1. Show the on-site water distribution system layout on the plans, including the following:

   a. Show the diameter, route, ASTM specification, and SDR or SCH number of the new water main/lines. A “List of Acceptable Pipe” is found on-line at [www.in.gov/isdh/22961.htm](http://www.in.gov/isdh/22961.htm).

   b. Show the location and diameter of the existing water main to which connection will be made.

   c. The water lines used for service connections must be at least ¾-inch in diameter.

   d. Water distribution lines must be at least one inch in diameter. Provide calculations to support the pipe size selected.

   e. Water lines less than 1-1/2 inches in diameter must be specified as either polyethylene tubing (SDR 7, 160 psi) or metal pipe.

   f. Water risers that will be exposed above grade must be constructed of metal pipe. Type K copper tubing or galvanized iron pipe are acceptable.

   g. Fire hydrants must be connected to 6-inch, or larger, water mains.

   h. Specify the minimum water line cover depth. For a map showing the required water line depth for a given county, refer to [www.in.gov/isdh/files/Frost_Penetration.pdf](http://www.in.gov/isdh/files/Frost_Penetration.pdf).

   i. Show a summary of the total lineal feet for each diameter of water main/line to be used in this project on the plans.

2. Include the following items for connection to a public utility water main with the plan submittal:

   a. Provide a letter of permission for connection to the public utility water supply from the proper local authorities. Said letter must indicate the utility has sufficient supply to handle daily and peak water demands from the project.
b. Show the location and diameter of the utility water main on the site plan.

c. Submit details of the water main/line connection to the water utility, including the static and residual water pressure at the point of connection and the flow test data for the two hydrants nearest the point of connection.

3. Specify the following on the plans:

a. Where water lines and sewers cross, a minimum 18 inches vertical clearance must be maintained. Where this is not possible, the sewer must be constructed of either waterworks grade ductile iron pipe with mechanical joints, PVC ASTM-D 3034 SDR 26 pipe with gasketed, compression-type joints, or PVC ASTM-D 2241 SDR 21 or 26 pipe with gasketed compression-type joints. Said sewer pipe material shall be used within 10 feet of the crossing. The water line should preferably be located above the sewer.

b. Where water lines and sewers run parallel, a minimum separation distance of 10 feet must be maintained. If a 10-foot distance cannot be maintained, then the sewer must be constructed of either waterworks grade ductile iron pipe with mechanical joints, PVC ASTM-D 3034 SDR 26 sewer pipe with gasketed compression-type joints, or PVC ASTM-D 2241 SDR 21 or 26 pipe with gasketed compression-type joints.