

**SECTION 02841
TRAFFIC SIGNS****PART 1 GENERAL****1.1 REQUIREMENTS, CODES**

- A. All applicable portions of Division 1 - General Requirements shall be considered as included with this section.
- B. The following are minimum requirements and shall govern except that all Federal, Local and/or State Codes and Ordinances shall govern when their requirements are in excess hereof.

1.2 RELATED DOCUMENTS

- A. Drawings and General Provisions of Contract, including General and other Division 1 Specifications Sections, apply to this Section.

1.3 SUMMARY

- A. Supplying and Installation of sign face sheet aluminum signs and metal sign posts as locations indicated on the Contract Drawings and in accordance with these Specifications.
- B. Selectively Clear areas so designated of vegetation, dead trees and brush, and other vegetation as determined by the Engineer as necessary to create optimum sight lines..

PART 2 PRODUCTS

- A. Sheet Aluminum Sign Blanks: Sheet aluminum sign blanks shall be constructed of sheet aluminum, alloy 6061-T6 or alloy 5052-H38. Sheet aluminum sign blanks shall conform to ASTM B209. They shall be degreased and etched in accordance with the recommendations of the sheeting manufacturer or treated with a light, tightly adherent chromate conversion coating, free of any powdery residue, ranging in color from silvery iridescent to a pale yellow, conforming to ASTM B449, Class 2 (10-35 mg/sq. ft.) with 25 mg/sq. ft. as the optimum coating. The thickness shall be as specified on the plans.
- B. Metal Sign Posts: Metal signposts, and square tubular supports shall conform to the requirements as noted on plans. Galvanizing shall conform to ASTM A-176.

After fabrication of the posts and supports, including hole punching or drilling, they shall be galvanized. Steel for posts shall conform to the mechanical requirements of ASTM A499 for Grade 60 steel and to the chemical requirements of ASTM A-176 carbon steel tee rail having nominal weight of 91 pounds or greater per liner yard.

- C. Sign Mounting Bolts: Bolts used for sign mounting shall be of aluminum alloy 2024-T4. Self-locking nuts shall be of aluminum alloy 2011-T3, 2014-T4 or 2017-T4. Aluminum alloys shall conform to the requirements of ASTM B211.
- D. Reflective sheeting shall conform to CONNDOT Form 816 Article M18.09 for Type 1 enclosed lens or Type II encapsulated lens sheeting. Color requirements, reflective intensity, specular gloss, processing shrinkage, flexibility, adhesive, impact resistance, durability, general characteristics and packaging shall conform to CONNDOT Form 816 Article M.18.09

PART 3 EXECUTION

- A. Metal sign posts shall be driven or the holes augured and the backfill thoroughly tamped after the posts have been set level and plumb.

Depth of post installation shall be a minimum of 3'-0" or as directed by the Engineer.

- B. Sign Face placement and dimensions of copy, border and mounting holes shall conform to details of the Manual of Uniform Traffic Control Devices. Non-reflective copy, border and background shall be applied by the silk screen process in a manner specified by the reflective sheeting manufacturer. The silk screening of all copy, border and background on encapsulated lens reflective sheeting shall be accomplished prior to the application of the reflective sheeting to the finished aluminum sign blank. Encapsulated lens reflective sheeting shall be of the heat activated adhesive type and shall be applied in a manner specified by the reflective sheeting manufacturer.

Direct application of cutout enclosed lens and encapsulated lens reflective sheeting copy and border shall conform to the requirements specified by the reflective sheeting manufacturer. Cutout copy and border shall be applied directly to clean, dust-free reflective sheeting background panels. Borders shall be cut neatly and butt-joined at corners and panel joints. Enclosed lens reflective sheeting used for direct applied cutout copy and border shall be uniform in brightness and color.

The fabrication of aluminum sign blanks including cutting to size and shape and the punching of mounting holes shall be completed prior to metal degreasing and the application of reflective sheeting. Aluminum sign blanks shall be free of buckles, warp, dents, cockles, burrs and defects resulting from fabrication.

- C. Sign Mounting after complete fabrication of the signs indicated on the plans and in conformance with the requirements contained in the specifications, shall be on the type of support designated on the plans and after the supports have been satisfactorily installed at it proper location. The reinforcing plate shall be installed as shown on the plans. Erection of completed sign panels shall be accomplished in a manner so as not to cause twisting, bending or deforming of sign panels or scratching of the sign face. Any sign panel damaged shall be repaired or replaced at the Contractor's expense. They shall be level, correctly aligned as indicated on the plans and shall be properly fastened to the structure or supports with the necessary hardware as indicated on the plans.

END OF SECTION 02841