

Engineering has reviewed the plans for the Woodlands at Echo Farms Tract 5 project submitted April 26, 2018 for TRC review and have the following comments:

1. This project is proposing the construction of on-site newly constructed impervious surface greater than 10,000 sf, therefore the project is subject to full stormwater review. Please submit the Stormwater Management Permit Application Form, a \$1,000 permit application processing fee, one full set of design plans, calculations, etc. and include a digital copy of the entire submittal package. Please see the Engineering Plan Review Checklist for submittal requirements. Additional comments will be made once the full engineering submittal is reviewed. Please note our review times are approximately 45-60 days right now. Please factor this into your submittal schedule.
2. What purpose does the median serve at the eastern end of Road A? The median will prohibit residents of units 30 thru 36 from being able to make a left out of their driveway towards McCarley Boulevard. Instead they will have to make U-turn at the intersection or worse make an illegal left turn.
3. Can the existing cart path be removed from the wetland area to the west to return this area to all wetlands, keeping the pedestrian traffic around the perimeter?
4. Provide wetland delineations.
5. SRB notes 17 and 18 refer to a Road M and Road L. Where are these roads?
6. Are there to be any roadway improvements along Carolina Beach Road? Sidewalk?
7. Drainage easements around storm pipe that convey public water must be labelled as public.
8. Wetland area M/N must be in a public drainage easement.
9. The stormdrain pipe running underneath the pump station must be realigned. It cannot remain under the pump station.
10. The sidewalk along the southern side of Road A near the intersection of McCarley appears to be in conflict with the end of an existing storm drain pipe.
11. The storm drain pipe run that goes beside unit 14 will also need to be in a public drainage easement.
12. How will the asphalt/concrete walking trail runoff be collected and conveyed to the SCMs?
13. Runoff cannot sheet flow across the walking trails.
14. Structure labels on C-3.2 need to be fixed.
15. All pipe ends must have a headwall or flared end section.
16. SW Ordinance; Sec. 18-761(a): The pre-development peak discharge rate shall be computed assuming that all land uses in the drainage area of the proposed facility are in a predevelopment state. The city considers predevelopment state to be woods in good condition for the purposes of determining runoff coefficients.
17. All stormwater control systems must be designed to treat the stormwater runoff from all surfaces generated by one and one-half (1-1/2) inches of rainfall for water quality purposes.
18. The city has determined regardless of density classification or location the minimum control for safety of life and property to be the control of the post-development peak discharge rate of the two (2)-year, ten (10)-year and twenty-five (25)-year storms to not exceed the pre-development peak runoff discharge rate for the same storms.
19. Privately owned and maintained on-site conveyances must be designed for the 10-yr storm and analyzed for the 50-yr storm event to check the system for flooding. Please be sure to include appropriate tailwater condition in the storm drainage analysis.
20. Include inlet and SCM drainage area maps with the analysis or within the plan set. Please make sure each drainage area is labeled and quantified.
21. Address how roof runoff is to be conveyed to the wet ponds.

22. Provide the 10' maintenance access and 5' landscape zone around the perimeter of the pond from the top of the bank outward per the technical standards. Need 15 feet as the two cannot be combined or overlap.
23. Provide deed restrictions for the four single-family lots.
24. Spot grades will be required along the roads and sidewalks per the Engineering Checklist to demonstrate compliance with the technical standards.

Please call or email if there are any questions. Thank you.