

**To:** Jeff Petroff, Coastal Land Design  
**From:** Nicole Smith, Associate Planner; 910-341-1611  
**CC:** File;  
**Date:** 9/29/2020  
**Re:** Eden Village

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The following is a list of comments for review from planning regarding the project. Please provide your corrections as listed below. Additional review will be required once all the needed documents have been provided. Items or documents not provided on initial submission will be subject to further review. Please contact me for any further questions.

Review	Department	Comments
Nicole Smith	Planning	See comments below
Trent Butler	Engineering	See comments below
Ann Reh-Gingerich	Stormwater Services	See comments below
Chris Walker	Fire	Nothing Further. Prepared to sign.
Bill McDow	Transportation Planning	See comments below
Mitesh Baxi	Traffic Engineering	See comments below

Planning (Nicole Smith):

Site Plan Comments

- Please include the address of the project on all title block sheets of the plans.
- Show wetlands and conservation setbacks required. Will need a wetland Determination permit from the US Army Corp. The adjacent Salvation Army Property is flagged for wetland potential. Please provide documentation that the proposed development will not encroach into any required wetland buffers or setbacks.
- Add maximum parking calculations to site data table.
- Update ownership, Eden Village of Wilmington current property owner.
- SRB required to review prior to plan approval. Deadline for submittal is October 5<sup>th</sup> for a November 18 hearing.
- Update minimum lot area to comply with prescribed conditions, vary from R-7 zoning. Minimum is 162 sq. ft. for 32 units per Sec. 18-327(b)

Sec. 18-327: Single-family Courtyard developments Comments:

- Elevations are required to ensure compliance with Sec. 18-327(b)(3)(b) and 18-327(b)(3)(c). Update elevations to provide details required to ensure code compliance with required porch dimensions and avoid blank rear façade.

- Add note regarding proposed square footage of units per Sec. 18-327(b)(3)(e).
- Add minimum distance between buildings per Sec. 18-327(b)(3)(f)(ii).
- Add setback of 6-18 ft. from units to open space per Sec. 18-327(b)(3)(f)(iii).
- Provide setback of parking from open space to ensure compliance with Sec. 18-327(b)(6)(b).
- Provide calculation to ensure compliance with Sec. 18-327(b)(6)(e).
- Is stormwater pond located outside of the streetyard area? Sec. 18-477 may apply. Rely on Engineering to weigh in.

Landscape Plan:

- Clarify location and minimum width of streetyard area.
- What shrubs are being used to ensure code compliance with foundation requirements outlined in Sec. 18-327(b)(4)(d)?
- Please provide details of the required fencing used as part of the dumpster screen per Sec. 18-504.
- Conflicts exist in Plant Schedule. 6 Shumard Red Oaks in table, 8 shown on plan. 7 Willow Oak shown in table, 5 shown on Plan. 40 Chindo Sweet Viburnum shown in table, 41 called out on plan.
- Chindo Sweet Viburnum shown in streetyard. Minimum size is 12 inches per Sec. 18-477(b)(1)(c).
- Update provided streetyard trees to 11 (code compliant). Data shows 13 provided. I believe you may be counting trees used for other code requirements.
- Four trees short of code compliance for Sec. 18-327(b)(4)(b). Agree 64 is the requirement, but 2 preserved trees cannot count as 6.

Engineering (Richard Christensen):

Engineering has reviewed the plans for the Eden Village project submitted August 12, 2020 for TRC review and have the following comments:

Stormwater Management System Plans

1. Replace the Approved Drainage Plans approval stamp with the Stormwater Management Plan Approval stamp. All sheets in the plan set should have the stamp.
2. SP-1: The existing driveway must be removed. Revise the 'abandoned driveway' note to make it clear that the driveway apron is to be removed and replaced with curbing that matches the curbing along Kornegay.
3. SP-D1: The existing concrete apron must be brought into compliance with the city's commercial driveway detail, specifically the missing driveway sidewalk section. The proposed Kornegay sidewalk must connect to the driveway sidewalk per the city standard detail SD 3-03.3 and 303.4. Provide spot grades.
4. LS-1/LS-2: a. Is it desirable to place the 5 CYP-SB (Cypress trees) on the slopes of the attenuation basin? Should they be placed on the top of bank? b. How will the Shumard Red Oaks and Willow Oaks affect the maintenance requirements of the pervious concrete? Do these trees drop debris that will clog the pervious concrete over time? c. There are trees planted over the underdrain pipes for the pervious concrete.
5. CU-1: No water meter boxes, cleanouts, manholes, etc. should be placed in sidewalks or driveways due to: i. The potential for differential settlement (between structures and sidewalks), or displacement of covers, that may create a tripping hazard. ii. These structures present challenges for proper jointing of concrete slabs.
6. CU-D1/CU-D2: These two sheets can be omitted. The city does not sign and approve CFPUA details. All CFPUA detail sheets should be removed from the final plan set for city approval.
7. SW-1: a. Provide spot grades along the both sides of the proposed Kornegay sidewalk to demonstrate compliance with city cross and longitudinal slope requirements. b. Show the existing driveway cut removed and replaced with curbing. c. See the SP-D1 comment for the driveway apron at the roundabout. d. Should the turf cell drive fan out to connect at the edges of the apron to eliminate any rutting from vehicle tires that leave the surfaces when the drive is utilized? e.

Sheet flow over public sidewalk is typically not allowed for public safety reasons. Is there another way to direct flow from the spillway to the Kornegay curb inlet without going over the sidewalk?

8. SW-1/SW-2: Provide the storm structure and pipe information, i.e. rims, inverts, pipe sizes, pipe materials, etc. They appear to be there, just at a really small scale.

9. SW-D2: This does not appear to be an infiltrating pervious concrete design; it more resembles detention. The soils report shows a negligible infiltration rate at a depth of 46 inches. It appears that the runoff won't actually infiltrate into the soil. It will only pass through the concrete, stone and sand before it is collected in the perforated PVC underdrain and conveyed to the detention area. Figure 2 on page 3 of the Permeable Pavement chapter shows an infiltrating system. This figure shows an upturned pipe to set the design volume until it can infiltrate into the soil. I don't see that this design is capable of infiltration due to the poor underlying soils. The design looks more like what is shown in Figure 4 on page 11. Detention systems do not receive the pervious credit. The runoff is considered treated but the credit is not given. Can you help me understand how this is an infiltration design that should receive the credit? Stormwater Application/Supplement/Design Narrative/Design Calculations

10. If the PC remains a detention system without pervious credit, the supporting documents will need to be revised.

11. Drawdown time for detention is 2 to 5 days per MDC 8. 12. Storm drain System Basin Design: Is an intensity of 4 in/hr being used?

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

#### Stormwater Services (Anna Reh-Gingerich):

Since the wet pond has already been submitted as part of the stormwater permit, consider incorporating floating wetland islands to provide more nutrient removal. We are encouraging more practices to reduce the potential for toxic algal blooms, which pose a public health and safety risk. They fall under Design Variant 1 in the NCDEQ Stormwater Design Manual (page 15):<https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/BMP%20Manual/C-3%20%20Wet%20Pond%2004-17-17.pdf>

#### Transportation Comments (Bill McDow):

##### **TECHNICAL STANDARDS – ACCESS (driveway, sidewalk, and sight distance):**

1. Please provide details and a drawing for the proposed site access gates.
2. Site plan sheet shows the proposed Mulch Path and Pedestrian Connection to the Salvation Army site located to the East of this site. Please provide details of the pedestrian connection and Mulch Path.
3. No Further Comments.

#### TrafficEngineering(MiteshBaxi):

##### **BASE INFORMATION:**

- Coordinate with engineering division for any variance to the technical standards.

##### **TECHNICAL STANDARDS:**

1. Dimension driveway flares.
2. There is an existing parking restriction sign at the location of proposed driveway off Kornegay Ave. Relocate this sign as per MUTCD standards and show the new location of the site plan. Contact City's Signs and markings Supervisor for the new location.
3. Provide a turning movement analysis of a largest vehicle accessing this location.
4. Site plan shows card/siren activated gate at the entrance of perimeter drive. Please demonstrate the turnaround for the vehicle in the event of gate been malfunctioned.
5. On parallel curb ramps shown for accessible aisles, detectable warning surfaces shall be placed on the turning space at the flush transition. Show the graphics at accessible aisles.

6. Handicap parking signs are recommended to be installed outside the 2.5' overhang area to avoid the damaging. Or wheel stops may be installed for handicap spaces.
7. Street trees must be located a minimum of 15 feet from streetlights. [CofW SD 15-17]. Please add this note with the landscape notes. Verify the spacing of the proposed perimeter vegetation from the existing streetlights in the vicinity of roundabout and Robeson St intersection on Kornegay Ave.

Please let me know if you have any questions or if I can be of further assistance.