



Newton County Water and Sewerage Authority

Residential, Commercial, Institutional and Industrial Construction Plans Checklist

Checklist marks to be interpreted as follows:

✓ : OK X: Revision Required N/A: Not Applicable ? : Additional Information Required

I. WATER LAYOUT

- _____ 1. Site plan with water layout only (topographic overlay required).
- _____ 2. Pipe Locations and sizes (8" minimum for water mains).
- _____ 3. Materials to be used. Ductile iron pipe required under all intersections, stream crossings, road crossings, over and under all cross drains and at all other locations specified by the Authority.
- _____ 4. Location and size of gate valve at intersections, along water mains, at fire hydrants and at connection to existing mains.
- _____ 5. Thrust blocks at all bends and tees.
- _____ 6. Location of all existing and proposed fire hydrants.
- _____ 7. Existing water main locations, sizes and types of material surrounding the project.
- _____ 8. Detail of connection to existing water main.
- _____ 9. Nearest existing line valves on both sides of connection to existing water main.
- _____ 10. Proposed meter sizes and locations.
- _____ 11. Water main on north and east side of road.
- _____ 12. If proposed water line crosses private property, a 20-foot permanent easement must be provided.
- _____ 13. Details:
 - _____ A. Fire hydrant at the end of line in cul-de-sacs
 - _____ B. Air and Vacuum release valve assembly
 - _____ C. House service installation
 - _____ D. Line valve
 - _____ E. Typical fire hydrant installation
- _____ 14. Location of air release valves.
- _____ 15. A gate valve and a minimum of 36 feet of pipe shall be provided at the end of all lines for phased developments. The end of the line shall be provided with temporary plug and concrete thrust collar.
- _____ 16. Detail dead end line with one full joint of D.I. Pipe, Fire Hydrants, M.J. Plug, Retainer Glands and concrete thrust blocking.

_____ 17. Flow test required for each phase. Place order with Newton County Water and Sewerage Authority. Current cost _____.

II. SEWER LAYOUT

_____ 1. EPD Sanitary Sewer Extension Submittal Form filled out for proposed project.

_____ 2. Sewage acceptance letter issued by NCWSA.

_____ 3. Landfill letter issued by Newton County.
_____ A. Land Disturbing Activity Permit
_____ B. SWCD Report of Technical Review

_____ 4. Site plan showing sewer layout (topography overlay required).

_____ 5. Sewer layout should have manhole numbers, line designations, flow arrows, street names and topography.

_____ 6. Sewer layout showing proposed storm drain crossings.

_____ 7. Detail tie-in of proposed lines with existing lines providing existing and proposed pipe sizes and invert elevations.

_____ 8. Profile of proposed sewer lines with proposed grades.

_____ 9. Manhole numbers and locations on plan and profile.

_____ 10. Outside drop-manhole designated on profile where invert “in” elevation is more than 2.0 feet above the invert “out” elevation.

_____ 11. Percent grade and length on profile.

_____ 12. Size of mains on profile.

_____ 13. Lateral locations on plan. As-builts should have distances in feet from manhole to lateral as well as station numbers.

_____ 14. Materials to be used. Ductile Iron Pipe where required such as fills, shallow cover, less than 2’ of clearance, over 14’ of fill, etc.

_____ 15. Location in profile of streams and storm drains.

_____ 16. Permanent easements are to be 20’ wide for sanitary sewer and 30’ wide for easements containing both sanitary sewer and storm drains.

_____ 17. Easements for future sewer.

_____ 18. Details:
_____ A. Precast concrete manhole
_____ B. 6” service connection
_____ C. Sewer service location
_____ D. Manhole frame and cover
_____ E. Class A, B, C and Special PVC bedding

_____ F. Pipe adapter – Joining different types of pipe

_____ G. Cleanout

- _____ 19. No acute angles between “in” lines and “out” line in manhole.
- _____ 20. Proper manhole spacing.
- _____ 21. Sewers within minimum and maximum slope requirements for expected flow, pipe material and pipe size.
- _____ 22. In manholes where the pipe size increases, the crown of the smaller pipe must be at the same elevation or higher than the crown elevation of the larger pipe.
- _____ 23. Minimum cover of 7’ in roadway where laterals are located to obtain 6’ of cover over lateral at R/W limit, or D.I.P. laterals designated.

III. ADDITIONAL REQUIREMENTS

- _____ 1. Horizontal separation of at least 10 feet between water main and existing or proposed sewer (measured edge to edge).
- _____ 2. Where water main crosses existing or proposed sewer, 18” vertical separation is required between the two mains (measured edge to edge) and include a note that a full joint of water main is required to be centered at sewer main crossing so that both joints are as far away from the sewer as possible.
- _____ 3. Newton County utility location detail.
- _____ 4. Newton County Water and Sewerage Authority Water System Construction General Notes.
- _____ 5. Utilities Protection Center Detail.
- _____ 6. Water and sewer plans bear the stamp of a registered professional as required by OCG 43-15.
- _____ 7. All plans shall be submitted with plan sheets sized 22” x 34” or 24” x 36”.
- _____ 8. Existing water mains along existing roads shall be shown to be replaced with D.I.P. (if they are not already D.I.P.) beneath the proposed subdivision entrance and acceleration/deceleration lanes.

- NOTES:
- 1. Flow test valid for 6 months and only applies to a single phase/unit of this project.
 - 2. Plan approval valid for 12 months without beginning construction. Plans subject to further review and approval if 12 months expire.
 - 3. The Authority will not be responsible for any house built too low to be served nor for any service covered by construction.
 - 4. As-builts are required to be submitted upon completion of construction.

5. NCWSA New Subdivision & Line Extension Data Sheet shall be completed and submitted to the Authority upon project completion. (Forms attached.)
6. Existing county roads shall not be open cut unless permission is granted by the Georgia D.O.T. or the Newton County Road Department. Submittal of authorization letter from the Georgia D.O.T. or Newton County Road Department is required.
7. If work is performed on a Georgia D.O.T. or Newton County R/W, a letter from the governing agency is required to be submitted after construction is complete stating that grassing, clean-up, drainage, etc. is acceptable.



Newton County Water & Sewerage Authority As-Built / Record Drawing Specifications

(This guidance represents a condensed version of NCWSA Standards found at: <https://ncwsa.us/departments/engineering/>)

1. As part of NCWSA's Asset Management Program, contributed capital assets are incorporated into our Fixed Assets Report and inventory on an ongoing basis.
2. To record same, a field-run survey of all contributed capital assets shown or specified on the approved Construction Drawings shall be completed and submitted by Owner / Developer including buried lines, valves, structures, hydrants, service laterals, clean-outs, manholes, etc.
3. The field survey shall be performed under supervision of and sealed by a Georgia PLS, as allowed / specified under O.C.G.A. 43-15.
4. The field survey shall be performed to Georgia State Plane Coordinate System, NAD 83, USGS vertical datum, to Mean Sea Level.
5. Existing improvements located on the site shall also be recorded and described including fire hydrants, valves, buried lines, manholes, vaults, water meters, equipment and appurtenances.
6. Field notes provided by Constructor shall be included as needed for additional context.
7. The Cover of the Record Drawings shall contain the following information:
 - a. Name of Owner / Developer, address and contact information.
 - b. Name, address and contact information for Constructor, including Georgia Utility Contractor's License No.
 - c. Name of NCWSA Inspector(s)
 - d. Date of acceptance by NCWSA
 - e. Manufacturer, model, year of all new materials and products furnished (e.g., pipe, fittings, valves, structures, joint restraint system)
8. Recorded easement agreement(s) and exhibit(s) must accompany the As-Built / Record Drawings as individual recorded documents or contained on the Final Plat of the Site Development or Subdivision of Land.
9. NCWSA will review the As-Built / Record Drawings for conformance to these requirements and return comments for correction as needed. NCWSA signatures on Final Plats or Certificate of Occupancy shall be withheld until all project documentation is received.
10. Submittal Format: Submit one full-size paper copy, one AutoCAD.dwg file and one Adobe PDF file on memory stick or stable media

