

ITEM 11564.10nn M - REPAIR OF EXISTING STRUCTURAL STEEL UNDER RED FLAG CONDITIONS

DESCRIPTION

Under this work, the Contractor shall furnish, shop fabricate, and stockpile at the site structural steel to be used for repairs to the existing steelwork under Red Flag conditions. The Contractor shall field modify the stockpiled steel to suit existing conditions and in accordance with the design drawings specific to the reported Red Flag.

MATERIALS

The requirements of paragraph 564-2 shall apply, and the following:

1. Charpy V-Notch impact testing is required for all new steel including filler plates.
2. Shop painting is not required.

CONSTRUCTION DETAILS

All structural steelwork including, but not limited to fabrication, inspection, transportation, storage and erection shall be done in accordance with the provisions of the NYSSCM and the following:

1. Shop drawings shall be prepared, approved and distributed in accordance with the provisions of the NYSSCM, except the term "D. C. E. S." shall be interpreted as "the Engineer." Shop drawings shall be prepared based on the Red Flag Steel Repair Types shown in the Contract Plans. This material shall be shop fabricated blank (without copes and holes) and shall be transported to the site for stockpiling and storage by the Contractor. The Contractor shall furnish a watertight, lockable steel and/or wood enclosure within a secured location, approved by the Engineer, to protect the material from the weather and theft. The enclosure type and size shall be submitted to the Engineer for approval. This enclosure shall become the property of the State and shall remain after the project's completion. The shop drawing process and shop fabrication shall be expedited so that the material is available for use at the site within sixty (60) days from the Contract Award date. Failure to perform shall result in penalties, as stipulated in the Contract Documents.
2. The Contractor shall immediately prepare, for the Engineer's approval, working drawings and/or sketches with Bills of Material based on the design drawings of the actual Red Flag repair condition, and the field measurements obtained by the Contractor. The Contractor's working drawings/sketches shall indicate all field modifications to the stockpiled material including, but not limited to, copes, drilled holes, overall and detailed dimensions showing the cutting and shaping of the steel. The Contractor may not begin the repair until the working drawings/sketches are stamped "Approved" or "Approved As Noted" and after receiving the Engineer's Notice to Proceed with the repair. The Contractor shall allow the Engineer two (2) working days to review the Contractor's working drawings/sketches. The time period, from receiving design drawings from the Engineer to the completion of the work shall not exceed twenty-one (21) calendar days. Failure to complete the work within this time frame shall result in penalties, as stipulated in the Contract Documents.
3. The Contractor shall submit "AS BUILT" shop drawings in accordance with the provisions of the NYSSCM. The shop drawings shall be based on the previously approved working drawings/sketches, Bills of Material, and shall be forwarded to the D. C. E. S. for record purposes, by no later than the end of the Contract.
4. Shop inspection and verification shall be in accordance with NYSSCM Section 3. Material shall be accepted based on field inspection by the EIC. Field modifications to the stockpiled material shall require Quality Control (QC) inspection performed by the Contractor and Quality Assurance (QA)

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inspection performed by the EIC. QA inspection shall include, but is not limited to, verifying the material meets dimensional checks, hole diameters/spacing, copes, cuts and that the field fabrication complies with the Contract plans and all applicable requirements, including workmanship, stipulated in the NYSSCM. Prior to installation, the QA field inspection shall verify that the fabricated steel is correct and fits the field condition. The Contractor shall designate a responsible QC field inspector to assure the material and installation is in full compliance with the Contract requirements and to discuss and resolve any related issues with the QA field inspector or the EIC.

5. Welding and the preparation of base metals shall be done in accordance with the NYSSCM. Weld procedures, including weld processes, shall be submitted to and approved by the DCES for all field and shop welds. Field and shop welding shall be performed by a Qualified Welder as per the NYSSCM. Field weld inspection shall be performed by an AWS Certified Welding Inspector (CWI) as per NYSSCM subparagraph 302.a) and shop weld inspection as per NYSSCM paragraph 302.
6. Splicing of steel material is prohibited, unless otherwise allowed by the DCES.

METHOD OF MEASUREMENT

Measurement will be made on a kilogram basis in accordance with paragraph 564-4.01 and the following:

1. For the stockpiled steel, the mass of metal of each shipping unit shall be based on the approved shop drawings.
2. For the installed steel, the mass of metal of each unit shall be based on the in-place installed steel item.
3. Payment will be made for each kilogram as follows: Ninety percent (90%) of the amount bid will be paid when the repair work is fully completed. The remaining ten percent (10%) will be paid when the Engineer obtains the "AS BUILT" Shop Drawings.

BASIS OF PAYMENT

The unit price bid shall include all labor, and equipment necessary to complete the work. The price bid for the stockpiled material shall include all costs for the material, shop fabrication, transportation to the site, stockpiling and the watertight storage enclosure. The price bid for the installation of the stockpiled material into the repair shall include all costs for the field modifications to the stockpiled material for use in the repair. Additional work items that are included in the price bid and are the Contractor's responsibility shall be in accordance with paragraph 564-5.02. No separate payment will be made for welding.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
11564.1001M	Furnishing and Stockpiling of Structural Steel	Kilogram
11564.1002M	Field Fabrication and Installation of Stockpiled Structural Steel	Kilogram