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

RE: Innsbrook North End Public Roadway Plans

LOCATION: Nuckols Rd/Lake Brook Dr/Sadler Rd

Intersection

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.

## General

- 1. We do not recollect 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 to the east where the 6" line to the western hydrant would be replaced with a 12" line that extends to Sadler Road and the hydrant relocated to the eastern corner of Sadler Road. Otherwise, the 12" main must come straight across Nuckols Road to the upper portion of Sadler Road.
- 2. As previously commented, the owner is to submit an 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 the 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
    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 the valve location for hydrant tee of hydrant WHY007161. It appears to be covered up by other dimensional text.
  - As previously commented, show the complete location and alignment of the 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 the 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 there is 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,

Jøhn L. Clark PE Utilities Engineer

cc: Jeff Emerson, Highwoods Realty Limited Partnership

bc: Marchelle Sossong
Ralph Claytor
Daniel Ivy
Spenger Norman Play

Spencer Norman, Planning

JLC/djm