

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
MISCELLANEOUS METAL PRODUCTS REVISIONS

STR:REL

1 of 2

APPR:MJF:MLO:08-12-25
FHWA:APPR:08-12-25

Delete subsection 908.14, on page 9-63 of the Standard Specifications for Construction, in its entirety and replace with the following:

- A. **General.** Provide the Engineer with a Mill Test Report (MTR) from the manufacturer's records that indicate the chemical composition and physical properties of the anchor bolt material meets ASTM F1554 for the grade specified in the contract in addition to the following:

1. Heat number;
2. Yield strength;
3. Tensile strength;
4. Elongation;
5. Reduction of area;
6. Charpy V-notch (when applicable); and
7. Furnace lot numbers for heat treatment (when applicable).

Order additional bolts to replace those used for Department testing. Each anchor bolt must be provided with two washers and two nuts unless otherwise required in the contract.

Provide bolts, nuts, and washers in the size and shape shown on the plans and hot-dip galvanized in accordance with ASTM F2329/F2329M. Galvanize the exposed threaded end of anchor bolts a minimum of 20 inches.

Nuts must meet the requirements of ASTM A563/A563M, Grade DH, or ASTM A194/A914M, Grade 2H. Lubricate nuts in accordance with ASTM A563/A563M, supplementary requirement S1 and S2. Re-tap nuts after galvanizing in accordance with ASTM A563/A563M. Provide flat, circular washers meeting the requirements of ASTM F436/F436M.

- B. **Anchor Bolts for Traffic Sign Support Structures (Cantilever, Truss, and Dynamic Message Sign), CCTV Pole, Tower Lighting Unit, Light Standards, and Traffic Signal Mast Pole and Mast Arm.** Steel anchor bolts must meet the requirements of subsection 908.14.A and meet ASTM F1554 Grade 55 with supplemental requirements

S1, S3 and S4.

Bolt threads must conform to Class 2A, Unified Coarse Thread Series of ASME B1.1 before coating. After coating, the pitch and major diameter must not exceed the dimensions specified in ASTM F1554 for allowable zinc build up and corresponding between thread dimensions.

Nut threads must conform to Class 2B, Unified Coarse Thread Series of ASME B1.1 before zinc coating. Zinc coated nuts must be overlapped with the diametral allowance for the thread series listed in ASTM A563/A563M.

- C. **Anchor Bolts for Traffic Signal Strain Poles.** Steel anchor bolts must meet the requirements of subsection 908.14.A and meet ASTM F1554 Grade 105 with supplemental requirements S3 and S4.

Bolt threads must conform to Class 2A, Unified Coarse Thread Series of ASME B1.1 before coating. After coating, the pitch and major diameter must not exceed the dimensions specified in ASTM F1554 for allowable zinc build up and corresponding between thread dimensions.

Nut threads must conform to Class 2B, Unified Coarse Thread Series of ASME B1.1 before zinc coating. Zinc coated nuts must be overlapped with the diametral allowance for the thread series listed in ASTM A563/A563M.

- D. **Anchor Bolts for Other Purposes.** Steel anchor bolts must meet the requirements of subsection 908.14.A and meet ASTM F1554 Grade 36 (Grade 55 supplemental S1 may be substituted at the supplier's discretion).