

Date: Wednesday, July 05, 2023

To: Doug Ubben
Phelps Engineering, 1270 N. Winchester St., Suite #5878
Olathe, KS 66061

From: Sue Pyles, P.E.
Development Engineering Manager

Application Number: PL2022325

Application Type: Engineering Plan Review

Application Name: Orchard Woods - Streets, Stormwater, and Master Drainage Plan

The Development Services Department received plans for this project on September 07, 2022. We have completed our review 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 five (5) business days of the date received.

Engineering Review - Corrections

1. Submit an updated Engineer's Estimate of Probable Construction Costs.
2. The comment response letter indicates that swale depths have been revised, but this submittal matches the previous submittal. Please review.
3. Include TRM in Swales A & C. This is not dependent on shear stress calculations.
4. Add 100-yr WSE at each inlet that water is above the opening and at each property corner.
5. The MBOE shall be 2' above the 100-yr WSE. On lots that slope from back to front, there is typically a berm that meets the MBOE elevation requirement so the house doesn't have to be unreasonably high. Another solution, where possible, is to contain the 100-yr flow within the pipe system.
6. Include 100-year drainage and inlet calculations.
7. Add dimensions to the Outlet Structure detail to clarify which side is which width.

Traffic Review - No Comments

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.
Development Engineering Manager
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cc: Development Engineering Project File