

DEVELOPMENT SERVICES

Date: Friday, April 03, 2020

- To: OLSSON ASSOCIATES 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116
- From: Gene Williams, P.E. Senior Staff Engineer

Application Number:PL2020074Application Type:Engineering Plan ReviewApplication Name:Osage 1st - Water Line

The Development Services Department received plans for this project on March 19, 2020. 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 - Corrections

- 1. Sheet 306: It appears the water main will exceed 7 feet of cover at the storm line crossing. Can the storm line be adjusted? Are there any alternatives, such as placement of the water line above the storm line, and construction of a "doghouse" insulation cover over the water main, to prevent feezing? This would be the preferred method (i.e., installed above the storm line), due to the fact that water lines frequently fail, and maintenance would be much easier if the water line were installed above the storm line.
- 2. The layout of the water line does not follow the approved Preliminary Development Plan in terms of providing a connection beneath M-150. Two connections are shown along Pryor Rd., which was not the intent. Please see the approved Preliminary Development Plan for more information.

Traffic Review - Not Required

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 mulit-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,

Digitally signed

Gene Williams, P.E. Senior Staff Engineer (816) 969-1223 Gene.Williams@cityofls.net

cc: Development Engineering Project File