

Amend **Section 604 - Manholes, Inlets and Catch Basins** to read as follows:

**"SECTION 604 - INLETS AND VALVE BOXES**

**604.01 Description.** This work includes adjusting inlets and valve boxes according to the contract.

**604.02 Materials.** Concrete for structures shall be of the class specified. Concrete shall conform to Section 601 - Structural Concrete. If concrete in structures is to come in direct contact with sewage or sewage gases, the Contractor shall modify the proportioning of concrete according to Section 625 - Sewer System.

Brick for water valve manhole shall be concrete brick. Brick for water valve manhole shall conform to Subsection 704.02 - Concrete Brick.

Other materials shall conform to the following:

Asphalt Filler	702.07
Structural Backfill Material	703.20
Trench Backfill Material	703.21
Asphalt (Filler) Type C Asphalt	705.06(C)
Clay or Shale Brick	704.01
Mortar for Manholes	705.08
Reinforcing Steel	709.01
Pipe Collar for Valve Box	712.22
Cullet Materials for Utility Structures	717.03
Cullet Materials for Drainage Systems	717.04

When the location of manufacturing plants allows, the Engineer may inspect the plants periodically for compliance with specified manufacturing methods. The Engineer may get material samples to verify compliance with the contract. This may be the basis for acceptance of manufacturing lots regarding quality.

The condition of materials will be subject to inspection for acceptance before or during incorporation of materials into the work.

### **604.03 Construction Requirements.**

**(A) General.** Concrete construction shall conform to Section 503 - Concrete Structures.

Reinforcing steel work shall conform to Section 602 - Reinforcing Steel.

A certified welder shall do the shop and field welding according to Section 501 - Steel Structures.

Dip or soak the brick in water before laying the bricks. Joints shall be full mortar joints. Joints shall not be more than 0.5-inch wide. Joints in the brick work on the inside portion of the brick manhole shall be neatly struck.

**(B) Setting Frames.** Place the frames in the concrete according to the contract. Carefully tamp the concrete around the frame.

Set the frame in full mortar beds. Bring the mortar up around the bottom of the frame.

**(C) Excavation and Backfill.** Excavate and backfill according to Section 206 - Excavation and Backfill for Conduits and Structures.

**(D) Adjusting Inlets.** Adjust the inlets to the required elevations as shown on the plans and as ordered by the Engineer.

**(1) Grated Drop Inlet No. 1.** Remove the top portion of the existing concrete drop inlet. Drill holes and place #4 reinforcing steel dowels as shown on the plans. Fill the annular space with epoxy after placing the #4 dowels. Portion of drop inlet to be removed and spacing of dowels are indicated on the plans.

After placing the dowels, rebars and steel seat angles, pour Class A concrete to the required grade. When the concrete has cured sufficiently, install the new frame and grate.

All steel items shall be hot-dip galvanized after fabrication.

**(2) Grated Drop Inlet No. 2.** Remove the existing steel grate from the existing drain inlet. Do not remove the existing steel frame.

Weld new structural angles and steel bars to the existing steel seat angles as shown on the plans. Reinstall the existing steel grates to the required grade.

Apply two (2) layers of zinc coating to all new steel items and all welded areas.

**(E) Adjusting Valve Boxes.** Construct or adjust the valve boxes to the required elevations according to the contract and as ordered by the Engineer.

Set and center the 8-inch pipe collar plumb over the valve stem. Ends of the pipe collar shall have smooth, machined edges. Backfill around the gate valve and pipe collar with trench backfill by hand. Backfill 8 inches below the surface of the ground.

Upon completion of installation, clean and paint the valve box frames and covers with one coat of accepted asphaltum paint.

Adjust the existing valve boxes to the required grade using the same type of material used in its original construction. Carefully remove, clean, and paint the existing cast iron frame and cover with accepted asphaltum paint. Cut the existing pipe collar or install a new pipe collar. Reinstall the frame and cover and pour the four inch thick concrete.

**604.04 Method of Measurement.** The Engineer will measure for the adjusting of grated drop inlets and water valve box frame and cover per each.

For reconstructed structures, the depth measurement shall be the vertical measurement from the beginning of reconstruction shown in the contract to the top of the deck slab, or grating cover.

**604.05 Basis of Payment.** The Engineer will pay for the accepted adjusting of water valve boxes frame and cover at the contract unit price per each complete in place. The contract unit price shall be full compensation for furnishing and installing frames and grates, frames and covers, and rungs; adjusting or demolishing; excavating and backfilling; placing concrete; furnishing and installing reinforcing steel, brick, precast concrete, precast reinforced concrete walls, including the cone or tapered sections and cast-in-place walls vertically; furnishing materials, equipment, tools, labor and other incidentals necessary to complete the work.

The Engineer will pay for the accepted adjusting of grated drop inlets at the contract unit price per each complete in place.

The contract unit price paid for the adjusting of Grated Drop Inlet No. 1 shall be full compensation for removing and disposing of existing steel frames, grates and concrete boxes or any portions thereof; furnishing and installing new steel frames, grates, structural steel sections, concrete and reinforcing steel; furnishing materials, equipment, tools, labor and other incidentals necessary to complete the work.

The contract unit price paid for the adjusting of Grated Drop Inlet No. 2 shall be full compensation for removing and reinstalling the existing steel grates; furnishing and installing new steel frames, structural steel sections and reinforcing steel; furnishing materials, equipment, tools, labor and other incidentals necessary to complete the work.

The Engineer will make payment under:

<b>Pay Item</b>	<b>Pay Unit</b>
Adjusting Grated Drop Inlet No. _____	Each
Adjusting Water Valve Box Frame and Cover	Each"

**END OF SECTION**