

## **Exhibit 7**

### **CHCID Requirements for**

#### **New Commercial Domestic & Irrigation Water Line Installations**

**Per Maricopa Association of Governments (MAG)**

#### **Uniform Standard Specifications for Public Works Construction and AWWA 600**

**June 6, 2018**

All new commercial water main lines installed in the Chandler Heights Citrus Irrigation District shall conform to the MAG specifications 601 through 611; 630-631, other appropriate sections, and CHCID engineer approval.

1. Prior to starting any water line construction, the contractor shall attend a coordination meeting with CHCID staff and receive a copy of the above specifications. A list of approved pipe, fittings, valves, meter boxes and covers, fire hydrants and other material to be used will also be provided by CHCID.
2. All pipes shall be a minimum of 6" and maximum 12", C-900 class 200 (DR-14) bells & spigot with a rubber gasket in the bell end for domestic water. NSF-approved lubricant for use in drinking water systems, shall be used on each rubber gasket for ease of joining pipe and to prevent rolling the gasket. For Hydrants and Realignments install D.I.P class 350 min, restrained joints per M.A.G. STD. DTL 303-1 AND 303-2.
3. All below grade valves on main lines and fire hydrants shall be Muller number 2360 gate valves. These valves are available with MJ X MJ connections or MJ X flange connections. All bolted below-ground metal valves and fittings shall be protected from corrosion by encasement in a polyethylene protective wrapping, referred to hereafter as "poly-wrap", per MAG Specifications 601.5 through 601.5.3. Valve boxes and covers shall comply with MAG Detail 391-1B with the word "WATER" molded into the cover. Locking type debris caps as manufactured by SW Services, Model R-457-B or equivalent, shall be installed inside each valve box in compliance with MAG detail 392 and as directed by CHCID.
4. The contractor shall submit five (5) copies of each submittal for each item to be used on any project to CHCID for approval. Any material purchased by contractor prior to CHCID approval shall be at his own risk and may be rejected by CHCID if not compliant with CHCID standards. Three copies of each submittal shall be returned to contractor as "accepted" or "with comments". Submittals shall be reviewed only two times without additional cost to the contractor.
5. All trenches for main lines shall have a minimum depth of five (5) feet and a width in accordance with Table 601-1 of the MAG specifications.

6. At no time shall the contractor have more than 1320 feet of open trench (MAG 601-2.10). Trenches in paved roads and main unpaved roadways are to be considered open until all ABC for pavement placement has been placed and compacted to 95%. Trenches in any utility easement street, road or alley right of way, outside of paved street areas are to be considered open until the backfill has been properly installed and compacted to 85-90% in accordance with MAG table 601-2.
7. Prior to excavation, contractor shall obtain blue-stake for underground utilities. After all existing underground utilities have been identified; the contractor shall be responsible and liable for any damages to or interruption of any service caused by construction.
8. Pipe bedding material shall be a minimum depth of 6" and consist of clean granular material such as sand, pea-gravel or native soil, free of broken concrete, broken pavement, wood or other deleterious material, as approved by CHCID. The pipe zone material shall be of like kind as bedding and shall extend from the pipe bedding to 12" above the top of the pipe.
9. Trench widths shall conform to MAG specifications table 601-1. All trench excavation shall comply with OSHA requirements and MAG specification 601.2.9. Backfill material shall be of approved material and shall be placed and compacted to 85-90% in 8" lifts from the pipe zone material to finished grade for unpaved areas and to 95% to finished sub-grade for paved areas and main roads. Compaction of backfill material shall comply with MAG specifications table 601-2. All new domestic PVC water main line trenches shall be backfilled to 18" below the surface, and then a continuous wire locator shall be placed in the middle of the trench. Backfill and compaction shall continue from this point until trench backfill and compaction is completed.
10. The contractor shall employ and pay for the services of an Arizona State Approved Testing Lab for the purpose of testing the density of compaction of all backfill material. Compaction tests shall be performed every 100 feet of trench or as directed by CHCID and at each 2 foot lift and accordance with paragraphs 5 and 8 herein. CHCID shall be notified when these tests are to be performed and may request to be present to witness these tests. Copies of all compaction test results shall be given or sent to CHCID. CHCID shall, if not present for any test, be notified immediately should any compaction test fail.
11. All installations of any underground water lines shall be inspected and approved by CHCID prior to placing pipe zone and backfill material. Incomplete water lines shall be plugged or capped at the end of each work shift to prevent rodents or foreign material from entering pipe lines. During construction, all pipe and fittings shall be kept clean and clear of any damage. No pipe shall be installed that shows any indication of UV or other damage.
12. Newly laid or repaired water mains shall be flushed, pressure tested, disinfected and final flushed prior to placing into service.
  - a. Primary Flushing of Water Lines: New and repaired water lines smaller than 12" shall be flushed for a minimum period of 15 minutes. This is accomplished with all pipe joints and couplings left exposed.

- b. Pressure Testing of Main Lines: With all pipe joints and couplings exposed, all new and repaired water mains shall be tested at a minimum of 200 psi for a period of two hours. Maximum psi loss shall not exceed two psi at any time during the test. CHCID shall witness and approve all pressure tests.
  - c. Disinfection of Water Lines: The contractor shall employ and pay for the services of an Arizona State Approved Testing Lab. Disinfection of all water mains shall be completed in accordance with MAG specifications 611.6, 611.11 and AWWA 651-9 using an NSF approved, 12.5% LIQUID bleach solution for 24 hours. The amount of the 12.5% bleach solution to be used shall be so sufficient that, after the 24 hour test, the chlorine residual shall not be less than 10.0 PPM. Should the residual be less than 10 PPM, the contractor shall retest until an acceptable result can be accomplished. CHCID shall witness and approve all tests.
13. Final Flushing, Sampling and Testing of All New and Repaired Main Lines: After a successful disinfection test, the new or repaired main lines shall be flushed and tested in accordance with the MAG specifications 611.15, AWWA 651-05, Sec 4.5 and until the chlorine residual throughout the line is reduced to 1.0 ppm or less. CHCID shall witness this complete process and the contractor shall be required to send a copy of the final Lab Test Report to CHCID for our records.
  14. Any connections dedicated for "Fire Protection", a reduced pressure double check valve assembly shall be installed in the fire protection water supply line directly off of the CHCID main water supply line, in accordance with AWWA standards, Maricopa County and CHCID requirements.
  15. All costs requiring any existing CHCID system upgrades to facilitate water service to new installations shall be paid by the contractor to CHCID prior to beginning construction.
  16. During construction of any new water mains or water lines requiring CHCID water service, owner or contractor shall keep CHCID informed of the project progress and request for inspections shall be made at least 24 hours (one business day) prior to inspection time and date.
  17. In the event any work associated with the installation of new water mains or water lines is found NOT in compliance with CHCID requirements, CHCID may issue a "Stop Work Order" requiring all work to be stopped until the issue out of compliance has been corrected to CHCID's satisfaction.
  18. Upon Substantial completion (system operational) of work, a walk-through with CHCID shall be required and a "Punch List" created of any items found to need correcting. Once all listed items have been corrected, a final walk-through inspection shall be made. CHCID will issue a "Letter of Final Completion" when the project is in full compliance and no infractions or remaining noncompliant issues are found.
  19. The owner shall be required to convey to CHCID any easements required for water utility maintenance as directed by CHCID.
  20. At the same time, the owner shall issue to CHCID a one-year unconditional warranty covering all of his work, including labor and material, one set of as-built drawings, and a letter or "Certificate of Ownership" of the newly constructed water lines and easements required for the operation and maintenance of the system.

21. Should the owner or contractor need any additional information during construction, contact CHCID prior to proceeding with the project.
22. Irrigation requirements: Property must be able to hold a minimum of 30 minutes of irrigation at 1600 GPM in order to receive irrigation from CHCID. Smaller parcels, i.e., less than 1 acre, depending on landscape design, may not be able to take 30 minutes of water. Owners should consult with CHCID in advance to ascertain whether they will be able to receive irrigation.

NOTE: METER COST, WATER RATES AND REQUIRED WATER SUPPLY TO TREATMENT PLANT, USERS' WATER DEMAND, WATER STORAGE, UPGRADE TO ANY CHCID WATER CONVEYANCE INFRASTRUCTURE SYSTEM, TREATMENT OR PUMPING SYSTEM, AND OVERALL CONSTRUCTION COST TO MEET DEVELOPER OR OWNER WATER DEMAND SHALL BE PAID TO CHCID **PRIOR** TO STARTING ANY CONSTRUCTION, OR A SIGNED AGREEMENT BETWEEN CHCID AND AN AUTHORIZED REPRESENTATIVE THAT THE DEVELOPER WILL PERFORM THE REQUIRED SERVICES TO CHCID STANDARDS AND UNDER CHCID SUPERVISION.

DEVELOPMENT FEES DO NOT INCLUDE THE COST FOR DOMESTIC WATER METERS, LANDSCAPE WATER METERS AND FIRE PROTECTION CONNECTIONS.

CHCID REQUIREMENTS  
FOR  
COMMERCIAL WATER METER  
SERVICE AND PIPING  
June 6, 2018

Scope of Work: Commercial Water Meter Service and piping is that part of the domestic water system that delivers water from the main line to the customer's service connection. It includes the following; Service Saddle, Corp. Stop Valve, "K" Copper Tubing, Curb Stop Angle Valve, Water Meter, Meter Double Check Valve, Concrete Meter Box and Metal Cover. All material shall meet AWWA, MAG and CHCID Specifications. All material shall be new or undamaged. All material shall be of proper size to meet these requirements and water service being applied for. The "K" copper service line shall have no kinks or bends that shall impede the flow of water or place undue stress upon any of the fittings. There shall be no joint connections between the Corp. Stop Valve and the Curb Stop Angle Valve. Where street or driveway crossings are necessary, all copper tubing from the main line to the angle curb stop, shall be installed through a Schedule 80 PVC sleeve placed at a minimum depth of three (3) feet below finished paved or unpaved street or driveway.

Meter Boxes shall be manufactured of concrete and be of sufficient size to accommodate the Curb Stop Valve, Water Meter, Double Check Valve and Discharge Connection. The meter box and water meter shall be readily accessible. Meter boxes shall be located in the CHCID easements and where possible, in front of the building property. The meter box shall be installed high enough and with sufficient elevation and berm, so as to remain dry during irrigation of the served and adjacent properties. Meter boxes shall not be installed in paved driveways, or high traffic areas.

Submittals: Prior to starting construction, contractor shall submit to CHCID Engineer, 5 copies of all material product specifications or data sheets, the contractor proposes to use on the project. CHCID engineer shall review and return 3 copies with comments or approved as submitted. Submittals requiring more than 2 reviews for approval, the contractor shall be charged an additional review fee as determined by CHCID.

Service Saddle: Shall be manufactured by Muller, Mdl. Number, H-13491-330 or an approved equal, and of sufficient size for the main line size and meter service line size.

Corporation Stop Valve: Shall be brass manufactured by Muller, Mdl. Number, B-25028 or an approved equal, and of sufficient size for required water service.

Copper Tubing: Shall be type "K" soft copper.

Curb Stop Angle Valve: Shall be as manufactured by Muller, Mdl. Number B-24258 or an approved equal.

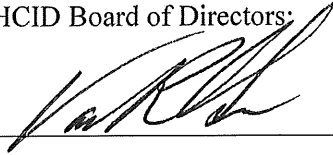
Water Meter: Shall be provided by CHCID.

Meter Double Check Valve: Shall be as manufactured by AY McDonald, Magnetic Mdl. Number for  $\frac{3}{4}$ " is 11-3NP. For 1  $\frac{1}{2}$ " Meters, the Mdl. Number is, 12-7DE66 (This is a flanged to female threaded angle double check valve).

Meter Box and Cover: Shall be a concrete box with a metal cover of sufficient size to enclose the required angle valve, meter, double check valve and space for the building connection. Example, a  $\frac{5}{8}$ " x  $\frac{3}{4}$ " meter would require a number one (1) or a number two (2) box. A 1  $\frac{1}{2}$ " meter will require a number three (3) or a number four (4) box.

Approved by the CHCID Board of Directors:

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