

WATER NOTES:

1. ALL PERMITS SHALL BE SECURED AND FEES SHALL BE PAID PRIOR TO START OF CONSTRUCTION.
2. CONTRACTOR SHALL CONTACT CEDAR RAPIDS UTILITIES DEPARTMENT WATER ENGINEERING OFFICE (319) 286-5950 TO OBTAIN A 'START WORK' ORDER 24 HOURS PRIOR TO BEGINNING CONSTRUCTION OF WATER SYSTEM IMPROVEMENTS.
3. CONSTRUCTION OF PUBLIC AND PRIVATE WATER SYSTEM IMPROVEMENTS REQUIRES AN APPROVED PLAN SET ON FILE IN THE CEDAR RAPIDS UTILITIES DEPARTMENT WATER ENGINEERING OFFICE, 1111 SHAVER ROAD NE.
4. ON SITE INSPECTION OF WATER MAIN INSTALLATION WILL BE PROVIDED BY THE MUNICIPAL UTILITY.
5. THE CONTRACTOR IS RESPONSIBLE TO CONTACT IOWA ONE-CALL 1-800-292-8989 PRIOR TO EXCAVATION.
6. WATER MAIN MATERIALS, INSTALLATION AND TESTING MUST COMPLY WITH CEDAR RAPIDS METROPOLITAN AREA (METRO) DESIGN STANDARDS AND SPECIFICATIONS. THIS APPLIES TO BOTH PUBLIC AND PRIVATE WATER MAINS AND LARGE SERVICE LINES (3" OR LARGER) ON THE DISTRIBUTION SIDE OF THE METER. FOR PUBLICLY ACCEPTED IMPROVEMENTS CONSTRUCTED AS PART OF A SUBDIVISION, THE CONTRACTOR SHALL PURCHASE HYDRANTS AND VALVES FROM THE CITY PER CURRENT POLICY. EXCEPTIONS MUST BE PRE-APPROVED BY WATER ENGINEERING.
7. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE CEDAR RAPIDS UTILITIES DEPARTMENT WATER ENGINEERING OFFICE FOR ANY VARIANCE FROM THE APPROVED PLAN.
8. CONTRACTOR SHALL CONTACT CEDAR RAPIDS UTILITIES DEPARTMENT WATER ENGINEERING OFFICE (319) 286-5950 FOR THE FOLLOWING SERVICES:
WATER SHUT DOWN, TAP, FLUSH & FILL, SAMPLING AND OTHER SERVICES RELATED TO THE WATER SYSTEM. DISPOSAL OF HIGHLY CHLORINATED WATER SHALL BE IN COMPLIANCE WITH LOCAL, STATE & FEDERAL CODES.
9. WARRANTY: FOR THAT PORTION OF THE WATER SYSTEM IMPROVEMENTS THAT ARE TO BE ACCEPTED INTO THE PUBLIC WATER DISTRIBUTION SYSTEM, THE CONTRACTOR SHALL WARRANT THE WORKMANSHIP AND MATERIAL OF THE INSTALLED IMPROVEMENTS FOR A PERIOD OF TWO (2) YEARS FROM DATE OF ACCEPTANCE AND SHALL FURNISH THE MUNICIPALITY WITH A MAINTENANCE BOND COVERING THE COST OF THE WATER IMPROVEMENTS FOR THAT PERIOD. NO WATER SERVICE SHALL BE PROVIDED PRIOR TO RECEIPT OF THE REQUIRED MAINTENANCE BOND.
FOR CITY FUNDED CAPITAL PROJECTS, PERFORMANCE BOND REQUIREMENTS IN THE CONTRACT DOCUMENTS GOVERN.
10. ALL SERVICE TAP MATERIALS ARE TO BE FURNISHED BY THE CONTRACTOR. THE WATER UTILITY WILL MAKE ALL TAPS USING CONTRACTOR SUPPLIED MATERIALS THAT COMPLY WITH 'METRO' SPECIFICATIONS.
11. THE WATER UTILITY SHALL OPERATE ALL SYSTEM VALVES.
12. TRACER WIRE IS REQUIRED ON ALL PRIVATE AND PUBLIC WATER MAIN 3 INCHES IN DIAMETER OR LARGER. HOLES IN VALVE BOXES FOR TRACER WIRE MUST BE DRILLED.
13. WHERE WATER MAIN AND SANITARY OR STORM SEWERS CROSS, ONE FULL (20 FOOT) LENGTH OF WATER MAIN SHOULD BE CENTERED OVER THE SEWER, AND A VERTICAL DISTANCE SHOULD BE MAINTAINED OF 18 INCHES OR GREATER. WHERE WATER LINES AND SEWERS CROSS AND THE MINIMUM CLEARANCE CANNOT BE MAINTAINED, AND THE WATER MAIN CROSSES UNDER THE SEWER, THE WATER MAIN MUST UTILIZE NITRILE GASKETS AND SANITARY SEWER MUST BE CONSTRUCTED OF WATER MAIN GRADE AWWA C-900 SDR-18 PVC OR DUCTILE IRON PIPE WITH COMPRESSION FITTINGS OR MECHANICAL JOINTS IF WITHIN 10 FEET OF THE WATER MAIN. RCP STORM SEWERS ARE TO HAVE 'O'-RING GASKETS.
14. UNLESS SPECIFICALLY APPROVED OTHERWISE, ALL LATERAL CONNECTIONS TO EXISTING MAINS THAT HAVE BEEN PREVIOUSLY TESTED AND TURNED INTO SERVICE, THAT ARE 4-INCH OR LARGER SHALL BE DONE BY 'LIVE' TAP USING AN APPROVED TAPPING SLEEVE OR SADDLE AND VALVE.
15. WATER MAINS AND LARGE SERVICES (3" OR LARGER) OVER 20 FEET IN LENGTH ARE REQUIRED TO BE DISINFECTED, FLUSHED, FILLED AND PRESSURE TESTED. PRESSURE / LEAKAGE TESTS ARE CONDUCTED AT 150 PSI UNDER THE DIRECTION OF THE CEDAR RAPIDS WATER UTILITY.
16. ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C 651. NO WATER MAIN SHALL BE PLACED INTO SERVICE UNTIL ALL SAMPLES HAVE PASSED BACTERIOLOGICAL TESTS.

17. HEAVILY CHLORINATED WATER MAY NOT REMAIN IN THE PIPELINE FOR MORE THAN 48 HOURS. HEAVILY CHLORINATED WATER SHALL BE FLUSHED THOROUGHLY FROM THE PIPELINE, UNTIL THE REPLACEMENT WATER THROUGHOUT ITS LENGTH WILL BE EQUAL IN QUALITY TO PERMANENT SOURCE OF SUPPLY. THE CHLORINATED WATER SHALL BE NEUTRALIZED BY TREATING WITH SODIUM BISULFITE, SODIUM SULFITE, SODIUM THIOSULFATE OR EQUAL APPROVED CHEMICAL BEFORE DISPOSAL

IN ORDER TO PREVENT DAMAGE TO THE PIPE LINING AND VALVE COMPONENTS FROM DRY POWDER OR TABLET CHLORINE THE FOLLOWING PROCEDURE MUST BE USED. IN CASES WHERE THE CONTRACTOR IS UTILIZING POWDER OR TABLET CHLORINE DEPOSITED INTO THE WATER MAIN WHILE IT IS BEING INSTALLED, THE MAIN MUST BE FILLED WITHIN 48 HOURS.

THE CONTRACTOR IS RESPONSIBLE FOR WATER MAIN FLUSHING OPERATIONS. THIS RESPONSIBILITY INCLUDES BUT IS NOT LIMITED TO VERIFYING PROCEDURES, PROVIDING ADEQUATE PERSONNEL AND EQUIPMENT, OBTAINING APPROVAL TO DISCHARGE INTO STORM OR SANITARY SEWERS, MONITORING SEWERS FOR BACK-UPS, MONITORING FLOW AND DE-CHLORINATION RESULTS. WATER DIVISION PERSONNEL WILL OPERATE VALVES AS REQUESTED.

18. IF INSTALLATION OF A CASING PIPE IS REQUIRED, IT SHALL INCLUDE CASING SPACERS AND WATERTIGHT MECHANICAL RUBBER END SEALS (METRO SPEC. 02250).

ISSUED: JULY 1, 2011

REVISED: 01-23-2015 (NOTES # 9 & 13)