

## SECTION 62

### DROP INLETS

#### 62.1 DESCRIPTION

##### A. General

This work consists of furnishing materials and the construction of drop inlets. See also Detailed Drawings.

##### B. Related Work

Section 54	Pipe Culverts
Section 55	Concrete Masonry
Section 56	Concrete for Incidental Construction (Class M)
Section 57	Reinforcement for Concrete Masonry
Section 63	Storm Sewer Manholes
Section 100	Portland Cement
Section 101	Air-Entraining Admixtures
Section 102	Chemical Admixtures for Concrete
Section 104	Water for Use in Portland Cement Concrete
Section 105	Fine Aggregate for Use in Portland Cement Concrete
Section 106	Masonry Mortar Sand and Epoxy Resin Mortar Sand
Section 107	Coarse Aggregate for Use in Portland Cement Concrete
Section 108	Concrete Curing Materials
Section 113	Preformed Expansion Joint Filler for Concrete
Section 114	Concrete Joint Sealer
Section 120	Reinforced Concrete Pipe
Section 121	Corrugated Metal Pipe
Section 123	Reinforcement

#### 62.2 MATERIALS

- A. Concrete shall meet the requirements of Section 55.
- B. Castings - Frames and gratings shall consist of approved gray iron castings meeting the requirements of AASHTO M105, Class 30, for material and to the detailed plan drawings for dimensions and weights. Gratings shall fit the frames with which they are to be used. Inaccuracies of bearing shall be corrected by machining or grinding before use or replaced with new assemblies.
- C. Steel reinforcement shall conform to the requirements of Section 123. All reinforcing steel used in the construction of drop inlets shall be epoxy coated.

- D. Mortar shall consist of one (1) part Portland Cement and two (2) parts mortar sand conforming to Sections 100 and 106 respectively.
- E. Curing compound shall conform to the requirements of Section 108.

### 62.3 CONSTRUCTION REQUIREMENTS

Type "E" inlets shall be cast in-place and precasting of Type E inlets is not permitted. Special Type "B" and Type "B" inlets maybe precast with prior authorization of the Engineer. A requirement to precasting Special Type "B" and Type "B" inlets will be the submission of precasting details (shop drawings) and reinforcement inspections by the Engineer prior to placement of concrete.

Concrete for drop inlets shall be proportioned, mixed, hauled, and placed in accordance with Section 55.

When the foundation for a drop inlet is in new embankment, the embankment shall be constructed to an elevation at least one (1) foot above the footing before the foundation for the drop inlet is prepared. The foundation shall be compacted to the satisfaction of the Engineer.

The foundation excavated for drop inlets shall be thoroughly moistened immediately prior to the placing of the concrete.

Epoxy coated steel reinforcement shall be placed in accordance with Section 57.

Castings shall be set in full mortar beds or secured as shown on the plans. Castings shall be set accurately to the correct elevation so subsequent adjustment will not be necessary.

Inlet and outlet pipe connections shall be of the same size and kind and shall meet the same requirements as the pipe they connect. Unless otherwise permitted by the Engineer, pipe sections shall be flush on the inside of the structure wall and project outside sufficiently for proper connection with the next pipe section. Masonry shall fit neatly and tightly around the pipe.

The finished surface of the concrete shall present a neat and smooth appearance. Concrete shall be protected and cured in accordance with Sections 55, except the minimum curing time before removing forms may be reduced to seventy-two (72) hours. The other provisions regarding curing time shall be maintained.

Upon completion and curing of the unit, the sheeting, bracing, forms, and falsework shall be removed and the excavation backfilled. The unit shall not be backfilled until the completion of the 72 hour curing period, or until the concrete reaches a minimum compressive strength of 3000 psi. Backfill shall be placed in layers not exceeding six (6) inches thick and compacted to the same degree as specified for the adjacent

embankment. Installations shall be finished and left in a neat appearing condition satisfactory to the Engineer.

Pipe culverts and storm drains (storm sewers) shall be tested in accordance with the provisions contained in Section 54 – Pipe Culverts.

#### **62.4 METHOD OF MEASUREMENT**

As provided in the contract, drop inlets will be measured on a per each basis. The “gutter throat” for Type “E” Inlets will be measured as curb and gutter.

#### **62.5 BASIS OF PAYMENT**

When payment for drop inlets is made on a per each basis, payment will be full compensation for furnishing cast-iron frames and gratings, concrete, reinforcing steel, labor, equipment, and incidentals necessary. The “gutter throat” for Type “E” Inlets will be paid for as curb and gutter.

**END OF SECTION**