



Date: March 17, 2020

City of Lee's Summit, MO
Development Services
220 SE Green Street
Lee's Summit, MO 64063

**RE: Osage First Plat
Land Disturbance and Sanitary Sewer Plans – 1st Review**

We are responding to your comments dated February 25th, 2020 and February 28th, 2020 and are submitting with this letter revised plans, as well as other required documents. Please find the original comments below; our responses are below in ***bold italics***.

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

Thanks,

Brock Worthley

Sanitary Sewer Plans

1. These review comments reflect a review of the plans without regard to the engineering plans for the street, stormwater, Master Drainage Plan, or water line extension plans. As such, these comments should be considered preliminary, since the aforementioned plans have not yet been submitted for the project.

Acknowledged

2. Proposed off-site easement widths appear to be sufficient. Applicant shall be responsible for the acquisition and execution of all off-site sanitary sewer easements, in a form acceptable to the City. Standard templates are available for sanitary sewer easements, and should be used. In addition, all off-site easements must also include an 8.5 inch by 11 inch exhibit, prepared by a licensed land surveyor, showing in graphic format the limits of the easement.

Acknowledged. The easements will be provided at a later date.

3. There are two (2) instances where "stub-outs" are proposed for future extension during future platting. This is not allowed in the City of Lee's Summit. All future connections must be core-drilled into the manhole. Please correct.

Manholes have been moved into the future plats and laterals will be installed to the future lots to avoid disturbing any developed properties once the future plat is to be constructed.

4. Without the Final Plat, it is difficult to determine the locations of the proposed sanitary sewer laterals. This will be formally evaluated at the time the Final Plat is submitted.

Acknowledged

5. The geometry between manhole 1-7 and 1-5 conflicts with the dam and spillway. It appears there are better routes for construction of this line. Would a route that runs almost north/south from manhole 1-7 be more appropriate? It appears this is a better option.

Sanitary Line 1 geometry has been revised to follow the eastern right of way line. If the sanitary line were to be run under the detention basin, manholes 1-5 and 1-7 would be very deep. The new route avoids impacting the detention basin and dam.

6. The City is currently revising its Design and Construction Manual. Currently, sanitary sewer is required to be outside of the paved areas, except where it crosses the street. With the new changes that have not taken effect, the desire is to place the sanitary sewer lines along the centerline of all streets, regardless of whether the change has officially taken place or not. Please change the geometry to reflect this new change (i.e., please move all sanitary sewers to the centerline of the streets, except where crossing the detention basin, etc.).

Per conversation with city, sanitary sewer will be left outside of the pavement. The future plats will be designed to be compliant with the new manual requirements.

7. With the changes noted above concerning placement of the sanitary sewer along the centerline of all streets, this may affect the placement of water lines since there will be more options for placement of water line. The City will still require that water and storm lines be placed outside the limits of the paved surface, but there will now be additional options available for placement of the water main due to the placement of the sanitary sewer along the centerline of the street.

Per conversation with city, sanitary sewer will be left outside of the pavement. The future plats will be designed to be compliant with the new manual requirements.

8. It appears Line 7 along Maryville Place can be shortened. Please look into the possibility of shortening this line to the minimum needed to serve each unit on Lot 13 and 11. It appears the line can be shortened to be less than 500 feet, which would also eliminate manhole 7-1.

Line 7 will be greater than 500 ft even if the northern units on lots 13 and 11 are served from Line 1 therefore manhole 7-1 has been left in place.

9. It appears manhole 1-13 and 1-14 can be eliminated. In their place, a manhole could be placed between Lot 2 and 3?

Manholes removed and a new manhole has been placed between lots 2 and 3.

10. It appears manhole 1-10 and 1-11 can be eliminated. In their place, a new manhole could be placed near the boundary of Tract E and Lot 9?

Manholes removed and a new manhole has been placed between lot 9 and tract E.

11. Sheet C204: Please label the existing grade as "existing/proposed" or equivalent language.

Existing ground label added to profile view.

12. Sheet C205: Is there a water main crossing that is missing from the profile view between manhole 1-4 and 1-5?

Existing water line crossing added to profile view.

13. Sheet C206: It appears the maximum twenty (20) foot depth (i.e., as measured to the flowline, not the top of pipe) is exceeded at station 23+00. However, with the realignment discussed earlier in this comment letter, this issue may no longer be relevant.

Sanitary sewer depth changed so it is not deeper than 20 ft.

14. Sheet C206: It appears a water main was omitted from the profile view near station 22+50?

Water line crossing added to profile view.

15. Sheet C213: An 8 inch water line appears to be shown near sta 10+50. Is this a typographical error?

Water was shown in the correct spot but has since been moved.

16. In terms of showing the location of sanitary sewer manholes on the centerline, they will be slightly offset due to the concentric cone. Ensure there are sufficient notes and location call-outs for the manholes, which place the actual frame and lid at the geometric center of the road. In other words, the frame and lid must be exactly centered on the centerline. It is essential that the "downslope" side of the lid (i.e., the part of the lid on the "downslope" side of the crown) be flush with the surface of the street. In other words, there will be a slight "flat spot" at the crown, where sanitary sewer manholes are located.

Per conversation with city, sanitary sewer will be left outside of the pavement. The future plats will be designed to be compliant with the new manual requirements.

Land Disturbance Plans

1. General: These review comments are considered to be initial or cursory review comments for the portion of the plans associated with erosion control. We are not providing comments regarding the grading aspects of the plans. More detailed and complete comments will be provided following receipt of additional information as stated below.

Acknowledged

2. General: Please make sure to include a note stating that "The contractor shall contact the City's Development Services Engineering Inspectors 48 hours prior to any land disturbance work at (816) 969-1200".

Note has been added to general notes sheet.

3. General: Please provide SWPPP report and MDNR permit along with the resubmittal.

SWPPP and MDNR permit have been included with this submittal.

4. Sheet C407: Please edit to show storm event data for 2-year, 10-year and 100-year.

2-year, 10-year, 25-year and 100-year water surface elevations are now shown in the basin design summary.

5. Sheet C407: Is the spillway width 160 feet or 176 feet? Please clarify and revise on the plans.

The spillway width should be 160 ft. Basin grading and dimensions have been revised to reflect this.

6. Sheet C407: Is the top of riser 1017.10 feet or 1012.60 feet? Please clarify and revise on the plans.

The first opening on the basin outlet structure is at 1012.60 ft which has been considered the top of riser since the water surface elevation never reaches the invert of the opening on the top of the basin structure.

7. Sheet C407: Please address the sketch as "Temporary sediment basin 1".

Name of detail changed to Temporary Sediment Basin 1.

8. Sheet C405, C408, C409 & C410: Please show the locations of the silt fence J-hooks (100 feet maximum runs), if necessary, on the plans.

J hooks are now shown on the plans where necessary.

9. Sheet C405, C408, C409 & C410: It looks like the legend for "turf reinforcement mat" is not properly identified on all sheets. Please revise.

The legend has been corrected

10. Sheet C405, C408, C409 & C410: Please match the same nomenclature for the project stages (in the ESC staging chart) and the four (4) set of plans phases (listed on the table of contents). E.g.: "Site Disturbance phase A" with "(A) Pre-Mass Grading".

Phase 1 changed to Phase A, Phase 2 changed to Phase B, Phase 3 changed to Phase C and Phase 4 changes to Phase D.

11. Sheet C405, C408, C409 & C410: Silt excavation from basin and removal of skimmer can't be found on the plans. Please include both and state what stage/phase each of them belongs to.

Silt removal and skimmer removal note added to Site Disturbance Phase D.