**Description:**

Stop Angle

**Hinge Note:**

Orient the Access Hatch so that the hinges are located down-grade.

**Access Hatch Assembly**

- 1 1⁄2" Ø Pipe Grab Rail
- 1" Ø Ladder Brace
- 1 1⁄2" Ø Hinge Bolt, Nut & Washer

**Hinge Detail**

- 1 1⁄2" Ø Hinge Bolt
- 1" Ø Hinge Bolts, Nuts & Washers

**Hinge Bar Detail**

- 1 1⁄2" Ø Hinge Bolt
- 1" Ø Hinge Bars

**Hatch Lock Bar Detail**

- 1 1⁄2" Ø Hatch Lock Bar
- 1 1⁄2" Ø Hatch Handle Bar

**Box Lock Bar Detail**

- 1 1⁄2" Ø Box Lock Bar

**Notes:**

1. All Structural Steel material in Access Hatch Assemblies shall conform to ASTM A709 Grade 36.
2. 1 1⁄2" Ø Pipe Grab Rail shall be in accordance with ASTM A53 Grade B for standard weight pipe (Schedule 40).
3. 1 1⁄2" Ø Hatch Handle Bar, Hitch Pin, and 1" Ø Ladder Brace shall be in accordance with ASTM A36.
4. All bolts shall conform to ASTM A307 or A449. All nuts shall conform to ASTM A563 and all washers shall conform to ASTM F-436.
5. All exposed edges of plates and openings shall be ground smooth.
6. Place Ladder Brace near the End Bents exclusively and only when the height is reasonable for access by a Ladder.
7. See Framing Plan sheets for locations of Access Hatch Openings.
8. Coat structural steel in accordance with Specification Section 560.
9. Include the cost of the Access Hatch Assembly and incidental items in the cost of the Steel Box Girders. No separate payment will be made for coating structural steel.