GreenvilleWater

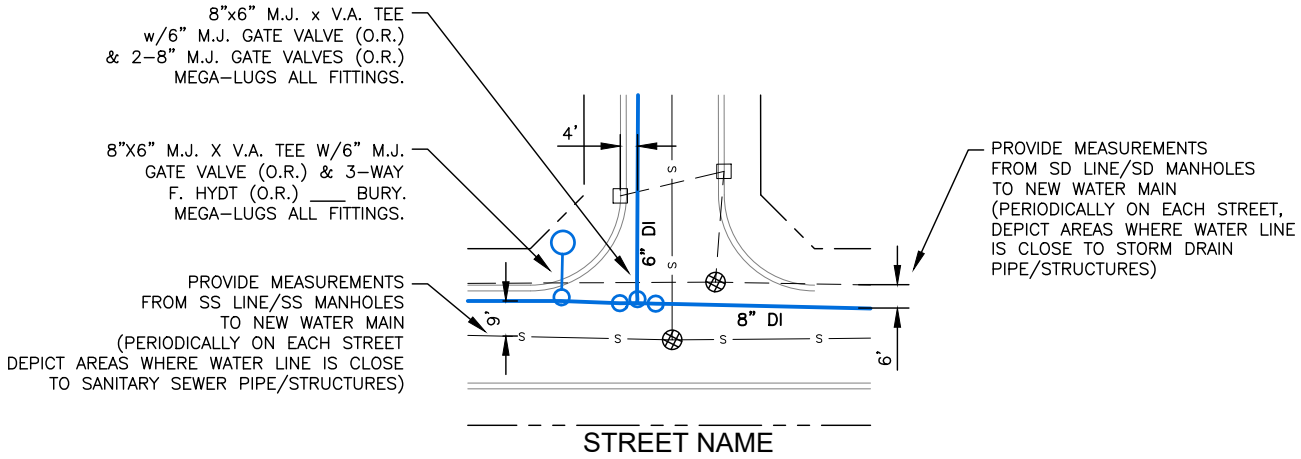
Record Drawing Requirements

(Dated: 03.22.24)

Record Drawings shall reflect all as-built conditions for water mains, water services, and curbstops/meters. Record Drawings shall be sealed, signed, and dated by an Engineer registered in the state of South Carolina. Record Drawings shall include the following items at a minimum:

1. Main plan view:
   a. Scale shall be no smaller than 1” = 100'.
   b. Dimension precision for locations of water lines, fittings, and associated appurtenances shall be to the nearest foot.
   c. Dimension text size shall be no smaller than 0.06 in., paper space size.
   d. Location of new water mains, horizontal & vertical bends, sleeves, casing, valves, hydrants, and curb stops. Greenville Water inspector will provide GPS points for new water lines and structures at the end of construction.
   e. As-built locations of new sewer lines & manholes, new storm drain lines, manholes and catch basins. Engineering company is responsible for obtaining as-built locations of sewer and storm manholes and catch basins. Elevation profile depictions (if applicable) shall show all sewer & storm line crossings.
   f. Dimensions from water main to sewer and storm lines, especially depict areas where water mains are in close proximity to other utilities. Each street shall have representative measurements.
   g. Two (2) tie-down dimensions from any horizontal and/or vertical bends in water mains to reference points in the main plan view. If scale does not allow, these dimensions shall be shown on a separate detail at appropriate scale for legibility. (reference point examples: fire hydrant, storm drain manhole, catch basin, sanitary sewer manhole, power pole, street sign). If separate details are used, these dimensions are not to be shown on main plan view.
   h. Limits and length of casing pipe and arch encasements, if applicable. Two (2) tie-down dimensions from ends of casing and arch encasement to reference points. Indicate if TR Flex pipe or equivalent was used in casing.
   i. Original design callouts revised accordingly. Any changes from the original design (e.g.: types of TEE used, angles of bends used, and bury depth of hydrants) shall be identified on the drawing. All pertinent information can be found in GPS points attributes provided by Greenville Water inspector.
   j. Completed Material Table. Table template will be provided in a CAD file by Greenville Water (GW).

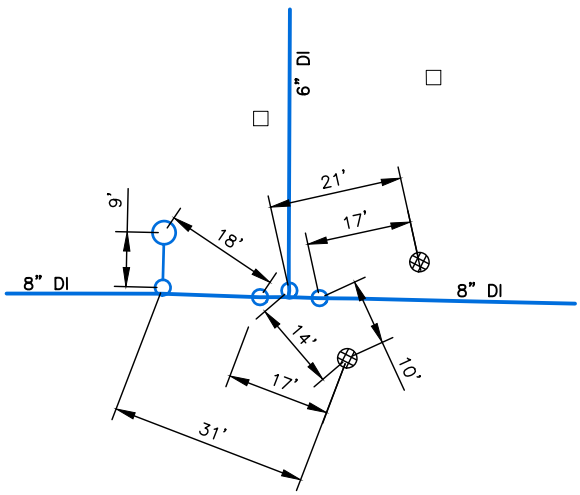
MATERIAL TABLE	
XX LF	8" D.I. Pipe
XX LF	6" D.I. Pipe
XX	Fire Hydrant 3-Way (O.R.)
XX	8" M.J. Gate Valve (O.R.)
XX	6" M.J. Gate Valve (O.R.)
XX	2" I.B.N.R.S. Gate Valve (O.L.)
Notes: 6" and up valves open right 2" valves open left Fire hydrants are 3-way and open right.	



1 PLAN VIEW

Scale: NTS

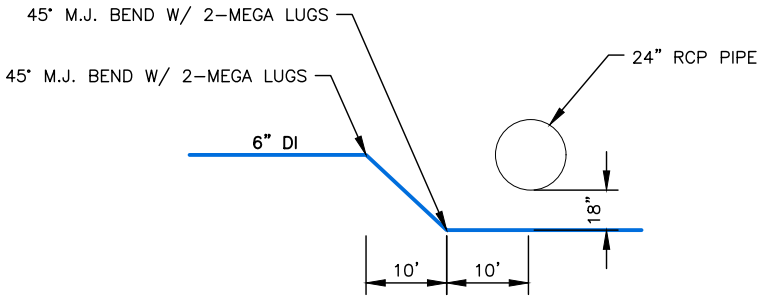
2. Detail views:
   a. Dimension precision for locations of water lines, fittings, and associated appurtenances shall be to the nearest foot.
   b. Detailed diagrams shall be shown for tees, valves, and fittings at road intersections and areas where valves/fittings are clustered. Detailed diagrams shall indicate at least two (2) tie-down dimensions to the nearest reference points.



2b DETAIL VIEW

Scale: NTS

c. Detailed diagrams shall be shown for any vertical bends that were used. Size of bends shall be labeled. Horizontal distance between bends and all structures/utilities that required the installation of vertical bends shall be shown.

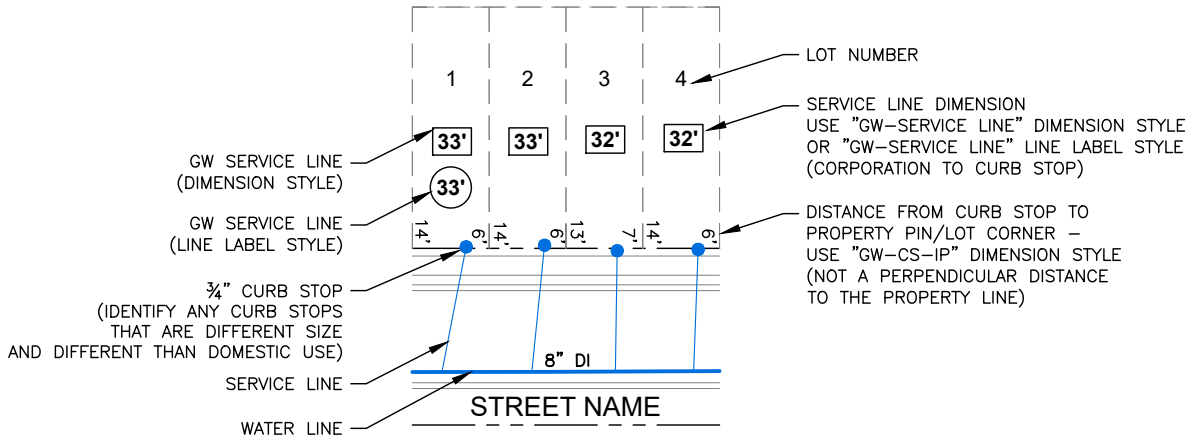


VERTICAL BENDS
2c CROSS SECTION
Scale: NTS

3. Meters/Curbstops:

a. Dimension precision for locations of water lines, fittings, and associated appurtenances shall be to the nearest foot.

b. Meter/curbstop locations shall be tied down by property pins, catch basins, manholes, or any other permanent visible structures. Length of service lines from water main tap to meter/curbstop shall be dimensioned.



3b TAP TO CURB
Scale: NTS

4. A full elevation profile showing top of pipe elevation, centerline of ditch elevation, centerline of the road elevation and all storm and sewer line crossings shall be shown for all water mains twelve (12) inches and larger diameter. Dimension precision for locations of water lines, fittings, and associated appurtenances shall be to the nearest foot.

5. A PDF and .dwg CAD drawing shall be submitted for review by GW. Record Drawings must be clearly legible, accurately represent the installation of water mains, and of good quality. If submitted drawings contain inaccuracies, they will be returned to the Developer's Engineer for revision. Permit to Operate acceptance letters will not be provided until the Record Drawings are approved by GW Inspector. The Developer's Engineer shall be ultimately responsible for the accuracy of all Record Drawings.