

**WATER GENERAL NOTES**

1. PVC WATER MAIN COLOR SHALL BE BLUE.
2. ALL WATER LINES SHALL BE COMPLETE IN PLACE INCLUDING ALL BENDS, BLOCKS, FITTINGS, SERVICES AND APPURTENANCES BEFORE PRESSURE TESTING.
3. SURFACE REPLACEMENT SHALL BE INCLUDED IN THE UNIT PRICE FOR WATER SERVICES.
4. PLACE METALLIC TRACER WIRE ON TOP OF TRENCH EXCAVATION PRIOR TO PLACEMENT OF EMBEDMENT AND WATER LINE AND CONNECT TO EACH SERVICE, VALVE AND FIRE HYDRANT. SEE DETAIL [W-34](#)
5. METALLIC TRACER WIRE SHALL BE #12 AWG SOLID WIRE WITH A BLUE COATING. LOCATOR WIRE MUST TERMINATE IN AN APPROVED TRACER WIRE BOX. SEE DETAIL [W-34](#)
6. ALL DUCTILE IRON WATER PIPE AND FITTINGS MUST BE POLY-WRAPPED PER CITY SPECIFICATIONS.
7. A STAMPED "W" OF 4 IN. IN HEIGHT AND 3/8 IN. IN DEPTH SHALL BE PLACED IN THE CENTER OF FACE OF CURB AT EACH NEW SERVICE LOCATION AND IN ANY NEW CURB AT EXISTING SERVICES.
8. ALL COPPER SERVICE PIPE MUST BE TYPE K-SOFT.
9. ALL POLYETHYLENE SERVICE PIPE SHALL BE SDR-9 WITH EXTERIOR BLUE COLOR. CONTRACTOR SHALL USE 1 IN. OR 2 IN. CTS TUBING WITH STAINLESS STEEL INSERTS. ALL PIPE MUST MEET NSF 61, AWWA C901, ASTM D3350 AND ASTM D2737 STANDARD SPECIFICATIONS.
10. 3/4 IN. WASHED ROCK SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATIONS FOR CONSTRUCTION ITEM A.2.a, CRUSHED STONE EMBEDMENT, OF SECTION 4.2 PART 2, EXCEPT THE GRADATION SHALL BE:

3/4 IN. WASHED ROCK	
SIEVE	PERCENTAGE RETAINED
1 1/2 IN.	0%
3/4 IN.	100%

11. ALL SUBSTITUTIONS FOR USE AS A PRE-APPROVED EQUAL MUST BE SUBMITTED IN WRITING, AND APPROVED BY CITY ENGINEER, IN ADVANCE, IN ACCORDANCE WITH THE CURRENT VERSION OF THE CITY OF WACO STANDARD SPECIFICATIONS FOR CONSTRUCTION.
12. ANY DEVIATION FROM STANDARD DETAILS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER AND APPROVED IN WRITING BY CITY ENGINEER.
13. IN ACCORDANCE WITH [G-7](#) NOTE 6, PRIOR TO PLACEMENT OF CONCRETE FOR A DIAMOND IN PAVEMENT FOR A WATER VALVE, MATERIAL BELOW SHALL BE COMPACTED / RE-COMPACTED TO 95% STANDARD PROCTOR DENSITY AT ±2% OPTIMAL MOISTURE CONTENT.
14. IDENTIFICATION NON-DETECTABLE UNDERGROUND WARNING TAPE SHALL BE PLACED 24 IN. ABOVE TOP OF THE PIPE FOR ENTIRE LENGTH OF ALL WATER MAINS. TAPE SHALL BE A MINIMUM 4 MIL OVERALL THICKNESS AND BE 6 IN. WIDE, APWA BLUE IN COLOR, COLORFAST, CHEMICALLY INERT, AND WITH BLACK LETTERING IMPRINTED LEGEND "CAUTION BURIED WATER LINE BELOW." SEE [G-8](#) NOTE 7.

**WATER SERVICE TAP NOTES**

15. WHERE NEW WATER SERVICES ARE INSTALLED UNDER EXISTING CURB AND GUTTER, THE CONTRACTOR WILL HAVE THE FOLLOWING OPTIONS:
  - A. REMOVE AND REPLACE CURB AND GUTTER SECTION FROM JOINT TO JOINT, TYPICALLY 10 FT.
  - B. CONSTRUCT MINIMUM SIZE TUNNEL NECESSARY TO INSTALL NEW WATER SERVICE AND THEN 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 AS THE EXISTING PIPE.
16. ALL SERVICE TAPS MUST BE MADE UNDER PRESSURE AND FLUSHED, OR TAPPED DRY AND THEN HAVE A SWAB PULLED THROUGH THE PIPE BEFORE CONNECTING THE TAPPED PIPE TO THE MAIN.
17. 1-1/2 IN. AND 2 IN. METERS MUST BE BROUGHT TO THE WATER OFFICE TO BE TESTED. 3 IN. AND LARGER ARE TESTED IN THE FIELD BEFORE SERVICE IS APPROVED.
18. ALL 1-1/2 IN. AND LARGER METERS SHALL BE SENSUS OMNI METERS WITH ITRON CONNECTORS.
19. ALL EXTERNAL NUTS, BOLTS AND WASHERS SHALL BE STAINLESS STEEL.
20. 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 24 HOURS NOTICE MUST BE GIVEN.



**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
1	ADD NOTE 13 & 14; RENUMBER 15-20	MZ	04/19/2024
##	DESCRIPTION	FL	MM/DD/YYYY

DATE  
01/01/2024

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