

PUBLIC WORKS ENGINEERING DIVISION

Date: Tuesday, May 23, 2017

To:

BHC RHODES

Patrick Joyce, P.E.

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Fax #: (913) 663-1633

From: Gene Williams, P.E.

Senior Staff Engineer

Application Number: PL2017092

Application Type: Engineering Plan Review

Application Name: The Grove at Lee's Summit LLC - Phase 1A - 16th Street Widening

The Development Services Department received plans for this project on April 21, 2017. We have completed our review and offer the following comments:

Engineering Review

1. Please add a note stating "...all construction shall follow the City of Lee's Summit Design and Construction Manual. Where discrepancies exist between these plans and the Design and Construction Manual, the Design and Construction Manual shall prevail."
2. Please be aware that no plans were provided for the connection to MoDOT right of way near M-291. Will there be any additional work in MoDOT right of way? This will require separate review and approval by MoDOT.
3. All Sheets: 15 inch storm lines are the minimum size allowed in the City of Lee's Summit, but 12 inch storm lines are called-out. In addition, CMP is called-out, but if used, must follow the standards set forth in the Design and Construction Manual, including the requirement that the CMP be aluminized. Is there a reason that HDPE or RCP is not being specified?
4. Are the side slopes on the swales adjacent to the road going to be less than 4:1?
5. All Profile Sheets: The hydraulic grade line for the design storm must be shown.
6. All Sheets: Private entrances are called-out as being replaced with granular material. The private entrances should be replaced with KCMMB concrete, from the street to the right of way line.
7. All Sheets Showing Grading: Contours were not labeled, and the contour interval was not shown. Please

label contours and provide a contour interval.

8. Ensure that minimum slopes within swales are achieved.
9. Sheet C11.0: The typical section should include a layer of geogrid beneath the granular sub-base.
10. Sheet C12.0: The trench-and-backfill method for silt fence installation is not allowed within Lee's Summit. Please specify machine-laid silt fence.
11. Provide notes on the traffic control plan stating that adequate notice shall be given, and appropriate right of way permits shall be obtained for the work.
12. Provide a typical section view of the pipe trenching.
13. Has there been a condition survey of the existing pavement to conclude whether or not additional work along the north edge of the pavement is warranted? A site visit revealed the existence of several areas of shoving and alligator cracking along the northern edge of pavement. These areas will not be conducive to a clean joint where widening is planned, and additional work would need to be done to establish a clean joint with the proper strength.

Traffic Review

1. Eliminate the center line pavement marking from 16th Street.
2. Verify the typical section 7' existing pavement north of centerline is consistent with the location of sawcut and widening depicted on the plans.

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

Beginning 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, Gene Williams either at (816) 969-1223 or e-mail to Gene.Williams@cityofls.net.

Sincerely,

Original Signed

Gene Williams, P.E.
Senior Staff Engineer

cc: Development Engineering Project File