August 11, 2016

REVISION OF SECTIONS 614 AND 713

SIGN PANEL SHEETING

**NOTICE**

This is a standard special provision that revises or modifies CDOT’s *Standard Specifications for Road and Bridge Construction.* It has gone through a formal review and approval process and has been issued by CDOT’s Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT’s Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

**Instructions for use on CDOT construction projects:**

Use in projects having permanent signing.

Sections 614 and 713 of the Standard Specifications are hereby revised for the project as following:

Delete subsection 614.04 and replace with the following:

**614.04 Sign Panels.** Sign panel materials shall conform to Section 713 and to the details shown on the plans.

Sign panels shall be produced in accordance with the retroreflective sheeting manufacturer’s recommendations.

Layout and font design shall conform to the “Standard Highway Signs” published by FHWA. Font selection for guide sign legends shall conform to the most recent version of the “CDOT Sign Design Manual”. Sign layouts for special signs shall be in accordance with the detailed sign layouts proved in the plans or by the Engineer.

Silk screen and digital process figures shall be in accordance with the plans and series figures described in the current editions of “Standard Highway Signs”, published by the FHWA, and the “Colorado Supplement to Standard Highway Signs”.

All exposed lockbolt fastener heads on the faces of the sign panels shall be covered with material matching the background of the panel.

All sign panels shall be identified with the month and year that the sign was manufactured. The date shall be located on the lower right side of the back of the sign panel and shall be approximately ¼ inch high. The date shall be stamped or adhered onto the sign panel material for a permanent record. This work will be paid for as part of the Item.

In subsection 713.01, delete Table 713-1 and replace with the following:

**Table 713-1**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Aluminum** | | **Steel** |
| **Application** | **ASTM Designation** | **Allow No.** | **ASTM Designation** |
| Sign panels | B 4491  B 9211 | 6061-T6  5052-H36  5052-H38 | A 6532 |
| Traffic controller cabinets | B 209 | 6061-T6 | A 709  Grade 36 |
| Clip bolts | B 211 | 2024-T4 |  |
| Locknuts or steel nuts and bolts | B 211 | 2014-T4 | A 307 |
| Clips and backing angles | B 221 | 6061-T6 |  |
| 1In lieu of ASTM treatment, aluminum sign blanks shall receive a Class 2 anodized coating prior to the placement of retroreflective sheeting.  2 Steel sheets shall have a Z600 zinc coating in accordance with ASTM A 653 and a light phosphate coating. Phosphate coating of 3.5 oz./sq. ft. will be required for application with reflective sheeting. Nuts and bolts shall be galvanized or cadmium plated. | | | |

Delete subsection 713.04 and replace with the following:

**713.04** **Sign Message Materials.** The legend, border, and overlay shall be used in accordance with the sheeting manufacturer’s recommendation. Retroreflective sheeting background material shall be approved in the Department’s Approved Product List; and the retroreflective sheeting background material shall be the type as specified on the plans. At a minimum, ASTM 4956 Type IV shall be used for ground mount signs. ASTM D4956 Type XI shall be used for Class III overhead signs.

For Class III overhead signs, the legend and borders shall be ASTM D4956 Type XI sheeting.

All reflective sheeting shall be sealed at the seams and edges as recommended by the manufacturer.

Delete subsection 713.06 and replace with the following:

**713.06 (unused)**