SECTION 916 -- CATCH BASINS, MANHOLES, INLETS, AND JUNCTION BOXES

916.01 -- Description

The Contractor shall construct catch basins, manholes, inlets, junction boxes, and similar concrete structures as prescribed in the plans.

916.02 -- Material Requirements

1. All materials shall conform to the requirements in Table 916.01.

Table 916.01

Material Requirements	
Applicable Materials	Section
Concrete Risers and Tops	1037
Portland Cement Concrete	1002
Reinforcing Steel	1020, 1022, 1023
Structural Steel	1045
Steel Castings	1050
Gray Iron Castings	1051
Paints and Paint Materials	1077

2. Concrete shall be Class 47B-20.

916.03 -- Construction Methods

- 1. The Contractor shall excavate to the dimensions shown in the plans.
- 2. The Contractor shall backfill as prescribed in Section 702 for culverts.

3. Reinforcing steel shall be handled and placed in accordance with the requirements of Section 707.

4. Concrete construction shall be performed in accordance with the requirements of Section 704.

5. The foundation excavation shall be as dry as practicable before concrete is placed.

6. a. When footings can be placed on the dry excavation without the use of cribs or cofferdams, back forms may be omitted when the soil will provide a smooth, plumb surface.

b. Concrete placed outside the dimensions shown in the plans will be at no additional cost to the Department.

7. a. Structural steel and miscellaneous metals shall be fabricated and placed as provided in Section 708.

b. Castings shall be made in conformance with AWS Standard Specifications.

c. All castings shall be set on full mortar beds or otherwise secured as shown in the plans. They shall be set accurately to the correct elevation so that subsequent adjustments will not be necessary.

8. Structural steel shall be painted in accordance with the requirements of Section 709.

916.04 -- Method of Measurement

1. Manholes are measured by the each.

2. Concrete for catch basins, inlets, and junction boxes is measured as prescribed in Section 704.

3. Reinforcement for catch basins, inlets, and junction boxes is measured as prescribed in Section 707.

4. Structural steel and miscellaneous metals are measured by the kilogram and are included in the pay item "Structural Steel".

5. a. "Cast Iron _____" and "Castings _____" are measured by the kilogram.

b. The mass of castings shall be computed by the Department from dimensions shown in the plans with an addition of 3 percent for fillets and overruns.

916.05 -- Basis of Payment

1.

Pay ItemPay UnitManhole _____Each (ea)Concrete for _____Cubic Meter (m³)Reinforcing Steel for _____Kilogram (kg)Structural SteelKilogram (kg)Cast Iron _____Kilogram (kg)CastingsKilogram (kg)

2. Excavation for catch basins, manholes, inlets, and junction boxes is subsidiary to the appropriate structure.

3. Concrete and reinforcing steel are subsidiary to "Manhole _____".

4. Concrete, except that used in the construction of manholes, shall be paid for in accordance with the provisions of Section 704.

5. Reinforcement, except that used in the construction of manholes, shall be paid for in accordance with the provisions of Section 707.

6. The depth of any manhole, except a precast manhole, may be increased or decreased from the depth indicated in the plans by not more than 300 mm without any adjustment in compensation. When the depth of a manhole is increased or decreased more than 300 mm, the change in quantities and the adjustment in prices, when necessary to reflect the change in design, shall be recorded in a supplemental agreement.

7. Payment is full compensation for all work prescribed in this Section.