

August 17, 2023

Zackary A. Wilkins, P.E.
Townes Site Engineering
1 Park West Circle, Suite 108
Midlothian, VA 23114

**RE: QTS Tract 9 – Full Buildout Plan
Portugee Rd
POD2023-00314**

Dear Mr. Wilkins:

We have reviewed the construction plans submitted to the Planning Department on August 9, 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. 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 complete when submitted, an Agreement will be forwarded to the Owner for signature within 21 days.
2. DPU still hasn't received F-12 form. As previously commented, provide F-12 (Notice of Intent to discharge to Sanitary sewer) forms.
3. Provide an original seal and signature.

C-17 & C-18 (Utility Layout):

4. Correct the number of valves label at the tee near water main STA 46+55.
5. Remove the 8" gate valve and box reference at the 30" water main connection. The valve is part of the tapping sleeve and valve.
6. Provide the casing pipe spec such as wall thickness.
7. Three (3) fire hydrants on the eastern side are not accessible behind the fence. Relocate the fences to go around fire hydrants or fire hydrants.
8. Only two (2) water valves are required at the tee. Remove 3rd water valves at five (5) tee locations.
9. The sheet location references for the 8" internal fire system backflow preventer is incorrect. Review the sheet references for all detail notes on the plan.
10. Remove "Public" from the sanitary sewer laterals between M/H:183 and M/H:177 and M/H:175. DPU will only maintain sanitary sewer in the utility easement.
11. As previously commented, provide a minimum separation of 50' between fire hydrants and the building or request an exception to the DPU Standards to allow the fire hydrants to be within 50' of the building.
12. As previously commented, move boundary valves, water and irrigation meters, and fire hydrants closer to the sidewalk or curb and reduce utility easements.

13. Label all ductile iron pipes on the plan (for water and sanitary sewer).
14. As previously commented, label the sanitary sewer as private from the building RIC-DC6 to M/H:5.
15. As previously commented, label material of all the sanitary sewer pipes shown on the plan.
16. As previously commented, provide internal angles at the manhole connection and each manhole.
17. Move the manhole numbers to be visible on the plan sheet.
18. Make the benchmarks darker.
19. Provide water main stations on sheet C-18.
20. Fire hydrants can be shifted/rearranged to make maximum use/hoselay. Remember that the dedicated fire hydrants will not be used for firefighting purposes.
21. Show the fire pump location and provide a spec. Reference the sheet the pump spec and provide a note indicating the fire pump must have a control device to prevent a reduction of pump suction line pressure to less than 20psig.

C-26 (Profile):

22. As previously commented, label monitoring manholes in the profile.

C-27 & C-28 (Profile):

23. Water pipes need to be ductile iron where pipe are installed 3.5' cover from filled grade but less than 3.5' cover from the existing grade. Make sure pipe transition at the fittings.
24. Correct the pipe material between STA 46+50 and STA 47+90.

C-42 (DPU Reports):

25. Check the maximum demand in meter sizing forms. With 1,068 fixture counts, demand should be at 130 GPM range.
26. Per the meter sizing form, 2" water meter is needed. Check the calculations and provide 2" or dual 1 1/2" meters. DPU doesn't use 3" water meter.
27. Check fire flow estimate form calculations. Ci, NFF, Total and final Required fire flow numbers are wrong.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4511 or Alice Thompson at 501-4508.

Sincerely,


John Yi
Utilities Engineer

cc: Sarah Blue, Quality Investment Property Richmond LLC

bc: Ralph Claytor
Marchelle Sossong
Daniel Ivy
Tony Greulich, Planning

ANT/djm