

Date: Tuesday, December 17, 2019

To: GBA ARCHITECTS ENGINEERS
9801 RENNER BLVD
LENEXA, KS 66219

From: Sue Pyles, P.E.
Senior Staff Engineer

Application Number: PL2019334

Application Type: Engineering Plan Review

Application Name: PARAGON STAR - PUBLIC SANITARY

The Development Services Department received plans for this project on September 27, 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 - Corrections

1. Why is the sanitary system so deep upstream of MH A-4? It seems like the depth could be reduced by several feet.
2. The service line being installed to serve the future apartments is a 6" line. It would make more sense to wait and see if the apartments might require an 8" line than to install a stub that might be too small. The 8" line could connect into the end MH.
3. The proposed grade over the last pipe segment of Line A doesn't appear correct for a parking lot. Please review and revise.
4. For information, not a part of this plan set, the water meter vaults shown under parking stalls will not be allowed. Access must be provided to the meters at all times.
5. The Metering Structure Plan shows mechanical joint connections in one detail and Strong Back RC Couplings in another for the same connection point. Please revise to require mechanical joint connections in all views.
6. Label horizontal separation between MHs D-3, D-4, E-1 and the adjacent storm sewers. If the required

separation isn't provided, revise accordingly.

7. Please verify crossing angles meet City requirements.
8. Please submit an Engineer's Estimate of probable Construction Costs.

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 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,

Sue Pyles, P.E.
Senior Staff Engineer
(816) 969-1245
Sue.Pyles@cityofls.net

cc: Development Engineering Project File