

# WCID #17 CONSTRUCTION NOTES

1. The City of Austin standard specifications for construction shall govern material and methods used to do this work as modified by WCID 17.
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 48 hours before beginning any water construction in public R.O.W. or public easement, the contractor shall notify Travis County Transportation & Natural Resources inspection division, WCID 17 and City of Lakeway for main line construction and for utility taps inspection. Contact WCID 17 48 hours prior to connecting to existing lines.
4. The contractor shall contact the Austin area "One Call" system at 499-2822 for existing utility locations at least 48 prior to beginning 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 service that would interfere with the water services. No dry utilities (gas, electric) shall be placed within 5 feet of water or wastewater services.
6. The city specification item 509 will be required as a minimum trench safety measure contract documents which include a trench safety plan and a pay item for trench safety measures, in compliance with Texas House Bill 1569, 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, and an inspector must be present. With 2 working days (min.) notice, WCID 17 crews can make taps up to 12 inches, 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 full circle-gasketed tapping sleeve. Concrete blocking shall be placed behind and under all tap sleeves 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. In areas of high pressure, concrete will be required in addition to mechanical restraint.
  - a. Concrete steel cylinder pipe use joints in accordance with AWWA No. M9, Chapter 7, for a test pressure of 200 PSI and a coefficient of friction and 0.3.
  - b. Ductile iron pips: 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. Fire hydrants shall be set in accordance with city standard specification item 511.4(2). Lakeway fire hydrant- national standard thread with steamer connector of 4.5 (four and one-half) inches. 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	1000-1499 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 minimum 48 inches of cover from finished grade to top of pipe unless otherwise noted on 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 a minimum 8 Mil . Polyethylene.

15. All pipes shall be marked with magnetic tape for ease of identification. (See standards details for water appurtenances).

16. Contractor shall bring all operating nuts of proposed valves to standard depth with approved extensions. 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 types of marks.
18. Prior to beginning any construction, a City of Lakeway utility development permit 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 staff current on the status of each stage of construction activity.
21. WCID 17 approval is required on all work completed.
22. Deflection at pipe joints of half of manufacturer's recommended maximum deflection angle is allowable.
23. The location of existing underground utilities are shown in approximate locations 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.

## ADDITIONAL CONSTRUCTION NOTES

1. All force mains shall be white with brown poly wrap stating "force main".
2. Force mains shall have brown "force main" twelve-inch wide magnetic tape placed eighteen inches below finish grades.

3. Lift stations will be coated inside with Raven coating of 180 mils or LaFarge aluminium silicate compound to an approved thickness of ½ inch minimum.
4. Manholes for wastewater will be coated with Raven coating to 80 mils or LaFarge aluminum silicate compound to approved thickness of 1/2 inch minimum.
5. All grinder stations or E- One units that service more than one residence shall have communication capability to the District's SCADA System.
6. All grinder stations, lift stations or self contained E- One units servicing more than one residence shall have potable water service.
7. No yellow mine or SDR35 pipe may be used.
8. All water lines greater than twelve inches in diameter shall be ductile iron.
9. Only ARI plastic air relief valves for water and wastewater are acceptable.
10. HDPE rings for manholes are acceptable.
11. Single Bolt self sealing manhole lids are acceptable.
12. All valve piping in lift station dry wells and force main cleanouts shall be painted or coated against corrosion.

13. All gravity wastewater mains must be eight-inch minimum.
14. All water and wastewater lines that go under 24 inch and larger RCP, shall be sleeved.
15. Camera testing of wastewater lines shall be done after castings are raised and hydrojetting is completed.
16. Contractors are responsible for flushing of water lines. Schedule flushing with District #17; 24 hour notice required.