ITEM 03202.97 M - DISMANTLING AND STORING EXISTING SUPERSTRUCTURE (SPAN 2)

DESCRIPTION:

This work shall consist of disassembling, disposing of waste materials, and storing designated steel members of the truss span at Location 1 as indicated on the Contract Plans. Location 1 is Route 31 over the Seneca River at Belgium, New York.

Storage of the designated steel members of the truss span could be at Location 1, Location 2 (Plainville Road [CR 32] over the Erie Canal [State Ditch Cut], or any suitable location selected by the contractor and approved by the EIC. Transportation to the storage site of materials designated to be stored is part of this work item. Transportation of materials from the storage site to Location 2 shall be paid under Item 03564.97 M in the Plainville Road Bridge Estimate.

Specific steel components of the truss that are designated for storage (to be used at Location 2) are indicated in the contract drawings.

MATERIALS: (Not specified)

CONSTRUCTION DETAILS:

In accordance with the requirements of the latest edition of the New York State Department of Transportation Standard Specifications section 202-3.01 General Safety Requirements, section 202-3.05 Demolition of Structures-General and the following, all concrete and paving material and other materials, as directed, shall be carefully removed from the truss span in a manner so as to not damage structural members to be stored. Any removed materials that are not to be stored shall be disposed of by the Contractor in a manner approved by the Engineer and as outlined in the New York State Department of Transportation Standard Specifications section 202-3.02 Disposal of Waste Materials. The parts of the truss span designated to be stored shall be dismantled, protected, and stored on site or at locations designated without damage. All stored steel members and other stored members as directed shall be adequately match-marked in order to permit re-assembly.

After the steel components designated for storage have been dismantled, dunnage shall be used under the stored truss members. The stored truss members and components shall be commercial blast cleaned to remove 100 % of the lead paint. Payment for pressure washing and abrasive cleaning will be made under Item 03573.97 M in the Plainville Road Bridge Estimate. Payment for Class A Containment System for pressure washing and abrasive cleaning will be made under Item 18570.150401 M in the Plainville Road Bridge Estimate.

The Contractor shall notify the Engineer-In -Charge (EIC) seven (7) calendar days in advance of the commercial blast cleaning operation. The Contractor is required to provide access for the Engineer to inspect all of the structural steel designated for storage. Access for the inspection shall occur after the commercial blast cleaning has been completed; but, prior to the second abrasive cleaning process required to obtain a near white surface for the application of the primer coat of the paint system. Payment for the second abrasive cleaning will be made under Shop Applied Structural Steel Paint System Item 16572.03nnnn M in the Plainville Road Bridge Estimate. A second payment for Class A Containment

System for solvent and abrasive cleaning will be made under Item 18570.150402 M in the Plainville Road Bridge Estimate.

The Contractor is cautioned that the eight-hour maximum period between the second abrasive cleaning and application of the primer coat will be strictly enforced. The protective paint coating system applied to the truss structural steel will be paid for under item 16572.03 M in the Plainville Road Bridge Estimate.

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Lead Health Safety associated with the dismantling and storage of the existing superstructure (SPAN 2) will be paid separately under the following Items in the Route 31 Bridge Estimate:

Item 18570.010001 M - Lead Health & Safety Program
Item 18570.020001 M - Lead Exposure Control Plan
Item 18570.030001 M – Medical Testing & Exposure Monitoring Sample Analysis
Item 18570.040001 M – Decontamination Facilities

Prior to the beginning of any steel removal and or disassembly operations, the paint shall be removed for a minimum distance of 100 mm on each side of the centerline of cut, bolt row, rivet row, or weld as applicable. The paint removal work shall be done in accordance with the requirements of New York State Department of Transportation Standard Specifications, Section 741 (Localized paint removal using vacuum contained methods). In cases where the contractor can clearly demonstrate through exposure monitoring that other work practices and engineering controls, under the oversight of a certified industrial hygienist, can effectively maintain actual worker exposure below the permissible exposure level, the Engineer may grant exceptions to this requirement.

The existing protective coating system on Route 31 Superstructure has been tested for asbestos. No positive test results were obtained indicating presence of asbestos.

During the disassembly and removal of Span 2, Environmental Ground Protection and Environmental Waterway Protection will be paid separately under Items 570.090001 and 570.100001 in the Route 31 Bridge Estimate.

Any parts of the truss designated for storage which are damaged during the course of the dismantling operation or during storage shall be repaired or replaced at the direction of the Engineer at the Contractors expense.

Disassembly of the existing structural steel shall be performed in accordance with the requirements of the New York State Steel Construction Manual. The Contractor shall determine the method of disassembling the structural steel. The Contractor shall submit a Disassembly Procedure for approval forty-five- (45) days prior to commencement of disassembly work. The Disassembly Procedure is subject to the approval of the New York State Canal Corporation, Deputy Chief Engineer Structures, and U.S. Coast Guard. The disassembly procedure work plan shall meet the requirements of New York State Department of Transportation Standard Specifications, Section 202-3.01, General and Safety Requirements. The work plan shall set forth all expected supports, disconnections and adjustments to steel which are to remain. If, during the course of the work it becomes necessary to support, disconnect, or adjust steel, not previously noted in the work plan, the contractor shall submit a revised work plan to the Engineer for approval.

The Erie/Barge Canal transportation system is closed from 11/15 to approximately 4/15 each season. Barges and temporary bents that restrict or block navigational traffic during the winter will be permitted at Location 1. During the navigational season (4/15 to 11/15), legal horizontal and vertical clearances for the canal will be required in addition to a plan for Canal Maintenance and Protection of Traffic. It is the

Contractor's sole responsibility to submit and obtain New York State Canal Corporation Work Permits and approved New York State Canal Corporation Maintenance and Protection of Traffic Plan.
The existing navigation light system on the truss at Location 1 shall remain operational until the replacement structure navigation lights have been put into service. When dismantling operations commence at Location 1, the existing electrical services for the River Road Motion Detector mounted on the bridge and the navigation lights shall be disconnected and meter services shall be discontinued AOBE. The navigation lights shall be carefully dismantled without damage from the truss bottom chords and delivered to the NYS Canal

Corporation Maintenance Facility at Phoenix, New York. Salvage of the junction boxes, conduits, conductors, and meter service will not be necessary.

All removed truss pieces from Location 1 shall have been "stamp-marked" at the lower down-station end at Location 1 project. The "stamp-marking system" selected by the Contractor must be such that truss piece marks will not be obliterated by the paint removal process and shall be approved by the DCES. The truss marks with descriptions shall be recorded in tabular form and cross-referenced to drawings or sketches of the truss. A copy of the mark list and accompanying drawings/sketches shall be submitted to the EIC prior to truss dismantling.

The total steel dead load camber at Location 1 shall be measured and recorded by a Licensed Land Surveyor currently registered in the State of New York. The cost of this work will be paid under Item 03202.97 M. The total steel dead load camber will be measured after the entire structural deck, wearing surface, curbs, safety walks, and bridge railing have been removed. The truss shall be supported only at the existing bearing points. Vertical elevations will be recorded at the top of each floor-beam flange located directly above the floor-beam web centerline within 50-mm of each floor-beam to truss connection. A length will be measured from the theoretical working line of the bottom chord indicated in the original 1949 shop drawings for the truss to the projected top of each floor-beam flange at the working line for each vertical elevation recorded. The total steel dead load camber shall be calculated from a theoretical datum line that intersects the working line of each truss at the end panel locations, L0 and L16. The camber shall be provided at each truss panel point and shall be recorded as the perpendicular length between the datum line and the theoretical working line of the bottom chord of each truss. This work shall be completed within an accuracy of 3-mm (+/-). The field survey and calculations shall be submitted for approval to the EIC.

All structural steel assembly connections that are disassembled prior to storage shall be completed by one of the following methods:

- Pneumatic Removal
- Exothermic Cutting Rod (Slice Rod) – Procedure shall utilize a "stand-off" pipe guide with ceramic bushing inserts. The contractor must demonstrate a proficiency at burning through the rivet shank without damaging connecting parts. The contractors procedure shall be approved by the DCES.
- Flame cutting (after paint removal) of rivet heads at the top of designated connection plates and/or shapes that are to be discarded.

METHOD OF MEASUREMENT:

The work will be measured on a lump sum basis for "Dismantling and Storing Existing Superstructure (Span 2)". Monthly estimates of the percentage completion shall be made for this work in proportion to the amount of work satisfactorily completed.

BASIS OF PAYMENT:

The lump sum bid shall include the cost of all labor, professional services, materials, storage, transportation and equipment necessary to complete the work. The lump sum bid shall include the cost of repair or replacement of any element designated to be stored that is damaged during the operation. Temporary access fill, excavation, and back filling with suitable materials to enable the Contractor to complete this work shall be included in the lump sum price bid. Specific structural steel members designated for dismantling and storage as shown in the contract plans shall be paid for under the unit price bid for this item. The cost of the stamp-marking of the designated structural steel members shall be included in the lump sum price bid for this item. The entire structural deck, wearing surface, curbs, safety walks, bridge railing, and bridge bearings for the truss span (Span 2) shall be removed and disposed of under the unit price bid for this item.