

SECTION 02820 – METAL GUARDRAIL

(Follow all instructions and make all edits with “Track Changes” turned on. If there are no instructions [purple text] above a subsection, paragraph, sentence, or bullet, then include it in the Project. Delete all purple text before preparing the final document. All other modifications to this Section will require ODOT Technical Resource and State Specifications Engineer approval.)

Replace Section 02820 of the Standard Specifications except for the Section number and title with the following:

Description

02820.00 Scope - This Section includes the requirements for forming galvanized steel sheets into metal beam rail, and the manufacture of guardrail hardware.

Materials

02820.10 Metal Beam Rail - Form metal beam rail from galvanized steel. Furnish galvanized steel beam rail meeting the requirements of AASHTO M 180, Class A. Furnish zinc coating meeting the requirements of AASHTO M 180, Type II, applied after fabrication and subject to the single spot test. Backup plates are accepted with ungalvanized edges and bolt holes, provided these areas are field coated with an approved galvanizing substitute.

02820.20 Metal Guardrail and Median Barrier Posts - Furnish metal posts that are structural steel meeting the requirements of ASTM A36 and galvanized according to AASHTO M 111 (ASTM A123).

02820.30 Guardrail Hardware - Furnish all bolts, nuts, washers and other fittings for beam type guardrail that are galvanized steel meeting the requirements of AASHTO M 180.

Furnish all bolts, nuts, and washers as detailed, with nuts tapped oversize not to exceed 1/32 inch.

02820.40 Guardrail Anchor Hardware - Furnish cable and fittings for guardrail anchors according to the requirements of AASHTO M 30, Class A, for Type II cable. Galvanize all fittings according to AASHTO M 111 (ASTM A123).

For steel anchors, furnish steel tubing meeting the requirements of ASTM A500, Grade B, ASTM A501 or ASTM A618. Furnish a Soil plate meeting the requirements of ASTM A36. After fabrication galvanize tubing and plate according to AASHTO M 111 (ASTM A123).

02820.50 Acceptance of Materials - Acceptance of metal guardrail Materials is according to Section 00165.35.

