

**ITEM 605.21015025 - PRE-CAST CONCRETE HEADWALLS FOR SIX (6) INCH LATERAL OUTLET PIPES**

**1. DESCRIPTION:**

- 1.01 Furnish and install pre-cast concrete headwalls at lateral outlet pipes where shown in the Contract Documents.

**2. MATERIALS:**

**2.01 Pre-Cast Headwall:**

- A. Notify the Engineer of the name and location of the pre-cast headwall fabricator at least 30 days before the start of production. Supply pre-cast headwalls meeting the requirements of §740-03, except as noted herein.
- B. Use the dimensions shown on Page 2 of this specification. Proposed changes to these dimensions, other than minor changes approved by the Engineer, require submission of three (3) complete sets of working drawings to the Engineer for review and approval.
- C. Mark the name or trademark of the manufacturer, the date of manufacture, and the unit identification number on the units with permanent waterproof paint.

- 2.02 **Rodent Screen:** Use screens #2 or #3 welded wire mesh, 16 gauge or heavier, made of Type 304 stainless steel wire or carbon steel wire, hot dipped galvanized in accordance with §719-01. A manufacturer's certification to these requirements will serve as the evidence of acceptability.

- 2.03 **Steel Bars:** Use ½ inch diameter, two (2) foot long deformed, or plain billet-steel bar meeting the requirements of ASTM A615 (such that it will fit in holes in head wall). The steel bar shall be either hot dipped galvanized in accordance with ASTM A123 or epoxy coated in accordance with 709-04. A manufacturer's certification to these requirements will serve as the evidence of acceptability.

**3. CONSTRUCTION DETAILS:**

- 3.01 Install each headwall with a rodent screen and two (2) steel bars as specified. Install headwalls flush with the finished slope and orient to allow the headwall apron to drain. Extend outlet pipes into the headwall fitting until flush with the installed rodent screen. Install a steel bar in each of the two (2) holes, driven to a minimum of 5/8 inch and a maximum of two (2) inches below the top surface of the headwall.

**4. METHOD OF MEASUREMENT:**

- 4.01 Headwalls will be measured by the number of units supplied and installed according to the contract documents.

**5. BASIS OF PAYMENT:**

- 5.01 Include the cost of all labor, materials, and equipment required to fabricate and install the headwalls in the unit price bid per headwall. Headwalls damaged during construction shall be replaced at the Contractor's expense.