



Planning, Development and Transportation

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DATE: 12.31.2019
TO: ProTrak
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Traffic Engineering

■ **THE WOODLANDS AT ECHO FARMS TRACT 1 [TRC Plan Review]**

↻ Initial Review Note ↻

All comments are based on adopted policy documents, specific City of Wilmington Land Development Code (CofW LDC) and City of Wilmington Technical Standards and Specifications Manual (CofWTSSM) requirements in effect at the time of this review. These have been noted after the comment as appropriate for your ease in further research.

The City Engineer may administratively approve dimensional variance requests per LDC Sec. 18-348. If the Applicant feels further interpretation is in order, please contact Transportation Planning directly to discuss in additional detail. Please apply for all administrative variances in writing, an email is acceptable or this may be included on the plan set. Please see Sec. 18-348 of the Land Development Code for the information required to process a variance request.



BASE INFORMATION:

- Revise all sheets to accurately illustrate the existing conditions on and surrounding this parcel. Show all adjacent traffic signs, lane configurations, traffic control devices and pavement markings on the site inventory plan. Please refer to the Technical Standards and Specifications Manual (link is below) Ch. VII C.1.a.2. for specific information and distance requirements. Contact Traffic Engineering at 341-7888 if you need assistance locating these elements.
<https://www.wilmingtonnc.gov/home/showdocument?id=1910>
- Provide a signage and pavement marking plan showing all proposed traffic control signs, street name signs, and related pavement markings locations and types.
<https://www.wilmingtonnc.gov/home/showdocument?id=3940>
- File a sidewalk and travel lane closure plan with Bret Russell, Construction Management and Randall Glazier, Traffic Engineering prior to release of the project for construction. Add a note stating “The Riverwalk must remain open during Construction Activities. Please sign all detours on the site” (Transportation comment).

TECHNICAL STANDARDS – (Applicable if roads are proposed as private or public ROW):

1. Please clarify whether the proposal is for public or private ‘Road’. Label it accordingly.
2. All private streets shall be designed and constructed to meet or exceed the public street standards as specified by the [city's] Technical Standards and Specifications Manual. [\[Sec.18-378 \(d\) CofW LDC\]](#)
3. The site does not show Right Turn Lanes and Right Lane Tapers for the property. Please show right turn lanes for Road A and Road C on the site plan, if proposed any.
4. The intersections of proposed ROW Road A and Independence Blv are closer than the 200’ minimum distance from the intersection of Musket Bay Dr of Woodlands at Echo Farms Tract 2 and Independence Blv offset between centerlines of intersections on opposite sides of street, per the

City's technical standards. [7-5 CofW Tech Stds]. Please contact Engineering for a variance request, if required.

5. A typical cross section of road with parking may require a variance. Please contact Engineering for a variance request, if required.
6. The minimum street corner radii is 35'. [7-5 CofW Tech Stds] Please contact Engineering for a variance request, if required.

ROUNDBABOUT

Please provide the details as per below;

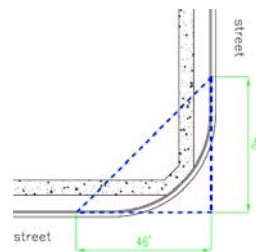
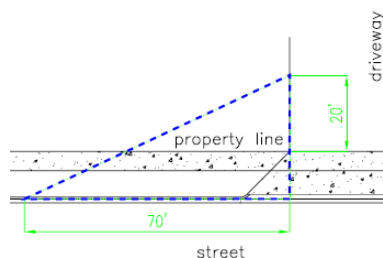
- Entry angle and offset to center as appropriate
- Entry, Circulating and exit speed-radius relationships
- Inscribed diameter consistent with design vehicle (Provide autoturn analysis)
- Truck apron, if provided, consistent with design vehicle.
- Consideration for Splitter Island that accommodate pedestrian refuge as room allows.
- Please provide the reasoning for not able to provide a raised splitter island and extending it beyond the crosswalk.
- Pedestrian crossings should be set back from the yield or entrance line in the increment of a full vehicle length.
- Approach/departure, across the center island and stopping sight distances to crosswalks.
- Traffic signage and pavement markings plan.
- Vertical cross section with dimensions and grading details.
- Dimension all the design elements on plan and section details. Like splitter island, entry/exit travel lane width, crosswalk, exit radius, and as applicable.
- Provide ADA ramps as applicable.

This list is not inclusive and submittals should provide reasoning used for each parameter.

References: FHWA, NCDOT

TECHNICAL STANDARDS – ACCESS (sidewalk and sight distance):

7. Provide sidewalk detail SD 3-10 on the plan. [Sec. 18-529(b)(2) CofW LDC]
8. Provide curbing detail SD 3-11 on the plan. [Sec. 18-529(b)(2) CofW LDC]
9. Show and apply the City's 20'x70' sight distance triangle at each driveway and the City's 46'x46' sight distance triangle at each street corner intersection on the site plan and landscaping plan. [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 INTERSECTIONS WITH SAID THOROUGHFARES

If the Roads are proposed as ROW:

Site plan shows different sight distance triangles for Road A and Road C intersecting with Independence Boulevard. Please reconcile. 46'x46' and 20'x70' are not an appropriate sight distance triangles and must not be applied at these intersections.

Independence Boulevard is a major thoroughfare [Chap VII (C) (2) (a) of CofW Tech Stds]. The required triangular sight distance for any street intersections with said thoroughfares shall be provided in compliance with the AASHTO sight distance standards. [Sec.18-556 CofW LDC]

TECHNICAL STANDARDS – PARKING:

10. If all the Roads are proposed as drive aisles, the minimum radius is 25' for any portion of a parking lot adjacent to a travel way (i.e. islands at the end of a parking bay) for parking that is open to the public. A variance may be required.
11. Provide a turning movement analysis of largest vehicle accessing this development.
12. Traffic restriction signage is recommended to ensure the availability of 14' wide fire access path whenever it is required. [MUTCD]

TECHNICAL STANDARDS – ADA:

13. Townhouse Building 4, Building 5, Building 6 and Building 7 does not have a designated accessible parking spaces.
Recommendation: Please revise to show separate accessible parking spaces for easy access to all the buildings.
14. If an additional ADA is not proposed/required, show an accessible route from an accessible space in front of building 3 leading to other building across Road A.
15. Show the typical handicap sign detail on the plan as per ADA and City standards. [Sheets A1 of 5 and A2 of 5, CofW Sign Specification]
<https://www.wilmingtonnc.gov/home/showdocument?id=3940>
16. Please show location of accessible ramp(s) on the plan. Detectable warning domes shall be installed at the transition of pedestrian to accessible aisle regardless of ramps.
17. Note/label the plan with spot elevations that clearly indicate the accessible route from the HC space(s) to the building. [Sec. 18-529(b)(2) CofW LDC] [ADA standards]
18. Detectable warning domes must be installed at the end of each sidewalk before entering drive aisle/pavement surface. [ADA standards]

GENERAL NOTES TO ADD TO THE PLAN:

- A. Street trees must be located a minimum of 15 feet from street lights. [CofW SD 15-17]
- B. All pavement markings in public rights-of-way and for driveways are to be thermoplastic and meet City and/or NCDOT standards. [Detail SD 11-03 and SD 15-13 CofW Tech Stds]
- C. All traffic control signs and markings off the right-of-way are to be maintained by the property owner in accordance with MUTCD standards.

MISCELLANEOUS:

- ❖ Contact Traffic Engineering at (910) 341-7888 to discuss street lighting options.
- ❖ We will reserve comments on other technical issues until a full construction drawing is submitted.

Please let me know if you have any questions or if I can be of further assistance as this development moves through the review process.