



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0016

Paul R. LePage  
GOVERNOR

David Bernhardt  
COMMISSIONER

December 10, 2018  
Subject: Barbers Island Bridge  
Rehabilitation  
State WIN: 022607.00  
Location: **Boothbay**  
**Amendment No. 4**

Dear Sir/Ms.:

Please make the following changes to the Bid Documents:

In the Bid Book:

**ADD** the attached United States Coast Guard Bridge Permit, 16 pages, dated Oct. 15, 2018.

Consider these changes and information prior to submitting your bid on **December 12, 2018**.

Sincerely,

A handwritten signature in blue ink that reads "George M. A. Macdougall".

George M. A. Macdougall P.E.  
Contracts & Specifications Engineer



PRINTED ON RECYCLED PAPER



## BRIDGE PERMIT

### AMENDMENT

(12a-81-1)

OCT 15 2018

**WHEREAS** by a permit issued on 11 September 1930, as amended 7 April 1931, the Secretary of the Army approved the location and plans of a bridge to be constructed by the Maine State Highway Commission across the Back River at Boothbay, Maine, under the authority of an act of Congress approved 3 May 1899, as amended, and that the bridge was constructed;

**AND WHEREAS** Section 9 of that act, as amended, transferred to and vested in the Secretary of Homeland Security the functions, powers and duties of the Secretary of the Army pertaining to the approval of plans for bridges over the navigable waters of the United States, and the Secretary of Homeland Security has delegated these functions, powers and duties to the Commandant; U.S. Coast Guard by Department of Homeland Security Delegation Number: 0170.1;

**AND WHEREAS** by an amendment to permit issued 18 February 1981, the Commandant granted to the State of Maine, approval of plans indicating modification of the bridge;

**AND WHEREAS** the Commandant of the Coast Guard has further delegated to the District Commander, by Section 1.01-60(b) of Title 33, Code of Federal Regulations, authority to issue permits for construction, reconstruction, or alteration of bridges across navigable waters of the United States;

**AND WHEREAS** condition 1 of the permit, as amended, provided that no deviation from the approved plans may be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Commandant and the - **STATE OF MAINE** - now has submitted for approval plans indicating further modification to the bridge;

**NOW THEREFORE**, This is to certify that the location and plans dated 8 June 2018 hereby approved supersede plan sheets dated 30 October 1979 previously approved. In granting this approval, all conditions to which the original permit, as amended, was subject are superseded by the following conditions:

1. No deviation from the approved plans may be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Commandant.

2. The construction of falsework, pilings, cofferdams or other obstructions, if required, shall be in accordance with plans submitted to and approved by the Commander, First Coast Guard District, prior to modification of the bridge. All work

shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. Timely notice of any and all events that may affect navigation shall be given to the District Commander during modification of the bridge. The channel or channels through the structure shall be promptly cleared of all obstructions placed therein or caused by the modification of the bridge to the satisfaction of the District Commander, when in the judgment of the District Commander the modification work has reached a point where such action should be taken, but in no case later than 120 days after the bridge has been opened to traffic.

3. Issuance of this permit amendment does not relieve the permittee of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of any federal, state or local authority having cognizance of any aspect of the location, modification or maintenance of said bridge.

4. The temporary bridge across the Back River, mile 2.0, shall be constructed in accordance with the approved plan sheets 6 and 7 (of 7) dated 8 June 2018.

5. The bridge protective system shall be constructed and maintained as shown on the approved plan sheets 3 and 5 (of 7) dated 8 June 2018 for the safety of navigation.

6. Clearance gauges shall be installed and maintained in a good and legible condition by and at the expense of the owner of the bridge when so required by the District Commander. The type of gauges and the locations in which they are to be installed will be submitted to the District Commander for approval.

7. All parts of the temporary bridge or incomplete parts thereof shall be removed in their entirety and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed by and at the expense of the owner of the bridge within 120 days after the new permanent bridge has been opened to traffic.

8. All parts of the existing to-be-modified swing span associated with the Barbers Island Bridge across the Back River, mile 2.0, not utilized in the new bridge, shall be removed in its entirety, except pier No. 2 which shall be removed to bedrock. The waterway shall be cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed by and at the expense of the owner of the bridge upon due notice from the District Commander.

9. When the proposed bridge is no longer used for transportation purposes, it shall be removed in its entirety or to an elevation deemed appropriate by the District Commander and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed by and at the expense of the owner of the bridge upon due notice from the District Commander.

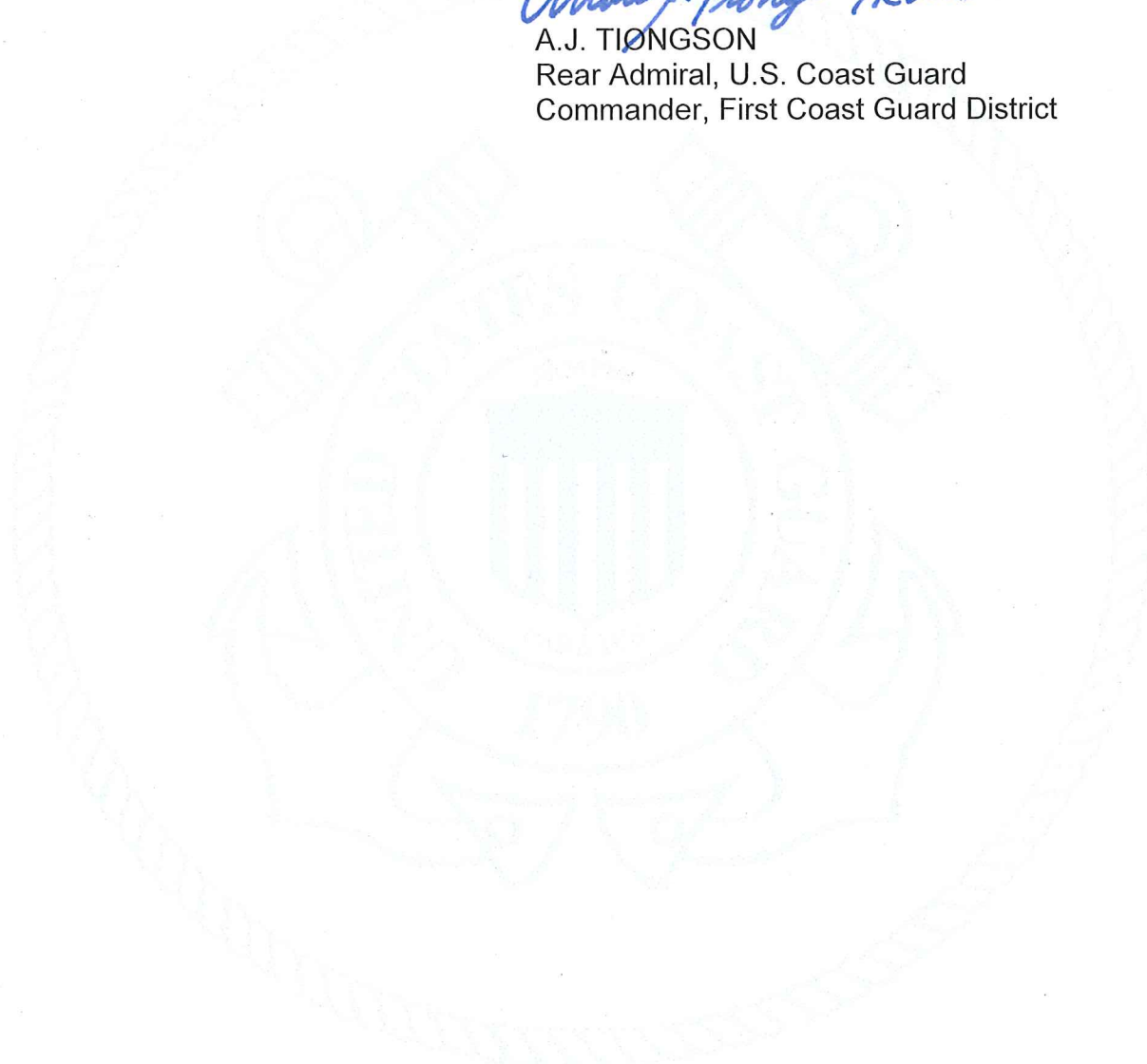
OCT 15 2018

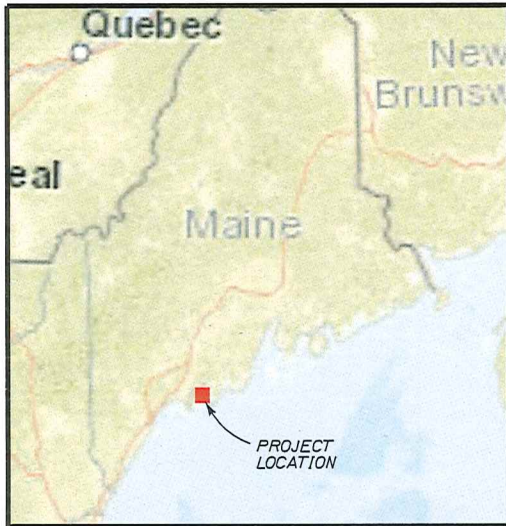
BRIDGE PERMIT  
AMENDMENT  
(12a-81-1)

10. The approval hereby granted shall cease and be null and void unless modification of the bridge is commenced within three years and completed within six years after the date of this permit amendment.

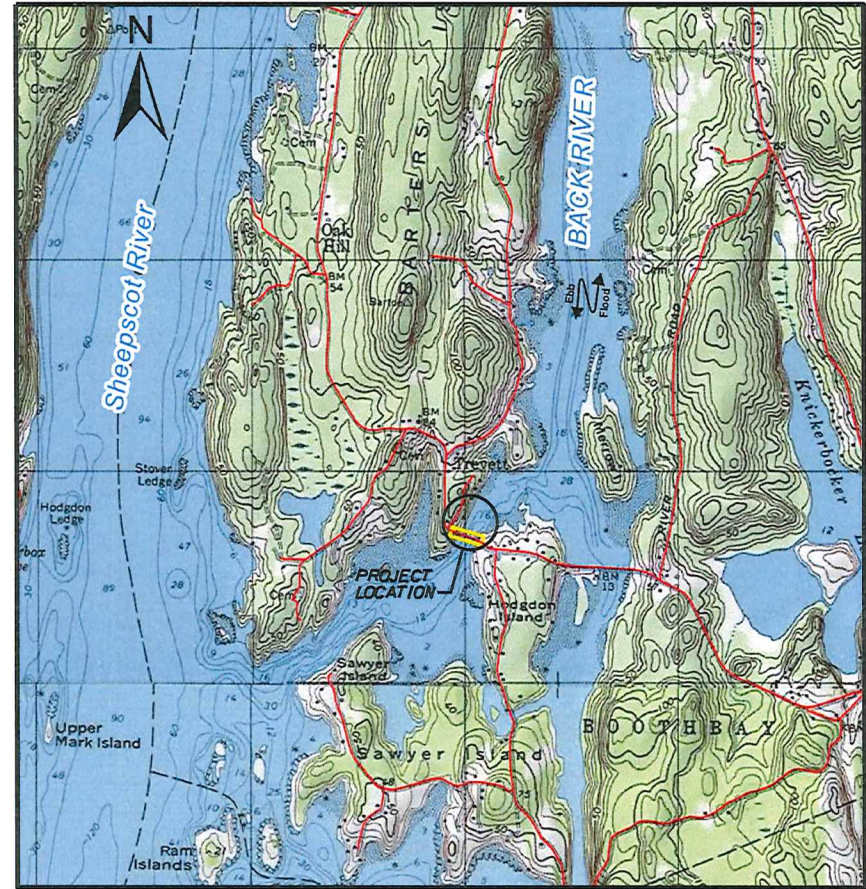
*A.J. Tjongson, RDMC USCG*

A.J. TJONGSON  
Rear Admiral, U.S. Coast Guard  
Commander, First Coast Guard District

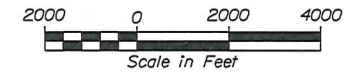




VICINITY PLAN



LOCATION PLAN

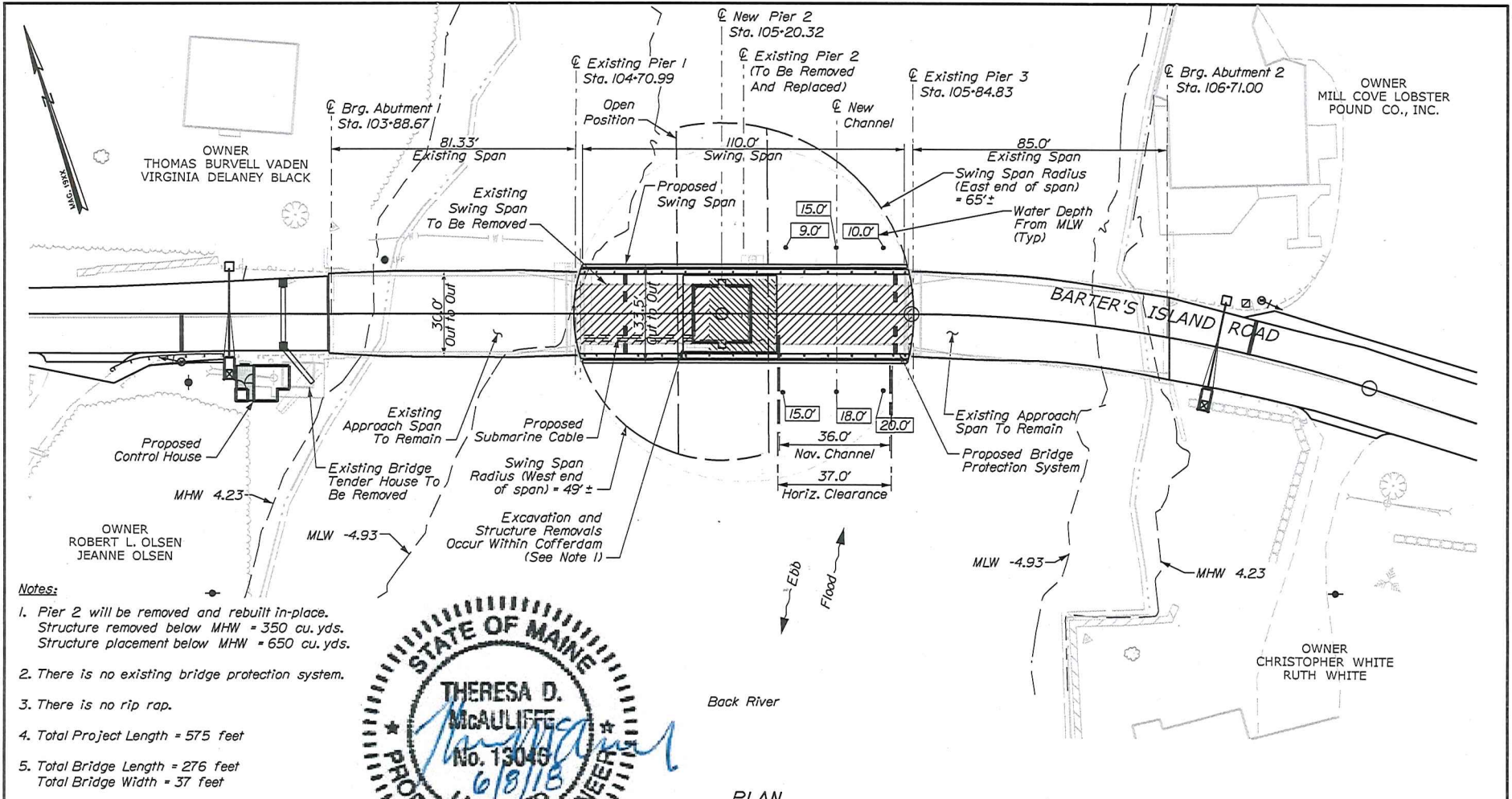


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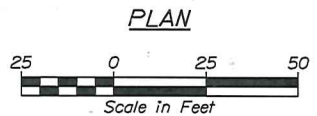
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
STP-2260(700)	
June 8, 2018	WIN 22607.00
BRIDGE NO. 2039	BRIDGE PLANS

BARTERS ISLAND BRIDGE BACK RIVER (RIVER MILE 2.0)	
BOOTHBAY	LINCOLN COUNTY
LOCATION & VICINITY MAP	

SHEET NUMBER
1
OF 7



- Notes:**
1. Pier 2 will be removed and rebuilt in-place. Structure removed below MHW = 350 cu. yds. Structure placement below MHW = 650 cu. yds.
  2. There is no existing bridge protection system.
  3. There is no rip rap.
  4. Total Project Length = 575 feet
  5. Total Bridge Length = 276 feet  
Total Bridge Width = 37 feet



All Elevations shown are based on NAVD88

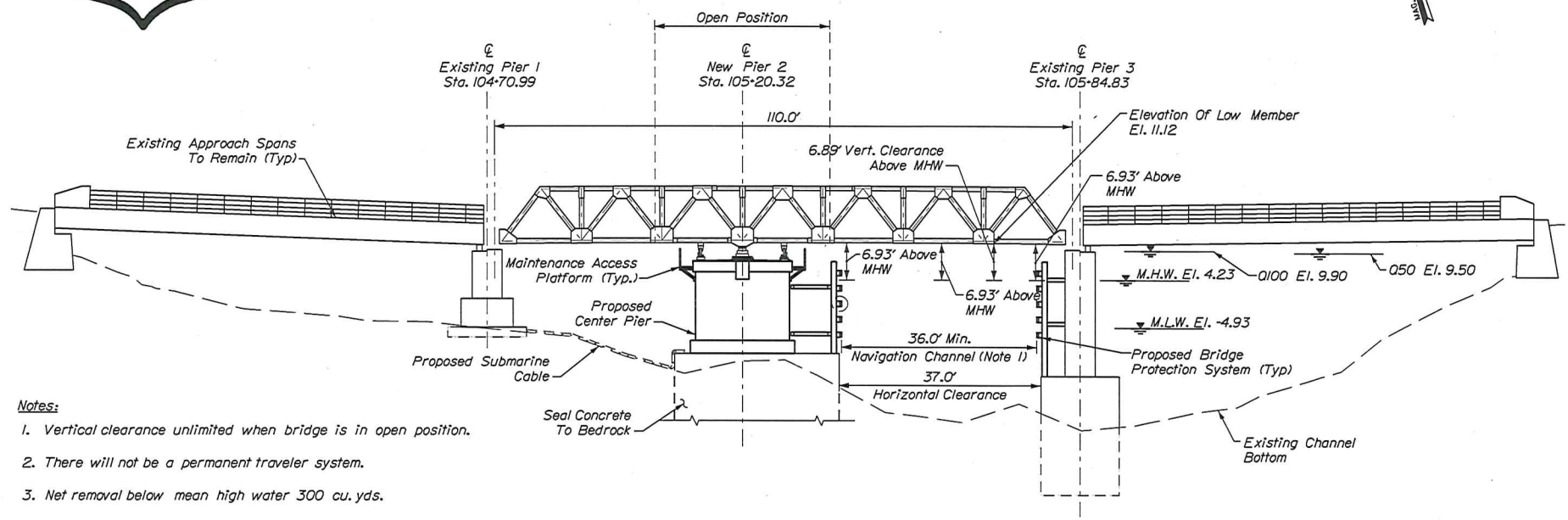


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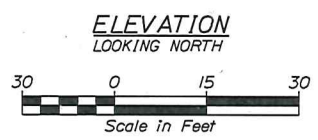
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
STP-2260(700)	
June 8, 2018	WIN 22607.00
BRIDGE NO. 2039	BRIDGE PLANS

BARTERS ISLAND BRIDGE BACK RIVER (RIVER MILE 2.0)	
BOOTHBAY	LINCOLN COUNTY
BRIDGE PLAN	

SHEET NUMBER
2
OF 7



- Notes:**
1. Vertical clearance unlimited when bridge is in open position.
  2. There will not be a permanent traveler system.
  3. Net removal below mean high water 300 cu. yds.
  4. Existing Pier 2 to be removed. Not shown for clarity.



All Elevations shown are based on NAVD88

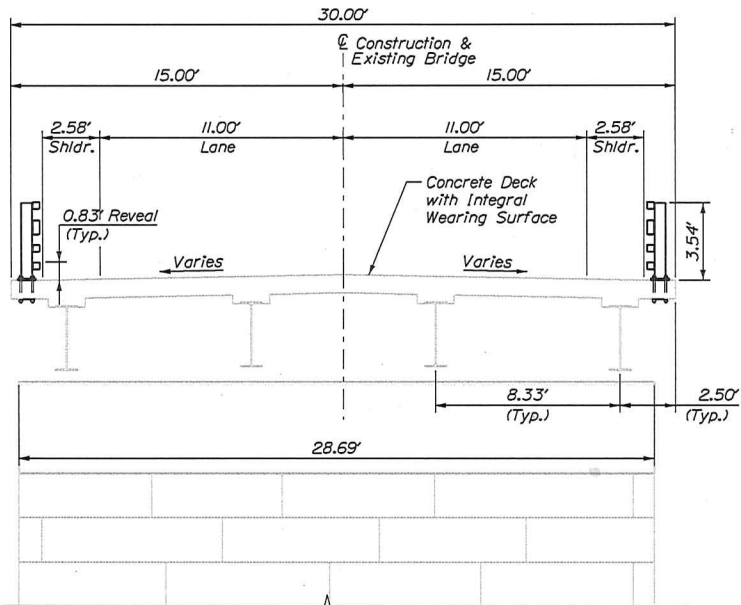


McFarland Johnson

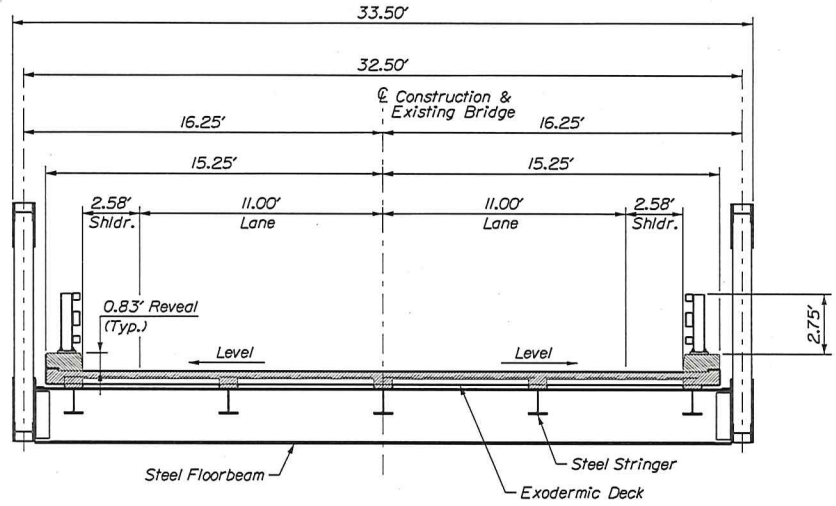
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
STP-2260(700)
June 8, 2018 WIN BRIDGE NO. 2039 22607.00
BRIDGE PLANS

BARTERS ISLAND BRIDGE BACK RIVER (RIVER MILE 2.0 )
BOOTHBAY LINCOLN COUNTY
<b>BRIDGE ELEVATION</b>

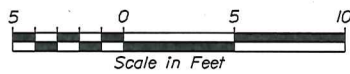
SHEET NUMBER
<b>3</b>
OF 7



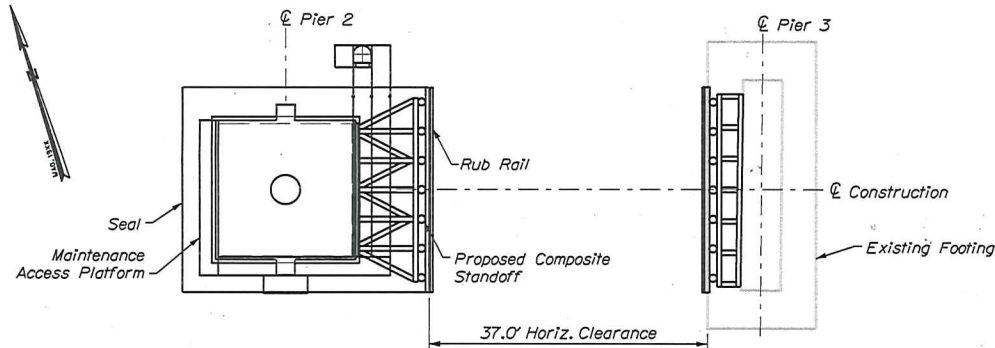
EXISTING BRIDGE SECTION (APPROACH SPANS)



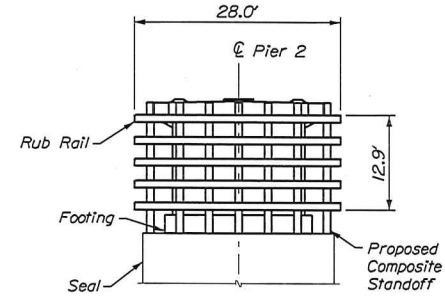
PROPOSED BRIDGE SECTION (SWING SPAN)



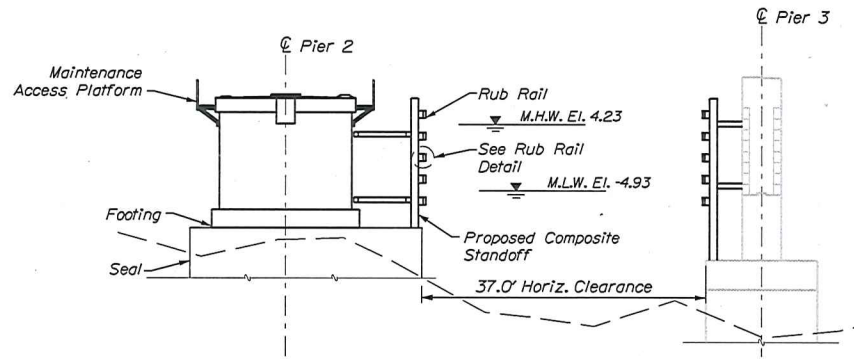
McFarland Johnson	STATE OF MAINE DEPARTMENT OF TRANSPORTATION	BARTERS ISLAND BRIDGE BACK RIVER (RIVER MILE 2.0 )	SHEET NUMBER  <b>4</b>  OF 7
	STP-2260(700)	BOOTHBAY LINCOLN COUNTY	
June 8, 2018 WIN 22607.00 BRIDGE NO. 2039	BRIDGE PLANS <b>TYPICAL SECTIONS</b>		



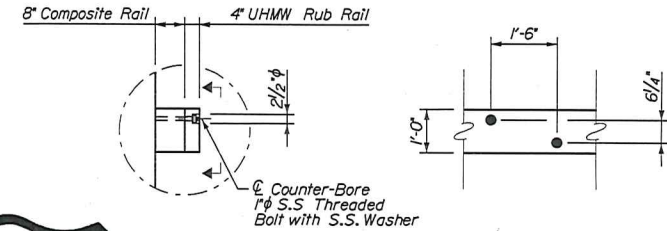
**BRIDGE PROTECTION SYSTEM PLAN**



**PIER 2 BRIDGE PROTECTION SYSTEM ELEVATION**



**BRIDGE PROTECTION SYSTEM ELEVATION**

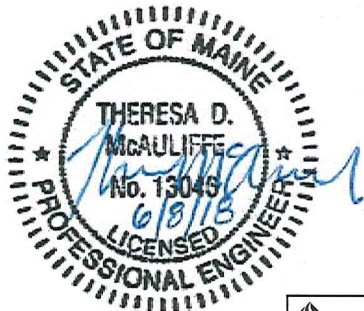
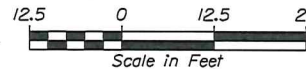


**RUB RAIL DETAIL**  
NOT TO SCALE



**Notes:**

1. Rubrails and standoffs will be made of composite materials. Bridge Protective System to provide smooth surface and mounted with countersunk hardware.
2. All hardware shall be stainless steel A316
3. UHMW = Ultra High Molecular Weight Polyethylene

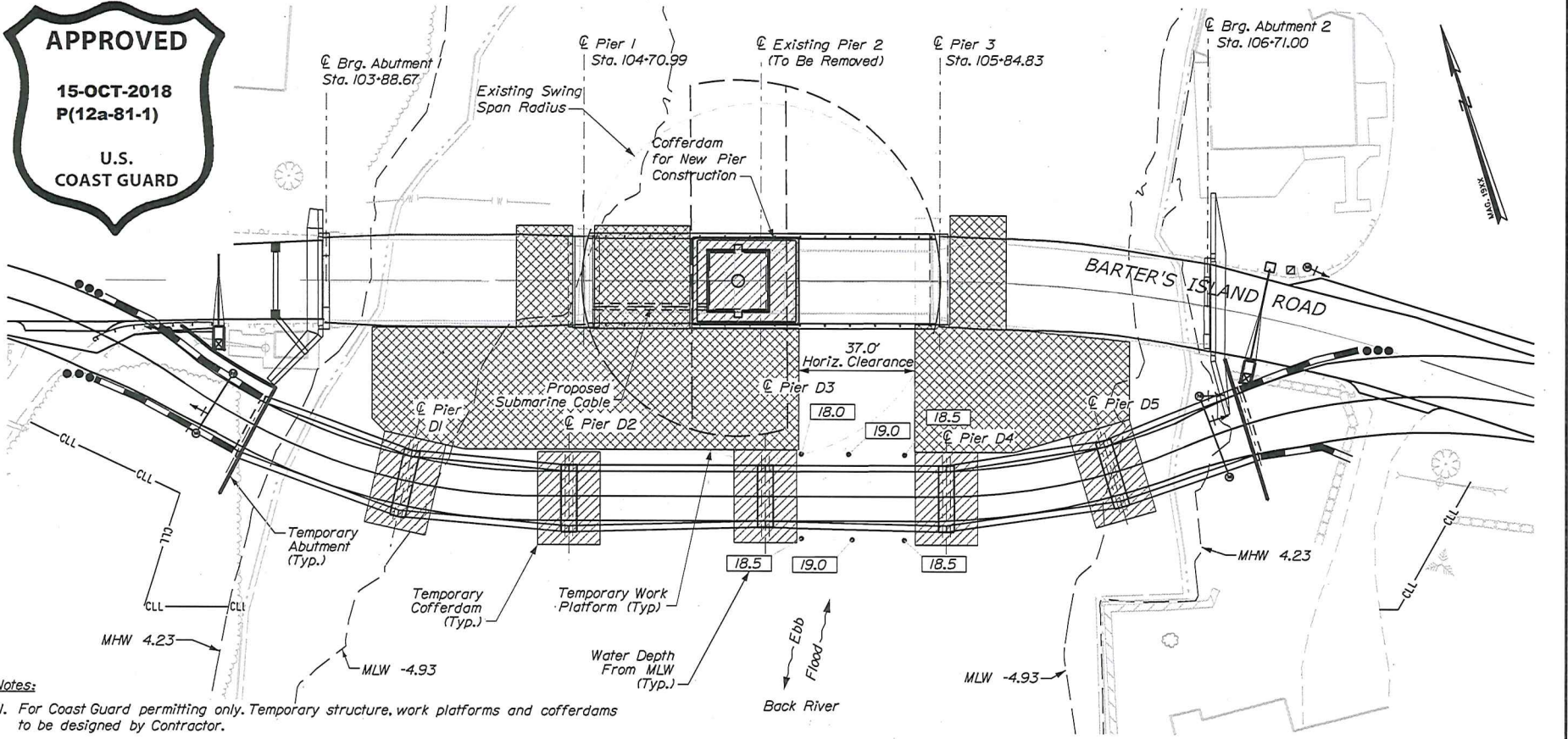


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STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
STP-2260(700)	
June 8, 2018	WIN 22607.00
BRIDGE NO. 2039	BRIDGE PLANS

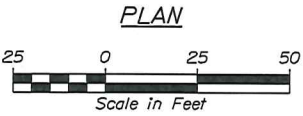
BARTERS ISLAND BRIDGE BACK RIVER (RIVER MILE 2.0)	
BOOTHBAY	LINCOLN COUNTY
<b>BRIDGE PROTECTION SYSTEM</b>	

SHEET NUMBER
<b>5</b>
OF 7



McFarland Johnson

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
STP-2260(700)	
June 8, 2018	WIN 22607.00
BRIDGE NO. 2039	BRIDGE PLANS

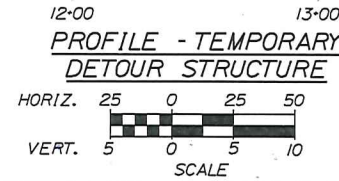
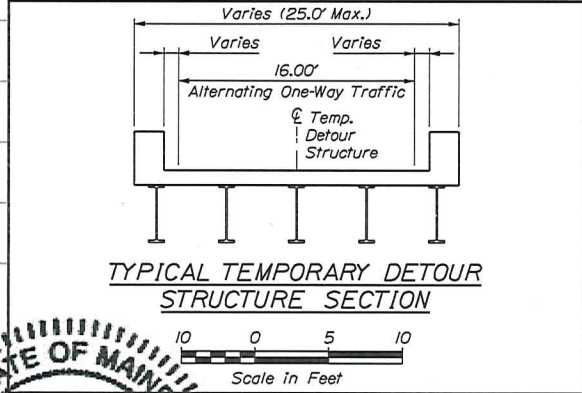
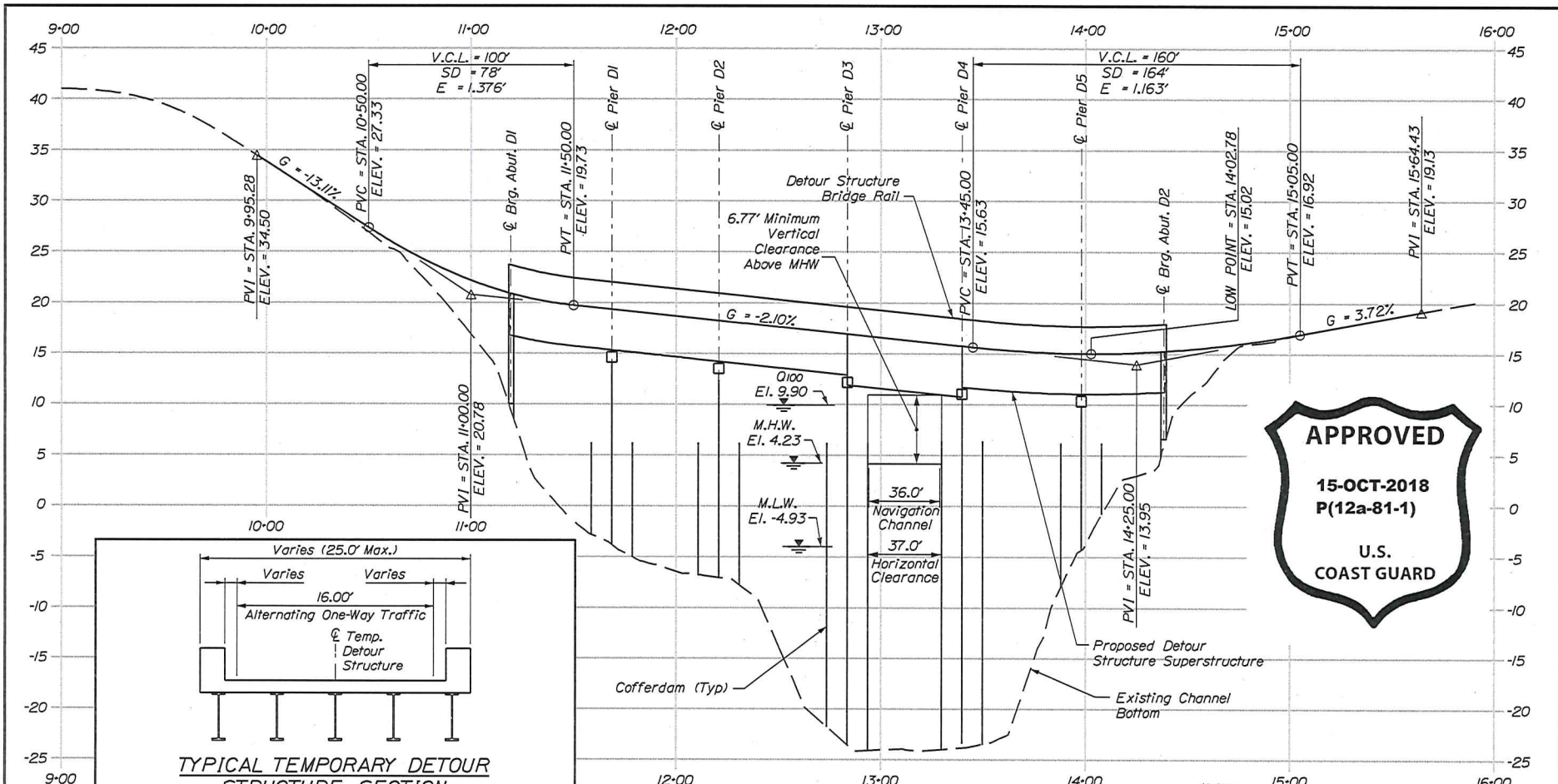


- Temporary Work Platform
- Cofferdam

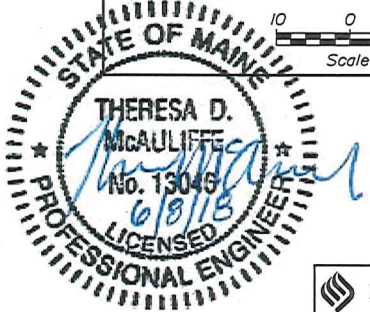
All Elevations shown are based on NAVD88

BARTERS ISLAND BRIDGE BACK RIVER (RIVER MILE 2.0)	
BOOTHBAY	LINCOLN COUNTY
TEMPORARY STRUCTURES PLAN	

SHEET NUMBER  
**6**  
OF 7



- Notes:
1. For Coast Guard Permitting only. Structure to be designed by the Contractor.
  2. Span over navigational channel to be placed last and removed first.
- All Elevations shown are based on NAVD88



McFarland Johnson

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STP-2260(700)  
June 8, 2018 WIN 22607.00  
BRIDGE NO. 2039 BRIDGE PLANS

BARTERS ISLAND BRIDGE  
BACK RIVER  
(RIVER MILE 2.0)  
BOOTHBAY LINCOLN COUNTY  
TEMP. STRUCTURES PROFILE

SHEET NUMBER  
7  
OF 7

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commander  
First Coast Guard District

One South Street  
Battery Park Bldg  
New York, NY 10004-1466  
Staff Symbol: dpb  
Phone: (212) 514-4338  
Fax: (212) 514-4337

16591

October 16, 2018

Maine Department of Transportation  
Attn: Leanne R. Timberlake, P.E.  
Senior Project Manager Bridge Program  
16 State House Station  
Augusta, ME 04333

Dear Ms. Timberlake:

Enclosed is Bridge Permit (12a-81-1) dated October 15, 2018 approving the location and construction of the Barters Island Bridge across the Back River, mile 2.0, at Boothbay, ME.

The proposed construction work is approved subject to the provisions contained in the Permit, this Transmittal Letter, the forthcoming Construction Approval Letter, and the attached General Construction Requirements. Removal conditions are contained in paragraphs 7, 8, and 9 of the permit.

In accordance with Title 33 CFR Part 114.45, any requests to amend this permit must be received by the District Commander at least 30 days before the existing permit expires to allow the permit to remain in effect until the final agency action is taken.

Upon receipt of this letter please contact Jeffrey Stieb, Bridge Management Specialist at [Jeffrey.D.Stieb@uscg.mil](mailto:Jeffrey.D.Stieb@uscg.mil) for coordination. Additionally, this office must be notified 30 days prior to the actual commencement and completion of the bridge work so that appropriate announcements may be prepared for our Local Notice to Mariners publication.

Permanent navigational lights shall be installed in accordance with Part 118 of Title 33, Code of Federal Regulations (CFR). Plans for the navigational lights should be submitted to this office for approval at an early date. Drawings showing location and arc of visibility of the lights should be shown in elevation and plan view on 8 ½" x 11" sheets. Approved prints will be returned to you. Permanent navigational lighting shall be operational upon completion of bridge construction. The Coast Guard Bridge Lighting Manual may be obtained at the following website:

<http://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/Marine-Transportation-Systems-CG-5PW/Office-of-Bridge-Programs/> (Click on Bridge Lighting Manual).

During the periods of construction, each pier, abutment or other obstruction must be required to be lighted for the safety of navigation. This office shall be contacted during construction plan development for a determination of temporary lighting needs.

Prior to and during construction the following requirements apply:

- a. At least 30 days prior to commencement of any work, we must have for our review, a copy of the construction plans, contractor's schedule, preferably depicted in a time line graphic format, and the contractor's daily hours of operation. The construction plan package must show the following: (1) a plan of the entire waterway area in the vicinity of the project. (2) The location of work barges during working and off-hours. (3) In addition, a drawing must be included, if applicable, depicting any scaffolding or containment used indicating the location and the total vertical or horizontal channel reduction. All vertical clearance reductions below low steel or concrete under the bridge as a result of the use of scaffolding must be clearly detailed on the drawings shown in total feet. (4) Emergency 24-hour telephone numbers for all responsible individuals for this project must be submitted to this office before any phase of construction begins in case of an emergency situation during off-hours.
- b. The contractor will be required to comply with all provisions of the Inland Navigation Rules, copies of which are available at:  
[http://www.navcen.uscg.gov/mwv/navrules/rotr\\_online.htm](http://www.navcen.uscg.gov/mwv/navrules/rotr_online.htm).
- c. It is the permittee's responsibility to ensure that channel depths are not affected by this work. Any material, machinery or equipment lost, dumped, thrown into, or otherwise entering the waterway must be removed immediately. If immediate removal is impractical and the object entering the waterway could possibly obstruct or hazard navigation, the object must be marked immediately to protect navigation and the Coast Guard shall be notified as soon as possible. Such notification shall give the location and type of obstruction and the navigational markings installed.
- d. Spillage of oil and hazardous substances is specifically prohibited by Section 311 of the Clean Water Act, as amended. Measures including properly maintaining construction equipment, designating fuel/hazardous substances handling areas to allow spills to be contained before reaching the waterway, instructing personnel not to dispose of oil/hazardous substances into drains or into the waterway directly, and other necessary procedures should be implemented to prevent spillage. If oil/hazardous substances are spilled into the waterway in spite of such planning, the U.S. Coast Guard is to be notified immediately at 800-424-8802. An adequate supply of absorbent material should be readily accessible to soak up any possible spillage pending Coast Guard arrival. The use of chemical dispersing agents and emulsifiers is not authorized without prior, specific, federal approval.
- e. Should archaeological resources be encountered during construction operations, the work shall cease and this office and the State Historic Preservation Office shall be consulted for possible recovery of those resources.
- f. Compliance with attached General Construction Requirements.

Upon completion of construction the following requirements apply:

- a. Photographs of the completed bridge, preferably 8 1/2" x 11", taken from the mariner's perspective both up and downstream of the bridge, are required for record purposes.
- b. The vertical and horizontal clearances through the navigable channel of the completed structure (as-built clearances) shall be certified in writing to this office by a responsible official of the permittee, a licensed surveyor or a registered professional engineer upon completion of bridge work. As built clearances consist of: vertical clearance in the navigational channel measured from mean high and mean low water to the lowest point of the superstructure; horizontal clearance through the navigational channel between piers or fenders measured normal to the axis of the channel. Documentation shall state the horizontal and vertical datum (e.g., NAVD88) used for all measurements. Please contact this office if there are questions regarding the required clearance data for specific bridge types, i.e. fixed or movable.
- c. The permittee or registered professional engineer shall certify that the waterway depths have not been impaired and that the waterway is clear of materials or debris resulting from bridge construction.

Should the permittee fail to ensure that the contractor complies with these requirements and should the Federal Government be required to take action for the protection of navigation, the Government reserves the right to recover the cost for such work from the permittee, the contractor, or both, as applicable.

The Government assumes no responsibility for any damages sustained or caused by the contractor's equipment or barges being anchored or moored at the aforementioned location. Also, this approval shall not act as a waiver of liability for any damage that may result from the applicant's operation.

Sincerely,



C. J. Bisignano  
Supervisory Bridge Management Specialist  
U.S. Coast Guard  
By direction

Encl: 1) Bridge Permit (12a-81-1) dated October 15, 2018w/approved plans

Encl: 2) U.S. Coast Guard D1 Bridge Administration General Construction Requirements

Copy: Jay Clement, USACE New England District w/enclosure 1  
LT Matt Odom, Coast Guard Sector Northern New England  
Maria Drozd, FHWA-Maine Division  
Kristin Chamberlain, ME DOT

## U.S. Coast Guard Bridge Administration

### GENERAL CONSTRUCTION REQUIREMENTS

1. All bridge closures, or bridge operating schedule changes, must be requested in writing, 30 days in advance, from the First Coast Guard District Bridge Branch Office. No channel restrictions, or vertical clearance reductions may be made without written approval from the above office.
2. Waterway closures/restrictions, barge placement or safety zones must also be requested a **minimum** of 90-days in advance. Please contact USCG Sector Northern New England, 259 High Street, South Portland, ME 04106-2028. Ph: (207) 741-5421.
3. All submissions to the Coast Guard for review and approval must first be approved by the owner of the bridge or their authorized agent. All submission of plans, scope of work, and schedules of operation must be sent to the First Coast Guard District, Bridge Branch Office.
4. At least 30 days prior to commencement of any work, we must have for our review, a copy of the construction plans, contractor schedule, preferably depicted in a time line graphic format, and the contractor's daily hours of operation. The construction plan package must include the following: (1) a plan of the entire waterway area in the vicinity of the project; (2) the location of work barges during working and off-hours; (3) a drawing, if applicable, depicting scaffolding or containment used and the location of any reduction of vertical or horizontal clearance. All vertical clearance reductions below low steel or concrete under the bridge as a result of scaffolding must be detailed on the drawings shown in total feet; and (4) emergency 24 hour telephone numbers for responsible individuals for this project.
5. Scaffolding used under any span of the bridge must be lighted with constant burning red lights every 50 feet and on all corners. The placement of scaffolding must not interfere with the ability of a moveable bridge to open for vessel traffic. Moveable bridges must continue to operate according to their normal schedule unless special drawbridge operation regulation changes have been requested. Warning signs must be posted on both sides of the bridge, visible for a 1-mile range, to warn mariners of the vertical clearance reduction. The signs shall face upstream and downstream so as to draw the mariner's attention to the fact that the clearance has been reduced.
6. All barges placed in the waterway must be lighted with constant burning white lights on all four corners of the barge. The contractor is required to comply with all provisions of the Navigation Rules International-Inland, regarding the use of work barges or floating equipment in the waterway. [www.navcen.uscg.gov](http://www.navcen.uscg.gov) .
7. Placement of construction barges in the navigable channel shall be done so as to provide a minimum horizontal clearance reduction. Only one navigation channel of a swing bridge may be blocked by work equipment at anytime. Barges must be moved out of the navigable channel after working hours unless approved in writing by the USCG.
8. Barges held in place by anchor lines must be marked by anchor buoys, which should be lighted.

9. The vertical and horizontal clearances through the navigable channel of the completed structure (as-built clearances) shall be certified in writing to this office by a responsible official of the permittee, a licensed surveyor or a registered professional engineer upon completion of bridge work. As built clearances consist of: vertical clearance in the navigational channel measured from mean high and mean low water to the lowest point of the superstructure; horizontal clearance through the navigational channel between piers or fenders measured normal to the axis of the channel. Documentation shall state the horizontal and vertical datum (e.g., NAVD88) used for all measurements. Please contact this office if there are questions regarding the required clearance data for specific bridge types, i.e. fixed or movable.
10. The on-scene contractor must have a VHF-FM marine radio set to the bridge communication channels 16/13 or the designated channel for the bridge. Additional marine radios monitoring the above channels must also be maintained at the main control of any floating equipment or barges on station.
11. Preventive measures must be taken to prevent any hot work, debris, or construction material from entering the waterway. This includes sandblasting material, paint, and any concrete work by-products. Welding and burning must cease upon approach of a vessel and shall not start again until the vessel has passed the bridge.
12. If permanent bridge navigational lighting cannot be maintained operational during any phase of this project, temporary battery/power lights must be installed at the same locations. These temporary lights must be visible for a distance of 2,000 yards on 90% of the nights of the year. Generally, a lamp of (50 candela) will meet these requirements. Plans for temporary lighting shall be submitted to this office for written approval. Deviations from the approved temporary lighting shall be permitted only upon written authorization from this office.
13. All newly constructed bridge piers, or those in the process of demolition, must be lighted with either red or white flashing (60 flashes per minute) lights. All cofferdams used during construction must also be lighted with red or white flashing (60 flashes per minute) on all four corners.
14. Bridge protective fenders shall not be constructed or rebuilt with any metal surfaces on the rubbing face of the fender system. All bolts, spikes, or other metal fastening devices must be countersunk. Metal splicing plates, if used, shall be mounted on back of outer wales.
15. All piles including those previously damaged or broken that are not being used in the new or repaired fender shall be extracted rather than cut off at the mud line. Upon completion of all fender repairs a bottom sweep is required to determine if any piles or debris are present in the waterway. A wire-drag sweep or side-scan sonar is the preferred method.
16. It is the owners' responsibility to ensure that channel depths are not affected by this work. Any material, machinery or equipment lost, dumped, thrown into, or otherwise entering the waterway must be removed immediately. If immediate removal is impractical and the object entering the waterway could possibly obstruct or hazard navigation, the object must be marked immediately to protect navigation and the Coast Guard shall be notified as soon as possible. Such notification shall give the location and type of obstruction and the navigational markings installed.

17. Spillage of oil and hazardous substances is specifically prohibited by Section 311 of the Clean Water Act, as amended. Measures including properly maintaining construction equipment, designating fuel/hazardous substances handling areas to allow spills to be contained before reaching the waterway, instructing personnel not to dispose of oil/hazardous substances into drains or into the waterway directly, and other necessary procedures should be implemented to prevent spillage. If oil/hazardous substances are spilled into the waterway in spite of such planning, the U.S. Coast Guard is to be notified immediately at 800-424-8802. An adequate supply of absorbent material should be readily accessible to soak up any possible spillage pending Coast Guard arrival. The use of chemical dispersing agents and emulsifiers is not authorized without prior, specific, federal approval.
18. The bridge owner/contractor shall provide any and all necessary equipment and personnel to determine the presence of obstructions in the waterway at any time during or following bridge construction or demolition operations.
19. The owner or registered professional engineer shall certify that the waterway depths have not been impaired and that the waterway is clear of materials or debris resulting from bridge construction or demolition.
20. This approval may be revoked and/or civil penalties imposed for failure to ensure that the above listed stipulations are adhered to or if work is determined to hazard or impair navigation.
21. This bridge work authorization does not relieve the project proponent of the responsibility to comply with applicable state, local or other federal requirements for this project.