

WATER LINE CONSTRUCTION NOTES

1. ALIGNMENT, CENTERLINE CURVE DATA, AND STATIONING TO BE DETERMINED FROM APPROVED AND/OR RECORDED SUBDIVISION OR ROAD RIGHT-OF-WAY PLAT.
2. ALL WATER LINE CONSTRUCTION TO BE ACCOMPLISHED IN ACCORDANCE WITH THE LATEST EDITION OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS.
3. ALL WATER LINES TO BE LOCATED INSIDE PUBLIC ROAD RIGHT-OF-WAYS OR PUBLIC EASEMENTS. CITY REPRESENTATIVE TO INSPECT & APPROVE PRIOR TO BACKFILL.
4. ALL WATER MAINS LESS THAN OR EQUAL TO 12" IN DIAMETER SHALL BE PVC C-900 (DR-18). ALL PROPOSED WATER MAINS GREATER THAN OR EQUAL TO 14" IN DIAMETER SHALL BE PVC C-905 (DR-18).
5. WATER MAINS TO HAVE A MINIMUM COVER OF FOUR (4) FEET. VARY FLOW LINE UNIFORMLY FROM DEPTH AND LOCATION SHOWN IN PLANS.
6. WATER LINE FITTINGS TO BE DUCTILE IRON WITH POLYETHYLENE WRAP AS SPECIFIED UNLESS OTHERWISE NOTED.
7. MAINTAIN 12-INCH MINIMUM CLEARANCE AT CROSSINGS BETWEEN ALL WATER LINES AND ALL UTILITIES INCLUDING STORM SEWERS AND CULVERTS UNLESS OTHERWISE NOTED.
8. WATER LINES SHALL BE SAND-BEDDED AS SHOWN IN THE CITY OF TOMBALL DETAILS. (COT-WA-02) ALL WATER LINES TO BE INSPECTED BY CITY OF TOMBALL PRIOR TO BACKFILL.
9. WATERLINE TRENCHES UNDER OR WITHIN ONE (1) FOOT OF PROPOSED OR FUTURE PAVEMENT SHALL BE BACKFILLED PER THE CITY OF TOMBALL DETAILS (COT-WA-02).
10. ALL 2" THRU 12" GATE VALVES FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH AWWA C509 AND BE MANUFACTURED BY MUELLER, AMERICAN-DARLING, OR APPROVED EQUAL RESILIENT SEAT GATE VALVES AND SHALL OPEN IN A COUNTER CLOCKWISE DIRECTION ONLY. VALVES ON ALL TAPPING SLEEVES ARE TO BE OF THE SAME TYPE.
11. VALVES TO BE LOCATED OPPOSITE PROPERTY CORNER WHERE APPROPRIATE.
12. ALL VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADE AFTER PAVING/GRADING IS COMPLETE.
13. ALL FIRE HYDRANTS SHALL BE MUELLER CENTURION OR AMERICAN DARLING. EQUIP EACH FIRE HYDRANT WITH TWO (2) TWO AND ONE-HALF (2 1/2) INCH NOMINAL INSIDE DIAMETER HOSE NOZZLES AND ONE (1) FOUR AND ONE-HALF (4 1/2) INCH NOMINAL INSIDE DIAMETER PUMPER NOZZLE WITH NATIONAL STANDARD THREADS ON EACH NOZZLE. SUPPLY STORZ CONNECTOR & PRESSURE CAP FOR PUMPER NOZZLE.
14. CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING TO WITHSTAND TEST PRESSURES SPECIFIED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND THE CITY OF TOMBALL.
15. ALL WATER LINE TESTING SHALL BE WITNESSED AND APPROVED BY THE CITY OF TOMBALL.
16. TWELVE (12) GAUGE LOCATOR WIRE TO BE INSTALLED ON ALL WATER LINES, GAS LINES AND FORCE MAINS. TO BE ACCESSIBLE AT VALVE STACKS.
17. ALL TS&V SHALL BE FULL BODY - CAST IRON OR APPROVED STAINLESS STEEL OR DUCTILE IRON.
18. ONE (1) WATER SAMPLE PER 1000 FEET SHALL BE SUBMITTED TO A TEXAS DEPARTMENT OF HEALTH APPROVED LABORATORY AND SHALL BE FREE OF ANY CONTAMINATES, PRIOR TO BEING PUT IN SERVICE.
19. DISINFECTION OF NEW AND REPAIRED WATER MAINS SHALL BE IN CONFORMANCE WITH AWWA C651. ALL NEW WATER MAINS SHALL BE DISINFECTED BEFORE THEY ARE PLACED IN SERVICE. ALL WATER MAINS TAKEN OUT OF SERVICE FOR INSPECTING, REPAIRING OR OTHER ACTIVITY, WHICH MIGHT LEAD TO CONTAMINATION OF WATER, SHALL BE DISINFECTED BEFORE THEY ARE RETURNED TO SERVICE. (NO SEP. PAY)
20. CONTRACTOR TO INSTALL 4" X 4" BLUE REFLECTORIZED PAVEMENT MARKERS 6" OFF CENTER OF ROADWAY ON FIRE HYDRANT SIDE OF STREET. RAY-O-LITE OR EQUAL.
21. PROPOSED WATER MAINS SHALL BE CONSTRUCTED SUCH THAT ALL CROSSINGS WITH WASTEWATER MAINS OR LATERALS SHALL CENTER ONE FULL SECTION OF WATER LINE AT THE WASTEWATER CROSSING SO THE JOINTS OF THE WATER LINE ARE AT LEAST NINE (9) FEET HORIZONTALLY FROM THE CENTERLINE OF THE WASTEWATER PIPE. WATER LINE SHALL BE AT LEAST TWO (2) FEET ABOVE WASTEWATER. WHERE WATER LINE CROSSES UNDER WASTEWATER LINES, WATER LINE SEGMENT SHALL BE ENCASED IN DUCTILE IRON OR STEEL PIPE AT LEAST TWO NOMINAL PIPE DIAMETERS LARGER THAN WATER LINE AND MAINTAIN AT LEAST ONE (1) FOOT VERTICAL CLEARANCE FROM WASTEWATER LINE.
22. WHERE WATERLINE CROSSES UNDER SANITARY SEWER LINE, BOTH SEGMENTS MUST PASS A PRESSURE AND LEAKAGE TEST AS SPECIFIED IN AWWA C600 STANDARDS.
23. ALL VALVE BOXES SHALL BE ERECTED PLUMBED & BE FREE OF DEBRIS.
24. PROVIDE BACKFLOW PREVENTOR BASED ON APPROPRIATE APPLICATIONS (I.E. IRRIGATION, DOMESTIC, FIRE)

NOT TO SCALE

<b>CITY OF TOMBALL</b> ENGINEERING & PLANNING DEPARTMENT	
<b>WATER LINE CONSTRUCTION NOTES</b>	
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