

---

**PUBLIC WORKS ENGINEERING DIVISION**

**Date:** Tuesday, July 17, 2018

**To:**

SCHLAGEL & ASSOCIATES

Mark Breuer, P.E.

Email: mab@schlagelassociates.com

Fax #: (913) 492-8400

**From:** Gene Williams, P.E.

Senior Staff Engineer

**Application Number:** PL2018104

**Application Type:** Engineering Plan Review

**Application Name:** Oakview Storage - Public Sanitary Sewer Extension

---

The Development Services Department received plans for this project on June 25, 2018. 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 C2.0: A minimum drop of 0.5 feet is required at the existing manhole, due to the magnitude of the angle of deflection.
2. Sheet C2.0: Please number the existing manhole. It is City Manhole #23-053.
3. Sheet C2.0: The depth of cover between A1 and A2 exceeds the City's maximum of fifteen (15.0) feet. We measured 16.5 feet.
4. Sheet C2.0: The depth of cover between A3 and A4 exceeds the City's maximum of fifteen (15.0) feet. We measured 15.5 feet.
5. Detail Sheet(s) were missing the following required items: 1) manhole frame and lids, with appropriate lettering (i.e., SEWER), 2) trenching and backfill detail in accordance with the Design and Construction Manual, and 3) trench check detail.
6. Detail Sheet(s) appear to show items that will not be installed as part of this project. Please remove them. This includes the concrete encasement detail, the drop manhole detail, and the shallow manhole detail.

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