

May 12, 2023

Joseph Faudale, PE
The Bay Companies INC
8500 Bell Creek Road
Mechanicsville, VA 23116

RE: Fairways Section 2
Location: 3100 Creighton Road
File No.: POD2023- 00172

Dear Mr. Faudale:

We have reviewed the construction plans submitted to the Planning Department on April 25, 2023. 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. Owner to submit executed Utility Agreements prior to approval of building permits or prior to the utility pre-construction meeting and authorization to proceed with utility construction by DPU. 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. 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. As previously commented, provide an exception request for the fire hydrant less than 50' from proposed homes. Exception request is to be addressed to the DPU Director and must provide justification for the request.
3. The information for the model didn't address our previous comments. Also, revise Project Summary Report as needed to reflect final pipe quantities based on subsequent comments.

C1 Cover Sheet

4. Revise water and sewer material quantities in accordance with all comments and per the following:
 - a. Remove the 8"x4" tee
 - b. Four 6"x4" tees
 - c. Two 8" plugs
 - d. Four 6" plugs
 - e. Review all sewer quantities
 - f. Revise to say '**vandal proof/watertight**' frame and cover as this is now a combined assembly for both purposes per D-155 and D-160.

C2 Existing Conditions and Demolition Plan

5. Show the existing buildings near the existing pond to be removed.
6. Correct the GIS ID of MH 045SW004.

C4 Overall Section 2

7. Revise the multiple runs of sewer that are to be DI.
8. Provide sanitary sewer manhole numbers for reference.
9. Show the 30' utility easement that is to be provided for future trunk sewer replacement.

C9-11 Layout & Utility Plan Sheets

10. Include reference D505-1 for all flushing hydrants in cul-de-sacs.
11. Include the Deed book and page number for the existing 16' utility easement for the trunk sewer (DB1416 PG475 per GIS information).
12. Revise the CWB/CSB sheets to only reference 45SW.
13. Label manholes 230, 210, 206, 205, 223 as vandal proof/watertight with reference to D-160 (non-traffic rated).
14. Terminate all lateral SIPs behind the sidewalk on the resident side so that plumbing contractor does not have to cut up the sidewalk with lateral portion to each house.

C9 Layout & Utility Plan

15. Remove the following:
 - a. 8"x6" reducer callout to the left of lot 276.
 - b. Waterline adjustment near storm structure 207.
 - c. The callout of (2) 8" 22.5° bends near Putter Lane and Nine Iron Drive.
 - d. The southernmost valve is at the intersection of Putter Lane and Nine Iron Drive.
16. Label DI lateral where connecting to DI sewer main for lot 201.
17. Label the fire hydrant assembly and reducer in front of lot 197. Provide an easement around the hydrant to have at least 8' of clearance all around.
18. Revise waterline adjustment symbol near storm structure 202 to coincide with waterline crossing.
19. Show a waterline adjustment near storm structure 204.

C10 Layout & Utility Plan

20. Remove the following:
 - a. Waterline adjustment near storm structure 223, 236, 239.
 - b. Callout of "brick up opening..." at MH205. Openings shall be cored when needed.
21. At the intersection of Nine Iron Drive and Nine Iron Lane: Revise tee to 8"x8".
22. Regarding the stretch of waterline from the end of the cul-de-sac of Nine Iron Drive to the entrance of Nine Iron Lane:
 - a. As previously commented, profile lateral crossings for lots 216-218 to confirm there is adequate separation from the storm pipe 239-240. Push the lateral SIP and water meters serving 217 and 218 to be beyond the sidewalk.
 - b. Provide mechanical joint restraint for the 45° bend in front of lot 218 closest to the storm pipe. Call this note out on the relevant profile as well.
 - c. Clarify where the reducer is being placed and correct size of pipe and appurtenances. Update profile.

C11 Layout & Utility Plan

23. Call out the two 8" 45° bends to the left of lot 232.
24. Correct pipe size labeling to show 8" PVC waterline to the last hydrant on Nine Iron Lane. Additionally, label and call out the 8"x6" reducer.

C16 Road, Storm, and Utility Profiles

25. Profile all sanitary lateral crossings that have 0.5' or less separation from storm sewer crossings or 1' or less from water main crossings. Verify at least 0.5' of vertical separation at each storm crossing and 1' at each waterline crossing.

26. Update all profiles in accordance with all comments.
27. Label and call out all vandal proof/watertight manholes with reference to D-160.
28. Regarding Nine Iron Drive Profile:
 - a. As previously commented, show the existing storm crossing in Creighton Road near STA10+25.
 - b. Combine and rotate the bends at STA10+75 to minimize the amount of bends. Revise callout wording to say, "first two vertical bends shall be rotated to achieve a combined 22.5° horizontal deflection..."
 - c. Show the missing sanitary crossing near STA12+25.
 - d. Lower waterline at STA15+75 to have at least 3.5' depth of cover. Separation from the top of the storm pipe can be as little as 0.5'.
 - e. There is a missing bend near STA16+60.
 - f. Coordinate callout notes at the end of the waterline with the plan view.

C17 Road, Storm, and Utility Profiles

29. Regarding Tiger Lane Profile:
 - a. Revise location of fire hydrant assembly and 8"x6" reducer shown at STA12+00 to match plan view.

C18 Road, Storm, and Utility Profiles

30. Regarding Nine Iron Lane Profile:
 - a. Adjust the placement of the fire hydrant to the right of MH218 so that it is not connected in the bend of the waterline adjustment.
 - b. Revise tee and gate valves near STA13+60 to match plan view.
 - c. Show the missing fire hydrant assembly and 8"x6" reducer near STA16+40.
31. Regarding Nine Iron Court Profile:
 - a. Show the waterline adjustment and storm crossing near STA10+60.
 - b. Include the two missing laterals INV INS to MH215 and provide matching crowns between laterals and main.

C20 Utility and Storm Profiles

32. Provide a typical note of 3.5' minimum depth of cover.
33. Regarding Sanitary Sewer 213 to 205:
 - a. Show the pipe connection symbol on MH213 of the other sewer main.
 - b. Show 8" waterline crossing at the correct elevation per other profile.
34. Regarding Sanitary Sewer EX to 222:
 - a. Coordinate pipe length from MH222-223 to match plan view.
35. Regarding Sanitary Sewer EX to 201:
 - a. Show the storm crossing near STA11+80 and separation distance from sewer main.

C42 Utility Details

36. Include Detail 505-1.

C50 RPA Reforestation Plan

37. It appears from Legend that a significant portion of the future trunk sewer 30' easement is to be under RPA reforestation design requirements. Please revise to show no reforestation in this easement as DPU will have to clear this area in the future.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4993 or John Clark at 501-4501 for any necessary clarifications.

Sincerely,

Kiara L Korkuc

Kiara Korkuc
Utilities Engineer

cc: Doug Godsey – Godsey Properties (2354 Charles City Road, Henrico, VA 23231)
Glenwood Golf Club INC (3100 Creighton Road, Henrico, VA, 23223)
Daniel Caskie – The Bay Companies INC (8500 Bell Creek Road, Mechanicsville, VA 23116)

bc: Marchelle Sossong
Daniel Ivy
John Clark
Ralph Claytor
Christina Goggin, Planning

KLK/vr