



Application Number: PL2022228
Application Type: Commercial Final Development Plan
Application Name: Living Faith Parking Lot Addition
Location: 1121 SW Hook Road, Lee's Summit, MO 64082

Please see our responses to City comments, below in bold.

Planning Review

1. Ownership affidavit. Please upload an ownership affidavit application. **To Be Uploaded.**
2. STREETS. Label the centerline and ROW width for SW Hook Rd. **Added.**
3. **LIGHTING To be submitted under separate cover.**
 - Please show the lighting specification for the pole and the headlight fixture. Parking lot lighting shall meet the requirements of the UDO lighting Section specification 8.250.
 - Please indicate the foot-candle level at the property line shared with the residential property to the west. A max of 0.5 fc is allowed. Provide a revised photometric plan.

Engineering Review

1. Both swales entering the detention basin abruptly enter at a 3:1 slope, which will lead to rilling and erosion and subsequent backcutting of the swales. A better design is required to manage the storm water flows from both swales entering the detention basin. Please evaluate, review, and revise the design as appropriate. **The abrupt change has been revised to provide a smooth transition from both swales to the detention basin. Velocities in each swale are well below 5 fps for the 100-year storm which is ideal for turf lined swales.**
2. Index on the cover sheet does not match what is shown in the plan set. Please review and revise as appropriate. **Revised.**
3. A spillway is called-out on Sheet C.202, but this appears to be an emergency spillway. Please correct the callout. **Revised.**
4. Are steps being provided for the outlet structure? If so, where are they located? **Steps are being provided for the control structure at each manway opening. Sheet C.202 depicts step locations.**
5. As built note on Sheet C.202 only listed as built storage. Other aspects of the as built condition shall be required, such as top of dam elevation, spillway elevation, weir/orifice elevations, top of structure, bottom of detention basin, and other as built information for the detention basin. Please revise as appropriate. **Note has been revised to include all stated/applicable information.**
6. Additional off-site elevation contours are required showing how the discharge of the detention basin will be directed off site. As shown, it is impossible to determine the impact of this new point source discharge. Please review, and if negative impacts are shown, a redesign of this discharge point is required. **The proposed discharge point is located at an existing swale section, see existing contours on Sheet C.202. The majority of the site and some offsite flows currently flow to this swale. By adding detention/extended detention discharge to this point will be metered below existing conditions. We have attached an aerial image which depicts the swale/creek sections in this area and further south. The erosion control sheets show existing contours to the south property line per our field survey.**
7. Is the 24 inch HDPE flared end section connected to the outlet structure with the trash rack going to be RCP rather than HDPE? It appears RCP is better suited for this design. Please review and revise as appropriate. **The flared end section may be HDPE, Metal or RCP with trash rack included per detail.**
8. Would RCP be better suited for the incoming pipe connected to the outlet structure? **We don't believe RCP to be better nor necessary in this application. A multitude of materials will work satisfactorily for this application.**



9. Incoming swales may need to be eliminated, and an underground storm line system installed in their place. With the excessive slope in a portion of one of the swales (i.e., 10% on a portion of the southern swale), and the abrupt discharge into the detention basin, it appears this is warranted. Please review and raise as appropriate. **See response to Item 1 above.**
10. Longitudinal slope callout for a portion of the southern swale was missing. It appears to be 10%, which is too steep for a swale. Please see previous comments concerning the applicability of an underground pipe system from the parking lot to the detention basin. It appears this is warranted. **Swales have been regraded to provide smooth transition and meet maximum velocities less than 5 fps in the 100-yr storm.**
11. Grading along the northeast side of the detention basin appears to show a small swale directed towards the adjacent property to the east, and existing drainage in this area appears to sheetflow. This new point discharge has the potential to create an adverse impact to adjacent property owner to the east, and mitigation is warranted. Please evaluate and revise as appropriate. **A small berm has been graded to maximize capture of existing field inlet.**
12. Cost estimate shall be required prior to final approval. **Enclosed.**

Please let me know if there is any additional information that is required.

Thanks,

Matt Schlicht

SW Hook Rd

SW Hook Rd

SW Ward Rd

SW Ward Rd

705 ft

