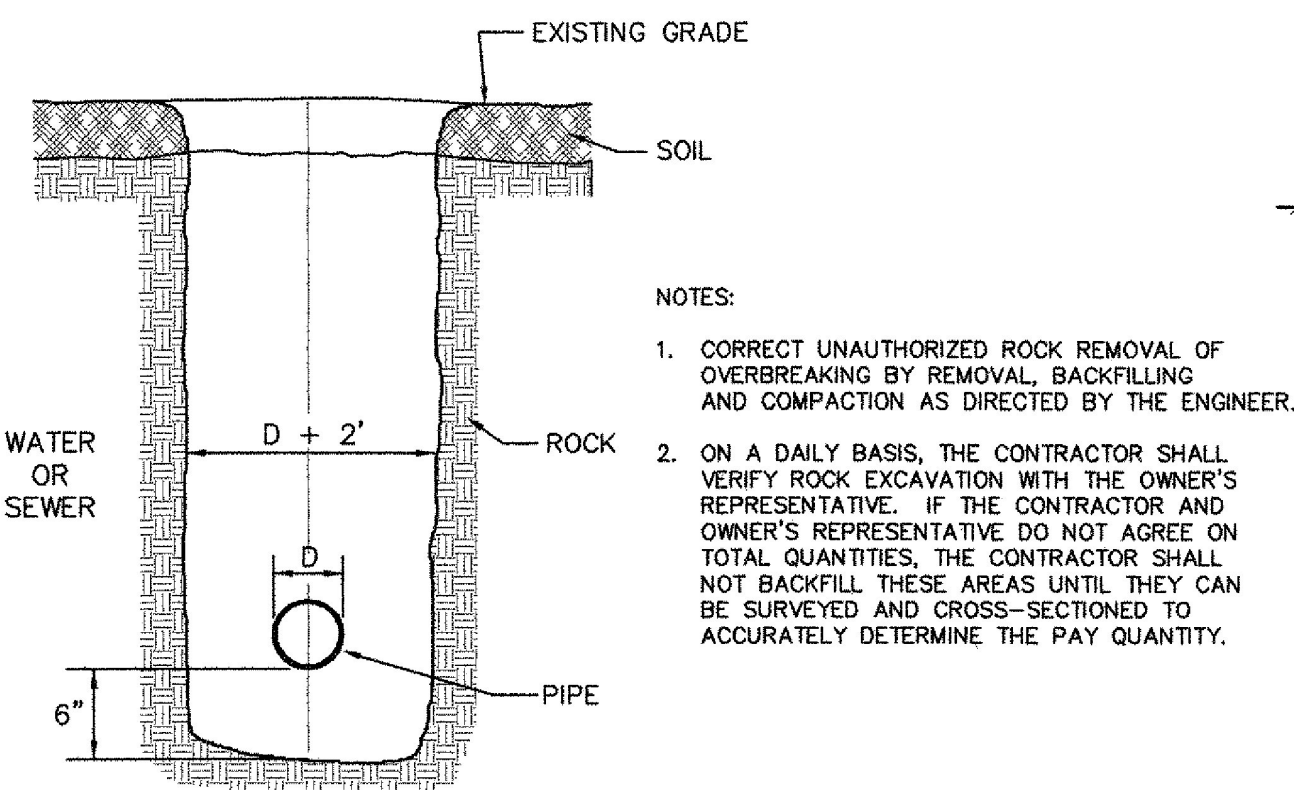
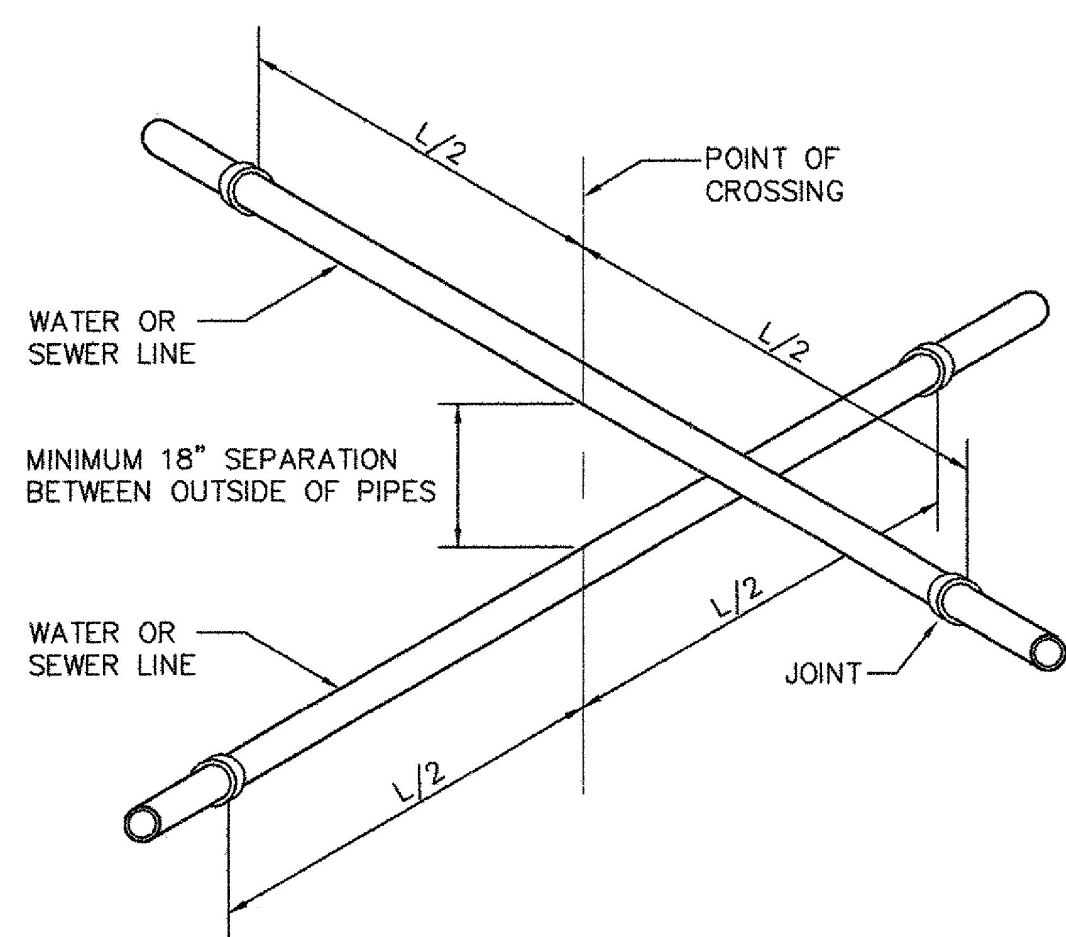


- NOTES:
1. Compaction of backfill and bedding shall be a minimum of 90% (95% under roadway surfaces) of maximum dry density determined in the standard proctor test (ASTM D698).
 2. Bedding material shall not be placed on frozen subgrade.
 3. Approved backfill shall not contain any stones more than 12" in largest dimension (6" in roadways, 2" maximum diameter within 2' of the outside of the pipe), or contain any frozen, wet, or organic material.
 4. Trenches shall be completely dewatered prior to placing of pipe bedding material and kept dewatered during installation of pipe and backfill.
 5. In trenches with unstable materials, trench bottom shall first be stabilized by placement of filter fabric then crushed stone (3/4" maximum).
 6. The sides of trenches 4' or more in depth entered by personnel shall be sheeted or sloped to the angle of repose as defined by O.S.H.A. standards.

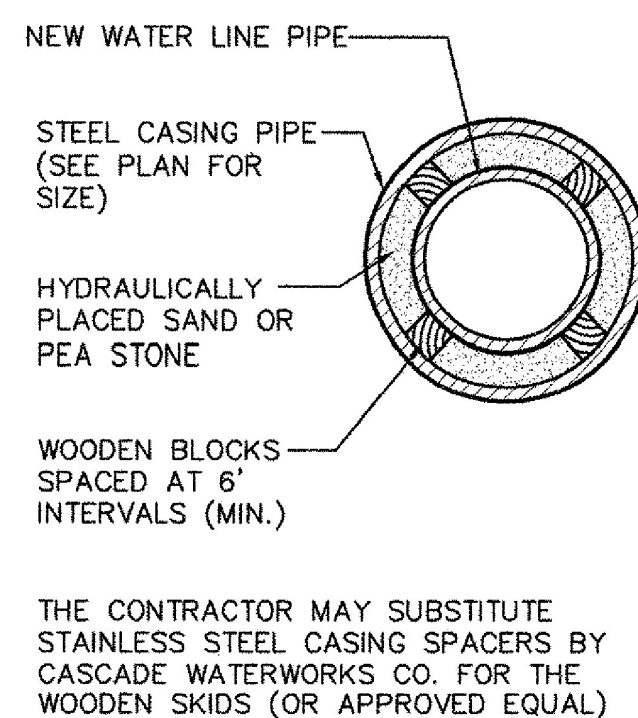
TYPICAL WATER TRENCH DETAIL
N.T.S.



TRENCH ROCK EXCAVATION PAY LIMITS
N.T.S.

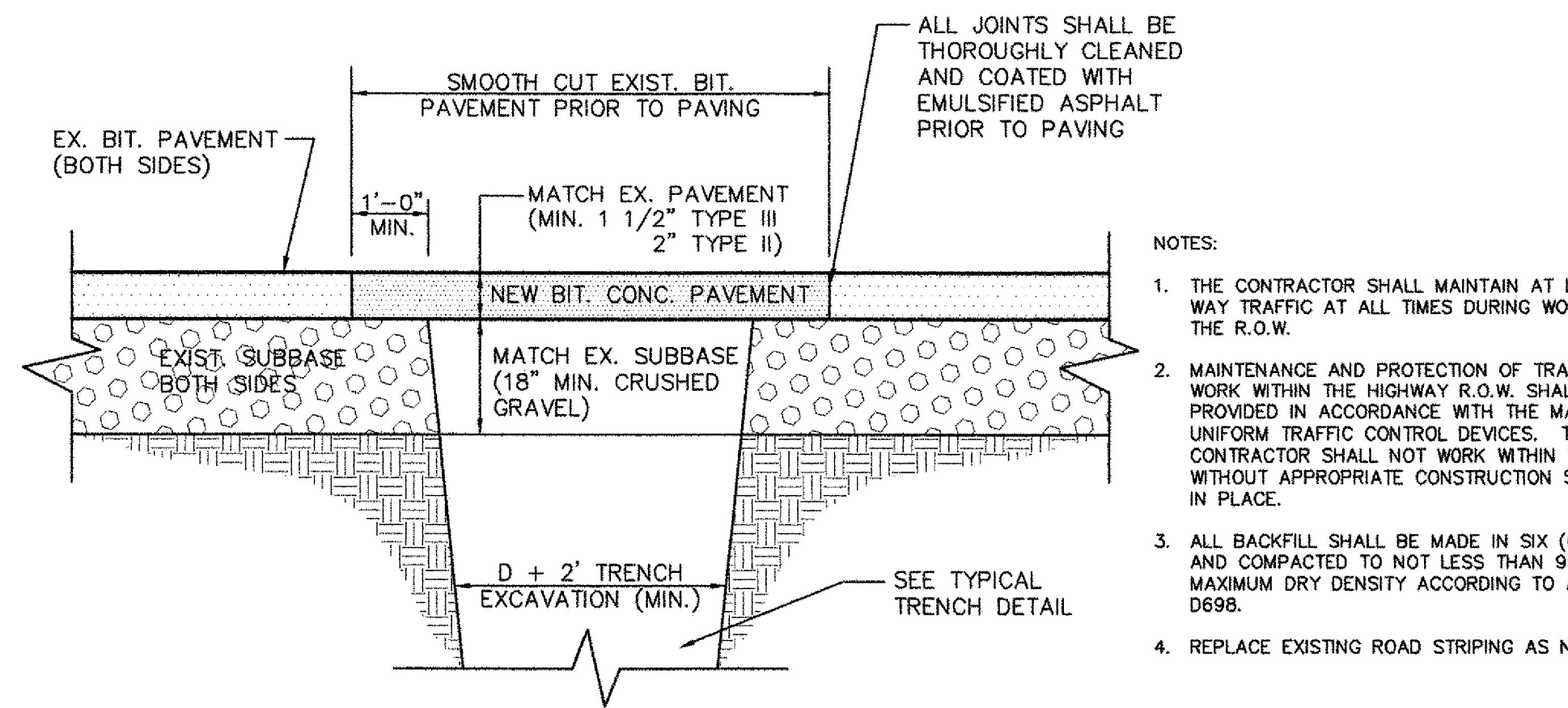


WATER/SEWER CROSSING DETAIL
N.T.S.

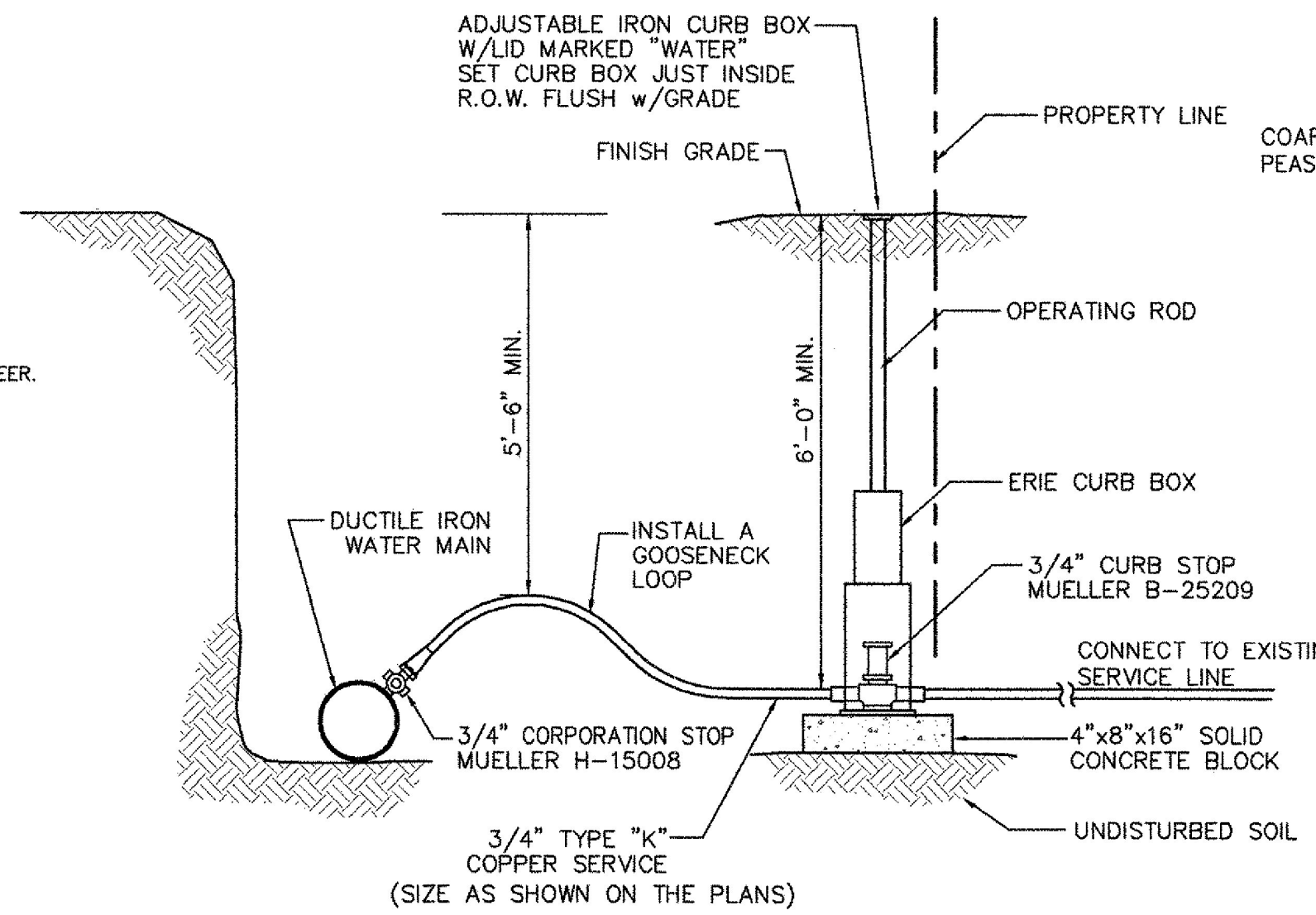


CASING AND CARRIER PIPE DETAIL
N.T.S.

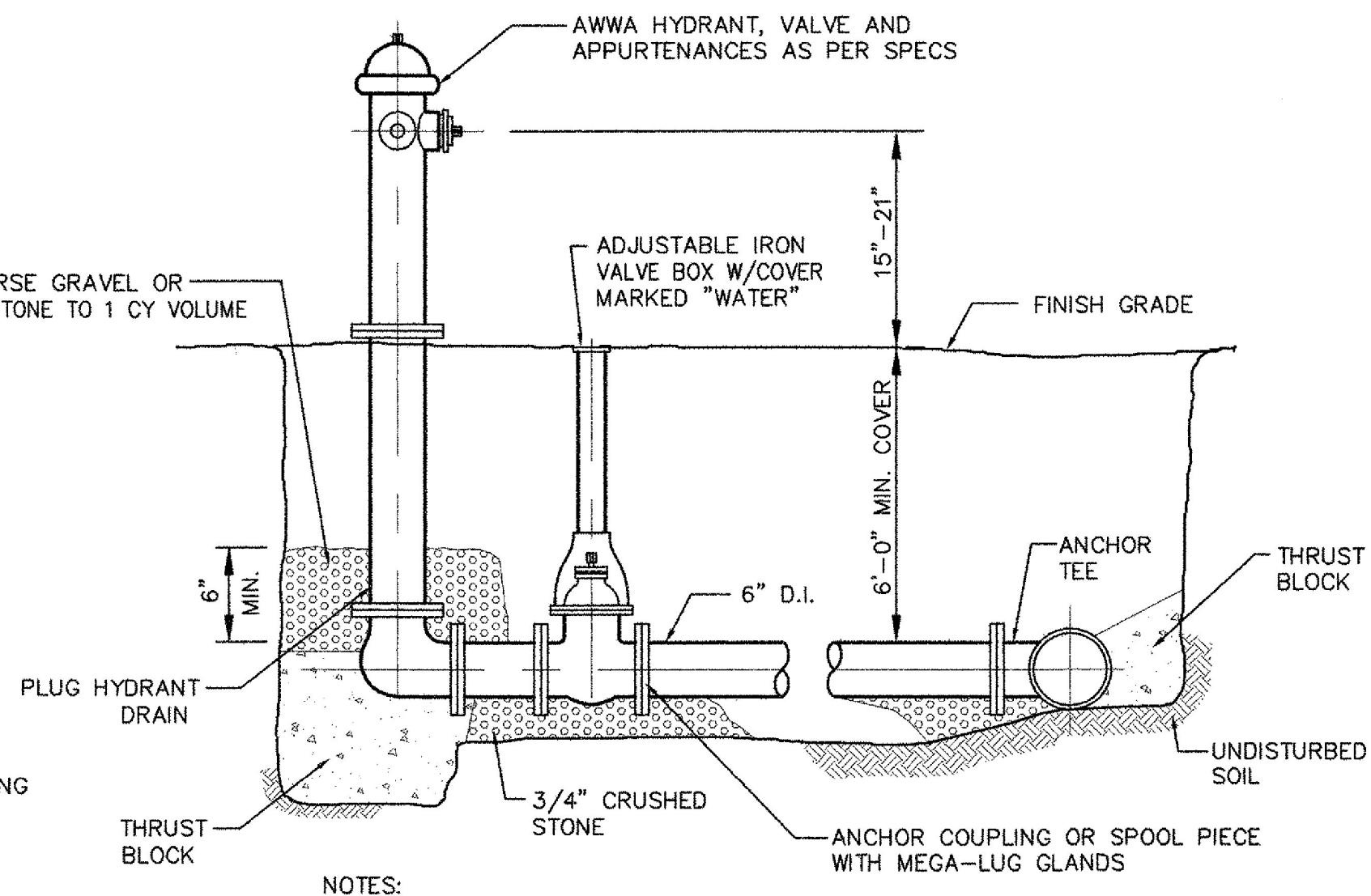
THE CARRIER PIPE SHALL BE PLACED THROUGH THE SLEEVE USING SKIDS SIZED SUCH THAT A UNIFORM SLOPE WILL BE ESTABLISHED. THE ANNULAR SPACE BETWEEN THE CARRIER AND SLEEVE SHALL BE FILLED WITH SAND. THE CARRIER SHALL BE SEALED AT EACH END OF THE SLEEVE BY USE OF A "LINK-SEAL" OR OTHER METHOD APPROVED BY THE ENGINEER. REFER TO A.O.T. STANDARD DRAWING D-20 (HIGHWAY CROSSING SLEEVES FOR UNDERGROUND UTILITIES) FOR SLEEVE LIMITS AND DETAILS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL THE NEW UTILITY CROSSING SO THAT THERE IS NO CONFLICT WITH OTHER UTILITIES



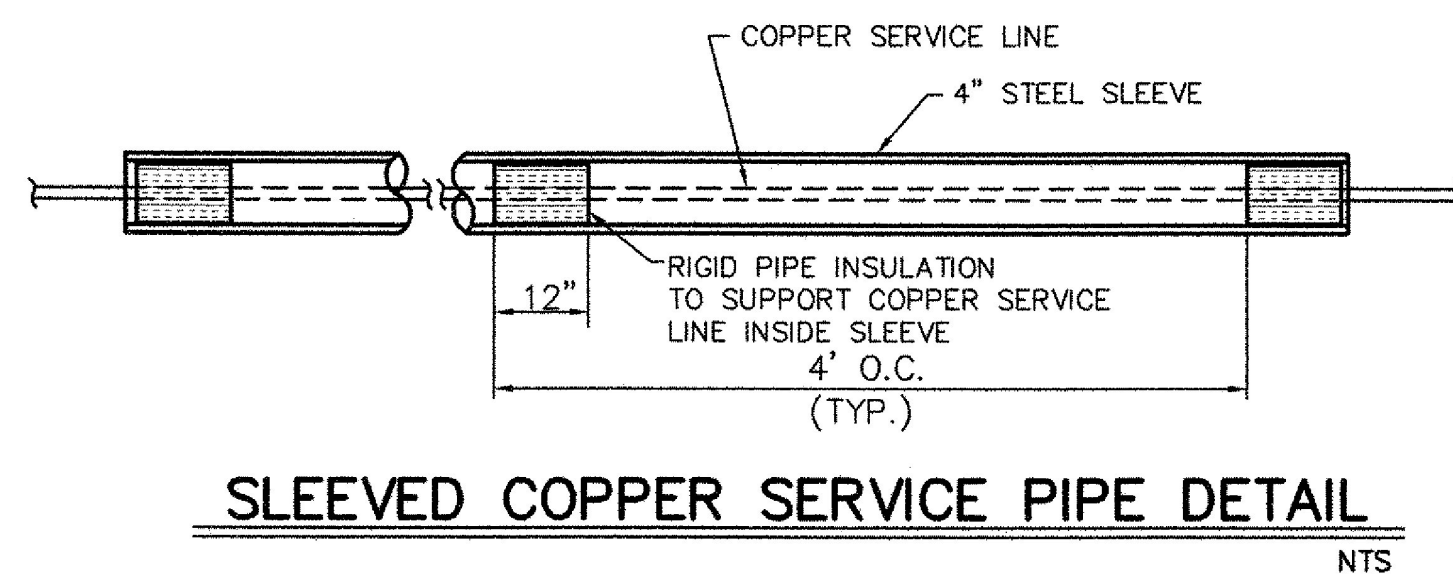
REPLACEMENT OF EXIST. PAVEMENT
N.T.S.



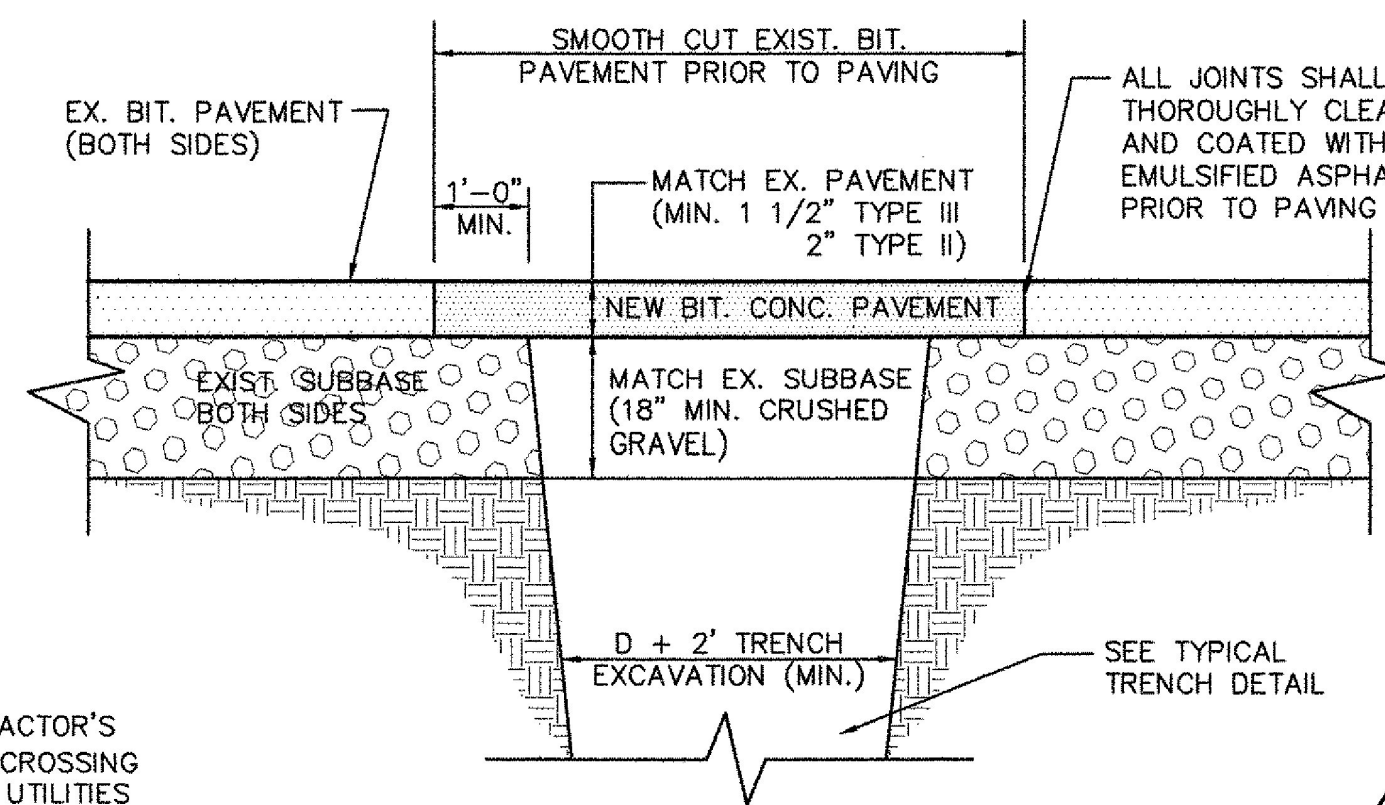
WATER SERVICE CONNECTION
N.T.S.



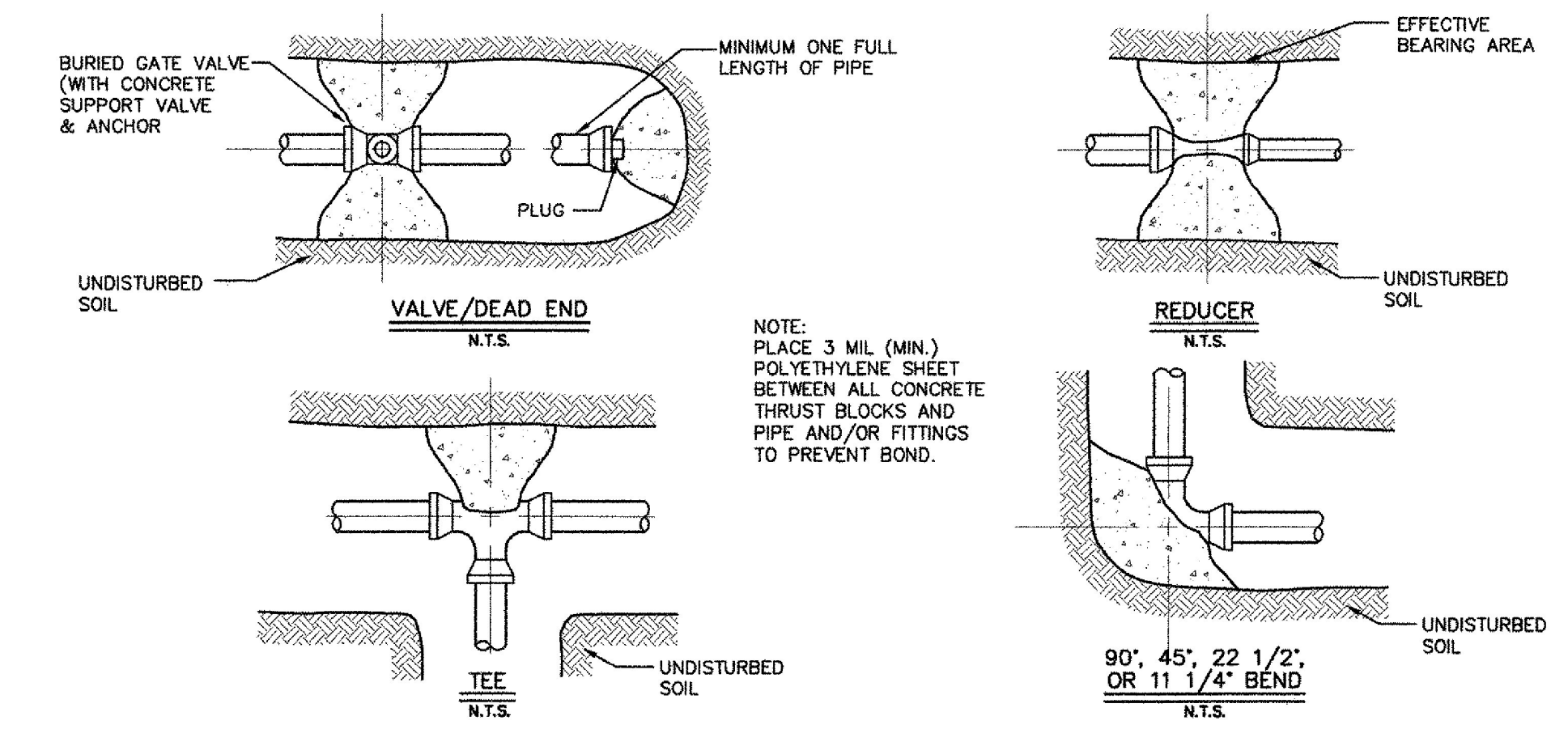
HYDRANT ASSEMBLY DETAIL
N.T.S.



SLEEVED COPPER SERVICE PIPE DETAIL
N.T.S.



REPLACEMENT OF EXIST. PAVEMENT
N.T.S.

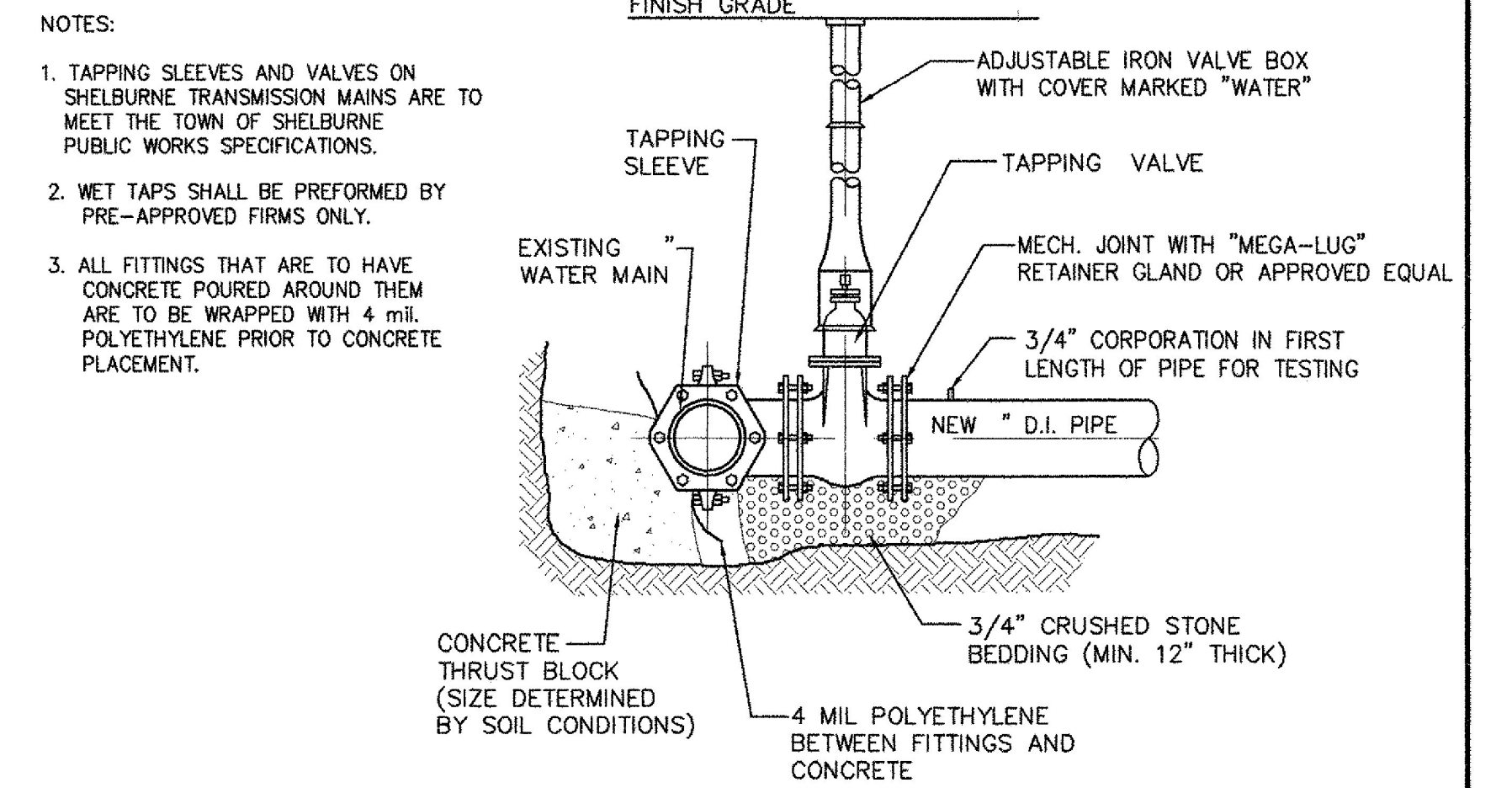


MINIMUM AREA OF BEARING SURFACE OF CONC. THRUST BLOCKS
(IN SQUARE FEET)

3"		4"		6"		8"		12"		SAFE BEARING LOAD (PSF)											
ENDS & TEES	90° & 45° ELB.	ENDS & TEES	90° & 45° ELB.	ENDS & TEES	90° & 45° ELB.	ENDS & TEES	90° & 45° ELB.	ENDS & TEES	90° & 45° ELB.												
0.5	0.5	0.5	0.5	1.0	1.5	1.0	0.5	2.0	2.5	1.5	1.0	4.0	5.5	3.0	1.5	SOUND SHALE	10,000				
1.0	1.0	1.0	1.5	2.0	1.0	0.5	3.0	4.0	2.0	1.0	4.5	6.5	3.5	2.0	10.0	14.0	7.5	2.0	CEMENTED GRAVEL AND SAND	4,000	
1.0	1.5	1.0	0.5	2.0	2.5	1.5	1.0	3.5	6.0	3.0	1.5	6.0	8.5	5.0	2.5	13.0	18.5	10.0	5.0	CEMENTED GRAVEL AND SAND (COARSE) AND FINE MEDIUM PLAYS (CAN BE SPADED)	3,000
1.5	2.5	1.5	1.0	2.5	3.5	2.0	1.0	5.5	7.5	4.0	2.0	9.0	13.0	7.0	3.5	20.0	27.5	15.0	8.0	SOUND SHALE	2,000
3.0	4.5	2.5	1.5	5.0	7.0	4.0	2.0	10.5	15.0	8.0	4.0	18.0	25.0	14.0	7.0	39.0	55.0	30.0	15.0	SOUND SHALE	1,000

MAXIMUM WATER PRESSURE = 300 PSI. NOTE: REDUCER BEARING AREA = 45° BEND OF LARGER PIPE

THRUST BLOCK DETAILS
N.T.S.



TAPPING SLEEVE & VALVE DETAIL
N.T.S.

- NOTES:
1. THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE-WAY TRAFFIC AT ALL TIMES DURING WORK WITHIN THE R.O.W.
 2. MAINTENANCE AND PROTECTION OF TRAFFIC DURING WORK WITHIN THE HIGHWAY R.O.W. SHALL BE PROVIDED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL NOT WORK WITHIN THE R.O.W. WITHOUT APPROPRIATE CONSTRUCTION SIGNING IN PLACE.
 3. ALL BACKFILL SHALL BE MADE IN SIX (6") LIFTS AND COMPACTED TO NOT LESS THAN 95% MAXIMUM DRY DENSITY ACCORDING TO ASTM D698.
 4. REPLACE EXISTING ROAD STRIPING AS NECESSARY.

Note: All work to be performed in accordance with the Town of Shelburne Development Specifications.

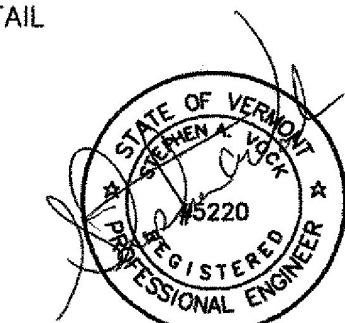
Shelburne NH EGC 019-4 (27)
Sheet 494 of 537

**TOWN OF SHELBURNE
WATER LINE RELOCATION
WATER DETAILS**

Date	2-17-04	SAV/AGL	ADD NOTE TO CASING & CARRIER PIPE DETAIL
Drawn by	ACL	Date	MARCH, 2003
Checked by	SAV	Scale	AS SHOWN
Approved by		Project No.	95160

SHELBURNE VERMONT
CIVIL ENGINEERING ASSOCIATES, INC.
SHELBURNE, VERMONT

SHEET
C-29



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