



October 28, 2024

Daniel Fernandez
Planning Division
City of Lee's Summit
220 SE Green
Lee's Summit, MO 6463

Re: PL2024191 - HCA Midwest Lots 1C & 1D
Final Development Plan Comment Response Letter

Dear Daniel Fernandez,

The following are responses to your comments received on September 27, 2024, for the above-referenced project:

Traffic Review – Erin Ralovo

1. Sheet DP-C5.1 - The ADA on the east side of the bridge is not marked.
Response: The Overall Layout Plan (sheet C5.0) now shows the locations of the existing ADA parking spaces. Please note the ADA parking spaces are outside the scope of the project and there are no changes in the existing, provided, or required parking spaces.
2. There are 2 signs at the crosswalk across the driveway are not labeled.
Response: The pedestrian crosswalk signs are now labeled.

Planning Review – Claire Byers

1. No comments.

Engineering Review – Gene Williams, P.E.

1. Excessive slope greater than 3:1 on west side of detention basin, east side of detention basin, and north side of detention basin. Correction required unless accompanied by geotechnical report with field sampling.
Response: Grading has been revised to contain no slopes greater than 3:1.

2. There are numerous instances of excessive slope greater than 3:1. Correction required unless supported by geotechnical report with field sampling.

Response: Grading has been revised to contain no slopes greater than 3:1.

3. Refer to comment #3 in previous applicant letter dated Aug. 12, 2024 (hereinafter referred to as the "applicant letter"). The stormwater study did not discuss the emergency spillway. Correction to the text of the stormwater study required.

Response: The Emergency Spillway is now discussed in the Stormwater Study.

4. Refer to comment #4 in the previous applicant letter. No analysis of the downstream receiving system to a point(s) as identified by the engineer were provided in the text of the report. Typically, we have seen other engineers use the 10% rule. Regardless of how this is analyzed, the engineer of record shall provide the point(s) of interest to analyze to ensure detention is not creating an adverse effect to downstream peak flows. Correction required.

Response: The downstream analysis is provided in the Stormwater Study. With the reduction in discharge volumes and rates, provided by the detention basin, the discharge rate and water surface elevation of the adjacent stream is reduced.

5. Jurisdictional determination for "Waters of the United States" shall be submitted prior to formal approval of the plans. It is understood this is in progress in accordance with the report entitled "Waters of the United States Delineation Report – Proposed Pedestrian Bridge Lee's Summit Medical Center" dated May 2, 2024. If the findings of the jurisdictional determination require modification to the plans, then the Final Development Plan shall be modified accordingly.

Response: USACE coordination is ongoing, we anticipate receiving the exemption letter the week of 10/28/2024. The USACE determination will be provided upon receipt.

6. Sheet 6.3: The grading within the detention basin has now changed from the previous submittal in terms of geometry. You were showing curvilinear grading, but are now showing abrupt intersection lines where grading is to take place, and this does not appear practical. Correction required to a more curvilinear grading.

Response: The grading has been revised accordingly.

7. In reference to the above comment, routing calculations and the stage/storage relationship shall be updated to reflect the decrease in storage when using the curvilinear grading. Correction and revision to the stormwater study and routing required.

Response: The plans, stormwater study, and routing calculations are coordinated and the areas/volumes are consistent throughout.

8. Are you certain an 8 inch discharge pipe is sufficient to carry the 100 year flow from the primary spillway? It appears this pipe is not large enough. In accordance with Section 5608.4(E)2, the discharge from the detention facility when inflow is equal to or less than the maximum design storm under the required strategy shall be via the primary outlet system which includes the discharge pipe. If appropriate, correction required.
Response: The outlet pipe has been upsized to 24". Please see the included pipe profile in the Stormwater Study.
9. Refer to comment #10 of the previous applicant letter. The 100 year nominal and 100 year clogged/zero available storage elevation were not shown or called-out on the plan view in graphical format. Dimensions from the graphical callouts of these elevations were not shown to property lines (i.e., a minimum of 20 feet is required from the clogged/zero available storage condition). Correction required.
Response: Please refer to sheet C6.3 where the WSE are provided in the detention basin and emergency spillway details.
10. Refer to comment #11 in the previous applicant letter. Are you certain the hydraulic grade line for the 8 inch line is correct? According to my cursory calculations, this line is not large enough. If appropriate, correction required to upsize the pipe.
Response: The outlet pipe has been increased to 24", please refer to the Stormwater Study for additional information.
11. Pond set up table appears to show a circular riser, but plans show a rectangular riser. Correction is required.
Response: The riser in the pond set up has been revised to "box".
12. Pond setup table in the stormwater study shows an elevation for the 6 inch wide rectangular weir which is significantly different than what is show in the plan. Correction required.
Response: The pond model set up provides a 2" rectangular weir, which is consistent in the plans.
13. Pond setup table shows an elevation of the emergency spillway which is significantly different than what is shown on the plans. Correction required.
Response: The emergency spillway elevation in the plans and stormwater model is now consistent.
14. Refer to comment #14 in previous applicant letter. Response to comments stated the calculations are included on Sheet 8.0. No such details were provided on the sizing and dimensions of rip rap on Sheet 8.0. Rip rap sizing shall be shown on the plan view where appropriate. It shall callout the size of rip rap, the length, width, and depth, and

callout the use of geofabric beneath the rip rap. It shall be based on calculations you have provided elsewhere in the plans. City inspector or contractor shall not be required to look up the sizing based on the table. Corrections required.

Response: The rip rap size is now called out in the plan view on sheet C6.3. Additional calculations are provided on sheet C3.3.

15. Pedestrian bridge shall not be approved until a separate plan is provided signed and sealed by a design professional registered in the State of Missouri. Informational comment only.

Response: Acknowledged, the required Pedestrian Bridge submittals will be included within the future Building Permit.

16. General Comment on Bridge: Wouldn't it be better to place the bridge piers closest to the stream bank at an angle to the stream, more in line with the stream? Correction required if appropriate.

Response: The piers have been revised accordingly.

17. Refer to comment #17 in the previous applicant letter. KCMMB asphaltic concrete mix is required for all projects, whether public or private. It should be noted that KCMMB mix requires a minimum of 2 inch lift, so the surface course should be called-out as 2 inches rather than 1.5 inches, and the base course thickness of KCMMB mix called-out as 4.5 inches or 3.5 inches if heavy duty pavement or light duty pavement. Correction required.

Response: The dimensions in detail 1 / C8.0 have been revised accordingly.

18. Refer to comment #17 in the previous applicant letter. Geogrid or chemically-stabilized subgrade is required beneath the 6 inch aggregate base layer. Correction required.

Response: A geogrid callout has been added between the aggregate base layer and subgrade in the pavement detail located on sheet C8.0.

19. Refer to comment #18 in the previous applicant letter. A site-specific plan for the ADA-accessible ramps was requested, but was not provided. A site-specific plan for the ADA-accessible ramps shall be provided that address all aspects of comment #18 of the previous applicant letter, including the ADA-accessible route across the commercial entrance. Correction required.

Response: The only ADA required access for the remote parking lot is the public sidewalk within the ROW. The accessible path is now shown in the Site Layout and Grading & Drainage sheets. The Lee's Summit standard details are used for the public sidewalk and driveway access.

20. In regard to above comment, do not include "wings" or "flares" on the ADA-accessible ramps. ADA-accessible ramps shall be constructed so that "wings" or "flares" are not required and not desired at this location, and grading to the ramp will be sufficient. Informational comment for use in preparation of the site specific ADA-accessible ramp plan.

Response: The referenced ramp is not a required ADA access, rather a ramp for golf cart access.

21. Will the retaining wall along the parking lot require a fence? It appears the height of the fence and proximity to the pedestrian walking surface will require the installation of a fence. Correction required.

Response: A guardrail/handrail is provided at the retaining wall and the elevated walk leading to the pedestrian bridge.

22. If not designed by your firm, retaining wall shall be designed and sealed by a design professional registered in the State of Missouri. This shall be a condition of approval of the plans. Informational comment.

Response: Acknowledged, our standard detail is applicable to the wall considering the maximum height.

23. Refer to comment #19 in the previous applicant letter. Sheet C5.1 calls out a note which refers the reader to standard detail for sidewalk construction. No such detail was included in the plan. Recommend City detail on this sheet to make it easy to distinguish between that which is shown internal to the project with woven wire fabric, and that which is required by the City. Correction required.

Response: The private sidewalks will utilize the sidewalk details provided on sheet C8.0, while the public ROW sidewalks will utilize the Lee's Summit Standard.

24. Refer to comment #21 in the previous applicant letter. Specific slope callouts, dimensional callouts, elevation callouts, and ADA-accessible routes across drive aisles are required within the parking lot, and the ADA -accessible route(s) to the building(s). Maximum slope within a parking lot in any direction is 5.00%, and the ADA-accessible route to the buildings include requirements for cross-slope maximum being 1.50% and a maximum 5.00% running grade. Corrections required.

Response: Spot shots and slope call outs are provided for the public ADA path along the Cumberland ROW.

25. Refer to comment #22 in the previous applicant letter. Water main is not shown on the landscape plan, but it appears trees are located directly on top of the water mains. A minimum of 5 feet distance is required from trees to the outside of the water main, as measured from the mature tree trunk to the outside of the water main. Water main shall

be shown on the landscape plan based on survey, and trees located as per above requirements. Correction required.

Response: The Landscape Plan has been revised accordingly, there are no trees planted within the water main easement.

26. Pedestrian bridge is proposed over an existing sanitary sewer line with inadequate space above the grade to perform maintenance. Bridge abutment appears to be located within the easement. The location of the bridge at this location appears to prevent any maintenance to the sanitary sewer line and bridge abutment is encroaching within the easement. Recommend a re-design in terms of geometry to eliminate the conflict at the west end of the bridge where the height prevents future maintenance to the sanitary sewer line, and all structures such as bridge abutments are outside limits of easement. This could be managed by extending the fill towards the stream, contingent upon the depth of the sanitary sewer line being less than 20 feet of depth to the flowline after fill.

Response: In coordination with Lee's Summit, the bridge has been raised over the sanitary sewer main to provide 7' of vertical clearance between the bottom of the bridge and the existing grade.

27. In regard to above comment, the sanitary sewer line was missing on the profile view. Show the sanitary sewer on the profile view in relation to the bridge.

Response: The sanitary sewer line is now shown in the bridge profile.

28. In lieu of reconfiguring the bridge as per the above comment, it is possible Water Utilities may grant a waiver to the encroachment. It is recommended, however, to raise the bridge at the west end as high as possible to create a more accessible area beneath the bridge to perform maintenance on the sanitary sewer line. Informational comment.

Response: Acknowledged, the bridge has been raised as discussed with the City.

29. A SWPPP is required due to the disturbed area being greater than 1 acre. Provide a SWPPP for the project.

Response: A SWPPP has been included in the resubmittal package.

30. A cost estimate prepared by a design professional licensed in the State of Missouri, or a signed and itemized contract for the work shall be required prior to a formal approval of the Final Development Plan. The plan shall include all sitework necessary to construct the project, including retaining walls, bridge, parking lot, sidewalk, grading, detention basin, stormwater, sanitary sewer, water lines, etc. Please do not include the cost of any buildings, lighting, or landscaping.

Response: Acknowledged, the cost estimate will be provided prior to the formal approval of the FDP.

31. Development Services is awaiting a response from Water Utilities on their desired strategy in regard to the bridge encroachment. Anticipated schedule for decision is Sep. 27, 2024.

Response: Acknowledged.

Fire Review – Jim Eden

1. Provide and post a SE Cumberland address, or something different from the existing address for the hospital parking lot.

Response: 701 SE Cumberland Drive is the proposed address for the remote parking lot.

Building Codes Review – Joe Frogge

1. Inadequate information to complete review. Provide the following:
- Light pole base detail.
 - o 9/20/24 – detail provided in incomplete. Structural information is required.
 - Complete grease trap designs.
 - o 9/20/24 – deferred per request.

Response: The structural detail for the light pole is provided on sheet DP-S201.

Please review the above responses together with the revised plans and let me know if you have questions or need additional information.

Regards,

Catalyst Design Group



Jack Parker, PE; LEED AP
Principal, Senior Project Manager