

Chester Metropolitan District Water Main Construction Plans Checklist

This checklist must be submitted with every set of engineering construction plans for water main improvements. All items on the checklist shall be addressed. If the item is not applicable to this project check the box next to the item labeled "N/A". Note that this checklist is not intended to be all-inclusive, and fulfillment of this checklist does not alleviate the obligation of the designer to meet all Chester Metropolitan District, Federal, State, and local codes, regulations, ordinances, and specifications. The purpose of this checklist is to facilitate a more efficient plan review process for the designer and the review team.

This checklist and review is for Chester Metropolitan District only. Please contact Chester County Wastewater Recovery for wastewater requirements.

Project Name: _____

Project Location: _____

Submittal Documents:

Yes	No	N/A	Comments
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Water Calculations <i>Hydrant flow tests shall be completed by District personnel only</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Encroachment Application(s) <i>SCDOT, County, Railroad, Electric, etc.</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 Sets of Signed Plans for Review
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PDF Version of the Signed Plans
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Applicable Fees

Water Construction Plans:

Yes	No	N/A	Comments
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Project Title
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vicinity Map
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Legend
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sheet Index
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Contact Information <i>Engineer and Developer</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Engineer's Seal and COA
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Benchmark (State Plane and NAVD)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Overall Project Layout
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Overall Utility Layout: no smaller than 1:200 <i>Only necessary if water lines require multiple plan sheets</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Project Notes <i>Verify project notes do not conflict with the District's specifications</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Water main construction sequence <i>Describe in detail how tie-ins, change overs, startups, etc. should be completed</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Plan sheet scale: between 1:10 and 1:60
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Plan sheets shall be 24" x 36"
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Street Names and R/W widths
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lot numbers
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Label lots with water pressure greater than 80 psi
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	North Arrow and Bar Scale
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Property Lines and Owner Info
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Existing Utilities <i>With size and material, if known</i>

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- Existing topography with labels _____
- Floodplains and water courses _____
- Proposed grading with labels _____
- Shade so that proposed utilities are legible*
- Proposed Utilities w/ Size and Material _____
- Project stationing increases left to right _____
- Minimum water line cover is 42" _____
- Ductile iron pipe required if less than 42" of cover*
- Existing and Proposed Valves _____
- Proposed: 3 at tees, 4 at crosses, 1 at stub-outs for future connections.*
- Nearest Existing Fire Hydrant _____
- Nearest upstream and downstream valves _____
- Water line extends full length of property frontage along right-of-way _____
- Stubouts and easements for future development (valve required before blow-off) _____
- Water line 6' behind curb/edge of pavement _____
- Water system is looped _____
- Show and label a jumper connection at the connection point of the proposed water line and the existing water line. _____
- Water line profiles for lines 10" and larger _____
- Utilities shown at all water line crossings _____
- On profiles only*
- Appropriate blocking or pipe restraint _____
- Individual water services and meters and service sizes, located 5' from center of lots _____
- Air release valves indicated where required _____
- Blow-offs or means of flushing at dead ends _____
- Backflow Preventers where required _____
- Label all proposed water appurtenances _____
- Encasement shall extend 5' beyond edge of pavement (proposed or existing) _____
- All existing and proposed easements shown _____
- Easement shown along water lines outside public right-of-way _____
- No proposed trees within 10' of water line _____
- Proposed site improvements are shown clearly legible _____
- District's standard details _____
- Limits of disturbance and erosion control measures _____

Minimum clearances:

- Water 18" vertically above Sewer _____
- Water 10' horizontally from Sewer _____
- Water and sewer must be ductile iron if above clearances cannot be met*

Proposed Fire Hydrants and Spacing:

- Street Intersections _____
- 500' max spacing for commercial, multifamily, and residential (lot size < 1 ac) _____
- 800' max spacing for residential _____

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(lot size 1 ac and greater)

2,500' max spacing on transmission lines _____

Standard Project Notes:

1. The Contractor shall verify the location of all existing utilities prior to beginning construction. Contact South Carolina 811 at 811 (within SC), 1-888-721-7877 (nationwide), or www.sc811.com at least 72 hours prior to beginning construction. Contractor shall be responsible for any and all damages to existing utilities resulting from negligence and/or failure to properly locate and protect said utilities.
2. The Contractor shall notify Chester Metropolitan District (District) 48 hours prior to beginning water line work.
3. Water lines shall be installed with 42" minimum cover.
4. Only District personnel shall operate the District's valves.
5. All materials, construction, and plans shall comply with the District's current Standard Specifications and Details.
6. All water lines and services, regardless of material, shall have a tracer wire installed along the top half of the pipe (3 o'clock position).
7. Water mains shall be laid at least 10-foot horizontally from any existing or proposed sewer. The distance shall be measured edge to edge. Water mains crossing sewers should be laid to provide a minimum vertical distance of 18" between the outside of the water main and the outside of the sewer line. This shall be the case whether the main is either above or below the sewer. Water mains shall be located above the sewer line when possible. At the crossing, one full length of water pipe should be centered on the sewer line so that both joints will be as far from the sewer as possible. When these requirements cannot be met, both the water and sewer shall be ductile iron pipe and extended a minimum of 10' each side of the crossing.
8. Valves shall not be installed within sidewalks, curb or gutter, or driveways.
9. Submit shop drawings to the District for review and approval prior to beginning work.
10. All water lines shall be pressure tested, disinfected, and have passing bacteriological tests prior to being placed into service.
11. The District shall be notified 48 hours in advance to inspect/witness the following items:
 - a. Tapping Saddle/Sleeve Installation and Pressure Test
 - b. Water Main Tap
 - c. Pressure Test
 - d. Water Main Connection (Jumper connection removal)
 - e. Tracer Wire Connectivity
12. The Contractor shall notify the District and all property owners 24 hours prior to cutting any existing water service off. Water service shall not be interrupted for more than 3 hours at any one time unless otherwise directed by the District.
13. As-builts shall be submitted and approved before water service will be activated.
14. The new water line may not be placed into service or connected to the existing water line until a Permit to Operate is obtained from SCDHEC.
15. The Contractor shall be responsible for moving services from existing water mains to be abandoned to new water mains.
16. Developer, Contractor, or Homebuilder is responsible for installing a pressure reducing valve on the customer's side of the meter for all lots indicated that have water pressures greater than 80 psi.

Form Completed By: _____

Date: _____

Signature

Printed Name