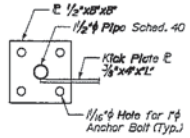
¾" = 1'-0"



DETAIL 1

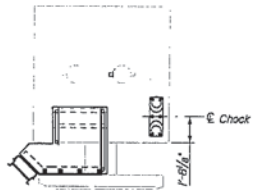
(Applies to all rolling mounting locations, Kick plate not shown for clarity)

1½" = 1'-0"



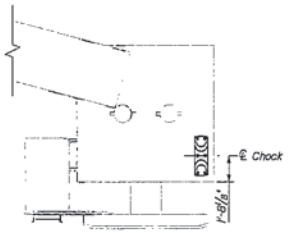
SECTION A-A

1½" = 1'-0"



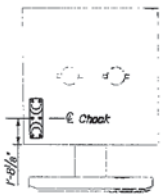
D1 CHOCK PLAN

¼" = 1'-0"



D2 CHOCK PLAN

¼" = 1'-0"



D3 CHOCK PLAN

¼" = 1'-0"

NOTES:

1. Solar lantern shall be a Carmanah B60 lantern or approved equal.
2. Solar lantern shall be self-contained.
3. Solar lantern shall have an optical performance of 230 cd or more for the red lens.
4. Solar lantern shall have an ingress protection of 68 or better.
5. Solar lantern light shall be LED.
6. The solar modules of the lantern shall be high-efficiency cells with embedded MPPT.
7. For additional details on chock setting, see Sheet S06.
8. Contractor shall support the navigation sign along the back of the fender panel with a pair of U-channels in accordance with Special Provision 645, Highway Signing.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 022202.00

PROJ MANAGER
DESIGNED BY N. Kirby 01/19
CHECKED BY C. Wynn 01/19
DRAWN BY P. Estey
CHECKED BY C. Wynn
REVISIONS 1
REVISIONS 2
REVISIONS 3
FED. AID PROJ. NO.

SIGNATURE
#2009
P.E. NUMBER
DATE

FRENCHBORO
FERRY TERMINAL

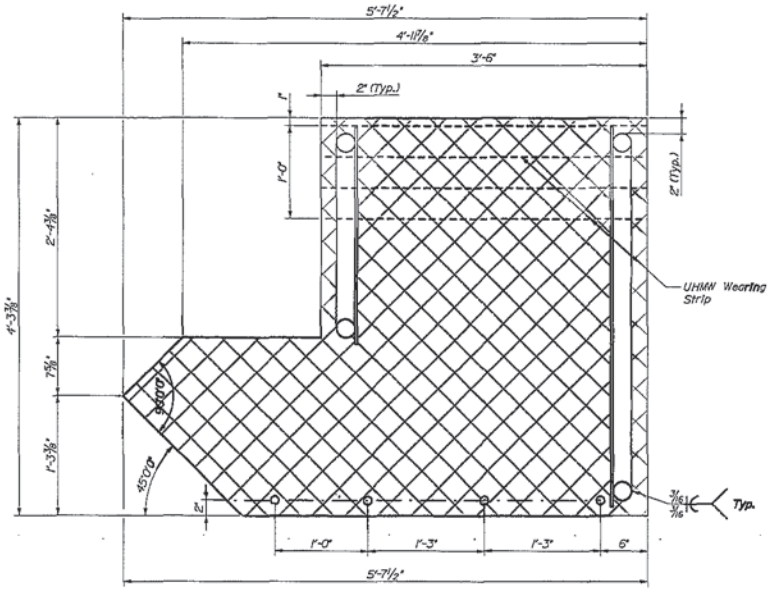
DOLPHIN DETAILS
MISCELLANEOUS

SHEET NUMBER
S09
14 OF 17

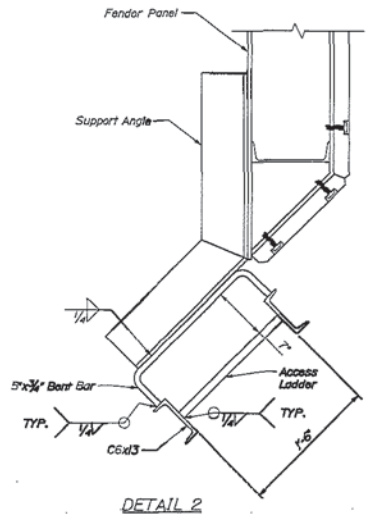
Filename: 04_Miscellaneous Details.dgn Division: Username: Date: 11/22/2019

DOLPHIN DETAILS
LADDERS 1
FRENCHBORO
FERRY TERMINAL
SHEET NUMBER
S10
15 OF 17
HNTB
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WIN
022202.00
NOTES:
1. The panel mounted access ladder shall be designed by the Contractor for a 350 Lb concentrated vertical load acting at any point on the ladder. The ladder shall conform with all applicable provisions of OSHA regulations for ladders and with dimensions shown on the drawings. The ladder assembly shall be hot-dip galvanized after fabrication.
DETAIL 2
(Typical all ladder mounting locations)
DETAIL 1
(Typical for all ladders)
SECTION A-A
SECTION
ELEVATION
DOLPHIN ACCESS LADDER

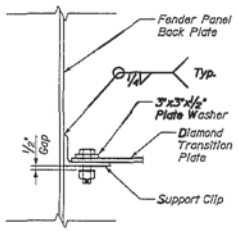
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WIN 022202.00



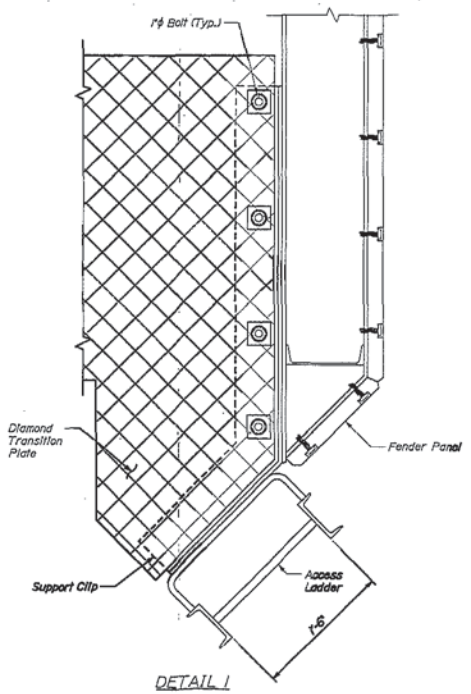
DIAMOND TRANSITION PLATE DETAIL
1½" = 1'-0"



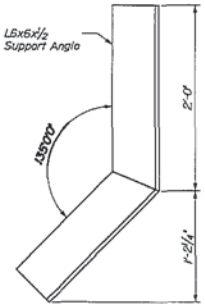
DETAIL 2
1½" = 1'-0"



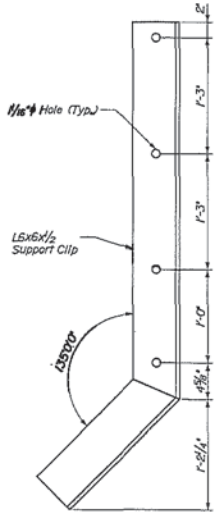
SUPPORT CLIP ATTACHMENT DETAIL
1½" = 1'-0"



DETAIL 1
(Hand rail not shown for clarity)
1½" = 1'-0"



SUPPORT ANGLE DETAIL
1½" = 1'-0"



SUPPORT CLIP DETAIL
1½" = 1'-0"

NOTES:
1. Grind tread flat to weld plate (Typ.)

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 022202.00

PROJ. MANAGER		BY	DATE
DESIGN DETAILER	N. Kirby	P.E.209	03/19
DESIGNED BY	C. Lynch	C.Lynch	03/19
DESIGNED (FHWA)			
DESIGNED (MaDOT)			
FIELD CHECK 1			
FIELD CHECK 2			
FIELD CHECK 3			
FIELD CHECK 4			
FIELD CHECKED			

SIGNATURE
D209
P.E. NUMBER
DATE

FRENCHBORO
FERRY TERMINAL

DOLPHIN DETAILS
LADDERS III

SHEET NUMBER
S12
17 OF 17

Filename: 017_Miscellaneous Details IV.dgn Division: Username: Date: 11/22/2019

US Army Corps
of Engineers ®
New England District

WORK-START NOTIFICATION FORM

(Minimum Notice: Two weeks before work begins)

****

EMAIL TO: jay.l.clement@usace.army.mil

or

MAIL TO:

Jay Clement
US Army Corps of Engineers
Maine Project Office
442 Civic Center Drive
Augusta, Maine 04330

****

Corps of Engineers Permit No. NAE-2020-00315 was issued to the Maine Dept. of Transportation. This work is located in Lunt Harbor at Frenchboro, Maine and authorized the permittee to upgrade the existing state ferry terminal facility. Regulated work includes the addition of a turning dolphin and minor upgrades of hardware on the existing terminal components. New piling installations will result in a cumulative total of 27 s.f. of permanent tidal bottom impact.

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

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

_____

_____

Phone & email: (___) _____ (___) _____ _____

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-2020-00315

Project Manager Clement

Name of Permittee: Maine Dept. of Transportation

Permit Issuance Date: _____

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 FOR
THE STATE OF MAINE

The New England District of the U.S. Army Corps of Engineers (Corps) hereby issues a General Permit (GP) for activities subject to Corps jurisdiction in waters of the U.S. within the boundaries of the State of Maine. This GP is issued in accordance with Corps regulations at 33 CFR 320 - 332 [see 33 CFR 325.2(e)(2)]. This GP authorizes activity-specific categories of work that are similar in nature and cause no more than minimal individual and cumulative adverse environmental impacts. Refer to Page 2 for the list of activities and Appendix A for activity specific conditions of eligibility in inland and tidal waters.

I. GENERAL CRITERIA

1. 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 – 20), and Appendix A - Definition of Categories.

2. Under this GP, projects may qualify for the following:
   - Category 1: Category 1 Self -Verification Notification Form is required (SVNF – see Appendix B).
   - Category 2: Application to and written approval from the Corps is required (Pre-Construction Notification (PCN)). No work may proceed until written approval from the Corps is 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 activities eligible 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.

3. Prospective permittees need to read:
   a. Section II to determine if the activity requires Corps authorization.
   b. Sections III and IV to determine if the activity may be eligible for authorization under this GP, specifically whether it is eligible for Self-Verification (SV) or whether Pre-Construction Notification (PCN) is required.

4. Permittees must ensure compliance with all applicable General Conditions in Section IV. The Corps will consider unauthorized any activity requiring Corps authorization if that activity is under construction or completed and does not comply with all of the terms and conditions.

5. Project proponents are encouraged to contact the Corps with questions at any time. Pre-application meetings (see 33 CFR 325.1(b)), whether arranged by the Corps or requested by permit applicants, are encouraged to facilitate the review of projects. Pre-application meetings and/or site visits can help streamline the permit process by alerting the applicant to potentially time-consuming concerns that are likely to arise during the evaluation of their project (e.g., avoidance, minimization and compensatory mitigation requirements, historic properties, endangered species, essential fish habitat, and dredging contaminated sediments).

II. CORPS JURISDICTION/ACTIVITIES COVERED

1. Permits are required from the Corps of Engineers for the following work:

a. The construction of any structure in, over or under any navigable water of the United States (U.S.)[1], the excavating or dredging from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters. The Corps regulates these activities under Section 10 of the Rivers and Harbors Act of 1899. See 33 CFR 322;

b. The discharge of dredged or fill material and certain discharges associated with excavation into waters of the U.S. (e.g. sidecasting). The Corps regulates these activities under Section 404 of the Clean Water Act (CWA). See 33 CFR 323; and

c. The transportation of dredged material for the purpose of disposal in the ocean. The Corps regulates these activities under Section 103 of the Marine Protection, Research and Sanctuaries Act. See 33 CFR 324.

2. Related laws:

33 CFR 320.3 includes a list of related laws, including: Section 401 of the CWA, Section 402 of the CWA, Section 307(c) of the Coastal Zone Management (CZM) Act of 1972, The National Historic Preservation Act of 1966, the Endangered Species Act, the Fish and Wildlife Act of 1956, the Marine Mammal Protection Act of 1972, Magnuson-Stevens Act, and Section 7(a) of the Wild and Scenic Rivers Act.

3. An activity listed below may be authorized by this GP only if that activity and the permittee satisfy all of the GP's terms and conditions. Any activity not specifically listed below may still be eligible for the GP; applicants are advised to contact the Corps for a specific eligibility determination. Category 1 and Category 2 eligibility criteria for each activity in both Inland and Tidal waters can be found in Appendix A.

1. Repair, Replacement, Expansion, and Maintenance of Authorized Structures and Fills
2. Moorings
3. Structures, Floats and Lifts
4. Aids to Navigation, and Temporary Recreational Structures
5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation
6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges
7. Bank and Shoreline Stabilization
8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities
9. Utility Line Activities
10. Linear Transportation Projects
11. Mining Activities
12. Boat Ramps and Marine Railways
13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects
14. Reshaping Existing Drainage Ditches and Mosquito Management
15. Oil Spill and Hazardous Material Cleanup
16. Cleanup of Hazardous and Toxic Waste
17. Scientific Measurement Devices
18. Survey Activities
19. Agricultural Activities
20. Fish and Wildlife Harvesting, Enhancement, and Attraction Devices
21. Habitat Restoration, Establishment and Enhancement Activities
22. Previously Authorized Activities
23. Stream & Wetland Crossings
24. Aquaculture

Note: Multiple activities may be authorized in the same GP, e.g. a recreational pier (#3) with an associated mooring (#2) or a windpower facility (#13) with an associated transmission line (#9).

[1] Defined in Appendix F, Definitions and at 33 CFR 328.

III. PROCEDURES

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

In order for authorizations under this GP to be valid, 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 (PBR) and general permit authorizations; Site Location of Development Act permit; Maine Waterway Development and Conservation Act permit; and Maine Hazardous Waste, Septage, and Solid Waste Management Act license.
- Maine Department of Conservation, Agriculture & Forestry: Land Use Planning Commission (LUPC) permit.
- Maine Department of Marine Resources: Aquaculture Leases.
- Maine Department of Conservation, Bureau of Parks and Lands, Submerged Lands: Submerged Lands Lease.

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

2. How to Obtain/Apply for Authorization.

a. Category 1 (Self-Verification): Self-Verification Notification Form (SVNF) required. The SVNF is required for all SV eligible work in Maine unless otherwise stated in Appendix A. Activities that are eligible for SV are authorized under this GP and may commence without written verification from the Corps provided the prospective permittee has:

i. Confirmed that the activity will meet the terms and conditions of Category 1. Consultation with the Corps and/or other relevant federal and state agencies may be necessary to ensure compliance with the applicable general conditions (GCs) and related federal laws such as the National Historic Preservation Act (see GC 6), the Endangered Species Act (GC 8) and the Wild and Scenic Rivers Act (GC 9). Prospective permittees are encouraged to contact the Corps with SV eligibility questions. Activities not meeting the SV criteria must submit a PCN to the Corps.

ii. Submitted the SVNF (see GC 27 and Appendix B) to the Corps. **NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF. Whichever form chosen needs to include a location map, plans, and an Official Species List for federally listed threatened or endangered species (Reference Appendix D).**

b. Category 2 (Pre-Construction Notification (PCN)): Application to and written verification from the Corps is required before work can proceed. For activities that do not qualify for SV or where otherwise required by the terms of the GP, the permittee must submit a PCN and obtain a written permit before starting work in Corps jurisdiction.

i. The Corps will coordinate review of all activities requiring PCN with federal and state agencies and federally recognized tribes, as appropriate. To be eligible and subsequently authorized, an activity must result in no more than minimal individual and cumulative effects on the aquatic environment as determined by the Corps in accordance with the criteria listed within this GP. This may require project modifications involving avoidance, minimization, or compensatory mitigation for unavoidable impacts to ensure that the net adverse effects of a project are no more than minimal.

ii. The Corps will attempt to issue a written eligibility determination within the state's review period. Regardless, work eligible for Category 2 may not proceed before Corps written approval is received.

c. All applicants for Category 2 projects must:

i. Apply directly to the Corps using the state application form or the Corps application form (ENG Form 4345[2]), and apply directly to the state (DEP, LUPC, BPL or DMR) as applicable using the appropriate state form, if the work is regulated by the Corps and the state; or

ii. Apply directly to the Corps using the Corps application form (ENG Form 4345[2]) if the work is regulated by the Corps but not the state (DEP, LUPC, BPL or DMR).

iii. Provide application information (see "Information Typically Required" in Appendix C) to help ensure the application is complete and to speed project review.

iv. Obtain an Official Species List of federally threatened or endangered species in the project area (GC 8).

v. Submit a copy of their application materials to the Maine Historic Preservation Commission (MHPC) *and* all five Indian tribes listed at Appendix E, at the same time, or before, they apply to 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 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).

d. Work that is not regulated by the State of Maine, but is subject to Corps jurisdiction, may still be eligible for authorization under this GP.

e. Emergency Situations: 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." Emergency work is subject to the same terms and conditions of this GP as non-emergency work, and similarly, must qualify for authorization under the GP; otherwise an IP is required. The Corps will work with all applicable agencies to expedite verification according to established procedures in emergency situations.

3. Individual Permits. Projects that are not authorized by this GP require an Individual Permit (IP) (33 CFR 325.5) and proponents must submit an application directly to the Corps. This GP does not affect the Corps IP review process or activities exempt from Corps regulation. For general information and application form, see the Corps website or contact the Corps (see Appendix E). The Corps encourages applicants to apply concurrently for a Corps IP and applicable state permits.

The Corps retains discretionary authority on a case-by-case basis to elevate a GP eligible project to an IP based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR 320.4(a)]. Whenever the Corps notifies an applicant that an IP is required, no work in Corps jurisdiction may be conducted until the Corps issues the required authorization in writing indicating that work may proceed.

4. Enforcement/Non-Compliance. Work performed without the required Corps of Engineers permits is subject to administrative, civil, and criminal penalties. The Corps will evaluate unauthorized activities for enforcement action under 33 CFR 326.

The Corps will consider unauthorized any activity requiring Corps authorization if that activity is under construction or completed and does not comply with all of the terms and conditions of a GP or an IP. The Corps may elect to suspend enforcement proceedings if the permittee modifies his project to comply with a GP.

After considering whether a violation was knowing or intentional, and other indications of the need for a penalty, the Corps can elect to terminate an enforcement proceeding with an after-the- fact authorization under a GP, if all terms and conditions of the GP have been satisfied, either before or after the activity has been accomplished.

[2] Located at www.nae.usace.army.mil/missions/regulatory under "Forms & Publications."

IV. GENERAL CONDITIONS

To qualify for GP authorization, the prospective permittee must comply with the following general conditions, as applicable.

1. Other Permits
2. Federal Jurisdictional Boundaries
3. Minimal Direct, Secondary, and Cumulative Impacts
4. Mitigation (Avoidance, Minimization, and Compensatory Mitigation)
5. Single and Complete Projects
6. Historic Properties
7. Corps Projects and Property
8. Federal Threatened and Endangered Species
9. Wild and Scenic Rivers
10. Navigation
11. Federal Liability
12. Utility Line Installation and Removal
13. Heavy Equipment in Wetlands or Mudflats
14. Temporary Fill
15. Restoration of Special Aquatic Sites (including wetland areas).
16. Soil Erosion, Sediment and Turbidity Controls
17. Time of Year Windows/Restrictions.
18. Aquatic Life Movements & Management of Water Flows
19. Water Quality and Coastal Zone Management
20. Floodplains and Floodways
21. Storage of Seasonal Structures
22. Spawning, Breeding, and Migratory Areas
23. Vernal Pools
24. Invasive and Other Unacceptable Species
25. Programmatic Agreements
26. Permit On-Site
27. Self-Verification Notification Form (SVNF)
28. Inspections
29. Maintenance
30. Property Rights
31. Transfer of GP Verifications
32. Modification, Suspension, and Revocation
33. Special Conditions
34. False or Incomplete Information
35. Abandonment
36. Enforcement Cases
37. Duration of Authorization
38. Previously Authorized Activities
39. Discretionary Authority
40. St. John/St. Croix Rivers.
41. National Lands
42. Essential Fish Habitat (EFH)
43. Work Site Restoration
44. Bank Stabilization
45. Stream Work & Crossings and Wetland Crossings

1. Other Permits. Permittees must obtain other federal, state, or local authorizations required by law. Applicants are responsible for applying for and obtaining all required state or local approvals. 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 http://www.maine.gov/dacf/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 square feet (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 (PCN), and for those filling ≥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 supplement (see Appendix C). 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 LUPC jurisdiction regardless of whether they're shown on LUPC 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. See www.nae.usace.army.mil/missions/regulatory >> Jurisdictional Limits and Wetlands for more information on delineating jurisdictional areas.

3. Minimal Direct, Secondary, and Cumulative Effects[3]

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 4) 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 and Appendix F.

c. Site clearing, grading and construction activities in the upland habitat surrounding vernal pools ("Vernal Pool Management Areas") are secondary impacts. See GC 23 for avoidance and minimization requirements and recommendations.

d. Bank stabilization activities in tidal waters are provided at Appendix A, Page 30. Direct impacts in tidal waters from contiguous bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.

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

a. 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.

b. Applicants proposing work in jurisdictional waters should consider riparian/forested buffers for stormwater management and low impact development (LID) best management practices (BMPs) to reduce

[3] Direct, secondary and cumulative effects are defined at Appendix F, Definitions and Acronyms.

impervious cover and manage stormwater to minimize secondary impacts to aquatic resources to the maximum extent practicable.[4]

c. Compensatory mitigation[5] for effects to waters of the U.S., including direct, secondary and temporal[6], may be required for permanent impacts that exceed the SV area limits, and may be required for temporary impacts that exceed the SV area limits, to offset unavoidable impacts which remain after all appropriate and practicable avoidance and minimization has been achieved and to ensure that the adverse effects to the aquatic environment are no more than minimal. Proactive restoration projects or temporary impact work with no lasting secondary effects may generally be excluded from this requirement. Refer to Appendix G.

5. Single and Complete Projects[7]

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

b. A single and complete project must have independent utility[7].

c. Unless the Corps determines the activity has independent utility:

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

ii. All components of a single project and/or all planned phases of a multi-phased project (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be treated together as constituting one single and complete project.

d. For linear projects, such as power lines or pipelines with multiple crossings, the single and complete project is all crossings of a single water of the U.S. (i.e., single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies and crossings of such features cannot be considered separately. If any crossing requires a Category 2 activity, then the entire linear project shall be reviewed as one project under Category 2.

6. Historic Properties

a. No undertaking shall cause effects (defined at 33 CFR 325 Appendix C and 36 CFR 800) on properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places[8], including previously unknown historic properties within the permit area, unless the Corps or another Federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act (NHPA). The State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO) and the National Register of Historic Places can assist with locating information on: i) previously identified historic properties; and ii) areas with potential for the presence of historic resources, which may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with the Corps and the SHPO and/or THPO(s).

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[4] See: www.nae.usace.army.mil/missions/regulatory >> State General Permit >> Permit Resources >> Mitigation for this additional information: a) "Wetland BMP Manual - Techniques for Avoidance & Minimization," b) riparian/forested buffer BMPs, and c) LID BMPs. LID BMPs include, but are not limited to: replacing curbs and gutters with swales; using an open space design for subdivisions; using permeable, pervious or porous pavements; constructing bio-retention systems; and/or, adding a green roof or rain garden.

[5] Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR 332. See also the New England District Compensatory Mitigation Guidance at www.nae.usace.army.mil/regulatory >> Mitigation.

[6] Temporal loss: The time lag between the loss of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site(s) (33 CFR 332.2).

[7] Single and Complete Project and Independent Utility are defined in Appendix F - Definitions.

[8] The majority of historic properties are not listed on the National Register of Historic Places and may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with the Corps and the SHPO and/or THPO(s).

b. For activities eligible for SV, proponents must ensure and document that the activity will not cause effects as stated in 6(a). Proponents must submit a PCN if the authorized activity may cause effects as stated in 6(a) as soon as possible to ensure that the Corps is aware of any potential effects of the permitted activity on any historic property to ensure all Section 106 requirements are met.

c. All PCNs shall: i) show notification to the SHPO and applicable THPO(s)[9] for their identification of historic properties, ii) state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties, and iii) include any available documentation from the SHPO or THPO(s) indicating that there are or are not historic properties affected. Starting consultation early in project planning can save proponents time and money.

d. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

7. Corps Projects and Property

a. In addition to any authorization under this GP, proponents must contact the Corps Real Estate Division at (978) 318-8585 for work occurring on or potentially affecting Corps properties and/or Corps-controlled easements to initiate reviews and determine what real estate instruments are necessary to perform work. Permittees may not commence work on Corps properties and/or Corps-controlled easements until they have received any required Corps real estate documents evidencing site-specific permission to work.

b. Any proposed temporary or permanent alteration, or modification or use, including occupation, of a federal project (including but not limited to a levee, dike, floodwall, channel, anchorage, breakwater, seawall, 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 operations and maintenance, is not eligible for SV and requires review and approval by the Corps pursuant to 33 USC 408. Where Section 408 is applicable, a decision on a Department of the Army general permit application will not be rendered prior to the decision on a Section 408 request.

c. Any structure or work within any Corps Federal Navigation Project (FNP) or its buffer zone[10], shall be subject to removal at the owner's expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. See GC 10 for more requirements related to FNPs.

8. Federal Threatened and Endangered Species

a. No activity is authorized which: i) is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species; ii) "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed; or iii) violates the ESA.

b. **All applicants must request an Official Species List from the US Fish & Wildlife Service and must include the list in the Corps permit application. To request an Official Species List, refer to the instructions in Appendix D.**

c. For federally listed species in tidal waters, applicants should contact the National Marine Fisheries Service at: http://www.greateratlantic.fisheries.noaa.gov/protected/section7/

[9] Appendix E, 3(a)&(b). Historic Resources, provides contact information and each tribe's "area of concern."
[10] See Appendix H for a list of FNPs. The buffer zone is equal to three times the authorized depth of the FNP.

d. A PCN is required if a threatened or endangered species, a species proposed for listing as threatened or endangered, or designated or proposed critical habitat (all hereinafter referred to as "listed species or habitat"), as identified under the ESA, is present in the action area[11].

e. Federal agencies should follow their own procedures for complying with the requirements of the ESA but should coordinate that consultation with the Corps as well.

9. Wild and Scenic Rivers.[12] 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 2015 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); and 11.25 miles of the York River, in the State of Maine, from its headwaters at York Pond to the mouth of the river at York Harbor, plus its tributaries (currently under study).

10. Navigation

a. Any structure or work that extends closer to the horizontal limits of any Corps Federal Navigation Project (see Appendix H) 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 28 (Moorings) and Page 29 (Structures, Floats & Lifts).

b. 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.

c. 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.

d. A PCN is required for all work in, over or under an FNP or its buffer zone unless otherwise indicated in Appendix A. (Reference Appendix A, Endnote 13, Page 36)

11. 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.

12. Utility Line Installation and Removal

a. Subsurface utility lines shall remain subsurface. If it is necessary to discharge dredged or filled material not previously authorized in order to keep such utility lines buried or restore them to their original subsurface condition, a PCN and written verification from the Corps may be required (e.g., in the case of side

[11] The "Endangered Species Consultation Handbook – Procedures for Conducting Consultation and Conference Activities Under Section 7 of the ESA," 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]."
[12] Additional information can be found at: http://www.rivers.gov.

casting into wetlands from utility trenches). Certain repair, replacement or maintenance activities may be eligible for Category 1 – refer to Appendix A.

b. Subsurface utility lines must be installed at a sufficient depth to avoid damage from anchors, dredging, etc., and to prevent exposure from erosion and stream adjustment. In accordance with Corps New England District Regulation NEDER 1110-1-9 (www.nae.usace.army.mil/missions/regulatory >> Useful Links and Documents), as an absolute minimum, the bottom cover associated with the initial installation of utility lines under navigable waters and navigation channels shall be 48 inches in soil or 24 inches in rock excavation in competent rock unless specified in a written determination. These minimum bottom cover requirements for pipelines and cables shall be measured from the maximum depth of dredging to the top of the utility. The maximum depth of dredging, in waterways having existing FNPs, is generally considered to be the authorized project depth plus any allowance for advanced maintenance and the allowable overdepth for dredging tolerances. In waterways that do not have existing FNPs, this depth should be taken as two feet below the existing bottom or maximum depth of proposed dredging, as applicable.

c. Aerial utility lines that cross navigable waters must meet minimum clearances. See 33CFR322.5(i).

d. For horizontal directional drilling work, returns of drilling fluids to the surface (i.e., frac-outs) are not authorized and require restoration to the maximum extent practicable in accordance with the terms and conditions of this GP. The permittee and its contractor shall have onsite and shall implement the procedures detailed in a frac-out contingency plan for monitoring drilling operations and for the immediate containment, control and recovery/removal of drilling fluids released into the environment should a discharge of material occur during drilling operations.

e. Within the context of any new installations, any abandoned or inactive utility lines should be removed and faulty lines (e.g., leaking hazardous substances, petroleum products, etc.) should be removed or repaired to the extent practicable. A PCN and written verification from the Corps is required if they are to remain in place, e.g., to protect sensitive areas or ensure safety.

f. No work shall drain a water of the U.S. by providing a conduit for water on or below the surface. Trench plugs installed along pipelines may be effective.

13. Heavy Equipment in Wetlands or Mudflats. 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. Construction mats should be managed in accordance with the Construction Mat BMPs at www.nae.usace.army.mil/missions/regulatory >> State General Permits >> Permit Resources.

14. 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 and disturbed soils shall be stabilized to prevent its eroding into waters of the U.S. where it is not authorized. Work shall include phased or staged development to ensure only areas under active development are exposed and to allow for stabilization practices as soon as practicable, typically within three calendar days after disturbance. Accelerated stabilization (the providing of temporary or permanent cover by the end of the work day to prevent erosion) shall be employed as necessary. Temporary fill must be placed in a manner that will prevent it from being eroded by expected high flows.

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

c. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Place materials in a location and manner that does not adversely impact surface or subsurface water flow into or out of the wetland. Temporary fill authorized for discharge into wetlands shall be placed on geotextile fabric or other appropriate material laid on the pre-construction wetland grade where practicable to minimize impacts and to facilitate restoration to the original grade. Construction mats are excluded from this requirement.

d. Temporary fill, construction mats and corduroy roads shall be entirely removed as soon as they are no longer needed to construct the authorized work. Temporary fill shall be placed in its original location or disposed of at an upland site and suitably contained to prevent its subsequent erosion into waters of the U.S. To qualify for Category 1, temporary fill placed during the: i.) growing season must be removed before the beginning of the next growing season; and ii.) non-growing season may remain throughout the following growing season, but must be removed before the beginning of the next growing season.

e. Temporary fill, construction mats and corduroy roads are considered temporary only if they are removed as soon as they are no longer needed to construct the authorized work.

f. Construction debris and/or deteriorated materials shall not be located in waters of the U.S.

15. Restoration of Special Aquatic Sites (Including Wetland Areas)

a. Temporary fills must be removed in their entirety and the affected areas restored to their pre-construction condition, function and elevation. Restoration shall typically commence no later than the completion of construction.

b. For excavated areas, "restored to pre-construction condition, function and elevation" means careful removal of existing soil and vegetation, separate topsoil and subsoil stockpiling, soil protection, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized. Plan for natural settling that will occur (the initial post-restoration elevation of the backfilled areas should be above the desired final grade as topsoil may settle by 33% to 50%), minimize compaction, and ensure that topsoil is void of gravel and subsoil. A minimum of 4 inches of topsoil should be at the surface after the soil has settled. Wetland areas temporarily disturbed shall be stabilized (e.g., seeded or planted). Seed mixes and vegetation shall include only plant species native to New England and shall not include any species listed as "Invasive and Other Unacceptable Plant Species" in the "New England District Compensatory Mitigation Guidance" (see GC 24 and refer to Appendix G). This list may be updated periodically.

c. Limit compaction to the minimum needed to promote a successful seedbed; avoid a 'fluffy' seedbed, which is susceptible to erosion until the plants get established, and a compacted topsoil layer, which is counter-productive and will lead to greater erosion susceptibility down the road. Test soils for compaction. A soil probe, auger, or shovel should be able to retrieve samples of post-restoration profile. Equipment refusal shall be considered a failure of restoration, in which case the soil should be restored through deep-ripping and/or de-compaction, or other appropriate methods, and wetland hydrology must be maintained. See the BMPs at www.nae.usace.army.mil/missions/regulatory >> State General Permits >> Permit Resources >> Restoration.

d. In areas of authorized temporary disturbance, cut woody vegetation (trees, shrubs, etc.) shall be cut at or above 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.

e. Trenches shall be constructed or backfilled so that the trench does not drain waters of the U.S. (e.g., materials or methods that create a French drain effect).

16. Soil Erosion, Sediment and Turbidity Controls

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 .

17. Time of Year Work Windows/Restrictions. For activities where work is authorized in streams and tidal waters that causes turbidity or sediment re-suspension or other construction related disturbances, work must be conducted during the following TOY work windows (not during the TOY restrictions) unless otherwise authorized by the Corps under Category 2 review:

	TOY Restriction (no work)	TOY Work Window (work allowed)
Non-tidal waters	Oct. 01 through Jul. 14	Jul. 15 through Sep. 30
Tidal waters	Apr. 10 through Nov. 07	Nov. 08 through Apr. 09

Alternate windows authorized under Category 2 may include species specific windows recommended by the Maine Dept. of Marine Resources and/or Maine Dept. of Inland Fisheries & Wildlife.

18. Aquatic Life Movements & Management of Water Flows

a. No activity may 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, unless the activity's primary purpose is to impound water. Unless otherwise stated, activities impounding water in a stream require a PCN to ensure impacts to aquatic life species are avoided and minimized. All permanent and temporary crossings of waterbodies (e.g., streams, wetlands) shall be:

i. Suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species; and

ii. Properly aligned and constructed to prevent bank erosion or streambed scour both adjacent to and inside the culvert. Permanent and temporary crossings of wetlands shall be suitably culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity between the wetlands on either side of the road.

b. To avoid adverse impacts on aquatic organisms, the low flow channel/thalweg shall remain unobstructed during periods of low flow, except when it is necessary to perform the authorized work.

c. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

19. Water Quality and Coastal Zone Management

a. Applicants must satisfy any conditions imposed by the state and EPA, where applicable, in their CWA § 401 Water Quality Certifications (WQC) for this GP, or in any Individual § 401 WQC. See Appendix E for state-specific contact information and to determine if any action is required to obtain a 401 WQC. The Corps may require additional water quality management measures to ensure that the authorized activity does not cause or contribute to a violation of water quality standards. All projects authorized by this GP shall be designed, constructed and operated to minimize or eliminate the discharge of pollutants.

b. Applicants must satisfy any additional conditions imposed by the state in their Coastal Zone Management (CZM) Act consistency concurrences for this GP, or in any Individual CZM consistency concurrences. The Corps may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

20. Floodplains and Floodways

a. Appropriate measures must be taken to minimize flooding to the maximum extent practicable.

b. Activities within 100-Year Floodplains must comply with applicable Federal Emergency Management Agency (FEMA)-approved state and/or local floodplain management permitting requirements. Proponents may need to coordinate with FEMA and apply for a formal change to the flood insurance study products or forward a set of project plans and relevant technical documentation in a digital format to the Risk

Analysis Branch Chief, Mitigation Division, FEMA, Region 1, 99 High Street, Boston, Massachusetts 02110. Applicants should provide a copy of any documentation to the Corps along with the PCN.

c. Proponents may have to obtain a Flood Hazard Development Permit issued by the town. Inquiries may be directed to the municipality or to the Maine Floodplain Management Coordinator at (207) 287-8063. See http://www.maine.gov/dacf/flood/

21. Storage of Seasonal Structures. Seasonal or recreational structures such as pier sections, floats, aquaculture structures, etc. 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 landward of mean high water (MHW) or ordinary high water (OHW) and not in wetlands, tidal wetlands, their substrate or on mudflats. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is waterward of MHW or OHW. Seasonal storage of structures in navigable waters, e.g., in a protected cove on a mooring, requires Corps approval and local harbormaster approval.

22. Spawning, Breeding, and Migratory Areas

a. Jurisdictional activities and impacts such as excavations, discharges of dredged or fill material, and/or suspended sediment producing activities in jurisdictional waters that provide value as 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.

b. Jurisdictional activities in waters of the United States that provide value as breeding areas for migratory birds must be avoided to the maximum extent practicable. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity (See Appendix E).

23. Vernal Pools

a. Only vernal pools that meet the current definition of waters of the U.S. are regulated by the Corps.

b. Direct and indirect adverse effects to all vernal pools (VPs), including their envelopes and critical terrestrial habitats (VP Management Areas[13]), shall be avoided and minimized to the maximum extent practicable. Site clearing, grading, and construction activities associated with a regulated activity in the VP Management Area may cause these adverse effects to the VP.

c. The State of Maine has specific protections for vernal pools.[14]

d. When any regulated activities occur within 750 feet of a vernal pool, the following management practices must be followed for all work within any VP Management Area (750' of a VP's edge) *in order to qualify for Category 1*:

i. No disturbance within the VP Depression or VP Envelope (area within 100 feet of the VP Depression's edge)[15];

ii. Maintain a minimum of 75% of the Critical Terrestrial Habitat (area within 100-750 feet of the VP Depression's edge) as unfragmented forest with at least a partly-closed canopy of overstory trees to provide shade, deep litter and woody debris;

iii. Maintain or restore forest corridors connecting wetlands and significant vernal pools;

iv. Minimize forest floor disturbance; and

v. Maintain native understory vegetation and downed woody debris.

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[13] 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.

[14] Appendix G, 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.

[15] 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.

vi. Cape Cod style-curbing or no curbing options shall be used on new roads to facilitate amphibian passage. (Reference Appendix G)

e. A PCN is required for any regulated activity within 750' of a vernal pool when all work within the VP Management Area does not comply with the Category 1 requirements in (d) above. Information on directional buffers in accordance with the VP Directional Buffer Guidance document may be provided in order to demonstrate minimal impact and avoid compensation requirements (Reference Appendix G). Conservation of the un-impacted area within the VP Management Area will often be required.

f. GC 2 requires applicants to delineate or approximately identify on the project plans all waters of the U.S., which contain vernal pools.

g. GC 23(b-d) do not apply to projects that are within a municipality and meet the provisions of a Corps-approved VP Special Area Management Plan (VP SAMP) and are otherwise eligible for self-verification.

24. Invasive and Other Unacceptable Species[16]

a. The introduction or spread of invasive or other unacceptable plant or animal species on the project site or areas adjacent to the project site caused by the site work shall be avoided to the maximum extent practicable. For example, construction mats and equipment shall be thoroughly cleaned and free of vegetation and soil before and after use. The introduction or spread of invasive plant or animal species on the project site caused by the site work shall be controlled.

b. No cultivars, invasive or other unacceptable plant species may be used for any mitigation, bioengineering, vegetative bank stabilization or any other work authorized by this GP. However, non-native species and cultivars may be used when it is appropriate and specified in a written verification, such as using *Secale cereale* (Annual Rye) to quickly stabilize a site. All PCNs should explain the reason for using non-native species or cultivars.

25. Programmatic Consultations or Agreements. The Corps requirements to comply with Section 106 of the NHPA, Section 7 of the Endangered Species Act or Essential Fish Habitat conservation under the Magnuson-Stevens Act may be satisfied by a Programmatic Agreement with the Corps, New England District or another federal action agency. Any Corps, New England District Programmatic Agreements will be available on our website.

26. Permit On Site. The permittee shall ensure that a copy of this GP and any accompanying authorization letter with attached plans are at the site of the work authorized by this GP whenever work is being performed and that all construction personnel performing work which may affect waters of the U.S. are aware of its terms and conditions. The entire permit authorization shall be made a part of any and all contracts and subcontracts 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 entire 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 subcontract. Although the permittee may assign various aspects of the work to different contractors or subcontractors, all contractors and subcontractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire GP authorization, and no contract or subcontract shall require or allow unauthorized work in areas of Corps jurisdiction.

[16] For the purposes of this GP, plant species that are considered invasive and unacceptable are provided in Appendix G "Invasive and other Unacceptable Plant Species" of our document "Compensatory Mitigation Guidance" at www.nae.usace.army.mil/missions/regulatory >> Mitigation. Chapter 4(e) Planting is also particularly relevant. The June 2009 "Corps of Engineers Invasive Species Policy" provides policy, goals and objectives and is located at www.nae.usace.army.mil/missions/regulatory >> Invasive Species. Additional information can be found at: www.eddmaps.org/ipane.

27. Self-Verification Notification Form (SVNF). Permitees must complete and submit the SVNF provided at Appendix B to the Corps for work authorized by this GP unless otherwise noted in Appendix A. **NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF provided either form used also include plans and an Official Species List of federally listed threatened or endangered species.**

28. Inspections. The permittee shall allow the Corps to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this GP and any written verification. The Corps may also require post-construction engineering drawings for completed work, post-dredging survey drawings for any dredging work, or other post-construction reports. To facilitate these inspections, the permittee shall complete and return to the Corps the following forms:

- For Category 1/Self-Verification: The SVNF (see Appendix B).
- For Category 2/PCN: The a) Work-Start Notification Form and b) Compliance Certification Form, when either is provided with the authorization letter.

29. Maintenance

a. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable general conditions and activity-specific conditions to a written verification.

b. The requirement in (a) above does not include maintenance of dredging projects. Each maintenance dredging event exceeding the self-verification limits requires a new PCN unless an unexpired, written PCN or other Corps authorization specifies that the permittee may "dredge and maintain" an area for a particular time period. Self-verification or PCN maintenance dredging includes only those areas and depths previously authorized and actually dredged. Maintenance dredging with ocean or open water disposal will always require a PCN and at least Category 2 review.

c. Some maintenance activities may not be subject to regulation under Section 404 in accordance with 33 CFR 323.4(a)(2). Refer to Appendix A, Endnote 7.

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

31. Transfer of GP Verifications. 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 authorizations, as well as the new owner(s) of the property. If the permittee sells the property associated with a GP verification, the permittee may transfer the GP verification to the new owner by submitting a letter to the Corps (see Appendix E for address) to validate the transfer. A copy of the GP verification must be attached to the letter, and *the letter must contain the new owner's contact information and 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."

_____

(Transferee)

_____

(Date)

32. Modification, Suspension, and Revocation. Any work authorized under this GP by self-verification or PCN may be either modified, suspended, or revoked, in whole or in part, pursuant to the policies and procedures of 33 CFR 325.7. Any such action shall not be the basis for any claim for damages against the U.S.

33. 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 terms and 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.

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

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

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

37. Duration of Authorization. This GP expires on October 12, 2020. 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 12, 2021 to complete the activity under the terms and conditions of the current GP.

38. 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 GP in effect between October 12, 2010 and October 12, 2015 remains authorized subject to the terms and general conditions of this GP along with any special conditions in the authorizing written letter. Exception – if previously authorized work is not commenced and a new federally listed threatened or endangered species could be affected, the Corps must consult with the Service(s) prior to re-authorizing the work under this GP. Requests for re-authorization must include an updated Official Species list. To request an Official Species List, refer to the instructions in Appendix D.

39. 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.

40. 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 a PCN 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.

41. National Lands. 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 are not eligible for Category 1 and require a PCN.

42. Essential Fish Habitat (EFH). 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 G for more information).

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

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

- Exploratory drilling and borings for bridges.
- Moorings (see Appendix A, Page 28 for Category 1 thresholds and requirements)
- Structures, floats & lifts (see Appendix A, Page 29 for Category 1 thresholds and requirements)
- Other activities specified in a programmatic agreement with NMFS.

43. 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 GC 24 and refer to Appendix G). 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.

44. 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.

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 total length along the bank(s); 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 sub-angular 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. Bank stabilization activities in tidal waters are provided at Appendix A, Page 30 & 31. Direct impacts in tidal waters from contiguous bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.

45. Stream Work and Crossings & Wetland Crossings

Notes:

a. For *Stream Work and Crossings* below, conditions (a) and (b) apply to Inland Waters and Wetlands (see Appendix A, Page 1 for definition) and Navigable Waters (see Appendix A, Page 27 for definition). Conditions (c)-(l) below 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, Atlantic sturgeon, or shortnose sturgeon [see GC 8(b)] and some stream work such as crossings on EFH waters (see GC 42) 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 for more state contact information.

Conditions for Stream Work and Crossings:

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 G, 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 45(a) and GC 45(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 19 and the stream simulation document listed at Appendix G, 8(a).

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

i. Must ensure compliance with GC 45(a) and GC 45(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 19 and the stream simulation document listed at Appendix G, 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 and at least Category 2 review.

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 G, 8(e)]. Note: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine the review category in Appendix A.

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

iii. Temporary stream crossings that are not spans[17] (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. Installed and removed during the low flow period specified in GC 45(l) below.

2. Placed on geotextile fabric or other material where practicable to ensure restoration to the original grade. Soil may not be used to construct or stabilize these structures and rock must be large enough to allow for easy removal without disrupting the streambed.

3. Designed and maintained to withstand and pass high flows. Water height should be no higher than the top of the culvert's inlet. A minimum culvert diameter of two feet is required to pass debris. Culverts must be aligned to prevent bank erosion or streambed scour.

4. Equipped with energy dissipating devices installed downstream if necessary to prevent scour.

5. Designed and maintained to prevent soil from entering the waterbody.

6. Removed upon the completion of work. Impacts to the streambed or banks requires restoration to their original condition using stream simulation methods[18].

g. Slip Lining. Work using slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), invert lining, or resulting in decreased diameter, does 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 14(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 45(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 45(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 45(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 GC 45(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 – September 30 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.

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

a. Culverts must be embedded:

[17] 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.

[18] Design and construction shall be in accordance with the stream simulation document listed at Appendix G, 8(a).

- ≥ 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**, spans[17] are required to avoid or cause minimal disruption to the streambed and to meet the requirements of General Condition 45(a) and 45(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 45(h)ii requires Category 2 review and, unless demonstrated otherwise, stream simulation[18] to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.

c. **For replacement crossings**, spans[17] are required to meet the requirements of General Condition 45(a) and 45(b). Footings and abutments shall be landward of 1.2 times bankfull width. Unless demonstrated otherwise, stream simulation[18] 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) at the time of construction and over time as the structure has had the opportunity to pass significant flood events. To allow terrestrial passage for wildlife and prevent undermining the footings, crossings shall have a bank on both sides of the stream matching the horizontal profile of the existing stream and banks[18]. Note: Installation of substrate material within smaller culverts may not be safe or practicable. In these cases, it may be necessary to allow for natural deposition and bed development unless alternative methods are identified.

e. Crossings must be designed and constructed[18] 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.

Conditions for 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 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.



Robert J. Desista
Deputy Chief, Regulatory Division
For DISTRICT ENGINEER **DATE** 10/13/15

APPENDIX A: DEFINITION OF CATEGORIES		
A. INLAND WATERS AND WETLANDS	**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. (tidal and freshwater).*** 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 and designated activities, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands[1] to tidal waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 27 below.)	
	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 5–20).	
ACTIVITY	**CATEGORY 1** Self-Verification Eligible **(*SVNF Required*)**	**CATEGORY 2 (*PCN Required)***
1. Repair, Replacement, Expansion, and Maintenance of Authorized Structures and Fills	Repair or maintenance of existing, currently serviceable, authorized fills with no expansion or change in use: • 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. • No effect on federally listed endangered or threatened species or critical habitat.	Replacement of non-serviceable fills, or repair/maintenance of serviceable fill, with expansion <3 acres, or with a change in use.
2. Moorings	NA – moorings in non-navigable inland waters are not subject to Corps jurisdiction. Note: Moorings placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on Page 28 below.)	NA
3. Structures, Floats & Lifts	For solid fill or crib supported structures on inland waters, <15,000 square feet (SF) of waterway and/or wetland fill, associated secondary impacts[2] , and temporary fills. • No effect on federally listed endangered or threatened species or critical habitat. • Note: Temporary or permanent structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 29 below.	1. Work not eligible for Category 1 2. ≥15,000 SF to <3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated).
4. Aids to Navigation and Temporary Recreational Structures	NA - this activity in non-navigable inland waters is not subject to Corps jurisdiction. Note: Aids to Navigation and other structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 30 below.)	NA

5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation	1. For regulated discharges associated with excavation, and disposal <15,000 SF inland waterway and/or wetland impacts. 2. The activity does not occur in navigable waters of the U.S. 3. Stream channelization, relocation or loss of streambed including impoundments or discharge of tailings into streams does not occur. 4. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1 2. ≥15,000 SF to <3 acres of inland waters.
6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges	NA - For discharges incidental to the construction of bridges in inland waters of the U.S. refer to Activity 23 (Stream and Wetland Crossings) and GC 45. Note: Discharges of Dredged or Fill Material Incidental to the Construction of Bridges in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 30 below.)	NA

7. Bank and Shoreline Stabilization	Inland bank stabilization <500 FT long and ≤1 CY of fill per linear foot below OHW, provided: • ≤1 cubic yard of fill per linear foot placed along the bank waterward of ordinary high water. • Work complies with the GCs (GC 44 in particular), including: o No structures angled steeper than 1H:1V allowed. Only rough-faced stone or fiber roll revetments allowed. o No in-stream work involving fill or excavation in flowing waters (see GC 45(h)). • In-water work limited to Jul 15 – Sep 30. • No work in vernal pools[5] or SAS[3]. • No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities	1. <15,000 SF of inland waterway and/or wetland fill and associated secondary impacts[2] (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 GC 14] Provided: • Historic fill + proposed impact area <15,000 SF complies with GC 5, Single and Complete Projects. • No work in special aquatic sites (SAS)[4] other than wetlands. • No effect on federally listed endangered or threatened species or critical habitat. 2. For work in Vernal Pool (VP) Management Areas (includes VPs)[5]:	1. Work not eligible for Category 1. 2. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 3. *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.* See GC 2 and Appendix C for wetland delineation

	• See GC 23 and Appendix C for VP delineation requirements. • See GC 23 to determine if work qualifies for Category 1 or 2. • See Appendix G for VP documents providing mitigation guidance.	requirements.
9. Utility Line Activities	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts[2], and temporary fills. 2. The activity does not occur in, over, or under navigable waters of the U.S. 3. Intake structures that are dry hydrants used exclusively for firefighting activities with no stream impoundments. 4. There is no permanent change in pre-construction contours in waters of the U.S. 5. Material resulting from trench excavation is temporarily side cast into waters of the U.S. for ≤ 3 months and is placed in such a manner that it is not dispersed by currents or other forces. 6. The utility line is placed within and does not run a) parallel to, or b) along a streambed. 7. Stream channelization, relocation or loss of streambed including impoundments does not occur. 8. No effect on federally listed endangered or threatened species or critical habitat. 9. There is no discharge in SAS other than non-tidal wetlands. 10. Construction mats[4] 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 43). 11. Stream crossings must comply with GC 17.	1. Work not eligible for Category 1 2. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 3. *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.*
10. Linear Transportation Projects *(not including stream crossings)* **For stream crossings, refer to Activity 23**	1. <15,000 SF of inland waterway and/or wetland fill associated secondary impacts (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 fill. (See GC 14.) Provided: • Historic fill + proposed impact area <15,000 SF and complies with GC 5 single and complete projects. • No work in special aquatic sites (SAS) other than wetlands. 2. Construction mats[4] 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 43). 3. No effect on federally listed endangered or threatened species or critical habitat.	1. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 2. *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.*

11. Mining Activities	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. The activity does not occur in navigable waters of the U.S. 3. Stream channelization, relocation or loss of streambed including impoundments or discharge of tailings into streams does not occur. 4. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1. 2. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation.
12. Boat Ramps	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1 2. >15,000 SF and < 3 acres of impact.
13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects	*For land-based facilities:* 1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. Stream channelization, relocation or loss of streambed including impoundments does not occur. 3. No effect on federally listed endangered or threatened species or critical habitat. *For water-based facilities and hydropower projects:* No new facilities are eligible.	*For land-based activities:* 1. Work not eligible for Category 1. 2. >15,000 SF and < 3 acres impact. 3. *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.* *For water-based facilities and hydropower projects:* > 3 acres of impact will require an IP.
14. Reshaping Existing Drainage Ditches & Mosquito Management	Not Applicable	Not Applicable
15. Oil Spill and Hazardous Material Cleanup	Jurisdictional 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 or any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS[3] must typically be restored in place at the same elevation. ***Note: SVNF or a surrogate state reporting form may be submitted after the fact.***	Work not eligible for Category 1

16. Cleanup of Hazardous and toxic waste	Specific jurisdictional activities to effect the containment, stabilization, or removal of hazardous or toxic waste materials, including court ordered remedial action plans or related settlements, which are performed, ordered or sponsored by a government agency with established legal or regulatory authority. SAS should be restored in place at the same elevation. • <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. • No stream channelization, relocation or loss of streambed occurs. • The project does not involve establishing new disposal sites or expanding existing sites used for the disposal of hazardous or toxic waste. • No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
17. Scientific Measurements Devices	1. 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 or concentrate movement of aquatic organisms. 2. No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
18. Survey Activities	1. Jurisdictional 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 43. 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). 2. No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
19. Agricultural Activities	1. For those activities subject to Corps jurisdiction[16], <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. No stream channelization, relocation, loss of streambed, or farm ponds in streams. 3. No effect on federally listed endangered or threatened species or critical habitat.	1. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 2. > 3 acres of impact will require an IP.

20. Fish and Wildlife Harvesting, Enhancement and Attraction Devices and Activities	NA - this activity in non-navigable inland waters, if not involving a discharge of dredged or fill material, is not subject to Corps jurisdiction. Note: Related structures placed in freshwater navigable waters (e.g. the upper Penobscot or Kennebec Rivers) are reviewed in the Navigable Waters section. (See B. Navigable Waters on Page 33 below.)	Not Applicable
21. Habitat Restoration, Establishment and Enhancement Activities	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. The activity is supported in writing by a local, state, or non-Corps Federal environmental agency. Water impoundments require PCN. 3. No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another. 4. No dam removal. 5. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1 2. 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 ≥15,000 SF, provided those activities result in net increase in overall aquatic resource functions and services.[8]
22. Previously Authorized Activities	Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015. The terms and general conditions of this GP apply along with any special conditions in the written authorization.	
23. Stream & Wetland Crossings	1. River, stream and brook work and crossings: • Must comply with GC 45 in particular, including: o No slip lining [see GC 45 (g)]. o No in-stream work involving fill or excavation in flowing waters [see GC 45(h)]. o In-stream work limited to Jul 15 – Sep 30 [see GC 45 (l)]. • No work in riffles and pools[3]. • No stream relocations. • No dams or dikes[6]. • No effect on federally listed endangered or threatened species or critical habitat. • <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. Wetland crossings must comply with the particularly relevant GC 45.	Work not eligible for Category 1
24. Aquaculture (freshwater)	For land based installations, <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. • In-stream/in-water work limited to Jul 15 – Sep 30. • No effect on federally listed endangered or threatened species or critical habitat. Note: Related structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters, below.)	Work not eligible for Category 1

B. NAVIGABLE WATERS	**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 wetlands[1] to tidal waters are also reviewed in this Navigable Waters section.	
	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 - 20).	
ACTIVITY	**CATEGORY 1** Self-Verification Eligible ***(SVNF Required)***	**CATEGORY 2 *(PCN Required)***
1. Repair, Replacement, Expansion, and Maintenance of Authorized (or grandfathered) Structures and Fills	1.Repair, replacement in-kind, or maintenance[7] of existing, currently serviceable[7], authorized structures or fills: • All work is to be conducted in-the-dry, during low water. • Conditions of the original authorization apply. • No substantial expansion or change in use. • No new fill in SAS[3]. • Must be rebuilt in same footprint, however minor deviations in structure 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.	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. 2. <1 acre temporary or permanent fill, excavation and/or secondary impacts. Fill area includes all temporary and permanent waterway fills, provided: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 3. Standard Pile Driving Conditions. Work involving piles shall adhere to one of the four methods below: • Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or • Must be drilled and pinned to ledge, or • Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or • 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 • For the methods above: o In-water noise levels shall not exceed >187dB cSEL re 1µPa or 206dB peak re 1µPa at a distance >10m from the pile being installed, and o In-water noise levels >150dB 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 150dB peak re 1µPa) must be provided between work days. • Existing derelict, degraded or abandoned piles in the project area that are affected by project activities should be removed and properly disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate or mudflats.

2. Moorings	1. Private, non-commercial, non-rental, single-boat moorings, provided: • Authorized by the local harbormaster/town. • Not associated with any boating facility.[11] • Boat or mooring not located in a Federal Navigation Project or buffer zone[12] other than in a Federal Anchorage[12]. Moorings in a Federal Anchorage not associated with a boating facility[11] and are not for rent. • No interference with navigation. • No new moorings located in SAS[3]. 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 SAS[3] are going to be replaced, they should be replaced with low impact mooring technology that prevents mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS protection systems where practicable. 2. Minor relocation of previously authorized moorings, provided: • Authorized by the local harbormaster/town. • Not located in SAS[3] • No interference with navigation. • Cannot be relocated into a Federal Navigation Project[12] other than a Federal Anchorage[12] ***Note: Cat 1 eligible moorings do not require SVNF.***	1. Moorings associated with an existing boating facility[11]. An eelgrass[14] survey may be required. 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. 3. Moorings located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits[13] of a Federal Channel[12]. (See Appendix H.) The buffer zone is equal to 3 times the authorized depth of that channel. 4. An IP is required for moorings within the horizontal limits[11], or with moored vessels that extend, into the horizontal limits of a Federal Navigation Project[12], except those in Federal Anchorages[12]. *For 1-4 above, siting of new individual moorings in SAS[3], including eelgrass[14], should be avoided to the maximum extent practicable. If SAS[3] 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. For moorings that appear to impact SAS, the Corps may require an eelgrass survey.*
3. Structures, Floats and Lifts	1. Reconfiguration of existing authorized structures shall occur in-the-dry during low water. 2. Minor relocation of <u>previously authorized</u> floats or moored floats/lobster cars, provided: • Authorized by the local harbormaster/town. • Not located in SAS[3]. • No interference with navigation. • Cannot be relocated into a Federal Navigation Project[12] other than a Federal Anchorage[12].	1. New structures or floats, including floatways/skidways, built to access waterway (seasonal and permanent). Includes both pile supported and crib supported structures. 2. Expansions to existing boating facilities[11] ***For 1 & 2 above, compliance with the following design standards is <u>not required but recommended</u>:*** • *Pile-supported structures <400 SF, with attached floats totaling <u>≤</u>200 SF.* • *Bottom anchored floats <u>≤</u>200 SF.* • *Structures are <u>≤</u>4' wide and have at least a 1:1 height:width ratio[11].* • *Floats supported a minimum of 18" above the substrate during all*

		tides. • *Structures & floats not located within 25' of any eelgrass[8].* • *Moored vessels not positioned over SAS[3].* • *The Corps may require a letter of no objection from the abutter if structure is to be within 25 feet of the property line.* • *No structure extends across >25% of the waterway width at mean low water.* • *Not located within the buffer zone of the horizontal limits[13] of a Corps Federal Navigation Project (FNP) (App. F). The buffer zone is equal to three times the authorized depth of that FNP.* 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 limits[13] of a Corps Federal Navigation Project[12] (see App. H). 4. An Individual Permit is required for structures & floats associated with a new or previously unauthorized boating facility[11]. 5. Standard Pile Driving Conditions. Work involving piles shall adhere to one of the four methods below: • Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or • Must be drilled and pinned to ledge, or • Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or • 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 • For the methods above: o In-water noise levels shall not exceed >187dB cSEL re 1µPa or 206dB peak re 1µPa at a distance >10m from the pile being installed, and o In-water noise levels >150dB 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 150dB peak re 1µPa) must be provided between work days. • Existing derelict, degraded or abandoned piles in the project area that are affected by project activities should be removed and properly disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate or mudflats.

4. Aids to Navigation and Temporary Recreational Structures	1. Temporary buoys, markers, floats, etc. for recreational use during specific events, provided they are removed within 30 days after use is discontinued. 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)." ***Note: Cat 1 eligible aids to navigation and regulatory markers do not require SVNF.***	Work not eligible for Category 1
5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation	1. Maintenance dredging[10] for navigational purposes <1,000 CY with upland disposal. Includes return water from upland contained disposal area, provided: • Proper siltation controls are used. • Dredging & disposal operation limited to Nov. 8 – Apr. 9. • No impact to SAS[3]. • No dredging in intertidal areas. • No dredging within 100' of shellfish beds. • No dredging in areas designated as Critical Habitat for Atlantic salmon [see GC 8(b) & (c)]. • For dredging in tidal waters outside of Atlantic salmon critical habitat, applicants must contact NMFS (see GC 8) to ensure no impacts to listed species such as shortnose sturgeon, Atlantic surgeon, and listed sturgeon critical habitat. • Project proponents must contact the USFWS for work on coastal beaches to ensure no impacts to piping plovers, roseate terns, rufa red knot, or their habitat [see GC 8(c)]. • No underwater blasting. 2. Maintenance dredging 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.	1. Maintenance dredging[10] ≥1,000 CY, new dredging <25,000 CY, or projects not meeting Category 1. Includes return water from upland contained disposal areas. Disposal includes: • Upland. • Beach nourishment (above mean high water) of any area provided the dredging's primary purpose is navigation or the sand is from an upland source. • Open water & confined aquatic disposal, if Corps finds the material suitable. 2. Beach nourishment associated with dredging when the primary purpose is not navigation requires at least a Category 2 review. 3. Maintenance or new dredging[10] and/or disposal in or affecting a SAS[3] requires an Individual Permit.

6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges	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. 2. Causeways and approach fills are not included in this category and require Category 2 or Individual Permit authorization.	<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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
7. Bank and Shoreline Stabilization	1. Bank stabilization projects <200 linear feet provided: • ≤1 cubic yard of fill per linear foot placed along the bank waterward of high tide line. No fill or equipment will occur in SAS[3]. • Work conducted in the intertidal zone must be conducted in-the-dry during low water. • No structures angled steeper than 1H:1V and only rough-faced stone or fiber roll revetments allowed. • No driving of piles or sheeting. 2. Bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.	1. Work not eligible for Category 1. 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities	Not Eligible	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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 2. Conversions of previously authorized pile supported buildings over navigable waters to residences, offices, or other non-water dependent uses require at least a Category 2 review. 3. Floating house boats or businesses on floats require Category 2 review.
9. Utility Line Activities	1. Repair or maintenance of existing, currently serviceable, authorized utilities with no expansion or change in use: • Conditions of the original authorization apply. • Trenching or filling is confined to the existing footprint. • In water work conducted between Nov 8 and Apr 9. • No new impact to SAS. 2. Particularly relevant is GC12. 3. New work in, over, or under navigable waters requires a PCN and Category 2 review. 4. Except for aerial utility lines, 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	1. New or replacement installations or work not otherwise eligible for Category 1. 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 3. Particularly relevant is GC12

	Squaw Point) on Cape Jellison in Stockton Springs or in tidal	
10. Linear Transportation Projects **(Not Including Stream Crossings)**	Not eligible	<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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
11. Mining Activities	Not Eligible	Not Eligible
12. Boat Ramps and Marine Railways	1. No new impact to SAS 2. Marine railway and boat ramp work not eligible for maintenance[7] (i.e. not currently serviceable[7]) may be replaced "in-kind" with minor deviations[7] provided: • Work is in the intertidal zone. • No fill expansion below high tide line. • Work conducted in-the-dry during low water. 3. No new boat ramps or marine railways.	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects	Not Eligible	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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 2. No new impoundments.
14. Reshaping Existing Drainage Ditches and Mosquito Management	1. ≤500 linear feet of drainage ditch will be modified. The reshaping of the ditch cannot increase drainage capacity beyond the original as-built capacity nor can it expand the area drained by the ditch as originally constructed (i.e., the capacity of the ditch must be the same as originally constructed and it cannot drain additional wetlands or other waters of the U.S.). 2. No new ditches or relocation of drainage ditches constructed in waters of the U.S.; the location of the centerline of the reshaped drainage ditch must be approximately the same as the location of the centerline of the original drainage ditch. 3. No effect on federally listed endangered or threatened species or critical habitat	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.

15. Oil Spill and Hazardous Material Cleanup	Jurisdictional activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS[3] must typically be restored in place at the same elevation. ***Note: SVNF or a surrogate state reporting form may be submitted after the fact. No SVNF is required for Category 1eligible containment booms.***	Work not eligible for Category 1
16. Cleanup of Hazardous and Toxic Waste	Not eligible - except for booms placed for hazardous and toxic waste containment and absorption and prevention which are eligible for SV. ***Note: No SVNF is required for Category 1 eligible containment booms.***	Specific jurisdictional 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 and other SAS must typically be restored in place at the same elevation to qualify.
17. Scientific Measurement Devices	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 or concentrate movement of aquatic organisms; no activity results in a hazard to navigation; and no activity requiring underwater blasting.	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
18. Survey Activities	Jurisdictional survey activities such as exploratory drilling, surveying and sampling activities, excluding any biological sampling devices. Does not include any activity requiring underwater blasting, seismic exploratory operations, or oil and gas exploration and fill for roads or construction pads. No activity may result in a hazard to navigation.	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
19. Agricultural Activities	Not Eligible	Not Eligible

20. Fish & Wildlife Harvesting, Enhancement and Attraction Devices and Activities (Not Aquaculture)	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 may result in a hazard to navigation. ***Note: A SVNF is not required for these Category 1 eligible devices and activities.***	1. Work not eligible for Category 1. 2. Impoundments or semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster and new fish weirs with an impounded area $\leq$ ½ acre. For Aquaculture operations, refer to Activity 24.
21. Habitat Restoration, Establishment and Enhancement Activities	1. Cultch placement in tidal waters is eligible for SV provided there are no salt marsh or vegetated shallow impacts. 2. SAS planting and transplanting $\leq$ 100 SF in tidal waters; 3. No artificial or living reefs. 4. The activity is authorized in writing by a local, state, or non-Corps federal environmental agency. Water impoundments require PCN. 5. No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another. 6. No dam removal. 7. Shellfish habitat enhancement such as brushing the flats is eligible for Category 1, *but not the use of netting which requires Category 2 review.*	1. Work not eligible for Category 1. 2. Aquatic habitat restoration, establishment and enhancement provided those activities are proactive and result in net increases in aquatic resource functions and services.[8]
22. Previously Authorized Activities	Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015. The terms and general conditions of this GP apply along with any special conditions in the written authorization.	
23. Stream & Wetland Crossings	Not Eligible	All temporary or permanent crossings of tidal navigable waters or adjacent tidal wetlands not eligible as maintenance require a PCN. GC 45 applies
24. Aquaculture	Not Eligible	Shellfish & finfish aquaculture (with the exception of Atlantic salmon and any other salmonid, or other federally listed endangered or threatened species), or other aquaculture facilities with no more than minimal individual and cumulative impacts to environmental resources or navigation. This is inclusive but not limited to cages, nets, bags, racks, long lines, fences, posts, poles, predator screening, etc. Aquaculture guidelines are provided at: www.maine.gov/dmr/aquaculture/index.htm.

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 high water mark and above the normal hydrologic influence of their adjacent waterbody. Note, with respect to the federally designated navigable rivers, the wetlands bordering and contiguous to the tidally influenced portions of those rivers are reviewed under "II. Navigable Waters."

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

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

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

Cumulative Impacts: The 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 G, 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)** The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3 – "Activities occurring before certain dates," provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification.

- Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make repair, rehabilitation, or replacement are authorized.
- Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.
- No seaward expansion for bulkheads or any other fill activity is considered Category 1 maintenance.
- 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.

b) The state's maintenance provisions may differ from the Corps and may require reporting and written authorization from the state.

c) Contact the Corps to determine whether stream crossing replacements require a written application to the Corps for at least a Category 2 review.

d) Exempted Maintenance. In accordance with 33 CFR 323.4(a)(2), any discharge of dredged or fill material that may result from any of the following activities is not prohibited by or otherwise subject to regulation under Section 404 of the CWA: "Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design."

[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. The Corps may require proof of authorization. Maintenance dredging typically refers to the routine removal of sediment to maintain the design depths of serviceable navigation channels, harbors, basins, marinas, boat launches, and port facilities. Maintenance dredging is conducted for navigational purposes and does not include any expansion of the previously dredged area or depth. The Corps may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS, shellfish, etc.

[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, dockominiums, 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. Note: Eelgrass surveys should be conducted be conducted between May and October unless otherwise directed.

[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.

[16] **Agricultural Activities:** The Clean Water Act exempts certain discharges associated with normal farming, ranching, and forestry activities such as plowing, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices (Section 404(f)(1)(A)). Applicants are strongly advised to contact the Corps for a determination of whether their activity is exempt or requires a permit.

US Army Corps of Engineers ®
New England District

Appendix B: Self-Verification Notification Form

(for all tidal and non-tidal projects in Maine subject to Corps jurisdiction)

At least two weeks before work commences, complete **all** fields (write "none" if applicable) below or use the fillable form at www.nae.usace.army.mil/missions/regulatory.aspx. Send this form, a location map, any project plans, and an Official Species List (See GC 8) to the address noted below; fax to (207) 623-8206; or email to jay.l.clement@usace.army.mil. The two-week lead time is not required for emergency situations (see page 4 for definition). Please call (207) 623-8367 with questions.

Maine Project Office
U.S. Army Corps of Engineers
New England District
675 Western Avenue #3
Manchester, Maine 04351

State Permit Number: _____
Date of State Permit: _____
State Project Manager: _____

Permittee: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Contractor: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Consultant/Engineer/Designer: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Wetland/Vernal Pool Consultant: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Project Location/Description: _____
Address, City, State & Zip: _____
Latitude/Longitude Coordinates: _____ Tax Map/Lot: _____
Waterway Name: _____
Work Description: _____

_____

Provide any prior Corps permit numbers: _____
Proposed Work Dates: Start: _____ Finish: _____

Area of wetland impact: _____ SF (leave blank if work involves structures & no fill in Navigable Waters)
Area of waterway impact: _____ SF (leave blank if work involves structures & no fill in Navigable Waters)
Area of compensatory mitigation provided: _____ SF

Work will be done under the following Appendix A categories (circle all that apply):

I. Inland Waters and wetlands: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
II. Navigable Waters: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Your name/signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions of Category 1 of the Maine General Permit.

Permittee Printed Name: _____

Permittee Signature: _____ Date: _____

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Appendix C: Content of Pre-Construction Notification

In addition to the following required information, the applicant must provide additional information as the Corps deems essential to make a public interest determination including, where applicable, a determination of compliance with the Section 404(b)(1) guidelines or ocean dumping criteria. Such additional information may include environmental data and information on alternate methods and sites as may be necessary for the preparation of the required environmental documentation. For a more comprehensive checklist, go to www.nae.usace.army.mil/missions/regulatory >> Forms >> Application and Plan Guideline Checklist. Please check with the Corps for project-specific requirements.

Information required for all projects:

- ☐ Corps application form (ENG Form 4345) or appropriate state application form (see Appendix E). Forms may need to be supplemented to include the information noted below.
- ☐ Proof of notification to the SHPO and the appropriate THPOs (see Appendix E).
- ☐ Official Species List for any federally listed endangered or threatened species (Instructions at Appendix D)
- ☐ Drawings, sketches, or plans (detailed engineering plans and specifications are not required) that are legible, reproducible (color is encouraged, but features must be distinguishable in black and white), no larger than 11"x17", with bar scale. Wetland area impact sheets should have the highest resolution possible to show work within Corps jurisdiction (do not just reduce project overview or cut large-scale plan into quadrant sheets). Provide locus map and a plan overview of the entire property with a key index to the individual impact sheets. A locus map be on a section of color USGS topographic map is encouraged. Digital submissions are encouraged.
- ☐ Include:
  - ☐ All direct, secondary, permanent and temporary effects the project would cause, including the anticipated amount of impacts to waters of the U.S. expected to result from the activity, in acres, linear feet, or other appropriate unit of measure.
  - ☐ Any historic permanent fill associated with each single and complete project.
  - ☐ Cross-section views of all wetland and waterway fill areas and wetland replication areas.
  - ☐ Delineation of all wetlands, other special aquatic sites (vegetated shallows, saltmarsh, mudflats, riffles and pools, coral reefs, and sanctuaries and refuges), and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Use Federal delineation methods and include Corps wetland delineation data sheets (see GC 2).
  - ☐ MLW and MHW elevations in tidal waters. Show the HTL elevations when fill is involved. Show OHW elevation in lakes and non-tidal streams.
  - ☐ Existing and proposed conditions.
  - ☐ For vegetated shallow and eelgrass survey guidance, see www.nae.usace.army.mil/missions/regulatory >> Jurisdictional Limits and Wetlands >> Submerged Aquatic Vegetation Survey Guidance for the New England Region.
  - ☐ Show all known VPs on the project site. See GC 23 for vernal pool identification requirements.
- ☐ 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 OHW in inland waters and below the HTL in coastal waters.

- An Official Species List of federally "listed species or critical habitat" present in the action area (see GC 8).
- A restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions (see GC 43).

Information that may be required:

- Photographs of wetland/waterway to be impacted. Photos at low tide are preferred for work in tidal waters.
- For drawings, sketches, or plans:
  - The vertical datum for all coastal projects must be in U.S. survey feet and referenced to MLLW and current tidal epochs, with a reference chart showing conversion factor to NAVD88; do not use local datum. See www.nae.usace.army.mil/missions/regulatory >> Forms and Publications >>Vertical Datum - FEMA (Jul 2007);
  - The horizontal state plane coordinates shall be in U.S. survey feet and based on the appropriate state plane coordinate system.
- For the construction of a filled area or pile or float-supported platform, the use of, and specific structures to be erected on, the fill or platform.
- For the discharge of dredged or fill material into waters of the U.S. or the transportation of dredged material for the purpose of disposing of it in ocean waters, the source of the material; the purpose of the discharge, a description of the type, composition and quantity of the material; the method of transportation and disposal of the material; and the location of the disposal site.
- For the discharge 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. Include either a statement describing how impacts to waters of the U.S. are to be compensated for or a statement explaining why compensatory mitigation should not be required for the proposed impacts.
- Purpose and need for the proposed activity;
- Limits and coordinates of any Federal Navigation Project in the vicinity of the project area.
- Limits and coordinates of any proposed mooring field, reconfiguration zone or aquaculture activity. Provide coordinates for all corners;
- Schedule of construction/activity;
- Names and addresses of adjoining property owners;
- Location and dimensions of adjacent structures;
- List of authorizations required by other Federal, interstate, state, or local agencies for the work, including all approvals received or denials already made.
- Identification and description of potential impacts to Essential Fish Habitat (defined at VI. Definitions and Acronyms.
- Identification of potential discharges of pollutants to waters, including potential impacts to impaired waters, in the project area (see GC 19).
- Invasive Species Control Plan (see GC 24). For sample control plans, see www.nae.usace.army.mil/missions/regulatory >> Invasive Species.
- Wildlife Action Plan (WAP) maps. Contact Maine Inland Fisheries & Wildlife (Appendix E) or on line at http://www.maine.gov/ifw/wildlife/conservation/action_plan.html

Information for dredging projects that may be required:

- 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).
- ☐ Identification and description of any potential impacts to Essential Fish Habitat.
- ☐ Delineation of submerged aquatic vegetation (e.g., eelgrass beds).

Information for aquaculture projects that may be required:

- ☐ Maine Aquaculture guidelines and joint Corps/Maine DMR applications may be found at: www.maine.gov/dmr/aquaculture/index.htm.
- ☐ In addition to the information required above, applications must also include:
  - ☐ Whether canopy predator nets are being used.

Appendix D: Instruction for USFWS IPaC Project Builder/Official Species List

NOTE: These instructions are subject to change by the USFWS. Users should check this GP's Corps webpage for the latest instructions or click here.

In your internet browser go to http://ecos.fws.gov/ipac/

1. Click on get started.

2. Click on enter project location.

3. Search or zoom to your project location. (You can enter an address and then zoom in with your mouse).

4. Define your area. (Select the polygon tool and click around the boundary of your project.) or (Use the draw a line tool for linear projects)

Note: You can change/select the map from Streets to Satellite or Topo in the lower left corner of the map.
5. Click finished drawing then click confirm and select continue.

6. On the next page under Tasks (lower left), select Request an official species list. The pane will open. Select "request official species list" again.

7. A new page will open. Fill in the project information blanks with the project name, brief description, project type, lead agency, and contact information. Be sure to check the box to verify this is a legitimate project. Click on Submit Official Species List Request.

8. You will be sent an e-mail with instructions to complete the request by clicking on the link provided.

9. The site will open Official Species List Request Completed. Under the Maine Ecological Services Field Office address you will see "Official Species List Document". Click on that link and your document will open. Save and or print a copy and **include the entire report with your application**.

Note, you will receive a second e-mail with the same information. You can save the link in the event you need to return to the IPaC site for an updated list.

If a period of time has passed since your initial "Official Species List" identifier number was generated, you may choose to generate an "UPDATED SPECIES LIST". To do this, return to the IPaC homepage at http://ecos.fws.gov/ipac site. In the middle of the page, click the purple "Need an updated species list" link.

On the request an "Updated Official Species List" page, complete the information in the boxes provided. You will need the project specific official consultation code generated and stated on the original official list as well as the email address entered with the original submission.

Click "Request Updated Species List". Print, or save.

Appendix E: Contacts and Tribal Areas of Interest

1. Federal

U.S. Army Corps of Engineers
Maine Project Office
675 Western Avenue #3
Manchester, ME 04351
(207) 623-8367 (phone); (207) 623-8206 (fax)

U.S. Environmental Protection Agency
5 Post Office Square
Suite 100 (OEP05–2)
Boston, MA 02109-3912
(617) 918-1589 (phone)

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

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

Federal Emergency Management Agency
99 High St.
Boston, MA 02110
(877) 336-2734 (phone)
(Flood Plain Management)

National Marine Fisheries Service
55 Great Republic Drive
Gloucester, MA 01930
(978) 281-9102 (phone); (978) 281-9301 (fax)
(Federal endangered species & EFH)

National Park Service
North Atlantic Region
15 State Street
Boston, MA 02109
(617) 223-5203 (phone)
(Wild and Scenic Rivers)

Commander (dpb)
First Coast Guard District
One South Street - Battery Bldg
New York, NY 10004-1466
(212) 668-7021 (phone); (212) 668-7967 (fax)
(bridge permits)

2. State of Maine

a. Department of Environmental Protection (*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 (phone)

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

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

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

b. Department of Agriculture, Conservation and Forestry

i. Maine Land Use Planning Commission (LUPC) (*State permits & Water Quality Certifications in the unorganized areas of the State*)

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

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

Rangeley Regional Office
133 Fyfe Road
PO Box 307
West Farmington, ME 04992
(207) 670-7493 (phone); (207) 287-7439 (fax)

Downeast Regional Office
106 Hogan Rd, Suite 8
Dorothea Dix Complex
Bangor, Maine 04401
(207) 941-4052 (phone); (207) 941-4222 (fax)

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

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

ii. Maine Coastal Program

Department of Agriculture, Conservation and Forestry
Bureau of Resource Information and Land Use Planning
17 Elkins Lane {physical address}
State House Station 93
Augusta, Maine 04333-0038
(207) 287-2801 (phone); (207) 287-2353 (fax)
(CZM consistency determinations)

iii. Division of Parks and Public Lands

22 State House Station
Augusta, Maine 04333
(207) 287-3061 (phone); (207) 287-6170 (fax)
(submerged lands leases)

c. Department of Marine Resources

P.O. Box 8
West Boothbay Harbor, Maine 04575
(207) 633-9500 (phone); (207) 624-6024 (fax)
(aquaculture leases)

3. Historic Properties

a. State Historic Preservation Officer (SHPO)

Mr. Kirk F. Mohney, Director

Maine Historic Preservation Commission (MHPC)
65 State House Station
Augusta, Maine 04333-0065
(207) 287-2132 (phone); (207) 287-2335 (fax)
Area of concern: The entire State of Maine

b. Tribal Historic Preservation Officers (THPOs)

Note: The area of concern for each tribe is the entire State of Maine

THPO & Environmental Planner
Houlton Band of Maliseet Indians
88 Bell Road
Littleton, Maine 04730
(207) 532-4273, x215 (phone)
(207) 532-6883 (fax)
envplanner@maliseets.com
ogs1@maliseets.com

THPO
Aroostook Band of Micmacs
7 Northern Road
Presque Isle, Maine 04769
(207) 764-1972 (phone); (207) 764-7667 (fax)
jpictou@micmac-nsn.gov

THPO
Passamaquoddy Tribe of Indians
Pleasant Point Reservation
P.O. Box 343
Perry, Maine 04667
(207) 853-2600 (phone); (207) 853-6039 (fax)
soctomah@gmail.com

THPO
Penobscot Nation
Cultural and Historic Preservation Dept.
12 Wabanaki Way
Indian Island, Maine 04468
(207) 817-7471 (phone)
chris.sockalexis@penobscotnation.org

THPO
Passamaquoddy Tribe of Indians
Indian Township Reservation
P.O. Box 301
Princeton, Maine 04668
(207) 796-2301 (phone)
(207) 796-5256 (fax); soctomah@gmail.com

4. Organizational Websites (Note – Subject to Change):

U.S. Army Corps of Engineers, N.E. District	www.nae.usace.army.mil/missions/regulatory.aspx
U.S. Army Corps of Engineers, Headquarters	See above link>>Useful Links>>Federal Agency Links
U.S. Environmental Protection Agency	www.epa.gov/owow/wetlands
National Marine Fisheries Service	www.nmfs.noaa.gov
U.S. Fish and Wildlife Service	www.fws.gov/mainefieldoffice
National Park Service	www.nps.gov/rivers/index.html
Maine Department of Environmental Protection	www.maine.gov/dep
Maine Department of Agriculture, Conservation and Forestry	www.maine.gov/acf/index.shtml
Maine Land Use Planning Commission	www.maine.gov/doc/lupc/commission/offices.shtml
Maine Department of Marine Resources	www.maine.gov/dmr/index.htm
State of Maine - Aquaculture Guidelines	www.maine.gov/dmr/aquaculture/index.htm

Appendix F: Definitions

Definitions

Attendant Features: Occurring with or as a result of; accompanying.

Biodegradable: A material that decomposes into elements found in nature within a reasonably short period of time and will not leave a residue of plastic or a petroleum derivative in the environment after degradation. Examples of biodegradable materials include jute, sisal, cotton, straw, burlap, coconut husk fiber (coir) or excelsior. In contrast, degradable plastics break down into plastic fragments that remain in the environment after degradation.

Boating facilities: These provide, rent or sell mooring space, such as marinas, yacht clubs, boat yards, dockominiums, town facilities, land/home owners, etc. Not classified as boating facilities are piers shared between two abutting properties or town mooring fields that charge an equitable user fee based on the actual costs incurred.

Brushing the Flats: The placement of tree boughs, wooden lath structure, or small-mesh fencing on mudflats, or any bottom disturbance (e.g., discing, plowing, raking, etc.), to enhance recruitment of shellfish.

Buffer Zone: The buffer zone of an FNP is equal to three times the authorized depth of the FNP.

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 are installed temporarily or permanently

Cumulative effects: See "Direct, secondary, and cumulative effects."

Direct, secondary, and cumulative effects:

Direct Effects: The loss of aquatic ecosystem within the footprint of the discharge of dredged or fill material. Direct effects are caused by the action and occur at the same time and place.

Secondary Effects: 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) aquatic areas drained, flooded, fragmented, or mechanically cleared, b) fluctuating water levels in all impoundment and downstream associated with the operation of a dam, c) septic tank leaching and surface runoff from residential or commercial developments on fill, and d) leachate and runoff from a sanitary landfill located in waters of the U.S. See 40 CFR 230.11(h).

Cumulative Effects: The changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual 1) discharges of dredged or fill material, or 2) structures. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems. See 40 CFR 230(g).

Dredging:

Maintenance Dredging: Includes areas and depths previously authorized by the Corps and dredged. The Corps may require proof of authorization. Maintenance dredging typically refers to the routine removal of accumulated sediment from channel beds to maintain the design depths of navigation channels, harbors, marinas, boat launches and port facilities. Routine maintenance dredging is conducted regularly for navigational purposes (typically at least once every ten years) and does not include any expansion of the previously dredged area or depth. The Corps may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS,

shellfish, etc. The main characteristics of maintenance dredging projects are variable quantities of material; soft, uncompacted soil; contaminant content possible; thin layers of material;occurring in navigation channels and harbors; repetitive activity

New Dredging: Dredging of an area or to a depth that has never been authorized by the Corps or dredged.

Dredged material & discharge of dredged material: These are defined at 323.2(c) and (d). The term dredged material means material that is excavated or dredged from waters of the U.S.

Essential Fish Habitat (EFH): This is broadly defined to include those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

Fill material & discharge of fill material: These are defined at 323.2(e) and (f). The term fill material is defined as material placed in waters of the U.S. where the material has the effect of either replacing any portion of a water of the U.S. with dry land or changing the bottom elevation of any portion of a water of the U.S.

Federal anchorages, Federal channels and Federal turning basin: Refer to Appendix H for those in Maine

Federal navigation projects (FNPs): These areas are maintained by the Corps; authorized, constructed and maintained on the premise that they will be accessible and available to all on equal terms; and are comprised of Federal Anchorages, Federal Channels and Federal Turning Basins. The buffer zone is equal to three times the authorized depth of a FNP. More information on the following FNPs is provided at www.nae.usace.army.mil/missions/navigation.aspx >> Navigation Projects.

Flume: An open artificial water channel, in the form of a gravity chute, that leads water from a diversion dam or weir completely aside a natural flow. A flume can be used to measure the rate of flow.

Frac out: During normal drilling operations, drilling fluid travels up the borehole into a pit. When the borehole becomes obstructed or the pressure becomes too great inside the borehole, the ground fractures and fluid escapes to the surface.

Independent utility: A test to determine what constitutes a single and complete non-linear 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.

Individual Permit: A Department of the Army authorization that is issued following a case-by-case evaluation of a specific structure or work in accordance with the procedures of 33 CFR 322, or a specific project involving the proposed discharge(s) in accordance with the procedures of 33 CFR 323, and in accordance with the procedures of 33 CFR 325 and a determination that the proposed discharge is in the public interest pursuant to 33 CFR 320.

Maintenance: Regulations on maintenance are provided at 33 CFR 323.4. The following definitions are applicable:

Minor deviations: 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, which are necessary to make repair, rehabilitation, or replacement are permitted, provided the adverse environ-mental effects resulting from such repair, rehabilitation, or replacement are minimal.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Marina reconfiguration zone: A Corps-authorized area in which permittees may rearrange pile-supported structures and floats without additional authorizations. A reconfiguration zone does not grant exclusive privileges to an area or an increase in structure or float area.

Navigable waters of the U.S.: See Waters of the U.S. below.

Overall project: See "single and complete linear project" below.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.
Permanent impacts: Permanent impacts means waters of the U.S. that are permanently affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent impacts include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. Temporary impacts include waters of the U.S. that are temporarily filled, flooded, excavated, drained or mechanically cleared because of the regulated activity.
Pre-construction notification (PCN): A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by this GP. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of these GPs. A PCN may be voluntarily submitted in cases where PCN is not required and the project proponent wants confirmation that the activity is authorized under this GP.
Secondary effects: See "Direct, secondary, and cumulative effects."
Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the U.S. (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for the purposes of this GP. 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.
The overall project, for purposes of this GP, includes all regulated activities that are reasonably related and necessary to accomplish the project purpose.
Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For non-linear projects, the single and complete project must have independent utility (see definition).
Special aquatic sites: These include inland and saltmarsh wetlands, mud flats, vegetated shallows, sanctuaries and refuges, coral reefs, and riffle and pool complexes. These are defined at 40 CFR 230 Subpart E.
Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.
Temporary impacts: See permanent impacts above.
Utility line: Any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term 'utility line' does not include activities that drain a water of the U.S., such as drainage tile or French drains, but it does apply to pipes conveying drainage from another area.
Vegetated shallows: Permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as eelgrass and widgeon grass (*Rupiamaritima*) in marine systems (doesn't include salt marsh) as well as a number of freshwater species in rivers and lakes. Note: These areas are also commonly referred to as submerged aquatic vegetation (SAV).
Vernal pools (VPs): For the purposes of this GP, VPs are depressional wetland basins that typically go dry in most years and may contain inlets or outlets, typically of intermittent flow. Vernal pools range in both size and depth depending upon landscape position and parent material(s). Pools usually

support one or more of the following obligate indicator species: wood frog, spotted salamander, blue-spotted salamander, marbled salamander, Jefferson's salamander and fairy shrimp. However, they should preclude sustainable populations of predatory fish.
VP areas are:

- Depression (includes the VP depression up to the spring or fall high water mark, and includes any vegetation growing within the depression),
- Envelope (area within 100 feet of the VP depression's edge), and
- Critical terrestrial habitat (area within 100-750 feet of the VP depression's edge).

Note: See footnote to GC 23. The Corps may determine during the PCN review that a waterbody should not be designated as a VP based on available evidence.
Water diversions: Water diversions are activities such as bypass pumping (e.g., "dam and pump") 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.
Weir: A barrier across a river designed to alter the flow characteristics. In most cases, weirs take the form of a barrier, smaller than most conventional dams, across a river that causes water to pool behind the structure (not unlike a dam) and allows water to flow over the top. Weirs are commonly used to alter the flow regime of the river, prevent flooding, measure discharge and help render a river navigable.
Waters of the U.S. & Waters of the United States (U.S.): The term waters of the U.S. and all other terms relating to the geographic scope of jurisdiction are defined at 33 CFR 328. Also see Section 502(7) of the Federal CWA [33 USC 1352(7)]. Waters of the U.S. include jurisdictional wetlands. Not all waters and wetlands are jurisdictional. Contact the Corps with any questions regarding jurisdiction.
Navigable waters: Refer to 33 CFR 329. These waters include the following federally designated navigable waters in New England. This list represents only those waterbodies for which affirmative determinations have been made; absence from this list should not be taken as an indication that the waterbody is not navigable:

ME: All tidal waters; Kennebec River to Moosehead Lake; Penobscot River to the confluence of the East and West Branch at Medway, Maine; Lake Umbagog within the State of Maine.

Appendix G: 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/missions/regulatory 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.
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 8: 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 8(b)] or to provide information on federally-listed species or habitat [GC 8(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 & procedures).
(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 42: Essential Fish Habitat.
As part of the GP 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 4: Avoidance, Minimization and Compensatory Mitigation.
(a) See www.nae.usace.army.mil/missions/regulatory 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/missions/regulatory, "Mitigation" and then "Maine," or www.maine.gov/dep/blwq/docstand/nrpa/ILF_and_NRCP/index.htm.

6. GCs 24, 15, and 43: Invasive Species.
(a) Information on what are considered "invasive species" is provided in our "Compensatory Mitigation Guidance" document at www.nae.usace.army.mil/missions/regulatory 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/missions/regulatory 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/missions/regulatory under "Invasive Species" and provides policy, goals and objectives.

7. GC 44: 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/missions/regulatory under "Useful Links and Documents" for design and construction guidance.

8. GC 45: Stream and Wetland Crossings.
(a) Projects should be designed and constructed to ensure long-term success using the most recent manual located at www.nae.usace.army.mil/missions/regulatory 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 offer guidance 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/missions/regulatory and then "Stream and River Continuity."

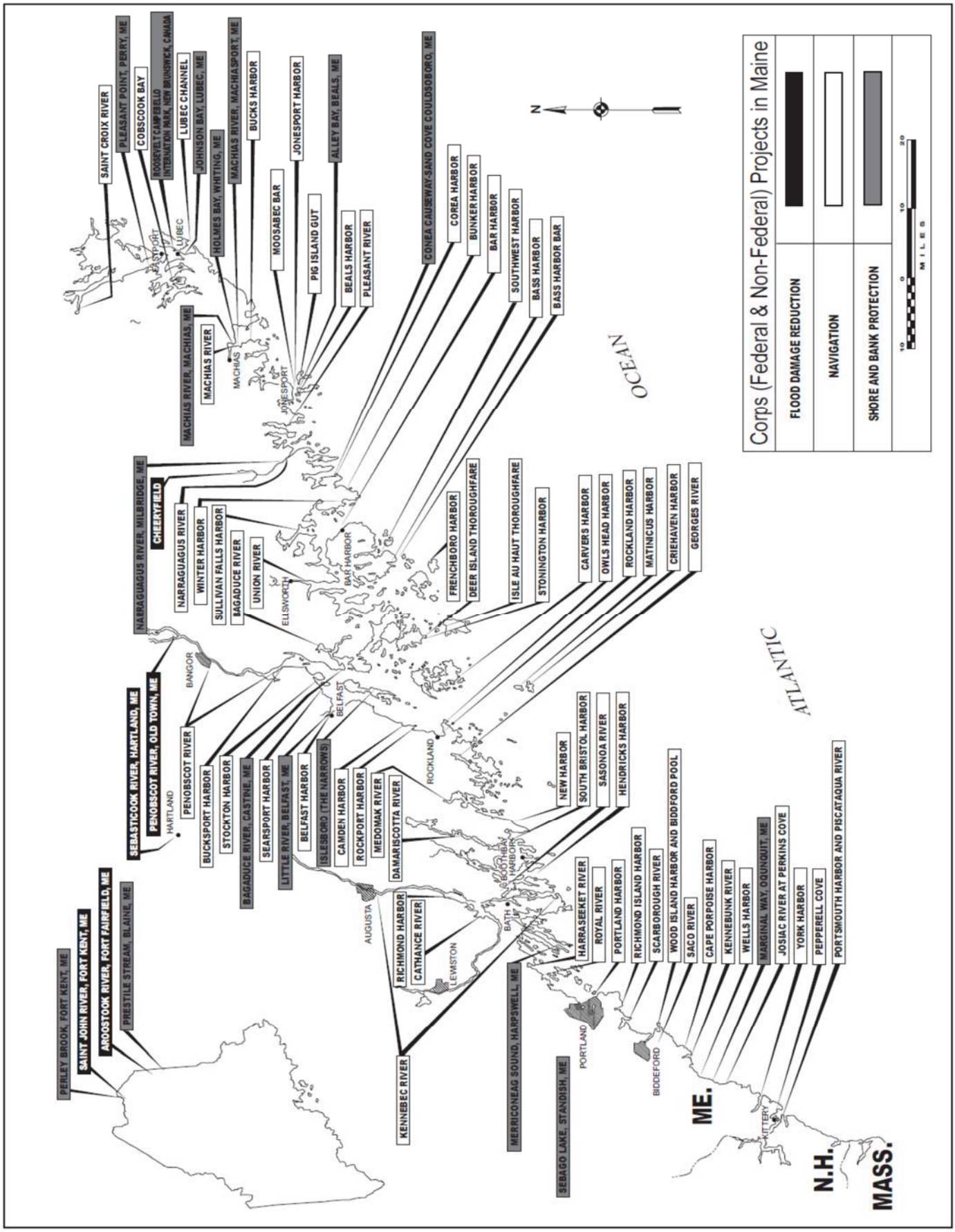
(d) The ME DOT's document "Waterway and Wildlife Crossing Policy and Design Guide for Aquatic Organism, Wildlife Habitat, and Hydrologic Connectivity," 3rd Edition, July 2008, may be used as guidance to evaluate impacts to aquatic, wildlife and surface water resources when designing, constructing, repairing 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 45 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 45(f): The Skidder Bridge Fact Sheet at www.nae.usace.army.mil/missions/regulatory under "Stream and River Continuity" may be a useful temporary span construction method.

9. GC 45: Wetland Crossings. The Maine DEP's crossing standards are at 06-096 DEP, Chapter 305: Permits by Rule, 9 & 10) Crossings (utility lines, pipes and cables). www.maine.gov/dep/blwq/rules/NRPA/2009/305/305_effective_2009.pdf

10. GC 23: 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/missions/regulatory under: 1) "State General Permits" and then "Maine," and 2) "Vernal Pools."

11. GC 29: 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 H: Federal Navigation Projects in Maine



04/06/2017

DEPARTMENT OF ENVIRONMENTAL PROTECTION
PERMIT BY RULE NOTIFICATION FORM

(For use with DEP Regulation, Natural Resouces Protection Act- Permit by Rule Standards, Chapter 305)

PLEASE TYPE OR PRINT IN *BLACK INK ONLY*

APPLICANT INFORMATION (Owner)		AGENT INFORMATION (If Applying on Behalf of Owner)	
Name:	Maine DOT - Danielle Tetreau	**Name:**	
Mailing Address:	16 State House Station	**Mailing Address:**	
Town:	Augusta	**Town:**	
State and Zip Code:	Maine 04333	**State and Zip Code:**	
Daytime Phone #:	207-592-2358	**Daytime Phone #:**	
Email Address:	danielle.tetreau@maine.gov	**Email Address:**	

PROJECT INFORMATION

Part of a larger project? (check one):	☐ Yes ■ No	**After the Fact? (check one):**	☐ Yes ■ No	**Project involves work below mean low water? (check one):**	☐ Yes ■ No	**Name of waterbody:**	Lunt Harbor (Atlantic Ocean)
Project Town:	Frenchboro	**Project Location (Address):**	West Shore Road			**Map & Lot Number:**	Delorme Map 16, E-2
Brief Project Description:	Ferry terminal modifications and improvements.						
Brief Directions to Site:	Located at the MaineDOT ferry terminal on Long Island (Frenchboro).						

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.**

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

NOTE: Municipal permits *may* also be required. Contact your local code enforcement office for more information. Federal permits may be required for stream crossings and for projects involving wetland fill. Contact the Army Corps of Engineers at the Maine Project Office for more information.

NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS

- ☐ ***Attach*** **all required submissions for the PBR Section(s) checked above. The required submissions for each PBR Section are outlined in Chapter 305 and may differ depending on the Section you are submitting under.**
- ☐ ***Attach*** **a check for the correct fee made payable to: "Treasurer, State of Maine".The current fee for NRPA PBR Notifications can be found at the Department's website: http://www.maine.gov/dep/feesched.pdf**
- ■ ***Attach*** **a location map that clearly identifies the site (U.S.G.S. topo map, Maine Atlas & Gazetteer, or similar).**
- ☐ ***Attach Proof of Legal Name*** **if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's *registration information* (available at http://icrs.informe.org/nei-sos-icrs/ICRS?MainPage=x) Individuals and municipalities are not required to provide any proof of identity.**

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 PBR becomes effective 14 calendar days after receipt by the Department *unless the Department approves or denies the PBR prior to that date.*

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:		**Date:**	1-27-2020

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.**

AUGUSTA DEP
17 STATE HOUSE STATION
AUGUSTA, ME 04333-0017
(207)287-7688

PORTLAND DEP
312 CANCO ROAD
PORTLAND, ME 04103
(207)822-6300

BANGOR DEP
106 HOGAN ROAD
BANGOR, ME 04401
(207)941-4570

PRESQUE ISLE DEP
1235 CENTRAL DRIVE
PRESQUE ISLE, ME 04769
(207)764-0477

OFFICE USE ONLY	Ck.# IB		Staff	Staff	
PBR # 69329	FP 1250.00	Date 1/29/2020	Acc. Date 2/10/20	Def. Date	After Photos

MaineDOT Authorized Agent: Danielle Tetreau.

Project Scope: Ferry terminal modifications and improvements.

Project Description: Frenchboro is experiencing an increase in riders of the ferry that operates between Bass Harbor, Frenchboro, and Swan's Island. MaineDOT operates the ferry system and is designing and constructing a new, larger ferry vessel to support the increased use. The new vessel is larger than what the existing infrastructure can safely accommodate. The terminal was renovated in 2014 to upgrade the dolphins, however one timber mooring dolphin remains. To support the larger vessel, MaineDOT is proposing to add 1 turning dolphin to the Frenchboro ferry terminal.

Funding Source: Federal

Resource Impacts:

	Permanent (s.f.)	Temporary (s.f.)
Direct Impacts	27	0
Indirect Impacts	256	0

Proposed in-water work window: August 1 – April 9

Maintenance of Traffic: This project will not result in disruptions to the maintenance of traffic.

Erosion & Sedimentation Control Best Management Practices: This project will be performed in accordance with erosion control measures conforming with the latest versions of the *State of Maine Department of Transportation Standard Specifications for Highways and Bridges* and the *Department of Transportation's Best Management Practices for Erosion and Sediment Control.*

Mitigation: The project is proposing 27 sf of unavoidable permanent sub-tidal impact as new piles for this project. The impacts are minor and near an active ferry terminal. For these reasons, compensation is not proposed.

Purpose and Need: The purpose of the project is to enhance the existing fender system at the ferry terminal to accommodate a new larger ferry vessel commencing service within the next 3 years. The proposed project is needed due to the insufficient capacity of the existing timber turning dolphin to withstand berthing forces from the larger ferry vessel. The ferry terminal is a vital component to summer tourism and is greatly utilized by the island community.

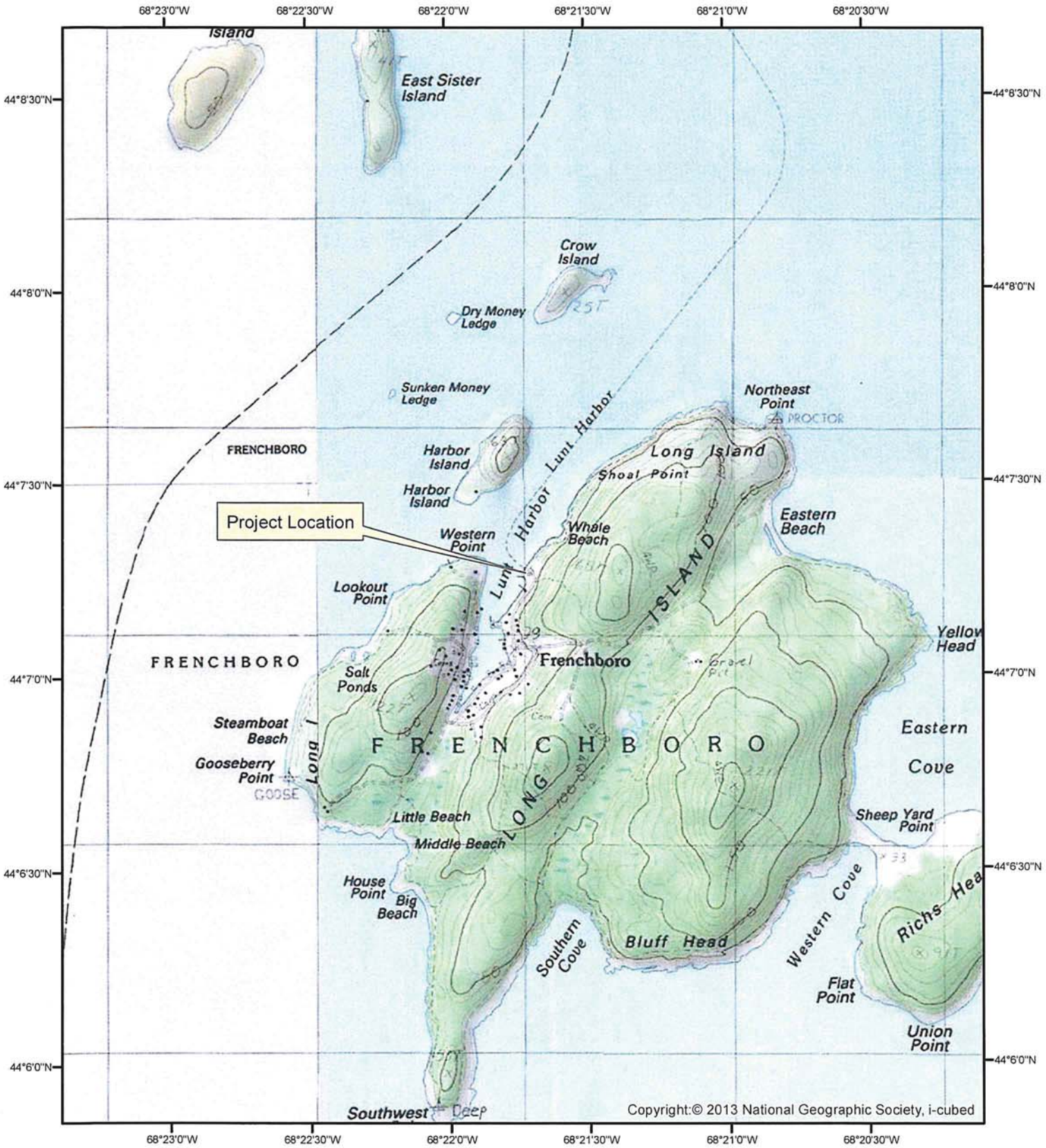
MaineDOT is contracted the design and construction of a new, larger ferry vessel in 2020 which will be completed and brought into service in 2022. The new vessel is 24 feet longer (154 feet total) than the current ferry vessel and will hold 23 vehicles and 250 passengers.

Alternatives Analysis: During the design phase of the project, MaineDOT considered the alternatives for the ferry terminal structure. The design team coordinated with the MaineDOT vessel captains and port officials to determine the appropriate level of modifications necessary to safely and adequately satisfy the operational requirements for the project. Collectively the design team considered the following alternatives:

1. No build alternative – this alternative was not selected as the preferred alternative. It does not meet the purpose and need of the project by accommodating the new vessel into the existing ferry terminal facilities.
2. Modify the terminal by adding two turning dolphins – this was not the selected alternative. While typically 2 dolphins would be required for a vessel of this size, in coordination with the captains and port officials it was determined that one new dolphin would be sufficient since the vessel does not overnight in this pen. For these reasons, this alternative was determined to be excessive to support the purpose and need of the project.
3. **Modify the terminal by adding one turning dolphin – this was the selected alternative**. There is a timber dolphin in approximately the same location, this project will upgrade that dolphin to modern standards with steel piles and will meet the needs of the new vessel at the existing facility.

Avoidance and Minimization: This project involves permanent and temporary impacts to sub-tidal portions of Lunt Harbor, including aerial/shading impacts. During the design process, the structure number was evaluated to minimize impacts but also provide safe transfer of people and vehicles from the ferry vessel. In-water work will occur between August 1 and April 9 to accommodate the new ferry vessel delivery schedule. MaineDOT reviewed the mapped eelgrass and state-listed threatened and endangered species locations in the vicinity of the ferry terminal. An eelgrass bed is known to occur in the vicinity of the ferry terminal, however during a 2019 dive survey there was no eelgrass observed. Observations from a August 2018 site visit is provided in Section 7, and details about the dive survey results is provided in Section 10.





Ferry Terminal Improvements
WIN 22202.00
Frenchboro, ME (Hancock County)

0 0.5 1 Miles

N W E S

Project Location: 44.121091, -68.362218



Photo 1. View of the approach to the ferry slip showing existing infrastructure and turn radius required, facing south. MaineDOT, August 2018

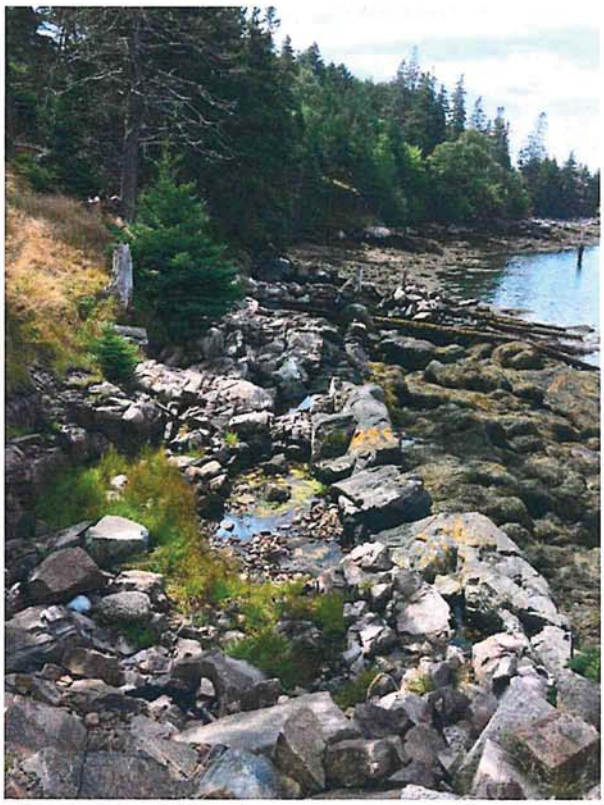


Photo 2. View of rocky intertidal and marsh grasses south of terminal, facing south. MaineDOT August 2018



Photo 3. View of rocky intertidal area north of terminal, facing north. MaineDOT August 2018



Photo 4. Intertidal substrate south of ferry terminal. MaineDOT, August 2018.



Photo 5. View of 2014 dolphins at ferry terminal, facing east. MaineDOT, August 2018.



Photo 6. View of timber dolphin (to be removed/upgraded) on the seaward end of the southern side of ferry slip, facing south. MaineDOT, August 2018.

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**.

Environmental Summary Sheet

WIN: 23476.00 **Date Submitted: 8/22/2019**
Town: Bass Harbor
CPD Team Leader: Danielle Tetreau
ENV Field Contact: Ryan Annis

NEPA Complete: Programmatic Categorical Exclusion (CE) 23 CFR 771.117.c.23.i issued on 8/1/2019

☒ **Section 106**
No effect: SHPO Concurrence 10/1/2018
Section 106 Resources: none

☒ **Section 4(f) and 6(f)**
Section 4(f)
Review Complete - No use
Section 6(f)
Not Applicable - No takes

☐ **Maine Department of Inland Fisheries and Wildlife Essential Habitat**
Not Applicable **Timing Window:** Not Applicable

☒ **Section 7**
Informal Consultation - May affect, not likely to adversely affect. **In water work window: 8/1 – 3/14**
Species of Concern: Atlantic salmon DPS
Atlantic sturgeon GOM DPS
shortnose sturgeon
northern long-eared bat: no effect, no tree clearing.

☒ **Essential Fish Habitat**
Adverse Effect, not substantial: consultation complete 7/31/2019.
Species of Concern: Multi-species, coastal EFH.
In-water work window: 8/1 – 3/14. Eelgrass exclusion zone.

☒ **Maine Department of Conservation/Public Lands, Submerged Land Lease**
Applicable - MaineDOT Legal Office managing the Submerged Land Lease Modification.

☐ **Maine Land Use Regulation Commission**
Not Applicable

☒ **Maine Department of Environmental Protection**
Permit By Rule (PBR) – Section 11
**Applicable Standards and Permits are included with the contract*

☒ **Army Corps of Engineers: Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.**
Category 2 Corps Permit #NAE-2019-01206
-Work Start Notification Form to be completed by ENV Field Contact and submitted to ACOE with copy to Danielle Tetreau
-Compliance Certification Form to be completed by ENV Field Contact and submitted to ACOE w/ copy to Danielle Tetreau

☐ **Stormwater Review**
Not Applicable

☒ **Special Provisions Required**

Special Provision 105-Timing of Work Restriction	N/A☐	Applicable☒
Standard Specification 656-Erosion Control Plan	N/A☐	Applicable☒
General Note for Hazardous Waste	N/A☒	Applicable☐
Special Provision 203-Dredge Spec	N/A☒	Applicable☐
Special Provision 203-Hazardous Waste	N/A☒	Applicable☐

**All permits and approvals based on plans/scope as of: 10/9/2019*

04/06/2017

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PERMIT BY RULE NOTIFICATION FORM

DEP-BANGORAM11:44-MAY13'19RC

(For use with DEP Regulation, Natural Resouces Protection Act- Permit by Rule Standards, Chapter 305)

PLEASE TYPE OR PRINT IN *BLACK INK ONLY*

APPLICANT INFORMATION (Owner)		AGENT INFORMATION (If Applying on Behalf of Owner)	
Name:	MaineDOT c/o Danielle Tetreau	**Name:**	
Mailing Address:	16 State House Station	**Mailing Address:**	
Town:	Augusta	**Town:**	
State and Zip Code:	Maine 04333	**State and Zip Code:**	
Daytime Phone #:	207-592-2358	**Daytime Phone #:**	
Email Address:	danielle.tetreau@maine.gov	**Email Address:**	

PROJECT INFORMATION

Part of a larger project? (check one):	☐ Yes ■ No	**After the Fact? (check one):**	☐ Yes ■ No	**Project involves work below mean low water? (check one):**	■ Yes ☐ No	**Name of waterbody:**	Bass Harbor
Project Town:	Tremont	**Project Location (Address):**	Ferry Terminal			**Map & Lot Number:**	Delorme Map 16, D-2
Brief Project Description:	Add 1 turning dolphin, wave screen, walkways, and lighting and fender modifications.						
Brief Directions to Site:	Located at the seaward end of the Bass Harbor ferry terminal.						

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.**

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

NOTE: Municipal permits *may* also be required. Contact your local code enforcement office for more information. Federal permits may be required for stream crossings and for projects involving wetland fill. Contact the Army Corps of Engineers at the Maine Project Office for more information.

NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS

- ■ ***Attach*** **all required submissions for the PBR Section(s) checked above. The required submissions for each PBR Section are outlined in Chapter 305 and may differ depending on the Section you are submitting under.**
- ☐ ***Attach*** **a check for the correct fee made payable to: "Treasurer, State of Maine".The current fee for NRPA PBR Notifications can be found at the Department's website: http://www.maine.gov/dep/feesched.pdf**
- ■ ***Attach*** **a location map that clearly identifies the site (U.S.G.S. topo map, Maine Atlas & Gazetteer, or similar).**
- ☐ ***Attach Proof of Legal Name*** **if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's *registration information* (available at http://icrs.informe.org/nei-sos-icrs/ICRS?MainPage=x) Individuals and municipalities are not required to provide any proof of identity.**

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 PBR becomes effective 14 calendar days after receipt by the Department *unless the Department approves or denies the PBR prior to that date.*

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:	Danielle Tetreau	**Date:**	5-10-2019

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.**

AUGUSTA DEP
17 STATE HOUSE STATION
AUGUSTA, ME 04333-0017
(207)287-7688

PORTLAND DEP
312 CANCO ROAD
PORTLAND, ME 04103
(207)822-6300

BANGOR DEP
106 HOGAN ROAD
BANGOR, ME 04401
(207)941-4570

PRESQUE ISLE DEP
1235 CENTRAL DRIVE
PRESQUE ISLE, ME 04769
(207)764-0477

OFFICE USE ONLY	Ck.# Internal Bill		Staff HL	Staff	
PBR # 67728	FP $80.00	Date 5/13/19	Acc. Date 5/15/2019	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.

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(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.

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(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.

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(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**.

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

ENVIRONMENTAL OFFICE
MAINE DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333

CORPS PERMIT # NAE-2019-01206
CORPS GP ID# 19-293
STATE ID# PBR

DESCRIPTION OF WORK:
Upgrade the existing state ferry terminal facility in Bass Harbor at Tremont, Maine. Regulated work includes the addition of a turning dolphin, a wave screen, improved fender systems, an elevated walkway to the new dolphin, and modifications to the existing lighting system. New piling installations will result in a total of 38 s.f. of permanent tidal bottom impact. This work is shown on the attached plans entitled "PROPOSED FERRY TERMINAL IMPROVEMENTS/MODIFICATIONS, BASS HAROBR FERRY TERMINAL" in two sheets
Project Description Continued on Page 2

LAT/LONG COORDINATES : 44.234802° N -68.348679° W USGS QUAD: BASS HARBOR, 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 Federal Permit, the Maine General Permit (GP).** http://www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/ME/Maine_General_Permit_2015.pdf

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 38 of the GP (page 16) 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 13, 2020. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 13, 2021.

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: 5/23/19 LEVEL OF REVIEW: CATEGORY 1: CATEGORY 2: X

AUTHORITY (Based on a review of plans and/or State/Federal applications): SEC 10 X , 404 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 Augusta, Maine Project Office. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0

Jay L. Clement

JAY L. CLEMENT
SENIOR PROJECT MANAGER
MAINE PROJECT OFFICE

8-2-2019

FRANK J. DEL GIUDICE DATE
CHIEF, PERMITS & ENFORCEMENT BRANCH
REGULATORY DIVISION

US Army Corps
of Engineers ®
New England District

Project Description Continued from Page 1

dated "OCTOBER 9, 2018" and "BASS HARBOR FERRY TERMINAL" in 17 sheets dated "02/19".

PLEASE NOTE THE FOLLOWING CONDITIONS FOR DEPARTMENT OF THE ARMY GENERAL PERMIT NO. NAE-2019-01206

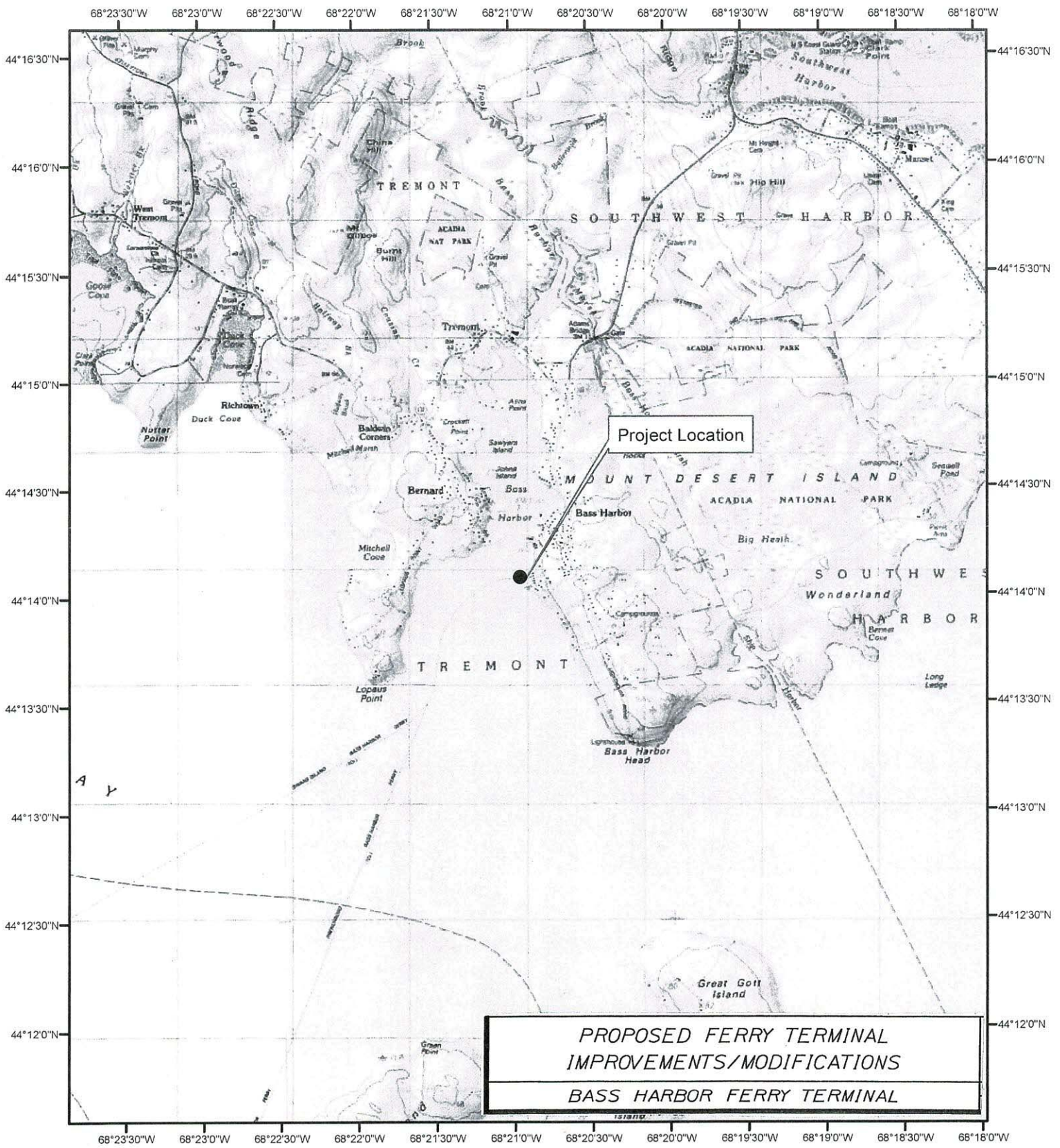
1. This authorization requires you to 1) notify us before beginning work so we may inspect the project, and 2) submit a Compliance Certification Form. You must complete and return the enclosed Work Start Notification Form(s) to this office at least two weeks before the anticipated starting date. You 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. In water work shall be conducted between August 1 and March 14 of any year in order to minimize potential impacts to fisheries, Essential Fish Habitat, and local water quality.

4. In accordance with the Project Verification Form supporting the work described in this permit (countersigned by National Marine Fisheries Service on February 25, 2019), the permittee shall comply with all designated Project Design Criteria (PDCs).

5. The permittee is required to mark the ferry terminal facility in accordance with appropriate US Coast Guard Regulations and to contact 1st Coast Guard District, Aids to Navigation Office at (617) 223-8347.



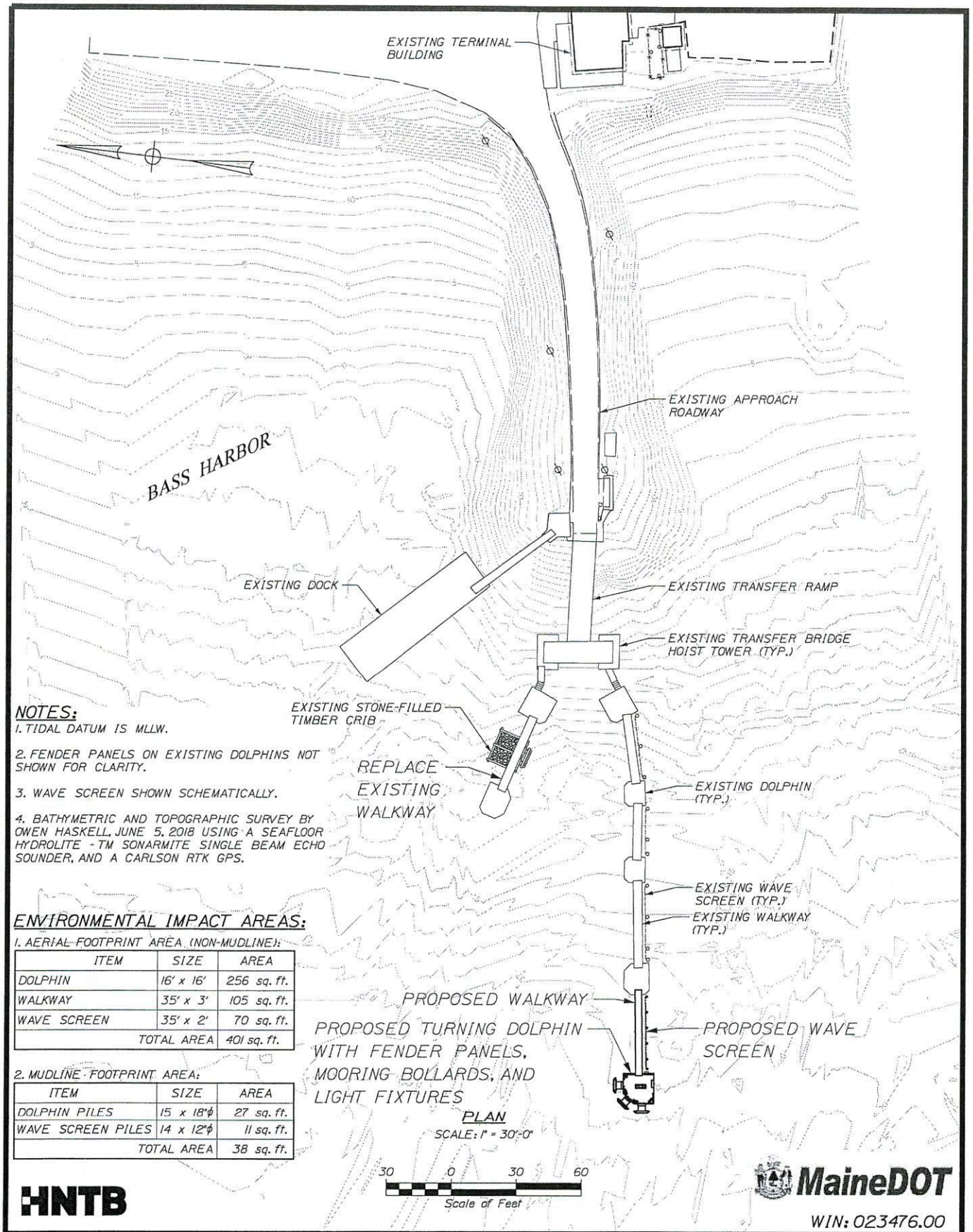
Bass Harbor Ferry Terminal Improvements
WIN 23476.00
Tremont, ME Hancock County)

Project Location: 44.234802, -68.348679

N
W E
S

0 0.9 1.8 Miles

OCTOBER 9, 2018



NOTES:

1. TIDAL DATUM IS MLLW.
2. FENDER PANELS ON EXISTING DOLPHINS NOT SHOWN FOR CLARITY.
3. WAVE SCREEN SHOWN SCHEMATICALLY.
4. BATHYMETRIC AND TOPOGRAPHIC SURVEY BY OWEN HASKELL, JUNE 5, 2018 USING A SEAFLOOR HYDROLITE - TM SONARMITE SINGLE BEAM ECHO SOUNDER, AND A CARLSON RTK GPS.

ENVIRONMENTAL IMPACT AREAS:

1. AERIAL FOOTPRINT AREA (NON-MUDLINE):

ITEM	SIZE	AREA
DOLPHIN	16' x 16'	256 sq. ft.
WALKWAY	35' x 3'	105 sq. ft.
WAVE SCREEN	35' x 2'	70 sq. ft.
	TOTAL AREA	401 sq. ft.

2. MUDLINE FOOTPRINT AREA:

ITEM	SIZE	AREA
DOLPHIN PILES	15 x 18"ϕ	27 sq. ft.
WAVE SCREEN PILES	14 x 12"ϕ	11 sq. ft.
	TOTAL AREA	38 sq. ft.

HNTB

MaineDOT

WIN: 023476.00

PROPOSED FERRY TERMINAL IMPROVEMENTS/MODIFICATIONS	WATERFRONT GENERAL PLAN	FIGURE 1
BASS HARBOR FERRY TERMINAL	DESIGNER: CRAIG R. MORIN, P.E. DATE: OCTOBER 9, 2018	

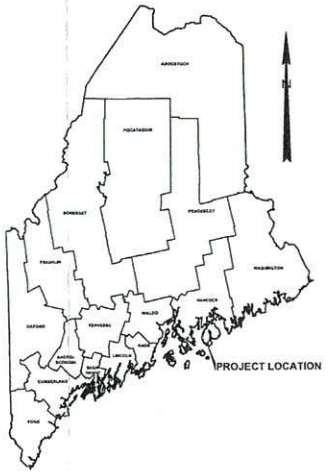
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

VILLAGE OF BASS HARBOR
HANCOCK COUNTY

BASS HARBOR FERRY TERMINAL

FENDER SYSTEM MODIFICATIONS

WIN: 023476.00



INDEX OF SHEETS

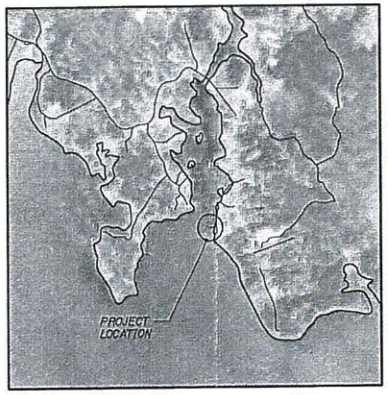
SHEET NO.		TITLE
GENERAL		
G01	1	TITLE SHEET
G02	2	GENERAL NOTES AND DESIGN CRITERIA
G03	3	EXISTING CONDITIONS
G04	4	BORING LOGS
MARINE PLANS		
S01	5	SITE PLAN
S02	6	BERTH PLAN
S03	7	DOLPHIN FOUNDATION PLAN
S04	8	DOLPHIN FOUNDATION DETAILS
S05	9	DOLPHIN PLAN, ELEVATION, AND DETAILS
S06	10	DOLPHIN DETAILS MOORING HARDWARE
S07	11	DOLPHIN DETAILS FENDER SYSTEM I
S08	12	DOLPHIN DETAILS FENDER SYSTEM II
S09	13	DOLPHIN DETAILS MISCELLANEOUS I
S10	14	DOLPHIN DETAILS MISCELLANEOUS II
S11	15	WAVE SCREEN PLAN AND ELEVATION
S12	16	GANGWAY PLAN AND ELEVATION
ELECTRICAL PLANS		
E01	17	ELECTRICAL PLAN
E02	18	ELECTRICAL DETAILS

THE PROFESSIONAL ENGINEER WHOSE STAMP APPEARS ON THIS COVER SHEET BEARS RESPONSIBILITY FOR THE FOLLOWING SHEETS WITHIN THIS DRAWING SET:

GENERAL	G01-G03
STRUCTURAL PLANS	S01-S12

ADDITIONAL WORK APPEARS WITHIN THIS DRAWING SET AND IS THE RESPONSIBILITY OF THE FOLLOWING ORGANIZATIONS, WHOSE STAMP APPEARS ON THOSE INDIVIDUAL SHEETS:

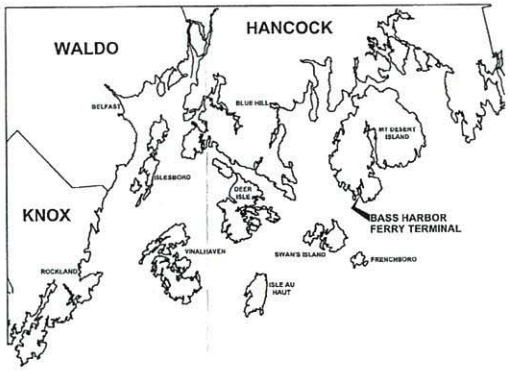
GENERAL	G04	GEOTECHNICAL BORING LOGS	SCHONEWALD ENGINEERING
ELECTRICAL PLANS	E01-E02	ELECTRICAL DESIGN	BARTLETT DESIGN, INC.



LOCATION MAP

1/2 0 1/2 1

Scale In Miles



98% PS&E
February 15, 2019

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

	APPROVED	DATE
COMMISSIONER:		
CHIEF ENGINEER:		

PROJECT INFORMATION			
PROGRAM	MULTIMODAL		
PROJECT MANAGER	AURELE GONEAU II	SIGNATURE	
DESIGNER	CRAIG R. MORIN, P.E.	10209	
CONSULTANT	HNTB CORPORATION	P.E. NUMBER	
PROJECT RESIDENT			
CONTRACTOR		DATE	
PROJECT COMPLETION DATE			

BASS HARBOR FERRY TERMINAL
FENDER SYSTEM MODIFICATIONS
BASS HARBOR HANCOCK COUNTY

TITLE SHEET

WIN 023476.00

SHEET NUMBER
G01
1 OF 17

Filename: ...\02 CAD\00L_Title.dgn Division: Username: Date:2/15/2019

GENERAL NOTES

1. These notes contain general information and are not complete for construction purposes. Contractor shall verify information given here with specifications and other drawings and bring any conflicts to the Engineer's attention before beginning work.

2. All dimensions and details shall be verified by the Contractor prior to construction.

3. Contractor shall provide and maintain horizontal and vertical controls in the Maine state plane coordinate system.

4. Upon project completion, the Contractor shall relocate the MaineDOT field office to the parking lot of the Islesboro ferry terminal. Payment shall be incidental to the Contract.

SPECIFICATIONS AND CODES

1. Project specifications titled, "Special Provisions For: Vinalhaven Ferry Terminal Fender System Modifications", dated February 15, 2019.

2. State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, 2014. Including all supplemental specifications and special provisions.

3. Codes and other references

   A. Unified Facilities Criteria Manuals:
      - UFC 4-150-06 Military Harbors and Coastal Facilities, with Change 1
      - UFC 4-150-07 Maintenance and Operation: Maintenance of Waterfront Facilities, with Change 1
      - UFC 4-150-08 Inspection of Mooring Hardware
      - UFC 4-151-10 General Criteria for Waterfront Construction, with Change 1
      - UFC 4-152-01 Design: Piers and Wharves
      - UFC 4-159-03 Design: Moorings, with Change 2
   B. US Army Corps of Engineers: Coastal Engineering Manual, current edition
   C. AASHTO LRFD specifications, 8th edition, 2017 with interims
   D. AWS, D1.1, "Structural Welding Code Steel", current edition
   E. AWS, D1.2, "Structural Welding Code Aluminum", current edition

SURVEY CONTROL

1. Vertical control for marine structures is in reference to MLLW (Mean Lower Low Water). To convert to National Geodetic Vertical Datum (NGVD), use the following formula:
   El. (NGVD) = El. (MLLW) - 9.28 ft

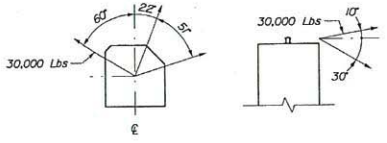
2. Horizontal control is the Maine state plane coordinate system (east zone), NAD 27.

BERTHING LOADS

Dolphin	Berthing Velocity		Energy to Fender	Minimum Fender Design Energy	Max. Reaction on Dolphin
	Ship Velocity (Vs)	⊥ to Fender			
Turning Dolphins	–	1.41 Knots	107,000 Ft Lbs	380,000 Ft Lbs	300,000 Lb

MOORING LOADS

Dolphin D7
Mooring line pull: Single line in each direction.



PLAN

PLAN

FENDER NOTES

1. All dimensions, details and existing conditions shall be verified by the Contractor prior to construction.

2. Contractor shall design fender panels, support chains and anchors for the indicated loads.

3. Support chain anchors shall be chemical or adhesive anchors with 9 inch minimum edge distance and a minimum embedment of 12 times the diameter of the anchor.

4. The anchor design shall be based on an existing concrete strength of 3,000 psi.

5. Anchors shall be set by template.

DOLPHIN/FENDER DESIGN LOADS

Design Vessel: MV Margaret Chase Smith*
- Length = 166'-6"
- Beam = 40'-0"
- Max. Displacement = 633 long tons

* This vessel was chosen as the design vessel since it envelopes the existing vessel fleet as well as the new ferry currently in design (LOA = 154 ft).

Current Vessel: MV Captain Henry Lee
- Length = 130'-0"
- Beam = 35'-0"
- Max. Displacement = 500 long tons (est.)

New Vessel: New Ferry (TBD)
- Length = 154'-0"
- Beam = 38'-0"
- Max. Displacement = 600 long tons (est.)

STEEL PIPE PILES

1. Steel pipe piles shall conform to ASTM A252, Grade 3, Fy = 55 ksi minimum. Per standard specification 711.01, Concrete fill shall be MaineDOT class "A".

2. Steel pipe pile order lengths shall be determined by the Contractor based on pile embedment and driving allowances as indicated on the drawings and in the specifications.

3. Piles shall be coated with fusion bonded epoxy in accordance with the specifications.

4. Pile splices shall not be allowed without prior approval of the Engineer of record.

5. Any portion of pile cracked, deformed, or otherwise damaged by pile driving shall be replaced.

6. Pipe piles were designed using AASHTO LRFD specifications and shall be installed as follows:
   - Piles shall driven to a minimum ultimate capacity: ϕRn = 687 kips
   - The maximum factored axial pile load: Rn = 588 kips

7. Piles shall not be out of position shown by more than 6" longitudinally along the pile cap, and 2" transversely across the width of the pile cap.

8. Piles shall be 16"ϕ, ½" wall steel pipe piles with concrete fill. Piles shall be fabricated of seamless or straight-seamed material. Spiral welded pipe pile is not permitted.

DEMOLITION NOTES

1. Demolition shall be conducted to prevent debris from falling into the ocean. To the maximum extent practicable, all construction debris, including any liquids or slurries that are produced as part of the demolition, shall be captured and disposed of properly. The Contractor shall comply with applicable permit conditions and environmental regulations listed in the specifications. Work shall include removal of any construction debris from the river and installation and maintenance of appropriate turbidity controls during demolition and construction such that no turbidity escapes the immediate work area. Underwater inspections may be conducted by the Owner's representative to ensure all demolition and construction debris is removed from the ocean.

ENVIRONMENTAL CONDITIONS

1. Wind:
   - Transverse 50 plf, Longitudinal 12 plf
   - Wind on Live Load: Transverse 100 plf
   - Wind on Structure: 40 psf
   - Thermal: Temp. Range for Concrete Structure = 80°F
2. Railings:
   - Aluminum Pedestrian: Vertical 50 plf, Horizontal 50 plf (acting simultaneously)
3. Tidal ranges (elevations in feet):

Bass Harbor	Tidal Datums				
	NGVD29	MSL	MLLW	MLW	STND
Top of Dolphin*	9.10	12.71	18.38	18.00	21.85
Highest Observed Tide	6.93	10.54	16.21	15.83	19.68
MHHW	2.09	5.70	11.37	10.99	14.84
MHW	1.67	5.28	10.95	10.57	14.42
NGVD29**	0.00	3.61	9.28	8.90	12.75
MSL	-3.61	0.00	5.67	5.29	9.14
MLW	-8.90	-5.29	0.38	0.00	3.85
MLLW	-9.28	-5.67	0.00	-0.38	3.47
Lowest Observed Tide	-12.19	-8.58	-2.91	-3.29	0.56
STND (Station Datum)	-12.75	-9.14	-3.47	-3.85	0.00

*Along top edge of dolphin at corner nearest pen.
**NGVD29 conversion taken from archive project drawings.
Station ID: 8413320, Bar Harbor, ME
Tidal Epoch: 1983-2001

LEGEND:

- Baseline
- Plate
- Centerline
- XX-XX-XX Washboring
- Flood Light
- Navigation Marker Light
- Site Light - Existing
- Site Light - Proposed
- Curbing
- Diameter
- Double Bitt
- Chock
- Ladder

ABBREVIATIONS:

CY	Cubic Yard
EA	Each
EL	Elevation In Feet
HSS	Hollow Structural Sections
ID	Inside Diameter
K (KIP)	1000 Pounds
LBS	Pounds
LF	Linear Feet
MAX	Maximum
MIN.	Minimum
NTS	Not To Scale
OC	On Center
PSF	Pounds Per Square Foot
R	Radius
REF	Reference
SCHD.	Schedule
SF	Square Feet
TYP.	Typical
UON	Unless Otherwise Noted
USACE	United States Army Corps of Engineers

STRUCTURAL STEEL AND MISCELLANEOUS STEEL FABRICATIONS

1. Steel shapes and plates shall be ASTM A709, Grade 36 typical, ASTM A709 Grade 50 where noted.

2. Steel pipes shall be ASTM A53, Grade B.

3. Steel tubing shall be ASTM A500, Grade B.

4. All bolts and nuts shall conform to ASTM A307 and be hot-dip galvanized in accordance with ASTM A153. Set anchor bolts by template only.

5. All miscellaneous steel, including all fasteners, chains, shackles, and u-bolts unless noted otherwise, shall be hot-dip galvanized. Galvanize items after fabrication. Stress relieve bends before galvanizing. Galvanizing damaged accidentally or due to field welding shall be restored with a field applied galvanizing compound.

6. Welding Electrodes: E70XX, Low Hydrogen

7. All welding shall be in accordance with the requirements of the structural welding code, D1.1 and D3.6, of the American Welding Association (AWS).

ALUMINUM ANODES

1. Cathodic protection for steel pipe piles and fender panels shall be 80 lb aluminum alloy. Dimensions shall conform to the general configuration shown on the Plans.

ALUMINUM GANGWAYS

1. The design and construction of the aluminum gangways shall be in accordance with the special provisions for the item "Aluminum Gangway". The Contractor's manufacturer shall design the gangways in accordance with the plans, specifications, and loads shown below.

2. Vertical Loads: Uniform Live Load 85 psf, Additional Dead Load 50 plf

3. Horizontal Loads: Wind - Transverse 50 plf, Wind - Longitudinal 12 plf

4. The minimum support seat width, measured perpendicular to the edge of the concrete support shall be 18 inches.

5. Handrail shall be designed for a concentrated horizontal load of 200 pounds acting at the center of the railing.

CONCRETE

1. Concrete basic design stresses shall be:
   - Fill for Pipe Piles: Class "A"
   - Cast-in-place (non): Class "LP"

2. Marine concrete shall contain 5.0 gal/cy of calcium corrosion inhibitor admixture.

3. Clearances for reinforcement shall be 2" unless otherwise noted.

4. Chamfer all concrete edges 1" @ 45° unless otherwise noted.

5. All reinforcing shall be fully supported on non-metallic approved chairs. Reinforcing shall not be supported on timber blocks, bricks, concrete blocks, miscellaneous rebar, etc.

6. Construction joints shall be made only as shown unless approved otherwise.

7. All existing concrete surfaces to receive concrete shall be roughened to a minimum amplitude of ¼" and coated with a product listed on the MaineDOT pre-qualified list of concrete bonding agents.

8. Wet curing of concrete is to begin within 30 minutes after concrete finishing, or as soon as possible without damaging finished surface.

9. All framework for concrete shall be left in place and concrete surfaces shall be covered and kept moist for a period of not less than seven (7) full days after concrete placements.

10. Contractor shall submit detailed reinforcing drawings including bar and bending schedules to the Engineer for review and approval prior to delivery of any reinforcing steel.

11. All ferrous metal handling/lifting devices and existing embedded metals/anchors no longer in use shall be recessed or removed to a depth of one inch below the surface of the concrete and patched with an approved polymer-modified cementitious mortar. Devices located in areas to be totally encased in cast-in-place concrete shall be galvanized. Devices located in areas not to be encased in cast-in-place concrete shall be stainless steel, unless otherwise noted.

STEEL REINFORCEMENT

1. Reinforcing Steel: ASTM A615 Grade 60, deformed, epoxy coated, unless noted otherwise

2. Rock Anchors: ASTM A722, Grade 150, deformed, with triple corrosion protection

3. Splicing of reinforcing steel is permitted. Stagger splices one splice length minimum. No more than 50 percent of the reinforcing steel shall be spliced at any location. Provide a minimum splice length of 50 bar diameters, unless noted otherwise on the drawings.

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February 15, 2019

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

PROJ. MANAGER	N. Wiley	P. Bishop	02/19
DESIGN DETAILED		C. Main	02/19
CHECKED BY			
QUALITY CK BY			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

1209
P.E. NUMBER

DATE

BASS HARBOR
FERRY TERMINAL

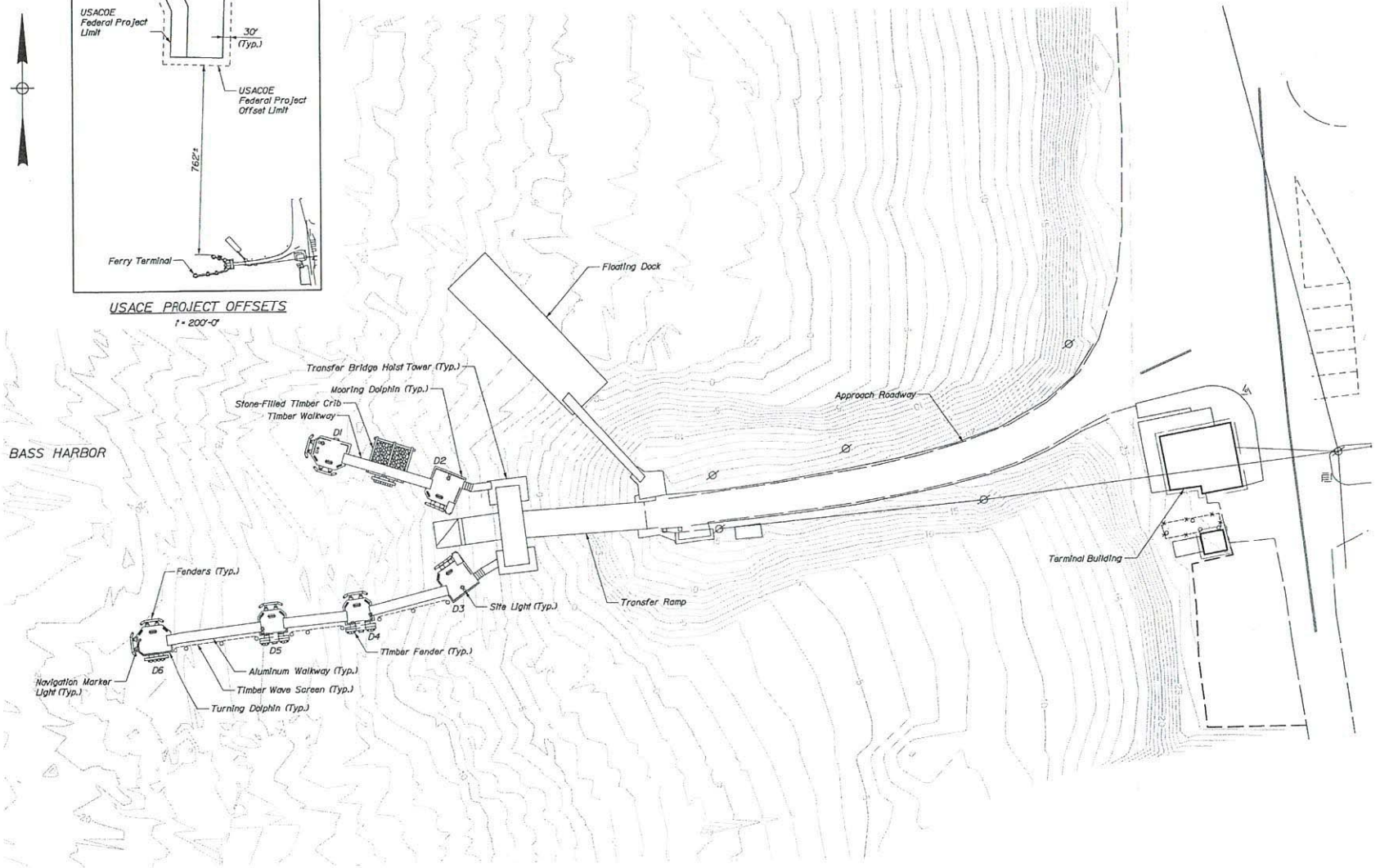
GENERAL NOTES AND DESIGN CRITERIA

SHEET NUMBER
G02
2 OF 17

Date: 2/15/2019
Username:
Division:
Filename: ...\02 CADD\002_GeneralNotes.dgn

USACE PROJECT OFFSETS

1" = 200'-0"



SITE PLAN

1" = 20'-0"

20 0 20 40

Scale of Feet

NOTES:

1. For existing electrical details, see Sheet E01.

2. USACOE project limit per https://www.nae.usace.army.mil/Missions/Navigation/Maine-Proje
Offset limit dimension determined by 3x water depth (mllw).

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February 15, 2019

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	N. Wiley	P. Bishop	02/18
CHECKED-REVIEWED		C. Mann	02/18
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

1229

P.E. NUMBER

DATE

BASS HARBOR
FERRY TERMINAL

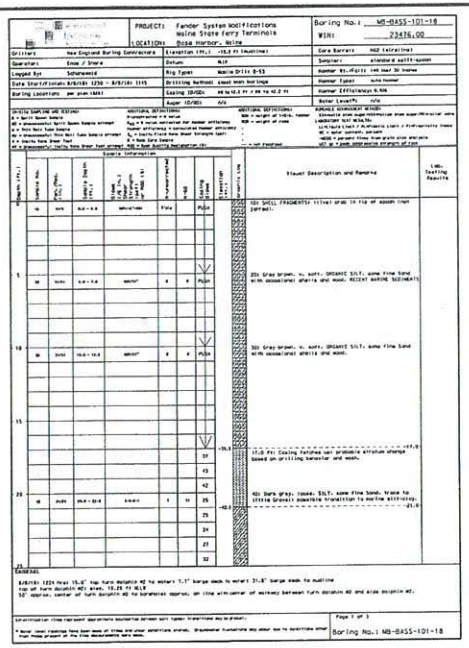
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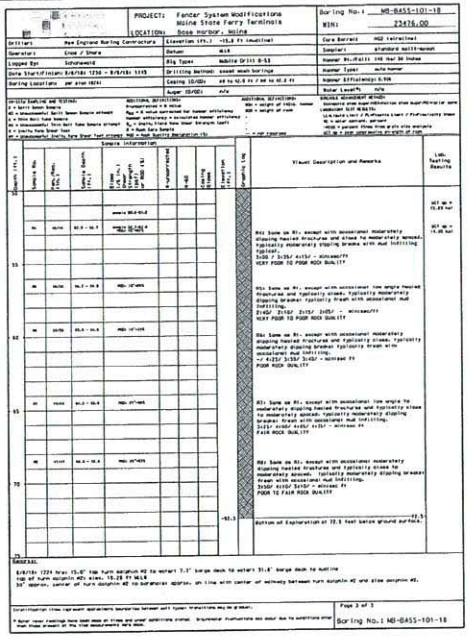
SHEET NUMBER

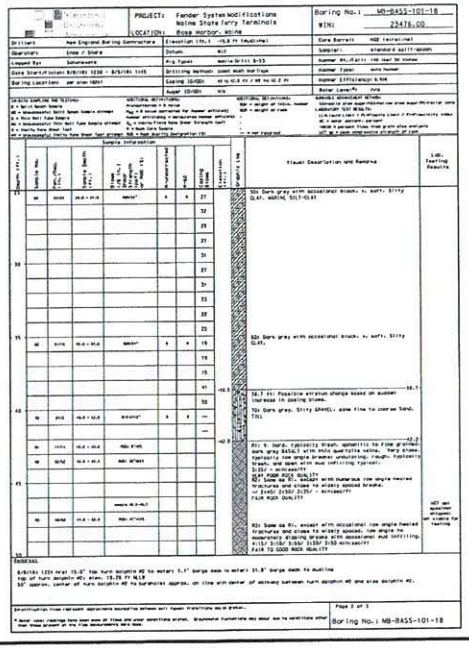
G03

3 OF 17

Filename: ...\003_Existing Conditions.dgn Division: Username: Date:2/15/2019







GEOTECHNICAL NOTES:

1. Soil classification, properties, and descriptions are based on engineering interpretation of available subsurface information by Schoenwald Engineering Associates, Inc. and may not necessarily reflect actual variations. In subsurface conditions that may be encountered between individual borings or sample locations.

2. Observed water levels and/or water conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall methods of exploration, and other factors.

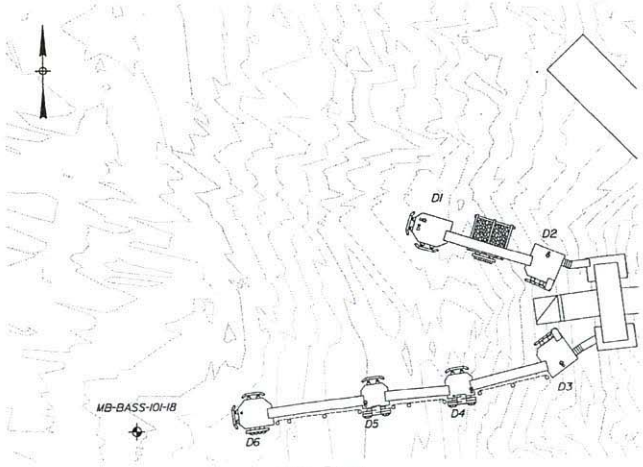
3. Sound engineering judgment was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and intended for MaineDOT design and estimate purposes only. Presentation of the information on these plans or elsewhere is for the purpose of providing intended users with access to the same data available to MaineDOT. The subsurface information is presented in good faith and is not intended as a substitute for additional explorations. Independent interpretations, independent analysis, or judgment by the Contractor.

4. Grid north on the North American Datum 1983 (NAD83).

5. Tidal datum is Mean Lower Low Water (MLLW).

BORING COORDINATES		
Location	Northing	Easting
MB-BASS-101-18	207089.81	1023740.02

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February 15, 2019



KEY PLAN
N.T.S.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

BASS HARBOR
FERRY TERMINAL

BORING LOGS

	PROJ. MANAGER	BY	DATE
DESIGN DETAILED	N. Riley	P. Bishop	01/18
DESIGN DETAILED		C. Sam	01/18
DESIGN DETAILED			SIGNATURE
DESIGN DETAILED			10259
			P.E. NUMBER
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			DATE
REVISIONS 4			
FIELD CHANGES			

SHEET NUMBER
G04
4 OF 17

Filename: ...\02 CADD\004_Boring Logs.dgn Division: Username: Date:2/15/2019

EXISTING D1		
LOCATION	NORTHING	EASTING
A	207178.93	1023857.59
B	207174.79	1023871.95
C	207166.18	1023869.39
D	207164.47	1023865.22
E	207166.69	1023857.77
F	207170.86	1023855.26

EXISTING D2		
LOCATION	NORTHING	EASTING
A	207165.68	1023906.03
B	207160.60	1023918.36
C	207148.44	1023913.05
D	207153.54	1023900.77

EXISTING D3		
LOCATION	NORTHING	EASTING
A	207129.11	1023915.84
B	207118.50	1023923.39
C	207110.74	1023912.78
D	207121.52	1023905.10

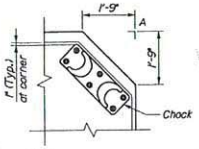
EXISTING D4		
LOCATION	NORTHING	EASTING
A	207113.34	1023879.07
B	207103.86	1023880.71
C	207102.15	1023869.20
D	207111.72	1023867.72

EXISTING D5		
LOCATION	NORTHING	EASTING
A	207109.10	1023844.55
B	207099.57	1023845.44
C	207098.35	1023834.01
D	207107.88	1023832.93

EXISTING D6		
LOCATION	NORTHING	EASTING
A	207103.20	1023792.75
B	207100.34	1023796.41
C	207092.19	1023797.55
D	207090.58	1023785.02
E	207098.70	1023782.02
F	207102.32	1023784.80

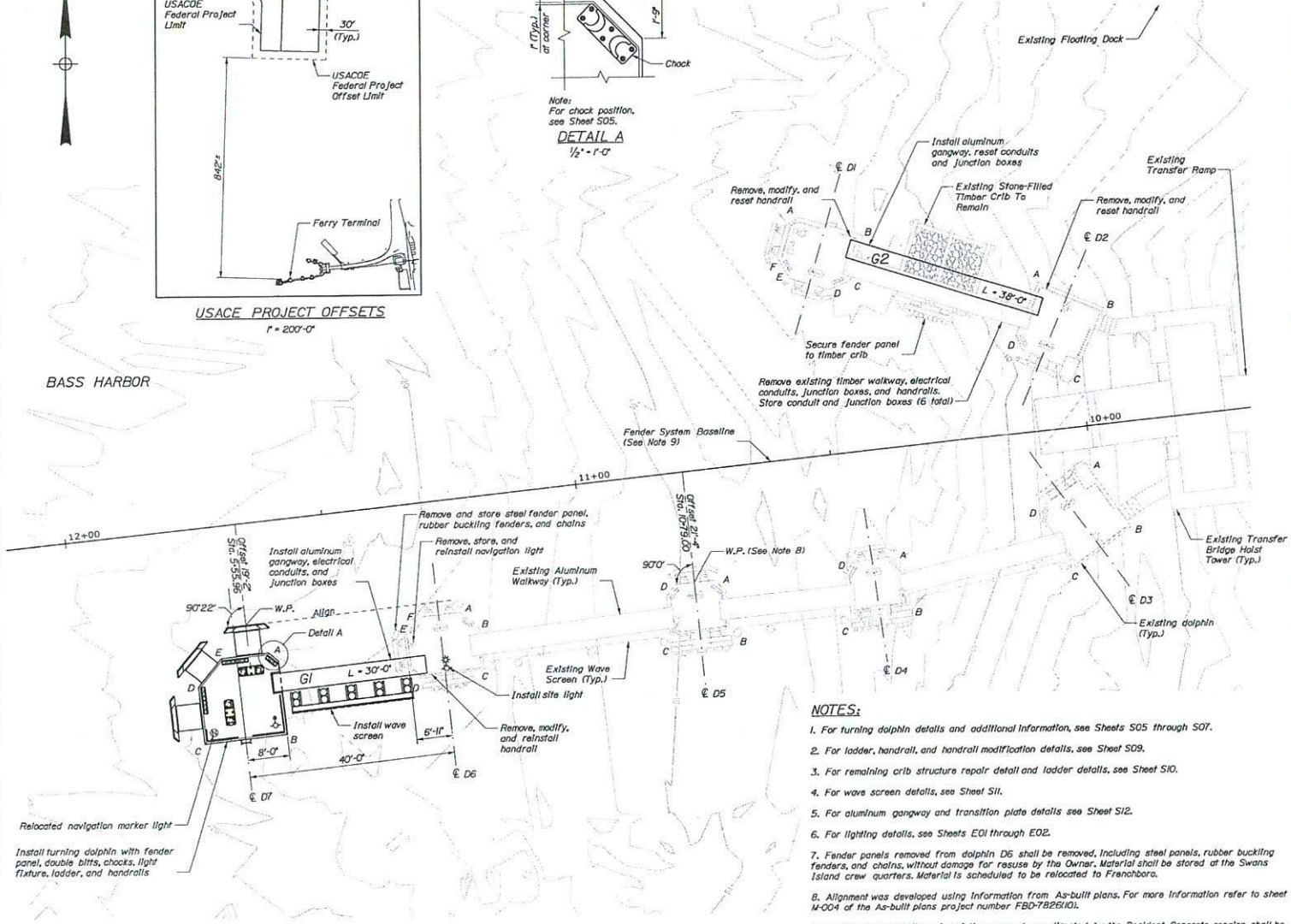
PROPOSED D7		
LOCATION	NORTHING	EASTING
A	207096.01	1023757.19
B	207080.11	1023758.96
C	207078.34	1023743.05
D	207089.28	1023741.84
E	207094.80	1023746.26

USACE PROJECT OFFSETS
1" = 200'-0"



Note:
For chock position, see Sheet S05.

DETAIL A
½" = 1'-0"



SITE PLAN
1" = 10'-0"

10 0 10 20
Scale of Feet

NOTES:

1. For turning dolphin details and additional information, see Sheets S05 through S07.
2. For ladder, handrail, and handrail modification details, see Sheet S09.
3. For remaining crib structure repair detail and ladder details, see Sheet S10.
4. For wave screen details, see Sheet S11.
5. For aluminum gangway and transition plate details see Sheet S12.
6. For lighting details, see Sheets E01 through E02.
7. Fender panels removed from dolphin D6 shall be removed, including steel panels, rubber buckling fenders, and chains, without damage for resuse by the Owner. Material shall be stored at the Swans Island crew quarters. Material is scheduled to be relocated to Frenchboro.
8. Alignment was developed using information from As-built plans. For more information refer to sheet M-004 of the As-built plans project number FBD-7826(10).
9. The Contractor shall repair existing concrete as directed by the Resident. Concrete repairs shall be measured for payment under pay items, 518.50, 518.51, and 518.60, Repair of Upward Facing Surfaces - Reinforcing Steel < 8 inches, Repair of Upward Facing Surfaces - below Reinforcing Steel, and Repair of Vertical Surfaces < 8 inches, respectively.

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February 15, 2019

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

PROJ. MANAGER		BY	DATE
DESIGN DETAILED	N. Wiley	P. Sipos	02/19
DESIGN DETAILED		C. Bard	02/19
DESIGN DETAILED			
DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
M288
P.E. NUMBER
DATE

BASS HARBOR
FERRY TERMINAL

SITE PLAN

SHEET NUMBER
S01
5 OF 17

Filename: ...\02 CAD\005_Site Plan.dgn Division: Username: Date:2/15/2019

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		PROJ. MANAGER	N. Haley			
		CHECKED-REVIEWED				
		DESIGNED-DETAILED				
		DESIGNED-DETAILED				
		REVISIONS 1				
		REVISIONS 2				
		REVISIONS 3				
		REVISIONS 4				
		FIELD CHANGES				
P.E. NUMBER 10209	SIGNATURE	C. Wohn	02\19	P. Bishop	02\19	DATE
WIN WIN 023476.00						

BASS HARBOR
FERRY TERMINAL

BERTH PLAN

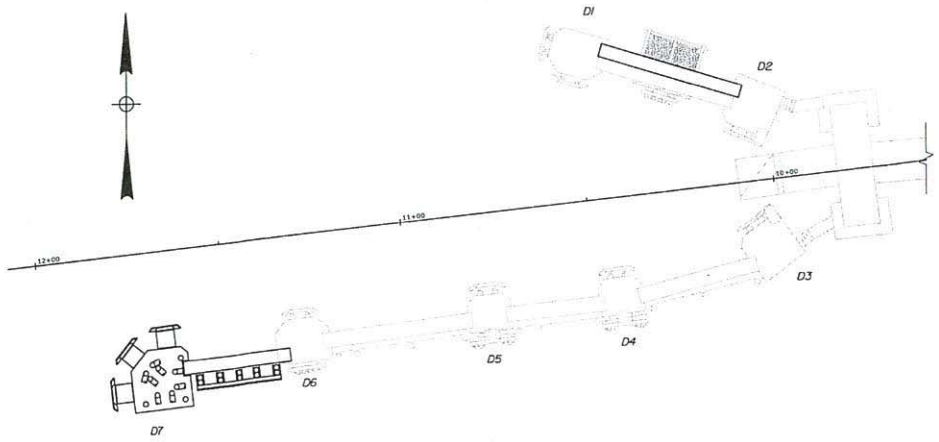
SHEET NUMBER S02 6 OF 17

HNTB

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February 15, 2019

NOTES:
1. MV. Captain Henry Lee is currently in operation. New ferry is proposed. Margret Chase Smith is shown for comparative purposes.

Filename: ...\02 CADD\006_Berth Plan.dgn Division: Username: Date:2/15/2019



PLAN

STEEL PIPE PILE TABLE			
	Pile No.	Estimated Pile Length	Vertical or Batter (Rise/Run)
Turning Dolphin DF	1	80	Vert.
	2	85	Batter 4:12
	3	85	Batter 4:12
	4	80	Vert.
	5	85	Batter 4:12
	6	85	Batter 4:12
	7	80	Vert.
	8	85	Batter 4:12
	9	85	Batter 4:12
	10	82	Batter 2:12
	11	82	Batter 2:12

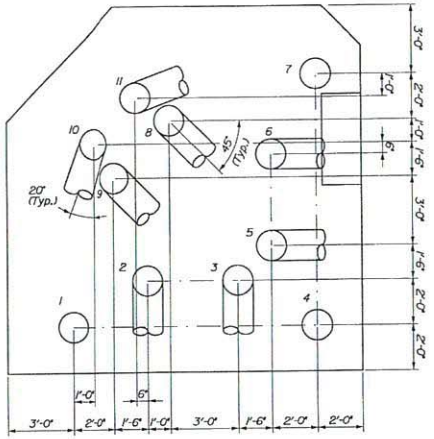
Pile Load Schedule	
Max. Design Load - Compression (LRFD):	588 kips
Max. Design Load - Tension (LRFD):	155 kips
Req. Ultimate Pile Capacity Compression (LRFD):	687 kips
Req. Ultimate Rock Anchor Capacity Tension (ASD):	361 kips
Rock Anchor Proof Load (LRFD):	213 kips
Rock Anchor Lock Off Load (LFRD):	176 kips

NOTES:

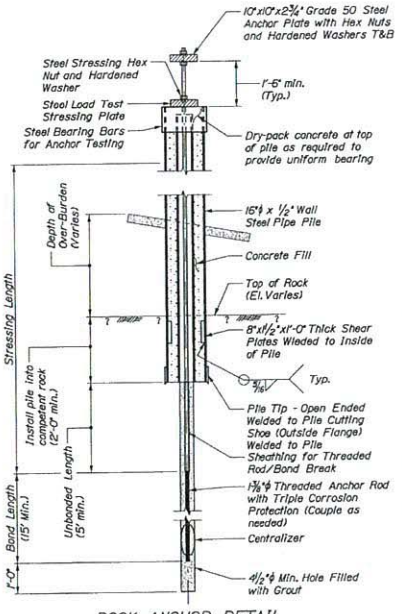
1. A length of 5' has been included for contingency to each estimated pile length to determine order length.
2. All steel pipe piles shall have rock anchors. For rock anchors, see detail.
3. All steel pipe piles shall have aluminum anodes.
4. Overburden and rock materials removed during pile installation activities shall be disposed in accordance with Special Provision 203.
5. For anode details, see Sheet S04.
6. Pile splices shall not be allowed without prior approval of the Engineer of Record (EOR). Pile splices approved by the EOR and installed by the Contractor to achieve the installed pile length as noted herin shall be incidental to pay Item 501.241, Steel Pipe Piles In-Place. If the estimated pile length is less than the required length due to varying field conditions then the Contractor shall submit for approval a request to splice the piles which shall be paid under 501.91, Pile Splices.

PILE AND ROCK ANCHOR SUGGESTED CONSTRUCTION SEQUENCE:

1. Advance pipe pile open ended with cutting shoe to the top of or near top of bedrock. Drive to required ultimate capacity (see pile schedule). Advance pipe pile into competent rock.
2. Pile shall be cut off at final top elevation to perform anchor load test. Refer to structural drawings for top of pile elevations.
3. Install casing with centralizers as required to top of soil plug inside the pipe pile. Advance sacrificial casing until it is seated in bedrock or refusal of the casing is achieved.
4. Insert rock anchor drill casing and drill bit into sacrificial casing and drill anchor hole. Minimum length of anchor hole bond zone per the detail.
5. Clean and flush rock cuttings from socket. Do not allow drill cuttings to enter the pipe pile.
6. Install double corrosion protected anchor, anchor with centralizers.
7. Install 5,000 psi cement grout inside of anchor hole and casing using tremie tube. Place 5,000 psi concrete Class "A" between casing and pipe piles to 7.5 feet below top of finish pile elevation.
8. Install two grade 50 bearing stress plates at top of pile.
9. Install load test stressing plate.
10. Verify that pile head is restrained from moving laterally by fixing the pile head to the driving template, falsework or other appropriate means.
11. Perform rock anchor proof test to 133% of the design load (See pile schedule).
12. Lock off rock anchor at 110% of the dead load (See pile schedule).
13. Install anchor plate at top of anchor with hex nuts and hardened washers, top and bottom.
14. Proceed with dolphin construction.



D7 FOUNDATION PLAN
(Dimensions shown at pile cut-off elevation)
3/8" = 1'-0"



ROCK ANCHOR DETAIL
½" = 1'-0"

98% PS&E
February 15, 2019

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

BASS HARBOR
FERRY TERMINAL

DOLPHIN
FOUNDATION PLAN

	PROJ. MANAGER	BY	DATE
DESIGN DETAILED	N. Wiley	P. Bishop	02/19
CHECKED - REVIEWED		C. Morin	02/19
DESIGN - DETAILED			
DESIGN - CHECKED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

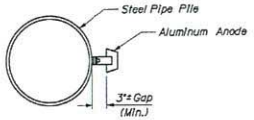
12209
P.E. NUMBER

DATE

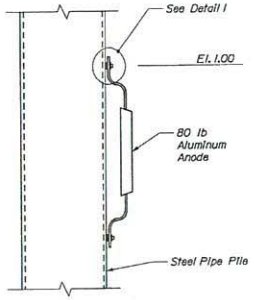
SHEET NUMBER
S03
7 OF 17

Filename: ...\007_Dolphin Foundation Plan.dgn Division: Username: Date:2/15/2019

313



PLAN

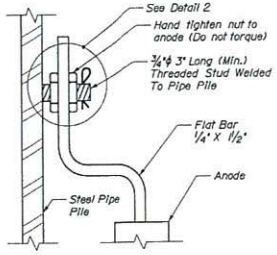


ELEVATION

Note: Anode shall be positioned along the inshore face of piles.

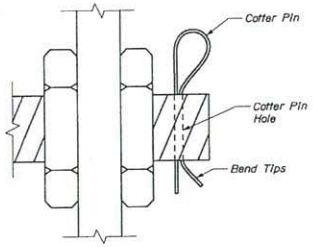
ANODE DETAIL

N.T.S.



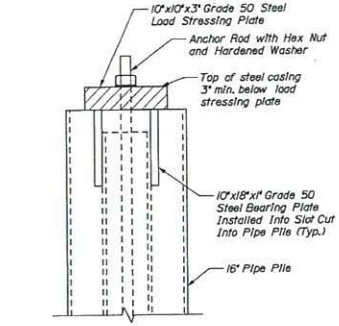
DETAIL 1

N.T.S.



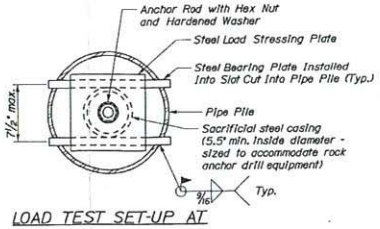
DETAIL 2

N.T.S.



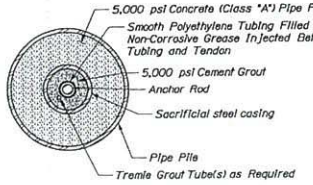
PILE LOAD TESTING DETAIL

N.T.S.



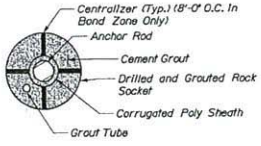
LOAD TEST SET-UP AT TOP OF PILES DETAIL

N.T.S.



ROCK ANCHOR SECTION (UNBONDED ZONE)

N.T.S.



ROCK ANCHOR SECTION (BOND ZONE)

N.T.S.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

PROJ. MANAGER	N. Riley		
DESIGN REVIEW		C. Bibb	02/19
CHECKED/REVIEWED		C. Bibb	02/19
DESIGN DETAILED			
DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

ENTER NUMBER

P.E. NUMBER

DATE

BASS HARBOR
FERRY TERMINAL

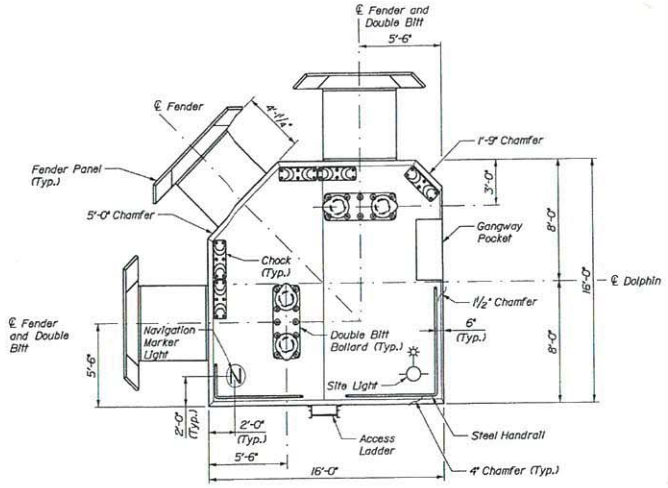
DOLPHIN FOUNDATION DETAILS

SHEET NUMBER

S04

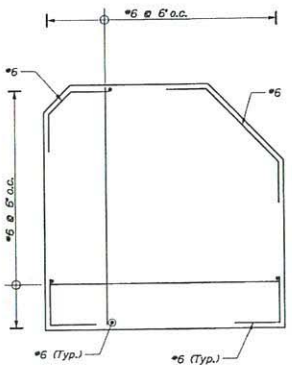
OF 17

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TURNING DOLPHIN PLAN

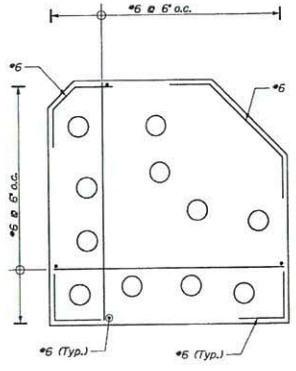
1/4" = 1'-0"



SECTION A-A

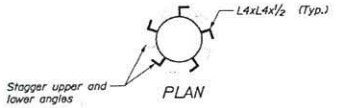
(Same as shown for El. 9.50 and down, but with pile cutouts)

1/4" = 1'-0"

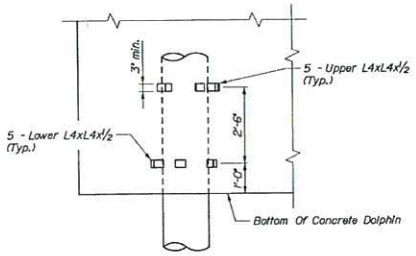


SECTION B-B

1/4" = 1'-0"



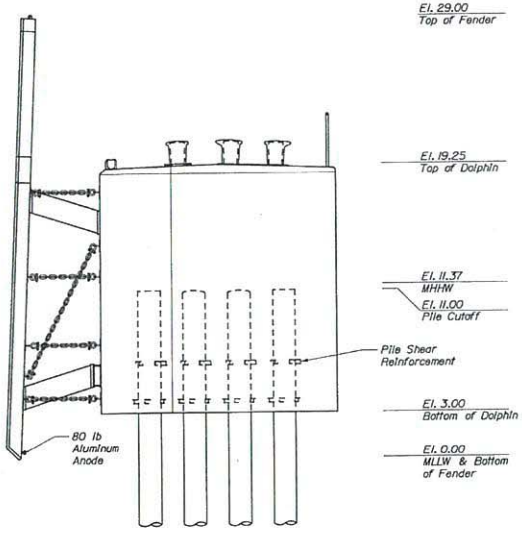
PLAN



ELEVATION

PILE SHEAR REINFORCEMENT

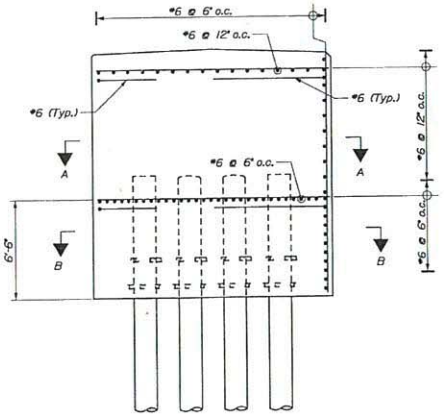
½" = 1'-0"



TURNING DOLPHIN ELEVATION

(Light, additional fenders, and chocks not shown for clarity)

1/4" = 1'-0"



TURNING DOLPHIN REINFORCING PLAN

1/4" = 1'-0"

NOTES:

1. For anode details, see Sheet S04.
2. For double bitt and chock details, see Sheet S06.
3. For access ladder and handrail details, see Sheet S09.
4. For gangway pocket and transition plate detail, see Sheet S12.
5. All reinforcing shall maintain 2" clear from piles and 3" clear of concrete surfaces.
6. Reinforcing bars shall be adjusted to maintain 1" clear from anchor rods.

98% PS&E
February 15, 2019

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

PROJ. MANAGER		BY	DATE
DESIGN DETAILED	N. Riley	P. Bishop	02/19
CHECKED/REVIEWED		C. Morin	02/19
DESIGN DETAIL [02]			
DESIGN DETAIL [03]			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

KDDB

P.E. NUMBER

DATE

BASS HARBOR
FERRY TERMINAL

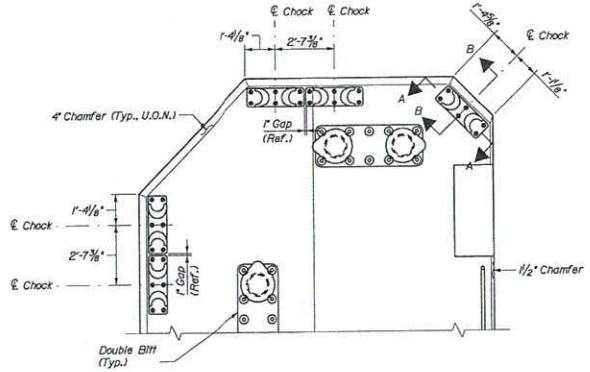
DOLPHIN PLAN, ELEVATION, AND DETAILS

SHEET NUMBER

S05

9 OF 17

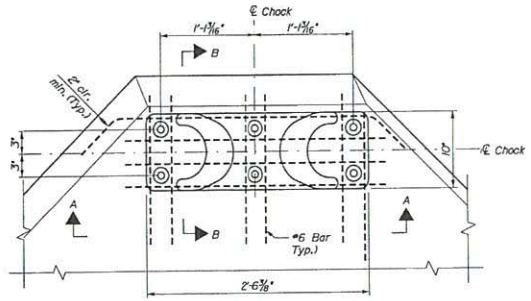
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PLAN VIEW OF DOLPHIN

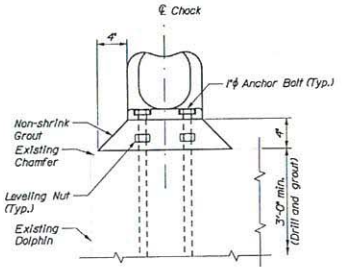
(Hand rails, lights, and fenders not shown for clarity)

3/8" = 1'-0"



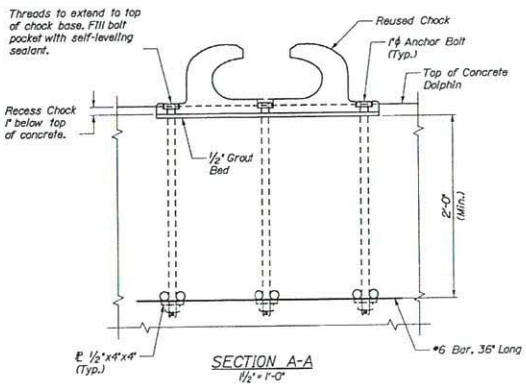
CHOCK PLAN AT CHAMFER

1 1/2" = 1'-0"



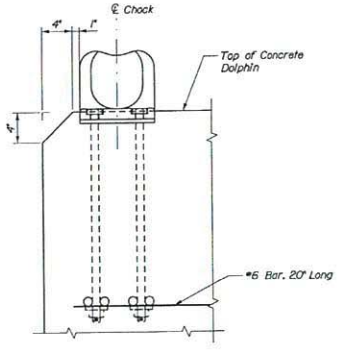
EXISTING CONCRETE CHOCK DETAIL

1 1/2" = 1'-0"



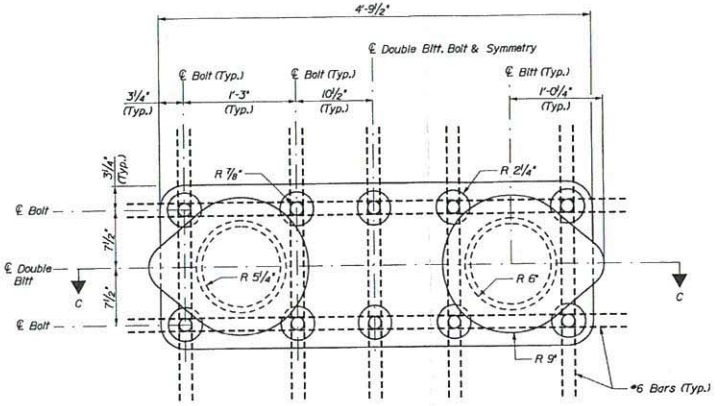
SECTION A-A

1 1/2" = 1'-0"



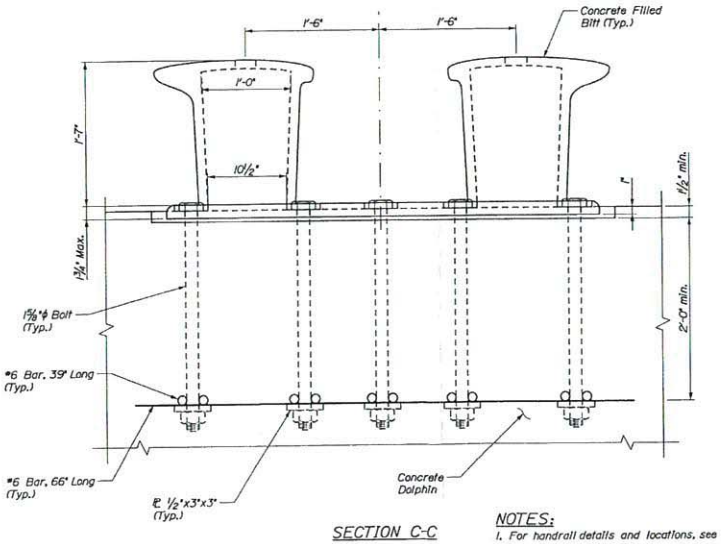
SECTION B-B

1 1/2" = 1'-0"



DOUBLE BITT PLAN

1 1/2" = 1'-0"



SECTION C-C

1 1/2" = 1'-0"

NOTES:

1. For handrail details and locations, see Sheet S09.
2. For gangway pocket dimensions, see Sheet S12.

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February 15, 2019

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

	BY	DATE
PROJ MANAGER		
DESIGN DETAILED	N. Wiley	12/19
CHECKED DETAILED	P. Bibbo	12/19
DESIGN QUALITY CONTROL	C. Berry	12/19
ESTIMATED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

12289
P.E. NUMBER

DATE

BASS HARBOR
FERRY TERMINAL

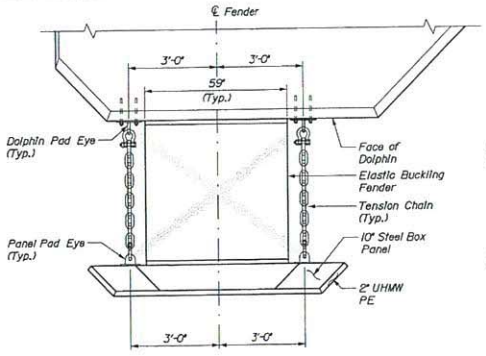
DOLPHIN DETAILS
MOORING HARDWARE

SHEET NUMBER

S06

10 OF 17

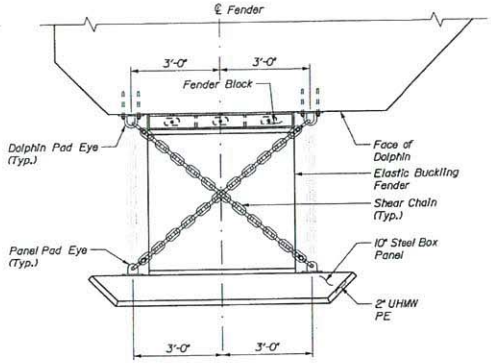
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PLAN - TYPE I TOP OF FENDER PANEL

(D7 Pen facing fender shown, others similar)

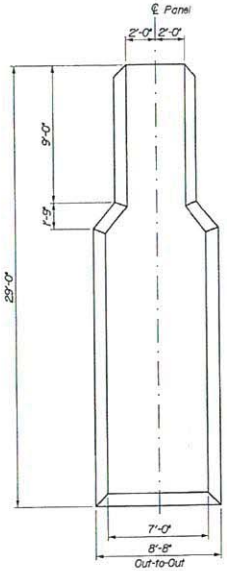
1/2" = 1'-0"



PLAN - TYPE I BOTTOM OF FENDER PANEL

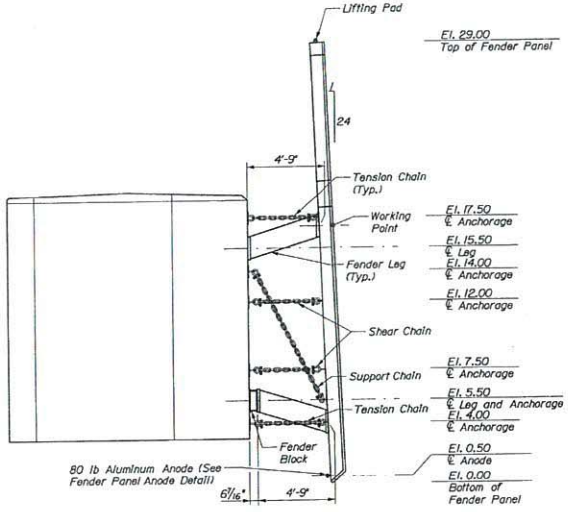
(D7 Pen facing fender shown, others similar)

1/2" = 1'-0"



TYPE I PANEL

1/4" = 1'-0"



ELEVATION - TYPE I PANEL

(Foundation piles and hardware not shown for clarity)

1/4" = 1'-0"

NOTES:

1. Contractor shall use fender plate or fender block detail to maintain proposed fender panel alignment.

2. For fender block, panel pad eye, panel anode, dolphin pad eye and spacer plate details, see Sheet S08.

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February 15, 2019

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

PROJ. MANAGER
DESIGN DETAILED K. Wiley
CHECKED-REVIEWED
DESIGN DETAILED
DESIGN DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

BY
P. Bishop
C. Bryan

DATE
02/18
02/18

SIGNATURE
12209
P.E. NUMBER
DATE

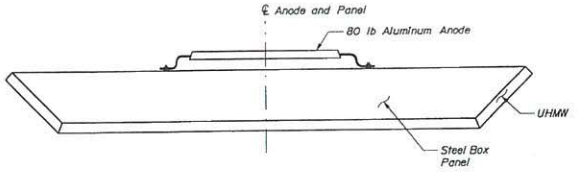
BASS HARBOR
FERRY TERMINAL

DOLPHIN DETAILS
FENDER SYSTEM I

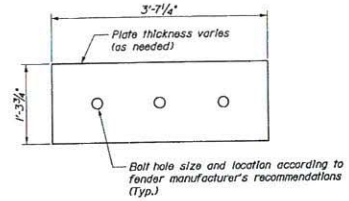
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S07
11 OF 17

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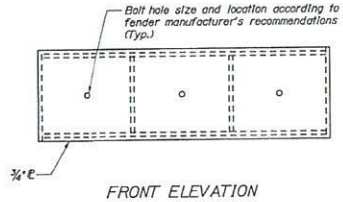
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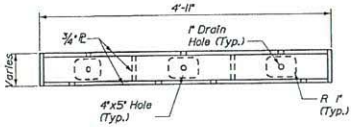
FENDER PANEL ANODE DETAIL



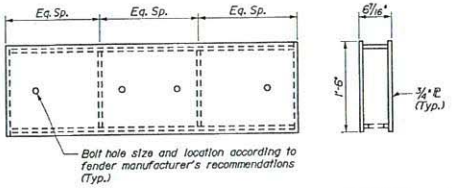
TYPE I PANEL SPACER PLATE DETAIL
1" = 1'-0"



FRONT ELEVATION



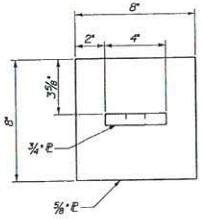
PLAN

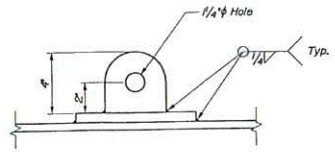


BACK ELEVATION

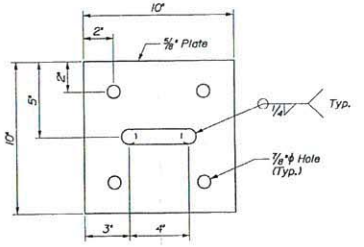
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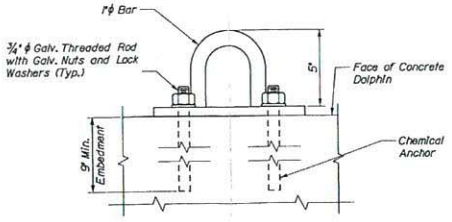
STEEL FENDER BLOCK
1" = 1'-0"





PANEL PAD EYE DETAIL
3" = 1'-0"





DOLPHIN PAD EYE DETAIL
3" = 1'-0"

NOTES:
1. For anode attachment details, see Sheet S04.
2. For additional details on chock setting, see Sheet S06.

98% PS&E
February 15, 2019

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

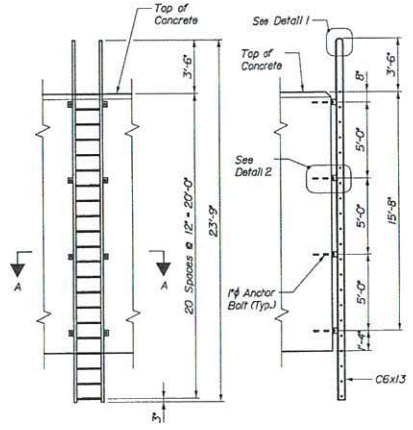
		By	Date
PROJ. MANAGER			
DESIGN-DETAILED	N. Wiley	P. Bishop	2/7/19
CHECKED-REVIEWED		C. Mayer	2/8/19
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
12209
P.E. NUMBER
DATE

BASS HARBOR
FERRY TERMINAL

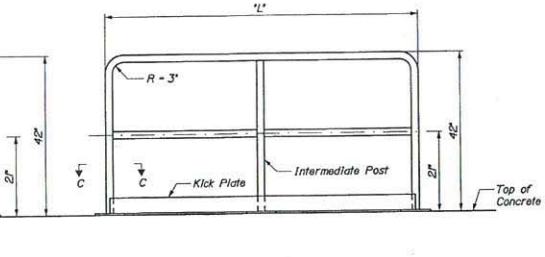
DOLPHIN DETAILS
FENDER SYSTEM II

SHEET NUMBER
S08
12 OF 17



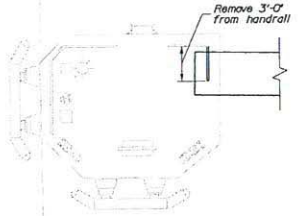
ELEVATION SECTION

DOLPHIN ACCESS LADDER
1/4" = 1'-0"

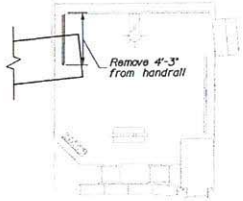


Type 1 Type 2

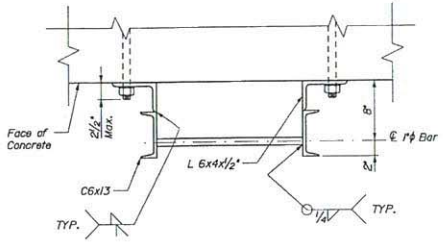
HANDRAIL DETAIL
1" = 1'-0"



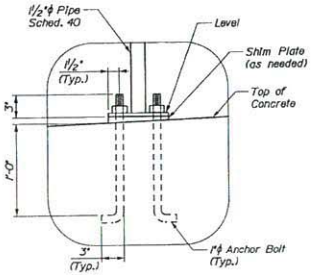
D1 HANDRAIL MODIFICATION PLAN
1" = 5'-0"



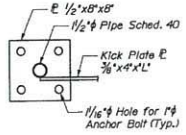
D2 HANDRAIL MODIFICATION PLAN
1" = 5'-0"



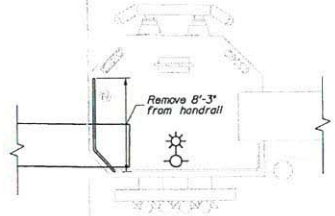
SECTION A-A
1½" = 1'-0"



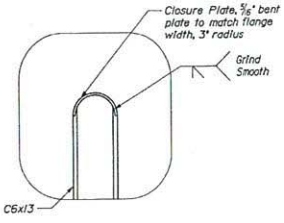
DETAIL 3
(Applies to all railing mounting locations. Kick plate not shown for clarity)
1½" = 1'-0"



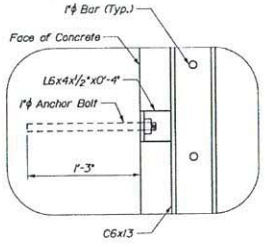
SECTION B-B
1½" = 1'-0"



D6 HANDRAIL MODIFICATION PLAN
1" = 5'-0"



DETAIL 1
(Typical for all ladders)
1½" = 1'-0"

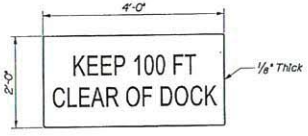


DETAIL 2
(Typical all ladder mounting locations)
1½" = 1'-0"

TABLE 1
HANDRAIL SUMMARY TABLE

Dolphin	Location	Identification
D7	SE	T2 - 13'-2" - 3
D7	SW	T2 - 8'-4" - 2

Railing Identification: T2 - L - X
Type — Length — Inter. Post Quantity



SIGN DETAIL
¾" = 1'-0"

NOTES:

1. The panel mounted access ladder shall be designed by the Contractor for a 350 Lb concentrated vertical load acting at any point on the ladder. The ladder shall conform with all applicable provisions of OSHA regulations for laddders and with dimensions shown on the drawings. The ladder assembly shall be hot-dip galvanized after fabrication.
2. Where handrail posts or line guard anchorages are removed, fill with Sika Flex 1A self leveling sealant, or approved equal.
3. Contractor shall grind smooth and cap ends of cut handrails.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

BASS HARBOR
FERRY TERMINAL

DOLPHIN DETAILS
MISCELLANEOUS I

	BY	DATE
PROJ. MANAGER	K. Wiley	
DESIGN DETAILED		
CHECKED DETAILED	P. Bishop	02/19
QUALITY REVIEW	L. Ware	02/19
DESIGN DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

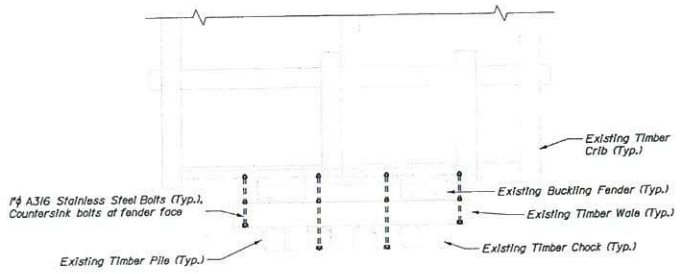
SIGNATURE

P.E. NUMBER
12059

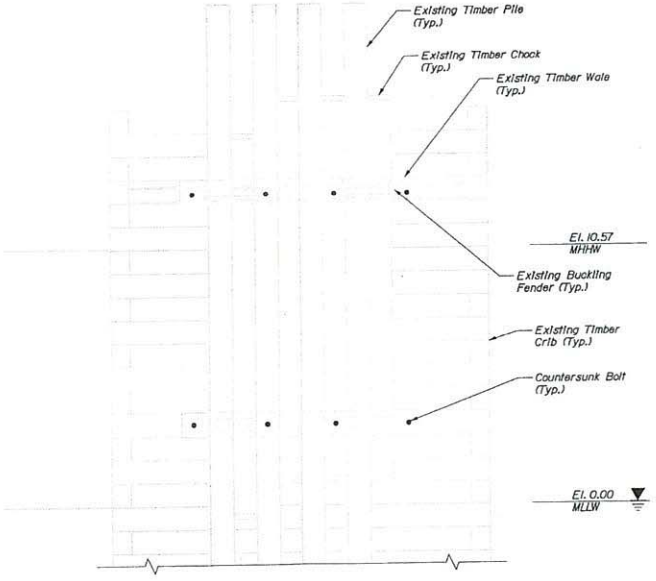
DATE

SHEET NUMBER
S09
13 OF 17

Filename: ...\013_Miscellaneous Details 1.dgn Division: Username: Date: 2/15/2019



REMAINING CRIB STRUCTURE REPAIR PLAN
3/8" = 1'-0"



REMAINING CRIB STRUCTURE REPAIR ELEVATION
3/8" = 1'-0"

NOTES:
1. Bolts drilled through the lower fender attachment may be angled to avoid rock fill.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

	BY	DATE
PROJ. MANAGER		
DESIGN DETAILED	N. Miller	02/19
CHECKED BY	P. Blake	02/19
DESIGN DETAILED	C. Sayer	02/19
DESIGN DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER
10206

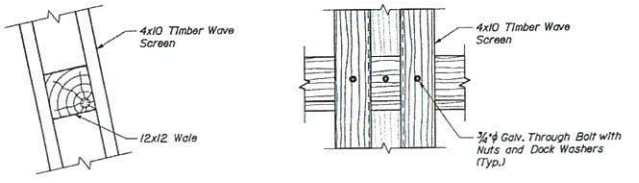
DATE

BASS HARBOR
FERRY TERMINAL

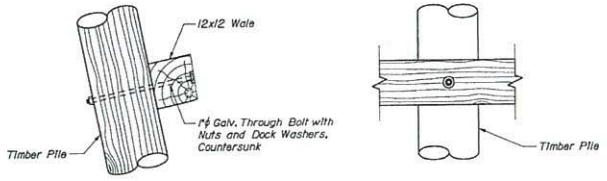
DOLPHIN DETAILS
MISCELLANEOUS II

SHEET NUMBER
S10
14 OF 17

Filename: ...\104_Miscellaneous Details II.dgn Division: Username: Date:2/15/2019



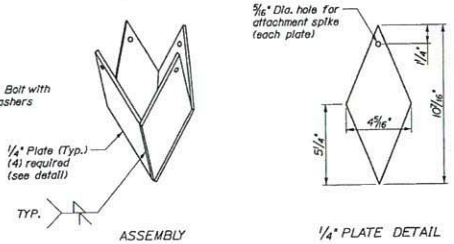
SCREEN CONNECTIONS



WALE CONNECTIONS

WAVE SCREEN CONNECTIONS

¾" = 1'-0"



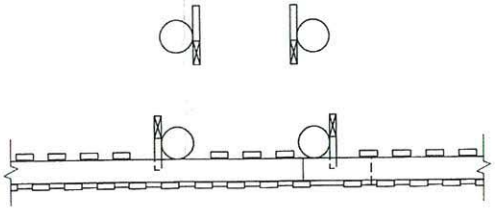
ASSEMBLY

¼" PLATE DETAIL

Note: Dimensions shown similar to pile point manufactured by Associated Pile & Fitting

TIMBER PILE POINT DETAIL

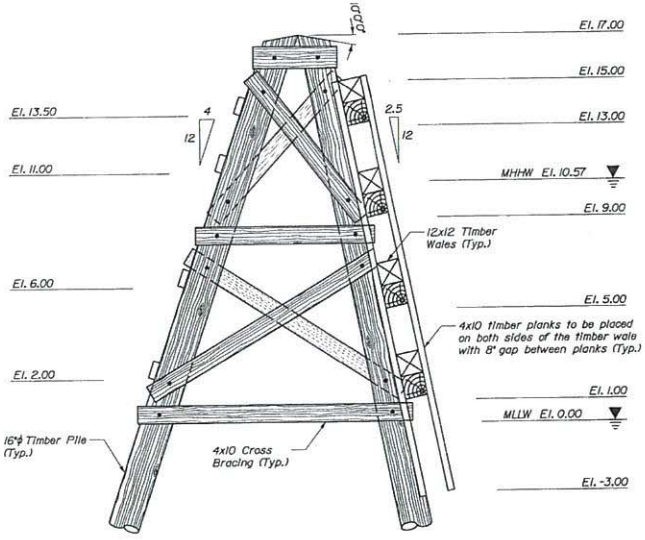
3" = 1'-0"



WAVE SCREEN PLAN VIEW

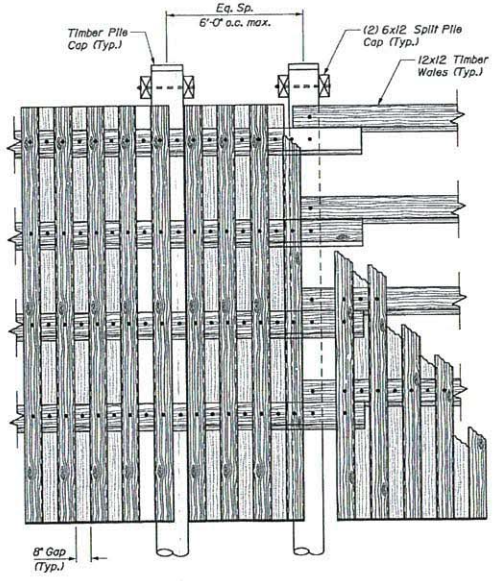
(View shown at El. 11.00)

⅜" = 1'-0"



WAVE SCREEN END ELEVATION

⅜" = 1'-0"



WAVE SCREEN FRONT ELEVATION

⅜" = 1'-0"

NOTES:

1. All bolts are 1" dia. galv. with nuts and dock washers, except where noted.
2. All timber associated with wave screen shall be 2.5 cca treated.
3. All timber vertical and batter piles shall have a driven capacity of 16 tons or a minimum embedment length of 20 feet. See timber pile point detail.
4. All timber battered piles for wave screens shall be installed at a batter of 4 horiz. on 12 vert. except for the slip side piles which shall have a batter of 2.5 horiz. on 12 vert.
5. Timber shall be southern pine with a stress rating of 1,200 psi. Timber shall be pressure treated in accordance with the specifications.
6. All timber construction shall conform to the national design specification for wood construction of the American Forest and Paper Association.
7. All connections shall be made with ¾"ϕ ASTM A325, type I galvanized bolts and 13/16"ϕ holes and shall have washers on both ends, unless otherwise noted.
8. Field treat all cut and drilled timber surfaces with two coats of preservative containing copper napthanate solution (min. 2% metallic solution) per specifications.
9. Wave screens shall be 6" minimum clear from dolphins.

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February 15, 2019

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	N. Wiley	J. Bishop	02/19
DESIGN-DETAILED		C. Wiley	02/19
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

12095
P.E. NUMBER

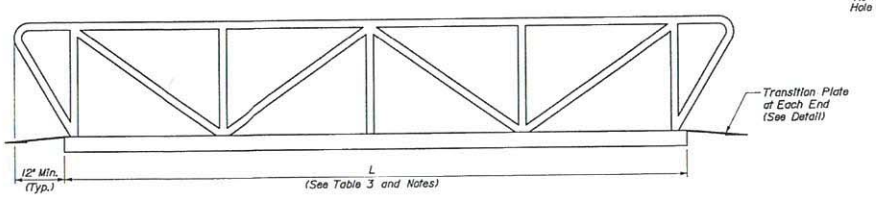
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BASS HARBOR
FERRY TERMINAL

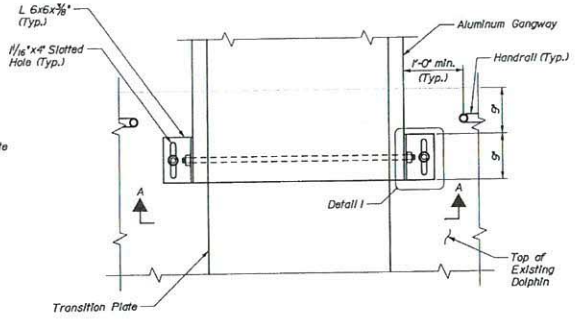
WAVE SCREEN
PLAN AND ELEVATION

SHEET NUMBER
S11
15 OF 17

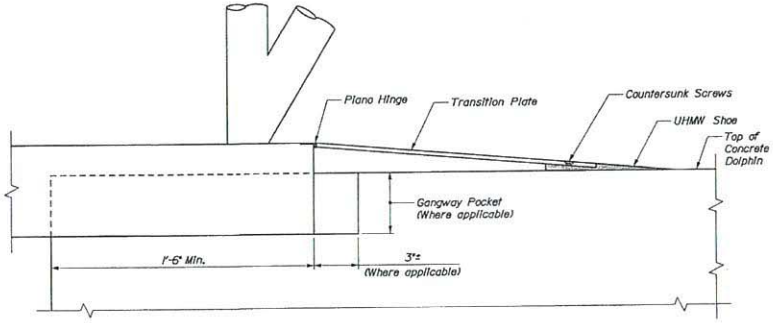
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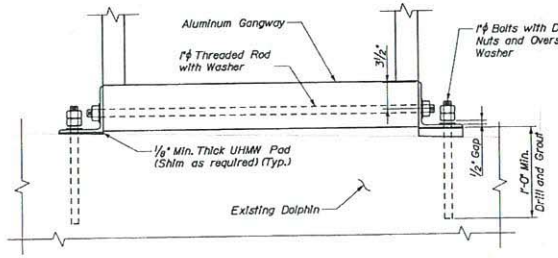
GANGWAY ELEVATION
(Schematically Shown)
1/2" = 1'-0"



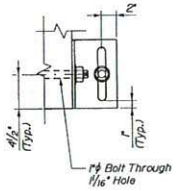
DOLPHIN GANGWAY CONNECTION
(Existing Dolphin shown, proposed Dolphin similar)
1" = 1'-0"



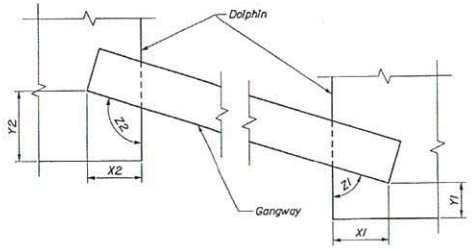
TRANSITION PLATE DETAIL
3" = 1'-0"



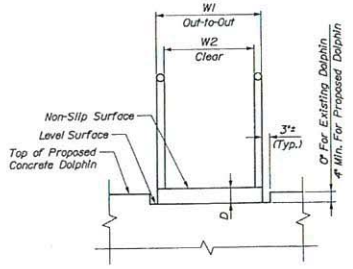
SECTION A-A
1 1/2" = 1'-0"



DETAIL I
1 1/2" = 1'-0"



GANGWAY LAYOUT
N.T.S.



PROPOSED DOLPHIN GANGWAY TYPICAL SECTION
1/2" = 1'-0"

TABLE 1
GANGWAY DIMENSIONS

	Dimensions											
Gangway I.D.	W1	W2	D	L	Dolphin 1	X1	Y1	Z1	Dolphin 2	X2	Y2	Z2
G1	42"	36"	6"	30'-0"	D6	2'-2"	0'-10"	45°40'	D7	1'-6"	8'-0"	90°0'
G2	42"	36"	6"	38'-0"	D2	2'-0"	2'-6"	83°31'	D1	2'-0"	1'-6"	89°34'

NOTES:

1. See Sheet G02 for design loads.
2. Gangway shall be truss type constructed, fabricated of aluminum grade 6061-T6 marine alloy.
3. Gangway length shall be confirmed or adjusted once dolphins are constructed.
4. Contractor shall field verify dimensions of dolphins for pocket sizes and distances between dolphins.
5. Install bolt through gangway prior to installing bolts into existing concrete.
6. Contractor shall provide shims at gangway ends as required.

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February 15, 2019

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

PROJ MANAGER		BY	DATE
DESIGN-DETAILED	K. Wiley	P. Bishop	02/19
CHECKED-REVIEWED		C. Marin	02/19
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

12099
P.E. NUMBER

DATE

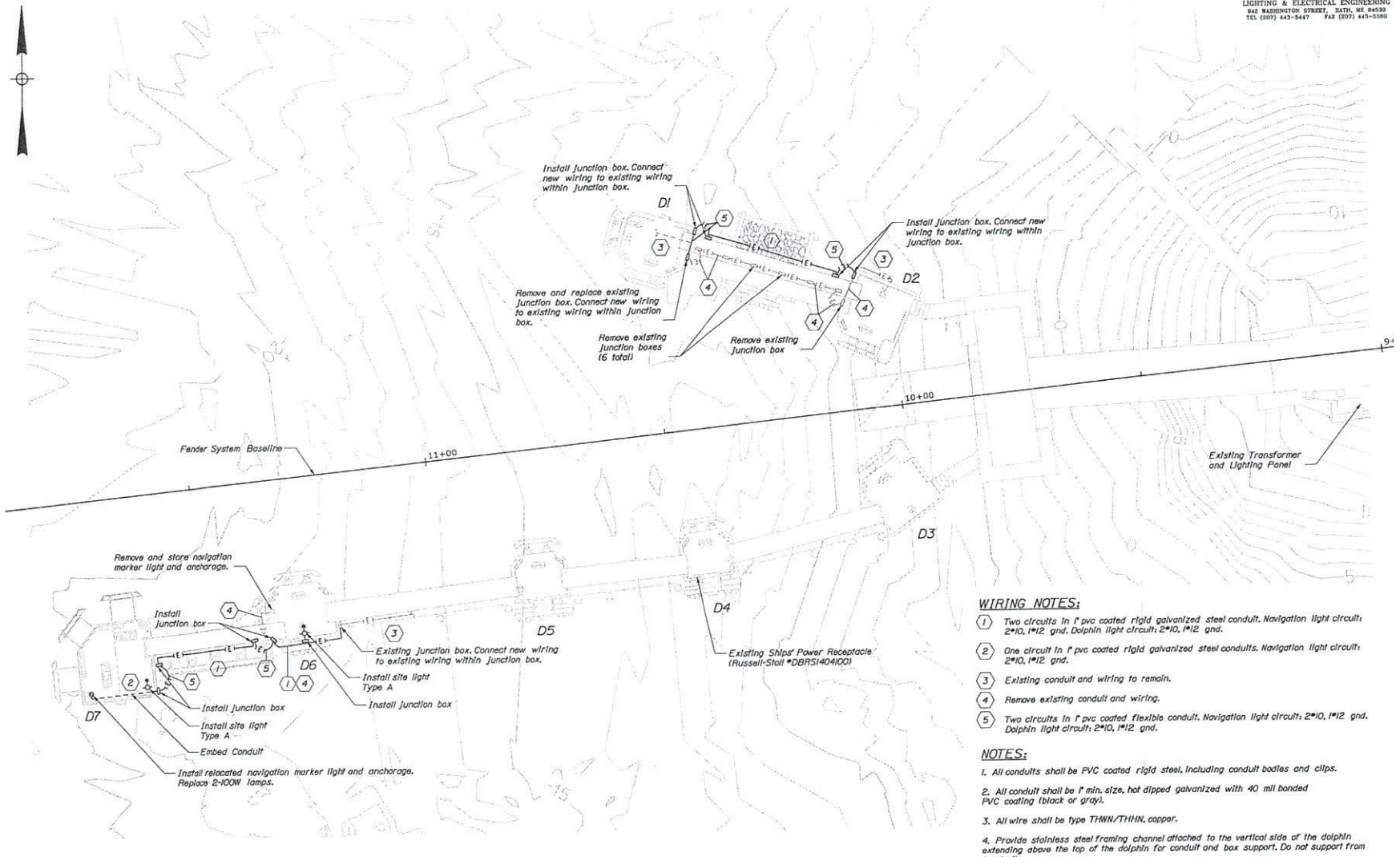
BASS HARBOR
FERRY TERMINAL

GANGWAY
PLAN AND ELEVATION

SHEET NUMBER
S12
16 OF 17

Filename: ...\016_Gangway Plan and Elevation.dgn Division: Username: Date:2/15/2019

Bartlett Design
LIGHTING & ELECTRICAL ENGINEERING
942 WASHINGTON STREET, BATH, ME 04530
TEL (207) 443-9447 FAX (207) 443-5580



PLAN
1" = 10'-0"
10 0 10 20
Scale of Feet

WIRING NOTES:

1. Two circuits in 1" pvc coated rigid galvanized steel conduit. Navigation light circuit: 2#10, 1#12 gnd. Dolphin light circuit: 2#10, 1#12 gnd.
2. One circuit in 1" pvc coated rigid galvanized steel conduits. Navigation light circuit: 2#10, 1#12 gnd.
3. Existing conduit and wiring to remain.
4. Remove existing conduit and wiring.
5. Two circuits in 1" pvc coated flexible conduit. Navigation light circuit: 2#10, 1#12 gnd. Dolphin light circuit: 2#10, 1#12 gnd.

NOTES:

1. All conduits shall be PVC coated rigid steel, including conduit bodies and clips.
2. All conduit shall be 1" min. size, hot dipped galvanized with 40 mil bonded PVC coating (black or gray).
3. All wire shall be type THWN/THHN, copper.
4. Provide stainless steel framing channel attached to the vertical side of the dolphin extending above the top of the dolphin for conduit and box support. Do not support from handrails.
5. New junction boxes shall be 16"x16" stainless steel.
6. All electrical work shall conform to NFPA 70.
7. Verify existing electrical conditions to determine proper installation means and methods.
8. Bond all new junction boxes and connectors to the equipment grounding conductor inside the box.

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February 15, 2019

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

PROJ MANAGER	N. Wiley	BY	DATE
DESIGN-DETAILED		P. Bishop	02/19
DESIGN-DETAILED		C. Myers	02/19
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER
10258

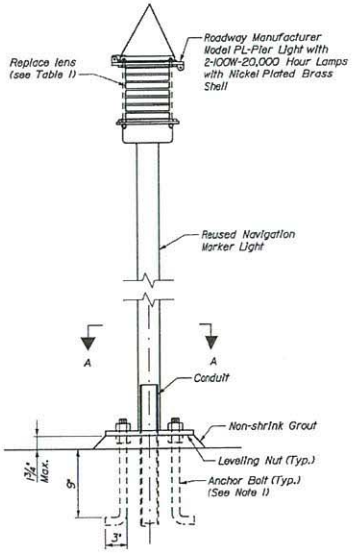
DATE

BASS HARBOR
FERRY TERMINAL

ELECTRICAL PLAN

SHEET NUMBER
E01
17 OF 17

Filename: ...\017_Electrical Plan.dgn Division: Username: Date:2/15/2019

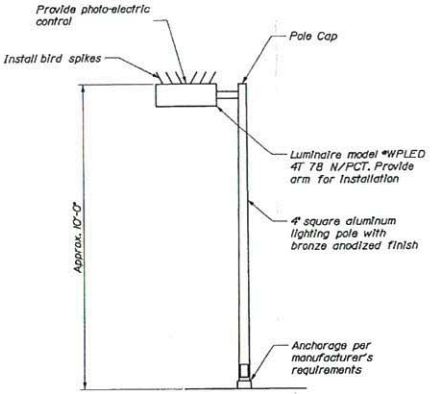


NAVIGATION MARKER INSTALLATION DETAIL

N.T.S.

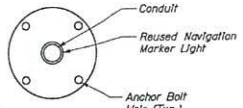
TABLE I
NAVIGATIONAL MARKER LENS REPLACEMENT SUMMARY

Location	# of Light Opening	Lamp Size	Lens
Dolphin D7	In Kind	2-100W A-19	In Kind



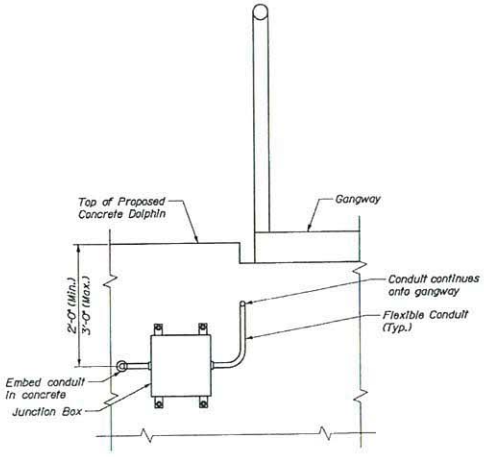
SITE LIGHT TYPE A DETAIL

N.T.S.



SECTION A-A

N.T.S.



EMBEDDED CONDUIT JUNCTION BOX DETAIL

1" = 1'-0"

NOTES:

1. Anchor bolt size and pattern shall match the existing condition.
2. Navigation marker wiring connection shall match the existing condition.
3. Where anchorages are removed, bolts and rods shall be cut, ground flush to concrete, and filled with Sika 1A Flex self-leveling sealant, or approved equal.

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February 15, 2019

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023476.00

PROJ. MANAGER		BY:	DATE
DESIGNED BY	L. Bartlett	P. Ricci	02/19
DESIGNED REVIEWED	C. Boyer	C. Boyer	02/19
DESIGN DETAILED			
DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

1209
P.E. NUMBER

DATE

BASS HARBOR
FERRY TERMINAL

ELECTRICAL DETAILS

SHEET NUMBER
E02
18 OF 17

Filename: ...\018_ElectricalDetails.dgn Division: Username: Date:2/15/2019

US Army Corps
of Engineers ®
New England District

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

COMPLIANCE CERTIFICATION FORM

Permit Number: NAE-2019-01206

Project Manager Clement

Name of Permittee: Maine Dept. of Transportation

Permit Issuance Date: _____

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

US Army Corps
of Engineers ®
New England District

WORK-START NOTIFICATION FORM

(Minimum Notice: Two weeks before work begins)

****

EMAIL TO: jay.l.clement@usace.army.mil

or

MAIL TO:

Jay Clement
US Army Corps of Engineers
Maine Project Office
442 Civic Center Drive
Augusta, Maine 04330

****

Corps of Engineers Permit No. NAE-2019-01206 was issued to the Maine Dept. of Transportation. This work is located in Bass Harbor at Tremont, Maine and authorized the permittee to upgrade the existing state ferry terminal facility. Regulated work includes the addition of a turning dolphin, a wave screen, improved fender systems, an elevated walkway to the new dolphin, and modifications to the existing lighting system. New piling installations will result in a total of 38 s.f. of permanent tidal bottom impact.

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

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

_____

_____

Phone & email: (___) _____ (___) _____ _____

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

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

Printed Name: _____ **Title:** _____

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

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FOR USE BY THE CORPS OF ENGINEERS

PM: Clement **Submittals Required:** No

Inspection Recommendation: Inspect as convenient

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DEPARTMENT OF THE ARMY
GENERAL PERMIT FOR
THE STATE OF MAINE

The New England District of the U.S. Army Corps of Engineers (Corps) hereby issues a General Permit (GP) for activities subject to Corps jurisdiction in waters of the U.S. within the boundaries of the State of Maine. This GP is issued in accordance with Corps regulations at 33 CFR 320 - 332 [see 33 CFR 325.2(e)(2)]. This GP authorizes activity-specific categories of work that are similar in nature and cause no more than minimal individual and cumulative adverse environmental impacts. Refer to Page 2 for the list of activities and Appendix A for activity specific conditions of eligibility in inland and tidal waters.

I. GENERAL CRITERIA

1. 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 – 20), and Appendix A - Definition of Categories.

2. Under this GP, projects may qualify for the following:
   - Category 1: Category 1 Self -Verification Notification Form is required (SVNF – see Appendix B).
   - Category 2: Application to and written approval from the Corps is required (Pre-Construction Notification (PCN)). No work may proceed until written approval from the Corps is 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 activities eligible 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.

3. Prospective permittees need to read:
   a. Section II to determine if the activity requires Corps authorization.
   b. Sections III and IV to determine if the activity may be eligible for authorization under this GP, specifically whether it is eligible for Self-Verification (SV) or whether Pre-Construction Notification (PCN) is required.

4. Permittees must ensure compliance with all applicable General Conditions in Section IV. The Corps will consider unauthorized any activity requiring Corps authorization if that activity is under construction or completed and does not comply with all of the terms and conditions.

5. Project proponents are encouraged to contact the Corps with questions at any time. Pre-application meetings (see 33 CFR 325.1(b)), whether arranged by the Corps or requested by permit applicants, are encouraged to facilitate the review of projects. Pre-application meetings and/or site visits can help streamline the permit process by alerting the applicant to potentially time-consuming concerns that are likely to arise during the evaluation of their project (e.g., avoidance, minimization and compensatory mitigation requirements, historic properties, endangered species, essential fish habitat, and dredging contaminated sediments).

II. CORPS JURISDICTION/ACTIVITIES COVERED

1. Permits are required from the Corps of Engineers for the following work:

a. The construction of any structure in, over or under any navigable water of the United States (U.S.)[1], the excavating or dredging from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters. The Corps regulates these activities under Section 10 of the Rivers and Harbors Act of 1899. See 33 CFR 322;

b. The discharge of dredged or fill material and certain discharges associated with excavation into waters of the U.S. (e.g. sidecasting). The Corps regulates these activities under Section 404 of the Clean Water Act (CWA). See 33 CFR 323; and

c. The transportation of dredged material for the purpose of disposal in the ocean. The Corps regulates these activities under Section 103 of the Marine Protection, Research and Sanctuaries Act. See 33 CFR 324.

2. Related laws:

33 CFR 320.3 includes a list of related laws, including: Section 401 of the CWA, Section 402 of the CWA, Section 307(c) of the Coastal Zone Management (CZM) Act of 1972, The National Historic Preservation Act of 1966, the Endangered Species Act, the Fish and Wildlife Act of 1956, the Marine Mammal Protection Act of 1972, Magnuson-Stevens Act, and Section 7(a) of the Wild and Scenic Rivers Act.

3. An activity listed below may be authorized by this GP only if that activity and the permittee satisfy all of the GP's terms and conditions. Any activity not specifically listed below may still be eligible for the GP; applicants are advised to contact the Corps for a specific eligibility determination. Category 1 and Category 2 eligibility criteria for each activity in both Inland and Tidal waters can be found in Appendix A.

1. Repair, Replacement, Expansion, and Maintenance of Authorized Structures and Fills
2. Moorings
3. Structures, Floats and Lifts
4. Aids to Navigation, and Temporary Recreational Structures
5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation
6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges
7. Bank and Shoreline Stabilization
8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities
9. Utility Line Activities
10. Linear Transportation Projects
11. Mining Activities
12. Boat Ramps and Marine Railways
13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects
14. Reshaping Existing Drainage Ditches and Mosquito Management
15. Oil Spill and Hazardous Material Cleanup
16. Cleanup of Hazardous and Toxic Waste
17. Scientific Measurement Devices
18. Survey Activities
19. Agricultural Activities
20. Fish and Wildlife Harvesting, Enhancement, and Attraction Devices
21. Habitat Restoration, Establishment and Enhancement Activities
22. Previously Authorized Activities
23. Stream & Wetland Crossings
24. Aquaculture

Note: Multiple activities may be authorized in the same GP, e.g. a recreational pier (#3) with an associated mooring (#2) or a windpower facility (#13) with an associated transmission line (#9).

[1] Defined in Appendix F, Definitions and at 33 CFR 328.

III. PROCEDURES

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

In order for authorizations under this GP to be valid, 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 (PBR) and general permit authorizations; Site Location of Development Act permit; Maine Waterway Development and Conservation Act permit; and Maine Hazardous Waste, Septage, and Solid Waste Management Act license.
- Maine Department of Conservation, Agriculture & Forestry: Land Use Planning Commission (LUPC) permit.
- Maine Department of Marine Resources: Aquaculture Leases.
- Maine Department of Conservation, Bureau of Parks and Lands, Submerged Lands: Submerged Lands Lease.

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

2. How to Obtain/Apply for Authorization.

a. Category 1 (Self-Verification): Self-Verification Notification Form (SVNF) required. The SVNF is required for all SV eligible work in Maine unless otherwise stated in Appendix A. Activities that are eligible for SV are authorized under this GP and may commence without written verification from the Corps provided the prospective permittee has:

i. Confirmed that the activity will meet the terms and conditions of Category 1. Consultation with the Corps and/or other relevant federal and state agencies may be necessary to ensure compliance with the applicable general conditions (GCs) and related federal laws such as the National Historic Preservation Act (see GC 6), the Endangered Species Act (GC 8) and the Wild and Scenic Rivers Act (GC 9). Prospective permittees are encouraged to contact the Corps with SV eligibility questions. Activities not meeting the SV criteria must submit a PCN to the Corps.

ii. Submitted the SVNF (see GC 27 and Appendix B) to the Corps. **NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF. Whichever form chosen needs to include a location map, plans, and an Official Species List for federally listed threatened or endangered species (Reference Appendix D).**

b. Category 2 (Pre-Construction Notification (PCN)): Application to and written verification from the Corps is required before work can proceed. For activities that do not qualify for SV or where otherwise required by the terms of the GP, the permittee must submit a PCN and obtain a written permit before starting work in Corps jurisdiction.

i. The Corps will coordinate review of all activities requiring PCN with federal and state agencies and federally recognized tribes, as appropriate. To be eligible and subsequently authorized, an activity must result in no more than minimal individual and cumulative effects on the aquatic environment as determined by the Corps in accordance with the criteria listed within this GP. This may require project modifications involving avoidance, minimization, or compensatory mitigation for unavoidable impacts to ensure that the net adverse effects of a project are no more than minimal.

ii. The Corps will attempt to issue a written eligibility determination within the state's review period. Regardless, work eligible for Category 2 may not proceed before Corps written approval is received.

c. All applicants for Category 2 projects must:

i. Apply directly to the Corps using the state application form or the Corps application form (ENG Form 4345[2]), and apply directly to the state (DEP, LUPC, BPL or DMR) as applicable using the appropriate state form, if the work is regulated by the Corps and the state; or

ii. Apply directly to the Corps using the Corps application form (ENG Form 4345[2]) if the work is regulated by the Corps but not the state (DEP, LUPC, BPL or DMR).

iii. Provide application information (see "Information Typically Required" in Appendix C) to help ensure the application is complete and to speed project review.

iv. Obtain an Official Species List of federally threatened or endangered species in the project area (GC 8).

v. Submit a copy of their application materials to the Maine Historic Preservation Commission (MHPC) *and* all five Indian tribes listed at Appendix E, at the same time, or before, they apply to 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 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).

d. Work that is not regulated by the State of Maine, but is subject to Corps jurisdiction, may still be eligible for authorization under this GP.

e. Emergency Situations: 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." Emergency work is subject to the same terms and conditions of this GP as non-emergency work, and similarly, must qualify for authorization under the GP; otherwise an IP is required. The Corps will work with all applicable agencies to expedite verification according to established procedures in emergency situations.

3. Individual Permits. Projects that are not authorized by this GP require an Individual Permit (IP) (33 CFR 325.5) and proponents must submit an application directly to the Corps. This GP does not affect the Corps IP review process or activities exempt from Corps regulation. For general information and application form, see the Corps website or contact the Corps (see Appendix E). The Corps encourages applicants to apply concurrently for a Corps IP and applicable state permits.

The Corps retains discretionary authority on a case-by-case basis to elevate a GP eligible project to an IP based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR 320.4(a)]. Whenever the Corps notifies an applicant that an IP is required, no work in Corps jurisdiction may be conducted until the Corps issues the required authorization in writing indicating that work may proceed.

4. Enforcement/Non-Compliance. Work performed without the required Corps of Engineers permits is subject to administrative, civil, and criminal penalties. The Corps will evaluate unauthorized activities for enforcement action under 33 CFR 326.

The Corps will consider unauthorized any activity requiring Corps authorization if that activity is under construction or completed and does not comply with all of the terms and conditions of a GP or an IP. The Corps may elect to suspend enforcement proceedings if the permittee modifies his project to comply with a GP.

After considering whether a violation was knowing or intentional, and other indications of the need for a penalty, the Corps can elect to terminate an enforcement proceeding with an after-the- fact authorization under a GP, if all terms and conditions of the GP have been satisfied, either before or after the activity has been accomplished.

[2] Located at www.nae.usace.army.mil/missions/regulatory under "Forms & Publications."

IV. GENERAL CONDITIONS

To qualify for GP authorization, the prospective permittee must comply with the following general conditions, as applicable.

1. Other Permits
2. Federal Jurisdictional Boundaries
3. Minimal Direct, Secondary, and Cumulative Impacts
4. Mitigation (Avoidance, Minimization, and Compensatory Mitigation)
5. Single and Complete Projects
6. Historic Properties
7. Corps Projects and Property
8. Federal Threatened and Endangered Species
9. Wild and Scenic Rivers
10. Navigation
11. Federal Liability
12. Utility Line Installation and Removal
13. Heavy Equipment in Wetlands or Mudflats
14. Temporary Fill
15. Restoration of Special Aquatic Sites (including wetland areas).
16. Soil Erosion, Sediment and Turbidity Controls
17. Time of Year Windows/Restrictions.
18. Aquatic Life Movements & Management of Water Flows
19. Water Quality and Coastal Zone Management
20. Floodplains and Floodways
21. Storage of Seasonal Structures
22. Spawning, Breeding, and Migratory Areas
23. Vernal Pools
24. Invasive and Other Unacceptable Species
25. Programmatic Agreements
26. Permit On-Site
27. Self-Verification Notification Form (SVNF)
28. Inspections
29. Maintenance
30. Property Rights
31. Transfer of GP Verifications
32. Modification, Suspension, and Revocation
33. Special Conditions
34. False or Incomplete Information
35. Abandonment
36. Enforcement Cases
37. Duration of Authorization
38. Previously Authorized Activities
39. Discretionary Authority
40. St. John/St. Croix Rivers.
41. National Lands
42. Essential Fish Habitat (EFH)
43. Work Site Restoration
44. Bank Stabilization
45. Stream Work & Crossings and Wetland Crossings

1. Other Permits. Permittees must obtain other federal, state, or local authorizations required by law. Applicants are responsible for applying for and obtaining all required state or local approvals. 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 http://www.maine.gov/dacf/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 square feet (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 (PCN), and for those filling ≥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 supplement (see Appendix C). 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 LUPC jurisdiction regardless of whether they're shown on LUPC 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. See www.nae.usace.army.mil/missions/regulatory >> Jurisdictional Limits and Wetlands for more information on delineating jurisdictional areas.

3. Minimal Direct, Secondary, and Cumulative Effects[3]

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 4) 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 and Appendix F.

c. Site clearing, grading and construction activities in the upland habitat surrounding vernal pools ("Vernal Pool Management Areas") are secondary impacts. See GC 23 for avoidance and minimization requirements and recommendations.

d. Bank stabilization activities in tidal waters are provided at Appendix A, Page 30. Direct impacts in tidal waters from contiguous bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.

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

a. 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.

b. Applicants proposing work in jurisdictional waters should consider riparian/forested buffers for stormwater management and low impact development (LID) best management practices (BMPs) to reduce

[3] Direct, secondary and cumulative effects are defined at Appendix F, Definitions and Acronyms.

impervious cover and manage stormwater to minimize secondary impacts to aquatic resources to the maximum extent practicable.[4]

c. Compensatory mitigation[5] for effects to waters of the U.S., including direct, secondary and temporal[6], may be required for permanent impacts that exceed the SV area limits, and may be required for temporary impacts that exceed the SV area limits, to offset unavoidable impacts which remain after all appropriate and practicable avoidance and minimization has been achieved and to ensure that the adverse effects to the aquatic environment are no more than minimal. Proactive restoration projects or temporary impact work with no lasting secondary effects may generally be excluded from this requirement. Refer to Appendix G.

5. Single and Complete Projects[7]

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

b. A single and complete project must have independent utility[7].

c. Unless the Corps determines the activity has independent utility:

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

ii. All components of a single project and/or all planned phases of a multi-phased project (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be treated together as constituting one single and complete project.

d. For linear projects, such as power lines or pipelines with multiple crossings, the single and complete project is all crossings of a single water of the U.S. (i.e., single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies and crossings of such features cannot be considered separately. If any crossing requires a Category 2 activity, then the entire linear project shall be reviewed as one project under Category 2.

6. Historic Properties

a. No undertaking shall cause effects (defined at 33 CFR 325 Appendix C and 36 CFR 800) on properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places[8], including previously unknown historic properties within the permit area, unless the Corps or another Federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act (NHPA). The State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO) and the National Register of Historic Places can assist with locating information on: i) previously identified historic properties; and ii) areas with potential for the presence of historic resources, which may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with the Corps and the SHPO and/or THPO(s).

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[4] See: www.nae.usace.army.mil/missions/regulatory >> State General Permit >> Permit Resources >> Mitigation for this additional information: a) "Wetland BMP Manual - Techniques for Avoidance & Minimization," b) riparian/forested buffer BMPs, and c) LID BMPs. LID BMPs include, but are not limited to: replacing curbs and gutters with swales; using an open space design for subdivisions; using permeable, pervious or porous pavements; constructing bio-retention systems; and/or, adding a green roof or rain garden.

[5] Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR 332. See also the New England District Compensatory Mitigation Guidance at www.nae.usace.army.mil/regulatory >> Mitigation.

[6] Temporal loss: The time lag between the loss of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site(s) (33 CFR 332.2).

[7] Single and Complete Project and Independent Utility are defined in Appendix F - Definitions.

[8] The majority of historic properties are not listed on the National Register of Historic Places and may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with the Corps and the SHPO and/or THPO(s).

b. For activities eligible for SV, proponents must ensure and document that the activity will not cause effects as stated in 6(a). Proponents must submit a PCN if the authorized activity may cause effects as stated in 6(a) as soon as possible to ensure that the Corps is aware of any potential effects of the permitted activity on any historic property to ensure all Section 106 requirements are met.

c. All PCNs shall: i) show notification to the SHPO and applicable THPO(s)[9] for their identification of historic properties, ii) state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties, and iii) include any available documentation from the SHPO or THPO(s) indicating that there are or are not historic properties affected. Starting consultation early in project planning can save proponents time and money.

d. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

7. Corps Projects and Property

a. In addition to any authorization under this GP, proponents must contact the Corps Real Estate Division at (978) 318-8585 for work occurring on or potentially affecting Corps properties and/or Corps-controlled easements to initiate reviews and determine what real estate instruments are necessary to perform work. Permittees may not commence work on Corps properties and/or Corps-controlled easements until they have received any required Corps real estate documents evidencing site-specific permission to work.

b. Any proposed temporary or permanent alteration, or modification or use, including occupation, of a federal project (including but not limited to a levee, dike, floodwall, channel, anchorage, breakwater, seawall, 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 operations and maintenance, is not eligible for SV and requires review and approval by the Corps pursuant to 33 USC 408. Where Section 408 is applicable, a decision on a Department of the Army general permit application will not be rendered prior to the decision on a Section 408 request.

c. Any structure or work within any Corps Federal Navigation Project (FNP) or its buffer zone[10], shall be subject to removal at the owner's expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. See GC 10 for more requirements related to FNPs.

8. Federal Threatened and Endangered Species

a. No activity is authorized which: i) is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species; ii) "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed; or iii) violates the ESA.

b. **All applicants must request an Official Species List from the US Fish & Wildlife Service and must include the list in the Corps permit application. To request an Official Species List, refer to the instructions in Appendix D.**

c. For federally listed species in tidal waters, applicants should contact the National Marine Fisheries Service at: http://www.greateratlantic.fisheries.noaa.gov/protected/section7/

[9] Appendix E, 3(a)&(b). Historic Resources, provides contact information and each tribe's "area of concern."
[10] See Appendix H for a list of FNPs. The buffer zone is equal to three times the authorized depth of the FNP.

d. A PCN is required if a threatened or endangered species, a species proposed for listing as threatened or endangered, or designated or proposed critical habitat (all hereinafter referred to as "listed species or habitat"), as identified under the ESA, is present in the action area[11].

e. Federal agencies should follow their own procedures for complying with the requirements of the ESA but should coordinate that consultation with the Corps as well.

9. Wild and Scenic Rivers.[12] 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 2015 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); and 11.25 miles of the York River, in the State of Maine, from its headwaters at York Pond to the mouth of the river at York Harbor, plus its tributaries (currently under study).

10. Navigation

a. Any structure or work that extends closer to the horizontal limits of any Corps Federal Navigation Project (see Appendix H) 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 28 (Moorings) and Page 29 (Structures, Floats & Lifts).

b. 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.

c. 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.

d. A PCN is required for all work in, over or under an FNP or its buffer zone unless otherwise indicated in Appendix A. (Reference Appendix A, Endnote 13, Page 36)

11. 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.

12. Utility Line Installation and Removal

a. Subsurface utility lines shall remain subsurface. If it is necessary to discharge dredged or filled material not previously authorized in order to keep such utility lines buried or restore them to their original subsurface condition, a PCN and written verification from the Corps may be required (e.g., in the case of side

[11] The "Endangered Species Consultation Handbook – Procedures for Conducting Consultation and Conference Activities Under Section 7 of the ESA," 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]."
[12] Additional information can be found at: http://www.rivers.gov.

casting into wetlands from utility trenches). Certain repair, replacement or maintenance activities may be eligible for Category 1 – refer to Appendix A.

b. Subsurface utility lines must be installed at a sufficient depth to avoid damage from anchors, dredging, etc., and to prevent exposure from erosion and stream adjustment. In accordance with Corps New England District Regulation NEDER 1110-1-9 (www.nae.usace.army.mil/missions/regulatory >> Useful Links and Documents), as an absolute minimum, the bottom cover associated with the initial installation of utility lines under navigable waters and navigation channels shall be 48 inches in soil or 24 inches in rock excavation in competent rock unless specified in a written determination. These minimum bottom cover requirements for pipelines and cables shall be measured from the maximum depth of dredging to the top of the utility. The maximum depth of dredging, in waterways having existing FNPs, is generally considered to be the authorized project depth plus any allowance for advanced maintenance and the allowable overdepth for dredging tolerances. In waterways that do not have existing FNPs, this depth should be taken as two feet below the existing bottom or maximum depth of proposed dredging, as applicable.

c. Aerial utility lines that cross navigable waters must meet minimum clearances. See 33CFR322.5(i).

d. For horizontal directional drilling work, returns of drilling fluids to the surface (i.e., frac-outs) are not authorized and require restoration to the maximum extent practicable in accordance with the terms and conditions of this GP. The permittee and its contractor shall have onsite and shall implement the procedures detailed in a frac-out contingency plan for monitoring drilling operations and for the immediate containment, control and recovery/removal of drilling fluids released into the environment should a discharge of material occur during drilling operations.

e. Within the context of any new installations, any abandoned or inactive utility lines should be removed and faulty lines (e.g., leaking hazardous substances, petroleum products, etc.) should be removed or repaired to the extent practicable. A PCN and written verification from the Corps is required if they are to remain in place, e.g., to protect sensitive areas or ensure safety.

f. No work shall drain a water of the U.S. by providing a conduit for water on or below the surface. Trench plugs installed along pipelines may be effective.

13. Heavy Equipment in Wetlands or Mudflats. 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. Construction mats should be managed in accordance with the Construction Mat BMPs at www.nae.usace.army.mil/missions/regulatory >> State General Permits >> Permit Resources.

14. 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 and disturbed soils shall be stabilized to prevent its eroding into waters of the U.S. where it is not authorized. Work shall include phased or staged development to ensure only areas under active development are exposed and to allow for stabilization practices as soon as practicable, typically within three calendar days after disturbance. Accelerated stabilization (the providing of temporary or permanent cover by the end of the work day to prevent erosion) shall be employed as necessary. Temporary fill must be placed in a manner that will prevent it from being eroded by expected high flows.

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

c. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Place materials in a location and manner that does not adversely impact surface or subsurface water flow into or out of the wetland. Temporary fill authorized for discharge into wetlands shall be placed on geotextile fabric or other appropriate material laid on the pre-construction wetland grade where practicable to minimize impacts and to facilitate restoration to the original grade. Construction mats are excluded from this requirement.

d. Temporary fill, construction mats and corduroy roads shall be entirely removed as soon as they are no longer needed to construct the authorized work. Temporary fill shall be placed in its original location or disposed of at an upland site and suitably contained to prevent its subsequent erosion into waters of the U.S. To qualify for Category 1, temporary fill placed during the: i.) growing season must be removed before the beginning of the next growing season; and ii.) non-growing season may remain throughout the following growing season, but must be removed before the beginning of the next growing season.

e. Temporary fill, construction mats and corduroy roads are considered temporary only if they are removed as soon as they are no longer needed to construct the authorized work.

f. Construction debris and/or deteriorated materials shall not be located in waters of the U.S.

15. Restoration of Special Aquatic Sites (Including Wetland Areas)

a. Temporary fills must be removed in their entirety and the affected areas restored to their pre-construction condition, function and elevation. Restoration shall typically commence no later than the completion of construction.

b. For excavated areas, "restored to pre-construction condition, function and elevation" means careful removal of existing soil and vegetation, separate topsoil and subsoil stockpiling, soil protection, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized. Plan for natural settling that will occur (the initial post-restoration elevation of the backfilled areas should be above the desired final grade as topsoil may settle by 33% to 50%), minimize compaction, and ensure that topsoil is void of gravel and subsoil. A minimum of 4 inches of topsoil should be at the surface after the soil has settled. Wetland areas temporarily disturbed shall be stabilized (e.g., seeded or planted). Seed mixes and vegetation shall include only plant species native to New England and shall not include any species listed as "Invasive and Other Unacceptable Plant Species" in the "New England District Compensatory Mitigation Guidance" (see GC 24 and refer to Appendix G). This list may be updated periodically.

c. Limit compaction to the minimum needed to promote a successful seedbed; avoid a 'fluffy' seedbed, which is susceptible to erosion until the plants get established, and a compacted topsoil layer, which is counter-productive and will lead to greater erosion susceptibility down the road. Test soils for compaction. A soil probe, auger, or shovel should be able to retrieve samples of post-restoration profile. Equipment refusal shall be considered a failure of restoration, in which case the soil should be restored through deep-ripping and/or de-compaction, or other appropriate methods, and wetland hydrology must be maintained. See the BMPs at www.nae.usace.army.mil/missions/regulatory >> State General Permits >> Permit Resources >> Restoration.

d. In areas of authorized temporary disturbance, cut woody vegetation (trees, shrubs, etc.) shall be cut at or above 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.

e. Trenches shall be constructed or backfilled so that the trench does not drain waters of the U.S. (e.g., materials or methods that create a French drain effect).

16. Soil Erosion, Sediment and Turbidity Controls

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 .

17. Time of Year Work Windows/Restrictions. For activities where work is authorized in streams and tidal waters that causes turbidity or sediment re-suspension or other construction related disturbances, work must be conducted during the following TOY work windows (not during the TOY restrictions) unless otherwise authorized by the Corps under Category 2 review:

	TOY Restriction (no work)	TOY Work Window (work allowed)
Non-tidal waters	Oct. 01 through Jul. 14	Jul. 15 through Sep. 30
Tidal waters	Apr. 10 through Nov. 07	Nov. 08 through Apr. 09

Alternate windows authorized under Category 2 may include species specific windows recommended by the Maine Dept. of Marine Resources and/or Maine Dept. of Inland Fisheries & Wildlife.

18. Aquatic Life Movements & Management of Water Flows

a. No activity may 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, unless the activity's primary purpose is to impound water. Unless otherwise stated, activities impounding water in a stream require a PCN to ensure impacts to aquatic life species are avoided and minimized. All permanent and temporary crossings of waterbodies (e.g., streams, wetlands) shall be:

i. Suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species; and

ii. Properly aligned and constructed to prevent bank erosion or streambed scour both adjacent to and inside the culvert. Permanent and temporary crossings of wetlands shall be suitably culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity between the wetlands on either side of the road.

b. To avoid adverse impacts on aquatic organisms, the low flow channel/thalweg shall remain unobstructed during periods of low flow, except when it is necessary to perform the authorized work.

c. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

19. Water Quality and Coastal Zone Management

a. Applicants must satisfy any conditions imposed by the state and EPA, where applicable, in their CWA § 401 Water Quality Certifications (WQC) for this GP, or in any Individual § 401 WQC. See Appendix E for state-specific contact information and to determine if any action is required to obtain a 401 WQC. The Corps may require additional water quality management measures to ensure that the authorized activity does not cause or contribute to a violation of water quality standards. All projects authorized by this GP shall be designed, constructed and operated to minimize or eliminate the discharge of pollutants.

b. Applicants must satisfy any additional conditions imposed by the state in their Coastal Zone Management (CZM) Act consistency concurrences for this GP, or in any Individual CZM consistency concurrences. The Corps may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

20. Floodplains and Floodways

a. Appropriate measures must be taken to minimize flooding to the maximum extent practicable.

b. Activities within 100-Year Floodplains must comply with applicable Federal Emergency Management Agency (FEMA)-approved state and/or local floodplain management permitting requirements. Proponents may need to coordinate with FEMA and apply for a formal change to the flood insurance study products or forward a set of project plans and relevant technical documentation in a digital format to the Risk

Analysis Branch Chief, Mitigation Division, FEMA, Region 1, 99 High Street, Boston, Massachusetts 02110. Applicants should provide a copy of any documentation to the Corps along with the PCN.

c. Proponents may have to obtain a Flood Hazard Development Permit issued by the town. Inquiries may be directed to the municipality or to the Maine Floodplain Management Coordinator at (207) 287-8063. See http://www.maine.gov/dacf/flood/

21. Storage of Seasonal Structures. Seasonal or recreational structures such as pier sections, floats, aquaculture structures, etc. 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 landward of mean high water (MHW) or ordinary high water (OHW) and not in wetlands, tidal wetlands, their substrate or on mudflats. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is waterward of MHW or OHW. Seasonal storage of structures in navigable waters, e.g., in a protected cove on a mooring, requires Corps approval and local harbormaster approval.

22. Spawning, Breeding, and Migratory Areas

a. Jurisdictional activities and impacts such as excavations, discharges of dredged or fill material, and/or suspended sediment producing activities in jurisdictional waters that provide value as 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.

b. Jurisdictional activities in waters of the United States that provide value as breeding areas for migratory birds must be avoided to the maximum extent practicable. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity (See Appendix E).

23. Vernal Pools

a. Only vernal pools that meet the current definition of waters of the U.S. are regulated by the Corps.

b. Direct and indirect adverse effects to all vernal pools (VPs), including their envelopes and critical terrestrial habitats (VP Management Areas[13]), shall be avoided and minimized to the maximum extent practicable. Site clearing, grading, and construction activities associated with a regulated activity in the VP Management Area may cause these adverse effects to the VP.

c. The State of Maine has specific protections for vernal pools.[14]

d. When any regulated activities occur within 750 feet of a vernal pool, the following management practices must be followed for all work within any VP Management Area (750' of a VP's edge) *in order to qualify for Category 1*:

i. No disturbance within the VP Depression or VP Envelope (area within 100 feet of the VP Depression's edge)[15];

ii. Maintain a minimum of 75% of the Critical Terrestrial Habitat (area within 100-750 feet of the VP Depression's edge) as unfragmented forest with at least a partly-closed canopy of overstory trees to provide shade, deep litter and woody debris;

iii. Maintain or restore forest corridors connecting wetlands and significant vernal pools;

iv. Minimize forest floor disturbance; and

v. Maintain native understory vegetation and downed woody debris.

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[13] 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.

[14] Appendix G, 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.

[15] 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.

vi. Cape Cod style-curbing or no curbing options shall be used on new roads to facilitate amphibian passage. (Reference Appendix G)

e. A PCN is required for any regulated activity within 750' of a vernal pool when all work within the VP Management Area does not comply with the Category 1 requirements in (d) above. Information on directional buffers in accordance with the VP Directional Buffer Guidance document may be provided in order to demonstrate minimal impact and avoid compensation requirements (Reference Appendix G). Conservation of the un-impacted area within the VP Management Area will often be required.

f. GC 2 requires applicants to delineate or approximately identify on the project plans all waters of the U.S., which contain vernal pools.

g. GC 23(b-d) do not apply to projects that are within a municipality and meet the provisions of a Corps-approved VP Special Area Management Plan (VP SAMP) and are otherwise eligible for self-verification.

24. Invasive and Other Unacceptable Species[16]

a. The introduction or spread of invasive or other unacceptable plant or animal species on the project site or areas adjacent to the project site caused by the site work shall be avoided to the maximum extent practicable. For example, construction mats and equipment shall be thoroughly cleaned and free of vegetation and soil before and after use. The introduction or spread of invasive plant or animal species on the project site caused by the site work shall be controlled.

b. No cultivars, invasive or other unacceptable plant species may be used for any mitigation, bioengineering, vegetative bank stabilization or any other work authorized by this GP. However, non-native species and cultivars may be used when it is appropriate and specified in a written verification, such as using *Secale cereale* (Annual Rye) to quickly stabilize a site. All PCNs should explain the reason for using non-native species or cultivars.

25. Programmatic Consultations or Agreements. The Corps requirements to comply with Section 106 of the NHPA, Section 7 of the Endangered Species Act or Essential Fish Habitat conservation under the Magnuson-Stevens Act may be satisfied by a Programmatic Agreement with the Corps, New England District or another federal action agency. Any Corps, New England District Programmatic Agreements will be available on our website.

26. Permit On Site. The permittee shall ensure that a copy of this GP and any accompanying authorization letter with attached plans are at the site of the work authorized by this GP whenever work is being performed and that all construction personnel performing work which may affect waters of the U.S. are aware of its terms and conditions. The entire permit authorization shall be made a part of any and all contracts and subcontracts 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 entire 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 subcontract. Although the permittee may assign various aspects of the work to different contractors or subcontractors, all contractors and subcontractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire GP authorization, and no contract or subcontract shall require or allow unauthorized work in areas of Corps jurisdiction.

[16] For the purposes of this GP, plant species that are considered invasive and unacceptable are provided in Appendix G "Invasive and other Unacceptable Plant Species" of our document "Compensatory Mitigation Guidance" at www.nae.usace.army.mil/missions/regulatory >> Mitigation. Chapter 4(e) Planting is also particularly relevant. The June 2009 "Corps of Engineers Invasive Species Policy" provides policy, goals and objectives and is located at www.nae.usace.army.mil/missions/regulatory >> Invasive Species. Additional information can be found at: www.eddmaps.org/ipane.

27. Self-Verification Notification Form (SVNF). Permitees must complete and submit the SVNF provided at Appendix B to the Corps for work authorized by this GP unless otherwise noted in Appendix A. **NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF provided either form used also include plans and an Official Species List of federally listed threatened or endangered species.**

28. Inspections. The permittee shall allow the Corps to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this GP and any written verification. The Corps may also require post-construction engineering drawings for completed work, post-dredging survey drawings for any dredging work, or other post-construction reports. To facilitate these inspections, the permittee shall complete and return to the Corps the following forms:

- For Category 1/Self-Verification: The SVNF (see Appendix B).
- For Category 2/PCN: The a) Work-Start Notification Form and b) Compliance Certification Form, when either is provided with the authorization letter.

29. Maintenance

a. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable general conditions and activity-specific conditions to a written verification.

b. The requirement in (a) above does not include maintenance of dredging projects. Each maintenance dredging event exceeding the self-verification limits requires a new PCN unless an unexpired, written PCN or other Corps authorization specifies that the permittee may "dredge and maintain" an area for a particular time period. Self-verification or PCN maintenance dredging includes only those areas and depths previously authorized and actually dredged. Maintenance dredging with ocean or open water disposal will always require a PCN and at least Category 2 review.

c. Some maintenance activities may not be subject to regulation under Section 404 in accordance with 33 CFR 323.4(a)(2). Refer to Appendix A, Endnote 7.

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

31. Transfer of GP Verifications. 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 authorizations, as well as the new owner(s) of the property. If the permittee sells the property associated with a GP verification, the permittee may transfer the GP verification to the new owner by submitting a letter to the Corps (see Appendix E for address) to validate the transfer. A copy of the GP verification must be attached to the letter, and *the letter must contain the new owner's contact information and 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."

_____

(Transferee)

_____

(Date)

32. Modification, Suspension, and Revocation. Any work authorized under this GP by self-verification or PCN may be either modified, suspended, or revoked, in whole or in part, pursuant to the policies and procedures of 33 CFR 325.7. Any such action shall not be the basis for any claim for damages against the U.S.

33. 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 terms and 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.

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

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

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

37. Duration of Authorization. This GP expires on October 12, 2020. 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 12, 2021 to complete the activity under the terms and conditions of the current GP.

38. 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 GP in effect between October 12, 2010 and October 12, 2015 remains authorized subject to the terms and general conditions of this GP along with any special conditions in the authorizing written letter. Exception – if previously authorized work is not commenced and a new federally listed threatened or endangered species could be affected, the Corps must consult with the Service(s) prior to re-authorizing the work under this GP. Requests for re-authorization must include an updated Official Species list. To request an Official Species List, refer to the instructions in Appendix D.

39. 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.

40. 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 a PCN 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.

41. National Lands. 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 are not eligible for Category 1 and require a PCN.

42. Essential Fish Habitat (EFH). 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 G for more information).

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

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

- Exploratory drilling and borings for bridges.
- Moorings (see Appendix A, Page 28 for Category 1 thresholds and requirements)
- Structures, floats & lifts (see Appendix A, Page 29 for Category 1 thresholds and requirements)
- Other activities specified in a programmatic agreement with NMFS.

43. 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 GC 24 and refer to Appendix G). 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.

44. 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.

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 total length along the bank(s); 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 sub-angular 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. Bank stabilization activities in tidal waters are provided at Appendix A, Page 30 & 31. Direct impacts in tidal waters from contiguous bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.

45. Stream Work and Crossings & Wetland Crossings

Notes:

a. For *Stream Work and Crossings* below, conditions (a) and (b) apply to Inland Waters and Wetlands (see Appendix A, Page 1 for definition) and Navigable Waters (see Appendix A, Page 27 for definition). Conditions (c)-(l) below 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, Atlantic sturgeon, or shortnose sturgeon [see GC 8(b)] and some stream work such as crossings on EFH waters (see GC 42) 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 for more state contact information.

Conditions for Stream Work and Crossings:

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 G, 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 45(a) and GC 45(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 19 and the stream simulation document listed at Appendix G, 8(a).

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

i. Must ensure compliance with GC 45(a) and GC 45(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 19 and the stream simulation document listed at Appendix G, 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 and at least Category 2 review.

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 G, 8(e)]. Note: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine the review category in Appendix A.

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

iii. Temporary stream crossings that are not spans[17] (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. Installed and removed during the low flow period specified in GC 45(l) below.
2. Placed on geotextile fabric or other material where practicable to ensure restoration to the original grade. Soil may not be used to construct or stabilize these structures and rock must be large enough to allow for easy removal without disrupting the streambed.
3. Designed and maintained to withstand and pass high flows. Water height should be no higher than the top of the culvert's inlet. A minimum culvert diameter of two feet is required to pass debris. Culverts must be aligned to prevent bank erosion or streambed scour.
4. Equipped with energy dissipating devices installed downstream if necessary to prevent scour.
5. Designed and maintained to prevent soil from entering the waterbody.
6. Removed upon the completion of work. Impacts to the streambed or banks requires restoration to their original condition using stream simulation methods[18].

g. Slip Lining. Work using slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), invert lining, or resulting in decreased diameter, does 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 14(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 45(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 45(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 45(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 GC 45(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 – September 30 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.

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

a. Culverts must be embedded:

[17] 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.

[18] Design and construction shall be in accordance with the stream simulation document listed at Appendix G, 8(a).

- ≥ 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**, spans[17] are required to avoid or cause minimal disruption to the streambed and to meet the requirements of General Condition 45(a) and 45(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 45(h)ii requires Category 2 review and, unless demonstrated otherwise, stream simulation[18] to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.

c. **For replacement crossings**, spans[17] are required to meet the requirements of General Condition 45(a) and 45(b). Footings and abutments shall be landward of 1.2 times bankfull width. Unless demonstrated otherwise, stream simulation[18] 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) at the time of construction and over time as the structure has had the opportunity to pass significant flood events. To allow terrestrial passage for wildlife and prevent undermining the footings, crossings shall have a bank on both sides of the stream matching the horizontal profile of the existing stream and banks[18]. Note: Installation of substrate material within smaller culverts may not be safe or practicable. In these cases, it may be necessary to allow for natural deposition and bed development unless alternative methods are identified.

e. Crossings must be designed and constructed[18] 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.

Conditions for 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 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.



Robert J. Desista
Deputy Chief, Regulatory Division
For DISTRICT ENGINEER **DATE** 10/13/15

APPENDIX A: DEFINITION OF CATEGORIES		
A. INLAND WATERS AND WETLANDS	**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. (tidal and freshwater).*** 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 and designated activities, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands[1] to tidal waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 27 below.)	
	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 5–20).	
ACTIVITY	**CATEGORY 1** Self-Verification Eligible **(*SVNF Required*)**	**CATEGORY 2 (*PCN Required)***
1. Repair, Replacement, Expansion, and Maintenance of Authorized Structures and Fills	Repair or maintenance of existing, currently serviceable, authorized fills with no expansion or change in use: • 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. • No effect on federally listed endangered or threatened species or critical habitat.	Replacement of non-serviceable fills, or repair/maintenance of serviceable fill, with expansion <3 acres, or with a change in use.
2. Moorings	NA – moorings in non-navigable inland waters are not subject to Corps jurisdiction. Note: Moorings placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on Page 28 below.)	NA
3. Structures, Floats & Lifts	For solid fill or crib supported structures on inland waters, <15,000 square feet (SF) of waterway and/or wetland fill, associated secondary impacts[2] , and temporary fills. • No effect on federally listed endangered or threatened species or critical habitat. • Note: Temporary or permanent structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 29 below.	1. Work not eligible for Category 1 2. ≥15,000 SF to <3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated).
4. Aids to Navigation and Temporary Recreational Structures	NA - this activity in non-navigable inland waters is not subject to Corps jurisdiction. Note: Aids to Navigation and other structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 30 below.)	NA

5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation	1. For regulated discharges associated with excavation, and disposal <15,000 SF inland waterway and/or wetland impacts. 2. The activity does not occur in navigable waters of the U.S. 3. Stream channelization, relocation or loss of streambed including impoundments or discharge of tailings into streams does not occur. 4. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1 2. ≥15,000 SF to <3 acres of inland waters.
6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges	NA - For discharges incidental to the construction of bridges in inland waters of the U.S. refer to Activity 23 (Stream and Wetland Crossings) and GC 45. Note: Discharges of Dredged or Fill Material Incidental to the Construction of Bridges in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 30 below.)	NA

7. Bank and Shoreline Stabilization	Inland bank stabilization <500 FT long and ≤1 CY of fill per linear foot below OHW, provided: • ≤1 cubic yard of fill per linear foot placed along the bank waterward of ordinary high water. • Work complies with the GCs (GC 44 in particular), including: o No structures angled steeper than 1H:1V allowed. Only rough-faced stone or fiber roll revetments allowed. o No in-stream work involving fill or excavation in flowing waters (see GC 45(h)). • In-water work limited to Jul 15 – Sep 30. • No work in vernal pools[5] or SAS[3]. • No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities	1. <15,000 SF of inland waterway and/or wetland fill and associated secondary impacts[2] (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 GC 14] Provided: • Historic fill + proposed impact area <15,000 SF complies with GC 5, Single and Complete Projects. • No work in special aquatic sites (SAS)[4] other than wetlands. • No effect on federally listed endangered or threatened species or critical habitat. 2. For work in Vernal Pool (VP) Management Areas (includes VPs)[5]:	1. Work not eligible for Category 1. 2. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 3. *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.* See GC 2 and Appendix C for wetland delineation

	• See GC 23 and Appendix C for VP delineation requirements. • See GC 23 to determine if work qualifies for Category 1 or 2. • See Appendix G for VP documents providing mitigation guidance.	requirements.
9. Utility Line Activities	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts[2], and temporary fills. 2. The activity does not occur in, over, or under navigable waters of the U.S. 3. Intake structures that are dry hydrants used exclusively for firefighting activities with no stream impoundments. 4. There is no permanent change in pre-construction contours in waters of the U.S. 5. Material resulting from trench excavation is temporarily side cast into waters of the U.S. for ≤ 3 months and is placed in such a manner that it is not dispersed by currents or other forces. 6. The utility line is placed within and does not run a) parallel to, or b) along a streambed. 7. Stream channelization, relocation or loss of streambed including impoundments does not occur. 8. No effect on federally listed endangered or threatened species or critical habitat. 9. There is no discharge in SAS other than non-tidal wetlands. 10. Construction mats[4] 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 43). 11. Stream crossings must comply with GC 17.	1. Work not eligible for Category 1 2. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 3. *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.*
10. Linear Transportation Projects *(not including stream crossings)* **For stream crossings, refer to Activity 23**	1. <15,000 SF of inland waterway and/or wetland fill associated secondary impacts (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 fill. (See GC 14.) Provided: • Historic fill + proposed impact area <15,000 SF and complies with GC 5 single and complete projects. • No work in special aquatic sites (SAS) other than wetlands. 2. Construction mats[4] 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 43). 3. No effect on federally listed endangered or threatened species or critical habitat.	1. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 2. *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.*

11. Mining Activities	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. The activity does not occur in navigable waters of the U.S. 3. Stream channelization, relocation or loss of streambed including impoundments or discharge of tailings into streams does not occur. 4. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1. 2. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation.
12. Boat Ramps	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1 2. >15,000 SF and < 3 acres of impact.
13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects	*For land-based facilities:* 1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. Stream channelization, relocation or loss of streambed including impoundments does not occur. 3. No effect on federally listed endangered or threatened species or critical habitat. *For water-based facilities and hydropower projects:* No new facilities are eligible.	*For land-based activities:* 1. Work not eligible for Category 1. 2. >15,000 SF and < 3 acres impact. 3. *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.* *For water-based facilities and hydropower projects:* > 3 acres of impact will require an IP.
14. Reshaping Existing Drainage Ditches & Mosquito Management	Not Applicable	Not Applicable
15. Oil Spill and Hazardous Material Cleanup	Jurisdictional 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 or any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS[3] must typically be restored in place at the same elevation. ***Note: SVNF or a surrogate state reporting form may be submitted after the fact.***	Work not eligible for Category 1

16. Cleanup of Hazardous and toxic waste	Specific jurisdictional activities to effect the containment, stabilization, or removal of hazardous or toxic waste materials, including court ordered remedial action plans or related settlements, which are performed, ordered or sponsored by a government agency with established legal or regulatory authority. SAS should be restored in place at the same elevation. • <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. • No stream channelization, relocation or loss of streambed occurs. • The project does not involve establishing new disposal sites or expanding existing sites used for the disposal of hazardous or toxic waste. • No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
17. Scientific Measurements Devices	1. 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 or concentrate movement of aquatic organisms. 2. No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
18. Survey Activities	1. Jurisdictional 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 43. 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). 2. No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
19. Agricultural Activities	1. For those activities subject to Corps jurisdiction[16], <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. No stream channelization, relocation, loss of streambed, or farm ponds in streams. 3. No effect on federally listed endangered or threatened species or critical habitat.	1. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 2. > 3 acres of impact will require an IP.

20. Fish and Wildlife Harvesting, Enhancement and Attraction Devices and Activities	NA - this activity in non-navigable inland waters, if not involving a discharge of dredged or fill material, is not subject to Corps jurisdiction. Note: Related structures placed in freshwater navigable waters (e.g. the upper Penobscot or Kennebec Rivers) are reviewed in the Navigable Waters section. (See B. Navigable Waters on Page 33 below.)	Not Applicable
21. Habitat Restoration, Establishment and Enhancement Activities	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. The activity is supported in writing by a local, state, or non-Corps Federal environmental agency. Water impoundments require PCN. 3. No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another. 4. No dam removal. 5. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1 2. 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 ≥15,000 SF, provided those activities result in net increase in overall aquatic resource functions and services.[8]
22. Previously Authorized Activities	Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015. The terms and general conditions of this GP apply along with any special conditions in the written authorization.	
23. Stream & Wetland Crossings	1. River, stream and brook work and crossings: • Must comply with GC 45 in particular, including: o No slip lining [see GC 45 (g)]. o No in-stream work involving fill or excavation in flowing waters [see GC 45(h)]. o In-stream work limited to Jul 15 – Sep 30 [see GC 45 (l)]. • No work in riffles and pools[3]. • No stream relocations. • No dams or dikes[6]. • No effect on federally listed endangered or threatened species or critical habitat. • <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. Wetland crossings must comply with the particularly relevant GC 45.	Work not eligible for Category 1
24. Aquaculture (freshwater)	For land based installations, <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. • In-stream/in-water work limited to Jul 15 – Sep 30. • No effect on federally listed endangered or threatened species or critical habitat. Note: Related structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters, below.)	Work not eligible for Category 1

B. NAVIGABLE WATERS	**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 wetlands[1] to tidal waters are also reviewed in this Navigable Waters section.	
	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 - 20).	
ACTIVITY	**CATEGORY 1** Self-Verification Eligible ***(SVNF Required)***	**CATEGORY 2 *(PCN Required)***
1. Repair, Replacement, Expansion, and Maintenance of Authorized (or grandfathered) Structures and Fills	1.Repair, replacement in-kind, or maintenance[7] of existing, currently serviceable[7], authorized structures or fills: • All work is to be conducted in-the-dry, during low water. • Conditions of the original authorization apply. • No substantial expansion or change in use. • No new fill in SAS[3]. • Must be rebuilt in same footprint, however minor deviations in structure 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.	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. 2. <1 acre temporary or permanent fill, excavation and/or secondary impacts. Fill area includes all temporary and permanent waterway fills, provided: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 3. Standard Pile Driving Conditions. Work involving piles shall adhere to one of the four methods below: • Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or • Must be drilled and pinned to ledge, or • Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or • 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 • For the methods above: o In-water noise levels shall not exceed >187dB cSEL re 1µPa or 206dB peak re 1µPa at a distance >10m from the pile being installed, and o In-water noise levels >150dB 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 150dB peak re 1µPa) must be provided between work days. • Existing derelict, degraded or abandoned piles in the project area that are affected by project activities should be removed and properly disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate or mudflats.

2. Moorings	1. Private, non-commercial, non-rental, single-boat moorings, provided: • Authorized by the local harbormaster/town. • Not associated with any boating facility.[11] • Boat or mooring not located in a Federal Navigation Project or buffer zone[12] other than in a Federal Anchorage[12]. Moorings in a Federal Anchorage not associated with a boating facility[11] and are not for rent. • No interference with navigation. • No new moorings located in SAS[3]. 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 SAS[3] are going to be replaced, they should be replaced with low impact mooring technology that prevents mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS protection systems where practicable. 2. Minor relocation of previously authorized moorings, provided: • Authorized by the local harbormaster/town. • Not located in SAS[3] • No interference with navigation. • Cannot be relocated into a Federal Navigation Project[12] other than a Federal Anchorage[12] ***Note: Cat 1 eligible moorings do not require SVNF.***	1. Moorings associated with an existing boating facility[11]. An eelgrass[14] survey may be required. 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. 3. Moorings located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits[13] of a Federal Channel[12]. (See Appendix H.) The buffer zone is equal to 3 times the authorized depth of that channel. 4. An IP is required for moorings within the horizontal limits[11], or with moored vessels that extend, into the horizontal limits of a Federal Navigation Project[12], except those in Federal Anchorages[12]. *For 1-4 above, siting of new individual moorings in SAS[3], including eelgrass[14], should be avoided to the maximum extent practicable. If SAS[3] 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. For moorings that appear to impact SAS, the Corps may require an eelgrass survey.*
3. Structures, Floats and Lifts	1. Reconfiguration of existing authorized structures shall occur in-the-dry during low water. 2. Minor relocation of <u>previously authorized</u> floats or moored floats/lobster cars, provided: • Authorized by the local harbormaster/town. • Not located in SAS[3]. • No interference with navigation. • Cannot be relocated into a Federal Navigation Project[12] other than a Federal Anchorage[12].	1. New structures or floats, including floatways/skidways, built to access waterway (seasonal and permanent). Includes both pile supported and crib supported structures. 2. Expansions to existing boating facilities[11] • *Pile-supported structures <400 SF, with attached floats totaling <u>≤</u>200 SF.* • *Structures are <u>≤</u>4' wide and have at least a 1:1 height:width ratio[11].* • *Floats supported a minimum of 18" above the substrate during all tides.* • *Structures & floats not located within 25' of any eelgrass[8].* • *Moored vessels not positioned over SAS[3].*

		• *The Corps may require a letter of no objection from the abutter if structure is to be within 25 feet of the property line.* • *No structure extends across >25% of the waterway width at mean low water.* • *Not located within the buffer zone of the horizontal limits[13] of a Corps Federal Navigation Project (FNP) (Appendix F). The buffer zone is equal to three times the authorized depth of that FNP.* 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 limits[13] of a Corps Federal Navigation Project[12] (see Appendix H). 4. An Individual Permit is required for structures & floats associated with a new or previously unauthorized boating facility[11]. 5. Standard Pile Driving Conditions. Work involving piles shall adhere to one of the four methods below: • Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or • Must be drilled and pinned to ledge, or • Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or • 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 • For the methods above: o In-water noise levels shall not exceed >187dB cSEL re 1µPa or 206dB peak re 1µPa at a distance >10m from the pile being installed, and o In-water noise levels >150dB 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 150dB peak re 1µPa) must be provided between work days. • Existing derelict, degraded or abandoned piles in the project area that are affected by project activities should be removed and properly disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate or mudflats.

4. Aids to Navigation and Temporary Recreational Structures	1. Temporary buoys, markers, floats, etc. for recreational use during specific events, provided they are removed within 30 days after use is discontinued. 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)." ***Note: Cat 1 eligible aids to navigation and regulatory markers do not require SVNF.***	Work not eligible for Category 1
5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation	1. Maintenance dredging[10] for navigational purposes <1,000 CY with upland disposal. Includes return water from upland contained disposal area, provided: • Proper siltation controls are used. • Dredging & disposal operation limited to Nov. 8 – Apr. 9. • No impact to SAS[3]. • No dredging in intertidal areas. • No dredging within 100' of shellfish beds. • No dredging in areas designated as Critical Habitat for Atlantic salmon [see GC 8(b) & (c)]. • For dredging in tidal waters outside of Atlantic salmon critical habitat, applicants must contact NMFS (see GC 8) to ensure no impacts to listed species such as shortnose sturgeon, Atlantic surgeon, and listed sturgeon critical habitat. • Project proponents must contact the USFWS for work on coastal beaches to ensure no impacts to piping plovers, roseate terns, rufa red knot, or their habitat [see GC 8(c)]. • No underwater blasting. 2. Maintenance dredging 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.	1. Maintenance dredging[10] ≥1,000 CY, new dredging <25,000 CY, or projects not meeting Category 1. Includes return water from upland contained disposal areas. Disposal includes: • Upland. • Beach nourishment (above mean high water) of any area provided the dredging's primary purpose is navigation or the sand is from an upland source. • Open water & confined aquatic disposal, if Corps finds the material suitable. 2. Beach nourishment associated with dredging when the primary purpose is not navigation requires at least a Category 2 review. 3. Maintenance or new dredging[10] and/or disposal in or affecting a SAS[3] requires an Individual Permit.

6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges	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. 2. Causeways and approach fills are not included in this category and require Category 2 or Individual Permit authorization.	<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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
7. Bank and Shoreline Stabilization	1. Bank stabilization projects <200 linear feet provided: • ≤1 cubic yard of fill per linear foot placed along the bank waterward of high tide line. No fill or equipment will occur in SAS[3]. • Work conducted in the intertidal zone must be conducted in-the-dry during low water. • No structures angled steeper than 1H:1V and only rough-faced stone or fiber roll revetments allowed. • No driving of piles or sheeting. 2. Bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.	1. Work not eligible for Category 1. 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities	Not Eligible	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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 2. Conversions of previously authorized pile supported buildings over navigable waters to residences, offices, or other non-water dependent uses require at least a Category 2 review. 3. Floating house boats or businesses on floats require Category 2 review.
9. Utility Line Activities	1. Repair or maintenance of existing, currently serviceable, authorized utilities with no expansion or change in use: • Conditions of the original authorization apply. • Trenching or filling is confined to the existing footprint. • In water work conducted between Nov 8 and Apr 9. • No new impact to SAS. 2. Particularly relevant is GC12. 3. New work in, over, or under navigable waters requires a PCN and Category 2 review. 4. Except for aerial utility lines, 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	1. New or replacement installations or work not otherwise eligible for Category 1. 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 3. Particularly relevant is GC12

	Squaw Point) on Cape Jellison in Stockton Springs or in tidal	
10. Linear Transportation Projects **(Not Including Stream Crossings)**	Not eligible	<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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
11. Mining Activities	Not Eligible	Not Eligible
12. Boat Ramps and Marine Railways	1. No new impact to SAS 2. Marine railway and boat ramp work not eligible for maintenance[7] (i.e. not currently serviceable[7]) may be replaced "in-kind" with minor deviations[7] provided: • Work is in the intertidal zone. • No fill expansion below high tide line. • Work conducted in-the-dry during low water. 3. No new boat ramps or marine railways.	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects	Not Eligible	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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 2. No new impoundments.
14. Reshaping Existing Drainage Ditches and Mosquito Management	1. ≤500 linear feet of drainage ditch will be modified. The reshaping of the ditch cannot increase drainage capacity beyond the original as-built capacity nor can it expand the area drained by the ditch as originally constructed (i.e., the capacity of the ditch must be the same as originally constructed and it cannot drain additional wetlands or other waters of the U.S.). 2. No new ditches or relocation of drainage ditches constructed in waters of the U.S.; the location of the centerline of the reshaped drainage ditch must be approximately the same as the location of the centerline of the original drainage ditch. 3. No effect on federally listed endangered or threatened species or critical habitat	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.

15. Oil Spill and Hazardous Material Cleanup	Jurisdictional activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS[3] must typically be restored in place at the same elevation. ***Note: SVNF or a surrogate state reporting form may be submitted after the fact. No SVNF is required for Category 1eligible containment booms.***	Work not eligible for Category 1
16. Cleanup of Hazardous and Toxic Waste	Not eligible - except for booms placed for hazardous and toxic waste containment and absorption and prevention which are eligible for SV. ***Note: No SVNF is required for Category 1 eligible containment booms.***	Specific jurisdictional 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 and other SAS must typically be restored in place at the same elevation to qualify.
17. Scientific Measurement Devices	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 or concentrate movement of aquatic organisms; no activity results in a hazard to navigation; and no activity requiring underwater blasting.	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
18. Survey Activities	Jurisdictional survey activities such as exploratory drilling, surveying and sampling activities, excluding any biological sampling devices. Does not include any activity requiring underwater blasting, seismic exploratory operations, or oil and gas exploration and fill for roads or construction pads. No activity may result in a hazard to navigation.	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
19. Agricultural Activities	Not Eligible	Not Eligible

20. Fish & Wildlife Harvesting, Enhancement and Attraction Devices and Activities (Not Aquaculture)	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 may result in a hazard to navigation. ***Note: A SVNF is not required for these Category 1 eligible devices and activities.***	1. Work not eligible for Category 1. 2. Impoundments or semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster and new fish weirs with an impounded area $\leq$ ½ acre. For Aquaculture operations, refer to Activity 24.
21. Habitat Restoration, Establishment and Enhancement Activities	1. Cultch placement in tidal waters is eligible for SV provided there are no salt marsh or vegetated shallow impacts. 2. SAS planting and transplanting $\leq$ 100 SF in tidal waters; 3. No artificial or living reefs. 4. The activity is authorized in writing by a local, state, or non-Corps federal environmental agency. Water impoundments require PCN. 5. No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another. 6. No dam removal. 7. Shellfish habitat enhancement such as brushing the flats is eligible for Category 1, *but not the use of netting which requires Category 2 review.*	1. Work not eligible for Category 1. 2. Aquatic habitat restoration, establishment and enhancement provided those activities are proactive and result in net increases in aquatic resource functions and services.[8]
22. Previously Authorized Activities	Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015. The terms and general conditions of this GP apply along with any special conditions in the written authorization.	
23. Stream & Wetland Crossings	Not Eligible	All temporary or permanent crossings of tidal navigable waters or adjacent tidal wetlands not eligible as maintenance require a PCN. GC 45 applies
24. Aquaculture	Not Eligible	Shellfish & finfish aquaculture (with the exception of Atlantic salmon and any other salmonid, or other federally listed endangered or threatened species), or other aquaculture facilities with no more than minimal individual and cumulative impacts to environmental resources or navigation. This is inclusive but not limited to cages, nets, bags, racks, long lines, fences, posts, poles, predator screening, etc. Aquaculture guidelines are provided at: www.maine.gov/dmr/aquaculture/index.htm.

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 high water mark and above the normal hydrologic influence of their adjacent waterbody. Note, with respect to the federally designated navigable rivers, the wetlands bordering and contiguous to the tidally influenced portions of those rivers are reviewed under "II. Navigable Waters."

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

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

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

Cumulative Impacts: The 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 G, page 3, Paragraph 10(b).

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[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)** The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3 – "Activities occurring before certain dates," provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification.

- Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make repair, rehabilitation, or replacement are authorized.
- Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.
- No seaward expansion for bulkheads or any other fill activity is considered Category 1 maintenance.
- 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.

b) The state's maintenance provisions may differ from the Corps and may require reporting and written authorization from the state.

c) Contact the Corps to determine whether stream crossing replacements require a written application to the Corps for at least a Category 2 review.

d) Exempted Maintenance. In accordance with 33 CFR 323.4(a)(2), any discharge of dredged or fill material that may result from any of the following activities is not prohibited by or otherwise subject to regulation under Section 404 of the CWA: "Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design."

[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. The Corps may require proof of authorization. Maintenance dredging typically refers to the routine removal of sediment to maintain the design depths of serviceable navigation channels, harbors, basins, marinas, boat launches, and port facilities. Maintenance dredging is conducted for navigational purposes and does not include any expansion of the previously dredged area or depth. The Corps may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS, shellfish, etc.

[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, dockominiums, 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. Note: Eelgrass surveys should be conducted be conducted between May and October unless otherwise directed.

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[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.

[16] **Agricultural Activities:** The Clean Water Act exempts certain discharges associated with normal farming, ranching, and forestry activities such as plowing, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices (Section 404(f)(1)(A)). Applicants are strongly advised to contact the Corps for a determination of whether their activity is exempt or requires a permit.

US Army Corps of Engineers®
New England District

Appendix B: Self-Verification Notification Form

(for all tidal and non-tidal projects in Maine subject to Corps jurisdiction)

At least two weeks before work commences, complete **all** fields (write "none" if applicable) below or use the fillable form at www.nae.usace.army.mil/missions/regulatory.aspx. Send this form, a location map, any project plans, and an Official Species List (See GC 8) to the address noted below; fax to (207) 623-8206; or email to jay.l.clement@usace.army.mil. The two-week lead time is not required for emergency situations (see page 4 for definition). Please call (207) 623-8367 with questions.

Maine Project Office
U.S. Army Corps of Engineers
New England District
675 Western Avenue #3
Manchester, Maine 04351

State Permit Number: _____
Date of State Permit: _____
State Project Manager: _____

Permittee: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Contractor: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Consultant/Engineer/Designer: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Wetland/Vernal Pool Consultant: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Project Location/Description: _____
Address, City, State & Zip: _____
Latitude/Longitude Coordinates: _____ Tax Map/Lot: _____
Waterway Name: _____
Work Description: _____

_____

Provide any prior Corps permit numbers: _____
Proposed Work Dates: Start: _____ Finish: _____

Area of wetland impact: _____ SF (leave blank if work involves structures & no fill in Navigable Waters)
Area of waterway impact: _____ SF (leave blank if work involves structures & no fill in Navigable Waters)
Area of compensatory mitigation provided: _____ SF

Work will be done under the following Appendix A categories (circle all that apply):

I. Inland Waters and wetlands: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
II. Navigable Waters: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Your name/signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions of Category 1 of the Maine General Permit.

Permittee Printed Name: _____

Permittee Signature: _____ Date: _____

US Army Corps of Engineers®
New England District

Appendix C: Content of Pre-Construction Notification

In addition to the following required information, the applicant must provide additional information as the Corps deems essential to make a public interest determination including, where applicable, a determination of compliance with the Section 404(b)(1) guidelines or ocean dumping criteria. Such additional information may include environmental data and information on alternate methods and sites as may be necessary for the preparation of the required environmental documentation. For a more comprehensive checklist, go to www.nae.usace.army.mil/missions/regulatory >> Forms >> Application and Plan Guideline Checklist. Please check with the Corps for project-specific requirements.

Information required for all projects:

- ☐ Corps application form (ENG Form 4345) or appropriate state application form (see Appendix E). Forms may need to be supplemented to include the information noted below.
- ☐ Proof of notification to the SHPO and the appropriate THPOs (see Appendix E).
- ☐ Official Species List for any federally listed endangered or threatened species (Instructions at Appendix D)
- ☐ Drawings, sketches, or plans (detailed engineering plans and specifications are not required) that are legible, reproducible (color is encouraged, but features must be distinguishable in black and white), no larger than 11"x17", with bar scale. Wetland area impact sheets should have the highest resolution possible to show work within Corps jurisdiction (do not just reduce project overview or cut large-scale plan into quadrant sheets). Provide locus map and a plan overview of the entire property with a key index to the individual impact sheets. A locus map be on a section of color USGS topographic map is encouraged. Digital submissions are encouraged.
- ☐ Include:
  - ☐ All direct, secondary, permanent and temporary effects the project would cause, including the anticipated amount of impacts to waters of the U.S. expected to result from the activity, in acres, linear feet, or other appropriate unit of measure.
  - ☐ Any historic permanent fill associated with each single and complete project.
  - ☐ Cross-section views of all wetland and waterway fill areas and wetland replication areas.
  - ☐ Delineation of all wetlands, other special aquatic sites (vegetated shallows, saltmarsh, mudflats, riffles and pools, coral reefs, and sanctuaries and refuges), and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Use Federal delineation methods and include Corps wetland delineation data sheets (see GC 2).
  - ☐ MLW and MHW elevations in tidal waters. Show the HTL elevations when fill is involved. Show OHW elevation in lakes and non-tidal streams.
  - ☐ Existing and proposed conditions.
  - ☐ For vegetated shallow and eelgrass survey guidance, see www.nae.usace.army.mil/missions/regulatory >> Jurisdictional Limits and Wetlands >> Submerged Aquatic Vegetation Survey Guidance for the New England Region.
  - ☐ Show all known VPs on the project site. See GC 23 for vernal pool identification requirements.
- ☐ 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 OHW in inland waters and below the HTL in coastal waters.

- An Official Species List of federally "listed species or critical habitat" present in the action area (see GC 8).
- A restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions (see GC 43).

Information that may be required:

- Photographs of wetland/waterway to be impacted. Photos at low tide are preferred for work in tidal waters.
- For drawings, sketches, or plans:
  - The vertical datum for all coastal projects must be in U.S. survey feet and referenced to MLLW and current tidal epochs, with a reference chart showing conversion factor to NAVD88; do not use local datum. See www.nae.usace.army.mil/missions/regulatory >> Forms and Publications >>Vertical Datum - FEMA (Jul 2007);
  - The horizontal state plane coordinates shall be in U.S. survey feet and based on the appropriate state plane coordinate system.
- For the construction of a filled area or pile or float-supported platform, the use of, and specific structures to be erected on, the fill or platform.
- For the discharge of dredged or fill material into waters of the U.S. or the transportation of dredged material for the purpose of disposing of it in ocean waters, the source of the material; the purpose of the discharge, a description of the type, composition and quantity of the material; the method of transportation and disposal of the material; and the location of the disposal site.
- For the discharge 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. Include either a statement describing how impacts to waters of the U.S. are to be compensated for or a statement explaining why compensatory mitigation should not be required for the proposed impacts.
- Purpose and need for the proposed activity;
- Limits and coordinates of any Federal Navigation Project in the vicinity of the project area.
- Limits and coordinates of any proposed mooring field, reconfiguration zone or aquaculture activity. Provide coordinates for all corners;
- Schedule of construction/activity;
- Names and addresses of adjoining property owners;
- Location and dimensions of adjacent structures;
- List of authorizations required by other Federal, interstate, state, or local agencies for the work, including all approvals received or denials already made.
- Identification and description of potential impacts to Essential Fish Habitat (defined at VI. Definitions and Acronyms.
- Identification of potential discharges of pollutants to waters, including potential impacts to impaired waters, in the project area (see GC 19).
- Invasive Species Control Plan (see GC 24). For sample control plans, see www.nae.usace.army.mil/missions/regulatory >> Invasive Species.
- Wildlife Action Plan (WAP) maps. Contact Maine Inland Fisheries & Wildlife (Appendix E) or on line at http://www.maine.gov/ifw/wildlife/conservation/action_plan.html

Information for dredging projects that may be required:

- 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).
- ☐ Identification and description of any potential impacts to Essential Fish Habitat.
- ☐ Delineation of submerged aquatic vegetation (e.g., eelgrass beds).

Information for aquaculture projects that may be required:

- ☐ Maine Aquaculture guidelines and joint Corps/Maine DMR applications may be found at: www.maine.gov/dmr/aquaculture/index.htm.
- ☐ In addition to the information required above, applications must also include:
  - ☐ Whether canopy predator nets are being used.

Appendix D: Instruction for USFWS IPaC Project Builder/Official Species List

NOTE: These instructions are subject to change by the USFWS. Users should check this GP's Corps webpage for the latest instructions or click here.

In your internet browser go to http://ecos.fws.gov/ipac/

1. Click on get started.

2. Click on enter project location.

3. Search or zoom to your project location. (You can enter an address and then zoom in with your mouse).

4. Define your area. (Select the polygon tool and click around the boundary of your project.) or (Use the draw a line tool for linear projects)

Note: You can change/select the map from Streets to Satellite or Topo in the lower left corner of the map.
5. Click finished drawing then click confirm and select continue.

6. On the next page under Tasks (lower left), select Request an official species list. The pane will open. Select "request official species list" again.

7. A new page will open. Fill in the project information blanks with the project name, brief description, project type, lead agency, and contact information. Be sure to check the box to verify this is a legitimate project. Click on Submit Official Species List Request.

8. You will be sent an e-mail with instructions to complete the request by clicking on the link provided.

9. The site will open Official Species List Request Completed. Under the Maine Ecological Services Field Office address you will see "Official Species List Document". Click on that link and your document will open. Save and or print a copy and **include the entire report with your application**.

Note, you will receive a second e-mail with the same information. You can save the link in the event you need to return to the IPaC site for an updated list.

If a period of time has passed since your initial "Official Species List" identifier number was generated, you may choose to generate an "UPDATED SPECIES LIST". To do this, return to the IPaC homepage at http://ecos.fws.gov/ipac site. In the middle of the page, click the purple "Need an updated species list" link.

On the request an "Updated Official Species List" page, complete the information in the boxes provided. You will need the project specific official consultation code generated and stated on the original official list as well as the email address entered with the original submission.

Click "Request Updated Species List". Print, or save.

Appendix E: Contacts and Tribal Areas of Interest

1. Federal

U.S. Army Corps of Engineers
Maine Project Office
675 Western Avenue #3
Manchester, ME 04351
(207) 623-8367 (phone); (207) 623-8206 (fax)

U.S. Environmental Protection Agency
5 Post Office Square
Suite 100 (OEP05–2)
Boston, MA 02109-3912
(617) 918-1589 (phone)

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

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

Federal Emergency Management Agency
99 High St.
Boston, MA 02110
(877) 336-2734 (phone)
(Flood Plain Management)

National Marine Fisheries Service
55 Great Republic Drive
Gloucester, MA 01930
(978) 281-9102 (phone); (978) 281-9301 (fax)
(Federal endangered species & EFH)

National Park Service
North Atlantic Region
15 State Street
Boston, MA 02109
(617) 223-5203 (phone)
(Wild and Scenic Rivers)

Commander (dpb)
First Coast Guard District
One South Street - Battery Bldg
New York, NY 10004-1466
(212) 668-7021 (phone); (212) 668-7967 (fax)
(bridge permits)

2. State of Maine

a. Department of Environmental Protection (*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 (phone)

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

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

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

b. Department of Agriculture, Conservation and Forestry

i. Maine Land Use Planning Commission (LUPC) (*State permits & Water Quality Certifications in the unorganized areas of the State*)

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

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

Rangeley Regional Office
133 Fyfe Road
PO Box 307
West Farmington, ME 04992
(207) 670-7493 (phone); (207) 287-7439 (fax)

Downeast Regional Office
106 Hogan Rd, Suite 8
Dorothea Dix Complex
Bangor, Maine 04401
(207) 941-4052 (phone); (207) 941-4222 (fax)

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

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

ii. Maine Coastal Program

Department of Agriculture, Conservation and Forestry
Bureau of Resource Information and Land Use Planning
17 Elkins Lane {physical address}
State House Station 93
Augusta, Maine 04333-0038
(207) 287-2801 (phone); (207) 287-2353 (fax)
(CZM consistency determinations)

iii. Division of Parks and Public Lands

22 State House Station
Augusta, Maine 04333
(207) 287-3061 (phone); (207) 287-6170 (fax)
(submerged lands leases)

c. Department of Marine Resources

P.O. Box 8
West Boothbay Harbor, Maine 04575
(207) 633-9500 (phone); (207) 624-6024 (fax)
(aquaculture leases)

3. Historic Properties

a. State Historic Preservation Officer (SHPO)

Mr. Kirk F. Mohney, Director

Maine Historic Preservation Commission (MHPC)
65 State House Station
Augusta, Maine 04333-0065
(207) 287-2132 (phone); (207) 287-2335 (fax)
Area of concern: The entire State of Maine

b. Tribal Historic Preservation Officers (THPOs)

Note: The area of concern for each tribe is the entire State of Maine

THPO & Environmental Planner
Houlton Band of Maliseet Indians
88 Bell Road
Littleton, Maine 04730
(207) 532-4273, x215 (phone)
(207) 532-6883 (fax)
envplanner@maliseets.com
ogs1@maliseets.com

THPO
Aroostook Band of Micmacs
7 Northern Road
Presque Isle, Maine 04769
(207) 764-1972 (phone); (207) 764-7667 (fax)
jpictou@mimca-nsn.gov

THPO
Passamaquoddy Tribe of Indians
Pleasant Point Reservation
P.O. Box 343
Perry, Maine 04667
(207) 853-2600 (phone); (207) 853-6039 (fax)
soctomah@gmail.com

THPO
Penobscot Nation
Cultural and Historic Preservation Dept.
12 Wabanaki Way
Indian Island, Maine 04468
(207) 817-7471 (phone)
chris.sockalexis@penobscotnation.org

THPO
Passamaquoddy Tribe of Indians
Indian Township Reservation
P.O. Box 301
Princeton, Maine 04668
(207) 796-2301 (phone)
(207) 796-5256 (fax); soctomah@gmail.com

4. Organizational Websites (Note – Subject to Change):

U.S. Army Corps of Engineers, N.E. District	www.nae.usace.army.mil/missions/regulatory.aspx
U.S. Army Corps of Engineers, Headquarters	See above link>>Useful Links>>Federal Agency Links
U.S. Environmental Protection Agency	www.epa.gov/owow/wetlands
National Marine Fisheries Service	www.nmfs.noaa.gov
U.S. Fish and Wildlife Service	www.fws.gov/mainefieldoffice
National Park Service	www.nps.gov/rivers/index.html
Maine Department of Environmental Protection	www.maine.gov/dep
Maine Department of Agriculture, Conservation and Forestry	www.maine.gov/acf/index.shtml
Maine Land Use Planning Commission	www.maine.gov/doc/lupc/commission/offices.shtml
Maine Department of Marine Resources	www.maine.gov/dmr/index.htm
State of Maine - Aquaculture Guidelines	www.maine.gov/dmr/aquaculture/index.htm

Appendix F: Definitions

Definitions

Attendant Features: Occurring with or as a result of; accompanying.

Biodegradable: A material that decomposes into elements found in nature within a reasonably short period of time and will not leave a residue of plastic or a petroleum derivative in the environment after degradation. Examples of biodegradable materials include jute, sisal, cotton, straw, burlap, coconut husk fiber (coir) or excelsior. In contrast, degradable plastics break down into plastic fragments that remain in the environment after degradation.

Boating facilities: These provide, rent or sell mooring space, such as marinas, yacht clubs, boat yards, dockominiums, town facilities, land/home owners, etc. Not classified as boating facilities are piers shared between two abutting properties or town mooring fields that charge an equitable user fee based on the actual costs incurred.

Brushing the Flats: The placement of tree boughs, wooden lath structure, or small-mesh fencing on mudflats, or any bottom disturbance (e.g., discing, plowing, raking, etc.), to enhance recruitment of shellfish.

Buffer Zone: The buffer zone of an FNP is equal to three times the authorized depth of the FNP.

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 are installed temporarily or permanently

Cumulative effects: See "Direct, secondary, and cumulative effects."

Direct, secondary, and cumulative effects:

Direct Effects: The loss of aquatic ecosystem within the footprint of the discharge of dredged or fill material. Direct effects are caused by the action and occur at the same time and place.

Secondary Effects: 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) aquatic areas drained, flooded, fragmented, or mechanically cleared, b) fluctuating water levels in all impoundment and downstream associated with the operation of a dam, c) septic tank leaching and surface runoff from residential or commercial developments on fill, and d) leachate and runoff from a sanitary landfill located in waters of the U.S. See 40 CFR 230.11(h).

Cumulative Effects: The changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual 1) discharges of dredged or fill material, or 2) structures. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems. See 40 CFR 230(g).

Dredging:

Maintenance Dredging: Includes areas and depths previously authorized by the Corps and dredged. The Corps may require proof of authorization. Maintenance dredging typically refers to the routine removal of accumulated sediment from channel beds to maintain the design depths of navigation channels, harbors, marinas, boat launches and port facilities. Routine maintenance dredging is conducted regularly for navigational purposes (typically at least once every ten years) and does not include any expansion of the previously dredged area or depth. The Corps may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS,

shellfish, etc. The main characteristics of maintenance dredging projects are variable quantities of material; soft, uncompacted soil; contaminant content possible; thin layers of material;occurring in navigation channels and harbors; repetitive activity

New Dredging: Dredging of an area or to a depth that has never been authorized by the Corps or dredged.

Dredged material & discharge of dredged material: These are defined at 323.2(c) and (d). The term dredged material means material that is excavated or dredged from waters of the U.S.

Essential Fish Habitat (EFH): This is broadly defined to include those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

Fill material & discharge of fill material: These are defined at 323.2(e) and (f). The term fill material is defined as material placed in waters of the U.S. where the material has the effect of either replacing any portion of a water of the U.S. with dry land or changing the bottom elevation of any portion of a water of the U.S.

Federal anchorages, Federal channels and Federal turning basin: Refer to Appendix H for those in Maine

Federal navigation projects (FNPs): These areas are maintained by the Corps; authorized, constructed and maintained on the premise that they will be accessible and available to all on equal terms; and are comprised of Federal Anchorages, Federal Channels and Federal Turning Basins. The buffer zone is equal to three times the authorized depth of a FNP. More information on the following FNPs is provided at www.nae.usace.army.mil/missions/navigation.aspx >> Navigation Projects.

Flume: An open artificial water channel, in the form of a gravity chute, that leads water from a diversion dam or weir completely aside a natural flow. A flume can be used to measure the rate of flow.

Frac out: During normal drilling operations, drilling fluid travels up the borehole into a pit. When the borehole becomes obstructed or the pressure becomes too great inside the borehole, the ground fractures and fluid escapes to the surface.

Independent utility: A test to determine what constitutes a single and complete non-linear 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.

Individual Permit: A Department of the Army authorization that is issued following a case-by-case evaluation of a specific structure or work in accordance with the procedures of 33 CFR 322, or a specific project involving the proposed discharge(s) in accordance with the procedures of 33 CFR 323, and in accordance with the procedures of 33 CFR 325 and a determination that the proposed discharge is in the public interest pursuant to 33 CFR 320.

Maintenance: Regulations on maintenance are provided at 33 CFR 323.4. The following definitions are applicable:

Minor deviations: 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, which are necessary to make repair, rehabilitation, or replacement are permitted, provided the adverse environ-mental effects resulting from such repair, rehabilitation, or replacement are minimal.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Marina reconfiguration zone: A Corps-authorized area in which permittees may rearrange pile-supported structures and floats without additional authorizations. A reconfiguration zone does not grant exclusive privileges to an area or an increase in structure or float area.

Navigable waters of the U.S.: See Waters of the U.S. below.

Overall project: See "single and complete linear project" below.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.
Permanent impacts: Permanent impacts means waters of the U.S. that are permanently affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent impacts include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. Temporary impacts include waters of the U.S. that are temporarily filled, flooded, excavated, drained or mechanically cleared because of the regulated activity.
Pre-construction notification (PCN): A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by this GP. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of these GPs. A PCN may be voluntarily submitted in cases where PCN is not required and the project proponent wants confirmation that the activity is authorized under this GP.
Secondary effects: See "Direct, secondary, and cumulative effects."
Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the U.S. (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for the purposes of this GP. 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.
The overall project, for purposes of this GP, includes all regulated activities that are reasonably related and necessary to accomplish the project purpose.
Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For non-linear projects, the single and complete project must have independent utility (see definition).
Special aquatic sites: These include inland and saltmarsh wetlands, mud flats, vegetated shallows, sanctuaries and refuges, coral reefs, and riffle and pool complexes. These are defined at 40 CFR 230 Subpart E.
Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.
Temporary impacts: See permanent impacts above.
Utility line: Any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term 'utility line' does not include activities that drain a water of the U.S., such as drainage tile or French drains, but it does apply to pipes conveying drainage from another area.
Vegetated shallows: Permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as eelgrass and widgeon grass (*Rupiamaritima*) in marine systems (doesn't include salt marsh) as well as a number of freshwater species in rivers and lakes. Note: These areas are also commonly referred to as submerged aquatic vegetation (SAV).
Vernal pools (VPs): For the purposes of this GP, VPs are depressional wetland basins that typically go dry in most years and may contain inlets or outlets, typically of intermittent flow. Vernal pools range in both size and depth depending upon landscape position and parent material(s). Pools usually

support one or more of the following obligate indicator species: wood frog, spotted salamander, blue-spotted salamander, marbled salamander, Jefferson's salamander and fairy shrimp. However, they should preclude sustainable populations of predatory fish.
VP areas are:

- Depression (includes the VP depression up to the spring or fall high water mark, and includes any vegetation growing within the depression),
- Envelope (area within 100 feet of the VP depression's edge), and
- Critical terrestrial habitat (area within 100-750 feet of the VP depression's edge).

Note: See footnote to GC 23. The Corps may determine during the PCN review that a waterbody should not be designated as a VP based on available evidence.
Water diversions: Water diversions are activities such as bypass pumping (e.g., "dam and pump") 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.
Weir: A barrier across a river designed to alter the flow characteristics. In most cases, weirs take the form of a barrier, smaller than most conventional dams, across a river that causes water to pool behind the structure (not unlike a dam) and allows water to flow over the top. Weirs are commonly used to alter the flow regime of the river, prevent flooding, measure discharge and help render a river navigable.
Waters of the U.S. & Waters of the United States (U.S.): The term waters of the U.S. and all other terms relating to the geographic scope of jurisdiction are defined at 33 CFR 328. Also see Section 502(7) of the Federal CWA [33 USC 1352(7)]. Waters of the U.S. include jurisdictional wetlands. Not all waters and wetlands are jurisdictional. Contact the Corps with any questions regarding jurisdiction.
Navigable waters: Refer to 33 CFR 329. These waters include the following federally designated navigable waters in New England. This list represents only those waterbodies for which affirmative determinations have been made; absence from this list should not be taken as an indication that the waterbody is not navigable:

ME: All tidal waters; Kennebec River to Moosehead Lake; Penobscot River to the confluence of the East and West Branch at Medway, Maine; Lake Umbagog within the State of Maine.

Appendix G: 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/missions/regulatory 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.
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 8: 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 8(b)] or to provide information on federally-listed species or habitat [GC 8(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 & procedures).
(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 42: Essential Fish Habitat.
As part of the GP 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 4: Avoidance, Minimization and Compensatory Mitigation.
(a) See www.nae.usace.army.mil/missions/regulatory 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/missions/regulatory, "Mitigation" and then "Maine," or www.maine.gov/dep/blwq/docstand/nrpa/ILF_and_NRCP/index.htm.

6. GCs 24, 15, and 43: Invasive Species.
(a) Information on what are considered "invasive species" is provided in our "Compensatory Mitigation Guidance" document at www.nae.usace.army.mil/missions/regulatory 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/missions/regulatory 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/missions/regulatory under "Invasive Species" and provides policy, goals and objectives.

7. GC 44: 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/missions/regulatory under "Useful Links and Documents" for design and construction guidance.

8. GC 45: Stream and Wetland Crossings.
(a) Projects should be designed and constructed to ensure long-term success using the most recent manual located at www.nae.usace.army.mil/missions/regulatory 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 offer guidance 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/missions/regulatory and then "Stream and River Continuity."

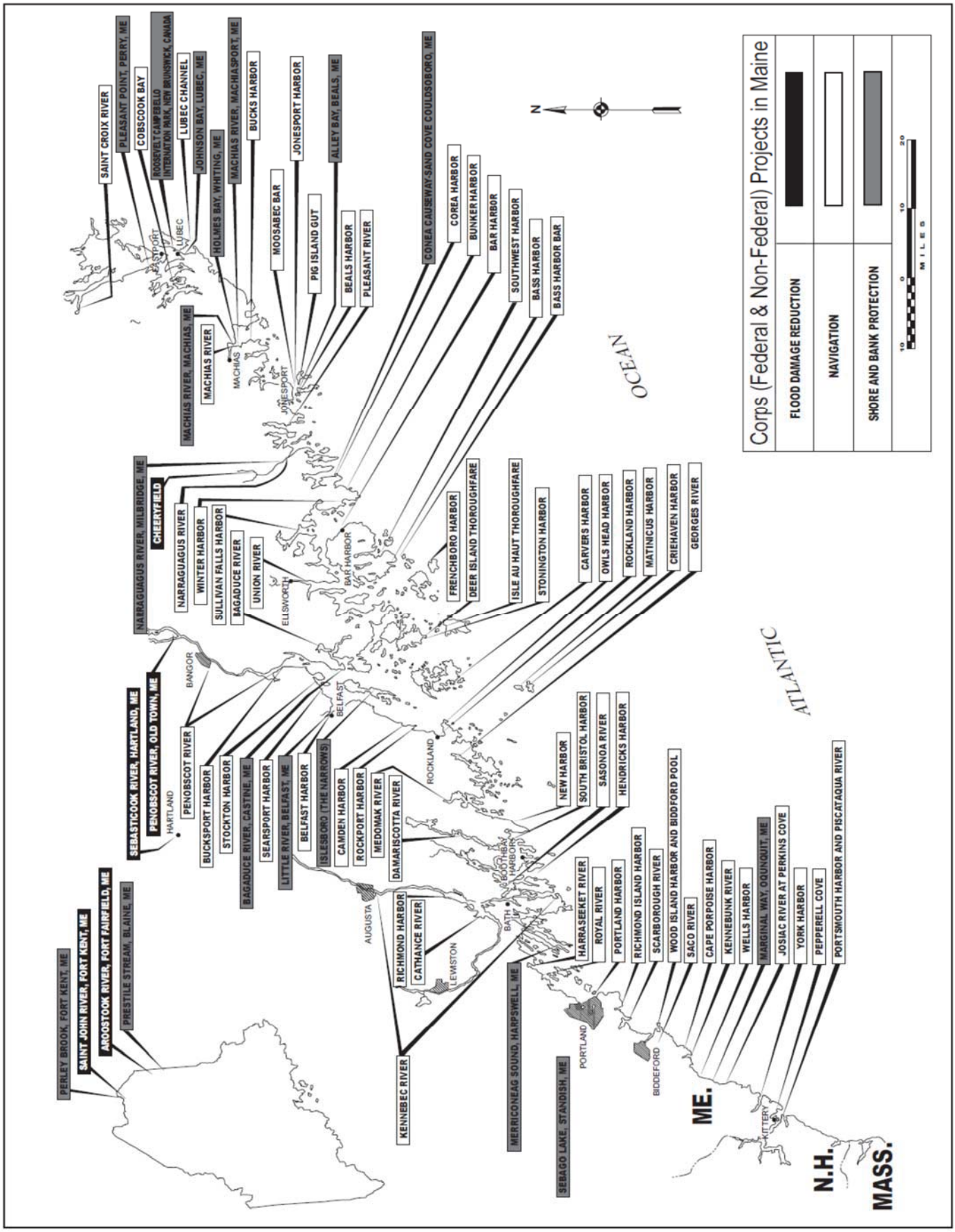
(d) The ME DOT's document "Waterway and Wildlife Crossing Policy and Design Guide for Aquatic Organism, Wildlife Habitat, and Hydrologic Connectivity," 3rd Edition, July 2008, may be used as guidance to evaluate impacts to aquatic, wildlife and surface water resources when designing, constructing, repairing 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 45 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 45(f): The Skidder Bridge Fact Sheet at www.nae.usace.army.mil/missions/regulatory under "Stream and River Continuity" may be a useful temporary span construction method.

9. GC 45: Wetland Crossings. The Maine DEP's crossing standards are at 06-096 DEP, Chapter 305: Permits by Rule, 9 & 10) Crossings (utility lines, pipes and cables). www.maine.gov/dep/blwq/rules/NRPA/2009/305/305_effective_2009.pdf

10. GC 23: 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/missions/regulatory under: 1) "State General Permits" and then "Maine," and 2) "Vernal Pools."

11. GC 29: 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 H: Federal Navigation Projects in Maine



Environmental Summary Sheet

WIN: 23480.00 **Date Submitted: 5/4/2020**
Town: Swans Island
CPD Team Leader: Danielle Tetreau
ENV Field Contact: Ryan Annis

NEPA Complete: Programmatic Categorical Exclusion (CE) 23 CFR 771.117.c.23.i issued on 3/23/2020

☒ **Section 106**
Review Complete: SHPO Concurrence- - No effect, 10/1/2018
Section 106 Resources: none

☒ **Section 4(f) and 6(f)**

Section 4(f)	Section 6(f)
Review Complete - No use	Not Applicable - No takes

☐ **Maine Department of Inland Fisheries and Wildlife Essential Habitat**
Not Applicable **Timing Window:** Not Applicable

☒ **Section 7**
Informal Consultation Complete – May affect, not likely to adversely affect
Species of Concern: Atlantic salmon DPS
Atlantic sturgeon DPS
Shortnose sturgeon
Green sea turtle
Kemp's ridley sea turtle
Loggerhead sea turtle (Northwest Atlantic DPS)
Leatherback sea turtle:
northern long-eared bat: No effect, no clearing

☒ **Essential Fish Habitat**
Adverse Effect, not substantial – consultation complete 3/4/2020
Species of Concern: multi-species, coastal EFH

☒ **Maine Department of Conservation/Public Lands, Submerged Land Lease**
Applicable
*To be completed by MaineDOT legal office

☐ **Maine Land Use Regulation Commission**
Not Applicable

☒ **Maine Department of Environmental Protection**
Permit-By-Rule –#69326
**Applicable Standards and Permits are included with the contract*

☒ **Army Corps of Engineers: Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.**
Category 2 - Corps Permit #NAE-2020-00491
-Work Start Notification form to be completed by ENV Field Contact and submitted to ACOE with copy to Team Leader.
-Compliance Certification Form to be completed by ENV Field Contact and submitted to ACOE with copy to Team Leader.
**Applicable Standards and Permits are included with the contract*

☐ **Stormwater Review**
Not Applicable

☒ **Special Provisions Required**

Special Provision 105-Timing of Work Restriction	N/A☐	Applicable☒
Standard Specification 656-Erosion Control Plan	N/A☐	Applicable☒
Special Provision 656-Minor Soil Disturbance	N/A☒	Applicable☐
Special Provision 203-Dredge Spec	N/A☒	Applicable☐

**All permits and approvals based on plans/scope as of: 10/9/2018*

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

ENVIRONMENTAL OFFICE
MAINE DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333

CORPS PERMIT # NAE-2020-00491
CORPS GP ID# 20-096
STATE ID# PBR

DESCRIPTION OF WORK:
Upgrade the existing state ferry terminal facility in Mackerel Cove at Swans Island, Maine. Regulated work includes the addition of two turning dolphins, wave screens, elevated walkways to the new turning dolphins, and modifications to the existing lighting system. New piling installations will result in a cumulative total of 69 s.f. of permanent tidal bottom impact. This work is shown on the attached plans entitled "Ferry Terminal Improvements, WIN 23480.00, Swans Island, ME (Hancock County)" in one sheet undated, "SWAN'S ISLAND
Project Description Continued on Page 2

LAT/LONG COORDINATES : 44.181941° N -68.424511° W USGS QUAD: SWANS ISLAND, 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 Federal Permit, the Maine General Permit (GP).** http://www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/ME/Maine_General_Permit_2015.pdf

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 38 of the GP (page 16) 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 13, 2020. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 13, 2021.

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: 2/20/20 LEVEL OF REVIEW: CATEGORY 1: ____ CATEGORY 2: X

AUTHORITY (Based on a review of plans and/or State/Federal applications): SEC 10 X , 404 ____ 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 Augusta, Maine Project Office. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0

Jay L. Clement

JAY L. CLEMENT
SENIOR PROJECT MANAGER
MAINE PROJECT OFFICE

FOR Jay L. Clement 3/27/20

FRANK J. DEL GIUDICE DATE
CHIEF, PERMITS & ENFORCEMENT BRANCH
REGULATORY DIVISION

US Army Corps
of Engineers ®
New England District

Project Description Continued from Page 1

FERRY TERMINAL, FENDER SYSTEM MODIFICATIONS, SWAN'S ISLAND, HANCOCK COUNTY" in one sheet dated "11/22/19", and "SWAN'S ISLAND FERRY TERMINAL" in 17 sheets dated "09/19".

PLEASE NOTE THE FOLLOWING CONDITIONS FOR DEPARTMENT OF THE ARMY GENERAL PERMIT NO. NAE-2020-00491

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.

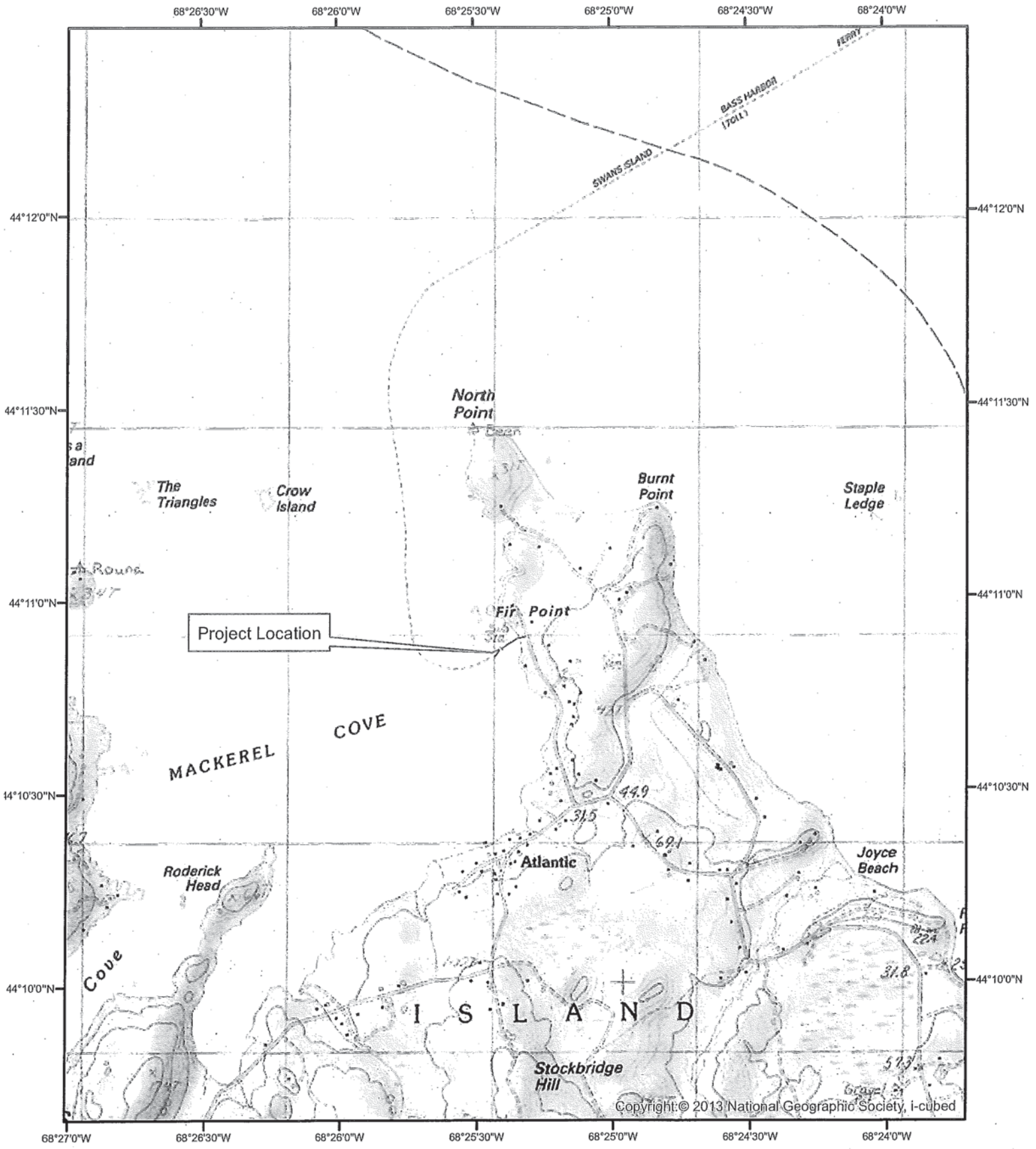
3. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause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

4. In water work shall be conducted between August 1 and April 9 of any year in order to minimize potential impacts to fisheries and local water quality.

5. In accordance with the Project Verification Form supporting the work described in this permit (countersigned by National Marine Fisheries Service on January 31, 2020), the permittee shall comply with all designated Project Design Criteria (PDCs).

6. The permittee is required to mark the ferry terminal facility in accordance with appropriate US Coast Guard Regulations and to contact 1st Coast Guard District, Aids to Navigation Office at (617) 223-8347.

7. In order to minimize potential impacts to Essential Fish Habitat (EFH), the permittee shall conduct a pre-construction survey during the normal eelgrass growing season between May and September at the Frenchboro ferry terminal per the Submerged Aquatic Vegetation Survey Guidance for the New England Region (2016). The survey will identify and map the extent and edges of any existing eelgrass beds. Maps showing the location of delineated eelgrass beds shall be provided to all contractors. Project vessels will be prohibited from anchoring or contacting the bottom within 50 feet of the eelgrass beds. Project impacts to coastal resources, including eelgrass, will be monitored by the Project resident and Maine DOT Environmental staff. Any impacts to eelgrass will be reported to NOAA in writing. Point of contact at NMFS is Mike Johnson at mike.r.johnson@noaa.gov; 978-281-9130.



Ferry Terminal Improvements
WIN 23480.00
Swans Island, ME (Hancock County)

0 0.5 1 Miles

N
W E
S

Project Location: ~~44.181066, -68.362218~~
44.181941, -68.424511

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

TOWN OF SWAN'S ISLAND
HANCOCK COUNTY

SWAN'S ISLAND FERRY TERMINAL

FENDER SYSTEM MODIFICATIONS

FEDERAL PROJECT NO. 02348000
MAINEDOT WIN: 023480.00



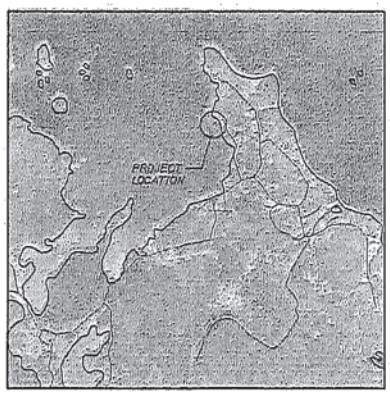
INDEX OF SHEETS

SHEET NO.		TITLE
GENERAL		
G01	1	TITLE SHEET
G02	2	GENERAL NOTES AND DESIGN CRITERIA
G03	3	EXISTING CONDITIONS
G04	4	BORING LOGS
MARINE PLANS		
S01	5	SITE PLAN
S02	6	BERTH PLAN
S03	7	DOLPHIN FOUNDATION PLAN
S04	8	DOLPHIN FOUNDATION DETAILS
S05	9	DOLPHIN PLAN, ELEVATION, AND DETAILS
S06	10	DOLPHIN DETAILS MOORING HARDWARE
S07	11	DOLPHIN DETAILS FENDER SYSTEM I
S08	12	DOLPHIN DETAILS FENDER SYSTEM II
S09	13	DOLPHIN DETAILS MISCELLANEOUS
S10	14	DOLPHIN REPAIR DETAILS
S11	15	WAVE SCREEN PLAN AND ELEVATION
S12	16	GANGWAY PLAN AND ELEVATION
ELECTRICAL PLANS		
E01	17	ELECTRICAL PLAN
E02	18	ELECTRICAL DETAILS

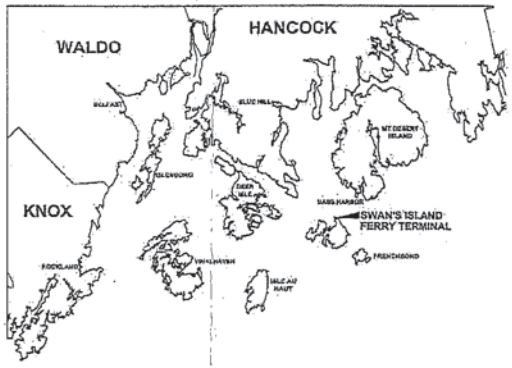
THE PROFESSIONAL ENGINEER WHOSE STAMP APPEARS ON THIS COVER SHEET BEARS RESPONSIBILITY FOR THE FOLLOWING SHEETS WITHIN THIS DRAWING SET:
GENERAL PLANS G01-G03
STRUCTURAL PLANS S01-S12

ADDITIONAL WORK APPEARS WITHIN THIS DRAWING SET AND IS THE RESPONSIBILITY OF THE FOLLOWING ORGANIZATIONS, WHOSE STAMP APPEARS ON THOSE INDIVIDUAL SHEETS:

GENERAL PLANS	G04	GEOTECHNICAL BORING LOGS	SCHNEWALD ENGINEERING
ELECTRICAL PLANS	E01-E02	ELECTRICAL DESIGN	BARTLETT DESIGN, INC.



LOCATION MAP
1/2 0 1/2 1
Scale: In Miles



FEDERAL PROJECT NO. 02348000

WIN 023480.00

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED	DATE
COMMISSIONER:	
CHIEF ENGINEER:	

PROJECT INFORMATION

DESIGN:	M.S. HODGDON	
PROJECT MANAGER	AURÉLE GOSSELIN I	
ESIGNER	CRAIG R. MOSER, P.E.	P.E. NUMBER 13269
CONSULTANT	HNTB CORPORATION	SIGNATURE
PROJECT ENGINEER		DATE 11/22/19
CONTRACTOR		
PROJECT COMPLETION DATE		

SWAN'S ISLAND FERRY TERMINAL
FENDER SYSTEM MODIFICATIONS
SWAN'S ISLAND HANCOCK COUNTY

TITLE SHEET

SHEET NUMBER
G01
1 OF 18

Date:11/22/2019 Username: Division: Filename: 001_Title.dgn

GENERAL NOTES

1. These notes contain general information and are not complete for construction purposes. Contractor shall verify information given here with specifications and other drawings and bring any conflicts to the Engineer's attention before beginning work.

2. All geotechnical and electrical notes may be found on Sheets G04 and E01, respectively.

3. All dimensions and details shall be verified by the Contractor prior to construction.

4. Contractor shall provide and maintain horizontal and vertical controls in the Maine state plane coordinate system.

5. The MaineDOT field office shall be placed on terminal property near the crew's quarters at a location approved/determined by the Resident. The Contractor shall make accomodations off-site for their field office, lay down area, restroom facilities, etc.

SPECIFICATIONS AND CODES

1. Project specifications titled, "Special Provisions For: Swan's Island Ferry Terminal Fender System. Modifications", dated May 31, 2019.

2. State of Maine, Department of Transportation, Standard Specifications, November 2014, including all supplemental specifications and special provisions.

3. Codes and other references
   - A. Unified Facilities Criteria Manuals:
     - UFC 4-150-06 Military Harbors and Coastal Facilities, with Change 1
     - UFC 4-150-07 Maintenance and Operation: Maintenance of Waterfront Facilities, with Change 1
     - UFC 4-150-08 Inspection of Mooring Hardware
     - UFC 4-151-10 General Criteria for Waterfront Construction, with Change 1
     - UFC 4-152-01 Design: Piers and Wharves
     - UFC 4-159-03 Design: Moorings, with Change 2
   - B. US Army Corps of Engineers: Coastal Engineering Manual, current edition
   - C. AASHTO LRFD specifications, 8th edition, 2017 with Interims
   - D. AWS, D1.1, "Structural Welding Code Steel", current edition
   - E. AWS, D1.2, "Structural Welding Code Aluminum", current edition

SURVEY CONTROL

1. Vertical control for marine structures is in reference to MLLW (Mean Lower Low Water). To convert to National Geodetic Vertical Datum (NGVD), use the following formula:
   El. (NGVD) = El. (MLLW) - 9.28 ft

2. Horizontal control is the Maine state plane coordinate system (east zone), NAD 27.

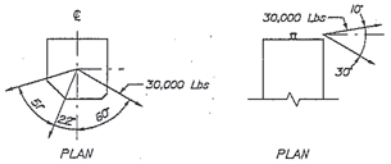
BERTHING LOADS

Dolphin	Berthing Velocity: Ship Velocity (Vs)	Berthing Velocity: ⊥ to Fender	App. Angle	Energy to Fender	Minimum Fender Design Energy	Max. Reaction on Dolphin*
Turning Dolphins: Normal	2.0 Knots	1.41 Knots	45°	112,000 Ft Lbs	380,000 Ft Lbs	244,000 Lb
Turning Dolphins: Extreme	3.0 Knots	2.60 Knots	60°	378,000 Ft Lbs	380,000 Ft Lbs	244,000 Lb

* Includes 1.4 load factor

MOORING LOADS

Dolphin D7 and D8
Mooring line pull: Single line in each direction.



PLAN

PLAN

FENDER NOTES

1. All dimensions, details and existing conditions shall be verified by the Contractor prior to construction.

2. Contractor's steel manufacturer shall design the fender panels for the indicated loads.

3. Embedded anchors for chains shall be set by chemical/adhesive material with 9 inch minimum edge distance and a minimum embedment of 12 times the diameter of the anchor. Strength of existing concrete is 3,000 psi.

4. Anchors shall be set by template.

DOLPHIN/FENDER DESIGN LOADS

Design Vessel: MV Margaret Chase Smith*
Length = 168'-6"
Beam = 40'-0"
Max. Displacement = 633 long tons

* This vessel was chosen as the design vessel since it envelopes the existing vessel fleet as well as the new ferry currently in design (LOA = 154 ft).

Current Vessel: Captain Henry Lee
Length = 130'-0"
Beam = 36'-0"
Max. Displacement = 500 long tons (est.)

New Vessel: TBD
Length = 154'-0"
Beam = 38'-0"
Max. Displacement = 600 long tons (est.)

STEEL PIPE PILES

1. Steel pipe piles shall conform to ASTM A252, Grade 3, Fy = 45 ksi minimum. Per standard specification 711.01, Concrete fill shall be MaineDOT class "A".

2. Piles shall be coated with fusion bonded epoxy in accordance with the specifications.

3. Pile splices shall not be allowed without prior approval of the Engineer of record.

4. Any portion of pile cracked, deformed, or otherwise damaged by pile driving shall be replaced.

5. Piles shall not be out of position shown by more than 2" longitudinally along the pile cap, and 2" transversely across the width of the pile cap.

6. The distance from the side of any pile to the nearest edge of concrete shall not be less than 9".

7. Piles shall be 16"ϕ, ⅝" wall steel pipe piles with concrete fill. Piles shall be fabricated of seamless or straight-seamed material. Spiral welded pipe pile is not permitted.

DEMOLITION NOTES

1. Demolition shall be conducted to prevent debris from falling into the ocean. To the maximum extent practicable, all construction debris, including any liquids or slurries that are produced as part of the demolition, shall be captured and disposed of properly. The Contractor shall comply with applicable permit conditions and environmental regulations listed in the specifications. Work shall include removal of any construction debris from the river and installation and maintenance of appropriate turbidity controls during demolition and construction such that no turbidity escapes the immediate work area. Underwater inspections may be conducted by the Owner's representative to ensure all demolition and construction debris is removed from the ocean.

ENVIRONMENTAL CONDITIONS

1. Wind:
   - Transverse 50 plf, Longitudinal 12 plf
   - Wind on Live Load: Transverse 100 plf
   - Wind on Structure: 40 psf
   - Thermal: Temp. Range for Concrete Structure = 80°F
2. Railings:
   - Aluminum Pedestrian: Vertical 50 plf, Horizontal 50 plf (acting simultaneously)
3. Tidal ranges (elevations in feet):

Swan's Island	Tidal Datums: NGVD29	MSL	MLW	MLLW	STND
Top of Dolphin*	9.12	12.94	18.04	18.40	19.31
Highest Observed Tide	6.93	10.75	15.85	16.21	17.12
MHHW	1.64	5.46	10.56	10.92	11.83
MHW	1.23	5.05	10.15	10.51	11.42
NGVD29**	0.00	3.82	8.92	9.28	10.19
MSL	-3.82	0.00	5.10	5.46	6.37
MLW	-8.92	-5.10	0.00	0.36	1.27
MLLW	-9.28	-5.46	-0.36	0.00	0.91
Lowest Observed Tide	-10.19	-6.37	-1.27	-0.91	0.00
STND (Station Datum)	-12.19	-8.37	-3.27	-2.91	-2.00

* Along top edge of dolphin at corner nearest pen.

** NGVD29 conversion taken from archive project drawings.

Station ID: 8413825, Swans Island, ME
Tidal Epoch: 1983-2001

LEGEND:

- Baseline
- Plate
- Centerline
- XX-XX-XX Washboring
- Flood Light
- Navigation Marker Light
- Site Light - Existing
- Site Light - Proposed
- Curbing
- ϕ Diameter
- Double Bitt
- Chock
- Ladder

ABBREVIATIONS:

CY	Cubic Yard
EA	Each
EL	Elevation In Feet
HSS	Hollow Structural Sections
ID	Inside Diameter
K (KIP)	1000 Pounds
LBS	Pounds
LF	Linear Feet
MAX.	Maximum
MIN.	Minimum
NA	Not Applicable
N.T.S.	Not To Scale
OC	On Center
PSF	Pounds Per Square Foot
R	Radius
REF	Reference
SCHD.	Schedule
SF	Square Feet
TYP.	Typical
UON	Unless Otherwise Noted
USACOE	United States Army Corps of Engineers

STRUCTURAL STEEL AND MISCELLANEOUS STEEL FABRICATIONS

1. Steel shapes and plates shall be ASTM A709, Grade 36 typical, ASTM A709 Grade 50 where noted.

2. Steel pipes shall be ASTM A53, Grade B.

3. Steel tubing shall be ASTM A500, Grade B.

4. All bolts and nuts for steel connections shall conform to ASTM A325 and be hot-dip galvanized in accordance with ASTM A153. Set anchor bolts by template only. All bolts and nuts for timber connections shall conform to ASTM A307 and be hot-dip galvanized.

5. All miscellaneous steel, including all fasteners, chains, shackles, and u-bolts unless noted otherwise, shall be hot-dip galvanized. Galvanize items after fabrication. Stress relieve bends before galvanizing. Galvanizing damaged accidentally or due to field welding shall be restored with a field applied galvanizing compound.

6. Welding Electrodes: E70XX, Low Hydrogen.

7. All welding shall be in accordance with the requirements of the structural welding code, D1.1 and D3.6, of the American Welding Association (AWS).

ALUMINUM ANODES

1. Cathodic protection for steel pipe piles and fender panels shall be 80 lb aluminum alloy. Dimensions shall conform to the general configuration shown on the Plans.

ALUMINUM GANGWAYS

1. The design and construction of the aluminum gangways shall be in accordance with the special provisions for the item "Aluminum Gangway". The Contractor's manufacturer shall design the gangways in accordance with the plans, specifications, and loads shown below.

2. Vertical Loads: Uniform Live Load 85 psf, Additional Dead Load 50 plf

3. Horizontal Loads: Wind - Transverse 50 plf, Wind - Longitudinal 12 plf

4. The minimum support seat width, measured perpendicular to the edge of the concrete support shall be 18 inches.

5. Handrail shall be designed for a concentrated horizontal load of 200 pounds acting at the top of the railing.

CONCRETE

1. Concrete basis design stresses shall be:
   - Fill for Pipe Piles: Class "A"
   - Fill for Double Bitts: Class "A"
   - Cast-in-place (non): Class "LP"

2. Concrete shall contain 5.0 gal/cy of calcium corrosion inhibitor admixture.

3. Clearances for reinforcement shall be 3" unless otherwise noted.

4. Chamfer all concrete edges ¾" @ 45° unless otherwise noted.

5. All reinforcing shall be fully supported on non-metallic approved chairs. Reinforcing shall not be supported on timber blocks, bricks, concrete blocks, miscellaneous rebar, etc.

6. Construction joints shall be made only as shown unless approved otherwise.

7. All existing concrete surfaces to receive concrete shall be roughened to a minimum amplitude of ¼" and coated with a product listed on the MaineDOT pre-qualified list of concrete bonding agents.

8. Wet curing of concrete is to begin within 30 minutes after concrete finishing, or as soon as possible without damaging finished surface.

9. All formwork for concrete shall be left in place and concrete surfaces shall be covered and kept moist for a period of not less than seven (7) full days after concrete placements.

10. Contractor shall submit detailed reinforcing drawings including bar and bending schedules to the Engineer for review and approval prior to delivery of any reinforcing steel.

11. All ferrous metal handling/lifting devices and existing embedded metals/anchors no longer in use shall be recessed or removed to a depth of one inch below the surface of the concrete and patched with an approved polymer-modified cementitious mortar. Devices located in areas to be totally encased in cast-in-place concrete shall be galvanized. Devices located in areas not to be encased in cast-in-place concrete shall be stainless steel, unless otherwise noted.

STEEL REINFORCEMENT

1. Reinforcing Steel: ASTM A775, unless noted otherwise.

2. Rock Anchors: ASTM A722, Grade 150, deformed, with triple corrosion protection.

3. Splicing of reinforcing steel is permitted. Stagger splices one splice length minimum. No more than 50 percent of the reinforcing steel shall be spliced at any location. Provide a minimum splice length of 50 bar diameters, unless noted otherwise on the drawings.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
023480.00

PROJ. MANAGER
DESIGN-DETAILED: N. Riley
CHECKED-REVIEWED: C. Wirth
DESIGN-DETAILED:
DESIGN-CHECKED:
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

BY	DATE
P. Bishop	07/19
C. Wirth	09/19

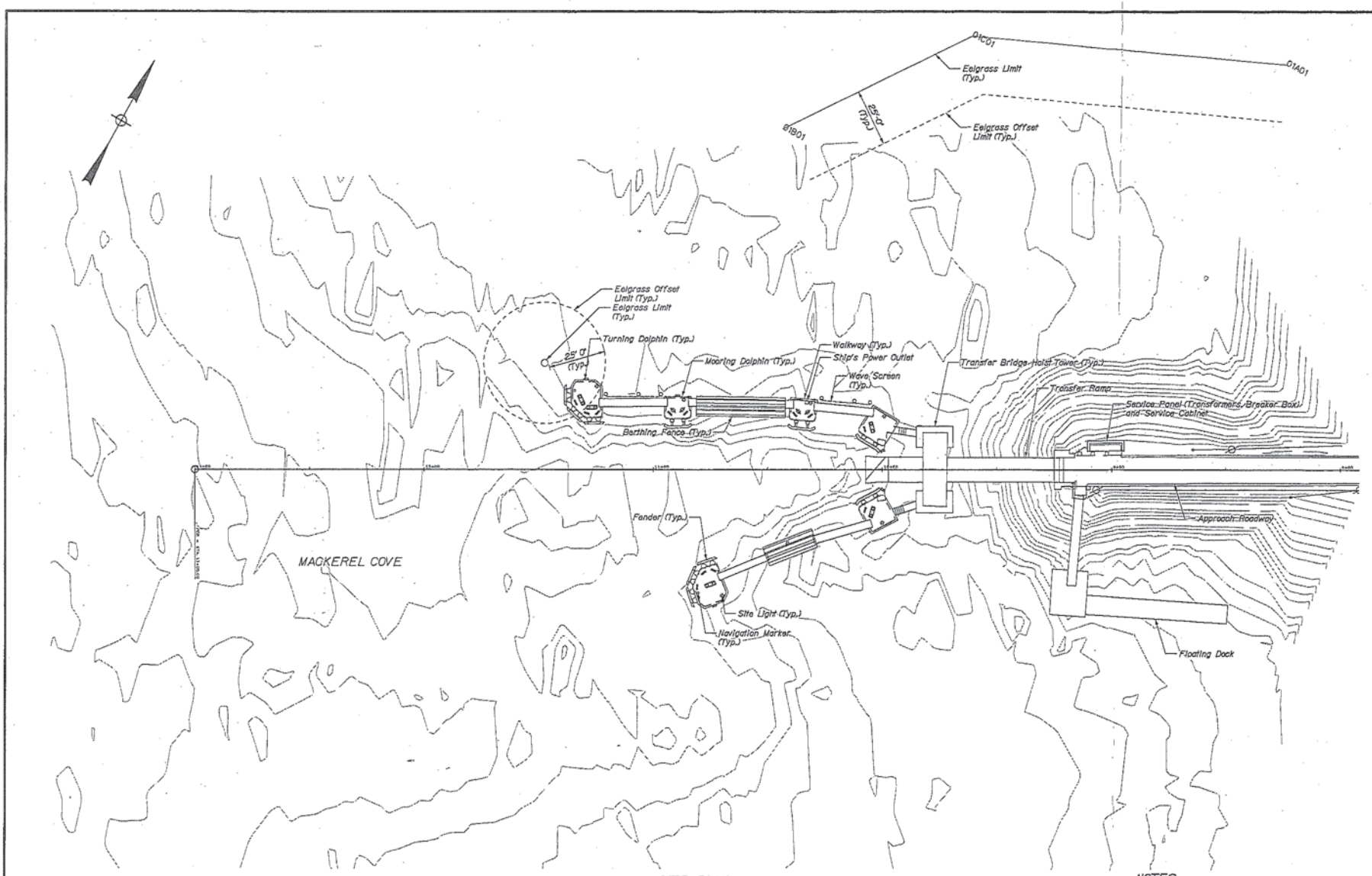
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0209
P.E. NUMBER
DATE

SWAN'S ISLAND
FERRY TERMINAL

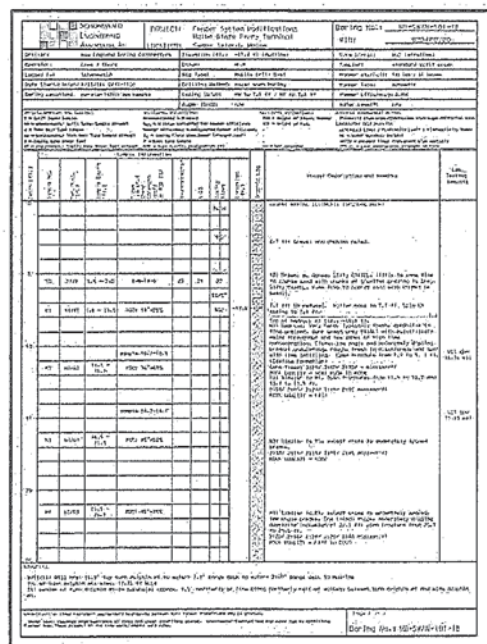
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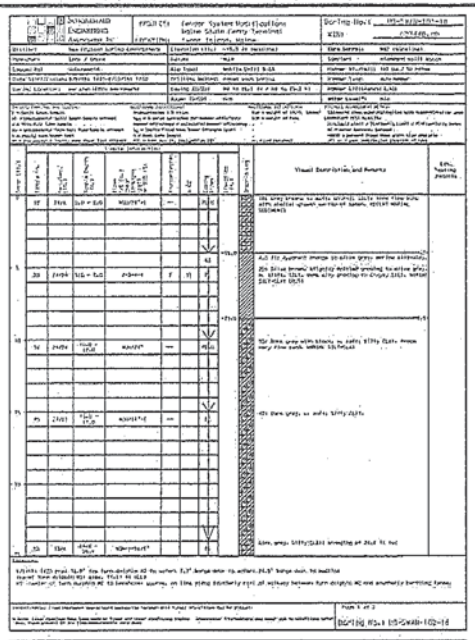
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G02
2 OF 18

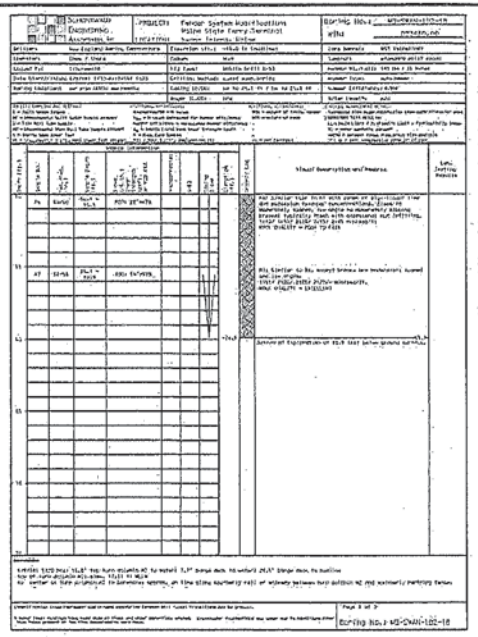
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Division:
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385

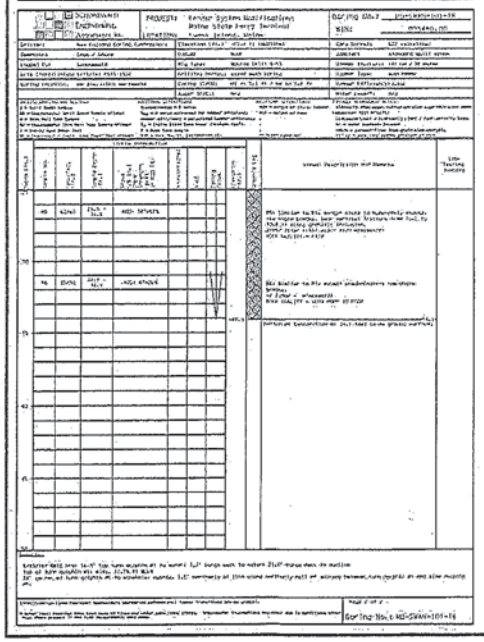


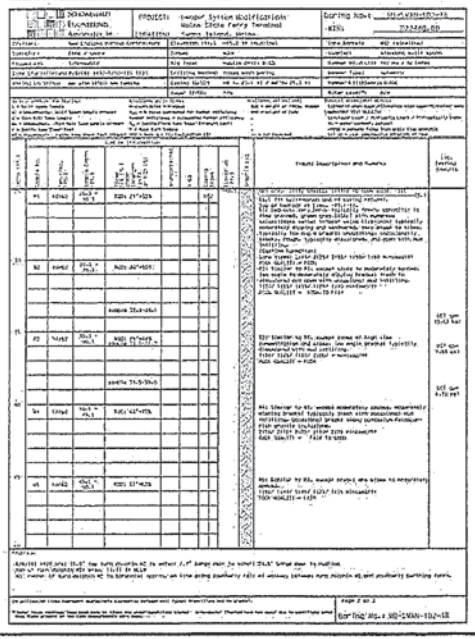
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GEOTECHNICAL NOTES:

1. The geotechnical report for the project is entitled "Geotechnical Design Report, Fender System Modifications, Maine State Ferry Terminal, Swan's Island, Maine, MaineDOT WIN 023480.00," dated May 2019 and prepared by Sohanowald Engineering Associates, Inc. The report is available on the MaineDOT website.

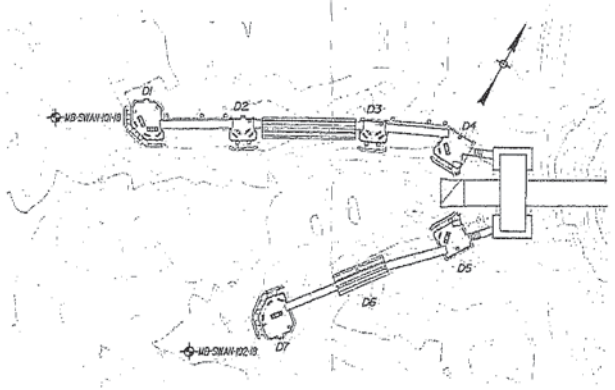
2. Geotechnical information furnished or referenced in this plan set is for the Bidders' and Contractors' use. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the time of construction. The Department shall not be responsible for the Bidders' and Contractors' interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set and the referenced report present interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between widely-spaced boring locations.

3. Grid north on the North American Datum 1983 (NAD83).

4. Tidal datum is Mean Lower Low Water (MLLW).

BORING COORDINATES

Location	Northing	Easting
MB-SWAN-101-18	187497.56	1004101.54
MB-SWAN-102-18	187439.61	1004197.27



KEY PLAN
1" = 25'-0"

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
WIN 023480.00

SWAN'S ISLAND
FERRY TERMINAL

BORING LOGS

SHEET NUMBER
G04
4 OF 18

Filename: ...\02 CAD\004_Boring Logs.dgn Division Username: Date:5/29/2019

387

DOLPHIN COORDINATES

EXISTING D1

LOCATION	NORTHING	EASTING
A	187518.94	1004125.14
B	187511.34	1004145.32
C	187507.47	1004138.63
D	187509.71	1004130.46
E	187525.71	1004137.15

EXISTING D2

LOCATION	NORTHING	EASTING
A	187538.14	1004174.69
B	187529.81	1004179.33
C	187523.90	1004169.29
D	187532.48	1004164.54

EXISTING D3

LOCATION	NORTHING	EASTING
A	187563.79	1004223.83
B	187554.91	1004227.43
C	187550.29	1004216.89
D	187558.99	1004212.99

EXISTING D4

LOCATION	NORTHING	EASTING
A	187573.23	1004259.46
B	187560.02	1004258.93
C	187560.18	1004245.37
D	187573.66	1004245.98

EXISTING D5

LOCATION	NORTHING	EASTING
A	187541.78	1004258.87
B	187534.95	1004279.84
C	187523.85	1004272.69
D	187531.08	1004261.70

EXISTING D6

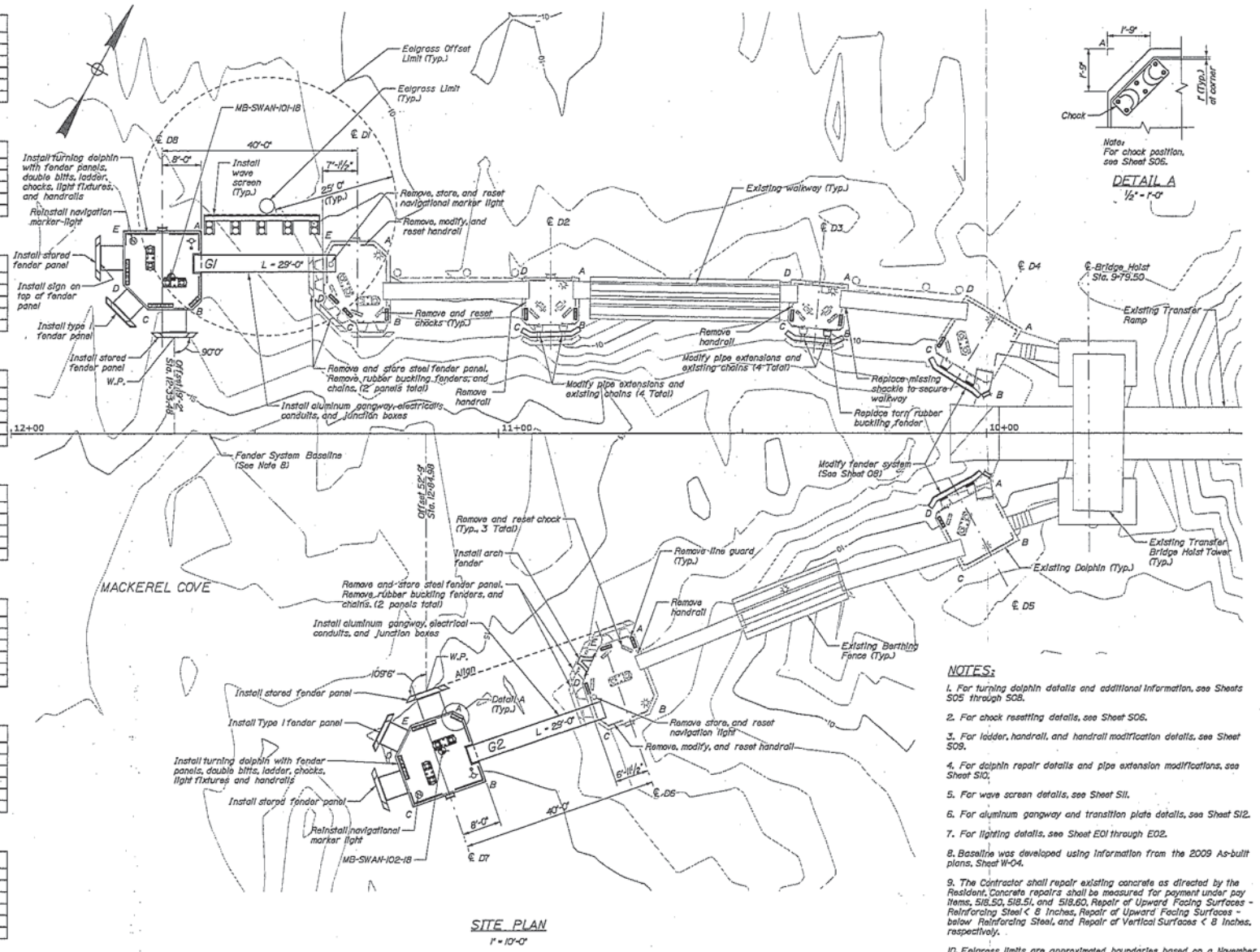
LOCATION	NORTHING	EASTING
A	187479.83	1004220.00
B	187469.20	1004232.73
C	187458.39	1004223.56
D	187465.64	1004215.55
E	187474.08	1004214.86

PROPOSED D7

LOCATION	NORTHING	EASTING
A	187449.13	1004196.37
B	187438.47	1004208.30
C	187426.54	1004197.64
D	187433.87	1004189.44
E	187440.92	1004189.04

PROPOSED D8

LOCATION	NORTHING	EASTING
A	187508.76	1004102.40
B	187494.71	1004110.34
C	187489.43	1004100.57
D	187491.37	1004093.77
E	187500.98	1004088.42



SITE PLAN
1" = 10'-0"

10 0 10 20
Scale of Feet

NOTES:

1. For turning dolphin details and additional information, see Sheets S05 through S08.
2. For chock resetting details, see Sheet S06.
3. For ladder, handrail, and handrail modification details, see Sheet S09.
4. For dolphin repair details and pipe extension modifications, see Sheet S10.
5. For wave screen details, see Sheet S11.
6. For aluminum gangway and transition plate details, see Sheet S12.
7. For lighting details, see Sheet E01 through E02.
8. Baseline was developed using information from the 2009 As-built plans, Sheet W-04.
9. The Contractor shall repair existing concrete as directed by the Resident. Concrete repairs shall be measured for payment under pay items, 518.50, 518.51, and 518.60, Repair of Upward Facing Surfaces - Reinforcing Steel < 8 Inches, Repair of Upward Facing Surfaces - below Reinforcing Steel, and Repair of Vertical Surfaces < 8 Inches, respectively.
10. Eelgrass limits are approximated boundaries based on a November 2019 dive survey by MaineDOT.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 023480.00

	BY	DATE
PROJ. MANAGER	N. Tzyl	05/19
DESIGN DETAILED	P. Bishop	05/19
CHECKED-REVIEWED	C. Lynch	C. Lynch
DESIGN DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FINAL SUBMISSION		

P.E. NUMBER 12209
SIGNATURE
DATE

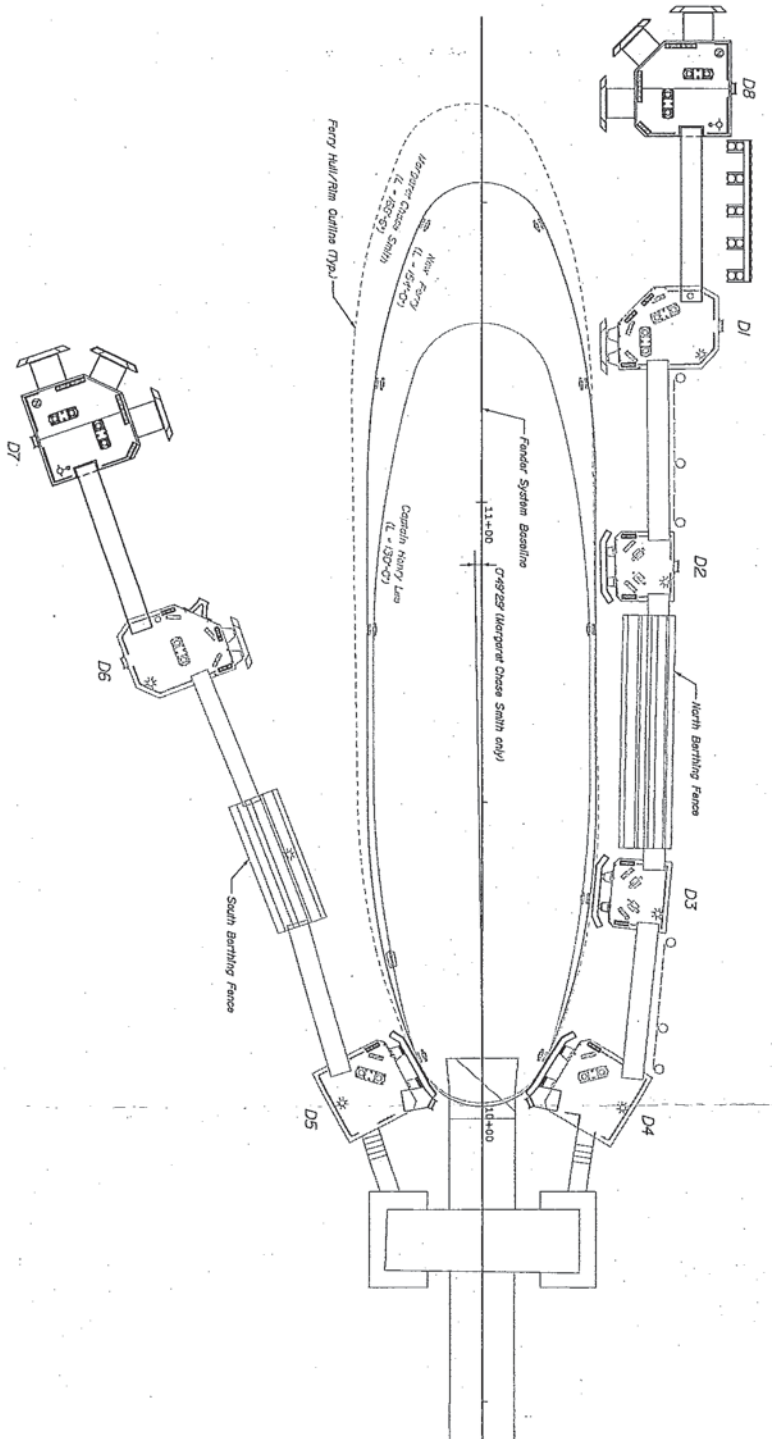
SWAN'S ISLAND
FERRY TERMINAL

SITE PLAN

SHEET NUMBER
S01
5 OF 18

Filename: 005_Site Plan.dgn Division: Username: Date: 12/11/2019

Filename: 006_Berth Plan.dgn Division: Username: Date:11/22/2019



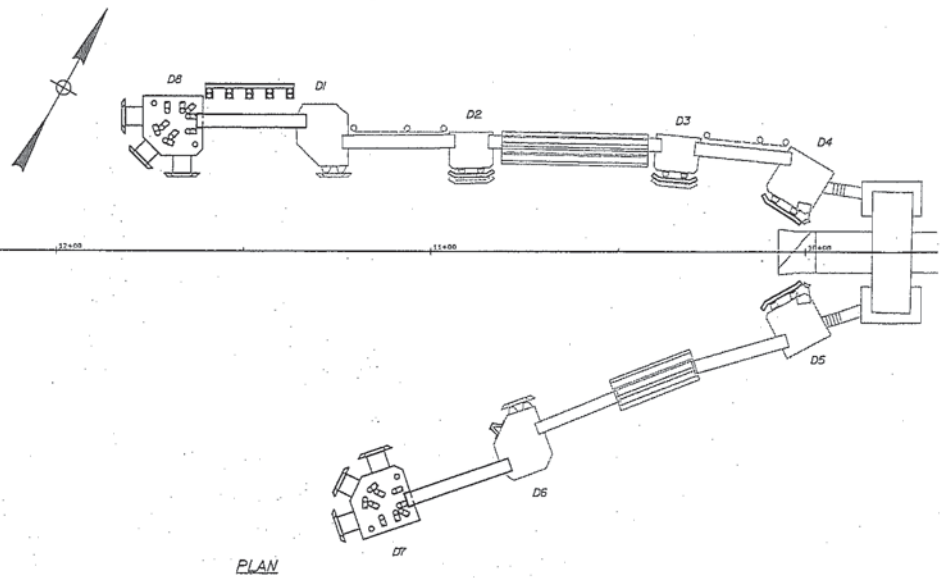
PLAN
1" = 10'-0"
Scale of Feet
10 0 10 20

NOTES:
1. MV Captain Henry Lee is currently in operation. New Ferry is proposed. Margaret Chase Smith is shown for comparative purposes.

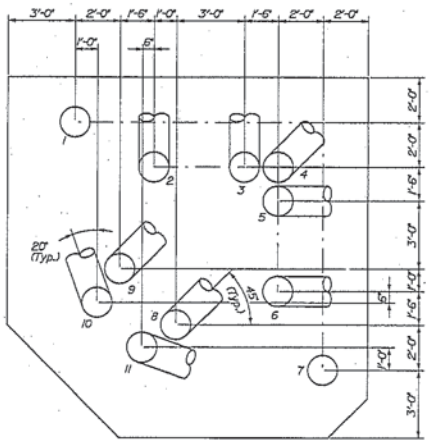
HNTB

SWAN'S ISLAND FERRY TERMINAL	PROJ. MANAGER		BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
	DESIGN-DETAILED	N. Wiley	P. Bishop	09\19	
	CHECKED-REVIEWED	C. Morin	C. Morin	09\19	SIGNATURE
	DESIGN2-DETAILED2				12209
	DESIGN3-DETAILED3				P.E. NUMBER
BERTH PLAN	REVISIONS 1				DATE
	REVISIONS 2				
	REVISIONS 3				WIN 023480.00
	REVISIONS 4				
	FIELD CHANGES				

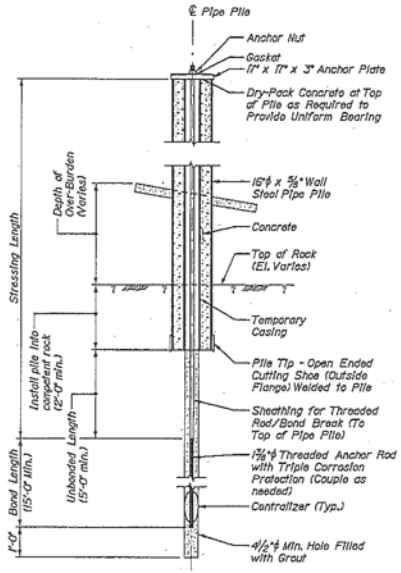
SHEET NUMBER S02 6 OF 18



PLAN
1/16" = 1'-0"



FOUNDATION PLAN
(Dimensions shown at pile cut-off elevation, El. 11.00 ft)
(Dolphin D8 shown, D7 similar)
3/8" = 1'-0"



ROCK ANCHOR DETAIL
1/2" = 1'-0"

STEEL PIPE PILE TABLE

	Pile No.	Estimated Pile Length	Vertical or Batter (Rise/Run)
Turning Dolphin D7	1	59	Vert.
	2	62	Batter 4:12
	3	62	Batter 4:12
	4	62	Batter 4:12
	5	62	Batter 4:12
	6	62	Batter 4:12
	7	59	Vert.
	8	62	Batter 4:12
	9	62	Batter 4:12
	10	59	Batter 2:12
	11	59	Batter 2:12
Turning Dolphin D8	1	39	Vert.
	2	41	Batter 4:12
	3	41	Batter 4:12
	4	41	Batter 4:12
	5	41	Batter 4:12
	6	41	Batter 4:12
	7	39	Vert.
	8	41	Batter 4:12
	9	41	Batter 4:12
	10	39	Batter 2:12
	11	39	Batter 2:12

NOTES:

1. A length of 5' has been included for contingency to each estimated pile length to determine order length.
2. All steel pipe piles shall have rock anchors. For rock anchors, see detail.
3. All steel pipe piles shall have aluminum anodes.
4. For anode details, see Sheet S04.
5. Pile splices shall not be allowed without prior approval of the Engineer of Record (EOR). Pile splices approved by the EOR and installed by the Contractor to achieve the installed pile length as noted herein shall be incidental to pay item 501.241, Steel Pipe Piles In-Place.

PILE AND ROCK ANCHOR SUGGESTED CONSTRUCTION SEQUENCE:

1. Advance pipe pile open ended using drilling methods to top of competent rock and socketed into competent rock per detail.
2. Pile shall be cut off at final top elevation to perform anchor load test. Refer to structural drawings for top of pile elevations.
3. Clean and flush rock cuttings and soil from inside the pile and socket. Confirm pile socketed into bedrock per detail. Check tolerances. Inspect integrity of pipe pile. Resident shall accept pipe pile prior to optional grout plug installation and/or to rock anchor installation. Install grout plug (Contractor's option).
4. Install temporary casing with centralizers as needed until it is seated into the grout plug or into bedrock at the bottom of pile.
5. Insert rock anchor drill casing and drill bit into temporary casing and drill anchor hole. Minimum length of anchor hole per the detail.
6. Clean and flush rock cuttings from anchor hole. Do not allow drill cuttings to enter the pipe pile.
7. Install triple corrosion protected anchor, sheathing and centralizers, preassembled to the required dimensions.
8. Using tremie methods, fill the annular space between the anchor rod / sheathing and the anchor hole with 5,000 psi cement grout to above the top of the bedrock surface.
9. Install anchor plate at top of anchor with hex nut and hardened washer.
10. Verify that pile head is restrained from moving laterally by fixing the pile head to the pile template, falsework or other appropriate means.
11. Perform rock anchor proof and performance tests to 133% of the max. pile tension load (See pile schedule). Release proof load and remove anchor plate.
12. Place concrete in the annular space between the anchor rod sheathing and the pipe pile as the temporary casing is withdrawn, maintaining the concrete surface above the bottom of the temporary casing at all times.
13. Re-install anchor plate at top of anchor with hex nut and hardened washer. Apply 110% of the max. pile tension load (see pile schedule). Lock off rock anchor.
14. Proceed with dolphin construction.

Pile Load Schedule

Max. Factored Applied Pile Compression Load (LRFD)₁	345 kips
Max. Factored Applied Pile Tension Load (LRFD)₁	217 kips
Max. Applied Pile Tension Load (ASD)₁	112 kips
Min. Pile Compression Resistance (LRFD)₁	390 kips
Min. Rock Anchor Tension Capacity (ASD)₁	361 kips
Rock Anchor Test Load₁	150 kips
Rock Anchor Lock Off Load₁	124 kips

NOTES:

1. In the absence of definitive guidance in AASHTO's LRFD Bridge Design Specifications (LRFD Manual), Article 10.7.3.2.3 "Point Bearing Piles on Rock - Piles Driven to Hard Rock," the geotechnical axial capacity of pipe piles end-bearing on rock was determined using established ASD methods with a Factor of Safety of 2.0, equivalent to a resistance factor of 0.5 as required per the LRFD Manual.
2. The tensile capacity of rock anchors was determined using established ASD methods in the absence of definitive guidance in the LRFD Manual, Article 11.9.4.2 - "Anchor Pullout Capacity." A resistance factor equal to 1.0 is allowed per the LRFD Manual since all the rock anchors will be tested.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
023460.00

PROJ. MANAGER
DESIGN DETAILED
CHECKED-REVIEWED
QUANTITIES
DESIGN DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
FIELD CHANGES

BY
K. Sharp
C. Bohn
C. Bohn

DATE
09/19
09/19

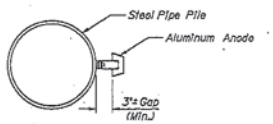
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DATE

SWAN'S ISLAND
FERRY TERMINAL

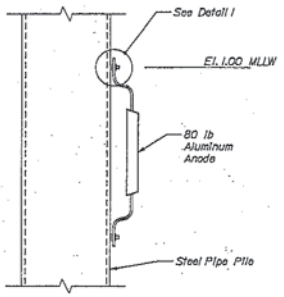
DOLPHIN
FOUNDATION PLAN

SHEET NUMBER
S03
7 OF 18

Filename: 607_Dolphin Foundation Plan.dgn Division: Username: Date: 11/22/2019



PLAN

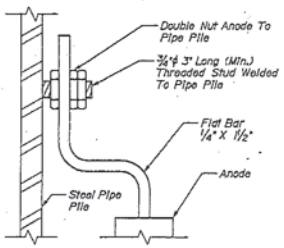


ELEVATION

Note: Anode shall be positioned along the inshore face of piles. Set top of Anode at +1.00 MLLW

ANODE DETAIL

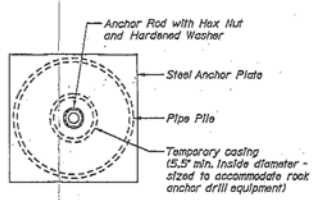
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DETAIL I

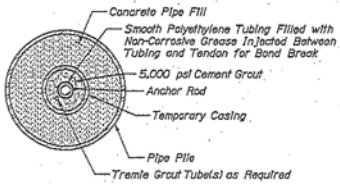
N.T.S.

NOTE:
1. Studs and hardware shall be stainless steel.



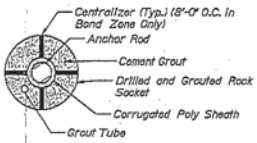
TOP OF PILE DETAIL

N.T.S.



ROCK ANCHOR SECTION
(UNBONDED ZONE)

N.T.S.



ROCK ANCHOR SECTION
(BOND ZONE)

N.T.S.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
023460.00

	BY	DATE
PROJ. MANAGER		
DESIGN DETAILED	K. Wiley	09/18
CHECKED PLANS	C. Bailey	09/18
DESIGN DETAILED		
DESIGN DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

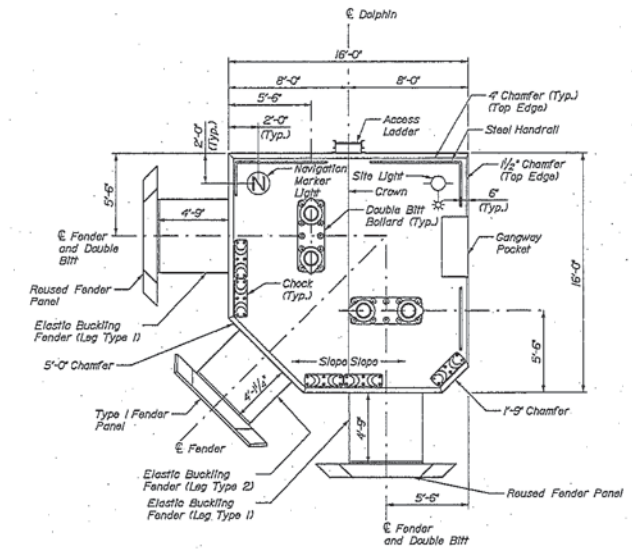
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SWAN'S ISLAND
FERRY TERMINAL

DOLPHIN FOUNDATION
DETAILS

SHEET NUMBER
S04
8 OF 18

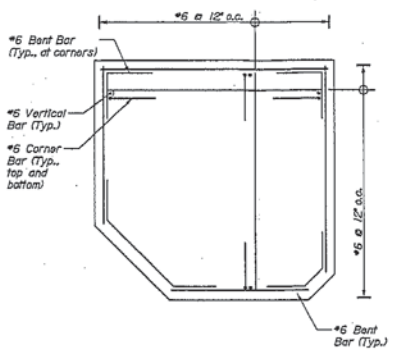
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TURNING DOLPHIN PLAN

(Dolphin D8 shown, D7 mirror image horizontally)

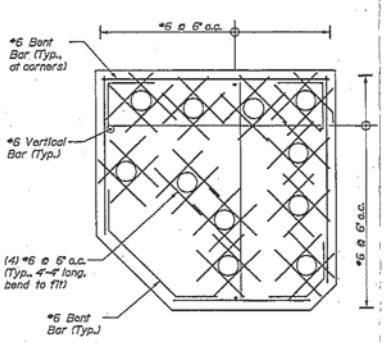
1/4" = 1'-0"



SECTION A-A

(Dolphin D8 shown, D7 similar)
(Same as shown for El. 9.50 - 11.00, but with pile cutouts)

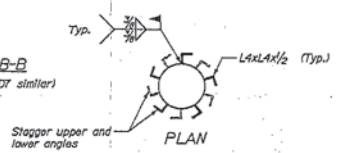
1/4" = 1'-0"



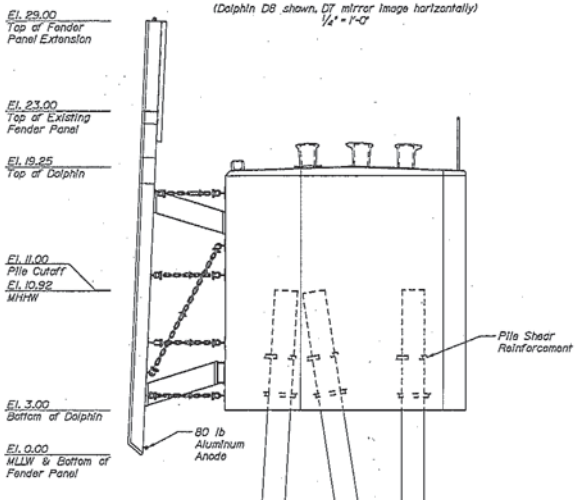
SECTION B-B

(Dolphin D8 shown, D7 similar)

1/4" = 1'-0"



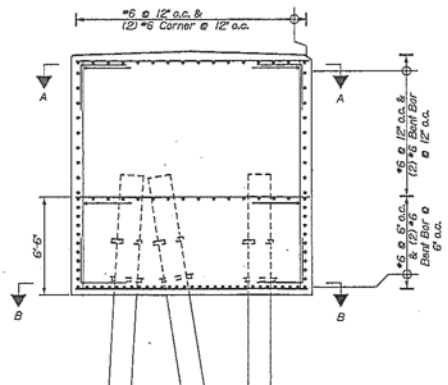
PLAN



TURNING DOLPHIN ELEVATION

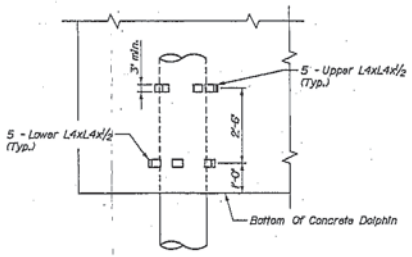
(Select fenders and chocks not shown for clarity)

1/4" = 1'-0"



TURNING DOLPHIN REINFORCING TYPICAL SECTION

1/4" = 1'-0"



ELEVATION

PILE SHEAR REINFORCEMENT

½" = 1'-0"

NOTES:

1. For anode details, see Sheet S04.
2. For double bitt and chock details, see Sheet S06.
3. For handrail and access ladder details, see Sheet S09.
4. For gangway pocket and transition plate detail, see Sheet S12.
5. All reinforcing shall be cut to maintain 2" clear from piles and 3" clear of concrete surfaces.
6. Reinforcing bars shall be adjusted to maintain 1" clear from anchor rods.
7. Crown slope at top of dolphin shall be ¼" per foot and pitched as shown.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 023480.00

	BY	DATE
PROJ. MANAGER		
DESIGN DETAILED	P. Bilicz	03/19
CHECKED (QA/QC)	C. Wirth	03/19
DESIGNED (FACES)		
DESIGNED (TALOS)		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

ME P.E. NUMBER

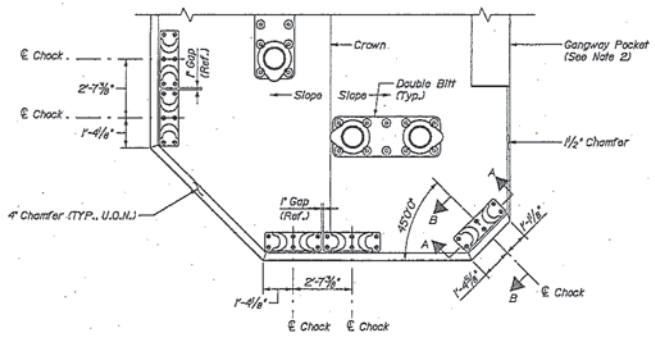
DATE

SWAN'S ISLAND
FERRY TERMINAL

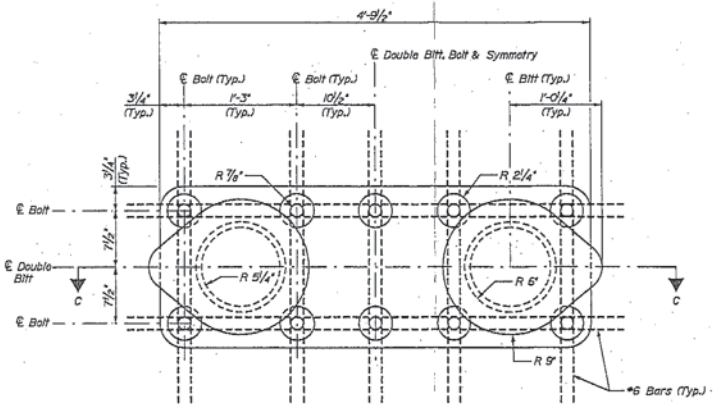
DOLPHIN PLAN, ELEVATION, AND DETAILS

SHEET NUMBER
S05
9 OF 18

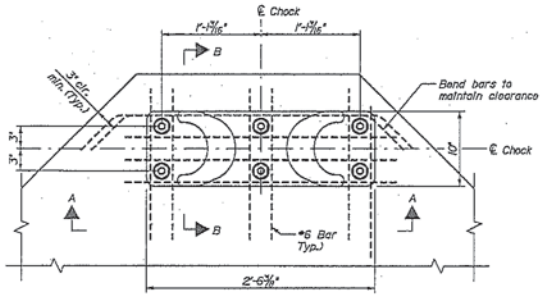
Filename: 009_Dolphin Plan and Elevation.dgn Division: Username: Date: 11/22/2019



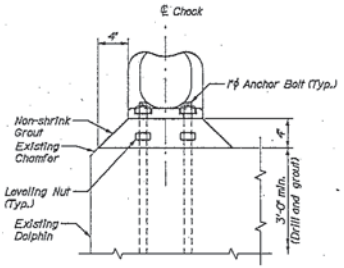
PLAN VIEW OF DOLPHIN
(Hand rails, lights, and fenders not shown for clarity)
3/8" = 1'-0"



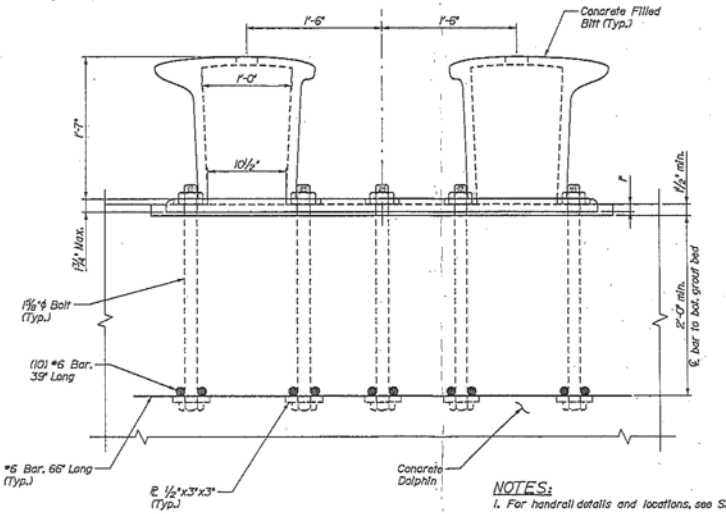
DOUBLE BITT PLAN
1 1/2" = 1'-0"



CHOCK PLAN AT CHAMFER
1 1/2" = 1'-0"

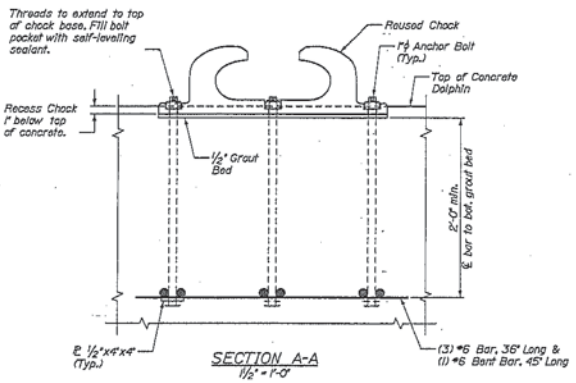


EXISTING CONCRETE CHOCK DETAIL
1 1/2" = 1'-0"

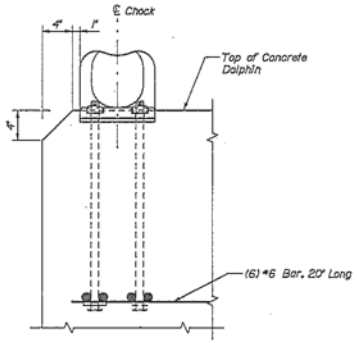


SECTION C-C
1 1/2" = 1'-0"

NOTES:
1. For handrail details and locations, see Sheet S09.
2. For gangway pocket dimensions, see Sheet S12.



SECTION A-A
1 1/2" = 1'-0"



SECTION B-B
1 1/2" = 1'-0"

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 023480.00

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	N. Kirby	P. Brooks	09/19
CHECKED-DETAILED	E. Keith	C. Bath	09/19
DESIGN-ESTIMATED			
CHECKED-ESTIMATED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER
12269

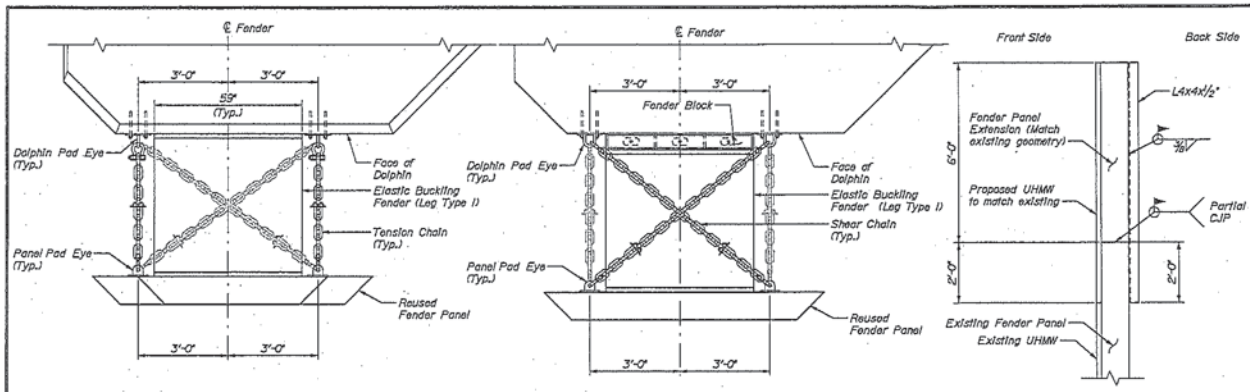
DATE

SWAN'S ISLAND
FERRY TERMINAL

DOLPHIN DETAILS
MOORING HARDWARE

SHEET NUMBER
S06
10 OF 18

Filename: 093_Mooring Hardware.dgn Division: Username: Date: 11/22/2019



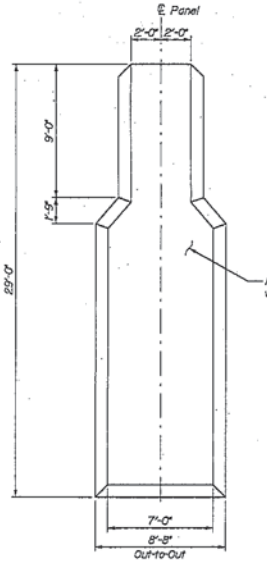
PLAN - TOP OF FENDER PANEL
(DT Pen facing fender with Leg Type I shown, others similar)
1/2" = 1'-0"

PLAN - BOTTOM OF FENDER PANEL
(DT Pen facing fender with Leg Type I shown, others similar)
1/2" = 1'-0"

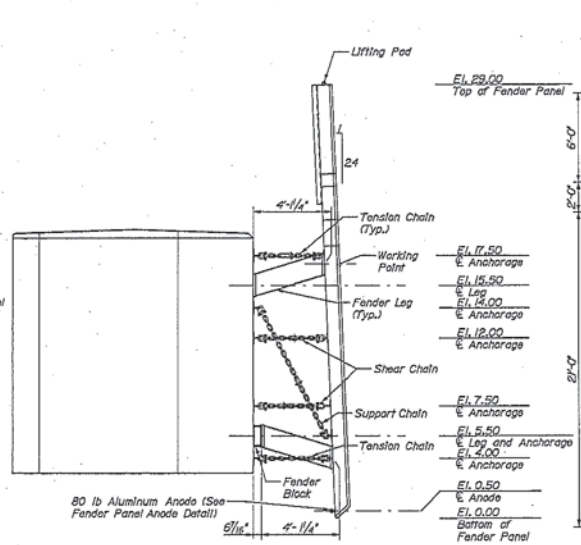
TYPICAL PANEL EXTENSION DETAIL
1/2" = 1'-0"

NOTES:

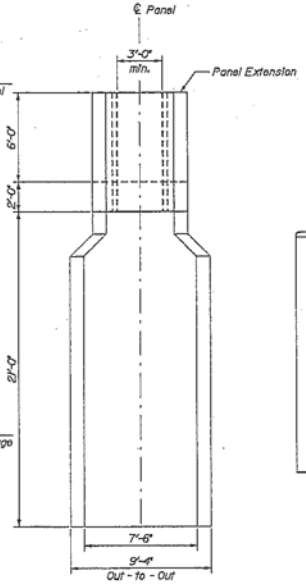
1. Contractor shall use fender plate or fender block detail to maintain proposed fender panel alignment.
2. For dolphin pad eye, panel pad eye, steel fender block, panel anode, and spacer plate details, see Sheet S08.
3. Contractor shall remove obstructions or modify detail for panel extension.
4. Elastic buckling fenders (Leg Type 1) shall be Trelleborg Compound B M/ 1450x1500, or approved equal.
5. Elastic buckling fenders (Leg Type 2) shall be Trelleborg Compound B M/ 1250x1500, or approved equal.
6. Contractor shall verify geometry and dimensions of existing panels based on field measurements.



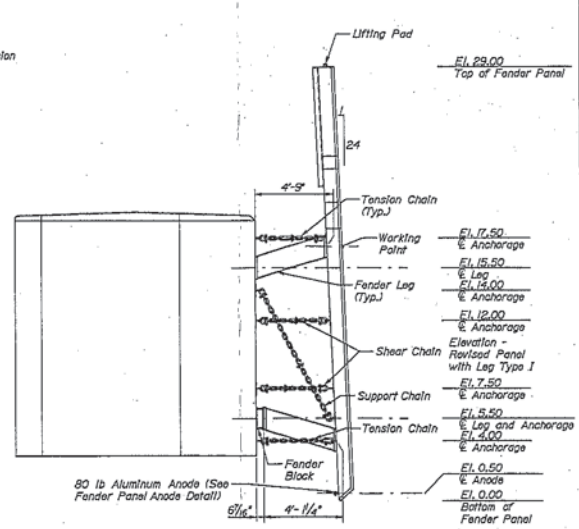
TYPE I PANEL
1/4" = 1'-0"



ELEVATION - TYPE I PANEL WITH LEG TYPE 2
(Foundation piles and hardware not shown for clarity)
1/4" = 1'-0"



REUSED PANEL
1/4" = 1'-0"



ELEVATION - REUSED PANEL WITH LEG TYPE I
(Foundation piles and hardware not shown for clarity)
1/4" = 1'-0"

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
023480.00

PROJ. MANAGER	K. Wiley	P. Bailey	09/19
DESIGN DETAILED	K. Wiley	P. Bailey	09/19
CHECKED-REVIEWED	C. Bohn	C. Bohn	09/19
DESIGN OVERALL (S)			
DESIGN DETAILED (S)			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

10209
P.E. NUMBER

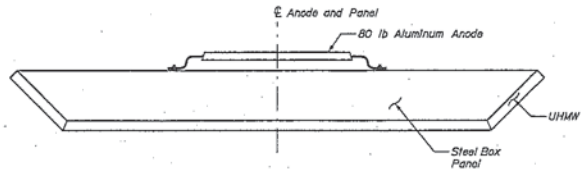
DATE

SWAN'S ISLAND
FERRY TERMINAL

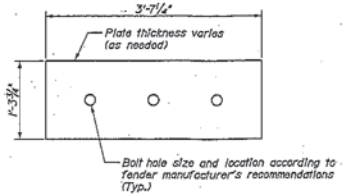
DOLPHIN DETAILS
FENDER SYSTEM I

SHEET NUMBER
S07
11 OF 18

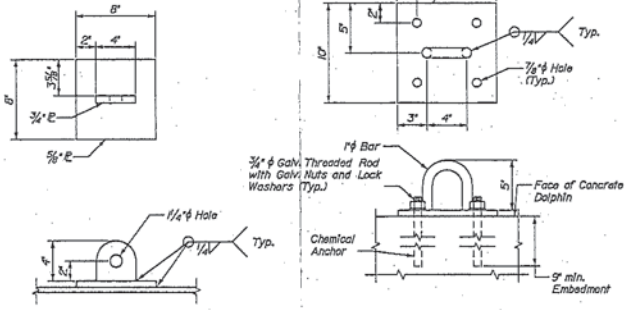
Date: 11/22/2019 Username: Division: Filename: 01L Fender System 1.dgn



FENDER PANEL ANODE DETAIL
1" = 1'-0"

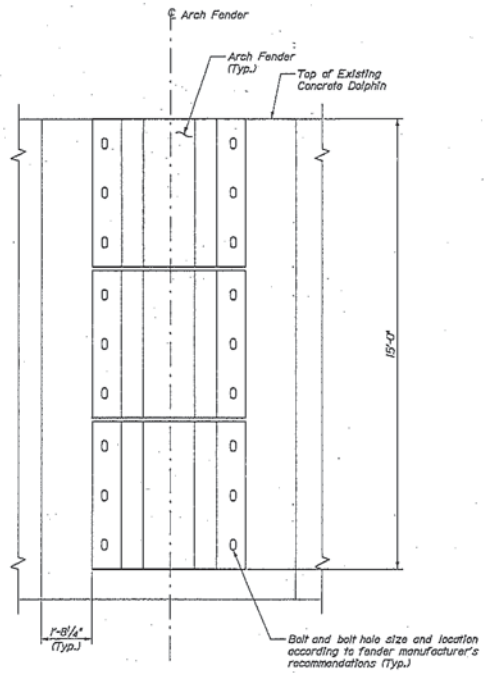


TYPE I PANEL SPACER PLATE DETAIL
1" = 1'-0"

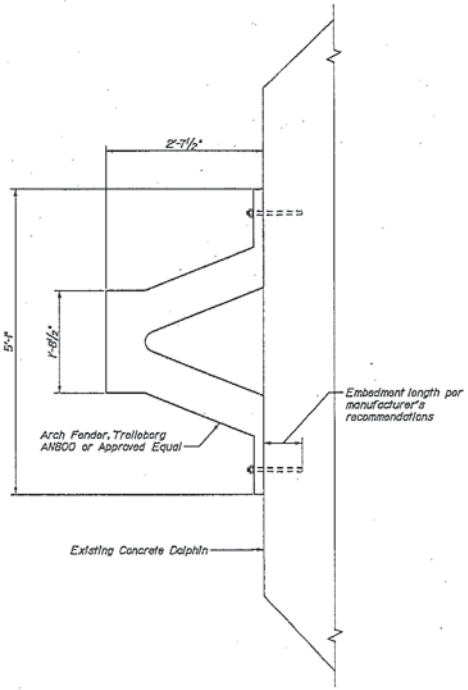


PANEL PAD EYE DETAIL
2" = 1'-0"

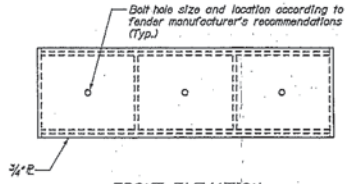
DOLPHIN PAD EYE DETAIL
2" = 1'-0"



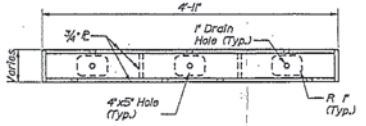
ELEVATION - ARCH FENDER
1" = 1'-0"



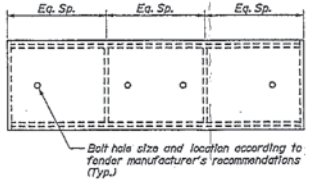
ARCH FENDER TYPICAL SECTION
1" = 1'-0"



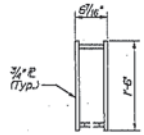
FRONT ELEVATION



PLAN



BACK ELEVATION



SECTION

STEEL FENDER BLOCK
1" = 1'-0"

NOTES:
1. For anode attachment details, see Sheet S04.
2. All steel hardware shall be hot-dip galvanized.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 023480.00

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	K. Riley	
CHECKED-REVIEWED	P. Bishop	09/19
DESIGN-DETAILED	C. Wells	09/19
CHECKED-REVIEWED	E. Wells	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

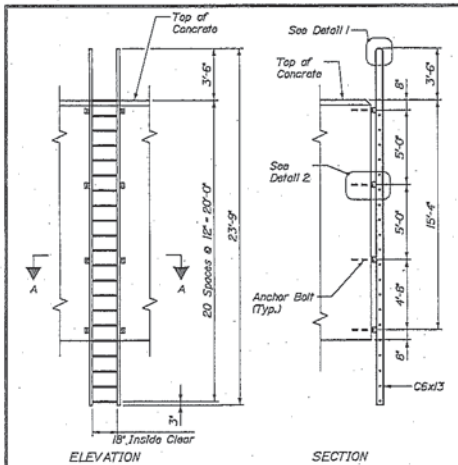
SIGNATURE
12203
P.E. NUMBER
DATE

SWAN'S ISLAND
FERRY TERMINAL

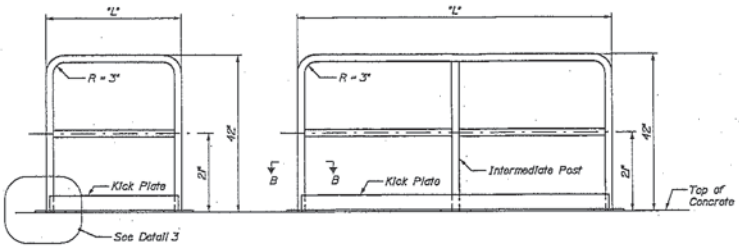
DOLPHIN DETAILS
FENDER SYSTEM II

SHEET NUMBER
S08
12 OF 18

Filename: 012_Fender System 2.dgn Division: Username: Date: 11/22/2019



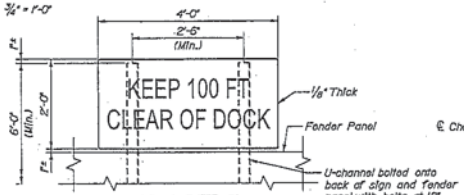
DOLPHIN ACCESS LADDER
1/4" = 1'-0"



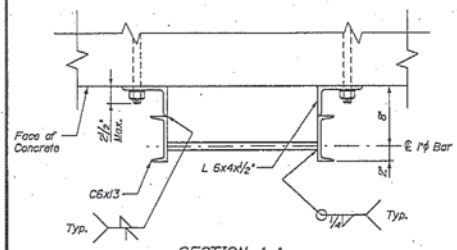
Type 1 Handrail

Type 2 Handrail

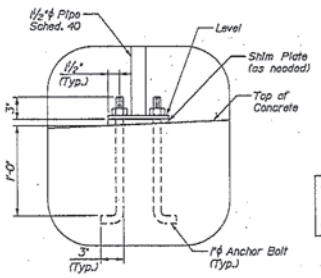
HANDRAIL DETAIL
3/4" = 1'-0"



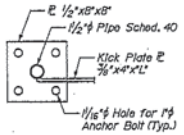
SIGN DETAIL
3/4" = 1'-0"



SECTION A-A
1 1/2" = 1'-0"



DETAIL 3
(Applies to all railing mounting locations. Kick plate not shown for clarity)
1 1/2" = 1'-0"

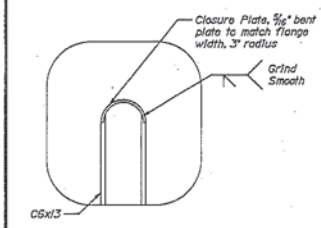


SECTION B-B
1 1/2" = 1'-0"

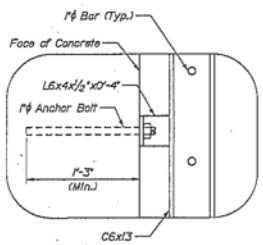
TABLE 1
HANDRAIL SUMMARY TABLE

Dolphin	Location	Identification
D1	S	T2 - 8'-2" - 2
D1	E	T2 - 9'-0" - 2
D1	N	T1 - 4'-2" - 0
D8	W	T2 - 8'-2" - 2
D8	N	T2 - 9'-4" - 2
D8	E	T1 - 3'-8" - 0

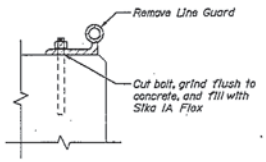
Railing Identification: T2 - L - X
Type
Length
Inter. Post Quantity



DETAIL 1
(Typical for all ladders)
1 1/2" = 1'-0"



DETAIL 2
(Typical all ladder mounting locations)
1 1/2" = 1'-0"

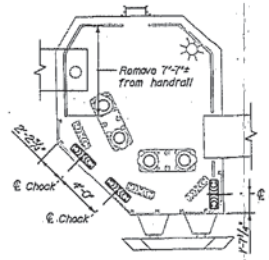


LINE GUARD REMOVAL DETAIL
1 1/2" = 1'-0"

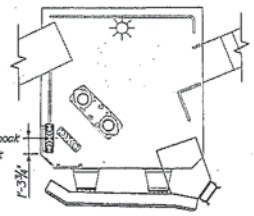
TABLE 2
LINE GUARD REMOVAL SUMMARY

Dolphin	Length of Removal (ft)	No. of Bolts
D1	16	10
D2	13	8
D3	13	8
D4	7	4
D5	7	4
D6	16	10

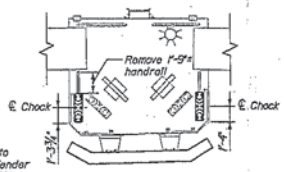
NOTES:
1. Contractor to field verify dimensions of line guards & number of bolts to be removed.



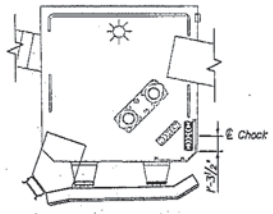
D1 CHOCK MODIFICATION PLAN
1" = 5'-0"



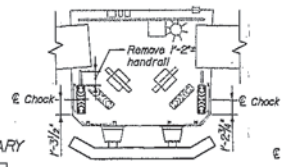
D4 CHOCK MODIFICATION PLAN
1" = 5'-0"



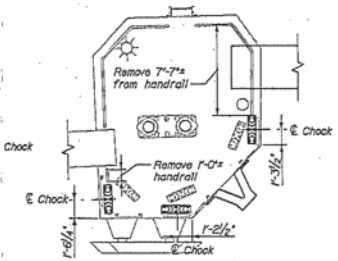
D2 CHOCK MODIFICATION PLAN
1" = 5'-0"



D5 CHOCK MODIFICATION PLAN
1" = 5'-0"



D3 CHOCK MODIFICATION PLAN
1" = 5'-0"



D6 CHOCK MODIFICATION PLAN
1" = 5'-0"

NOTES:
1. The panel mounted access ladder shall be designed by the Contractor for a 350 Lb concentrated vertical load acting at any point on the ladder. The ladder shall conform with all applicable provisions of OSHA regulations for ladders and with dimensions shown on the drawings. The ladder assembly shall be hot-dip galvanized after fabrication.
2. Where handrail posts or line guard anchorages are removed, fill with Sika Flex 1A self leveling sealant, or approved equal.
3. For additional details on chock setting, see Sheet S06.
4. Contractor shall grind smooth, cap ends of cut handrails, and galvanize exposed steel.
5. Contractor shall support the navigation sign along the back of the fender panel with a pair of u-channels in accordance with Special Provision 645, Highway Signing.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 023460.00

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	K. Wiley	05/19
CHECKED-REVIEWED	C. Work	05/19
DESIGN-DETAILED		
CHECKED-REVIEWED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

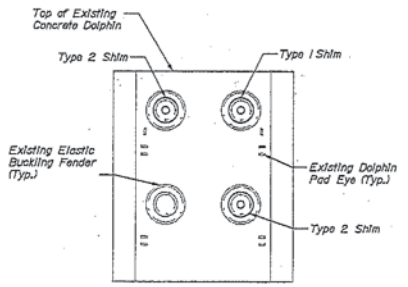
SIGNATURE
P.E. NUMBER
DATE

SWAN'S ISLAND
FERRY TERMINAL

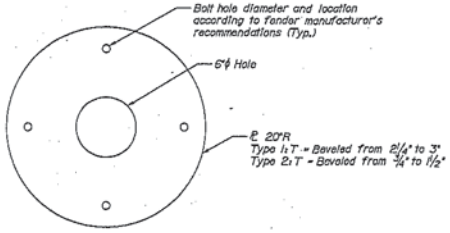
DOLPHIN DETAILS
MISCELLANEOUS

SHEET NUMBER
S09
13 OF 18

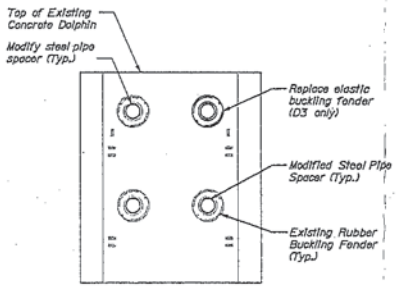
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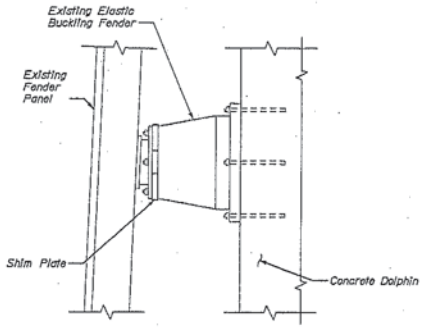
ELEVATION - DOLPHIN D4
(Dolphin D5 opposite hand)
1/4" = 1'-0"



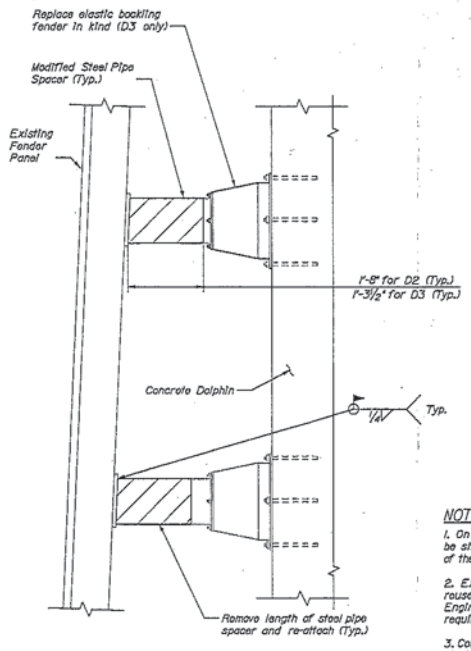
SHIM DETAIL
2" = 1'-0"



ELEVATION - DOLPHIN D2
(Dolphin D2 shown, D3 similar)
1/4" = 1'-0"



TYPICAL DOLPHIN FENDER
SHIM ATTACHMENT DETAIL
3/4" = 1'-0"



TYPICAL DOLPHIN D2
FENDER ATTACHMENT DETAIL
(Dolphin D2 shown, D3 similar)
3/4" = 1'-0"

NOTES:

1. On dolphins D2 and D3, support chains shall be shortened to accomodate the change in length of the steel pipe spacers.

2. Existing chains and connectors shall be reused unless damaged or corroded. The Engineer shall determine if replacement is required and Contractor shall replace in kind.

3. Contractor shall field verify dimensions of steel pipe spacer.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
023480.00

PROJ. MANAGER	BY	DATE
DESIGNED	K.Berry	09/19
DETAILED	C.Dorn	09/19
DESIGN CHECKED		
QUALITY CONTROL		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER
8209

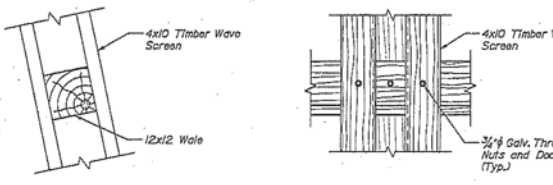
DATE

SWAN'S ISLAND
FERRY TERMINAL

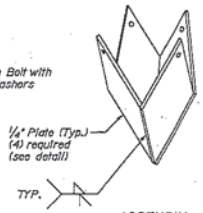
DOLPHIN REPAIR DETAILS

SHEET NUMBER
S10
14 OF 18

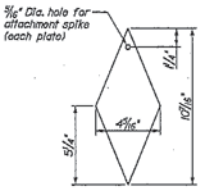
Filename: 014_Dolphin Repair Details.dgn Division: Username: Date: 11/22/2019



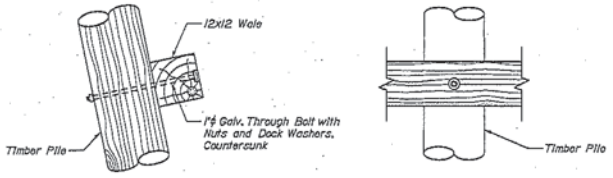
SCREEN CONNECTIONS



ASSEMBLY



¼" PLATE DETAIL



WALE CONNECTIONS

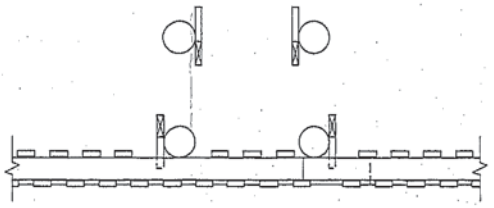
WAVE SCREEN CONNECTIONS

¾" = 1'-0"

Note: Dimensions shown similar to pile point manufactured by Associated Pile & Fitting

TIMBER PILE POINT DETAIL

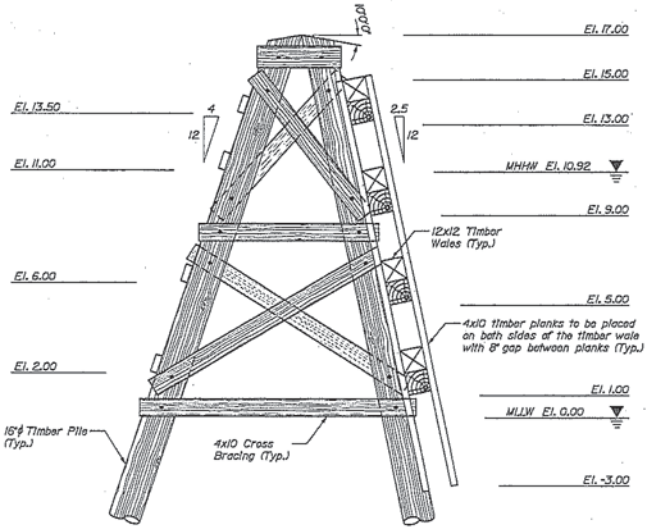
3" = 1'-0"



WAVE SCREEN PLAN VIEW

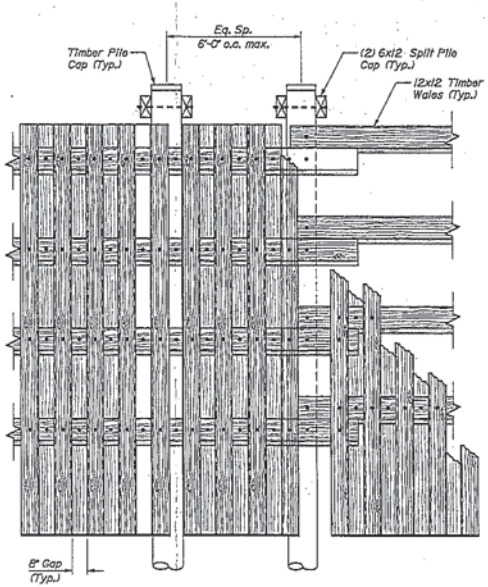
(View shown at El. 11.00)

⅜" = 1'-0"



WAVE SCREEN END ELEVATION

⅜" = 1'-0"



WAVE SCREEN FRONT ELEVATION

⅜" = 1'-0"

NOTES:

1. All bolts for timber connections are 1" dia. galv. with nuts and dock washers per ASTM A307, except where noted.
2. All timber associated with wave screen shall be 2.5 cca treated.
3. All timber vertical and batter piles shall have a driven capacity of 16 tons or a minimum embedment length of 20 feet. See timber pile point detail.
4. All timber battered piles for wave screens facing towards the Pen shall be installed at a batter of 4 horiz. on 12 vert. All timber battered piles for wave screens with timber wales and planks facing away from the Pen shall have a batter of 2.5 horiz. on 12 vert.
5. Timber shall be southern pine with a stress rating of 1,200 psi. Timber shall be pressure treated and branded in accordance with the specifications.
6. All timber construction shall conform to the national design specification for wood construction of the American Forest and Paper Association.
7. All other connections shall be made with ASTM A325, type 1 galvanized bolts and 1/16"ϕ oversized holes and shall have washers on both ends, unless otherwise noted.
8. Field treat all cut and drilled timber surfaces with two coats of preservative containing copper napthanate solution (min. 2% metallic solution) per specifications.
9. Wave screens shall be 6' minimum clear from dolphins.
10. Contractor shall take care while installing timber piles to avoid conflict with steel pipe piles.
11. Timber pile cap shall be white with flat top.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
023480.00

	BY	DATE
PROJ. MANAGER		
DESIGN DETAILED	K. Riley	07/19
DESIGN CHECKED	K. Lein	07/19
DESIGN DETAILER		
DESIGN DETAILER		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

2009
P.E. NUMBER

DATE

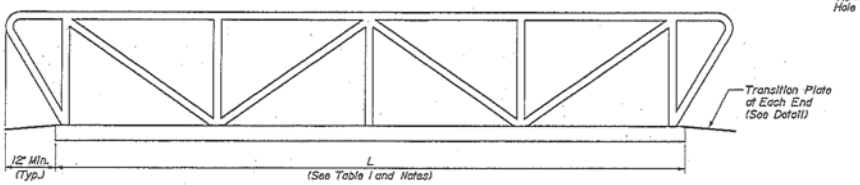
SWAN'S ISLAND
FERRY TERMINAL

WAVE SCREEN
PLAN AND ELEVATION

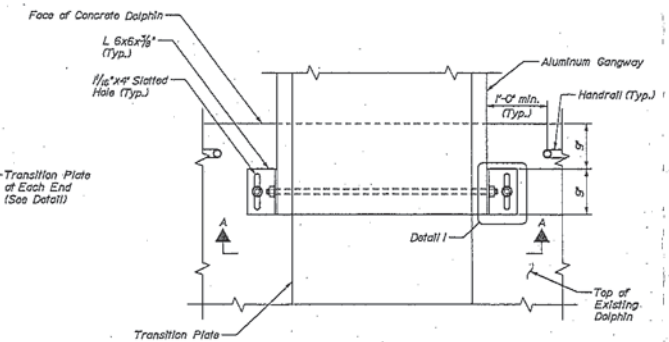
SHEET NUMBER
S11
15 OF 18

HNTB

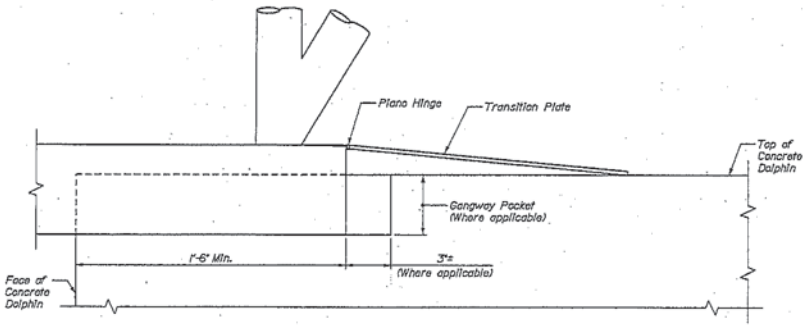
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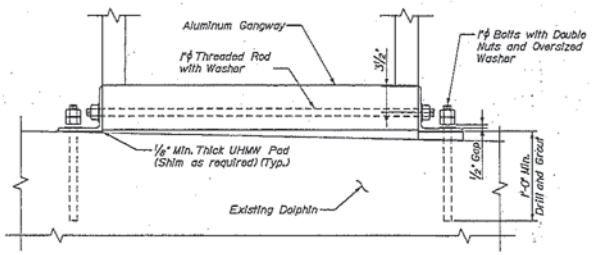
GANGWAY ELEVATION
(Schematically Shown)
1/2" = 1'-0"



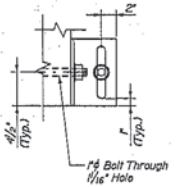
EXISTING DOLPHIN
GANGWAY CONNECTION
1" = 1'-0"



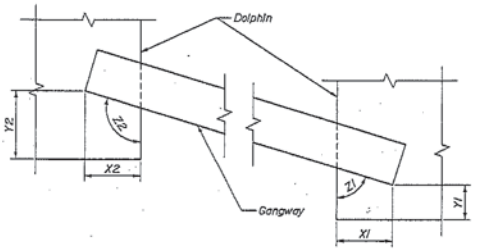
TRANSITION PLATE DETAIL
3" = 1'-0"



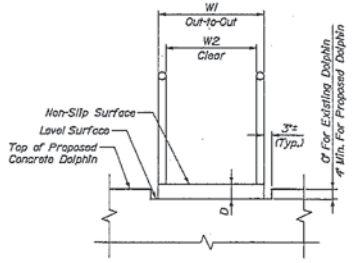
SECTION A-A
1/2" = 1'-0"



DETAIL 1
1/2" = 1'-0"



GANGWAY LAYOUT
N.T.S.



PROPOSED DOLPHIN GANGWAY TYPICAL SECTION
1/2" = 1'-0"

TABLE 1
GANGWAY DIMENSIONS

	Dimensions											
Gangway I.D.	W1	W2	D	L	Dolphin 1	X1	Y1	Z1	Dolphin 2	X2	Y2	Z2
G1	42"	36"	6"	29'-0"	D8	1'-6"	4'-11"	90°0'	D1	7"	2'-9"	89°55'
G2	42"	36"	6"	29'-0"	D6	6"	2'-6"	90°22'	D1	1'-6"	4'-2"	90°0'

NOTES:

1. See Sheet G02 for design loads.
2. Gangway shall be truss type constructed, fabricated of aluminum grade 6061-T6 marine alloy.
3. Gangway length shall be confirmed or adjusted once dolphins are constructed.
4. Contractor shall field verify dimensions of dolphins for pocket sizes and distances between dolphins.
5. Install bolt through gangway prior to installing bolts into existing concrete.
6. Contractor shall provide shims at gangway ends as required.
7. A kick plate is not required along the bottom of the rail posts.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
023480.00

PROJ. MANAGER		BY	DATE
DESIGNED/REVIEWED	R. Kirby	R. Kirby	09/19
CHECKED/REVIEWED	C. Hicks	C. Hicks	09/19
DESIGN-DETAILED			
DRAWN-DETAILED			
REVISION 1			
REVISION 2			
REVISION 3			
REVISION 4			
FED GRANTS			

SIGNATURE

P.E. NUMBER

DATE

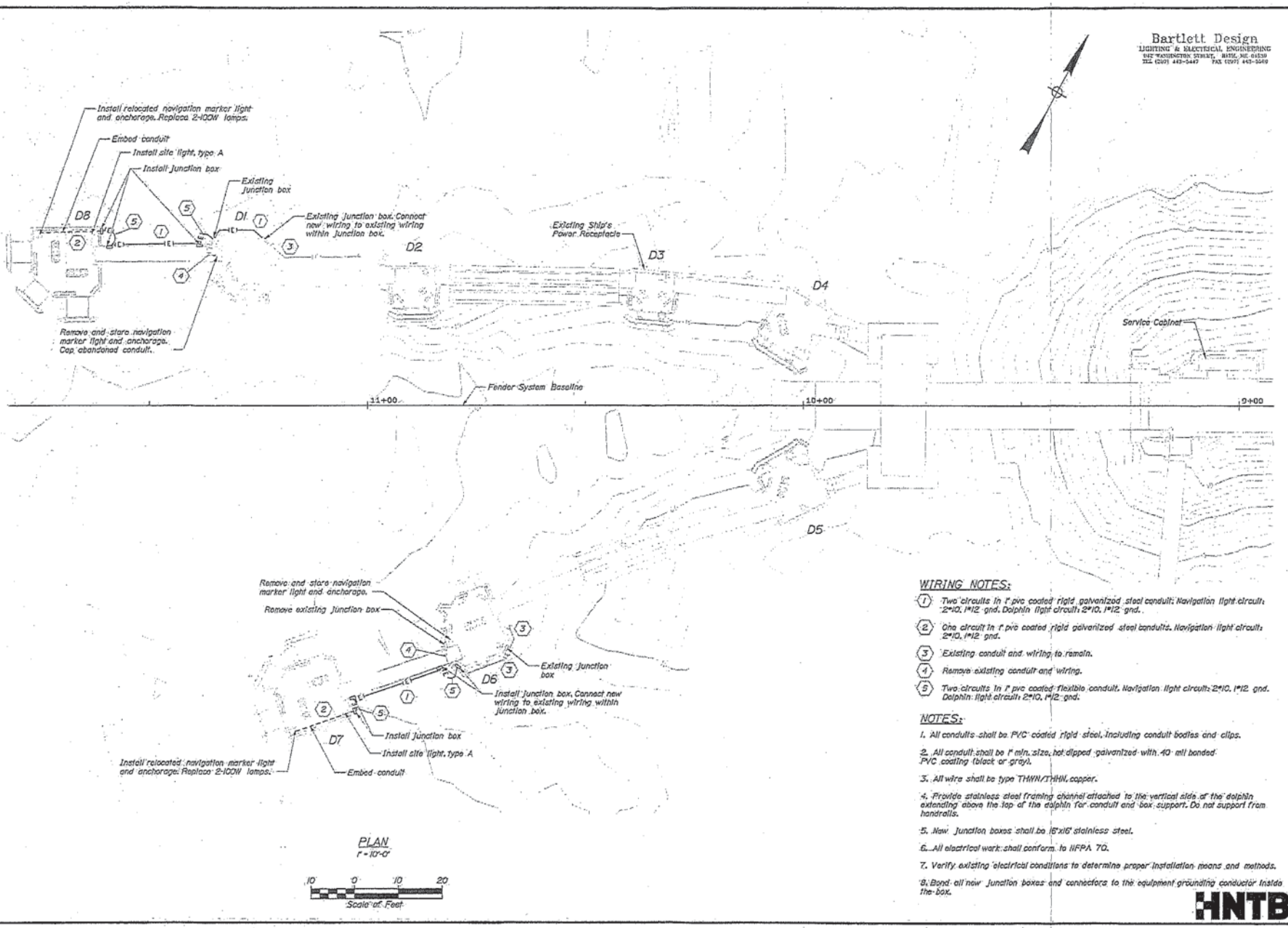
SWAN'S ISLAND
FERRY TERMINAL

GANGWAY
PLAN AND ELEVATION

SHEET NUMBER
S12
16 OF 18

FFilename: 016_Gangway Plan and Elevation.dgn Username: Division: Date:11/22/2019

399



WIRING NOTES:

1. Two circuits in 1" pvc coated rigid galvanized steel conduit: Navigation light circuit: 2#10, 1#12 gnd. Dolphin light circuit: 2#10, 1#12 gnd.
2. One circuit in 1" pvc coated rigid galvanized steel conduits. Navigation light circuit: 2#10, 1#12 gnd.
3. Existing conduit and wiring to remain.
4. Remove existing conduit and wiring.
5. Two circuits in 1" pvc coated flexible conduit. Navigation light circuit: 2#10, 1#12 gnd. Dolphin light circuit: 2#10, 1#12 gnd.

NOTES:

1. All conduits shall be PVC coated rigid steel, including conduit bodies and clips.
2. All conduit shall be 1" min. size, hot dipped galvanized with .40 mil bonded PVC coating (black or gray).
3. All wire shall be type THWN/THHN, copper.
4. Provide stainless steel framing channel attached to the vertical side of the dolphin extending above the top of the dolphin for conduit and box support. Do not support from handrails.
5. New junction boxes shall be 16"x16" stainless steel.
6. All electrical work shall conform to NFPA 70.
7. Verify existing electrical conditions to determine proper installation means and methods.
8. Bond all new junction boxes and connectors to the equipment grounding conductor inside the box.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 023480.00

LAWRENCE E. PINKHAM JR. — P.E. NUMBER 7926 — DATE 6/30/2019

P.E. STAMP	BY	DATE
ISSUED	P.E.PINK	05/19
ISSUED-REVISED	C.TYPO	05/19
ISSUED-REVISED		
ISSUED-REVISED		
REVISED 1		
REVISED 2		
REVISED 3		
REVISED 4		
FINAL ISSUANCE		

SWAN'S ISLAND
FERRY TERMINAL

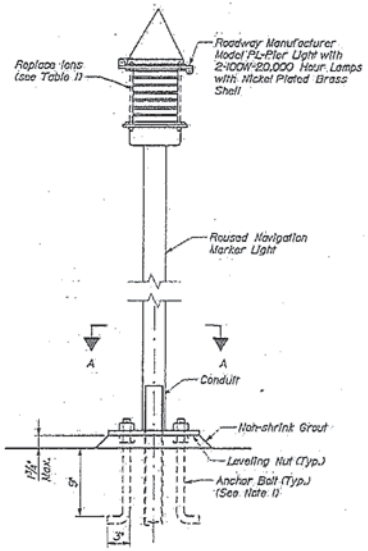
ELECTRICAL PLAN

SHEET NUMBER
E01
17 OF 18

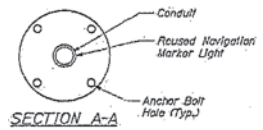
Filename: ...\01_Electrical Plan.dgn Division: Username: Date: 6/30/2019

TABLE I
NAVIGATIONAL MARKER LENS REPLACEMENT SUMMARY

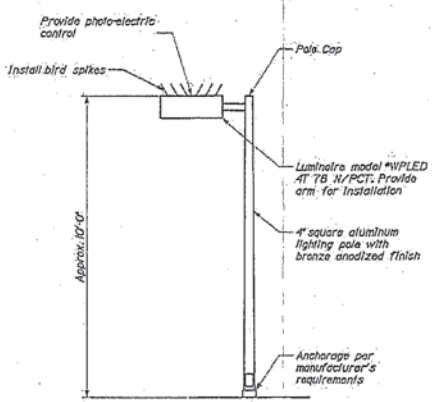
Location	# of Light Opening	Lamp Size	Lens
Dolphin D7	In Kind	2-100W A-19	In Kind
Dolphin D8	In Kind	2-100W A-19	In Kind



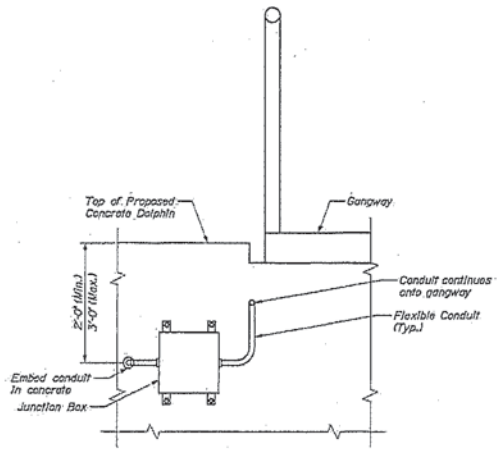
NAVIGATION MARKER INSTALLATION DETAIL
N.T.S.



SECTION A-A
N.T.S.



SITE LIGHT TYPE A DETAIL
N.T.S.



EMBEDDED CONDUIT JUNCTION BOX DETAIL
1"=1'-0"

NOTES:

1. Anchor bolt size and pattern shall match the existing condition.
2. Navigation marker wiring connection shall match the existing condition.
3. Where anchorages are removed, bolts and rods shall be cut, ground flush to concrete, and filled with Sika 1A Flex self-leveling sealant, or approved equal.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 023490.00

LAWRENCE E. BARTLETT No. 11121 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE

ISSUE STATUS	BY	DATE
100% SUBMITTED	L.E.Bartlett	5/30/2019
90% SUBMITTED	C.R.Cole	5/3/2019
60% SUBMITTED		
30% SUBMITTED		
REVISION 1		
REVISION 2		
REVISION 3		
REVISION 4		
FINAL PLANS		

L.E. BARTLETT
P.E. NUMBER 11121
DATE 5/30/2019
SIGNATURE

SWAN'S ISLAND
FERRY TERMINAL

ELECTRICAL DETAILS

SHEET NUMBER
E02
18 OF 18

Filename: ...\018_ElectricalDetails.dgn Division: Usernames: Date: 5/30/2019

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-2020-00491

Project Manager Clement

Name of Permittee: Maine Dept. of Transportation

Permit Issuance Date: _____

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

US Army Corps of Engineers®
New England District

WORK-START NOTIFICATION FORM

(Minimum Notice: Two weeks before work begins)

****

EMAIL TO: jay.l.clement@usace.army.mil

or

MAIL TO:

Jay Clement
US Army Corps of Engineers
Maine Project Office
442 Civic Center Drive
Augusta, Maine 04330

****

Corps of Engineers Permit No. NAE-2020-00491 was issued to the Maine Dept. of Transportation. This work is located in Mackerel Cove at Swans Island, Maine and authorized the permittee to upgrade the existing state ferry terminal facility. Regulated work includes the addition of two turning dolphins, wave screens, elevated walkways to the new turning dolphins, and modifications to the existing lighting system. New piling installations will result in a cumulative total of 69 s.f. of permanent tidal bottom impact.

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

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

_____

_____

Phone & email: (___)_____ (___)_____ _____

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

_____

DEPARTMENT OF THE ARMY
GENERAL PERMIT FOR
THE STATE OF MAINE

The New England District of the U.S. Army Corps of Engineers (Corps) hereby issues a General Permit (GP) for activities subject to Corps jurisdiction in waters of the U.S. within the boundaries of the State of Maine. This GP is issued in accordance with Corps regulations at 33 CFR 320 - 332 [see 33 CFR 325.2(e)(2)]. This GP authorizes activity-specific categories of work that are similar in nature and cause no more than minimal individual and cumulative adverse environmental impacts. Refer to Page 2 for the list of activities and Appendix A for activity specific conditions of eligibility in inland and tidal waters.

I. GENERAL CRITERIA

1. 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 – 20), and Appendix A - Definition of Categories.

2. Under this GP, projects may qualify for the following:
   - Category 1: Category 1 Self -Verification Notification Form is required (SVNF – see Appendix B).
   - Category 2: Application to and written approval from the Corps is required (Pre-Construction Notification (PCN)). No work may proceed until written approval from the Corps is 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 activities eligible 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.

3. Prospective permittees need to read:
   a. Section II to determine if the activity requires Corps authorization.
   b. Sections III and IV to determine if the activity may be eligible for authorization under this GP, specifically whether it is eligible for Self-Verification (SV) or whether Pre-Construction Notification (PCN) is required.

4. Permittees must ensure compliance with all applicable General Conditions in Section IV. The Corps will consider unauthorized any activity requiring Corps authorization if that activity is under construction or completed and does not comply with all of the terms and conditions.

5. Project proponents are encouraged to contact the Corps with questions at any time. Pre-application meetings (see 33 CFR 325.1(b)), whether arranged by the Corps or requested by permit applicants, are encouraged to facilitate the review of projects. Pre-application meetings and/or site visits can help streamline the permit process by alerting the applicant to potentially time-consuming concerns that are likely to arise during the evaluation of their project (e.g., avoidance, minimization and compensatory mitigation requirements, historic properties, endangered species, essential fish habitat, and dredging contaminated sediments).

II. CORPS JURISDICTION/ACTIVITIES COVERED

1. Permits are required from the Corps of Engineers for the following work:

a. The construction of any structure in, over or under any navigable water of the United States (U.S.)[1], the excavating or dredging from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters. The Corps regulates these activities under Section 10 of the Rivers and Harbors Act of 1899. See 33 CFR 322;

b. The discharge of dredged or fill material and certain discharges associated with excavation into waters of the U.S. (e.g. sidecasting). The Corps regulates these activities under Section 404 of the Clean Water Act (CWA). See 33 CFR 323; and

c. The transportation of dredged material for the purpose of disposal in the ocean. The Corps regulates these activities under Section 103 of the Marine Protection, Research and Sanctuaries Act. See 33 CFR 324.

2. Related laws:

33 CFR 320.3 includes a list of related laws, including: Section 401 of the CWA, Section 402 of the CWA, Section 307(c) of the Coastal Zone Management (CZM) Act of 1972, The National Historic Preservation Act of 1966, the Endangered Species Act, the Fish and Wildlife Act of 1956, the Marine Mammal Protection Act of 1972, Magnuson-Stevens Act, and Section 7(a) of the Wild and Scenic Rivers Act.

3. An activity listed below may be authorized by this GP only if that activity and the permittee satisfy all of the GP's terms and conditions. Any activity not specifically listed below may still be eligible for the GP; applicants are advised to contact the Corps for a specific eligibility determination. Category 1 and Category 2 eligibility criteria for each activity in both Inland and Tidal waters can be found in Appendix A.

1. Repair, Replacement, Expansion, and Maintenance of Authorized Structures and Fills
2. Moorings
3. Structures, Floats and Lifts
4. Aids to Navigation, and Temporary Recreational Structures
5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation
6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges
7. Bank and Shoreline Stabilization
8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities
9. Utility Line Activities
10. Linear Transportation Projects
11. Mining Activities
12. Boat Ramps and Marine Railways
13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects
14. Reshaping Existing Drainage Ditches and Mosquito Management
15. Oil Spill and Hazardous Material Cleanup
16. Cleanup of Hazardous and Toxic Waste
17. Scientific Measurement Devices
18. Survey Activities
19. Agricultural Activities
20. Fish and Wildlife Harvesting, Enhancement, and Attraction Devices
21. Habitat Restoration, Establishment and Enhancement Activities
22. Previously Authorized Activities
23. Stream & Wetland Crossings
24. Aquaculture

Note: Multiple activities may be authorized in the same GP, e.g. a recreational pier (#3) with an associated mooring (#2) or a windpower facility (#13) with an associated transmission line (#9).

[1] Defined in Appendix F, Definitions and at 33 CFR 328.

III. PROCEDURES

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

In order for authorizations under this GP to be valid, 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 (PBR) and general permit authorizations; Site Location of Development Act permit; Maine Waterway Development and Conservation Act permit; and Maine Hazardous Waste, Septage, and Solid Waste Management Act license.
- Maine Department of Conservation, Agriculture & Forestry: Land Use Planning Commission (LUPC) permit.
- Maine Department of Marine Resources: Aquaculture Leases.
- Maine Department of Conservation, Bureau of Parks and Lands, Submerged Lands: Submerged Lands Lease.

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

2. How to Obtain/Apply for Authorization.

a. Category 1 (Self-Verification): Self-Verification Notification Form (SVNF) required. The SVNF is required for all SV eligible work in Maine unless otherwise stated in Appendix A. Activities that are eligible for SV are authorized under this GP and may commence without written verification from the Corps provided the prospective permittee has:

i. Confirmed that the activity will meet the terms and conditions of Category 1. Consultation with the Corps and/or other relevant federal and state agencies may be necessary to ensure compliance with the applicable general conditions (GCs) and related federal laws such as the National Historic Preservation Act (see GC 6), the Endangered Species Act (GC 8) and the Wild and Scenic Rivers Act (GC 9). Prospective permittees are encouraged to contact the Corps with SV eligibility questions. Activities not meeting the SV criteria must submit a PCN to the Corps.

ii. Submitted the SVNF (see GC 27 and Appendix B) to the Corps. **NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF. Whichever form chosen needs to include a location map, plans, and an Official Species List for federally listed threatened or endangered species (Reference Appendix D).**

b. Category 2 (Pre-Construction Notification (PCN)): Application to and written verification from the Corps is required before work can proceed. For activities that do not qualify for SV or where otherwise required by the terms of the GP, the permittee must submit a PCN and obtain a written permit before starting work in Corps jurisdiction.

i. The Corps will coordinate review of all activities requiring PCN with federal and state agencies and federally recognized tribes, as appropriate. To be eligible and subsequently authorized, an activity must result in no more than minimal individual and cumulative effects on the aquatic environment as determined by the Corps in accordance with the criteria listed within this GP. This may require project modifications involving avoidance, minimization, or compensatory mitigation for unavoidable impacts to ensure that the net adverse effects of a project are no more than minimal.

ii. The Corps will attempt to issue a written eligibility determination within the state's review period. Regardless, work eligible for Category 2 may not proceed before Corps written approval is received.

c. All applicants for Category 2 projects must:

i. Apply directly to the Corps using the state application form or the Corps application form (ENG Form 4345[2]), and apply directly to the state (DEP, LUPC, BPL or DMR) as applicable using the appropriate state form, if the work is regulated by the Corps and the state; or

ii. Apply directly to the Corps using the Corps application form (ENG Form 4345[2]) if the work is regulated by the Corps but not the state (DEP, LUPC, BPL or DMR).

iii. Provide application information (see "Information Typically Required" in Appendix C) to help ensure the application is complete and to speed project review.

iv. Obtain an Official Species List of federally threatened or endangered species in the project area (GC 8).

v. Submit a copy of their application materials to the Maine Historic Preservation Commission (MHPC) *and* all five Indian tribes listed at Appendix E, at the same time, or before, they apply to 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 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).

d. Work that is not regulated by the State of Maine, but is subject to Corps jurisdiction, may still be eligible for authorization under this GP.

e. Emergency Situations: 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." Emergency work is subject to the same terms and conditions of this GP as non-emergency work, and similarly, must qualify for authorization under the GP; otherwise an IP is required. The Corps will work with all applicable agencies to expedite verification according to established procedures in emergency situations.

3. Individual Permits. Projects that are not authorized by this GP require an Individual Permit (IP) (33 CFR 325.5) and proponents must submit an application directly to the Corps. This GP does not affect the Corps IP review process or activities exempt from Corps regulation. For general information and application form, see the Corps website or contact the Corps (see Appendix E). The Corps encourages applicants to apply concurrently for a Corps IP and applicable state permits.

The Corps retains discretionary authority on a case-by-case basis to elevate a GP eligible project to an IP based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR 320.4(a)]. Whenever the Corps notifies an applicant that an IP is required, no work in Corps jurisdiction may be conducted until the Corps issues the required authorization in writing indicating that work may proceed.

4. Enforcement/Non-Compliance. Work performed without the required Corps of Engineers permits is subject to administrative, civil, and criminal penalties. The Corps will evaluate unauthorized activities for enforcement action under 33 CFR 326.

The Corps will consider unauthorized any activity requiring Corps authorization if that activity is under construction or completed and does not comply with all of the terms and conditions of a GP or an IP. The Corps may elect to suspend enforcement proceedings if the permittee modifies his project to comply with a GP.

After considering whether a violation was knowing or intentional, and other indications of the need for a penalty, the Corps can elect to terminate an enforcement proceeding with an after-the- fact authorization under a GP, if all terms and conditions of the GP have been satisfied, either before or after the activity has been accomplished.

[2] Located at www.nae.usace.army.mil/missions/regulatory under "Forms & Publications."

IV. GENERAL CONDITIONS

To qualify for GP authorization, the prospective permittee must comply with the following general conditions, as applicable.

1. Other Permits
2. Federal Jurisdictional Boundaries
3. Minimal Direct, Secondary, and Cumulative Impacts
4. Mitigation (Avoidance, Minimization, and Compensatory Mitigation)
5. Single and Complete Projects
6. Historic Properties
7. Corps Projects and Property
8. Federal Threatened and Endangered Species
9. Wild and Scenic Rivers
10. Navigation
11. Federal Liability
12. Utility Line Installation and Removal
13. Heavy Equipment in Wetlands or Mudflats
14. Temporary Fill
15. Restoration of Special Aquatic Sites (including wetland areas).
16. Soil Erosion, Sediment and Turbidity Controls
17. Time of Year Windows/Restrictions.
18. Aquatic Life Movements & Management of Water Flows
19. Water Quality and Coastal Zone Management
20. Floodplains and Floodways
21. Storage of Seasonal Structures
22. Spawning, Breeding, and Migratory Areas
23. Vernal Pools
24. Invasive and Other Unacceptable Species
25. Programmatic Agreements
26. Permit On-Site
27. Self-Verification Notification Form (SVNF)
28. Inspections
29. Maintenance
30. Property Rights
31. Transfer of GP Verifications
32. Modification, Suspension, and Revocation
33. Special Conditions
34. False or Incomplete Information
35. Abandonment
36. Enforcement Cases
37. Duration of Authorization
38. Previously Authorized Activities
39. Discretionary Authority
40. St. John/St. Croix Rivers.
41. National Lands
42. Essential Fish Habitat (EFH)
43. Work Site Restoration
44. Bank Stabilization
45. Stream Work & Crossings and Wetland Crossings

1. Other Permits. Permittees must obtain other federal, state, or local authorizations required by law. Applicants are responsible for applying for and obtaining all required state or local approvals. 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 http://www.maine.gov/dacf/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 square feet (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 (PCN), and for those filling ≥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 supplement (see Appendix C). 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 LUPC jurisdiction regardless of whether they're shown on LUPC 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. See www.nae.usace.army.mil/missions/regulatory >> Jurisdictional Limits and Wetlands for more information on delineating jurisdictional areas.

3. Minimal Direct, Secondary, and Cumulative Effects[3]

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 4) 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 and Appendix F.

c. Site clearing, grading and construction activities in the upland habitat surrounding vernal pools ("Vernal Pool Management Areas") are secondary impacts. See GC 23 for avoidance and minimization requirements and recommendations.

d. Bank stabilization activities in tidal waters are provided at Appendix A, Page 30. Direct impacts in tidal waters from contiguous bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.

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

a. 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.

b. Applicants proposing work in jurisdictional waters should consider riparian/forested buffers for stormwater management and low impact development (LID) best management practices (BMPs) to reduce

[3] Direct, secondary and cumulative effects are defined at Appendix F, Definitions and Acronyms.

impervious cover and manage stormwater to minimize secondary impacts to aquatic resources to the maximum extent practicable.[4]

c. Compensatory mitigation[5] for effects to waters of the U.S., including direct, secondary and temporal[6], may be required for permanent impacts that exceed the SV area limits, and may be required for temporary impacts that exceed the SV area limits, to offset unavoidable impacts which remain after all appropriate and practicable avoidance and minimization has been achieved and to ensure that the adverse effects to the aquatic environment are no more than minimal. Proactive restoration projects or temporary impact work with no lasting secondary effects may generally be excluded from this requirement. Refer to Appendix G.

5. Single and Complete Projects[7]

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

b. A single and complete project must have independent utility[7].

c. Unless the Corps determines the activity has independent utility:

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

ii. All components of a single project and/or all planned phases of a multi-phased project (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be treated together as constituting one single and complete project.

d. For linear projects, such as power lines or pipelines with multiple crossings, the single and complete project is all crossings of a single water of the U.S. (i.e., single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies and crossings of such features cannot be considered separately. If any crossing requires a Category 2 activity, then the entire linear project shall be reviewed as one project under Category 2.

6. Historic Properties

a. No undertaking shall cause effects (defined at 33 CFR 325 Appendix C and 36 CFR 800) on properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places[8], including previously unknown historic properties within the permit area, unless the Corps or another Federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act (NHPA). The State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO) and the National Register of Historic Places can assist with locating information on: i) previously identified historic properties; and ii) areas with potential for the presence of historic resources, which may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with the Corps and the SHPO and/or THPO(s).

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[4] See: www.nae.usace.army.mil/missions/regulatory >> State General Permit >> Permit Resources >> Mitigation for this additional information: a) "Wetland BMP Manual - Techniques for Avoidance & Minimization," b) riparian/forested buffer BMPs, and c) LID BMPs. LID BMPs include, but are not limited to: replacing curbs and gutters with swales; using an open space design for subdivisions; using permeable, pervious or porous pavements; constructing bio-retention systems; and/or, adding a green roof or rain garden.

[5] Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR 332. See also the New England District Compensatory Mitigation Guidance at www.nae.usace.army.mil/regulatory >> Mitigation.

[6] Temporal loss: The time lag between the loss of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site(s) (33 CFR 332.2).

[7] Single and Complete Project and Independent Utility are defined in Appendix F - Definitions.

[8] The majority of historic properties are not listed on the National Register of Historic Places and may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with the Corps and the SHPO and/or THPO(s).

b. For activities eligible for SV, proponents must ensure and document that the activity will not cause effects as stated in 6(a). Proponents must submit a PCN if the authorized activity may cause effects as stated in 6(a) as soon as possible to ensure that the Corps is aware of any potential effects of the permitted activity on any historic property to ensure all Section 106 requirements are met.

c. All PCNs shall: i) show notification to the SHPO and applicable THPO(s)[9] for their identification of historic properties, ii) state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties, and iii) include any available documentation from the SHPO or THPO(s) indicating that there are or are not historic properties affected. Starting consultation early in project planning can save proponents time and money.

d. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

7. Corps Projects and Property

a. In addition to any authorization under this GP, proponents must contact the Corps Real Estate Division at (978) 318-8585 for work occurring on or potentially affecting Corps properties and/or Corps-controlled easements to initiate reviews and determine what real estate instruments are necessary to perform work. Permittees may not commence work on Corps properties and/or Corps-controlled easements until they have received any required Corps real estate documents evidencing site-specific permission to work.

b. Any proposed temporary or permanent alteration, or modification or use, including occupation, of a federal project (including but not limited to a levee, dike, floodwall, channel, anchorage, breakwater, seawall, 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 operations and maintenance, is not eligible for SV and requires review and approval by the Corps pursuant to 33 USC 408. Where Section 408 is applicable, a decision on a Department of the Army general permit application will not be rendered prior to the decision on a Section 408 request.

c. Any structure or work within any Corps Federal Navigation Project (FNP) or its buffer zone[10], shall be subject to removal at the owner's expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. See GC 10 for more requirements related to FNPs.

8. Federal Threatened and Endangered Species

a. No activity is authorized which: i) is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species; ii) "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed; or iii) violates the ESA.

b. **All applicants must request an Official Species List from the US Fish & Wildlife Service and must include the list in the Corps permit application. To request an Official Species List, refer to the instructions in Appendix D.**

c. For federally listed species in tidal waters, applicants should contact the National Marine Fisheries Service at: http://www.greateratlantic.fisheries.noaa.gov/protected/section7/

[9] Appendix E, 3(a)&(b). Historic Resources, provides contact information and each tribe's "area of concern."
[10] See Appendix H for a list of FNPs. The buffer zone is equal to three times the authorized depth of the FNP.

d. A PCN is required if a threatened or endangered species, a species proposed for listing as threatened or endangered, or designated or proposed critical habitat (all hereinafter referred to as "listed species or habitat"), as identified under the ESA, is present in the action area[11].

e. Federal agencies should follow their own procedures for complying with the requirements of the ESA but should coordinate that consultation with the Corps as well.

9. Wild and Scenic Rivers.[12] 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 2015 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); and 11.25 miles of the York River, in the State of Maine, from its headwaters at York Pond to the mouth of the river at York Harbor, plus its tributaries (currently under study).

10. Navigation

a. Any structure or work that extends closer to the horizontal limits of any Corps Federal Navigation Project (see Appendix H) 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 28 (Moorings) and Page 29 (Structures, Floats & Lifts).

b. 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.

c. 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.

d. A PCN is required for all work in, over or under an FNP or its buffer zone unless otherwise indicated in Appendix A. (Reference Appendix A, Endnote 13, Page 36)

11. 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.

12. Utility Line Installation and Removal

a. Subsurface utility lines shall remain subsurface. If it is necessary to discharge dredged or filled material not previously authorized in order to keep such utility lines buried or restore them to their original subsurface condition, a PCN and written verification from the Corps may be required (e.g., in the case of side

[11] The "Endangered Species Consultation Handbook – Procedures for Conducting Consultation and Conference Activities Under Section 7 of the ESA," 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]."
[12] Additional information can be found at: http://www.rivers.gov.

casting into wetlands from utility trenches). Certain repair, replacement or maintenance activities may be eligible for Category 1 – refer to Appendix A.

b. Subsurface utility lines must be installed at a sufficient depth to avoid damage from anchors, dredging, etc., and to prevent exposure from erosion and stream adjustment. In accordance with Corps New England District Regulation NEDER 1110-1-9 (www.nae.usace.army.mil/missions/regulatory >> Useful Links and Documents), as an absolute minimum, the bottom cover associated with the initial installation of utility lines under navigable waters and navigation channels shall be 48 inches in soil or 24 inches in rock excavation in competent rock unless specified in a written determination. These minimum bottom cover requirements for pipelines and cables shall be measured from the maximum depth of dredging to the top of the utility. The maximum depth of dredging, in waterways having existing FNPs, is generally considered to be the authorized project depth plus any allowance for advanced maintenance and the allowable overdepth for dredging tolerances. In waterways that do not have existing FNPs, this depth should be taken as two feet below the existing bottom or maximum depth of proposed dredging, as applicable.

c. Aerial utility lines that cross navigable waters must meet minimum clearances. See 33CFR322.5(i).

d. For horizontal directional drilling work, returns of drilling fluids to the surface (i.e., frac-outs) are not authorized and require restoration to the maximum extent practicable in accordance with the terms and conditions of this GP. The permittee and its contractor shall have onsite and shall implement the procedures detailed in a frac-out contingency plan for monitoring drilling operations and for the immediate containment, control and recovery/removal of drilling fluids released into the environment should a discharge of material occur during drilling operations.

e. Within the context of any new installations, any abandoned or inactive utility lines should be removed and faulty lines (e.g., leaking hazardous substances, petroleum products, etc.) should be removed or repaired to the extent practicable. A PCN and written verification from the Corps is required if they are to remain in place, e.g., to protect sensitive areas or ensure safety.

f. No work shall drain a water of the U.S. by providing a conduit for water on or below the surface. Trench plugs installed along pipelines may be effective.

13. Heavy Equipment in Wetlands or Mudflats. 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. Construction mats should be managed in accordance with the Construction Mat BMPs at www.nae.usace.army.mil/missions/regulatory >> State General Permits >> Permit Resources.

14. 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 and disturbed soils shall be stabilized to prevent its eroding into waters of the U.S. where it is not authorized. Work shall include phased or staged development to ensure only areas under active development are exposed and to allow for stabilization practices as soon as practicable, typically within three calendar days after disturbance. Accelerated stabilization (the providing of temporary or permanent cover by the end of the work day to prevent erosion) shall be employed as necessary. Temporary fill must be placed in a manner that will prevent it from being eroded by expected high flows.

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

c. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Place materials in a location and manner that does not adversely impact surface or subsurface water flow into or out of the wetland. Temporary fill authorized for discharge into wetlands shall be placed on geotextile fabric or other appropriate material laid on the pre-construction wetland grade where practicable to minimize impacts and to facilitate restoration to the original grade. Construction mats are excluded from this requirement.

d. Temporary fill, construction mats and corduroy roads shall be entirely removed as soon as they are no longer needed to construct the authorized work. Temporary fill shall be placed in its original location or disposed of at an upland site and suitably contained to prevent its subsequent erosion into waters of the U.S. To qualify for Category 1, temporary fill placed during the: i.) growing season must be removed before the beginning of the next growing season; and ii.) non-growing season may remain throughout the following growing season, but must be removed before the beginning of the next growing season.

e. Temporary fill, construction mats and corduroy roads are considered temporary only if they are removed as soon as they are no longer needed to construct the authorized work.

f. Construction debris and/or deteriorated materials shall not be located in waters of the U.S.

15. Restoration of Special Aquatic Sites (Including Wetland Areas)

a. Temporary fills must be removed in their entirety and the affected areas restored to their pre-construction condition, function and elevation. Restoration shall typically commence no later than the completion of construction.

b. For excavated areas, "restored to pre-construction condition, function and elevation" means careful removal of existing soil and vegetation, separate topsoil and subsoil stockpiling, soil protection, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized. Plan for natural settling that will occur (the initial post-restoration elevation of the backfilled areas should be above the desired final grade as topsoil may settle by 33% to 50%), minimize compaction, and ensure that topsoil is void of gravel and subsoil. A minimum of 4 inches of topsoil should be at the surface after the soil has settled. Wetland areas temporarily disturbed shall be stabilized (e.g., seeded or planted). Seed mixes and vegetation shall include only plant species native to New England and shall not include any species listed as "Invasive and Other Unacceptable Plant Species" in the "New England District Compensatory Mitigation Guidance" (see GC 24 and refer to Appendix G). This list may be updated periodically.

c. Limit compaction to the minimum needed to promote a successful seedbed; avoid a 'fluffy' seedbed, which is susceptible to erosion until the plants get established, and a compacted topsoil layer, which is counter-productive and will lead to greater erosion susceptibility down the road. Test soils for compaction. A soil probe, auger, or shovel should be able to retrieve samples of post-restoration profile. Equipment refusal shall be considered a failure of restoration, in which case the soil should be restored through deep-ripping and/or de-compaction, or other appropriate methods, and wetland hydrology must be maintained. See the BMPs at www.nae.usace.army.mil/missions/regulatory >> State General Permits >> Permit Resources >> Restoration.

d. In areas of authorized temporary disturbance, cut woody vegetation (trees, shrubs, etc.) shall be cut at or above 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.

e. Trenches shall be constructed or backfilled so that the trench does not drain waters of the U.S. (e.g., materials or methods that create a French drain effect).

16. Soil Erosion, Sediment and Turbidity Controls

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 .

17. Time of Year Work Windows/Restrictions. For activities where work is authorized in streams and tidal waters that causes turbidity or sediment re-suspension or other construction related disturbances, work must be conducted during the following TOY work windows (not during the TOY restrictions) unless otherwise authorized by the Corps under Category 2 review:

	TOY Restriction (no work)	TOY Work Window (work allowed)
Non-tidal waters	Oct. 01 through Jul. 14	Jul. 15 through Sep. 30
Tidal waters	Apr. 10 through Nov. 07	Nov. 08 through Apr. 09

Alternate windows authorized under Category 2 may include species specific windows recommended by the Maine Dept. of Marine Resources and/or Maine Dept. of Inland Fisheries & Wildlife.

18. Aquatic Life Movements & Management of Water Flows

a. No activity may 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, unless the activity's primary purpose is to impound water. Unless otherwise stated, activities impounding water in a stream require a PCN to ensure impacts to aquatic life species are avoided and minimized. All permanent and temporary crossings of waterbodies (e.g., streams, wetlands) shall be:

i. Suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species; and

ii. Properly aligned and constructed to prevent bank erosion or streambed scour both adjacent to and inside the culvert. Permanent and temporary crossings of wetlands shall be suitably culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity between the wetlands on either side of the road.

b. To avoid adverse impacts on aquatic organisms, the low flow channel/thalweg shall remain unobstructed during periods of low flow, except when it is necessary to perform the authorized work.

c. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

19. Water Quality and Coastal Zone Management

a. Applicants must satisfy any conditions imposed by the state and EPA, where applicable, in their CWA § 401 Water Quality Certifications (WQC) for this GP, or in any Individual § 401 WQC. See Appendix E for state-specific contact information and to determine if any action is required to obtain a 401 WQC. The Corps may require additional water quality management measures to ensure that the authorized activity does not cause or contribute to a violation of water quality standards. All projects authorized by this GP shall be designed, constructed and operated to minimize or eliminate the discharge of pollutants.

b. Applicants must satisfy any additional conditions imposed by the state in their Coastal Zone Management (CZM) Act consistency concurrences for this GP, or in any Individual CZM consistency concurrences. The Corps may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

20. Floodplains and Floodways

a. Appropriate measures must be taken to minimize flooding to the maximum extent practicable.

b. Activities within 100-Year Floodplains must comply with applicable Federal Emergency Management Agency (FEMA)-approved state and/or local floodplain management permitting requirements. Proponents may need to coordinate with FEMA and apply for a formal change to the flood insurance study products or forward a set of project plans and relevant technical documentation in a digital format to the Risk

Analysis Branch Chief, Mitigation Division, FEMA, Region 1, 99 High Street, Boston, Massachusetts 02110. Applicants should provide a copy of any documentation to the Corps along with the PCN.

c. Proponents may have to obtain a Flood Hazard Development Permit issued by the town. Inquiries may be directed to the municipality or to the Maine Floodplain Management Coordinator at (207) 287-8063. See http://www.maine.gov/dacf/flood/

21. Storage of Seasonal Structures. Seasonal or recreational structures such as pier sections, floats, aquaculture structures, etc. 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 landward of mean high water (MHW) or ordinary high water (OHW) and not in wetlands, tidal wetlands, their substrate or on mudflats. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is waterward of MHW or OHW. Seasonal storage of structures in navigable waters, e.g., in a protected cove on a mooring, requires Corps approval and local harbormaster approval.

22. Spawning, Breeding, and Migratory Areas

a. Jurisdictional activities and impacts such as excavations, discharges of dredged or fill material, and/or suspended sediment producing activities in jurisdictional waters that provide value as 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.

b. Jurisdictional activities in waters of the United States that provide value as breeding areas for migratory birds must be avoided to the maximum extent practicable. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity (See Appendix E).

23. Vernal Pools

a. Only vernal pools that meet the current definition of waters of the U.S. are regulated by the Corps.

b. Direct and indirect adverse effects to all vernal pools (VPs), including their envelopes and critical terrestrial habitats (VP Management Areas[13]), shall be avoided and minimized to the maximum extent practicable. Site clearing, grading, and construction activities associated with a regulated activity in the VP Management Area may cause these adverse effects to the VP.

c. The State of Maine has specific protections for vernal pools.[14]

d. When any regulated activities occur within 750 feet of a vernal pool, the following management practices must be followed for all work within any VP Management Area (750' of a VP's edge) *in order to qualify for Category 1*:

i. No disturbance within the VP Depression or VP Envelope (area within 100 feet of the VP Depression's edge)[15];

ii. Maintain a minimum of 75% of the Critical Terrestrial Habitat (area within 100-750 feet of the VP Depression's edge) as unfragmented forest with at least a partly-closed canopy of overstory trees to provide shade, deep litter and woody debris;

iii. Maintain or restore forest corridors connecting wetlands and significant vernal pools;

iv. Minimize forest floor disturbance; and

v. Maintain native understory vegetation and downed woody debris.

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[13] 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.

[14] Appendix G, 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.

[15] 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.

vi. Cape Cod style-curbing or no curbing options shall be used on new roads to facilitate amphibian passage. (Reference Appendix G)

e. A PCN is required for any regulated activity within 750' of a vernal pool when all work within the VP Management Area does not comply with the Category 1 requirements in (d) above. Information on directional buffers in accordance with the VP Directional Buffer Guidance document may be provided in order to demonstrate minimal impact and avoid compensation requirements (Reference Appendix G). Conservation of the un-impacted area within the VP Management Area will often be required.

f. GC 2 requires applicants to delineate or approximately identify on the project plans all waters of the U.S., which contain vernal pools.

g. GC 23(b-d) do not apply to projects that are within a municipality and meet the provisions of a Corps-approved VP Special Area Management Plan (VP SAMP) and are otherwise eligible for self-verification.

24. Invasive and Other Unacceptable Species[16]

a. The introduction or spread of invasive or other unacceptable plant or animal species on the project site or areas adjacent to the project site caused by the site work shall be avoided to the maximum extent practicable. For example, construction mats and equipment shall be thoroughly cleaned and free of vegetation and soil before and after use. The introduction or spread of invasive plant or animal species on the project site caused by the site work shall be controlled.

b. No cultivars, invasive or other unacceptable plant species may be used for any mitigation, bioengineering, vegetative bank stabilization or any other work authorized by this GP. However, non-native species and cultivars may be used when it is appropriate and specified in a written verification, such as using *Secale cereale* (Annual Rye) to quickly stabilize a site. All PCNs should explain the reason for using non-native species or cultivars.

25. Programmatic Consultations or Agreements. The Corps requirements to comply with Section 106 of the NHPA, Section 7 of the Endangered Species Act or Essential Fish Habitat conservation under the Magnuson-Stevens Act may be satisfied by a Programmatic Agreement with the Corps, New England District or another federal action agency. Any Corps, New England District Programmatic Agreements will be available on our website.

26. Permit On Site. The permittee shall ensure that a copy of this GP and any accompanying authorization letter with attached plans are at the site of the work authorized by this GP whenever work is being performed and that all construction personnel performing work which may affect waters of the U.S. are aware of its terms and conditions. The entire permit authorization shall be made a part of any and all contracts and subcontracts 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 entire 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 subcontract. Although the permittee may assign various aspects of the work to different contractors or subcontractors, all contractors and subcontractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire GP authorization, and no contract or subcontract shall require or allow unauthorized work in areas of Corps jurisdiction.

[16] For the purposes of this GP, plant species that are considered invasive and unacceptable are provided in Appendix G "Invasive and other Unacceptable Plant Species" of our document "Compensatory Mitigation Guidance" at www.nae.usace.army.mil/missions/regulatory >> Mitigation. Chapter 4(e) Planting is also particularly relevant. The June 2009 "Corps of Engineers Invasive Species Policy" provides policy, goals and objectives and is located at www.nae.usace.army.mil/missions/regulatory >> Invasive Species. Additional information can be found at: www.eddmaps.org/ipane.

27. Self-Verification Notification Form (SVNF). Permitees must complete and submit the SVNF provided at Appendix B to the Corps for work authorized by this GP unless otherwise noted in Appendix A. **NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF provided either form used also include plans and an Official Species List of federally listed threatened or endangered species.**

28. Inspections. The permittee shall allow the Corps to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this GP and any written verification. The Corps may also require post-construction engineering drawings for completed work, post-dredging survey drawings for any dredging work, or other post-construction reports. To facilitate these inspections, the permittee shall complete and return to the Corps the following forms:

- For Category 1/Self-Verification: The SVNF (see Appendix B).
- For Category 2/PCN: The a) Work-Start Notification Form and b) Compliance Certification Form, when either is provided with the authorization letter.

29. Maintenance

a. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable general conditions and activity-specific conditions to a written verification.

b. The requirement in (a) above does not include maintenance of dredging projects. Each maintenance dredging event exceeding the self-verification limits requires a new PCN unless an unexpired, written PCN or other Corps authorization specifies that the permittee may "dredge and maintain" an area for a particular time period. Self-verification or PCN maintenance dredging includes only those areas and depths previously authorized and actually dredged. Maintenance dredging with ocean or open water disposal will always require a PCN and at least Category 2 review.

c. Some maintenance activities may not be subject to regulation under Section 404 in accordance with 33 CFR 323.4(a)(2). Refer to Appendix A, Endnote 7.

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

31. Transfer of GP Verifications. 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 authorizations, as well as the new owner(s) of the property. If the permittee sells the property associated with a GP verification, the permittee may transfer the GP verification to the new owner by submitting a letter to the Corps (see Appendix E for address) to validate the transfer. A copy of the GP verification must be attached to the letter, and *the letter must contain the new owner's contact information and 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."

_____

(Transferee)

_____

(Date)

32. Modification, Suspension, and Revocation. Any work authorized under this GP by self-verification or PCN may be either modified, suspended, or revoked, in whole or in part, pursuant to the policies and procedures of 33 CFR 325.7. Any such action shall not be the basis for any claim for damages against the U.S.

33. 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 terms and 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.

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

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

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

37. Duration of Authorization. This GP expires on October 12, 2020. 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 12, 2021 to complete the activity under the terms and conditions of the current GP.

38. 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 GP in effect between October 12, 2010 and October 12, 2015 remains authorized subject to the terms and general conditions of this GP along with any special conditions in the authorizing written letter. Exception – if previously authorized work is not commenced and a new federally listed threatened or endangered species could be affected, the Corps must consult with the Service(s) prior to re-authorizing the work under this GP. Requests for re-authorization must include an updated Official Species list. To request an Official Species List, refer to the instructions in Appendix D.

39. 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.

40. 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 a PCN 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.

41. National Lands. 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 are not eligible for Category 1 and require a PCN.

42. Essential Fish Habitat (EFH). 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 G for more information).

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

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

- Exploratory drilling and borings for bridges.
- Moorings (see Appendix A, Page 28 for Category 1 thresholds and requirements)
- Structures, floats & lifts (see Appendix A, Page 29 for Category 1 thresholds and requirements)
- Other activities specified in a programmatic agreement with NMFS.

43. 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 GC 24 and refer to Appendix G). 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.

44. 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.

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 total length along the bank(s); 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 sub-angular 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. Bank stabilization activities in tidal waters are provided at Appendix A, Page 30 & 31. Direct impacts in tidal waters from contiguous bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.

45. Stream Work and Crossings & Wetland Crossings

Notes:

a. For *Stream Work and Crossings* below, conditions (a) and (b) apply to Inland Waters and Wetlands (see Appendix A, Page 1 for definition) and Navigable Waters (see Appendix A, Page 27 for definition). Conditions (c)-(l) below 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, Atlantic sturgeon, or shortnose sturgeon [see GC 8(b)] and some stream work such as crossings on EFH waters (see GC 42) 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 for more state contact information.

Conditions for Stream Work and Crossings:

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 G, 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 45(a) and GC 45(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 19 and the stream simulation document listed at Appendix G, 8(a).

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

i. Must ensure compliance with GC 45(a) and GC 45(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 19 and the stream simulation document listed at Appendix G, 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 and at least Category 2 review.

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 G, 8(e)]. Note: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine the review category in Appendix A.

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

iii. Temporary stream crossings that are not spans[17] (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. Installed and removed during the low flow period specified in GC 45(l) below.

2. Placed on geotextile fabric or other material where practicable to ensure restoration to the original grade. Soil may not be used to construct or stabilize these structures and rock must be large enough to allow for easy removal without disrupting the streambed.

3. Designed and maintained to withstand and pass high flows. Water height should be no higher than the top of the culvert's inlet. A minimum culvert diameter of two feet is required to pass debris. Culverts must be aligned to prevent bank erosion or streambed scour.

4. Equipped with energy dissipating devices installed downstream if necessary to prevent scour.

5. Designed and maintained to prevent soil from entering the waterbody.

6. Removed upon the completion of work. Impacts to the streambed or banks requires restoration to their original condition using stream simulation methods[18].

g. Slip Lining. Work using slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), invert lining, or resulting in decreased diameter, does 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 14(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 45(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 45(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 45(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 GC 45(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 – September 30 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.

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

a. Culverts must be embedded:

[17] 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.

[18] Design and construction shall be in accordance with the stream simulation document listed at Appendix G, 8(a).

- ≥ 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**, spans[17] are required to avoid or cause minimal disruption to the streambed and to meet the requirements of General Condition 45(a) and 45(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 45(h)ii requires Category 2 review and, unless demonstrated otherwise, stream simulation[18] to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.

c. **For replacement crossings**, spans[17] are required to meet the requirements of General Condition 45(a) and 45(b). Footings and abutments shall be landward of 1.2 times bankfull width. Unless demonstrated otherwise, stream simulation[18] 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) at the time of construction and over time as the structure has had the opportunity to pass significant flood events. To allow terrestrial passage for wildlife and prevent undermining the footings, crossings shall have a bank on both sides of the stream matching the horizontal profile of the existing stream and banks[18]. Note: Installation of substrate material within smaller culverts may not be safe or practicable. In these cases, it may be necessary to allow for natural deposition and bed development unless alternative methods are identified.

e. Crossings must be designed and constructed[18] 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.

Conditions for 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 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.



Robert J. Desista
Deputy Chief, Regulatory Division
For DISTRICT ENGINEER **DATE** 10/13/15

APPENDIX A: DEFINITION OF CATEGORIES

A. INLAND WATERS AND WETLANDS	**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. (tidal and freshwater).*** 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 and designated activities, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands[1] to tidal waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 27 below.)	
	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 5–20).	
ACTIVITY	**CATEGORY 1** Self-Verification Eligible **(*SVNF Required*)**	**CATEGORY 2 (*PCN Required)***
1. Repair, Replacement, Expansion, and Maintenance of Authorized Structures and Fills	Repair or maintenance of existing, currently serviceable, authorized fills with no expansion or change in use: • 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. • No effect on federally listed endangered or threatened species or critical habitat.	Replacement of non-serviceable fills, or repair/maintenance of serviceable fill, with expansion <3 acres, or with a change in use.
2. Moorings	NA – moorings in non-navigable inland waters are not subject to Corps jurisdiction. Note: Moorings placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on Page 28 below.)	NA
3. Structures, Floats & Lifts	For solid fill or crib supported structures on inland waters, <15,000 square feet (SF) of waterway and/or wetland fill, associated secondary impacts[2] , and temporary fills. • No effect on federally listed endangered or threatened species or critical habitat. • Note: Temporary or permanent structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 29 below.	1. Work not eligible for Category 1 2. ≥15,000 SF to <3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated).
4. Aids to Navigation and Temporary Recreational Structures	NA - this activity in non-navigable inland waters is not subject to Corps jurisdiction. Note: Aids to Navigation and other structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 30 below.)	NA

5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation	1. For regulated discharges associated with excavation, and disposal <15,000 SF inland waterway and/or wetland impacts. 2. The activity does not occur in navigable waters of the U.S. 3. Stream channelization, relocation or loss of streambed including impoundments or discharge of tailings into streams does not occur. 4. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1 2. ≥15,000 SF to <3 acres of inland waters.
6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges	NA - For discharges incidental to the construction of bridges in inland waters of the U.S. refer to Activity 23 (Stream and Wetland Crossings) and GC 45. Note: Discharges of Dredged or Fill Material Incidental to the Construction of Bridges in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 30 below.)	NA
7. Bank and Shoreline Stabilization	Inland bank stabilization <500 FT long and ≤1 CY of fill per linear foot below OHW, provided: • ≤1 cubic yard of fill per linear foot placed along the bank waterward of ordinary high water. • Work complies with the GCs (GC 44 in particular), including: o No structures angled steeper than 1H:1V allowed. Only rough-faced stone or fiber roll revetments allowed. o No in-stream work involving fill or excavation in flowing waters (see GC 45(h)). • In-water work limited to Jul 15 – Sep 30. • No work in vernal pools[5] or SAS[3]. • No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities	1. <15,000 SF of inland waterway and/or wetland fill and associated secondary impacts[2] (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 GC 14] Provided: • Historic fill + proposed impact area <15,000 SF complies with GC 5, Single and Complete Projects. • No work in special aquatic sites (SAS)[4] other than wetlands. • No effect on federally listed endangered or threatened species or critical habitat. 2. For work in Vernal Pool (VP) Management Areas (includes VPs)[5]:	1. Work not eligible for Category 1. 2. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 3. *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.* See GC 2 and Appendix C for wetland delineation

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	• See GC 23 and Appendix C for VP delineation requirements. • See GC 23 to determine if work qualifies for Category 1 or 2. • See Appendix G for VP documents providing mitigation guidance.	requirements.
9. Utility Line Activities	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts[2], and temporary fills. 2. The activity does not occur in, over, or under navigable waters of the U.S. 3. Intake structures that are dry hydrants used exclusively for firefighting activities with no stream impoundments. 4. There is no permanent change in pre-construction contours in waters of the U.S. 5. Material resulting from trench excavation is temporarily side cast into waters of the U.S. for ≤ 3 months and is placed in such a manner that it is not dispersed by currents or other forces. 6. The utility line is placed within and does not run a) parallel to, or b) along a streambed. 7. Stream channelization, relocation or loss of streambed including impoundments does not occur. 8. No effect on federally listed endangered or threatened species or critical habitat. 9. There is no discharge in SAS other than non-tidal wetlands. 10. Construction mats[4] 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 43). 11. Stream crossings must comply with GC 17.	1. Work not eligible for Category 1 2. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 3. *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.*
10. Linear Transportation Projects *(not including stream crossings)* **For stream crossings, refer to Activity 23**	1. <15,000 SF of inland waterway and/or wetland fill associated secondary impacts (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 fill. (See GC 14.) Provided: • Historic fill + proposed impact area <15,000 SF and complies with GC 5 single and complete projects. • No work in special aquatic sites (SAS) other than wetlands. 2. Construction mats[4] 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 43). 3. No effect on federally listed endangered or threatened species or critical habitat.	1. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 2. *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.*

11. Mining Activities	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. The activity does not occur in navigable waters of the U.S. 3. Stream channelization, relocation or loss of streambed including impoundments or discharge of tailings into streams does not occur. 4. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1. 2. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation.
12. Boat Ramps	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1 2. >15,000 SF and < 3 acres of impact.
13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects	*For land-based facilities:* 1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. Stream channelization, relocation or loss of streambed including impoundments does not occur. 3. No effect on federally listed endangered or threatened species or critical habitat. *For water-based facilities and hydropower projects:* No new facilities are eligible.	*For land-based activities:* 1. Work not eligible for Category 1. 2. >15,000 SF and < 3 acres impact. 3. *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.* *For water-based facilities and hydropower projects:* > 3 acres of impact will require an IP.
14. Reshaping Existing Drainage Ditches & Mosquito Management	Not Applicable	Not Applicable
15. Oil Spill and Hazardous Material Cleanup	Jurisdictional 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 or any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS[3] must typically be restored in place at the same elevation. ***Note: SVNF or a surrogate state reporting form may be submitted after the fact.***	Work not eligible for Category 1

16. Cleanup of Hazardous and toxic waste	Specific jurisdictional activities to effect the containment, stabilization, or removal of hazardous or toxic waste materials, including court ordered remedial action plans or related settlements, which are performed, ordered or sponsored by a government agency with established legal or regulatory authority. SAS should be restored in place at the same elevation. • <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. • No stream channelization, relocation or loss of streambed occurs. • The project does not involve establishing new disposal sites or expanding existing sites used for the disposal of hazardous or toxic waste. • No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
17. Scientific Measurements Devices	1. 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 or concentrate movement of aquatic organisms. 2. No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
18. Survey Activities	1. Jurisdictional 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 43. 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). 2. No effect on federally listed endangered or threatened species or critical habitat.	Work not eligible for Category 1
19. Agricultural Activities	1. For those activities subject to Corps jurisdiction[16], <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. No stream channelization, relocation, loss of streambed, or farm ponds in streams. 3. No effect on federally listed endangered or threatened species or critical habitat.	1. ≥15,000 SF 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 (including mats), and regulated discharges associated with excavation. 2. > 3 acres of impact will require an IP.

20. Fish and Wildlife Harvesting, Enhancement and Attraction Devices and Activities	NA - this activity in non-navigable inland waters, if not involving a discharge of dredged or fill material, is not subject to Corps jurisdiction. Note: Related structures placed in freshwater navigable waters (e.g. the upper Penobscot or Kennebec Rivers) are reviewed in the Navigable Waters section. (See B. Navigable Waters on Page 33 below.)	Not Applicable
21. Habitat Restoration, Establishment and Enhancement Activities	1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. The activity is supported in writing by a local, state, or non-Corps Federal environmental agency. Water impoundments require PCN. 3. No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another. 4. No dam removal. 5. No effect on federally listed endangered or threatened species or critical habitat.	1. Work not eligible for Category 1 2. 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 ≥15,000 SF, provided those activities result in net increase in overall aquatic resource functions and services.[8]
22. Previously Authorized Activities	Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015. The terms and general conditions of this GP apply along with any special conditions in the written authorization.	
23. Stream & Wetland Crossings	1. River, stream and brook work and crossings: • Must comply with GC 45 in particular, including: o No slip lining [see GC 45 (g)]. o No in-stream work involving fill or excavation in flowing waters [see GC 45(h)]. o In-stream work limited to Jul 15 – Sep 30 [see GC 45 (l)]. • No work in riffles and pools[3]. • No stream relocations. • No dams or dikes[6]. • No effect on federally listed endangered or threatened species or critical habitat. • <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. Wetland crossings must comply with the particularly relevant GC 45.	Work not eligible for Category 1
24. Aquaculture (freshwater)	For land based installations, <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. • In-stream/in-water work limited to Jul 15 – Sep 30. • No effect on federally listed endangered or threatened species or critical habitat. Note: Related structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters, below.)	Work not eligible for Category 1

B. NAVIGABLE WATERS	**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 wetlands[1] to tidal waters are also reviewed in this Navigable Waters section.	
	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 - 20).	
ACTIVITY	**CATEGORY 1** Self-Verification Eligible ***(SVNF Required)***	**CATEGORY 2 *(PCN Required)***
1. Repair, Replacement, Expansion, and Maintenance of Authorized (or grandfathered) Structures and Fills	1.Repair, replacement in-kind, or maintenance[7] of existing, currently serviceable[7], authorized structures or fills: • All work is to be conducted in-the-dry, during low water. • Conditions of the original authorization apply. • No substantial expansion or change in use. • No new fill in SAS[3]. • Must be rebuilt in same footprint, however minor deviations in structure 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.	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. 2. <1 acre temporary or permanent fill, excavation and/or secondary impacts. Fill area includes all temporary and permanent waterway fills, provided: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 3. Standard Pile Driving Conditions. Work involving piles shall adhere to one of the four methods below: • Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or • Must be drilled and pinned to ledge, or • Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or • 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 • For the methods above: o In-water noise levels shall not exceed >187dB cSEL re 1µPa or 206dB peak re 1µPa at a distance >10m from the pile being installed, and o In-water noise levels >150dB 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 150dB peak re 1µPa) must be provided between work days. • Existing derelict, degraded or abandoned piles in the project area that are affected by project activities should be removed and properly disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate or mudflats.

2. Moorings	1. Private, non-commercial, non-rental, single-boat moorings, provided: • Authorized by the local harbormaster/town. • Not associated with any boating facility.[11] • Boat or mooring not located in a Federal Navigation Project or buffer zone[12] other than in a Federal Anchorage[12]. Moorings in a Federal Anchorage not associated with a boating facility[11] and are not for rent. • No interference with navigation. • No new moorings located in SAS[3]. 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 SAS[3] are going to be replaced, they should be replaced with low impact mooring technology that prevents mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS protection systems where practicable. 2. Minor relocation of previously authorized moorings, provided: • Authorized by the local harbormaster/town. • Not located in SAS[3] • No interference with navigation. • Cannot be relocated into a Federal Navigation Project[12] other than a Federal Anchorage[12] ***Note: Cat 1 eligible moorings do not require SVNF.***	1. Moorings associated with an existing boating facility[11]. An eelgrass[14] survey may be required. 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. 3. Moorings located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits[13] of a Federal Channel[12]. (See Appendix H.) The buffer zone is equal to 3 times the authorized depth of that channel. 4. An IP is required for moorings within the horizontal limits[11], or with moored vessels that extend, into the horizontal limits of a Federal Navigation Project[12], except those in Federal Anchorages[12]. *For 1-4 above, siting of new individual moorings in SAS[3], including eelgrass[14], should be avoided to the maximum extent practicable. If SAS[3] 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. For moorings that appear to impact SAS, the Corps may require an eelgrass survey.*
3. Structures, Floats and Lifts	1. Reconfiguration of existing authorized structures shall occur in-the-dry during low water. 2. Minor relocation of <u>previously authorized</u> floats or moored floats/lobster cars, provided: • Authorized by the local harbormaster/town. • Not located in SAS[3]. • No interference with navigation. • Cannot be relocated into a Federal Navigation Project[12] other than a Federal Anchorage[12].	1. New structures or floats, including floatways/skidways, built to access waterway (seasonal and permanent). Includes both pile supported and crib supported structures. 2. Expansions to existing boating facilities[11] • *Pile-supported structures <400 SF, with attached floats totaling <u>≤</u>200 SF.* • *Structures are <u>≤</u>4' wide and have at least a 1:1 height:width ratio[11].* • *Floats supported a minimum of 18" above the substrate during all tides.* • *Structures & floats not located within 25' of any eelgrass[8].* • *Moored vessels not positioned over SAS[3].*

		• *The Corps may require a letter of no objection from the abutter if structure is to be within 25 feet of the property line.* • *No structure extends across >25% of the waterway width at mean low water.* • *Not located within the buffer zone of the horizontal limits[13] of a Corps Federal Navigation Project (FNP) (Appendix F). The buffer zone is equal to three times the authorized depth of that FNP.* 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 limits[13] of a Corps Federal Navigation Project[12] (see Appendix H). 4. An Individual Permit is required for structures & floats associated with a new or previously unauthorized boating facility[11]. 5. Standard Pile Driving Conditions. Work involving piles shall adhere to one of the four methods below: • Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or • Must be drilled and pinned to ledge, or • Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or • 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 • For the methods above: o In-water noise levels shall not exceed >187dB cSEL re 1µPa or 206dB peak re 1µPa at a distance >10m from the pile being installed, and o In-water noise levels >150dB 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 150dB peak re 1µPa) must be provided between work days. • Existing derelict, degraded or abandoned piles in the project area that are affected by project activities should be removed and properly disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate or mudflats.

4. Aids to Navigation and Temporary Recreational Structures	1. Temporary buoys, markers, floats, etc. for recreational use during specific events, provided they are removed within 30 days after use is discontinued. 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)." ***Note: Cat 1 eligible aids to navigation and regulatory markers do not require SVNF.***	Work not eligible for Category 1
5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation	1. Maintenance dredging[10] for navigational purposes <1,000 CY with upland disposal. Includes return water from upland contained disposal area, provided: • Proper siltation controls are used. • Dredging & disposal operation limited to Nov. 8 – Apr. 9. • No impact to SAS[3]. • No dredging in intertidal areas. • No dredging within 100' of shellfish beds. • No dredging in areas designated as Critical Habitat for Atlantic salmon [see GC 8(b) & (c)]. • For dredging in tidal waters outside of Atlantic salmon critical habitat, applicants must contact NMFS (see GC 8) to ensure no impacts to listed species such as shortnose sturgeon, Atlantic surgeon, and listed sturgeon critical habitat. • Project proponents must contact the USFWS for work on coastal beaches to ensure no impacts to piping plovers, roseate terns, rufa red knot, or their habitat [see GC 8(c)]. • No underwater blasting. 2. Maintenance dredging 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.	1. Maintenance dredging[10] ≥1,000 CY, new dredging <25,000 CY, or projects not meeting Category 1. Includes return water from upland contained disposal areas. Disposal includes: • Upland. • Beach nourishment (above mean high water) of any area provided the dredging's primary purpose is navigation or the sand is from an upland source. • Open water & confined aquatic disposal, if Corps finds the material suitable. 2. Beach nourishment associated with dredging when the primary purpose is not navigation requires at least a Category 2 review. 3. Maintenance or new dredging[10] and/or disposal in or affecting a SAS[3] requires an Individual Permit.

6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges	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. 2. Causeways and approach fills are not included in this category and require Category 2 or Individual Permit authorization.	<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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
7. Bank and Shoreline Stabilization	1. Bank stabilization projects <200 linear feet provided: • ≤1 cubic yard of fill per linear foot placed along the bank waterward of high tide line. No fill or equipment will occur in SAS[3]. • Work conducted in the intertidal zone must be conducted in-the-dry during low water. • No structures angled steeper than 1H:1V and only rough-faced stone or fiber roll revetments allowed. • No driving of piles or sheeting. 2. Bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.	1. Work not eligible for Category 1. 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities	Not Eligible	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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 2. Conversions of previously authorized pile supported buildings over navigable waters to residences, offices, or other non-water dependent uses require at least a Category 2 review. 3. Floating house boats or businesses on floats require Category 2 review.
9. Utility Line Activities	1. Repair or maintenance of existing, currently serviceable, authorized utilities with no expansion or change in use: • Conditions of the original authorization apply. • Trenching or filling is confined to the existing footprint. • In water work conducted between Nov 8 and Apr 9. • No new impact to SAS. 2. Particularly relevant is GC12. 3. New work in, over, or under navigable waters requires a PCN and Category 2 review. 4. Except for aerial utility lines, 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	1. New or replacement installations or work not otherwise eligible for Category 1. 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 3. Particularly relevant is GC12

	Squaw Point) on Cape Jellison in Stockton Springs or in tidal	
10. Linear Transportation Projects **(Not Including Stream Crossings)**	Not eligible	<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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
11. Mining Activities	Not Eligible	Not Eligible
12. Boat Ramps and Marine Railways	1. No new impact to SAS 2. Marine railway and boat ramp work not eligible for maintenance[7] (i.e. not currently serviceable[7]) may be replaced "in-kind" with minor deviations[7] provided: • Work is in the intertidal zone. • No fill expansion below high tide line. • Work conducted in-the-dry during low water. 3. No new boat ramps or marine railways.	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects	Not Eligible	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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF. 2. No new impoundments.
14. Reshaping Existing Drainage Ditches and Mosquito Management	1. ≤500 linear feet of drainage ditch will be modified. The reshaping of the ditch cannot increase drainage capacity beyond the original as-built capacity nor can it expand the area drained by the ditch as originally constructed (i.e., the capacity of the ditch must be the same as originally constructed and it cannot drain additional wetlands or other waters of the U.S.). 2. No new ditches or relocation of drainage ditches constructed in waters of the U.S.; the location of the centerline of the reshaped drainage ditch must be approximately the same as the location of the centerline of the original drainage ditch. 3. No effect on federally listed endangered or threatened species or critical habitat	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.

15. Oil Spill and Hazardous Material Cleanup	Jurisdictional activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS[3] must typically be restored in place at the same elevation. ***Note: SVNF or a surrogate state reporting form may be submitted after the fact. No SVNF is required for Category 1eligible containment booms.***	Work not eligible for Category 1
16. Cleanup of Hazardous and Toxic Waste	Not eligible - except for booms placed for hazardous and toxic waste containment and absorption and prevention which are eligible for SV. ***Note: No SVNF is required for Category 1 eligible containment booms.***	Specific jurisdictional 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 and other SAS must typically be restored in place at the same elevation to qualify.
17. Scientific Measurement Devices	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 or concentrate movement of aquatic organisms; no activity results in a hazard to navigation; and no activity requiring underwater blasting.	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
18. Survey Activities	Jurisdictional survey activities such as exploratory drilling, surveying and sampling activities, excluding any biological sampling devices. Does not include any activity requiring underwater blasting, seismic exploratory operations, or oil and gas exploration and fill for roads or construction pads. No activity may result in a hazard to navigation.	1. Work not eligible for Category 1 2. <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: • Temporary or permanent fill in eelgrass[14] <1000 SF. • Permanent fill in SAS (excluding eelgrass[14]) <4300 SF.
19. Agricultural Activities	Not Eligible	Not Eligible

20. Fish & Wildlife Harvesting, Enhancement and Attraction Devices and Activities (Not Aquaculture)	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 may result in a hazard to navigation. ***Note: A SVNF is not required for these Category 1 eligible devices and activities.***	1. Work not eligible for Category 1. 2. Impoundments or semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster and new fish weirs with an impounded area $\leq$ ½ acre. For Aquaculture operations, refer to Activity 24.
21. Habitat Restoration, Establishment and Enhancement Activities	1. Cultch placement in tidal waters is eligible for SV provided there are no salt marsh or vegetated shallow impacts. 2. SAS planting and transplanting $\leq$ 100 SF in tidal waters; 3. No artificial or living reefs. 4. The activity is authorized in writing by a local, state, or non-Corps federal environmental agency. Water impoundments require PCN. 5. No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another. 6. No dam removal. 7. Shellfish habitat enhancement such as brushing the flats is eligible for Category 1, *but not the use of netting which requires Category 2 review.*	1. Work not eligible for Category 1. 2. Aquatic habitat restoration, establishment and enhancement provided those activities are proactive and result in net increases in aquatic resource functions and services.[8]
22. Previously Authorized Activities	Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015. The terms and general conditions of this GP apply along with any special conditions in the written authorization.	
23. Stream & Wetland Crossings	Not Eligible	All temporary or permanent crossings of tidal navigable waters or adjacent tidal wetlands not eligible as maintenance require a PCN. GC 45 applies
24. Aquaculture	Not Eligible	Shellfish & finfish aquaculture (with the exception of Atlantic salmon and any other salmonid, or other federally listed endangered or threatened species), or other aquaculture facilities with no more than minimal individual and cumulative impacts to environmental resources or navigation. This is inclusive but not limited to cages, nets, bags, racks, long lines, fences, posts, poles, predator screening, etc. Aquaculture guidelines are provided at: www.maine.gov/dmr/aquaculture/index.htm.

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 high water mark and above the normal hydrologic influence of their adjacent waterbody. Note, with respect to the federally designated navigable rivers, the wetlands bordering and contiguous to the tidally influenced portions of those rivers are reviewed under "II. Navigable Waters."

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

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

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

Cumulative Impacts: The 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 G, page 3, Paragraph 10(b).

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[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)** The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3 – "Activities occurring before certain dates," provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification.

- Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make repair, rehabilitation, or replacement are authorized.
- Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.
- No seaward expansion for bulkheads or any other fill activity is considered Category 1 maintenance.
- 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.

b) The state's maintenance provisions may differ from the Corps and may require reporting and written authorization from the state.

c) Contact the Corps to determine whether stream crossing replacements require a written application to the Corps for at least a Category 2 review.

d) Exempted Maintenance. In accordance with 33 CFR 323.4(a)(2), any discharge of dredged or fill material that may result from any of the following activities is not prohibited by or otherwise subject to regulation under Section 404 of the CWA: "Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design."

[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. The Corps may require proof of authorization. Maintenance dredging typically refers to the routine removal of sediment to maintain the design depths of serviceable navigation channels, harbors, basins, marinas, boat launches, and port facilities. Maintenance dredging is conducted for navigational purposes and does not include any expansion of the previously dredged area or depth. The Corps may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS, shellfish, etc.

[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, dockominiums, 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. Note: Eelgrass surveys should be conducted be conducted between May and October unless otherwise directed.

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[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.

[16] **Agricultural Activities:** The Clean Water Act exempts certain discharges associated with normal farming, ranching, and forestry activities such as plowing, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices (Section 404(f)(1)(A)). Applicants are strongly advised to contact the Corps for a determination of whether their activity is exempt or requires a permit.

US Army Corps of Engineers®
New England District

Appendix B: Self-Verification Notification Form

(for all tidal and non-tidal projects in Maine subject to Corps jurisdiction)

At least two weeks before work commences, complete **all** fields (write "none" if applicable) below or use the fillable form at www.nae.usace.army.mil/missions/regulatory.aspx. Send this form, a location map, any project plans, and an Official Species List (See GC 8) to the address noted below; fax to (207) 623-8206; or email to jay.l.clement@usace.army.mil. The two-week lead time is not required for emergency situations (see page 4 for definition). Please call (207) 623-8367 with questions.

Maine Project Office
U.S. Army Corps of Engineers
New England District
675 Western Avenue #3
Manchester, Maine 04351

State Permit Number: _____
Date of State Permit: _____
State Project Manager: _____

Permittee: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Contractor: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Consultant/Engineer/Designer: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Wetland/Vernal Pool Consultant: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Project Location/Description: _____
Address, City, State & Zip: _____
Latitude/Longitude Coordinates: _____ Tax Map/Lot: _____
Waterway Name: _____
Work Description: _____

_____

Provide any prior Corps permit numbers: _____
Proposed Work Dates: Start: _____ Finish: _____

Area of wetland impact: _____ SF (leave blank if work involves structures & no fill in Navigable Waters)
Area of waterway impact: _____ SF (leave blank if work involves structures & no fill in Navigable Waters)
Area of compensatory mitigation provided: _____ SF

Work will be done under the following Appendix A categories (circle all that apply):

I. Inland Waters and wetlands: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
II. Navigable Waters: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Your name/signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions of Category 1 of the Maine General Permit.

Permittee Printed Name: _____

Permittee Signature: _____ Date: _____

US Army Corps of Engineers ®
New England District

Appendix C: Content of Pre-Construction Notification

In addition to the following required information, the applicant must provide additional information as the Corps deems essential to make a public interest determination including, where applicable, a determination of compliance with the Section 404(b)(1) guidelines or ocean dumping criteria. Such additional information may include environmental data and information on alternate methods and sites as may be necessary for the preparation of the required environmental documentation. For a more comprehensive checklist, go to www.nae.usace.army.mil/missions/regulatory >> Forms >> Application and Plan Guideline Checklist. Please check with the Corps for project-specific requirements.

Information required for all projects:

- ☐ Corps application form (ENG Form 4345) or appropriate state application form (see Appendix E). Forms may need to be supplemented to include the information noted below.
- ☐ Proof of notification to the SHPO and the appropriate THPOs (see Appendix E).
- ☐ Official Species List for any federally listed endangered or threatened species (Instructions at Appendix D)
- ☐ Drawings, sketches, or plans (detailed engineering plans and specifications are not required) that are legible, reproducible (color is encouraged, but features must be distinguishable in black and white), no larger than 11"x17", with bar scale. Wetland area impact sheets should have the highest resolution possible to show work within Corps jurisdiction (do not just reduce project overview or cut large-scale plan into quadrant sheets). Provide locus map and a plan overview of the entire property with a key index to the individual impact sheets. A locus map be on a section of color USGS topographic map is encouraged. Digital submissions are encouraged.
- ☐ Include:
  - ☐ All direct, secondary, permanent and temporary effects the project would cause, including the anticipated amount of impacts to waters of the U.S. expected to result from the activity, in acres, linear feet, or other appropriate unit of measure.
  - ☐ Any historic permanent fill associated with each single and complete project.
  - ☐ Cross-section views of all wetland and waterway fill areas and wetland replication areas.
  - ☐ Delineation of all wetlands, other special aquatic sites (vegetated shallows, saltmarsh, mudflats, riffles and pools, coral reefs, and sanctuaries and refuges), and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Use Federal delineation methods and include Corps wetland delineation data sheets (see GC 2).
  - ☐ MLW and MHW elevations in tidal waters. Show the HTL elevations when fill is involved. Show OHW elevation in lakes and non-tidal streams.
  - ☐ Existing and proposed conditions.
  - ☐ For vegetated shallow and eelgrass survey guidance, see www.nae.usace.army.mil/missions/regulatory >> Jurisdictional Limits and Wetlands >> Submerged Aquatic Vegetation Survey Guidance for the New England Region.
  - ☐ Show all known VPs on the project site. See GC 23 for vernal pool identification requirements.
- ☐ 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 OHW in inland waters and below the HTL in coastal waters.

- An Official Species List of federally "listed species or critical habitat" present in the action area (see GC 8).
- A restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions (see GC 43).

Information that may be required:

- Photographs of wetland/waterway to be impacted. Photos at low tide are preferred for work in tidal waters.
- For drawings, sketches, or plans:
  - The vertical datum for all coastal projects must be in U.S. survey feet and referenced to MLLW and current tidal epochs, with a reference chart showing conversion factor to NAVD88; do not use local datum. See www.nae.usace.army.mil/missions/regulatory >> Forms and Publications >>Vertical Datum - FEMA (Jul 2007);
  - The horizontal state plane coordinates shall be in U.S. survey feet and based on the appropriate state plane coordinate system.
- For the construction of a filled area or pile or float-supported platform, the use of, and specific structures to be erected on, the fill or platform.
- For the discharge of dredged or fill material into waters of the U.S. or the transportation of dredged material for the purpose of disposing of it in ocean waters, the source of the material; the purpose of the discharge, a description of the type, composition and quantity of the material; the method of transportation and disposal of the material; and the location of the disposal site.
- For the discharge 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. Include either a statement describing how impacts to waters of the U.S. are to be compensated for or a statement explaining why compensatory mitigation should not be required for the proposed impacts.
- Purpose and need for the proposed activity;
- Limits and coordinates of any Federal Navigation Project in the vicinity of the project area.
- Limits and coordinates of any proposed mooring field, reconfiguration zone or aquaculture activity. Provide coordinates for all corners;
- Schedule of construction/activity;
- Names and addresses of adjoining property owners;
- Location and dimensions of adjacent structures;
- List of authorizations required by other Federal, interstate, state, or local agencies for the work, including all approvals received or denials already made.
- Identification and description of potential impacts to Essential Fish Habitat (defined at VI. Definitions and Acronyms.
- Identification of potential discharges of pollutants to waters, including potential impacts to impaired waters, in the project area (see GC 19).
- Invasive Species Control Plan (see GC 24). For sample control plans, see www.nae.usace.army.mil/missions/regulatory >> Invasive Species.
- Wildlife Action Plan (WAP) maps. Contact Maine Inland Fisheries & Wildlife (Appendix E) or on line at http://www.maine.gov/ifw/wildlife/conservation/action_plan.html

Information for dredging projects that may be required:

- 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).
- ☐ Identification and description of any potential impacts to Essential Fish Habitat.
- ☐ Delineation of submerged aquatic vegetation (e.g., eelgrass beds).

Information for aquaculture projects that may be required:

- ☐ Maine Aquaculture guidelines and joint Corps/Maine DMR applications may be found at: www.maine.gov/dmr/aquaculture/index.htm.
- ☐ In addition to the information required above, applications must also include:
  - ☐ Whether canopy predator nets are being used.

Appendix D: Instruction for USFWS IPaC Project Builder/Official Species List

NOTE: These instructions are subject to change by the USFWS. Users should check this GP's Corps webpage for the latest instructions or click here.

In your internet browser go to http://ecos.fws.gov/ipac/

1. Click on get started.

2. Click on enter project location.

3. Search or zoom to your project location. (You can enter an address and then zoom in with your mouse).

4. Define your area. (Select the polygon tool and click around the boundary of your project.) or (Use the draw a line tool for linear projects)

Note: You can change/select the map from Streets to Satellite or Topo in the lower left corner of the map.
5. Click finished drawing then click confirm and select continue.

6. On the next page under Tasks (lower left), select Request an official species list. The pane will open. Select "request official species list" again.

7. A new page will open. Fill in the project information blanks with the project name, brief description, project type, lead agency, and contact information. Be sure to check the box to verify this is a legitimate project. Click on Submit Official Species List Request.

8. You will be sent an e-mail with instructions to complete the request by clicking on the link provided.

9. The site will open Official Species List Request Completed. Under the Maine Ecological Services Field Office address you will see "Official Species List Document". Click on that link and your document will open. Save and or print a copy and **include the entire report with your application**.

Note, you will receive a second e-mail with the same information. You can save the link in the event you need to return to the IPaC site for an updated list.

If a period of time has passed since your initial "Official Species List" identifier number was generated, you may choose to generate an "UPDATED SPECIES LIST". To do this, return to the IPaC homepage at http://ecos.fws.gov/ipac site. In the middle of the page, click the purple "Need an updated species list" link.

On the request an "Updated Official Species List" page, complete the information in the boxes provided. You will need the project specific official consultation code generated and stated on the original official list as well as the email address entered with the original submission.

Click "Request Updated Species List". Print, or save.

Appendix E: Contacts and Tribal Areas of Interest

1. Federal

U.S. Army Corps of Engineers
Maine Project Office
675 Western Avenue #3
Manchester, ME 04351
(207) 623-8367 (phone); (207) 623-8206 (fax)

U.S. Environmental Protection Agency
5 Post Office Square
Suite 100 (OEP05–2)
Boston, MA 02109-3912
(617) 918-1589 (phone)

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

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

Federal Emergency Management Agency
99 High St.
Boston, MA 02110
(877) 336-2734 (phone)
(Flood Plain Management)

National Marine Fisheries Service
55 Great Republic Drive
Gloucester, MA 01930
(978) 281-9102 (phone); (978) 281-9301 (fax)
(Federal endangered species & EFH)

National Park Service
North Atlantic Region
15 State Street
Boston, MA 02109
(617) 223-5203 (phone)
(Wild and Scenic Rivers)

Commander (dpb)
First Coast Guard District
One South Street - Battery Bldg
New York, NY 10004-1466
(212) 668-7021 (phone); (212) 668-7967 (fax)
(bridge permits)

2. State of Maine

a. Department of Environmental Protection (*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 (phone)

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

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

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

b. Department of Agriculture, Conservation and Forestry

i. Maine Land Use Planning Commission (LUPC) (*State permits & Water Quality Certifications in the unorganized areas of the State*)

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

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

Rangeley Regional Office
133 Fyfe Road
PO Box 307
West Farmington, ME 04992
(207) 670-7493 (phone); (207) 287-7439 (fax)

Downeast Regional Office
106 Hogan Rd, Suite 8
Dorothea Dix Complex
Bangor, Maine 04401
(207) 941-4052 (phone); (207) 941-4222 (fax)

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

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

ii. Maine Coastal Program

Department of Agriculture, Conservation and Forestry
Bureau of Resource Information and Land Use Planning
17 Elkins Lane {physical address}
State House Station 93
Augusta, Maine 04333-0038
(207) 287-2801 (phone); (207) 287-2353 (fax)
(CZM consistency determinations)

iii. Division of Parks and Public Lands

22 State House Station
Augusta, Maine 04333
(207) 287-3061 (phone); (207) 287-6170 (fax)
(submerged lands leases)

c. Department of Marine Resources

P.O. Box 8
West Boothbay Harbor, Maine 04575
(207) 633-9500 (phone); (207) 624-6024 (fax)
(aquaculture leases)

3. Historic Properties

a. State Historic Preservation Officer (SHPO)

Mr. Kirk F. Mohney, Director

Maine Historic Preservation Commission (MHPC)
65 State House Station
Augusta, Maine 04333-0065
(207) 287-2132 (phone); (207) 287-2335 (fax)
Area of concern: The entire State of Maine

b. Tribal Historic Preservation Officers (THPOs)

Note: The area of concern for each tribe is the entire State of Maine

THPO & Environmental Planner
Houlton Band of Maliseet Indians
88 Bell Road
Littleton, Maine 04730
(207) 532-4273, x215 (phone)
(207) 532-6883 (fax)
envplanner@maliseets.com
ogs1@maliseets.com

THPO
Aroostook Band of Micmacs
7 Northern Road
Presque Isle, Maine 04769
(207) 764-1972 (phone); (207) 764-7667 (fax)
jpictou@mimca-nsn.gov

THPO
Passamaquoddy Tribe of Indians
Pleasant Point Reservation
P.O. Box 343
Perry, Maine 04667
(207) 853-2600 (phone); (207) 853-6039 (fax)
soctomah@gmail.com

THPO
Penobscot Nation
Cultural and Historic Preservation Dept.
12 Wabanaki Way
Indian Island, Maine 04468
(207) 817-7471 (phone)
chris.sockalexis@penobscotnation.org

THPO
Passamaquoddy Tribe of Indians
Indian Township Reservation
P.O. Box 301
Princeton, Maine 04668
(207) 796-2301 (phone)
(207) 796-5256 (fax); soctomah@gmail.com

4. Organizational Websites (Note – Subject to Change):

U.S. Army Corps of Engineers, N.E. District	www.nae.usace.army.mil/missions/regulatory.aspx
U.S. Army Corps of Engineers, Headquarters	See above link>>Useful Links>>Federal Agency Links
U.S. Environmental Protection Agency	www.epa.gov/owow/wetlands
National Marine Fisheries Service	www.nmfs.noaa.gov
U.S. Fish and Wildlife Service	www.fws.gov/mainefieldoffice
National Park Service	www.nps.gov/rivers/index.html
Maine Department of Environmental Protection	www.maine.gov/dep
Maine Department of Agriculture, Conservation and Forestry	www.maine.gov/acf/index.shtml
Maine Land Use Planning Commission	www.maine.gov/doc/lupc/commission/offices.shtml
Maine Department of Marine Resources	www.maine.gov/dmr/index.htm
State of Maine - Aquaculture Guidelines	www.maine.gov/dmr/aquaculture/index.htm

Appendix F: Definitions

Definitions

Attendant Features: Occurring with or as a result of; accompanying.

Biodegradable: A material that decomposes into elements found in nature within a reasonably short period of time and will not leave a residue of plastic or a petroleum derivative in the environment after degradation. Examples of biodegradable materials include jute, sisal, cotton, straw, burlap, coconut husk fiber (coir) or excelsior. In contrast, degradable plastics break down into plastic fragments that remain in the environment after degradation.

Boating facilities: These provide, rent or sell mooring space, such as marinas, yacht clubs, boat yards, dockominiums, town facilities, land/home owners, etc. Not classified as boating facilities are piers shared between two abutting properties or town mooring fields that charge an equitable user fee based on the actual costs incurred.

Brushing the Flats: The placement of tree boughs, wooden lath structure, or small-mesh fencing on mudflats, or any bottom disturbance (e.g., discing, plowing, raking, etc.), to enhance recruitment of shellfish.

Buffer Zone: The buffer zone of an FNP is equal to three times the authorized depth of the FNP.

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 are installed temporarily or permanently

Cumulative effects: See "Direct, secondary, and cumulative effects."

Direct, secondary, and cumulative effects:

Direct Effects: The loss of aquatic ecosystem within the footprint of the discharge of dredged or fill material. Direct effects are caused by the action and occur at the same time and place.

Secondary Effects: 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) aquatic areas drained, flooded, fragmented, or mechanically cleared, b) fluctuating water levels in all impoundment and downstream associated with the operation of a dam, c) septic tank leaching and surface runoff from residential or commercial developments on fill, and d) leachate and runoff from a sanitary landfill located in waters of the U.S. See 40 CFR 230.11(h).

Cumulative Effects: The changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual 1) discharges of dredged or fill material, or 2) structures. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems. See 40 CFR 230(g).

Dredging:

Maintenance Dredging: Includes areas and depths previously authorized by the Corps and dredged. The Corps may require proof of authorization. Maintenance dredging typically refers to the routine removal of accumulated sediment from channel beds to maintain the design depths of navigation channels, harbors, marinas, boat launches and port facilities. Routine maintenance dredging is conducted regularly for navigational purposes (typically at least once every ten years) and does not include any expansion of the previously dredged area or depth. The Corps may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS,

shellfish, etc. The main characteristics of maintenance dredging projects are variable quantities of material; soft, uncompacted soil; contaminant content possible; thin layers of material;occurring in navigation channels and harbors; repetitive activity

New Dredging: Dredging of an area or to a depth that has never been authorized by the Corps or dredged.

Dredged material & discharge of dredged material: These are defined at 323.2(c) and (d). The term dredged material means material that is excavated or dredged from waters of the U.S.

Essential Fish Habitat (EFH): This is broadly defined to include those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

Fill material & discharge of fill material: These are defined at 323.2(e) and (f). The term fill material is defined as material placed in waters of the U.S. where the material has the effect of either replacing any portion of a water of the U.S. with dry land or changing the bottom elevation of any portion of a water of the U.S.

Federal anchorages, Federal channels and Federal turning basin: Refer to Appendix H for those in Maine

Federal navigation projects (FNPs): These areas are maintained by the Corps; authorized, constructed and maintained on the premise that they will be accessible and available to all on equal terms; and are comprised of Federal Anchorages, Federal Channels and Federal Turning Basins. The buffer zone is equal to three times the authorized depth of a FNP. More information on the following FNPs is provided at www.nae.usace.army.mil/missions/navigation.aspx >> Navigation Projects.

Flume: An open artificial water channel, in the form of a gravity chute, that leads water from a diversion dam or weir completely aside a natural flow. A flume can be used to measure the rate of flow.

Frac out: During normal drilling operations, drilling fluid travels up the borehole into a pit. When the borehole becomes obstructed or the pressure becomes too great inside the borehole, the ground fractures and fluid escapes to the surface.

Independent utility: A test to determine what constitutes a single and complete non-linear 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.

Individual Permit: A Department of the Army authorization that is issued following a case-by-case evaluation of a specific structure or work in accordance with the procedures of 33 CFR 322, or a specific project involving the proposed discharge(s) in accordance with the procedures of 33 CFR 323, and in accordance with the procedures of 33 CFR 325 and a determination that the proposed discharge is in the public interest pursuant to 33 CFR 320.

Maintenance: Regulations on maintenance are provided at 33 CFR 323.4. The following definitions are applicable:

Minor deviations: 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, which are necessary to make repair, rehabilitation, or replacement are permitted, provided the adverse environ-mental effects resulting from such repair, rehabilitation, or replacement are minimal.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Marina reconfiguration zone: A Corps-authorized area in which permittees may rearrange pile-supported structures and floats without additional authorizations. A reconfiguration zone does not grant exclusive privileges to an area or an increase in structure or float area.

Navigable waters of the U.S.: See Waters of the U.S. below.

Overall project: See "single and complete linear project" below.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.
Permanent impacts: Permanent impacts means waters of the U.S. that are permanently affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent impacts include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. Temporary impacts include waters of the U.S. that are temporarily filled, flooded, excavated, drained or mechanically cleared because of the regulated activity.
Pre-construction notification (PCN): A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by this GP. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of these GPs. A PCN may be voluntarily submitted in cases where PCN is not required and the project proponent wants confirmation that the activity is authorized under this GP.
Secondary effects: See "Direct, secondary, and cumulative effects."
Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the U.S. (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for the purposes of this GP. 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.
The overall project, for purposes of this GP, includes all regulated activities that are reasonably related and necessary to accomplish the project purpose.
Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For non-linear projects, the single and complete project must have independent utility (see definition).
Special aquatic sites: These include inland and saltmarsh wetlands, mud flats, vegetated shallows, sanctuaries and refuges, coral reefs, and riffle and pool complexes. These are defined at 40 CFR 230 Subpart E.
Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.
Temporary impacts: See permanent impacts above.
Utility line: Any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term 'utility line' does not include activities that drain a water of the U.S., such as drainage tile or French drains, but it does apply to pipes conveying drainage from another area.
Vegetated shallows: Permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as eelgrass and widgeon grass (*Rupiamaritima*) in marine systems (doesn't include salt marsh) as well as a number of freshwater species in rivers and lakes. Note: These areas are also commonly referred to as submerged aquatic vegetation (SAV).
Vernal pools (VPs): For the purposes of this GP, VPs are depressional wetland basins that typically go dry in most years and may contain inlets or outlets, typically of intermittent flow. Vernal pools range in both size and depth depending upon landscape position and parent material(s). Pools usually

support one or more of the following obligate indicator species: wood frog, spotted salamander, blue-spotted salamander, marbled salamander, Jefferson's salamander and fairy shrimp. However, they should preclude sustainable populations of predatory fish.
VP areas are:

- Depression (includes the VP depression up to the spring or fall high water mark, and includes any vegetation growing within the depression),
- Envelope (area within 100 feet of the VP depression's edge), and
- Critical terrestrial habitat (area within 100-750 feet of the VP depression's edge).

Note: See footnote to GC 23. The Corps may determine during the PCN review that a waterbody should not be designated as a VP based on available evidence.
Water diversions: Water diversions are activities such as bypass pumping (e.g., "dam and pump") 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.
Weir: A barrier across a river designed to alter the flow characteristics. In most cases, weirs take the form of a barrier, smaller than most conventional dams, across a river that causes water to pool behind the structure (not unlike a dam) and allows water to flow over the top. Weirs are commonly used to alter the flow regime of the river, prevent flooding, measure discharge and help render a river navigable.
Waters of the U.S. & Waters of the United States (U.S.): The term waters of the U.S. and all other terms relating to the geographic scope of jurisdiction are defined at 33 CFR 328. Also see Section 502(7) of the Federal CWA [33 USC 1352(7)]. Waters of the U.S. include jurisdictional wetlands. Not all waters and wetlands are jurisdictional. Contact the Corps with any questions regarding jurisdiction.
Navigable waters: Refer to 33 CFR 329. These waters include the following federally designated navigable waters in New England. This list represents only those waterbodies for which affirmative determinations have been made; absence from this list should not be taken as an indication that the waterbody is not navigable:

ME: All tidal waters; Kennebec River to Moosehead Lake; Penobscot River to the confluence of the East and West Branch at Medway, Maine; Lake Umbagog within the State of Maine.

Appendix G: 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/missions/regulatory 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.

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 8: 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 8(b)] or to provide information on federally-listed species or habitat [GC 8(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 & procedures).
(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 42: Essential Fish Habitat.

As part of the GP 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 4: Avoidance, Minimization and Compensatory Mitigation.

(a) See www.nae.usace.army.mil/missions/regulatory 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/missions/regulatory, "Mitigation" and then "Maine," or www.maine.gov/dep/blwq/docstand/nrpa/ILF_and_NRCP/index.htm.

6. GCs 24, 15, and 43: Invasive Species.
(a) Information on what are considered "invasive species" is provided in our "Compensatory Mitigation Guidance" document at www.nae.usace.army.mil/missions/regulatory 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/missions/regulatory 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/missions/regulatory under "Invasive Species" and provides policy, goals and objectives.

7. GC 44: 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/missions/regulatory under "Useful Links and Documents" for design and construction guidance.

8. GC 45: Stream and Wetland Crossings.
(a) Projects should be designed and constructed to ensure long-term success using the most recent manual located at www.nae.usace.army.mil/missions/regulatory 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 offer guidance 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/missions/regulatory and then "Stream and River Continuity."

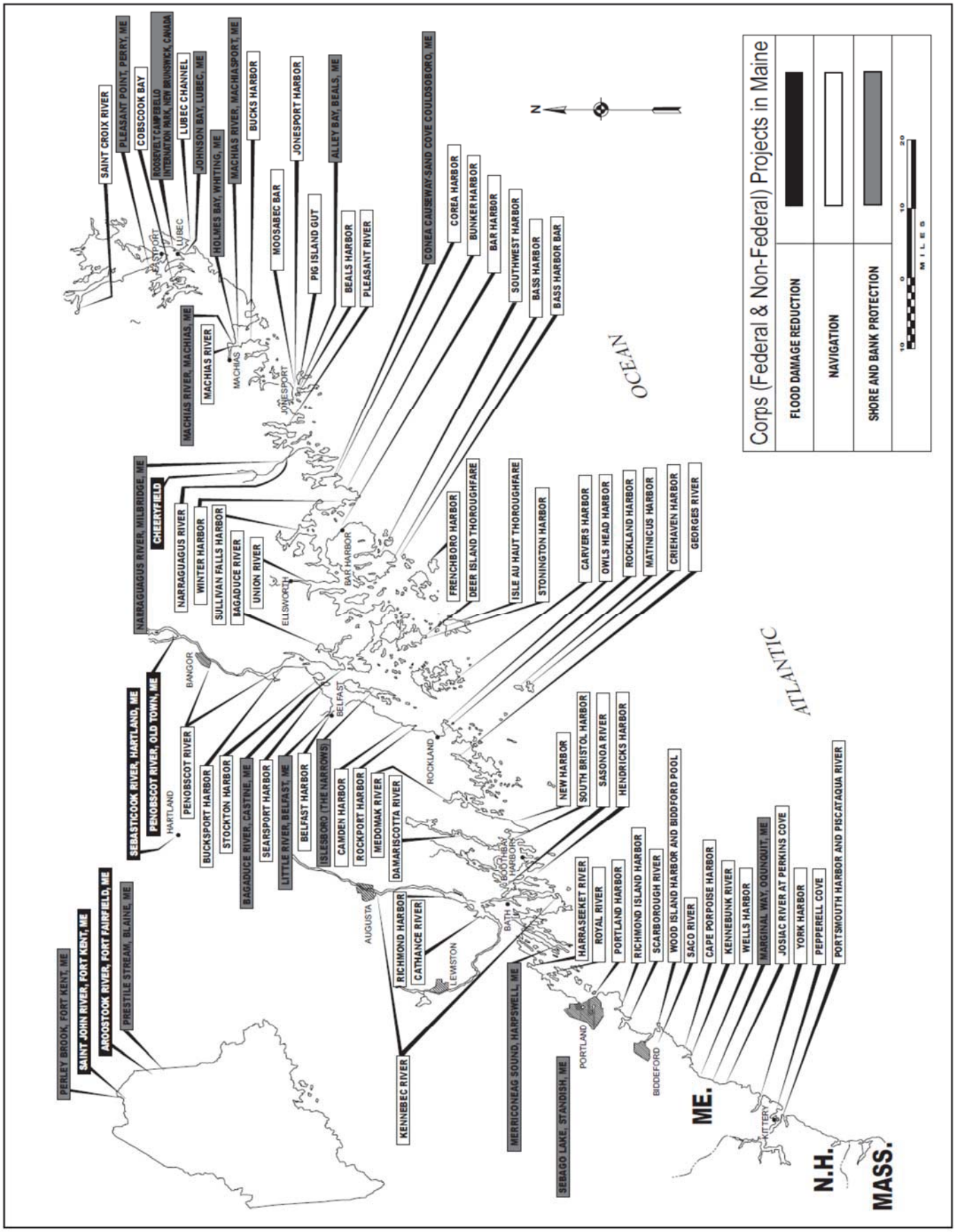
(d) The ME DOT's document "Waterway and Wildlife Crossing Policy and Design Guide for Aquatic Organism, Wildlife Habitat, and Hydrologic Connectivity," 3rd Edition, July 2008, may be used as guidance to evaluate impacts to aquatic, wildlife and surface water resources when designing, constructing, repairing 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 45 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 45(f): The Skidder Bridge Fact Sheet at www.nae.usace.army.mil/missions/regulatory under "Stream and River Continuity" may be a useful temporary span construction method.

9. GC 45: Wetland Crossings. The Maine DEP's crossing standards are at 06-096 DEP, Chapter 305: Permits by Rule, 9 & 10) Crossings (utility lines, pipes and cables). www.maine.gov/dep/blwq/rules/NRPA/2009/305/305_effective_2009.pdf

10. GC 23: 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/missions/regulatory under: 1) "State General Permits" and then "Maine," and 2) "Vernal Pools."

11. GC 29: 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 H: Federal Navigation Projects in Maine



04/06/2017

DEPARTMENT OF ENVIRONMENTAL PROTECTION
PERMIT BY RULE NOTIFICATION FORM

(For use with DEP Regulation, Natural Resouces Protection Act- Permit by Rule Standards, Chapter 305)

PLEASE TYPE OR PRINT IN *BLACK INK ONLY*

APPLICANT INFORMATION (Owner)		AGENT INFORMATION (If Applying on Behalf of Owner)	
Name:	Maine DOT - Danielle Tetreau	**Name:**	
Mailing Address:	16 State House Station	**Mailing Address:**	
Town:	Augusta	**Town:**	
State and Zip Code:	Maine 04333	**State and Zip Code:**	
Daytime Phone #:	207-592-2358	**Daytime Phone #:**	
Email Address:	danielle.tetreau@maine.gov	**Email Address:**	

PROJECT INFORMATION

Part of a larger project? (check one):	☐ Yes ■ No	**After the Fact? (check one):**	☐ Yes ■ No	**Project involves work below mean low water? (check one):**	☐ Yes ■ No	**Name of waterbody:**	Mackerel Cove, Atlantic Ocean
Project Town:	Swans Island	**Project Location (Address):**	Ferry Road, Ferry Terminal			**Map & Lot Number:**	Delorme Map 16, D-1
Brief Project Description:	Modifications and repairs to terminal fenders.						
Brief Directions to Site:	Located at the existing ferry terminal on Swans Island						

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.**

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

NOTE: Municipal permits *may* also be required. Contact your local code enforcement office for more information. Federal permits may be required for stream crossings and for projects involving wetland fill. Contact the Army Corps of Engineers at the Maine Project Office for more information.

NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS

- ☐ ***Attach*** **all required submissions for the PBR Section(s) checked above. The required submissions for each PBR Section are outlined in Chapter 305 and may differ depending on the Section you are submitting under.**
- ☐ ***Attach*** **a check for the correct fee made payable to: "Treasurer, State of Maine".The current fee for NRPA PBR Notifications can be found at the Department's website: http://www.maine.gov/dep/feesched.pdf**
- ■ ***Attach*** **a location map that clearly identifies the site (U.S.G.S. topo map, Maine Atlas & Gazetteer, or similar).**
- ☐ ***Attach Proof of Legal Name*** **if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's *registration information* (available at http://icrs.informe.org/nei-sos-icrs/ICRS?MainPage=x) Individuals and municipalities are not required to provide any proof of identity.**

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 PBR becomes effective 14 calendar days after receipt by the Department *unless the Department approves or denies the PBR prior to that date.*

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:		**Date:**	1/28/2020

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.**

AUGUSTA DEP
17 STATE HOUSE STATION
AUGUSTA, ME 04333-0017
(207)287-7688

PORTLAND DEP
312 CANCO ROAD
PORTLAND, ME 04103
(207)822-6300

BANGOR DEP
106 HOGAN ROAD
BANGOR, ME 04401
(207)941-4570

PRESQUE ISLE DEP
1235 CENTRAL DRIVE
PRESQUE ISLE, ME 04769
(207)764-0477

OFFICE USE ONLY	Ck.# IB		Staff JAC	Staff	
PBR # 69326	FP $250.00	Date 1/29/2020	Acc. Date 2/5/20	Def. Date	After Photos

MaineDOT Authorized Agent: Danielle Tetreau.

Project Scope: Ferry terminal modifications and improvements.

Project Description: The terminal is currently experiencing an increase in ridership which has spurred the design and construction of a new, larger ferry vessel. The new vessel will exceed the spatial capacity of the existing pen, requiring the addition of infrastructure and other modification. The scope of work proposed includes a wide range of modifications including: adding 2 turning dolphins, adding wave screens between the existing and new dolphins, adding walkways to the new turning dolphins, and modifying the existing lighting.

Funding Source: Federal

Resource Impacts:

	Permanent (s.f.)	Temporary (s.f.)
Direct Impacts	69	0
Indirect Impacts	802	0

Proposed in-water work window: August 1 – April 9

Maintenance of Traffic: This project will not result in disruptions to the maintenance of traffic.

Erosion & Sedimentation Control Best Management Practices: This project will be performed in accordance with erosion control measures conforming with the latest versions of the *State of Maine Department of Transportation Standard Specifications for Highways and Bridges* and the *Department of Transportation's Best Management Practices for Erosion and Sediment Control.*

Mitigation: The project is proposing 69 sf of unavoidable permanent sub-tidal impact as new piles for this project. The impacts are minor and near an active ferry terminal. For these reasons, compensation is not proposed.

Purpose and Need: The purpose of the project is to modify and expand upon the existing fender system at the ferry terminal to accommodate a new larger ferry vessel commencing service in 2021. The proposed project is needed due to the increased demand of the ferry service, which has resulted in the need for a new, larger ferry vessel. The current ferry terminal fender system is insufficient to accommodate the new ferry and modifications need to be made to improve the structural condition of the fender system. The ferry terminal is a vital component to summer tourism and is greatly utilized by the island community.

Alternatives Analysis: During the design phase of the project, MaineDOT considered the alternatives for the ferry terminal structure. The design team coordinated with the MaineDOT vessel captains and port officials to determine the appropriate level of

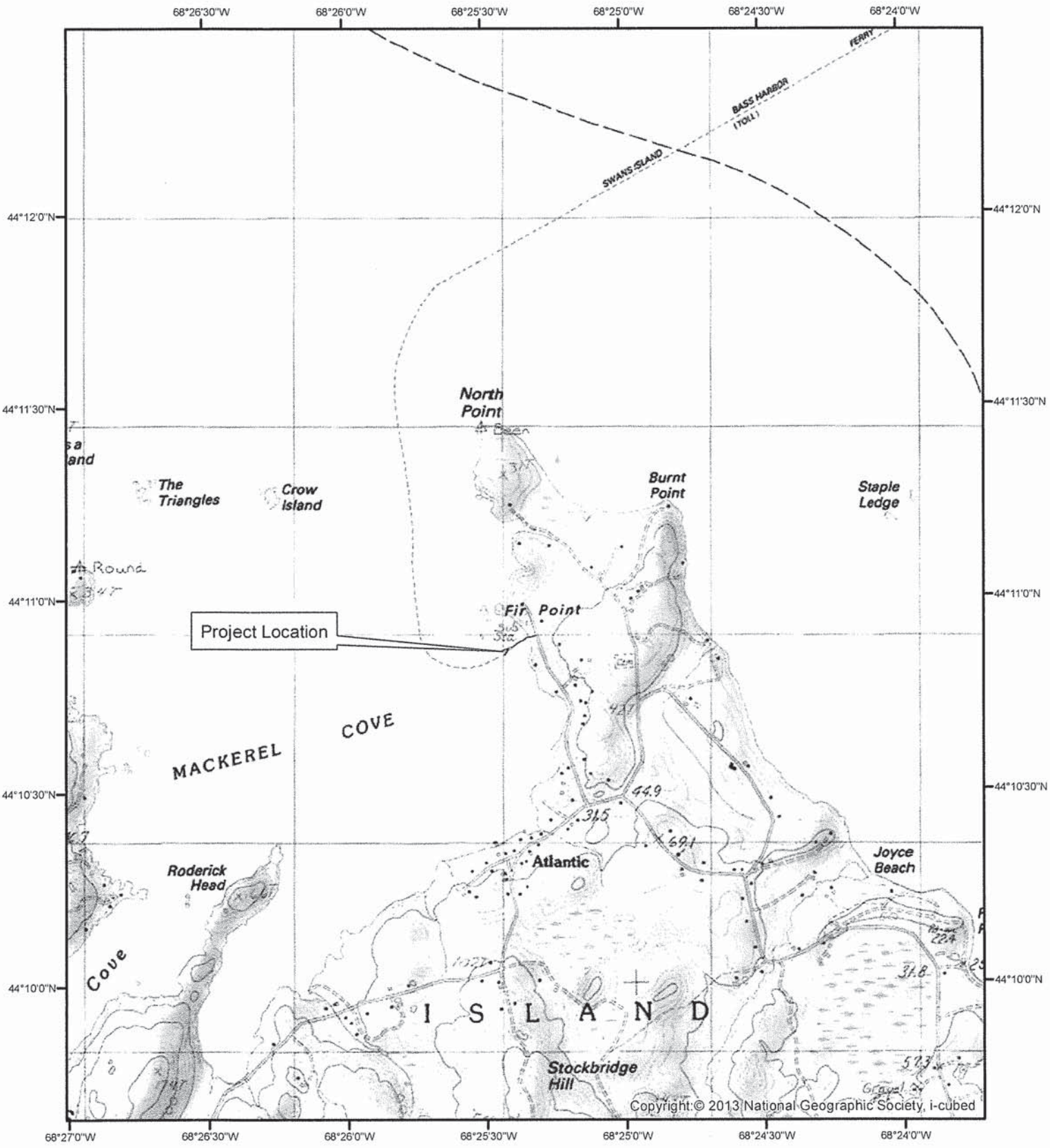
modifications necessary to safely and adequately satisfy the operational requirements for the project. Collectively the design team considered the following alternatives:

1. No build alternative – this alternative was not selected as the preferred alternative. It does not meet the purpose and need of the project by adding capacity to the existing ferry terminal infrastructure.
2. Modify the terminal by adding 1 dolphin – this alternative was not selected as the preferred alternative. It meets the purpose and need of the project by adding capacity of the terminal, however just one dolphin would compromise the safety of the vessel and passengers. The vessel overnights at this location, one dolphin is not sufficient to stabilize the boat overnight during all weather conditions.
3. Modify the terminal by adding 2 dolphins – this was the selected alternative. Larger vessels such as the one being constructed for this location normally requires dolphins on each side of the pen to accommodate a wide range of wind and wave forces.

Avoidance and Minimization: This project involves direct and indirect impacts to sub-tidal portions of Mackerel Cove, including modified aerial/shading impacts. In-water work will occur between August 1 and April 9 to coincide with construction proposed at the Bass Harbor and Frenchboro ferry terminals. A small (approximately 3-foot diameter) eelgrass patch was observed during a November 2019 dive survey and unavoidable impacts are proposed within 25 feet of that patch. The infrastructure is not able to be shifted to avoid the patch. Details from the dive survey and a site visit, including photos is provided in Section 7 and 10.

MaineDOT employs erosion and sedimentation control measures and best management practices to a higher standard than other sectors for all its projects. Further, MaineDOT utilizes standards at or above the state and federal requirements where practicable.





Ferry Terminal Improvements
WIN 23480.00
Swans Island, ME (Hancock County)

0 0.5 1 Miles

N
W E
S

Project Location: 44.181066, -68.362218



Photo 1. View to the head of the seaward-most dolphin showing wave screens, lighting, and walkway. Facing west. MaineDOT, July 25, 2018



Photo 2. Existing ferry slip infrastructure showing wave screens and dolphins, facing north. MaineDOT, July 25, 2018



Photo 3. Northern side of the ferry slip showing wave screen timber cribs on the seaward side, facing east. MaineDOT, July 25, 2018



Photo 4. Rocky intertidal zone on the north side of the terminal and approach roadway, facing southwest. MaineDOT, July 25, 2018



Photo 5. Subtidal substrate at boat launch on south side of approach roadway, facing west. MaineDOT, July 25, 2018



Photo 6. Rocky intertidal shoreline and saltmarsh north of ferry terminal, facing south. MaineDOT, July 25, 2018



Photo 7. Existing seaward infrastructure at ferry terminal: timber breasting dolphin with wave screen and turning dolphin, facing southeast. MaineDOT, July 25, 2018

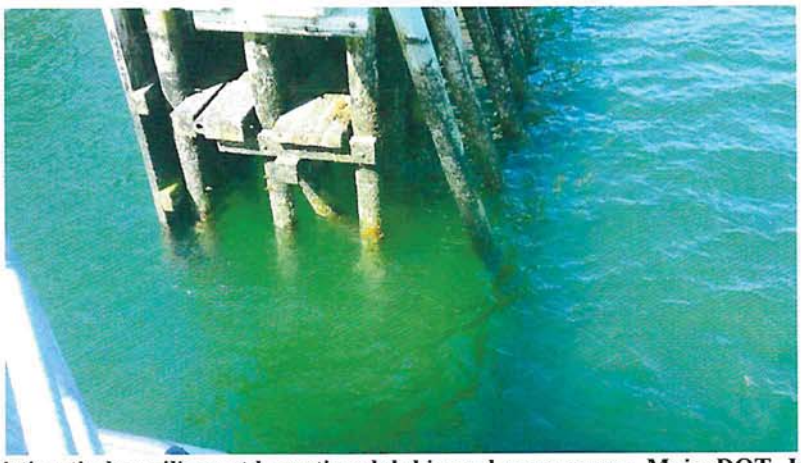


Photo 8. Existing timber pilings at breasting dolphin and wave screen. MaineDOT, July 25, 2018



Photo 9. Existing pilings at dolphin. MaineDOT, July 25, 2018

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**.