

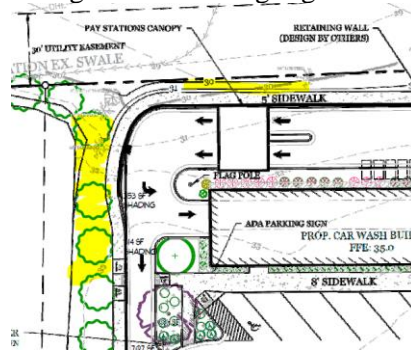
To: Charlie Cazier, PE
From: Pat O'Mahony, Associate Planner; 910-341-0189
CC: File;
Date: 11/22/2021
Re: H2 Turbo Wash West TRC Rev. 1

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:

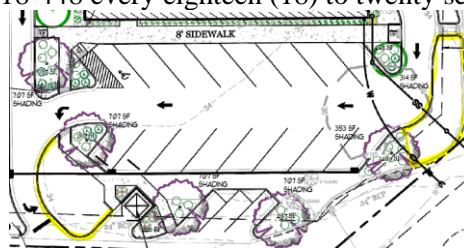
Staff	Department	Notes
Pat O'Mahony	Planning, Plan Review	Comments attached
Eric Seidel	Engineering	Comments attached
Chris Walker	Fire	No further comments
Mitesh Baxi	Traffic Engineering	Comments attached
Bill McDow	Transportation	Comments attached

Pat O'Mahony- Planning

- Additional plantings shall be provided to achieve an opaque screen for the payment station, located on the northwestern side of the vehicle wash building, and for the entrance bay door, located on the southwestern side of the vehicle wash building, to screen from the Independence Boulevard and Carolina Beach Road rights-of-way. Please shown compliance with screening in the areas highlighted below:



- Sec. 18-482 Perimeter Landscaping: A landscaped yard ten (10) feet in width shall be required along any side of a parking lot abutting a separate parking lot, driveway, or residentially-zoned property. Plantings shall consist, at a minimum of one (1) tree of the size specified in section 18-448 every eighteen (18) to twenty seven (27) feet.

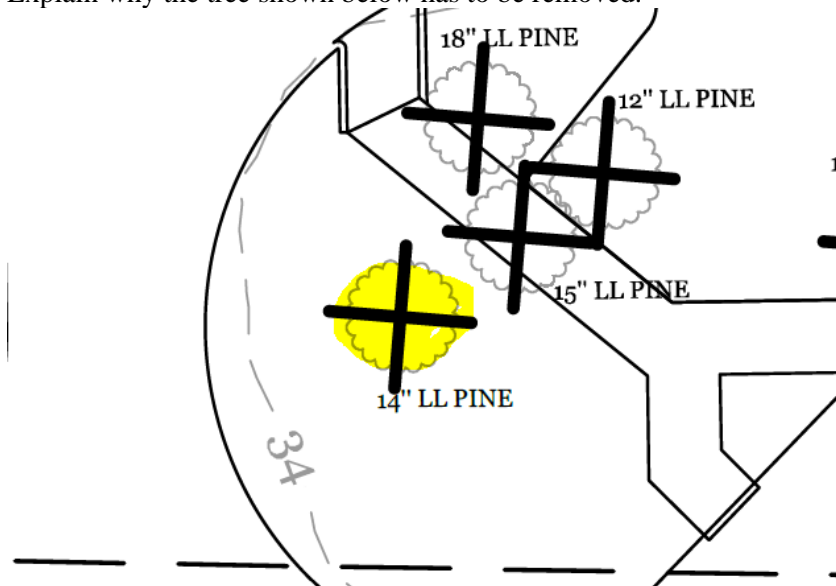


- Elevations shall be consistent with those provided and approved by City Council. Glazing was shown on the exterior of the building, but none shown on the submitted plans.



Architectural Detail
Along Shopping Center
Entry Drive

- Sec. 18-504: Dumpster screening - a visual screen shall be required to shield the use from the view of any adjacent property or right-of-way. Screening shall be a minimum of six (6) feet in height along the front or corner side of any lot and eight (8) feet in height along any side or rear property line. Chain link fencing shall not be permitted as a screening alternative. The screening shall consist of living and nonliving material.
- Explain why the tree shown below has to be removed.



- Provide tree credit calculations to offset the removal of the significant 29" live oak. Trees that are required to be preserved (protected trees) cannot count towards tree credits.

Project Name: H2 Turbo Wash West
Formal TRC Date: 11/24/2021
Reviewer: Eric Seidel, PE
Department: Engineering – Plan Review Section

1. Provide offsite supplement referencing Master Permit SW8970865.
2. Please forward Independence Commons NCDEQ permit modification SW8970865 from the State, once received.
3. Internal 5' sidewalk, adjacent to the retaining wall, needs to be located within a public pedestrian access easement. Please locate and label easement on the Site Plan.
4. Existing SCM Wet Pond needs to be maintained per DEQ permit conditions and O&M agreement.

DEQ has confirmed the junction box located adjacent to the emergency spillway has not been approved as a modification and is currently non-compliant. The wet pond must to be brought back to approved permitted conditions prior to final CO.

Project Name: H2 Turbo Carwash WEST

Formal TRC Date: NOV 24, 2021

Reviewer Name: Chris Walker

Reviewer Department/Division: Fire

No comments from FIRE

Project Name: **H2 TURBO WASH WEST**

Formal TRC Date: **11.24.2021**

Reviewer Name: **Mitesh Baxi**

Reviewer Department/Division: **PDT/Traffic Engineering**

COMMENTS:

1. 'Do not enter' signage is proposed for the exit only driveway off access easement. The orientation of this sign may create a confusion for the traffic entering driveway off Carolina Beach Rd.
'If DO NOT ENTER sign would be visible to traffic to which it does not apply, the sign should be turned away from, or shielded from, the view of that traffic.' [MUTCD]
2. Recommendation: A 'ONE WAY' sign may be placed parallel to an access easement so that it is visible to the traffic exiting parking facility, to avoid conflict with incoming traffic on one-way access easement.
3. Recommendation: ADA ramp as proposed at the location between employee parking and dumpster pad off access easement does not have receiving side ramp. If this ramp is provided for pedestrian access to shopping complex, the sidewalk may be continued further north as close as possible to an existing receiving ramp of shopping complex.

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

Project Name: **H2 TURBO WASH WEST**

Formal TRC Date: **11.24.2021**

Reviewer Name: **Mitesh Baxi**

Reviewer Department/Division: **PDT/Traffic Engineering**

COMMENTS:

1. 'Do not enter' signage is proposed for the exit only driveway off access easement. The orientation of this sign may create a confusion for the traffic entering driveway off Carolina Beach Rd.
'If DO NOT ENTER sign would be visible to traffic to which it does not apply, the sign should be turned away from, or shielded from, the view of that traffic.' [MUTCD]
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Please let me know if you have any questions or if I can be of further assistance.

Project Name: **H2 TURBO WASH WEST**
 TRC Date: **11.24.2021**
 Reviewer Name: **BILL McDow**
 Reviewer Department/Division: **PDT/Transportation Planning**

TECHNICAL STANDARDS:

1. The site has proposed a new 4,008 SF Automatic Carwash.
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
Vacant, Existing Land Use	N/A	N/A	0	0	0	0	0	0	0
Automatic Carwash, Proposed Land Use	4,008 SF	948	N/A	N/A	N/A	27	28	61	61

1. Based upon the estimated trip generation numbers for the Saturday Peak hour, A TIA may be required for this carwash.
2. Please contact Scott James, PE at (910) 473-5130 or scott.james@wilmingtonnc.gov to discuss this usage and begin the scoping process.
3. As previously stated, the employee parking spaces, and dumpster appear to have the vehicles backing into the one-way access easement adjacent to this parcel. Please revise the location of the employee parking and dumpster, so all vehicle movements entering the access easement are made in the forward direction.
4. The proposed entrance for the pay station is located near Independence Blvd. Please show the estimated vehicle queue for vehicles during the PM Peak Hour and Saturday Peak Hour. Vehicles will not be allowed to queue into the travel lanes for Independence Blvd or block the ROW for the public sidewalk.

Please let me know if you have any questions regarding the comments.

Project: H2 Turbo Wash West, formerly 3819 Carolina Beach Road Car Wash
TRC Meeting Date: 4/1/21; 9/23/21; 11/24/21
Reviewer: Anna Reh-Gingerich
Department: Stormwater Services

To Whom It May Concern:

The H2 Turbo Wash West car wash project falls within the Barnards Creek Watershed. Any additional stormwater capture on-site would help reduce the amount of stormwater runoff and pollution that could enter Barnards Creek and, eventually, the Cape Fear River, which is currently listed by the State for exceeding the pH standard, having a poor benthic community, high copper levels, and low dissolved oxygen.

My comments:

1. Please incorporate more tree save into the site plan. Citizens have been very vocal over tree loss and the Wilmington Tree Initiative was specifically created to improve the tree canopy within City limits. Trees are helpful for improving erosion control, stormwater management, the heat island effect, air quality, and energy efficiency.
2. Consider incorporating pervious materials, such as pervious pavers or cement, in parking stalls as the soils and groundwater levels allow. Another option is to convert some parking areas to bioretention/landscaping areas. More landscaping would help to reduce the heat island effect and the amount of stormwater runoff being generated at this property. It could even be incorporated as vegetated swales or bioretention areas.
 - a. <https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/BMP%20Manual/C-5--Permeable-Pavement-11-20-2020.pdf>



3. Incorporate native plants wherever possible in future landscaping plans. Native plants require less maintenance (fertilizers, pesticides, etc.) than non-native plants to grow successfully since they are already acclimated to local conditions.
 - **Please find alternatives for the proposed Ligustrum japonicum. Ligustrum japonicum is an invasive species in North Carolina:**
<https://plants.ces.ncsu.edu/plants/ligustrum-japonicum/>

- Inkberry or its cultivars: <https://plants.ces.ncsu.edu/plants/ilex-glabra/>
 - American Beautyberry: <https://plants.ces.ncsu.edu/plants/callicarpa-americana/>
 - Oak Leaf Hydrangea: <https://plants.ces.ncsu.edu/plants/hydrangea-quercifolia/>
 - Sweet Pepperbush: <https://plants.ces.ncsu.edu/plants/clethra-alnifolia/>
 - And others: https://plants.ces.ncsu.edu/find_a_plant/?plant_type_id=11&plant_type_id=17&flower_value_to_gardener_id=1&nc_region_id=1
4. **Native sedges are a great, low-maintenance option which could be used in place of the liriope, which is a species of concern in Georgia and South Carolina for invasive tendencies** (note that non-native sedges are indicated with an asterix *): http://hoffmannursery.com/assets/files/files/Hoffman_Nursery_Green_Infrastructure_Chart.pdf;
 - **Miscanthus sinensis “Adagio” is a non-native grass with invasive tendencies. Please look for a native or non-fertile alternative. More information can be found at the following links:** <https://plants.ces.ncsu.edu/plants/miscanthus-sinensis-adagio/>; <https://plants.ces.ncsu.edu/plants/miscanthus-sinensis/>
 - **The “White Cloud” variety of muhly grass would also be a showy, native grass alternative:** <https://plants.ces.ncsu.edu/plants/muhlenbergia-capillaris/>
 - Consider native alternatives to some of the other non-invasive, yet non-native shrubs currently proposed:
 - https://plants.ces.ncsu.edu/find_a_plant/?plant_type_id=11&plant_type_id=17&flower_value_to_gardener_id=1&nc_region_id=1
 - 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 to help achieve the stormwater volume reduction targets identified within the watershed restoration plan. 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 other questions or would like to explore other ways to incorporate green infrastructure into the project.

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

