Memo

To: Will Swaringen

From: Jeff Walton, Associate Planner; 910-341-3260

CC: File;

Date: 10/25/2021

Re: Tommy's Car Wash Oleander

The following is a list of comments for review from planning regarding the project. Please provide your corrections as listed below. A staff summary of comments:

Staff	Department	Notes
Jeff Walton	Planning, Plan Review	Comments provided below
Mitesh Baxi	Traffic Engineering	Comments provided below
Bill McDow	Transportation	Comments provided below
Chris Walker	Fire	Comments provided below
Richard Christensen	Engineering	Comments attached
Anna Reh-Gingerich	Storm Services	Optional comments attached

Jeff Walton- Planning – Attached

- Show all proposed sidewalk along Oleander and Audubon. A pedestrian connection is required from Audubon as well.
- Please show tree sizes for existing and removed trees.
- Provide a tree removal plan overlaid on the site plan to confirm removals.
- That Oak out front is nice, and you are showing preservation.
    - Can you add a note, sidewalk may have to be shifted to preserve tree?
- Show minimum square footage required and proposed for all streetyard (on both frontages) parking lot shading, foundation plantings and bufferyards.
    - At the end of every parking row, 216 SF of landscaping and a tree is required.
        - Show sizes
    - Streetyard , buffers and parking lot islands cannot be counted as the same.
    - Concern about the last parking spaces and the dumpster pad/bufferyard, that might have to be adjusted to get landscaping shown such as remove spaces.
- Any significant trees that would have to be mitigated, need to be pointed out.
- Sec. 18-504: Show compliance with screening of dumpsters with living and non-living material.
    - Screening shall be a minimum of 6 feet in height along the front or corner side of any lot and 8 feet in height along any side or rear property line.
    - Show a dumpster fence detail

Mitesh Baxi – Traffic Engineering

EXISTING CONDITIONS:

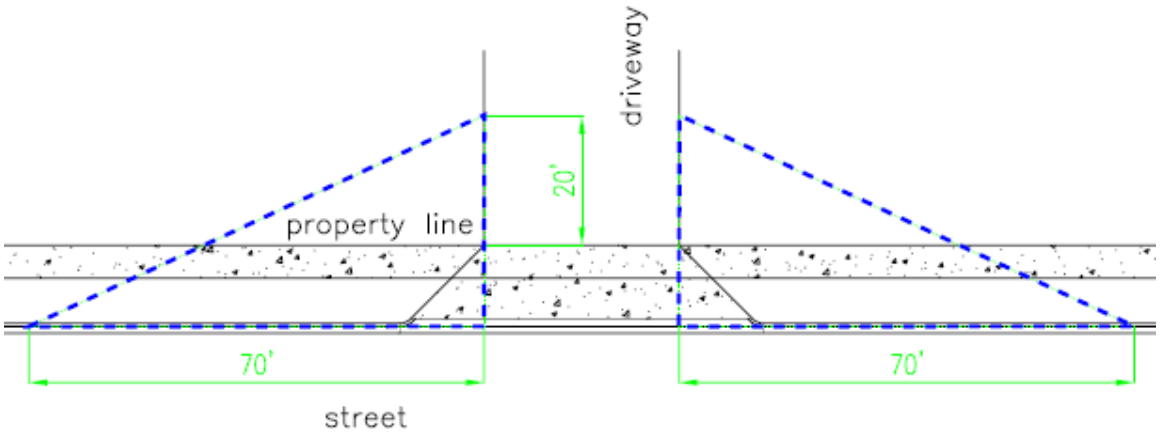
- Show and callout all the existing streetlights in the vicinity of this development off public ROWs.

TECHNICAL STANDARDS – DRIVEWAY ACCESS (Major Thoroughfares):

- This segment of Oleander Dr is a major thoroughfare [Chap VII (C) (2) (a) of CofW Tech Stds]. Driveways for lots along major thoroughfares must be at least 75' offset from property lines measured at the curb line. [Chap VII (C) (2) (c) (2) of CofW Tech Stds]. Subject to variance.

TECHNICAL STANDARDS:

- Please verify the location of the traffic signs used for the private driveway. Signs shall not be installed in the public right-of-way when the signs being installed are intended to function as traffic control for a private driveway [Figure 1.4, Figure 2.1, Sec 1 A (18) CofW Sign Specification]
- DO NOT ENTER sign, if used, should be placed directly in view of a road user at the point where a road user could wrongly enter a one-way roadway. The sign should be facing traffic that might enter the roadway in the wrong direction. Please verify the orientation appropriately. [MUTCD]
- Handicap ramps should be installed at the transition of drive aisle and sidewalk connecting the proposed crosswalk at the access of driveway off Oleander Dr.
- Show and apply the City's 20'x70' sight distance triangle at each driveway as per below image. [Sec.18-529(c) (3) CofW LDC] [Sec. 18-812 CofW LDC]. Add a note indicating that all proposed vegetation within sight triangles shall not interfere with clear visual sight lines from 30"-10'. [Sec.18-556 CofW LDC]



SIGHT DISTANCE TRIANGLE FOR ANY STREET/DRIVEWAY INTERSECTIONS WITH THOROUGHFARES

- Oleander Dr is a major thoroughfare [Chap VII (C) (2) (a) of CofW Tech Stds]. In accordance with the City Code, sight distances along thoroughfares must be calculated in compliance with the AASHTO requirements. [Chap VII (C) (1) of CofW Tech Stds] [Sec.18-556 CofW LDC]. Show AASHTO in addition to 20'x70' SDT for driveways. Show AASHTO departure sight distance for the Traffic exiting Audubon Blv. and driveway off Oleander Dr.

TECHNICAL STANDARDS – PARKING:

- Please show the graphics for accessible ramp on the plans.
- Handicap parking sign shall be installed out of 2.5' vehicle overhang area to avoid a collision.
- Note the required and proposed number of handicapped spaces in the development data. [Sec. 18-529(b)(2) CofW LDC]
- Provide the design type of the vehicles used for various turning movement plan C-301.

Bill McDow – Transpiration

1. The site has proposed a new 4,553 SF Automatic Carwash at 3915 Oleander Drive.
2. Please revise the ITE Estimated Trip Generation Numbers for the existing and proposed land uses for this project.

Land Use	Intensity	ITE Code*	24 Hour Volumes	AM Peak Hour Trips		PM Peak Hour Trips		Saturday Peak Hrs.	
				Enter	Exit	Enter	Exit	Enter	Exit
Funeral Home, Existing Land Use	SF								
Automatic Carwash, Proposed Land Use	4,553 SF	948							

3. The proposed Fire and Rescue Vehicle turning movements appear to enter the Do Not Enter driveway on Audubon Blvd. Please verify that the vehicles can safely enter the site from Oleander Drive.
4. Please show the estimated vehicle queue for vehicles during the PM Peak Hour and Saturday Peak Hour. Please use a minimum of 25' per vehicle spacing, and a maximum queue number based upon the estimated trip generation rates. The City of Wilmington will not allow waiting vehicles to queue vehicles on to Oleander Drive or Audubon Blvd.
5. The site has frontage on Oleander Drive and Audubon Blvd. Please show the installation of 5' sidewalk along the frontage for Oleander Drive and Audubon Blvd.

Chris Walker – Wilmington Fire

- Fire apparatus access greater than 150' must have an approved fire apparatus turnaround. It appears the vacuum area is a dead end at 170' from the point where an emergency apparatus could turn around. (from the street it's 225')

Engineering has reviewed the plans for the Tommy's Car Wash-Oleander project submitted October 28, 2021 for TRC review and have the following comments:

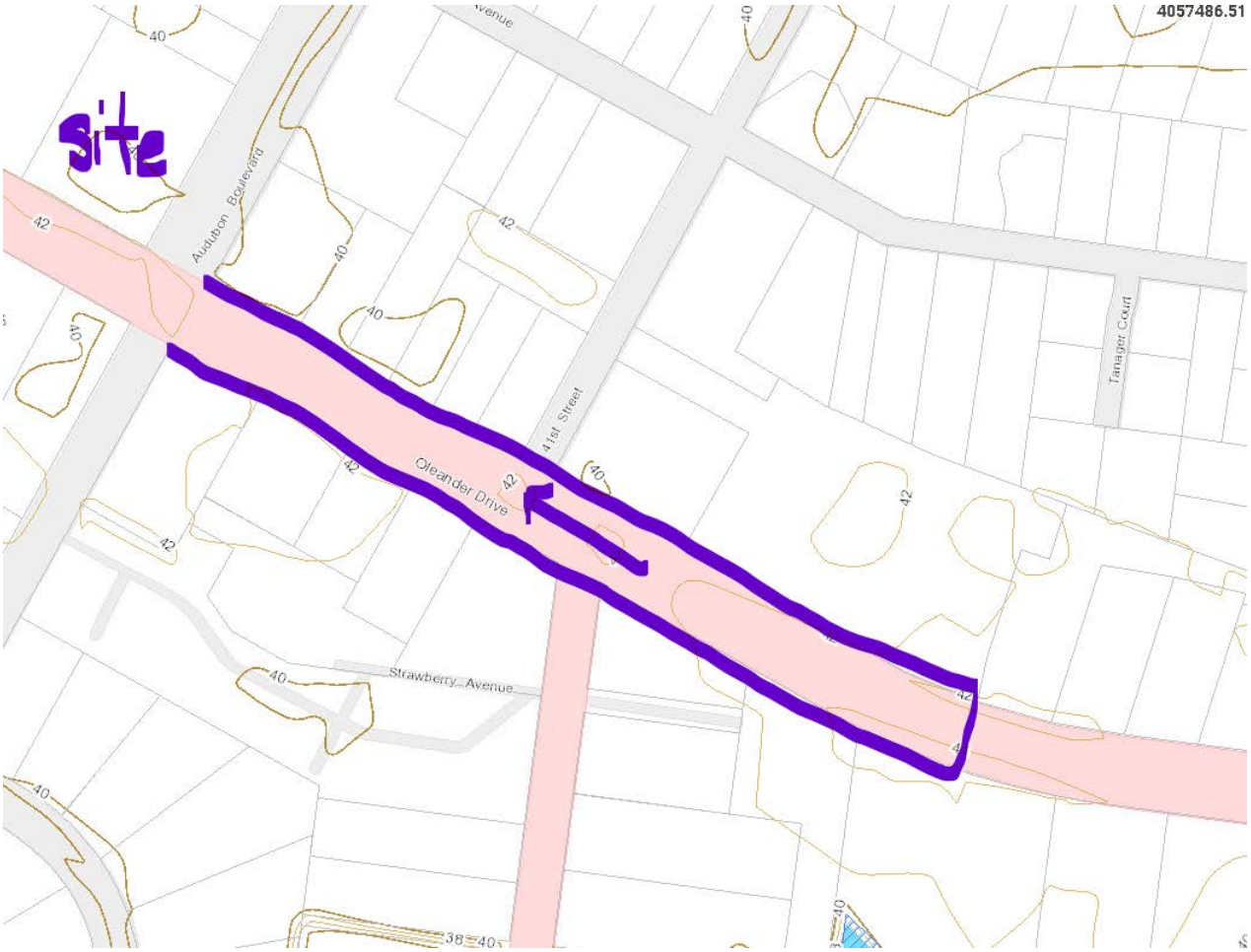
Please provide a comment/response

<u>Stormwater Management Permit Application Form</u>

1. II. Permit Information;#1: Uncheck the High Density box. Redevelopment need only be checked.
2. IV. Project Information; #12: Any impervious surface area constructed outside of the parcel boundary, inside the public right-of-way, needs to be quantified here.

<u>Stormwater Narrative</u>

3. Overall Basin Delineation: Verify that there is not additional drainage to the east that may be contributing to the flow through the existing system. See attached images. City GIS topo shows the possibility of additional drainage area within the Oleander Drive right-of-way. Was this area investigated?

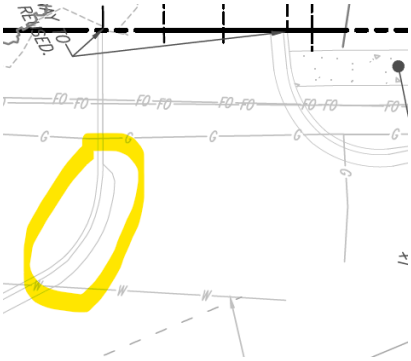


4. Stormwater Network Design:
    a. The inlet drainage areas delineated on the Inlet Delineation Map do not appear in the calculations. Please provide more columns of information of the stormwater analysis.
    b. The analysis table is insufficient. It would appear that the column titles don't match up with the information below them. There is not enough information provided in the table to validate what the profile reports illustrate. Where is the existing flow from the drainage study added to the system? I need more information before I can approve this. Please submit a complete analysis of the existing and proposed system.

<u>Site Plan Documents</u>

5. C-101:
    a. References and Contacts: Building Department is part of New Hanover County, not the City of Wilmington. The contact's name is correct, but not the governing agency.
    b. If the property is to be sold to ROC Wash Holdings, LLC, list them as the property owner to be consistent with the SWMP form.
    c. The Developer information was left incomplete.
6. C-102:
    a. General Notes: #1: This note appears to be incomplete. Enter State, etc.
    b. Soil Erosion &…Plan Notes: #3: Land disturbance exceeds 1.00 acre. Please submit a copy of the erosion control permit once received.

7. C-200: Remove and replace the existing curb with vertical curb (see below). The current curb was constructed to accept a curb ramp.



8. C-300:
   a. Previous comment: *The City has an Oleander Drive Sidewalks project underway. Below is the tentative schedule for the overall project through this corridor:*
      Oleander Drive Sidewalk from Hawthorne Drive to 42nd Street
      Project Schedule (Tentative):
      - *April 2021 - Completed 90% Plans*
      - *May 2021 thru November 2021 – Easement Acquisition Phase*
      - *January 2022 - Advertise for Construction*
      - *March 2022 thru June 2022 – Tentative Construction*

      Should the carwash project be underway before June 2022, the carwash will need to install the sidewalk along Oleander Drive. If not underway by then, the City will require a payment-in-lieu for the sidewalk. I will send the 90% complete sidewalk plans to you for further coordination. Should any portion of the sidewalk meander outside of the public r/w that portion of sidewalk will need to be placed in a public pedestrian access easement.

      Based on the phone conversation with Will Swaringen/Bohler on October 6th, it is expected that the project will be underway before June 2022. Therefore, the Oleander Drive sidewalk must be constructed as part of the car wash project. Payment-in-lieu is not an option at this time.
   b. Public sidewalk along Audubon Boulevard must be constructed as part of the car wash project. It is not part of the City's Oleander Sidewalk project. Please add it to the project.
   c. Oleander Drive Entrance-A Commercial Driveway must be constructed in compliance with the City's commercial driveway detail (SD 3-03.3 and 4), ramp-type, not street style. Show the sidewalk section of the driveway apron. It is not clear how pedestrians will move across the Oleander Drive entrance. See the Auto Zone entrance adjacent to the project site for an example of how the driveway apron is to be constructed(pictured below). I have also included a sketch that shows how the property frontage should be constructed.

The Audubon Blvd. driveway can remain street style because of the angles. However, the driveway is too wide for a one-way out. Consider reducing the driveway to 20 feet to discourage vehicles from entering the site while still providing enough width for fire /EMS access.

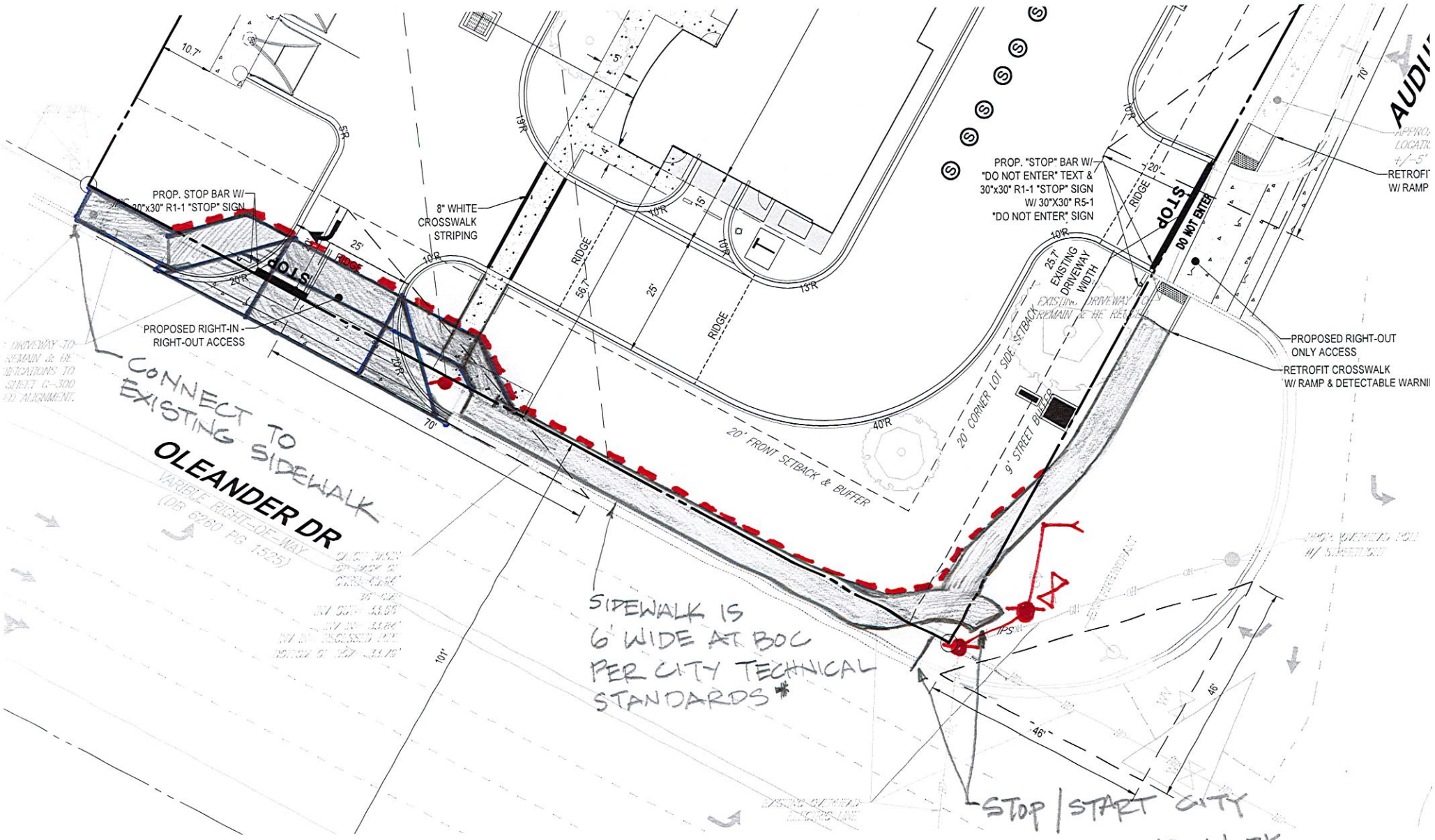
d. The Audubon Boulevard driveway apron cannot have the change of material in the alignment of the pedestrian crossing. If the driveway is to be concrete, it needs to extend further in to create the required sidewalk section per the city standard detail. But as stated earlier this driveway can remain asphalt.

9. C-701: Trees must not be located from within the public drainage easement.
10. C-901: None of the asphalt and concrete section details appear to have thicknesses assigned.

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

10/7/2021

* FOR ILLUSTRATION PURPOSES ONLY.



* ANY PORTION OF PUBLIC SIDEWALK
LOCATED OUTSIDE OF THE PUBLIC R/W IS TO BE PLACED IN A P.P.A.E.

Project: Tommy's Carwash Oleander
TRC Meeting Date: 10/28/2021
Reviewer: Anna Reh-Gingerich
Department: Stormwater Services

To Whom It May Concern:

The Tommy's Carwash Oleander project falls within the Burnt Mill Creek Watershed. Burnt Mill Creek is listed by the State for high chlorophyll and a poor benthic community. Any additional infiltration on-site would help reduce the amount of stormwater runoff and pollution that could enter Burnt Mill Creek and contribute to the current pollution problems.

My comments:

1. There appears to be quite a bit of impervious parking proposed. If the soils and water table levels allow, consider incorporating pervious materials for vacuum stalls or replacing some stalls with additional landscaping/bioretention areas Any replacement of impervious material with pervious material (pavers, pervious concrete, porous asphalt) would help reduce the amount of stormwater runoff being generated:
    a. https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/BMP%20Manual/C-5--Permeable-Pavement-11-20-2020.pdf

2. We encourage depressed bioretention areas in landscaping (with curb cuts) to allow for even more infiltration and pollution treatment on the property. Some examples are available at the following links:
    a. EPA Green Streets video https://www.youtube.com/watch?v=TxqxEqnHIKw&feature=youtu.be;
    b. Massachusetts "Green Parking" example: https://www.mass.gov/service-details/demonstration-3-permeable-paving-materials-and-bioretention-in-a-parking-lot
    c. NCDEQ Stormwater Manual, Bioretention Cell Chapter: https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/BMP%20Manual/C-2--Bioretention---11-20-020.pdf
    d. Filterra boxes (adding trees and stormwater management in one practice): https://www.conteches.com/stormwater-management/biofiltration-bioretention/filterra

f. ***Below are examples of bioretention, vegetated swales, and curb cuts combined with pervious pavement.***

3. Thank you for using some native plants! I'd still encourage you to incorporate more wherever possible:
    a. This link leads to a search of native, flowering, coastal shrubs that could be used in place of the non-native ilex crenatas, ilex cornuta, and oleander (adding more dwarf yaupon holly is also a possible alternative): https://plants.ces.ncsu.edu/find_a_plant/?plant_type__id=17&nc_region__id=1&flower_value_to_gardener__id=1&landscape_theme__id=7
    b. Consider native tree alternatives to the proposed maidenhair trees. Alternatives include native species such as serviceberry, American persimmon, American hophornbeam, redbuds, dogwoods, Carolina cherry laurel, varieties of *Magnolia grandiflora*, red maple (*Acer rubrum*), or cherrybark oak (*Quercus pagoda*), to name a few. A full list is available here, but keep space and height in mind when selecting: https://plants.ces.ncsu.edu/find_a_plant/?plant_type__id=11&plant_type__id=18&nc_region__id=1
    c. The "White Cloud" variety of muhly grass would also be a showy, native grass alternative to the proposed non-native fountain grass: https://plants.ces.ncsu.edu/plants/muhlenbergia-capillaris/
    d. There are more great options in this booklet, including trees, flowers, shrubs, and groundcovers: https://ncwildflower.org/handouts/Coastal-Landscaping-Guide-Book.pdf

4. Properties that go above and beyond to incorporate green infrastructure are eligible to apply to the Lower Cape Fear Stewardship Development Coalition Awards: http://www.stewardshipdev.org/

5. Additionally, stormwater fee credits up to 40% may be available to incentivize innovative stormwater management. Contact Fred Royal (Frederic.royal@wilmingtonnc.gov) for more information.

Thank you for the opportunity to review! Please do not hesitate to reach out to me if you have any questions or would like to explore ways to incorporate green infrastructure.

Thank you,

Anna Reh-Gingerich
Interim Watershed Coordinator - Heal Our Waterways Program
City of Wilmington Stormwater Services
Ph: 910-765-0629 | Fax: 910-341-7832
anna.reh-gingerich@wilmingtonnc.gov
www.healourwaterways.org