

# ITEM 585.3602 11M – TEMPORARY STEEL SUPPORTS FOR BRIDGE DECK

## DESCRIPTION

This work shall consist of furnishing, installing, maintaining and disassembling the temporary bridge deck supports for the deck slab overhangs at construction stage lines in accordance with the Contract Documents or as directed by the Engineer. Upon completion of the work, the Contractor shall remove from the site the new temporary bridge deck supports.

## MATERIALS

Materials shall meet the requirements of the New York State Steel Construction Manual (NYSSCM) and in the following subsections of Section 700 of the current New York State Standard Specifications, with current additions and modifications:

Timber	712-14
Structural Steel	715-01
High Strength Bolts, Nuts and Washers	715-14

Used structural steel and timber may be used for the temporary supports provided the material is in good condition and satisfactory to the Engineer. All high strength bolts, nuts and washers shall be new.

## CONSTRUCTION DETAILS

A. **General.** During the respective construction stages, adequate temporary support, connection and bracing shall be provided to support the cantilevered deck slab to permit the construction of the bridge while maintaining traffic. Temporary bridge deck supports shall be required to support cantilevered portions of both the new and existing bridge decks. The Contractor shall fabricate a minimum amount of assemblies as specified on the Contract Plans or as required by his/her operation. An assembly is defined as a complete steel setup as required to support the deck construction joint for a full span.

B. **Working Drawings.** The Contractor shall submit to the Engineer working drawings for review and approval of the temporary bridge deck supports. The working drawings shall include a sequence of operations describing how the temporary bridge deck supports will be installed and ultimately removed. All details shall be in conformance with the current NYSDOT Standard Specifications for Highway Bridges and the current New York State Steel Construction Manual (NYSSCM).

C. **Installation.** The Contractor shall construct the temporary bridge deck supports for dead load, construction loads, and MS18 live load. The support system shall provide support for the deck cantilevers resulting from the construction staging without overload or damage to the deck or supporting steel structure.

The temporary supports shall be completely connected and installed in accordance with the requirements of the NYSSCM, details as shown on the Contract Plans and the working drawings, prior to saw cutting the existing deck slab. The temporary supports shall be positively secured to the existing steel structure to prevent any dislodgement as a result of the construction operations and

## **ITEM 585.XXXXXX11M – TEMPORARY BRIDGE DECK SUPPORT STEEL**

vibrations from live loads. The deck support beam shall be placed tight against the bottom of the existing deck to remain, shim as required.

Welded connections to new or existing members to remain are not permitted. Drilled holes into the bottom flange of new or existing girders to remain are not permitted. Any field drilling of holes in members shall be in accordance with the Contractor's working drawings. No flame cutting or flame drilling will be permitted in existing or new girders. All damage to existing steel caused by the field drilling, as determined by the Engineer, shall be repaired by the Contractor at no cost to the State in a manner satisfactory to the Engineer. All temporary holes shall be filled with high strength bolts after removal of the assembly and prior to final field painting. Areas disturbed by the installation of the temporary supports shall be restored to the satisfaction of the Engineer.

**D. Removal.** The temporary supports shall not be removed until the new concrete deck supported by the temporary system, attains a minimum compressive strength of 21MPa, and in addition, shall be cured in accordance with NYSDOT Standard Specification paragraph 557-3.13 for the HP concrete deck and two (2) calendar days after placement of the accelerated concrete deck. A curing day shall be as defined in the NYSDOT Standard Specification paragraph. 555-3.08A.

**E. Stockpiling and Storage** The Contractor shall transport and neatly stockpile the new temporary supports, when not in use, at a site designated by the Engineer. The new supports shall be kept separate from any existing stockpile material.

All components of the new temporary supports shall remain the property of the Contractor.

### **METHOD OF MEASUREMENT**

Measurement will be made for each span location requiring the installation of the temporary deck support steelwork.

### **BASIS OF PAYMENT**

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work. The cost for the treatment, handling and disposal of paint removal waste material will be paid for under a separate item.