

July 10, 2020

Lee's Summit City Hall LSMO Development Services Attn: Mike Weisenborn 220 SE Green Lee's Summit, MO 64063

RE: Woodside Ridge 2nd Plat

We are responding to your comments dated June 30, 2020 and are submitting with this letter revised plans. Please find the original comments below; our responses are below in blue.

If you have any questions or need additional information, please do not hesitate to contact us.

Thanks,

Julie Sellers

Jole Seller

Streets, Storm and Mass Grading Comments:

Engineering Review – Corrections

- 1. Please add the signed waiver to the stormwater report. It appeared to have been missing. The signed waiver is on page 159 of the stormwater report from the first submittal.
- 2. Sheet C111 appears to be missing a vertical curve at sta 14+84. A PVI occurs at this point?
 - All PVI's have been labeled. There is no grade change occurring at station 14+84.
- 3. Sheet C128, C129, and C130: Please revise the table to read "Minimum Building Opening Elevation" MBOE.
 - The tables have been revised to read "Minimum Building Opening Elevation".
- 4. Master Drainage Plan Sheets: We are assuming the cashed contours are "proposed" contours, correct?
 - The contours have been revised to reflect the "finished" contours when the grading for the site has been completed.

5. Sheet C121 and C122: Better definition of the outlet structures should be specified, including materials, steel reinforcement, and anti-clogging measures whether a trash rack or modified anti-clogging system. As shown, there is little detail concerning these features. The structural design of the outlet structures, which would include steel reinforcement, will be completed by the structural engineer of the concrete fabricator. This has not been a previous requirement for these storm structures.

Traffic Review - No Comments

Sanitary Sewer Comments

Engineering Review – Corrections

- 1. Sheet C205 and C208 and C209: It appears the easement widths are too narrow for the side lot easements where the sanitary sewer line will be constructed. A minimum of fifteen (15) feet is required between the outside of the sanitary sewer line. In addition, depth of the sewers in these areas are deep, and in some cases are approximately twenty (20) feet deep as measured to the flowline of the pipe. The Design and Construction Manual requires a minimum of twice the depth of sanitary sewer minimum easement width, assuming the sewer line is installed in the middle of the easement.
 - Easement widths have been revised as necessary per depth requirements.
- 2. Sheet C207: Although the city now allows for twenty (20) feet of depth, this new standard is measured from proposed ground to the flowline of the pipe. It appears the sanitary sewer in the vicinity of the drop manhole is too deep. In addition, it is not clear whether "existing ground in this area is also proposed grade". Please clarify. Finally, there is another location where the sanitary sewer appears too deep along portions of the segment between manhole #2-1 and #1-2. The new standard allows twenty (20) feet of depth of cover, but "cover" is now defined as the flowline of the pipe rather than the top of the pipe. Adjustments have been made to the depths to be under the 20' depth of cover from top of manhole to flowline.
- 3. Please be aware that concrete pipe anchors shall be required if adjusting the drop manhole discussed in the above comment, where the new slope is 20% or greater. These are discussed in the Design and Construction Manual Section 6500.

 The slope of the adjusted pipe is less than 20%, no pipe anchors necessary.
- Sheet C207: Please label the drop manhole. As shown, it is labeled as a standard manhole in the plan view.
 The drop manhole has been labeled.
- 5. It appears several manholes can be eliminated along Killarney Rd. This would include #4-2, #4-3, #4-4, #4-5. After removing these manholes, a manhole could be placed at the north corner of lots 193 and 194, outside of the paved area, and outside the sidewalk

limits. From this point, a strait line shot could be made from this new location, to manhole #4-6. Please contact Development Engineering if there are any questions concerning this alignment.

Sanitary Line 4 has been realigned.

6. Standard Details: It appears a shallow manhole will be constructed. If so, then the city standard detail should be provided. In addition, the "storm" manhole lid should be revised to say "sewer". This can be done by crossing out the word "storm" and providing a note. The manhole lid has been revised to show "SEWER" in the standard details for shallow manhole.

Erosion and Siltation Comments

Engineering Review – Corrections

- As Mentioned, if a portion of the site is located within the zone "AE", please show/label
 the FEMA 100-year floodplain boundary (zone AE) within the set of plans. If not, please
 revise the FEMA National Flood Hazard information note, on the cover sheet.
 A note has been added on the cover sheet, the FEMA flood zone is X.
- 2. Please refer to "phase 1,2, and 3" as "project stage A, B and C" Sheets titles have been renamed "Project Stage A, B, and C".
- 3. On Sheet C403, please clarify what points A & B represent. Notes on Sheet C403 clarify what the points represent.
- 4. Since the total land disturbance area is above 1 acre, as required by the City, please provide a MDNR permit prior to permit issuance.
 The MDNR permit received along with Woodside Ridge First Plat encompasses the entire Woodside Ridge development and is current.
- Please provide an engineer's Opinion of Probable Construction Cost (EOOPCC) sheet, as required by the city, prior to permit issuance.
 An EOOPCC has been submitted with this submittal.
- 6. Please include ESC-12 construction standard detail within the set of plans. Standard detail included on Sheet C418.
- 7. Please remove the city review signature block, the city doesn't sign plans like that. The city review signature block has been removed on all cover sheets.
- 8. Please add hatching legends throughout the set of plans.
 Hatching legend has been added to their respective sheets where hatching is shown on the plans.

9. Sediment Basin emergency spillways use the same hatching as TCEs. Please distinguish between the two uses.

The emergency spillway hatch has been revised.

10. Clarify if/when the sediment basins will be converted to detention basins.

A note has been added to the staging chart when the basins will be converted.

Water Comments - Approved