

DEVELOPMENT SERVICES

Date: Thursday, December 12, 2019

To: LAMP RYNEARSON
9001 STATE LINE RD STE 200
KANSAS CITY, MO 64114

From: Sue Pyles, P.E.
Senior Staff Engineer

Application Number: PL2019392

Application Type: Engineering Plan Review

Application Name: SUMMIT VIEW FARMS 4TH PLAT - MASS GRADING, ESC, PAVING AND STORM
SEWER PLANS

The Development Services Department received plans for this project on November 20, 2019. We have completed our review and offer the following comments listed below.

- Resubmit three (3) full size sets of plans (no larger than 24"x36") folded to 8-½"x11", one (1) comment response letter, and one (1) digital copy following the electronic plan submittal guides as stated below.
- Revised plans will be reviewed within five (5) business days of the date received.

Engineering Review - Corrections

1. General:
 - Many of the proposed contours tie back into existing contours at very sharp angles. Please review the grading to smooth out the transition from proposed back into existing contours. Revise throughout the plan set.
 - Please include a Summary of Quantities table.
 - Submit an Engineer's Estimate of Probable Construction Costs.
 - Submit the SWPPP and a copy of the MDNR Land Disturbance Permit.
 - This project is unique in that it is so closely aligned with the Summit View Farms 5th Plat project in KCMO. Please provide confirmation from KCMO that they approve of detaining water from this project and for sharing the proposed sediment basin.
2. Sheet 1: The information in the Index of Sheets does not match the title blocks for sheets 20, 21, and 27. Please revise as needed.
3. Sheet 5:
 - What is the heavy dashed line around or thru parts of the project?
 - The project area is labeled as "Future Development." Please revise.
 - Please clarify whether or not construction of the sediment basin within the plat boundry will be performed with this project.

- Will SVF 4th and SVF 5th be constructed at the same time? Please provide a projected sequencing, emailed is fine, of how these 2 projects will work together.
- Is the offsite temporary diversion berm to be installed with this project?

4. Sheet 6:

- The sheet name in the title block is incorrect, please revise.
- When will the sediment basin be removed? Please include specific requirements.

5. Sheet 8: Please replace the Sediment Trap standard detail with the Sediment Basin standard detail.

6. Sheet 12:

- Include a typical cross-section with design information for each swale.
- Clearly indicate a start and stop location for each swale typical section.
- Include calculations showing the native grasses planned for the swales are adequate for the proposed velocities.
- Why is there no east side slope specified for Swale 2?
- Is there a berm along the west side of Swale 1? If so, please include design requirements.
- Include 100-year WSE at every lot corner adjacent to a swale. MBOE must be 2 feet above 100-year WSE.
- Include a note regarding the limits of the swale IF that will help to clarify the required location of the typical section.
 - o Example Note: Swale sections extend the entire length between upstream and downstream structures with the exception of a transition at each structure.
- As-Graded Plot Plan requirements will now be designated on the MDP. Please designate, in tabular form, which lots have this requirement based on the following:
 - o Lots that include or are adjacent to engineered swales designed for stormwater conveyance.
 - o Lots adjacent to stormwater conveyances or features, such as drainage ways, detention basins, retention basins, etc.
 - o Lots that contain berms designed to direct stormwater runoff as a part of the overall stormwater design.
 - o Lots that require specific grading that is a part of the overall stormwater design.

7. Sheets 14-17: Show and label underdrain where required.

8. Sheet 14:

- Remove "SW National Ave" from the title block, it is not on this sheet.
- Relocate overlapping text near Sta. 18+50 in the Profile view for clarity.

9. Sheet 15: Please extend the existing grade line the entire length of the street.

10. Sheets 18-19: Sign designations are included in General Note 1, but not included in the Plan view. Please add.
11. Sheet 20: Some text appears to be cut off in the bottom of the top right section. Please revise.
12. Sheet 22:
 - What does “(Piped)” refer to in the Tract D drainage area?
 - It appears that Tract A drains to FI 4-11A, but the calculations include it in the drainage area for Line 4-13. Please clarify.
13. Sheets 24-26:
 - Include the following note on any profile sheet applicable: “Compacted Fill shall be placed to a minimum 18” above the top of the pipe prior to installation.”
 - Show and label the limits of the compacted fill placement in the Profile view. Use hatching for clarity.
 - Storm sewer structures greater than 7’ deep require a special design. Please provide in the plan set.
 - Please label vertical separations that are 2’ or less from outside of pipe to outside of pipe. If required separation isn’t provided, please revise so the requirement is met.
14. Sheet 24:
 - Include removal of existing end section at CC 4-10J in Plan view and flowline in Profile view.
 - Relocate the Line 4-10 1% HGL label leader so it clearly points to just the appropriate line.
 - Please revise Lines 4-10 and 4-11 to contain the design HGL within the pipe system.
15. Sheet 25: Please label the horizontal separation between the sanitary MH and Line 4-13 near Sta. 3+50. If the required separation isn’t provided, please revise so the requirement is met.
16. Sheet 26:
 - Include the sanitary crossing just upstream of JB 4-13B in the Line 4-15 Profile view.
 - Please reverse the flowline information at JB 4-13B and CI 4-15B in the Profile views.
17. Sheet 27: Provide detailed information in the plans regarding the native plantings required for the swales.

Traffic Review - Corrections

1. End of Pavement OM's needed at the end of National not Serena
2. The K value for Saddlebred does not meet minimum criteria near Sta. 13+00. Saddlebred and Enoch will

both be streets extended south in the future as adjacent properties are subdivided.

3. Plans need to show the locations of stop signs and street name signs (e.g. post locations and noted signing on each post). The suffix TERR should be TER.

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,

Sue Pyles, P.E.
Senior Staff Engineer

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cc: Development Engineering Project File