

CASE NO.	WATER	SITUATION			CLEARANCE			REQUIREMENTS			TCEQ REF.
		SEWER	OTHER	PIPE ON TOP	VERTICAL	HORIZONTAL	WATER PIPE	SEWER PIPE	OTHER REQUIREMENTS		
PARALLEL LINES											
1	NEW	EXIST. NON-PRESSURE OR PRESSURE	CONFIRMED NO LEAKAGE	WATER	2 FT	4 FT	NONE	NONE	DO NOT DISTURB BEDDING/BACKFILL OF EXIST. SEWER	290.44 (e) (5) (A) (I)	
2	NEW	EXIST. PRESSURE-RATED	CANNOT CONFIRM LEAKAGE	WATER	2 FT	4 FT	NONE	REPLACE WITH 150 PSI PIPE		290.44 (e) (5) (A) (II)	
3	NEW	NEW SEWER/FORCE MAIN		WATER	2 FT	4 FT	NONE	150 PSI PIPE		290.44 (e) (5) (A) (III)	
4	EXIST.	NEW (NON-PRESSURE)		WATER	2 FT	4 FT	NONE	150 PSI PIPE		217.53 (d) (I)	
CROSSING LINES											
5	NEW	EXIST. NON-PRESSURE-RATED SEWER	NO LEAKAGE IN SEWER	WATER	2 FT	N/A	CENTER 18' SEGMENT	NONE	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	290.44 (e) (5) (B) (I)	
5A	SAME	SAME	SEWER LEAKING OR DISTURBED	WATER	2 FT	N/A	CENTER 18' SEGMENT	REPLACE W/18' OF 150 PSI PIPE	SAME	SAME	
6	NEW	EXIST. PRESSURE-RATED	NO LEAKAGE IN SEWER	WATER	6 IN	N/A	CENTER 18' SEGMENT	NONE	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	290.44 (e) (5) (B) (II)	
6A	SAME	SAME	SEWER LEAKING	WATER	6 IN	N/A	CENTER 18' SEGMENT	REPLACE W/18' OF 150 PSI PIPE	SAME	SAME	
7	NEW	NEW NON-PRESSURE-RATED	MIN. 18' PIPE SEGMENTS	WATER	2 FT	N/A	CENTER 18' SEGMENT	SDR 26 PIPE, EMBED IN CEMENT-STABILIZED SAND	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	290.44 (e) (5) (B) (III)	
7A	SAME	SAME	(LESS THAN 18' PIPE SEGMENTS)	WATER	2 FT	N/A	CENTER 18' SEGMENT	CENTER 18' OF 150 PSI PIPE		290.44 (e) (5) (B) (IV) (I)	
7B	SAME	SAME	(LESS THAN 18' PIPE SEGMENTS)	WATER	6 IN	N/A	NONE	ENCASE IN 18' MIN. OF SDR 26 PIPE		290.44 (E) (5) (B) (IV) (II)	
7C	SAME	SAME	(LESS THAN 18' PIPE SEGMENTS)	SEWER	1 FT	N/A	ENCASE IN 18' MIN. OF SDR-26 PIPE	NONE	WATER & SEWER MUST PASS PRESSURE & LEAKAGE TEST PER AWWA C600	290.44 (e) (5) (B) (IV) (III)	
8	NEW	NEW PRESSURE-RATED		WATER	6 IN	N/A	CENTER 18' SEGMENT	150 PSI PIPE, EMBED IN CEMENT-STABILIZED SAND	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	290.44 (e) (5) (B) (V)	
9	EXIST.	NEW (NON PRESSURE)		WATER	2 FT	N/A	NONE	CENTER 18' SEGMENT, 150 PSI PIPE OR SDR 26 PIPE	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	217.53 (d) (2)	
10	EXIST.	NEW (NON PRESSURE)		WATER	6 IN	N/A	NONE	CENTER 18' SEGMENT, SDR-26 PIPE EMBED IN CEMENT, STABILIZED SAND OR 150 PSI PIPE.	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	217.53 (d) (3)	
11	EXIST. OR NEW	MANHOLE (NEW OR EXIST.)		N/A	N/A	< 9 FT	ENCASE IN 18' MIN. 150 PSI PIPE	N/A		217.53 (d) (4)	

NOTES:

1. ENCASUREMENT SHALL MEET THE FOLLOWING REQUIREMENTS:

- SDR-26 OR 150 PSI PRESSURE CLASS PIPE AS NOTED IN TABLE
- MINIMUM 18 FEET LONG
- DIAMETER OF ENCASEMENT PIPE=DIAMETER OF CARRIER PIPE+2 NOMINAL PIPE SIZES MINIMUM (EXAMPLE: 8" CARRIER NEEDS 12" ENCASEMENT)
- SPACE AROUND CARRIER PIPE SHALL BE SUPPORTED AT MINIMUM 5FEET INTERVALS WITH SPACERS, OR FILLED TO SPRING LINE WITH WASHED SAND
- ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING
- BOTH ENDS TO BE SEALED WITH MANUFACTURED WATER-TIGHT END SEALS OR OTHER METHOD AS APPROVED BY THE CITY.

2. CEMENT-STABILIZED SAND EMBEDMENT SHALL MEET THE FOLLOWING:

- MINIMUM 2.5 BAGS OF CEMENT PER C.Y. OF MIXTURE
- MINIMUM EMBEDMENT THICKNESS IS TO BE AS FOLLOWS: 6" ABOVE; 4" BELOW; AND 6" ON THE SIDES OF THE PIPE.
- EMBEDMENT SHALL EXTEND A MINIMUM OF 12" BEYOND PIPE JOINTS ON EACH SIDE.

3. SDR 26 SEWER PIPE MEETS THE T.C.E.Q. STIFFNESS REQUIREMENT OF 115 PSI AT 5% DEFLECTION.

4. WHERE LEAKAGE/NO-LEAKAGE OF EXISTING SEWERS MUST BE DETERMINED, IT SHALL BE BY A LICENSED TEXAS PROFESSIONAL ENGINEER.

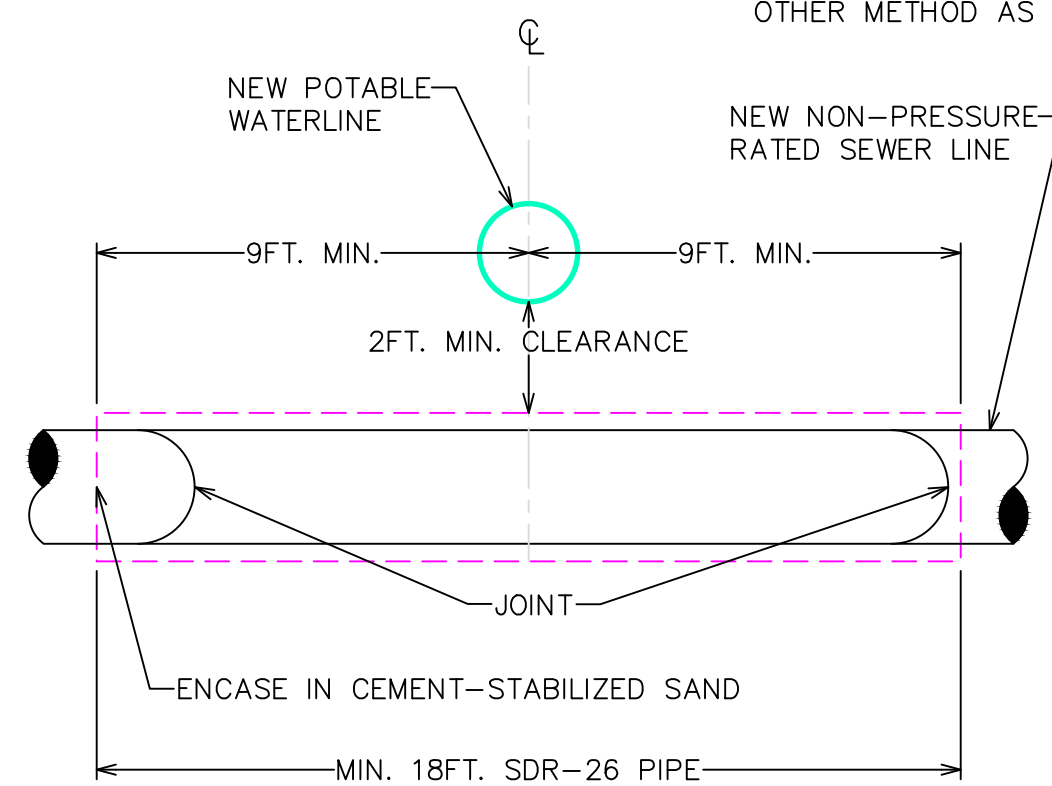
5. 18' MINIMUM LENGTH PIPE OR ENCASEMENT SEGMENTS MUST BE CENTERED ON THE CROSSING (JOINTS 9' FROM THE CROSSING.)

6. THIS TABLE AND NOTES ARE INTENDED TO COMPLY WITH T.C.E.Q. CHAPTER 290 (WATER) DATED SEPTEMBER 2000, AND DRAFT CHAPTER 217 (SEWER) RULE LOG 95100-317-WT.

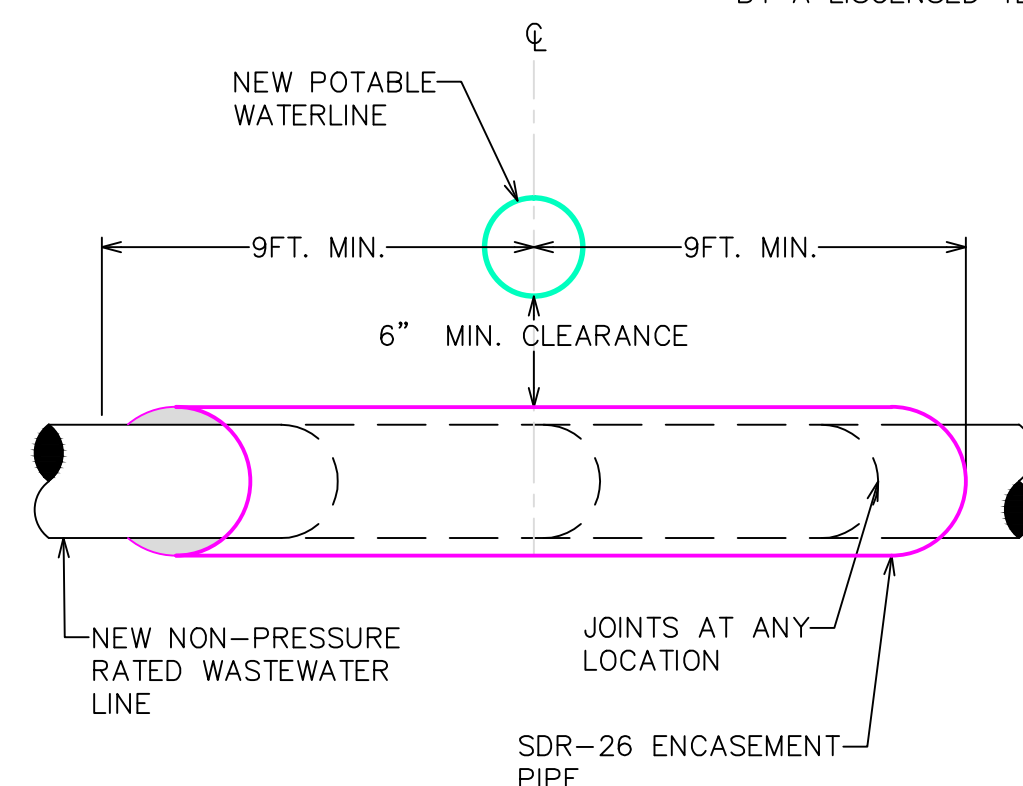
7. THE DISTRICT DOES NOT ALLOW THE OPTION OF DUCTILE IRON OR STEEL WATER CARRIER PIPE IN LIEU OF ENCASEMENT PIPE, WHICH THE T.C.E.Q. ALLOWS IN SOME SITUATIONS.

8. WHERE ENCASEMENT PIPE IS SPECIFIED, CLEARANCES ARE MEASURED FROM THE ENCASEMENT PIPE, NOT THE CARRIER PIPE.

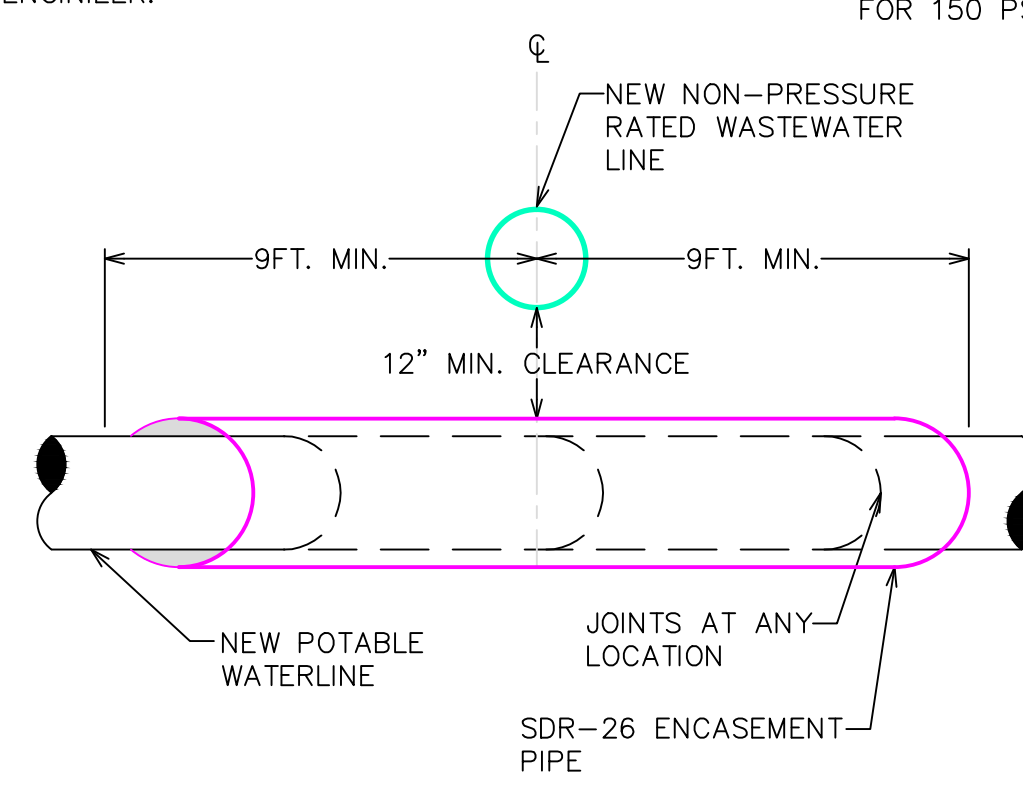
9. PIPE MEETING AWWA C900 OR C905 DR-18 MINIMUM WILL MEET THE T.C.E.Q. REQUIREMENTS FOR 150 PSI PIPE. THIS PIPE MAY BE SUBSTITUTED FOR SDR-26 PIPE.



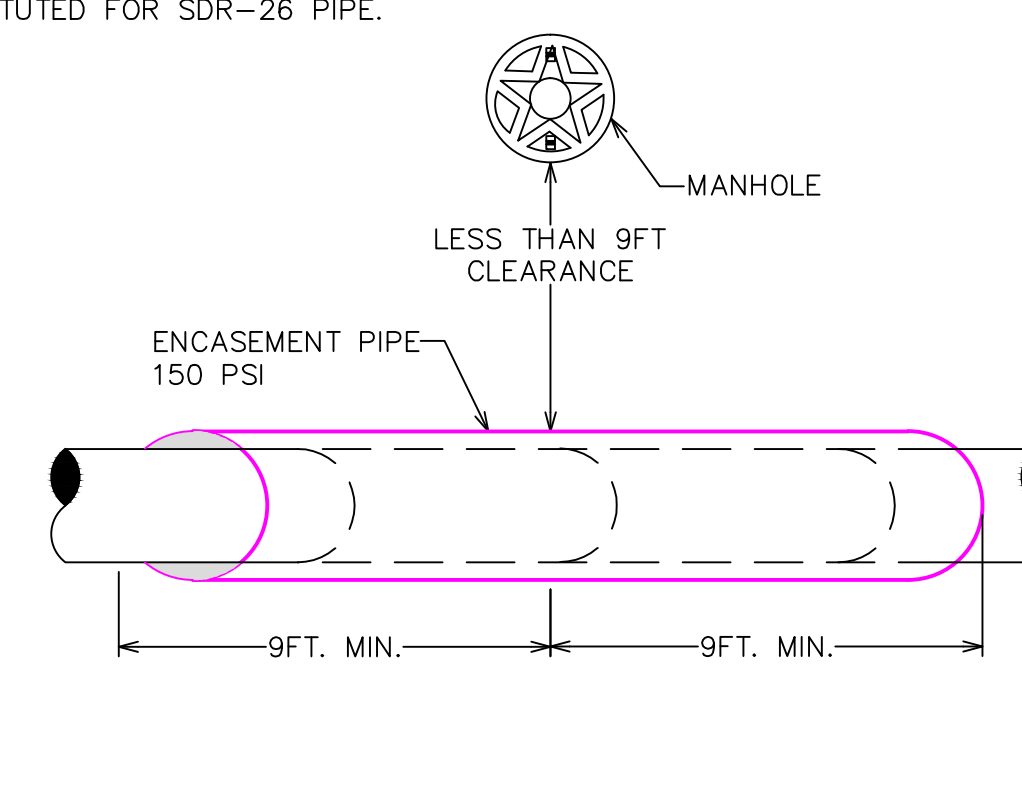
CASE 7
NEW WATER LINE OVER NEW SDR-26 SEWER LINE



CASE 7b
NEW WATER LINE OVER NEW ENCASED SEWER LINE



CASE 7c
NEW ENCASED POTABLE WATERLINE UNDER A NEW WASTEWATER LINE



CASE II
MANHOLE CLEARANCE

MODIFICATIONS TO THE CITY OF TEMPLE STANDARD DETAIL SHEETS ARE NOT ALLOWED. ANY EXCEPTIONS TO STANDARD DETAILS SHALL BE MADE ON SEPARATE SHEETS AND SUBMITTED FOR REVIEW WITH THE PLANS. ALL EXCEPTIONS SHALL CLEARLY NOTE THE SECTIONS AND DETAILS THEY WILL REPLACE. FAILURE TO NOTE EXCEPTIONS WILL VOID SUCH EXCEPTIONS. THE CITY OF TEMPLE ENGINEERING DEPARTMENT IS NOT RESPONSIBLE FOR SEALING THE DOCUMENTS. ANY ENGINEER USING STANDARD DETAILS PUBLISHED BY THE CITY OF TEMPLE IS RESPONSIBLE FOR SEALING THE DOCUMENTS IN ACCORDANCE WITH THE RULES OF THE STATE OF TEXAS PROFESSIONAL ENGINEERS REGISTRATION BOARD.

**WATER & WASTEWATER
CROSSING DETAIL**

CITY OF TEMPLE
ENGINEERING DEPARTMENT
SERVICE CENTER 3210 E. AVE., H. BLD., A TEMPLE, TX 76501
FILE APPROVED BY: DSAB DRAWN BY: DSAB APPROVED DATE: SCALE
SUBDDVENTRY.dwg MICHAEL C. NEWMAN, P.E. CHRIS PEAL 1 OCTOBER 2008 N.T.S.

