



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

Janet T. Mills
GOVERNOR

Bruce A. Van Note
COMMISSIONER

December 7, 2022
Subject: Bridge Rehabilitation
State WIN: 021751.01
Location: **Southport/Boothbay**
Amendment No. 7

Dear Sir/Ms.:

Remove page 48 titled SPECIAL PROVISIONS SECTION 104 Utilities dated September 14, 2022, and **Replace** with the attached SPECIAL PROVISIONS SECTION 104 Utilities Amended December 5, 2022

Remove page 60 titled SPECIAL PROVISION SECTION 107 TIME (Scheduling of work, Disincentives) dated August 29, 2022, and **Replace** with the attached SPECIAL PROVISION SECTION 107 TIME (Scheduling of work, Disincentives) dated December 6, 2022

Remove from amendment # 3 SPECIAL PROVISION SECTION 105 GENERAL SCOPE OF WORK (Bridge operation During Construction) Dated October 24, 2022 and **Replace** SPECIAL PROVISION SECTION 105 GENERAL SCOPE OF WORK (Bridge operation During Construction) with the attached dated December 6, 2022

The following questions have been received:

Question: During the Contractor Input throughout design Substructure Inc. tried to locate the existing submarine cables without any luck. Notes from CID show that delineated areas would be shown on the plans to prohibit access to prohibited areas around the submarine cable. This was so the contractor wouldn't also have to include costs and risks of trying to locate submarine cables that have failed to be located previously. Special Provisions Section 104 Utilities states, "The submarine utilities shall be positively located prior to securing barges with spud piles and before removing/installing piles for the timber fender system using a method that is acceptable to the Resident and Utility Companies. All work required to locate submarine utilities shall be considered incidental to the Contract pay items."

1. Since these cables couldn't be located previously what will be required in order to "positively locate" these? Dredging or jetting in order to expose these would not be allowed by permitting and would be an expensive endeavor and not quantifiable for bidding.

2. If the contractor delineates these areas with visual buoys will locating be required?

Response: Please see revised Special Provision 104 Utilities. As described in the Pre-Bid Meeting held on Wednesday 11/30/22, the responsibility to locate and mark the submarine utility cables will be on the utility companies and not on the Contractor. The utilities have contracted with a third-party utility locating company who will be heading an effort to locate and mark the utilities as required by law. These markings will be on the channel bottom. MaineDOT will be performing a hydrographic survey once the submarine cables are located. The information will be processed and provided to the Contractor for their reference. The effort to locate the cables has begun and all parties have contracted with the third-party locating service. As of 12/6/22, the physical work to locate these cables has been scheduled for the week of 12/12/22.

Question: Please clarify what if any surface prep & finish is required on the top flanges of spans 1 & 3. The drawings and specifications appear not to address this area.

Response: Surface preparation of the top flanges of spans 1 and 3 shall be in accordance with section 502.10 of the MaineDOT Standard Specifications. Surface preparation shall also be adequate to provide a sound, flat surface for shear stud installation in accordance with the Standard Specifications.

Question: Please provide the durometer required for the Polyurethane Bumper discussed in the response to the question asking for clarification on the End Stop shown on Drawing 25.

Response: Polyurethane Bumpers shall be high performance industrial bumpers consisting of expanded polyurethane resin material with properties suitable to meet the specification requirements of 860.16. Bumpers such as the RMV bumpers manufactured by ITT Enidine Inc. or approved equal will be considered acceptable.

Question: For the panel-to-panel connections on the new swing span grid deck, please provide connection requirements (welded, bolted, etc) for the bearing bars at the longitudinal stage line joint, supplemental bars at the longitudinal stage line joint, and cross-bars at transverse panel joints. (Note: some suppliers are suggesting that panels do not necessarily need to be connected to each other)

Response: The panel-to-panel connection requirements of the new swing span grid deck shall be as recommended and designed by the manufacturer. This design shall account for the full penetration weld at the stage line of the curved end dam plates that are welded to the end deck panels as shown in the Deck Joint Plan detail on Sheet 34 of 48 of the contract documents. At a minimum, the bolted clip assembly detail shown on Sheet 34 of 48, to be designed by the manufacturer, shall be utilized to fasten the deck panels at both sides of the stringer at the longitudinal joint.

Question: Special provision 105 states that the contractor must operate the bridge from the start of construction until project completion for 7 days a week. The schedule dictates that the swing span will not be modified until the winter of 2024, at which point the deck will be removed, the bridge will be unbalanced, and operation will not be possible. Following an in depth lock out tag out procedure to ensure all personnel are protected, is it necessary for the contractor to operate the bridge while its personnel are not on site? If so, it is requested that the department provide in depth training to our employees on the maintenance, repair and operation of the bridge.

Response: Please see revised Special Provision 105 Bridge Operation During Construction.

Question: The environmental conditions of the site during the winter closure are not within coating manufacturer requirements. Is it the intent of the department that we totally contain half of the swing span, approach spans, and upper truss as phased to control atmospheric conditions during coating and blasting operations to meet the 35 degree surface and air condition and 85% relative humidity requirements of the manufacturers?

Response: Please see revised Special Provision 107 Time (Scheduling of Work, Disincentives). The bridge closure windows have been extended to allow for work to be performed in more favorable weather conditions. However, if conditions are not favorable and the work still needs to be completed, then yes, without dictating the Contractor's means and methods, the atmospheric conditions would need to be controlled for the work to be completed as required by the Contract.

Question: Evaluating the quantity of work in the time frames currently allotted will be next to impossible to complete. We believe a more feasible approach to be a three season build with extending the third season into more favorable weather conditions to complete testing commissioning.

We suggest the following schedule parameters:

Season 1 Oct 23, 2023 to March 29, 2024 – Fender System

Season 2 Oct 24, 2024 to March 28, 2025 – Deck Replacement

Season 3 Oct 24, 2025 to May 29, 2026– Mechanical/Electrical/Commission

Response: Please see revised Special Provision 107 Time (Scheduling of Work, Disincentives). The bridge closure windows have been extended to allow for work to be performed in more favorable weather conditions.

Question: Per A-3 the contractor is required to assume operation of the swing bridge at the start of his work, please clarify who is responsible and what is required with regard to maintenance & repair of the bridge during contractor operation?

Response: Please see revised Special Provision 105 Bridge Operation During Construction. During construction, MaineDOT Bridge Maintenance will perform maintenance and repairs on the bridge, as required, outside of any maintenance or repair responsibilities put on the Contractor in the Standard Specifications.

Question: Please clarify why the contractor is required to operate the bridge when is he not working? This is a significant expense especially when considering that the DOT operators are to be present during in-season operation anyway.

Response: Please see revised Special Provision 105 Bridge Operation During Construction. The bridge operation requirements have changed and are now limited to more specific activities.

Question: Would bridge operation by the DOT during contractor work periods be reasonably assumed if exclusively and solely under the direct designated supervision of the contractor in lieu of contractor operation?

Response: Please see revised Special Provision 105 Bridge Operation During Construction. The bridge operation requirements have changed and are now limited to more specific activities.

Question: Please clarify if the bridge is intended to be manned 24/7 during all periods of contractor operation.

Response: Please see revised Special Provision 105 Bridge Operation During Construction. The bridge operation requirements have changed and are now limited to more specific activities.

Question: What is the prevailing wage rate required for the bridge operator, there are none listed in the General Decision.

Response: If needed, the wage rate may be requested upon Contract award along with any other wages rates that may not have been included but would needed for the project.

Question: Please refer to drawing 34 and the connection detail for the CIP Joint per Detail 1, there appears to be no connection detail to the existing structural steel, please clarify what is required.

Response: The CIP Joint detail shall be welded to top flanges of girders and shimmed as necessary as to secure the joint plate to the top flanges.

Question: Please confirm that the new steel scuppers shown on drawing 33 are paid under items 504.7 & 504.71.

Response: No, payment for bridge drains/scuppers is to be included in the payment for pay item 502.26 Structural Concrete Roadway and Sidewalk Slab on Steel Bridges. Please reference Standard Specification Section 502, Subsection 502.19 Basis of Payment which states "Payment...will be full compensation for furnishing and installing bridge drains...".

Question: Please confirm that pipe rail required on drawing 11 section A-A is paid under item 507.0841.

Response: Yes, steel pipe hand railing shown on Sheet 11 is to be paid for under Item 507.0841.

Question: If span 1/3 and span 2 decks are poured at different times a 2" difference in elevation will exist between the decks, please confirm that this is not an issue.

Response: Placing the decks at different times will not be an issue for MaineDOT provided that the temporary barrier as shown on Sheet 30 of 48 is utilized as required during the construction staging of the deck and that temporary ramps are installed to transition on and off the swing span. Please note, Special Provision 880 Bridge Balancing has provisions for temporary bridge balance conditions and the requirements of this special provision shall be adhered to if any temporary ramps are installed on the swing span. Appropriate construction signage per the MUTCD shall be utilized to inform motorists of uneven conditions and/or bumps.

Question : Will the DOT accept SSPC SP 11 surface prep in lieu of SSPC SP10 with the manufacturer approval for field surface paint preparation?

Response: SSPC SP-11 will be acceptable in lieu of the SSPC SP-10 surface preparation.

Question: Please refer to Special Provision 107 - Time and confirm that the contractor can completely close both navigation channels for the 157 consecutive days as stated.

Response: Special Provision 107 – Time (Scheduling of Work, Disincentives) has been revised. Yes, the intent is that the Contractor can complete close both navigation channels during the allowable closure periods. Please note, a minimum of 90-day advanced notice is required per #2 of the U.S. Coast Guard Bridge Administration General Construction Requirements when a waterway closure/restriction or safety zone is requested.

Question: The Shaft Coupler configuration is different from M3 to M7. The Reducer is to remain on site as indicated in the Special Provisions. Is the intent to field cut the shaft and machine the shaft with a new key to meet the new coupler configuration?

Response: There is a floating shaft between the existing motor and existing reducer as shown on Dwg. M3. All of the items indicated by the shading on Dwg. M3 are to be removed and disposed of. This includes (but is not necessarily limited to) the brakes, motors, floating shafts and couplings. The coupling hub that is on the reducer shaft is included for removal with these items. The new Span Drive Motor SD1 is to be coupled directly to the existing reducer input shaft using new Motor Coupling SD2 as shown on Dwg. M7. The “Reducer Input Shaft Detail” shown on Dwg. M8 was obtained from the reducer manufacturer (Philadelphia Gear Corp). The input shafts dimensions could not be field verified due to the presence of the existing motor coupling. The detail is therefore provided for reference only. The exact shaft dimensions need to be field verified by the contractor so that the new Motor Coupling SD2 can be fabricated with the proper bore and keyway sizes to provide the contract required fits and tolerances. See the contract Plans and Special Provisions for specific component materials, capacities and requirements.

Consider these changes and information prior to submitting your bid on **December 14, 2022**.

Sincerely,

Kevin Hanlon for

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

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Boothbay Harbor**
 Project: **21751.01**
 Date: **9/14/2022**
 Amended: **12/05/2022**

**SPECIAL PROVISIONS
SECTION 104
Utilities**

UTILITY COORDINATION

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

THE CONTRACTOR SHALL PLAN AND CONDUCT WORK ACCORDINGLY.

The Contractor shall notify all utilities a **minimum of ten (10) working days** prior to commencement of **any** work on the project.

MEETING

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

GENERAL INFORMATION

These Special Provisions outline the arrangements that have been made by the Department for 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 have been notified and will be furnished a project specification.

Overview of Utility Involvement:

Utility	Aerial	Underground
Central Maine Power <i>Jim Lemieux (207)607-2904</i>	X	
Consolidated Communications <i>Jim Scheid (207)626-2031</i>	X	
Charter Communications <i>Jason Cummings (207)620-3315</i>	X	
Town of Boothbay Harbor, Boothbay Region Water District, and East Boothbay Water District <i>John Ziegra (207)633-4723</i>		X

Temporary utility 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.

Unless otherwise specified, any underground utility facilities shown on the project plans represent approximate locations gathered from available information. The Department cannot certify the level of accuracy of this data. Underground facilities indicated on the topographic sheets (plan views) have been collected from historical records and/or on-site designations

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provided by the respective utility companies. Underground facilities indicated on the cross-sections have been carried over from the plan view data and may also include further approximations of the elevations (depths) based upon straight-line interpolation from the nearest manholes, gate valves, or test pits.

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

It is the responsibility of the Contractor with the Utility Pole owner, to layout all of the proposed pole locations in the field prior to the start of utility relocations. Should any adjustments be needed, the Utility will document adjustments and inform the Department prior to utility relocations.

The Contractor shall provide the utilities access to the new pole locations. Construction of any spot cuts or fills in excess of 2 feet must be completed prior to utility relocations. The Contractor shall prepare a plan for how access and the spot cuts and fills will be accomplished and what the schedule will be for performing the work. This plan will be discussed at the pre-construction utility meeting.

**** Specific information regarding the line voltage can be requested from Central Maine Power Company. ****

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

There are no aerial utility conflicts anticipated within the scope of work planned for this project. Should any arise the utility must be contacted as soon as possible. The bidding contractors are encouraged to review the pole and power line locations for crane clearances prior to bid.

At Existing pole #90 of the Westbound approach (Boothbay Harbor), the Maine Department of Transportation would like a riser installed to service the New Advance Warning Beacon that will be located on the east side of the bridge. The communication line for this advanced warning system will run west along Route 27 and shall be attached to the existing utility poles. A riser shall be installed on the existing pole at approximate Sta. 5+38, 13.67 Rt.

The Maine Department of Transportation plans to install a New Advance Warning Beacon at the west side bridge approach. A communication line for this advanced warning system shall start at a new Contractor installed utility pole at the corner of Route 27 and Route 238 and run through an underground conduit to existing pole #6. At existing pole #6 of the Eastbound approach (Southport), the Maine Department of Transportation would like a riser installed with a weather head drop to service the communication line for the warning beacon. The communication line will be attached to the existing utility poles and run east along Route 27 and cross Route 27 from pole #5 to pole #4 and continue to the riser pole at approximate Sta. 10+68, 13.67 Lt.

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The Maine Department of Transportation will require an upgraded Transformer on the Southport side to power the new equipment for the swing bridge. The Contractor shall work directly with Central Maine Power to ensure that the transformer is installed according to the plans and specifications provided within the Contract Plans.

Pole List:

Existing Pole #	Existing Station	Left/Right		Existing Offset	Proposed Station	Left/Right		Proposed Offset	Comments
		LT	RT			LT	RT		
#99	4+38		X	13.5'					No Change
#100	5+18	X		17.16'					No Change
#101	5+31	X		17'					No Change
	5+46	X		16'					No Change
	5+38		X	13.67'					Install Riser, Add Meter (By Others)
	6+16		X	14.2'					Remove (By Others)
					10+33	X		13.25'	New Pole w/Meter (By Others)
	10+46	X		17.25'					Remove (By Others)
	10+57	X		15.6'					No Change
	10+68	X		13.67'					No Change
	11+10		X	18.33					No Change Install Riser (By Others)
	11+80	X		22.75'					No Change

SUBSURFACE (Underwater)

Central Maine Power has utilities within the project limits that run under water on the downstream end of the bridge. The lines will be located by the utility, marked underwater with a concrete block system, and flagged with buoys. GPS locations will be provided to the Contractor. It will be the responsibility of the Contractor to protect the utility line from any damage during construction. Central Maine Power would like the Contractor to coordinate with them during construction to avoid any conflicts.

Charter Communications (Spectrum) has utilities within the project limits that run under water on the downstream end of the bridge. The lines will be located by the utility, marked underwater with a concrete block system, and flagged with buoys. GPS locations will be provided to the Contractor. It will be the responsibility of the Contractor to protect the utility line from any damage during construction. Charter Communications (Spectrum) would like the Contractor to coordinate with them during construction to avoid any conflicts.

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Consolidated Communications has utilities within the project limits that run under water on the upstream end of the bridge. The lines will be located by the utility, marked underwater with a concrete block system, and flagged with buoys. GPS locations will be provided to the Contractor. It will be the responsibility of the Contractor to protect the utility line from any damage during construction. Consolidated Communications would like the Contractor to coordinate with them during construction to avoid any conflicts.

The Boothbay Water District and East Boothbay Water District have a water line in the area that runs under water on the upstream side of the bridge. The depth and location of the water line has not been verified. The water line is to remain in place. It will be the responsibility of the Contractor to protect the water line from any damage during construction. The Boothbay Water District and East Boothbay Water District would like the Contractor to coordinate with them during construction to avoid any conflicts.

MAINTAINING UTILITY LOCATION MARKINGS

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

UTILITY SIGNING

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

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(Bridge Operation During Construction)

Description

The Contractor shall supply sufficient personnel during the duration of the project whose sole responsibility will be to operate the bridge during certain construction activities as defined below. The bridge shall normally operate as required by 33 CFR 117.537, outside of any U.S. Coast Guard approved deviations to bridge operations.

33 CFR 117.537

The draw of the Southport (SR27) Bridge, at mile 0.7, across Townsend Gut between Boothbay Harbor and Southport, Maine shall open on signal; except that, from April 29 through September 30, between 6 a.m. and 6 p.m., the draw shall open on signal on the hour and half hour only, after an opening request is given.

The bridge will be operated by MaineDOT Bridge Operators until the Contractor starts physical work on any movable bridge componentry or as required by the Resident, at which time, the operation of the bridge shall be handed over to the Contractor for the duration of any work related to the movable bridge componentry. Movable bridge componentry is defined as any structural, mechanical, or electrical bridge component that are, directly or indirectly, essential for the proper operation of the bridge. Operation of the bridge shall not be handed back over to MaineDOT until all mechanical and electric work is complete and all mechanical and electrical components have been fully tested, commissioned, and operator training has been completed.

Method of Measurement

This work will not be measured for payment.

Basis of Payment

The cost of this work shall be incidental to the various related items in the Contract.

SPECIAL PROVISION
SECTION 107
TIME
(Scheduling of Work, Disincentives)

Moveable Bridge Operations and Navigation Channel Restrictions:

The Contractor shall plan and prosecute work in such a manner to limit the closure of the movable bridge operations and full navigation channel restrictions to a maximum of two (2) closure periods between October 2, 2023-May 17, 2024 for 229 consecutive calendar days and between September 30, 2024-May 16, 2025 for 229 consecutive calendar days.

After the first closure period, between October 2, 2023 and May 17, 2024, the bridge shall be returned to the drawbridge's normal operation schedule as defined by 33 CFR 117.537 and include a fully operational mechanical and electrical bridge control system, fully operational traffic safety and control system including but not limited to the existing signals, gates, and advanced warning lights.

After the second closure period, between September 30, 2024 and May 16, 2025, the bridge shall be Substantially Complete and returned to the drawbridge's normal operation schedule as defined by 33 CFR 117.537. Substantially Complete is defined as having the following work complete and accepted at a minimum:

- Fully operational, new mechanical and electrical bridge control systems, including all field testing and commissioning activities.
- Fully operational, new traffic safety and control systems, including but not limited to the new traffic signals, barrier gates, and advanced warning signals.

A disincentive of \$5,000.00 (five thousand dollars) per calendar day shall be paid by the Contractor for every day that the navigation channels remain closed to boat traffic after the number of allowable consecutive calendar days per closure period, as specified above, other than any temporary waterway restrictions allowed per the Coast Guard General Construction Requirements and with coordination and approval by the Resident and the U.S. Coast Guard. The maximum disincentive paid by the Contractor shall be capped at \$350,000.