



## WCID 17 CONSTRUCTION NOTES

1. At the current time of bidding, WCID 17 uses amended City of Austin standard specifications for construction and shall govern material and methods used to do this work.
2. Contractor must obtain a street cut permit from Travis County Transportation & Natural Resources Department before beginning construction within the right-of-way of a public street, alley, or easement.
3. At least forty-eight hours (48 hours) before beginning ANY water construction in public R.W.W. or public easement, the contractor shall notify Travis County Transportation & Natural Resources inspection division, WCID 17 and the City of Lakeway for main line construction and for utility taps inspection. Contact WCID 17 forty-eight hours (48 hours) prior to connecting to existing lines.
4. The contractor shall contact the Austin area “One Call” system at 1-800-344-8377 for existing utility locations at least forty-eight hours (48 hours) prior to beginning any excavation. In advance of construction, the contractor shall verify the locations of all utilities to be tied to, or altered, or subject to damage/inconvenience by the construction operations. (Note: “One Call” does not take care of all utility locations.)
5. No other utility service/appurtenances shall be placed near the property line, or other assigned location designated for water utility service that would interfere with the water services.
6. The city specification item 509 will be required as a minimum trench safety measure contract document which includes a trench safety plan and a pay item for trench safety measures, in compliance with Texas House Bill 1569, which must be received by Travis County Transportation & Natural Resources Department. Contact administration officer before beginning work on the project.
7. All materials test, including soil density tests and related soil analysis, shall be accomplished by an independent laboratory funded by the developer in accordance with city standard specification item 1804.04.
8. Pressure taps shall be in accordance with city standard specification item 510.3(24) (as adopted by WCID 17.) The contractor shall do all excavation, etc. and shall furnish, install, and air test the sleeves and valve. If a private contractor makes the tap a WCID 17 tap, an inspector must be present. With two (2) working days (minimum) notice, WCID 17 crews can make taps up to two inches (2”), at the contractor’s expense; fiscal arrangements must be made in advance at the office. “Size on Size” taps will not be permitted unless made by use of an approved heavy duty MJ ductile iron tapping sleeve. Concrete blocking

shall be placed behind and under all tap sleeves twenty-four hours (24 hours) prior to making the wet tap. (200 PSI for 10 minutes and 150 PSI for 1 hour)

9. Thrust restraint shall be in accordance with city standard specification item 510.3(22). Restrained joints to be in accordance with AWWA No. A9, Chapter 7, for a test pressure of 200 PSI and a coefficient of friction of 0.3.
  - A. Concrete steel cylinder pipe use tie joints in accordance with AWWA No. M9, Chapter 7, for a test pressure of 200 PSI and a coefficient of friction of 0.3.
  - B. Ductile iron pipe: Joints shall be restrained the required length in accordance with the third edition of thrust restraint design of ductile iron pipe research association for a test pressure of 200 PSI restrained joints shall be the American Flex-Ring joint or equal.
  
10. Dependant on location, fire hydrants north-east of Mansfield Dam shall be set in accordance with the City of Austin standard specification item 511.4(2). Those located south-west of Mansfield Dam shall follow the National Standard Thread with steamer connector of four and one-half inches (4.5"). Colors – the bases shall be painted silver and the bolt and caps shall be painted the designated color per the gallon per minute (GPM) as follows:

Class AA	Light Blue	1500 or Higher GPM
Class A	Green	100-1499 GPM
Class B	Orange	500-999 GPM
Class C	Red	Less than 500 GPM
Class D	Black or Bagged	Out of Service
  
11. Water line testing and sterilization shall be performed in accordance with City of Austin standard specification items 510.3(27)-(29) as adopted by WCID 17. Any fittings, valves or other appurtenances necessary for testing or sterilization of utility lines shall be provided by the contractor at no additional cost to the owner.
  
12. All mains shall have a maximum 48 inches of cover from finished grade to top of pipe unless otherwise noted on the approved plans.
  
13. Manhole frames and covers and water valves shall be raised to finish pavement grade at the contractor's expense prior to final construction.
  
14. All ductile iron pipe and fittings to be wrapped with minimum 8 Mil. polyethylene.
  
15. All pipes shall be marked with magnetic tape for ease of identification. (See standard details for water appurtenances.)

16. If operating nut is deeper than thirty-six inches (36”), an extension must be added to bring the nut within twenty-four inches (24”) of finished grade of proposed valves. This work shall be subsidiary to valve pay item.
17. Contractor to mark location of valves outside of pavement area. Verify with WCID 17 on what type of marks.
18. Prior to beginning any construction, a City of Lakeway utility development permit (if working in Lakeway) and Travis County permit shall be posted on the job site.
19. Prior to any construction, the temporary erosion control items shall be in place.
20. Contractor shall keep WCID 17 current on status of each stage of construction activity.
21. WCID 17 approval is required on all work completed.
22. Either ductile iron pipe or concrete steel cylinder pipe (C-30) may be used at contractor’s option.
23. Deflection of pipe joints will be determined and approved by WCID 17 at the time of installation. Call for approval.
24. The locations of existing underground utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor’s failure to exactly locate and preserve any and all underground utilities. Utility relocation work has been or will be accomplished to clear the work space. The relocations are not reflected on these drawings.
25. Existing wastewater manholes that are tied-into must be rehabbed. Wet wells that are being modified must be rehabbed. Rehabbed meaning taking old coating off if it’s not Lafarge and recoated with Lafarge one-half inch (1/2”) manholes and one inch (1”) wet wells minimum thickness!
26. All force mains shall be white with brown poly wrap stating “Force Main.”
27. Force mains shall have brown “Force Main” twelve-inch (12”) wide magnetic tape placed eighteen inches (18”) below finish grades.
28. Lift stations will be coated inside with LaFarge aluminum silicate compound to an approved thickness of one inch (1”) minimum.

29. Manholes for wastewater will be coated with LaFarge aluminum silicate compound to approved thickness of one-half inch (1/2") minimum.
30. All grinder stations or E-One units that service more than one residence shall have communication capability to the WCID 17 SCADA System.
31. All grinder stations, lift stations or self contained E-One units servicing more than one residence shall have potable water service.
32. No yellow mine or SDR35 pipe may be used.
33. All water lines greater than twelve inches (12") in diameter shall be ductile iron.
34. Only ARI plastic air relief valves for water and wastewater are acceptable.
35. HDPE rings for manholes are acceptable.
36. Single bolt self-sealing manhole lids are acceptable.
37. All valve piping in lift station dry wells and force main cleanouts shall be painted to prevent corrosion with a rust proof paint approved by WCID 17.
38. All gravity wastewater mains must be eight inch (8") minimum.
39. All water and wastewater lines that go under twenty-four inch (24") and larger RCP, shall be sleeved.
40. Camera testing of wastewater lines shall be done after castings are raised and hydro-jetting is completed.
41. Contractors are responsible for flushing of water lines. Schedule flushing with WCID 17; twenty-four hour (24 hour) notice required.