



PUBLIC WORKS ENGINEERING DIVISION

Date: Friday, January 19, 2018

To:

ENGINEERING SOLUTIONS

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From: Sue Pyles, P.E.

Staff Engineer

Application Number: PL2017185

Application Type: Engineering Plan Review

Application Name: Manor at Stoney Creek 3rd Plat - Street, Stormwater, MDP, and ESC

The Development Services Department received plans for this project on September 01, 2017. We have completed our review and offer the following comments:

Engineering Review

1. Sheet C.001
 - A 2% to 4% cross-slope is shown for the sidewalk within the right of way on the typical asphaltic concrete section. Please revise to comply with our standard of 1.5% cross-slope.

2. Sheet C.051
 - Include a legend for inlet protection.

3. Sheets C.200-C.202
 - Storm sewer calculations for this project must be included in this plan set.
 - DA D includes multiple inlets. Please correct this error and verify that the calculations correctly match.
 - MBOEs were not provided for any of the lots on the Master Drainage Plan. It would appear that several lots adjacent to field inlets in the sump condition would warrant an MBOE. Please provide MBOEs for these lots, and elevate the MBOE so they are a minimum of 2.0 feet above the 100 year water surface elevation.
 - Basement types (e.g., standard, daylight, walkout) were provided on the Master Drainage Plan for lots not a part of this project. Replace those lots with lots from this project.

4. Sheet C.206
 - Please add a note specifying the use of KCM MB mix for sidewalks.
 - FYI – “Intersection” is misspelled in the Intersection/ADA Ramp Elevation title.

5. Sheet C.301
 - The pipe lengths don’t match the stationing for Lines 1 and 2.
 - The field inlets are shown in a sump condition, with openings on all sides. However, the profile view shows the tops being flush with the ground. Please correct the profile view to reflect the grading around the field inlets to create a localized sump.
 - Include station equations at all structures where multiple lines connect. Include the Line Number in each station label.
 - Please reverse the CI 1-1 flowlines in the Line 1 Profile view to show the flowline out on the d/s side of the label and the flowlines in on the u/s side of the label.
 - Include the sanitary sewer crossing between CI 3-4 & 1-1 in the Line 1 Profile.
 - Include the waterline crossing between FI 2-2 & CI 3-3 in the Line 2 Profile.
 - FI 2-1 appears to be located directly over the proposed sanitary sewer. Please relocate the structure to gain the proper separation.

6. Sheets C.600 & C.601 are not included with this submittal. Please include all required standard details, including those for erosion control, in the plan set.

7. All references to the existing temporary cul-de-sac appear to have been removed. Please clearly indicate removal of the existing cul-de-sac.

8. Notes should be provided stating that all ADA-accessible ramps shall be constructed along with the subdivision improvements. Sidewalks, however, are not subject to this requirement.

9. A SWPPP will be required prior to approval of any land disturbance or prior to approval of the plans, whichever comes first.

10. Engineer’s Estimate of Probable Construction Costs
 - Verify the quantities for Sidewalk and ADA Sidewalk Ramp. The pipe quantities can’t be checked until the storm sewer information is corrected.

Traffic Review

1. Generally, a full review of these plans was not completed. It has been determined the plans do not meet the minimum requirements in Section 5204.

2. Typical section should provide for 1.5% cross slope through sidewalk areas and 4:1 grading.
3. Missing horizontal alignment information.
4. Provide dimensions for deviations in typical section such as all curb return radii, PC/PT station/offset, cul-de-sac radius, etc.
5. Signing plan should coordinate with the adjacent plat engineering plans. Separate and identify stop signs and street name signs. Street name signs may or may not already be addressed in the adjacent plat (not necessary on both corners of the intersection).

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

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 me if you have any questions or comments.

Sincerely,

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Staff Engineer
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cc: Development Engineering Project File