Greg Nelson, PE Timmons Group 1001 Boulders Pkwy, Suite 300 Richmond, VA 23225

> RE: Hermitage Ace (Hermitage High School) 8350 Hermitage High Blvd FILE NO: County; POD2022-00177

Dear Mr. Nelson:

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 29, 2022.

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

General:

- 1. Agreements are not required for this County project.
- 2. Lighting cannot be approved until final utility layout has been approved.

Cover Sheet:

- 3. Provide original signature and date on the engineer's seal.
- 4. Provide a north arrow on the vicinity map.
- 5. Update Utility Quantities per plan comments.

Sheet 4:

- 6. Specify the size of the domestic backflow preventer.
- 7. Shift the boundary valve within the proposed utility easement.
- 8. Label the size and material of the fire service line between the water main connection and boundary valve.
- 9. Specify the horizontal separation between the gas line and water main. If possible, shift the gas line 8' from the water main.
- 10. Show the proposed utility easement around the existing water main on the school's property.
- 11. Show the limits of the tee connection for the existing fire hydrant near the proposed fire service connection for the Ex. Annex Bldg. to ensure adequate separation is provided between the two fittings.
- 12. Provide a utility easement around the fire service line/boundary valve to serve the Ex. Annex Bldg.
- 13. No fences are allowed in the utility easement. Provide a gate in the existing fence line with the waterline centered within the gate. Install the gate posts outside of the utility easement for accessibility to the water line.
- 14. A dedicated fire hydrant is required for the proposed fire sprinkler system for the Ex. Annex Bldg. The existing fire hydrant cannot be used as the dedicated fire hydrant for the sprinkler system since it is need to meet hose lay requirements. An additional fire hydrant is required.
- 15. The valve that is part of the tapping sleeve & valve cannot be used as a boundary valve. Show the valve that is part of the tapping sleeve & valve assembly on the plan sheet.

- 16. Review the following comments on the Waterline Construction Sequence:
 - a. Specify in Note 2 that the water line will be inspected and tested in accordance with DPU Standards.
 - b. The station number for the water line installation does not coordinate with the utility plan sheet.
 - c. Per DPU records, there is no existing valves on the eastern side of the Hermitage Bldg to avoid a water main shutdown. The existing water line will not remain operational as noted in Note 1. Update sequence accordingly.
 - d. Provide a note to ensure Fire will be onsite during shutdown to ensure fire protection is maintained during construction.

Sheet 510:

- 17. Revise the leader lines to point to the correct references on Waterline B Profile.
- 18. Clearly show the fittings on the water main (specifically, valves, boundary valves, and tees).
- 19. A water line adjustment is shown on the utility plan but not on the water line profile near STA 3+35. Coordinate the utility plan with the water line profile as necessary.
- 20. Reference the vertical clearance between the storm sewer and 8" water pipe near STA 3+35 on Waterline A Profile.
- 21. Reference the 6" plug at the end on the water main on the Waterline Profile.

Sheet 522:

22. No flushing hydrant and plastic meter box will be installed with this project. Remove D-500 and D-515 from the detail sheet. Update the detail sheets to coordinate with the utility plan.

Sheet 523 and 524:

23. Portion of the Meter Sizing Form is enlarged on the plan sheets. Revise the plan sheets accordingly.

Sheet W100:

- 24. Update the water model design to coordinate with the updated utility plan sheet.
- 25. Revise H-1 and H-2 in the Flow Demand Criteria. The worst-case hydrant needs to pull 1000 gpm and the second hydrant needs to pull 500 gpm. Update the residual pressure results based on the above changes.

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

Sincerely,

AN1

Alice Thompson Utilities Engineer

cc: Adam Beifield, Henrico County Public Schools

Ralph Claytor
Marchelle Sossong
Daniel Ivy
Megan Gallagher

Christina Goggin, Planning

ANT/tt

bc: