Notes:

1. All reinforcing bars are #5, placed 1 1/2", minimum from face of concrete.
2. In floors bars to be 6" centers each way. In walls horizontal bars to be on 6" centers and vertical bars to be on 12" centers.
3. All square corners on precast cover have 1/2" x 45° chamfer.
4. Bolt grate frame to inlet; alternate fastening methods will be allowed with the approval of the CO.
5. See Sheet 2 of 2 (Detail 604-02) for metal frame and grating.

Inlet shown in cut location. In fill locations, inlet to be similar except pipe outlet is on opposite side.

### INLET, TYPE 4D

**SECTION A-A**

**SECTION B-B**

**ISOMETRIC VIEW**
**VIEW B**

**GRATE FRAME**
- 2 1/2\* \(\times\) 1/8\* \(\times\) 4 1/2\* (Two required)
- 4\* \(\times\) 3\* \(\times\) 1/8\* \(\times\) 3\* - 10 1/2\* (Two required)

**GRATE**
- 3 1/2\* \(\times\) 1/8\* \(\times\) 4\* - 4\* Bar (11 Req'd)
- 1/8\* \(\times\) 2\* - 4 1/4\* Steel rods
- 1/8\* \(\times\) 2\* - 1/8\* Spacers (20 Req'd)
- Two 1/8\* \(\times\) 2\* - 1/4\* Bar (16 Req'd)

**METAL SPACERS**
- Alternate 1/8\* Dia.

**Notes:**
1. Alternate spaces include 1/8\* dia. holes instead of the slot shown, or 2 pieces of 1/8\* galvanized iron pipe.
2. Two 1/8\* Dia. \(\times\) 2\* - 1/4\* steel rods, two nuts each end rods threaded 2\* \(\times\) - 1/4\* each end.
3. In place of rods and nuts, bars may be welded together using spacers with 2 extra 1/8\* outside spacers added to each end.
4. Galvanize all metal parts for frame and grating after fabrication.
5. Frame and grating are steel.

**LEGEND**
- Weld both sides
- Fillet lap weld

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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
EASTERN REGIONAL DIVISION
U.S. CUSTOMARY DETAIL

INLET, TYPE 4D
Sheet 2 of 2

E604-02