BRIDGE RAILING REPAIR

**From Milton-Highgate IM MEMB(26)

xx. DESCRIPTION. This work shall consist of installing bridge railing components at the locations indicated in the Plans and as directed by the Engineer.

The work under this Section shall be performed in accordance with these provisions and Section 525 of the Standard Specifications, with the exception that the provisions of Subsection 525.03 do not apply.

xx. MATERIALS.

(a) Railing Components. Railing components shall meet the requirements of Subsection 732.03.

The bridge railing, bridge railing posts, railing splices, and railing post connectors will be supplied by the State. All screws, bolts, nuts, and anchor bolts shall be supplied by the Contractor.

Prior to beginning the work, the Contractor shall perform in the presence of the Engineer an inventory of the existing bridge railing components to be replaced. Upon completion of the inventory, the quantity of replacement components required to complete the work will be confirmed with the Project Manager.

The required replacement components to be supplied by the State will be made available for Contractor pick-up at the VAOT Maintenance Facility located at 680 Lower Newton Road in St. Albans, VT. The Engineer will contact Agency District Transportation Administrator David Blackmore [Tel.: (802)524-5926] a minimum of two (2) weeks prior to the required railing components needing to be available for pick-up by the Contractor.

(b) Hardware. The Contractor shall furnish five (5) new ASTM A 449 22 mm (7/8″) diameter X 250 mm (10″) long anchor bolts per post with 50 mm (2″) of thread on one end. The anchor bolts shall be furnished with one (1) nut and one (1) washer per bolt.

xx. GENERAL REQUIREMENTS. Bridge railing repair shall consist of removing existing Galvanized 3 Rail Box Beam bridge railing and posts and installing replacement Galvanized 3 Rail Box Beam bridge railing and posts with new anchor bolts drilled and grouted into existing concrete curb.

Drill holes shall be 45 mm (1 ¾″) in diameter. New anchor bolts shall be grouted in with a two component adhesive mortar or epoxy approved by the Engineer. A minimum pullout strength of 134 kN (30 kips) shall be attained on the new bolts. A sample grouted bolt will be tested before materials are approved for use, and then random bolts will be field tested by the Agency to ensure this strength is being attained. The Contractor shall assume that the existing concrete curb is 21 MPa (3000 psi) concrete.

xx. METHOD OF MEASUREMENT. The quantity of Special Provision (Remove and Replace Existing Bridge Railing Post) to be measured for payment will be the number of posts replaced in the complete and accepted work.

The quantity of Special Provision (Remove and Replace Existing Bridge Railing) to be measured for payment will be the number of meters (feet) of railing repaired in the complete and accepted work, measured separately for each individual railing replaced.

xx. BASIS OF PAYMENT. The accepted quantity of Special Provision (Remove and Replace Existing Bridge Railing Post) will be paid for at the Contract unit price per each.

The accepted quantity of Special Provision (Remove and Replace Existing Bridge Railing) will be paid for at the Contract unit price per meter (linear foot).

Payment will be full compensation for removing and disposing of existing railing components to be replaced; obtaining, transporting, furnishing, handling, and placing new railing components, including splice bars and associated hardware; for all work necessary for verifying and adjusting post height and/or bolt spacing of existing posts; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

Payment will be made under:

Pay Item	Pay Unit
900.620 Special Provision (Remove and Replace Existing Bridge Railing Post)	Each
900.640 Special Provision (Remove and Replace Existing Bridge Railing)	Meter (Linear Foot)