

Engineering has reviewed the plans for the Renaissance Apartments project submitted January 17, 2020 and have the following comments:

Note: Please forward NCDEQ permit modifications SW8020822 & SW8980549 to the City of Wilmington Engineering Department once received.

Stormwater Calculations:

- 1) Provide Rip Rap calculations for the 18" outfall pipe.
- 2) Please show existing future BUA allocation for each State permit, how much will be constructed/allocated for this project, and how much BUA will remain Future.

Plans:

- 3) C1.1 Grading / Drainage: Provide pipe schedule table showing slope, inverts, rim..ect.
- 4) C1.1 Grading / Drainage: provided additional spot elevations to define drainage breakpoint for Northern Driveway. A portion of internal runoff looks to leave the site and is not directed toward proposed flume / CI-5.
- 5) C1.1 Grading / Drainage: Provide a X-Section for proposed parallel parking along Ashe Drive. It appears the intent is to provide a valley curb at Street / Parking tie-in point, more detail is needed.
- 6) C1.1 Grading / Drainage: Provide a note assuring contractor will maintain existing stormwater infrastructure within project boundary. All existing piping and boxes shall remain free of accumulated sediment, debris, and/or encumbrances.
- 7) C1.1 Grading / Drainage: Provide a note that contractor shall assure all Stormwater Control Measures (SCM) receiving drainage from this project have been maintained per permit conditions and operations & maintenance agreements.
- 8) C2.1 Utility Plan: Show 12" PVC Roof Drain and 8" S/S Crossing near SSMH-3. There looks to be very little clearance between these two pipes.
- 9) DA Maps: Please provide overall drainage area maps for each State permit. It will be helpful to have these maps on file to distinguish where this project is in relation to each boundary.

Fresco Drive Improvements:

- 10) Comments for Fresco Drive were sent to Norris & Tunstall via email on January 27th, 2020. Please Coordinate Fresco Drive response with comments found above.

Please submit updated calculations, plans, and any other documentation to Engineering for additional review. Please call or email if there are any questions. Thank you.