

Engineering has reviewed the plans for the Raleigh Street Concrete Batching Plant project submitted October 26, 2017 and have the following comments:

Design Narrative

1. Remove the reference to a wet detention pond in the fourth paragraph of the design narrative.
2. Basin: DA #1 (PRE): The pre-development drainage area (6.23 acres) does not equal the post-development drainage area (5.75 acres). Because the infiltration basin drainage area encompasses all essential site improvements, the pre-development and post-development watersheds can equal the drainage area of the infiltration basin (5.75 acres). Please revise the calculations section of the design narrative. Be sure to update the **PRE vs. POST RUNOFF SUMMARY** on pages 6 and 7 of the design narrative if necessary.
3. Revise the HydroCAD models for a 5.75 acre PRE DA #1.
4. Check that the 2, 10, 25-year pre/post requirements are still satisfied.

Infiltration Basin Supplement

5. The Supplement does not appear to agree with the calculations for the infiltration basin. Please recheck the supplement for design accuracy.

Construction Documents

6. C-2.0:
 - a. *Previous comment: The proposed sidewalk at the western end of the property frontage along the right-of-way will not be contained in a 5' pedestrian access easement as the label indicates. Revise the description of the pedestrian access easement. The pedestrian access easement will need to be wider than 5 feet at the western property line. Easements will need to be recorded before issuance of the certificate of occupancy. This will not hold up construction release.*
 - b. At the request of Aaron Reese (Urban Forester), please reshape the infiltration basin footprint to avoid removing the grove of trees.
7. C-2.1: *Previous comment: Provide the direction of flow of the existing drainage ditch. The section of drainage ditch on the subject property should be placed in a private drainage easement. It is not clear on the plans which way the ditch flows. Just need a couple of arrows for illustration. Also, the private drainage easement requirement was not addressed.*
8. C-3.2: *Previous comment: The pre-development drainage area should match the post-development drainage area. The pre-development drainage area and post-development drainage area need to be equal for proper pre/post comparison. The site improvements appear to only occur within the drainage area of the infiltration basin. All areas outside of the infiltration basin drainage area appear to remain unchanged and would not affect pre/post calculations. Therefore, the pre and post-development drainage watersheds can be the 5.75 acre drainage area of the infiltration basin.*
9. C-3.4: It would appear that the pipe system is incomplete. DA-6 is not collected and conveyed to the infiltration basin. Update the 10 and 50-year storm calculations to include the conveyance measure for DA-6.
10. L-1.0:
 - a. *Previous comment: Show on the landscape plans how requirements for access and landscaping around the basin are being met (Ch. V.4.D.g & h). Add SD 15-16 to the details. The maintenance access (10') and landscape zone (5') to be a total of 15 feet wide and cannot overlap per the technical standards.*
 - b. The landscape buffer note speaks to a pond detail and wetland shelf plantings.
 - c. The infiltration basin is labelled as sediment basin #1 and is showing baffles.

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