DEVELOPMENT SERVICES

Date: Monday, March 31, 2025

To: Jeff Bartz

OWN, Inc, 8455 College Boulevard

Overland Park, KS 66210

From: Sue Pyles, P.E.

Development Engineering Manager

Application Number: PL2025071

Application Type: Engineering Plan Review

Application Name: Alura Apartments - Private Sewer and Water

The Development Services Department received plans for this project on March 31, 2025. 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 <u>devservices.cityofls.net</u>. 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. Sheet C200:

Backflow Vaults have been added to the plans

- The proposed private water line will require backflow vaults at each connection with the public main.
- Please label the service lines in a consistent manner. Service connections have been removed from this sheet.
- Clarify how the proposed entrances will be constructed.

Refer to the Alura FDP and Douglas Street Public Improvement Plans for additional information on the entrances.

2. Sheets C300-C303:

Duplicate labels have been removed.

- Why are pipe sizes shown twice in the flowline information in Profile view? Please revise.
- Easements are shown for the proposed sanitary sewer. Will they be a private easement or will it be handled as on the overall Discovery Park development? Please provide additional information and revise as necessary. A blanket easement will be provided. All easement lines have been removed on the plans.
 - Please extend the view enough to show the entire service line to Bldgs 2, 4, and 5.
- Much of the proposed sanitary sewer is deep. Please investigate options to shallow it up. Options could include adjusting drops and slopes or possible use of an outside drop MH or others similar.

The depth of the sewer has been decreased wherever possible.

The viewport has been revised to show Buildings 2, 4, and 5

3. Sheet C300: Please extend the Proposed Grade line all the way to the MH in Profile view.

The grade line has been extended.

4. Sheet C302:

The labels have been revised.

- Please relocate overlapping flowline information at MH B1 in Profile view for clarity.
- Please relocate overlapping building label for Bldg 10 in Plan view. The labels have been revised.
- Please include missing storm sewer crossings between MHs B1 & B3 in Profile view.
- Please provide information for MH B4 in Profile view. The storm crossings have been added.

The label has been added.

- 5. Sheet C305: Blank sheet. The drainage plan has been updated accordingly
- 6. Sheet C306: If this table is the only thing on this sheet, please enlarge somewhat for readability.

The tables have been increased in size.

- 7. Sheet C400:
 - Please relocate overlapping building label for Bldg 2 in Plan view. The labels have been revised.
 - 3 valves are required at tees. Please add at the connection to the existing water line and at the connection at Sta. 17+49. Additional valves have been added.
- 8. Sheet C401:

The labels have been revised.

- Please relocate overlapping callout information near Bldg. 7 in Plan view for clarity.
- 3 valves are required at tees. Please add at the connection at Sta. 30+89.

Additional valves have been added.

- 9. Sheet C402:
 - Is there a specific reason the bend at Sta. 35+65 isn't made with 2-45 degree bends like all of the others? The alignment has been revised to use a single 45 degree bend.
 - There is no sanitary service line crossing near Sta. 34+95 as is shown in both Plan and Profile views.
 - 3 valves are required at tees. Please add at the connection at Sta. 32+87.

 Additional valves have been added.

The service crossing has been removed.

- 10. Sheet C403:
 - Please extend the pipe to each end in Profile view. The pipe has been extended.
 - Please adjust the Sta. 13+49 callout in Plan view so the last line isn't cut off.

The label has been revised.

11. Sheet C404: Please extend the pipe to the end in the Profile view.

The pipe has been extended.

12. Sheets C500-C501: Is pavement patching anticipated during sanitary sewer construction? If not, please remove the standard detail. The detail has been removed.

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 mulit-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
(816) 969-1245
Sue.Pyles@cityofls.net

cc: Development Engineering Project File