

SECTION 2600 – STORM SEWERS

CITY OF BELTON, MISSOURI

STANDARD SPECIFICATIONS

The City of Belton hereby adopts Section 2600 of the Kansas City Metropolitan Chapter of APWA Construction and Material Specifications, current edition. The following additions, deletions and/or revisions are adopted as a part of Section 2600 for use within the City of Belton.

SECTION 2602 PIPE SEWER CONSTRUCTION

2602.2 Materials:

Remove Section A.2.b Cement Mortar

Remove Section A.2.d Preformed Plastic Compound

Delete Paragraph B (excluding tables) and replace with the following:

B. Aluminized Corrugated Metal Pipe (CMP)

1. Sheet steel for aluminized CMP shall conform to AASHTO M 274.
2. Pipe manufacture shall conform to AASHTO M 36.
3. Minimum wall thickness shall be 0.079 inches (14 gauge) for circular pipe 30 inches in diameter and smaller as well as for equivalent arch pipe. Larger pipe sizes shall conform to the table.
4. Joints shall be made with a bolted aluminized steel band assembly.
5. End sections shall be flared and shall have a rolled top edge.
6. All fittings shall be fabricated from the same materials as the pipe.

Delete Paragraphs D. Vitrified Clay Pipe and substitute the following as Paragraph D.

D. High Density Polyethylene (HDPE) Pipe

1. High density polyethylene pipe shall adhere to material requirements specified in MoDOT specification section 730.2.
2. High density polyethylene pipe shall adhere to construction requirements specified in MoDOT specification section 730.3.

Revise Paragraph G. Granular Bedding Material

Granular bedding material shall conform to the following gradation (CA-5):

Size	Percent Passing
------	-----------------

1 in	100
3/4 in	85-100
3/8 in	30-60
#4	0-10

Revise Section H.3 as follows:

Revise first sentence to read: All flowable fill shall be mix design type A unless approved by the City Engineer.

2602.3 Construction Details:

Revise Section A.1 as follows:

Unclassified Excavation: Unclassified excavation is defined as the removal of all material encountered regardless of its nature. All material excavated will be considered as Unclassified Excavation unless the Contract Documents specify Classified Materials.

Revise Section B.4 as follows:

Delete the first sentence and replace with the following: All pipes shall be embedded with one-half inch clean rock from six inches below to six inches around and above the pipe except in the case of RCB, one-half of the height.

Replace Section C.1 with the following:

- All backfill underneath pavement including streets, driveways, and sidewalks shall be as follows:
- a. Type A flowable fill for trenches ≤ 24 inches wide.
 - b. Type A flowable fill or dense, well-graded aggregate meeting the requirements for KDOT AB-3 or MoDOT Type 5 in wider trenches.

SECTION 2604 STRUCTURES

2604.2 Materials:

Delete Paragraph F. Brick

Add the following to Paragraph H. Metal Castings:

The following approved list of castings shall be used: Neenah R-1736, Clay and Bailey 2008, or Deeter #1315, East Jordan Iron Works (EJIW) V-1383 frame and cover, EJIW 1501-Z frame with 1501-A cover, or approved equal by the City Engineer, and shall be stamped "City of Belton - Storm Sewer."

Revise Paragraph I. Steel End Sections:

Steel end sections shall be fabricated from *aluminized* base metal as specified in Section 2602...

Revise Paragraph J. Toe Walls:

The last sentence of Paragraph J shall read: "Toe walls shall be a minimum of 8 inches thick by 24 inches deep by the width of the end section."

2604.3 Construction Details:

Add the following to 2604.3 A 1 Precast Structures:

All precast square or rectangular structures shall meet the requirements of ASTM C 913.

When installed, all gaps and openings intended to be closed, shall be sealed with grout, concrete or other approved material.

If an adjustment is required for the top slab which is less than or equal to 6 inches, the adjustment shall be made with brick and mortar with a coating of cement on both faces, if the adjustment is greater than 6 inches, the adjustment shall be made with dowelled concrete.

Dowels shall be bars embedded 6 inches into the walls. All reinforcement shall be the same size and spacing as the wall steel.

SECTION 2605 OPEN CHANNELS

2605.2 Materials

Delete Paragraph 1. Granular Filter from Section C. Filter Blanket

Delete Paragraph F. Sod and G. Seed

2605.3 Construction Details

Delete Paragraph 1. Granular Filter in Section C.

Delete Section G. Sod

SECTION 2606 MEASUREMENT AND PAYMENT

2606.1 Measurement

Delete Section L. Sodding

END OF SECTION