

### SECTION 3. PROJECT CLOSE-OUT:

3.1 **RECORD DRAWINGS:** Record drawings are required at the completion of all water and sanitary sewer system projects constructed for, or dedicated to, JCSA and shall include the following:

- A. Record Drawings for JCSA CIP Projects and Development Projects: Prior to acceptance of the water and sanitary sewer system improvements by JCSA , two (2) complete sets of preliminary record drawings for the project shall be submitted to JCSA for review and approval. The record drawings shall show the location of all easements, above ground appurtenances, service connections, water and sanitary sewer system components (including type of pipe), appurtenances, and all other data necessary to operate, maintain, and locate the water and sanitary sewer system improvements. All **fire hydrants, water main valves, tees, bends, blow-off valves, air release valves, water meter boxes and service lines, manholes, cleanouts and laterals, force main valves, bends and fittings, air release valves, offsets, abandoned facilities and repairs** shall have dimensions on the drawings to a minimum of two (2) permanent structures, such as property pins, edge of pavement, etc. Record drawings shall include elevations for all manhole rims, inverts, and cleanouts. All record drawings shall be stamped by a Engineer or Surveyor with a current license in the Commonwealth of Virginia confirming that the water and sanitary sewer system was installed within plus or minus one (1) foot horizontal dimensions for the locations indicated on the record drawings. Vertical and horizontal survey datum control for record drawings shall comply with Section 1.3 of the Design and Acceptance Criteria.

Water mains along roadways shall be dimensioned from the edge of pavement to the main every 50-feet. JCSA reserves the right to require additional dimensioning on the record drawings for areas of long distances between fittings.

B. Development Projects:

1. Final Inspection Requirements:
  - a. No final inspection will be scheduled until all property pins are installed, flagged, staked, and complete installation of all other utilities serving the development (to include Virginia Power, Telephone, Gas, Cable, and others) and submittal of record drawings. Record drawings shall be submitted in accordance with Section 3.1.A and delivered fifteen (15) days prior to scheduling the final inspection.
  - b. A letter shall be provided by the Developer/Owner confirming that all utilities (i.e. electric, gas, cable, telephone and others) have been installed. The letter shall include the cost associated with the installation of the water and sanitary sewer system, both on-site and off-site.

- c. A copy of the recorded plat and/or related documentation shall be submitted to JCSA. Easement dedication shall comply with Section 2.5.
- d. The Developer/Owner will provide a signed letter by the Engineer or Surveyor of record stating that the construction work was completed according to the approved plans and specifications. This statement will be based upon inspections of the construction, during and after construction.
- e. Contractor shall provide personnel responsible for exercising all valves in the presence of JCSA during the final inspection walkthrough.

3.2 **WARRANTY (DEVELOPMENT PROJECTS):** The Developer/Contractor will be responsible for, and obligated to, correct all deficiencies in construction and installation of the project for one-year from the date of acceptance of the facilities by JCSA. This will include repairs to any valves, meters, meter boxes, yokes, piping, manholes, manhole frames and covers, cleanouts, cleanout boxes, etc., damaged by subcontractors, builders or others, or to correct defects in installation or materials.

In addition to the above stated one (1) year warranty, the developer or contractor shall for all equipment installed for which the manufacturer thereof has a standard guarantee in excess of the one (1) year, transfer to JCSA all necessary warranties to properly guarantee such equipment by the manufacturer for the standard term of the manufacturer's guarantee.

3.3 **DEDICATION (DEVELOPMENT PROJECTS):** Following verification of the record drawings and completion of the punchlist, the developer/owner will formally dedicate the water distribution and sanitary sewer system, easements, and/or property to JCSA. Such dedication will be acknowledged in writing by JCSA.

Through the Engineer or Surveyor of record for the project submit: one (1) paper copy of the recorded plat for any easements; one (1) paper copy, one (1) reproducible mylar drawing, and one (1) disk with the record drawing information in electronic AutoCAD compatible format. Coordinates in the AutoCAD compatible file shall be Virginia coordinate system in accordance with Section 1.3.

3.4 **WATER METER ALLOWANCE:** No water meter will be installed in any subdivision or development prior to substantial completion of water and sanitary sewer systems. Substantial completion includes completion of all required tests, except CCTV, and verification from an acceptable laboratory that the water is bacteria free. JCSA will not accept any utility until final completion requirements of Section 3.1 have been met.

At the time of substantial completion, the Developer/Owner has two options before water meters will be installed in residential developments:

Option 1:

Wait until all water and sanitary sewer utilities are fully accepted by the JCSA. This will require installation of all other utilities (i.e. natural gas, electricity, telephone, TV cable, etc), completion of all deficiencies identified by JCSA in pre-final punch list and submittal of record drawings for the water and sanitary sewer desired for acceptance by JCSA.

Option 2:

Submit cash deposit or a letter of credit (the “deposited funds”) to JCSA that can be used to complete deficiencies not corrected by Developer/Contractor. Entire deposited funds or unused portion will be returned to Developer/Contractor once JCSA accepts utility. When requested by Developer, JCSA will identify deficiencies in pre-final punch list. If not corrected immediately, a plan for correction must be submitted to JCSA within 30 days of receipt of notice of deficiencies from JCSA. All deficiencies identified must be completed within 60 days of receipt of Notice of Deficiency. If not, JCSA will use deposited funds to correct deficiencies. JCSA will assess an administrative fee of 25% over costs for managing correction of deficiency. Deposited funds will be \$500 per meter multiplied by the total number of meters approved for the site plan and is to be made at the time of substantial completion. There is a \$12,000 minimum deposit.