



Hardin County Water District No. 2

Water Construction Plans Checklist

Project Name: _____

Project Location: _____

Submittal Documents:

Yes No N/A

Comments

- 2 Sets of Signed Plans for Review _____
- PDF Version of the Signed Plans _____
- Hydraulic Analysis
Hydrant flow tests shall be completed by District personnel only _____
- Hydraulic Analysis Fees _____
- KY Division of Water Approval Letter & Permit _____
- Water Line Extension Policy, Developer Agreement & Agreement for dechlorination and samples _____
- Escrow Deposit _____
- Encroachment Application(s)
KYDOT, County, Railroad, Electric, etc. _____

Water Construction Plans:

Yes No N/A

Comments

- Project Title _____
- Date _____
- Vicinity Map _____
- Legend _____
- Sheet Index _____
- Contact Information
Engineer and Developer _____
- Engineer's Seal and COA _____
- Benchmark (State Plane and NAVD) _____
- Overall Project Layout _____
- Overall Utility Layout no smaller than 1:200
Only necessary if water lines require multiple plan sheets _____
- Plan sheet scale: between 1:10 and 1:60
Typical scale 1:50 _____
- Plan sheets shall be 24" x 26" _____



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Water Construction Plans (cont'd):

Yes No N/A

Comments

- Street Names and R/W widths _____
- Lot Numbers _____
- North Arrow and Bar Scale _____
- Property Lines and Owner Info _____
- Project Notes _____
Verify project notes do not conflict with the District's specification
- Water main construction sequence _____
Describe in detail how tie-ins, change overs, startups, etc. should be completed
- Existing Utilities _____
With size and material, if known
- 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 30" _____
- Existing and Proposed Valves _____
Proposed: 3 at tees, 4 at crosses, 1 at stubs; so that no more than 800 ft. of main should be shut down
- Existing Fire Hydrant(s) _____
- Water line extends full length of property _____
frontage along utility easement or right-of-way
- Stubouts for future development _____
Valve required before blow-off
- Water line behind curb/edge of pavement _____
- Water system is looped _____
- Profiles for proposed water line _____
- Utilities shown at all water line crossings _____
On profiles only
- Appropriate blocking or pipe restraint _____
- Individual water services and meters _____
- Air release valves indicated if required _____



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Water Construction Plans (cont'd):

Yes No N/A

Comments

- Blow-offs or means of flushing at dead ends *sized to provide at least 2.5 ft./sec* _____
- Label all proposed water appurtenances _____
- Encasement shall extend from right-of-way to right-of-way or 5' beyond edge of pavements (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 _____

Minimum clearances:

- Water 24" vertically above sewer _____
- Water 10' horizontally from sewer
Water line must be encased if above clearances cannot be met _____

Proposed Fire Hydrants and Spacing:

- Street Intersections _____
- 500 ft. maximum spacing for developments _____
- Minimum 6" water line diameter
If necessary, larger mains shall be required to maintain minimum residual pressure _____



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Standard General Water Notes:

1. The Contractor shall fully comply with all Local, State and Federal safety and environmental regulations governing utility construction.
2. The Contractor shall verify the location of all existing utilities prior to beginning construction. Contact Kentucky811 at 811, 1-800-752-6007 (nationwide), or www.kentucky811.org 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.
3. Existing and proposed water main locations shall be verified by Hardin County Water District No. 2 prior to construction.
4. The Contractor shall notify the District forty-eight (48) hours prior to beginning water line construction, including to inspect/witness taps and pressure tests.
5. Construction practices and procedures shall conform to current AWWA standards and also conform to Hardin County Water District No. 2 Standards Specifications and Details for water main design, construction and materials. Specifications are on file at the District office. The Contractor shall refer to said specifications and details for all typical detail drawings.
6. Submit shop drawings to the District for review and approval prior to beginning work.
7. All water lines shall conform to ASTM specifications D-1784, C900-DR18 joints shall be slip-type with rubber gaskets conforming to ASTM-1869.
8. Fittings shall be Ductile Iron in accordance with AWWA C110 or C153 and shall be manufactured for the size and pressure class of the line on which they are used.
9. All valves shall conform to AWWA C509. Blow-off valves smaller than 4" shall conform to AWWA C500.
10. All water line crossing proposed paved surface shall be backfilled full depth with crushed stone.
11. All pipe and fittings shall have a minimum of 6" bedding of dirt under and on both sides of pipe unless otherwise specified. All pipe and fittings shall be backfilled with dirt unless otherwise specified.
12. All fittings: 90° bends, tees, etc., shall be blocked with a minimum of 12" poured concrete against undisturbed soil.
13. Water lines shall be installed a minimum 30" below the elevation of the finished roadway immediately adjacent to the pipe.
14. All fire hydrants shall be standard 3-way 5 1/4" breakaway type with a minimum 3 1/2-foot bury, turning left to open and right to close. All fire hydrants shall be painted Body – National Blue and Caps – Silver in color. Fire hydrants must be installed with the base of the fire hydrant 2-3" above final grade.
15. Valves shall not be installed within sidewalks, curb or gutter, or driveways. All valves shall have cast iron valve boxes extending no more than 1/2" above final grade or 2" in unsodded areas. Gate valves shall turn right to close and turn left to open.
16. Only District personnel shall operate the District's existing valves.
17. 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 4 hours at any one time unless otherwise directed by the District.
18. All water lines and services, regardless of material, shall have a tracer wire installed along the top half of the pipe.
19. After installation, all water lines shall be pressure tested (150 PSI @ 2 hours), disinfected with a chlorine solution (50 PPM initially and 25 PPM after 24 hours), and have passing bacteriological tests prior to being placed into service.