

Date: Friday, February 15, 2019

To:

HG CONSULT, INC

Kevin Sterrett, P.E.

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Fax #: <NO FAX NUMBER>

From: Gene Williams, P.E.

Senior Staff Engineer

Application Number: PL2018212

Application Type: Engineering Plan Review

Application Name: Cobey Creek 1st Plat - Off-site Sanitary Sewer

The Development Services Department received plans for this project on Feb. 8, 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 3 of 7: The plans show an 18 inch ductile iron pipe connected to existing City manhole SP-8. The profile view shows the correct geometry with the 18 inch pipe higher than the crown of the receiving pipe. However, the receiving pipe is 24 inch. The flowline elevations show that the 18 inch ductile iron pipe will be installed below the crown of the receiving pipe. It appears the receiving pipe was drawn in error. In accordance with the Design and Construction Manual, when a smaller sewer joins a large one, the invert of the larger sewer should be lowered sufficiently to maintain the same energy gradient. An approximate method for accomplishing this is to place the 0.8 depth point of both sewers at the same elevation. At an absolute minimum, the crown of the receiving pipe should be at or below the incoming pipe crown.
2. The above comment will likely require adjustment of the upstream segment up to and including manhole A2.

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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cc: Development Engineering Project File