**Design Standards Letter**

**Letter Number: P-2021-01**

**Letter Date: 10/28/2020**

**Effective Date: 01/01/2021**

**Section/Plan No.: 608.40, 614.11, 617.20, 703.10, 703.11, 703.12, 703.13, 703.14, 703.15, 703.16, 703.40, 703.41, 703.42, 703.43, 703.44, 703.45, 703.46, 703.80, 703.81, 703.82, 703.83, 703.84, 703.85, 703.86, 732.05, 732.10, 901.00, 901.01, 902.70, 903.03, 903.05, 903.06, 903.07, 903.08, 903.10, 903.12, 903.60**

**Subject: Revised Supplement to the 2020 Missouri Standard Plans for Highway**

**Construction.**

**TO:** All Central and District Offices

**FROM:** Sarah Kleinschmit

**DATE:**  October 28, 2020

**SUBJECT:** Engineering Policy

Standard Plans Letter No. 1, 2021

The Supplemental Revisions to the *2020 Missouri Standard Plans for Highway Construction,* effective January 1, 2021are now available on MoDOT’s website.

Questions regarding the Supplemental Revisions to the Missouri Standard Plans for Highway Construction should be directed to Rick Prosser, Central Office, Engineering Policy Services, at 573-526-8485 or myself at 573-751-7412.

**REVISIONS:**

**608.40** *(sheet 3 of 4)*. Added references to note in Plate Mounting Detail to specify “ASTM F1554 Grade 36” U-bolts or anchor bolts. Also, that the hardware “all shall be galvanized in accordance with AASHTO M 232 (ASTM A153), Class C.”.

**614.11** *(sheet 1 of 1)*. Added references to asterisk referenced note specifying “ASTM F1554, Grade 36” anchor bolts, nuts, and washers. Also added reference to require galvanization and mechanically galvanized finish to be “in accordance with AASHTO M 232 (ASTM A153), Class C”.

**617.20** *(sheet 6 of 8)*. Revised note in Bolt Through Deck Detail to say “1 1/8” dia, ASTM A307 Anchor Bolt with Hex Nut”. Updated last paragraph in General Notes to include “or an epoxy bonding agent in accordance with Sec 1039.”.

**703.10** *(sheet 3 of 3)*. Updated notes below the detail for Transverse Joint Thru Barrel, replacing words “Subsurface Drainage” with “Separation” to describe geotextile.

**703.11** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.12** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.13** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.14** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.15** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.16** *(sheet 1 of 1)*. Same as **703.10** (*sheet 3 of 3*).

**703.40** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.41** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.42** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.43** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.44** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.45** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.46** *(sheet 1 of 1)*. Same as **703.10** (*sheet 3 of 3*).

**703.80** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.81** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.82** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.83** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.84** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.85** *(sheet 3 of 3)*. Same as **703.10** (*sheet 3 of 3*).

**703.86** *(sheet 1 of 1)*. Same as **703.10** (*sheet 3 of 3*).

**732.05** *(sheet 1 of 2)*. Updated the fifth paragraph of general notes to specify “The ½” x 6” bolts and nuts shall be galvanized in accordance with AASHTO M232 (ASTM A153), class C specifications. Low carbon steel anchor bolts shall be ASTM F1554, grade 36.”.

**732.05** *(sheet 2 of 2)*. Updated the fifth paragraph of general notes to specify “The ½” x 6” bolts and nuts shall be galvanized in accordance with AASHTO M232 (ASTM A153), class C specifications. Low carbon steel anchor bolts shall be ASTM F1554, grade 36.”.

**732.10** *(sheet 1 of 3)*. Revised second paragraph of General Notes to read “All bolts unless otherwise shown shall be ASTM A307 bolts.”.

**901.00** *(sheet 3 of 4)*. Added the word “Anchor” before word “Bolts” in Plan view of each detail.

**901.00** *(sheet 4 of 4)*. Added the word “Anchor” before word “Bolts” in Plan view of Details of Screw Anchor Foundation.

**901.01** *(sheet 5 of 6)*. Added the word “Anchor” before word “Bolts” in Plan view of each detail.

**902.70** *(sheet 2 of 2)*. Replaced the word “Standard” with “Heavy” within note in Detail A Steel Plate and Anchor Base to read “Heavy Hex Nut and Washer”.

**903.03** *(sheet 1 of 16)*. Updated paragraph 14, sentence 2 of General Notes to specify “All other high strength shall be of the designation ASTM F3125 grade A325.”.

**903.05** *(sheet 1 of 2)*. Added the word “Heavy” before “Hex Nut” within note in Modified Footing in Solid Rock detail. Added new second paragraph in General Notes saying, “All anchor bolts shall be fully Galvanized High Strength Anchor Bolts.”

**903.05** *(sheet 2 of 2)*. Added the word “Heavy” before “Hex Nut” within note in Elevation View of Post Base detail.

**903.06** *(sheet 1 of 2**)*. Added new second paragraph in General Notes saying, “All Anchor Bolts Shall be Fully Galvanized High Strength Anchor Bolts.”. Added the word “Heavy” before “Hex Nut” within note in Modified Footing in Solid Rock detail.

**903.07** *(sheet 1 of 2)*. Added new second paragraph in General Notes saying, “All Anchor Bolts Shall be Fully Galvanized High Strength Anchor Bolts.”. Revised note in Modified Footing in Solid Rock to read “Heavy Hex Nut or Butt Weld”.

**903.07** *(sheet 2 of 2)*. Revised note in Detail A Elevation to read “Heavy Hex Nut”. Added missing -3” to dimension for foundation exposed above ground in detail for Double Arm Cantilever.

**903.08** *(sheet 1 of 2)*. Revised notes within Modified Footings in Solid Rock detail, adding the word “Heavy” before “Hex Nut”. Added new second paragraph in General Notes saying, “All Anchor Bolts Shall be Fully Galvanized High Strength Anchor Bolts.”.

**903.08** *(sheet 2 of 2).* Revised note within Detail A Elevation Base Detail, adding the word “Heavy” before “Hex Nut”.

**903.10** *(sheet 1 of 6)*. Updated paragraph 2 of General Notes to specify “All Anchor Bolts Shall be ASTM F1554, Grade 36.

**903.10** *(sheet 4 of 6)*. Revised note in Anchorage Detail B to read “Thread Lower Portion for Heavy Hex Nut.”.

**903.12** *(sheet 1 of 7)*. Updated Note in bottom left to specify “ASTM F1554, Grade36.” for bolts.

**903.12** *(sheet 3 of 7)*. Added the word “Heavy” before “Hex Nut” in note for Detail A Optional Anchorage.

**903.60** *(sheet 1 of 5)*. Updated paragraph 2 of General Notes to specify “All Anchor Bolts Shall be ASTM F1554, Grade36.”.

**903.60** *(sheet 3 of 5)*. Added the word “Heavy” before “Hex Nut” in note for Anchorage Detail B (optional).

SKK/RGP