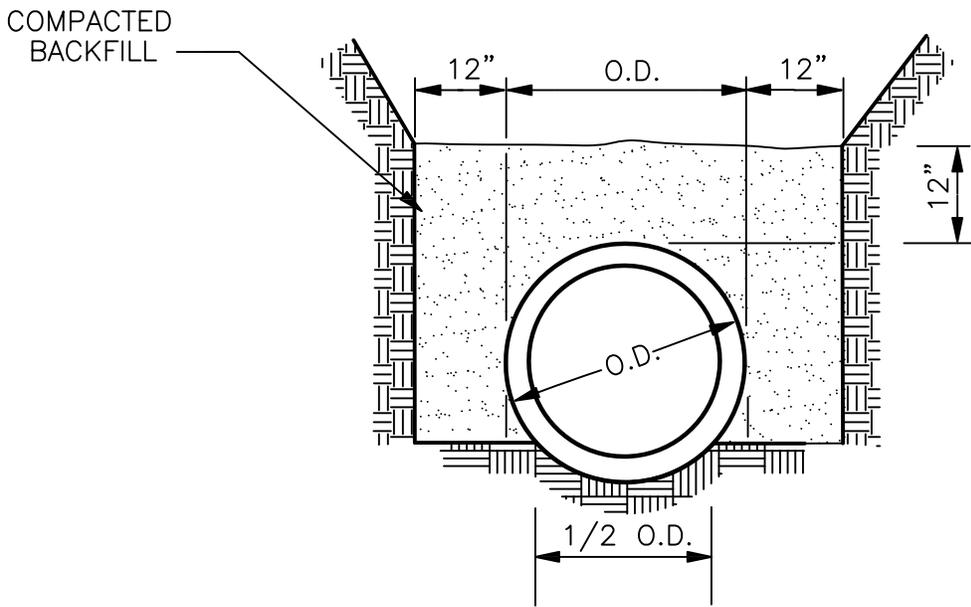


GRANULAR MATERIAL BEDDING



EARTH FOUNDATION

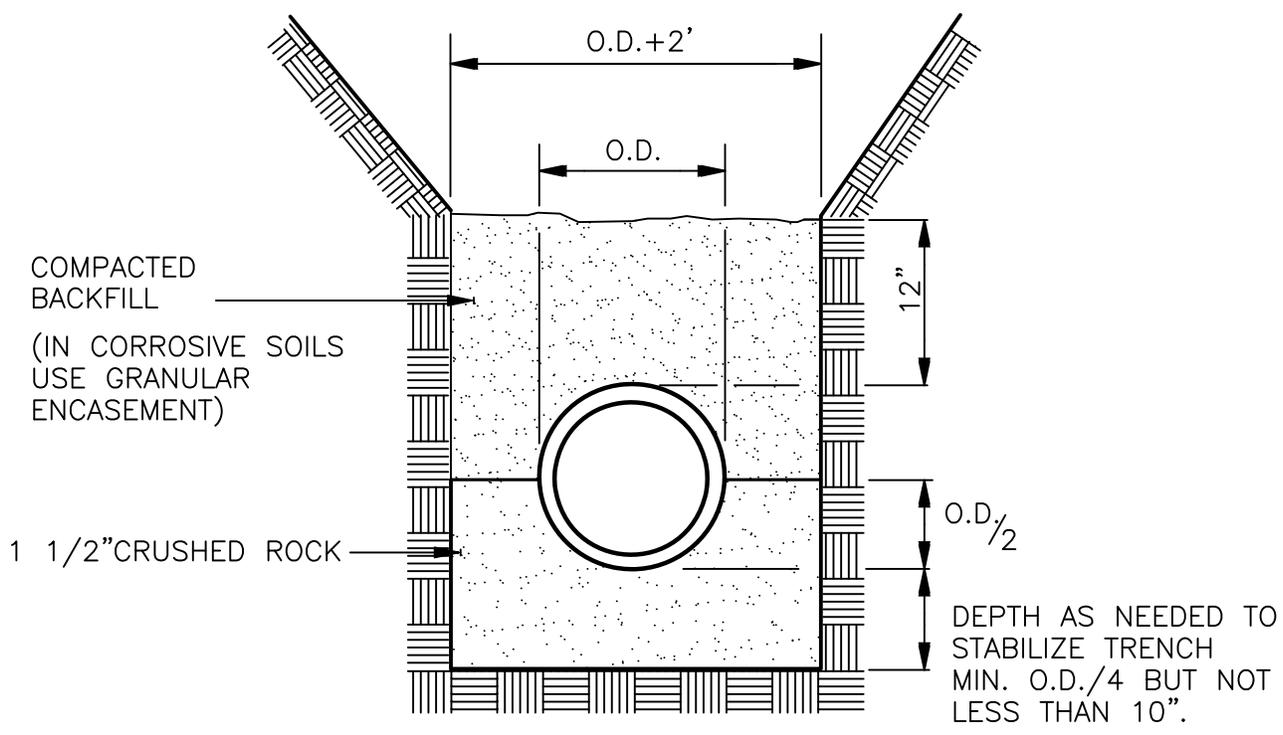
PVC PIPE INSTALLATION

5/22/06



STANDARD DRAWING
NO.

101B



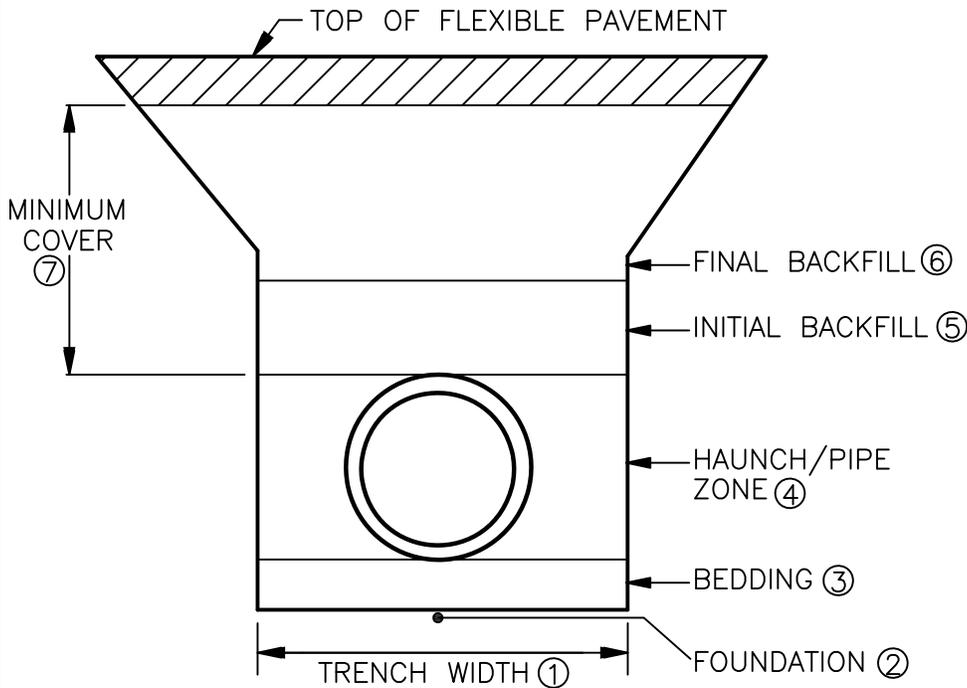
**SPECIAL FOUNDATION FOR
STABILIZING OR DEWATERING OF TRENCH**

5/22/06



STANDARD DRAWING
NO.
105A

HDPE STORM SEWER PIPE INSTALLATION



NOMINAL PIPE DIA.	TRENCH WIDTH
12"	30"
15"	35"
18"	40"
24"	47"
30"	57"
36"	65"
42"	72"
48"	80"
60"	87"

- ① **MINIMUM TRENCH WIDTH:** Minimum trench width shall be $1.25 \cdot OD + 12"$ or a minimum of 16" plus the outside diameter, whatever is greater. See table.
- ② **FOUNDATION:** Areas of unstable trench bottom shall be excavated to a depth determined by the Engineer and replaced with suitable foundation material to meet the requirements of Note 8 below.
- ③ **BEDDING:** Bedding thickness shall be a minimum of 4" for pipe diameters through 24 inches. Bedding thickness shall be 6" for diameters larger than 24 inches. The material shall meet the requirements of Note 8 below.
- ④ **HAUNCHING:** This material is placed and compacted evenly on both sides of the pipe, from the top of the bedding elevation to the top of the pipe. The haunch/pipe zone material shall meet the requirements of Note 8 below.
- ⑤ **INITIAL BACKFILL:** Initial backfill is from the top of the haunch/pipe zone elevation to 6 inches above the top of the pipe. For traffic areas, initial backfill material shall meet the requirements of note 8 below unless roadway embankment requirements supercede.
- ⑥ **FINAL BACKFILL:** For traffic applications, final backfill material and compaction efforts shall be consistent with the Engineer's parameters for the sub grade of the pavement cross-section which is 95% of Standard Proctor Density from the encasement zone to 3 feet below the surface and 100% of Standard Proctor Density in the upper 3 feet.
- ⑦ **MINIMUM COVER:** Minimum cover shall be 18" for pipes 12"–42" in diameter and 24" for pipes 48"–60" in diameter for H-25 loadings measured from the bottom of the flexible pavement or top of rigid pavement. Temporary ramping with Class 5 may be needed during construction to maintain cover depths for construction vehicles.
- ⑧ **FOUNDATION, BEDDING, HAUNCHING, AND INITIAL BACKFILL:** Material meeting and installed per ASTM D2321 Class I, II, or III as approved by the Engineer.

2/25/10



STANDARD DRAWING
NO.
106