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**PUBLIC WORKS ENGINEERING DIVISION**

**Date:** Friday, September 29, 2017

**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

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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 C001
  - Please complete "Lots Thru" or remove from title block.
  - Revise the MoDot Base thickness for Option 2 in Street & Storm Sewers Note 1 and the Typical Section.
  - Revise the Standard Detail references in Street & Storm Sewers Note 4.
2. ESC Sheets C050-052
  - Label the location of Temporary Sediment Trap.
3. Sheet C100
  - Clearly indicate the plat boundary.
  - Remove the MH label on Phase 2 Manor at Stoney Creek Lot 81.
  - Include offsite sanitary on the site plan.
  - Label manholes consistently. For example, MH A-6 includes the project name while MH A-8 does not.
4. Sheet C200
  - Include existing contours.
  - The proposed contour labels are difficult to read, please revise for clarity.

5. Sheet C201
  - Please clarify if the storm sewer along the east side of SW Stoney Creek Drive is existing, proposed, or future.
  - Several elevations overlap other text or graphics, please revise for clarity.
  - Lots 79, 101, and 102 have graphics on them that are unlabeled. Please remove or label for clarity.
  - Elevations at the intersection of SW Lodestone Dr and SW Georgetown Dr are missing, please revise.
6. Sheet C202
  - Include complete storm sewer calculations in the plan set.
  - Include detention calculations, outlet design info, and details.
  - DA 27 and DA 31 each include multiple inlets. Please revise.
  - Please review DA 9 as it does not appear the street grades would allow the flow to make a turn as depicted. Revise as needed.
7. Sheets C203-C206
  - Elevations are missing in the Profile views for SW Hightown Drive, SW Tanzanite, and SW Amethyst Drive.
  - Review these sheets for clarity. Many overlapping ov text and graphics require revision.
8. Sheet C208
  - General Comment Concerning the ADA-Accessible Ramps and ADA-Accessible Ways: The specific details of these features must include, at a minimum, the design details specified in Section 5304.8 of the Design and Construction Manual. Elevation call-outs, although required, are not sufficient. Other design details specified in this section are required, including slope call-outs which comply with the criteria listed in Table LS-5, and section views specified in 5304.8.
  - General Comment: All ADA-accessible ramps and ADA-accessible ways must have a specific detail associated with them. Please show the locations of these features, and provide a call-out on the plan view with a specific reference to the sheet number and detail number.
  - Review the information included on this sheet. Elevations are missing and overlapping of text and graphics occur many times. Please revise for clarity.
9. Sheet C300
  - CI 11-3 is mislabeled.
10. Sheets C301-C305
  - Include HGL(10) lines in all storm sewer profiles.

- Include all pipe crossings in the storm sewer profiles with elevation information to confirm adequate separation is provided.
- Include rip-rap d50 information.
- Indicate clearly the removal of existing end sections and how new pipe will connect.
- The stationing does not seem to be consistent. Please review and revise if needed. If pipe lengths and stationing do not correspond, please explain (email is fine).
- Label all tracts.
- Line 11 pipe slopes are missing.

#### 11. Sheets C600-601

- Please replace the APWA storm sewer details with City of Lee's Summit standard details.

#### 12. General

- Additional comments that haven't been included with this review may be required based on revisions due to these comments and submission of missing information.
- Please submit an Engineer's Estimate of Probable Construction Costs.
- Please submit the SWPPP.
- Please submit Stormwater and Detention studies. They may be combined into one comprehensive study.
- Remove the "Phase 3, The Manor at Stoney Creek" label from Lots 69/70 throughout the plan set.

### **Traffic Review**

1. Sag K value on Georgetown Dr. near Sta. 3+00 shall be at least 26.
2. The vertical profile along Lodestone at Georgetown creates a significant reverse crown along Georgetown through the intersection. In addition, the K values for Lodestone do not meet minimums resulting in sight distance concerns for traffic along Lodestone approaching the stop sign.
3. Intersection Details/Elevations are missing.
4. Street signing plan is incomplete. For the portions shown, add street name signs at the intersection of Hightown and Amethyst.
5. Profile mis-labeled and does not accurately depict Stoney Creek Drive. Details for intersection, existing and proposed, of Stoney Creek Drive and Georgetown Drive are missing.
6. Sidewalk should go around the perimeter of the bulb-out, without ramps (Hightown Dr/Amethyst)
- 7.

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**

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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, Sue Pyles either at (816) 969-1245 or e-mail to [Sue.Pyles@cityofls.net](mailto:Sue.Pyles@cityofls.net).

Sincerely,

Sue Pyles, P.E.  
Staff Engineer

cc: Development Engineering Project File