

March 27, 2020

Zachary Wilkins, PE  
Townes Engineering  
9850 Lori Rd, Suite 201  
Chesterfield, VA 23832

**RE: Dominion Boulevard Apartments  
4359 Sadler Road  
FILE NO. 2293; POD2020-00117**

Dear Mr. Wilkins:

The Department of Public Utilities has completed a review of the water and sewer plans that are part of the plan of development submitted to the Planning Department on March 6, 2020.

DPU recommends approval of these plans by the Planning Commission.

Please address the following comments before submitting the construction plans for signature.

**Sheet C -12**

1. The water main on the eastern side of the site will need to be looped back to Dominion Boulevard.
2. Review the connections to the existing mains. Will tapping sleeve and valves be utilized as opposed to tees and valves to avoid water main shutdowns? If tees will be utilized, call them out as 12" x 8" tees.
3. You cannot connect an 8' x 6" tee to a 12" water main. Revise where necessary.
4. FDC's must be installed outside of the utility easement. These are private items.
5. Review the easements, as presented the limits of the easements are not clear.
6. Revise the callouts for the fire backflow devices. All of the devices should be rpz and not double check.
7. Provide rpz backflow devices for the domestic services. Multi-use buildings and buildings over three stories and require backflow protection.
8. Since there are two valves for the fire protection system, the boundary valve size will need to be included in the callout as well.
9. Provide a bubble or circle around the areas where the water main will adjust under the storm sewer.
10. Review the location of the utilities in the traffic circle. If landscaping is desired to be installed in the circle, the utilities should be located around the circle.
11. Fire hydrant are located within 50' of the building and an exception the DPU Standards is required.
12. The proposed fire hydrant served by the existing water main is within 20 feet of the building and must be relocated.
13. Remove or lighten the hatching on the plan. As presented some labeling is difficult to see.
14. Provide a monitoring manhole for the retail portion of the project.

**Sheet C-18**

15. Darken the numbers on the Domestic Meter Sizing form. The valves provided are hard to see.
16. Review the values provide on all three of the Fire Flow Estimate Forms. Revise where necessary.
17. If the parking deck is not enclosed, there is no needed fire flow value per ISO.
18. The equivalent residential unit value for the retail building should be 12 and not 11 since the value calculates to 11.67.

**Sheet C-20**

19. Deepen MH 1 and MH 2 slightly to reduce the slope into MH E10.
20. The run of sewer from MH 1 into MH E10 should tie into the bench at the same elevation as the existing invert in since the pipes are the same. Is there a reason that they are not at the same elevation?

**Sheet C-23**

21. Remove detail D-425 and replace it with D-435.
22. Provide detail D-405 on the plan.
23. Provide detail D-740 on the plan.

**Sheet L2**

24. Provide utilities and utility easements on the lighting plan to ensure that there are no conflicts. See sheets L3 and L4 as well.

**General**

25. Agreements are required for this project. 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 been submitted for review. If the submitted Information Sheet is complete, an Agreement will be forwarded to the Owner for signature within 21 days.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4500.

Sincerely,



Alvin E. Christian, Jr., P.E.  
Senior Engineer, DPU Private Development

cc: Ms. Jacqueline Mackey  
Robinson Development Group, Inc.  
9615 Georgetown Pike  
Great Falls, VA 22066

bc: Ralph Claytor  
Carmel Duvern   
Tony Greulich, Planning

AEC/mab