

Date: Thursday, October 26, 2023

To: David Eickman, P.E.
Olsson Associates
North Kansas City, MO 64116

From: Gene Williams, P.E.
Senior Staff Engineer

Application Number: PL2023144

Application Type: Engineering Plan Review

Application Name: THE VILLAGE AT DISCOVERY PARK - PUBLIC WATER

The Development Services Department has completed its review of the above-referenced plans dated Oct. 9, 2023 and offer the following comments listed below.

- See comments below to determine the required revisions and resubmit to the Development Services Department public portal located at devservices.cityofls.net. Digital documents shall follow the electronic plan submittal guides as stated below.
- Revised plans will be reviewed within ten (10) business days of the date received.

Engineering Review - Corrections

1. Sheet 553: The old 12" water main running along the west side of the project in a north/south alignment should be abandoned at Lee's Summit Road. At Lee's Summit Road where this 12 inch main is currently connected, remove valve 84192 (i.e., the valve that is located on the 12 inch line serving the north/south branch of the line to the southwest of the existing tee), install a plug in the tee, pour a thrust block against the plug and abandon the old 12-inch main to the south. The water main might be under the sidewalk so some sidewalk restoration might be needed. Do not install a fire hydrant shown in detail 1, as the entire 12 inch line from Colbern Rd. to Lee's Summit Rd. will be abandoned in-place. Abandon the 12" main at the tee on the north side of Colbern Road. Plug the tee and place a thrust block against the plug. Abandon the 12-inch water main to the north of the tee on the north side of Colbern Road.
2. Sheet C557: Note in the profile at Sta. 21+53.38 includes installing a 12"X6" tee. There are no notes stating to install the remainder of the hydrant assembly. Please provide notes to install the remainder of the fire hydrant assembly.
3. Sheet 559: It looks like the Curb Inlet D-2 was moved closer to the RCB to avoid a conflict with the 20" water main. Looking at the 20-inch water main record drawing, it looks like the top of the main could be between elevation 946 and 947 where the proposed storm pipe will cross the water main. It is suggested the 20 inch water main be potholed in this location to confirm its location vertically and horizontally, as this will be a major impediment to construction if there are any conflicts.

4. Sheet 563: Please delete the air release valve if the hydrant at Sta. 13+70.64 is near the high point on the proposed water main. The fire hydrant can be used on a periodic basis by Water Utilities to release entrapped air, and hence the requirement to place an air-release assembly is negated.
5. Sheet 567: Add a 12" valve on the west side of the 12"X12" tee at Sta. 28+01.20. This is an important water main and needs three valves. The existing 12" water main connection located west of Sta. 28+01.20 has three valves.
6. All Sheets with 12 Inch Butterfly Valves (In particular, the northern extension sheets): Please delete the references to 12 inch butterfly valves, and substitute "gate valve" in its place. The City recently changed the requirements, and butterfly valves are no longer required unless the water main is 16 inches or larger.
7. Is it possible to rearrange the plans so the standard details section is located in the back? As shown, the south portion of the new water main is shown, then a few standard details, then the north portion is shown after, then more standard details. Suggest rearranging the plans to make more useable in the field, and to eliminate any confusion.
8. Sheet C567 - Temporary Connection Detail A: Please change the 12 inch butterfly valve to a 12 inch gate valve.
9. Sheet C566: Add notes specifying the 12 inch water main to be bored. No open trench installation will be allowed.
10. Add bold notes on the abandonment plan that abandonment of the existing north/south 12 inch water main shall not be allowed until the new line along Douglas St. and Colbern Rd. has been completed. Otherwise, there will be insufficient water pressure for water customers to the north of your development.

In order to calculate the Engineering Plan Review and Inspection Fee, a sealed Engineer's Opinion of Probable Construction Costs shall accompany your final submittal copies. The itemized estimate (material and installation) shall be sufficiently broken down and shall include the following items, as applicable.

- Public infrastructure, both onsite and offsite.
- Private street construction, including parking lots and driveways.
- Sidewalks located within the right-of-way.
- ADA accessible ramps.
- Sanitary sewer manholes and piping between manholes, including private mains.
- Connection of the building sanitary sewer stub to the public main.
- Waterlines larger than 2 inches in diameter, valves, hydrants, and backflow preventer with vault, if outside the building.

- Stormwater piping greater than 6 inches in diameter, structures, and detention / retention facilities - public or private.
- Water quality features installed to meet the 40-hour extended duration detention requirements.
- Grading for detention / retention ponds.
- Grading to establish proper site drainage.
- Utility infrastructure adjustments to finished grade (i.e. manhole lids, water valves, etc.).
- Erosion and sediment control devices required for construction.
- Re-vegetation and other post-construction erosion and sediment control activities.

Electronic Plans for Resubmittal

All Planning application and development engineering plan resubmittals shall include an electronic copy of the documents as well as the required number of paper copies.

Electronic copies shall be provided in the following formats

- Plats – All plats shall be provided in multi-page Portable Document Format (PDF).
- Engineered Civil Plans – All engineered civil plans shall be provided in multi-page Portable Document Format (PDF).
- Studies – Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).

Please contact me if you have any questions or comments.

Sincerely,

/s/ electronically signed Oct. 26, 2023

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cc: Development Engineering Project File