[MICHIGAN](http://mdotcf.state.mi.us/public/design/englishroadmanual/)

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**BRIDGE RAILING, 1 TUBE, ALUMINUM, RECONSTRUCT**

OAK:KHC 1 of 2 APPR:REL:SCK:04-19-24

**a. Description.** This work consists of repairing and reconstructing portions of existing aluminum railing in accordance with the plans, the standard specifications and as specified herein.

**b. Materials.**

1. Posts. Furnish extruded aluminum tubes in accordance with *ASTM B221* alloy 6061-T6.

2. Rails. Furnish extruded aluminum tubes in accordance with *ASTM B221* alloy 6061-T6.

3. Sleeves. Furnish extruded aluminum tubes in accordance with *ASTM B221* alloy 6061-T6.

4. Screws. Furnish stainless steel screws in accordance with *ASME B18.6.4*.

5. Washers. Furnish non-metallic washers in accordance with subsection 914.13 of the Standard Specifications for Construction.

**c. Construction.** Remove and dispose of damaged existing railing components to the limits determined by the Engineer.

Field-measure the spacing and dimensions of the existing post sleeves. Shop weld in accordance with *AWS D1.2* except as modified by the contract. Fabricate new components in accordance with the plans and field measurements.

Install new railing and secure posts, sleeves, and expansion joints with screws. Ensure holes for screws are drilled and tapped in the field to the screw manufacturers recommendations.

**d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

**Pay Item Pay Unit**

Bridge Railing, 1 Tube, Alum, Reconst Pound

**Bridge Railing, 1 Tube, Alum, Reconst** will be measured by weight, excluding filler metal in welding, using the following metal weights:

1. Aluminum – 0.10 pounds per cubic inch

2. Stainless steel – 0.2833 pounds per cubic inch

Washers will not be measured and paid for separately but included in the payment for **Bridge Railing, 1 Tube, Alum, Reconst**.