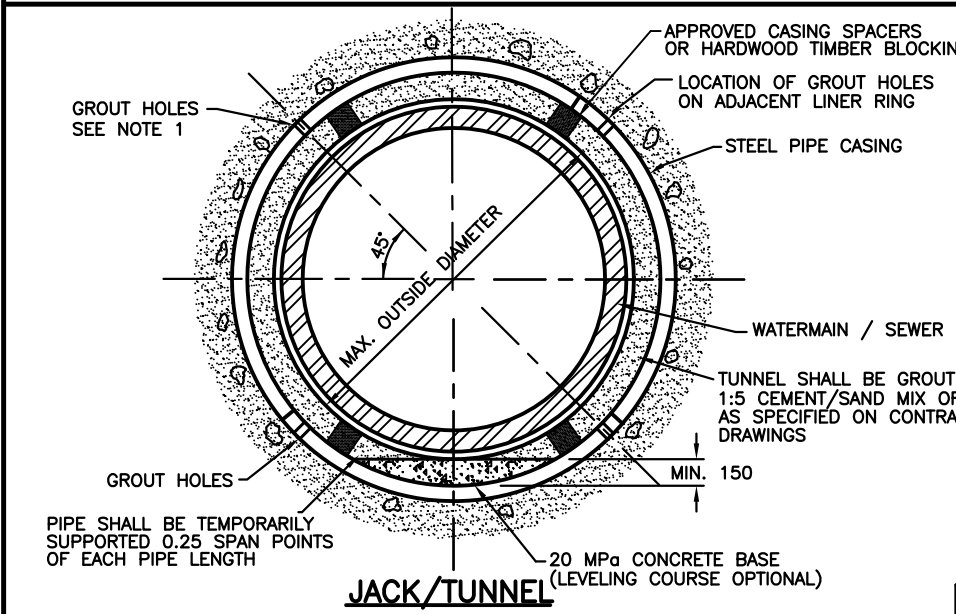


TUNNELING

NOTES

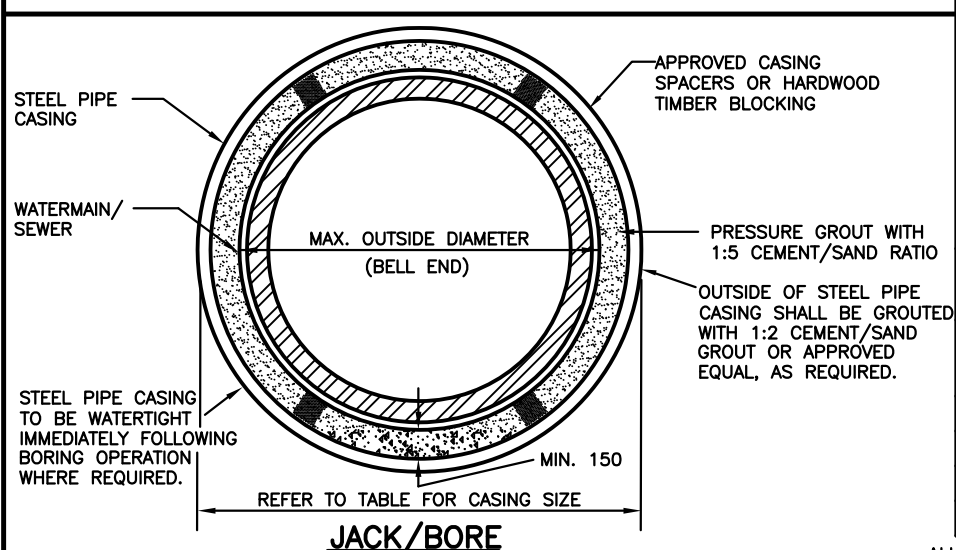
1. GROUT SHALL BE INJECTED INTO THE LOWER GROUT HOLE UNTIL GROUT EMERGES FROM THE UPPER HOLE.
2. OUTSIDE OF LINER PLATE SHALL BE GROUTED TO RESISTANCE WITH 1:2 CEMENT / SAND GROUT OR APPROVED EQUAL AT THE END OF EACH WORKING DAY, AS REQUIRED.
3. GROUT HOLES SHALL BE SECURELY PLUGGED AFTER GROUT INJECTION.
4. APPROVED CASING SPACERS SHALL BE USED AND INSTALLED AS PER THE MANUFACTURERS RECOMMENDED PROCEDURE.
5. LINER TO BE MADE WATERTIGHT AT THE END OF EACH WORKING DAY.



JACK/TUNNEL

NOTES

1. GROUT SHALL BE INJECTED INTO THE LOWER GROUT HOLE UNTIL GROUT EMERGES FROM THE UPPER HOLE.
2. OUTSIDE OF LINER PLATE SHALL BE GROUTED TO RESISTANCE WITH APPROVED GROUT AT THE END OF EACH WORKING DAY, AS REQUIRED.
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JACK/BORE

GENERAL NOTES

1. REFER TO "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS" FOR MINIMUM CASING PIPE SIZES FOR CONFINED SPACE ENTRY.
2. STEEL CASING PIPE TO CONFORM TO REQUIREMENTS OF GRADE 2 STEEL AS SPECIFIED IN ASTM STANDARD A252. PIPE ENDS SHALL BE BEVEL EDGED ON THE OUTSIDE TO AN ANGLE OF 30 DEGREES FOR BUTT WELD SPLICING.
3. BLOCKING OR CASING SPACERS SHALL BE SIZED TO PREVENT FLOATING.

SMOOTH WALL STEEL PIPE FOR DEPTH UP TO 10 m

PIPE DIAMETER	MINIMUM CASING SIZE SEE NOTE 1	MIN. CASING THICKNESS	
		UNDER ROADWAY	UNDER RAILWAY
150 mm	500 mm	6.350 mm	7.137 mm
200 mm	600 mm	9.525 mm	8.737 mm
300 mm	750 mm	9.525 mm	10.312 mm
400 mm	900 mm	12.700 mm	11.913 mm

ALL DIMENSIONS IN MILLIMETRES EXCEPT WHERE NOTED.



WORKS DEPARTMENT

PIPE CASING

DWG. DATE: 1978 03
 REVISION NO.: 8
 REV. DATE: 2013 04
 SCALE: N.T.S.

S-200.080