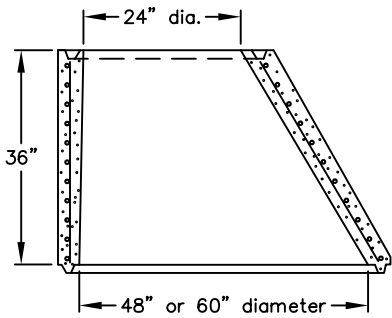
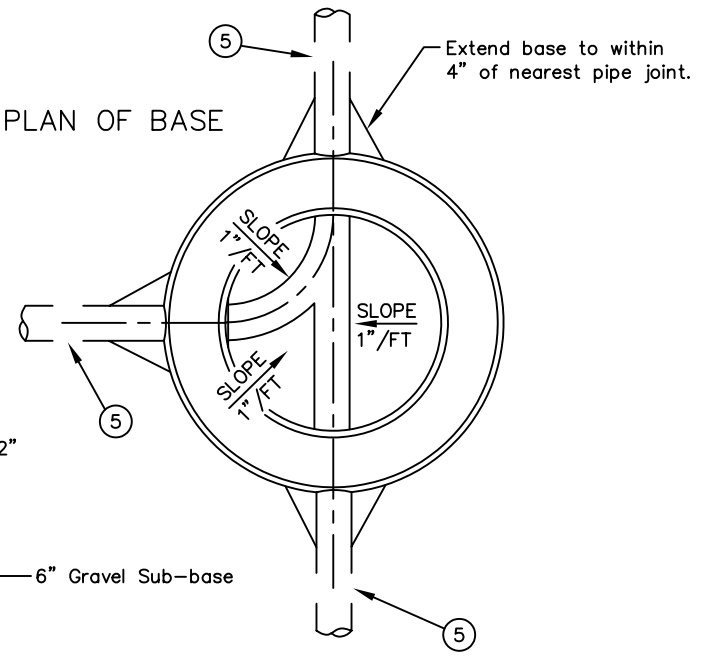


TYPICAL SECTION



48" x 24" & 60" x 24" ECCENTRIC CONE



PLAN OF BASE

**CONSTRUCTION NOTES:**

- ① Install manhole frame & cover per STD-112-L and STD-409-L.
- ② Construct concrete collar 12"x 6".
- ③ Install 3" grade ring where required.
- ④ Install 6" grade ring.
- ⑤ 6" Rubber couplings outside manhole base.
- ⑥ Install steps per STD-404-L

**GENERAL NOTES:**

- 1. For drop manhole see drawing STD-403-L.
- 2. The difference in elevation at each end of the invert of the manhole channel shall be 0.20 feet. Shelf slope shown is minimum.
- 3. For new manhole installations, lay new sewer pipe through manhole and cut out pipe for channel after base is poured.
- 4. All connections to existing manholes shall be core drilled and water tight when completed. Approved method for pipe to manhole connections: Use couplings with elastomeric gasket seals. Cement-grout into manhole walls. Insert pipe through coupling.
- 5. 60" Manhole for depth of 15' or greater.

CITY OF NEWPORT BEACH  
PUBLIC WORKS DEPARTMENT

**STANDARD MANHOLE**

APPROVED:

RCE NO. 36106

PUBLIC WORKS DIRECTOR

Drawn: M. Elias

Scale: N.T.S.

Date: Jan. 2004

F:\USERS\PBW\Shared\CAD\_STD\STD\_Details\2003\_Std\STD Sewer

DRAWING NO.

**STD-401-L**