Jared Condon, P.E. Timmons Group 1001 Boulders Parkway, Suite 300 Richmond, VA 23225

> RE: River Mill Townhomes Woodman Road FILE NO. 5567; POD2022-00085

Dear Mr. Condon:

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 11, 2022.

DPU recommends approval of these plans by the Planning Commission.

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

General:

1. An Information Sheet for Preparation of Agreements for Water and/or Sewer Service has not been submitted. The Information Sheet allows the Department of Public Utilities to prepare the Water and Sewer Agreements which must then be executed by the Owner and the County prior to approval of building permits or prior to the utility pre-construction meeting and authorization to proceed with utility construction. It is recommended that the Information Sheet be submitted as soon as possible to avoid delays in either of these steps. Preparation of the Agreements may take up to 15 days after receipt of the Information Sheet and execution by the County after execution by the Owner may take up to 10 days. Conflicts between the completed Information Sheet and the plans may generate additional review comments.

C2.1:

- 2. Provide four (4) northing/easting points on the plan.
- 3. Label the distance from the water line to either the face or back of curb in Road A and C.
- 4. Reference the size and material of all existing and proposed water and sanitary sewer mains.
- 5. Label the size of the existing plug to be removed.
- 6. Change the scale for the utility plan sheet so the utilities can be clearly seen. DPU recommends using either a 30 or 40 scale.
- 7. Several water meters conflicts with the proposed storm sewer pipes. Label the horizontal separation between the meters and storm sewer.
- 8. Reference the size of the proposed plugs at the end of the proposed water mains.
- 9. The domestic service line between the water main connection and water meter should not deflect. If the line needs to deflect, place a bend in the service line after the water meter.
- 10. Provide a minimum of 3' horizontal separation between the water meters and fire hydrant "tee" connections.
- 11. Dead end lines shall not contain more than 600' of the minimum size line. Either create a loop in the water system design or increase the size of the water main to 12 inches. Be advised, the Local Review will need to be updated to address the new water system design.
- 12. Fire hydrants should be located 50' from the proposed building. If the 50' cannot be obtained, request an exception to DPU Standards.

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- 13. Per the ISO calculations provided on the construction plan, two fire hydrants are required for a building. Additional fire hydrants are required for the proposed project.
- 14. Install a fire hydrant at the entrance to the site. Also, it is recommended that fire hydrants be installed at the intersections versus at the end of a terminated road.
- 15. Provide 2-3' separation between the water service connection and gate valve at the intersection of Road C and B.
- 16. Change the material of the sewer main to "DI" for the run of sewer between MH-1 and MH-7.
- 17. Show the location of the benchmarks as referenced in Note 7 in the bottom right corner of the plan sheet.
- 18. Provide a 30' utility easement around sewer mains with a depth of 10' or greater.
- 19. The utility easement around the proposed sanitary sewer must extend to the property line to the west and south for future sanitary sewer extension.
- 20. Provide the internal angle at each manhole.
- 21. Provide the rim and invert information for the existing manhole. See Profile Sheet as well.
- 22. Include the DWG File No. 2018-091 in Note 9.
- 23. Revise Material Quantities per plan comments.

C5.0:

24. Sanitary sewer stationing should begin at the most downstream manhole and increase upstream with equalities at each junction manhole. Minimize stationing changes by using the longest chain of sanitary sewer line run in the same stationing sequence. Road stationing is not adequate to provide stationing for sanitary sewer and should be located away from the sanitary sewer stationing to provide clarity.

C5.02:

- 25. Be sure to match crowns at EXMH-1 and MH-7. Update the inverts on the sanitary sewer profiles.
- 26. Will the existing manhole MH-E19 be adjusted? The rim information doesn't not match DPU asbuilts.
- 27. Provide the invert out for MH-E19 on the sanitary sewer profiles.

C7.2:

- 28. Provide D-160 detail on the construction plans.
- 29. Provide a Fire Flow Estimate Form for 6-, 5-, 4-, and 3-unit townhomes.

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,

Alice Thompson Utilities Engineer

cc: Paul Rubis, Winfrey Road, LLC

bc: Ralph Claytor, Marchelle Sossong Daniel Ivy, Megan Gallagher Marchelle Sossong Planner, Aimee Crady

ANT/vr