

SANITARY SEWER GENERAL NOTES AND SERVICE TAP NOTES

1. PVC SEWER MAIN PIPE COLOR SHALL BE GREEN.
2. ALL PVC SANITARY SEWER PIPE AND FITTINGS SHALL BE SDR26 OR PS115.
3. ALL PVC SANITARY SEWER SERVICES SHALL BE SCHEDULE 40 OR SDR26.
4. A STAMPED "S" OF 4 IN. IN HEIGHT AND 3/8 IN. IN DEPTH SHALL BE PLACED IN THE CENTER OF THE FACE OF CURB, AT EACH NEW TAP LOCATION, AND IN ANY NEW CURB AT EXISTING SERVICES.
5. PLEASE REFER TO STANDARD DETAIL S-2 FOR SEWER CLEANOUTS SITUATED IN A TRAFFIC AREA INCLUDING SIDEWALKS.
6. FOR BEDDING EMBEDMENT AND BACK FILL ABOVE EMBEDMENT REFER TO STANDARD DETAILS [G-8](#), [G-9](#) AND [G-10](#).
7. BID ITEM FOR SEWER SERVICE INCLUDES EXCAVATION, WYE, SERVICE LINE, CLEANOUT, BOX, ALL FITTINGS, BACKFILL, AND SURFACE REPLACEMENT.
8. ALL WYES SHALL BE SAME MATERIAL SPECIFICATION AS THE MAIN IN REGARDS TO MATERIAL, SDR, AND ASTM DESIGNATIONS.
9. ALL SERVICE CONNECTIONS TO EXISTING SEWER PIPE SHALL BE MADE BY USING NON-SHEAR COUPLINGS AND RIGID FITTINGS.
10. ALL ADAPTERS, BENDS, AND TEES ON SERVICE LINES SHALL BE FULLY ENCASED IN 6 IN. OF CONCRETE.
11. WHERE NEW SANITARY SEWER SERVICES ARE INSTALLED UNDER EXISTING CURB AND GUTTER, THE CONTRACTOR WILL HAVE THE FOLLOWING OPTIONS:
 - A. REMOVE AND REPLACE ADEQUATE AMOUNT OF CURB AND GUTTER.
 - B. PLACE CONTROLLED LOW STRENGTH MATERIAL BENEATH THE EXISTING CURB AND GUTTER.
 - C. INSTALL SERVICE THROUGH A HOLE AT THE SAME LOCATION AS THE EXISTING PIPE, AND APPROXIMATELY THE SAME DIAMETER.
12. ALL WATER AND SEWER CROSSINGS SHALL MEET TCEQ SEPARATION REQUIREMENTS. MINIMUM SEPARATION SHALL BE 6 INCHES. SEE STANDARD DETAIL [S-19](#) AND [S-20](#).
13. ANY UNDERGROUND DUCTILE IRON PIPE SHALL BE LINED WITH TNEMEC PERMA-SHIELD 431 OR A PRE-APPROVED EQUAL. USE OF DUCTILE IRON SANITARY SEWER PIPE SHALL BE PREAPPROVED BY THE CITY ENGINEER.
14. STEEL PIPE CASING USED FOR AERIAL CROSSING SHALL BE PAINTED WITH TNEMEC SERIES 46H-413 COAL TAR EPOXY AT 60.0 DRY MILS. PAINTING IS SUBSIDIARY TO THE CASING.
15. SEWER MAINS AND/OR SERVICES ENTERING INTO A MANHOLE MORE THAN 24 IN. ABOVE AN INVERT MUST HAVE A DROP FIXTURE.
16. ALL SERVICE TAPS MUST BE APPROVED IN ADVANCE BY THE CITY OF WACO AND MUST BE PERFORMED UNDER THE DIRECT SUPERVISION OF A DESIGNATED CITY OF WACO UTILITY INSPECTOR. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN.
17. PLEASE REFER TO CITY OF WACO STANDARD DETAILS FOR AIR RELEASE VALVES ON FORCE MAINS.
18. FILL ALL ABANDONED CONDUITS GREATER THAN 6 IN. DIAMETER WITH CONTROLLED LOW STRENGTH MATERIAL.
19. IDENTIFICATION NON-DETECTABLE UNDERGROUND WARNING TAPE SHALL BE PLACED 24 IN. ABOVE TOP OF THE PIPE FOR ENTIRE LENGTH OF ALL SANITARY SEWER MAINS. TAPE SHALL BE A MINIMUM 4 MIL OVERALL THICKNESS AND BE 6 IN. WIDE, APWA GREEN IN COLOR, COLORFAST, CHEMICALLY INERT, AND WITH BLACK LETTERING IMPRINTED LEGEND "PRESSURIZED WASTEWATER" FOR FORCE MAINS AND "CAUTION BURIED SEWER LINE BELOW" FOR GRAVITY FLOW LINES, SEE [G-8](#) NOTE 7.
20. IN ACCORDANCE WITH [G-7](#) NOTE 6, PRIOR TO PLACEMENT OF CONCRETE FOR A DIAMOND IN PAVEMENT FOR A FORCE MAIN VALVE OR A SANITARY SEWER MANHOLE, MATERIAL BELOW SHALL BE COMPACTED / RE-COMPACTED TO 95% STANDARD PROCTOR DENSITY AT ±2% OPTIMAL MOISTURE CONTENT.



ENGINEERING DIVISION

DISCLAIMER: THE USE OF THIS STANDARD IS GOVERNED BY THE "TEXAS ENGINEERING PRACTICE ACT". NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF WACO FOR ANY PURPOSE WHATSOEVER. THE CITY OF WACO ASSUMES NO RESPONSIBILITY FOR THE CONVERSION OF THIS STANDARD TO OTHER FORMATS OR FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

REVISIONS			
NO.	COMMENTS	BY	DATE
2	MODIFY NOTE 19	MZ	11/15/2024
1	ADD NOTE 19	MZ	04/19/2024
##	DESCRIPTION	FL	MM/DD/YYYY

DATE
01/01/2024

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