LEE'S SUMMIT

PUBLIC WORKS ENGINEERING DIVISION

 Date:
 Thursday, August 17, 2017

 To:
 Melissa DeGonia, P.E.

 Olsson Associates
 Email: MDeGonia@OLSSONASSOCIATES.COM

 Fax #: (816) 587-1393
 From: Sue Pyles, P.E.

 Staff Engineer
 Application Number:

 PL2017158
 Application Type:

 Engineering Plan Review
 Pergola Park, 4th Plat Street & Storm Plans

The Development Services Department received plans for this project on July 25, 2017. We have completed our review and offer the following comments:

Engineering Review

- General Comment Concerning the ADA-Accessible Ramps and ADA-Accessible Ways: The specific details
 of these features must include, at a minimum, the design details specified in Section 5304.8 of the Design
 and Construction Manual. Elevation call-outs, although required, are not sufficient. Other design details
 specified in this section are required, including slope call-outs which comply with the criteria listed in
 Table LS-5, and section views specified in 5304.8.
- 2. Include standard details for MH, CI, GI, and underdrains.
- 3. Revise the Engineer's Estimate of Probable Construction Cost to include all items shown in the plan set, including erosion and sediment control items. Check and revise all quantities.
- 4. Sheet C102: Revise General Note 3 to include the referenced sheet number.
- 5. Sheet C102: Update the Estimate of Quantities Table based on review comments.
- 6. Sheet C114: Include the water line crossing upstream of MH 1-6 in the Profile view.
- 7. Sheet C114: Include outlet protection at ES 1-1.
- 8. Sheet C114: CMP is not an allowable material for public infrastructure. Please revise.

- 9. Sheet C115: The drop thru CI 5-1 does not meet the minimum drop requirement. Please revise.
- 10. Sheet C115: Include a sheet number in the underdrain label.
- 11. Sheet C116: The drop thru GI 3-4 does not meet the minimum drop requirement. Please revise.
- 12. Sheet C118: Much of the Storm Sewer Design Calculation Tables does not match the information shown on the Plan & Profile sheets. Please revise.
- 13. Sheet C118: The Drainage Area for CI 1-5 does not match the Drainage Plan. Please revise as needed.
- 14. Sheet C118: Please revise the structure type for structure 1-2.
- 15. Sheet C125: Include the Detail Name for detail 06.

Traffic Review

- Provide sidwalk along the south side of Pergola Park Dr. from Armie St. west, with a ramp for crossing to the northwest corner of Armie and Pergola Park Dr. The sidewalk in this area is adjacent to Pergola Park and provides access to the proposed parking areas, then connection to the sidewalk along Pergola Park Dr. in the area where homes on the south side of Pergola Park Dr. are depicted in future phases of development. Should also be ramps for access to the sidewalk at Ovation Dr. intersection.
- 2. The east side of Redbuck Cir. from approx. Sta. 17+75 to approx. Sta. 20+20 should have an 8' offset (wider street section) for parallel parking similar to Redbuck. Cir. south of Longview where homes front the street without the availabity of side street parking. Furthermore, the offset width for parallel parking is necessary so that parking is permitted in this area without sight distance issues and traffic flow concerns.
- 3. Ovation Dr. should have CG-1 curb in consideration of the plan to restrict parking.
- 4. Contractor should not be responsible for roadway design (refer to plan comments on Sheet C106). Design and detail the tapers, station/offset, match points, etc. Consider maintaining the existing street design for Redbuck Cir. with the inclusion of parallel parking and parking restrictions noted in other comment(s).
- 5. Contractor should not be responsible for parking design (refer to plan comments on Sheet C109). Design and detail the radii, dimensions, station/offset, etc. for the proposed parking area on Pergola Park Dr. and any other deviations from typical sections.

- 6. According to the proposed preliminary plans and sight distance issues, the signing plan should include No Parking for Redbuck Cir. (north side/west side between Rockbridge Drive and Arena St. and south side between Ovation Dr. and Arena St.), Ovation Dr. (both sides), and portions of Pergola Park Drive near Ovation Dr.. There should also be signing for the parking along Pergola Park Dr. (an ADA parking space).
- 7. There should be at least one ADA parking stall marked within the parking area along Pergola Park Dr. and an accessible space with accessible route.
- 8. ADA ramp and intersection details should have some dimensioning, station/offset, etc.
- 9. Right of Way and/or Easement changes may be needed along the south side of Pergola Park Dr. to address and clarify the ownership and location of private/public parking area and sidewalk improvements.

10.

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

Begining Monday, May 23, 2016, 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 will not be required for initial application submittals at this time as the plans are subject to change.

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 Staff with any questions or concerns you may have.

If you have any questions or comments, please contact me, Sue Pyles either at (816) 969-1245 or e-mail to Sue.Pyles@cityofls.net.

Sincerely,

Sue Pyles, P.E. Staff Engineer

cc: Development Engineering Project File