
PUBLIC WORKS ENGINEERING DIVISION

Date: Thursday, March 29, 2018

To:

CMH PARKS INC

Email:

Fax #: <NO FAX NUMBER>

From: Sue Pyles, P.E.
Staff Engineer

Application Number: PL2017184

Application Type: Engineering Plan Review

Application Name: The Reserve at Stoney Creek 3rd Plat
Construction Plans

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.201: The spot elevations don't match proposed contours near the detention basin. Please review all spot elevations and revise as needed.
2. Sheet C.201: Verify MBOEs match proposed grading and 100-year WSE requirements.
3. Sheet C.202: Please include information for drainage areas A-D.
4. Sheet C.210: Please show the BMP limits in the Plan view.
5. Sheet C.210: Clearly indicate the 100-year WSE in both Plan and Profile views, as well as throughout the plan set.
6. Sheets C.203-206: Please add underdrains to the low points at Sta 1+12 Lodestone and Sta 12+87 Georgetown and remove the underdrain label at the Sta 7+75 Georgetown high point.
7. Sheet C.301: Label Field Inlet 1-2 in Plan view.
8. Sheet C.304: The Line 13 Profile view shows riprap at FES 13-1. Riprap isn't shown at the location anywhere else in the plan set. Please coordinate this information.

9. It does not appear that the Engineer's Estimate of Probable Construction Costs was revised with this submittal.
 - Review and verify quantities for all items
 - Revise quantities based on comments for this submittal
 - Replace the item for Curbing with items for Type CG-1 Curbing and Type CG-2 Curbing
 - Add items for 30" FES and Connection to Existing (Line 10)
 - Verify that the formulas are updates, as the totals were incorrect on the estimate submitted
10. I reviewed the 10 year storm pipe table included in the plan set. I will send it under separate cover. Please revise, and extend the revisions to all other storm sewer calculation tables.
11. Please revise the Macro Storm Water Drainage Study as follows:
 - Please more clearly indicate the maximum 100-year WSE in the report.
 - Update the study to reflect revisions made to the storm sewer calculation tables in the plan set based on review comments. Verify that the information in the study and plan set match.
 - Section 10, Maps & Exhibits, listed in the Table of Contents was not included. Please submit a revised study with all sections included.

Traffic Review

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

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 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,

Sue Pyles, P.E.
Staff Engineer
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cc: Development Engineering Project File