



September 14th, 2023

City of Lee's Summit, Missouri
Attn: Gene Williams
220 SE Green Street
Lee's Summit, MO 64063

**RE: THE VILLAGE AT DISCOVERY PARK – PUBLIC WATER
PL2023144**

This letter provides responses to comments as provided and dated below. Thank you for your time, all approvals are acknowledged without comment below. Please note the following formatting conventions:

- General statements, descriptions, and quotes from previous communication of changes not in direct response to a comment shall be unformatted.
- *Comments as provided or described as well as possible shall be italicized.*
- **Responses to comments shall be bold.**

Thanks,

David Eickman

Engineering Review - Corrections

1. Sheet C554: 1. Sta. 10+00 Line A: WU is considering installing a 12" X 12" cross instead of a 12' X 12" tee in the Colbern Road Project south of Sta. 10+00 Line A. If the cross is installed, the proposed water main will connect to the cross. 2. A note on the north side of Colbern Road included moving a fire hydrant 29 feet NW. WU is considering moving the hydrant in the Colbern Road plans 30 feet to the east to avoid the Discovery Park entrance. **Connection at Sta. 10+00 revised to connect to a cross instead of a tee. Fire hydrant callout removed from Sheet C554.**
2. Sheet C555: 1. There is a note to raise an existing hydrant on the north side of Colbern Road. The Private water main plans indicate abandoning the 8-inch water main. If the 8-inch water main will be abandoned, remove the hydrant instead of raising it. **Per coordination meeting with the city on 08/30, existing 8" water main on the north side of Colbern Rd are to be abandoned and plans updated accordingly. Fire hydrant is also being removed on Sheet C555.**
3. Sheet C556: 1. The proposed water main turns north at Sta. 19+62.40 to cross Colbern Road. Can the water main cross Colbern Road closer to the intersection such as near where the right-of-way turns toward the Douglas Road right-of-way lines?

Water main layout and design revised to cross Colbern Rd closer to the intersection. See Sheet C556.

4. Sheet C557: 1. Sta. 9+88.21 Line B: If the 8-inch water main is going to be abandoned, do not install a fire hydrant at Sta. 9+88.21 Line B.
Per coordination meeting with the city on 08/30, existing 8" water main on the north side of Colbern Rd are to be abandoned and plans updated accordingly. Fire hydrant removed from Sheet C557.
5. Private water main plans: 1. The water supply requirements for Discovery Park are unknown. WU is considering installing a 12-inch water main across the westernmost entrance instead of an 8-inch main in case a 12-inch main is needed. 2. Proposed hydrants are shown along the north side of Colbern Road that appear to connect to the proposed water main on the south side of Colbern Road. These hydrants will need to connect to the private water system north of Colbern Road.
Acknowledged. Private water main across the westernmost entrance is also upsized to 12" on separate private water plans.
There are no proposed fire hydrants along the north side of Colbern Road that connect to the proposed water main on the south side of Colbern Road.
6. On sheet C553 of the plans, there is a note to abandon approximately 1800 feet of 8-inch water main along the west side of the property. The main is actually a 12-inch water main. Abandoning the 1800 feet of 12-inch water main will create about two and a half miles of dead end water main extending north then east to the northeast corner of the airport property. The proposed 12-inch water main will need to be extended north along Lee's Summit Rd. and connected to the 12-inch water main running along Lee's Summit Road. Please revise as appropriate.
Note updated to indicate abandonment of 12" water main
Acknowledged. Proposed 12" public water main will be extended north per separate plans, that were previously approved with Aria Apartments development project.
7. Sheet C553, a note near Douglas states portions of the existing 8-inch water to be abandoned. This water main is actually 20-inch.
Note removed. Abandonment of existing 20" transmission main is no longer proposed per coordination meeting with the city on 08/30.
8. Sheet C554: Fire hydrant along Colbern at the new entrance is shown within 20 feet of curb return. All fire hydrants should be located no less than 20 feet from a curb return. Please revise.
Refer to Comment #1. The fire hydrant in question is being installed with Colbern Rd Reconstruction plans.
9. Sheet C554: Tee at station 10+00 is too close to the vertical bend. The northern valve may be on a 22.5 degree incline. For more information, see Garver Plan sheet C-817. Please revise as appropriate.
Per Comment #1, connection to existing main revised on Sheet C554 and proposed water main will be connecting to the cross instead.
10. Sheet C554: Incorrect fire hydrant is called-out. Please use the City of Lee's Summit standard fire hydrant for all fire hydrants used on this project.
Fire hydrant callout revised.

11. Sheet C554: The Garver plan set (i.e., Sheet C-818) shows the existing water main is under the shared-use path. Please evaluate and revise as appropriate.
Reconstructed Colbern Rd shown per latest CAD file obtained from Garver.
12. All Sheets: Please show the right of way and/or easement boundary on all sheets. In particular, Sheet C554 appeared to be missing this information.
Plotting styles of R/W and easement boundaries revised for better legibility.
13. Sheet C554: Inset view on "Permanent Connection Detail" shown in lower right hand corner states "existing solid sleeve". Shouldn't this be specified as "proposed solid sleeve"? The main doesn't exist at the present time.
Connection detail on Sheet C554 revised per Comment #1.
14. Sheet C554: The legend specifies a symbol for "straddle block". Please show where straddle blocks will be installed, including the inset views.
Symbol removed.
15. Sheet C555: A fire hydrant is shown within a median at the new entrance. Please move this fire hydrant outside the limits of the median, and ensure it is a minimum of 20 feet from any curb return.
Fire hydrant removed per Comment #2.
16. Sheet C555: Please show the location of all right of way and/or easements.
Plotting styles of R/W and easement boundaries revised for better legibility.
17. Sheet C556: Please show restrained joints inside the casing carrier pipe throughout the entire length.
Restrained joints added to the profile on Sheet C556.
18. Sheet C558: A bend is shown near station 17+00. The as-built Record Drawings from TransSystems do not show this bend. How was this information obtained?
Layout shown was obtained from Garver's CAD file. Existing water main layout updated on Sheet C558.
19. Sheet C558: There is confusion on where the right of way line is located. Please label, and ensure any future right of way line is also shown.
Plotting styles of R/W and easement boundaries revised for better legibility.
20. Sheet C559: A bend is shown in the existing line at station 20+50. The as-built Record Drawings from TransSystems do not show this bend. How was this information obtained?
Layout shown was obtained from Garver's CAD file. Existing water main layout updated on Sheet C558.
21. Sheet C560: Please show a restrained 8 inch gate valve to the 12" by 8" tee near the backflow vault.
Gate valves shown on Sheet C560.
22. Sheet C560: Dead end water mains shall always terminate with a fire hydrant, not a flushing assembly. However, the 12 inch main shall be extended along Douglas St. to form

a loop with the existing 12 inch main along Douglas St. to the north in accordance with prior comments, so the comment is moot. Please evaluate and revise as appropriate.

Acknowledged. Proposed 12" public water main will be extended north per separate plans, that were previously approved with Aria Apartments development project.

23. Water Utilities would prefer the 12 inch main serving their lift station facility be abandoned from Douglas St. to their lift station, as water service at this location is not needed. Please evaluate and revise as appropriate.

Acknowledged.

24. Sheet C560: Why is the section of water main near station 10+00 being relocated? In any case, as-built Record Drawings indicate there is a straddle block on the 20 inch main near station 10+56. If any work is necessary based on the question above, no disturbance of this straddle block should be allowed during construction. If appropriate, add sufficient notation that describes the straddle block and a clear note stating "do not disturb" or equivalent language.

Abandonment of existing 20" transmission main is no longer proposed per coordination meeting with the city on 08/30. Portions of existing 20" transmission main are shown to be encased instead.

25. Sheet C560: Profile view of 20 inch main shall be shown with restrained joints throughout the section to be replaced. Please revise as appropriate.

Abandonment of existing 20" transmission main is no longer proposed per coordination meeting with the city on 08/30.

26. Sheet C560: The as-built Record Drawings from TransSystems sheet LS-103 shows the 20 inch main crossing under the culvert. Top of the pipe at Station 10+00 should be approximately 938.0. Please revise as appropriate.

Abandonment of existing 20" transmission main is no longer proposed per coordination meeting with the city on 08/30.

27. A meeting between the engineer, Water Utilities, Development Services, and Public Works is warranted to discuss these comments and how they relate to the Colbern Rd. Capital Improvement Project. We will be in contact concerning this meeting which is anticipated to take place via Zoom.

Acknowledged. Meeting took place on 08/30.