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

**RE:** River Mill- Section 7

Woodman Rd

FILE NO: 5312, POD2021-00113

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 15, 2021.

DPU recommends approval of these plans by the Planning Commission.

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

#### Sheet C2.2:

- 1. Are there any existing wells and drainfield/septic tanks that served the existing structures to be demolished? If so, show the location of the wells and drainfield/septic tanks on the demolition sheet and provide a note indicating the wells and drainfield/septic tanks will be abandoned in accordance with VDH requirements.
- 2. The material of the proposed water line in Summer Porch Avenue is referenced as "PVC" and "DI". If the material will transition from one pipe material to another, be sure to change the material between fittings.
- 3. Reference the size of the tee that connect the flushing hydrants to the water lines.
- 4. Will a bend be placed in the flushing hydrant lead at the end of Summer Porch Avenue? If so, reference the angle of the bend on the plans.
- 5. Ensure a 3-4' separation is provided between sewer lateral connections on opposite sides of the main.
- 6. Why is a 40' utility easement provided around the water main in Fletcher Alley? Provide a 20' utility easement around the 8" water main.
- 7. Provide a flushing hydrant at the end of the 8" water main in Fletcher Alley for adequate flushing of the water line.
- 8. Label the distance from the water main to the edge of pavement in Fletcher and Gammon Alley.
- 9. Use two (2) 45°bends in replace of the 90°bend Gammon Alley.

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- 10. Relocate the 8" valve from over top of the storm sewer in Private Alley-1. Consider shifting the storm sewer further away from the water main.
- 11. Provide a gate valve between the 8" x 6" tee and 8" x 4" reducer in Summer Porch Avenue.
- 12. The proposed utilities cannot be installed within the limits of the SB2. How will this impact the Phase 1& 2 Sequence of Construction?
- 13. Label the horizontal separation between the proposed 8" water main and storm sewer pipe in Fletcher Alley. If 8' separation cannot be obtained between the two pipes, then change the material of the water pipe to DI.
- 14. The proposed utility easement should not be located within the building area for the proposed townhomes. DPU suggests either showing the location of the TH in the buildable area to ensure the buildings will not be located in the proposed utility easements or relocate the easements out of the building areas.
- 15. Sewer mains located between buildings and are inaccessible locations must be DI. Change the material of the sewer for the runs of sewer between MH-515 & MH-514, MH-514 & MH-513, MH-513 & MH-502, and MH-500 & MH-510. See Sheet C2.3 as well.

#### **Sheet C2.3:**

- 16. Relocate the fire hydrant in Egmont Terrace out of the proposed sidewalk. Ensure no utilities are located within the sidewalk.
- 17. Provide a gate valve prior to the 8" plug at the end of the water main in Rivermere Lane.
- 18. Redesign the water main at the end of the cul-de-sac in Egmont Terrace. Place a 45°bend after the water meter that serves Lot 8 in replace of the 90° bend. A suggested design will be provided with plan comments.
- 19. Redesign the water main at the end of the cul-de-sac in Emeline Drive. Remove the 90°bend and extend the water main straight to install the water services for Lots 6, 7, 8, and 9. Be sure to place a flushing hydrant at the end of the water main. There is no reason to bend the water line in the cul-de-sac.
- 20. Provide a table to address the raising of existing manholes to finished grade. This table should include:
  - a. Existing top elevation.
  - b. Proposed top elevation.
  - c. Amount of modification required, i.e. vertical feet of raising or lowering.
  - d. Proposed method of adjusting each manhole.
  - e. Phase of construction each manhole modification is to be done.
- 21. Note that a maximum of 12" adjustment may be done utilizing pre-cast riser rings to raise frame & cover. For additional height adjustment, pre-cast manhole sections must be installed. Decreasing manhole depth must be done by removal/replacement of pre-cast manhole sections.

### **Sheet C5.0:**

22. Label the vertical clearance between the storm and sanitary in Private Alley 1 Profile.

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- 23. 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.
- 24. Shift the 8" valve from over top of the storm sewer at STA 10+25 on Pottery Avenue Profile.

# **Sheet C5.1:**

- 25. The water main shown on Summer Porch Avenue Profile must be DI since it's not under natural ground. Revise the material of the water main.
- 26. An 8" x 8" cross is called out between STA 15+00 and STA 15+ 25 on Summer Porch Avenue Profile but no cross is shown on the utility plan. Coordinate the utility plan with the profile.

## General:

- 27. Review and update Material Quantities as necessary.
- 28. Provide ISO calculations for the proposed TH units.
- 29. Agreements have not been executed at this time. Agreements must be executed prior to the authorization to begin utility construction or approval of building permits. An Information Sheet for the Preparation of Utility Agreements has been submitted for review. If the Information Sheet is incomplete when submitted, we will send you comments for correction and resubmittal. If the required Information Sheet complete when submitted, an Agreement will be forwarded to the Owner for signature within 21 days.

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: Craige Shelton, HHHunt River Mill, LLC

bc: R. Claytor

M Gallagher

Aimee Crady, Planning

ANT/tt