

January 26, 2024

Joshua Krolewski, PE  
The Bay Companies  
8500 Bell Creek Road  
Mechanicsville, VA 23116

**RE: Gateway at Landmark Section 1**  
**Location: 501 Old Memorial Drive**  
**File No: POD2023-00075**

Dear Mr. Krolewski:

The following is in response to the construction plans submitted to the Department of Planning dated January 3, 2024 and received by DPU on January 5, 2024. Please address the following comments and **resubmit revised construction plans** for review. Water and Sewer Agreements that must be executed by the Owner and the County for water and sewer improvements **have not** been executed.

**General:**

1. Agreements have not been executed at this time. Agreements must be executed prior to the authorization to begin utility construction or approval of building permits or prior to subdivision plat approval. An Information Sheet for the Preparation of Utility Agreements has not been submitted for review. If the Information Sheet is incomplete when submitted, we will send you comments for correction and resubmittal. If the required Information Sheet is complete when submitted, an Agreement will be forwarded to the Owner for signature within 21 days.
2. The separate overall water and sewer utility plan submitted shall be approved by DPU for this development prior to approval of Section 1 or any section of this development.
3. A certificate to construct (CTC) from DEQ will be required for this project since average design flows exceed 40,000 gpd.
4. Revise and resubmit the Project summary report and Engineering Report in accordance with all plan comments and water model updates. Also, show separate PVC and DI quantities in the Project Summary Report.
5. Planning is requested to provide DPU with a copy of the HOA covenants for this project for review when available.

**Water Hydraulic Model:**

6. Provide the following changes within the pipe date and update model results:
  - Revise pipe size and length for P-16.
  - Revise pipe lengths for P-2 and P-7.

**C1 Cover Sheet:**

7. Revise the water and sewer materials quantities list in accordance with all comments and per the following:
  - Include the private fire line LF and all its appurtenances and label as private.

- Include an entry for the 6" reduced pressure detector assembly.
- Revise lateral quantities to show one DI lateral.
- Revise quantity of vandalproof/watertight frame and covers to match the plans.

**C2 Existing Conditions and Demolition Plan:**

8. Correct the labeling for existing sewer runs from Sandston Wood Sewer pump station. The sewer down to manhole 355NW006 is 8" PVC. Afterwards, it becomes 15" AC.

**C3 Overall Plan:**

9. Coordinate Overall utility layout with the separate Overall Utility plan submitted in regard to delineation of sections 2, 3, and 4.

**C9-11 (Layout & Utility Plan):**

10. Add the following to the plans for zinc coated DIP water main: "All ductile iron pipe and fittings shall coated with a layer of arcsprayed 99.99% pure zinc per ISO 8179. Zinc shall be coated on the exterior of the pipe at a mass of 200 g/m<sup>2</sup>. A finishing layer of bituminous paint shall be applied over the zinc coating in accordance with AWWA C-151. The coating system shall comply in entirety with ISO 8179-1:2017 "Ductile Iron Pipes, Fittings, Accessories and their joints – External zinc-based coating – Part 1: Metallic zinc with finishing layer".
11. Sheet C11 appears to be for Landmark Section 3 plans and not this plan. Please confirm and remove.
12. Adjust the callout and lead for the boundary valve to specifically point to this valve and distinguish from the regular 6" valve.
13. Show the regular 6" valve on the fire line to be next to the 8 x 6 tee.
14. Locate fire hydrants to be at least 50' away from buildings 1 and 7 or provide an exception request to the Director of Public Utilities with a justification for the exception.
15. Truncate water mains off Destination Drive and Destination Way to the edge of pavement or 5 feet from the hydrant tee.
16. In order to minimize manholes, extend sewer from Manholes 105 and 103 to the next manhole and eliminate manholes 104 and 102 due to the short runs.
17. Provide a DIP 6" lateral for building 1 since it is connected to DIP sewer main.
18. Resolve overlapping of callout for waterline bend across from building 5.
19. Clarify whether the hydrant at beginning of Destination Drive is existing per Landmark Section 3 or to be installed with this plan. If with this plan, a tapping sleeve and valve would be required. Show consistently within the profile as well.

**C15 Old Memorial Drive and Storm Sewer profiles:**

20. The title for this sheet should be changed to omit Old Memorial Drive since there are no profiles to be shown for this street.
21. On Destination Drive profile, there is a direct point load occurring between the storm pipe and the 6" fire line. Provide at least 1 foot separation.
22. Manhole 104 should be labeled as watertight/vandalproof frame and cover.

**C16 Storm Sewer profiles:**

23. Regarding Storm Sewer 37-30 profile, show the 8" WL crossing over the storm pipe with 3.5 feet of cover since this is available and will match the plan view.



24. Regarding Storm 63-59 profile, show sanitary laterals crossing with separation distance specified.

**C63 Utility Details:**

25. Revise the following for the ISO fire flow calculations:

- Round up the construction factor  $C_i$  to 2750 and adjust calculations accordingly.
- There should be a required fire flow of 1250 gpm with 2 hydrants required.

**L01 Conceptual Landscape plan:**

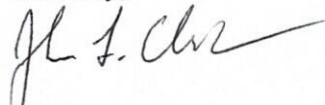
26. All proposed trees shall be located outside of utility easements and at least 10 feet from utilities. Adjust trees located next to water meter service for building 6 and behind the fire hydrant across from buildings 5 and 6.

**L02 Lighting:**

27. Show light poles outside of all utility easements or at least 10 feet from water and sewer utilities. Adjust light poles near the water service and meter for buildings 6 and 3.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4501 for any necessary clarifications.

Sincerely,



John L. Clark PE  
Utilities Engineer

cc: Dennis Harlow – G and G Limited

bc: Marchelle Sossong  
Ralph Claytor  
Daniel Ivy  
Kenisha Williams  
Otis Mitchell  
Christina Goggin, Planning

JLC/vr