

ORIGINATION FORM

Date: 08/30/12

Originator: Ahmad Sarshory

Contact Information: 414-4290

Specification Title: 700 HIGHWAY SIGNING.

Specification Section, Article, or Subarticle Number: 700-2.4.2 Installation.

Why does the existing language need to be changed? Further enhancements to 700-2.4.2 for the installation of cantilever overhead sign structures.

Summary of the changes: Instruct the installer to make necessary adjustments to the leveling nuts to achieve the back rake shown on the plans.

Are these changes applicable to all Department jobs? No

If not, what are the restrictions? Jobs with cantilever overhead sign structures only

Will these changes result in an increase or decrease in project costs? None

If yes, what is the estimated change in costs?

With who have you discussed these changes? Robert Robertson

What other offices will be impacted by these changes? Construction

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual? No

Is a Design Bulletin, Construction Memo, or Estimates Bulletin needed? No

Contact the State Specifications Office for assistance in completing this form.

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ANANTH PRASAD, P.E.
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M E M O R A N D U M

DATE: October 15, 2012
TO: Specification Review Distribution List
FROM: Trey Tillander, State Specifications Engineer
SUBJECT: Proposed Specification: **7000204 HIGHWAY SIGNING.**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Charles Boyd of the State Structures Design Office to instruct the installer to make necessary adjustments to the leveling nuts to achieve the back rake shown on the plans.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via e-mail at SP965TT or trey.tillander@dot.state.fl.us. Comments received after **November 12, 2012**, may not be considered. Your input is encouraged.

TT/
Attachment

HIGHWAY SIGNING.
(REV 109-1526-12)

SUBARTICLE 700-2.4.2 (Page 827) is deleted and the following substituted:

700-2.4.2 Installation: Install nuts on anchor bolts in accordance with 649-5 and 649-6 *with one exception* ~~these additional requirements at the end of step 5 one exception.~~ *For cantilever overhead sign structures, add the following to the end of step 5. A after placement of the upright and prior to installation of the truss, adjust the leveling nuts beneath the base plate to achieve the back rake shown on the Camber Diagram. If the top surface of the base plate has a slope that exceeds 1:40, use beveled washers under the top nuts.*

Use ASTM A325 bolt, nut and washer assemblies for all installations other than anchor bolts as follows. Use bolt, nut and washer assemblies that are free of rust and corrosion and that are lubricated properly as demonstrated by being able to easily hand turn the nut on the bolt thread for its entire length. Tighten nuts to the full effort of an ironworker using an ordinary spud wrench to bring the faying surfaces of the assembly into full contact which is referred to as snug tight condition. After bringing the faying surfaces of the assembly into full contact and to a snug tight condition, tighten nuts to achieve the minimum torque as specified in Table 700-1 unless the connection is an alternate splice connection of a span sign structure, in which case, tighten nuts in accordance with the turn-of-nut method of Table 460-7 of Section 460. Maintain uniform contact pressure on the faying surfaces during snugging and the subsequent final tightening process, by using a bolt tightening pattern that balances the clamping force of each bolt, as closely as possible, with the equal clamping force of a companion bolt. Within 24 hours after final tightening, the Engineer will witness a check of the minimum torque using a calibrated torque wrench for 3 bolts or a minimum of 10% of the bolts, whichever is greater, for each connection; however, do not perform this check on alternate splice connections of span sign structures.

Bolt Diameter (in.)	Minimum Torque (ft.-lbs.)
3/8	15
1/2	37
5/8	74
3/4	120
7/8	190
1	275
1 1/8	375
1 1/4	525