# DEPARTMENT OF PUBLIC UTILITIES 804-501-4517

## COUNTY OF HENRICO

### INTER - OFFICE MEMORANDUM

TO: Christina Goggin, Planning

FROM: Alice Thompson, Public Utilities

SUBJECT: Azalea Place @ 5251 Chamberlayne Rd (POD2022-00552)

**DATE:** November 17, 2022

We have reviewed a concept plan for the referenced project submitted to the Planning Office on October 27, 2022. This concept plan proposes to construct 157 townhome units. Our comments are intended to provide guidance for requirements for design and construction of the water and sewer service that will be provided by the County systems. Construction plans for water and sewer shall be designed in accordance with DPU Standards. The levels of detail provided in the following comments are based on the amount of detail provided on the plan.

#### General:

- 1. The extent of water and sewer requirements cannot be determined for the parcel until complete construction plans that include a separate Utility Plan Sheet (Water and Sewer Plan) have been submitted.
- 2. Construction Plans for review will need to be sealed and signed by a Professional Engineer or a Land Surveyor B.
- 3. Agreements for water and sewer service will be required for this project.
- 4. Include the following items with the construction plan submittal:
  - Local Review form (F-10).
  - DPU Engineering Report (Form F-1) with project checklist and water and sewer design calculations.
  - Water system flow availability request (Form F-7).
  - Other related DPU utility details.

#### Sheet C03:

- 5. The water main in Encore Autumn Lane will need to cross Chamberlayne Rd and connect to the existing 6" water line on Parcel 785-745-9803.
- 6. The water main in Berryrose St will need to be looped to the water line in Fireball Pkwy.
- 7. Provide a hydraulic water model for the proposed water system design. The engineer will need to determine if the 8" main at Chamberlayne & Wilmer can provide adequate supply to the site or if connection to the 12" main in Wilmer located approximately 350 feet west of Chamberlayne will be required.
- 8. The fire hydrant locations are not acceptable. Location of fire hydrants will need to be coordinated with Fire and DPU.
- 9. Fire protection requirements cannot be determined for this project at this time. ISO calculations have not been provided with this plan. The need for fire hydrants and hydrant locations will be determined after ISO calculations have been provided and reviewed.
- 10. Fire hydrant should be installed at a minimum of 50' from the structure. Either relocate the fire hydrants or request an exception to DPU Standards to allow the fire hydrants to be installed within 50' of the building.
- 11. Water meter must be installed in grass areas and not within the driveways to avoid damages to the meter box.

- 12. Provide a note indicating HOA will be responsible for the lateral from the sewer main to the building. This needs to be specified in the HOA covenants. DPU will need to review the Covenants before recordation.
- 13. Label the distance from the onsite water main to either the face or back of curb.
- 14. Provide a typical reference for the proposed sanitary sewer laterals to include the size, material, and slope. Be advised, DI laterals are required on DI mains.
- 15. Provide benchmarks no more than 500 apart along the lines of the construction but outside of the limits of construction.
- 16. No sanitary sewer profiles have been included in the concept plan. DPU will need to review the profiles to ensure the proposed sanitary sewer design is adequate to serve this site.
- 17. County sewer will need to be designed to serve adjacent property Owners. Extend the proposed sanitary sewer in Berryrose St to serve Parcel 787-744-1286. A utility easement will need to be provided to the proposed property line line for future water and sewer connection to Parcel 787-744-1286.
- 18. Label the material of the proposed and existing water and sewer pipes shown on the plan.
- 19. Show all existing utility easements and reference the DB & PG numbers.
- 20. Provide three northing/easting points on the plan.

#### Sheet C03:

- 21. Flushing hydrants should connect to the proposed water main using a "tee" connection.
- 22. DPU do not allow parallel sewer. The existing sewer main in Wilmer Ave will need to be removed and lowered as well.
- 23. Provide internal angle at the proposed manhole connection and upstream manholes.
- 24. Add the following note, "Connections to existing manholes without stubs or bricked-up openings shall be the equal of either Kor-N-Seal w/stainless steel expander ring or Press-Seal w/nylon expander sleeve installed by core drilling manhole and in strict accordance with manufacturer's specifications."
- 25. Existing sewer is in Wilmer Ave and extends in an easement to Brook Hill Rd. The engineer will need to determine if the depth of the existing sewer is adequate at Wilmer Ave to serve this site. Relaying of the existing sewer to Brook Hill Rd may be required in order to fully serve the site by gravity.

If you have any questions, please call me at 501-4508 or John Yi at 501-4511.

Sincerely,

ANT

Alice Thompson Utilities Engineer

cc: Justin Fournier, Balzer & Associates, Inc. Darin Smouse, RDK Land Holdings, LLC

be: Ralph Claytor
Marchelle Sossong

ANT/vr