



I. Call to Order

II. Approval of Minutes

- a. December 3, 2024 Regular Meeting Minutes

III. Business

- a. **CAMA Future Land Use Map Amendment for parcels on W Corbett Ave from RA to Suburban Town Center**

Presenter: Rebecca Brehmer, CFM, CZO, Town Planner

Flybridge Swansboro LLC has submitted an application for a future land use map amendment. The amendment proposed would change the site located at 1481 W Corbett Ave from a RA (rural/agricultural) designation to a Suburban Town Center designation.

Recommended Action: Motion to recommend approval or denial of proposed amendment to the CAMA Land Use Plan Map, changing the site from a RA (rural/agricultural) designation to a Suburban Town Center designation to the Board of Commissioners.

- b. **Zoning Map Amendment to rezone parcels on W Corbett Ave from RA to B-1 Conditional Zoning**

Presenter: Rebecca Brehmer, CFM, CZO, Town Planner

Flybridge Swansboro LLC seeks a conditional rezoning for +/- 38.92 acres on parcels of land identified as Tax Parcel ID 019494 and 027733, from RA (Rural/Agricultural) to B-1 CZ (business conditional zoning) to develop a proposed multi-family and commercial project.

Recommended Action: Motion to recommend approval or denial of the requested conditional rezoning, including the Comprehensive Plan Consistency Statement and draft ordinance to the Board of Commissioners based on recommendation of previous land use plan amendment and to be based on the site plan submitted and conditions proposed by developer.

- c. **UDO Text Amendment to § 152.016 Definition of Basic Terms and § 152.267 Computation of Sign Area**

Presenter: Rebecca Brehmer, CFM, CZO, Town Planner

After the discovery of a discrepancy in UDO Sections 152.016 Definitions of Basic Terms for the definition "Sign, Area Of" and 152.267 Computation of Sign Area (C) when it comes to calculating the square footage allowed on a sign, a text amendment to these sections is proposed for consistency.

Recommended Action: Motion to recommend approval of the UDO text amendment to Section §152.016 Definitions of Basic Terms and Section §152.267 Computation of Sign Area, along with the Comprehensive Plan Consistency Statement.

IV. Chairman/Board Thoughts/Staff Comments

V. Public Comments

VI. Adjournment

Town of Swansboro
Planning Board
Regular Meeting Minutes
December 3, 2024

Item II - a.

Call to Order

The meeting was called to order at 5:30pm. Board members in attendance were Christina Ramsey, Lauren Brown, Tim Vannoy, and Sherrie Hancock. Jerry Seddon and Clara Abalos were absent. There was one ETJ vacancy.

Approval of Minutes

On a motion by Mrs. Hancock, seconded by Mr. Vannoy, the October 3, 2024, Special Meeting Minutes were approved unanimously.

Business

UDO Text Amendment to Appendix III Historic District Design Standards, Section 14: Fences and Walls

Planner Brehmer shared that the Historic Preservation Commission had recommended an amendment to Appendix III Historic District Design Standards, Section 14: Fences and Walls to make clarifications on fence guidelines.

The purpose of the text amendment to Section 14: Fences and Walls was to keep the historic integrity of the district by requiring new fences visible to the public to be picket in style, not just wood in material as previously required. Section 14 Fences and Walls, bullet 4 was recommended to read: "Design new fences that are compatible with the associated building site, streetscape in height, proportion, scale, color, texture, material, and design. New wooden fences that are within the public view must be wooden picket in style and meet height requirements. Synthetic fence materials, such as vinyl, are not appropriate in the historic district."

In response to inquiries from the board, Planner Brehmer clarified the following:

- The Historic Preservation Commission directs the planner when they feel there is a need for an update to the Historic District ordinances.
- The approval process for updating a fence is handled by the Planner which requires staff approval, a fence permit, and zoning approval.
- The Building Inspectors inspect and verify that the fence meets all requirements once it has been built.
- The ordinance does not grant the Town the authority to dictate how homeowners should maintain their fences after they are installed and inspected.
- The State Historic Preservation Office determines the appropriate standards for inclusion on the National Register, and the Town strives to closely reflect those standards in its daily operations.

On a motion by Mr. Vannoy, seconded by Ms. Brown the proposed text amendment to UDO Appendix III Historic District Design Standards, Section 14: Fences and Walls was unanimously recommended for approval to the Board of Commissioners along with the Comprehensive Plan Consistency Statement.

Re-zoning Request- 1149 Hammocks Beach Road

Planner Brehmer reviewed that Shannon Weaver, PE, on behalf of property owners David and Linda Camp were seeking to rezone 1149 Hammocks Beach Road from RA (Rural/Agricultural) to B-1 (Business). The property was further identified as tax parcel ID 1319-66, and the total acreage requested for rezoning was +/-0.77 acres.

In response to inquiries from the board, Planner Brehmer and the applicant Shannon Weaver clarified the following:

- Given the proximity to B-1 and Walmart the Town felt it was a key intersection or public resource and consistent with the Future Land Use Plan.
- Mrs. Weaver plans to use the existing home and turn it into an office space for her engineering firm.

The board expressed concerns regarding the potential for Hammocks Beach Road becoming commercial and the implications of re-zoning to B-1, as this designation would allow future permitted commercial use to be established.

Planner Brehmer shared that it was the applicant's choice whether to resubmit the application for conditional re-zoning where the Board of Commissioners would be able to set conditions or apply for other zoning designations such as B-2 or O-I.

On a motion by Ms. Brown, seconded by Mr. Vannoy, the proposed re-zoning request for 1149 Hammocks Beach Road from RA (Rural/Agricultural) to B-1 (Business) was unanimously recommended for approval to the Board of Commissioners along with the Comprehensive Plan Consistency Statement.

Board Comments/Staff Comments

Planner Brehmer informed the board that the Flybridge project would likely be discussed at their January 7, 2024, regular meeting.

Public Comments

Mr. David Camp, owner of 1149 Hammocks Beach Road shared that he had lived there for over thirty years and saw no reason why there could not be an office on that property.

Mrs. Ramsey stated that they recommended the re-zoning request.

Adjournment

On a motion by Mrs. Hancock, seconded by Mr. Vannoy, the meeting was adjourned at 6:00 pm.



Planning Board Meeting Agenda Item Submittal

Item To Be Considered: **CAMA Future Land Use Map Amendment for parcels on W Corbett Ave from RA to Suburban Town Center**

Board Meeting Date: **January 7, 2025**

Prepared By: **Rebecca Brehmer, CFM, CZO, Town Planner**

Overview: Flybridge Swansboro LLC has submitted an application for a future land use map amendment. The amendment proposed would change the site located at 1481 W Corbett Ave from a RA (rural/agricultural) designation to a Suburban Town Center designation.

This is one of three steps (1. CAMA Future Land Use Plan Amendment, 2. Conditional Rezoning, and 3. A Special Use Permit) needing approval for a future mixed-use development project consisting of multifamily housing and commercial outparcels. This parcel of 39 acres of land is located directly across from the intersection of W Corbett Ave and Belgrade Swansboro Road. The CAMA Future Land Use Map currently designates this land as Rural/Agricultural deeming it important to preserve what is left of our rural views and working farmland. Changing the designation to a Suburban Town Center would deem this land suitable for medium to high intensity uses on the NC 24 corridor. It is important to note that this amendment is a crucial step in Flybridge Swansboro, LLC being able to meet one of the four criteria required in a Special Use Permit application, which is needed for multi-family development. The application for a Special Use Permit will be heard at a later date.

Background Attachment(s):

1. Flybridge Application
2. Future Land Use Map Amendment Application & Narrative
3. Aerial Location Map
4. CAMA Future Land Use Map

Recommended Action: Motion to recommend approval or denial of proposed amendment to the CAMA Land Use Plan Map, changing the site from a RA (rural/agricultural) designation to a Suburban Town Center designation to the Board of Commissioners.

Action: _____

Town of Swansboro
601 W. Corbett Avenue Swansboro, NC 28584
Phone (910) 326-4428 - Fax (910) 326-3101

APPLICATION FOR ZONING & ORDINANCE AMENDMENTS

Check the Appropriate Blank

- Add a Use to a Zoning District
- Remove a Use from a Zoning District
- Create a New Zoning District
- Future Land Use Map Amendment

- Application No. _____
- Amend Code of Ordinances
 - Amend Unified Development Ordinance
 - Zoning District Designation Change

A complete application must be received with the fee by the third Friday prior to the month of review.

Property Owner Name Flybridge Swansboro, LLC Phone # 910-791-6707 (rep)

Address of Zoning Request 1481 W Corbett Ave, Swansboro, NC 28584

Mailing Address PO Box 130, Sanford, NC 27331

Zoning Amendments

Attach a copy of the legal description of the property (including address if assigned) that is requested for a zoning change (i.e. metes and bounds). The application will not be scheduled for review until these items are received.

Provide a list names and mailing address of adjacent property owner on the reverse side of this application. The application will not be scheduled for review until these items are received.

Present Zoning RA (Residential / Agriculture) Desired Zoning Conditional B-1

Probable Use of Property Multi-Family Residential & Commercial

Reason for Zoning Change Request *See attached narrative

Ordinance Amendments

Code Section to be amended _____

Print clearly the code section wordage to be amended _____

Print clearly the code section wordage as suggested _____

Reason for requested amendment _____

Signature Cory Date 10/30/24

Future Land Use Map Amendment

Present Future Land Use Category RA Desired Future Land Use Category Suburban Town Center

Use of Property Proposed Multi-Family Residential & Commercial

Reason for Future Land Use Map Change Request *See attached narrative

Town Hall Use Only

Fee Paid \$800 Date Received 11/8/24 Date scheduled for Planning & Zoning Board review 11/7/25

Recommendation from Planning & Zoning Board _____

Public Hearing Run Dates _____ Date of Public Hearing _____

Effective Date of Change _____ Ordinance Number _____



**Flybridge Swansboro
FLUM Amendment & Conditional Rezoning Narrative**

Subject Site

1481 W Corbett Ave
Swansboro, NC 28584
Tax Parcels: 019494 & 027733
+/- 38.92 Acres

Applicant/Owner Information

Flybridge Swansboro, LLC
PO Box 130
Sanford, NC 27331

Agent Information

Paramounte Engineering, Inc.
122 Cinema Drive
Wilmington, NC 28403
bschuler@paramounte-eng.com
910-791-6707

Proposal

Flybridge Swansboro, LLC, is requesting to amend the Future Land Use Map and conditionally rezone the subject site in order to construct a mixed-use development consisting of multi-family housing and commercial outparcels. The multi-family housing is also required to obtain a Special Use Permit.

The subject site is located on Hwy 24/W Corbett Ave near the intersection of Hwy 24 and Belgrade-Swansboro Rd. The subject site consists of two parcels totaling approximately 39 acres of land. The property was previously used for single-family residential and agricultural purposes.

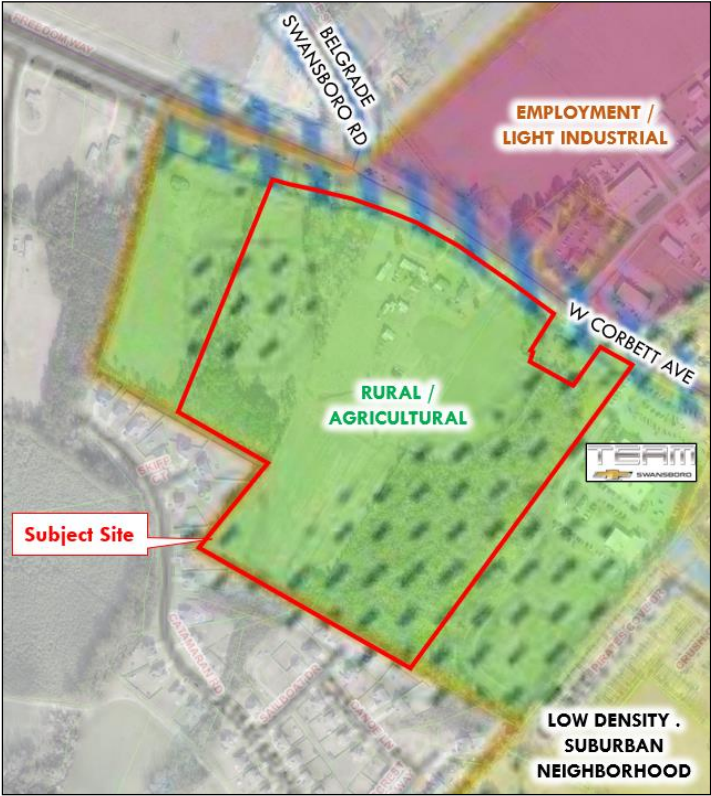
This proposal would amend the site's future land use classification to Suburban Town Center (STC) and rezone the property to a Conditional B1 district.

Future Land Use Map Amendment

While the subject site is currently classified as Rural / Agricultural on the Future Land Use Map, its direct access to a major commercial corridor at a signalized intersection, along with existing and planned growth of the area make it more suitable for a mixed-use development. The Hwy 24 corridor heading east into Swansboro consists of many highway business land uses including grocery stores and large retailers, restaurants, car dealerships, offices, and auto service businesses. The CAMA Land Use Plan also recommends land directly across of the subject site to be developed for employment and light industrial uses.

In addition, the only other properties in this area classified as Rural / Agricultural are currently zoned for commercial purposes, with one of these properties having been developed with a Chevrolet dealership. The land directly across the site is also classified for Employment and Light Industrial development.

Future Land Use Map:



Zoning Map:



The applicant is requesting to amend the site's classification on the Future Land Use Map from Rural / Agricultural to Suburban Town Center. The Suburban Town Center is a highway commercial designation that promotes medium to high intensity uses on the NC 24 corridor and is in keeping with the existing land uses along the corridor. Specially the Suburban Town Center promotes:

- Commercial activities nodes that are more auto-oriented such as the intersections of Hammocks Beach Road or Queen's Creek Road with NC 24.
- Access to several businesses via easements, sidewalks, or a secondary road network.
- Mix of uses including higher density residential (up to 12 dwellings per acre) including townhomes and market-rate apartments with access to major thoroughfares and existing utilities.
- Development opportunities on greenfields or underutilized sites.
- Commercial services that supply the community and larger geographic area.
- Secondary internal street network to reduce curb cuts and turning movements along the major thoroughfare.
- Sidewalks throughout the development.

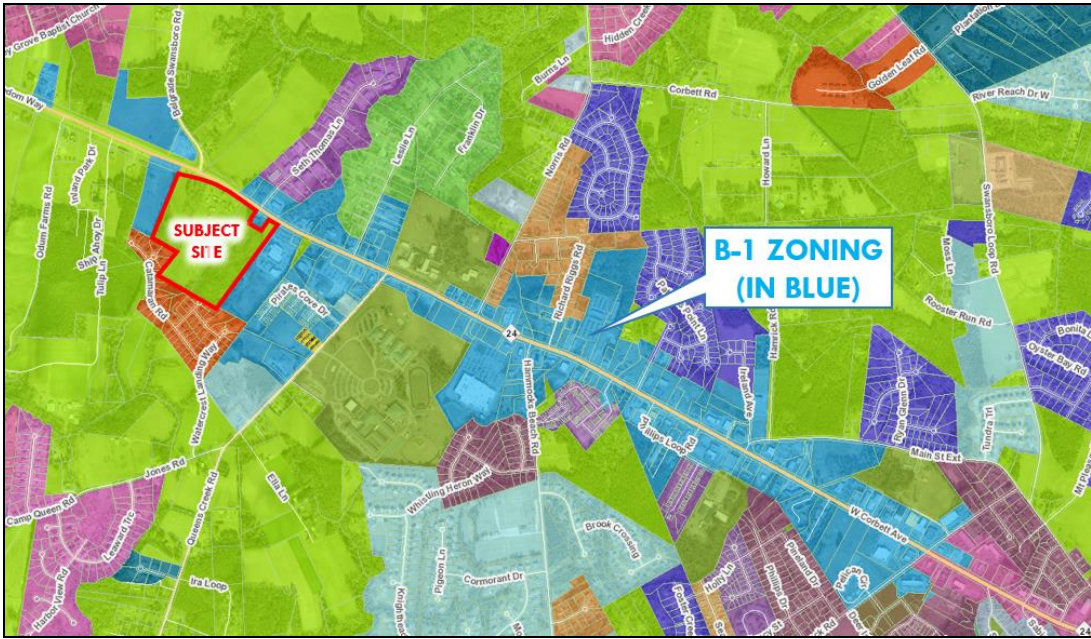
The site's location adjacent to a signalized intersection on NC 24 is consistent with the character of the Suburban Town Center classification, allowing convenient access to the community and surrounding area. In addition, the site's area of +/- 39 acres will allow for a mixture of uses, several commercial businesses, and an internal secondary road network. The mixture of uses positions people closer to the goods and services offered by the current and future commercial development, which helps reduce travel times and promotes alternative travel methods like walking and biking.

Conditional Rezoning

The applicant is requesting to rezone the site to a Conditional B1 district in order to construct a mixed-use development consisting of 324 multi-family units and six commercial outparcels. The proposed commercial district is consistent with the current zoning of the Hwy 24 corridor. As shown below, the vast majority of property along Hwy 24 is currently zoning B-1.

Following the goals of the Suburban Town Center classification, the proposed concept plan has been designed to provide for a secondary street network to reduce curb cuts on NC 24 and includes an internal sidewalk network. In addition, the proposed multi-family density at 10.6 dwellings per acre complies with the recommended maximum of 12 dwellings per acre for the Suburban Town Center classification.

The concept plan has been laid out to provide additional separation between the adjacent residential housing and proposed multi-family buildings. In addition to stormwater facilities being proposed along the rear portion of the site, existing jurisdictional wetlands will be preserved along the eastern side, contributing to a natural buffer.



A Traffic Impact Analysis has been completed for the proposal and approved by NCDOT. The project will make several improvements to the adjacent roadway including the installation of right turn lanes at the project’s entrances, and the extension of existing turn lanes at the NC 24/Belgrade-Swansboro Road intersection. Signal timing will also be optimized at this intersection and at the NC 24/Queens Creek Road intersection.

Overall, the proposed rezoning would be consistent with the current zoning of the Hwy 24 corridor and with the Suburban Town Center classification. The proposed development is designed to reduce impact to the surrounding residential housing, and will make improvements to the adjacent roadway system.

Parking Narrative

In accordance with standards for Conditional Rezoning, the proposal includes a variation from the off-street parking requirements for multi-family housing.

According to the Institute of Transportation Engineers (ITE) Parking Generation Manual, the proposed multi-family housing would generate an average parking peak of 1.27 vehicles per unit (411 spaces), and an 85th percentile demand of 1.59 vehicles per unit (515 spaces).

In addition, of the 324 units, 126 will be 1-bedroom units (about 39% of the units). The remaining units will consist of 162 2-bedroom units (50%) and 36 3-bedroom units (11%). Overall, the proposal will include 558 bedrooms, which is less than the provided 575 parking spaces.

Therefore, the proposed parking ratio of 1.77 spaces per unit (575 spaces) would accommodate the parking need for the proposal. By reducing the required parking, the proposal reduces unneeded impervious surface allowing for additional green/open space to be provided.

Owner:
FLYBRIDGE SWANSBORO LLC

Mailing Address:
PO BOX 130
SANFORD NC 27331-0130

December 2024
Item III - a.

NC PIN: 535503221934
Map Number: 1313-101
Parcel ID: 019494



General Information

Physical Address: 1481 W CORBETT AVE

Total Acres: 24.33
Land Value: \$ 638940
Bldg Value: \$ 103917
Market Val: \$ 742857
Heated Sqft: 1810
of Bedrooms: 4
Year Built: 0
Nbhd Code: 4276
Improv Code: D
Township: SWANSBORO
City Limit: UNINCORPORATED ONSLOW
Fire District: NORTHEAST
Subdivision: NO SUBDIVISION RECORDED
Property Desc: 24.33AC TR W CORBETT AVE
Plat Book: 00NO-SUBDIV

WARNING: THIS IS NOT A SURVEY
This map was prepared for the inventory of real property found within jurisdiction, and is compiled from recorded deeds, plats, and other public records and data. Users of this map are hereby notified that the aforementioned public primary sources should be consulted for verification of the information contained on this map. The County and mapping company assume no legal responsibility for the information contained on this map.

Last Sale Info:

Deed Ref: 5998 / 846
Sale Price: \$ 2200000
Sale Date: 14-JUL-23



Onslow County
Geographical Information Services
234 NW Corridor Blvd
Jacksonville, NC 28540
(910) 937-1190
gis@onslowcountync.gov



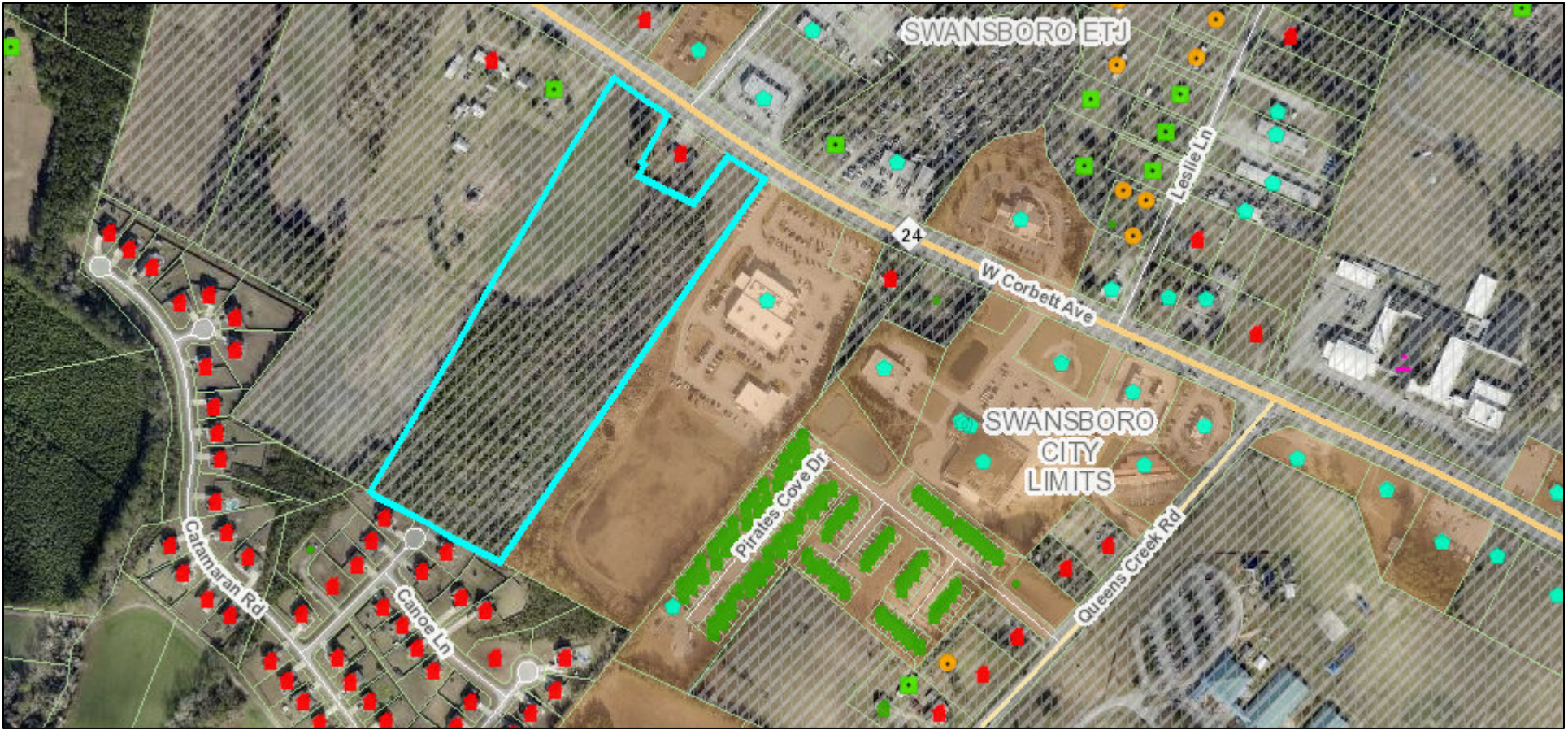
0 285 570 1,140 1,710 Feet

Owner:
FLYBRIDGE SWANSBORO LLC

Mailing Address:
PO BOX 130
SANFORD NC 27331-0130

December 2024
Item III - a.

NC PIN:
535503227635
Map Number:
1313-100
Parcel ID:
027733



General Information

Physical Address: W CORBETT AVE

Total Acres: 14.59
Land Value: \$ 147040
Bldg Value: \$ 0
Market Val: \$ 147040
Heated Sqft:
of Bedrooms:
Year Built:
Nbhd Code: 4276
Improv Code: R
Township: SWANSBORO
City Limit: UNINCORPORATED ONSLOW
Fire District: NORTHEAST
Subdivision: NO SUBDIVISION RECORDED
Property Desc: NC 24
Plat Book: 00NO-SUBDIV

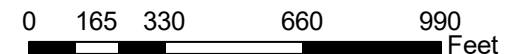
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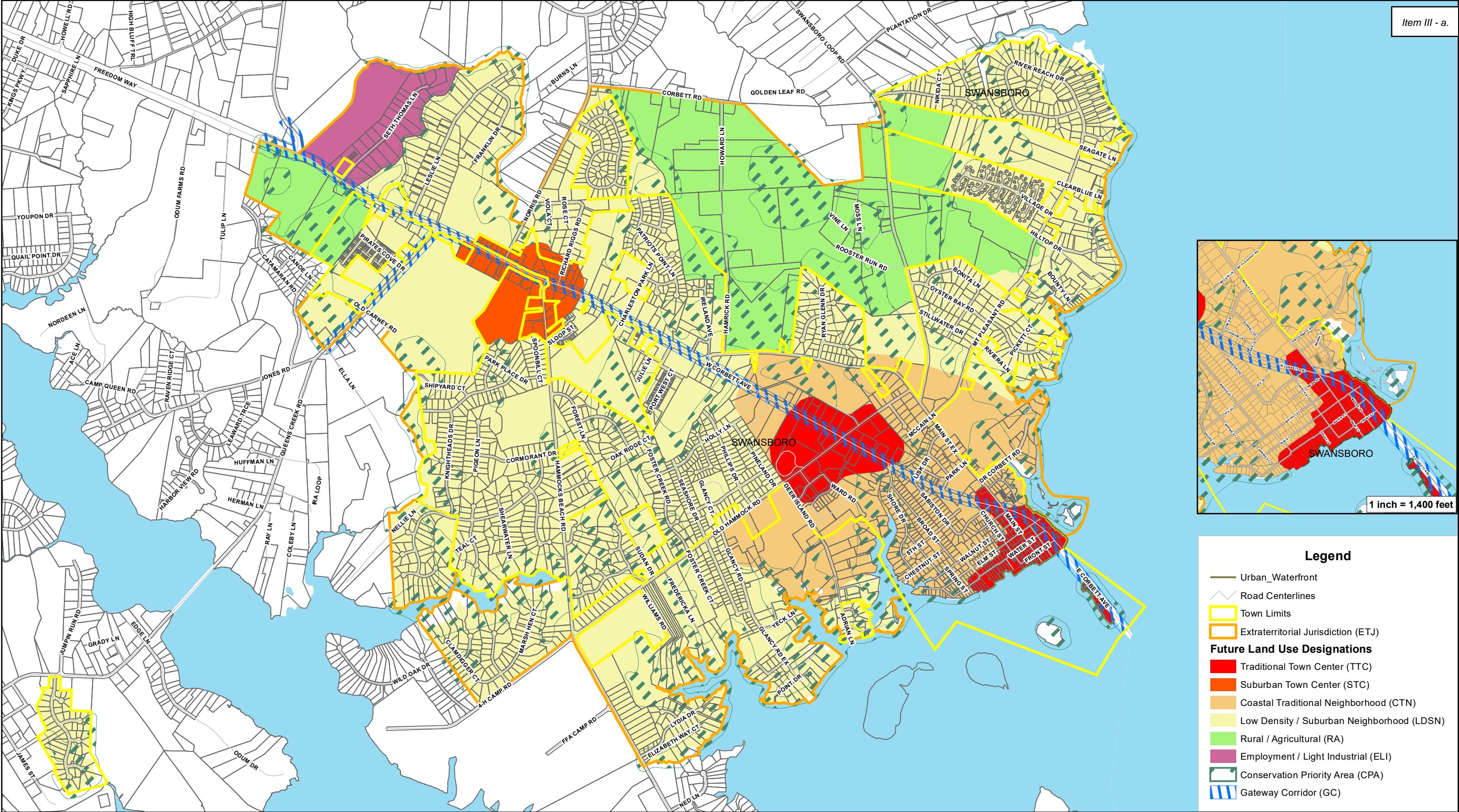
Last Sale Info:

Deed Ref: 6000 / 183
Sale Price: \$ 525000
Sale Date: 17-JUL-23



Onslow County
Geographical Information Services
234 NW Corridor Blvd
Jacksonville, NC 28540
(910) 937-1190
gis@onslowcountync.gov





Legend

- Urban_Waterfront
- Road Centerlines
- Town Limits
- Extraterritorial Jurisdiction (ETJ)

Future Land Use Designations

- Traditional Town Center (TTC)
- Suburban Town Center (STC)
- Coastal Traditional Neighborhood (CTN)
- Low Density / Suburban Neighborhood (LDSN)
- Rural / Agricultural (RA)
- Employment / Light Industrial (ELI)
- Conservation Priority Area (CPA)
- Gateway Corridor (GC)

SWANSBORO CAMA LAND USE PLAN UPDATE

- Future Land Use -

Date printed: 2/12/2020



1 inch = 1,600 feet

Adopted: January 22, 2019
Amended: June 8, 2020



Planning Board Meeting Agenda Item Submittal

Item To Be Considered: **Zoning Map Amendment to rezone parcels on W Corbett Ave from RA to B-1 Conditional Zoning**

Board Meeting Date: **January 7, 2025**

Prepared By: **Rebecca Brehmer, CFM, CZO, Town Planner**

Overview: Flybridge Swansboro LLC seeks a conditional rezoning for +/- 38.92 acres on parcels of land identified as Tax Parcel ID 019494 and 027733, from RA (Rural/Agricultural) to B-1 CZ (business conditional zoning) to develop a proposed multi-family and commercial project.

The conditions proposed by the developer are as follows:

1. Strategic placement of development to enhance and preserve the natural buffers already present by providing additional separation from multifamily development, specifically along the rear of the property where residential development is already present
2. Even with the stormwater facilities proposed along the rear portion of the site, existing jurisdictional wetlands will be preserved along the eastern side of the property.
3. In accordance with the conditional zoning district section of the UDO, the site plan shows a 200ft corridor setback and in turn there is flexibility to allow a 40ft mean height for the multi-family buildings. This is 5ft over the standard 35ft building height requirements.
4. The proposal includes a variation of the off-street parking requirements for multi-family housing. Details found in application narrative.

Background Attachment(s):

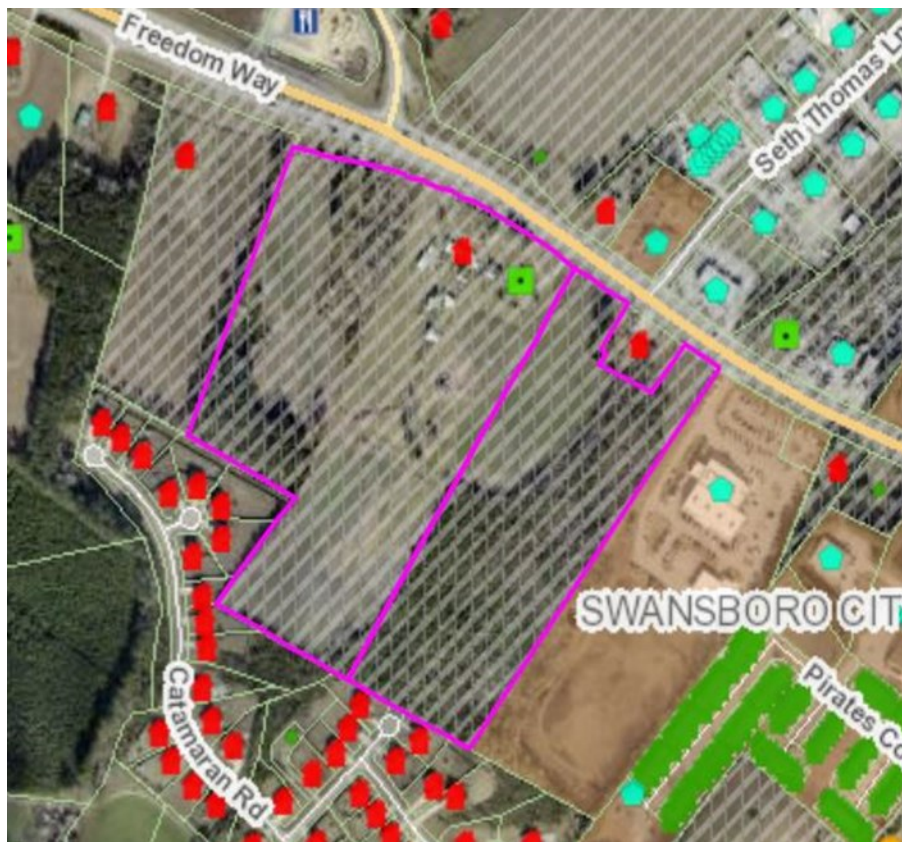
1. Staff Analysis
2. TRC (Technical Review Committee) Comments
3. Conditional rezoning application & narrative
4. Flybridge Conditional Rezoning Master Plan
5. Flybridge Building Elevations
6. Community meeting report
7. Traffic Impact Analysis
8. Comprehensive Plan Consistency Statement
9. Draft Ordinance

Recommended Action: Motion to recommend approval or denial of the requested conditional rezoning, including the Comprehensive Plan Consistency Statement and draft ordinance to the Board of Commissioners based on recommendation of previous land use plan amendment and to be based on the site plan submitted and conditions proposed by developer.

Action: _____

Flybridge

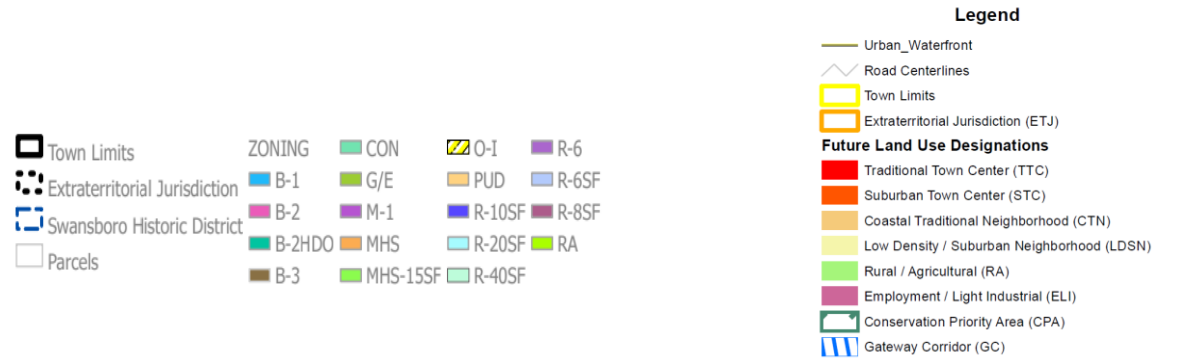
At 1481 W. Corbett Ave, the proposed mixed-use development will consist of 324 multi-family units and six commercial outparcels on approximately 39 acres of land. This parcel of land is in Swansboro's extra territorial jurisdiction and does fall under Swansboro's planning jurisdiction.



To start, developers for Flybridge have applied for a conditional rezoning and a future land use map amendment (please see application attached). Currently, the parcel is zoned RA (rural agricultural) and is also labeled as RA (rural/agricultural) on Swansboro's Future Land Use Map making it inconsistent for this type of development. In order to meet zoning and planning requirements, they are requesting to be rezoned to Conditional B-1 (business) and have the Future Land Use Map be amended to Suburban Town Center (highway commercial). These parcels are surrounded on either side by properties zoned B-1. Conditional rezonings differ from your standard rezoning process in that it allows for the Town to set conditions in order to meet desired development and typically is used to preserve environmentally sensitive areas such as wetlands. In return, the developers are granted some flexibility in zoning requirements such as lot sizes, setbacks, and building heights.

Town Zoning Map and Legend

Swansboro Future Land Use Map and Legend



Steps needed for approval:

1. Two community meetings held by developers to inform citizens on proposed development (this is a requirement of conditional rezoning and mailed notice was sent out to all who live in a mile radius of the site). This is not a Town sponsored meeting, and no decisions are made at this meeting.

After community meetings are completed:

2. Future Land Use Map amendment to Suburban Town Center and;
3. Conditional rezoning to B-1

Items 2 and 3 will be heard first at the Planning Board and then at the Board of Commissioners late January/early February depending on if the Planning Board decides to table discussion/recommendation for any reason. With approval of both step 2 and 3 from the Board of Commissioners, they will then move to step 4.

4. Technical Review Committee which is a staff level review of Site Plan.

Once TRC review is complete and Site Plan is approved;

5. Special Use Permit will need to be granted. Multi-family development, apartments in this case, is only a permitted use with a Special Use Permit in B-1.

The Special Use Permit application will first go to the Planning Board for review and recommendation and then go to the Board of Commissioners for approval or denial.

See excerpts from the CAMA Future Land Use Plan for Rural/Agricultural (current designation) and Suburban Town Center (proposed designation)

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RURAL / AGRICULTURAL (RA)

Respect for agricultural lands was determined to be an important character of the Swansboro area. Rural views and working farms were once a major component of the landscape. Contrary to common conception, farms are not idyllic gardens or “neighborhoods waiting to develop” but are an almost industrial-type use where soil is worked and food/products are grown and harvested by large machines. Higher, flatter, drier areas are often the first to be consumed by development, and that has occurred in Swansboro, even as recently as the construction of the new high school. Preservation of existing agricultural areas was therefore prioritized with the creation of a FLU designed to protect these landscapes.

CHARACTER

Residential structures are typically separated from each other by large yards and/or working farms that may contain industrial-style structures like pole barns or large metal sheds. Farm equipment and machinery is likely to be found stored outside either year-round or in between jobs. Landscaping is often sparse and generally is subservient to the uses on the farms.

ACCESS AND CIRCULATION

Characterized by rural roads with ditches and very little accommodation for pedestrians. Additional right-of-way may be reserved if the road is a rural thoroughfare, or likely to be widened and improved in the future.



Example of a rural homestead



Agricultural field

SETBACKS

Setbacks for residential structures often mimic Low Density/Suburban Neighborhood (LDSN), but setbacks for industrial structures should be closer to or greater than those found in Employment / Light Industrial (ELI). Minimum setbacks are often exceeded by nonresidential structures, which are located to facilitate work operations. Farm buildings often also function as repair shops, storage facilities, and limited processing operations, and so should be treated (and buffered) as such.

MASSING AND BUILDING HEIGHTS

Usually lower height structures, especially for residential, although some non-residential structures will likely be two stories tall to accommodate larger farm equipment.

BLOCKS

Maximum block lengths must not exceed twice the specifications found in Coastal Traditional Neighborhoods, regardless of density of development. This is especially relevant when connecting to existing roads which are or will be thoroughfares or collectors of any sort, including residential collectors. The appropriate block length will allow the neighborhood to evolve as the town grows and changes through time.

PARKING

Off-street parking is prevalent in this area. It is not uncommon to have informal parking areas associated with farm operations. Residential uses will have parking consistent with their zoning.

APPROPRIATE DENSITY

- » Lower densities that are separated by working agricultural areas.
- » Up to 4 dwellings per acre of any type of residential within a 1/2-mile walking distance of any Town Center area or within 1/4 mile walking distance of a Coastal Traditional Neighborhood area, whichever is greater (i.e. - allows increased densities to more property).
- » Up to 4 dwellings per acre of any type residential within a 1/4-mile walking distance



Example of Rural Agricultural (RA)

of a public park of 5 acres or more in size, if there is improved pedestrian access.

- » Up to 0.2 dwellings per acre in all other areas.

REPRESENTATIVE AREAS

- » Farmland and residential homes on Howard Lane
- » And to a lesser degree, on Corbett Road, Ella Lane, and some areas along Swansboro Loop Road

OTHER CONCERNS

The lower density of development in RA will quickly consume land in this area when it is developed and may inadvertently displace residential demand and development to just outside the town's ETJ. This may be exacerbated by the availability of water and sewer services, and potentially lower lot size requirements. The Town should coordinate with the County and ONWASA to avoid this outcome.

Additionally, a restriction on density within the town which provides municipal services (i.e. - parks, streets, water, sewer, police, etc.) may consume a large amount of land and return a lower amount of revenue (property taxes) that is used to support those municipal services. Generally speaking, higher density lots will provide greater return on investment (property taxes) to support the services that the town provides.

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SUBURBAN TOWN CENTER (STC)

These areas are meant to be commercial activity nodes that are more auto-oriented such as the intersections of Hammocks Beach Road or Queen’s Creek Road with NC 24. In well-designed projects, a person can patronize several businesses via access easements between businesses, a secondary road network, or on foot. Uses may be mixed, generally are larger in scale and include higher density residential including townhomes, market-rate apartments with access to major thoroughfares and existing utilities. Office, civic and institutional uses may be incorporated into this land use class. Development opportunities may occur on greenfields or sites with underutilized uses ripe for redevelopment.

CHARACTER

This auto-oriented business district, located at nodes along NC 24, supplies goods and services used by the community over the course of a week or month. These businesses are often supported by customers over a large geographic area and may be a regional draw. Uses may be mixed - often mixed horizontally - outlots and larger-scale (ex - grocery, larger-scale retail up to a certain square footage, etc.). While vehicular traffic dominates, all modes of travel are accommodated.

ACCESS AND CIRCULATION

Access management from major thoroughfares is key and the creation of a secondary internal street network can relieve or reduce the number of curb cuts and turning movements. Access to private or shared

Variety of scale and character for commercial development





Example of Suburban Town Center (STC)

parking, cross-access and shared driveways between adjacent businesses should be required in order to reduce traffic congestion. There are limited on-street parking opportunities.

Complete streets should be utilized, including bicycle and pedestrian infrastructure. Sidewalks should be included on all roads and from the main roads to business entrances. Ideally, sidewalks will be separated from traffic lanes by landscaping which is also used to screen the parking areas. Inter-parcel access is paramount for improving traffic circulation between developments and adjacent parcels of land.

SETBACKS

Large developments should be presented as a cohesive plan and can be implemented in phases. Smaller lot development is characterized by moderate setbacks which can accommodate vehicular circulation. Access between parcels is required. Parking may be either allowed or discouraged between the main structure and the streets, depending on context, but should be screened with landscaping.

MASSING AND BUILDING HEIGHTS

Scale is important. Large buildings setback behind a field of parking a couple hundred feet from the road is not the desired aesthetic expressed by the community. Minimum heights and maximum setbacks should be considered along thoroughfares. The orientation of entrances

to other buildings to create "spaces" that are "places" is important.

PARKING

Parking is primarily accommodated in private lots for each business or building. Some on-street parking may be present, but likely only in targeted areas.

APPROPRIATE DENSITY / INTENSITY

This district has a moderate level of density with:

- » Up to eight dwellings per acre single family detached residential.
- » Up to 12 dwellings per acre multi-family residential.
- » Development of this intensity should employ stormwater control measures that exceed the State stormwater control standards, and may include solutions that are shared between several properties. With increased density, the minimum elements of the Watershed Plan should be addressed:
 - » Identify pollution sources that need control measures
 - » Identify and detail reduction load and measures necessary to meet water quality standards
 - » Detailed management activities and the expected outcome
 - » Utilize green infrastructure



• Friendly City by the Sea •
Established 1783

www.swansboro-nc.org

Board of Commissioners

John Davis
Mayor

William Justice
Mayor Pro Tem

Jeffrey Conaway
Commissioner

Douglas Eckendorf
Commissioner

Joseph Brown
Commissioner

Patricia Turner
Commissioner

Interim Town Manager

Jon Barlow
tmgr@ci.swansboro.nc.us

Town Clerk

Alissa A. Fender, MMC
afender@ci.swansboro.nc.us

9/16/24

Flybridge
1481 W Corbett Ave
TRC 1st Submittal Comments

Provide the following items and required changes and notes on your site plan:

Fire Department- Jacob Randall, Fire Chief

- Comments attached on separate page.

ONWASA- Wynee Ray, Technical Operations Supervisor

- Plans need to be submitted separately, and comments will be sent to you by ONWASA under separate cover. ONWASA plan approval is needed in order for site plan to be signed off on.

Public Works- Gerlad Banks, Public Works Director

- Further review of stormwater plans needed after complete stormwater details are submitted.

Building Department-Paul Ingram, Building Inspector

- No comments at this point in the process, further review needed with more detailed Site Plan and with Building Plans.

Police Department-Dwanve Taylor, Police Chief

- Updates need to be made to the site plan to reflect TIA (see notes from traffic engineer attached).
- What are the proposed speed limits for the streets?
- Please provide a detailed lighting plan.

Planning Department- Rebecca Brehmer, Planner

- More detail needs to be provided, please refer to Appendix IV from our UDO (attached) and review all requirements needed in the Zoning Permit/Site Plan column.
- The Site Plan needs to be sealed by an engineer.
- Please check the numbering of buildings, there is no building 2.
- Is this a gated community? If so, there will need to be further discussion with the Fire Chief as well as ONWASA.
- Swansboro has a max height of 35' for all new buildings, please reflect that on Site Plan.
- Please provide proposed Street names.
- All State sign offs and permits needed before Site Plan approval.



Town of Swansboro Fire Department
609 West Corbett Avenue
Swansboro, NC 28584
(910)326-5908



Item III - b.

August 26, 2024

Plan Review Comments (Fly Bridge)

Site Plan

1. Due to the project's complexity, please provide a dedicated page of the plans that provides the following items.
 - a. Fire Hydrants
 - b. Size and location of water mains
 - c. Fire Department Connections (FDCs) – Sprinklers & Standpipes
 - i. Located within 50' of a Fire Hydrant
 - ii. Remotely Located outside of the Collapse Zone
 - iii. Properly Labeled
 - iv. Equipped with a 5" Storz Adapter
 - d. Fire Lane/Access Roadway Widths
 - i. Minimum Width 26' {In Front of All Structures and Fire Protection Features}
 - ii. It shall have surface material rated for 75,000 lbs and be maintained during all weather conditions.
 - e. Fire Flow for each building
 - f. Egress-Access Roads – Shall not be spaced closer than ½ the distance of the parcel (Measured Diagonally).
 - g. Plan Legend
2. Any dead-end road exceeding 150' shall be designed to have a turnaround for all emergency vehicles.
3. All areas designated as Fire Apparatus Roads, directly in front of Fire Protection Equipment (Hydrants, FDCs), shall have appropriate street signs and markings identifying them as Fire Lane.
4. Is this a gated community?
5. Provide tentative addressing (Building 2 Label is Missing) – if applicable.



Town of Swansboro Fire Department
609 West Corbett Avenue
Swansboro, NC 28584
(910)326-5908



Item III - b.

6. No Traffic Calming Devices shall be permitted unless approved by the Chief Fire Code Official.
7. Please ensure landscaping is designed to provide clear working space and at least 36" visibility around all fire protection equipment/fire hydrants.
8. Identify any "community grilling" locations (if applicable) construction to provide a clear and defensible space, not less than 6', around the area with an approved charcoal disposal container. These shall not be constructed with 50' of a structure.

Building Plan – Include

Below are a few items, not all, to ensure they are included on the building plans.

1. Identify the location of the Knox Box Key System for each structure.
2. Location of all sprinkler Riser Rooms and Alarm Panel Locations.
3. Fire Suppression System Drawings (Sprinkler & Standpipes)
4. Fire Alarm Drawings
5. Fire Extinguisher Locations (Will require one by the community grilling area – if applicable)

Town of Swansboro
601 W. Corbett Avenue Swansboro, NC 28584
Phone (910) 326-4428 - Fax (910) 326-3101

APPLICATION FOR ZONING & ORDINANCE AMENDMENTS

Check the Appropriate Blank

- Add a Use to a Zoning District
- Remove a Use from a Zoning District
- Create a New Zoning District
- Future Land Use Map Amendment

- Application No. _____
- Amend Code of Ordinances
 - Amend Unified Development Ordinance
 - Zoning District Designation Change

A complete application must be received with the fee by the third Friday prior to the month of review.

Property Owner Name Flybridge Swansboro, LLC Phone # 910-791-6707 (rep)

Address of Zoning Request 1481 W Corbett Ave, Swansboro, NC 28584

Mailing Address PO Box 130, Sanford, NC 27331

Zoning Amendments

Attach a copy of the legal description of the property (including address if assigned) that is requested for a zoning change (i.e. metes and bounds). The application will not be scheduled for review until these items are received.

Provide a list names and mailing address of adjacent property owner on the reverse side of this application. The application will not be scheduled for review until these items are received.

Present Zoning RA (Residential / Agriculture) Desired Zoning Conditional B-1

Probable Use of Property Multi-Family Residential & Commercial

Reason for Zoning Change Request *See attached narrative

Ordinance Amendments

Code Section to be amended _____

Print clearly the code section wordage to be amended _____

Print clearly the code section wordage as suggested _____

Reason for requested amendment _____

Signature Cory Date 10/30/24

Future Land Use Map Amendment

Present Future Land Use Category RA Desired Future Land Use Category Suburban Town Center

Use of Property Proposed Multi-Family Residential & Commercial

Reason for Future Land Use Map Change Request *See attached narrative

Town Hall Use Only

Fee Paid \$800 Date Received 11/8/24 Date scheduled for Planning & Zoning Board review 11/7/25

Recommendation from Planning & Zoning Board _____

Public Hearing Run Dates _____ Date of Public Hearing _____

Effective Date of Change _____ Ordinance Number _____



**Flybridge Swansboro
FLUM Amendment & Conditional Rezoning Narrative**

Subject Site

1481 W Corbett Ave
Swansboro, NC 28584
Tax Parcels: 019494 & 027733
+/- 38.92 Acres

Applicant/Owner Information

Flybridge Swansboro, LLC
PO Box 130
Sanford, NC 27331

Agent Information

Paramounte Engineering, Inc.
122 Cinema Drive
Wilmington, NC 28403
bschuler@paramounte-eng.com
910-791-6707

Proposal

Flybridge Swansboro, LLC, is requesting to amend the Future Land Use Map and conditionally rezone the subject site in order to construct a mixed-use development consisting of multi-family housing and commercial outparcels. The multi-family housing is also required to obtain a Special Use Permit.

The subject site is located on Hwy 24/W Corbett Ave near the intersection of Hwy 24 and Belgrade-Swansboro Rd. The subject site consists of two parcels totaling approximately 39 acres of land. The property was previously used for single-family residential and agricultural purposes.

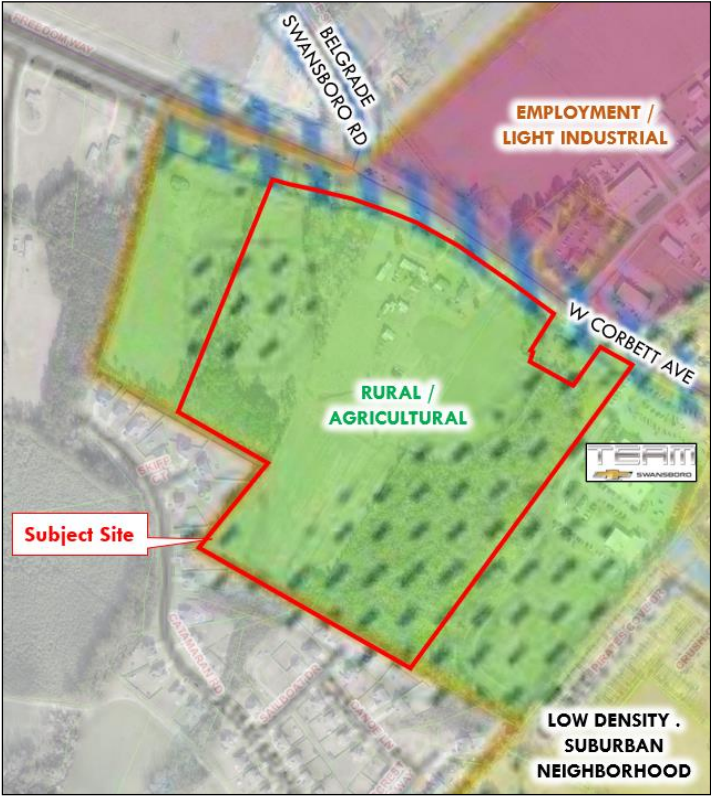
This proposal would amend the site's future land use classification to Suburban Town Center (STC) and rezone the property to a Conditional B1 district.

Future Land Use Map Amendment

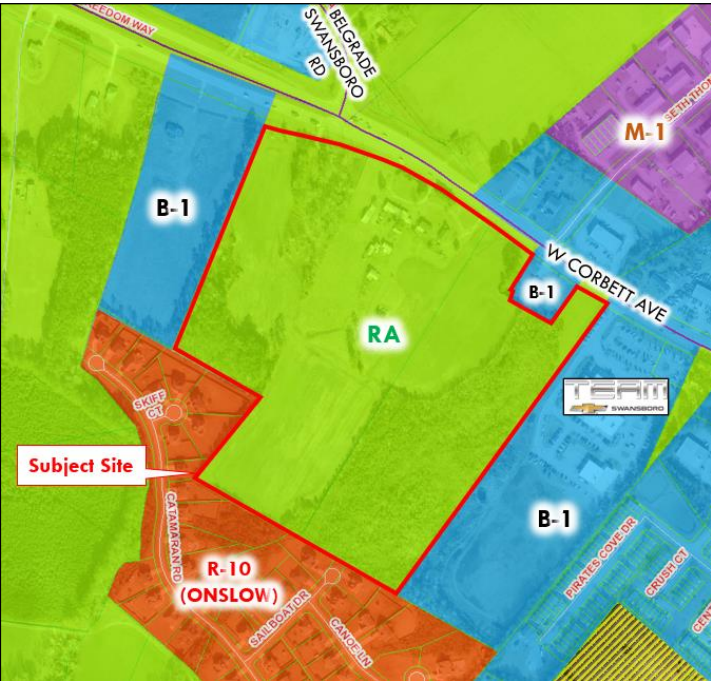
While the subject site is currently classified as Rural / Agricultural on the Future Land Use Map, its direct access to a major commercial corridor at a signalized intersection, along with existing and planned growth of the area make it more suitable for a mixed-use development. The Hwy 24 corridor heading east into Swansboro consists of many highway business land uses including grocery stores and large retailers, restaurants, car dealerships, offices, and auto service businesses. The CAMA Land Use Plan also recommends land directly across of the subject site to be developed for employment and light industrial uses.

In addition, the only other properties in this area classified as Rural / Agricultural are currently zoned for commercial purposes, with one of these properties having been developed with a Chevrolet dealership. The land directly across the site is also classified for Employment and Light Industrial development.

Future Land Use Map:



Zoning Map:



The applicant is requesting to amend the site's classification on the Future Land Use Map from Rural / Agricultural to Suburban Town Center. The Suburban Town Center is a highway commercial designation that promotes medium to high intensity uses on the NC 24 corridor and is in keeping with the existing land uses along the corridor. Specially the Suburban Town Center promotes:

- Commercial activities nodes that are more auto-oriented such as the intersections of Hammocks Beach Road or Queen's Creek Road with NC 24.
- Access to several businesses via easements, sidewalks, or a secondary road network.
- Mix of uses including higher density residential (up to 12 dwellings per acre) including townhomes and market-rate apartments with access to major thoroughfares and existing utilities.
- Development opportunities on greenfields or underutilized sites.
- Commercial services that supply the community and larger geographic area.
- Secondary internal street network to reduce curb cuts and turning movements along the major thoroughfare.
- Sidewalks throughout the development.

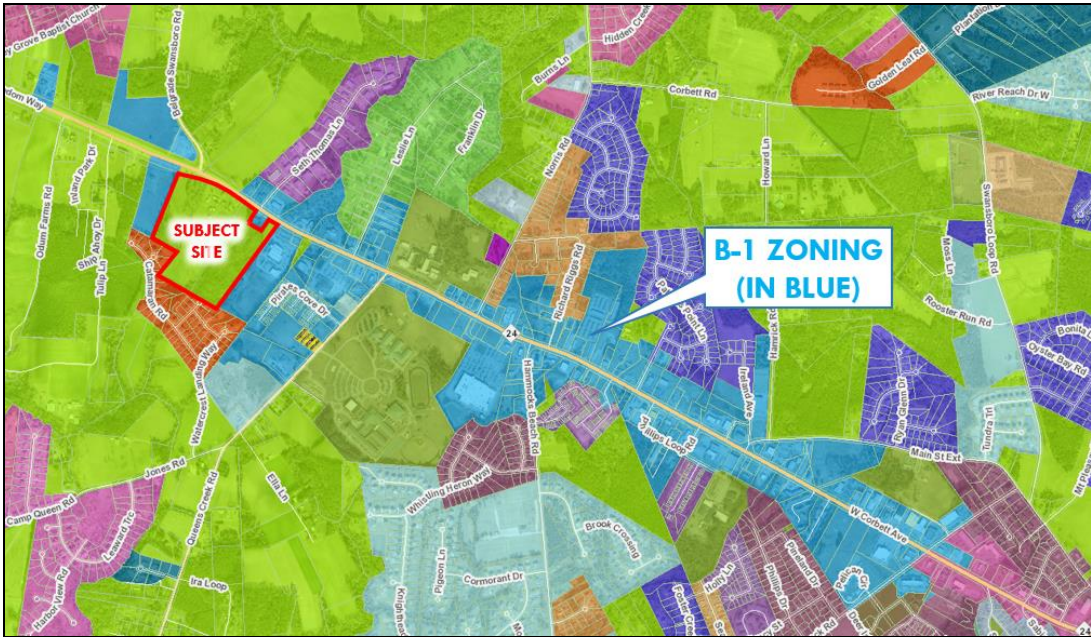
The site's location adjacent to a signalized intersection on NC 24 is consistent with the character of the Suburban Town Center classification, allowing convenient access to the community and surrounding area. In addition, the site's area of +/- 39 acres will allow for a mixture of uses, several commercial businesses, and an internal secondary road network. The mixture of uses positions people closer to the goods and services offered by the current and future commercial development, which helps reduce travel times and promotes alternative travel methods like walking and biking.

Conditional Rezoning

The applicant is requesting to rezone the site to a Conditional B1 district in order to construct a mixed-use development consisting of 324 multi-family units and six commercial outparcels. The proposed commercial district is consistent with the current zoning of the Hwy 24 corridor. As shown below, the vast majority of property along Hwy 24 is currently zoning B-1.

Following the goals of the Suburban Town Center classification, the proposed concept plan has been designed to provide for a secondary street network to reduce curb cuts on NC 24 and includes an internal sidewalk network. In addition, the proposed multi-family density at 10.6 dwellings per acre complies with the recommended maximum of 12 dwellings per acre for the Suburban Town Center classification.

The concept plan has been laid out to provide additional separation between the adjacent residential housing and proposed multi-family buildings. In addition to stormwater facilities being proposed along the rear portion of the site, existing jurisdictional wetlands will be preserved along the eastern side, contributing to a natural buffer.



A Traffic Impact Analysis has been completed for the proposal and approved by NCDOT. The project will make several improvements to the adjacent roadway including the installation of right turn lanes at the project’s entrances, and the extension of existing turn lanes at the NC 24/Belgrade-Swansboro Road intersection. Signal timing will also be optimized at this intersection and at the NC 24/Queens Creek Road intersection.

Overall, the proposed rezoning would be consistent with the current zoning of the Hwy 24 corridor and with the Suburban Town Center classification. The proposed development is designed to reduce impact to the surrounding residential housing, and will make improvements to the adjacent roadway system.

Parking Narrative

In accordance with standards for Conditional Rezoning, the proposal includes a variation from the off-street parking requirements for multi-family housing.

According to the Institute of Transportation Engineers (ITE) Parking Generation Manual, the proposed multi-family housing would generate an average parking peak of 1.27 vehicles per unit (411 spaces), and an 85th percentile demand of 1.59 vehicles per unit (515 spaces).

In addition, of the 324 units, 126 will be 1-bedroom units (about 39% of the units). The remaining units will consist of 162 2-bedroom units (50%) and 36 3-bedroom units (11%). Overall, the proposal will include 558 bedrooms, which is less than the provided 575 parking spaces.

Therefore, the proposed parking ratio of 1.77 spaces per unit (575 spaces) would accommodate the parking need for the proposal. By reducing the required parking, the proposal reduces unneeded impervious surface allowing for additional green/open space to be provided.

FLYBRIDGE SWANSBORO

W CORBETT AVE
SWANSBORO, NC

CONDITIONAL REZONING MASTER PLAN

NOVEMBER 2024

FOR

FLYBRIDGE SWANSBORO, LLC
PO BOX 130
SANFORD, NC 27331

NOTICE REQUIRED

ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES.

CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION.

CONTRACTORS SHALL CONTACT OVERHEAD ELECTRIC PROVIDER TO COMPLY WITH FEDERAL OSHA 1910.333 MINIMUM APPROACH DISTANCE TO ENERGIZED POWERLINES AND OSH 29 CFR 1926.1407-1411 MUST BE FOLLOWED.

CONTACT THESE UTILITIES

PENDER COUNTY PLANNING
PH: 910-326-4428

PIEDMONT NATURAL GAS
PH: 910-350-2242

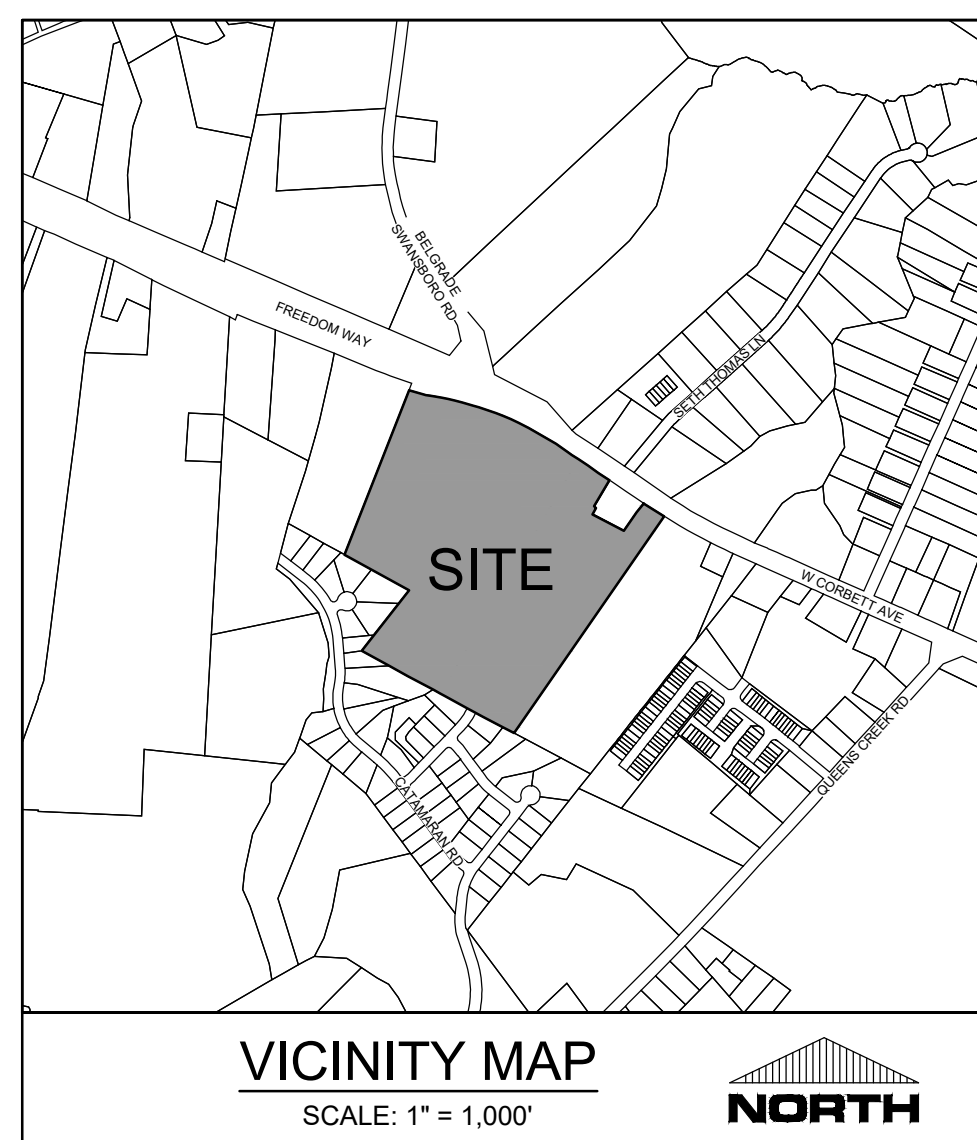
EMERGENCY DIAL 911
POLICE - FIRE - RESCUE

ONWASA (WATER & SEWER)
PH: 910-455-0722

DUKE ENERGY
PH: 910-602-4304

BELL SOUTH
PH: 910-341-0741

TIME WARNER CABLE
PH: 910-763-4638



Know what's below.

PRELIMINARY DESIGN - NOT RELEASED FOR CONSTRUCTION

FLYBRIDGE SWANSBORO
SWANSBORO, NORTH CAROLINA

PROJECT # 23124.PE

NOVEMBER 2024

SHEET INDEX

SHEET NUMBER	SHEET TITLE
C-0.0	COVER SHEET
EX-1	EXISTING CONDITIONS
C-2.0	MASTER PLAN / SITE PLAN
L-1.0	LANDSCAPE PLAN

APPROVALS:

CONSULTANTS:

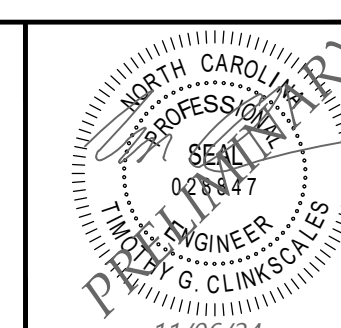
APPLICANT:
FLYBRIDGE SWANSBORO, LLC
PO BOX 130
SANFORD, NC 27331

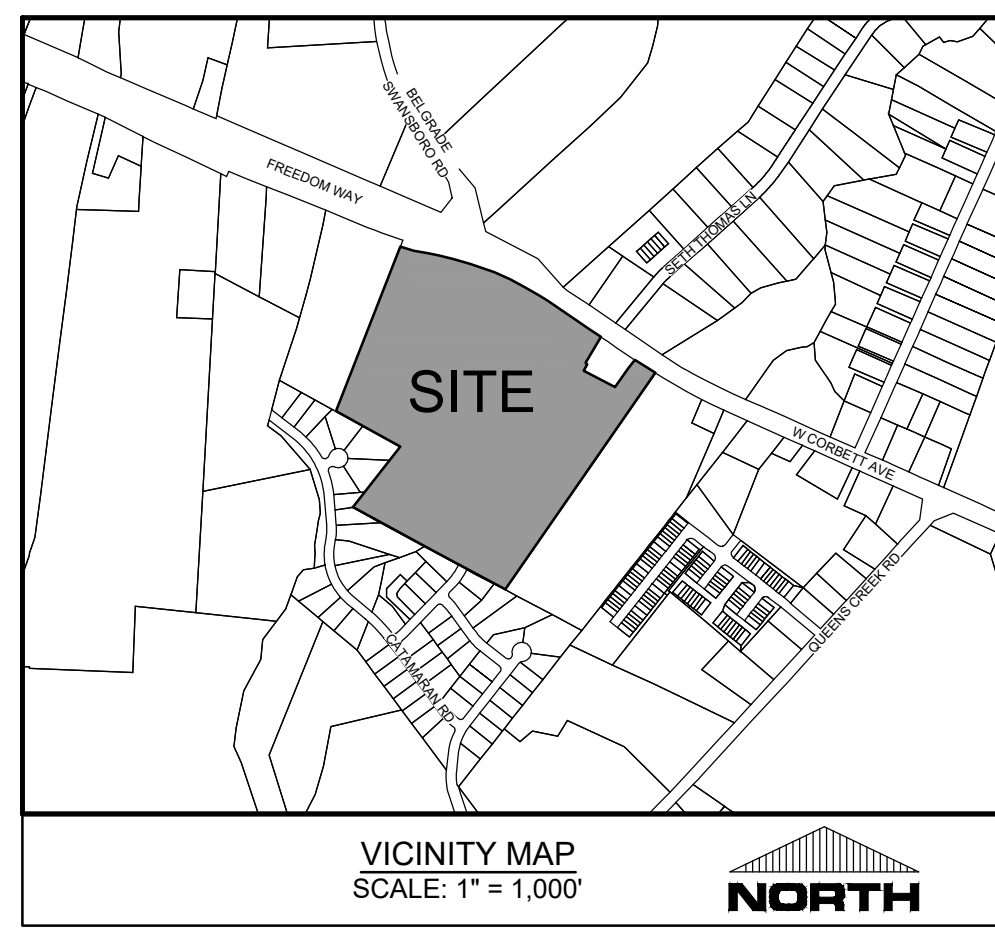
**ENGINEER /
LANDSCAPE ARCHITECT:**
PARAMOUNTE ENGINEERING, INC.
122 CINEMA DRIVE
WILMINGTON, NORTH CAROLINA 28403
P: (910) 791-6707
ATTN: TIM CLINKSCALE, PE (ENGINEERING)
ATTN: JIM CIRELLO (LANDSCAPE)

SURVEYOR :
PARAMOUNTE ENGINEERING, INC.
122 CINEMA DRIVE
WILMINGTON, NORTH CAROLINA 28403
P: (910) 791-6707
ATTN: JOSH TAYLOR, PLS

PREPARED BY:

PARAMOUNTE
ENGINEERING, INC.
122 Cinema Drive Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846





VICINITY MAP
SCALE: 1" = 1,000'



SITE DATA TABULATION	
PROJECT ADDRESS:	1481 W CORBETT AVE SWANSBORO, NC 28584
PROPERTY OWNER:	FLYBRIDGE SWANSBORO, LLC PO BOX 130 SANFORD, NC 27331
PARCEL ID:	019494 027733
PIN:	535503221934 535503227635
DEED BOOK / PAGE:	5998 / 846 6000 / 183
CURRENT ZONING:	RA (RESIDENTIAL / AGRICULTURAL)
TOTAL SITE AREA:	±38.92 ACRES OR 1,695,500 SF
PROPOSED USE:	MULTI-FAMILY / COMMERCIAL OUTPARCELS
PROPOSED ZONING:	CONDITIONAL B1
FLOOD INFORMATION:	THIS SITE IS NOT LOCATED IN A SPECIAL HAZARD AREA AS DETERMINED BY FEMA FLOOD PANEL 3720535500K, DATED JUNE 19, 2020
SOIL TYPES:	Ra - RAINS FINE SANDY LOAM GoA - GOLDSBORO FINE SANDY LOAM

DEVELOPMENT DATA

ACREAGE	
MULTI-FAMILY:	±30.53 AC
COMMERCIAL OUTPARCEL 1:	±1.68 AC
COMMERCIAL OUTPARCEL 2:	±0.66 AC
COMMERCIAL OUTPARCEL 3:	±1.17 AC
COMMERCIAL OUTPARCEL 4:	±1.04 AC
COMMERCIAL OUTPARCEL 5:	±1.28 AC
COMMERCIAL OUTPARCEL 6:	±0.84 AC
ROADWAYS:	±1.72 AC
TOTAL:	±38.92 AC

PRIVATE ROADWAY LENGTH:	1,484 LF
PROPOSED WATER LINE LENGTH:	4,028 LF
PROPOSED SEWER LINE LENGTH:	3,602 LF

MULTI-FAMILY (MF):	
PROPOSED RESIDENTIAL UNITS:	324 UNITS
PROPOSED RESIDENTIAL DENSITY:	10.6 DU / AC

SETBACKS:	
FRONT:	25'
SIDE:	13'
CORNER SIDE:	18'
REAR:	15'

MAX BUILDING HEIGHT:	40' (BUILDINGS LOCATED MORE THAN 200' FROM THE HWY 24 / CORBETT AVE CORRIDOR)
----------------------	---

PARKING PROVIDED:	575 TOTAL SPACES (1.77 SPACES PER UNIT) 28 ADA SPACES (11 REQUIRED)
-------------------	--

COMMERCIAL OUTPARCELS

SETBACKS:	
FRONT:	25'
INTERNAL SIDE:	0'
CORNER SIDE:	10'
SIDE ADJ. RESIDENTIAL:	10'
REAR:	10'

MAX BUILDING HEIGHT:

35'

ALLOWABLE USES:

- USES SHALL BE LIMITED TO THOSE PERMITTED IN THE B1 ZONING DISTRICT. REFER TO THE TABLE OF PERMITTED / SPECIAL USES (UDO SECTION 152.179) FOR USES PERMITTED BY-RIGHT AND BY SPECIAL USE.
- CERTAIN USES MAY BE SUBJECT TO ADDITIONAL USE STANDARDS AS NOTED ON THE TABLE OF PERMITTED / SPECIAL USES.
- THE APPLICABLE PERMITS AND ZONING APPROVALS SHALL BE OBTAINED FOR THE COMMERCIAL OUTPARCELS AT THE TIME OF THE DEVELOPMENT PROPOSAL.

ACCESSORY USES:

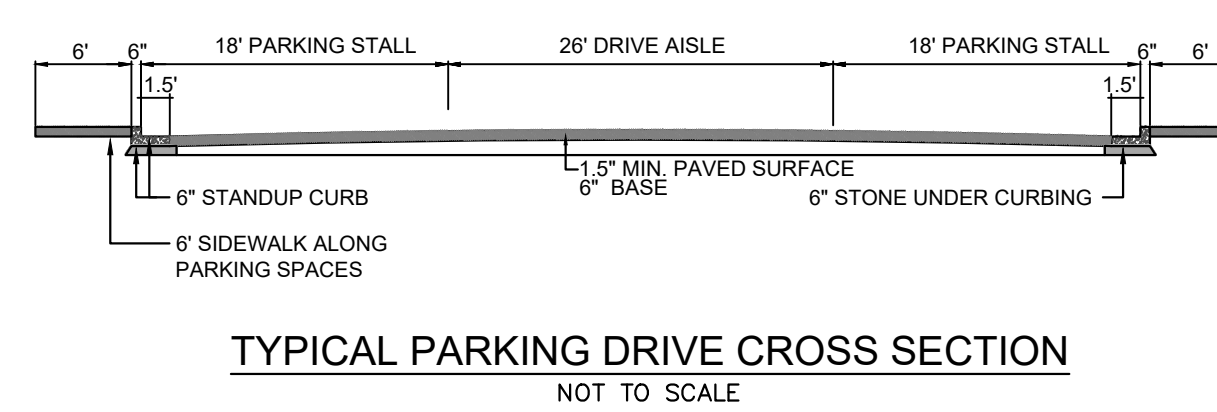
- ACCESSORY STRUCTURES SHALL BE SUBJECT TO THE SETBACKS LISTED IN TABLE 152.195 OF THE UDO.

LEGEND

- PROPERTY BOUNDARY
- - - ADJACENT PROPERTY BOUNDARY
- WET - WETLAND BOUNDARY
- W - WATER LINE
- SS - SEWER LINE
- S - STREETLIGHT
- FH - FIRE HYDRANT

GENERAL NOTES

- NO CHANGES TO ANY ASPECT OF THIS SITE PLAN, INCLUDING BUT NOT LIMITED TO, LANDSCAPING, GRADING, BUILDING ELEVATIONS, LIGHTING OR UTILITIES WILL BE MADE WITHOUT THE APPROVAL OF THE TOWN.
- THE SITE SHALL BE STABILIZED AND SEEDING PRIOR TO THE ISSUANCE OF A CERTIFICATION OF OCCUPANCY OR GUARANTEED BY APPROVED METHODS IF APPLICABLE.
- ALL REQUIRED IMPROVEMENT SHALL COMPLY WITH THE STANDARDS OF THE CODE OF ORDINANCES.

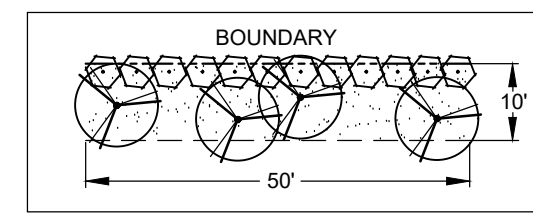


TYPICAL PARKING DRIVE CROSS SECTION
NOT TO SCALE



REQUIRED BUFFER YARDS

- THE PROPOSED MULTI-FAMILY AND COMMERCIAL OUTPARCELS SHALL PROVIDE A PERIMETER AND STREETSCAPE BUFFER.
- EXISTING VEGETATION SHALL BE PRESERVED WITHIN REQUIRED BUFFERS. IN AREAS WHERE EXISTING VEGETATION DOES NOT COMPLY WITH THE BELOW SPECIFICATIONS, ADDITIONAL LANDSCAPING SHALL BE INSTALLED.
- THE REQUIRED BUFFER SHALL BE A MINIMUM OF 10' IN WIDTH AND CONTAIN AT LEAST 2 CANOPY TREES OR FOUR UNDERSTORY TREES, AND 12 SHRUBS FOR EVERY 50 LINEAR FEET.
- THE BUFFER SHALL INCLUDE A 6' WOODED FENCE WHERE ABUTTING RESIDENTIALLY ZONED PROPERTY, EXCEPT IN AREAS THAT CONTAIN EXISTING WETLANDS.



PARKING LOT LANDSCAPING

- AT LEAST 8% OF THE GROSS PAVED AREA OF A PARKING FACILITY SHALL BE LANDSCAPED.
- CONSECUTIVE PARKING SPACES SHALL INCORPORATE LANDSCAPE ISLANDS NO MORE THAN 15 SPACES APART AND AT THE ENDS OF ALL PARKING ROWS.
- LANDSCAPE ISLANDS SHALL BE A MINIMUM OF 100 SQUARE FEET IN AREA AND AT LEAST 8 FEET IN WIDTH.

MF LANDSCAPING REQUIRED:	16,534 SF
8% OF THE 206,679 SF GROSS PAVED AREA	
LANDSCAPING PROVIDED:	21,502 SF (10.4%)

SCREENING

- ALL TRASH CONTAINMENT AREAS SHALL BE SCREENED WITH AN ENCLOSURE AT LEAST 8 FEET IN HEIGHT OR 2 FEET TALLER THAN THE HIGHEST POINT OF THE COMPACTOR / DUMPSTER (WHICHEVER IS GREATER).
- THE ENCLOSURE SHALL BE MADE OF A MASONRY, WOOD, OR SIMILAR MATERIAL THAT IS 80% OPAQUE.
- THE ENCLOSURE SHALL BE SURROUNDED BY A CONTINUOUS LANDSCAPE BUFFER.

TRAFFIC

- A TRAFFIC IMPACT ANALYSIS (TIA) HAS BEEN COMPLETED AND WAS APPROVED BY NCDOT. REQUIRED ROADWAY IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH NCDOT STANDARDS.

STREETLIGHTS

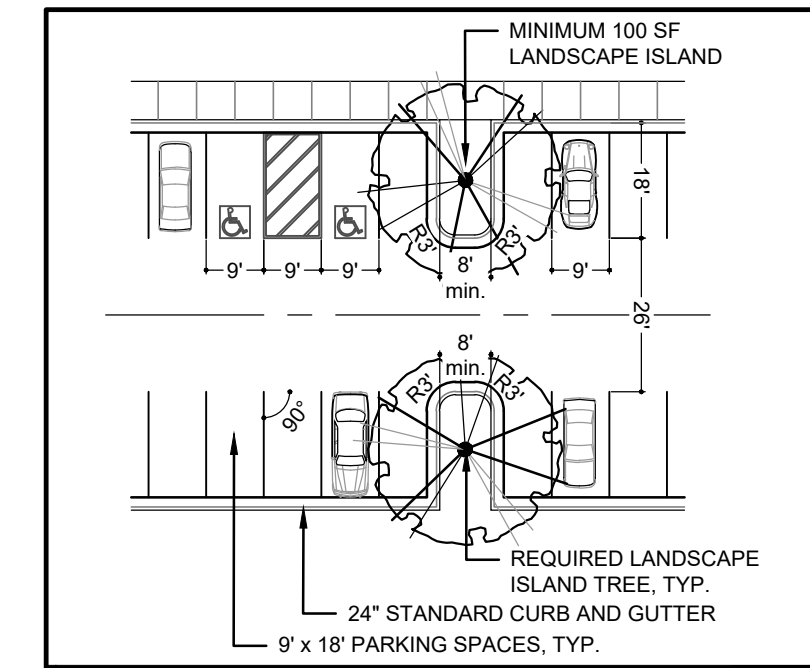
- STREETLIGHT LOCATIONS SHOWN ON PLAN ARE PRELIMINARY. FINAL DESIGN AND LOCATIONS WILL BE PROVIDED AND MUST COMPLY WITH THE LIGHTING REQUIREMENTS FOUND IN SECTIONS 152.500 - 152.512 OF THE UDO.

EXISTING VEGETATION SHALL SERVE AS THE REQUIRED BUFFER. WHERE EXISTING VEGETATION IS INADEQUATE TO PROVIDE THE REQUIRED BUFFERING, ADDITIONAL VEGETATION SHALL BE INSTALLED AS SHOWN IN BUFFER PLANTING DETAIL, THIS SHEET.

6' SIDEWALKS ALONG PARKING SPACES

9' X 18' PARKING SPACES

PARKING LOT LANDSCAPING, TYP.



TYPICAL 90° PARKING SPACE DETAIL - NOT TO SCALE

DRIVEWAY STEM LENGTHS PROVIDED IN ACCORDANCE WITH APPROVED TIA

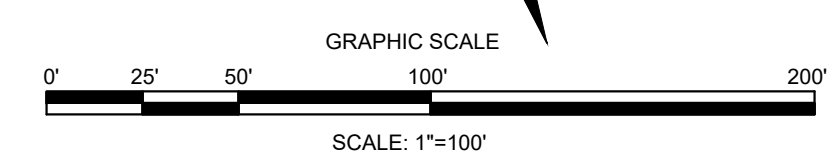
PROPOSED RIGHT TURN LANE

PROPOSED OFFSET LEFT TURN LANES

EXISTING RIGHT TURN LANE TO BE EXTENDED IN ACCORDANCE WITH THE TIA



Know what's below.
Call before you dig.



Item III - b.

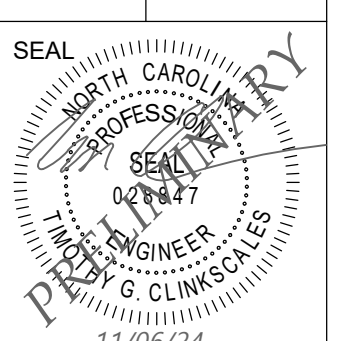
REVISIONS:

CLIENT INFORMATION:

PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6700 (F)
NC License #: C-2846

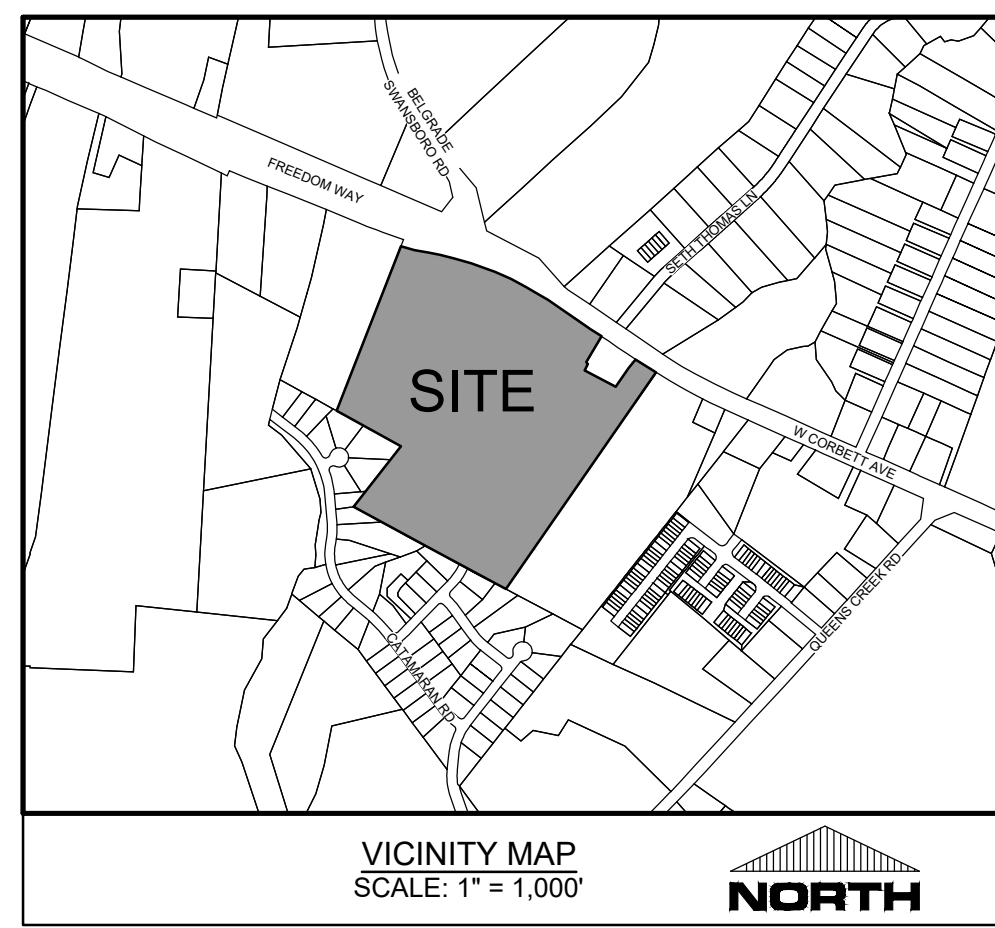
SITE PLAN
FLYBRIDGE SWANSBORO
1481 W CORBETT AVE
SWANSBORO, NC 28584

PROJECT STATUS:
CONCEPTUAL LAYOUT:
FINAL DESIGN:
RELEASED FOR CONSTRUCTION



C-2.0
PEI JOB#: 23124 PE

PRELIMINARY DESIGN - NOT RELEASED FOR CONSTRUCTION



VICINITY MAP
SCALE: 1" = 1,000'

NORTH

SITE DATA TABULATION

PROJECT ADDRESS: 1481 W CORBETT AVE
SWANSBORO, NC 28584

PROPERTY OWNER: FLYBRIDGE SWANSBORO, LLC
PO BOX 130
SANFORD, NC 27331

PARCEL ID: 019494
027733

PIN: 535503221934
535503227635

DEED BOOK / PAGE: 5998 / 846
6000 / 183

CURRENT ZONING: RA (RESIDENTIAL / AGRICULTURAL)

TOTAL SITE AREA: ±38.92 ACRES OR 1,695,500 SF

PROPOSED USE: MULTI-FAMILY / COMMERCIAL OUTPARCELS
PROPOSED ZONING: CONDITIONAL B1

FLOOD INFORMATION: THIS SITE IS NOT LOCATED IN A SPECIAL HAZARD AREA AS DETERMINED BY FEMA FLOOD PANEL 3720535500K, DATED JUNE 19, 2020

GENERAL LANDSCAPING NOTES

- SPECIFIC LANDSCAPING SHOWN ON THIS PLAN IS FOR THE MULTI-FAMILY SECTION OF THE DEVELOPMENT. LANDSCAPE PLANS FOR THE COMMERCIAL OUTPARCELS TO BE PROVIDED AT THE TIME OF THE SITE PLAN REVIEW FOR THE OUTPARCELS.
- ALL TREE AND PLANT MATERIAL SELECTION SHALL BE NATIVE OR ADAPTABLE TO THE SWANSBORO REGION AND ITS CLIMATE.
- EACH SHRUB SHALL BE A MINIMUM OF 3 GALLONS AND 12 INCHES IN HEIGHT AT THE TIME OF PLANTING.
- EACH TREE SHALL BE A MINIMUM OF 3 INCHES IN CALIPER AND 12 FEET IN HEIGHT AT THE TIME OF PLANTING.

REQUIRED BUFFER YARDS

- THE PROPOSED MULTI-FAMILY AND COMMERCIAL OUTPARCELS SHALL PROVIDE A PERIMETER AND STREETSCAPE BUFFER.
- EXISTING VEGETATION SHALL BE PRESERVED WITHIN REQUIRED BUFFERS. IN AREAS WHERE EXISTING VEGETATION DOES NOT COMPLY WITH THE BELOW SPECIFICATIONS, ADDITIONAL LANDSCAPING SHALL BE INSTALLED.
- THE REQUIRED BUFFER SHALL BE A MINIMUM OF 10' IN WIDTH AND CONTAIN AT LEAST 2 CANOPY TREES OR FOUR UNDERSTORY TREES, AND 12 SHRUBS FOR EVERY 50 LINEAR FEET.
- THE BUFFER SHALL INCLUDE A 6' WOODED FENCE WHERE ABUTTING RESIDENTIALLY ZONED PROPERTY, EXCEPT IN AREAS THAT CONTAIN EXISTING WETLANDS.

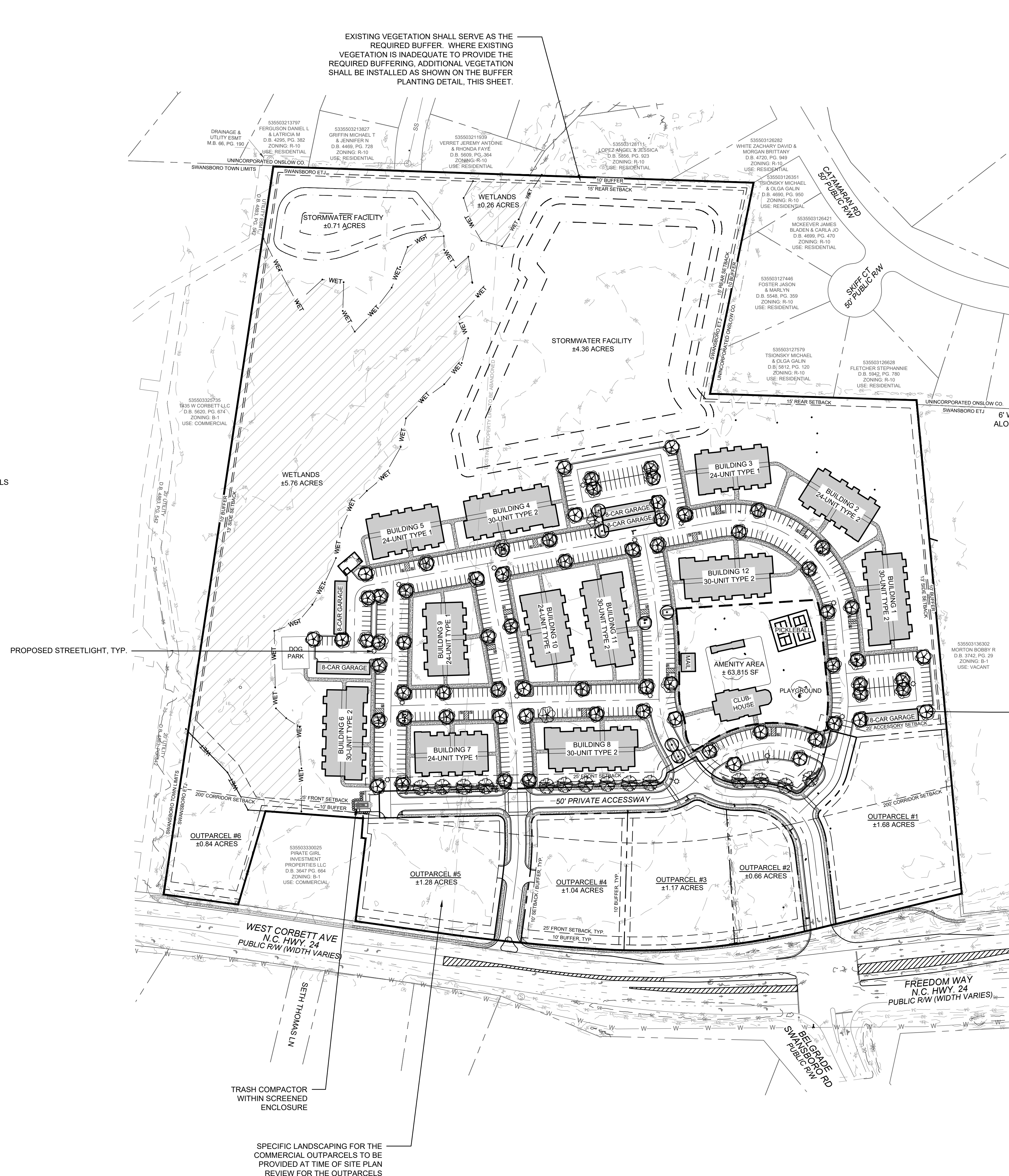
PARKING LOT LANDSCAPING

- AT LEAST 8% OF THE GROSS PAVED AREA OF A PARKING FACILITY SHALL BE LANDSCAPED.
- CONSECUTIVE PARKING SPACES SHALL INCORPORATE LANDSCAPE ISLANDS NO MORE THAN 15 SPACES APART AND AT THE ENDS OF ALL PARKING ROWS.
- LANDSCAPE ISLANDS SHALL BE A MINIMUM OF 100 SQUARE FEET IN AREA AND AT LEAST 8 FEET IN WIDTH.

MF LANDSCAPING REQUIRED: 16,534 SF
8% OF THE 206,679 SF GROSS PAVED AREA
LANDSCAPING PROVIDED: 21,502 SF (10.4%)

SCREENING

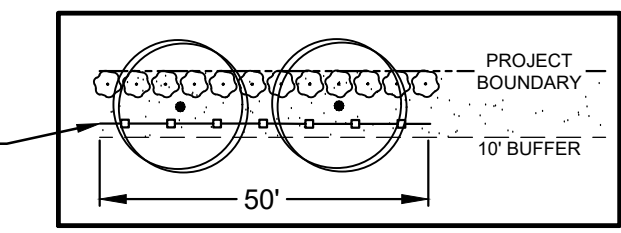
- ALL TRASH CONTAINMENT AREAS SHALL BE SCREENED WITH AN ENCLOSURE AT LEAST 8 FEET IN HEIGHT OR 2 FEET TALLER THAN THE HIGHEST POINT OF THE COMPACTOR / DUMPSTER (WHICHEVER IS GREATER).
- THE ENCLOSURE SHALL BE MADE OF A MASONRY, WOOD, OR SIMILAR MATERIAL THAT IS 80% OPAQUE.
- THE ENCLOSURE SHALL BE SURROUNDED BY A CONTINUOUS LANDSCAPE BUFFER.



EXISTING VEGETATION SHALL SERVE AS THE REQUIRED BUFFER. WHERE EXISTING VEGETATION IS INADEQUATE TO PROVIDE THE REQUIRED BUFFERING, ADDITIONAL VEGETATION SHALL BE INSTALLED AS SHOWN ON THE BUFFER PLANTING DETAIL, THIS SHEET.

PLANT SCHEDULE BUFFERYARD

SYMBOL	QTY	BOTANICAL / COMMON NAME	SIZE
TREES			
	2	MAGNOLIA GRANDIFLORA / SOUTHERN MAGNOLIA	3" CAL / 12' H (MIN)
SHRUBS			
	12	MYRICA CERIFERA / WAX MYRTLE	3 GAL / 12" HT



BUFFERYARD PLANTING LAYOUT

PLANT SCHEDULE STREETYARD BUFFER

SYMBOL	QTY	BOTANICAL / COMMON NAME	SIZE
CANOPY TREES			
	14	QUERCUS VIRGINIANA / SOUTHERN LIVE OAK	3" CAL / 12' H (MIN)
SHRUBS			
	172	CALLICARPA AMERICANA / AMERICAN BEAUTYBERRY	3 GAL / 12" HT

PLANT SCHEDULE PARKING LOT

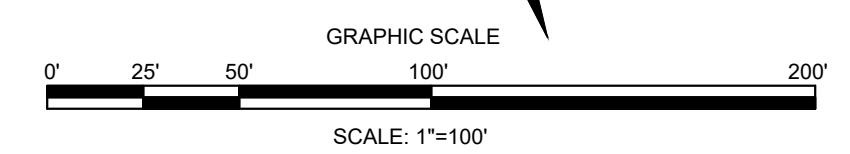
SYMBOL	QTY	BOTANICAL / COMMON NAME	SIZE
CANOPY TREES			
	66	QUERCUS NUTTALLII / NUTTALL OAK	10' - 12' H

PLANT SCHEDULE SCREENING

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONTAINER
	MC	21	MYRICA CERIFERA / WAX MYRTLE	3 GAL / 12" HT



Know what's below.
Call before you dig.



Item III - b.

REVISIONS:

CLIENT INFORMATION:
FLYBRIDGE SWANSBORO LLC
PO BOX 130
SANFORD, NC 27331

ENGINEERING INFORMATION:
PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

LANDSCAPE PLAN
FLYBRIDGE SWANSBORO
1481 W CORBETT AVE
SWANSBORO, NC 28584

PROJECT STATUS:
CONCEPTUAL LAYOUT:
FINAL DESIGN:
RELEASED FOR CONSTRUCTION

DRAWING INFORMATION:
SCALE: 1" = 100'
DESIGNED: [Signature]
CHECKED: [Signature]

SEAL:
PROFESSIONAL ENGINEER
PEI G. CLUNK, No. 1100
11/06/24

L-1.0

PEI JOB#: 23124.PE

PRELIMINARY DESIGN - NOT RELEASED FOR CONSTRUCTION



**SCHEMATIC ELEVATION
FLYBRIDGE SWANSBORO
SEPTEMBER 27, 2023**





**SCHEMATIC ELEVATION
FLYBRIDGE SWANSBORO
SEPTEMBER 27, 2023**



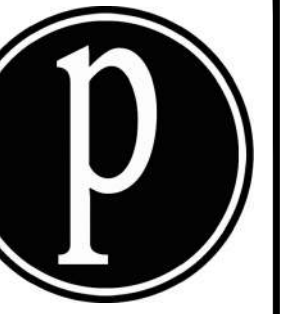


**SCHEMATIC ELEVATION
FLYBRIDGE SWANSBORO
SEPTEMBER 27, 2023**



EXTERIOR ELEVATION MATERIALS LEGEND

TAG	DESCRIPTION
1	HARDIE PLANK LAP SIDING (CEDARMILL): 7" EXPOSURE
2	HARDIE PANEL SIDING (SMOOTH) WITH 2" BATTENS ("RUSTIC GRAIN")
3	HARDIE PANEL SIDING (SMOOTH) WITH 2" BATTENS ("RUSTIC GRAIN") AT 24" O.C.
4	30 YEAR ARCHITECTURAL ASPHALT SHINGLES
5	HARDIE PLANK 3 1/2" TRIM BOARD, "RUSTIC GRAIN"
6	HARDIE PLANK 5 1/2" TRIM BOARD, "RUSTIC GRAIN"
7	HARDIE PLANK 7 1/4" TRIM BOARD, "RUSTIC GRAIN"
8	HARDIE PLANK 9 1/4" TRIM BOARD, "RUSTIC GRAIN"
9	HARDIE PLAN 11 1/4" TRIM BOARD, "RUSTIC GRAIN"
10	PRESSURE TREATED WOOD GUARDRAIL PAINTED WHITE
11	AWNING WITH METAL ROOF



PLAGEMAN ARCHITECTURE
BURLINGTON SWANSBORO

FOR REVIEW ONLY

NOT FOR CONSTRUCTION

SCHEMATIC DESIGN DRAWINGS FOR
FLYBRIDGE SWANSBORO
SWANSBORO, NORTH CAROLINA

REVISIONS

JOB NUMBER
PA2304

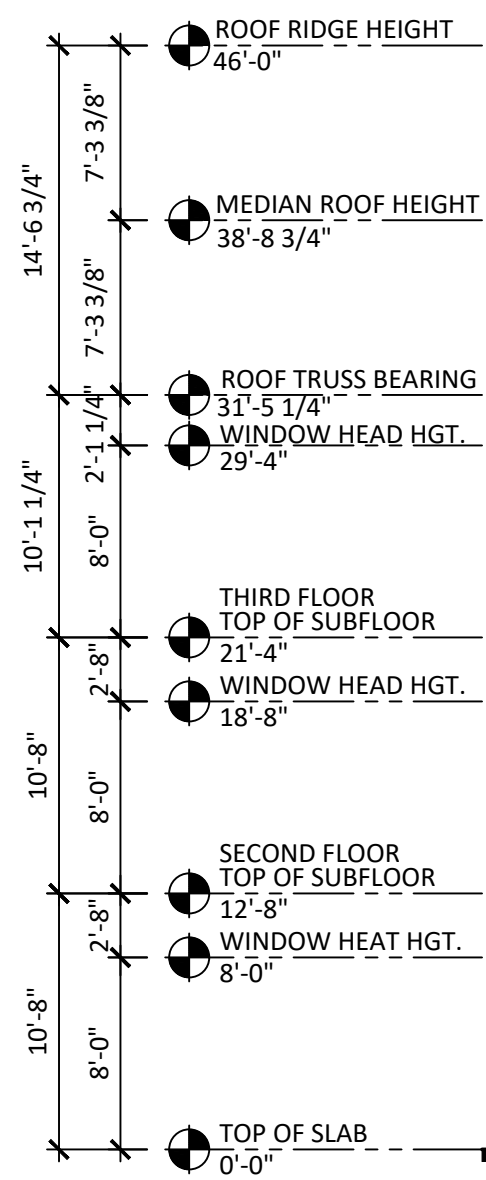
DRAWN BY: (PARCH)

SHEET NAME
COVER SHEET

SHEET NUMBER

AP000

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FLYBRIGE APARTMENTS

BUILDING TYPE ONE EXTERIOR ELEVATION

1 FRONT ELEVATION
SCALE: 1/8" = 1'-0"

PARAMOUNT

ENGINEERING, INC.

Community Meeting Report for Flybridge Swansboro

Conditional Rezoning by Flybridge Swansboro, LLC

Two community meetings were held by the applicant to discuss the Flybridge Swansboro proposal with interested neighbors. Notice of the meetings was mailed to owners of all properties located within one mile of the perimeter of the parcel boundaries as listed on the Onslow County tax records. The meetings were held on November 25, 2024 from 2:00pm-4:00pm and from 5:00-7:00pm at the Swansboro Recreation Center, 830 Main Street Ext, Swansboro, NC 28584.

In addition to the below summary of the meeting, the following items are attached:

1. A list of the adjacent property owners to whom written notice was mailed;
2. A copy of the written notice; and
3. A list of the parties who attended the meeting.

General information on the project was provided at the meeting including wetland preservation, project architecture, number of bedrooms, use of the commercial outparcels, proposed stormwater facilities, site access points, as well as discussion on the Traffic Impact Analysis and the proposed roadway improvements.

- Traffic
 - *Several neighbors had concerns about the existing traffic back up, specifically near the Food Lion area and school traffic.*
 - *The proposed development has completed a Traffic Impact Analysis (TIA) which was reviewed and approved by NCDOT. As a result of the TIA, the developer is required to install several roadway improvements along the Hwy 24 corridor. The improvements include the installation of right turn lanes at the project's entrances, and the extension of existing turn lanes at the NC 24/Belgrade-Swansboro Road intersection. Signal timing will also be optimized at this intersection and at the NC 24/Queens Creek Road intersection. With the proposed improvements, the studied intersections can operate at the same or better level of services as without the development.*
- Buffering
 - *Many neighbors asked how the project would be buffered.*
 - *The Town's zoning regulations require a buffer to be installed around the project. The buffer will include a 6-foot wooden fence abutting residentially zoned property (except in areas that contain existing wetlands). Existing vegetation will be retained within the preserved wetlands and in buffer areas. It was noted that our concept plan showed less preservation than discussed – we have altered that graphic for Board review. Additional landscaping will be installed within the buffer in areas where existing vegetation is inadequate to provide the required screening. In addition, stormwater facilities are proposed in the rear of the site resulting in*

the multi-family buildings to be located farther from the adjacent single-family homes.

- **Stormwater**
 - *Neighbors expressed concerns about flooding.*
 - *The project is required to comply with local and State stormwater regulations. Stormwater facilities will be provided within the development that are designed to collect and treat all stormwater runoff generated by the site. In addition, our engineers are examining designing the system for a 200-year storm event.*
- **Commercial Uses**
 - *Neighbors were interested in the types of proposed commercial uses.*
 - *The exact uses that will occupy the commercial outparcels are unknown at this time but would be limited to businesses permitted in the B1 zoning district. The TIA studied a range of commercial uses including a convenience store with gas sales, restaurants, and strip-style commercial that would typically have a mixture of office, retail, and restaurant establishments.*
- **Concerns with Multi-Family Housing**
 - *Many residents expressed fear and concern over apartments, but when it was explained they were market-rate, some were relieved. Not everyone wanted apartments in their community.*
 - *Because the apartments are market rate, the exact rental rates are not known at this time but will likely average approximately \$1,500 a month. The site has been designed with stormwater facilities in the rear resulting in increased setbacks for the multi-family buildings. The multi-family building closest to an existing residential lot is setback approximately 90 feet from the project boundary. This will allow for additional buffering to be preserved along the boundary. The multi-family housing is also required to obtain a Special Use Permit which is considered by the Board of Commissioners at a separate public hearing.*
- **School Impact**
 - *Many residents were concerned about the impact of the development on area schools.*
 - *The proposed multi-family housing will consist of approximately 50% 2-bedroom units, 40% 1-bedroom units, and 10% 3-bedroom units. While school children are expected to live within the development, the proposed unit sizes would typically result in smaller household sizes and less school age children than a typical single-family development of the same size. In addition, one target demographic for the apartments would be government workers, such as entry-level teachers. The proposed development will also increase the tax base providing more funds that could be made available to the school system.*
- **Tax Base**
 - *Several residents had concerns about the development utilizing Town services without paying Town taxes.*
 - *While it cannot be a condition of the rezoning and is subject to the property owner's request and Town approval, it is the intention of the owner to petition for annexation into the Town.*
- **Timeline**
 - *If the rezoning is approved, it is anticipated that construction would begin in 2026.*



TRAFFIC IMPACT ANALYSIS

FOR

FLYBRIDGE

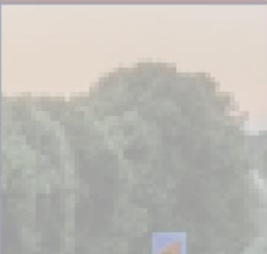
LOCATED

IN

SWANSBORO, NC

Prepared For:

Carolina Commercial Contractors
1600 Colon Road
Sanford, NC



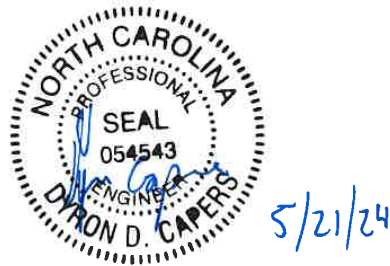
MAY 2024

DRMP Project No. 23103

Prepared By: GB

Reviewed By: DC

**TRAFFIC IMPACT
ANALYSIS
FOR
FLYBRIDGE
LOCATED IN
SWANSBORO, NC**



Prepared For:

Carolian Commercial Contractors
1600 Colon Road
Sanford, NC

Prepared By:

DRMP, Inc.
License #F-1524

TRAFFIC IMPACT ANALYSIS FLYBRIDGE

Swansboro, North Carolina

EXECUTIVE SUMMARY

1. Development Overview

A Traffic Impact Analysis (TIA) was conducted for the proposed Olive Ridge development in accordance with the Swansboro (Town) Unified Development Ordinance (UDO) and North Carolina Department of Transportation (NCDOT) capacity analysis guidelines. The proposed Flybridge development to be located south of NC 24 and east of Queens Creek Road in Swansboro, North Carolina. The proposed development, anticipated to be completed in 2026, is assumed to consist of 306 apartments, 35,000 square feet (s.f.) shopping plaza, 7,000 s.f. high-turnover restaurant, 3,000 s.f. fast-food restaurant with drive-through, and a convenience store with a gas station with 12 fueling positions. Site access is proposed via one full movement driveway creating a fourth leg to the intersection of NC 24 and Belgrade Swansboro Road and two right-in/right-out driveways along NC 24.

2. Existing Traffic Conditions

The study area for the TIA was determined through coordination with the North Carolina Department of Transportation (NCDOT) and the Town of Swansboro (Town) and consists of the following existing intersections:

- NC 24 & Belgrade Swansboro Road (signalized)
- NC 24 & Queens Creek Road (signalized)
- NC 24 & Norris Road (signalized)
- NC 24 & Hammocks Beach Road (signalized)
- Belgrade-Swansboro Road & Swansboro Loop Road (unsignalized)

Existing peak hour traffic volumes were determined based on traffic counts conducted at the study intersection listed above, in May of 2023 during a typical weekday AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak periods. Traffic volumes were balanced between study intersections, where appropriate.

3. Future Traffic Conditions

Through coordination with the NCDOT and the Town, it was determined that an annual growth rate of 3% would be used to generate 2026 projected weekday AM and PM peak hour traffic volumes. It was also determined that a seasonal growth of 7% in addition to the annual growth rate of 3% would be used to generate 2027 (Build year +1) projected weekday AM and PM peak hour traffic volumes. The following adjacent developments were identified to be included as an approved adjacent development in this study:

- Swansboro Wawa
- West Corbett Avenue Starbucks

4. Site Trip Generation

Average weekday daily, AM peak hour, and PM peak hour trips for the proposed development were estimated using methodology contained within the ITE Trip Generation Manual, 11.1 Edition. Table E-1, on the following page, provides a summary of the trip generation potential for the site.

Table E-1: Site Trip Generation

Land Use (ITE Code)	Intensity	Daily Traffic (vpd)	Weekday AM Peak Hour Trips (vph)		Weekday PM Peak Hour Trips (vph)	
			Enter	Exit	Enter	Exit
Multifamily Housing Low Rise (220)	306 Units	2,038	28	90	96	56
Strip Retail Plaza (822)	35,000 s.f.	1,708	40	26	95	94
High-Turnover Restaurant (932)	7,000 s.f.	750	37	30	38	25
Fast-Food Restaurant with Drive- Through (934)	3,000 s.f.	1,402	68	66	52	47
C-Store with Gas Station (945)	12 VFP	3,182	97	97	111	111
Total Trips		9,080	270	309	391	334
<i>Internal Capture (14% AM & 10% PM) *</i>			-27	-35	-34	-28
Total External Trips			243	274	357	306
<i>Pass-By Trips: Shopping Center (29% PM)</i>			-0	-0	-24	-24
<i>Pass-By Trips: High-Turnover Restaurant (43% PM)</i>			-0	-0	-12	-12
<i>Pass-By Trips: Fast-Food Restaurant with Drive-Through (49% AM, 50% PM)</i>			-33	-33	-27	-27
<i>Pass-By Trips: C-Store with Gas Station (76% AM, 75% PM)</i>			-63	-63	-75	-75
Total Primary Trips			147	178	219	168

*Utilizing methodology contained in the NCHRP Report 684.

To estimate traffic conditions with the site fully built-out, the total site trips were added to the 2026 and 2027 no-build traffic volumes to determine the 2026 and 2027 build traffic volumes. The study analyzes traffic conditions during the weekday AM and PM peak hours for the following scenarios:

- 2023 Existing Traffic Conditions
- 2026 No-Build Traffic Conditions
- 2026 Build Traffic Conditions
- 2026 Build Traffic Conditions with Improvements
- 2027 No-Build Traffic Conditions
- 2027 Build Traffic Conditions
- 2027 Build Traffic Conditions with Improvements

5. Capacity Analysis Summary

The analysis considered weekday AM and PM peak hour traffic for 2023 existing, 2026 and 2027 no-build, and 2026 and 2027 build conditions. Refer to Section 7 of the TIA for the capacity analysis summary performed at each study intersection.

6. Recommendations

Based on the findings of this study, specific geometric and traffic control improvements have been identified at study intersections. The improvements are summarized below and are illustrated in Figure E-1.

Recommended Improvements by Developer

NC 24 & Belgrade-Swansboro Road/Access A

- Restripe the existing southbound left-turn lane to a shared left-through lane.
- Extend the westbound left-turn lane to 500 feet of storage and appropriate taper length.
- Construct the northbound approach with one ingress lane and two egress lanes striped as a shared left-through lane and a right-turn lane.
- Construct an eastbound right-turn lane with 100 feet of storage and appropriate taper length.
- Signal timing modifications.

NC 24 & Queens Creek Road/School Exit

- Signal timing modifications.

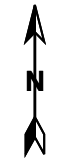
NC 24 & Access B

- Construct the northbound approach with one ingress lane and one egress lane striped as a right-turn lane.
- Provide stop control for the northbound approach.
- Construct an eastbound right-turn lane with 100 feet of storage and appropriate taper length.

NC 24 & Access C

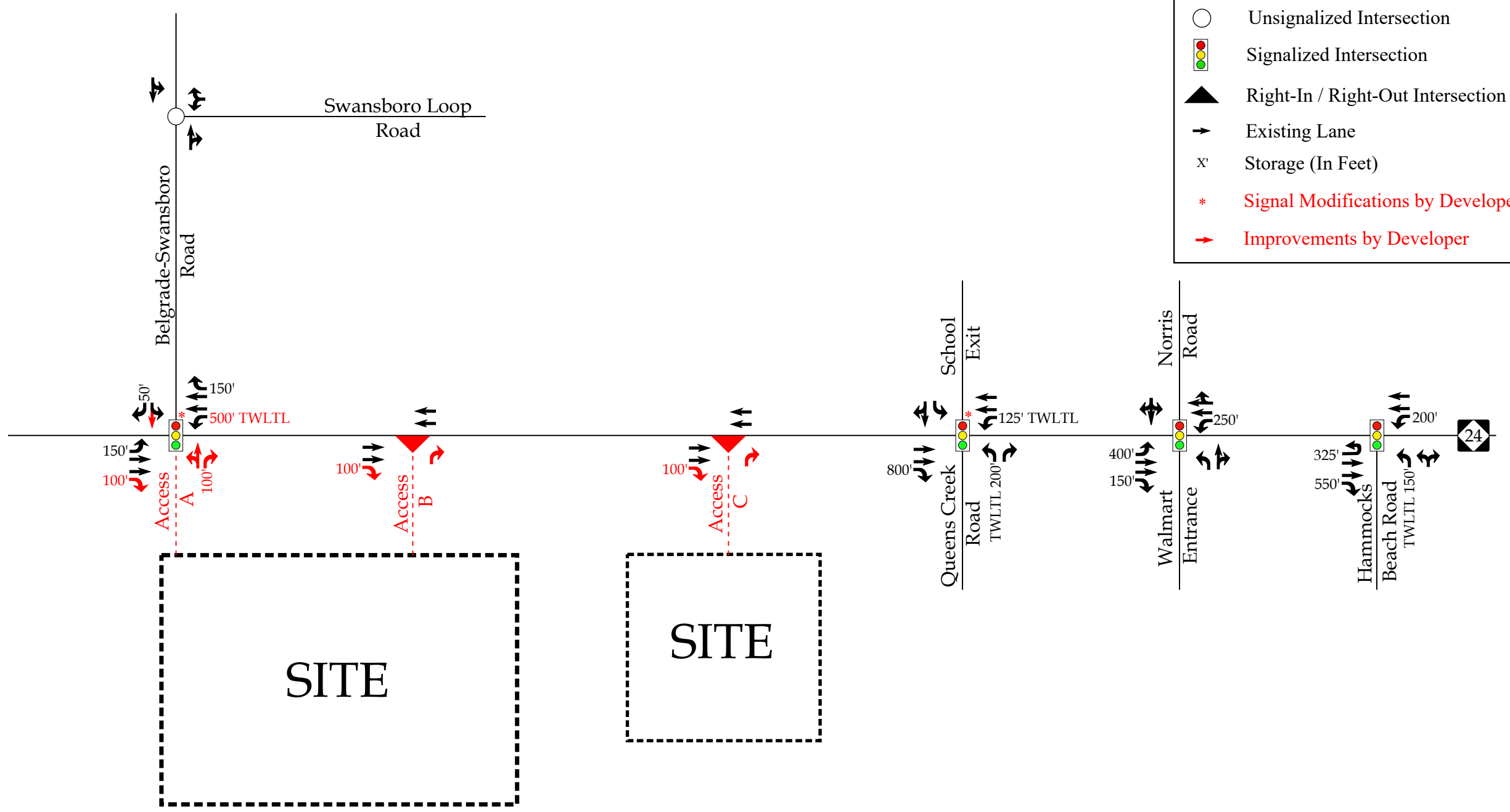
- Construct the northbound approach with one ingress lane and one egress lane striped as a right-turn lane.
- Provide stop control for the northbound approach.
- Construct an eastbound right-turn lane with 100 feet of storage and appropriate taper length.

Item III - b.



LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In / Right-Out Intersection
- Existing Lane
- x' Storage (In Feet)
- * Signal Modifications by Developer
- ➔ Improvements by Developer




	Flybridge Swansboro, NC	Recommended Lane Configurations	
		Scale: Not to Scale	Figure E-1

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TRAFFIC IMPACT ANALYSIS

FLYBRIDGE Swansboro, North Carolina

1. INTRODUCTION

The contents of this report present the findings of the Traffic Impact Analysis (TIA) conducted for the proposed development to be located south of NC 24 and west of Queens Creek Road in Swansboro, North Carolina. The purpose of this study is to determine the potential impacts to the surrounding transportation system created by traffic generated by the proposed development, as well as recommend improvements to mitigate the impacts.

The proposed development, anticipated to be completed in 2026, is assumed to consist of the following uses:

- 306 apartment units
- 35,000 s.f. shopping plaza
- 7,000 s.f. high-turnover restaurant
- 3,000 s.f. fast-food restaurant with drive-through
- Convenience store with gas station with 12 fueling positions

The study analyzes traffic conditions during the weekday AM and PM peak hours for the following scenarios:

- 2023 Existing Traffic Conditions
- 2026 No-Build Traffic Conditions
- 2026 Build Traffic Conditions
- 2026 Build Traffic Conditions with Improvements
- 2027 No-Build Traffic Conditions
- 2027 Build Traffic Conditions
- 2027 Build Traffic Conditions with Improvements

1.1. Site Location and Study Area

The development is proposed to be located south of NC 24 and east of Queens Creek Road in Swansboro, North Carolina. Refer to Figure 1 for the site location map.

The study area for the TIA was determined through coordination with the North Carolina Department of Transportation (NCDOT) and the Town of Swansboro (Town) and consists of the following existing intersections:

- NC 24 & Belgrade Swansboro Road (signalized)
- NC 24 & Queens Creek Road (signalized)
- NC 24 & Norris Road (signalized)
- NC 24 & Hammocks Beach Road (signalized)
- Belgrade-Swansboro Road & Swansboro Loop Road (unsignalized)

Refer to Appendix A for the approved scoping documentation.

1.2. Proposed Land Use and Site Access

The site is expected to be located south of NC 24 and west of Queens Creek Road. The proposed development, anticipated to be completed in 2026, is assumed to consist of the following uses:

- 306 apartment units
- 35,000 s.f. shopping plaza
- 7,000 s.f. high-turnover restaurant
- 3,000 s.f. fast-food restaurant with drive-through
- Convenience store with gas station with 12 fueling positions

Site access is proposed via one full movement driveway creating a fourth leg to the intersection of NC 24 and Belgrade Swansboro Road and two right-in/right-out driveway along NC 24. Refer to Figure 2 for a copy of the preliminary site plan.

1.3. Adjacent Land Uses

The proposed development is located in an area consisting primarily of commercial development and residential development.

1.4. Existing Roadways

Existing lane configurations (number of traffic lanes on each intersection approach), speed limits, storage capacities, and other intersection and roadway information within the study area are shown in Figure 3. Table 1 provides a summary of this information, as well.

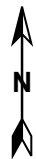
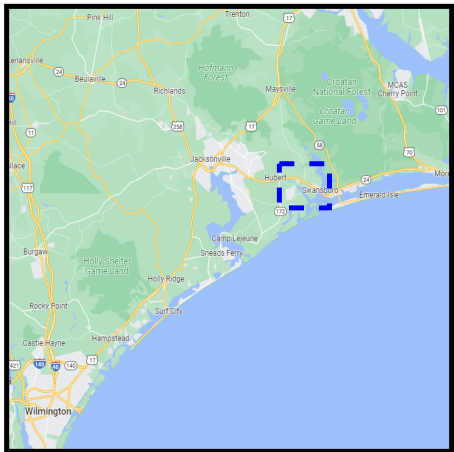
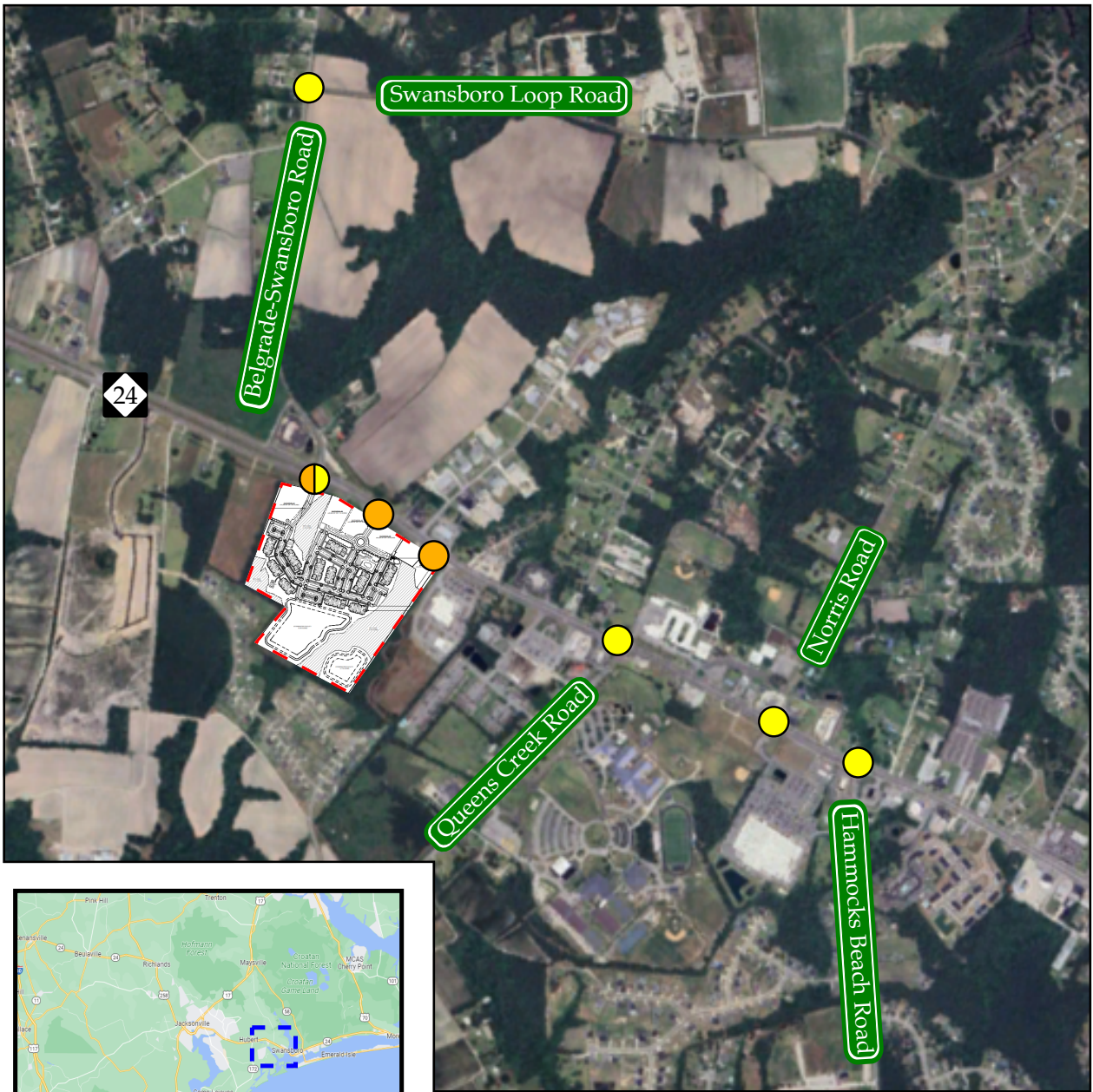
Table 1: Existing Roadway Inventory

Road Name	Route Number	Typical Cross Section	Speed Limit	2019 AADT (vpd)
W Corbett Avenue	NC 24	4-lane divided	35 mph/45 mph	29,000
Belgrade Swansboro Road	SR 1434	2-lane undivided	50 mph	5,400**
Queens Creek Road	1509	2-lane undivided	45 mph	14,000
Norris Road	SR 1445	2-lane undivided	45 mph	710***
Hammocks Beach Road	SR 1511	2-lane undivided	45 mph	3,400*
Swansboro Loop Road	SR 1444	2-lane undivided	45 mph	1,600

*ADT from 2016

**ADT from 2018

***ADT based on the traffic counts from 2023 and assuming the weekday PM peak hour volume is 10% of the average daily traffic.



LEGEND

- Study Intersection
- Proposed Site Access
- Study Area



Flybridge
Swansboro, NC

Site Location Map

Scale: Not to Scale

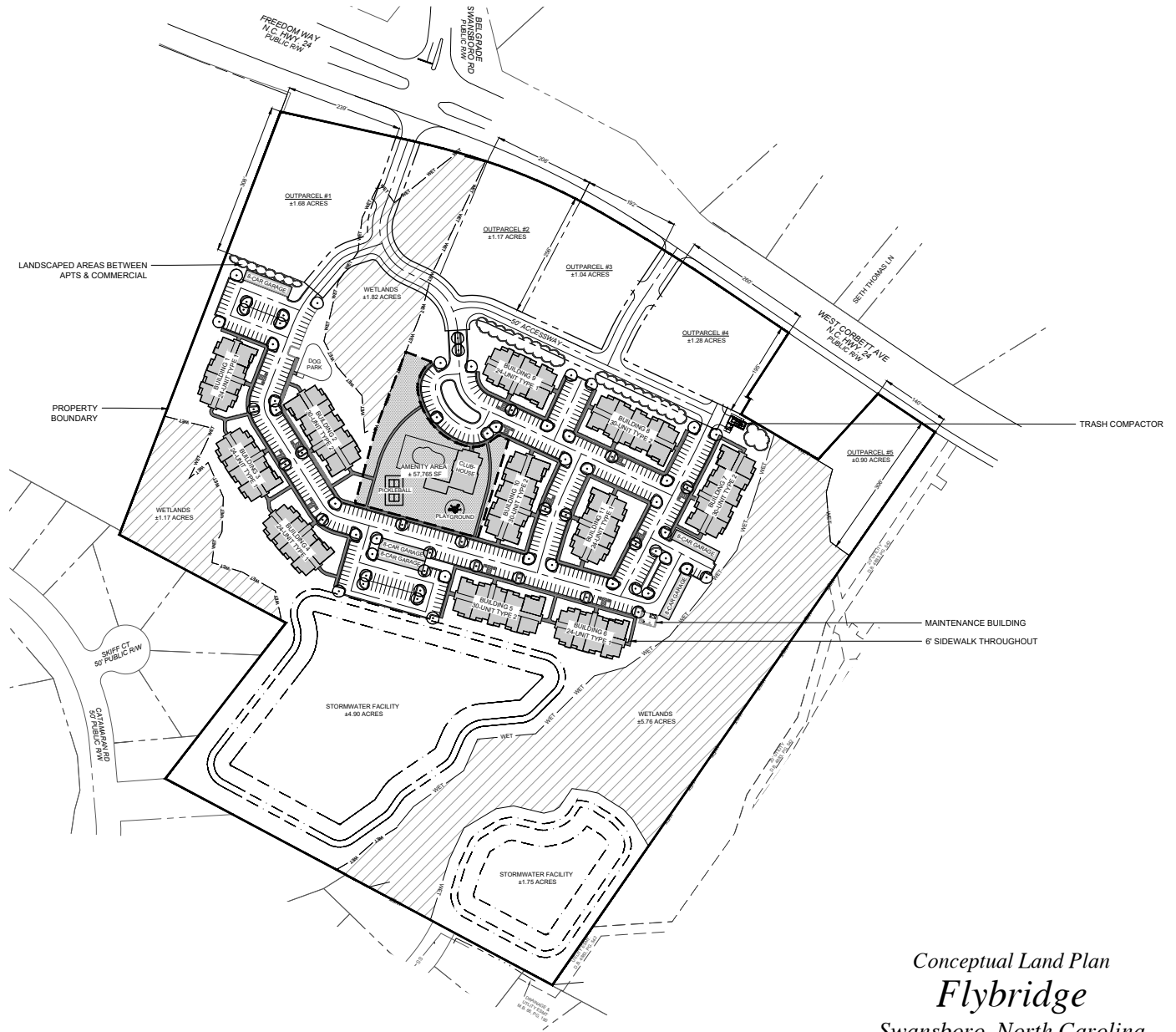
Figure 1

SITE DATA
 ADDRESS: 1481 W CORBETT AVE
 PID: 019494
 027733
 SITE ACREAGE: ±38.92 AC
 CURRENT ZONING: RA (RESIDENTIAL/AGRICULTURAL)
 PROPOSED USE: APARTMENTS
 COMMERCIAL OUTPARCELS

DEVELOPMENT DATA
COMMERCIAL ACREAGE
 OUTPARCEL 1: ±1.68 AC
 OUTPARCEL 2: ±1.17 AC
 OUTPARCEL 3: ±1.04 AC
 OUTPARCEL 4: ±1.28 AC
 OUTPARCEL 5: ±0.90 AC
 TOTAL: ±6.07 AC

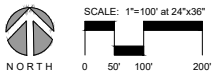
APARTMENT ACREAGE: ±30.48 AC
 PROPOSED UNITS: 300 UNITS IN 11 BUILDINGS
 DENSITY: 9.6 DU/AC
 REQUIRED AREA (R6 DISTRICT): 20.7 AC*
 *9,000 SF PLUS 3,000 SF PER EACH UNIT OVER 2
 APT. PARKING REQUIRED: 600 SPACES (2 PER UNIT)
 APT. PARKING PROVIDED: 513 TOTAL SPACES (1.71 PER UNIT)
 40 GARAGE SPACES
 473 SURFACE SPACES

APARTMENT DIMENSIONAL STANDARDS (R6 DISTRICT)
SETBACKS
 FRONT: 25'
 SIDE, INTERIOR: 13'
 SIDE, CORNER: 18'
 REAR: 25'
 MAX. HEIGHT: 35'
 MAX. GROSS BLDG. AREA: 40,000 SF



Prepared by:
PARAMOUNTE
 ENGINEERING, INC.

Date: 26 June 2023



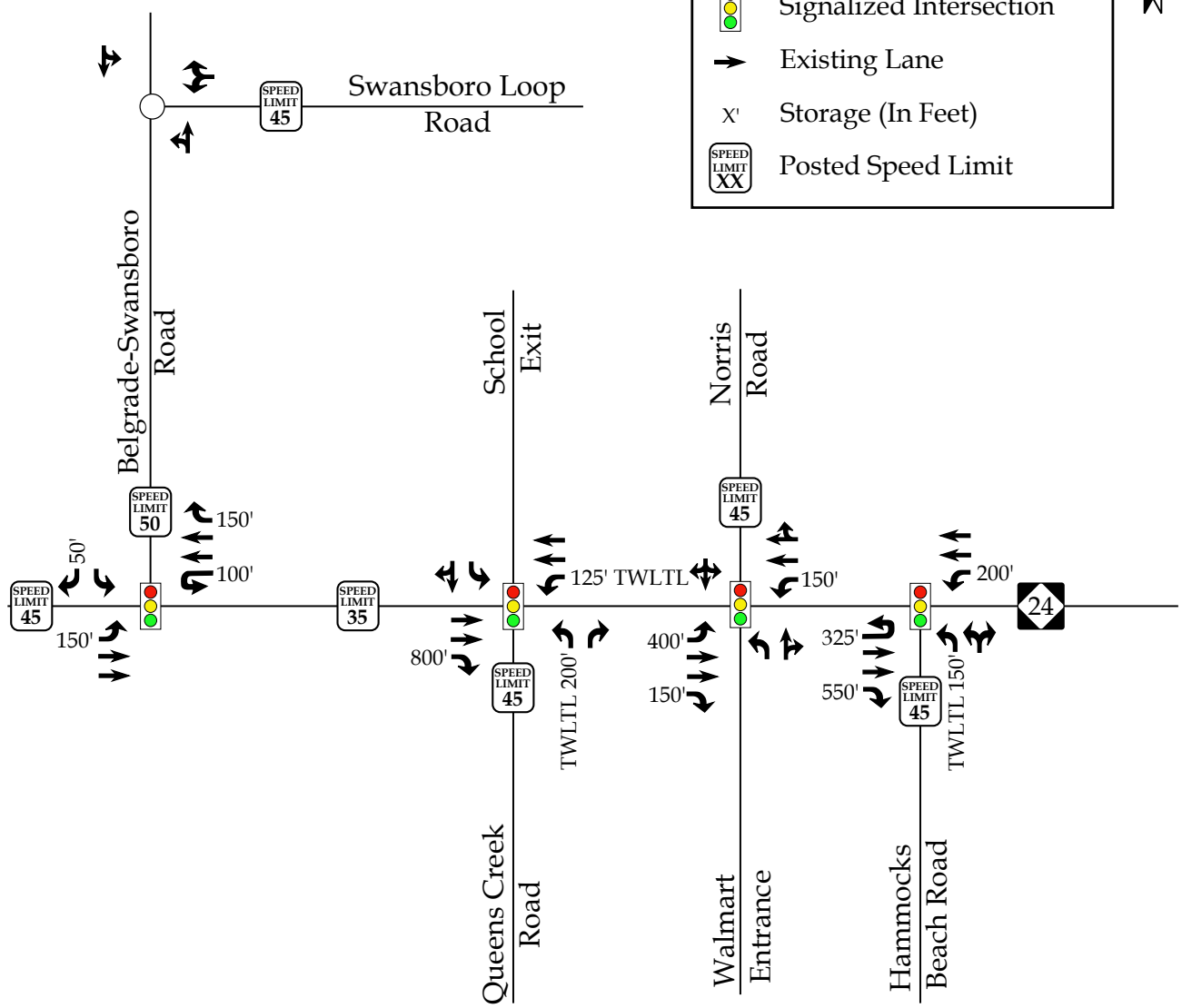
Preliminary, Not For Construction. This site plan is a graphic representation and should be utilized for discussion purposes only. This site plan approximates existing conditions relating to structures, wetlands, roads, parking, vegetation and property boundaries. Plan components may change based upon regulatory and municipal regulations and requirements at the time of approvals and/or development activity.

Conceptual Land Plan
Flybridge
 Swansboro, North Carolina

Item III - b.

LEGEND

- Unsignalized Intersection
- ⬆️⬆️⬆️ Signalized Intersection
- ➔ Existing Lane
- X' Storage (In Feet)
- Posted Speed Limit



	<p>Flybridge Swansboro, NC</p>	<p>2023 Existing Lane Configurations</p>	
		<p>Scale: Not to Scale</p>	<p>Figure 3</p>

2. 2023 EXISTING PEAK HOUR CONDITIONS

2.1. 2023 Existing Peak Hour Traffic Volumes

Existing peak hour traffic volumes were determined based on traffic counts conducted at the study intersections listed below, in May of 2023 during a typical weekday AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak periods:

- NC 24 & Belgrade Swansboro Road
- NC 24 & Queens Creek Road
- NC 24 & Norris Road
- NC 24 & Hammocks Beach Road
- Belgrade-Swansboro Road & Swansboro Loop Road



Weekday AM and PM traffic volumes were balanced between study intersections, where appropriate. Refer to Figure 4 for 2023 existing weekday AM and PM peak hour traffic volumes. A copy of the count data is located in Appendix B of this report.

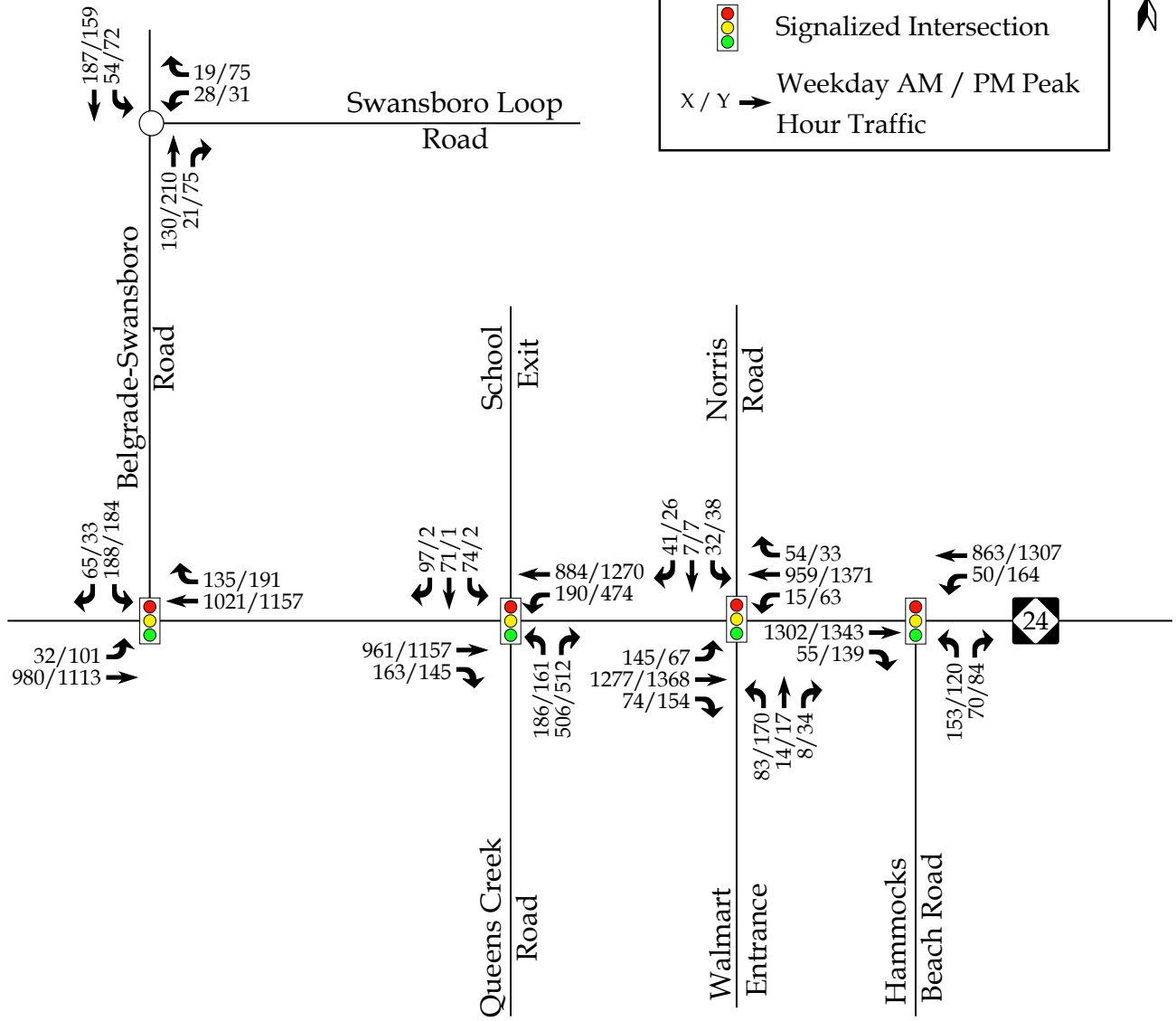
2.2. Analysis of 2023 Existing Peak Hour Traffic Conditions

The 2023 existing weekday AM and PM peak hour traffic volumes were analyzed to determine the current levels of service at the study intersections under existing roadway conditions. Signal information was obtained from NCDOT and is included in Appendix C. The results of the analysis are presented in Section 7 of this report.


Item III - b.

LEGEND

-  Unsignalized Intersection
-  Signalized Intersection
- X / Y → Weekday AM / PM Peak Hour Traffic



Note: Based on NCDOT Congestion Management guidelines, a volume of 4 vehicles per hour (vph) was analyzed for any movement with less than 4 vph.

	Flybridge Swansboro, NC	2023 Existing Peak Hour Traffic	
		Scale: Not to Scale	Figure 4

3. 2026 and 2027 NO-BUILD PEAK HOUR CONDITIONS

In order to account for growth of traffic and subsequent traffic conditions at a future year, no-build traffic projections are needed. No-build traffic is the component of traffic due to the growth of the community and surrounding area that is anticipated to occur regardless of whether or not the proposed development is constructed. No-build traffic is comprised of existing traffic growth within the study area and additional traffic created as a result of adjacent approved developments.

3.1. Ambient Traffic Growth

Through coordination with the NCDOT and the Town, it was determined that an annual growth rate of 3% would be used to generate 2026 projected weekday AM and PM peak hour traffic volumes. Refer to Figure 5a for 2026 projected peak hour traffic. It was also determined that a seasonal growth rate of 7% in addition to the annual growth rate of 3% would be used to generate 2027 projected weekday AM and PM peak hour traffic volumes. Refer to Figure 5b for 2027 projected peak hour traffic.

3.2. Adjacent Development Traffic

Through coordination with the NCDOT and the Town, the following adjacent developments were identified to be included as an approved adjacent development in this study:

- Swansboro Wawa
- West Corbett Avenue Starbucks

Table 2, on the following page, provides a summary of the adjacent developments.

Table 2: Adjacent Development Information

Development Name	Location	Build-Out Year	Land Use / Intensity	TIA Performed
Swansboro Wawa	Southwest corner of W. Corbett Avenue (NC 24) and Hammocks Beach Road	2023	5,915 s.f. convenience store with 16 fueling positions	February of 2023 by TPD
West Corbett Avenue Starbucks	South of NC 24 and west of Hammocks Beach Road	2023	2,223 s.f. coffee shop with drive-through	September of 2022 by Stantec

It should be noted that the adjacent developments were approved, during scoping, by the NCDOT and the Town. Adjacent development trips are shown in Figure 6. Adjacent development information can be found in Appendix D.

3.3. Future Roadway Improvements

Based on coordination with the NCDOT and the Town, it was determined there were no future roadway improvements to consider with this study.

3.4. 2026 and 2027 No-Build Peak Hour Traffic Volumes



The 2026 and 2027 no-build traffic volumes were determined by projecting the 2023 existing peak hour traffic to the years 2026 and 2027 and adding the adjacent development trips. Refer to Figure 7a for an illustration of the 2026 no-build peak hour traffic volumes at the study intersections. Refer to Figure 7b for an illustration of the 2027 no-build peak hour traffic volumes at the study intersections.

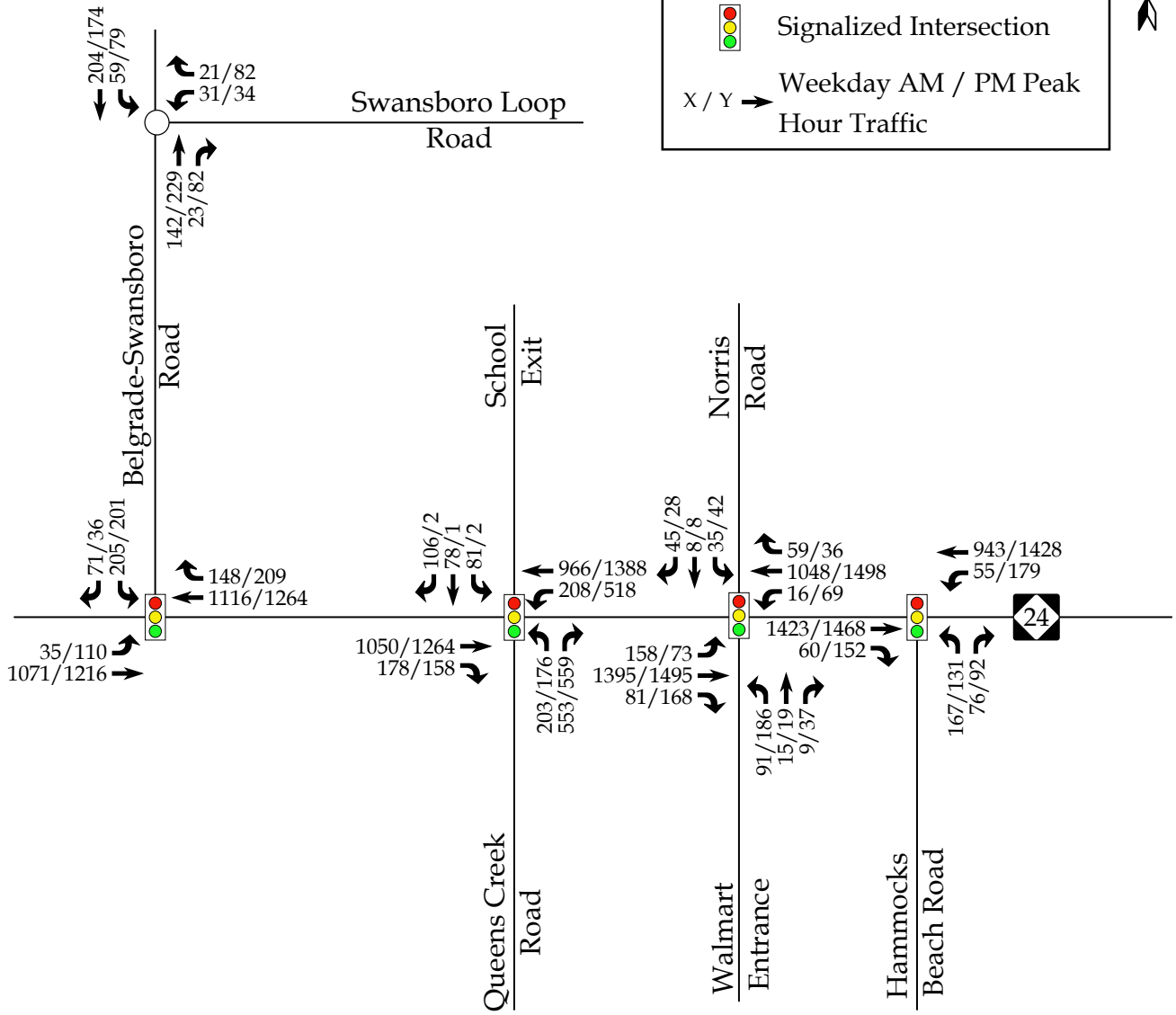
3.5. Analysis of 2026 and 2027 No-Build Peak Hour Traffic Conditions


The 2026 and 2027 no-build AM and PM peak hour traffic volumes at the study intersections were analyzed with future geometric roadway conditions and traffic control. The analysis results are presented in Section 7 of this report.

Item III - b.

LEGEND



-  Unsignalized Intersection
-  Signalized Intersection
- X / Y → Weekday AM / PM Peak Hour Traffic

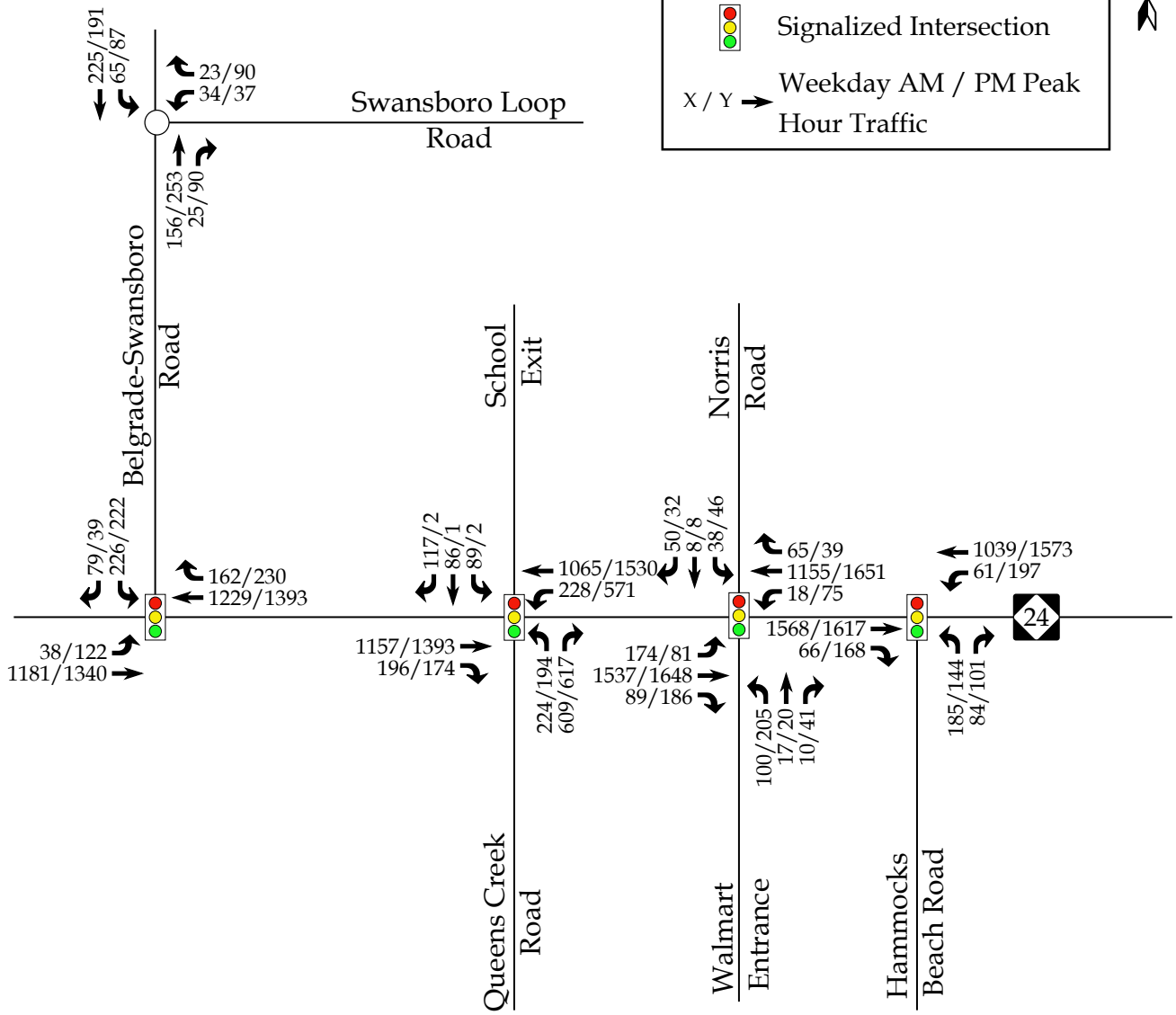



	Flybridge Swansboro, NC	2026 Projected Peak Hour Traffic	
		Scale: Not to Scale	Figure 5a

Item III - b.

LEGEND

-  Unsignalized Intersection
-  Signalized Intersection
- X / Y → Weekday AM / PM Peak Hour Traffic

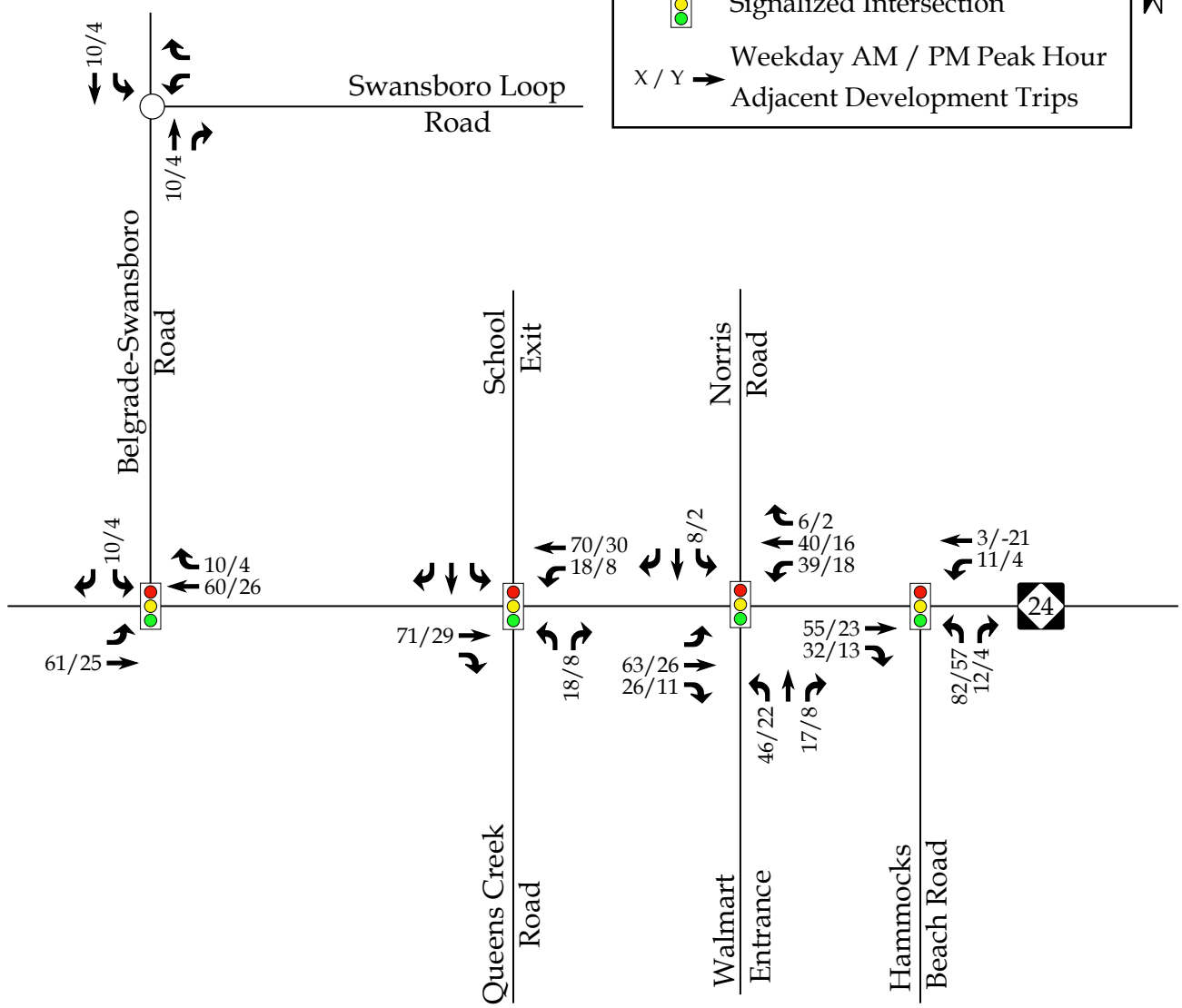


	Flybridge Swansboro, NC		2027 Projected Peak Hour Traffic	
			Scale: Not to Scale	Figure 5b

Item III - b.

LEGEND



- Unsignalized Intersection
- ◫ Signalized Intersection
- X / Y → Weekday AM / PM Peak Hour Adjacent Development Trips

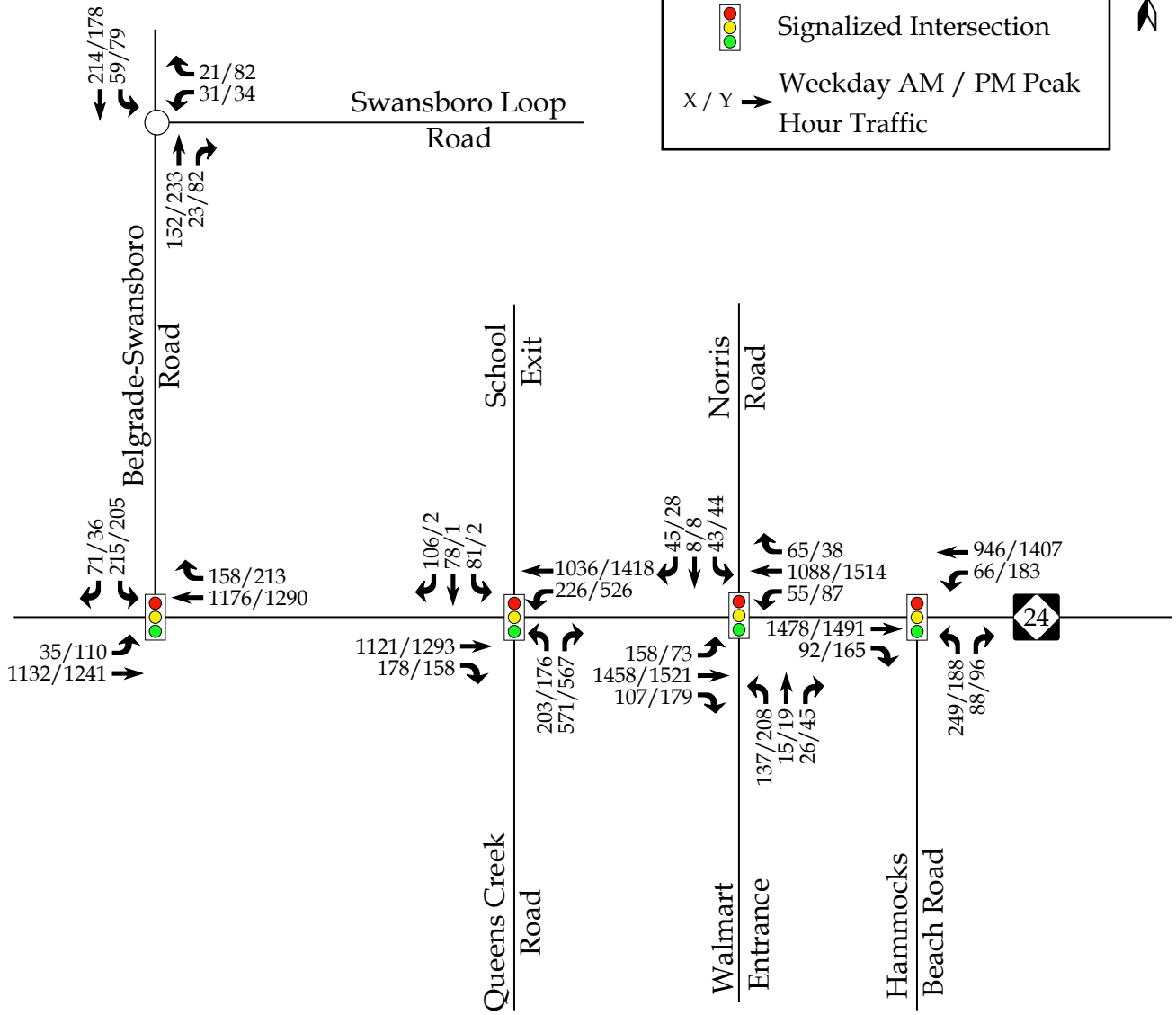


	<p>Flybridge Swansboro, NC</p>		<p>Peak Hour Adjacent Development Trips</p>	
			Scale: Not to Scale	Figure 6


Item III - b.

LEGEND

-  Unsignalized Intersection
-  Signalized Intersection
- X / Y → Weekday AM / PM Peak Hour Traffic





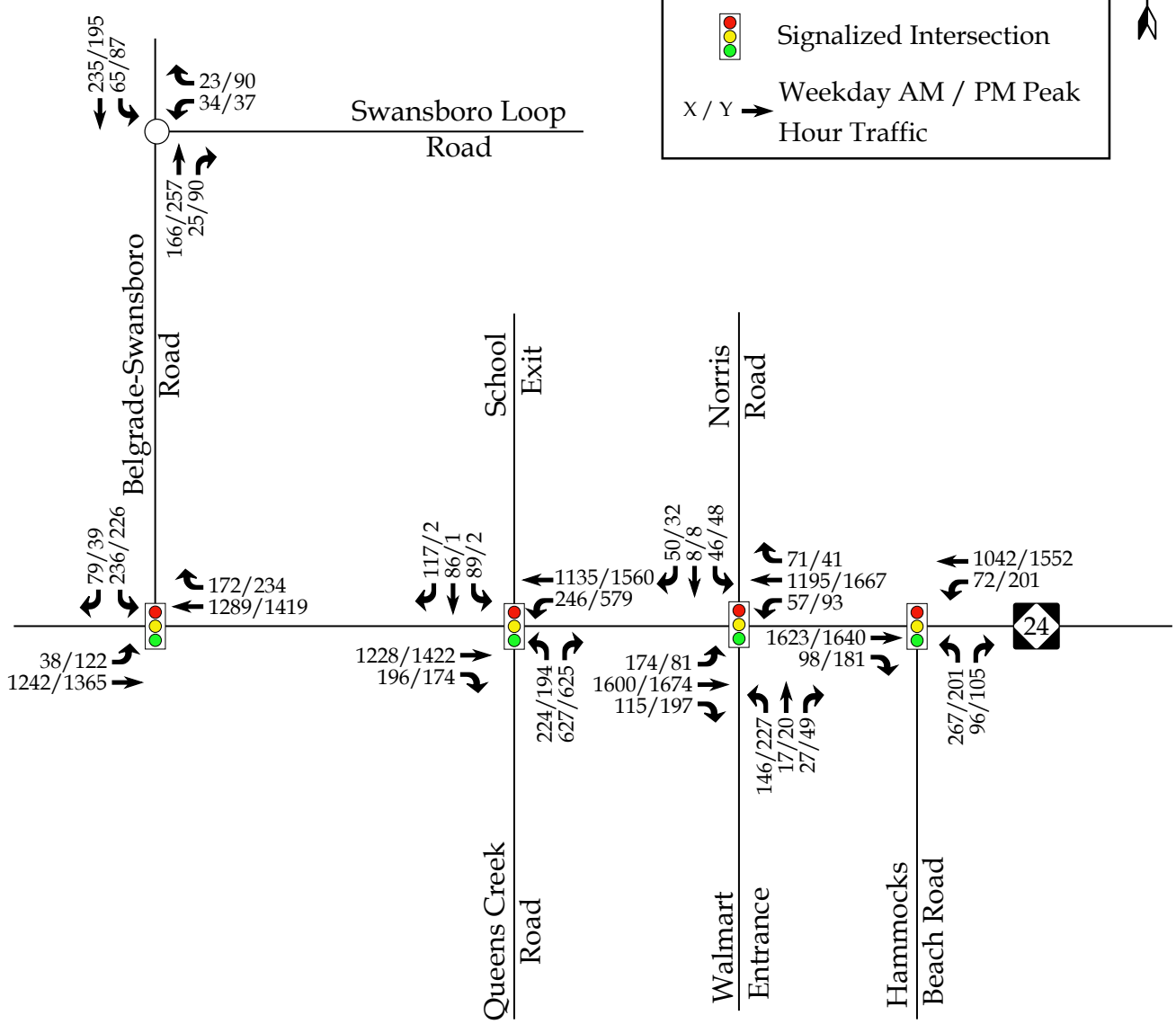
Note: Based on NCDOT Congestion Management guidelines, a volume of 4 vehicles per hour (vph) was analyzed for any movement with less than 4 vph.

	Flybridge Swansboro, NC	2026 No-Build Peak Hour Traffic	
		Scale: Not to Scale	Figure 7a


Item III - b.

LEGEND

-  Unsignalized Intersection
-  Signalized Intersection
- X / Y → Weekday AM / PM Peak Hour Traffic



Note: Based on NCDOT Congestion Management guidelines, a volume of 4 vehicles per hour (vph) was analyzed for any movement with less than 4 vph.

	Flybridge Swansboro, NC	2027 No-Build Peak Hour Traffic	
		Scale: Not to Scale	Figure 7b

4. SITE TRIP GENERATION AND DISTRIBUTION

4.1. Trip Generation

Average weekday daily, AM peak hour, and PM peak hour trips for the proposed development were estimated using methodology contained within the ITE *Trip Generation Manual*, 11.1 Edition. Table 3 provides a summary of the trip generation potential for the site.

Table 3: Trip Generation Summary

Land Use (ITE Code)	Intensity	Daily Traffic (vpd)	Weekday AM Peak Hour Trips (vph)		Weekday PM Peak Hour Trips (vph)	
			Enter	Exit	Enter	Exit
Multifamily Housing Low Rise (220)	306 Units	2,038	28	90	96	56
Strip Retail Plaza (822)	35,000 s.f.	1,708	40	26	95	94
High-Turnover Restaurant (932)	7,000 s.f.	750	37	30	38	25
Fast-Food Restaurant with Drive- Through (934)	3,000 s.f.	1,402	68	66	52	47
C-Store with Gas Station (945)	12 VFP	3,182	97	97	111	111
Total Trips		9,080	270	309	391	334
<i>Internal Capture (14% AM & 10% PM) *</i>			-27	-35	-34	-28
Total External Trips			243	274	357	306
<i>Pass-By Trips: Shopping Center (29% PM)</i>			-0	-0	-24	-24
<i>Pass-By Trips: High-Turnover Restaurant (43% PM)</i>			-0	-0	-12	-12
<i>Pass-By Trips: Fast-Food Restaurant with Drive-Through (49% AM, 50% PM)</i>			-33	-33	-27	-27
<i>Pass-By Trips: C-Store with Gas Station (76% AM, 75% PM)</i>			-63	-63	-75	-75
Total Primary Trips			147	178	219	168

*Utilizing methodology contained in the NCHRP Report 684.

It is estimated that the proposed development will generate approximately 9,080 total site trips on the roadway network during a typical 24-hour weekday period. Of the daily traffic volume, it is anticipated that 579 trips (270 entering and 309 exiting) will occur

during the weekday AM peak hour and 725 trips (391 entering and 334 exiting) will occur during the weekday PM peak hour.

Internal capture of trips between the restaurant, residential, and retail uses was considered in this study. Internal capture is the consideration for trips that will be made within the site between different land uses, so the vehicle technically never leaves the internal site but can still be considered as a trip to that specific land use. Internal capture typically only considers trips between residential, office, and retail/restaurant land uses. Based on NCHRP Report 684 methodology, a weekday AM peak hour internal capture of 14% and a weekday PM peak hour internal capture rate of 10% was applied to the total trips. The internal capture reductions are expected to account for approximately 62 (27 entering and 35 exiting) trips during the weekday AM peak hour and 62 trips (34 entering and 28 exiting) during the weekday PM peak hour.

Pass-by trips were also taken into consideration in this study. Pass-by trips are made by the traffic already using the adjacent roadway, entering the site as an intermediate stop on their way to another destination. Pass-by percentages are applied to site trips after adjustments for internal capture. Pass-by trips are expected to account for approximately 192 trips (96 entering and 96 exiting) during the weekday AM peak hour and approximately 276 trips (138 entering and 138 exiting) during the weekday PM peak hour. It should be noted that the pass-by trips were balanced, as it is likely that these trips would enter and exit in the same hour.

The total primary site trips are the calculated site trips after the reduction for internal capture and pass-by trips. Primary site trips are expected to generate approximately 325 trips (147 entering and 178 exiting) during the weekday AM peak hour and 387 trips (219 entering and 168 exiting) during the weekday PM peak hour.

4.2. Site Trip Distribution and Assignment

Trip distribution percentages used in assigning site traffic for this development were estimated based on a combination of existing traffic patterns, population centers adjacent to the study area, and engineering judgment.

It is estimated that the residential site trips will be regionally distributed as follows:

- 35% to/from the east via NC 24
- 35% to/from the west via NC 24
- 15% to/from the south via Queens Creek Road
- 10% to/from the north via Belgrade-Swansboro Road
- 5% to/from the south via Hammocks Beach Road

It is estimated that the retail site trips will be regionally distributed as follows:

- 40% to/from the east via NC 24
- 30% to/from the west via NC 24
- 15% to/from the south via Queens Creek Road
- 5% to/from the north via Belgrade-Swansboro Road
- 5% to/from the north via Norris Road
- 5% to/from the south via Hammocks Beach Road

The residential site trip distribution is shown in Figure 8a, and the retail site trip distribution is shown in Figures 8b and 8c. Refer to Figure 9a for the residential site trip assignment and Figures 9b and 9c for the retail site trip assignment.

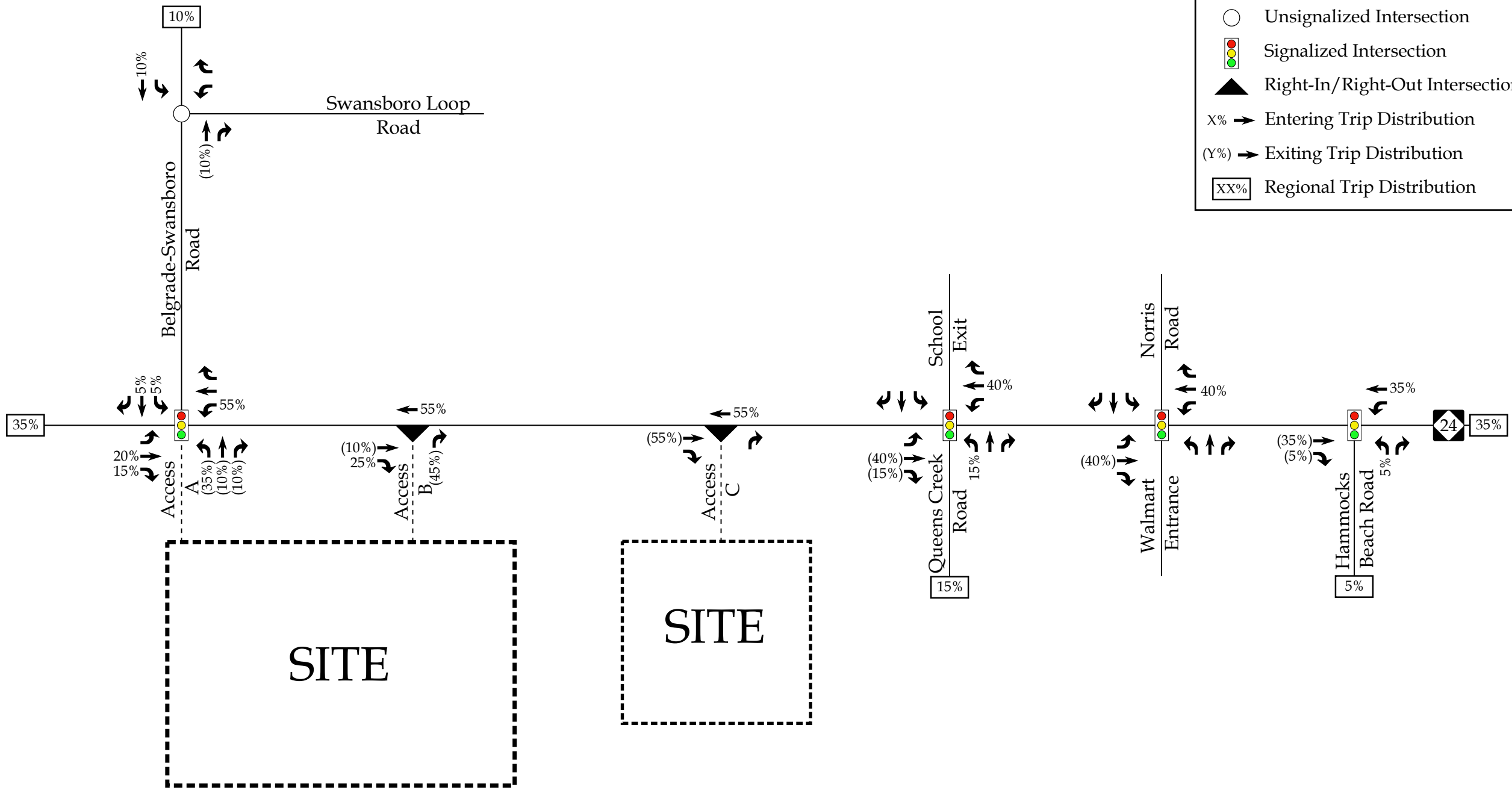
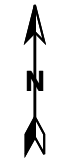
The pass-by site trips were distributed based on existing traffic patterns with consideration given to the proposed driveway access and site layout. Refer to Figures 10a and 10b for the pass-by site trip distributions. Pass-by site trips are shown in Figures 11a and 11b.

The total site trips were determined by adding the primary site trips and the pass-by site trips. Refer to Figure 12 for the total peak hour site trips at the study intersections.

Item III - b.

LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X% → Entering Trip Distribution
- (Y%) → Exiting Trip Distribution
- XX% Regional Trip Distribution

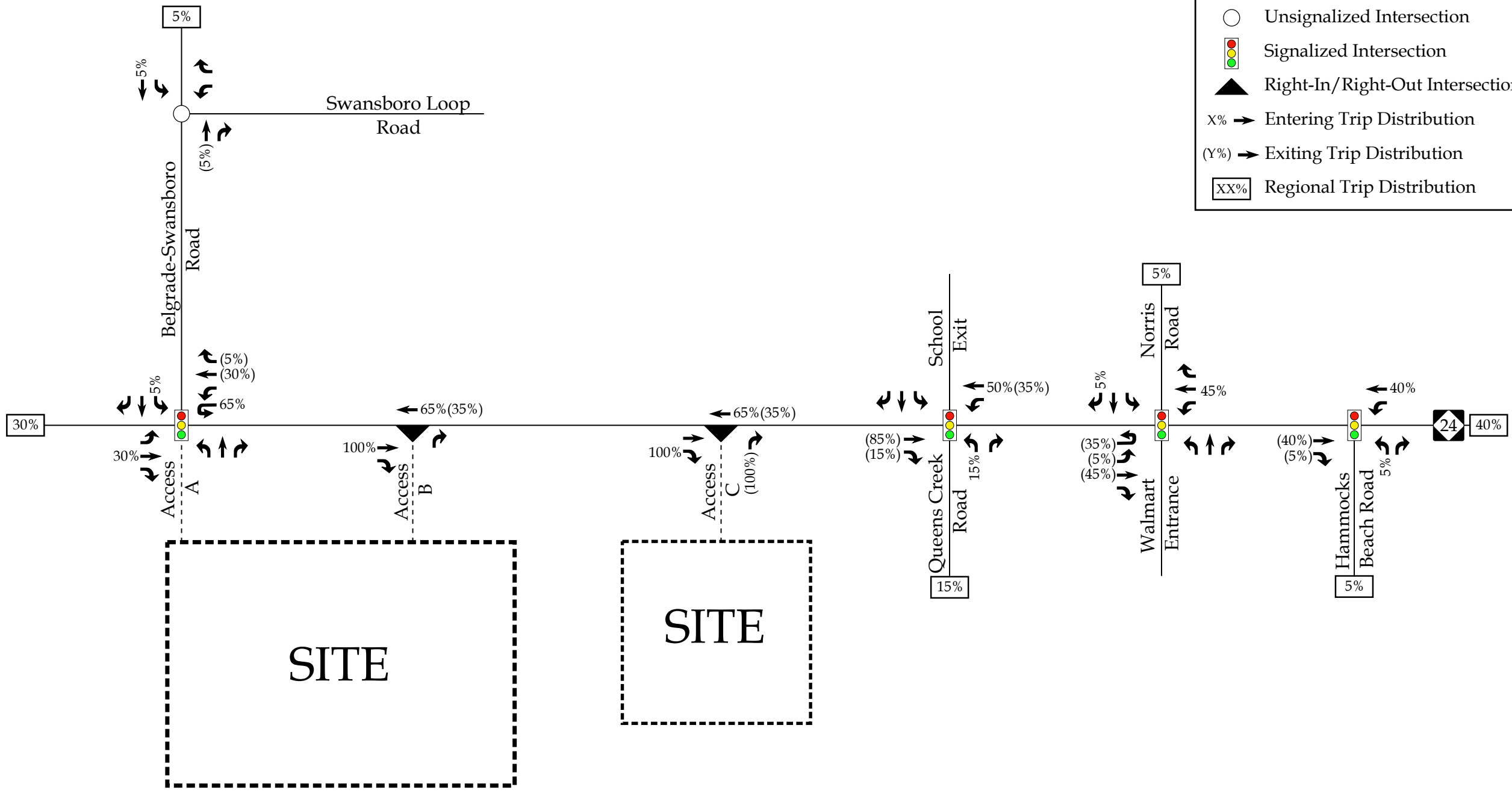
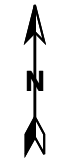


	Flybridge Swansboro, NC	Proposed Site Residential Trip Distribution	
		Scale: Not to Scale	Figure 8a

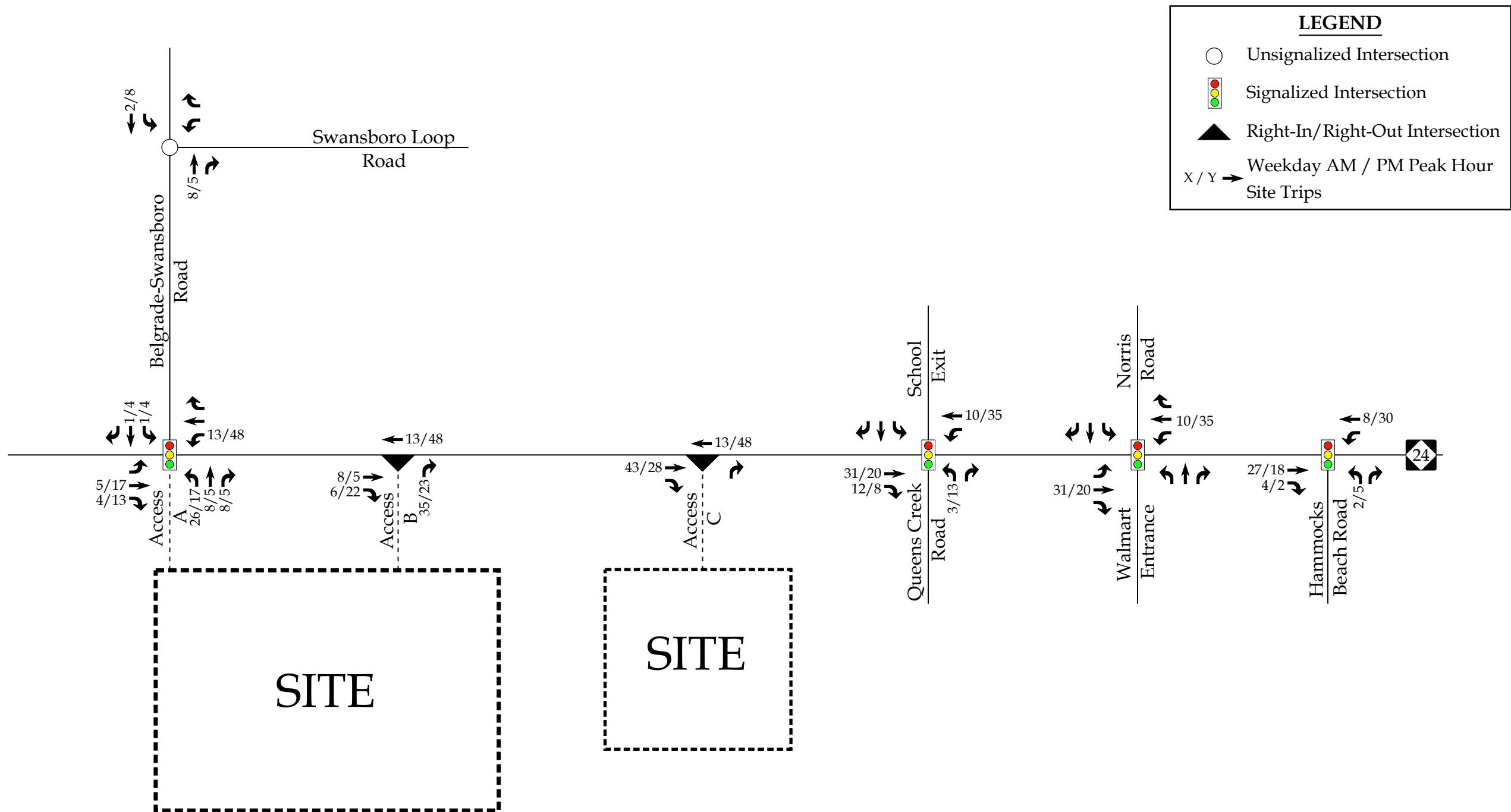
Item III - b.


LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X% → Entering Trip Distribution
- (Y%) → Exiting Trip Distribution
- XX% Regional Trip Distribution



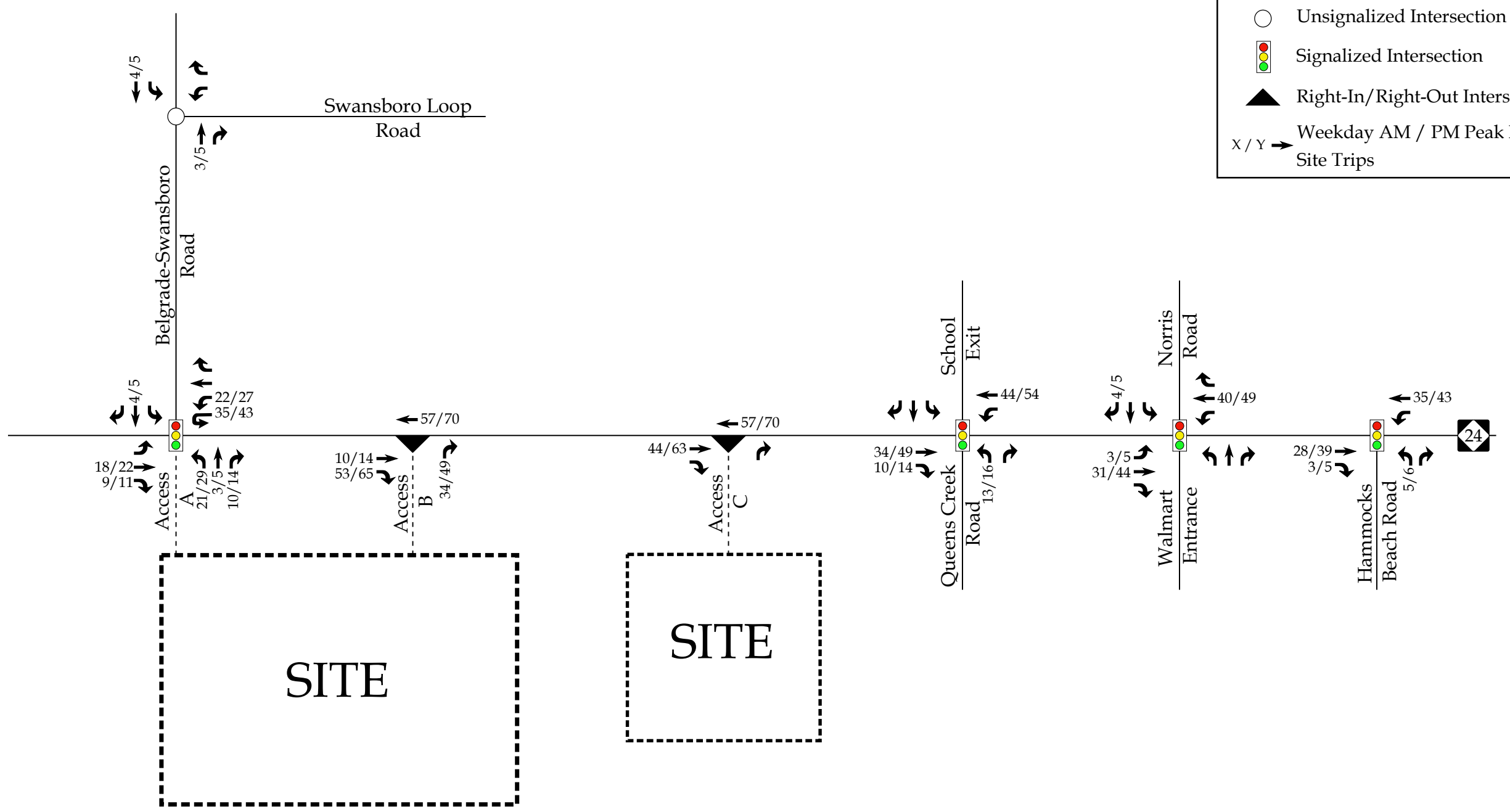
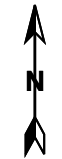
	Flybridge Swansboro, NC	Proposed Site Access C Trip Distribution	
		Scale: Not to Scale	Figure 8c



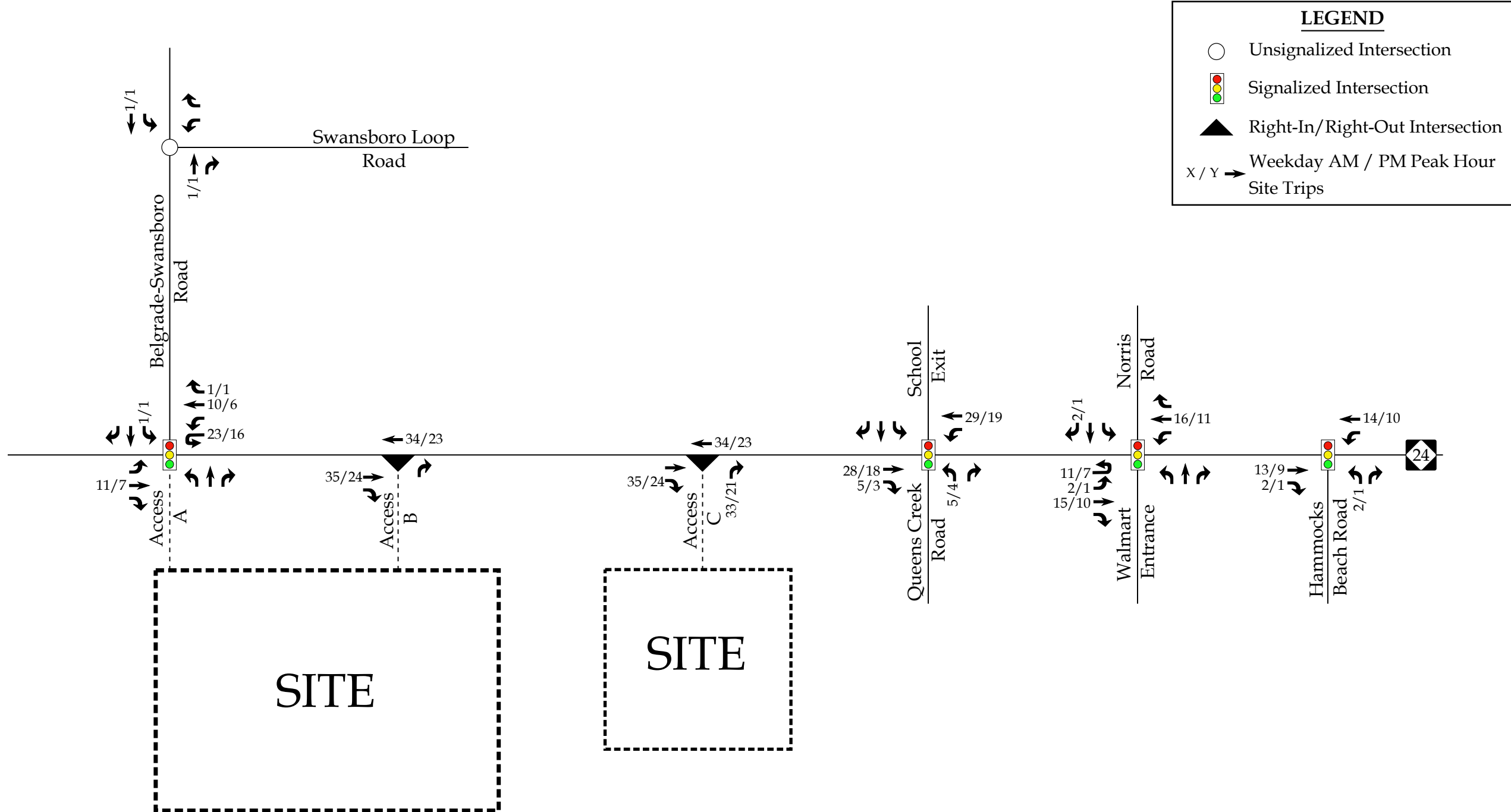
	Flybridge Swansboro, NC	Residential Site Trip Assignment	
		Scale: Not to Scale	Figure 9a

LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X / Y → Weekday AM / PM Peak Hour Site Trips



	Flybridge Swansboro, NC	Retail Site Trip Assignment	
		Scale: Not to Scale	Figure 9b



LEGEND

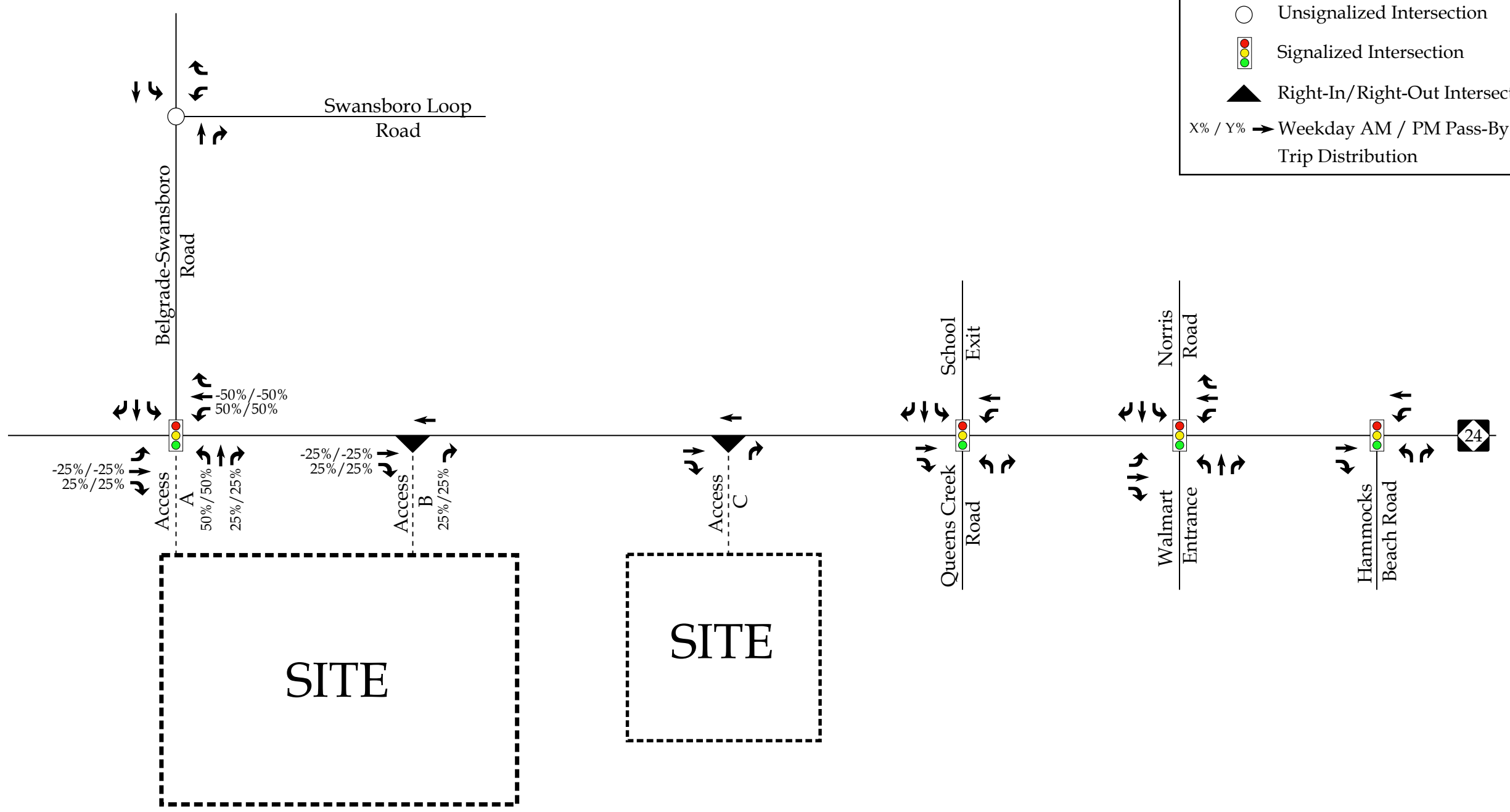
- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X / Y → Weekday AM / PM Peak Hour Site Trips

	Flybridge Swansboro, NC	Access C Site Trip Assignment	
		Scale: Not to Scale	Figure 9e

Item III - b.

LEGEND

- Unsignalized Intersection
- ◫ Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X% / Y% → Weekday AM / PM Pass-By Trip Distribution

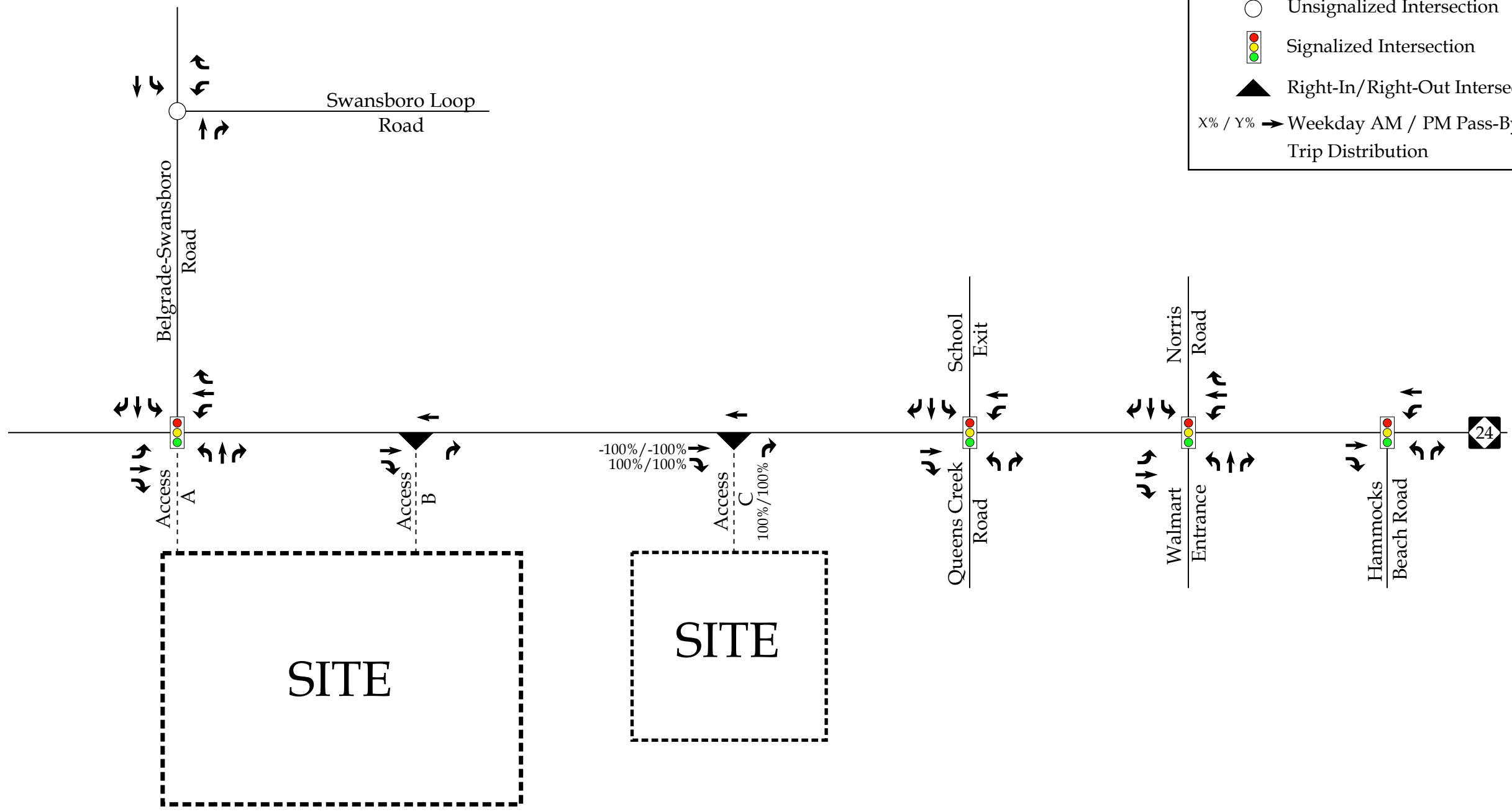


	Flybridge Swansboro, NC	Retail Pass-By Site Trip Distribution
		Scale: Not to Scale Figure 10

Item III - b.

LEGEND

- Unsignalized Intersection
- ◫ Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X% / Y% → Weekday AM / PM Pass-By Trip Distribution

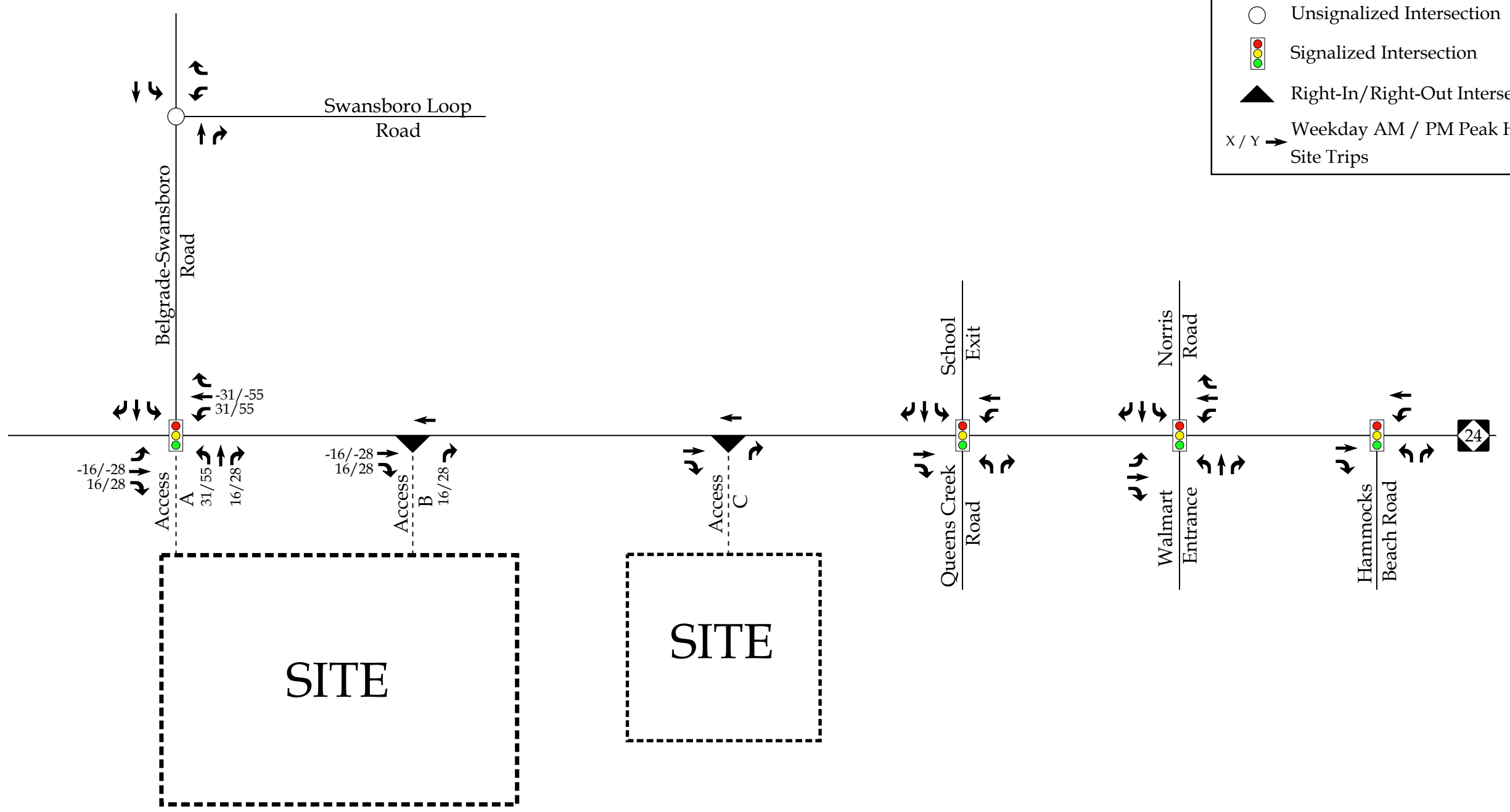
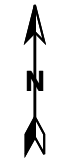


	Flybridge Swansboro, NC	Access C Pass-By Site Trip Distribution
		Scale: Not to Scale Figure 10b

Item III - b.

LEGEND

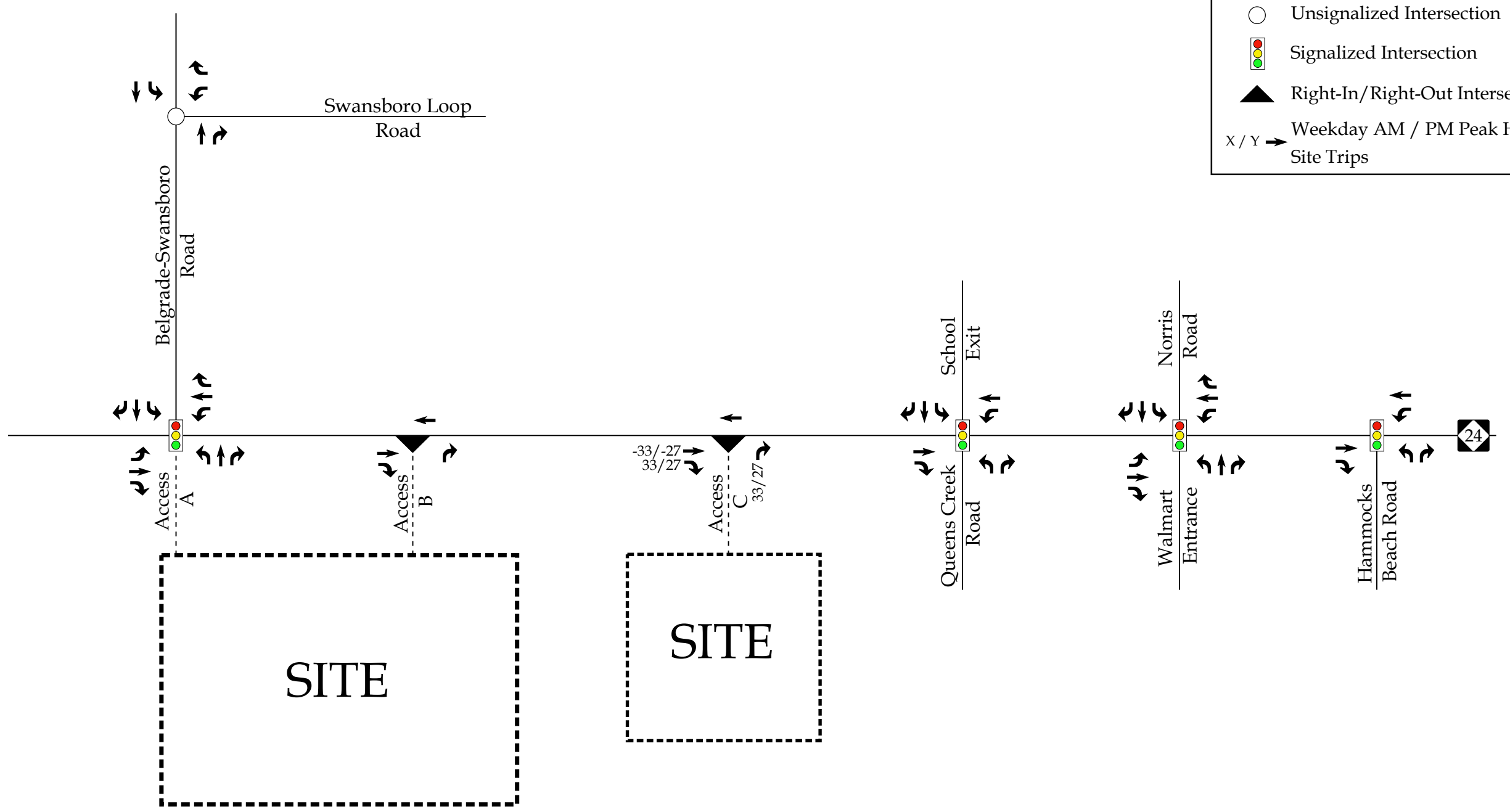
- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X / Y → Weekday AM / PM Peak Hour Site Trips



	Flybridge Swansboro, NC	Retail Pass-By Site Trip Assignment	
		Scale: Not to Scale	Figure 11a

LEGEND

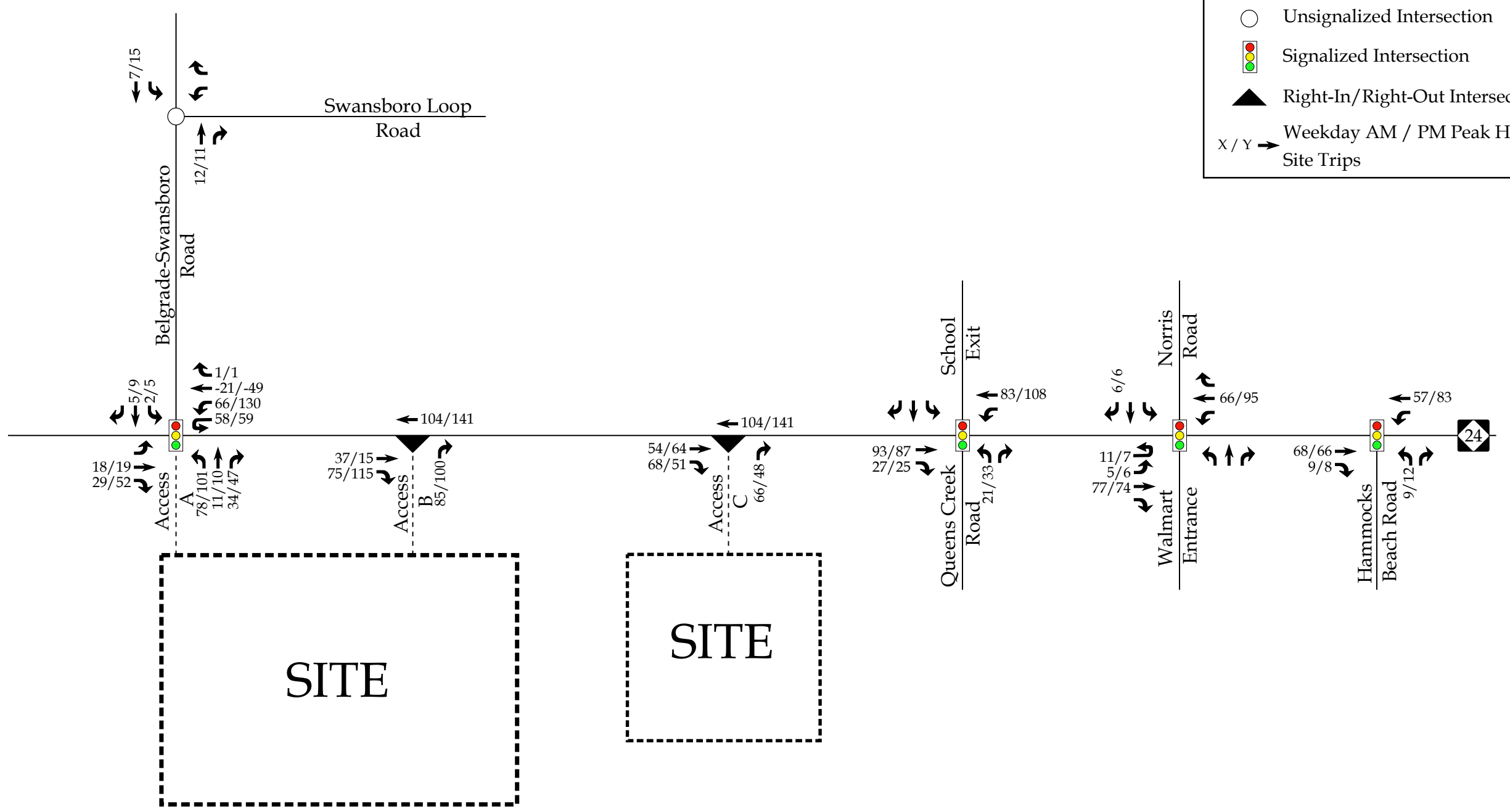
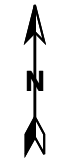
- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X / Y → Weekday AM / PM Peak Hour Site Trips



	Flybridge Swansboro, NC	Access C Pass-By Site Trip Assignment	
		Scale: Not to Scale	Figure 11b

LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X / Y → Weekday AM / PM Peak Hour Site Trips



	Flybridge Swansboro, NC	Total Site Trip Assignment	
		Scale: Not to Scale	Figure 12

5. 2026 and 2027 BUILD TRAFFIC CONDITIONS

5.1. 2026 and 2027 Build Peak Hour Traffic Volumes

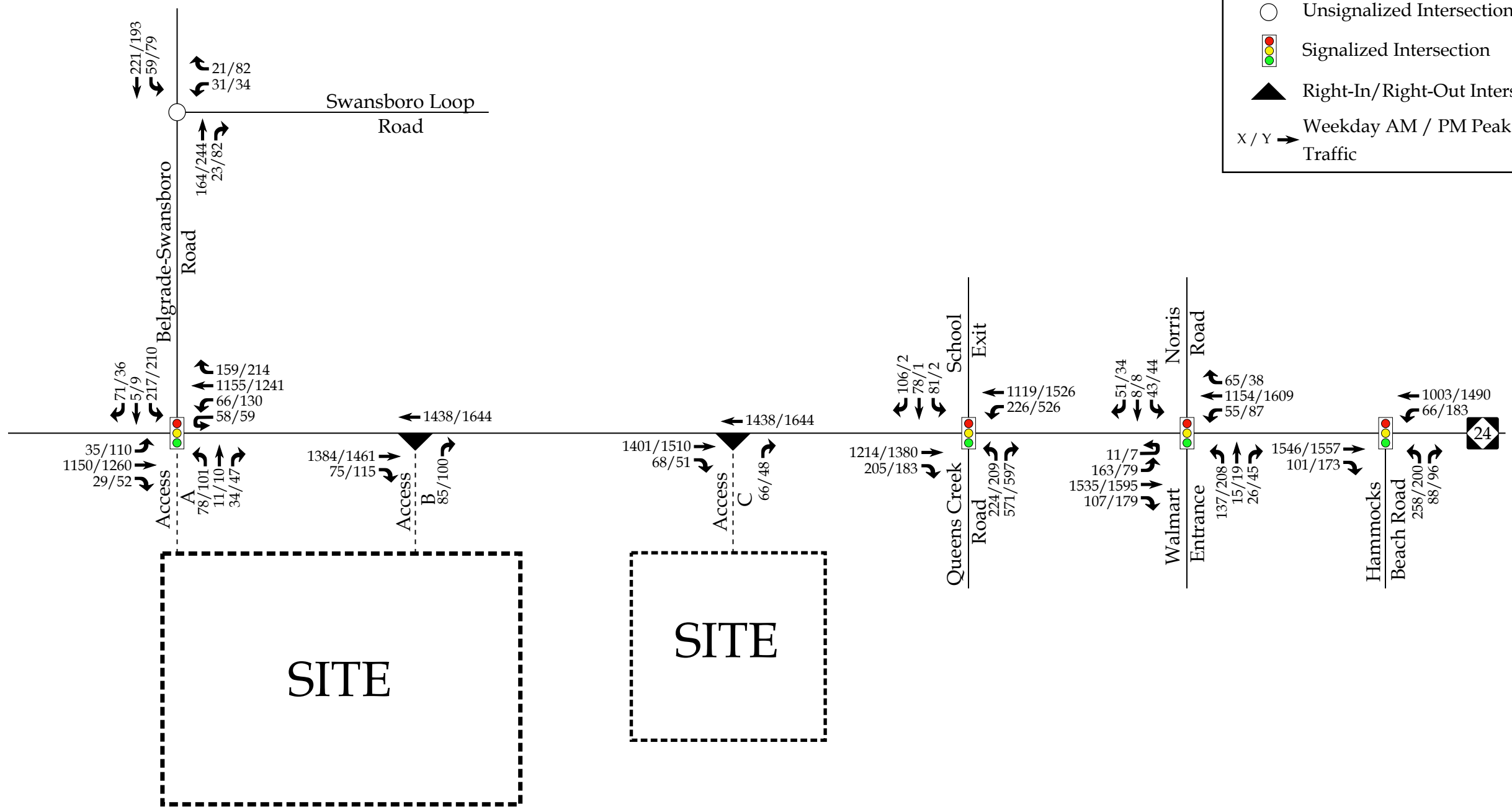
To estimate traffic conditions with the site fully built-out, the total site trips were added to the 2026 and 2027 no-build traffic volumes to determine the 2026 and 2027 build traffic volumes. Refer to Figure 13a for an illustration of the 2026 build peak hour traffic volumes with the proposed site fully developed. Refer to Figure 13b for an illustration of the 2027 build peak hour traffic volumes with the proposed site fully developed.

5.2. Analysis of 2026 and 2027 Build Peak Hour Traffic Conditions

Study intersections were analyzed with the 2026 and 2027 build traffic volumes using the same methodology previously discussed for existing and no-build traffic conditions. Intersections were analyzed with improvements necessary to accommodate future traffic volumes. The results of the capacity analysis for each intersection are presented in Section 7 of this report.

LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X / Y → Weekday AM / PM Peak Hour Traffic



Note: Based on NCDOT Congestion Management guidelines, a volume of 4 vehicles per hour (vph) was analyzed for any movement with less than 4 vph.



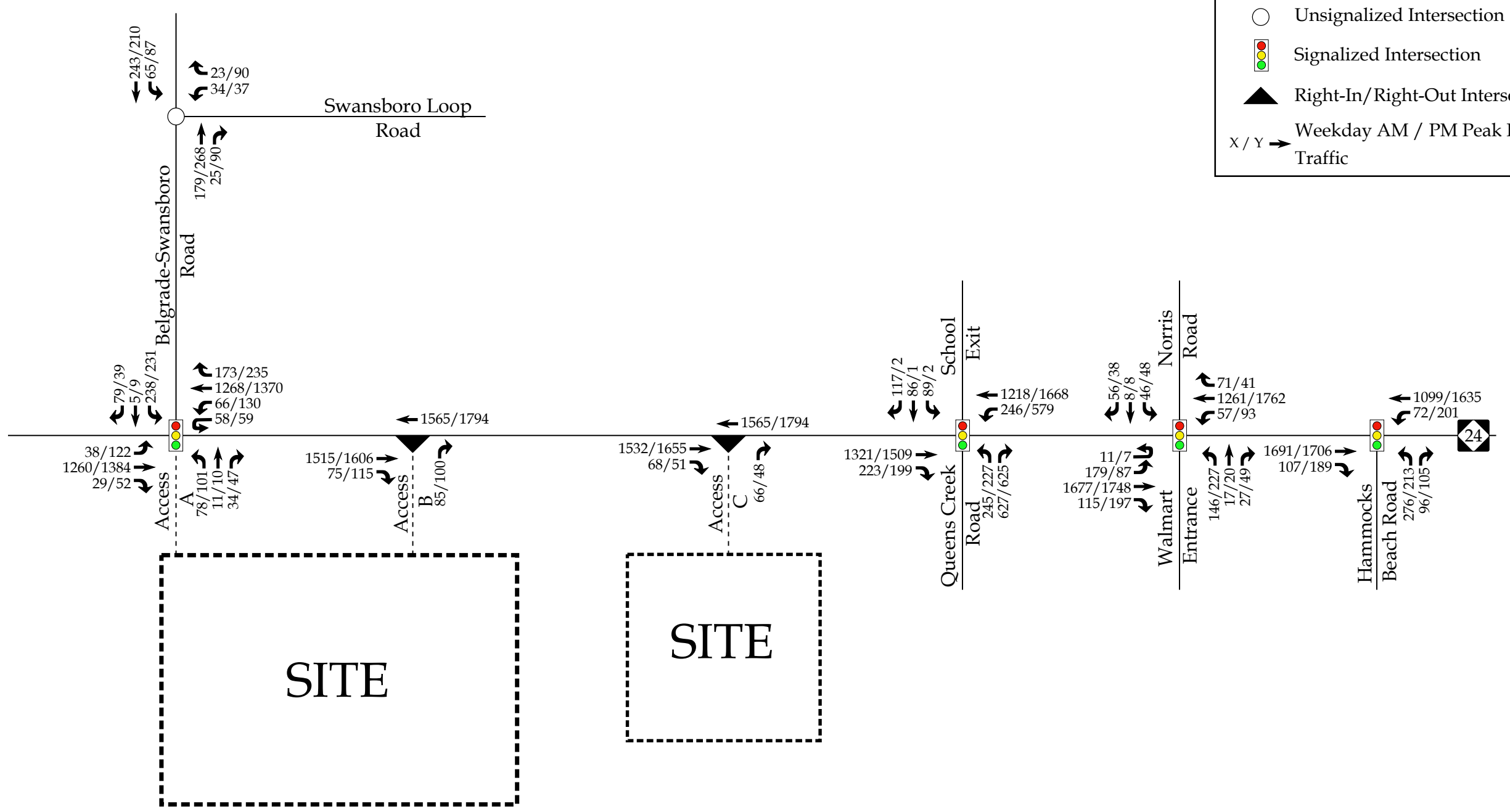
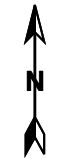
Flybridge
Swansboro, NC

2026 Build
Peak Hour Traffic

Scale: Not to Scale Figure 13a

LEGEND

- Unsignalized Intersection
- 🚦 Signalized Intersection
- ▲ Right-In/Right-Out Intersection
- X / Y → Weekday AM / PM Peak Hour Traffic



Note: Based on NCDOT Congestion Management guidelines, a volume of 4 vehicles per hour (vph) was analyzed for any movement with less than 4 vph.

	Flybridge Swansboro, NC	2027 Build Peak Hour Traffic	
		Scale: Not to Scale	Figure 12b

6. TRAFFIC ANALYSIS PROCEDURE

Study intersections were analyzed using the methodology outlined in the *Highway Capacity Manual* (HCM), 6th Edition published by the Transportation Research Board. Capacity and level of service are the design criteria for this traffic study. A computer software package, Synchro (Version 11.1), was used to complete the analyses for the study area intersections. Please note that the unsignalized capacity analysis does not provide an overall level of service for an intersection; only delay for an approach with a conflicting movement.

The HCM defines capacity as “the maximum hourly rate at which persons or vehicles can reasonably be expected to traverse a point or uniform section of a lane or roadway during a given time period under prevailing roadway, traffic, and control conditions.” Level of service (LOS) is a term used to represent different driving conditions and is defined as a “qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers.” Level of service varies from Level “A” representing free flow, to Level “F” where breakdown conditions are evident. Refer to Table 4 for HCM levels of service and related average control delay per vehicle for both signalized and unsignalized intersections. Control delay as defined by the HCM includes “initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay”. An average control delay of 50 seconds at a signalized intersection results in LOS “D” operation at the intersection.

Table 4: Highway Capacity Manual – Levels-of-Service and Delay

UNSIGNALIZED INTERSECTION		SIGNALIZED INTERSECTION	
LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)	LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)
A	0-10	A	0-10
B	10-15	B	10-20
C	15-25	C	20-35
D	25-35	D	35-55
E	35-50	E	55-80
F	>50	F	>80

6.1. Adjustments to Analysis Guidelines

Capacity analysis at all study intersections was completed according to the NCDOT Congestion Management Guidelines and Town UDO.

7. CAPACITY ANALYSIS

The following study intersections were analyzed under 2023 existing, 2026 and 2027 no-build, and 2026 and 2027 build traffic conditions:

- NC 24 & Belgrade-Swansboro Road/Access A
- NC 24 & Queens Creek Road/School Exit
- NC 24 & Norris Road/Walmart Entrance
- NC 24 & Hammocks Beach Road
- Belgrade-Swansboro Road & Swansboro Loop Road
- NC 24 & Access B
- NC 24 & Access C

All proposed site driveways were analyzed under 2026 and 2027 build traffic conditions. Refer to Tables 5-11 for a summary of capacity analysis results. Refer to Appendices E-L for the Synchro capacity analysis reports and SimTraffic queueing reports.

7.1. NC 24 & Belgrade-Swansboro Road/Access A

Refer to the table below for a summary of the capacity analysis of the subject intersection during the analysis scenarios.

Table 5: Analysis Summary of NC 24 & Belgrade-Swansboro Road/Access A

ANALYSIS SCENARIO	LANE GROUP	Existing Storage (ft)	Weekday AM Peak Hour					Weekday PM Peak Hour						
			Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)	Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)
			95th	Max					95th	Max				
2023 Existing Conditions	EBL	150	19	65	A	9	A (9)	B (10)	85	183	B	12	A (7)	B (11)
	EBT (2)	--	154	140	A	9			271	241	A	7		
	WBU	100	4	24	A	6	A (9)		1	34	A	3	A (4)	
	WBT (2)	--	164	182	A	9			201	293	A	5		
	WBR	150	45	107	A	7	C (20)		48	192	A	3	E (69)	
	SBL	0	113	264	C	21			254	342	E	73		
	SBR	50	47	148	B	17			61	150	D	50		
2026 No-Build Conditions	EBL	150	24	65	B	13	B (11)	B (12)	145	218	C	21	A (9)	B (14)
	EBT (2)	--	190	162	B	11			339	260	A	8		
	WBU	100	4	29	A	6	B (11)		2	29	A	7	A (9)	
	WBT (2)	--	202	172	B	11			546	327	A	9		
	WBR	150	51	77	A	7	C (21)		122	250	A	6	E (69)	
	SBL	0	133	266	C	22			279	340	E	72		
	SBR	50	51	150	B	18			64	150	D	49		
2026 Build Conditions	EBL	150	47	120	C	33	C (21)	C (25)	209	250	F	83	D (38)	D (37)
	EBT (2)	--	314	262	C	20			685	533	C	34		
	EBR	100	21	62	B	10			57	200	C	21		
	WBUL	100	151	195	D	46	B (18)		310	200	F	82	C (27)	
	WBT (2)	--	317	288	B	15			642	466	C	21		
	WBR	150	82	221	B	11	D (42)		167	250	B	14	E (59)	
	NBTL	100	125	116	D	48			174	190	E	67		
	NBR	--	42	86	C	27			71	110	D	40		
	SBTL	0	283	404	F	84	E (70)		344	350	F	83	E (77)	
SBR	50	73	150	C	28	59		150	D	39				
2026 Build Conditions with Improvements	EBL	150	70	249	D	55	C (32)	C (29)	177	250	E	78	D (37)	D (38)
	EBT (2)	--	558	375	C	31			685	554	C	34		
	EBR	100	34	200	B	18			57	200	C	21		
	WBUL	500	183	202	D	55	C (22)		314	252	F	81	C (31)	
	WBT (2)	--	502	389	B	20			773	406	C	26		
	WBR	150	125	250	B	15	D (39)		213	250	B	17	E (59)	
	NBTL	--	124	131	D	41			174	200	E	67		
	NBR	100	51	78	C	31			71	126	D	40		
	SBTL	0	284	323	D	53	D (48)		344	360	F	83	E (77)	
SBR	50	91	150	C	33	59		150	D	39				

ANALYSIS SCENARIO	LANE GROUP	Existing Storage (ft)	Weekday AM Peak Hour					Weekday PM Peak Hour						
			Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)	Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)
			95th	Max					95th	Max				
2027 No-Build Conditions	EBL	150	28	76	B	15	B (11)	B (12)	244	241	D	49	B (12)	B (16)
	EBT (2)	--	215	184	B	11			397	436	A	9		
	WBU	100	4	27	A	6	B (11)		2	30	A	9	B (11)	
	WBT (2)	--	230	203	B	12			699	329	B	12		
	WBR	150	54	105	A	7	C (24)		154	250	A	7	E (70)	
	SBL	0	162	433	C	25			307	371	E	74		
	SBR	50	62	150	B	19			67	150	D	48		
2027 Build Conditions	EBL	150	53	84	D	36	C (21)	C (29)	229	250	F	89	D (41)	D (40)
	EBT (2)	--	357	265	C	21			767	1444	D	38		
	EBR	100	20	134	A	10			54	200	B	20		
	WBUL	100	167	187	D	51	B (18)		307	200	F	88	D (31)	
	WBT (2)	--	362	395	B	16			840	468	C	26		
	WBR	150	86	219	B	10	E (65)		199	250	B	16	E (60)	
	NBTL	100	152	144	E	79			192	209	E	69		
	NBR	--	46	78	C	30			72	162	D	40		
	SBTL	0	343	1067	F	129	F (105)		401	496	F	89	F (82)	
	SBR	50	87	150	C	32			62	150	D	39		
2027 Build Conditions with Improvements	EBL	150	74	249	E	59	C (34)	C (32)	229	250	F	89	D (41)	D (40)
	EBT (2)	--	624	478	C	33			767	1359	D	38		
	EBR	100	33	200	B	18			54	200	B	20		
	WBUL	500	208	180	E	63	C (25)		307	291	F	88	C (31)	
	WBT (2)	--	582	424	C	22			840	467	C	26		
	WBR	150	135	250	B	16	D (41)		199	250	B	16	E (60)	
	NBTL	--	126	114	D	44			192	179	E	69		
	NBR	100	51	84	C	32			72	132	D	40		
	SBTL	0	321	347	E	58	D (52)		401	478	F	89	F (82)	
SBR	50	99	150	C	34	62		150	D	39				

Improvements to lane configuration are shown in bold.

Capacity analysis indicates that the intersection is expected to operate at an overall LOS D or better under all analysis scenarios during the weekday AM and PM peak hours. When comparing the no-build and build traffic conditions the overall LOS is expected to decrease from LOS B to LOS C in the AM peak hour and LOS D in the PM peak hour. It should be noted that with the addition of the northbound Site Access during the build traffic condition the overall intersection is expected to have an increase in delay to account for the additional movements. The minor street approaches are expected to operate at LOS F or better during the weekday AM and PM peak hours under the build traffic conditions. It is not uncommon for the minor street approach to experience higher delays especially at signalized intersections where the priority is placed on the mainline approach movements to maximize progression.

During the build with improvements scenarios a westbound left-turn lane extension and signal timing modifications were considered to improve the overall traffic flow at the intersection. Under the build with improvements traffic conditions the overall intersection is expected to operate at an overall LOS C during the weekday AM peak hour and LOS D during the weekday PM peak hour. Queueing along the minor-street approaches is expected to decrease significantly. Based on SimTraffic queuing reports, the northbound right-turn and eastbound right-turn lane queues exceed the storage lengths provided; however, this is due to the turning movements not being able to reach the turn lane.

7.2. NC 24 & Queens Creek Road/School Exit

Refer to the table below for a summary of the capacity analysis of the subject intersection during the analysis scenarios.

Table 6: Analysis Summary of NC 24 & Queens Creek Road/School Exit

ANALYSIS SCENARIO	LANE GROUP	Existing Storage (ft)	Weekday AM Peak Hour					Weekday PM Peak Hour						
			Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)	Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)
			95th	Max					95th	Max				
2023 Existing Conditions	EBT (2)	--	381	436	D	36	C (32)	E (55)	638	508	C	25	C (23)	D (49)
	EBR	800	81	128	B	10			67	104	A	9		
	WBL	125	187	224	D	52	C (23)		580	225	D	41	B (13)	
	WBT (2)	--	246	332	B	16			103	695	A	3		
	NBL	200	248	300	D	54	F (146)		388	300	F	341	F (192)	
	NBR	--	707	1048	F	180			711	1048	F	146		
	SBL	--	95	130	D	39	D (48)		17	35	E	64	E (64)	
	SBTR	--	222	218	D	52			26	42	E	65		
2026 No-Build Conditions	EBT (2)	--	467	574	D	36	C (32)	F (89)	885	880	D	44	D (40)	D (43)
	EBR	800	86	151	A	10			90	426	B	11		
	WBL	125	421	225	F	254	E (59)		851	225	F	131	D (39)	
	WBT (2)	--	300	511	B	16			173	1343	A	5		
	NBL	200	317	300	E	72	F (245)		321	300	F	81	E (57)	
	NBR	--	911	1050	F	307			626	951	D	50		
	SBL	--	111	138	D	45	E (60)		17	31	E	63	E (64)	
	SBTR	--	286	288	E	67			26	54	E	65		
2026 Build Conditions	EBT (2)	--	522	672	D	36	C (32)	F (95)	973	1491	F	88	E (79)	D (55)
	EBR	800	98	167	A	9			139	900	B	14		
	WBL	125	448	225	F	282	E (61)		830	225	F	130	D (38)	
	WBT (2)	--	333	768	B	16			247	1335	A	6		
	NBL	200	384	300	F	100	F (273)		399	300	E	71	D (48)	
	NBR	--	970	1048	F	342			626	985	D	40		
	SBL	--	118	166	D	48	E (67)		17	30	E	63	E (64)	
	SBTR	--	309	396	E	75			26	38	E	65		
2026 Build Conditions with Improvements	EBT (2)	--	800	1325	E	69	E (61)	E (61)	1070	1200	D	53	D (47)	D (50)
	EBR	800	127	756	B	13			41	757	A	5		
	WBL	125	358	225	E	74	C (28)		866	225	F	172	D (51)	
	WBT (2)	--	432	596	B	19			383	1346	A	9		
	NBL	200	289	300	E	69	F (105)		292	300	E	75	D (55)	
	NBR	--	823	1046	F	119			588	992	D	48		
	SBL	--	129	146	E	59	F (102)		17	23	E	64	E (64)	
	SBTR	--	348	484	F	121			26	43	E	65		

ANALYSIS SCENARIO	LANE GROUP	Existing Storage (ft)	Weekday AM Peak Hour					Weekday PM Peak Hour						
			Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)	Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)
			95th	Max					95th	Max				
2027 No-Build Conditions	EBT (2)	--	529	666	D	36	C (32)	F (116)	1030	2048	E	76	E (69)	E (60)
	EBR	800	93	192	A	9			96	900	B	11		
	WBL	125	496	225	F	342	E (74)		905	225	F	178	D (53)	
	WBT (2)	--	338	998	B	16			278	1351	A	6		
	NBL	200	391	300	F	102	F (337)		365	300	E	75	E (61)	
	NBR	--	1096	1050	F	421			753	1041	E	57		
	SBL	--	129	249	D	49	E (78)		17	31	E	63	E (64)	
	SBTR	--	355	462	F	91			26	52	E	65		
2027 Build Conditions	EBT (2)	--	592	604	D	36	C (32)	F (124)	1115	1639	F	138	F (123)	E (77)
	EBR	800	105	251	A	9			151	900	B	14		
	WBL	125	526	225	F	381	E (77)		848	225	F	177	D (52)	
	WBT (2)	--	374	1136	B	16			305	1349	A	8		
	NBL	200	465	300	F	146	F (376)		442	300	E	71	D (53)	
	NBR	--	1168	1048	F	465			753	1037	D	46		
	SBL	--	167	378	D	53	F (90)		17	33	E	63	E (64)	
	SBTR	--	380	698	F	106			26	61	E	65		
2027 Build Conditions with Improvements	EBT (2)	--	910	1644	F	103	F (90)	F (81)	1134	1644	F	130	F (116)	E (75)
	EBR	800	139	900	B	13			74	900	A	6		
	WBL	125	405	225	F	89	C (32)		848	225	F	177	D (52)	
	WBT (2)	--	493	547	C	21			305	1338	A	8		
	NBL	200	318	300	E	71	F (133)		442	300	E	71	D (53)	
	NBR	--	940	1048	F	157			753	1046	D	46		
	SBL	--	140	271	E	61	F (121)		17	23	E	63	E (64)	
	SBTR	--	388	737	F	147			26	56	E	65		

Capacity analysis indicates that the overall intersection is expected to operate at an overall LOS F or better during the weekday AM peak hour and an overall LOS E or better during the weekday PM peak hour under all analysis scenarios. It is not unusual for the minor street approaches to have higher delays at signalized intersections, especially when the signal is coordinated where the precedence is given to the mainline approaches to maximize progression. Queueing is not expected to increase significantly along the approaches. It is important to note that the southbound approach is a school driveway, therefore it is expected to have higher traffic volumes exiting the facility during the AM peak hour during the school year due to parent drop-offs. Immediately south of the intersection there are also two additional schools that also contribute to the higher volumes along the northbound approach during the school year. The proposed development is only expected to account for 7% of the total traffic at the intersection.

During the build with improvements scenarios, signal timing modifications were considered to better improve the delay at the intersection. With this improvement under the 2026 build with improvement traffic condition, the intersection is expected to operate at LOS E during the weekday AM peak hour and LOS D during the weekday PM peak hour. Under the 2027 build with improvements traffic condition the intersection is expected to operate at LOS F during the weekday AM peak hour and LOS E during the weekday PM peak hour. It is important to note that per Congestion Management guidelines right-turn on-red (RTOR) was not considered; however, RTOR is expected to further improve queuing lengths and overall delays at this intersection. Improvements for this intersection may need to be evaluated from a corridor perspective and should not fall on the responsibility of a single developer given that existing and no-build conditions are unsatisfactory.

7.3. NC 24 & Norris Road/Walmart Entrance

Refer to the table on the following page for a summary of the capacity analysis of the subject intersection during the analysis scenarios.

Table 7: Analysis Summary of NC 24 & Norris Road/Walmart Entrance

ANALYSIS SCENARIO	LANE GROUP	Existing Storage (ft)	Weekday AM Peak Hour					Weekday PM Peak Hour						
			Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)	Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)
			95th	Max					95th	Max				
2023 Existing Conditions	EBL	400	59	149	B	18	A (10)	B (14)	10	106	A	9	B (11)	B (18)
	EBT (2)	--	374	251	A	9			198	179	B	12		
	EBR	150	41	64	A	6			41	75	A	8		
	WBL	150	8	85	A	4	B (16)		24	159	B	11	B (15)	
	WBTTTR	--	337	306	B	16			620	281	B	15		
	NBL	0	91	145	C	31	C (30)		254	300	E	79	E (72)	
	NBTR	--	33	54	C	27			84	116	D	49		
SBLTR	--	89	118	C	30	C (30)	111	130	D	52	D (52)			
2026 No-Build Conditions	EBL	400	250	226	D	62	C (24)	C (26)	80	182	E	62	B (12)	C (24)
	EBT (2)	--	653	462	C	19			227	254	B	10		
	EBR	150	72	250	B	11			35	185	A	7		
	WBL	150	78	250	D	62	C (25)		182	250	F	99	C (25)	
	WBTTTR	--	407	422	C	23			750	761	C	21		
	NBL	0	146	174	D	76	D (39)		376	371	F	101	F (89)	
	NBTR	--	52	71	C	47			102	128	D	50		
SBLTR	--	103	139	C	54	C (35)	126	177	D	53	D (53)			
2026 Build Conditions	EBUL	400	278	246	D	50	C (26)	C (27)	88	149	E	56	B (11)	C (24)
	EBT (2)	--	714	512	C	24			193	242	A	9		
	EBR	150	72	250	B	12			31	136	A	7		
	WBL	150	78	249	D	46	C (27)		180	250	F	97	C (27)	
	WBTTTR	--	443	429	C	26			833	770	C	23		
	NBL	0	147	194	D	44	D (41)		380	392	F	103	F (91)	
	NBTR	--	52	78	C	31			102	121	D	50		
SBLTR	--	109	146	D	36	D (36)	134	160	D	53	D (53)			
2027 No-Build Conditions	EBL	400	278	482	D	53	C (28)	C (29)	79	168	E	57	B (12)	C (27)
	EBT (2)	--	765	591	C	26			225	245	B	10		
	EBR	150	77	250	B	12			35	143	A	7		
	WBL	150	80	249	D	47	C (28)		195	250	F	101	C (29)	
	WBTTTR	--	472	443	C	28			891	772	C	25		
	NBL	0	156	182	D	46	D (43)		425	423	F	121	F (105)	
	NBTR	--	54	94	C	31			108	109	D	50		
SBLTR	--	111	142	D	36	D (36)	137	171	D	53	D (53)			
2027 Build Conditions	EBUL	400	308	433	E	56	C (31)	C (32)	87	183	E	57	B (12)	C (28)
	EBT (2)	--	825	617	C	29			200	254	B	10		
	EBR	150	77	250	B	12			31	164	A	7		
	WBL	150	80	250	D	47	C (31)		178	250	F	99	C (32)	
	WBTTTR	--	514	598	C	31			987	774	C	29		
	NBL	0	157	183	D	48	D (44)		430	397	F	127	F (109)	
	NBTR	--	54	90	C	31			108	116	D	50		
SBLTR	--	116	156	D	37	D (37)	144	172	D	54	D (54)			

Capacity analysis indicates that the overall intersection is expected to operate at LOS C or better under all analysis scenarios during the weekday AM and PM peak hours. When

comparing the no-build and build traffic conditions queueing is not expected to increase significantly. Under all analysis scenarios the minor street approaches are expected to operate at a LOS F or better during the weekday AM and PM peak hours. It should be noted that it is not uncommon for the minor street approaches to have higher delays at signalized intersections, especially when the signal is coordinated where the precedence is given to the mainline approaches to maximize the progression. Due to the overall acceptable levels of service no improvements by the developer are recommended.

7.4. NC 24 & Hammocks Beach Road

Refer to the table below for a summary of the capacity analysis of the subject intersection during the analysis scenarios.

Table 8: Analysis Summary of NC 24 & Hammocks Beach Road

ANALYSIS SCENARIO	LANE GROUP	Existing Storage (ft)	Weekday AM Peak Hour						Weekday PM Peak Hour					
			Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)	Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)
			95th	Max					95th	Max				
2023 Existing Conditions	EBU	325	5	28	A	8	B (13)	B (12)	1	34	A	4	A (5)	A (10)
	EBT (2)	--	358	289	B	14			102	198	A	5		
	EBR	550	11	34	A	2			16	101	A	1		
	WBL	200	17	74	A	7	A (5)		83	214	C	22	A (7)	
	WBT (2)	--	117	157	A	5			243	253	A	5		
	NBL	150	98	152	C	30	C (30)		143	218	E	69	E (69)	
NBLR	--	--	184	--	--	--		270	--	--				
2026 No-Build Conditions	EBU	325	6	23	A	9	B (18)	B (18)	1	42	A	5	A (5)	B (17)
	EBT (2)	--	507	444	B	19			138	263	A	6		
	EBR	550	24	129	A	3			22	105	A	2		
	WBL	200	96	118	D	46	A (8)		358	300	F	127	B (20)	
	WBT (2)	--	130	176	A	6			290	1099	A	6		
	NBL	150	212	198	D	42	D (42)		194	237	E	70	E (70)	
NBLR	--	--	231	--	--	--		758	--	--				
2026 Build Conditions	EBU	325	6	23	A	9	B (19)	B (18)	1	46	A	6	A (6)	B (18)
	EBT (2)	--	554	578	C	20			172	235	A	7		
	EBR	550	26	130	A	3			29	100	A	2		
	WBL	200	101	113	D	49	A (8)		358	300	F	127	B (20)	
	WBT (2)	--	138	195	A	6			322	1415	A	7		
	NBL	150	242	240	D	44	D (44)		202	250	E	71	E (71)	
NBLR	--	--	277	--	--	--		1138	--	--				
2027 No-Build Conditions	EBU	325	5	107	A	8	B (20)	B (19)	1	33	A	7	A (7)	B (20)
	EBT (2)	--	620	585	C	21			220	269	A	8		
	EBR	550	27	170	A	3			38	92	A	2		
	WBL	200	115	139	D	53	A (9)		401	300	F	151	C (24)	
	WBT (2)	--	144	197	A	6			347	1417	A	7		
	NBL	150	289	245	D	50	D (50)		209	250	E	72	E (72)	
NBLR	--	--	280	--	--	--		960	--	--				
2027 Build Conditions	EBU	325	6	0	A	8	C (20)	B (20)	1	33	A	8	A (9)	C (20)
	EBT (2)	--	673	575	C	21			257	242	A	9		
	EBR	550	29	66	A	2			45	116	A	3		
	WBL	200	116	181	E	56	A (9)		401	300	F	151	C (24)	
	WBT (2)	--	156	271	A	6			386	1421	A	8		
	NBL	150	304	248	D	54	D (54)		217	250	E	73	E (73)	
NBLR	--	--	328	--	--	--		1140	--	--				

Capacity analysis indicates that the overall intersection is expected to operate at LOS C or better under all analysis scenarios during the weekday AM and PM peak hours. The northbound approach is expected to operate at a LOS E or better during the weekday AM and PM peak hours under all scenarios analyzed. As previously stated, it is not uncommon for the minor street approach to experience higher delays at signalized intersections where the priority is given to the mainline movements, especially in coordinated systems. It is important to note that the development is only expected to account for 6% of the total traffic volume at the intersection. Due to the overall acceptable level of service, no improvements by the developer are recommended.

7.5. Belgrade-Swansboro Road & Swansboro Loop Road

Refer to the table below for a summary of the capacity analysis of the subject intersection during the analysis scenarios.

Table 9: Analysis Summary of Belgrade-Swansboro Road & Swansboro Loop Road

ANALYSIS SCENARIO	LANE GROUP	Existing Storage (ft)	Weekday AM Peak Hour					Weekday PM Peak Hour							
			Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)	Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)	
			95th	Max					95th	Max					
2023 Existing Conditions	WBLR	--	8	52	B ²	11	B (11) ²	N/A	18	65	B ²	12	B (12) ²	N/A	
	NBTR	--	--	--	--	--	--		--	4	--	--	--		--
	SBLT	--	3	34	A ¹	8	A (8) ¹		5	58	A ¹	8	A (8) ¹		
2026 No-Build Conditions	WBLR	--	8	50	B ²	12	B (12) ²	N/A	20	92	B ²	13	B (13) ²	N/A	
	NBTR	--	--	--	--	--	--		--	4	--	--	--		--
	SBLT	--	3	48	A ¹	8	A (8) ¹		5	72	A ¹	8	A (8) ¹		
2026 Build Conditions	WBLR	--	8	60	B ²	12	B (12) ²	N/A	23	78	B ²	13	B (13) ²	N/A	
	NBTR	--	--	--	--	--	--		--	13	--	--	--		--
	SBLT	--	5	48	A ¹	8	A (8) ¹		5	78	A ¹	8	A (8) ¹		
2027 No-Build Conditions	WBLR	--	10	53	B ²	13	B (13) ²	N/A	25	85	B ²	14	B (14) ²	N/A	
	NBTR	--	--	--	--	--	--		--	13	--	--	--		--
	SBLT	--	5	56	A ¹	8	A (8) ¹		8	82	A ¹	8	A (8) ¹		
2027 Build Conditions	WBLR	--	10	54	B ²	13	B (13) ²	N/A	28	84	B ²	14	B (14) ²	N/A	
	NBTR	--	--	--	--	--	--		--	4	--	--	--		--
	SBLT	--	5	70	A ¹	8	A (8) ¹		8	87	A ¹	8	A (8) ¹		

1. Level of service for major-street left-turn movement.
2. Level of service for minor-street approach.

Capacity analysis indicates that the major-street left-turn movement is expected to operate at a LOS A under all analysis scenarios during the weekday AM and PM peak hours. The minor-street approach is expected to operate at an overall LOS B under all analysis scenarios during the weekday AM and PM peak hours. When comparing the no-build and build traffic conditions queuing is not expected to increase significantly. Due to the acceptable levels of service, no improvements by the developer are recommended.

7.6. NC 24 & Access B

Refer to the table below for a summary of the capacity analysis of the subject intersection during the analysis scenarios.

Table 10: Analysis Summary of NC 24 & Access B

ANALYSIS SCENARIO	LANE GROUP	Existing Storage (ft)	Weekday AM Peak Hour					Weekday PM Peak Hour						
			Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)	Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)
			95th	Max					95th	Max				
2026 Build Conditions	EBT (2)	--	--	--	--	--	--	--	15	--	--	--	N/A	
	EBR	100	--	--	--	--	--	--	--	--	--	--		
	WBT (2)	--	--	--	--	--	--	127	--	--	--	--		
	NBR	--	28	94	C ¹	19	C (19) ¹	38	149	C ¹	22	C (22) ¹		
2027 Build Conditions	EBT (2)	--	--	--	--	--	--	520	--	--	--	--	N/A	
	EBR	100	--	--	--	--	--	200	--	--	--	--		
	WBT (2)	--	--	124	--	--	--	15	--	--	--	--		
	NBR	--	33	112	C ¹	22	C (22) ¹	45	560	D ¹	26	D (26) ¹		

Improvements by developer are shown in bold.

1. Level of service for minor-street approach.

Capacity analysis indicates that the minor-street approach is expected to operate at a LOS C under the 2026 build traffic condition, and LOS D under the 2027 build traffic condition during the weekday AM and PM peak hours. It should be noted that due to the proximity of the signalized intersection of NC 24 and Belgrade Swansboro Road/Access A, there will be gaps in the flow traffic along the eastbound approach which will allow for the side-street traffic to enter the mainline flow, which in turn reduces queueing and delay.

An eastbound right-turn lane was considered based on the NCDOT *Policy on Street and Driveway Access to North Carolina Highways* and was found to be warranted.

7.7. NC 24 & Access C

Refer to the table below for a summary of the capacity analysis of the subject intersection during the analysis scenarios.

Table 11: Analysis Summary of NC 24 & Access C

ANALYSIS SCENARIO	LANE GROUP	Existing Storage (ft)	Weekday AM Peak Hour					Weekday PM Peak Hour						
			Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)	Queue (ft)		Lane LOS	Delay (sec)	Approach LOS (sec)	Overall LOS (sec)
			95th	Max					95th	Max				
2026 Build Conditions	EBT (2)	--	--	--	--	--	--	--	183	--	--	--	N/A	
	EBR	100	--	--	--	--	--	40	--	--	--	N/A		
	WBT (2)	--	--	--	--	--	--	--	--	--	--			N/A
	NBR	--	20	65	C ¹	19	C (19) ¹	15	88	C ¹	19			
2027 Build Conditions	EBT (2)	--	--	--	--	--	--	580	--	--	--		N/A	
	EBR	100	--	--	--	--	--	200	--	--	--	N/A		
	WBT (2)	--	--	--	--	--	--	--	--	--	--			N/A
	NBR	--	23	105	C ¹	21	C (21) ¹	18	366	C ¹	21			

Improvements by developer are shown in bold.

1. Level of service for minor-street approach.

Capacity analysis indicates that the minor-street approach is expected to operate at a LOS C under the build traffic conditions during the weekday AM and PM peak hours. It should be noted that due to the proximity of the signalized intersection of NC 24 and Belgrade Swansboro Road/Access A, there will be gaps in the flow traffic along the eastbound approach which will allow for the side-street traffic to enter the mainline flow, which in turn reduces queueing and delay.

An eastbound right-turn lane was considered based on the NCDOT *Policy on Street and Driveway Access to North Carolina Highways* and was found to be warranted.

8. CONCLUSIONS

This Traffic Impact Analysis was conducted to determine the potential traffic impacts of the proposed development, south of NC 24 and east of Queens Creek Road in Swansboro, North Carolina. The proposed development is expected to be a mixed-use development and be built out in 2026. Site access is proposed via one full movement driveway creating a fourth leg to the intersection of NC 24 and Belgrade Swansboro Road and two right-in/right-out driveway along NC 24.

The study analyzes traffic conditions during the weekday AM and PM peak hours for the following scenarios:

- 2023 Existing Traffic Conditions
- 2026 No-Build Traffic Conditions
- 2026 Build Traffic Conditions
- 2026 Build Traffic Conditions with Improvements
- 2027 No-Build Traffic Conditions
- 2027 Build Traffic Conditions
- 2027 Build Traffic Conditions with Improvements

Trip Generation

It is estimated that the proposed development will generate approximately 325 primary trips (147 entering and 178 exiting) during the weekday AM peak hour and 387 primary trips (219 entering and 168 exiting) during the weekday PM peak hour.

Adjustments to Analysis Guidelines

Capacity analysis at all study intersections was completed according to NCDOT Congestion Management Guidelines. Refer to section 6.1 of this report for a detailed description of any adjustments to these guidelines made throughout the analysis.

Intersection Capacity Analysis Summary

All the study area intersections (including the proposed site driveways) are expected to operate at acceptable levels-of-service under existing and future year conditions with the exception of the intersections described in Section 7. A summary of the study area intersections that are expected to need improvements can be found in Section 7.

9. RECOMMENDATIONS

Based on the findings of this study, specific geometric improvements have been identified and are recommended to accommodate future traffic conditions. See a more detailed description of the recommended improvements below. Refer to Figure 14 for an illustration of the recommended lane configuration for the proposed development.

Recommended Improvements by Developer

NC 24 & Belgrade-Swansboro Road/Access A

- Restripe the existing southbound left-turn lane to a shared left-through lane.
- Extend the westbound left-turn lane to 500 feet of storage and appropriate taper length.
- Construct the northbound approach with one ingress lane and two egress lanes striped as a shared left-through lane and a right-turn lane.
- Construct an eastbound right-turn lane with 100 feet of storage and appropriate taper length.
- Signal timing modifications.

NC 24 & Queens Creek Road/School Exit

- Signal timing modifications.

NC 24 & Access B

- Construct the northbound approach with one ingress lane and one egress lane striped as a right-turn lane.
- Provide stop control for the northbound approach.
- Construct an eastbound right-turn lane with 100 feet of storage and appropriate taper length.

NC 24 & Access C

- Construct the northbound approach with one ingress lane and one egress lane striped as a right-turn lane.
- Provide stop control for the northbound approach.
- Construct an eastbound right-turn lane with 100 feet of storage and appropriate taper length.

TOWN OF SWANSBORO PLANNING AND ZONING BOARD
STATEMENT OF CONSISTENCY

On January 7, 2025, the Planning Board heard the requested conditional rezoning map amendment and did not recommended approval of the requested rezoning map amendment to the Board of Commissioners.

The Town’s Planning Board finds that the requested conditional rezoning map amendment is not consistent with the Comprehensive Plan including 2019 Cama Land Use Plan Update amended August 23, 2023, and considers the action taken to not be reasonable and in keeping with the Town’s adopted plan.

Planning Board Chair

Town Planner

TOWN OF SWANSBORO PLANNING AND ZONING BOARD
STATEMENT OF CONSISTENCY

On January 7, 2025, the Planning Board heard the requested conditional rezoning map amendment and recommended unanimous approval of the requested rezoning map amendment to the Board of Commissioners.

The Town's Planning Board finds that the requested conditional rezoning map amendment is consistent with the Comprehensive Plan including 2019 Cama Land Use Plan Update amended August 23, 2023, and considers the action taken to be reasonable and in keeping with the Town's adopted plan.

Planning Board Chair

Town Planner

**Draft Ordinance 2025-
Zoning Map Amendment**

WHEREAS North Carolina General Statute 160D-701 requires that zoning regulations shall be made in accordance with a Comprehensive Plan; and

WHEREAS NCGS 160D-604 also states that when adopting or rejecting any zoning amendment, the governing board shall approve a statement describing whether its action is consistent with an adopted Comprehensive Plan and any other officially adopted plan that is applicable, and briefly explain why the board considers the action taken to be not reasonable and not in the public interest; and

WHEREAS the Board of Commissioners finds that the proposed conditional re-zoning of PARID Number: 019494 and 027733 located off of W Corbett Ave, is not reasonable and not in public interest because the conversion of approximately 38.92- acres from RA (Rural/Agricultural) zoning designation to B-1 (Business) Conditional zoning is not consistent with the Comprehensive Plan, specifically the 2019 Land Use Plan Update amended August 28, 2023, and the property is identified as not appropriate for mixed-use land use.

NOW BE IT ORDAINED by the Town of Swansboro Board of Commissioners that the Town Zoning Map be amended by converting PARID Numbers 019494 and 027733 from RA (Rural/Agricultural) zoning designation to B-1 (Business) Conditional zoning.

This Ordinance shall be effective upon adoption.

Adopted by the Board of Commissioners in regular session, _____, 2025.

Attest:

Alissa Fender, Town Clerk

William Justice, Mayor Pro Tem

**Draft Ordinance 2025-
Zoning Map Amendment**

WHEREAS North Carolina General Statute 160D-701 requires that zoning regulations shall be made in accordance with a Comprehensive Plan; and

WHEREAS NCGS 160D-604 also states that when adopting or rejecting any zoning amendment, the governing board shall approve a statement describing whether its action is consistent with an adopted Comprehensive Plan and any other officially adopted plan that is applicable, and briefly explain why the board considers the action taken to be reasonable and in the public interest; and

WHEREAS the Board of Commissioners finds that the proposed conditional re-zoning of PARID Number: 019494 and 027733 located off of W Corbett Ave, is reasonable and in public interest because the conversion of approximately 38.92- acres from RA (Rural/Agricultural) zoning designation to B-1 (Business) Conditional zoning is consistent with the Comprehensive Plan, specifically the 2019 Land Use Plan Update amended August 28, 2023, and the property is identified as appropriate for mixed-use land use.

NOW BE IT ORDAINED by the Town of Swansboro Board of Commissioners that the Town Zoning Map be amended by converting PARID Numbers 019494 and 027733 from RA (Rural/Agricultural) zoning designation to B-1 (Business) Conditional zoning.

This Ordinance shall be effective upon adoption.

Adopted by the Board of Commissioners in regular session, _____, 2025.

Attest:

Alissa Fender, Town Clerk

William Justice, Mayor Pro Tem



Planning Board Meeting Agenda Item Submittal

Item To Be Considered: **UDO Text Amendment to § 152.016 Definition of Basic Terms and § 152.267 Computation of Sign Area**

Board Meeting Date: **January 7, 2025**

Prepared By: **Rebecca Brehmer, CFM, CZO, Town Planner**

Overview: After the discovery of a discrepancy in UDO Sections 152.016 Definitions of Basic Terms for the definition “Sign, Area Of” and 152.267 Computation of Sign Area (C) when it comes to calculating the square footage allowed on a sign, a text amendment to these sections is proposed for consistency.

Currently, the two last sentences of Section 152.016 Definitions of Basic Terms for the definition of “Sign, Area Of” reads “In computing the area, only one side of a double-face sign structure shall be considered. Unless copy is not the same on both sides, then both sides should be calculated as area of sign” which contradicts Section 152.267 Computation of Sign Area (C) which reads “The sign area computation shall include all sides of the sign in which there is sign copy which can be seen”. Based on past enforcement and interpretation and to keep new signs in town consistent with what is already present, the proposed text amendment changes the last two sentences of Section 152.016 Definition of Basic Terms “Sign, Area of” by changing the way of computing the area of a sign to include calculating both sides of a double-faced structure and completely removing the last sentence and changes Section 152.267 Computation of Sign Area (C) to “The sign area computation shall include all sides of the sign.”. This leaves no conflict and clearly states that all sides of a sign, whether the same copy or not, shall be counted in total square footage allowed.

Background Attachment(s):

1. Draft Ordinance
2. Comprehensive Plan Consistency Statement

Recommended Action: Motion to recommend approval of the UDO text amendment to Section §152.016 Definitions of Basic Terms and Section §152.267 Computation of Sign Area, along with the Comprehensive Plan Consistency Statement.

Action: _____

**DRAFT ORDINANCE 2025-
AN AMENDMENT TO THE UNIFIED DEVELOPMENT ORDINANCE
§152.179 TABLE OF PERMITTED/SPECIAL USES, § 152.016 Definition of Basic Terms and
§ 152.267 Computation of Sign Area**

WHEREAS North Carolina General Statute 160D-605 and 160D-701 requires that zoning regulations shall be made in accordance with a Comprehensive Plan; and

WHEREAS the Board of Commissioners finds that the proposed text amendments to the Unified Development Ordinance regarding referenced above to be consistent with the Town of Swansboro CAMA LAND USE Plan updated January 22, 2019, and amended August 28, 2023.

NOW BE IT ORDAINED by the Town of Swansboro Board of Commissioners that the Town Unified Development Ordinance be amended.

***TITLE XV: LAND USAGE
CHAPTER 152: UNIFIED DEVELOPMENT ORDINANCE
§ 152.016 DEFINITIONS OF BASIC TERMS.***

SIGN, AREA OF. Sign area shall be computed by the smallest square, triangle, rectangle, circle, or combination thereof, which will encompass the entire sign including lattice work, frame, or supports incidental to its decoration. In computing the area, **only one side both sides of a double-face sign structure shall be considered. Unless copy is not the same on both sides, then both sides should be calculated as area of sign.**

***TITLE XV: LAND USAGE
CHAPTER 152: UNIFIED DEVELOPMENT ORDINANCE
§ 152.267 COMPUTATION OF SIGN AREA***

(C) The sign area computation shall include all sides of the sign, **in which there is sign copy which can be seen.**

This Ordinance shall be effective upon adoption.

Adopted by the Board of Commissioners in regular session, _____, 2025.

Attest:

Alissa Fender, Town Clerk

William Justice, Mayor Pro Tem

**TOWN OF SWANSBORO PLANNING AND ZONING BOARD
STATEMENT OF CONSISTENCY**

On January 7, 2025, the Planning Board heard the requested text amendments and recommended unanimous approval of the text amendments to the Town Unified Development Ordinance as followed: §152.016 Definitions of Basic Terms and §152.267 Computation of Sign Area .

The Town’s Planning Board finds that the proposed text amendments are consistent with the current Comprehensive Plan and other applicable plans and policies and considers the action taken to be reasonable and in the public interest because it provides the structure, for Town staff to proactively address issues related to impacts caused by development in order to protect the health, safety, and welfare of the Town’s residents.

Planning Board Chair

Town Planner