



DEPARTMENT OF PUBLIC WORKS

Memorandum

To: Matthew Nymbega
John Gysling, P.E.
Michael Clendaniel, P.E.
Chip O'Conner

From: Stacy McNatt, P.E.
Ellie Mortazavi

Cc: Doug Hokuf, P.E.
Michael Harris

Re: **Steeple Glenn – As-built Plan Review Comments**

Date: October 31, 2018

SENT VIA EMAIL

Thank you for providing an interim as-built package for our review. Below are comments and concerns from the Department of Public Works review of the as-built documents regarding the stormwater facilities. It appears the report and plans are missing some critical information and/or documentation to support the long-term maintenance and inspection of the stormwater facilities within this community. It is important for all responsible parties to have plans with the most appropriate and correct data for future maintenance and major repairs.

1. This package appears to be incomplete and the necessary data during construction and installation of all the stormwater facilities especially the subsurface infiltration facilities is not provided. This information is necessary to support any future maintenance or major re-construction.
2. It appears the site grading is not consistent with design and the necessary swales are not installed to direct runoff into the stormwater facilities as designed.
3. Delineate and label the location and dimensions of all easements, including but not limited to, the easements around all stormwater facilities, all pipe easements, all maintenance and access easements, offsite easement from CB#13 to the existing catch basin in Waterford, etc. Clearly identify the easement type and party responsible for maintenance.
4. The grading and construction of the Stormwater Facility #1 is not consistent with the design. As shown, the runoff bypasses the system. The Forebays shall be installed as designed. The basin shall be re-graded as identified on the approved plan. The emergency spillway is not installed.
5. Stilling basins or forebays are not installed per approved design. Provide all as-built data on Sheet C4.8 for the Stilling Basin once installed.
6. All outfall pipes, cross sections, and profiles shall have design and as-built data provided.
7. Provide the as-built plan view location of the subsurface infiltration practices for future maintenance purposes.

8. Provide the emergency spillway cross section for Stormwater Facility #1 and associated topography and elevations.
9. The as-built freeboard between the 100-year WSEL and the top of bank in Stormwater Facility #1 is more than 6 inches less design. Regrade the berm to meet the design freeboard of 1.11 feet.
10. Provide all as-built inverts and elevations in Cross Section A-A of Retention Facility #1.
11. Since the subsurface facility #1 is smaller than designed, was a new water balance computed to demonstrate the volume of recharge was still provided in accordance with the design and the Water Management Agreement?
12. Provide all documentation that demonstrates the terms of the Water Management Agreement have been fulfilled.
13. Provide all as-built data and information of Catch Basin # 1 & #11 Diversion Structure.
14. Due to the age of the infrastructure installed and the lack of detailed as-built installation information and data, all outfall pipes from stormwater management facilities shall be videoed with an accompanying report documenting proper installation and good operating condition.
15. Provide the necessary design storage capacity of each facility and demonstrate the facilities as installed are greater than or equal to the design.