S LEE'S SUMMIT MISSOURI

PUBLIC WORKS ENGINEERING DIVISION

Date: Friday, March 09, 2018 To: PHOENIX ENGINEERING & SURVEYING LLC Brian Glenn, P.E. Email: BRIAN@PHOENIX-LLC.COM Fax #: (660) 429-1801

From:	Gene Williams, P.E.	
	Senior Staff Engineer	
Applica	ation Number:	PL2017194
Applica	ation Type:	Engineering Plan Review
Applica	ation Name:	Whispering Woods 1st Plat - On-Site Sanitary

The Development Services Department received plans for this project on Feb. 28, 2018. We have completed our review and offer the following comments:

Engineering Review

- 1. The waiver request is in progress.
- 2. Please refer to comment #9 contained in the previous comment letter dated Feb. 22, 2018. Manhole B-1 is still shown as an existing manhole. This is a new drop manhole, and the City does not want any misunderstandings in the field concerning this new structure. Please remove "existing" from the note.
- 3. Please refer to comment #11 contained in the previous comment letter dated Feb. 22, 2018. A trenching and backfill detail is provided, but may not comply with Section 2102.4.G, H, I, and J "Excavation, Trenching, and Backfilling for Pipe and Structures" contained within the Design and Construction Manual. The typical sections provided in the revised plans do not show the trench width, and this will be critical in the design of the trench backfill within right of way. Please see Section 2102.4 for specific requirements. Ensure the bedding material complies with the requirements contained in this section.

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

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 on CD in the following formats

- Plats All plats shall be provided in Tagged Image Format File (TIFF) Group 4 compression.
- Engineered Civil Plans All engineered civil plans shall be provided in Tagged Image Format File (TIFF) Group 4 compression. All sheets shall be individually saved and titled with the sheet title.
- Architectural and other plan drawings Architectural and other plan drawings, such as site electrical and landscaping, shall be provided in Portable Document Format (PDF).
- Studies Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).
- It is requested that each plan sheet be a maximum of 2MB.

Please contact me if you have any questions or comments.

Sincerely,

Original Signed

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

cc: Development Engineering Project File