
PUBLIC WORKS ENGINEERING DIVISION

Date: Tuesday, March 14, 2017

To:

ENGINEERING SOLUTIONS

Matt Schlicht, P.E.

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From: Gene Williams, P.E.

Senior Staff Engineer

Application Number: PL2016105

Application Type: Engineering Plan Review

Application Name: Manor at Stoney Creek 2nd Plat Street, Stormwater, MDP

We have completed our review of the above-referenced plans, and offer the following comments:

Engineering Review

2. Sheet C.001: The "Index of Sheets" does not appear to match the existing plan sheets. For instance, Sheet C.208 states this is a "Intersection Details and ADA Ramp Layout", but in fact this is a "Detention Basin and BMP Plan".
3. A sheet covering intersection design and ADA-accessible ramp design was missing from this particular plan set.
4. Sheet C.001: Sheet C.207 does not exist within the plan set.
5. Sheet C.001: No standard detail sheet(s) for curb inlets, junction boxes, or field inlets was provided. A dedicated sheet(s) must be provided, and the "Index of Sheets" updated to reflect the new sheet(s).
6. Note Concerning ADA-accessible Ramps: The ADA-accessible ramp detail sheet was missing from this submittal. Please ensure that all ADA-accessible ramps, regardless of whether they are built during the construction of the subdivision improvements or later, are included in the detail sheet(s). The City of Lee's Summit has adopted the PROWAG standards, and must be followed. Sufficient details must be provided in the design details for all ADA-accessible ramps.
7. Sheet C.208: Field inlet 5-2 does not appear to be installed within a "sump". The Master Drainage Plan appears to show the majority of stormwater will bypass this field inlet.

8. Sheet C.208: A generic design of the detention basin outlet structure was provided. Please provide a specific design for this outlet structure.
9. Sheet C.208: The southern dimension (i.e., 97 feet) of the BMP area does not appear to be correct. The dimension line ends halfway along the length.
10. Sheet C.208: The BMP area was not sufficiently detailed in terms of the thickness of the permeable soil layer. Please provide a specific thickness for this feature. In addition, provide sufficient notes that the permeable soil mixture shall be thoroughly mixed on the project site prior to placement.
11. Sheet C.301: Storm Line 1 shows a hydraulic grade line which is suspect. This line is directly connected to the detention basin, and as such, it would appear the hydraulic grade line shown on the profile view is too low.
12. Sheet C.301: The hydraulic grade line for the 100 year event appears at grade for the field inlets located in the sump condition. This pertains to field inlet 5-5, and 5-6. Section 5600 of the APWA Stormwater Manual requires a minimum of 0.5 feet from any opening to the hydraulic grade line. This does not appear to have been met.
13. Sheet C.301: Are you certain the 100 year hydraulic grade line at the end of FES 5-1 is 3 feet higher than the 100 year water surface elevation within the detention basin?
14. Sheet C.301: Field inlet 1-2 is shown on the profile view in a confusing manner. It does not appear to be installed within a "sump", and the grade to the west is not clearly defined.
15. Sheet C.301: Field inlet 5-2 is called-out as being installed in a sump condition, but it does not appear from the plan view this is the case.
16. Sheet C.302: Since Storm Line 1 may have changed due to the previous comments, please update the hydraulic grade line within Storm Line 2.
1. The County Line Improvements plans are separate from this review, and are being treated as a separate submittal. The scheduled deadline for comments is Mar. 17, 2017 based on the submittal date.

Traffic Review

1. Please see Planning comments related to Alabaster. Pavement marking plans should also be revised based on these comments.

In order to calculate the Public Works' 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

Beginning Monday, May 23, 2016, 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 will not be required for initial application submittals at this time as the plans are subject to change.

Electronic copies shall be provided on CD in the following formats

- Plats – All plats shall be provided in Tagged Image Format File (TIFF) Group 4 compression.
- Engineered Civil Plans – All engineered civil plans shall be provided in Tagged Image Format File (TIFF) Group 4 compression. All sheets shall be individually saved and titled with the sheet title.
- Architectural and other plan drawings – Architectural and other plan drawings, such as site electrical and landscaping, shall be provided in Portable Document Format (PDF).
- Studies – Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).
- It is requested that each plan sheet be a maximum of 2MB.

Please contact Staff with any questions or concerns you may have.

If you have any questions or comments, please contact me, Gene Williams either at (816) 969-1812 or e-mail to Gene.Williams@cityofls.net.

Sincerely,

Gene Williams, P.E.
Senior Staff Engineer

cc: Development Engineering Project File