

**ITEM 010162**

**Item 0101621 - SEWER MANHOLE FRAME & COVER**

**Item 0101622 - STORM DRAIN MANHOLE FRAME & COVER**

**DESCRIPTION**

The work and materials required by this item consists of furnishing and setting in-place, new cast-iron manhole frames and covers, complete, on new or existing manhole structures in accordance with the drawings and specifications and as directed by the engineer.

**REFERENCED ITEMS**

None

**REQUIRED SUBMITTALS**

Shop Drawings:

Submit 5 copies of shop drawings for manhole frames and covers in accordance with the contract general requirements.

**MATERIALS**

Cast-iron manhole frames and covers shall conform to the types and styles as specified and shown on the drawings. Drawings shall be submitted to the Engineer for approval before fabrication. Gray iron castings shall conform to the requirements of AASHTO designation: M-105-96, Class 25, as amended to date. Iron castings shall be true to pattern in form and dimensions; free from pouring faults, sponginess, cracks, blowholes and other defects in positions affecting the strength and value for the service intended. The finished castings shall be painted with a bituminous material to preserve a smooth, finished coating, tough and tenacious when cold and not tacky or with tendency to scale off under reasonable temperature changes.

Cast-iron manhole frames and covers shall be provided for all sanitary manhole structures. All manhole covers shall have the work "SEWER" or "STORM DRAIN" cast thereon, and shall have two (2) 1/2" diameter holes for venting.

**CONSTRUCTION METHODS**

Cast-iron manhole frames with covers shall be installed on the manholes and shall be well-bedded in cement-mortar and accurately set-in to the grades indicated or as directed; the manhole frames shall be encased with cement-mortar around the entire perimeter of the frames.

**METHOD OF MEASUREMENTS**

Manhole frames and covers will be measured for payment by the number of each unit completed and accepted.

**BASIS FOR PAYMENT**

Manhole frame and cover will be paid for at the contract unit price each for "SEWER MANHOLE FRAME AND COVER" OR "STORM DRAIN MANHOLE FRAME AND COVER", completed and accepted, which price shall include all materials, equipment, tools and labor incidental thereto.

<b><u>PAY ITEM</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>PAY UNIT</u></b>
0101621	Sewer Manhole Frame & Cover	EA
0101622	Storm Drain Manhole Frame & Cover	EA