

SECTION 321717 – GUARDRAIL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification sections, apply to this section.

1.2 SUMMARY

- A. This section includes the furnishing and installation of guardrails.

1.3 REFERENCES

- A. Except as herein specified or as indicated on the Drawings, the work of this section shall comply with the following:
 - 1. MDOT:
 - a. 2012 Standard Specifications for Construction.
 - b. Standard Plans.
 - 2. AASHTO: Material Specification M-180.

1.4 SUBMITTALS

- A. Shop Drawings: For guardrails and components.
 - 1. Dimensions.
 - 2. Finishes.
 - 3. Details of construction and installation.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Guardrails, posts, offset blocks, backup elements, fittings, end shoes, reflectorized washers, nuts, bolts, and washers shall comply with the material specification of MDOT 908.
- B. Steel: Comply with AASHTO material requirements M-180.
- C. Galvanizing: Guardrails and hardware shall be Type II galvanized in accordance with the above noted references.
- D. Wood Posts: Wood posts shall have a minimum bending stress of 1000 psi.

2.2 FABRICATION

- A. Shop Bends: Guardrail with a radius of 150 feet or less shall be shop bent to the radius indicated on the Drawings.

- B. Laps: Beam elements shall be lapped in the direction of traffic.
- C. Anchorages: Guardrail anchorages shall be constructed in accordance with MDOT Standard Plan R-60-F.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install in accordance with MDOT 807.
- B. Post Spacing: Maximum post spacing shall be 6'-3".
- C. Endings:
 - 1. Endings exposed to approaching traffic shall be protected with a buffered or sloped end section if Contractor is unable to complete the specified ending at the end of the day.
 - 2. This work shall be incidental to construction of the guardrail.

3.2 CLEANING

- A. Prior to acceptance of the work of this section, thoroughly clean all installed materials and related areas in accordance with Division 01 requirements.

END OF SECTION 321717