

**TOWN OF BUCKLAND, MASSACHUSETTS
BRIDGE REPLACEMENT OF B-28-017
NILMAN ROAD OVER CLARK BROOK**

ADDENDUM NO. 1

June 24, 2021

THIS ADDENDUM MUST BE ACKNOWLEDGED ON THE BID FORM WHERE INDICATED.

BIDS TO BE OPENED AND READ: _____ WEDNESDAY, JULY 7, 2021 AT 2:00 PM

SEE ANSWERS TO QUESTION BELOW:

QUESTION AND ANSWER

Q1: In lieu of the 79-hour travel restriction outlined in the special provisions can a temporary bridge be installed? If not, why?

A: A temporary bridge may be utilized in lieu of the 79-hour travel restriction. The temporary bridge shall conform to the attached specifications.

Q2: What is to be done with the OHW that are directly over the bridge?

A: The intent of this contract is to perform the work without the relocation of overhead wires. The Contractor shall develop the means and methods necessary to complete the bridge replacement under and adjacent to the existing overhead wires or coordinate the relocation of the overhead wires by their own means and methods.

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ATTACHMENTS FOLLOW

TEMPORARY BRIDGE SPECIFICATIONS

A temporary bridge, if chosen to be used, shall conform to the general provisions of Section 995 and the following requirements. Where no specific requirement is directed for a component part of the item, the Standard Specifications shall apply, except for payment.

The temporary bridge shall meet the following design criteria:

1. Design shall be in accordance with AASHTO Guide Design Specifications for Bridge Temporary Works, 2nd Edition.
2. The bridge shall be designed for HS20 loading at a minimum.
3. The railing system on the bridge and the barrier along the approach roadways shall be designed for AASHTO TL-1 loading as a minimum.
4. The roadway width on the approach roadway and on the bridge shall be a minimum of 12 feet.
5. The maximum allowable bearing pressure is 3 tons/sq. ft (6 ksf). If the Contractor chooses to exceed the maximum allowable, additional subsurface exploration and geotechnical evaluation shall be performed. The additional bearing capacity evaluation shall be submitted to the Engineer of Record for approval.
6. If the Contractor chooses to exceed the ROW limits, the Contractor shall be responsible for obtaining written agreements from the Town and applicable property owners.
7. The Contractor is responsible for any permits required resulting from the use of a temporary bridge.
8. A minimum low chord elevation of the temporary bridge shall not be lower than the low chord elevation of the proposed bridge.

CONSTRUCTION METHODS FOR TEMPORARY BRIDGE

General.

The field personnel shall have knowledge of and follow the approved Field Erection Plan and Assembly Plan. Field Erection shall comply with 960.61, *Erection* and the Assembly Plan shall be as described below.

Submittal Requirements.

The Contractor shall submit a temporary bridge design package to the Engineer for approval prior to the installation of the temporary bridge which shall include calculations and plans for the design of the temporary bridge and retaining walls. Plans and calculations shall be stamped by a Professional Engineer registered in the Commonwealth of Massachusetts.

Prior to erection of the temporary bridge, the Contractor shall submit for approval by the Engineer, detailed assembly plans, procedures, computations and drawings for transport, hoisting, erection and handling of the bridge stamped by a Professional Engineer registered in the Commonwealth of Massachusetts. The assembly plans shall include structural steel details, steel reinforcing details, deck details, the location and details of lifting devices, minimum concrete compressive strength to be obtained prior to handling the units, as well as concrete stresses and steel member stresses during handling transport and erection, crane capacities, pick radii, sling geometry, and lifting hardware.

The erection procedure shall be in conformance with Subsection 960.61 and include the following as a minimum:

- Verification that the equipment can handle all pick loads and weights with appropriate factor of safety
- Evaluation of construction sequence/evaluation of any geometric conflicts in the placement procedures
- Design of crane supports including verification of subgrade for support.
- Documentation of all preparatory work necessary for moving personnel, equipment, supplies, additional equipment used to move the superstructure, and incidentals to the project site before beginning work.
- Provision of a pre-operations checklist, and a proposed schedule for meetings with the Engineer for review and approval of the pre-operations checklist.
- Documentation that the system shall be sufficiently redundant to avoid damage to the structure during fabrication, transport and placement.

The following submittals, as described above, shall be submitted to the Designer of Record:

- Calculations and Plans for temporary retaining walls
- Calculations and Plans for temporary bridge
- Erection Procedure and Assembly Plan for temporary bridge
- Calculations and Plans for the transport, hoisting, erection and handling of the bridge

Survey and Layout.

Working points, working lines, and benchmark elevations shall be established prior to placement of all elements. The Contractor is responsible for field survey as necessary to complete the work. The Town reserves the right to perform additional independent survey. This survey does not relieve the Contractor of performing survey for the construction. If discrepancies are found, the Contractor may be required to verify previous survey data.

Erection.

The elements shall be placed in the sequence and according to the methods outlined in the Erection and Assembly Plan.

Approach Roadway.

Approach roadways shall be constructed in accordance with the Standard Specifications. The temporary pavement materials and thicknesses shall be submitted to the Engineer for review.

Approach Guardrail.

Approach guardrail shall be according to the latest edition of the MassDOT Construction Standard Details. Approach guardrail shall meet TL-1.

Restoration of Site.

After traffic is transferred to the proposed permanent bridge, the temporary bridge shall be disassembled and removed from the project site. The project site shall be restored to its original conditions.