COMMONWEALTH OF VIRGINIA



COUNTY OF HENRICO

April 22, 2021

Malachi Mills, P.E. Rummel, Kleppler & Kahl, LLP 2100 E Cary Street, Suite 309 Richmond, VA 23223

> RE: Innsbrook Dominion Residences 5000 Dominion Boulevard File No. 2293; POD2021-00165

Dear Mr. Mills:

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 April 12, 2021.

DPU continues to recommend approval of these plans by the Planning Commission.

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

Cover Sheet

1. Provide an original signature on the engineer's seal.

Sheet C9.1

- 2. Provide a flushing hydrant at the end of the water lines serving the townhomes in accordance with DPU Standards. The blowoff is not acceptable. See Sheet C9.2 as well.
- 3. Meters must be installed within the limits of the right of way or within easements. Revise meters accordingly. See Sheet C9.2 as well.
- 4. A rpz backflow device will be required for the apartment buildings. Call out the size of the device and indicate the approximate location of the domestic backflow devices.
- 5. Indicate the size all backflow devices, both fire and domestic. Revise where necessary.
- 6. Fire protection systems must utilize control valves, system boundary valves and rpz backflow devices with bypass meters. Revise all fire system designs and callouts accordingly. See Sheet C9.2 as well.
- 7. Show the approximate location of the Siamese connections for the fire protection systems. See Sheet C9.2 as well.
- 8. There is no dedicated hydrant proposed for Apartment Building #2.
- 9. Fire hydrants must be a minimum of 20' from any structure. See Sheet C9.2 as well.
- 10. Provide a bubble, circle, or other symbol in areas where the water main will be vertically adjusted. See Sheet C9.2 as well.
- 11. Sewer laterals cannot connect to sewer mains via wyes. Connections to the main must be made via tees. See Sheet C9.2 as well.

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- 12. Provide a note indicating that laterals are private from the building to the main. See Sheet C9.2 as well.
- 13. Provide a note indicating that the Homeowners Association will be responsible for the laterals from the main to the meter for the townhomes if the townhomes are privately owned. If they are not privately owned, this note is not required. See Sheet C9.2 as well.

Sheet C9.3

- 14. Offsite easements must be recorded prior to the approval of these plans.
- 15. The sewer main must be installed in Waterfront Place and not outside the road adjacent to the electrical line.

Sheet C10.2

- 16. There is no water model information provided on this sheet, but the sheet is titled "Water Model and Calculations".
- 17. Review the Fire Flow Estimate Forms provided. Per ISO, buildings that are sprinklered do not get counted as exposures. Revise the forms accordingly.

Sheet C13.0

- 18. On Water-1, show the tapping sleeve at the existing water main at the end of the profile as opposed to the tee. See Water -3 as well.
- 19. On Water-2, an adjustment is shown on the profile, but no crossing is shown on the plan.
- 20. On Water-2, the match line label overlaps text and the text cannot be clearly seen.
- 21. Select backfill is required for water and storm crossing less than 1'.
- 22. Where water main crosses storm pipes at less than 8", the portion of water main at the crossing must be ductile iron.

Sheet C13.01

23. The slope provided on the sewer is less than what is allowed in the Standards and SCAT Regulations. The minimum slope on 8" sewer mains is 0.4%.

Sheet C13.02

24. No invert outs have been provided for the profiles for G, H, and N.

Landscape Plan L3.0

- 25. Easements have not been shown on the plan.
- 26. As presented, DPU cannot determine if conflicts exist with utilities and/or utility easements.

Light Plan L5.0

- 27. Utilities need to be presented so that the standout and can be clearly seen on the plan.
- 28. Easements have not been shown on the plan.
- 29. As presented, DPU cannot determine if conflicts exist with utilities and/or utility easements.

General

30. Agreements have not been executed for this project. An Information Sheet has not been submitted for the preparation of Agreements. Be advised that building permits cannot be approved, nor can utility construction begin without executed Agreements.

- 31. Utility plans need to be updated to show the proposed parcel lines for the townhome portion of this project.
- 32. Revise the Engineering Report to show average water flow based on 92,200 GPD.
- 33. Provide an unsigned copy of the Project Summary Report. This document is to be signed by the person in DPU that approves the plans.

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. Assistant Director, DPU

SeEPE!

cc: Blaine Garrett, Virginia Electric and Power Company Michael Campbell, Dominion Realty Partners, LLC