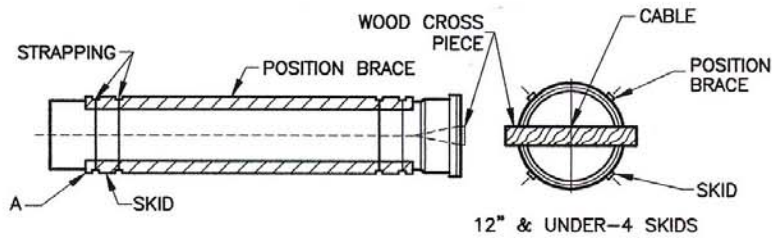


DETAIL-PVC PIPE CASING SKIDS



CASINGS—PRESSURE AND NON—PRESSURE PIPE
 WHEN PVC SEWER PIPE IS INSTALLED UNDER HIGHWAYS, RUNWAYS OR RAILWAYS, CASINGS MAY BE REQUIRED FOR THE FOLLOWING REASONS:

- TO PREVENT DAMAGE TO STRUCTURES CAUSED BY SOIL EROSION OR SETTLEMENT IN THE PIPE INSTALLATION EFFECTED BY LINE FAILURE OR LEAKAGE.
 - TO PERMIT ECONOMICAL PIPE REMOVAL AND REPLACEMENT IN THE FUTURE.
 - TO ACCOMMODATE REGULATIONS OR REQUIREMENTS IMPOSED BY PUBLIC OR PRIVATE OWNERS OF PROPERTY IN WHICH THE PIPE IS INSTALLED.
 - TO PERMIT BORING RATHER THAN EXCAVATION WHERE OPEN EXCAVATION WOULD BE IMPOSSIBLE OR PROHIBITIVELY EXPENSIVE.
- WHEN PVC PIPE IS INSTALLED IN CASINGS, SKIDS MUST BE USED TO PREVENT DAMAGE TO PIPE AND BELL JOINTS DURING INSTALLATION AND TO PROVIDE PROPER LONG-TERM LINE SUPPORT. PVC PIPE IN CASINGS SHOULD NOT REST ON BELLS. SKIDS SHOULD PROPERLY POSITION THE PVC PIPE IN THE CASING. TOP DETAIL SHOWS A TYPICAL SKID ARRANGEMENT ON PVC PIPE.

SKIDS MAY EITHER EXTEND FOR THE FULL LENGTH OF PIPE, WITH THE EXCEPTION OF THE BELL AND SPIGOT PORTION REQUIRED FOR ASSEMBLY, OR MAY BE SPACED AT INTERVALS. SKIDS MUST PROVIDE SUFFICIENT HEIGHT TO PERMIT CLEARANCE BETWEEN BELL JOINT AND CASING WALL. SKIDS SHOULD BE FASTENED SECURELY TO PIPE WITH STAINLESS STEEL, STRAPPING, CABLES, OR CLAMPS.

PIPE MAY BE INSTALLED IN THE CASING USING:

- WINCH DRAWN CABLE
- JACKING

IN BOTH METHODS CARE MUST BE EXERCISED TO AVOID DAMAGE TO PIPE OR BELL JOINTS. USE OF LUBRICANT (FLAX SOAP OR DRILLING MUD) BETWEEN SKIDS AND CASING CAN EASE INSTALLATION.

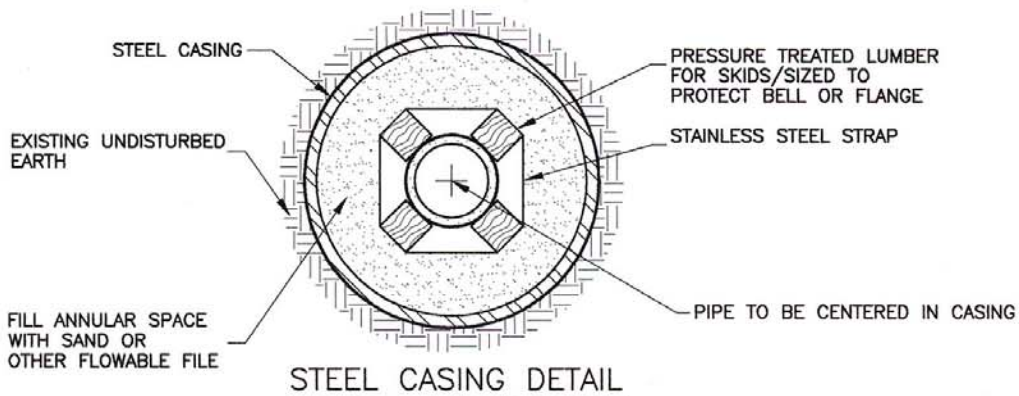
CAUTION: DO NOT USE PETROLEUM PRODUCTS (eg. OIL OR GREASE).

PROLONGED EXPOSURE TO THESE PRODUCTS CAN EFFECT DAMAGE TO SOME ELASTOMERIC GASKETS.
 UPON COMPLETION OF PIPE INSERTION, BACKFILLING IN ACCORDANCE WITH DESIGN REQUIREMENTS CAN BE ACCOMPLISHED.

NOTE: WOODEN SKIDS SHALL BE TREATED WITH WOOD PRESERVATIVE. DURING BACKFILL, CARE MUST BE EXERCISED TO PREVENT FLOATING THE PVC PIPE OUT OF PROPER POSITION. DO NOT USE WEDGES TO LOCK PIPE INTO POSITION DURING BACKFILL OPERATIONS. WHEN PRESSURE GROUTING IS USED FOR BACKFILLING, EXERCISE CAUTION THAT EXCESS GROUT PRESSURE DOES NOT EFFECT PIPE DISTORTION OR COLLAPSE.

TABLE OF CASING SIZES

NOMINAL PIPE SIZE (DIAMETER IN INCHES)	CASING SIZE (INSIDE DIAMETER)		MAXIMUM SKID SUPPORT SPACING	
	in.	mm.	ft.	m.
4,6	10	254	4.7	1.4
8	12	305	6.3	1.9
10	14-16	356-406	7.4	2.3
12	16-18	406-457	8.5	2.6
15	18-20	457-508	9.6	2.9
18	22-24	559-610	11.0	3.4



STEEL CASING DETAIL

STANDARD DETAIL

BORE CROSSING

DETAIL