LEE'S SUMMIT
MISSOURI

DEVELOPMENT SERVICES

Date: Tuesday, July 27, 2021

To: SM ENGINEERING
919 W STEWART RD
COLUMBIA, MO 65203

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

Application Number:	PL2021267
Application Type:	Engineering Plan Review
Application Name:	STREETS OF WEST PRYOR - PHASE II LOWENSTEIN ROAD IMPROVEMENTS

The Development Services Department received plans for this project on July 09, 2021. 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**. 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. Submit an Engineer's Estimate of Probable Construction Costs.

2. Show location of all oil/gas wells, or indicate none are present, and cite the source.

3. Please add a note stating: "The contractor shall contact the City's Development Services Engineering Inspection to schedule a pre-construction meeting with a Field Engineering Inspector prior to any land disturbance work at (816) 969-1200."

4. Please revise line weights throughout the plan set. The future buildings in the development should be scaled back, and work included in this project should be the only portion shown in a darker line weight. The labels for all proposed and existing storm sewer, etc. should be removed unless existing and connecting to work included on this project. The exception would be the existing conditions sheet.

5. The Layout Plan sheet is shown as "C5.0", but should be "C3.0" and the Erosion Control Plan sheet is shown as "C4.0 Grading Plan" but should be "C5.0 Erosion Control Plan." Please revise.

6. Sheet C4.0:
   - From line weight, it appears that the existing ADA-accessible ramp at Autumn Lane is shown as

proposed.

• Please clarify the grading limits for this project. As shown, they extend north beyond the the extent of the view on this sheet.

7. Sheet C6.0: Please include the Curb Inlet Protection standard detail.

8. Sheets C7.0 & C8.0: Please label begin and end construction locations in both Plan and Profile views.

9. Sheet C7.0:
   • Please label the dimension of the saw cut line from the edge of curb and gutter in the Typical Section.
   • Please clearly show what is included in this project at the future Black Twig Circle intersection. Will curb returns be included, will construction of that road include curb removal of curb constructed straight thru on this project, will any Black Twig Circle pavement be constructed, etc.?

10. Sheet C9.0: Please revise to include a Turning Space that doesn't exceed 1.5% slope in any direction, including diagonal. Include enough dimension and elevation information that this can be verified.

11. Sheets C10.0 – C12.0:
   • Please show the hydraulic grade line for the design storm in the Profile views.
   • The structure type for Structures E-1 and F-1 don't match between Plan and Profile views. Please revise as needed.
   • Please review invert elevations at Curb Inlets E-2 & E-3, as flowlines in are lower than flowlines out.
   • Include the following note: "Compacted Fill shall be placed to a minimum 18" above the top of the pipe prior to installation." Show and label the limits of the compacted fill placement in the Profile view. Use hatching for clarity. It appears this would be required both upstream and downstream of Curb Inlet E-5.

12. Include stormwater calculations in the plan set.

13. Is a Junction Box with an inlet opening the same as an Area Inlet? What is the intent of the opening? Please clarify Structure E-1. Appropriate construction details will be required.

14. There is an existing ramp on the south side of Lowenstein Drive at Autumn Lane. Please add a mid-block ramp to this project to provide connection to the proposed sidewalk.

Traffic Review - No Comments

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 developmrnt 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.
Senior Staff Engineer
(816) 969-1245
Sue.Pyles@cityofls.net

cc: Development Engineering Project File