

DEVELOPMENT SERVICES

Date: Monday, July 29, 2019

To: OLSSON ASSOCIATES
Melissa DeGonia, P.E.
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116

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

Application Number: PL2019236

Application Type: Engineering Plan Review

Application Name: HAWTHORN RIDGE 2ND PLAT - WATER LINE PLANS

The Development Services Department received plans for this project on July 15, 2019. We have completed our review and offer the following comments listed below.

- Resubmit three (3) full size sets of plans (no larger than 24"x36") folded to 8-½"x11", one (1) comment response letter, and one (1) digital copy following the electronic plan submittal guides as stated below.
- Revised plans will be reviewed within five (5) business days of the date received.

Engineering Review

1. Sheet 02: Please add notes that specify that all fittings shall be ductile iron, with fusion-bonded epoxy coating complying with ANSI/AWWA C116/A21.16 on the interior and exterior. Also, add a note concerning the requirement that tracer wire be installed with the water main.
2. There appears to be a misunderstanding on the number of valves at tees and crosses. The City requires that two (2) valves be installed at a tee, and three (3) valves at a cross. It appears that every tee and cross is missing one (1) valve. Please ensure that each tee and cross has the correct number of valves.
3. Sheet 04: It appears the inline fire hydrant is being removed, and not replaced. Based on our records, it appears a fire hydrant is warranted near this location, as the nearest fire hydrant is located approximately 500 feet to the north.
4. General Comment Concerning All Plan and Profile Sheets: Please ensure that all notes concerning the gate valves has been updated to reflect the requirement that two (2) valves be installed at every cross, and three (3) valves at all tees.
5. When performing the re-design to allow for the additional valves, please ensure that valves are not placed within the sidewalk, if possible.

6. A trenching and backfill detail was missing. Please provide a typical section view of the trenching and backfill method to be used on this project.
7. Please provide the standard details for water valves and boxes, and the fire hydrant assemblies.

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,

Original Signed

Gene Williams, P.E.
Senior Staff Engineer
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Gene.Williams@cityofls.net

cc: Development Engineering Project File