

**Date:** Thursday, September 01, 2022

**To:** Julie Sellers  
Olsson Associates

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

**Application Number:** PL2022292

**Application Type:** Engineering Plan Review

**Application Name:** Raintree Village Senior Living-Phase 1: Sanitary Sewer Plan

---

The Development Services Department received plans for this project on August 10, 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](https://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. General:
  - Submit an Engineer's Estimate of Probable Construction Costs.
  - Submit a copy of the MDNR permit.
  - The easement width, 30', appears too narrow in some locations. Please review and revise as necessary.
  - The City does not allow public infrastructure to be located under retaining walls. Please investigate other options.
2. Sheet S1.0:
  - Revise General Note 2. "CPD-DS-LDD" does not apply.
  - The City does not allow ABS or VCP pipe. Please revise General Notes 4 & 5 accordingly.
3. Sheet S2.0:
  - Please label the existing MH with the City's MH number, 60-163, in both Plan and Profile view.
  - Revise the line type downstream of SS 1-1 in Plan view.
  - Include note that connection to the existing MH is by core drilling.
  - Include invert elevation in from the west at the existing MH.
  - The drop across the EX MH does not meet City requirements. Please revise.

4. Sheet S2.1:

- Include bore info at the retaining wall in Plan view to match the other bore locations.
- The casing pipe diameter appears too small to work with a 10" pipe. Please revise diameter and include wall thickness.
- Include any special design requirements for the pipe being bored.
- The drop across SS 1-4 does not meet City requirements. Please revise.

5. Sheets S3.0-S3.1:

- Only include applicable details in the plan set.
- Add the Casing Pipe standard detail to the plan set.
- The City requires bedding be placed to a minimum 12" above the top of pipe. Please revise the detail accordingly.

### **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