



PUBLIC WORKS ENGINEERING DIVISION

Date: Friday, March 24, 2017

To:

TOWNSEND SUMMIT LLC

Email:

Fax #: (410) 321-1901

THHINC MCCLURE ENGINEERING CO

Email: rf fuller@mecresults.com

Fax #: (573) 814-1128

From: Gene A. Williams, P.E.
Senior Staff Engineer

Application Number: PL2017043

Application Type: Engineering Plan Review

Application Name: WARD RD EXPANSION/ CHIPMAN TO TUDOR/ STREET AND STORMWATER

The Public Works Department received plans for this project on March 02, 2017. We have completed our review and offer the following comments:

Engineering Review

1. All Sheets: There seemed to be a lack of street labeling throughout the plan set. Please go through the plan set and provide labeling of the street names, including cross-streets.
2. Font size is very small on the profile views, and cross-section sheets to the extent that they will be illegible on the half size plan set. Please enlarge font size to the point where they are legible on the half size set.
3. Sheet C101, and C102: Call-outs are provided for ADA-accessible ramps, but only a generic, out-of-date detail is shown. The City of Lee's Summit does not use the KCAPWA standard details for ADA-accessible ramps, and therefore, these details should be removed. Site-specific details should be provided for each ADA-accessible ramp. They should be designed in accordance with Section 5300 of the City of Lee's Summit Design and Construction Manual.
4. Sheet C201: There appears to be a conflict in what is existing versus what is proposed. The profile view of Storm Line C shows an existing 15" RCP, but another note to the right states "connect to existing 15" HDPE". Regardless of whether the RCP is existing or the HDPE is existing, the existing pipe should be extended with the same material. Connecting different pipe material with a Fernco does not appear to be a good solution. This would also pertain to Storm Line B, D, and E.

5. Sheet C201: Storm Line A shows an existing box culvert with a slope of 0.02%. Is this a typographical error?
6. What is meant by the label "remove plug" on the existing RCP? How were these pipes plugged? Are all of the pipes plugged? There is concern that the "plug" may not be removable without destroying the pipe.
7. Should the notation discussed in the above comment (i.e., plug removal) be added to subsequent sheets?
8. Sheet C501: Please revise the typical pavement section for the widened portion and the full width pavement section as per the email dated Mar. 7, 2017 from Ryan Fuller to Mike Weisenborn.
9. Sheet C501: Concrete sidewalk typical section should include non-reinforced KCMMB concrete 4" thick. The aggregate layer is correct.
10. Sheet C501: The section entitled "Sidewalk with Grass Parkway" shows 5" of P.C. Concrete at 2.0%. This should be revised to 4" of KCMMB concrete at 1.5% in accordance with Section 5300 of the City of Lee's Summit Design and Construction Manual.
11. Sheet C502: Please remove the PCC Sidewalk Ramp Details since the City of Lee's Summit does not recognize the KCAPWA standard details for ADA-accessible ramps. A generic detail is not adequate, and a site-specific design for each ADA-accessible ramp is required.
12. Sheet C502: Please remove any "PC Concrete Pavement Joint Details" that are not part of this project, and please remove the expansion joint and transverse construction joint from the "PCC Sidewalk Joint Details".
13. Sheet C502: Sidewalk at Back of Curb is shown with reinforcing steel. All sidewalk should be non-reinforced KCMMB concrete, 4" thick with a 4" leveling course. Only at ADA-accessible ramps does the thickness increase to 6" with tie bars.
14. Please add sufficient notes which indicate that the field inlets to the east of the new curb inlets will be connected to the curb inlets.

Traffic Review

15. There should not be stop lines along Ward Road where there are no stop signs or traffic signals. Markings and signs will be reviewed in more detail upon resubmittal.

16. Show temporary traffic control plan.
17. Refer to Lee's Summit standard marking, signing, and traffic control details in the plans (not MoDOT). Adjust markings as required to meet the City standards. Do not use ONLY markings for the right-turn lanes in this application.
18. Need to maintain the pedestrian crossing of Ward Road on the north side of Tudor Road intersection. The ramp in the southeast corner of this intersection should be directional crossing Tudor Road, not diagonal into the intersection.
19. The southbound left-turn lane along Ward Road at Tudor Road appears unnecessary or inconsistent with the constructed left-turn lane in association with the Tudor Road Project.
20. Why is there a short northbound left-turn lane along Ward Road at Tudor Road proposed? There is no approach (nor will there be in the future) on the west side of Ward Road.
21. Drive 3 Entrance location should not be within the right-turn lane along Ward Road for Tudor Road. Continuous right-turn lanes for driveways are not permitted.
22. Review the truck turning movement from westbound Donovan to southbound Ward. The median on the south side of the intersection along Ward may need to move farther south.

In order to calculate the Public Works' 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, either at (816) 969-1812 or e-mail to .

Sincerely,

Original Signed

Gene A. Williams, P.E.

cc: Development Engineering Project File