(CORRECTED) September 12, 2023

Jonathan Bonghi, PE VHB, Inc. 115 S. 15th Street, Suite 200 Richmond, VA 23219

> RE: Innsbrook North End Public Roadway Plans LOCATION: Nuckols Rd/Lake Brook Dr/ Sadler Rd Intersections POD NO. 2023-00188

Dear Mr. Bonghi:

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 August 18, 2023 and received by DPU on August 23, 2018.

DPU recommends approval of these plans by the **Director of Planning**.

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

General

- 1. We do not recall the same discussion details that were cited by Mr. Eddie Glass regarding the requirement for this project to install 12" water main across Nuckols Road as part of the Nuckols Road improvements that will be made with this phase. My Assistant Director, Ralph Claytor, discussed another option with him using the existing 8" waterline crossing Nuckols Road into the east where the 6" line to the western hydrant would be replaced with a 12" line that extends to Sadler Road to Nuckols Rd R.O.W. extended. The existing hydrant needs to be relocated to the eastern corner of Sadler Road. This option also requires installation of a cut in valve on the east side of the 12" x 8" tee on the north side of Nuckols Road where the 8" waterline crosses Nuckols Road. Otherwise, the 12" main must come straight across Nuckols Road into Sadler Road at the Nuckols Rd R.O.W extended.
- As previously commented, the owner is to submit executed green card prior to final utility plan approval by DPU for the proposed utility work.
- 3. As previously commented, an engineering report form F-1 and Project Summary Report F-10 shall be submitted with the next plan submittal for the above referenced utility work. These forms will also require water modeling results to show what the system pressure will be during a fire flow event with maximum day domestic demand.

R4.01-R4.07(Roadway Plan)

- 4. Label all fire hydrants with GIS ID on all sheets. Only one was labeled since previous submittal.
- 5. As previously commented, add notes at all applicable locations to adjust all manhole covers and valve boxes to final grade of newly paved road.
- 6. The following are related to sheet R4.02:
 - As previously commented, provide a new fire hydrant location for hydrant WHY007161 as this hydrant is now shown to be within the widened road. Add a note that the existing

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hydrant cannot be reused but must be replaced with a new hydrant and the existing one returned to DPU Operations staff.

- As previously commented, clearly show valve location for hydrant tee of hydrant WHY007161. It appears to be covered up by other dimensional text.
- As previously commented, show complete location and alignment of water main within the intersection of Lake Brook Drive and Nuckols Road.
- Remove the label 12" W(OLD) that appears west of intersection between Lake Brook Drive and Nuckols Road. DPU has an existing 16" DI waterline in this area.
- 7. The following are related to sheet R4.03:
 - Label that manhole SMH012773 will be adjusted to final pavement grade. In addition, add a note that use of adjustment rings shall not exceed 12", otherwise replacement of manhole sections will be required.
- 8. The following are related to sheet R4.05:
 - Pothole the depth to 12" DI waterline at the storm sewer crossing from structure 100 to the existing structure. Profile crossing of new storm pipe versus waterline and determine if there will be a need for a vertical waterline adjustment which would also create a shutdown in service and fire protection and require additional provisional notes and information on the plan.

R8.01-R8.07(Grading plan)

- 9. Label all of these sheets in the title blocks as Grading Plan and provide a legend on each sheet that describes the work being done.
- 10. Apply all related comments from the Roadway Plan to this series of sheets.
- 11. Profile any grade change over existing waterline on all sheets.
- 12. Show location of future sidewalk and determine whether any impact on existing fire hydrant on sheet R8.06.

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

Sincerely,

Ralph E. Claytor, PE

Assistant Director for Enterprise Programs

cc: Jeff Emerson, Highwoods Realty Limited Partnership

bc: Marchelle Sossong Ralph Claytor Daniel Ivy

Dainer Ivy

Spencer Norman, Planning

JLC/vr