
DEVELOPMENT SERVICES

Date: Tuesday, September 13, 2022

To: POWELL CWM INC
3200 S STATE ROUTE 291 BLDG 1
INDEPENDENCE, MO 64057

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

Application Number: PL2022164

Application Type: Engineering Plan Review

Application Name: Lakewood Business Center on I-470 Plat S - Public Street and Storm Water

The Development Services Department has completed its review of the above-referenced plans dated Aug. 24, 2022 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 ten (10) business days of the date received.

Engineering Review

1. Sheet 131: The turning spaces on all ADA-accessible ramps appear to be designed with slopes higher than 1.50% in the diagonal direction. Please see previous comment letter concerning this issue. The design slope in any direction, including the diagonal, shall be equal to or less than 1.50% in any direction. Please revise as appropriate.
2. Sheet 131: Many of the ADA-accessible ramps are called-out with slopes greater than 7.50%. Please refer to previous comment letter concerning this issue. The City has adopted more stringent standards for the design slope, and 7.50% is the maximum longitudinal slope. Please revise as appropriate for all applicable ramps.
3. Sheet 131: A 1.58% callout is provided on the ADA-accessible route across the intersection at Hagan and Maguire. As discussed in previous comment letter, the maximum cross-slope within an ADA-accessible route is 1.50% in the City of Lee's Summit. Please revise as appropriate.
4. Please refer to comment #10 in the previous applicant letter. An additional curb inlet is warranted near sta 1+80 on Maguire (north side) due to City requirements of 400 foot maximum spacing. This is required regardless of gutter spread calculations. Please revise as appropriate.

5. Sheet 222: The hydraulic grade lines are not defined on "ST A Profile" as requested in previous comment letter. The leader lines are not pointing to any hydraulic grade lines on the profile view. Please reconcile.
6. Please refer to comment #14 in previous applicant letter. The underdrain detail shall be shown. As presented, all options were shown, and only one (1) method pertains to this particular installation. Please cross-out the other methods of installing underdrains, as the City will be expecting the first method to be used. Alternatively, you can only show the first method and not show the other methods. Please review and revise as appropriate.
7. Please refer to previous comment #12. CPP is not the same as HDPE. If you desire additional clarification, please refer to the City of Lee's Summit Design and Construction Manual "Specifications" section. Please reconcile, and please consider RCP as a substitute rather than CPP for these street crossings beneath Maguire.
8. Please refer to comment #13 within the previous applicant letter. No such anchor is shown on the 60 inch storm line entering the basin at a shallow depth, despite the response to comments stating otherwise. Please revise, and show specific details within the plans showing how the anchor will be constructed.
9. A SWPPP shall be required prior to formal approval of the plans, as well as formal definition of wetlands identified by your investigation. Your response to comments stated that wetlands exist, but you are disputing this delineation. Please keep us updated on the findings of this investigation, as this shall be needed prior to approval of any plans.
10. A separate off-site drainage easement shall be required prior to formal approval of the plans. This off-site drainage easement shall encompass the area to the south of Maguire Blvd., up to and including the flared end section and sufficiently wide around the flared end section and associated pipe to allow for future maintenance. The off-site easement shall be public, and shall follow the standard template provided by the City of Lee's Summit, and shall be reviewed prior to execution and recording. Please provide this off-site drainage easement on forms provided by the City for "Public Drainage Easement".

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 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 multi-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,

/s/ electronically signed Sep. 13, 2022

Gene Williams, P.E.
Senior Staff Engineer
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cc: Development Engineering Project File