

May 5, 2021

Re: Application #PL2021150 - Response to Comments

BHC Rhodes has received your comments and have the following responses:

The following deficiencies need to be corrected:

## **Engineering Review**

 Separate engineering plans shall be submitted for the public water main improvements. No MDNR permit is required for this upgrade if installed in the same general location and trench.

A separate set of public water main improvement plans is attached to this submittal.

- 2. A profile view of the public water main improvements is required. Air release valves may be required at high points of any 12-inch line. Please contact me prior to placement of any potential air release valves as this will need to be reviewed by Water Utilities for placement. The plan and profile sheet is shown on sheet 3 of the public water main improvement plans. A callout has been added to show the proposed location of air release valves.
- Valve locations for the new public water main were not shown. Two (2) valves are required at a tee, and three (3) valves are required at a cross. New and existing valves along the proposed water main are now shown.
- 4. Recommend the note concerning 85 feet of restrained joint pipe (i.e., note W08) in the public water main plans be modified to include an asterisk, or some other prominent designator to alert the contractor and inspector. This has not typically been performed in the past, and we need to ensure the contractor and inspector are aware of these requirements. Possibly include a typical detail of what is being described? On the profile view? The restrained joint pipe note W08 is now bold. The limits of the restrained joint piping is also shown on the profile view (Sheet 3).
- Recommend the list of notes on Sheet C6.4 of the public water main plans be updated to include all three (3) scenarios as separate list items. These notes have been updated.



BHC is a Trademark of Brunaardt Honomichl & Company, P.A.

6. What is the phasing plan for this work? Individual water users shall not be out of water service per the requirements contained in the Design and Construction Manual. Sufficient notice must also be made to water customers prior to shutting down water to them. Is the intent to lay the line parallel to the existing line, and make the final connections at that time? A clear and concise plan shall be developed for this work, with sufficient notes concerning shut down times, work at night, notice to water customers before shutdown is made, notification to Development Services Inspections prior to performing any shutdowns notes about City only allowed to turn valves on or off, and maximum amount of time allowed for the shutdown.

Phasing notes have been added to Sheet 3.

- A standard detail for the domestic water service, valve and valve box was not provided in the public water main plans.
  This detail has been added to Sheet 4.
- It is assumed the existing water main will be removed and disposed. Please provide notes concerning the disposition of the existing water main on the public water main plans. The existing water main will be abandoned in place. This note is shown on Sheet 2.
- It is assumed there will be work within streets during the removal and replacement of the public water main. Restoration would therefore need to be performed. Please include GEN-5 "Trenching/Patching Roadways Detail" in the plans. It may also be necessary to temporarily plate the street, so please consider adding GEN-6. A restoration note has been added to Sheet 2.
- 10. If air release valve is needed at the high points of public 12-inch water main, please provide the standard detail WAT-10 in the plans and show its location on the plan view. Air release valve locations and notes are shown on Sheet 3.
- 11. Fire hydrant standard detail sheets shall be provided in the public water main plans (i.e., WAT-7 and WAT-8 as appropriate for the hydrant to be relocated and reconnected). Fire hydrant details are shown on Sheet 4.
- Thrust block and straddle block standard details were missing from the public water main plans. This would include WAT-1, WAT-2, and WAT-3. These details are shown on Sheet 4.
- 13. Fire hydrant locations appear to have been omitted in the public water main plans. Please show their location and ensure the maximum distance between fire hydrants is followed in the design.

Fire hydrants are now shown on all plans. Maximum distance between fire hydrants is met.

- 14. Proposed water main on the public plans appear to be very light in contrast to the existing water mains. Recommend slightly darkening or thickening the proposed water main to make it easier to distinguish for contractor and inspector. Proposed water main has been darkened and is now much more legible.
- 15. Provide sufficient notes concerning the removal and replacement of ADA-accessible ramps, curb and gutter, sidewalk, driveways, landscaping, grass, etc. on the public water main plans.

A restoration note has been added to Sheet 2.

16. Revision to the cost estimate for this work shall be provided prior to approval of the plans. Water main shown on FDP cost estimate was subtracted from the fee worksheet for that portion of the work.

A revised cost estimate has been attached to this submittal.

If you have any further questions, feel free to contact me at 913-663-1900 or by email at scott.tanner@ibhc.com

Sincerely,

Scott Tanner Design Engineer BHC Rhodes 7101 College Blvd, Suite 400 Overland Park, KS 66210



