Planning Commission

Wednesday, July 26, 2023 at 6:00 PM

Theodore D. Washington Municipal Building, 20 Bridge Street, Henry "Emmett" McCracken Jr. Council Chambers

AGENDA

This meeting can be viewed live on Beaufort County Channel, on Hargray Channel 9 and 113 or on Spectrum Channel 1304.

I. CALL TO ORDER

II. ROLL CALL

III. NOTICE REGARDING ADJOURNMENT

The Planning Commission will not hear new items after 9:30 p.m. unless authorized by a majority vote of the Commission Members present. Items which have not been heard before 9:30 p.m. may be continued to the next regular meeting or a special meeting date as determined by the Commission Members.

IV. NOTICE REGARDING PUBLIC COMMENTS*

Every member of the public who is recognized to speak shall address the Chairman and in speaking, avoid disrespect to Commission, Staff, or other members of the Meeting. State your name and address when speaking for the record. COMMENTS ARE LIMITED TO THREE (3) MINUTES.

V. ADOPTION OF THE AGENDA

VI. ADOPTION OF MINUTES

1. June 28, 2023 Minutes

VII. PUBLIC COMMENTS FOR ITEMS NOT ON THE AGENDA*

VIII. OLD BUSINESS

IX. NEW BUSINESS

1. **Parcel B-1 (Initial Master Plan):** A request by Brian Witmer of Witmer Jones Keefer, Ltd, on behalf of Millstone Ventures, LLC, and with the approval of the property owner, Parcel 8A, LLC, for approval of an initial master plan application. The project proposes 16.02 acres of residential development and 5.9 acres of commercial development. The property is zoned Buckwalter PUD and consists of 21.92 acres identified by tax map number R610 028 000 0921

0000 and located at the northeast corner of the intersection of SC Highway 170 and Gibbet Road. (MP-06-23-018137) (Staff – Dan Frazier)

2. **CarVillage Bluffton (Development Plan Application):** A request by Dan Keefer of Witmer Jones Keefer, Ltd, on behalf of the property owner, Charlie and Brown, LLC for approval of a preliminary development plan. The project consists of the construction of a +/-20,000 sq. ft. two-story Clubhouse and 5 buildings divided into +/- 31 high-end garage condominium units. The property is zoned Village at Verdier PUD and consists of approximately 5.00 acres, identified by tax map number R610-021-000-0808-0000 and located on Highway 170 approximately 1,200 feet south of Seagrass Station Road. (DP-08-22-017076) (Staff – Dan Frazier)

X. DISCUSSION

XI. ADJOURNMENT

"FOIA Compliance – Public notification of this meeting has been published and posted in compliance with the Freedom of Information Act and the Town of Bluffton policies."

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 ("ADA"), the Town of Bluffton will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities. The Town of Bluffton Council Chambers are ADA compatible. Auditory accommodations are available. Any person requiring further accommodation should contact the Town of Bluffton ADA Coordinator at 843.706.4500 or adacoordinator@townofbluffton.com as soon as possible but no later than 48 hours before the scheduled event.

**Please note that each member of the public may speak at one public comment session and a form must be filled out and given to the Town Clerk. Public comment is limited to 3 minutes per speaker.*

Executive Session - The public body may vote to go into executive session for any item identified for action on the agenda.

Planning Commission

Theodore D. Washington Municipal Building, 20 Bridge Street, Henry "Emmett" McCracken Jr. Council Chambers

June 28, 2023

I. CALL TO ORDER

Chairwoman Denmark called the meeting to order at 6pm.

II. ROLL CALL

PRESENT
Chairwoman Amanda Jackson Denmark
Vice Chairman Charlie Wetmore
Commissioner Kathleen Duncan
Commissioner Rich Delcore
Commissioner Jason Stewart
Commissioner Jim Flynn
Commissioner Lydia DePauw

III. ADOPTION OF THE AGENDA

Vice Chairman Wetmore made a motion to adopt the agenda as written.

Seconded by Commissioner Flynn.
Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Duncan, Commissioner Delcore, Commissioner Stewart, Commissioner Flynn, Commissioner DePauw

All were in favor and the motion passed.

IV. ADOPTION OF MINUTES

1. May 24, 2023 Minutes

   Commissioner Delcore made a motion to adopt the minutes as written.

   Seconded by Commissioner Flynn.
   Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Duncan, Commissioner Delcore, Commissioner Stewart, Commissioner Flynn, Commissioner DePauw

   All were in favor and the motion passed.

V. PUBLIC COMMENTS FOR ITEMS NOT ON THE AGENDA*

VI. OLD BUSINESS

VII. NEW BUSINESS

1. **Lakes at New Riverside Phases 5 and 6 (Street Naming):** A request by John Paul Moore of Thomas & Hutton, on behalf of Pritchard Farms, LLC for approval of a street naming application. The project consists of 144 single family lots and associated infrastructure. The property is identified by tax map number R610 044 000 0443 0000 and consists of 48.9 acres within the New Riverside Planned Unit Development Zoning District. (STR-05-23-018020) (Staff - Dan Frazier)

Staff presented. Applicant was in attendance.

Vice Chairman Wetmore made a motion to approve the application as submitted.

Seconded by Commissioner Delcore.
Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Duncan, Commissioner Delcore, Commissioner Stewart, Commissioner Flynn, Commissioner DePauw

All were in favor and the motion passed.

2. **Midpoint (Street Naming):** A request by Pulte Homes Company on behalf of Walcam Land Group, LLC for approval of a street naming application. The project consists of seven additional streets for the Midpoint neighborhood with associated single-family home lots. The property is identified by tax map number R610 044 000 0126 0000 and R614 045 000 0019 0000 and is located within the New Riverside PUD. (STR-05-23-018057) (Staff - Dan Frazier)

   Staff presented. The applicant was in attendance. There was discussion about repetitive street names.

   Commissioner Delcore made a motion to approve the street names as presented by staff with the exception of number 13, Coral Cove Court.

   Seconded by Commissioner Duncan.
   Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Duncan, Commissioner Delcore, Commissioner Stewart, Commissioner Flynn, Commissioner DePauw

   All were in favor and the motion passed.

3. **Wetland Impact for Parcels 12A, 12B and 12C (Development Plan):** A request by Nathan Long of Thomas & Hutton on behalf of Jake Reed of University Investments, LLC for approval of a preliminary development plan. The project proposes partial wetland filling of approximately 0.56 acres to allow crossings for future road alignments. The properties are zoned Buckwalter Planned Unit Development and consists of approximately 58.0 acres identified by tax map numbers R610 029 000 0611 0000, R610 029 000 2343 0000, R610 029 000 2344 0000, and R610 029 000 1721 0000 located south and adjacent to Bluffton Parkway. (DP-03-23-017841) (Staff – Dan Frazier)

   Staff presented. The applicant was in attendance. There was discussion about the access management plan, the intent of the future use of the property and the dry ponds.

   Vice Chairman Wetmore made a motion to approve the plan as submitted with the condition that an approved encroachment permit allowing the applicant to perform work within the Town-owned Innovation Drive Extension property will be required prior to final development plan approval.

   Seconded by Commissioner Stewart.
   Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Duncan, Commissioner Delcore, Commissioner Stewart, Commissioner Flynn, Commissioner DePauw

   All were in favor and the motion passed.

4. **Public Hearing:** Certain Amendments to the Town of Bluffton's Municipal Code of Ordinances, Chapter 23, Unified Development Ordinance (UDO), Sec. 3.2.3, Public Hearing Notice; Sec.

5.13, Signs, Exempt and Prohibited; and, Sec. 5.15, Old Town Bluffton Historic District, Cupolas, Setbacks in the NCE-HD and NG-HD Districts, and Establishing a Medium House Building Type with Related Building Requirements (Staff - Charlotte Moore)

Chairman Denmark opened the Public Hearing. There was a first call for public comment, then a second call and a final call for public comment. There was no public comment. The public hearing was closed.

Staff presented the proposed changes.

Commissioner Flynn made a motion to approve the amendments to the Town of Bluffton Code of Ordinances Chapter 23 - Unified Development Ordinance, as recommended by Town Staff with the following additional amendments:

1. Section 5.3.7: Eliminate the Sign Permit requirement for the following Temporary Signage: property sales/leases, construction projects and campaign signs; and
2. Section 3.2.4: Eliminate the public notice requirement for Street Naming and for a Minor Subdivision associated within an active Development Plan.

Seconded by Commissioner Delcore.
Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Duncan, Commissioner Delcore, Commissioner Stewart, Commissioner Flynn, Commissioner DePauw

All were in favor and the motion passed.

5. **Big Blue Marble Academy (Certificate of Appropriateness- Highway Corridor Overlay):** A request by Samantha Kozlowski, Development Manager, on behalf of the parcel owners EIG14T BBMA SC BLUFFFTON, LLC, for approval of a Certificate of Appropriates – Highway Corridor Overlay. The project consists of the landscape, lighting and architecture for Big Blue Marble Academy, a 11,293 SF one-story square foot childcare facility including an outdoor child play area and associated parking, located at the intersection of Mill Creek Boulevard and Okatie Highway (SC HWY 170) off Slater Street in the Jones Estate PUD, within the Cypress Ridge Master Plan. (COFA-03-23-017836) (Staff - Katie Peterson)

Staff presented. The applicant was in attendance. The applicant responded to the staff conditions. There was discussion about the conditions listed in the staff report, planting species, buffer near the sidewalk, the floor plan layout, safety concerns, fencing, door types, and when sign permits are required. Planning Commission Attorney LaBruce reviewed the options for the Planning Commission to act. The applicant requested to table the application. Staff reviewed the items discussed to ensure clear direction for the applicant to resubmit materials.

Vice Chairman Wetmore made a motion to table the application with the consideration that the applicant work with Staff to address the concerns the Commission had prior to returning to Planning Commission.

Seconded by Commissioner Delcore.
Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Duncan, Commissioner Delcore, Commissioner Stewart, Commissioner Flynn, Commissioner DePauw

All were in favor and the motion to table the application passed.

6. **Refuel (Certificate of Appropriateness - Highway Corridor Overlay):** A Certificate of Appropriateness to permit the landscape, lighting and architecture for Refuel convenience store and gas station, located along SC Highway 46 across from the May River Xing intersection. It is zoned PUD within the New Riverside PUD and New Riverside Village Master Plan. (COFA-04-23-017905)(Staff - Katie Peterson)

   Staff presented. The applicant was in attendance. There was discussion about landscaping, parking, ceiling height, roof lines, plant selection, the canopy over the fuel section, the horizontal windows and mass and scale. The applicant requested to table the application. Staff reviewed the Commission's concerns.

   Commissioner Duncan made a motion to table the application.

   Seconded by Commissioner Delcore.
   Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Duncan, Commissioner Delcore, Commissioner Stewart, Commissioner Flynn, Commissioner DePauw

   All were in favor and the motion to table the application passed.

VIII. DISCUSSION

Staff introduced the Commission to the Growth Management Department Summer Intern, Angie Castrillon.

Staff thanked Commissioner Duncan for her years of service as this was her last meeting.

IX. ADJOURNMENT

Commissioner Duncan made a motion to adjourn.

Seconded by Vice Chairman Wetmore.
Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Delcore, Commissioner Stewart, Commissioner Flynn, Commissioner DePauw, Commissioner Duncan

All were in favor and the motion passed. The meeting was adjourned at 8:28pm.

PLANNING COMMISSION

STAFF REPORT
Department of Growth Management

MEETING DATE:	July 26, 2023
PROJECT:	Consideration of approval of an Initial Master Plan for property referred to as Parcel B-1 within the Buckwalter Planned Unit Development consisting of 21.92 acres that will include 16.02 acres of residential development and 5.9 acres of commercial development.
PROJECT MANAGER:	Dan Frazier, AICP Principal Planner Department of Growth Management

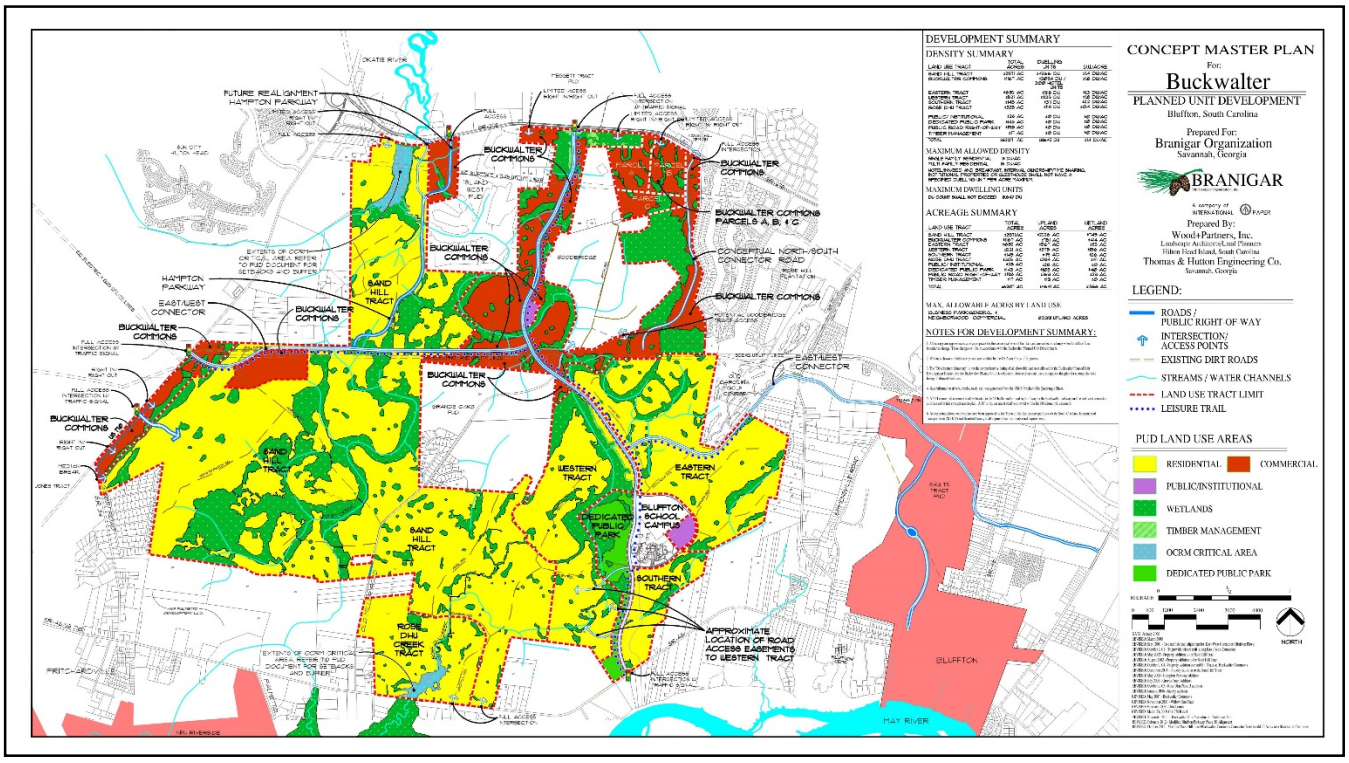
REQUEST: A request for approval of an Initial Master Plan application for Parcel B-1 within the Buckwalter Planned Unit Development (Attachments 1 and 2).

INTRODUCTION: The Applicant, Brian Witmer of Witmer Jones Keefer, Ltd, on behalf of Millstone Ventures, LLC, and with the approval of the property owner, Parcel 8A, LLC, is requesting approval for an Initial Master Plan for Parcel B-1. The subject parcel is identified as a commercial land use area within the Buckwalter Commons Tract of Buckwalter PUD Concept Master Plan (Attachment 3).

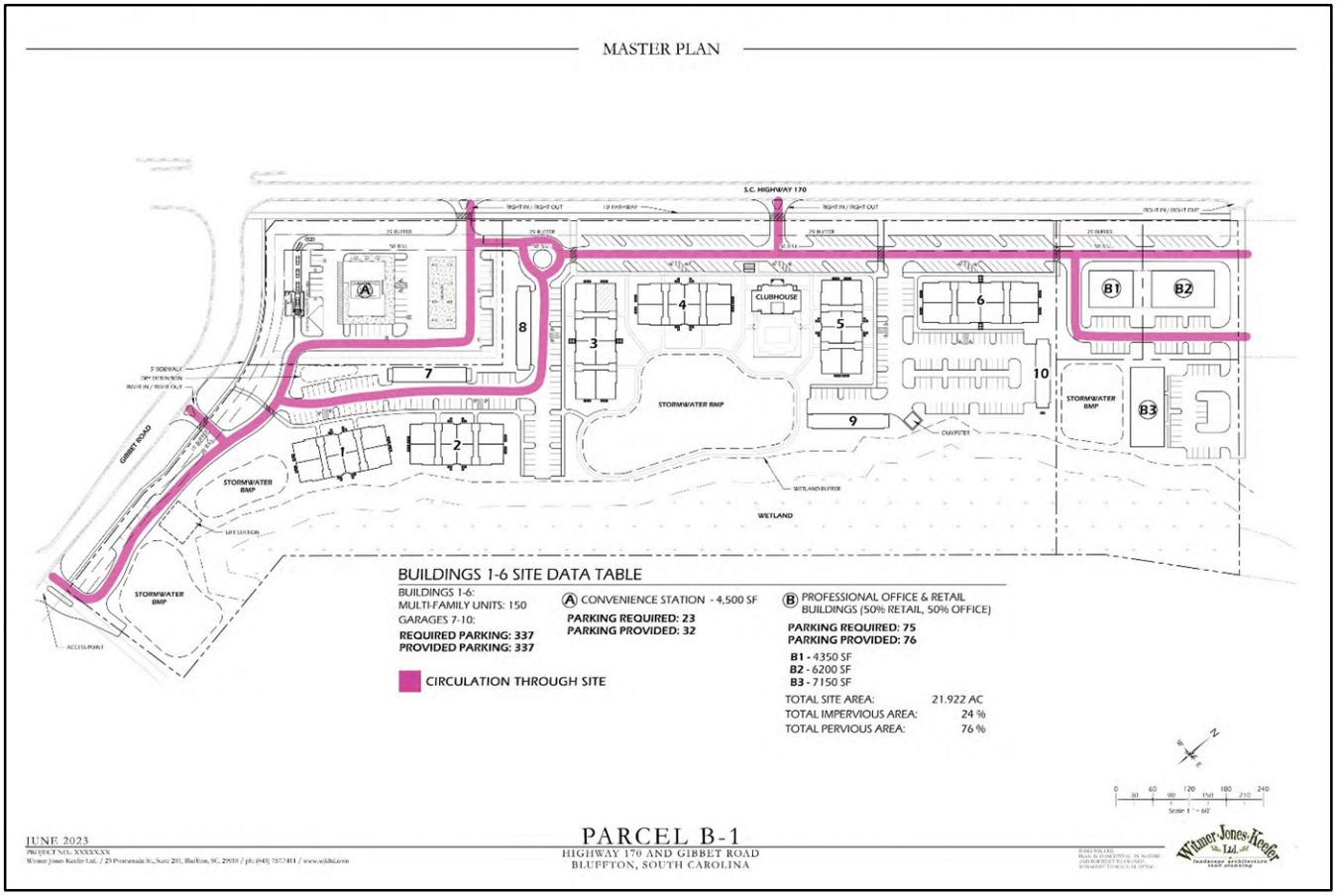
BACKGROUND: This initial master plan application request was previously submitted as a master plan amendment application requesting to amend the Buckwalter Crossroads Master Plan. On May 24, 2023, the planning commission recommended approval of the request subject to conditions. The request was subsequently withdrawn prior to proceeding to town council for consideration.

The Initial Master Plan consists of 21.92 acres that will include 16.02 acres of residential development and 5.9 acres of commercial development (Attachment 4). More specifically, the applicant proposes a conceptual site layout that includes a 150-unit multi-family development and two outparcels. Outparcel A proposes a 4,500 s.f. gas station/convenience store located at the northeast corner of Gibbet Road and SC Highway 170. Outparcel B proposes three professional office and retail buildings totaling 17,700 s.f north of the proposed multi-family development. The conceptual site layout provides interconnectivity between the uses and northward into the adjacent properties located within the Buckwalter Crossroads Master Plan.

Site layouts shown on the proposed master plan are conceptual in nature and are subject to review and approval in accordance with the Town of Bluffton Unified Development Ordinance at time of development plan submittal. As the subject properties are located within the Highway Corridor Overlay District, a Certificate of Appropriateness-HCOD is required. The marginal access road providing interconnectivity between developments is recognized as a requirement of the master plan.



Buckwalter PUD Concept Master Plan



Proposed Master Plan

The Applicant's complete submittal booklet provides a master plan narrative and master plan exhibits including existing and proposed conditions, wetlands, and a tree survey (Attachment 5). The Applicant has also provided a traffic impact analysis that has been reviewed and approved by the South Carolina Department of Transportation (SCDOT) (Attachment 6). The five site access locations and movements shown on the conceptual site layout are consistent with the conclusions of the traffic impact analysis.

The Beaufort County CONNECTS 2021 Bicycle and Pedestrian Plan, adopted by resolution by the Town of Bluffton on September 14, 2021, identifies a bicycle and pedestrian facility to be installed on the "Northbound side of SC-170 from SC-46 to Bluffton Parkway". The location of the 10-foot path is to be determined at the time of development plan submittal, and long-term maintenance of the path will be provided by Beaufort County if SCDOT does not assume this responsibility. Whether located on or off-site, the path is to be included in development plan applications and installed in conjunction with individual developments as they are constructed. A statement shall be placed on the amended master plan declaring that all development within the Buckwalter Crossroads Master Plan shall conform to the requirements and recommendations of the Beaufort County CONNECTS 2021 Bicycle and Pedestrian Plan.

Comments on the current master plan amendment were reviewed at the June 28, 2023, meeting of the Development Review Committee (Attachment 7). The Applicant satisfactorily addressed the DRC comments in a July 7, 2023, resubmittal.

REVIEW CRITERIA & ANALYSIS: The Planning Commission is required to consider the criteria set forth in Section 3.9.3 of the Unified Development Ordinance in assessing an application for a Master Plan. These criteria are provided below followed by a Staff Finding(s).

1. Section 3.9.3.B. Promotion of and consistency with the land use goals, environmental objectives and overall intent of the policies within the Comprehensive Plan.

   Finding. The application is consistent with the Comprehensive Plan.

   The Land Use Element within the Comprehensive Plan provides a vision that suggests a balance of land uses to ensure a high quality of life, business opportunity, environmentally protected areas, and proper placement of commercial uses. The Parcel B-1 Initial Master Plan proposes a mix of residential and commercial uses that will stimulate economic growth and contribute to the Town's goal of being a sustainable community with a diversified tax base to support Town facilities and services.

2. Section 3.9.3.C. Consistency with the intent of the Planned Unit Development Zoning District as prescribed in this Ordinance.

   Finding. The application is consistent with the Town of Bluffton Zoning and Development Standards Ordinance that applies to the Buckwalter PUD Concept Plan.

The Buckwalter PUD Concept Plan was designed to be a mixed-use development, which includes residential and commercial uses. The initial master plan application proposes a mixed-use development that is consistent with the Buckwalter PUD Concept Plan.

3. Section 3.9.3.D. As applicable, consistency with the provisions of the associated Development Agreement and/or PUD Concept Plan.

   Finding. The application is consistent with the provisions of the Buckwalter PUD Concept Plan.

   The initial master plan application is consistent with the Buckwalter PUD Concept Plan, which identifies the subject properties as being within the Buckwalter Commons Land Use Tract, which allows for General Commercial and Multi-family Residential land uses.

4. Section 3.9.3.E. Compatibility of proposed land uses, densities, traffic circulation and design with adjacent land uses and environmental features, as well as the character of the surrounding area.

   Finding. The application is compatible with the surrounding area.

   The proposed land uses and densities are compatible with existing development in the surrounding area. The traffic impact analysis provided with the application was prepared in April 2023, and has been reviewed and approved by SCDOT. The five site access locations and movements shown on the conceptual site layout are consistent with the conclusions of the traffic impact analysis.

5. Section 3.9.3.F. Ability to be served by adequate public services, including, but not limited to, water, sanitary sewer, roads, police, fire, and school services. For developments that have the potential for significant impact on infrastructure and services the applicant shall be required to provide an analysis and mitigation of the impact on transportation, utilities, and community services.

   Finding. The property can be served by adequate public services.

   Existing water mains, located along both Gibbet Road and SC170, will serve the parcels. The water supply system will be designed to provide flow and pressure for fire protection. The wastewater will be collected and pumped to an existing wastewater facility owned and operated by BJWSA. As previously stated, the traffic impact analysis provided with the application was prepared in April 2023, and has been reviewed and approved by SCDOT.

6. Section 3.9.3.G. Demonstration of innovative site planning techniques that improve upon the standards in other allowable Town of Bluffton zoning districts with the purpose of enhancing the Town of Bluffton's health, safety and welfare.

   Finding. The Master Plan includes innovative site planning techniques that enhance the Town's health, safety, and welfare.

The site will be required to use best practices in stormwater management and is subject to the requirements of the Town of Bluffton Unified Development Ordinance and Stormwater Design Manual (SWDM), to include the Southern Lowcountry Stormwater Ordinance & Design Manual.

The site will also be required to meet the requirements and recommendations of the Beaufort County CONNECTS 2021 Bicycle and Pedestrian Plan, to include installing a bicycle and pedestrian path along SC 170 frontage.

7. Section 3.9.3.H. **Ability of the site to sufficiently accommodate the densities and land use intensities of the proposed development.**

   Finding. The property can sufficiently accommodate the proposed development.

   The site is consistent with the approved Buckwalter PUD Concept Plan.

8. Section 3.9.3.I. **Conformance with adopted or accepted plans, policies, and practices of the Town of Bluffton.**

   Finding. The requested initial master plan is in conformance with adopted or accepted plans, policies, and practices of the Town.

TOWN STAFF RECOMMENDATION: Town Staff finds that the requirements of Section 3.9.3 of the Unified Development Ordinance can be met with the following conditions and recommends that the Planning Commission provide a recommendation of conditional approval to Town Council for the Parcel B-1 Initial Master Plan

1. A statement shall be placed on the initial master plan declaring that all development within the master plan shall conform to the requirements and recommendations of the Beaufort County CONNECTS 2021 Bicycle and Pedestrian Plan.
2. Whether located on- or off-site, it shall be the responsibility of developers to install a 10-foot-wide bicycle and pedestrian path along SC Highway 170 frontage consistent with the requirements and recommendations of the Beaufort County CONNECTS 2021 Bicycle and Pedestrian Plan in conjunction with individual site development within the Parcel B-1 Initial Master plan.
3. Site layouts for all parcels are subject to full Town review and approval at time of development plan submittal.

PLANNING COMMISSION ACTIONS: The Planning Commission has the authority to take the following actions with respect to the recommendation of the application to Town Council:

1. Recommend approval to Town Council of the application as submitted by the Applicant;
2. Recommend approval to Town Council of the application with conditions; or
3. Recommend denial to Town Council of the application as submitted by the Applicant.

NEXT STEPS: Forward recommendation to Town Council:

Master Plan Procedure	Step Completed	Date Completed
Step 1. Pre-Application Meeting	✓	December 1, 2022
Step 2. Application Check-In Meeting	✓	January 24, 2023
Step 3. Review by DRC	✓	June 28, 2023
Step 4. Planning Commission Recommendation	✓	July 26, 2023
Step 5. Town Council Consideration for Approval of Majority Vote		TBD

ATTACHMENTS:

1. Application
2. Location Map
3. Buckwalter PUD Concept Master Plan
4. Initial Master Plan
5. Complete Submittal Booklet
6. Traffic Impact Analysis (April 18, 2023)
7. DRC Comments (June 28, 2023)

TOWN OF BLUFFTON
PLANNED UNIT DEVELOPMENT (PUD) MASTER PLAN APPLICATION

Growth Management Custom
20 Bridge Street
Bluffton, SC 29910
(843)706-4522
www.townofbluffton.sc.gov
applicationfeedback@townofbluffton.com

Applicant	Property Owner
Name: Witmer Jones Keefer	Name: Millstone Ventures LLC
Phone: 843-757-7411	Phone: 317-694-5114
Mailing Address: 23 Promenade Street	Mailing Address:
E-mail: Brian@wjkltd.com	E-mail: Owen@millstonemgmt.com
Town Business License # (if applicable):	

Project Information

Project Name: Parcel B-1	☒ New	☐ Amendment
Project Location: HWY 170 & GIBBET RD.	Acreage: 21.922	
PUD Name: Buckwalter		
Tax Map Number(s): R610 028 000 0921 0000		
Project Description: Multi family, Convienence Store, Professional, Retail uses		

Minimum Requirements for Submittal

- ☑ 1. Two (2) full sized copies and digital files of the Master Plan.
- ☑ 2. Recorded deed and plat showing proof of property ownership.
- ☑ 3. Project Narrative describing reason for application and compliance with the criteria in Article 3 of the UDO.
- ☐ 4. An Application Review Fee as determined by the Town of Bluffton Master Fee Schedule. Checks made payable to the Town of Bluffton.

Note: **A Pre-Application Meeting is required prior to Application submittal.**

Disclaimer: **The Town of Bluffton assumes no legal or financial liability to the applicant or any third party whatsoever by approving the plans associated with this permit.**

I hereby acknowledge by my signature below that the foregoing application is complete and accurate and that I am the owner of the subject property. As applicable, I authorize the subject property to be posted and inspected.

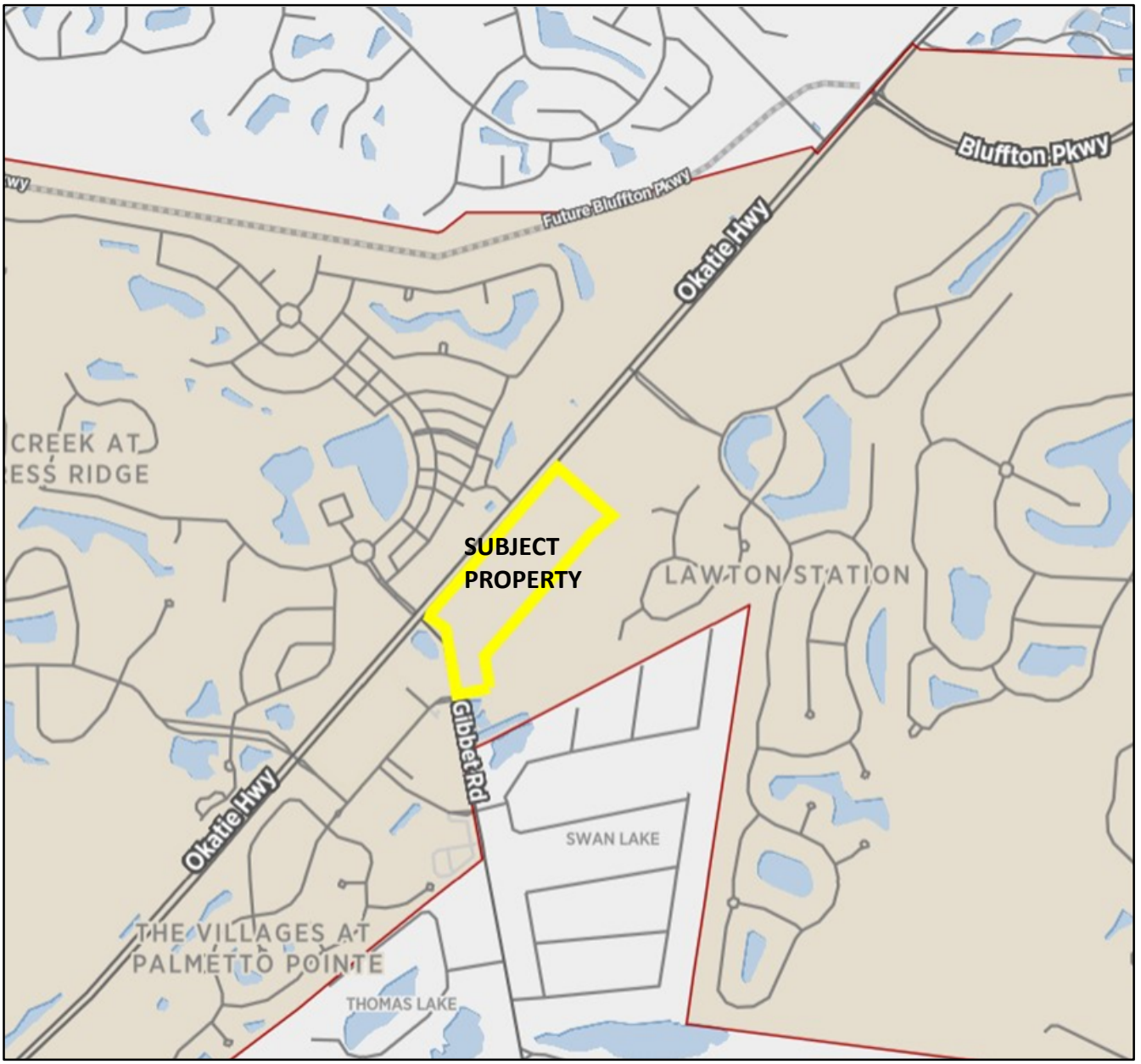
Property Owner Signature: Adrien Dommiller Date: 6/1/23

Applicant Signature: Date: 6/5/23

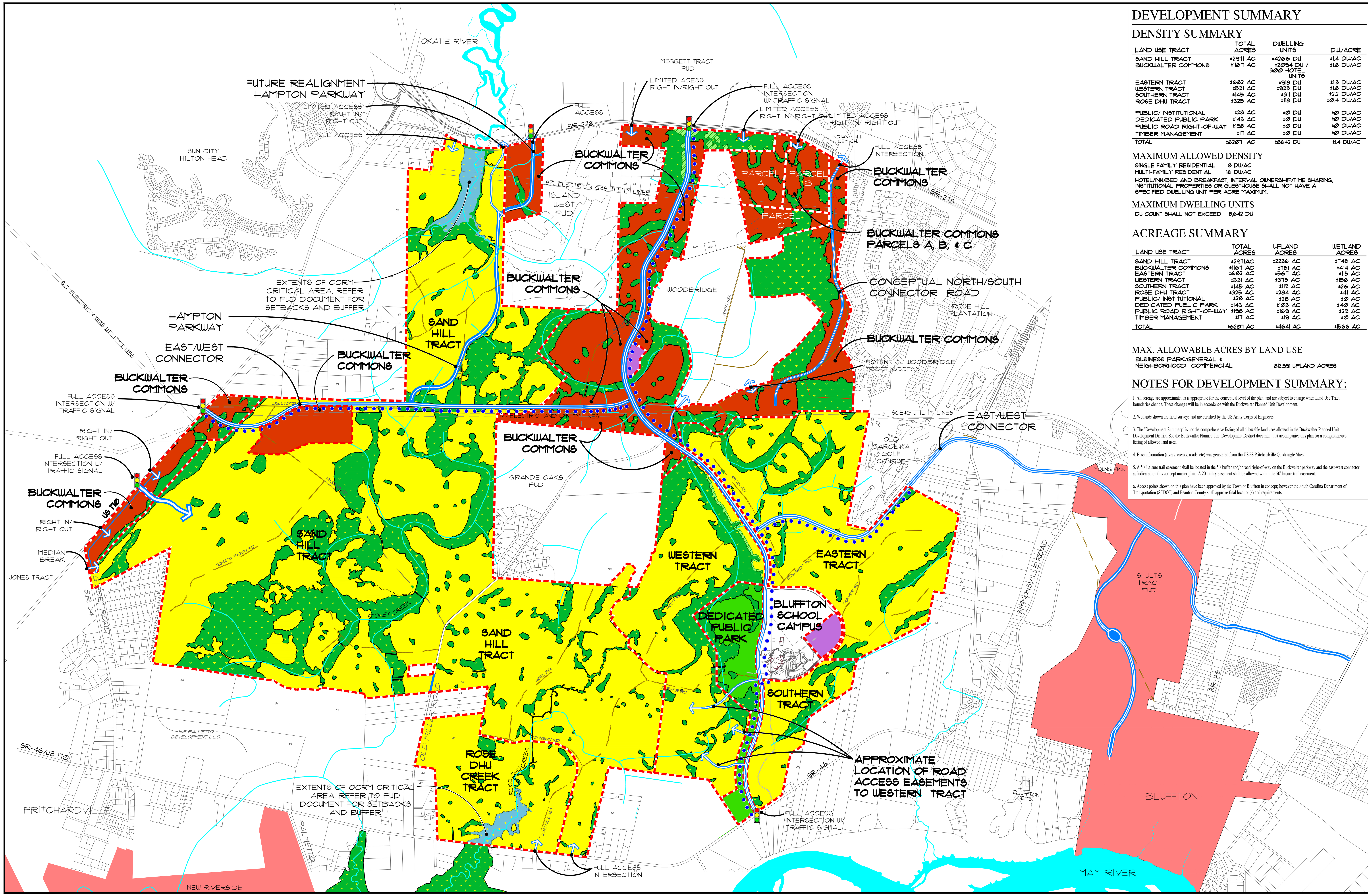
For Office Use

Application Number:	*Date Received:*
Received By:	*Date Approved:*

VICINITY MAP
PARCEL B-1
INITIAL MASTER PLAN



ATTACHMENT 3



DEVELOPMENT SUMMARY

DENSITY SUMMARY

LAND USE TRACT	TOTAL ACRES	DWELLING UNITS	D.U./ACRE
SAND HILL TRACT	±2971 AC	±4266 DU	±1.4 DU/AC
BUCKWALTER COMMONS	±1167 AC	±2094 DU / 300 HOTEL UNITS	±1.8 DU/AC
EASTERN TRACT	±682 AC	±918 DU	±1.3 DU/AC
WESTERN TRACT	±531 AC	±935 DU	±1.8 DU/AC
SOUTHERN TRACT	±145 AC	±311 DU	±2.2 DU/AC
ROSE DHU TRACT	±325 AC	±118 DU	±0.4 DU/AC
PUBLIC/ INSTITUTIONAL	±28 AC	±0 DU	±0 DU/AC
DEDICATED PUBLIC PARK	±143 AC	±0 DU	±0 DU/AC
PUBLIC ROAD RIGHT-OF-WAY	±198 AC	±0 DU	±0 DU/AC
TIMBER MANAGEMENT	±17 AC	±0 DU	±0 DU/AC
TOTAL	±6207 AC	±8642 DU	±1.4 DU/AC

MAXIMUM ALLOWED DENSITY

SINGLE FAMILY RESIDENTIAL 8 DU/AC
MULTI-FAMILY RESIDENTIAL 16 DU/AC

HOTEL/INN/BED AND BREAKFAST, INTERVAL OWNERSHIP/TIME SHARING, INSTITUTIONAL PROPERTIES OR GUESTHOUSE SHALL NOT HAVE A SPECIFIED DWELLING UNIT PER ACRE MAXIMUM.

MAXIMUM DWELLING UNITS

DU COUNT SHALL NOT EXCEED 8,642 DU

ACREAGE SUMMARY

LAND USE TRACT	TOTAL ACRES	UPLAND ACRES	WETLAND ACRES
SAND HILL TRACT	±2971AC	±2226 AC	±745 AC
BUCKWALTER COMMONS	±1167 AC	±751 AC	±414 AC
EASTERN TRACT	±682 AC	±567 AC	±115 AC
WESTERN TRACT	±531 AC	±375 AC	±156 AC
SOUTHERN TRACT	±145 AC	±119 AC	±26 AC
ROSE DHU TRACT	±325 AC	±284 AC	±41 AC
PUBLIC/ INSTITUTIONAL	±28 AC	±28 AC	±0 AC
DEDICATED PUBLIC PARK	±143 AC	±103 AC	±40 AC
PUBLIC ROAD RIGHT-OF-WAY	±198 AC	±169 AC	±29 AC
TIMBER MANAGEMENT	±17 AC	±19 AC	±0 AC
TOTAL	±6207 AC	±4641 AC	±1566 AC

MAX. ALLOWABLE ACRES BY LAND USE

BUSINESS PARK/GENERAL & NEIGHBORHOOD COMMERCIAL 812.991 UPLAND ACRES

NOTES FOR DEVELOPMENT SUMMARY:

1. All acreage are approximate, as is appropriate for the conceptual level of the plan, and are subject to change when Land Use Tract boundaries change. These changes will be in accordance with the Buckwalter Planned Unit Development.

2. Wetlands shown are field surveys and are certified by the US Army Corps of Engineers.

3. The "Development Summary" is not the comprehensive listing of all allowable land uses allowed in the Buckwalter Planned Unit Development District. See the Buckwalter Planned Unit Development District document that accompanies this plan for a comprehensive listing of allowed land uses.

4. Base information (rivers, creeks, roads, etc) was generated from the USGS Pritchardville Quadrangle Sheet.

5. A 50' Leisure trail easement shall be located in the 50' buffer and/or road right-of-way on the Buckwalter parkway and the east-west connector as indicated on this concept master plan. A 20' utility easement shall be allowed within the 50' leisure trail easement.

6. Access points shown on this plan have been approved by the Town of Bluffton in concept; however the South Carolina Department of Transportation (SCDOT) and Beaufort County shall approve final location(s) and requirements.

CONCEPT MASTER PLAN

For:

Buckwalter

PLANNED UNIT DEVELOPMENT

Bluffton, South Carolina

Prepared For:
Branigar Organization
Savannah, Georgia

BRANIGAR
The Branigar Organization, Inc.
A company of INTERNATIONAL PAPER

Prepared By:
Wood+Partners, Inc.
Landscape Architects/Land Planners
Hilton Head Island, South Carolina
Thomas & Hutton Engineering Co.
Savannah, Georgia

LEGEND:

- ROADS / PUBLIC RIGHT-OF-WAY
- INTERSECTION/ ACCESS POINTS
- EXISTING DIRT ROADS
- STREAMS / WATER CHANNELS
- LAND USE TRACT LIMIT
- LEISURE TRAIL

PUD LAND USE AREAS

- RESIDENTIAL
- COMMERCIAL
- PUBLIC/INSTITUTIONAL
- WETLANDS
- TIMBER MANAGEMENT
- OCRM CRITICAL AREA
- DEDICATED PUBLIC PARK

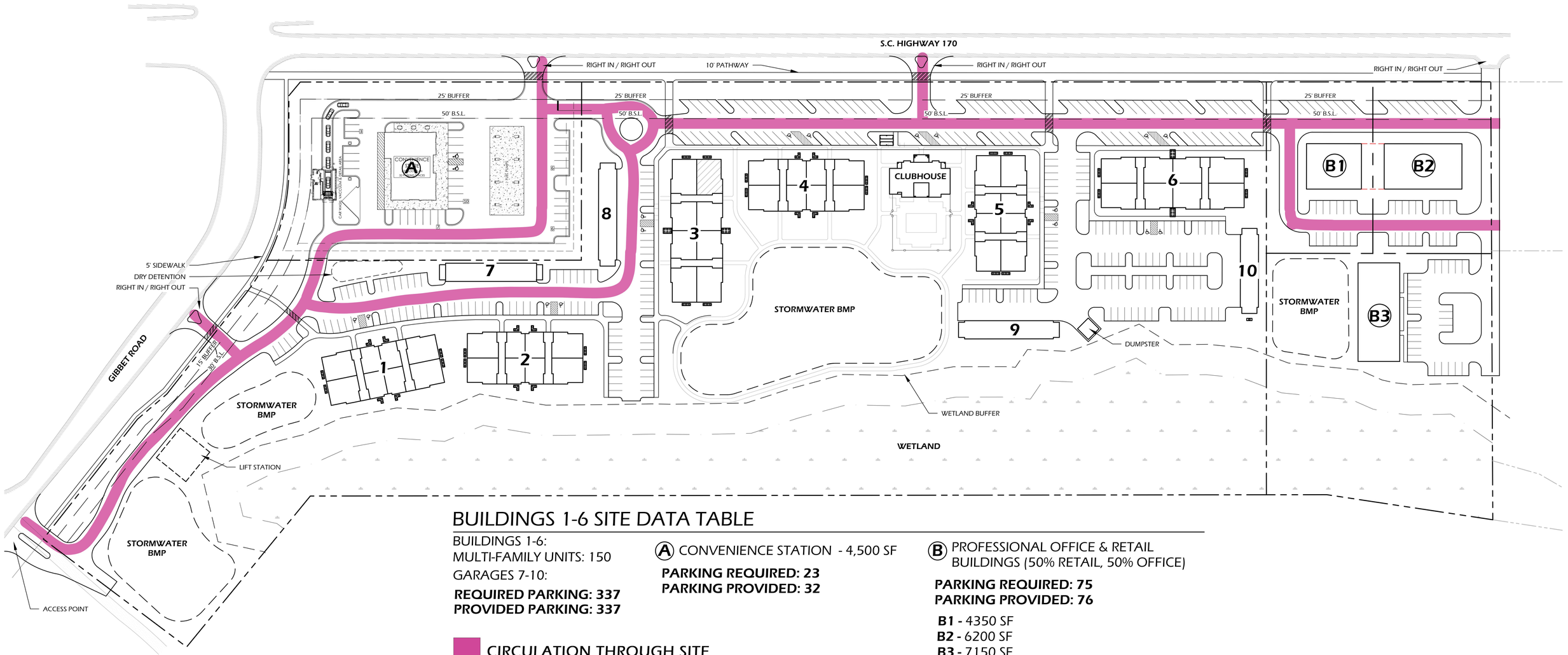
MILEAGE 0 ½ 1

0 600 1200 2400 3600 4800

NORTH

DATE: January 2000
REVISED: March 2000
REVISED: Sept. 2001 - To establish final alignment for East-West Connector (Bluffton Pkwy.)
REVISED: October 2001 - To provide leisure trail along East / West Connector
REVISED: May 2002 - Property addition to the Sand Hill Tract
REVISED: August 2002 - Property addition to the Sand Hill Tract
REVISED: October 2004 - Property addition to Sand Hill Tract & Buckwalter Commons
REVISED: December 2004 - Property addition to the Sand Hill Tract
REVISED: May 2005 - Hampton Parkway addition
REVISED: July 2005 - Graves Tract Addition
REVISED: October 2005 - Rose Dhu Phase 3 addition
REVISED: January 2006 - Jacoby addition
REVISED: May 2007 - Buckwalter Commons
REVISED: November 2007 - Willow Run Tract
REVISED: February 2008 - Unit Counts
REVISED: March 23, 2009 C-1 278 Parcel
REVISED: November 2011 - Buckwalter 10th Amendment - Robertson Site
REVISED: February 2012 - Modified Bluffton Parkway Phase 5B Alignment
REVISED: October 2012 - Modified Sand Hill Tract/Buckwalter Commons Connector Tract to add 70 Acres into Buckwalter Commons

MASTER PLAN



BUILDINGS 1-6 SITE DATA TABLE

BUILDINGS 1-6:
MULTI-FAMILY UNITS: 150
GARAGES 7-10:

REQUIRED PARKING: 337
PROVIDED PARKING: 337

Ⓐ CONVENIENCE STATION - 4,500 SF

PARKING REQUIRED: 23
PARKING PROVIDED: 32

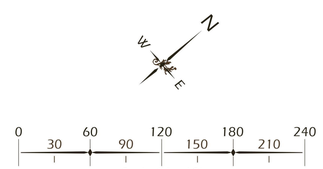
Ⓑ PROFESSIONAL OFFICE & RETAIL BUILDINGS (50% RETAIL, 50% OFFICE)

PARKING REQUIRED: 75
PARKING PROVIDED: 76

B1 - 4350 SF
B2 - 6200 SF
B3 - 7150 SF

CIRCULATION THROUGH SITE

TOTAL SITE AREA:	21.922 AC
TOTAL IMPERVIOUS AREA:	24 %
TOTAL PERVIOUS AREA:	76 %



JUNE 2023
PROJECT NO.: XXXXX.XX

Witmer Jones Keefer Ltd. / 23 Promenade St., Suite 201, Bluffton, SC. 29910 / ph: (843) 757.7411 / www.wjkltd.com

PARCEL B-1

HIGHWAY 170 AND GIBBET ROAD
BLUFFTON, SOUTH CAROLINA

Witmer Jones Keefer Ltd.
landscape architecture
land planning

MASTER PLAN
FOR:
PARCEL B1

TOWN OF BLUFFTON,
SOUTH CAROLINA

PREPARED FOR:
MILLSTONE VENTURES LLC

JUNE 2023

Prepared By:
Witmer Jones Keefer, Ltd.

Table of Contents

List of Exhibits

Title	Exhibit
1. Vicinity Map/ Survey	A
2. Master Plan	B
3. Water Master Plan	C
4. Sewer Master Plan	D
5. Stormwater Master Plan	E
6. Topographic Data	F
7. Wetlands	G
8. Buckwalter Concept Master Plan (dated February 2020)	H
9. Property Deed	I
10. Tree Survey	J
11. Traffic Impact Analysis	K

Project Team

Owner:	Millstone Ventures LLC
Land Planning & Architecture:	
Witmer Jones Keefer, Ltd	Brian Witmer Ashleigh Keaney
Engineering:	
Ward Edwards	Willy Powell
Legal:	
Burr & Forman	Walter Nestor

Master Plan Narrative

I. Project Introduction and Overview

This application is for a Master Plan for Parcel B-1, a 21.92 Acre property (Exhibit A), located within the Buckwalter Planned Unit Development. This application is submitted under Section 5.8.8 of the Town of Bluffton Planned Development Ordinance, and the Buckwalter PUD adopted by the Town in January 2000. The Master Plan includes the addition of 16.02 residential and 5.9 acres of commercial uses.

The Town of Bluffton approved the Concept Plan and a Development Agreement for the Buckwalter PUD in January 2000. The Concept Plan defines the allowed land uses in the various areas of the Buckwalter PUD. The documents also define the development standards, which govern all development activity within the Buckwalter Crossroads Master Plan, including Parcel B1.

This written narrative, together with all exhibits attached hereto, constitutes the full application, and upon approval, shall constitute the official Buckwalter Crossroads Master Plan.

II. Existing Conditions

The applicant, Witmer Jones Keefer, Ltd. submits the application herein as an agent of the property owner, Millstone Ventures LLC.

This applicant seeks final approval of the Master Plan based on the conditions approved under the Buckwalter PUD, and the matters contained in this application. The attached Exhibits provide detailed information regarding the existing conditions of the property. These items include:

A. Survey

The boundary survey plat (Exhibit A) of the property contains the following information:

1. Vicinity Map

2. Boundary and Dimensions
3. Existing Easements
4. Existing Roads
5. Existing Drainage Ways
6. Property Owners of Adjacent Properties

B. Wetlands Verification

A wetland impacts determination was issued on April 29, 2022. (Exhibit G)

C. Topography

1. Topographic Data is shown on (Exhibit F).

D. Land Cover

Parcel B1 is comprised of planted pine and delineated wetland areas. The preserved wetland areas are predominantly pines, mixed hardwoods, maple, and bay trees.

E. Conceptual Wastewater Collection Master Plan

1. The existing Sanitary Sewer Collection System is provided by BJWSA. (Exhibit D)

F. Conceptual Water Distribution Master Plan

1. Existing Water Distribution System is provided by BJWSA. (Exhibit C)

III. Development Master Plan

The project will be developed in accordance with the Buckwalter PUD, dated February 2020 (Exhibit H). The final location of roads, lagoons, open spaces, buildings, parking, and other elements may vary at the time of Development Permit Applications. The plan demonstrates a potential arrangement of land uses, road corridors and uses. The pink line also demonstrates a potential arrangement of interconnected roads and drives through the property. Like the adjacent Buckwalter Crossroads Master Plan, the connectivity is shown through streetscapes with angled parking, drives with 90 degree parking, coming to stop movements, turns, traffic circles, and multiple connections to SC Highway 170 and Gibbet Road. This arrangement would slow designs speeds providing safer interconnectivity for pedestrians and vehicles alike. The final layout will vary

based on market conditions and environmental constraints. The property will be accessed from two existing locations: SC Highway 170 (Okatie Highway) and Gibbet Road.

A. Site Design and Development Standards

Site design standards shall be as set forth under the Buckwalter PUD and Development Agreement. The applicant intends to responsibly exercise the design functions entrusted to the applicant as the private developer under the PUD and Development Agreement.

B. Stormwater Management

Development areas will be designed to meet the requirements of the Town of Bluffton Unified Development Ordinance and Stormwater Design Manual (SWDM), to include the Southern Lowcountry Stormwater Ordinance & Design Manual.

C. Utility Services

1. Potable Water Distribution

Potable Water will be provided by Beaufort–Jasper Water & Sewer Authority (BJWSA). Existing water mains, located along both Gibbet Road and SC170, will serve the parcels. This water main will provide adequate flow to support this project. (Exhibit C)

2. Wastewater Collection

Wastewater Collection will be provided by a combination of gravity sewers and a pumping station within the development area. The wastewater will be collected and pumped to an existing wastewater facility owned and operated by BJWSA. Development outparcels will tie into the existing system as determined at time of future development plan submittal. (Exhibit D)

3. Power Supply and Service

This tract is serviced by Palmetto Electric. Service will be extended as development progresses. PUD Master Plan approval does not amend any rights provided to a landowner by the Public Service Commission or South Carolina.

4. Telecommunication Service

This tract is serviced by Hargray. The telecommunications infrastructure will include voice, data, and video facilities. Service will be extended and activated as development progresses. Master Plan approval does not amend any rights provided to a landowner or telecommunications provider as granted by the Public Service Commission.

5. Fire Protection

The community is in the Bluffton Township Fire District (BTFD) jurisdiction. The water supply system will be designed to provide flow and pressure for fire protection.

D. Proposed Streets

Access points will be coordinated with Beaufort County and South Carolina Department of Transportation (SCDOT) at time of Development Plan review.

Roads and Right of Ways outside of the Beaufort County Frontage roads may be privately owned and maintained by the Property Owner's Association, or other entity assigned with the legal responsibility. Roadways, upon mutual agreement between the Town of Bluffton and the Owner, Property Owners Association, or other entity assigned with the legal responsibility, may be transferred to the Town of Bluffton upon completion. Acceptance of these roads will be based on Town of Bluffton requirements.

E. Open Space and Pedestrian connections

The proposed parcels will connect internal sidewalks to public walkways.

F. Ownership and Maintenance of Common Areas and Utilities

1. Common Areas

The Common Areas, which include easements, open space, sidewalks, etc., will be owned by the Property Owners Association or some other legal entity, established in the Covenants and Restrictions. This ownership will include the maintenance of facilities, lagoons and drainage on the property. Lagoon access and maintenance easements may be provided to allow lagoon maintenance. Fees will be assessed from all property owners to provide funding for operation and maintenance of common areas. In some cases, individual elements of the overall stormwater retention and drainage

system may be constructed on individually owned development sites, but all functioning elements will be subject to master covenants, including easements and maintenance rights, which will assure the ability and means to maintain the system in perpetuity.

No public lands or methods of dedication and access are proposed.

2. Utilities

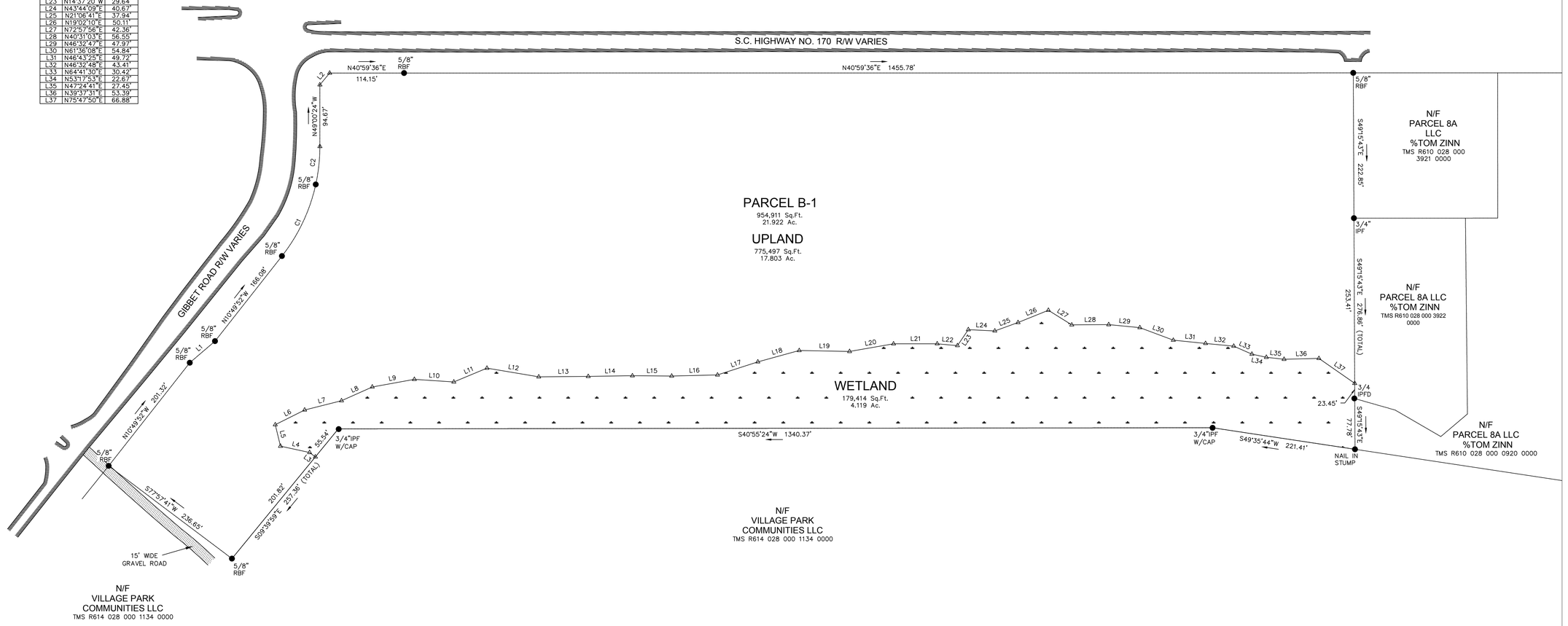
Beaufort-Jasper Water & Sewer Authority will own and operate the water and sewer facilities necessary for this project. Electrical power facilities will be owned and operated by Palmetto Electric, or other provider as approved by the Public Service Commission.

IV. Development Rights and Assignment

The Development Agreement states the Owner is required to notify the Town when Development Rights are transferred to a Developer, including the name and address of such Developer, the location and number of acres transferred, the residential density transferred, the commercial acreage transferred, and other relevant information.

LINE TABLE		
LABEL	BEARING	DISTANCE
L1	N00°28'44"E	50.99'
L2	N09°12'04"W	23.43'
L3	S78°14'53"W	11.07'
L4	S53°14'48"W	45.78'
L5	N62°32'59"W	33.84'
L6	N14°19'14"E	50.43'
L7	N26°53'51"E	58.32'
L8	N16°52'58"E	51.70'
L9	N30°44'01"E	65.48'
L10	N44°45'13"E	60.67'
L11	N18°27'35"E	55.14'
L12	N50°32'33"E	80.48'
L13	N40°30'14"E	75.84'
L14	N40°04'17"E	67.85'
L15	N41°28'06"E	60.28'
L16	N39°38'00"E	70.22'
L17	N22°59'25"E	65.05'
L18	N25°42'43"E	65.88'
L19	N42°04'18"E	77.14'
L20	N31°09'11"E	68.45'
L21	N40°54'57"E	67.00'
L22	N46°09'43"E	31.10'
L23	N14°37'20"W	29.64'
L24	N43°44'09"E	40.67'
L25	N21°06'41"E	37.94'
L26	N19°02'10"E	50.11'
L27	N72°57'56"E	42.36'
L28	N40°31'03"E	56.55'
L29	N46°30'47"E	47.97'
L30	N61°36'08"E	54.84'
L31	N46°43'25"E	49.72'
L32	N46°32'48"E	43.41'
L33	N64°41'30"E	30.42'
L34	N53°17'53"E	22.67'
L35	N47°24'41"E	27.45'
L36	N39°37'31"E	53.39'
L37	N75°47'50"E	66.88'

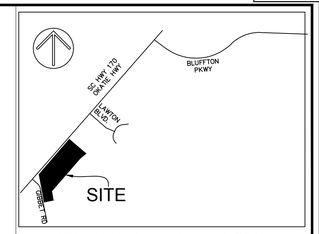
CURVE TABLE					
LABEL	RADIUS	ARC	CHORD	CHORD BEARING	DELTA
C1	272.00'	122.51'	121.48'	N23°44'04"W	25°48'23"
C2	272.00'	58.72'	58.61'	N42°49'20"W	12°22'08"



PARCEL B-1 ACREAGE CHART

TOTAL UPLAND	775,497 Sq.Ft.	17.803 Ac.
TOTAL WETLAND	179,414 Sq.Ft.	4.119 Ac.
TOTAL ACREAGE	954,911 Sq.Ft.	21.922 Ac.

80 40 0 80 160
GRAPHIC SCALE



VICINITY MAP NOT TO SCALE

LEGEND

- CALC POINT – CORNER NOT SET
- IPF ● IRON PIPE FOUND
- IPFD ● IRON PIPE FOUND DISTURBED
- RBF ● IRON REBAR FOUND
- EDGE OF PAVEMENT
- △ WETLAND FLAG
- WETLANDS

NOTES

1. THIS PARCEL APPEARS TO LIE IN FLOOD ZONE X. COMMUNITY 450025, MAP NUMBER 45013C0265G.
2. WETLANDS SHOWN AS DELINEATED BY NEWKIRK ENVIRONMENTAL, INC. IN MARCH, 2021.
3. BEARINGS ARE BASED ON SOUTH CAROLINA STATE PLANE GRID (NAD 83).

REFERENCES

1. DEED BOOK: 3270 PAGE: 122
2. DEED BOOK: 2555 PAGE: 1006
3. DEED BOOK: 2042 PAGE: 2177
4. DEED BOOK: 1996 PAGE: 1867
5. DEED BOOK: 3027 PAGE: 2390
6. PLAT BOOK: 100 PAGE: 173
7. PLAT BOOK: 127 PAGE: 105
8. PLAT BOOK: 103 PAGE: 58
9. PLAT BOOK: 109 PAGE: 190
10. PLAT BOOK: 112 PAGE: 134
11. A SET OF CONSTRUCTION PLANS FOR THE WIDENING OF SC HIGHWAY 170.
    FILE #: 7.036938A
    BY: THOMAS & HUTTON
    RPE: DOYLE D. KELLY

PREPARED FOR:
ZINN ASSET MANAGEMENT CORP.

A WETLAND PLAT OF

PARCEL B-1

TAX PARCEL No.
R610 028 000 0921 0000

TOWN OF BLUFFTON
BEAUFORT COUNTY, SOUTH CAROLINA

FIELD WORK:	JLG
FIELD CHECK:	JRW
DRAWN BY:	TGJ
DATE:	09-01-2021
SCALE:	1"=80'
PROJECT No.:	BFT-17327
FILE:	BFT-17327 B1.DWG

ATLAS SURVEYING INC.
49 BROWN'S COVE ROAD, SUITE #5
RIDGELAND, SC 29936
PHONE: (843) 645-9277
WEBSITE: WWW.ATLASSURVEYING.COM

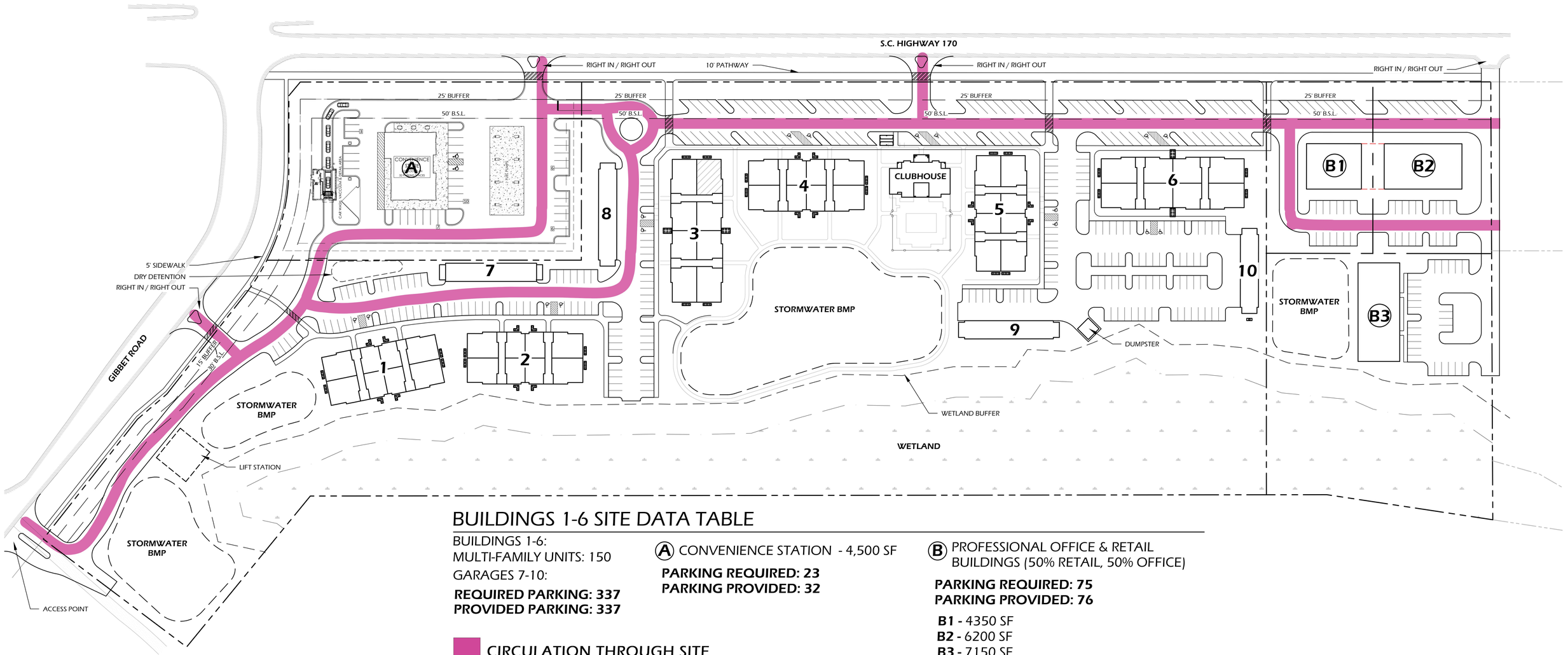
SOUTH CAROLINA — ATLAS SURVEYING BFT LLC No. C05928 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL LAND SURVEYOR — No. 28139 — JEREMY W. REEDER

I HEREBY STATE THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREIN WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "A" SURVEY AS SPECIFIED THEREIN.

JEREMY W. REEDER
S.C.P.L.S. No. 28139

MASTER PLAN



BUILDINGS 1-6 SITE DATA TABLE

BUILDINGS 1-6:
MULTI-FAMILY UNITS: 150
GARAGES 7-10:

REQUIRED PARKING: 337
PROVIDED PARKING: 337

Ⓐ CONVENIENCE STATION - 4,500 SF

PARKING REQUIRED: 23
PARKING PROVIDED: 32

Ⓑ PROFESSIONAL OFFICE & RETAIL BUILDINGS (50% RETAIL, 50% OFFICE)

PARKING REQUIRED: 75
PARKING PROVIDED: 76

B1 - 4350 SF
B2 - 6200 SF
B3 - 7150 SF

CIRCULATION THROUGH SITE

TOTAL SITE AREA:	21.922 AC
TOTAL IMPERVIOUS AREA:	24 %
TOTAL PERVIOUS AREA:	76 %

N W E

0 30 60 90 120 150 180 210 240
Scale 1 " = 60'

JUNE 2023

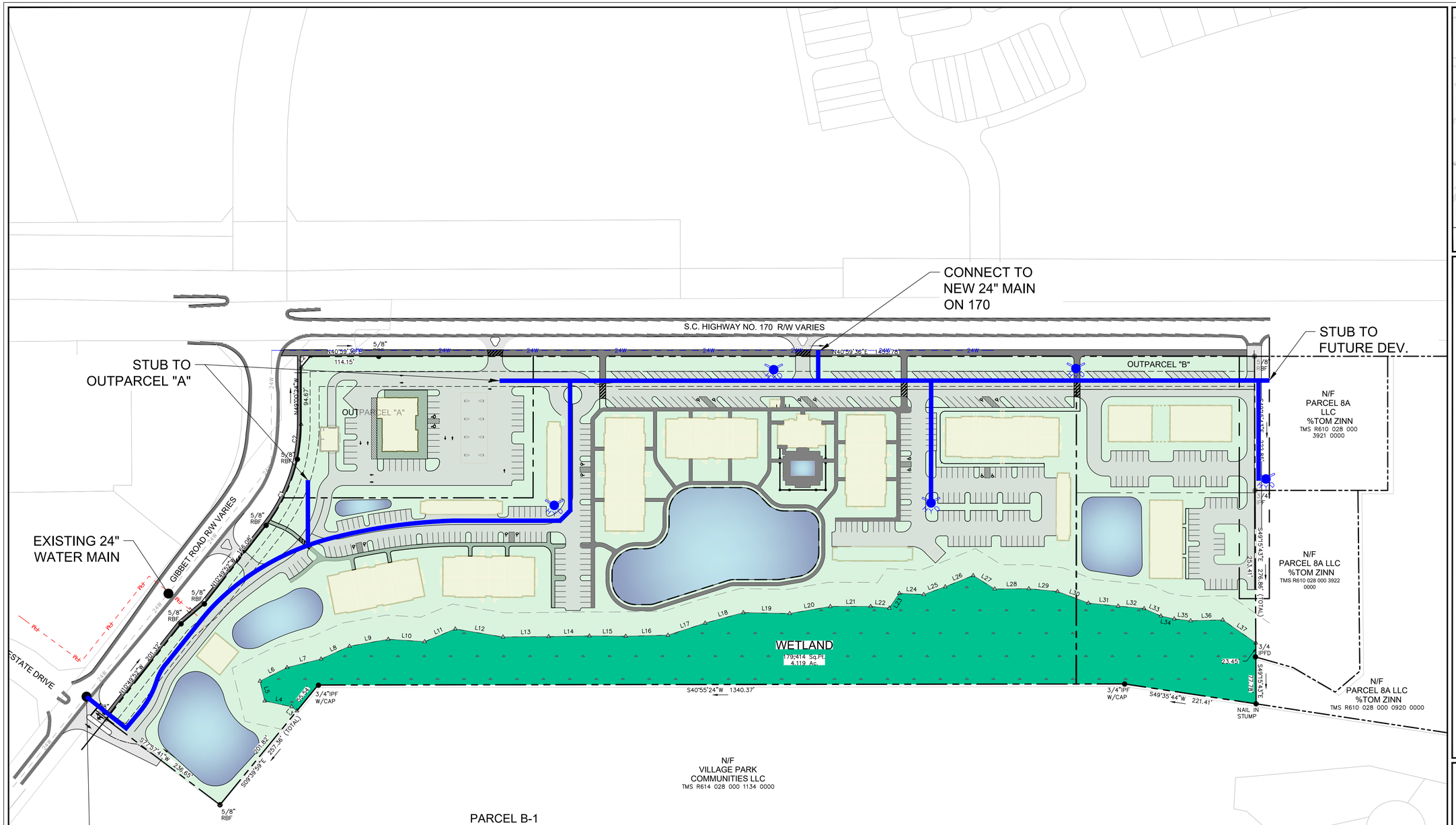
PROJECT NO.: XXXXX.XX

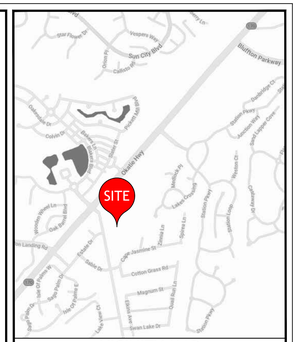
Witmer Jones Keefer Ltd. / 23 Promenade St., Suite 201, Bluffton, SC. 29910 / ph: (843) 757.7411 / www.wjkltd.com

PARCEL B-1

HIGHWAY 170 AND GIBBET ROAD
BLUFFTON, SOUTH CAROLINA

Witmer Jones Keefer Ltd.
landscape architecture
land planning





VICINITY MAP
Not To Scale

WATER MASTER PLAN
EXHIBIT D

PARCEL B-1 TRACT

TOWN OF BLUFFTON, SOUTH CAROLINA

PREPARED FOR:
MILLSTONE MANAGEMENT LLC.

PARCEL B-1
ACREAGE CHART

TOTAL UPLAND	775,497 Sq.Ft.	17.803 Ac.
TOTAL WETLAND	179,414 Sq.Ft.	4.119 Ac.
TOTAL ACREAGE	954,911 Sq.Ft.	21.922 Ac.

WATER LEGEND

PROPOSED WATER MAIN

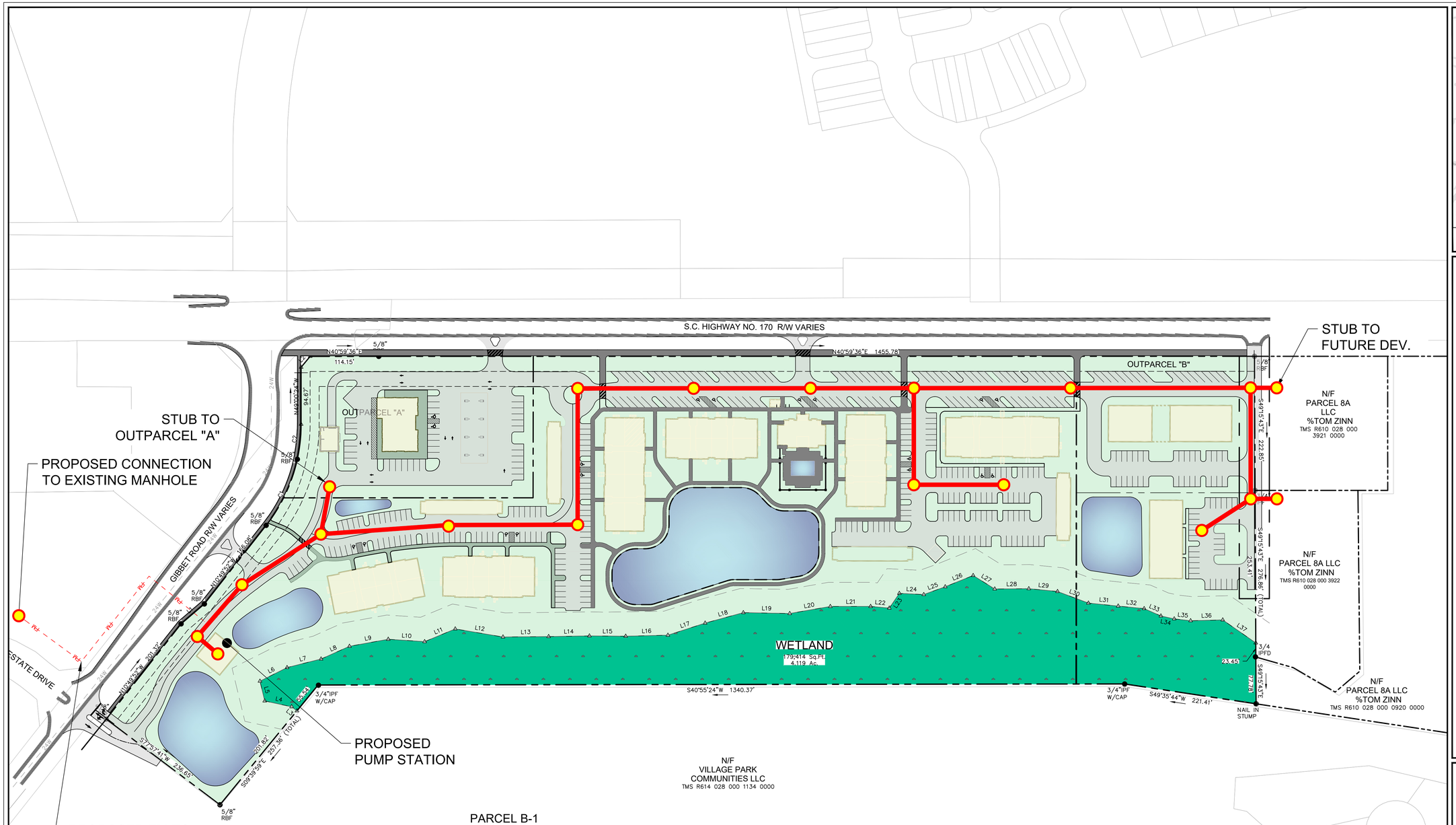
EXISTING WATER MAIN

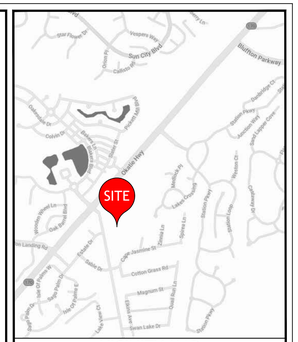
THIS GRAPHIC ILLUSTRATES A GENERAL PLAN OF THE DEVELOPMENT, DOES NOT LIMIT OR BIND THE OWNER/DEVELOPER, AND IS SUBJECT TO CHANGE AND REVISION. DIMENSIONS, BOUNDARIES, AND IMPROVEMENT ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE OWNER/DEVELOPER RESERVES THE RIGHT TO ADJUST FEATURES SUCH AS BUT NOT LIMITED TO LOT LINES, ROADS, LAGOONS, ETC. WHILE MEETING THE INTENT OF THE PDD AND APPROVED BY JURISDICTION OF AUTHORITY.

0 80 160 Feet
SCALE: 1" = 80 '

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

PROJECT #:	220137
DATE:	07/06/23
PREPARED BY:	WGP
SHEET NUMBER:	1 OF 1





VICINITY MAP
Not To Scale

SEWER MASTER PLAN
EXHIBIT E

PARCEL B-1 TRACT

TOWN OF BLUFFTON, SOUTH CAROLINA

PREPARED FOR:
MILLSTONE MANAGEMENT LLC.

SEWER LEGEND

PROPOSED GRAVITY SEWER LINE

PROPOSED GRAVITY SEWER MANHOLE

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SCALE: 1" = 80 '

PARCEL B-1
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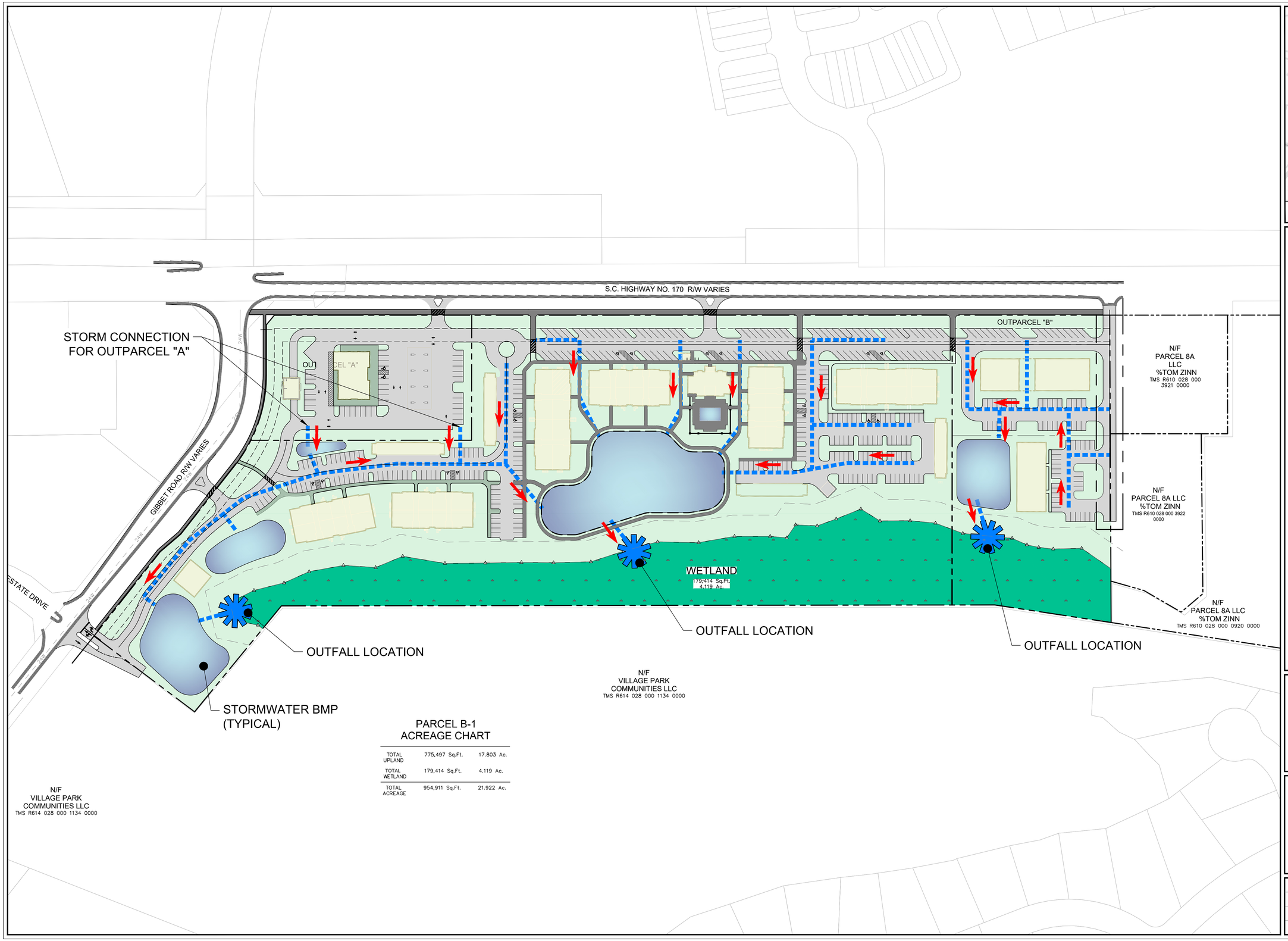

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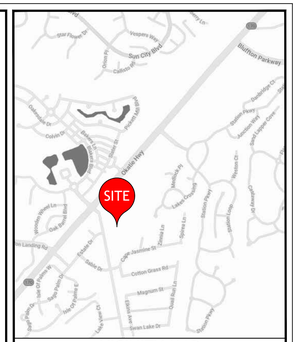

VICINITY MAP
Not To Scale

STORMWATER MASTER PLAN
EXHIBIT F

PARCEL B-1 TRACT

TOWN OF BLUFFTON, SOUTH CAROLINA

PREPARED FOR:
MILLSTONE MANAGEMENT LLC.

DRAINAGE LEGEND

PROPOSED STORM DRAIN

PROPOSED STORM DRAIN FLOW DIRECTION

PROPOSED STORM OUTLET

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0 80 160 Feet
SCALE: 1" = 80 '

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South Carolina 29910
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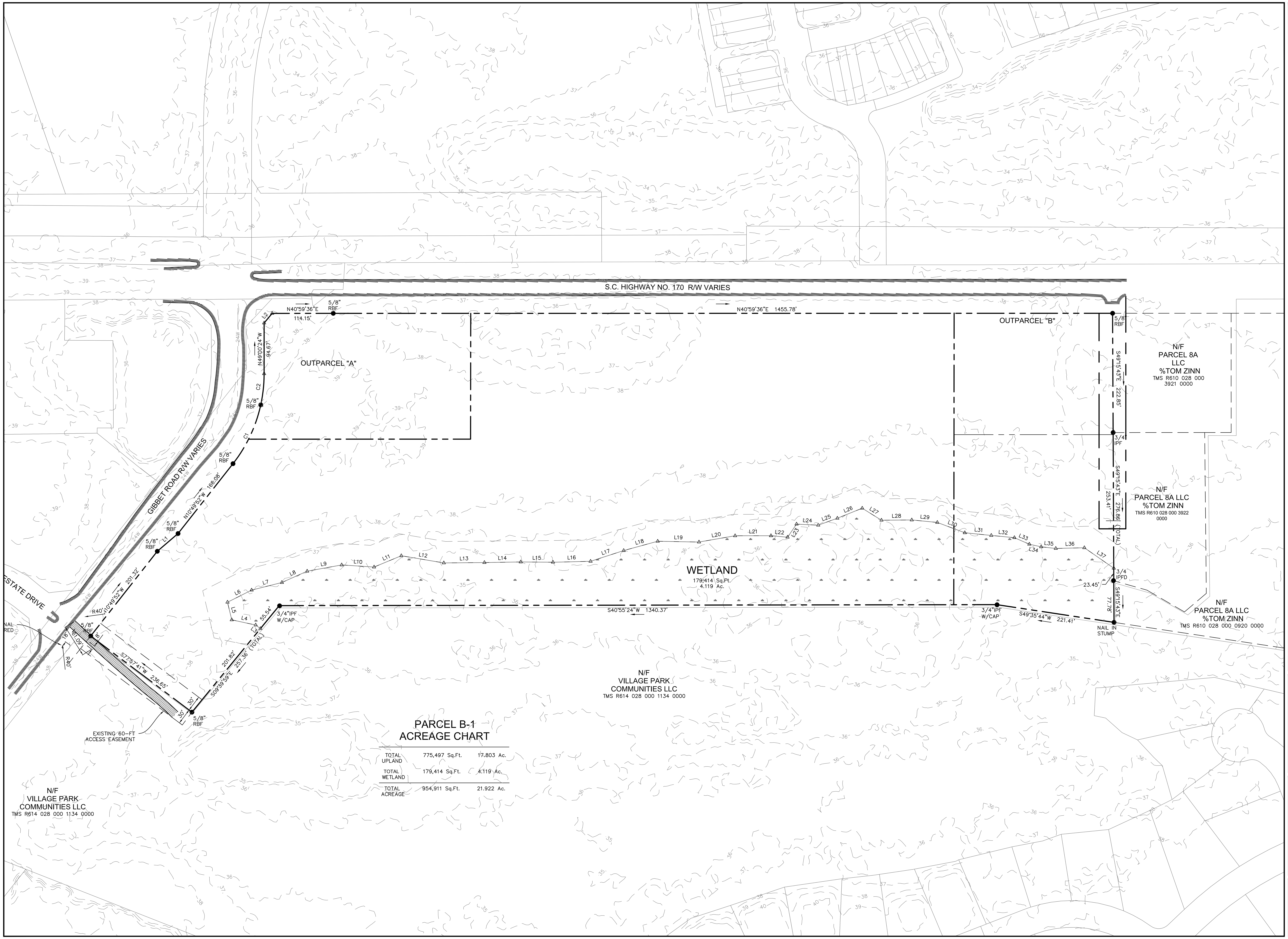
SHEET NUMBER:	1 OF 1



PARCEL B-1
ACREAGE CHART

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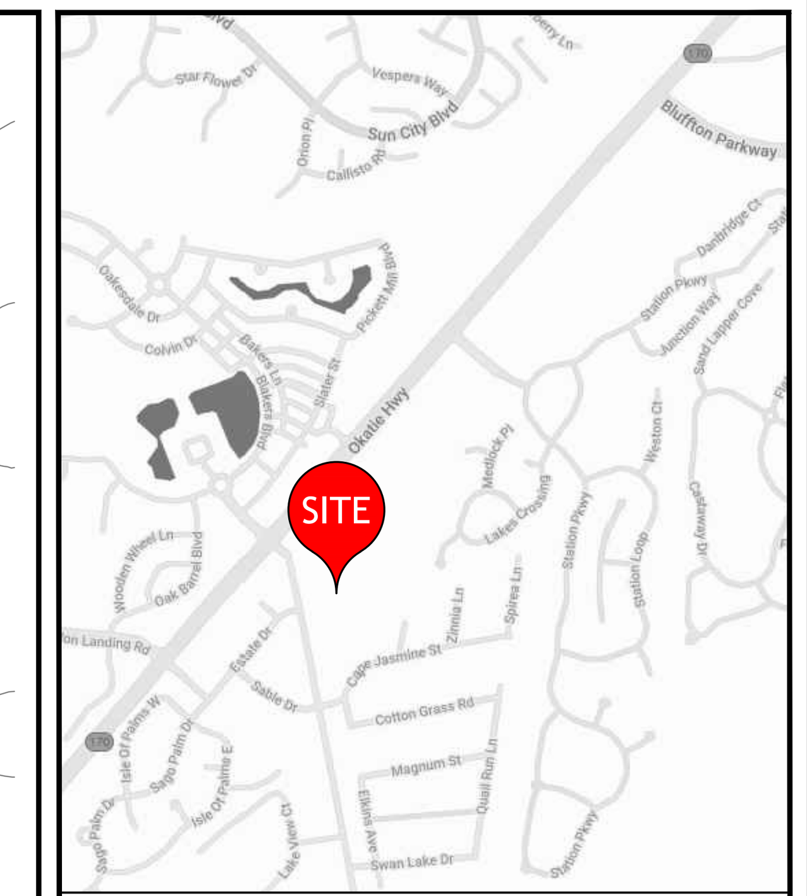

VICINITY MAP
Not To Scale

TOPOGRAPHIC DATA EXHIBIT G

PARCEL B-1 TRACT

TOWN OF BLUFFTON, SOUTH CAROLINA

PREPARED FOR:
MILLSTONE MANAGEMENT LLC.

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0 80 160 Feet
SCALE: 1"= 80'

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

PROJECT #:	220137
DATE:	04/18/23
PREPARED BY:	WGP
SHEET NUMBER:	1 OF 1

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, CHARLESTON DISTRICT
69A HAGOOD AVENUE
CHARLESTON, SC 29403-5107

April 29, 2022

Regulatory Division

Mr. Asher Howell
Newkirk Environmental, Inc.
73 Sea Island Parkway, Ste 20
Beaufort, South Carolina 29907
asher@newkirkenv.com

Dear Mr. Howell:

This is in response to your request for a preliminary jurisdictional determination (PJD) that is part of an overall project known as Zinn - Gibbet Road Project. Based on information submitted to the U.S. Army Corps of Engineers (Corps) we have determined there may be waters of the United States, including wetlands on your parcel located at the following:

Project Number:	SAC-2021-00635
County:	Beaufort County
Project/Site Size:	22 Acres
Latitude:	32.2568441523638°
Longitude:	-80.9651686824472°
Project/Site Location:	Highway 170 and Gibbet Road, Bluffton, SC 29909
Waters (Acreage/Linear Feet):	4.2 Acres

A copy of the PJD form and the plat dated September 1, 2021, and titled A WETLAND PLAT OF PARCEL B-1, is enclosed. Please carefully read this form, then sign and return a copy to the project manager at the following Sean.M.Dillard@usace.army.mil within 30 days from the date of this notification.

Please be advised a Department of the Army permit will be required for regulated work in all areas which may be waters of the United States, as indicated in this PJD. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a PJD will treat all waters and wetlands, which would be affected in any way by the permitted activity on the site, as if they are jurisdictional waters of the United States. Should you desire an approved Corps determination, one will be issued upon request.

You are cautioned that work performed in areas which may be waters of the United States, as indicated in the PJD, without a Department of the Army permit could subject you to enforcement action.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

If you submit a permit application as a result of this PJD, include a copy of this letter and the depiction as part of the application. Not submitting the letter and depiction will cause a delay while we confirm a PJD was performed for the proposed permit project area. Note that some or all of these areas may be regulated by other state or local government entities, and you should contact the South Carolina Department of Health and Environmental Control, Bureau of Water and/or Office of Ocean and Coastal Resource Management, to determine the limits of their jurisdiction.

In all future correspondence, please refer to file number SAC-2021-00635. A copy of this letter is forwarded to State and/or Federal agencies for their information. If you have any questions, please contact Sean M. Dillard, Project Manager, at (843) 329-8046, or by email at Sean.M.Dillard@usace.army.mil.

Sincerely,

Jeremy Kinney

Jeremy Kinney
Project Manager

Enclosures:
Preliminary Jurisdictional Determination Form
Notification of Appeal Options
A WETLAND PLAT OF PARCEL B-1

Copies Furnished:

Mr. Tom Zinn
Parcel BA LLC
PO Box 1726
Bluffton, South Carolina 29910

SC DHEC - Bureau of Water
2600 Bull Street
Columbia, South Carolina 29201
WQCWetlands@dhec.sc.gov

SC DHEC - OCRM
1362 McMillan Avenue, Suite 400
North Charleston, South Carolina 29405
OCRMPermitting@dhec.sc.gov

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: April 28, 2022

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

Applicant:
Mr. Tom Zinn
Parcel BA LLC
PO Box 1726
Bluffton, South Carolina 29910

Consultant:
Mr. Asher Howell
Newkirk Environmental, Inc.
73 Sea Island Parkway, Ste 20
Beaufort, South Carolina 29907
asher@newkirkenv.com

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: SAC-2021-00635 Zinn - Gibbet Road Project

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: The project is located on Highway 170 and Gibbet Road, Bluffton, SC 29909

(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: South Carolina County/parish/borough: Beaufort County City: Bluffton

Center coordinates of site (lat/long in degree decimal format):

Lat.: 32.2568441523638 ° Long.: -80.9651686824472 °

Universal Transverse Mercator: 17

Name of nearest waterbody: Okatee River

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: April 28, 2022

☐ Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Wetland 1	32.256298	-80.964911	4.12 acres	Wetland	Section 404

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may*

be" waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

☒ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map: A WETLAND PLAT OF PARCEL B-1 dated 09/21
☒ Data sheets prepared/submitted by or on behalf of the PJD requestor.
☒ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report. Rationale:

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:
☐ U.S. Geological Survey Hydrologic Atlas:

☒ USGS NHD data. USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: USGS Topographic dated 4/22

☐ Natural Resources Conservation Service Soil Survey. Citation:

☒ National wetlands inventory map(s). Cite name: NWI dated 4/22

☐ State/local wetland inventory map(s):
☐ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Location dated 4/22
☐ Other (Name & Date):

☐ Previous determination(s). File no. and date of response letter:
☒ Other information (please specify): Lidar dated 4/22

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Jeremy Kinney

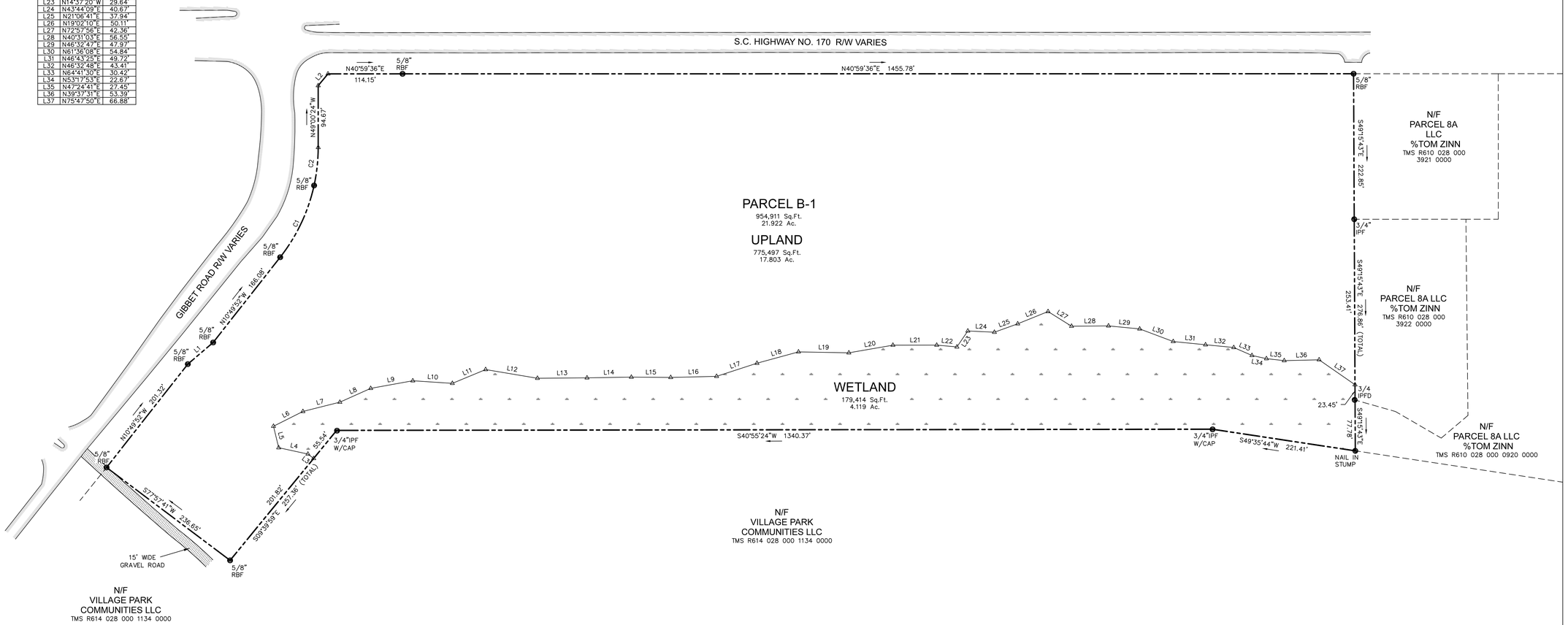
Signature and date of
Regulatory staff member
completing PJD

Signature and date of
person requesting PJD
(REQUIRED, unless obtaining the
signature is impracticable)[1]

[1] Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

LINE TABLE		
LABEL	BEARING	DISTANCE
L1	N00°28'44"E	50.99'
L2	N09°12'04"W	23.43'
L3	S78°14'53"W	11.07'
L4	S53°14'48"W	45.78'
L5	N62°32'59"W	33.84'
L6	N14°19'14"E	50.43'
L7	N26°53'51"E	58.32'
L8	N16°52'58"E	51.70'
L9	N30°44'01"E	65.48'
L10	N44°45'13"E	60.67'
L11	N18°27'35"E	55.14'
L12	N50°32'33"E	80.48'
L13	N40°30'14"E	75.84'
L14	N40°04'17"E	67.85'
L15	N41°28'06"E	60.28'
L16	N39°38'00"E	70.22'
L17	N22°59'29"E	65.05'
L18	N25°42'43"E	65.88'
L19	N42°04'18"E	77.14'
L20	N31°09'11"E	68.45'
L21	N40°54'57"E	67.00'
L22	N46°09'43"E	31.10'
L23	N14°37'20"W	29.64'
L24	N43°44'09"E	40.67'
L25	N21°06'41"E	37.94'
L26	N19°02'10"E	50.11'
L27	N72°57'56"E	42.36'
L28	N40°31'03"E	56.55'
L29	N46°32'47"E	47.97'
L30	N61°36'08"E	54.84'
L31	N46°43'25"E	49.72'
L32	N46°32'48"E	43.41'
L33	N64°41'30"E	30.42'
L34	N53°17'53"E	22.67'
L35	N47°24'41"E	27.45'
L36	N39°37'31"E	53.39'
L37	N75°47'50"E	66.88'

CURVE TABLE					
LABEL	RADIUS	ARC	CHORD	CHORD BEARING	DELTA
C1	272.00'	122.51'	121.48'	N23°44'04"W	25°48'23"
C2	272.00'	58.72'	58.61'	N42°49'20"W	12°22'08"

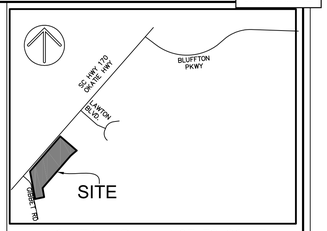


80 40 0 80 160

GRAPHIC SCALE

PARCEL B-1 ACREAGE CHART

TOTAL UPLAND	775,497 Sq.Ft.	17.803 Ac.
TOTAL WETLAND	179,414 Sq.Ft.	4.119 Ac.
TOTAL ACREAGE	954,911 Sq.Ft.	21.922 Ac.



VICINITY MAP NOT TO SCALE

LEGEND

		CALC POINT – CORNER NOT SET
IPF	●	IRON PIPE FOUND
IPFD	●	IRON PIPE FOUND DISTURBED
RBF	●	IRON REBAR FOUND
		EDGE OF PAVEMENT
	△	WETLAND FLAG
		WETLANDS

NOTES

1. THIS PARCEL APPEARS TO LIE IN FLOOD ZONE X. COMMUNITY 450025, MAP NUMBER 45013C0265G.
2. WETLANDS SHOWN AS DELINEATED BY NEWKIRK ENVIRONMENTAL, INC. IN MARCH, 2021.
3. BEARINGS ARE BASED ON SOUTH CAROLINA STATE PLANE GRID (NAD 83).

REFERENCES

1. DEED BOOK: 3270 PAGE: 122
2. DEED BOOK: 2555 PAGE: 1006
3. DEED BOOK: 2042 PAGE: 2177
4. DEED BOOK: 1996 PAGE: 1867
5. DEED BOOK: 3027 PAGE: 2390
6. PLAT BOOK: 100 PAGE: 173
7. PLAT BOOK: 127 PAGE: 105
8. PLAT BOOK: 103 PAGE: 58
9. PLAT BOOK: 109 PAGE: 190
10. PLAT BOOK: 112 PAGE: 134
11. A SET OF CONSTRUCTION PLANS FOR THE WIDENING OF SC HIGHWAY 170.
    FILE #: 7.036938A
    BY: THOMAS & HUTTON
    RPE: DOYLE D. KELLY

PREPARED FOR:
ZINN ASSET MANAGEMENT CORP.

A WETLAND PLAT OF

PARCEL B-1

TAX PARCEL No.
R610 028 000 0921 0000

TOWN OF BLUFFTON
BEAUFORT COUNTY, SOUTH CAROLINA

FIELD WORK:	JLG
FIELD CHECK:	JRW
DRAWN BY:	TDJ
DATE:	09-01-2021
SCALE:	1"=80'
PROJECT No.:	BFT-17327
FILE:	BFT-17327 B1.DWG

ATLAS SURVEYING INC.
49 BROWN'S COVE ROAD, SUITE #5
RIDGELAND, SC 29936
PHONE: (843) 645-9277
WEBSITE: WWW.ATLASSURVEYING.COM

SOUTH CAROLINA ATLAS SURVEYING BFT LLC No. C05928 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL LAND SURVEYOR No. 28139 JEREMY W. REEDER

I HEREBY STATE THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREIN WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "A" SURVEY AS SPECIFIED THEREIN.

JEREMY W. REEDER
S.C.P.L.S. No. 28139

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant:Asher Howell / Newkirk Environmental	File Number:SAC-2022-00635	Date:April 28, 2022
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
X	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the Division Engineer, South Atlantic Division, 60 Forsyth St, SW, Atlanta, GA 30308-8801. This form must be received by the Division Engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD **is not appealable**. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PE

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact the Corps biologist who signed the letter to which this notification is attached. The name and telephone number of this person is given at the end of the letter.

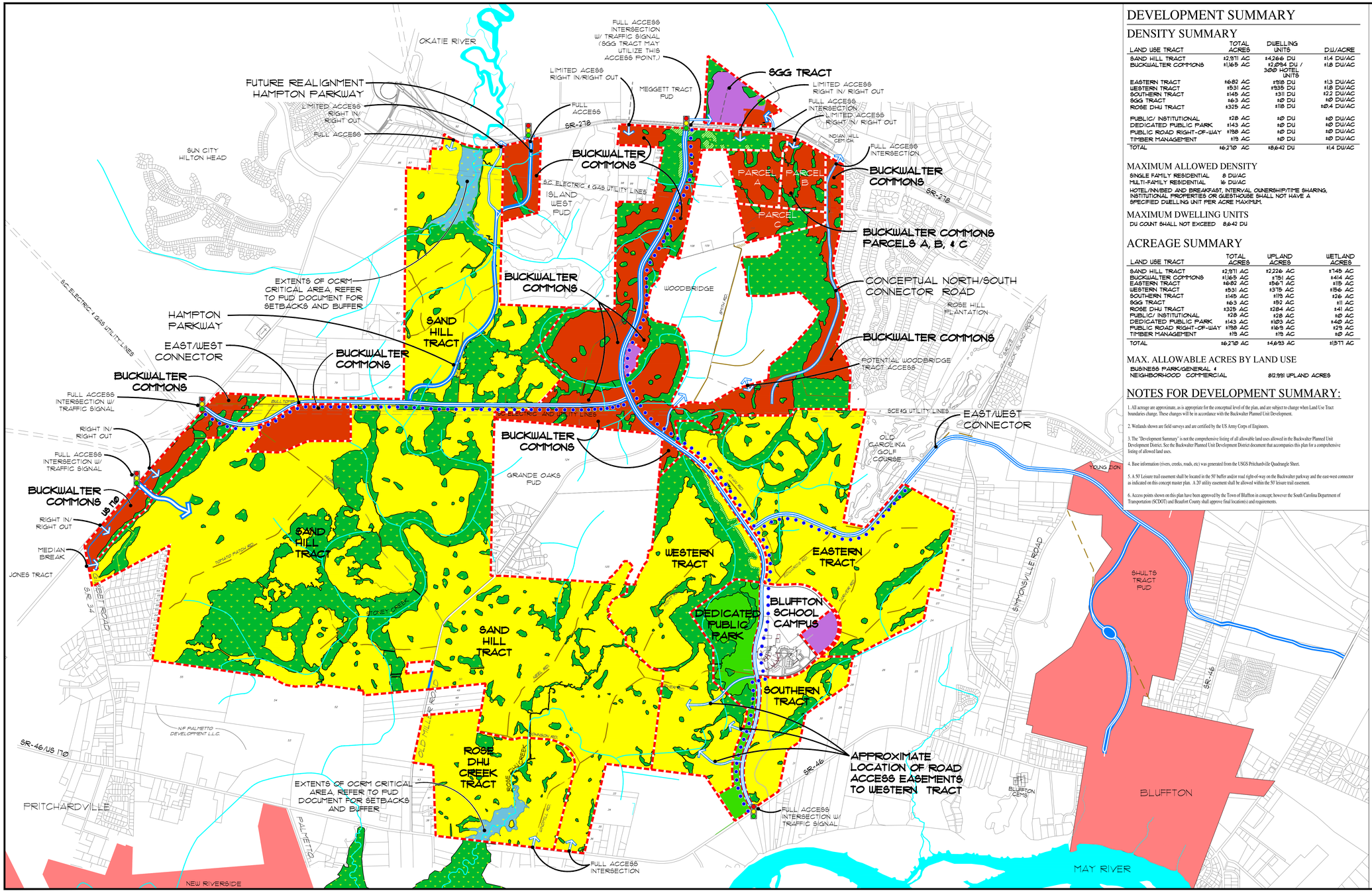
If you only have questions regarding the appeal process you may also contact:

Mr. Philip A. Shannin
Administrative Appeal Review Officer
CESAD-PDS-O
60 Forsyth Street Southwest, Floor M9
Atlanta, Georgia 30303-8803

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

Attachment 5



DEVELOPMENT SUMMARY

DENSITY SUMMARY

LAND USE TRACT	TOTAL ACRES	DWELLING UNITS	DU/ACRE
SAND HILL TRACT	±2,871 AC	±4,266 DU	±1.4 DU/AC
BUCKWALTER COMMONS	±1,165 AC	±2,094 DU / 300 HOTEL UNITS	±1.8 DU/AC
EASTERN TRACT	±682 AC	±918 DU	±1.3 DU/AC
WESTERN TRACT	±531 AC	±935 DU	±1.8 DU/AC
SOUTHERN TRACT	±145 AC	±311 DU	±2.1 DU/AC
SGG TRACT	±63 AC	±0 DU	±0 DU/AC
ROSE DHU TRACT	±325 AC	±118 DU	±0.4 DU/AC
PUBLIC/ INSTITUTIONAL	±28 AC	±0 DU	±0 DU/AC
DEDICATED PUBLIC PARK	±143 AC	±0 DU	±0 DU/AC
PUBLIC ROAD RIGHT-OF-WAY	±138 AC	±0 DU	±0 DU/AC
TIMBER MANAGEMENT	±19 AC	±0 DU	±0 DU/AC
TOTAL	±6,270 AC	±8,642 DU	±1.4 DU/AC

MAXIMUM ALLOWED DENSITY

SINGLE FAMILY RESIDENTIAL	8 DU/AC
MULTI-FAMILY RESIDENTIAL	16 DU/AC

HOTEL/INN/BED AND BREAKFAST, INTERVAL OWNERSHIP/TIME SHARING, INSTITUTIONAL PROPERTIES OR GUESTHOUSE SHALL NOT HAVE A SPECIFIED DWELLING UNIT PER ACRE MAXIMUM.

MAXIMUM DWELLING UNITS

DU COUNT SHALL NOT EXCEED 8,642 DU

ACREAGE SUMMARY

LAND USE TRACT	TOTAL ACRES	UPLAND ACRES	WETLAND ACRES
SAND HILL TRACT	±2,871 AC	±2,226 AC	±745 AC
BUCKWALTER COMMONS	±1,165 AC	±751 AC	±414 AC
EASTERN TRACT	±682 AC	±567 AC	±115 AC
WESTERN TRACT	±531 AC	±375 AC	±156 AC
SOUTHERN TRACT	±145 AC	±119 AC	±26 AC
SGG TRACT	±63 AC	±52 AC	±11 AC
ROSE DHU TRACT	±325 AC	±284 AC	±41 AC
PUBLIC/ INSTITUTIONAL	±28 AC	±28 AC	±0 AC
DEDICATED PUBLIC PARK	±143 AC	±103 AC	±40 AC
PUBLIC ROAD RIGHT-OF-WAY	±138 AC	±59 AC	±79 AC
TIMBER MANAGEMENT	±19 AC	±19 AC	±0 AC
TOTAL	±6,270 AC	±4,693 AC	±1,577 AC

MAX. ALLOWABLE ACRES BY LAND USE

BUSINESS PARK/GENERAL & NEIGHBORHOOD COMMERCIAL	812.991 UPLAND ACRES

NOTES FOR DEVELOPMENT SUMMARY:

1. All acreage are approximate, as is appropriate for the conceptual level of the plan, and are subject to change when Land Use Tract boundaries change. These changes will be in accordance with the Buckwalter Planned Unit Development.

2. Wetlands shown are field surveys and are certified by the US Army Corps of Engineers.

3. The "Development Summary" is not the comprehensive listing of all allowable land uses allowed in the Buckwalter Planned Unit Development District. See the Buckwalter Planned Unit Development District document that accompanies this plan for a comprehensive listing of allowed land uses.

4. Base information (rivers, creeks, roads, etc) was generated from the USGS Pritchardville Quadrangle Sheet.

5. A 50' Leisure trail easement shall be located in the 50' buffer and/or road right-of-way on the Buckwalter parkway and the east-west connector as indicated on this concept master plan. A 20' utility easement shall be allowed within the 50' leisure trail easement.

6. Access points shown on this plan have been approved by the Town of Bluffton in concept; however the South Carolina Department of Transportation (SCDOT) and Beaufort County shall approve final location(s) and requirements.

CONCEPT MASTER PLAN

For:

Buckwalter

PLANNED UNIT DEVELOPMENT

Bluffton, South Carolina

Prepared For:

Branigar Organization

Savannah, Georgia

BRANIGAR

The Branigar Organization, Inc.

A company of INTERNATIONAL PAPER

Prepared By:

Wood+Partners, Inc.

Landscape Architects/Land Planners

Hilton Head Island, South Carolina

Thomas & Hutton Engineering Co.

Savannah, Georgia

LEGEND:

- ROADS / PUBLIC RIGHT-OF-WAY
- INTERSECTION/ ACCESS POINTS
- EXISTING DIRT ROADS
- STREAMS / WATER CHANNELS
- LAND USE TRACT LIMIT
- LEISURE TRAIL

PUD LAND USE AREAS

- RESIDENTIAL
- COMMERCIAL
- PUBLIC/INSTITUTIONAL
- WETLANDS
- TIMBER MANAGEMENT
- OCRM CRITICAL AREA
- DEDICATED PUBLIC PARK

MILEAGE 0 1/2 1

0 600 1200 2400 3600 4800

NORTH

DATE: January 2000

REVISED: March 2000

REVISED: Sept. 2001 - To establish final alignment for East-West Connector (Bluffton Pkwy.)

REVISED: October 2001 - To provide leisure trail along East / West Connector

REVISED: May 2002 - Property addition to the Sand Hill Tract

REVISED: August 2002 - Property addition to the Sand Hill Tract

REVISED: October 2004 - Property addition to Sand Hill Tract & Buckwalter Commons

REVISED: December 2004 - Property addition to the Sand Hill Tract

REVISED: May 2005 - Hampton Parkway addition

REVISED: July 2005 - Graves Tract Addition

REVISED: October 2005 - Rose Dhu Phase 3 addition

REVISED: January 2006 - Jacoby addition

REVISED: May 2007 - Buckwalter Commons

REVISED: November 2007 - Willow Run Tract

REVISED: February 2008 - Unit Counts

REVISED: March 25, 2009 C-1 25ft Parcel

REVISED: November 2011 - Buckwalter 10th Amendment - Robertson Site

REVISED: February 2012 - Modified Bluffton Parkway Phase 5B Alignment

REVISED: October 2012 - Modified Sand Hill Tract/Buckwalter Commons Connector Tract to add 70 Acres into Buckwalter Commons

REVISED: February 2020 - Annexed Saint Gregory the Great Tract (SGG Tract). Modification includes addition of 51.8 acres of public / institution and 11.1 acres of commercial.

4/10 RBO Bird

BEAUFORT COUNTY SC - ROD
BK 3644 Pgs 1951-1954
FILE NUM 2018008497
02/15/2018 10:53:45 AM
REC'D BY rbing RCPT# 880521
RECORDING FEES $10.00
County Tax $1,265.00
State Tax $2,990.00

STATE OF SOUTH CAROLINA)
)
COUNTY OF BEAUFORT)

TITLE TO REAL ESTATE

WHEREAS, at a duly authorized meeting of the Charleston-Atlantic Presbytery held on September 16, 2017, a properly constituted quorum being present and acting in accordance with the Book of Order of the Presbyterian Church (U.S.A.), it was resolved that Jesse C. Dove, Baxter Norris, E. M. Seabrook, III and Beulah Washington, or any three of them, as Trustees of Charleston-Atlantic Presbytery, successor in title in interest to Charleston Presbytery, a corporate body organized and existing by Sovereign Charter, were authorized to execute and deliver the within deed upon the terms and conditions stated herein pursuant to Section 6.0100 of the Manual of Administrative Operations, Charleston-Atlantic Presbytery, Presbyterian Church (U.S.A.), as revised from time to time;

NOW, THEREFORE, KNOW ALL PERSONS BY THESE PRESENTS that the undersigned **Jesse C. Dove, Baxter Norris** and **E. M. Seabrook, III**, as Trustees of **Charleston-Atlantic Presbytery**, a South Carolina eleemosynary corporation, in the County and State aforesaid, in consideration of the sum of One Million One Hundred Fifty Thousand and No/Hundreds Dollars ($1,150,000.00) in hand paid at and before the sealing of these Presents by **Parcel 8A, LLC**, a South Carolina limited liability company, the receipt whereof is hereby acknowledged, and subject to zoning ordinances, restrictions, easements and/or rights-of-way affecting the following described Premises and appearing of record in the Office of the Register of Deeds for Beaufort County, South Carolina, have granted, bargained, sold and released, and by these Presents do hereby grant, bargain, sell and release unto the said **Parcel 8A, LLC**, a South Carolina limited liability company, its successors and assigns, the following described Premises:

SEE EXHIBIT A ATTACHED HERETO

AND INCORPORATED HEREIN BY REFERENCE

GRANTEE'S ADDRESS: P. O. Box 1726, Bluffton SC 29910

TOGETHER with all and singular, the Rights, Members, Hereditaments and Appurtenances to the said Premises belonging, or in anywise incident or appertaining.

TO HAVE AND TO HOLD, all and singular, the said Premises before mentioned unto the said **Parcel 8A, LLC**, a South Carolina limited liability company, its successors and assigns, in fee simple forever.

AND **Charleston-Atlantic Presbytery,** a South Carolina eleemosynary corporation, by its undersigned Trustees, does hereby bind itself and its successors and assigns to warrant and forever defend, all and singular, the said Premises unto the said **Parcel 8A, LLC**, a South Carolina limited liability company, its successors and assigns against every person whomsoever lawfully claiming, or to claim the same or any part thereof.

IN WITNESS WHEREOF, **Charleston-Atlantic Presbytery**, by its undersigned Trustees, has caused these presents to be executed this 9th day of February, 2018, in the Two Hundred Forty-Second Year of the Sovereignty and Independence of the United States of America.

Signed, Sealed and Delivered
In the Presence of:

First Witness

Second Witness

Charleston-Atlantic Presbytery

By: Jesse C Dove
Jesse C. Dove, Trustee

By: Baxter Norris
Baxter Norris, Trustee

By: E. M. Seabrook III
E. M Seabrook, III, Trustee

STATE OF SOUTH CAROLINA)
)
COUNTY OF CHARLESTON)

ACKNOWLEDGEMENT

BEFORE ME, the undersigned Notary Public for said County and State, personally appeared **Jesse C. Dove, Baxter Norris** and **E. M. Seabrook, III, as Trustees of Charleston-Atlantic Presbytery,** each of whom acknowledged his execution of the within instrument for the purposes and uses set forth therein.

ACKNOWLEDGED this 9th day of February, 2018.

Barbara A. Burger
Notary Public
State of South Carolina
My Commission Expires
November 24, 2024

Barbara A. Burger
Print Name: Barbara A. Burger
Notary Public for South Carolina
My commission expires: 11/24/2024

Exhibit "A"

All that tract or parcel of land lying, being and situate in Bluffton Township, Beaufort County, South Carolina, containing 21.681 acres, more or less, and being shown as Parcel B-1 on the plat entitled "A Boundary Survey of Parcel B-1, Tax Parcel Nos. R:600:028:000:0921:0000, Town of Bluffton, Beaufort County, South Carolina," prepared for Zinn Asset Management Corp. by Atlas Surveying, Inc. by Mark E. Lamb, S.C.P.L.S No. 23200 and recorded in Plat Book 148 at Page 133 in the Beaufort County Register of Deeds.

Subject to all easements shown on the above-referenced plat.

Being a portion of the same property conveyed to Charleston-Atlantic Presbytery by deed of Jerome K. Jones, Jacquita J. Jenkins, Wm. Jarrell Jones, Jeffrey H. Jones, Holly Branch Farms, LLLP, a Georgia limited partnership, Jones and Associates Limited Partnership, a South Carolina limited partnership, Dorothy R. Zetterower, Lillian R. Stephenson and Christopher C. Ryals dated October 25, 2004 and recorded October 27, 2004 in Book 21402 at Page 2177, Beaufort County Records.

This Deed was prepared in the Law Office of Stephen S. Bird, LLC, P.O. Box 2474, Bluffton, SC 299910.

R: 610:028:000:0921:0000

First American Title™	Owner's Policy of Title Insuranc
	ISSUED BY **First American Title Insurance Company**
Exhibit A	POLICY NUMBER **5011400-1986261e**

File No.: **1255-009-00**

The Land referred to herein below is situated in the County of Beaufort, State of South Carolina, and is described as follows:

Exhibit "A"

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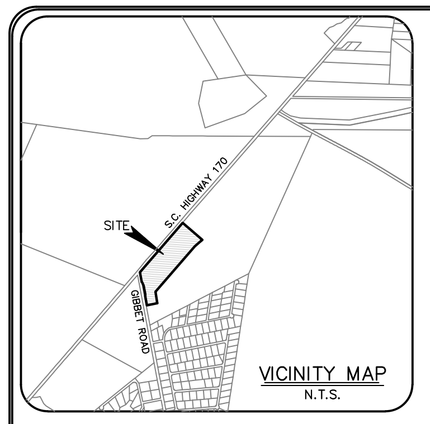
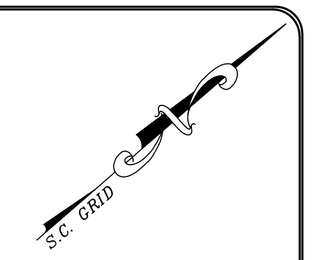
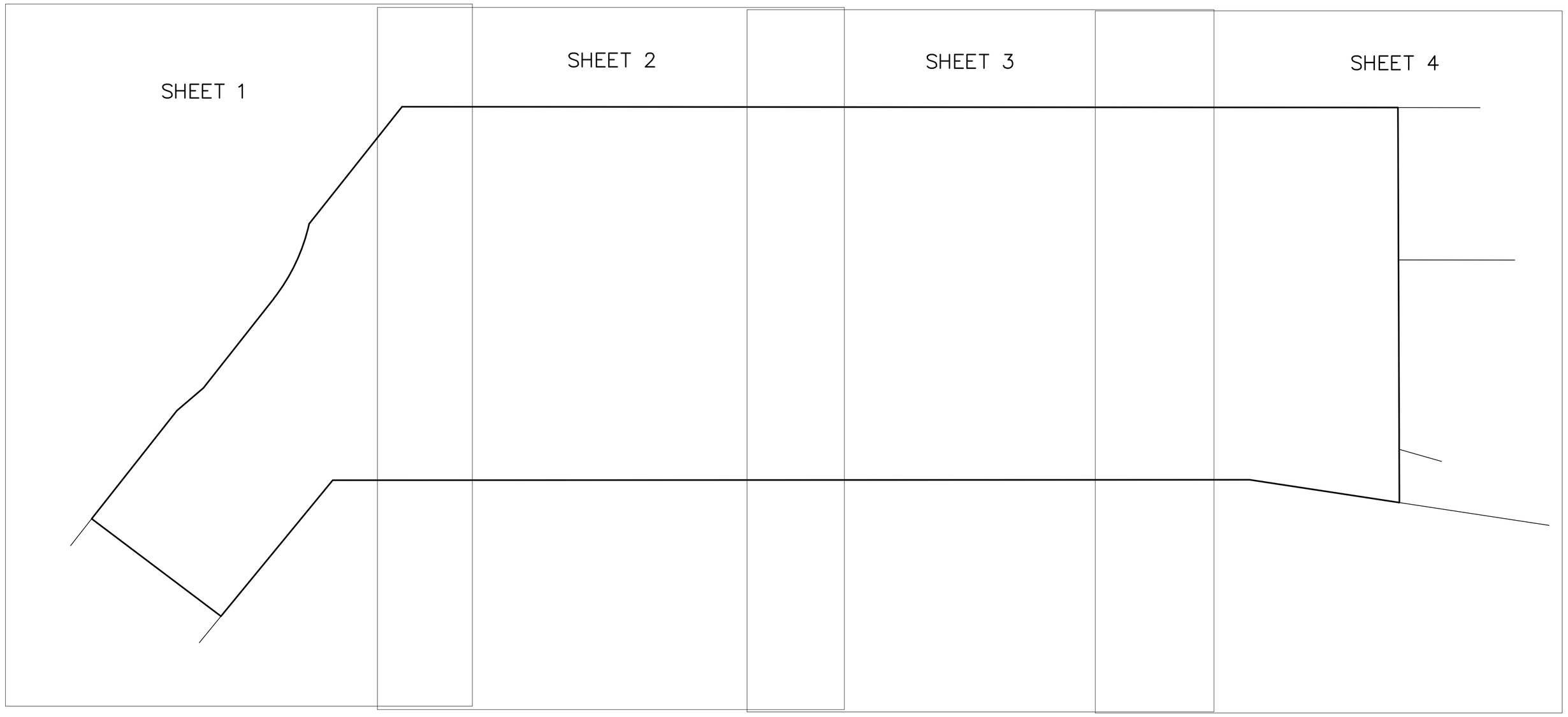
Attachment 5



VICINITY MAP
N.T.S.





REFERENCE PLAT

1) A BOUNDARY SURVEY OF: PARCEL B–1,
TAX PARCEL NOS. R610 028 000 0921 0000,
TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA
DRAWN: 12/1/2017
RECORDED IN BOOK 148, PAGE 133, DATED 2/15/2018
ROD. BEAUFORT COUNTY, SC
BY: MARK ELLIS LAMB, SR. S.C.R.L.S. # 23200

2) A SUBDIVISION OF PARCEL 8A, TMS: R610 028 000 0920 0000
A PORTION OF PARCEL 8, LLC PROPERTY,
TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA
DRAWN: 1/21/08
RECORDED IN BOOK 127, PAGE 105
ROD. BEAUFORT COUNTY, SC
BY: BOYCE L. YOUNG S.C.R.L.S. # 11079

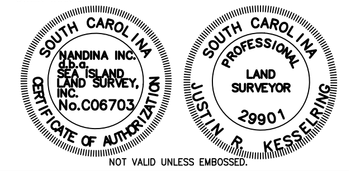
3) A BOUNDARY AND SUBDIVISION PLAT OF 37.89 ACRES KNOWN AS,
"PALMETTO POINT COMMERCIAL SUBDIVISION", BEING A PORTION OF THE CHURCH POINT TRACT,
OFF GIBBET ROAD, TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA
DRAWN: 1/21/08
RECORDED IN BOOK 112, PAGE 134, DATED: 3/31/06
ROD. BEAUFORT COUNTY, SC
BY: FORREST F. BAUGHMAN S.C.R.L.S. # 4922

PROPERTY AREA = 21.7 Ac. 944,430 Sq. Ft.
ADDRESS: NO STREET ADDRESS
DISTRICT: 610, MAP: 28, PARCEL: 921

THIS PROPERTY LIES IN F.E.M.A. ZONE X
BASE FLOOD ELEVATION = N/A
COMMUNITY NO. 450025, PANEL 0265G, DATED: 3/23/2021

SHEET INDEX

I HEREBY STATE THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "A" SURVEY AS SPECIFIED THEREIN; ALSO THERE ARE NO VISIBLE ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.



NOT VALID UNLESS EMBOSSED.

BOUNDARY, TREE AND TOPOGRAPHIC SURVEY OF:
PARCEL B-1, CYPRESS TRACT, GIBBET ROAD,
S.C. HIGHWAY 170, TOWN OF BLUFFTON,
BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
MILLSTONE MANAGEMENT

DATE : 2/21/2023 SCALE : 1" = 100'

GRAPHIC SCALE
0 100 200 300

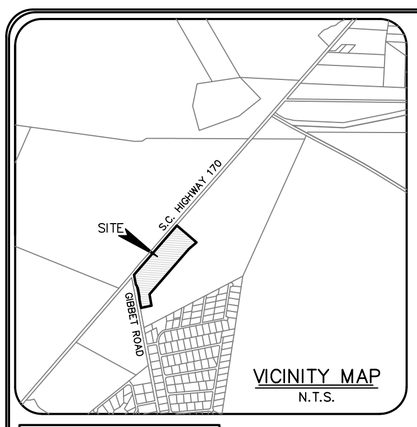
NANDINA

d.b.a. Sea Island Land Survey, Inc.
10 Oak Park Drive, Unit C1, Tel (843) 681-3248
Hilton Head Island, Fax (843) 689-3871
SC 29926 E-mail: admin@nandinainc.com

FILE No : 22311 DWG No. : 9-22311

CAD: CG, FLD: MW

Attachment 5



VICINITY MAP
N.T.S.

LEGEND & SYMBOLS:

TREE SIZES ARE INCHES IN DIAMETER

9.5 / 9	SPOT ELEVATION / CONTOUR	⌀	ELECTRIC SERVICE
3/4" IPPF ◎	3/4" IRON PIPE FOUND	⌀	ELECTRIC TRANSFORMER
TBM	TEMPORARY BENCH MARK	T	TELEPHONE SERVICE
IE	INVERT ELEVATION	■	TELEVISION SERVICE
RCP	REINFORCED CONCRETE PIPE	V	VALVE BOX
LO	LIVE OAK	S	SEWER VALVE
LA	LAUREL OAK	⌀	UTILITY POLE
MAP	MAPLE	UGP	UNDERGROUND POWER
RO	RED OAK	W	UNDERGROUND WATER LINE
PN	PINE	UTC	UNDERGROUND TELECOMMUNICATION
CHY	CHERRY	OHP	OVERHEAD POWER LINE
WO	WATER OAK		
GUM	GUM		
TUP	TUPELO		
HOL	HOLLY		
HIC	HICKORY		

LINE TABLE					
LINE	LENGTH	BEARING	LINE	LENGTH	BEARING
L1	67.76'	S74°45'06"W	L16	71.66'	S30°49'25"W
L2	52.35'	S39°42'00"W	L17	75.85'	S42°25'59"W
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L8	53.91'	S46°15'19"W	L23	55.67'	S18°35'00"W
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CURVE TABLE						
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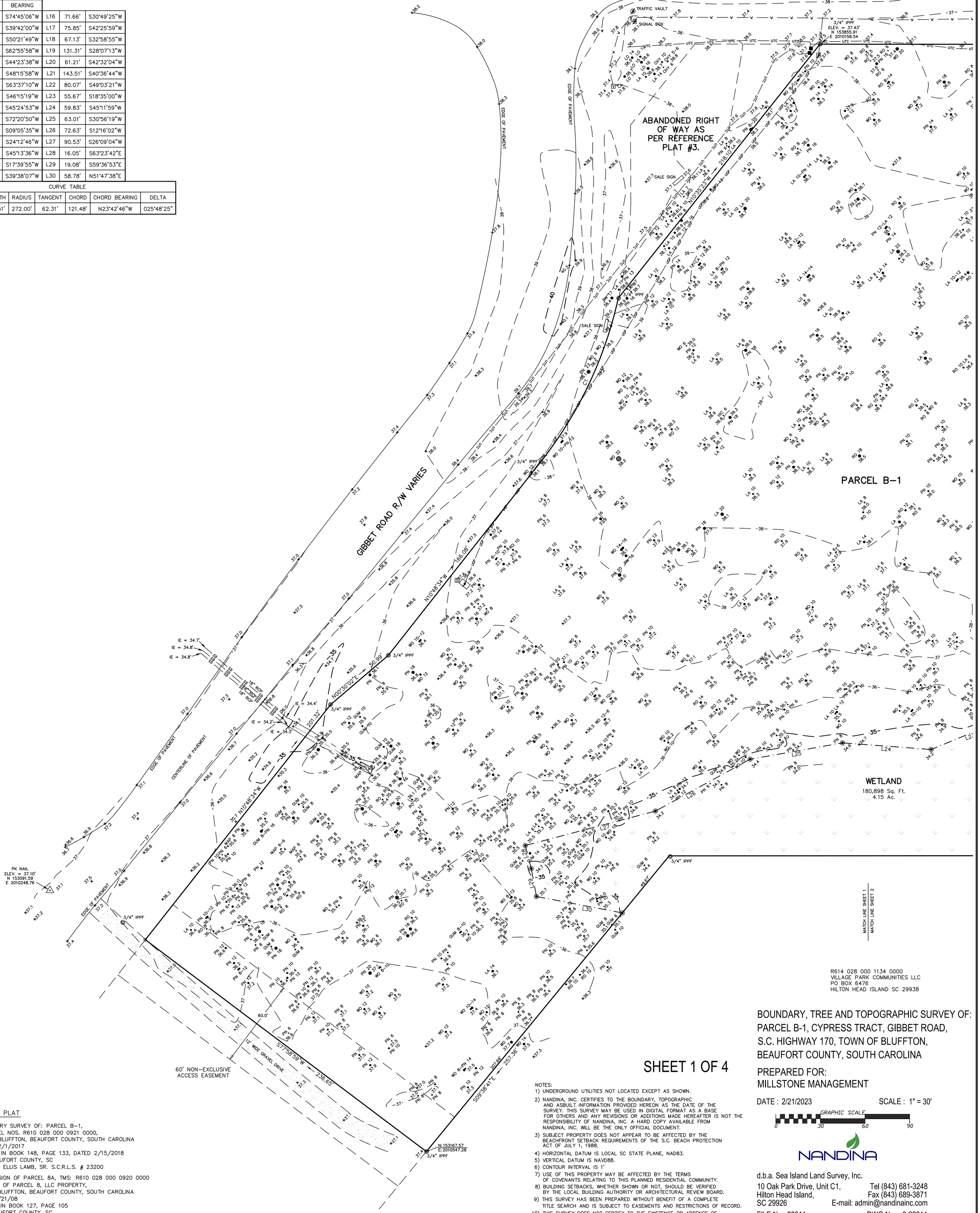

REFERENCE PLAT

1) A BOUNDARY SURVEY OF: PARCEL B-1,
TAX PARCEL NOS. R610 028 000 0921 0000,
TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA
DRAWN: 12/1/2017
RECORDED IN BOOK 148, PAGE 133, DATED 2/15/2018
ROD. BEAUFORT COUNTY, SC
BY: MARK ELLIS LAMB, SR. S.C.R.L.S. # 23200

2) A SUBDIVISION OF PARCEL 8A, TMS: R610 028 000 0920 0000
A PORTION OF PARCEL 8, LLC PROPERTY,
TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA
DRAWN: 1/21/08
RECORDED IN BOOK 127, PAGE 105
ROD. BEAUFORT COUNTY, SC
BY: BOYCE L. YOUNG S.C.R.L.S. # 11079

3) A BOUNDARY AND SUBDIVISION PLAT OF 37.89 ACRES KNOWN AS,
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OFF GIBBET ROAD, TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA
DRAWN: 1/21/08
RECORDED IN BOOK 112, PAGE 134, DATED: 3/31/06
ROD. BEAUFORT COUNTY, SC
BY: FORREST F. BAUGHMAN S.C.R.L.S. # 4922

PROPERTY AREA = 21.7 Ac. 944,430 Sq. Ft.
ADDRESS: NO STREET ADDRESS

DISTRICT: 610, MAP: 28, PARCEL: 921

THIS PROPERTY LIES IN F.E.M.A. ZONE X
BASE FLOOD ELEVATION = N/A
COMMUNITY NO. 450025, PANEL 0265G, DATED: 3/23/2021

R614 028 000 1134 0000
VILLAGE PARK COMMUNITIES LLC
PO BOX 6476
HILTON HEAD ISLAND SC 29938

BOUNDARY, TREE AND TOPOGRAPHIC SURVEY OF: PARCEL B-1, CYPRESS TRACT, GIBBET ROAD, S.C. HIGHWAY 170, TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
MILLSTONE MANAGEMENT

SHEET 1 OF 4

NOTES:
1) UNDERGROUND UTILITIES NOT LOCATED EXCEPT AS SHOWN.
2) NANDINA, INC. CERTIFIES TO THE BOUNDARY, TOPOGRAPHIC AND ASBUILT INFORMATION PROVIDED HEREON AS THE DATE OF THE SURVEY. THIS SURVEY MAY BE USED IN DIGITAL FORMAT AS A BASE FOR OTHERS AND ANY REVISIONS OR ADDITIONS MADE HEREAFTER IS NOT THE RESPONSIBILITY OF NANDINA, INC. A HARD COPY AVAILABLE FROM NANDINA, INC. WILL BE THE ONLY OFFICIAL DOCUMENT.
3) SUBJECT PROPERTY DOES NOT APPEAR TO BE AFFECTED BY THE BEACHFRONT SETBACK REQUIREMENTS OF THE S.C. BEACH PROTECTION ACT OF JULY 1, 1988.
4) HORIZONTAL DATUM IS LOCAL SC STATE PLANE, NAD83.
5) VERTICAL DATUM IS NAVD88.
6) CONTOUR INTERVAL IS 1'
7) USE OF THIS PROPERTY MAY BE AFFECTED BY THE TERMS OF COVENANTS RELATING TO THIS PLANNED RESIDENTIAL COMMUNITY.
8) BUILDING SETBACKS, WHETHER SHOWN OR NOT, SHOULD BE VERIFIED BY THE LOCAL BUILDING AUTHORITY OR ARCHITECTURAL REVIEW BOARD.
9) THIS SURVEY HAS BEEN PREPARED WITHOUT BENEFIT OF A COMPLETE TITLE SEARCH AND IS SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.
10) THIS SURVEY DOES NOT CERTIFY TO THE EXISTENCE OR ABSENCE OF FRESHWATER WETLANDS.
11) IF IDENTIFICATION OF TREES IS CRITICAL TO DEVELOPMENT, AN ARBORIST SHOULD BE CONSULTED TO VERIFY SUCH TREE IDENTIFICATION.

DATE : 2/21/2023 SCALE : 1" = 30'

GRAPHIC SCALE
0 30 60 90

NANDINA

d.b.a. Sea Island Land Survey, Inc.
10 Oak Park Drive, Unit C1, Hilton Head Island, SC 29926
Tel (843) 681-3248
Fax (843) 689-3871
E-mail: admin@nandainc.com

FILE No : 22311 DWG No. : 9-22311

CAD: CG, FLD: MW

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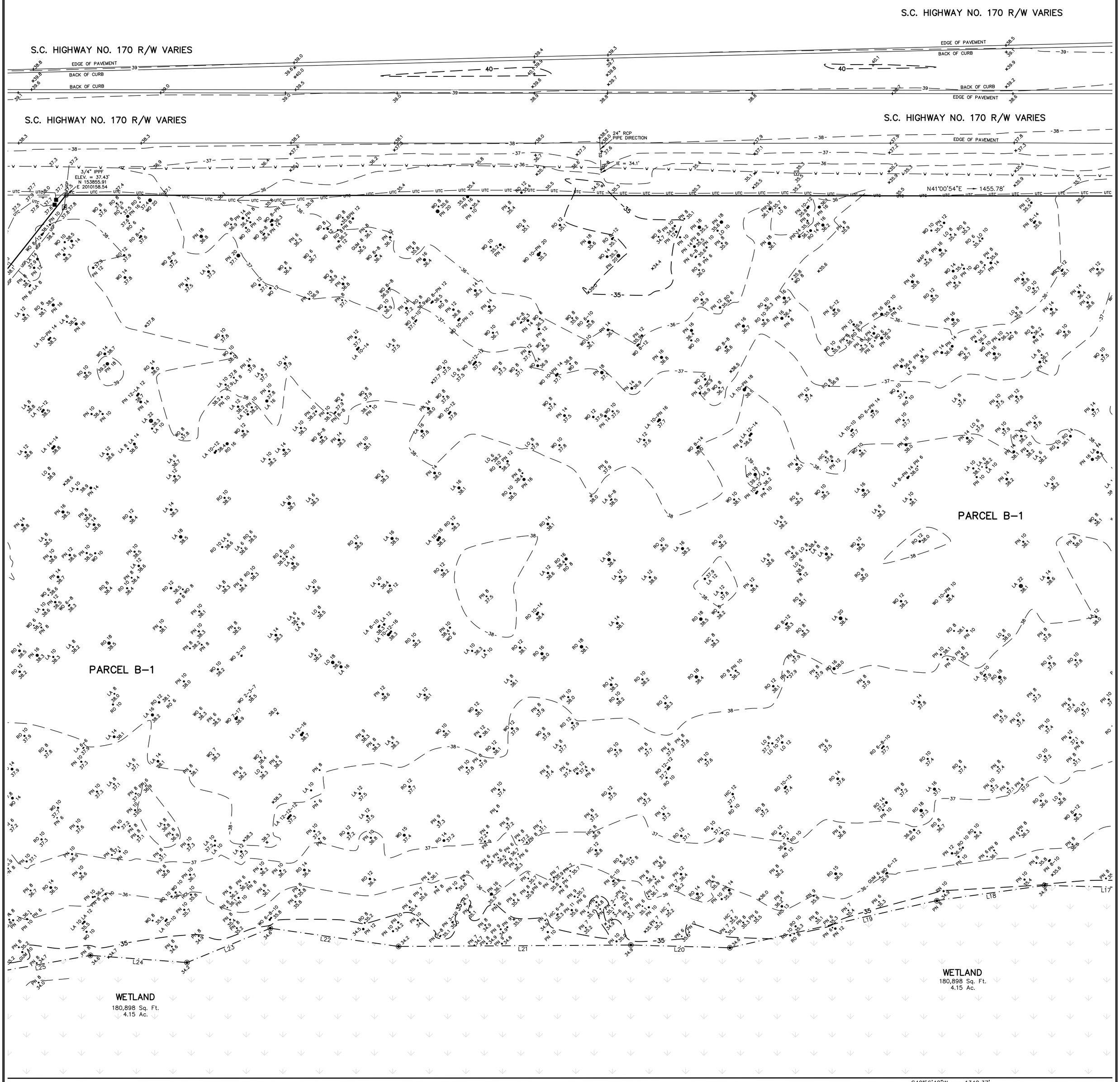
SOUTH CAROLINA NANDINA INC. d.b.a. SEA ISLAND LAND SURVEY, INC. No.C06703 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL LAND SURVEYOR 29901 JUSTIN R. KESSLERING

NOT VALID UNLESS EMBOSSED.

Attachment 5



MATCH LINE SHEET 1
MATCH LINE SHEET 2

MATCH LINE SHEET 2
MATCH LINE SHEET 3

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PREPARED FOR:
MILLSTONE MANAGEMENT

DATE : 2/21/2023 SCALE : 1" = 30'

GRAPHIC SCALE
0 30 60 90

NANDINA
d.b.a. Sea Island Land Survey, Inc.
10 Oak Park Drive, Unit C1, Hilton Head Island, SC 29926
Tel (843) 681-3248
Fax (843) 689-3871
E-mail: admin@nandainc.com

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LEGEND & SYMBOLS:

TREE SIZES ARE INCHES IN DIAMETER

9.5	SPOT ELEVATION
—9—	CONTOUR
3/4" IPPF ◎	3/4" IRON PIPE FOUND
TBM	TEMPORARY BENCH MARK
IE	INVERT ELEVATION
RCP	REINFORCED CONCRETE PIPE
LO	LIVE OAK
LA	LAUREL OAK
MAP	MAPLE
RO	RED OAK
PN	PINE
CHY	CHERRY
WO	WATER OAK
GUM	GUM
TUP	TUPELO
HOL	HOLLY
HIC	HICKORY

⌀	ELECTRIC SERVICE
⌀	ELECTRIC TRANSFORMER
T	TELEPHONE SERVICE
■	TELEVISION SERVICE
V	VALVE BOX
S	SEWER VALVE
⌀	UTILITY POLE
— UGP —	UNDERGROUND POWER
— W —	UNDERGROUND WATER LINE
— UTC —	UNDERGROUND TELECOMMUNICATION
— OHP —	OVERHEAD POWER LINE

SHEET 2 OF 4

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SOUTH CAROLINA — NANDINA INC. D.B.A. SEA ISLAND LAND SURVEY, INC. No.C06703 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL LAND SURVEYOR 29901 — JUSTIN R. KESSELRING

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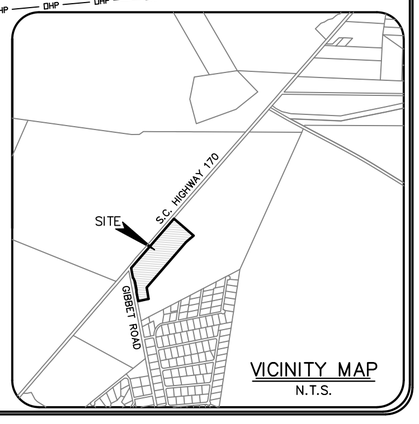
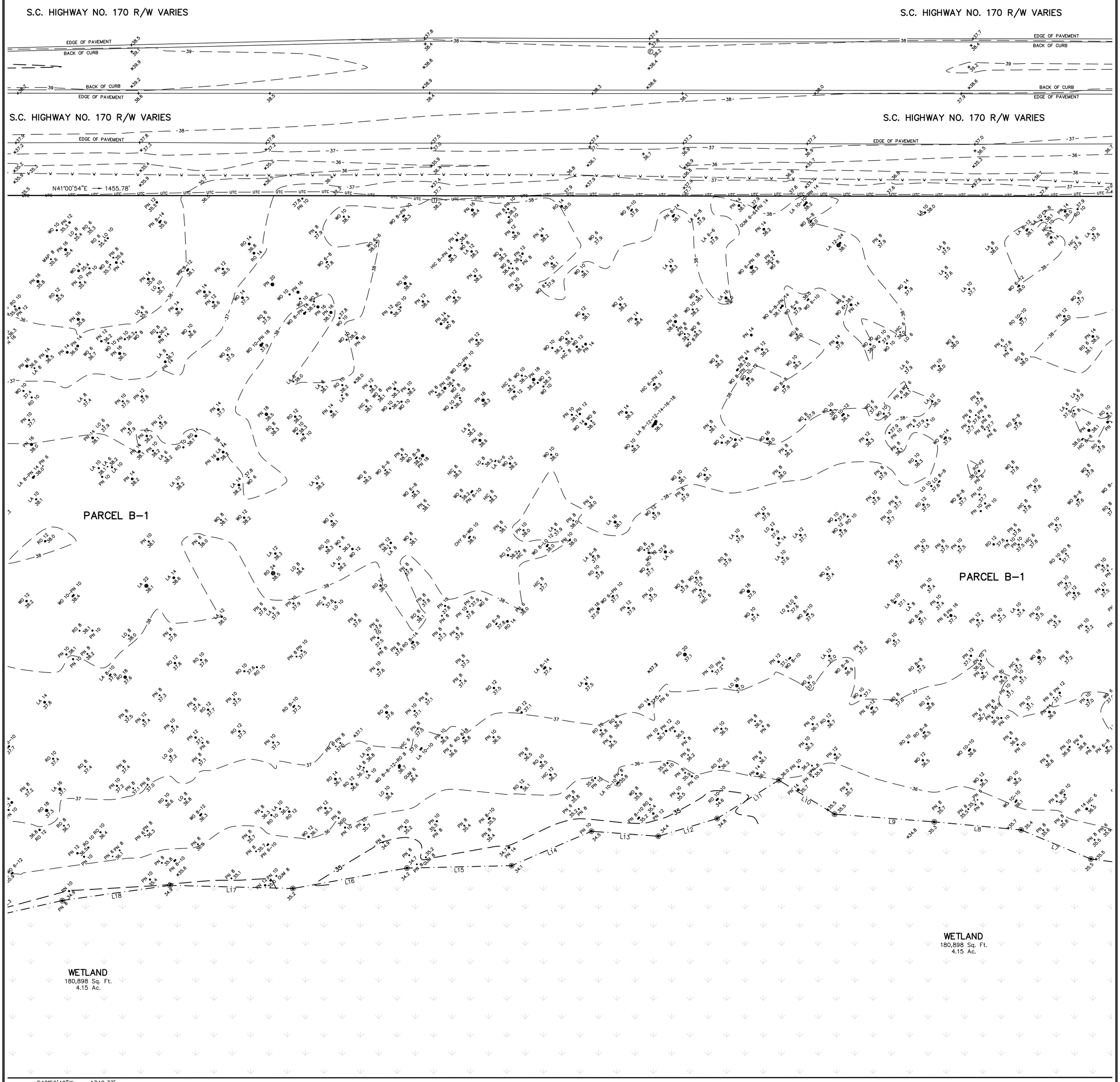


VICINITY MAP
N.T.S.

Attachment 5



MATCH LINE SHEET 2 | MATCH LINE SHEET 3

MATCH LINE SHEET 3 | MATCH LINE SHEET 4

R614 028 000 1134 0000
VILLAGE PARK COMMUNITIES LLC
PO BOX 6476
HILTON HEAD ISLAND SC 29938

R614 028 000 1134 0000
VILLAGE PARK COMMUNITIES LLC
PO BOX 6476
HILTON HEAD ISLAND SC 29938

BOUNDARY, TREE AND TOPOGRAPHIC SURVEY OF: PARCEL B-1, CYPRESS TRACT, GIBBET ROAD, S.C. HIGHWAY 170, TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
MILLSTONE MANAGEMENT

DATE : 2/21/2023 SCALE : 1" = 30'

GRAPHIC SCALE
0 30 60 90

NANDINA
d.b.a. Sea Island Land Survey, Inc.
10 Oak Park Drive, Unit C1, Hilton Head Island, SC 29926
Tel (843) 681-3248
Fax (843) 689-3871
E-mail: admin@nandinainc.com

FILE No : 22311 DWG No. : 9-22311

 CAD: CG, FLD: MW

LINE TABLE					
LINE	LENGTH	BEARING			
L1	67.76'	S74°45'06"W	L16	71.66'	S30°49'25"W
L2	52.35'	S39°42'00"W	L17	75.85'	S42°25'59"W
L3	47.72'	S50°21'49"W	L18	67.13'	S32°58'55"W
L4	34.60'	S62°55'58"W	L19	131.31'	S28°07'13"W
L5	43.85'	S44°23'38"W	L20	61.21'	S42°32'04"W
L6	52.63'	S48°15'58"W	L21	143.51'	S40°36'44"W
L7	46.67'	S63°37'10"W	L22	80.07'	S49°03'21"W
L8	53.91'	S46°15'19"W	L23	55.67'	S18°35'00"W
L9	61.86'	S45°24'53"W	L24	59.83'	S45°11'59"W
L10	40.29'	S72°20'50"W	L25	63.01'	S30°56'19"W
L11	44.86'	S09°05'35"W	L26	72.63'	S12°16'02"W
L12	37.97'	S24°12'46"W	L27	90.53'	S26°09'04"W
L13	41.44'	S45°13'36"W	L28	16.05'	S63°23'42"E
L14	53.69'	S17°39'55"W	L29	19.08'	S59°36'53"E
L15	64.68'	S39°38'07"W	L30	58.78'	N51°47'38"E

CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	CHORD	CHORD BEARING	DELTA
C1	122.51'	272.00'	62.31'	121.48'	N23°42'46"W	025°48'25"

LEGEND & SYMBOLS:

TREE SIZES ARE INCHES IN DIAMETER

9.5 / —9—	SPOT ELEVATION / CONTOUR	⌀	ELECTRIC SERVICE
3/4" IPPF ◎	3/4" IRON PIPE FOUND	⌀	ELECTRIC TRANSFORMER
TBM	TEMPORARY BENCH MARK	T	TELEPHONE SERVICE
IE	INVERT ELEVATION	■	TELEVISION SERVICE
RCP	REINFORCED CONCRETE PIPE	V	VALVE BOX
LO	LIVE OAK	S	SEWER VALVE
LA	LAUREL OAK	⌀	UTILITY POLE
MAP	MAPLE	— UGP —	UNDERGROUND POWER
RO	RED OAK	— W —	UNDERGROUND WATER LINE
PN	PINE	— UTC —	UNDERGROUND TELECOMMUNICATION
CHY	CHERRY	— OHP —	OVERHEAD POWER LINE
WO	WATER OAK		
GUM	GUM		
TUP	TUPELO		
HOL	HOLLY		
HIC	HICKORY		

PROPERTY AREA = 21.7 Ac. 944,430 Sq. Ft.
ADDRESS: NO STREET ADDRESS

DISTRICT: 610, MAP: 28, PARCEL: 921

THIS PROPERTY LIES IN F.E.M.A. ZONE X
BASE FLOOD ELEVATION = N/A
COMMUNITY NO. 450025, PANEL 0265G, DATED: 3/23/2021

REFERENCE PLAT

1) A BOUNDARY SURVEY OF: PARCEL B-1,
TAX PARCEL NOS. R610 028 000 0921 0000,
TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA
DRAWN: 12/1/2017
RECORDED IN BOOK 148, PAGE 133, DATED 2/15/2018
ROD. BEAUFORT COUNTY, SC
BY: MARK ELLIS LAMB, SR. S.C.R.L.S. # 23200

2) A SUBDIVISION OF PARCEL 8A, TMS: R610 028 000 0920 0000
A PORTION OF PARCEL 8, LLC PROPERTY,
TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA
DRAWN: 1/21/08
RECORDED IN BOOK 127, PAGE 105
ROD. BEAUFORT COUNTY, SC
BY: BOYCE L. YOUNG S.C.R.L.S. # 11079

3) A BOUNDARY AND SUBDIVISION PLAT OF 37.89 ACRES KNOWN AS,
"PALMETTO POINT COMMERCIAL SUBDIVISION", BEING A PORTION OF THE CHURCH POINT TRACT,
OFF GIBBET ROAD, TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA
DRAWN: 1/21/08
RECORDED IN BOOK 112, PAGE 134, DATED: 3/31/06
ROD. BEAUFORT COUNTY, SC
BY: FORREST F. BAUGHMAN S.C.R.L.S. # 4922

NOTES:
1) UNDERGROUND UTILITIES NOT LOCATED EXCEPT AS SHOWN.
2) NANDINA, INC. CERTIFIES TO THE BOUNDARY, TOPOGRAPHIC AND ASBUILT INFORMATION PROVIDED HEREON AS THE DATE OF THE SURVEY. THIS SURVEY MAY BE USED IN DIGITAL FORMAT AS A BASE FOR OTHERS AND ANY REVISIONS OR ADDITIONS MADE HEREAFTER IS NOT THE RESPONSIBILITY OF NANDINA, INC. A HARD COPY AVAILABLE FROM NANDINA, INC. WILL BE THE ONLY OFFICIAL DOCUMENT.
3) SUBJECT PROPERTY DOES NOT APPEAR TO BE AFFECTED BY THE BEACHFRONT SETBACK REQUIREMENTS OF THE S.C. BEACH PROTECTION ACT OF JULY 1, 1988.
4) HORIZONTAL DATUM IS LOCAL SC STATE PLANE, NAD83.
5) VERTICAL DATUM IS NAVD88.
6) CONTOUR INTERVAL IS 1'
7) USE OF THIS PROPERTY MAY BE AFFECTED BY THE TERMS OF COVENANTS RELATING TO THIS PLANNED RESIDENTIAL COMMUNITY.
8) BUILDING SETBACKS, WHETHER SHOWN OR NOT, SHOULD BE VERIFIED BY THE LOCAL BUILDING AUTHORITY OR ARCHITECTURAL REVIEW BOARD.
9) THIS SURVEY HAS BEEN PREPARED WITHOUT BENEFIT OF A COMPLETE TITLE SEARCH AND IS SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.
10) THIS SURVEY DOES NOT CERTIFY TO THE EXISTENCE OR ABSENCE OF FRESHWATER WETLANDS.
11) IF IDENTIFICATION OF TREES IS CRITICAL TO DEVELOPMENT, AN ARBORIST SHOULD BE CONSULTED TO VERIFY SUCH TREE IDENTIFICATION.

SHEET 3 OF 4

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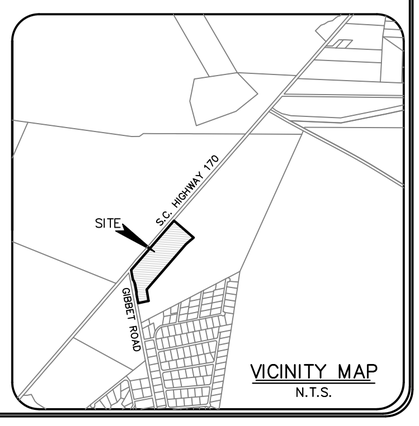


VICINITY MAP
N.T.S.

Attachment 5

S.C. HIGHWAY NO. 170 R/W VARIES

EDGE OF PAVEMENT

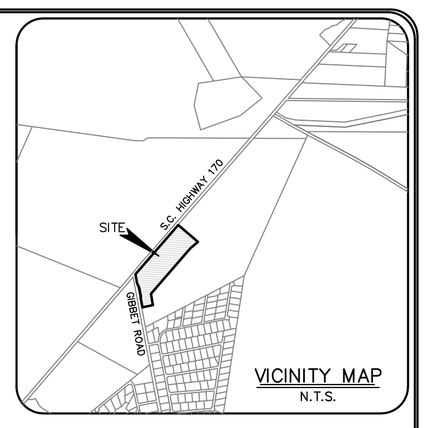
BACK OF CURB

BACK OF CURB

EDGE OF PAVEMENT

S.C. HIGHWAY NO. 170 R/W VARIES

EDGE OF PAVEMENT



VICINITY MAP
N.T.S.

18" RCP
PIPE DIRECTION
IE = 34.2'

3/4" IPPF
ELEV. = 36.61'
N 154954.22
E 2011113.78

60' NON-EXCLUSIVE
ACCESS EASEMENT

R610 028 000 3921 0000
PARCEL 8A LLC %TOM ZINN
PO BOX 1726
BLUFFTON SC 29910-1726

PARCEL B-1

3/4" IPPF

S49°14'25"E — 577.49'

252.95'

103.90'

118.95'

120' WIDE UTILITY EASEMENT

R610 028 000 3922 0000
PARCEL 8A LLC %TOM ZINN
PO BOX 1726
BLUFFTON SC 29910-1726

WETLAND
180,898 Sq. Ft.
4.15 Ac.

3/4" IPPF
DISTURBED

23.91'

77.78'

R610 028 000 0920 0000
PARCEL 8A LLC %TOM ZINN
PO BOX 1726
BLUFFTON SC 29910-1726

3/4" IPPF
N: 154433.73
E: 2011382.55

132.88'

S49°37'02"W — 221.41'

88.53'

MATCH LINE SHEET 3
MATCH LINE SHEET 4

R614 028 000 1134 0000
VILLAGE PARK COMMUNITIES LLC
PO BOX 6476
HILTON HEAD ISLAND SC 29938

REFERENCE PLAT

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LO	LIVE OAK	Ø	UTILITY POLE
LA	LAUREL OAK	UGP	UNDERGROUND POWER
MAP	MAPLE	W	UNDERGROUND WATER LINE
RO	RED OAK	UTC	UNDERGROUND TELECOMMUNICATION
PN	PINE	OHP	OVERHEAD POWER LINE
CHY	CHERRY		
WO	WATER OAK		
GUM	GUM		
TUP	TUPELO		
HOL	HOLLY		
HIC	HICKORY		

BOUNDARY, TREE AND TOPOGRAPHIC SURVEY OF:
PARCEL B-1, CYPRESS TRACT, GIBBET ROAD,
S.C. HIGHWAY 170, TOWN OF BLUFFTON,
BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
MILLSTONE MANAGEMENT

DATE : 2/21/2023 SCALE : 1" = 30'

GRAPHIC SCALE
0 30 60 90

SHEET 4 OF 4

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E-mail: admin@nandinainc.com

FILE No : 22311 DWG No. : 9-22311

CAD: CG, FLD: MW

Gibbet Road Residential Development

Traffic Impact Analysis

Bluffton, South Carolina

Prepared for

Milestone Management, LLC

Prepared by

Kimley»Horn

April 2023

Gibbet Road Residential Development

Traffic Impact Analysis

Bluffton, South Carolina

Prepared for

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Prepared by

Kimley»Horn

April 2023

115 Fairchild Street, Suite 250
Charleston, South Carolina, 29492

Table of Contents

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List of Tables

List of Appendices

1 Executive Summary

The proposed Gibbet Road Residential Development is in the northeast quadrant of the SC 170 (Okatie Highway) and Gibbet Road intersection in Bluffton, South Carolina. This development is planned to consist of the following phases and land uses:

- 2025 Build Phase 1 – 150 multi-family housing units.
- 2027 Build Phase 2 – 6,300 square-foot convenience store and gas station with 12 fueling positions.
- 2029 Build Phase 3 – 8,850 square feet office space and 8,850 square feet retail space.

It was assumed that the project will access the roadway network via the following five unsignalized driveways:

- Site Access #1 – Planned to be constructed under Phase 1 and is located approximately 850' north of Gibbet Road along SC 170 (Okatie Highway). This access is proposed to be restricted to right-in, right-out movements only.
- Site Access #2 – Planned to be constructed under Phase 1 and is located approximately 350' east of SC 170 (Okatie Highway) along Gibbet Road. This access is proposed to be restricted to right-in, right-out movements only.
- Site Access #3 – Planned to be constructed under Phase 1 and is proposed to be full-movement and align with Estate Drive.
- Site Access #4 – Planned to be constructed under Phase 2 and is located approximately 350' feet north of Gibbet Road along SC 170 (Okatie Highway). This access is proposed to be restricted to right-in, right-out movements only.
- Site Access #5 – Planned to be constructed under Phase 3 and is located approximately 875' feet south of Lawton Boulevard along SC 170 (Okatie Highway). This access is proposed to be restricted to right-in, right-out movements only.

This study summarizes the results of the traffic analyses at the following study intersections:

1) SC 170 (Okatie Highway) at Lawton Boulevard
2) SC 170 (Okatie Highway) at Gibbet Road/Mill Creek Boulevard
3) Gibbet Road at Estate Drive/Site Access #3
4) SC 170 (Okatie Highway) at Site Access #1
5) Gibbet Road at Site Access #2
6) SC 170 (Okatie Highway) at Site Access #4
7) SC 170 (Okatie Highway) at Site Access #5

Improvements Considered by Others

In the surrounding area, the approved development of the Palmetto Point Pickleball and Commercial Site, Kimley-Horn 2021, was accounted for in the analysis of 2025, 2027, and 2029 conditions. Based on this report, an eastbound right-turn lane along Gibbet Road at the intersection of Estate Drive will be constructed.

Based on the results of the traffic analyses, the following improvements are recommended to mitigate the impact of the proposed development's traffic on the study area intersections:

2025 Build Phase 1

Gibbet Road at Estate Drive/ Site Access #3

- Construct Site Access #3 to align with Estate Drive. Site Access #3 should consist of one ingress lane and two egress lanes. The egress lanes should consist of a left-turn lane and shared through/right-turn lane.

SC 170 (Okatie Highway) at Site Access #1

- Construct a northbound right-turn lane along SC 170 (Okatie Highway) in accordance with the SCDOT *Roadway Design Manual*.
- Construct Site Access #1 to be a right-in, right-out access only with one ingress lane and one egress lane.

Gibbet Road at Site Access #2

- Construct Site Access #2 to be a right-in, right-out access only with one ingress lane and one egress lane.

2027 Build Phase 2

Gibbet Road at Estate Drive/ Site Access #3

- Construct an eastbound left-turn lane along Gibbet Road in accordance with the SCDOT *Roadway Design Manual*.

SC 170 (Okatie Highway) at Site Access #4

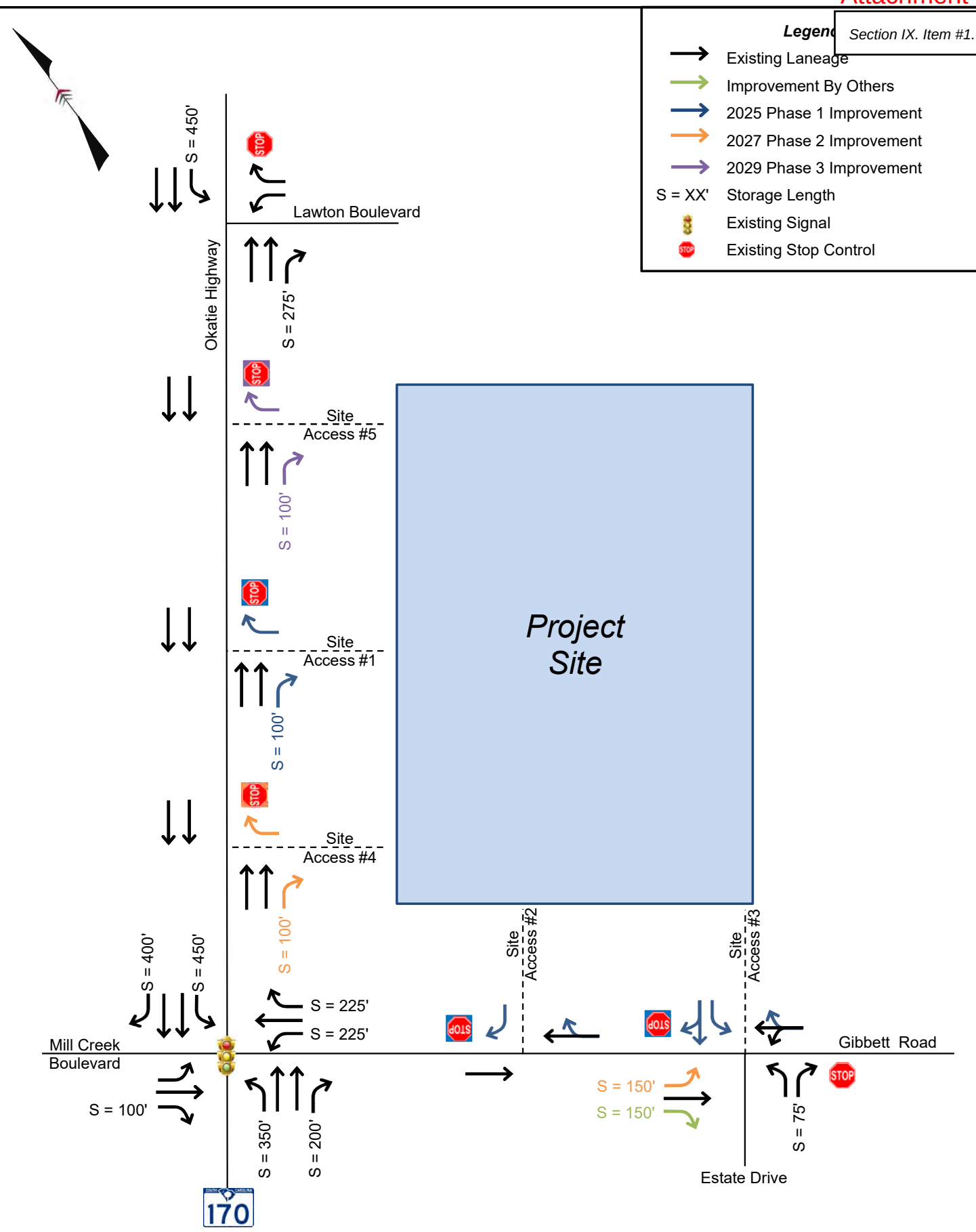
- Construct a northbound right-turn lane along SC 170 (Okatie Highway) in accordance with the SCDOT *Roadway Design Manual*.
- Construct Site Access #4 to be a right-in, right-out access only with one ingress lane and one egress lane.

2029 Build Phase 3

SC 170 (Okatie Highway) at Site Access #5

- Construct a northbound right-turn lane along SC 170 (Okatie Highway) in accordance with the SCDOT *Roadway Design Manual*.
- Construct Site Access #5 to be a right-in, right-out access only with one ingress lane and one egress lane.

Recommended improvements are illustrated in **Figure 1**.


Legend
Existing Laneage
Improvement By Others
2025 Phase 1 Improvement
2027 Phase 2 Improvement
2029 Phase 3 Improvement
S = XX' Storage Length
Existing Signal
Existing Stop Control
Lawton Boulevard
Okatie Highway
S = 450'
S = 275'
Site Access #5
S = 100'
Site Access #1
S = 100'
Site Access #4
S = 100'
Project Site
Site Access #2
Site Access #3
S = 400'
S = 450'
S = 225'
S = 225'
Mill Creek Boulevard
S = 100'
S = 350'
S = 200'
S = 150'
S = 150'
S = 75'
Gibbett Road
Estate Drive
170

1 Introduction

The proposed Gibbet Road Residential Development is in the northeast quadrant of the SC 170 (Okatie Highway) and Gibbet Road intersection in Beaufort County, South Carolina. This development is planned to consist of the following phases and land uses:

- 2025 Build Phase 1 – 150 multi-family housing units.
- 2027 Build Phase 2 – 6,300 square-foot convenience store and gas station with 12 fueling positions.
- 2029 Build Phase 3 – 8,850 square feet office space and 8,850 square feet retail space.

The location of the proposed development is illustrated in **Figure 2**, and the conceptual site plans are attached in **Appendix A**.

It is assumed that Phase 1 of the development will be built and fully occupied by 2025, Phase 2 by 2027, and Phase 3 by 2029. Therefore, this study summarizes the results of the traffic analyses under 2022 Existing conditions, future 2025 conditions, future 2027 conditions, and future 2029 conditions.

The study area consists of the following study intersections:

1) SC 170 (Okatie Highway) at Lawton Boulevard
2) SC 170 (Okatie Highway) at Gibbet Road/Mill Creek Boulevard
3) Gibbet Road at Estate Drive/Site Access #3 (proposed full-movement)
4) SC 170 (Okatie Highway) at Site Access #1 (proposed right-in, right-out access)
5) Gibbet Road at Site Access #2 (proposed right-in, right-out access)
6) SC 170 (Okatie Highway) at Site Access #4 (proposed right-in, right-out access)
7) SC 170 (Okatie Highway) at Site Access #5 (proposed right-in, right-out access)

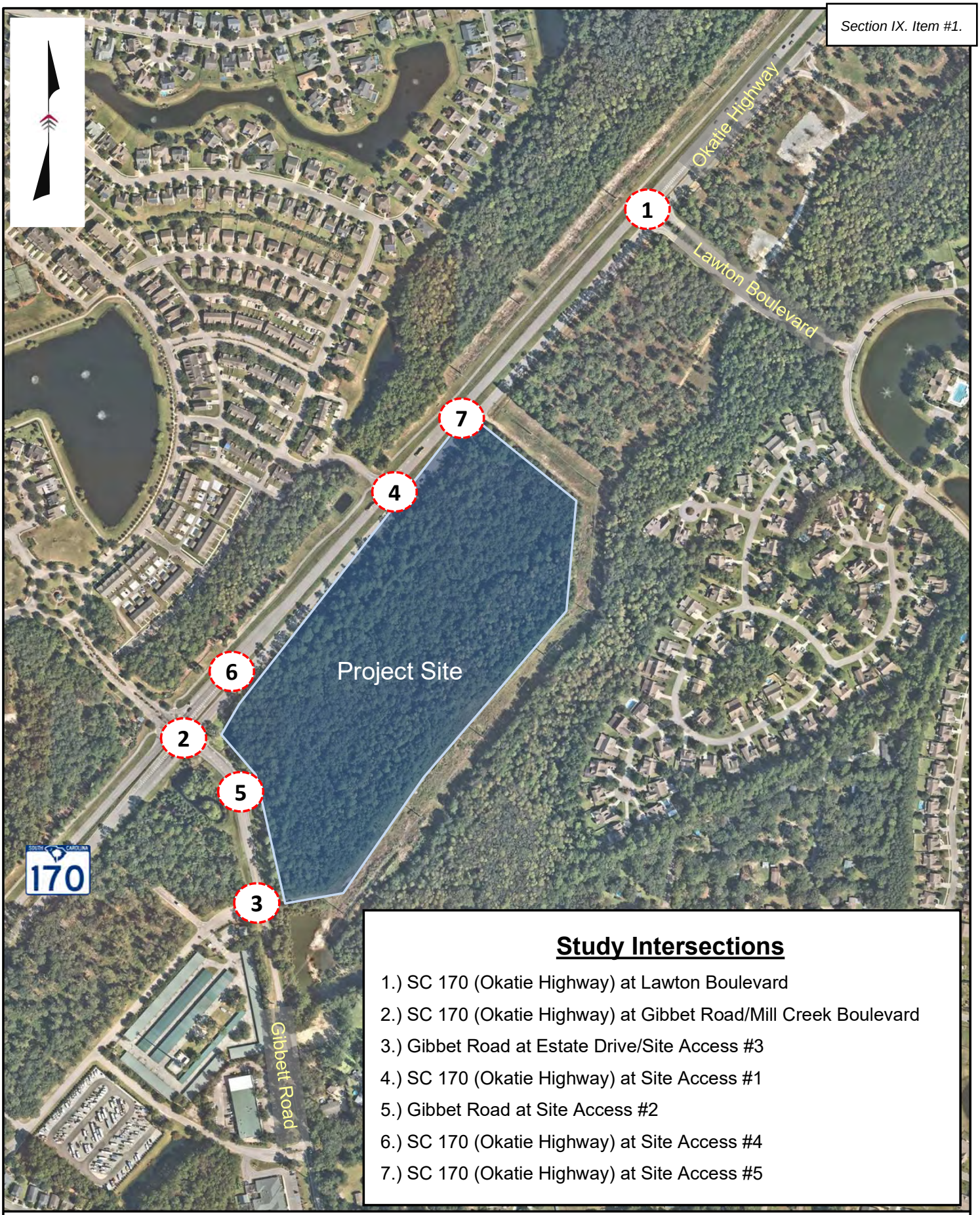
1.1 Existing Conditions

SC 170 (Okatie Highway) is a four-lane divided, urban minor arterial with a posted speed limit of 50 miles per hour (mph) in the study area. Based upon SCDOT data, 25,100 vehicles per day travelled along Okatie Highway in 2021 at count station 07-0165. Count station 07-0165 is good from SC 46 to US 278/W Fording Island Road.

Gibbet Road is a two-lane, urban major collector with a posted speed limit of 45 mph in the study area. Based upon SCDOT data, 3,500 vehicles per day travelled along Gibbet Road in 2021 at count station 07-0325. Count station 07-0325 is good from SC 170 (Okatie Highway) to May River Road.

Estate Drive and Lawton Boulevard are local roads. SCDOT does not provide daily traffic data for Estate Drive and Lawton Boulevard.

The existing geometry and traffic control for the study area intersections is illustrated in **Figure 3**.



Study Intersections

1.) SC 170 (Okatie Highway) at Lawton Boulevard

2.) SC 170 (Okatie Highway) at Gibbet Road/Mill Creek Boulevard

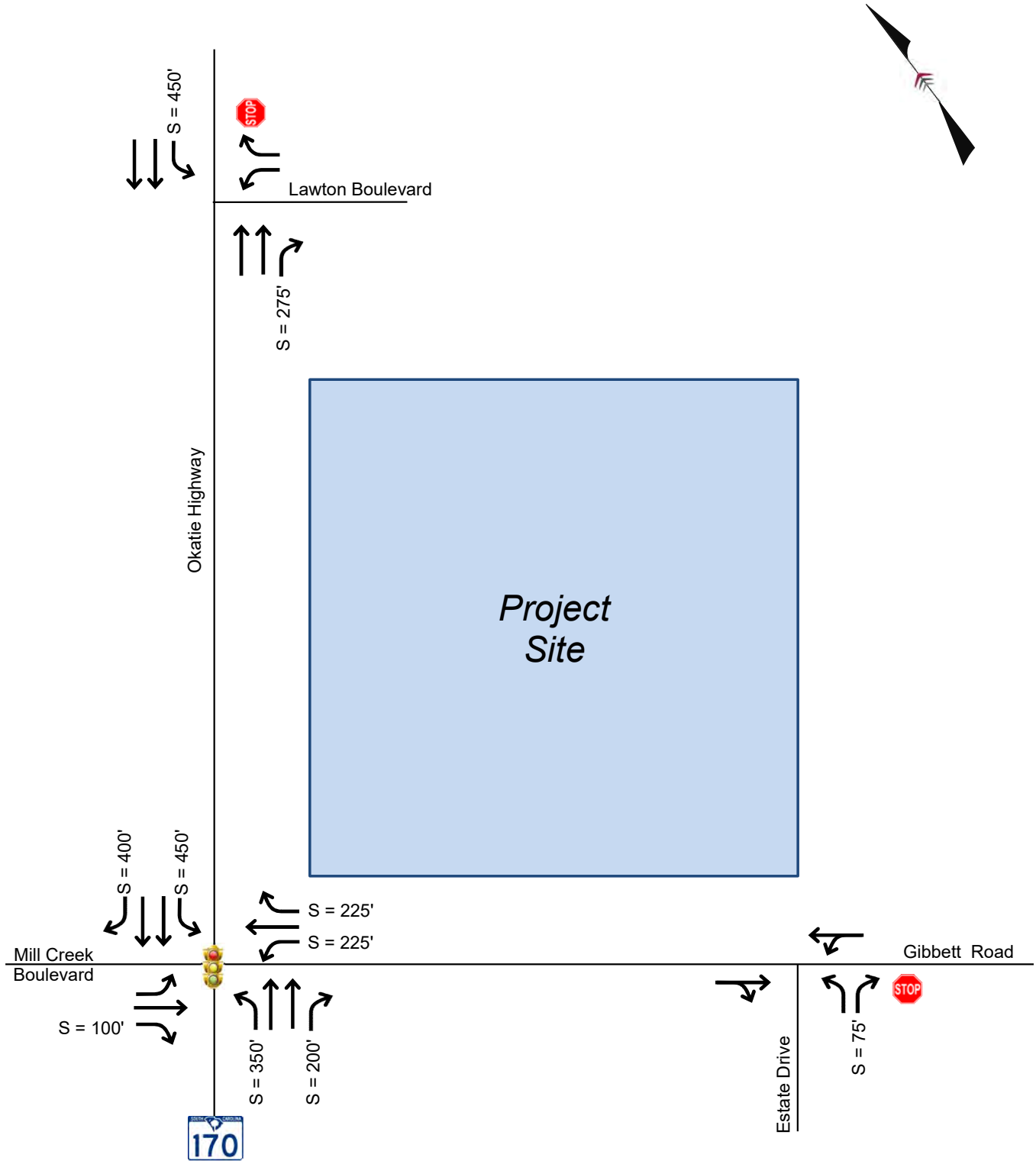
3.) Gibbet Road at Estate Drive/Site Access #3

4.) SC 170 (Okatie Highway) at Site Access #1

5.) Gibbet Road at Site Access #2

6.) SC 170 (Okatie Highway) at Site Access #4

7.) SC 170 (Okatie Highway) at Site Access #5


S = 450'
STOP
Lawton Boulevard
S = 275'
Okatie Highway
Project Site
S = 400'
S = 450'
S = 225'
S = 225'
Mill Creek Boulevard
S = 100'
S = 350'
S = 200'
170
Gibbett Road
STOP
S = 75'
Estate Drive
Legend
Existing Laneage
S = XX' Storage Length
Existing Signal
Existing Stop Conrol

2 Project Traffic

2.1 Trip Generation

The trip generation rates and equations published in the *Institute of Transportation Engineers (ITE) Trip Generation Manual; 11th Edition* were used to estimate the trip generation potential for the development. The analysis was performed using the information provided for the following land use codes (LUCs):

- LUC 220 - Multifamily Housing (Low-Rise) – 150 Dwelling Units
- LUC 712 – Small Office Building – 8,850 SF
- LUC 822 – Strip Retail Plaza (<40K) – 8,850 SF
- LUC 945 – Convenience Store/Gas Station (9-15 Fueling Positions) – 6,300 SF

Pass-by trip reductions were estimated based on the methodologies in the *ITE Trip Generation Manual, 11th Edition*. Furthermore, because Phase 1 only includes a multifamily scenario, pass-by trips were only estimated for Phase 2 and Phase 3 of the development. Since the development includes retail, residential, and office land uses internal capture reductions were calculated. As shown in **Table 1**, Phase 1 of the development is anticipated to generate 69 (17 In/52 Out) new AM peak hour trips and 85 (54 In/31Out) new PM peak hour net new external trips.

Table 2 shows that Phase 2 of the development is anticipated to generate 153 (59 in/94 out) new AM peak hour trips and 138 (81 in/57 out) new PM peak hour trips. The estimated trip generation is summarized in **Table 2**.

Table 3 shows that Phase 3 of the development is anticipated to generate 193 (86 in/107 out) new AM peak hour trips and 214 (116 in/98 out) new PM peak hour trips. The estimated trip generation is summarized in **Table 3**. Trip generation calculations can be found in **Appendix B**.

Table 1 – Phase 1 Trip Generation Summary

Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
220 – Multifamily Housing (Low-Rise)	150	DU	1,037	69	17	52	85	54	31
Subtotal			**1,037**	**69**	**17**	**52**	**85**	**54**	**31**
Total Net New External Trips			**1,037**	**69**	**17**	**52**	**85**	**54**	**31**

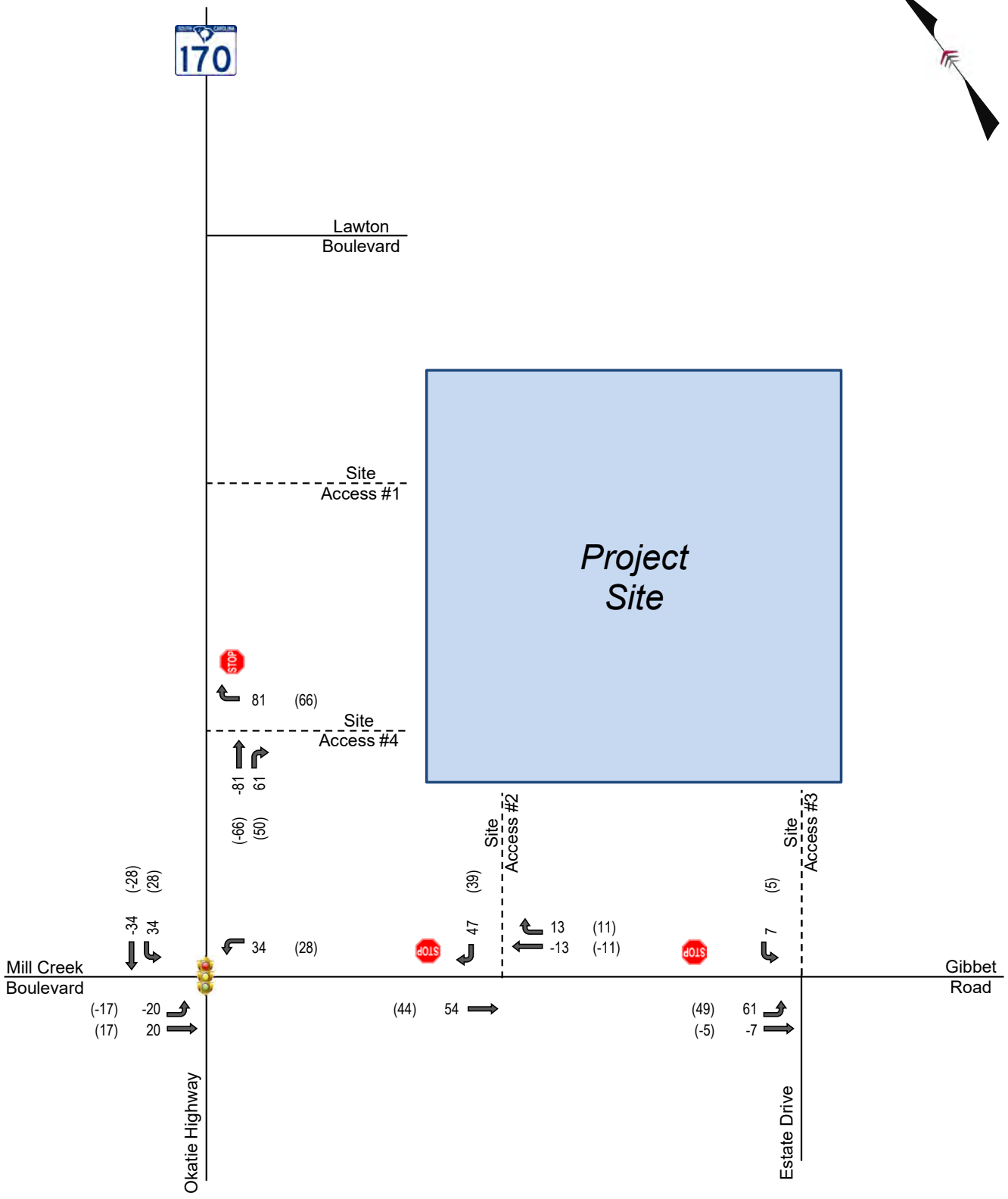
Table 2 - Phase 2 Trip Generation Summary

Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
220 – Multifamily Housing (Low-Rise)	150	DU	1,037	69	17	52	85	54	31
945 – Convenience Store/Gas Station (9-15 Fueling Positions)	6.3	KSF	4,082	356	178	178	343	172	171
Subtotal			**5,119**	**425**	**195**	**230**	**428**	**226**	**202**
Internal Capture			**-470**	**-2**	**-1**	**-1**	**-70**	**-35**	**-35**
Pass-By			**-3,000**	**-270**	**-135**	**-135**	**-220**	**-110**	**-110**
Total Net New External Trips			**1,649**	**153**	**59**	**94**	**138**	**81**	**57**

Table 3 - Phase 3 Trip Generation Summary

Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
220 – Multifamily Housing (Low-Rise)	150	DU	1,037	69	17	52	85	54	31
712 – Small Office Building	8.85	KSF	127	15	12	3	19	6	13
822 – Strip Retail Plaza (<40K)	8.85	KSF	603	27	16	11	71	36	35
945 – Convenience Store/Gas Station (9-15 Fueling Positions)	6.3	KSF	4,082	356	178	178	343	172	171
Subtotal			**5,849**	**467**	**223**	**244**	**518**	**268**	**250**
Internal Capture			**-556**	**-6**	**-3**	**-3**	**-80**	**-40**	**-40**
Pass-By			**-3,000**	**-268**	**-134**	**-134**	**-224**	**-112**	**-112**
Total Net New External Trips			**2,293**	**193**	**86**	**107**	**214**	**116**	**98**

The project pass-by project trips for phase 2 and phase 3 of the development is illustrated in **Figure 4** and **Figure 5**, respectively.



Legend

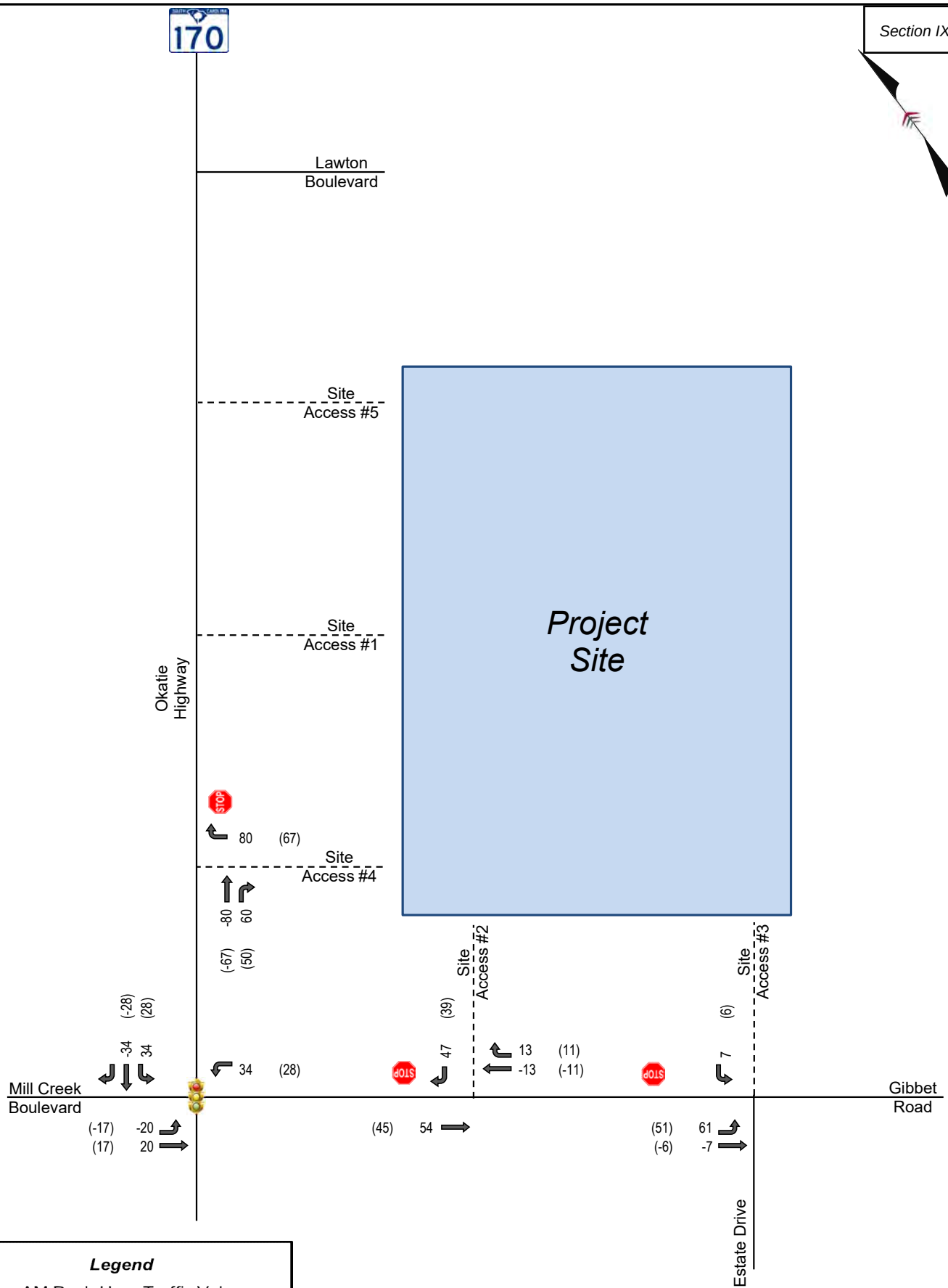
xx AM Peak Hour Pass-By Traffic

(xx) PM Peak Hour Pass-By Traffic

Kimley»Horn

Gibbet Road Residential Development

Figure 4 - Phase 2 Pass-By Project Trips



Legend

xx AM Peak-Hour Traffic Volumes

(xx) PM Peak-Hour Traffic Volumes

Kimley»Horn

Gibbet Road Residential Development

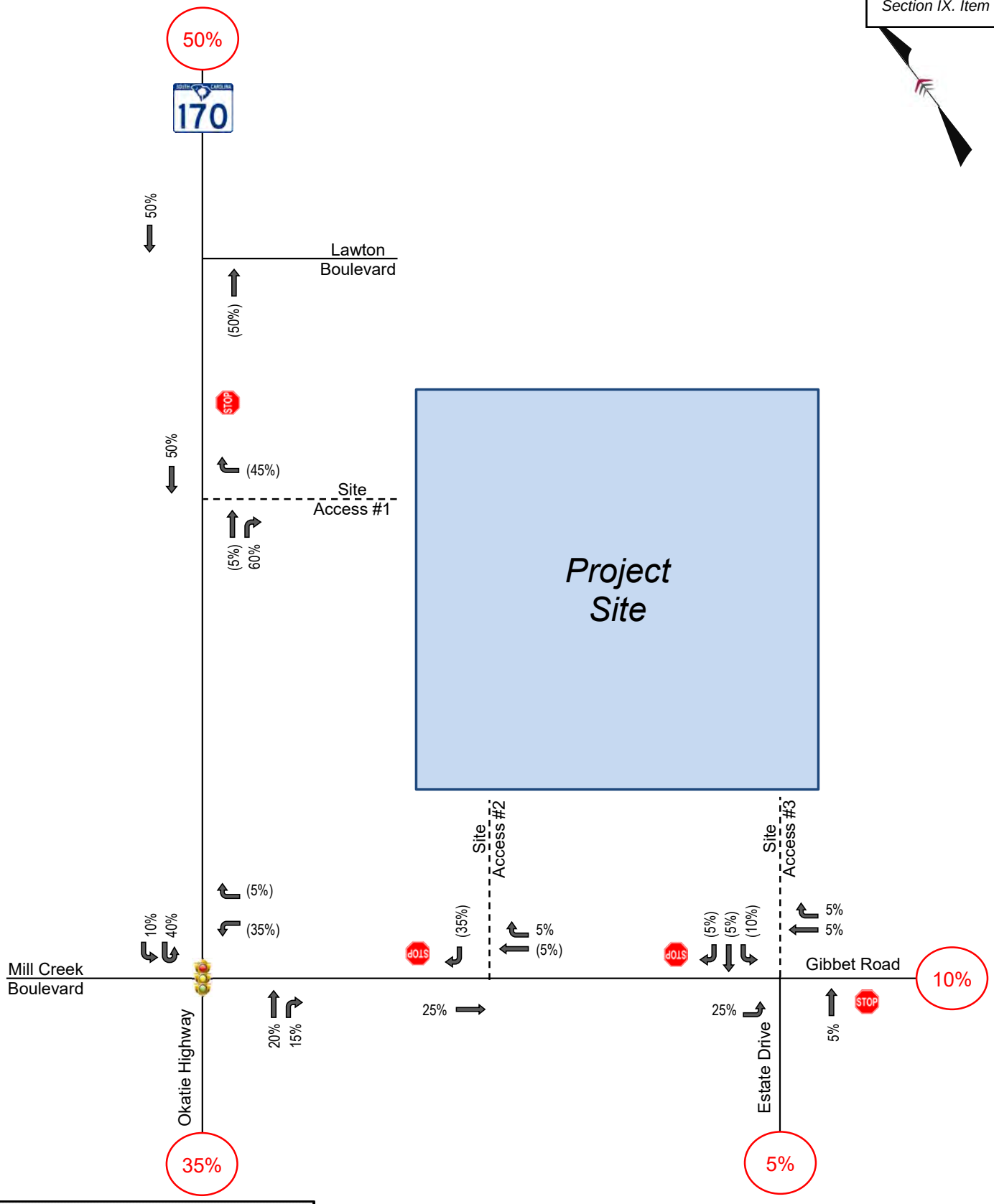
Figure 5 - Phase 3 Project Pass-By Trip

2.2 Trip Distribution & Assignment

New external trips generated by the proposed development were distributed and assigned to the surrounding roadway network based on existing travel patterns, surrounding land uses, and the proposed site layout. The trip distribution percentages used in this analysis are as follows.

- 50% to/from the North via SC 170 (Okatie Highway)
- 35% to/from the South via SC 170 (Okatie Highway)
- 5% to/from the South via Estate Drive
- 10% to/from the East via Gibbet Road

The site trip distributions and assignments for Phase 1, Phase 2, and Phase 3 are illustrated in **Figure 6**, **Figure 7**, and **Figure 8**, respectively. 2025 Phase 1 Project Trips, 2027 Phase 2 Project Trips, and 2029 Phase 3 Project Trips are illustrated in **Figure 9**, **Figure 10**, and **Figure 11**, respectively.



Legend

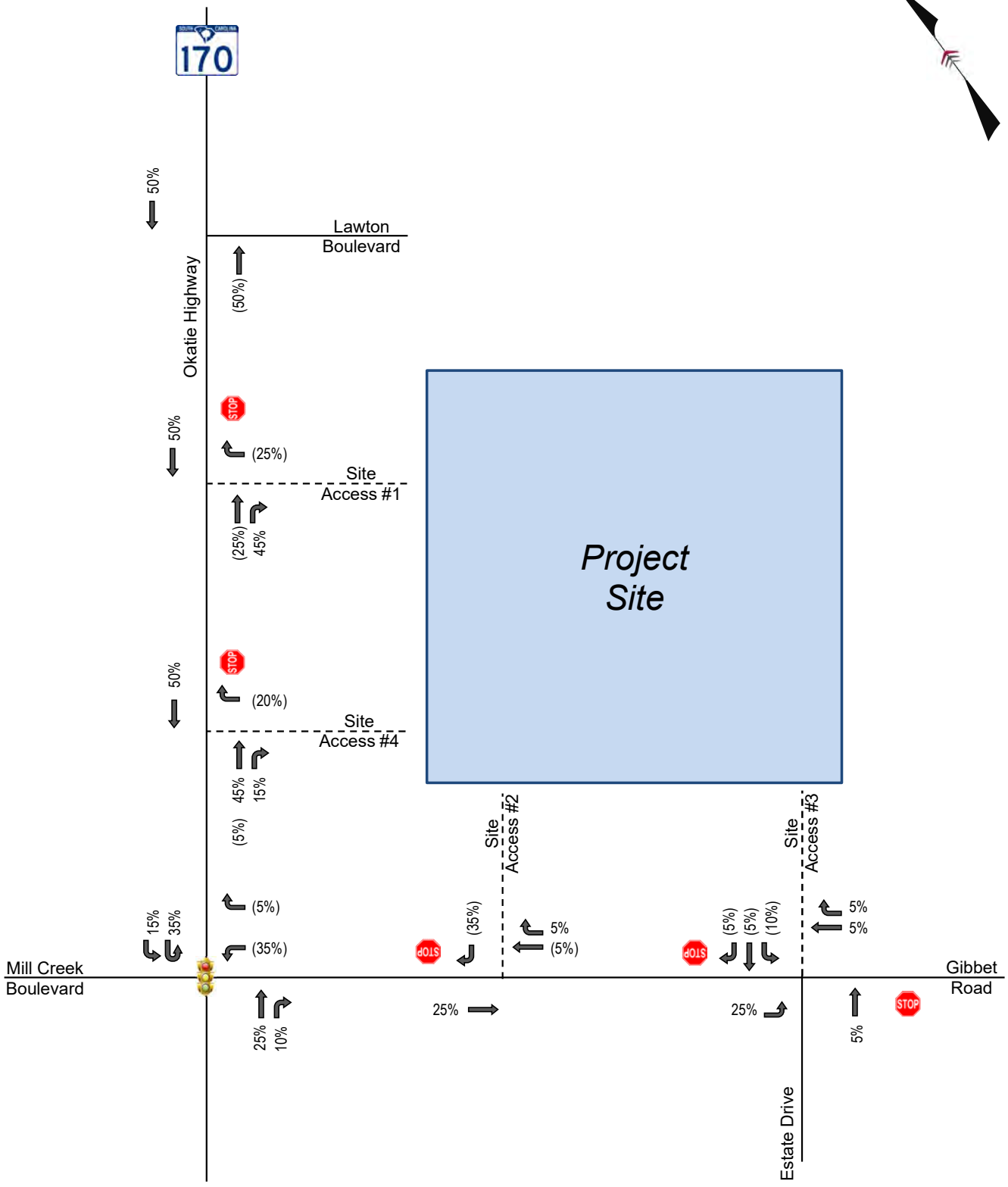
xx% Inbound Trip Distribution

(xx%) Outbound Trip Distribution

Kimley»Horn

Gibbet Road Residential Development

Figure 6 - Phase 1 Trip Distribution and Assi



Legend

xx% Inbound Trip Distribution

(xx%) Outbound Trip Distribution

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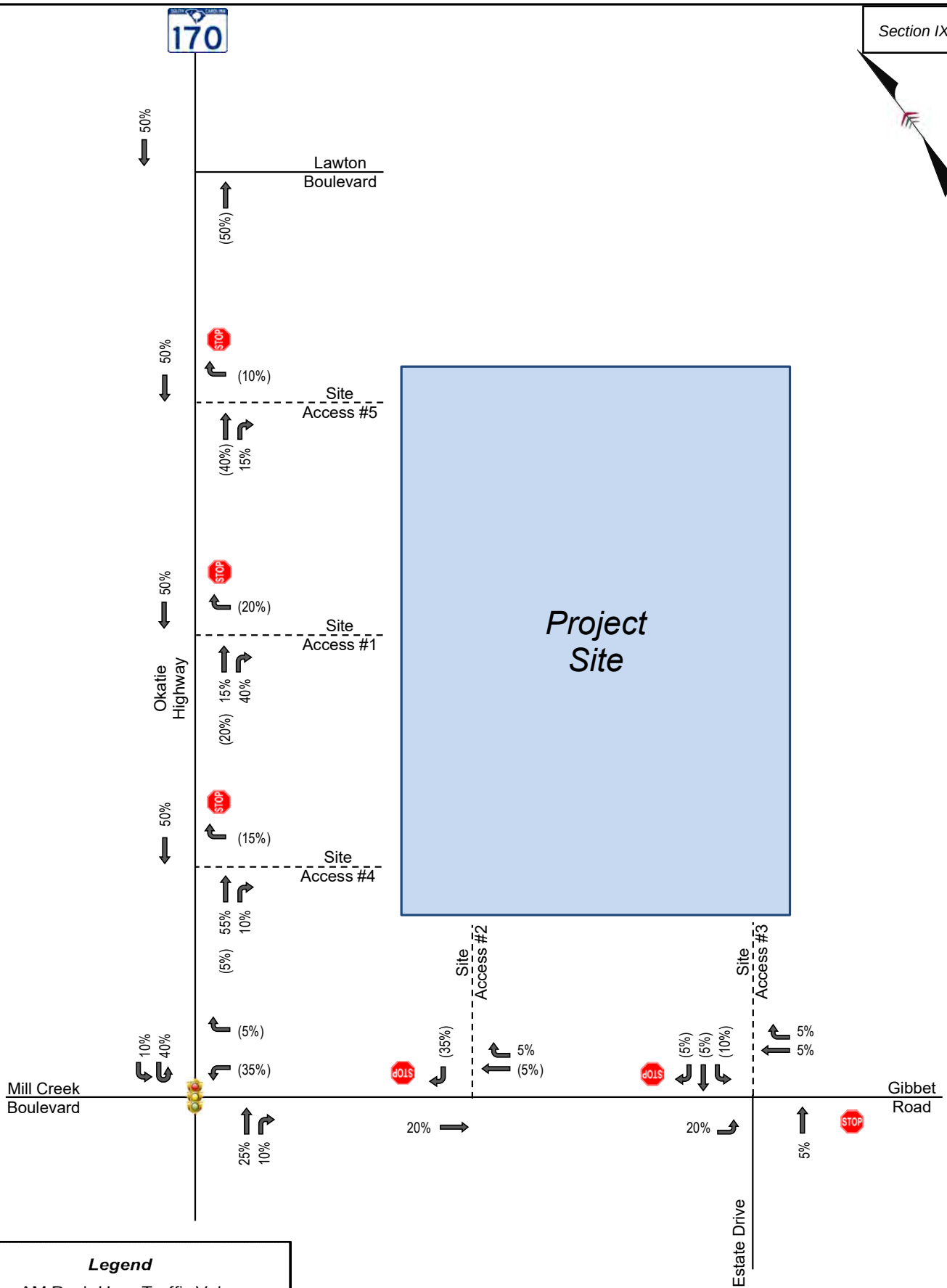
Gibbet Road Residential Development

Figure 7 - Phase 2 Trip Distribution and Assignment



Legend

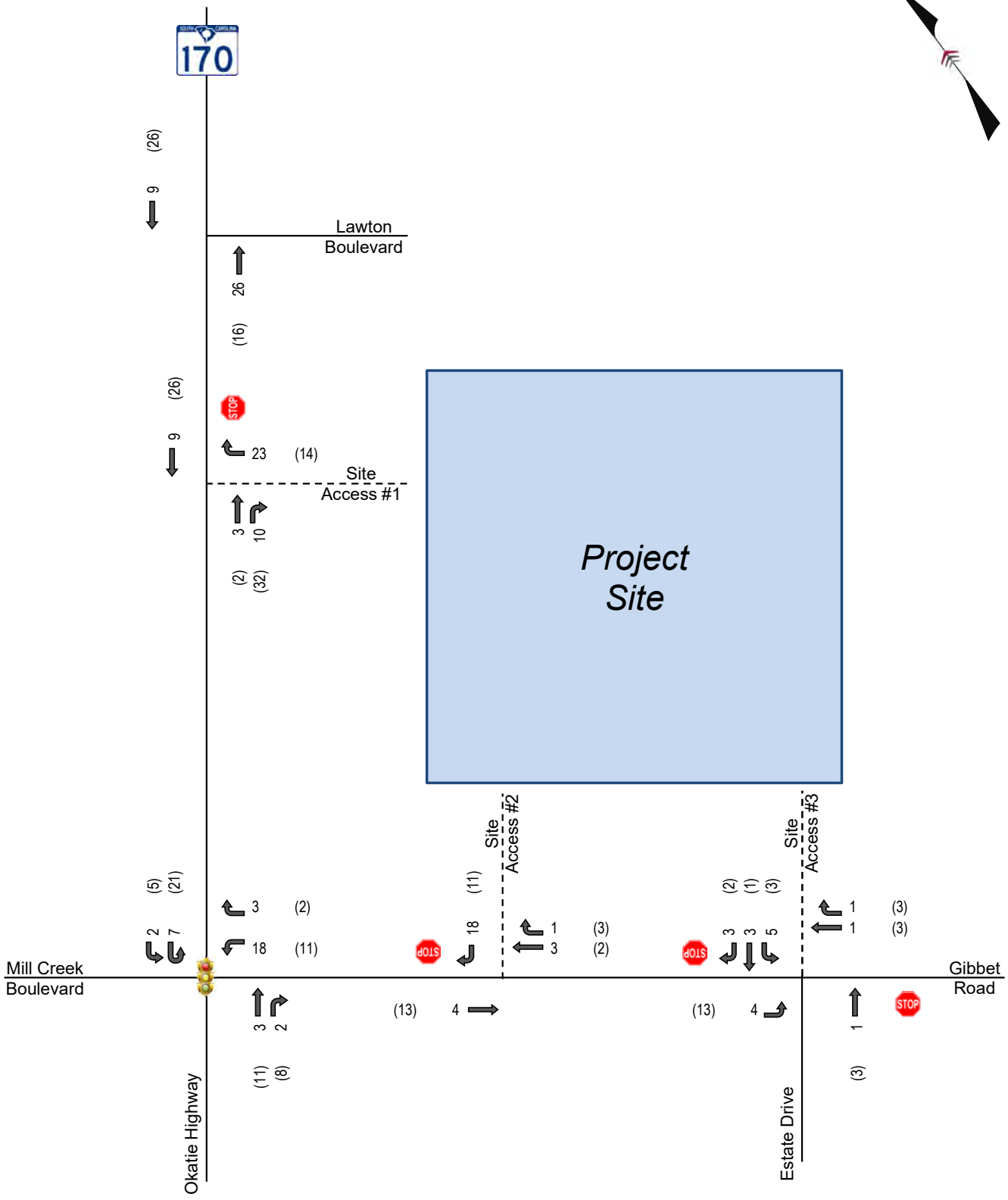
xx AM Peak-Hour Traffic Volumes

(xx) PM Peak-Hour Traffic Volumes

Kimley»Horn

Gibbet Road Residential Development

Figure 8 - 2029 Phase 3 Trip Distribution and Ass



Legend

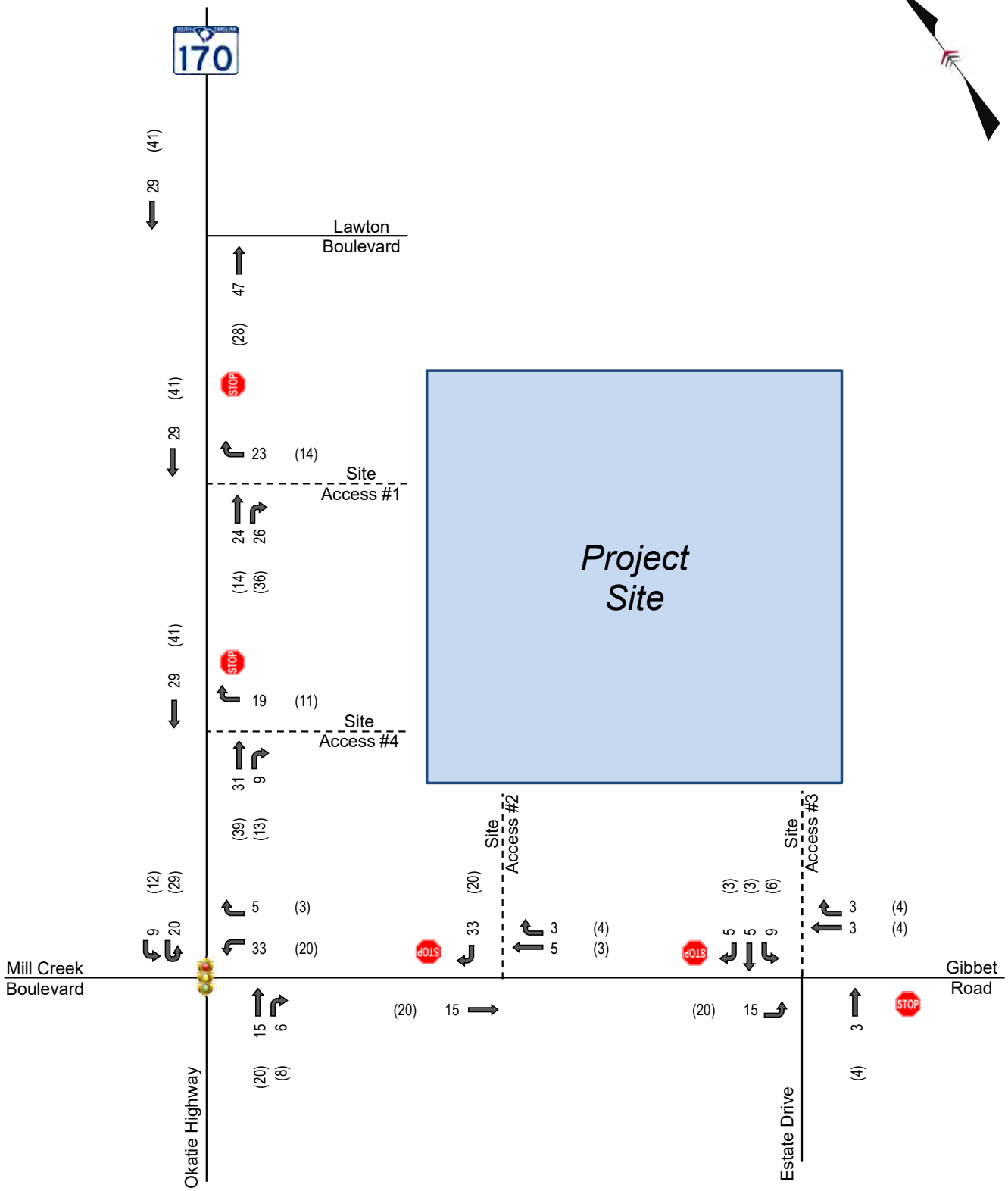
xx AM Peak Hour Project Trips

(xx) PM Peak Hour Project Trips

Kimley»Horn

Gibbet Road Residential Development

Figure 9 - 2025 Phase 1 Project Trips



Legend

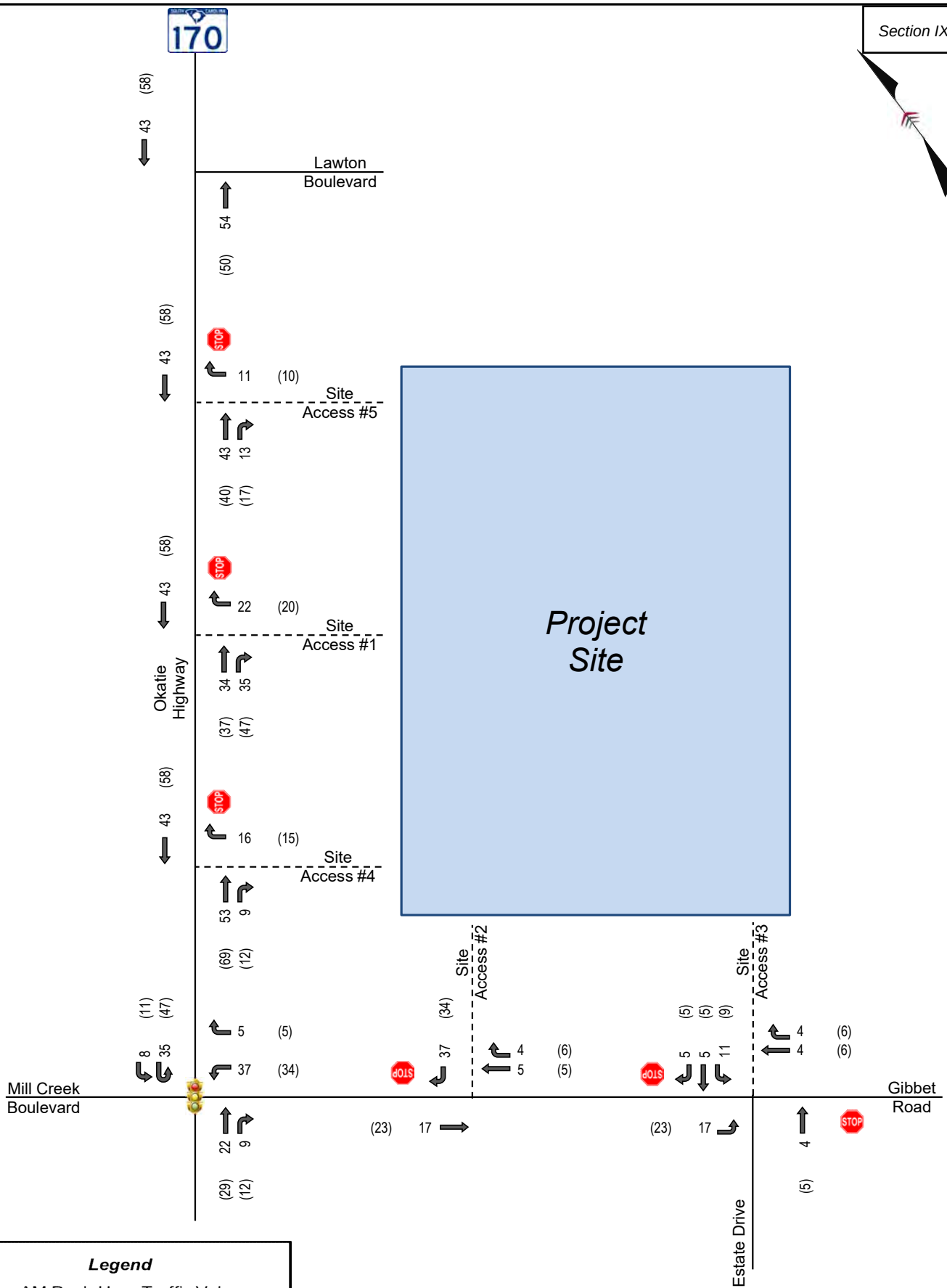
xx AM Peak Hour Project Trips

(xx) PM Peak Hour Project Trips

Kimley»Horn

Gibbet Road Residential Development

Figure 10 - Phase 2 Project Trips



Legend

xx AM Peak-Hour Traffic Volumes

(xx) PM Peak-Hour Traffic Volumes

3 Existing and Future Traffic Volume Development

Existing 2022 traffic volumes were utilized in the analysis and future-year traffic volumes were developed for projected 2025, 2027, and 2029 traffic conditions. The future-year volumes consisted of the existing traffic volumes adjusted by an annual growth rate and the projected traffic volumes of the Gibbet Road Residential development. Worksheets documenting the traffic volume development are provided in **Appendix C**.

3.1 2022 Existing Traffic

Peak-hour intersection turning movement counts were conducted in the AM peak period (7:00 AM to 9:00 AM) and PM peak period (4:00 PM to 6:00 PM) on Thursday, November 10th, 2022, at the following intersections:

- SC 170 (Okatie Highway) at Gibbet Road
- SC 170 (Okatie Highway) at Lawton Boulevard
- Gibbet Road at Estate Drive

Figure 12 illustrates the 2022 Existing peak-hour traffic volumes for the AM and PM peak hours. The raw-turning movement count data is included in **Appendix D**.

3.2 Future-Year No-Build Traffic Development

It was assumed that Phase 1 of the development will be built and fully occupied by 2025, Phase 2 by 2027, and Phase 3 by 2029. The future-year traffic volumes consist of the 2022 existing traffic volumes adjusted by a growth rate for the no-build scenarios.

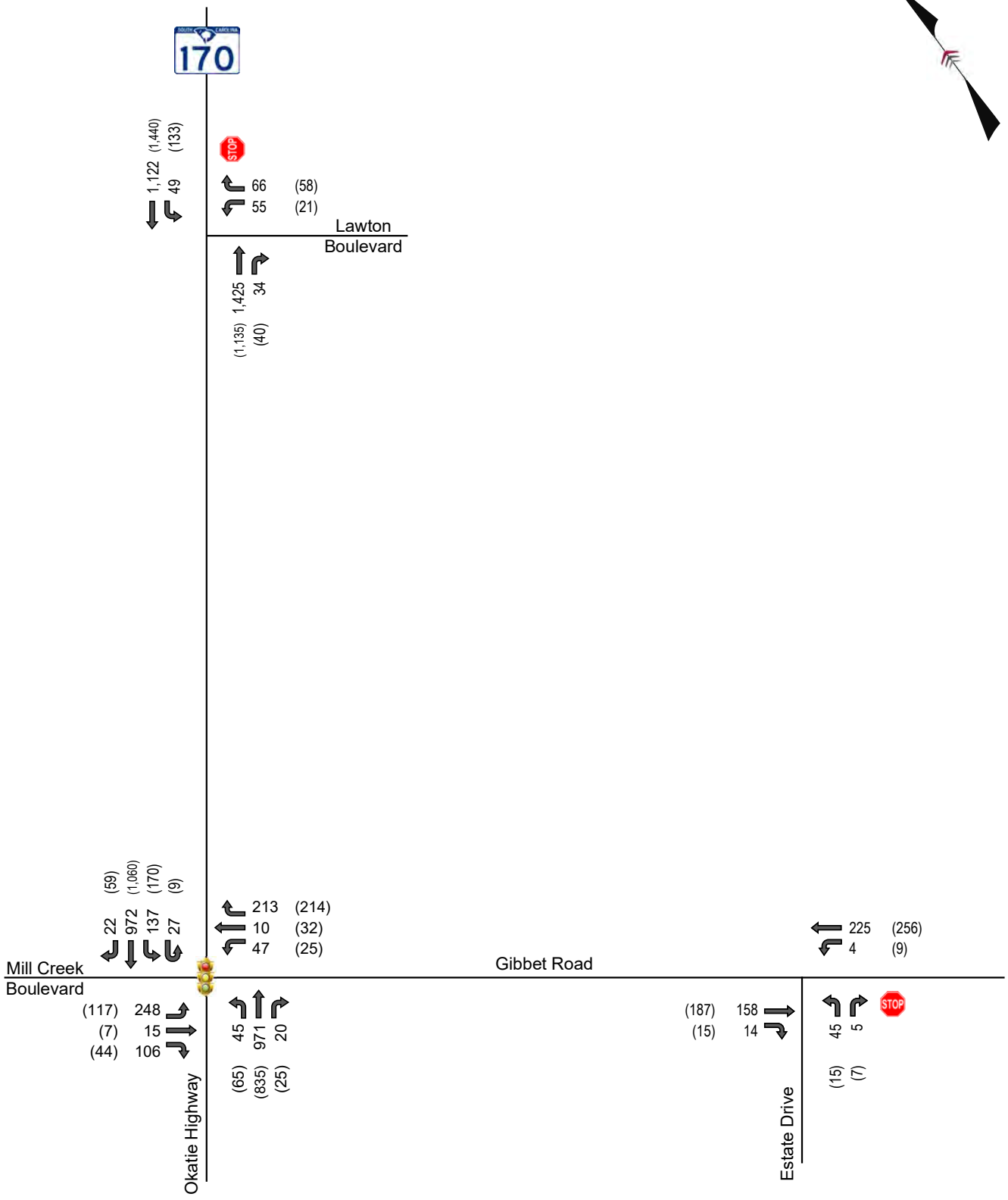
To determine the historical growth rate in the area, traffic count data was obtained from SCDOT for the count stations along Okatie Hwy and Gibbet Road. Over the past ten years, these roadways have experienced an annual growth rate of 6.5%. Therefore, a 7.0% growth rate was used to develop the no-build traffic volumes for the 2025, 2027, and 2029 conditions. A worksheet documenting the growth rate determination is included in **Appendix E**.

In the surrounding area, the approved background development of the *Palmetto Point Pickleball and Commercial Site*, Kimley-Horn 2021, was accounted for in developing 2025 No-Build, 2027 No-Build, and 2029 No-Build traffic volumes. Volumes associated with this development are illustrated in **Figure 13**.

Figure 14 illustrates the 2025 No-Build traffic volumes, **Figure 15** illustrates the 2027 No-Build traffic volumes, and **Figure 16** illustrates the 2029 No-Build traffic volumes for the AM and PM peak hours.

3.3 Future-Year Build Traffic Development

The Gibbet Road Residential project traffic volumes were added to the no-build traffic volumes to develop build traffic volumes for the 2025, 2027, and 2029 build-out scenarios**. Figure 17** illustrates the 2025 build traffic volumes, **Figure 18** illustrates the 2027 build traffic volumes, and **Figure 19** illustrates the 2029 build traffic volumes for the AM and PM peak hours.



Legend

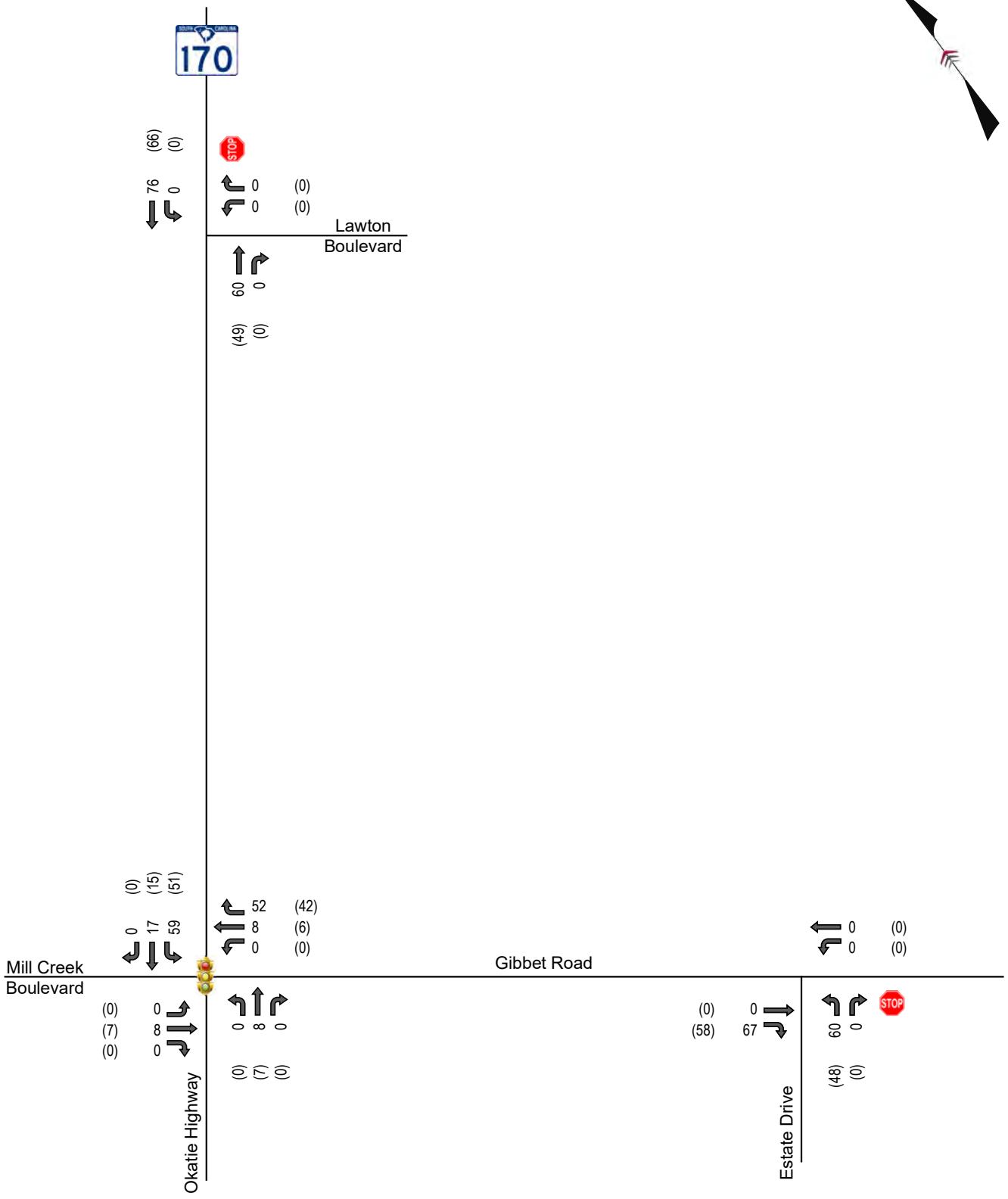
xx AM Peak-Hour Traffic Volumes

(xx) PM Peak-Hour Traffic Volumes

Kimley»Horn

Gibbet Road Residential Development

Figure 12 - 2022 Existing Peak Hour Traffic Volumes



Legend

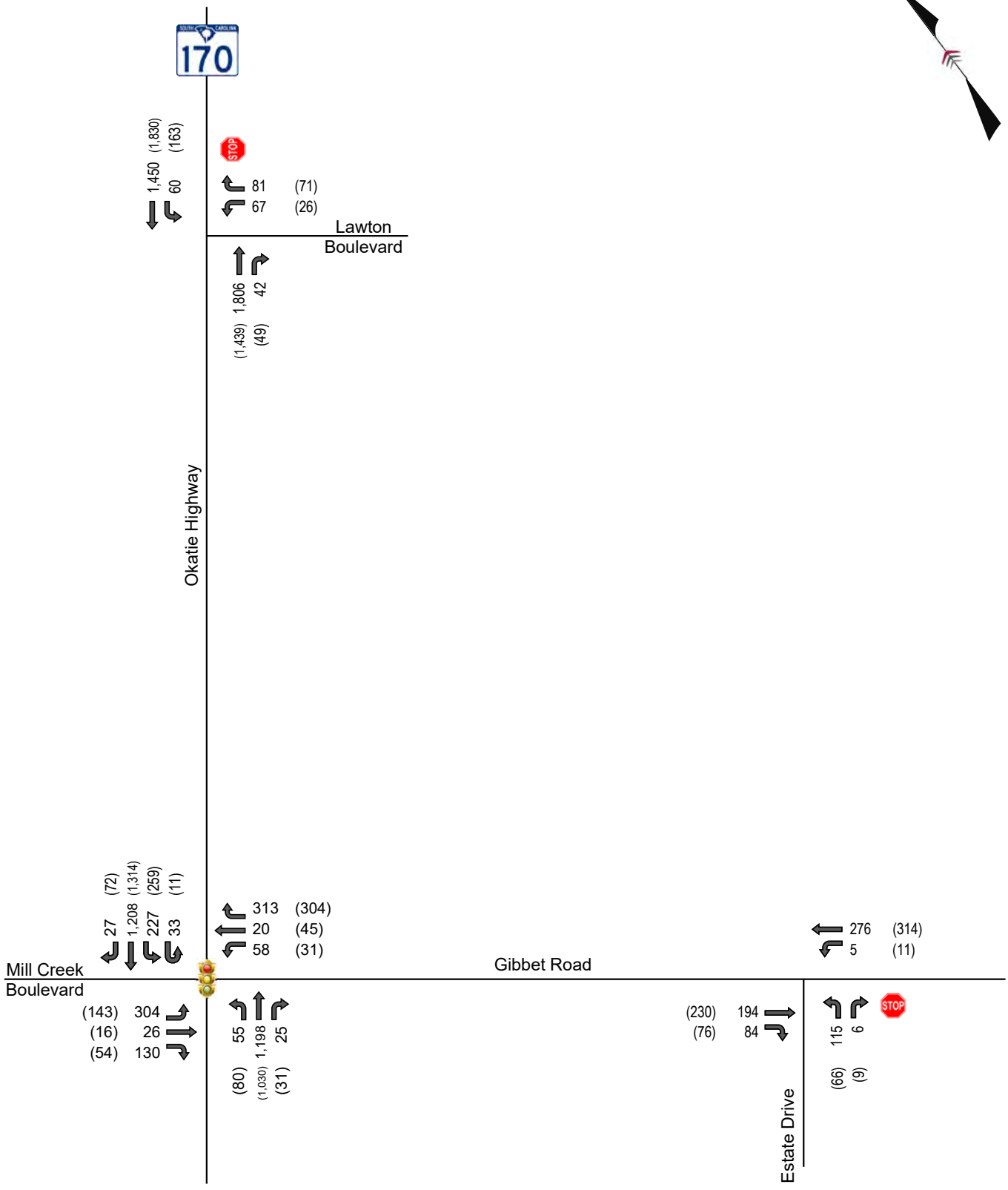
xx AM Peak-Hour Traffic Volumes

(xx) PM Peak-Hour Traffic Volumes

Kimley»Horn

Gibbet Road Residential Development

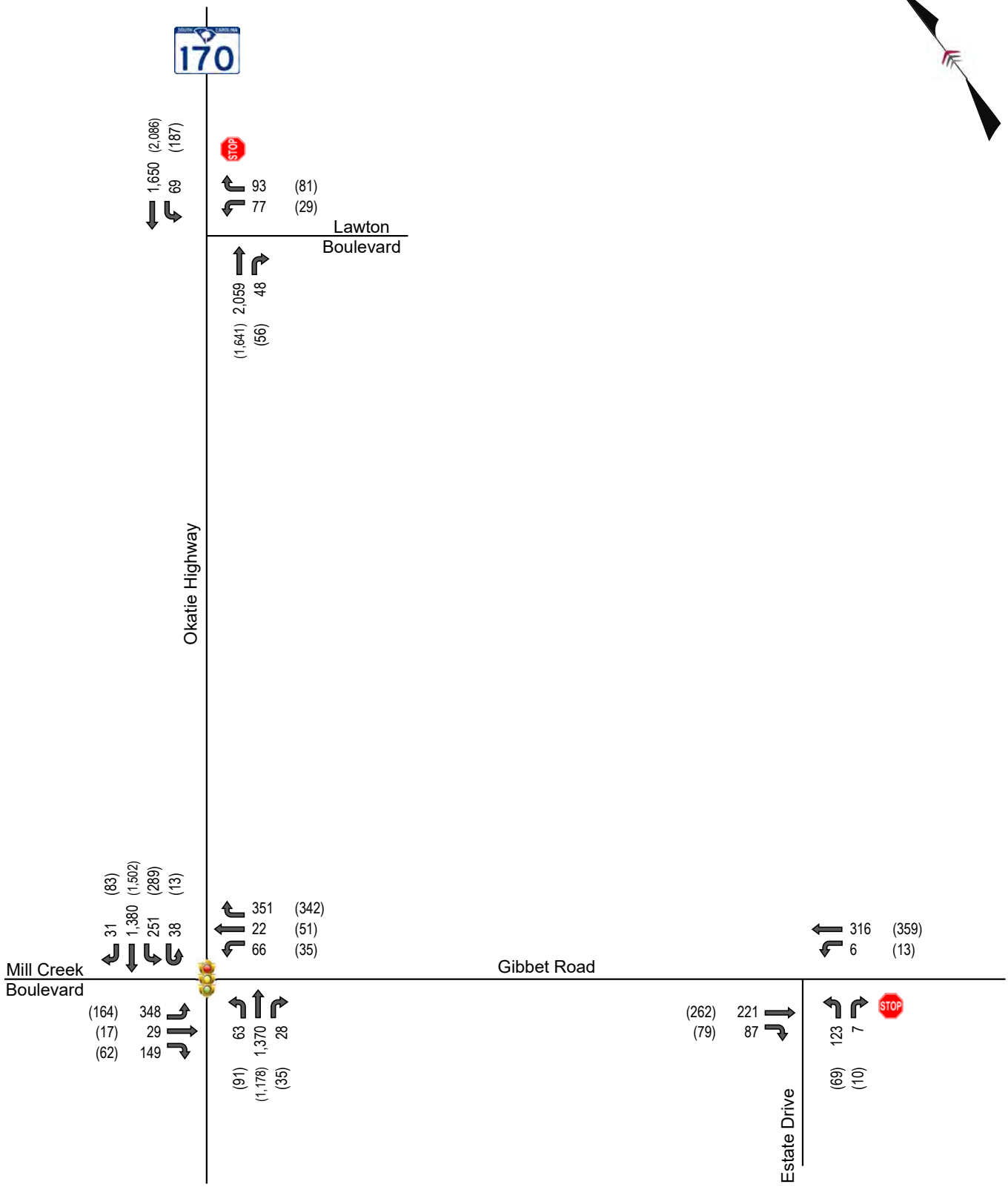
Figure 13 - Approved Development Traffic Volumes



Legend

xx AM Peak-Hour Traffic Volumes

(xx) PM Peak-Hour Traffic Volumes



Legend

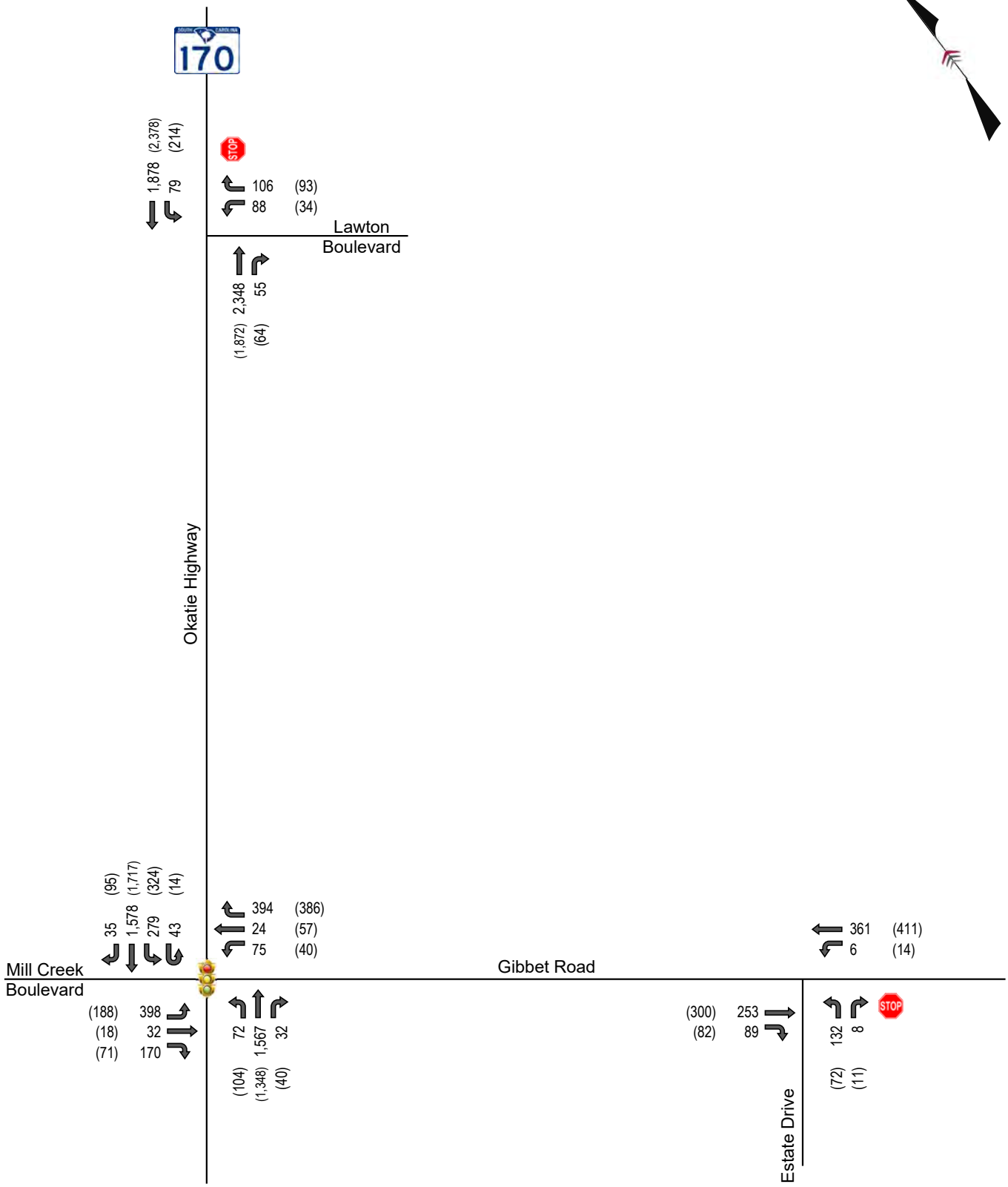
xx AM Peak Hour Traffic Volumes

(xx) PM Peak Hour Traffic Volumes

Kimley»Horn

Gibbet Road Residential Development

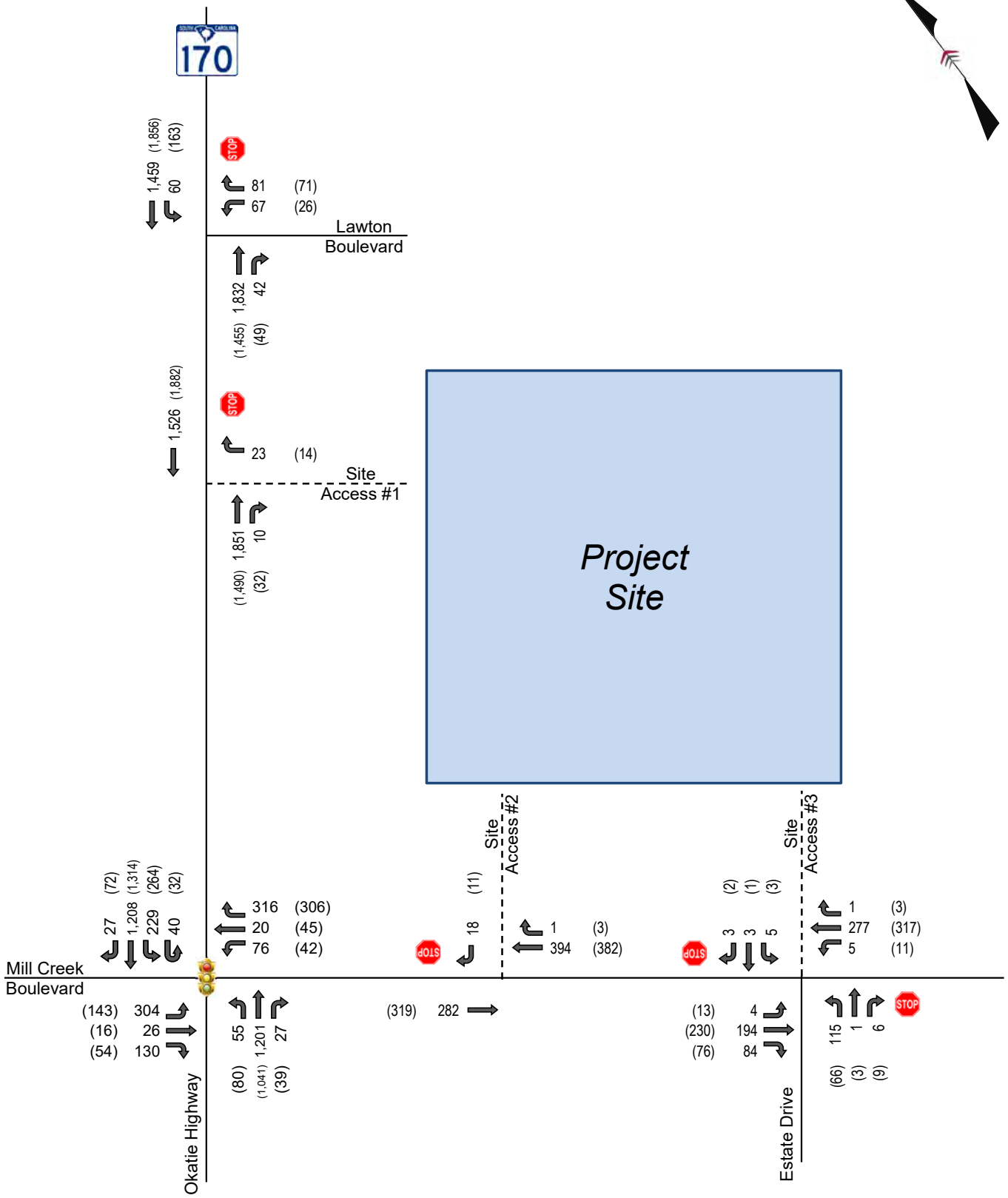
Figure 15 - 2027 No-Build Peak Hour Traffic V



Legend

xx AM Peak Hour Traffic Volumes

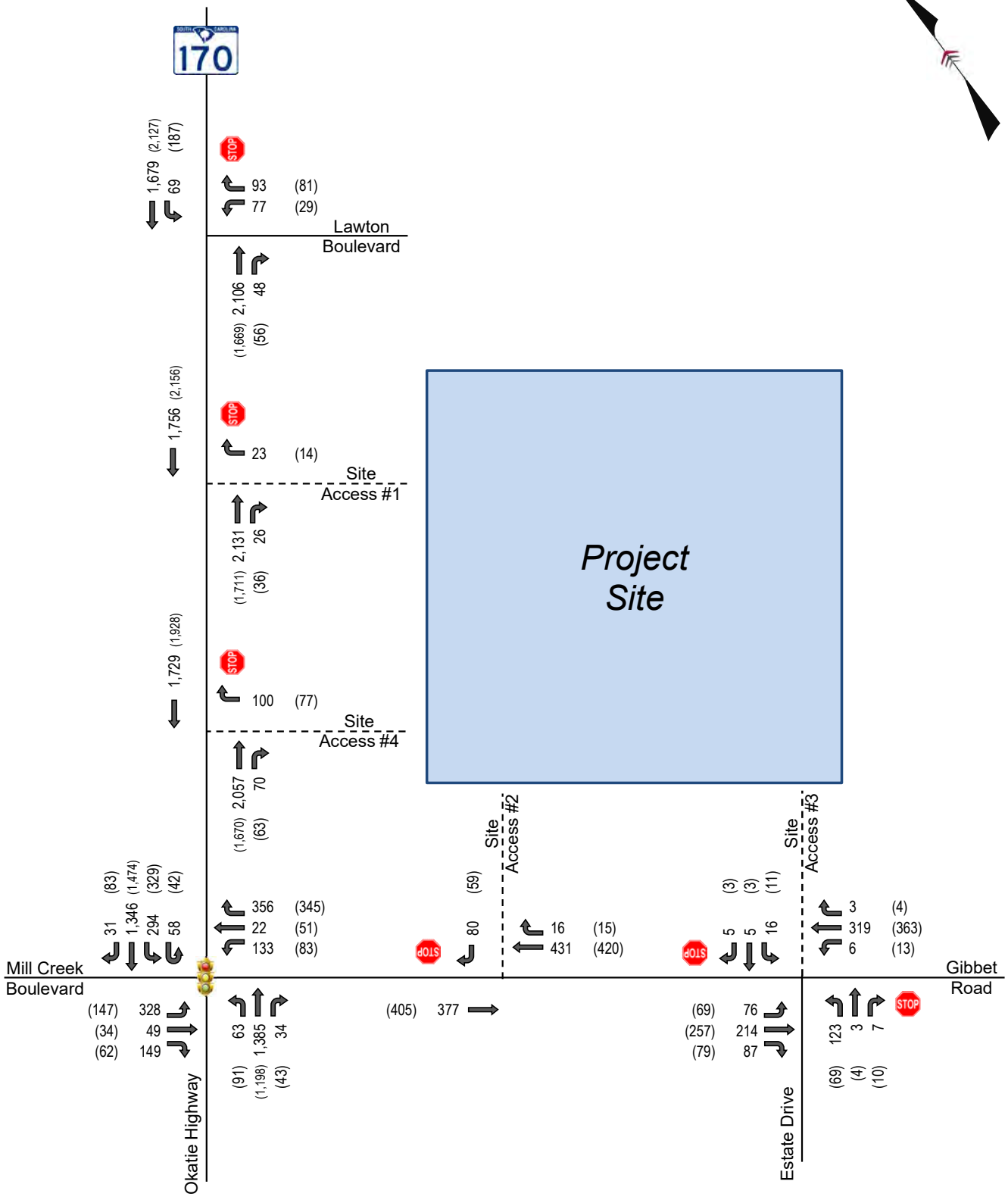
(xx) PM Peak Hour Traffic Volumes



Legend

xx AM Peak-Hour Traffic Volumes

(xx) PM Peak-Hour Traffic Volumes



Legend

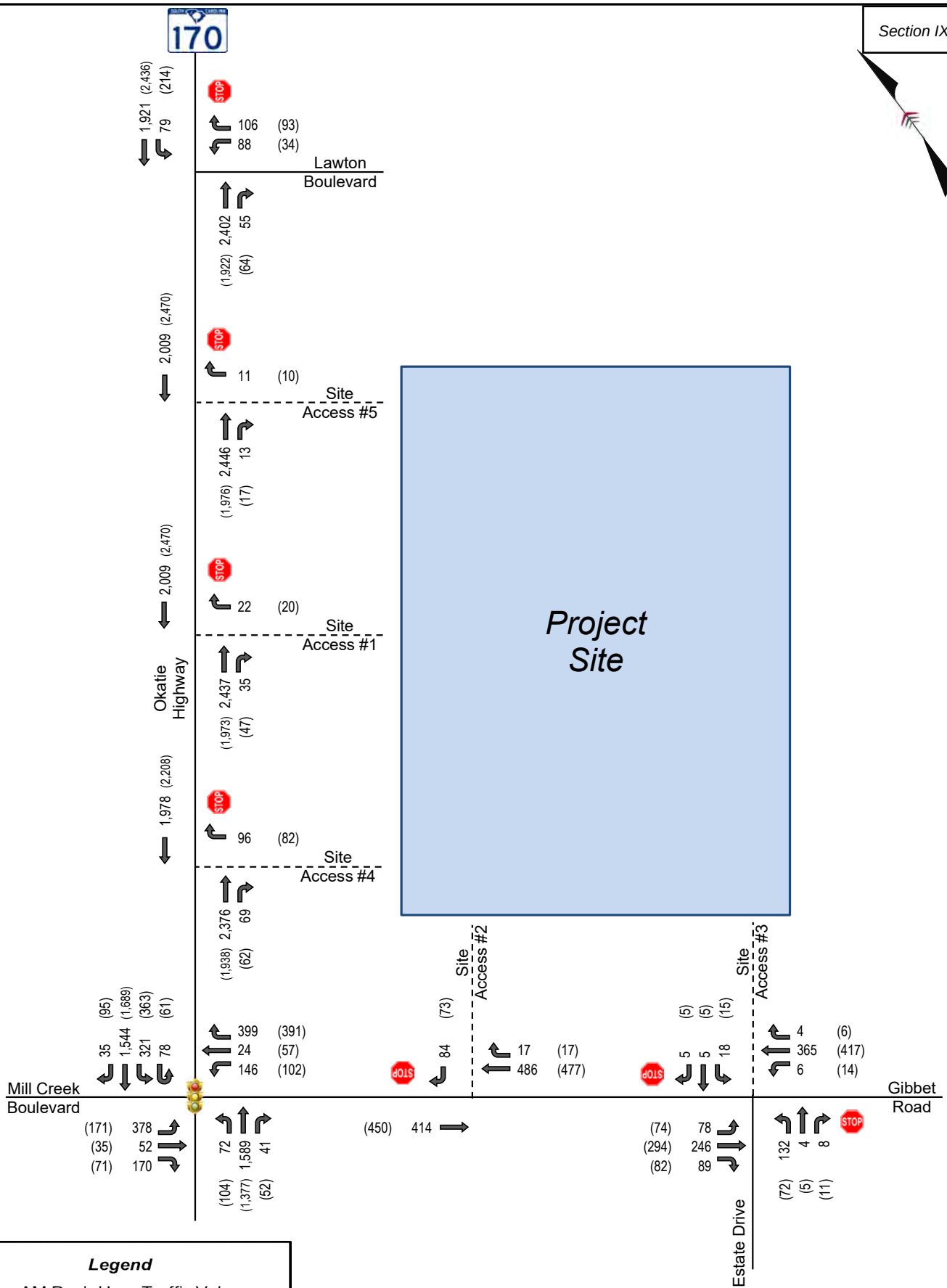
xx AM Peak-Hour Traffic Volumes

(xx) PM Peak-Hour Traffic Volumes

Kimley»Horn

Gibbet Road Residential Development

Figure 18 - 2027 Phase 2 Build Peak Hour Volumes



Legend

xx AM Peak-Hour Traffic Volumes

(xx) PM Peak-Hour Traffic Volumes

4 Capacity Analysis

Capacity/level-of-Service (LOS) analyses were conducted using the *Highway Capacity Manual (HCM),* 6th Edition, methodologies of the *Synchro*, Version 11, traffic analysis software. Capacity analyses were conducted for the AM and PM peak hours of the 2022 Existing conditions, 2025 No-Build conditions, 2025 Build conditions, 2027 No-Build conditions, 2027 Build conditions, 2029 No-Build conditions, and 2029 Build conditions analysis scenarios.

Intersection level of service (LOS) grades range from LOS A to LOS F, which are directly related to the level of control delay at the intersection and characterize the operational conditions of the intersection traffic flow. LOS A operations typically represent ideal, free-flow conditions where vehicles experience little to no delays, and LOS F operations typically represent poor, gridlocked conditions with high vehicular delays, and are generally considered undesirable. **Table 4** lists the LOS control delay thresholds published in the *HCM* for signalized and unsignalized intersections.

Table 4 – *HCM* Level of Service Criteria

LOS	Control Delay per Vehicle (sec/veh)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10	≤ 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80	> 50

As part of the intersection analysis, SCDOT's default Synchro parameters were utilized. Existing peak-hour factors (PHF) were utilized for the existing scenarios and the PHFs for the future-year scenarios were adjusted to a minimum of 0.90 and maximum of 0.95. Existing heavy vehicle percentages were utilized for all scenarios, with a minimum of 2% considered.

Please note, U-turns located at the intersection of SC 170 (Okatie Highway) with Gibbet Road were accounted for in the left-turn volume due to the phasing conflict with the right-turn overlap along Gibbet Road. In addition, the 2027 and 2029 No-Build conditions do not account for the previous phases of the development.

The following sections outline the results of the capacity analysis for each of the study intersections. The capacity analysis worksheets are included in **Appendix F.**

4.1 SC 170 (Okatie Highway) at Lawton Boulevard

The capacity analysis results for the SC 170 (Okatie Highway) at Lawton Boulevard intersection are summarized in **Table 5**.

Table 5 – SC 170 (Okatie Highway) at Lawton Boulevard Analysis Results

Condition	Measure	WB (Lawton Boulevard)		NB (SC 170 Okatie Hwy)		SB (SC 170 Okatie Hwy)	
		WBL	WBR	NBT	NBR	SBL	SBT
AM Peak Hour							
2022 Existing	LOS (Delay)	D (27.2)		A (0.0)		B (13.8)*	
	Synchro 95th Q	38'	18'	0'	0'	10'	0'
2025 No-Build	LOS (Delay)	F (69.1)		A (0.0)		C (19.6)*	
	Synchro 95th Q	100'	35'	0'	0'	20'	0'
2025 Phase 1 Build	LOS (Delay)	F (72.0)		A (0.0)		C (20.0)*	
	Synchro 95th Q	103'	35'	0'	0'	20'	0'
2027 No-Build	LOS (Delay)	F (126.7)		A (0.0)		C (24.1)*	
	Synchro 95th Q	148'	50'	0'	0'	28'	0'
2027 Phase 2 Build	LOS (Delay)	F (141.2)		A (0.0)		D (25.3)*	
	Synchro 95th Q	155'	53'	0'	0'	28'	0'
2029 No-Build	LOS (Delay)	F (298.3)		A (0.0)		E (35.4)*	
	Synchro 95th Q	225'	85'	0'	0'	45'	0'
2029 Phase 3 Build	LOS (Delay)	F ($)		A (0.0)		E (37.8)*	
	Synchro 95th Q	230'	90'	0'	0'	50'	0'
PM Peak Hour							
2022 Existing	LOS (Delay)	C (18.8)		A (0.0)		B (13.2)*	
	Synchro 95th Q	13'	13'	0'	0'	23'	0'
2025 No-Build	LOS (Delay)	D (28.5)		A (0.0)		C (18.5)*	
	Synchro 95th Q	28'	20'	0'	0'	45'	0'
2025 Phase 1 Build	LOS (Delay)	D (29.2)		A (0.0)		C (18.8)*	
	Synchro 95th Q	28'	20'	0'	0'	48'	0'
2027 No-Build	LOS (Delay)	E (45.1)		A (0.0)		D (26.2)*	
	Synchro 95th Q	48'	30'	0'	0'	78'	0'
2027 Phase 2 Build	LOS (Delay)	E (48.6)		A (0.0)		D (27.4)*	
	Synchro 95th Q	53'	30'	0'	0'	83'	0'
2029 No-Build	LOS (Delay)	F (155.8)		A (0.0)		F (50.0)*	
	Synchro 95th Q	108'	45'	0'	0'	150'	0'
2029 Phase 3 Build	LOS (Delay)	F (205.3)		A (0.0)		F (56.7)*	
	Synchro 95th Q	115'	48'	0'	0'	163'	0'

* LOS and Delay shown for the southbound left-turn movement
$ - Delay Exceeds 300 sec/veh

2022 Existing, 2025 No-Build, and 2025 Phase 1 Build

Under 2022 Existing conditions the westbound approach along Lawton Boulevard operates at LOS D during the AM peak hour and LOS C during the PM peak hour. Under 2025 No-Build conditions, the westbound approach is expected to operate at LOS F during the AM peak hour and LOS D during the PM peak hour. This westbound approach is expected to operate similarly under the 2025 Build conditions with the consideration of the proposed development. Therefore, based on the expected Build operations being similar to No-Build operations, no improvements are recommended to mitigate the impact of Phase 1 of this proposed development.

2027 No-Build and 2027 Phase 2 Build

Under 2027 No-Build conditions, the westbound approach is expected to operate at LOS F during the AM peak hour and LOS E during the PM peak hour. This westbound approach is expected to operate similarly under the 2027 Build conditions with the consideration of the proposed development. Therefore, based on the expected Build operations being similar to No-Build operations, no improvements are recommended to mitigate the impact of Phase 2 of this proposed development.

2029 No-Build and 2029 Phase 3 Build

Under 2029 No-Build conditions, the westbound approach is expected to operate at LOS F during the AM and PM peak hour. The large increase in delay is primarily due to the large background growth of 7% per year over the seven-year period from 2022 to 2029. Additionally, volumes grown along Lawton Boulevard are conservative due to a majority of the neighborhood being built and occupied at the time turning movement counts were conducted. In addition, queues are not only anticipated to increase by one to two vehicles. Based on this, it is recommended that this intersection be monitored for the potential of installation of a traffic signal. It should be noted that Lawton Boulevard will operate at LOS F with or without phase 3 of this development, and if a traffic signal is warranted in the future, the Gibbet Road Residential Development is not responsible for installation.

4.2 SC 170 (Okatie Highway) at Gibbet Road/Mill Creek Boulevard

The capacity analysis results for the SC 170 (Okatie Highway) at Gibbet Road/Mill Creek intersection is summarized in **Table 6** on the following page.

2022 Existing, 2025 No-Build, and 2025 Phase 1 Build

Under 2022 Existing conditions the signalized intersection of SC 170 (Okatie Highway) and Gibbet Road/Mill Creek Boulevard operates at LOS C during the AM peak hour and LOS B during the PM peak hour. Under 2025 No-Build conditions this intersection is expected to operate at LOS C during the AM and PM peak hours. However, the eastbound approach is expected to operate at LOS F during the AM peak hour. With the consideration of development traffic, this intersection is expected to operate at LOS D and LOS C under the 2025 Build conditions during the AM and PM peak hours, respectively.

2027 No-Build and 2027 Phase 2 Build

Under 2027 No-Build conditions this intersection is expected to operate at LOS D during the AM Peak hour and LOS C during the PM peak hour. With the consideration of development traffic, the intersection is expected to continue to operate at LOS D during the AM peak hour and LOS C during the PM peak hour. Therefore, based on the expected Build operations being similar to No-Build operations, no improvements are recommended to mitigate the impact of the proposed development at this intersection

2029 No-Build and 2029 Phase 3 Build

Under 2029 No-Build conditions this intersection is expected to operate at LOS F during the AM Peak hour and LOS D during the PM peak hour. With the consideration of development traffic, the intersection is expected to continue to operate at LOS F during the AM peak hour and LOS D during the PM peak hour. Although this intersection is expected to operate at LOS F during the PM peak hour, the addition of traffic associate with the development is only anticipated to increase the control delay of the intersection by 72 sec/veh and queues are anticipated to be similar to the No-Build condition. Therefore, based on the expected Build operations being similar to No-Build operations, no improvements are recommended to mitigate the impact of the proposed development at this intersection

Table 6 –SC 170 (Okatie Highway) at Gibbet Road/Mill Creek Boulevard Analysis Results

Condition	Measure	EB (Mill Creek Boulevard)			WB (Gibbet Road)			NB (SC 170/Okatie Highway)			SB (SC 170/Okatie Highway)			Intersection
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
AM Peak Hour														
2022 Existing	LOS (Delay)		D (41.2)			C (26.9)			C (21.2)			B (18.4)		C (22.6)
	Synchro 95th Q	#283'	26'	3'	59'	19'	128'	26'	371'	0'	80'	316'	0'	
2025 No-Build	LOS (Delay)		F (92.8)			C (29.6)			C (30.2)			C (26.0)		C (34.3)
	Synchro 95th Q	#401'	38'	21'	72'	32'	207'	31'	523'	0'	#285'	440'	0'	
2025 Phase 1 Build	LOS (Delay)		F (93.6)			C (29.3)			C (31.6)			C (26.7)		D (35.1)
	Synchro 95th Q	#401'	38'	21'	90'	32'	210'	31'	524'	0'	#301'	440'	0'	
2027 No-Build	LOS (Delay)		F (164.3)			C (29.8)			D (50.2)			C (32.2)		D (51.2)
	Synchro 95th Q	#474'	42'	34'	79'	34'	237'	34'	#685'	0'	#338'	537'	0'	
2027 Phase 2 Build	LOS (Delay)		F (135.6)			C (31.5)			D (52.7)			D (46.7)		D (53.0)
	Synchro 95th Q	#439'	61'	34'	147'	34'	241'	34'	#697'	0'	#449'	513'	0'	
2029 No-Build	LOS (Delay)		F (254.3)			C (31.6)			F (94.2)			D (44.8)		F (81.8)
	Synchro 95th Q	#560'	44'	50'	88'	37'	276'	#55'	#845'	0'	#395'	#738'	0'	
2029 Phase 3 Build	LOS (Delay)		F (217.8)			C (33.3)			F (99.8)			D (54.0)		F (88.0)
	Synchro 95th Q	#526'	64'	50'	159'	37'	281'	#55'	#863'	0'	#532'	#711'	0'	
PM Peak Hour														
2022 Existing	LOS (Delay)		D (36.9)			C (31.6)			B (14.5)			B (14.0)		B (17.2)
	Synchro 95th Q	#130'	16'	0'	35'	42'	118'	24'	249'	0'	58'	288'	0'	
2025 No-Build	LOS (Delay)		D (51.3)			D (40.0)			B (18.0)			B (17.4)		C (21.9)
	Synchro 95th Q	#190'	28'	0'	45'	58'	188'	31'	364'	0'	176'	395'	3'	
2025 Phase 1 Build	LOS (Delay)		D (51.4)			D (37.6)			B (18.8)			B (18.2)		C (22.3)
	Synchro 95th Q	#190'	28'	0'	56'	58'	189'	31'	370'	0'	#236'	395'	3'	
2027 No-Build	LOS (Delay)		E (76.9)			D (43.9)			C (21.9)			C (23.0)		C (27.7)
	Synchro 95th Q	#227'	29'	0'	48'	64'	219'	52'	#485'	0'	#266'	502'	7'	
2027 Phase 2 Build	LOS (Delay)		E (59.9)			C (32.9)			C (30.3)			C (26.8)		C (28.7)
	Synchro 95th Q	#199'	46'	0'	96'	64'	222'	#57'	#499'	0'	#374'	485'	7'	
2029 No-Build	LOS (Delay)		F (131.4)			D (37.0)			D (48.1)			D (35.8)		D (45.0)
	Synchro 95th Q	#267'	31'	0'	54'	69'	259'	#80'	#605'	0'	#322'	#715'	12'	
2029 Phase 3 Build	LOS (Delay)		F (98.3)			D (38.1)			D (53.2)			D (48.8)		D (51.3)
	Synchro 95th Q	#239'	48'	0'	115'	69'	264'	#80'	#626'	0'	#453'	#696'	12'	

4.3 Gibbet Road at Estate Drive/Site Access #3

The capacity analysis results for the Gibbet Road at Estate Drive/Site Access #3 intersection are summarized in **Table 7**. The southbound Site Access #3 approach is proposed to be constructed under Phase 1 of the development and is planned to consist of one ingress lane and two egress lanes.

Table 7 – Gibbet Road at Estate Drive/Site Access #3 Analysis Results

Condition	Measure	EB (Gibbet Road)			WB (Gibbet Road)			NB (Estate Drive)			SB (Site Access #3)		
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
AM Peak Hour													
2022 Existing	LOS (Delay)	A (0.0)			A (7.6)*			B (11.9)			-		
	Synchro 95th Q	-	0'		0'			8'	-	0'			
2025 No-Build	LOS (Delay)	A (0.0)			A (7.9)*			B (14.4)					
	Synchro 95th Q	-	0'	0'	0'			25'	-	0'			
2025 Phase 1 Build	LOS (Delay)	A (7.9)*			A (7.9)*			C (16.3)			B (13.0)		
	Synchro 95th Q	0'		0'	0'			30'	0'		0'	0'	
2027 No-Build	LOS (Delay)	A (0.0)			A (8.0)*			C (17.0)			-		
	Synchro 95th Q	-	0'	0'	0'			35'	-	0'			
2027 Phase 2 Build	LOS (Delay)	A (8.3)*			A (8.0)*			D (32.5)			C (18.7)		
	Synchro 95th Q	5'		0'	0'			75'	3'		5'	3'	
2029 No-Build	LOS (Delay)	A (0.0)			A (8.1)*			C (19.9)			-		
	Synchro 95th Q	-	0'	0'	0'			48'	-	0'			
2029 Phase 3 Build	LOS (Delay)	A (8.5)*			A (8.1)*			E (45.8)			C (21.2)		
	Synchro 95th Q	8'		0'	0'			108'	3'		8'	3'	
PM Peak Hour													
2022 Existing	LOS (Delay)	A (0.0)			A (7.7)*			B (11.5)			-		
	Synchro 95th Q	-	0'		0'			5'	-	0'			
2025 No-Build	LOS (Delay)	A (0.0)			A (8.8)*			B (14.2)					
	Synchro 95th Q	-	0'	0'	0'			15'	-	0'			
2025 Phase 1 Build	LOS (Delay)	A (8.0)*			A (8.0)*			C (16.3)			B (14.0)		
	Synchro 95th Q	0'		0'	0'			18'	3'		0'	0'	
2027 No-Build	LOS (Delay)	A (0.0)			A (8.1)*			C (16.2)			-		
	Synchro 95th Q	-	0'	0'	0'			20'	-	0'			
2027 Phase 2 Build	LOS (Delay)	A (8.4)*			A (8.1)*			D (25.8)			C (20.7)		
	Synchro 95th Q	5'		0'	0'			35'	3'		5'	3'	
2029 No-Build	LOS (Delay)	A (0.0)			A (8.3)*			C (18.5)			-		
	Synchro 95th Q	-	0'	0'	0'			25'	-	0'			
2029 Phase 3 Build	LOS (Delay)	A (8.6)*			A (8.2)*			D (33.5)			C (24.0)		
	Synchro 95th Q	8'		0'	0'			50'	3'		8'	3'	

* LOS and Delay shown for the southbound left-turn movement

2022 Existing, 2025 No-Build, and 2025 Phase 1 Build

Under 2022 Existing conditions the northbound approach along Estate Drive operates at LOS B during both the AM peak hour and PM peak hours. Under the 2025 No-Build conditions, a eastbound right-turn lane is planned to be constructed as part of the Palmetto Point Pickleball and Commercial Site. The northbound approach is expected to continue to operate at LOS B under 2025 No-Build conditions during both the AM and PM peak hour. With the addition of traffic associated with the proposed development, the northbound approach is expected to increase to LOS C during the AM and PM peak hour. The new southbound approach of Site Access #3 is expected to operate at LOS B during the AM and PM peak hours of the 2025 Build Phase 1 conditions.

Additional turn lane improvements for this unsignalized intersection beyond those necessary for capacity were determined based on guidelines in the 2021 SCDOT Roadway Design Manual. The results of the warrant indicate that under 2025 Build Phase 1 conditions an eastbound left-turn lane and westbound right-turn lane are not necessary along Gibbet Road. Therefore, based on the expected Build operations being a LOS C or better, no improvements are recommended to mitigate the impact of Phase 1 of this proposed development.

2027 No-Build and 2027 Phase 2 Build

Under 2027 No-Build conditions the northbound approach along Estate Drive is expected to operate at LOS C during the AM and PM peak hour. Under 2027 Build Phase 2 conditions the northbound approach is expected to operate at LOS D during the AM and PM peak hour. The southbound approach of Site Access #3 is expected to operate at LOS C during the AM and PM peak hour.

Additional turn lane improvements for this unsignalized intersection beyond those necessary for capacity were determined based on guidelines in the 2021 SCDOT *Roadway Design Manual*. The results of the warrant indicate that under 2027 Build Phase 2 conditions the eastbound left-turn lane along Gibbet Road should be considered. Therefore, it is recommended to construct an eastbound left-turn lane along Gibbet Road in accordance with the SCDOT *Roadway Design Manual*. Turn lane warrant worksheets can be seen in **Appendix G**.

2029 No-Build and 2029 Phase 3 Build

Under 2029 No-Build conditions the northbound approach along Estate Drive is expected to operate at LOS C during the AM and PM peak hour. Under 2029 Build conditions, it was assumed that the eastbound left-turn lane would be constructed with phase 2 of the development. Under 2029 Build Phase 2 conditions the northbound approach is expected to operate at LOS E during the AM peak hour and LOS D under the PM peak hour. The southbound approach of Site Access #3 is expected to operate at LOS C during the AM and PM peak hour.

Although there is an increase in LOS along the northbound approach with the consideration of project traffic, it is not uncommon for minor street approaches to operate at LOS E, or LOS F, during peak hours of travel. Therefore, no improvements are recommended to mitigate the impact of Phase 3 of this proposed development.

4.4 SC 170 (Okatie Highway) at Site Access #1

The capacity analysis results for the SC 170 (Okatie Highway) at Site Access #1 intersection are summarized in **Table 8**. Site Access #1 is proposed to be constructed as part of Phase 1 and is planned to consist of one ingress lane and one egress lanes that will be restricted to right-in, right-out access only. Site Access #1 is planned to be located approximately 850 feet north of the intersection of SC 170 (Okatie Highway) with Gibbet Road.

Table 8 - SC 170 (Okatie Hwy) at Site Access #1 Analysis Results

Condition	Measure	WB (Site Access #1)	NB (SC 170/Okatie Highway)		SB (SC 170/Okatie Highway)
		WBR	NBT	NBR	SBT
AM Peak Hour					
2025 Phase 1 Build	LOS (Delay)	C (22.7)	A (0.0)		A (0.0)
	Synchro 95th Q	10'	0'		0'
2027 Phase 2 Build	LOS (Delay)	D (28.6)	A (0.0)		A (0.0)
	Synchro 95th Q	13'	0'		0'
2029 Phase 3 Build	LOS (Delay)	E (36.1)	A (0.0)		A (0.0)
	Synchro 95th Q	15'	0'		0'
PM Peak Hour					
2025 Phase 1 Build	LOS (Delay)	C (17.4)	A (0.0)		A (0.0)
	Synchro 95th Q	5'	0'		0'
2027 Phase 2 Build	LOS (Delay)	C (20.2)	A (0.0)		A (0.0)
	Synchro 95th Q	5'	0'		0'
2029 Phase 3 Build	LOS (Delay)	C (24.4)	A (0.0)		A (0.0)
	Synchro 95th Q	10'	0'		0'

2025 Phase 1 Build

Under 2025 Build Phase 1 conditions the westbound approach along Site Access #1 is expected to operate at LOS C during the AM and PM peak hours. Additional turn lane improvements for this unsignalized intersection beyond those necessary for capacity were determined based on guidelines in the 2021 SCDOT *Roadway Design Manual*. The results of the warrant indicate that under 2025 Build Phase 1 conditions and 2027 Build Phase 2 conditions, a northbound right-turn lane is not necessary along SC 170 (Okatie Highway). However, based on coordination with the SCDOT, all driveways located along SC 170 (Okatie Highway) will be required to construct turn lanes for ingress movements. Turn lane warrant worksheets can be seen in **Appendix G**. Based on the capacity analysis, Site Access #1 is recommended to be constructed as a right-in, right-out only driveway with one ingress lane and one egress lane.

2027 Phase 2 Build

Under 2027 Build Phase 2 the westbound approach is anticipated to increase to LOS D during the AM peak hour and remain at LOS C during the PM peak hour. Therefore, no improvements are recommended to mitigate the impact of Phase 2 of this proposed development.

2029 Phase 3 Build

Under 2029 Build Phase 3 the westbound approach is anticipated to increase to LOS E during the AM peak hour and remain at LOS C during the PM peak hour. Please note that although the westbound approach along Site Access #1 is anticipated to operate at LOS E, it is not uncommon for unsignalized driveways to operate at LOS E, or LOS F, during peak hours of travel. In addition, queues are not anticipated to be more than two vehicles along the westbound approach. Based on this, no improvements are recommended to mitigate the impact of Phase 3 of this proposed development.

4.5 Gibbet Road at Site Access #2

The capacity analysis results for the Gibbet Road at Site Access #2 intersection are summarized in **Table 9.** Site Access #2 is proposed to be constructed as part of Phase 1 and is planned to consist of one ingress lane and one egress lanes that will be restricted to a right-in, right-out access only. Site Access #2 is planned to be located approximately 350' east of the intersection of SC 170 (Okatie Highway) at Gibbet Road.

Table 9 - Gibbet Road at Site Access #2 Analysis Results

Condition	Measure	EB (Gibbet Road)	WB (Gibbet Road)	SB (Site Access #2)
		EBT	WBTR	SBR
AM Peak Hour				
2025 Phase 1 Build	LOS (Delay)	A (0.0)	A (0.0)	B (11.0)
	Synchro 95th Q	0'	0'	3'
2027 Phase 2 Build	LOS (Delay)	A (0.0)	A (0.0)	B (12.3)
	Synchro 95th Q	0'	0'	13'
2029 Phase 3 Build	LOS (Delay)	A (0.0)	A (0.0)	B (13.1)
	Synchro 95th Q	0'	0'	13'
PM Peak Hour				
2025 Phase 1 Build	LOS (Delay)	A (0.0)	A (0.0)	B (10.8)
	Synchro 95th Q	0'	0'	0'
2027 Phase 2 Build	LOS (Delay)	A (0.0)	A (0.0)	B (11.9)
	Synchro 95th Q	0'	0'	10'
2029 Phase 3 Build	LOS (Delay)	A (0.0)	A (0.0)	B (12.8)
	Synchro 95th Q	0'	0'	13'

All approaches at this intersection are anticipated to operate with short delays during the AM and PM peak hours. Additional turn lane improvements for this unsignalized intersection beyond those necessary for capacity were determined based on guidelines in the 2021 SCDOT *Roadway Design Manual*. The results of the warrant indicate that under 2025 Build Phase 1 conditions, 2027 Phase 2 Build conditions, and 2029 Phase 3 Build conditions a westbound right-turn lane is not necessary along Gibbet Road. Turn lane warrant worksheets can be seen in **Appendix G**.

Based on all approaches anticipated to operate with short delays, and turn lane warrants not being met, no improvements are recommended for this intersection. Site Access #2 should be constructed as a right-in, right-out only driveway with one ingress lane and one egress lane.

4.6 SC 170 (Okatie Hwy) at Site Access #4

The capacity analysis results for the SC 170 (Okatie Highway)/ Site Access #4 intersection is summarized in **Table 10**. Site Access #4 is proposed to be constructed as part of Phase 2 and is planned to consist of one ingress lane and one egress lanes that will be restricted to a right-in, right-out access only. Site Access #4 is planned to be located approximately 350' north of the intersection of SC 170 (Okatie Highway) at Gibbet Road.

Table 10 - SC 170 (Okatie Hwy) at Site Access #4 Analysis Results

Condition	Measure	WB (Site Access #4)	NB (SC 170/Okatie Highway)		SB (SC 170/Okatie Highway)
		WBR	NBT	NBR	SBT
AM Peak Hour					
2027 Phase 2 Build	LOS (Delay)	F (51.7)	A (0.0)		A (0.0)
	Synchro 95th Q	85'	0'		0'
2029 Phase 3 Build	LOS (Delay)	F (76.4)	A (0.0)		A (0.0)
	Synchro 95th Q	108'	0'		0'
PM Peak Hour					
2027 Phase 2 Build	LOS (Delay)	D (26.0)	A (0.0)		A (0.0)
	Synchro 95th Q	35'	0'		0'
2029 Phase 3 Build	LOS (Delay)	D (33.5)	A (0.0)		A (0.0)
	Synchro 95th Q	50'	0'		0'

The westbound approach at this proposed intersection is anticipated to operate at LOS F during the AM peak hour and LOS D during the PM peak hour. Additional turn lane improvements for this unsignalized intersection beyond those necessary for capacity were determined based on guidelines in the 2021 SCDOT *Roadway Design Manual*. The results of the warrant indicate that under 2027 Build conditions, a northbound right-turn lane should be considered along SC 170 (Okatie Highway). Turn lane warrant worksheets can be seen in **Appendix G**.

Based on the capacity and turn lane warrant analysis, it is recommended to construct Site Access #4 as a right-in, right-out only driveway with one ingress and one egress lane, and construct a northbound right turn lane in accordance with the SCDOT *Roadway Design Manual*.

4.7 SC 170 (Okatie Hwy) at Site Access #5

The capacity analysis results for the SC 170 (Okatie Highway)/ Site Access #5 intersection is summarized in **Table 11**. Site Access #5 is proposed to be constructed as part of Phase 3 and is planned to consist of one ingress lane and one egress lanes that will be restricted to a right-in, right-out access only. Site Access #5 is planned to be located approximately 875' south of the intersection of SC 170 (Okatie Highway) at Lawton Boulevard.

Table 11 - SC 170 (Okatie Hwy) at Site Access #5 Analysis Results

Condition	Measure	WB (Site Access #5)	NB (SC 170/Okatie Highway)		SB (SC 170/Okatie Highway)
		WBR	NBT	NBR	SBT
AM Peak Hour					
2029 Phase 3 Build	LOS (Delay)	D (33.8)	A (0.0)		A (0.0)
	Synchro 95th Q	8'	0'		0'
PM Peak Hour					
2029 Phase 3 Build	LOS (Delay)	C (23.7)	A (0.0)		A (0.0)
	Synchro 95th Q	5'	0'		0'

The westbound approach at this proposed intersection is anticipated to operate at LOS D during the AM peak hour and LOS C during the PM peak hour. Additional turn lane improvements for this unsignalized intersection beyond those necessary for capacity were determined based on guidelines in the 2021 SCDOT *Roadway Design Manual*. The results of the warrant indicate that under 2029 Build Phase 3 conditions a northbound right-turn lane is not necessary along SC 170 (Okatie Highway). However, based on coordination with the SCDOT, all driveways located along SC 170 (Okatie Highway) will be required to construct turn lanes for ingress movements. Turn lane warrant worksheets can be seen in **Appendix G**.

Based on the capacity and turn lane warrant analysis, it is recommended to construct Site Access #5 as a right-in, right-out only driveway with one ingress and one egress lane, and construct a northbound right turn lane in accordance with the SCDOT *Roadway Design Manual*.

6 Conclusion

The proposed Gibbet Road Residential Development is in the northeast quadrant of the SC 170 (Okatie Highway) and Gibbet Road intersection in Bluffton, South Carolina. This development is planned to consist of the following phases and land uses:

- 2025 Build Phase 1 – 150 multi-family housing units.
- 2027 Build Phase 2 – 6,300 square-foot convenience store and gas station with 12 fueling positions.
- 2029 Build Phase 3 – 8,850 square feet office space and 8,850 square feet retail space.

It was assumed that the project will access the roadway network via the following five unsignalized driveways:

- Site Access #1 – Planned to be constructed under Phase 1 and is located approximately 850' north of Gibbet Road along SC 170 (Okatie Highway). This access is proposed to be restricted to right-in, right-out movements only.
- Site Access #2 – Planned to be constructed under Phase 1 and is located approximately 350' east of SC 170 (Okatie Highway) along Gibbet Road. This access is proposed to be restricted to right-in, right-out movements only.
- Site Access #3 – Planned to be constructed under Phase 1, and is proposed to be full-movement and align with Estate Drive.
- Site Access #4 – Planned to be constructed under Phase 2 and is located approximately 350' feet north of Gibbet Road along SC 170 (Okatie Highway). This access is proposed to be restricted to right-in, right-out movements only.
- Site Access #5 – Planned to be constructed under Phase 3 and is located approximately 875' feet south of Lawton Boulevard along SC 170 (Okatie Highway). This access is proposed to be restricted to right-in, right-out movements only.

This study summarizes the results of the traffic analyses at the following study intersections:

1) SC 170 (Okatie Highway) at Lawton Boulevard
2) SC 170 (Okatie Highway) at Gibbet Road/Mill Creek Boulevard
3) Gibbet Road at Estate Drive/Site Access #3
4) SC 170 (Okatie Highway) at Site Access #1
5) Gibbet Road at Site Access #2
6) SC 170 (Okatie Highway) at Site Access #4
7) SC 170 (Okatie Highway) at Site Access #5

Improvements Considered by Others

In the surrounding area, the approved development of the Palmetto Point Pickleball and Commercial Site, Kimley-Horn 2021, was accounted for in the analysis of 2025, 2027, and 2029 conditions. Based on this report, an eastbound right-turn lane along Gibbet Road at the intersection of Estate Drive will be constructed.

Based on the results of the traffic analyses, the following improvements are recommended to mitigate the impact of the proposed development's traffic on the study area intersections:

2025 Build Phase 1

Gibbet Road at Estate Drive/ Site Access #3

- Construct Site Access #3 to align with Estate Drive. Site Access #3 should consist of one ingress lane and two egress lanes. The egress lanes should consist of a left-turn lane and shared through/right-turn lane.

SC 170 (Okatie Highway) at Site Access #1

- Construct a northbound right-turn lane along SC 170 (Okatie Highway) in accordance with the SCDOT *Roadway Design Manual*.
- Construct Site Access #1 to be a right-in, right-out access only with one ingress lane and one egress lane.

Gibbet Road at Site Access #2

- Construct Site Access #2 to be a right-in, right-out access only with one ingress lane and one egress lane.

2027 Build Phase 2

Gibbet Road at Estate Drive/ Site Access #3

- Construct an eastbound left-turn lane along Gibbet Road in accordance with the SCDOT *Roadway Design Manual*.

SC 170 (Okatie Highway) at Site Access #4

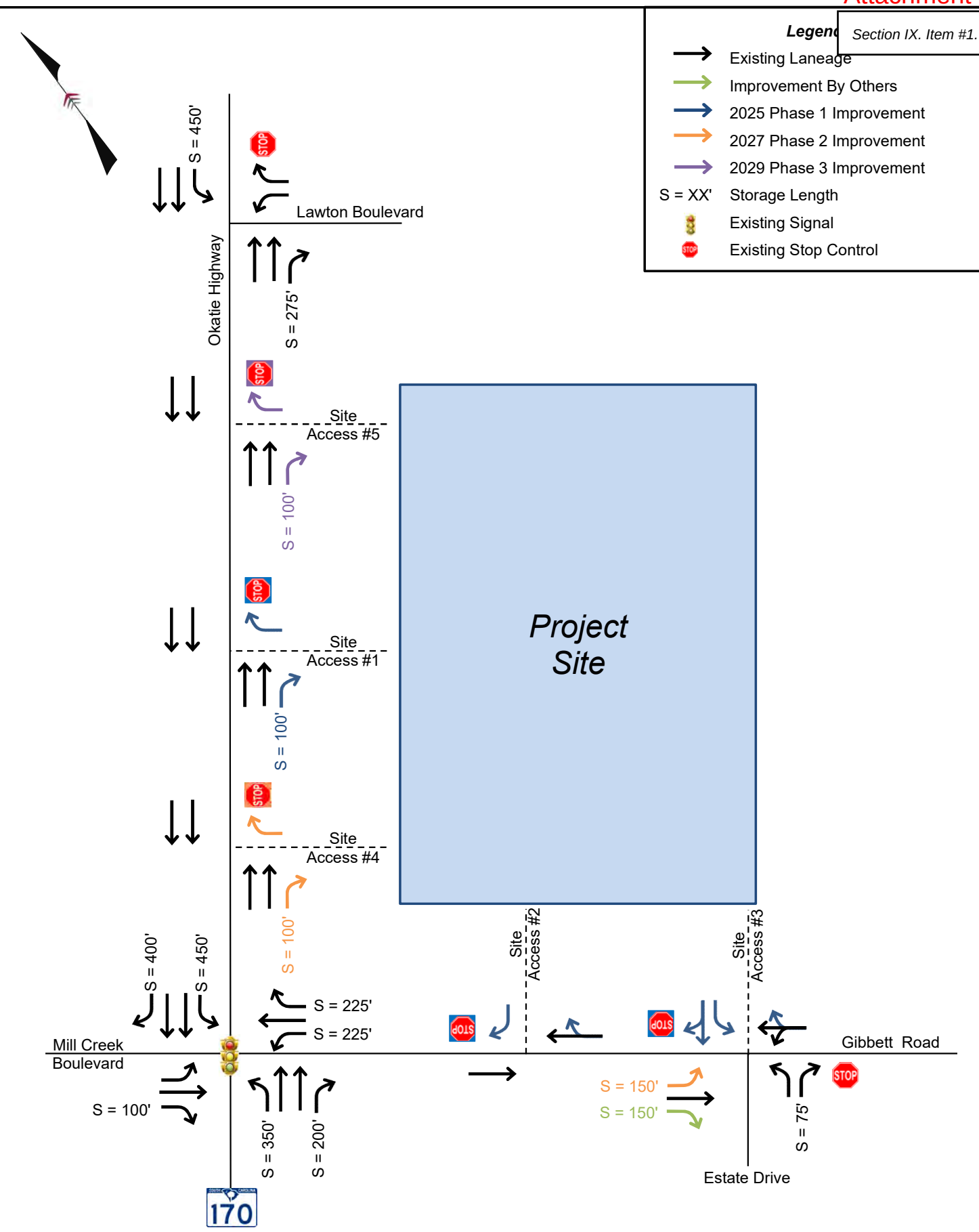
- Construct a northbound right-turn lane along SC 170 (Okatie Highway) in accordance with the SCDOT *Roadway Design Manual*.
- Construct Site Access #4 to be a right-in, right-out access only with one ingress lane and one egress lane.

2029 Build Phase 3

SC 170 (Okatie Highway) at Site Access #5

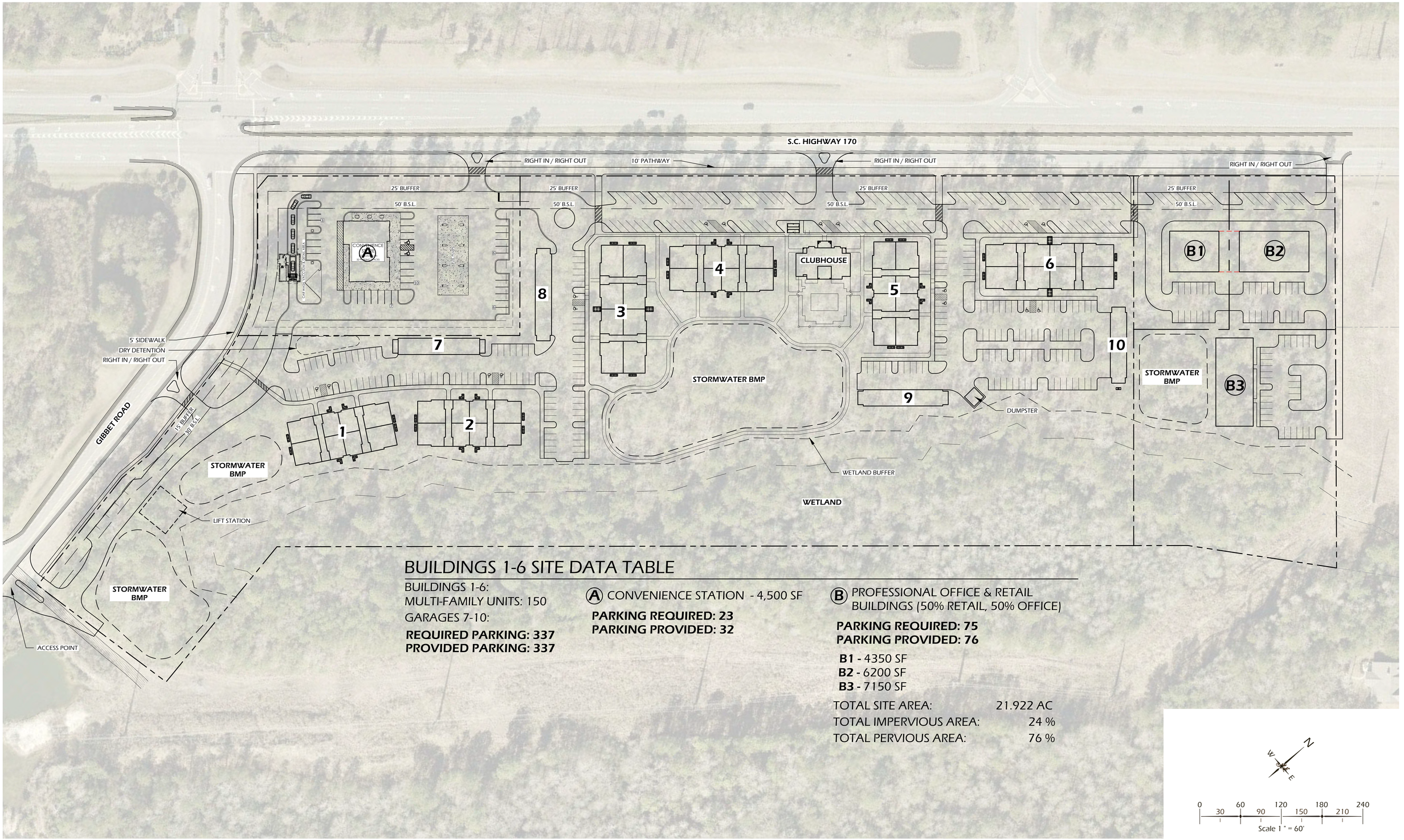
- Construct a northbound right-turn lane along SC 170 (Okatie Highway) in accordance with the SCDOT *Roadway Design Manual*.
- Construct Site Access #5 to be a right-in, right-out access only with one ingress lane and one egress lane.

Figure 20 illustrates the recommended improvements for the study area.


Legend
Existing Laneage
Improvement By Others
2025 Phase 1 Improvement
2027 Phase 2 Improvement
2029 Phase 3 Improvement
S = XX' Storage Length
Existing Signal
Existing Stop Control
S = 450'
Lawton Boulevard
Okatie Highway
S = 275'
Site Access #5
S = 100'
Site Access #1
S = 100'
Site Access #4
S = 100'
Project Site
S = 400'
S = 450'
Site Access #2
Site Access #3
S = 225'
S = 225'
Mill Creek Boulevard
Gibbett Road
S = 100'
S = 350'
S = 200'
S = 150'
S = 150'
S = 75'
Estate Drive
170

Appendix A – Site Plan

MASTER PLAN



BUILDINGS 1-6 SITE DATA TABLE

BUILDINGS 1-6:
MULTI-FAMILY UNITS: 150
GARAGES 7-10:

REQUIRED PARKING: 337
PROVIDED PARKING: 337

Ⓐ CONVENIENCE STATION - 4,500 SF

PARKING REQUIRED: 23
PARKING PROVIDED: 32

Ⓑ PROFESSIONAL OFFICE & RETAIL BUILDINGS (50% RETAIL, 50% OFFICE)

PARKING REQUIRED: 75
PARKING PROVIDED: 76

B1 - 4350 SF
B2 - 6200 SF
B3 - 7150 SF

TOTAL SITE AREA:	21.922 AC
TOTAL IMPERVIOUS AREA:	24 %
TOTAL PERVIOUS AREA:	76 %

JUNE 2023

PARCEL B-1

HIGHWAY 170 AND GIBBET ROAD
BLUFFTON, SOUTH CAROLINA

PROJECT NO.: XXXXX.XX
Witmer Jones Keefer Ltd. / 23 Promenade St., Suite 201, Bluffton, SC. 29910 / ph: (843) 757.7411 / www.wjkltd.com

Witmer Jones Keefer Ltd.
landscape architecture
land planning

Appendix B – Trip Generation Calculations

Gibbet Road Multifamily Phase 1 Trip Generation									
Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Residential Land Uses			**1,037**	**69**	**17**	**52**	**85**	**54**	**31**
220 - Multifamily Housing (Low-Rise)	150	DU	1,037	69	17	52	85	54	31
Subtotal			**1,037**	**69**	**17**	**52**	**85**	**54**	**31**
Total Net New External Trips			**1,037**	**69**	**17**	**52**	**85**	**54**	**31**

Note: Trip generation was calculated using the following data:

Daily Traffic Generation

Residential Land Uses

220 - Multifamily Housing (Low-Rise) ITE 220 = T = 6.41 * (X) + (75.31); (50 % In; 50 % Out)

AM Peak-Hour Traffic Generation

Residential Land Uses

220 - Multifamily Housing (Low-Rise) ITE 220 = T = 0.31 * (X) + (22.85); (24 % In; 76 % Out)

PM Peak-Hour Traffic Generation

Residential Land Uses

220 - Multifamily Housing (Low-Rise) ITE 220 = T = 0.43 * (X) + (20.55); (63 % In; 37 % Out)

Gibbet Road Residential Phase 2 Trip Generation									
Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Retail Land Uses			**4,082**	**356**	**178**	**178**	**343**	**172**	**171**
945 - Convenience Store/Gas Station (9-15 Fueling Positions)	6.3	KSF	4,082	356	178	178	343	172	171
Residential Land Uses			**1,037**	**69**	**17**	**52**	**85**	**54**	**31**
220 - Multifamily Housing (Low-Rise)	150	DU	1,037	69	17	52	85	54	31
Subtotal			**5,119**	**425**	**195**	**230**	**428**	**226**	**202**
Internal Capture			**470**	**2**	**1**	**1**	**70**	**35**	**35**
ITE Pass-By			***3,510***	***270***	***135***	***135***	***220***	***110***	***110***
Adjacent Street Traffic			*30,000*	*3,000*			*3,000*		
10% Adjacent Street Traffic			*3,000*	*300*	*150*	*150*	*300*	*150*	*150*
Pass-By			**3,000**	**270**	**135**	**135**	**220**	**110**	**110**
Total Net New External Trips			**1,649**	**153**	**59**	**94**	**138**	**81**	**57**

Note: Trip generation was calculated using the following data:

Daily Traffic Generation

Retail Land Uses

945 - Convenience Store/Gas Station (9-15 Fueling Positions) ITE 945 = T = 560.88 * (X) + (548.79); (50 % In; 50 % Out)

Residential Land Uses

220 - Multifamily Housing (Low-Rise) ITE 220 = T = 6.41 * (X) + (75.31); (50 % In; 50 % Out)

AM Peak-Hour Traffic Generation

Retail Land Uses

945 - Convenience Store/Gas Station (9-15 Fueling Positions) ITE 945 = T = 56.52 (X); (50 % In; 50 % Out)

Residential Land Uses

220 - Multifamily Housing (Low-Rise) ITE 220 = T = 0.31 * (X) + (22.85); (24 % In; 76 % Out)

PM Peak-Hour Traffic Generation

Retail Land Uses

945 - Convenience Store/Gas Station (9-15 Fueling Positions) ITE 945 = T = 54.52 (X); (50 % In; 50 % Out)

Residential Land Uses

220 - Multifamily Housing (Low-Rise) ITE 220 = T = 0.43 * (X) + (20.55); (63 % In; 37 % Out)

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Gibbet Road Residential Phase 2	**Organization:**	Kimley-Horn
Project Location:	Okatie, SC	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0	0	0
Retail				356	178	178
Restaurant				0	0	0
Cinema/Entertainment				0	0	0
Residential				69	17	52
Hotel				0	0	0
All Other Land Uses[2]				0	0	0
				425	195	230

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.10	0%	0%	1.10	0%	0%
Retail	1.10	0%	0%	1.10	0%	0%
Restaurant	1.10	0%	0%	1.10	0%	0%
Cinema/Entertainment	1.10	0%	0%	1.10	0%	0%
Residential	1.10	0%	0%	1.10	0%	0%
Hotel	1.10	0%	0%	1.10	0%	0%
All Other Land Uses[2]	1.10	0%	0%	1.10	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	468	215	253
Internal Capture Percentage	0%	0%	0%
External Vehicle-Trips[5]	423	194	229
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	1%	0%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	0%	2%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Gibbet Road Residential Phase 2	**Organization:**	Kimley-Horn
Project Location:	Okatie, SC	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0	0	0
Retail				343	172	171
Restaurant				0	0	0
Cinema/Entertainment				0	0	0
Residential				85	54	31
Hotel				0	0	0
All Other Land Uses[2]				0	0	0
				428	226	202

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.10	0%	0%	1.10	0%	0%
Retail	1.10	0%	0%	1.10	0%	0%
Restaurant	1.10	0%	0%	1.10	0%	0%
Cinema/Entertainment	1.10	0%	0%	1.10	0%	0%
Residential	1.10	0%	0%	1.10	0%	0%
Hotel	1.10	0%	0%	1.10	0%	0%
All Other Land Uses[2]	1.10	0%	0%	1.10	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1000	1000		1000	
Retail					1000	
Restaurant					1000	
Cinema/Entertainment					1000	
Residential		1000	1000			
Hotel					1000	

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	27	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	11	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	470	248	222
Internal Capture Percentage	16%	15%	17%
External Vehicle-Trips[5]	358	191	167
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	6%	14%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	46%	32%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Gibbet Road Residential Phase 3 Trip Generation									
Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Office Land Uses			**127**	**15**	**12**	**3**	**19**	**6**	**13**
712 - Small Office Building	8.85	KSF	127	15	12	3	19	6	13
Retail Land Uses			**4,685**	**383**	**194**	**189**	**414**	**208**	**206**
945 - Convenience Store/Gas Station (9-15 Fueling Positions)	6.30	KSF	4,082	356	178	178	343	172	171
822 - Strip Retail Plaza (<40k)	8.85	KSF	603	27	16	11	71	36	35
Residential Land Uses			**1,037**	**69**	**17**	**52**	**85**	**54**	**31**
220 - Multifamily Housing (Low-Rise)	150	DU	1,037	69	17	52	85	54	31
Subtotal			**5,849**	**467**	**223**	**244**	**518**	**268**	**250**
Internal Capture			**556**	**6**	**3**	**3**	**80**	**40**	**40**
ITE Pass-By			***3,996***	***268***	***134***	***134***	***224***	***112***	***112***
Adjacent Street Traffic			*30,000*	*3,000*			*3,000*		
10% Adjacent Street Traffic			*3,000*	*300*	*150*	*150*	*300*	*150*	*150*
Pass-By			**3,000**	**268**	**134**	**134**	**224**	**112**	**112**
Total Net New External Trips			**2,293**	**193**	**86**	**107**	**214**	**116**	**98**

Note: Trip generation was calculated using the following data:

Daily Traffic Generation

Office Land Uses

712 - Small Office Building — ITE 712 = T = 14.39 (X); (50 % In; 50 % Out)

Retail Land Uses

945 - Convenience Store/Gas Station (9-15 Fueling Positions) — ITE 945 = T = 560.88 * (X) + (548.79); (50 % In; 50 % Out)

822 - Strip Retail Plaza (<40k) — ITE 822 = T = 42.2 * (X) + (229.68); (50 % In; 50 % Out)

Residential Land Uses

220 - Multifamily Housing (Low-Rise) — ITE 220 = T = 6.41 * (X) + (75.31); (50 % In; 50 % Out)

AM Peak-Hour Traffic Generation

Office Land Uses

712 - Small Office Building — ITE 712 = T = 1.67 (X); (82 % In; 18 % Out)

Retail Land Uses

945 - Convenience Store/Gas Station (9-15 Fueling Positions) — ITE 945 = T = 56.52 (X); (50 % In; 50 % Out)

822 - Strip Retail Plaza (<40k) — ITE 822 = LN (T) = 0.66 * LN (X) + (1.84); (60 % In; 40 % Out)

Residential Land Uses

220 - Multifamily Housing (Low-Rise) — ITE 220 = T = 0.31 * (X) + (22.85); (24 % In; 76 % Out)

PM Peak-Hour Traffic Generation

Office Land Uses

712 - Small Office Building — ITE 712 = T = 2.16 (X); (34 % In; 68 % Out)

Retail Land Uses

945 - Convenience Store/Gas Station (9-15 Fueling Positions) — ITE 945 = T = 54.52 (X); (50 % In; 50 % Out)

822 - Strip Retail Plaza (<40k) — ITE 822 = LN (T) = 0.71 * LN (X) + (2.72); (50 % In; 50 % Out)

Residential Land Uses

220 - Multifamily Housing (Low-Rise) — ITE 220 = T = 0.43 * (X) + (20.55); (63 % In; 37 % Out)

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Gibbet Road Residential Phase 3	**Organization:**	Kimley-Horn
Project Location:	Okatie, SC	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				15	12	3
Retail				383	194	189
Restaurant				0	0	0
Cinema/Entertainment				0	0	0
Residential				69	17	52
Hotel				0	0	0
All Other Land Uses[2]				0	0	0
				467	223	244

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.10	0%	0%	1.10	0%	0%
Retail	1.10	0%	0%	1.10	0%	0%
Restaurant	1.10	0%	0%	1.10	0%	0%
Cinema/Entertainment	1.10	0%	0%	1.10	0%	0%
Residential	1.10	0%	0%	1.10	0%	0%
Hotel	1.10	0%	0%	1.10	0%	0%
All Other Land Uses[2]	1.10	0%	0%	1.10	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	0	0	0	0
Retail	1		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	513	245	268
Internal Capture Percentage	1%	1%	1%
External Vehicle-Trips[5]	461	220	241
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	8%	33%
Retail	1%	0%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	0%	2%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Gibbet Road Residential Phase 3	**Organization:**	Kimley-Horn
Project Location:	Okatie, SC	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				19	6	13
Retail				414	208	206
Restaurant				0	0	0
Cinema/Entertainment				0	0	0
Residential				85	54	31
Hotel				0	0	0
All Other Land Uses[2]				0	0	0
				518	268	250

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.10	0%	0%	1.10	0%	0%
Retail	1.10	0%	0%	1.10	0%	0%
Restaurant	1.10	0%	0%	1.10	0%	0%
Cinema/Entertainment	1.10	0%	0%	1.10	0%	0%
Residential	1.10	0%	0%	1.10	0%	0%
Hotel	1.10	0%	0%	1.10	0%	0%
All Other Land Uses[2]	1.10	0%	0%	1.10	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1000	1000		1000	
Retail					1000	
Restaurant					1000	
Cinema/Entertainment					1000	
Residential		1000	1000			
Hotel					1000	

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		2	0	0	0	0
Retail	2		0	0	27	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	11	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	570	295	275
Internal Capture Percentage	15%	15%	16%
External Vehicle-Trips[5]	440	229	211
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	43%	14%
Retail	6%	13%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	46%	35%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Appendix C – Traffic Volume Development Worksheets

PHASE 1 VOLUME DEVELOPMENT

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 1

INTERSECTION: SC 170/Okatie Highway at Lawton Boulevard
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.98 **AM FUTURE PEAK HOUR FACTOR:** 0.95
PM PEAK HOUR FACTOR: 0.95 **PM FUTURE PEAK HOUR FACTOR:** 0.95

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	55	0	66	0	0	1,425	34	0	49	1,122	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**55**	**0**	**66**	**0**	**0**	**1,425**	**34**	**0**	**49**	**1,122**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	6%	2%
AM 2025 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2025 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	12	0	15	0	0	321	8	0	11	252	0
AM 2025 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	67	0	81	0	0	1,746	42	0	60	1,374	0
Approved Development 1: Palmetto Point Pickleball and											60				76	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	60	0	0	0	76	0
AM 2025 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**67**	**0**	**81**	**0**	**0**	**1,806**	**42**	**0**	**60**	**1,450**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Net New	Entering															50%	
Distribution	Exiting											50%					

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Net New	0	0	0	0	0	0	0	0	0	0	26	0	0	0	9	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**26**	**0**	**0**	**0**	**9**	**0**
AM 2025 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**67**	**0**	**81**	**0**	**0**	**1,832**	**42**	**0**	**60**	**1,459**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	21	0	58	0	0	1,134	40	0	133	1,440	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**58**	**0**	**0**	**1,135**	**40**	**0**	**133**	**1,440**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2025 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2025 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	5	0	13	0	0	255	9	0	30	324	0
PM 2025 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	26	0	71	0	0	1,390	49	0	163	1,764	0
Approved Development 1: Palmetto Point Pickleball and											49				66	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	49	0	0	0	66	0
PM 2025 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**26**	**0**	**71**	**0**	**0**	**1,439**	**49**	**0**	**163**	**1,830**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Net New	Entering															50%	
Distribution	Exiting											50%					

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Net New	0	0	0	0	0	0	0	0	0	0	16	0	0	0	26	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**0**	**0**	**26**	**0**
PM 2025 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**26**	**0**	**71**	**0**	**0**	**1,455**	**49**	**0**	**163**	**1,856**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 1

INTERSECTION: SC 170/Okatie Highway at Gibbet Road
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.96 **AM FUTURE PEAK HOUR FACTOR:** 0.95
PM PEAK HOUR FACTOR: 0.91 **PM FUTURE PEAK HOUR FACTOR:** 0.91

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	248	12	106	0	47	10	213	0	45	961	16	27	123	972	22
AM Volume Balancing	0	0	3	0	0	0	0	0	0	0	10	4	0	14	0	0
AM 2022 EXISTING TRAFFIC	**0**	**248**	**15**	**106**	**0**	**47**	**10**	**213**	**0**	**45**	**971**	**20**	**27**	**137**	**972**	**22**
AM Heavy Vehicle Percentage	2%	1%	8%	3%	2%	4%	10%	1%	2%	9%	3%	2%	2%	6%	6%	2%
AM 2025 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2025 NO-BUILD TRAFFIC GROWTH	0	56	3	24	0	11	2	48	0	10	219	5	6	31	219	5
AM 2025 NO-BUILD TRAFFIC (No AD)	0	304	18	130	0	58	12	261	0	55	1,190	25	33	168	1,191	27
Approved Development 1: Palmetto Point Pickleball and			8				8	52			8			59	17	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	8	0	0	0	8	52	0	0	8	0	0	59	17	0
AM 2025 NO-BUILD TRAFFIC	**0**	**304**	**26**	**130**	**0**	**58**	**20**	**313**	**0**	**55**	**1,198**	**25**	**33**	**227**	**1,208**	**27**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Net New	Entering											20%	15%	40%	10%		
Distribution	Exiting						35%		5%								

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Net New	0	0	0	0	0	18	0	3	0	0	3	2	7	2	0	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**18**	**0**	**3**	**0**	**0**	**3**	**2**	**7**	**2**	**0**	**0**
AM 2025 BUILD-OUT TRAFFIC		**0**	**304**	**26**	**130**	**0**	**76**	**20**	**316**	**0**	**55**	**1,201**	**27**	**40**	**229**	**1,208**	**27**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	117	6	44	0	25	32	214	0	65	835	23	9	153	1,060	59
PM Volume Balancing	0	0	1	0	0	0	0	0	0	0	0	2	0	17	0	0
PM 2022 EXISTING TRAFFIC	**0**	**117**	**7**	**44**	**0**	**25**	**32**	**214**	**0**	**65**	**835**	**25**	**9**	**170**	**1,060**	**59**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	1%	2%	2%	5%	2%	11%	1%	2%	2%
PM 2025 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2025 NO-BUILD TRAFFIC GROWTH	0	26	2	10	0	6	7	48	0	15	188	6	2	38	239	13
PM 2025 NO-BUILD TRAFFIC (No AD)	0	143	9	54	0	31	39	262	0	80	1,023	31	11	208	1,299	72
Approved Development 1: Palmetto Point Pickleball and			7				6	42			7			51	15	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	7	0	0	0	6	42	0	0	7	0	0	51	15	0
PM 2025 NO-BUILD TRAFFIC	**0**	**143**	**16**	**54**	**0**	**31**	**45**	**304**	**0**	**80**	**1,030**	**31**	**11**	**259**	**1,314**	**72**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Net New	Entering											20%	15%	40%	10%		
Distribution	Exiting						35%		5%								

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Net New	0	0	0	0	0	11	0	2	0	0	11	8	21	5	0	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**11**	**0**	**2**	**0**	**0**	**11**	**8**	**21**	**5**	**0**	**0**
PM 2025 BUILD-OUT TRAFFIC		**0**	**143**	**16**	**54**	**0**	**42**	**45**	**306**	**0**	**80**	**1,041**	**39**	**32**	**264**	**1,314**	**72**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 1

INTERSECTION: Gibbet Road at Estate Drive/Site Access #3
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.86 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.87 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	158	14	0	4	212	0	0	42	0	5	0	0	0	0
AM Volume Balancing	0	0	0	0	0	0	13	0	0	3	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**158**	**14**	**0**	**4**	**225**	**0**	**0**	**45**	**0**	**5**	**0**	**0**	**0**	**0**
AM Heavy Vehicle Percentage	2%	2%	4%	21%	2%	2%	2%	2%	2%	5%	2%	20%	2%	2%	2%	2%
AM 2025 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2025 NO-BUILD TRAFFIC GROWTH	0	0	36	3	0	1	51	0	0	10	0	1	0	0	0	0
AM 2025 NO-BUILD TRAFFIC (No AD)	0	0	194	17	0	5	276	0	0	55	0	6	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and				67						60						
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	67	0	0	0	0	0	60	0	0	0	0	0	0
AM 2025 NO-BUILD TRAFFIC	**0**	**0**	**194**	**84**	**0**	**5**	**276**	**0**	**0**	**115**	**0**	**6**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Net New	Entering		25%					5%	5%			5%					
Distribution	Exiting														10%	5%	5%

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Net New	0	4	0	0	0	0	1	1	0	0	1	0	0	5	3	3
AM TOTAL PROJECT TRIPS		**0**	**4**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**5**	**3**	**3**
AM 2025 BUILD-OUT TRAFFIC		**0**	**4**	**194**	**84**	**0**	**5**	**277**	**1**	**0**	**115**	**1**	**6**	**0**	**5**	**3**	**3**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	187	15	0	9	254	0	0	15	0	7	0	0	0	0
PM Volume Balancing	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**187**	**15**	**0**	**9**	**256**	**0**	**0**	**15**	**0**	**7**	**0**	**0**	**0**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2025 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2025 NO-BUILD TRAFFIC GROWTH	0	0	43	3	0	2	58	0	0	3	0	2	0	0	0	0
PM 2025 NO-BUILD TRAFFIC (No AD)	0	0	230	18	0	11	314	0	0	18	0	9	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and				58						48						
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	58	0	0	0	0	0	48	0	0	0	0	0	0
PM 2025 NO-BUILD TRAFFIC	**0**	**0**	**230**	**76**	**0**	**11**	**314**	**0**	**0**	**66**	**0**	**9**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Net New	Entering		25%					5%	5%			5%					
Distribution	Exiting														10%	5%	5%

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Net New	0	13	0	0	0	0	3	3	0	0	3	0	0	3	1	2
PM TOTAL PROJECT TRIPS		**0**	**13**	**0**	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**3**	**0**	**0**	**3**	**1**	**2**
PM 2025 BUILD-OUT TRAFFIC		**0**	**13**	**230**	**76**	**0**	**11**	**317**	**3**	**0**	**66**	**3**	**9**	**0**	**3**	**1**	**2**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 1

INTERSECTION: SC 170/Okatie Highway at Site Access #1
COUNT DATE: November 11, 2022
AM PEAK HOUR FACTOR: 0.90 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.90 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,459	0	0	0	1,177	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,459**	**0**	**0**	**0**	**1,177**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
AM 2025 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2025 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	329	0	0	0	264	0
AM 2025 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,788	0	0	0	1,441	0
Approved Development 1: Palmetto Point Pickleball and											60				76	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	60	0	0	0	76	0
AM 2025 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,848**	**0**	**0**	**0**	**1,517**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Net New	Entering												**60%**			**50%**	
Distribution	Exiting								**45%**			**5%**					

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Net New	0	0	0	0	0	0	0	**23**	0	0	**3**	**10**	0	0	**9**	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**3**	**10**	**0**	**0**	**9**	**0**
AM 2025 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**1,851**	**10**	**0**	**0**	**1,526**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,174	0	0	0	1,461	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,175**	**0**	**0**	**0**	**1,461**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2025 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2025 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	264	0	0	0	329	0
PM 2025 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,439	0	0	0	1,790	0
Approved Development 1: Palmetto Point Pickleball and											49				66	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	49	0	0	0	66	0
PM 2025 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,488**	**0**	**0**	**0**	**1,856**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Net New	Entering												**60%**			**50%**	
Distribution	Exiting								**45%**			**5%**					

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Net New	0	0	0	0	0	0	0	**14**	0	0	**2**	**32**	0	0	**26**	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**2**	**32**	**0**	**0**	**26**	**0**
PM 2025 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**1,490**	**32**	**0**	**0**	**1,882**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 1

INTERSECTION: Gibbet Road at Site Access #2
COUNT DATE: November 12, 2022
AM PEAK HOUR FACTOR: 0.90 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.90 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	151	0	0	0	270	0	0	0	0	0	0	0	0	0
AM Volume Balancing	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**172**	**0**	**0**	**0**	**270**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM Heavy Vehicle Percentage	2%	2%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
AM 2025 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2025 NO-BUILD TRAFFIC GROWTH	0	0	39	0	0	0	61	0	0	0	0	0	0	0	0	0
AM 2025 NO-BUILD TRAFFIC (No AD)	0	0	211	0	0	0	331	0	0	0	0	0	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and			67				60									
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	67	0	0	0	60	0	0	0	0	0	0	0	0	0
AM 2025 NO-BUILD TRAFFIC	**0**	**0**	**278**	**0**	**0**	**0**	**391**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Net New	Entering			**25%**					**5%**								
Distribution	Exiting							**5%**									**35%**

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Net New	0	0	**4**	0	0	0	**3**	**1**	0	0	0	0	0	0	0	**18**
AM TOTAL PROJECT TRIPS		**0**	**0**	**4**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**
AM 2025 BUILD-OUT TRAFFIC		**0**	**0**	**282**	**0**	**0**	**0**	**394**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	182	0	0	0	271	0	0	0	0	0	0	0	0	0
PM Volume Balancing	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**202**	**0**	**0**	**0**	**271**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM Heavy Vehicle Percentage	2%	2%	1%	2%	2%	2%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2025 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2025 NO-BUILD TRAFFIC GROWTH	0	0	46	0	0	0	61	0	0	0	0	0	0	0	0	0
PM 2025 NO-BUILD TRAFFIC (No AD)	0	0	248	0	0	0	332	0	0	0	0	0	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and			58				48									
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	58	0	0	0	48	0	0	0	0	0	0	0	0	0
PM 2025 NO-BUILD TRAFFIC	**0**	**0**	**306**	**0**	**0**	**0**	**380**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Net New	Entering			**25%**					**5%**								
Distribution	Exiting							**5%**									**35%**

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Net New	0	0	**13**	0	0	0	**2**	**3**	0	0	0	0	0	0	0	**11**
PM TOTAL PROJECT TRIPS		**0**	**0**	**13**	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**
PM 2025 BUILD-OUT TRAFFIC		**0**	**0**	**319**	**0**	**0**	**0**	**382**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**

PHASE 2 VOLUME DEVELOPMENT

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 2

INTERSECTION: SC 170/Okatie Highway at Lawton Boulevard
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.98 **AM FUTURE PEAK HOUR FACTOR:** 0.98
PM PEAK HOUR FACTOR: 0.95 **PM FUTURE PEAK HOUR FACTOR:** 0.95

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	55	0	66	0	0	1,425	34	0	49	1,122	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**55**	**0**	**66**	**0**	**0**	**1,425**	**34**	**0**	**49**	**1,122**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	6%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	22	0	27	0	0	574	14	0	20	452	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	77	0	93	0	0	1,999	48	0	69	1,574	0
Approved Development 1: Palmetto Point Pickleball and											60				76	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	60	0	0	0	76	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**77**	**0**	**93**	**0**	**0**	**2,059**	**48**	**0**	**69**	**1,650**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering															**50%**	
	Exiting											**50%**					

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	0	0	0	**47**	0	0	0	**29**	0
AM TOTAL PROJECT TRIPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**47**	**0**	**0**	**0**	**29**	**0**
AM 2027 BUILD-OUT TRAFFIC	**0**	**0**	**0**	**0**	**0**	**77**	**0**	**93**	**0**	**0**	**2,106**	**48**	**0**	**69**	**1,679**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	21	0	58	0	0	1,134	40	0	133	1,440	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**58**	**0**	**0**	**1,135**	**40**	**0**	**133**	**1,440**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	8	0	23	0	0	457	16	0	54	580	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	29	0	81	0	0	1,592	56	0	187	2,020	0
Approved Development 1: Palmetto Point Pickleball and											49				66	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	49	0	0	0	66	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**29**	**0**	**81**	**0**	**0**	**1,641**	**56**	**0**	**187**	**2,086**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering															**50%**	
	Exiting											**50%**					

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	0	0	0	**28**	0	0	0	**41**	0
PM TOTAL PROJECT TRIPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**0**	**0**	**41**	**0**
PM 2027 BUILD-OUT TRAFFIC	**0**	**0**	**0**	**0**	**0**	**29**	**0**	**81**	**0**	**0**	**1,669**	**56**	**0**	**187**	**2,127**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 2

INTERSECTION: SC 170/Okatie Highway at Gibbet Road
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.96 **AM FUTURE PEAK HOUR FACTOR:** 0.96
PM PEAK HOUR FACTOR: 0.91 **PM FUTURE PEAK HOUR FACTOR:** 0.91

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	248	12	106	0	47	10	213	0	45	961	16	27	123	972	22
AM Volume Balancing	0	0	3	0	0	0	0	0	0	0	10	4	0	14	0	0
AM 2022 EXISTING TRAFFIC	**0**	**248**	**15**	**106**	**0**	**47**	**10**	**213**	**0**	**45**	**971**	**20**	**27**	**137**	**972**	**22**
AM Heavy Vehicle Percentage	2%	1%	8%	3%	2%	4%	10%	1%	2%	9%	3%	2%	2%	6%	6%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	100	6	43	0	19	4	86	0	18	391	8	11	55	391	9
AM 2027 NO-BUILD TRAFFIC (No AD)	0	348	21	149	0	66	14	299	0	63	1,362	28	38	192	1,363	31
Approved Development 1: Palmetto Point Pickleball and			8				8	52			8			59	17	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	8	0	0	0	8	52	0	0	8	0	0	59	17	0
AM 2027 NO-BUILD TRAFFIC	**0**	**348**	**29**	**149**	**0**	**66**	**22**	**351**	**0**	**63**	**1,370**	**28**	**38**	**251**	**1,380**	**31**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		-15%	15%											25%	-25%	
	Exiting						25%										
Net New Distribution	Entering											25%	10%	35%	15%		
	Exiting						35%		5%								

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		-20	20			34								34	-34	
	Net New	0	0	0	0	0	33	0	5	0	0	15	6	20	9	0	0
AM TOTAL PROJECT TRIPS		**0**	**-20**	**20**	**0**	**0**	**67**	**0**	**5**	**0**	**0**	**15**	**6**	**20**	**43**	**-34**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**328**	**49**	**149**	**0**	**133**	**22**	**356**	**0**	**63**	**1,385**	**34**	**58**	**294**	**1,346**	**31**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	117	6	44	0	25	32	214	0	65	835	23	9	153	1,060	59
PM Volume Balancing	0	0	1	0	0	0	0	0	0	0	0	2	0	17	0	0
PM 2022 EXISTING TRAFFIC	**0**	**117**	**7**	**44**	**0**	**25**	**32**	**214**	**0**	**65**	**835**	**25**	**9**	**170**	**1,060**	**59**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	1%	2%	2%	5%	2%	11%	1%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	47	3	18	0	10	13	86	0	26	336	10	4	68	427	24
PM 2027 NO-BUILD TRAFFIC (No AD)	0	164	10	62	0	35	45	300	0	91	1,171	35	13	238	1,487	83
Approved Development 1: Palmetto Point Pickleball and			7				6	42			7			51	15	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	7	0	0	0	6	42	0	0	7	0	0	51	15	0
PM 2027 NO-BUILD TRAFFIC	**0**	**164**	**17**	**62**	**0**	**35**	**51**	**342**	**0**	**91**	**1,178**	**35**	**13**	**289**	**1,502**	**83**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		-15%	15%											25%	-25%	
	Exiting						25%										
Net New Distribution	Entering											25%	10%	35%	15%		
	Exiting						35%		5%								

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		-17	17			28								28	-28	
	Net New	0	0	0	0	0	20	0	3	0	0	20	8	29	12	0	0
PM TOTAL PROJECT TRIPS		**0**	**-17**	**17**	**0**	**0**	**48**	**0**	**3**	**0**	**0**	**20**	**8**	**29**	**40**	**-28**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**147**	**34**	**62**	**0**	**83**	**51**	**345**	**0**	**91**	**1,198**	**43**	**42**	**329**	**1,474**	**83**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 2

INTERSECTION: Gibbet Road at Estate Drive/Site Access #3
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.86 **AM FUTURE PEAK HOUR FACTOR:** 0.86
PM PEAK HOUR FACTOR: 0.87 **PM FUTURE PEAK HOUR FACTOR:** 0.87

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	158	14	0	4	212	0	0	42	0	5	0	0	0	0
AM Volume Balancing	0	0	0	0	0	0	13	0	0	3	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**158**	**14**	**0**	**4**	**225**	**0**	**0**	**45**	**0**	**5**	**0**	**0**	**0**	**0**
AM Heavy Vehicle Percentage	2%	2%	4%	21%	2%	2%	2%	2%	2%	5%	2%	20%	2%	2%	2%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	63	6	0	2	91	0	0	18	0	2	0	0	0	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	221	20	0	6	316	0	0	63	0	7	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and				67						60						
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	67	0	0	0	0	0	60	0	0	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**221**	**87**	**0**	**6**	**316**	**0**	**0**	**123**	**0**	**7**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		45%	-5%													
	Exiting														5%		
Net New Distribution	Entering		25%					5%	5%			5%					
	Exiting														10%	5%	5%

"AM PROJECT TRIPS" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		61	-7											7		
	Net New	0	15	0	0	0	0	3	3	0	0	3	0	0	9	5	5
AM TOTAL PROJECT TRIPS		**0**	**76**	**-7**	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**3**	**0**	**0**	**16**	**5**	**5**
AM 2027 BUILD-OUT TRAFFIC		**0**	**76**	**214**	**87**	**0**	**6**	**319**	**3**	**0**	**123**	**3**	**7**	**0**	**16**	**5**	**5**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	187	15	0	9	254	0	0	15	0	7	0	0	0	0
PM Volume Balancing	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**187**	**15**	**0**	**9**	**256**	**0**	**0**	**15**	**0**	**7**	**0**	**0**	**0**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	75	6	0	4	103	0	0	6	0	3	0	0	0	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	262	21	0	13	359	0	0	21	0	10	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and				58						48						
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	58	0	0	0	0	0	48	0	0	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**262**	**79**	**0**	**13**	**359**	**0**	**0**	**69**	**0**	**10**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		45%	-5%													
	Exiting														5%		
Net New Distribution	Entering		25%					5%	5%			5%					
	Exiting														10%	5%	5%

"PM PROJECT TRIPS" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		49	-5											5		
	Net New	0	20	0	0	0	0	4	4	0	0	4	0	0	6	3	3
PM TOTAL PROJECT TRIPS		**0**	**69**	**-5**	**0**	**0**	**0**	**4**	**4**	**0**	**0**	**4**	**0**	**0**	**11**	**3**	**3**
PM 2027 BUILD-OUT TRAFFIC		**0**	**69**	**257**	**79**	**0**	**13**	**363**	**4**	**0**	**69**	**4**	**10**	**0**	**11**	**3**	**3**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 2

INTERSECTION: SC 170/Okatie Highway at Site Access #1
COUNT DATE: November 11, 2022
AM PEAK HOUR FACTOR: 0.90 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.90 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,459	0	0	0	1,177	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,459**	**0**	**0**	**0**	**1,177**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	588	0	0	0	474	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	2,047	0	0	0	1,651	0
Approved Development 1: Palmetto Point Pickleball and											60				76	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	60	0	0	0	76	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,107**	**0**	**0**	**0**	**1,727**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering												45%			50%	
	Exiting								25%			25%					

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	23	0	0	24	26	0	0	29	0
AM TOTAL PROJECT TRIPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**24**	**26**	**0**	**0**	**29**	**0**
AM 2027 BUILD-OUT TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**2,131**	**26**	**0**	**0**	**1,756**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,174	0	0	0	1,461	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,175**	**0**	**0**	**0**	**1,461**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	473	0	0	0	588	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,648	0	0	0	2,049	0
Approved Development 1: Palmetto Point Pickleball and											49				66	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	49	0	0	0	66	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,697**	**0**	**0**	**0**	**2,115**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering												45%			50%	
	Exiting								25%			25%					

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	14	0	0	14	36	0	0	41	0
PM TOTAL PROJECT TRIPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**14**	**36**	**0**	**0**	**41**	**0**
PM 2027 BUILD-OUT TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**1,711**	**36**	**0**	**0**	**2,156**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 2

INTERSECTION: Gibbet Road at Site Access #2
COUNT DATE: November 12, 2022
AM PEAK HOUR FACTOR: 0.90 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.90 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	151	0	0	0	270	0	0	0	0	0	0	0	0	0
AM Volume Balancing	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**172**	**0**	**0**	**0**	**270**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM Heavy Vehicle Percentage	2%	2%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	69	0	0	0	109	0	0	0	0	0	0	0	0	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	241	0	0	0	379	0	0	0	0	0	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and			67				60									
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	67	0	0	0	60	0	0	0	0	0	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**308**	**0**	**0**	**0**	**439**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering			**40%**				**-10%**	**10%**								
	Exiting																**35%**
Net New Distribution	Entering			**25%**					**5%**								
	Exiting							**5%**									**35%**

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By			**54**				**-13**	**13**								**47**
	Net New	0	0	**15**	0	0	0	**5**	**3**	0	0	0	0	0	0	0	**33**
AM TOTAL PROJECT TRIPS		**0**	**0**	**69**	**0**	**0**	**0**	**-8**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**80**
AM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**377**	**0**	**0**	**0**	**431**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**80**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	182	0	0	0	271	0	0	0	0	0	0	0	0	0
PM Volume Balancing	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**202**	**0**	**0**	**0**	**271**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM Heavy Vehicle Percentage	2%	2%	1%	2%	2%	2%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	81	0	0	0	109	0	0	0	0	0	0	0	0	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	283	0	0	0	380	0	0	0	0	0	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and			58				48									
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	58	0	0	0	48	0	0	0	0	0	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**341**	**0**	**0**	**0**	**428**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering			**40%**				**-10%**	**10%**								
	Exiting																**35%**
Net New Distribution	Entering			**25%**					**5%**								
	Exiting							**5%**									**35%**

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By			**44**				**-11**	**11**								**39**
	Net New	0	0	**20**	0	0	0	**3**	**4**	0	0	0	0	0	0	0	**20**
PM TOTAL PROJECT TRIPS		**0**	**0**	**64**	**0**	**0**	**0**	**-8**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**59**
PM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**405**	**0**	**0**	**0**	**420**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**59**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 2

INTERSECTION: SC 170/Okatie Highway at Site Access #4
COUNT DATE: November 13, 2022
AM PEAK HOUR FACTOR: 0.90 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.90 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,459	0	0	0	1,144	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,459**	**0**	**0**	**0**	**1,158**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	588	0	0	0	466	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	2,047	0	0	0	1,624	0
Approved Development 1: Palmetto Point Pickleball and											60				76	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	60	0	0	0	76	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,107**	**0**	**0**	**0**	**1,700**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering											-60%	45%				
	Exiting								60%								
Net New Distribution	Entering											45%	15%			50%	
	Exiting								20%			5%					

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By								81			-81	61				
	Net New	0	0	0	0	0	0	0	19	0	0	31	9	0	0	29	0
AM TOTAL PROJECT TRIPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**100**	**0**	**0**	**-50**	**70**	**0**	**0**	**29**	**0**
AM 2027 BUILD-OUT TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**100**	**0**	**0**	**2,057**	**70**	**0**	**0**	**1,729**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,174	0	0	0	1,281	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	17	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,175**	**0**	**0**	**0**	**1,298**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	473	0	0	0	523	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,648	0	0	0	1,821	0
Approved Development 1: Palmetto Point Pickleball and											49				66	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	49	0	0	0	66	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,697**	**0**	**0**	**0**	**1,887**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering											-60%	45%				
	Exiting								60%								
Net New Distribution	Entering											45%	15%			50%	
	Exiting								20%			5%					

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By								66			-66	50				
	Net New	0	0	0	0	0	0	0	11	0	0	39	13	0	0	41	0
PM TOTAL PROJECT TRIPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**77**	**0**	**0**	**-27**	**63**	**0**	**0**	**41**	**0**
PM 2027 BUILD-OUT TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**77**	**0**	**0**	**1,670**	**63**	**0**	**0**	**1,928**	**0**

PHASE 3 VOLUME DEVELOPMENT

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 3

INTERSECTION: SC 170/Okatie Highway at Lawton Boulevard
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.98 **AM FUTURE PEAK HOUR FACTOR:** 0.98
PM PEAK HOUR FACTOR: 0.95 **PM FUTURE PEAK HOUR FACTOR:** 0.95

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	55	0	66	0	0	1,425	34	0	49	1,122	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**55**	**0**	**66**	**0**	**0**	**1,425**	**34**	**0**	**49**	**1,122**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	6%	2%
AM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2029 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	33	0	40	0	0	863	21	0	30	680	0
AM 2029 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	88	0	106	0	0	2,288	55	0	79	1,802	0
Approved Development 1: Palmetto Point Pickleball and											60				76	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	60	0	0	0	76	0
AM 2029 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**88**	**0**	**106**	**0**	**0**	**2,348**	**55**	**0**	**79**	**1,878**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering															**50%**	
	Exiting											**50%**					

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	0	0	0	**54**	0	0	0	**43**	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**54**	**0**	**0**	**0**	**43**	**0**
AM 2029 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**88**	**0**	**106**	**0**	**0**	**2,402**	**55**	**0**	**79**	**1,921**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	21	0	58	0	0	1,134	40	0	133	1,440	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**58**	**0**	**0**	**1,135**	**40**	**0**	**133**	**1,440**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2029 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	13	0	35	0	0	688	24	0	81	872	0
PM 2029 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	34	0	93	0	0	1,823	64	0	214	2,312	0
Approved Development 1: Palmetto Point Pickleball and											49				66	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	49	0	0	0	66	0
PM 2029 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**34**	**0**	**93**	**0**	**0**	**1,872**	**64**	**0**	**214**	**2,378**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering															**50%**	
	Exiting											**50%**					

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	0	0	0	**50**	0	0	0	**58**	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**50**	**0**	**0**	**0**	**58**	**0**
PM 2029 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**34**	**0**	**93**	**0**	**0**	**1,922**	**64**	**0**	**214**	**2,436**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 3

INTERSECTION: SC 170/Okatie Highway at Gibbet Road
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.96 **AM FUTURE PEAK HOUR FACTOR:** 0.96
PM PEAK HOUR FACTOR: 0.91 **PM FUTURE PEAK HOUR FACTOR:** 0.91

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	248	12	106	0	47	10	213	0	45	961	16	27	123	972	22
AM Volume Balancing	0	0	3	0	0	0	0	0	0	0	10	4	0	14	0	0
AM 2022 EXISTING TRAFFIC	**0**	**248**	**15**	**106**	**0**	**47**	**10**	**213**	**0**	**45**	**971**	**20**	**27**	**137**	**972**	**22**
AM Heavy Vehicle Percentage	2%	1%	8%	3%	2%	4%	10%	1%	2%	9%	3%	2%	2%	6%	6%	2%
AM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2029 NO-BUILD TRAFFIC GROWTH	0	150	9	64	0	28	6	129	0	27	588	12	16	83	589	13
AM 2029 NO-BUILD TRAFFIC (No AD)	0	398	24	170	0	75	16	342	0	72	1,559	32	43	220	1,561	35
Approved Development 1: Palmetto Point Pickleball and			8				8	52			8			59	17	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	8	0	0	0	8	52	0	0	8	0	0	59	17	0
AM 2029 NO-BUILD TRAFFIC	**0**	**398**	**32**	**170**	**0**	**75**	**24**	**394**	**0**	**72**	**1,567**	**32**	**43**	**279**	**1,578**	**35**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		-15%	15%											25%	-25%	
	Exiting						25%										
Net New Distribution	Entering											25%	10%	40%	10%		
	Exiting						35%		5%								

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		-20	20			34								34	-34	
	Net New	0	0	0	0	0	37	0	5	0	0	22	9	35	8	0	0
AM TOTAL PROJECT TRIPS		**0**	**-20**	**20**	**0**	**0**	**71**	**0**	**5**	**0**	**0**	**22**	**9**	**35**	**42**	**-34**	**0**
AM 2029 BUILD-OUT TRAFFIC		**0**	**378**	**52**	**170**	**0**	**146**	**24**	**399**	**0**	**72**	**1,589**	**41**	**78**	**321**	**1,544**	**35**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	117	6	44	0	25	32	214	0	65	835	23	9	153	1,060	59
PM Volume Balancing	0	0	1	0	0	0	0	0	0	0	0	2	0	17	0	0
PM 2022 EXISTING TRAFFIC	**0**	**117**	**7**	**44**	**0**	**25**	**32**	**214**	**0**	**65**	**835**	**25**	**9**	**170**	**1,060**	**59**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	1%	2%	2%	5%	2%	11%	1%	2%	2%
PM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2029 NO-BUILD TRAFFIC GROWTH	0	71	4	27	0	15	19	130	0	39	506	15	5	103	642	36
PM 2029 NO-BUILD TRAFFIC (No AD)	0	188	11	71	0	40	51	344	0	104	1,341	40	14	273	1,702	95
Approved Development 1: Palmetto Point Pickleball and			7				6	42			7			51	15	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	7	0	0	0	6	42	0	0	7	0	0	51	15	0
PM 2029 NO-BUILD TRAFFIC	**0**	**188**	**18**	**71**	**0**	**40**	**57**	**386**	**0**	**104**	**1,348**	**40**	**14**	**324**	**1,717**	**95**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		-15%	15%											25%	-25%	
	Exiting						25%										
Net New Distribution	Entering											25%	10%	40%	10%		
	Exiting						35%		5%								

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		-17	17			28								28	-28	
	Net New	0	0	0	0	0	34	0	5	0	0	29	12	47	11	0	0
PM TOTAL PROJECT TRIPS		**0**	**-17**	**17**	**0**	**0**	**62**	**0**	**5**	**0**	**0**	**29**	**12**	**47**	**39**	**-28**	**0**
PM 2029 BUILD-OUT TRAFFIC		**0**	**171**	**35**	**71**	**0**	**102**	**57**	**391**	**0**	**104**	**1,377**	**52**	**61**	**363**	**1,689**	**95**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 3

INTERSECTION: Gibbet Road at Estate Drive/Site Access #3
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.86 **AM FUTURE PEAK HOUR FACTOR:** 0.86
PM PEAK HOUR FACTOR: 0.87 **PM FUTURE PEAK HOUR FACTOR:** 0.87

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	158	14	0	4	212	0	0	42	0	5	0	0	0	0
AM Volume Balancing	0	0	0	0	0	0	13	0	0	3	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**158**	**14**	**0**	**4**	**225**	**0**	**0**	**45**	**0**	**5**	**0**	**0**	**0**	**0**
AM Heavy Vehicle Percentage	2%	2%	4%	21%	2%	2%	2%	2%	2%	5%	2%	20%	2%	2%	2%	2%
AM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2029 NO-BUILD TRAFFIC GROWTH	0	0	95	8	0	2	136	0	0	27	0	3	0	0	0	0
AM 2029 NO-BUILD TRAFFIC (No AD)	0	0	253	22	0	6	361	0	0	72	0	8	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and				67						60						
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	67	0	0	0	0	0	60	0	0	0	0	0	0
AM 2029 NO-BUILD TRAFFIC	**0**	**0**	**253**	**89**	**0**	**6**	**361**	**0**	**0**	**132**	**0**	**8**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		45%	-5%													
	Exiting														5%		
Net New Distribution	Entering		20%					5%	5%			5%					
	Exiting														10%	5%	5%

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		61	-7											7		
	Net New	0	17	0	0	0	0	4	4	0	0	4	0	0	11	5	5
AM TOTAL PROJECT TRIPS		**0**	**78**	**-7**	**0**	**0**	**0**	**4**	**4**	**0**	**0**	**4**	**0**	**0**	**18**	**5**	**5**
AM 2029 BUILD-OUT TRAFFIC		**0**	**78**	**246**	**89**	**0**	**6**	**365**	**4**	**0**	**132**	**4**	**8**	**0**	**18**	**5**	**5**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	187	15	0	9	254	0	0	15	0	7	0	0	0	0
PM Volume Balancing	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**187**	**15**	**0**	**9**	**256**	**0**	**0**	**15**	**0**	**7**	**0**	**0**	**0**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2029 NO-BUILD TRAFFIC GROWTH	0	0	113	9	0	5	155	0	0	9	0	4	0	0	0	0
PM 2029 NO-BUILD TRAFFIC (No AD)	0	0	300	24	0	14	411	0	0	24	0	11	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and				58						48						
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	58	0	0	0	0	0	48	0	0	0	0	0	0
PM 2029 NO-BUILD TRAFFIC	**0**	**0**	**300**	**82**	**0**	**14**	**411**	**0**	**0**	**72**	**0**	**11**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		45%	-5%													
	Exiting														5%		
Net New Distribution	Entering		20%					5%	5%			5%					
	Exiting														10%	5%	5%

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		51	-6											6		
	Net New	0	23	0	0	0	0	6	6	0	0	5	0	0	9	5	5
PM TOTAL PROJECT TRIPS		**0**	**74**	**-6**	**0**	**0**	**0**	**6**	**6**	**0**	**0**	**5**	**0**	**0**	**15**	**5**	**5**
PM 2029 BUILD-OUT TRAFFIC		**0**	**74**	**294**	**82**	**0**	**14**	**417**	**6**	**0**	**72**	**5**	**11**	**0**	**15**	**5**	**5**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 3

INTERSECTION: SC 170/Okatie Highway at Site Access #1
COUNT DATE: November 11, 2022
AM PEAK HOUR FACTOR: 0.90 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.90 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,459	0	0	0	1,177	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,459**	**0**	**0**	**0**	**1,177**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
AM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2029 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	884	0	0	0	713	0
AM 2029 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	2,343	0	0	0	1,890	0
Approved Development 1: Palmetto Point Pickleball and											60				76	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	60	0	0	0	76	0
AM 2029 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,403**	**0**	**0**	**0**	**1,966**	**0**

"SITE TRAFFIC DISTRUBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											**15%**	**40%**			**50%**	
	Exiting								**20%**			**20%**					

"AM PROJECT TRIPS" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	**22**	0	0	**34**	**35**	0	0	**43**	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**	**0**	**0**	**34**	**35**	**0**	**0**	**43**	**0**
AM 2029 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**	**0**	**0**	**2,437**	**35**	**0**	**0**	**2,009**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,174	0	0	0	1,461	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,175**	**0**	**0**	**0**	**1,461**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2029 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	712	0	0	0	885	0
PM 2029 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,887	0	0	0	2,346	0
Approved Development 1: Palmetto Point Pickleball and											49				66	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	49	0	0	0	66	0
PM 2029 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,936**	**0**	**0**	**0**	**2,412**	**0**

"SITE TRAFFIC DISTRUBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											**15%**	**40%**			**50%**	
	Exiting								**20%**			**20%**					

"PM PROJECT TRIPS" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	**20**	0	0	**37**	**47**	0	0	**58**	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**37**	**47**	**0**	**0**	**58**	**0**
PM 2029 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**1,973**	**47**	**0**	**0**	**2,470**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 3

INTERSECTION: Gibbet Road at Site Access #2
COUNT DATE: November 12, 2022
AM PEAK HOUR FACTOR: 0.90 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.90 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	151	0	0	0	270	0	0	0	0	0	0	0	0	0
AM Volume Balancing	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**172**	**0**	**0**	**0**	**270**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM Heavy Vehicle Percentage	2%	2%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
AM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2029 NO-BUILD TRAFFIC GROWTH	0	0	104	0	0	0	164	0	0	0	0	0	0	0	0	0
AM 2029 NO-BUILD TRAFFIC (No AD)	0	0	276	0	0	0	434	0	0	0	0	0	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and			67				60									
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	67	0	0	0	60	0	0	0	0	0	0	0	0	0
AM 2029 NO-BUILD TRAFFIC	**0**	**0**	**343**	**0**	**0**	**0**	**494**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering			**40%**				**-10%**	**10%**								
	Exiting																**35%**
Net New Distribution	Entering			**20%**					**5%**								
	Exiting							**5%**									**35%**

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By			**54**				**-13**	**13**								**47**
	Net New	0	0	**17**	0	0	0	**5**	**4**	0	0	0	0	0	0	0	**37**
AM TOTAL PROJECT TRIPS		**0**	**0**	**71**	**0**	**0**	**0**	**-8**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**84**
AM 2029 BUILD-OUT TRAFFIC		**0**	**0**	**414**	**0**	**0**	**0**	**486**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**84**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	182	0	0	0	271	0	0	0	0	0	0	0	0	0
PM Volume Balancing	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**202**	**0**	**0**	**0**	**271**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM Heavy Vehicle Percentage	2%	2%	1%	2%	2%	2%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2029 NO-BUILD TRAFFIC GROWTH	0	0	122	0	0	0	164	0	0	0	0	0	0	0	0	0
PM 2029 NO-BUILD TRAFFIC (No AD)	0	0	324	0	0	0	435	0	0	0	0	0	0	0	0	0
Approved Development 1: Palmetto Point Pickleball and			58				48									
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	58	0	0	0	48	0	0	0	0	0	0	0	0	0
PM 2029 NO-BUILD TRAFFIC	**0**	**0**	**382**	**0**	**0**	**0**	**483**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering			**40%**				**-10%**	**10%**								
	Exiting																**35%**
Net New Distribution	Entering			**20%**					**5%**								
	Exiting							**5%**									**35%**

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By			**45**				**-11**	**11**								**39**
	Net New	0	0	**23**	0	0	0	**5**	**6**	0	0	0	0	0	0	0	**34**
PM TOTAL PROJECT TRIPS		**0**	**0**	**68**	**0**	**0**	**0**	**-6**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**73**
PM 2029 BUILD-OUT TRAFFIC		**0**	**0**	**450**	**0**	**0**	**0**	**477**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**73**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 3

INTERSECTION: SC 170/Okatie Highway at Site Access #4
COUNT DATE: November 13, 2022
AM PEAK HOUR FACTOR: 0.90 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.90 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,459	0	0	0	1,144	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,459**	**0**	**0**	**0**	**1,158**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
AM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2029 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	884	0	0	0	701	0
AM 2029 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	2,343	0	0	0	1,859	0
Approved Development 1: Palmetto Point Pickleball and											60				76	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	60	0	0	0	76	0
AM 2029 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,403**	**0**	**0**	**0**	**1,935**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering											-60%	45%				
	Exiting								60%								
Net New Distribution	Entering											55%	10%			50%	
	Exiting								15%			5%					

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By								80			-80	60				
	Net New	0	0	0	0	0	0	0	16	0	0	53	9	0	0	43	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**96**	**0**	**0**	**-27**	**69**	**0**	**0**	**43**	**0**
AM 2029 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**96**	**0**	**0**	**2,376**	**69**	**0**	**0**	**1,978**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,174	0	0	0	1,281	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	17	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,175**	**0**	**0**	**0**	**1,298**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%
PM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2029 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	712	0	0	0	786	0
PM 2029 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,887	0	0	0	2,084	0
Approved Development 1: Palmetto Point Pickleball and											49				66	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	49	0	0	0	66	0
PM 2029 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,936**	**0**	**0**	**0**	**2,150**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering											-60%	45%				
	Exiting								60%								
Net New Distribution	Entering											55%	10%			50%	
	Exiting								15%			5%					

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By								67			-67	50				
	Net New	0	0	0	0	0	0	0	15	0	0	69	12	0	0	58	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**82**	**0**	**0**	**2**	**62**	**0**	**0**	**58**	**0**
PM 2029 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**82**	**0**	**0**	**1,938**	**62**	**0**	**0**	**2,208**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT - PHASE 3

INTERSECTION: SC 170/Okatie Highway at Site Access #5
COUNT DATE: November 13, 2022
AM PEAK HOUR FACTOR: 0.90 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.90 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,459	0	0	0	1,177	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,459**	**0**	**0**	**0**	**1,177**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
AM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
AM 2029 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	884	0	0	0	713	0
AM 2029 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	2,343	0	0	0	1,890	0
Approved Development 1: Palmetto Point Pickleball and											60				76	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	60	0	0	0	76	0
AM 2029 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,403**	**0**	**0**	**0**	**1,966**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering												15%			50%	
	Exiting								10%			40%					

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	11	0	0	43	13	0	0	43	0
AM TOTAL PROJECT TRIPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**0**	**43**	**13**	**0**	**0**	**43**	**0**
AM 2029 BUILD-OUT TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**0**	**2,446**	**13**	**0**	**0**	**2,009**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,174	0	0	0	1,461	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,175**	**0**	**0**	**0**	**1,461**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2029 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
PM 2029 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	712	0	0	0	885	0
PM 2029 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,887	0	0	0	2,346	0
Approved Development 1: Palmetto Point Pickleball and											49				66	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	49	0	0	0	66	0
PM 2029 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,936**	**0**	**0**	**0**	**2,412**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering												15%			50%	
	Exiting								10%			40%					

"PM PROJECT TRIPS"

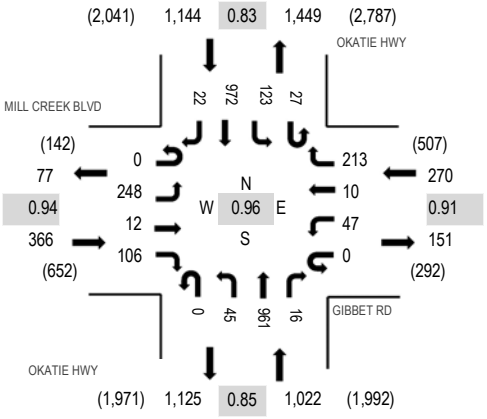
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	10	0	0	40	17	0	0	58	0
PM TOTAL PROJECT TRIPS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**40**	**17**	**0**	**0**	**58**	**0**
PM 2029 BUILD-OUT TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**1,976**	**17**	**0**	**0**	**2,470**	**0**

Appendix D – Raw Turning Movement Counts

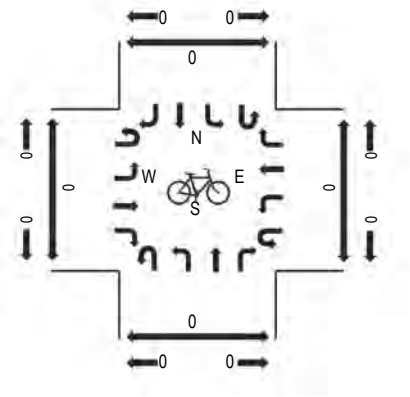
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 OKATIE HWY & GIBBET RD AM
Date: Thursday, November 10, 2022
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

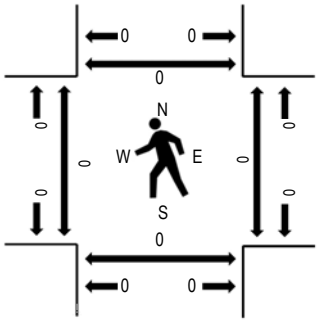
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MILL CREEK BLVD Eastbound				GIBBET RD Westbound				OKATIE HWY Northbound				OKATIE HWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	63	1	21	0	11	0	58	0	2	211	3	10	20	164	0	564	2,631	0	0	0	0
7:15 AM	0	66	3	30	1	7	3	58	1	10	258	8	6	17	175	2	645	2,723	0	0	0	0
7:30 AM	0	59	2	30	0	9	1	64	0	16	300	4	6	23	207	6	727	2,802	0	0	0	0
7:45 AM	0	67	3	17	0	14	6	60	0	11	258	4	8	34	210	3	695	2,710	0	0	0	0
8:00 AM	0	78	5	17	0	8	1	49	0	9	191	6	6	32	249	5	656	2,561	0	0	0	0
8:15 AM	0	44	2	42	0	16	2	40	0	9	212	2	7	34	306	8	724		0	0	0	0
8:30 AM	0	43	4	16	0	7	1	48	0	16	216	3	7	43	220	11	635		1	0	0	0
8:45 AM	0	29	0	10	0	6	2	35	0	13	226	3	4	35	178	5	546		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	1	0	0	0	0	6	0	0	1	14	0	22
Lights	0	246	11	103	0	45	9	210	0	41	933	16	27	116	911	22	2,690
Mediums	0	2	1	3	0	1	1	3	0	4	22	0	0	6	47	0	90
Total	0	248	12	106	0	47	10	213	0	45	961	16	27	123	972	22	2,802

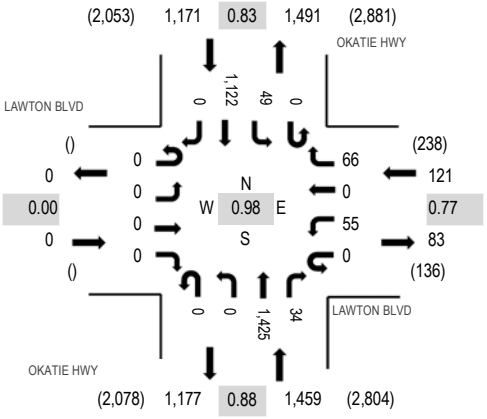
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.4%				0.6%				1.3%			0.8%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.8%	1.4%	0.0%	0.8%
Peak Hour Factor		0.94				0.91				0.85				0.83			0.96
Peak Hour Factor	0.00	0.87	0.70	0.63	0.25	0.73	0.46	0.94	0.25	0.73	0.86	0.69	0.75	0.84	0.80	0.66	0.96

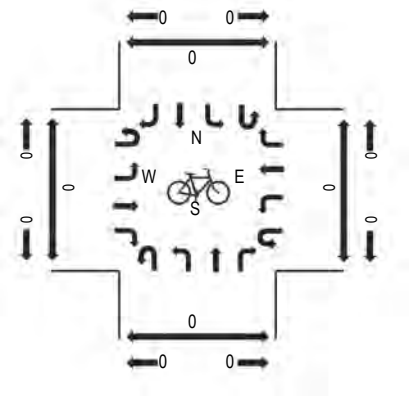
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 OKATIE HWY & LAWTON BLVD AM
Date: Thursday, November 10, 2022
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

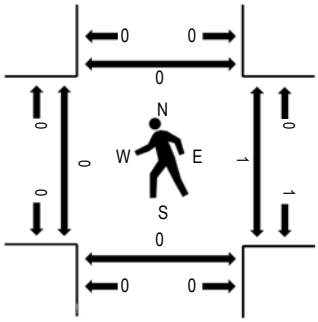
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	LAWTON BLVD Eastbound				LAWTON BLVD Westbound				OKATIE HWY Northbound				OKATIE HWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	13	0	16	0	0	337	3	0	2	172	0	543	2,565	0	0	0	0
7:15 AM	0	0	0	0	0	19	0	23	0	0	375	7	0	6	186	0	616	2,670	0	0	0	0
7:30 AM	0	0	0	0	0	7	0	15	0	0	431	16	0	11	225	0	705	2,751	0	0	0	0
7:45 AM	0	0	0	0	0	13	0	17	0	0	389	7	0	13	262	0	701	2,684	0	0	0	0
8:00 AM	0	0	0	0	0	10	0	17	0	0	320	7	0	13	281	0	648	2,530	0	1	0	0
8:15 AM	0	0	0	0	0	25	0	17	0	0	285	4	0	12	354	0	697		0	0	0	0
8:30 AM	0	0	0	0	0	14	0	16	0	0	324	6	0	9	269	0	638		0	0	0	0
8:45 AM	0	0	0	0	0	6	0	10	0	0	289	4	0	16	222	0	547		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	6	0	0	0	15	0	21
Lights	0	0	0	0	0	55	0	65	0	0	1,394	33	0	48	1,053	0	2,648
Mediums	0	0	0	0	0	0	0	1	0	0	25	1	0	1	54	0	82
Total	0	0	0	0	0	55	0	66	0	0	1,425	34	0	49	1,122	0	2,751

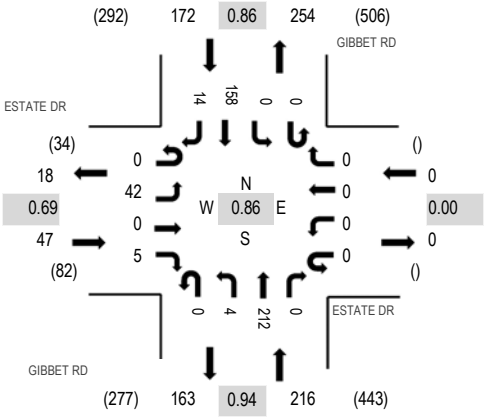
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.0%				0.4%				1.3%			0.8%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	1.3%	0.0%	0.8%
Peak Hour Factor		0.00				0.77				0.88				0.83			0.98
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.78	0.00	0.00	0.89	0.58	0.00	0.78	0.82	0.00	0.98

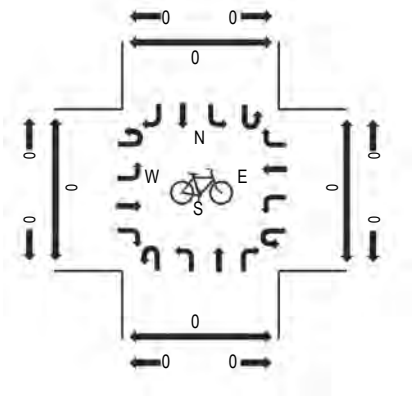
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 GIBBET RD & ESTATE DR AM
Date: Thursday, November 10, 2022
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

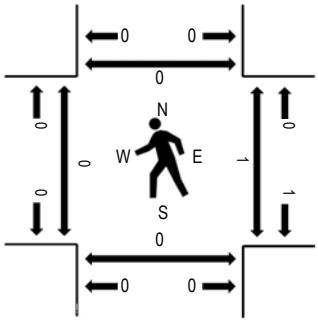
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ESTATE DR Eastbound				ESTATE DR Westbound				GIBBET RD Northbound				GIBBET RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	13	0	0	0	0	0	0	0	0	59	0	0	0	22	2	96	428	0	0	0	0
7:15 AM	0	6	0	1	0	0	0	0	0	2	63	0	0	0	25	3	100	430	0	0	0	0
7:30 AM	0	8	0	2	0	0	0	0	0	1	64	0	0	0	27	3	105	431	0	0	0	0
7:45 AM	0	17	0	1	0	0	0	0	0	3	65	0	0	0	37	4	127	435	0	0	0	0
8:00 AM	0	9	0	2	0	0	0	0	0	0	46	0	0	0	38	3	98	389	0	0	0	0
8:15 AM	0	10	0	1	0	0	0	0	0	1	49	0	0	0	38	2	101		0	1	0	0
8:30 AM	0	6	0	1	0	0	0	0	0	0	52	0	0	0	45	5	109		0	0	0	0
8:45 AM	0	4	0	1	0	0	0	0	0	3	35	0	0	0	36	2	81		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	40	0	4	0	0	0	0	0	4	208	0	0	0	152	11	419
Mediums	0	1	0	1	0	0	0	0	0	0	4	0	0	0	6	3	15
Total	0	42	0	5	0	0	0	0	0	4	212	0	0	0	158	14	435

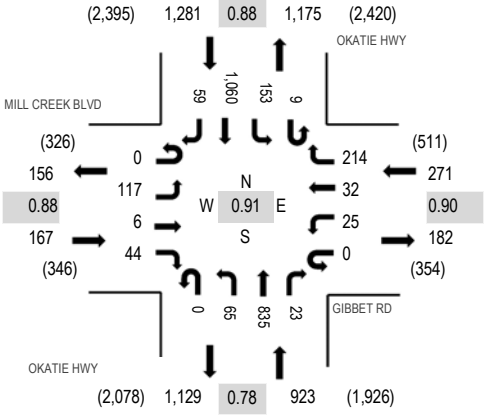
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		2.1%				0.0%				0.0%				0.0%			0.2%
Heavy Vehicle %	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor		0.69				0.00				0.94				0.86			0.86
Peak Hour Factor	0.00	0.65	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.50	0.97	0.00	0.00	0.00	0.88	0.70	0.86

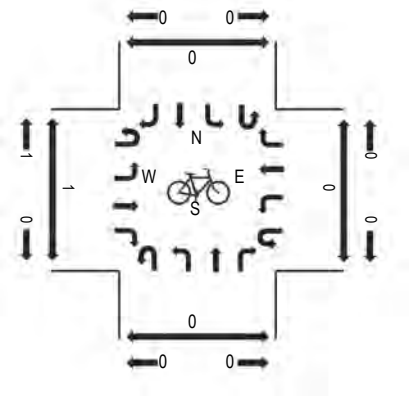
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 OKATIE HWY & GIBBET RD PM
Date: Thursday, November 10, 2022
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

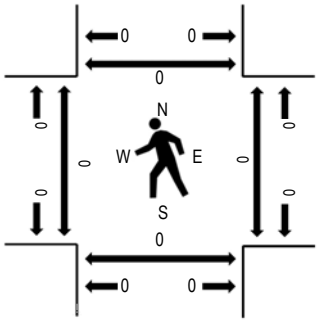
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MILL CREEK BLVD Eastbound				GIBBET RD Westbound				OKATIE HWY Northbound				OKATIE HWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	35	2	10	0	5	9	53	0	15	314	3	3	35	207	18	709	2,578	0	0	0	0
4:15 PM	0	25	0	9	0	6	7	37	0	19	219	5	5	36	209	23	600	2,520	0	0	0	0
4:30 PM	0	32	2	10	0	3	7	51	0	13	216	5	3	29	265	9	645	2,642	0	0	0	0
4:45 PM	0	29	2	14	0	5	3	50	0	18	199	7	1	38	237	21	624	2,617	0	0	0	0
5:00 PM	0	32	2	8	0	8	14	54	0	17	197	5	2	37	269	6	651	2,600	0	0	0	0
5:15 PM	0	24	0	12	0	9	8	59	0	17	223	6	3	49	289	23	722		0	0	0	0
5:30 PM	0	40	2	8	0	4	9	46	0	17	191	11	5	46	224	17	620		0	0	0	0
5:45 PM	0	30	4	14	0	7	5	52	0	19	188	2	2	26	246	12	607		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	6	0	0	1	2	0	10
Lights	0	115	6	43	0	25	32	212	0	65	796	23	8	152	1,036	59	2,572
Mediums	0	2	0	1	0	0	0	1	0	0	33	0	1	0	22	0	60
Total	0	117	6	44	0	25	32	214	0	65	835	23	9	153	1,060	59	2,642

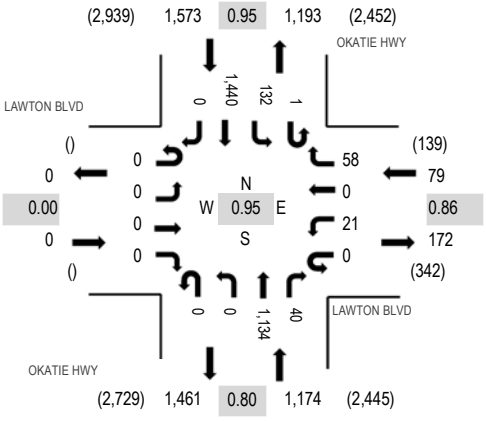
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.4%				0.7%				0.2%			0.4%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.7%	0.0%	0.0%	0.7%	0.2%	0.0%	0.4%
Peak Hour Factor		0.88				0.90				0.78				0.88			0.91
Peak Hour Factor	0.00	0.79	0.50	0.79	0.00	0.78	0.64	0.91	0.00	0.92	0.75	0.66	0.60	0.87	0.92	0.77	0.91

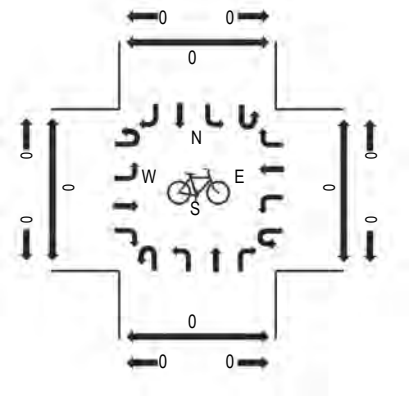
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 OKATIE HWY & LAWTON BLVD PM
Date: Thursday, November 10, 2022
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

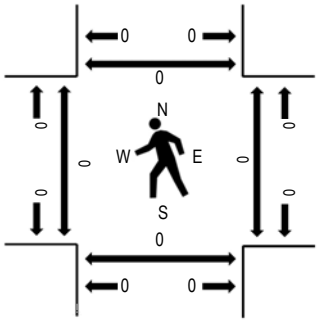
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	LAWTON BLVD Eastbound				LAWTON BLVD Westbound				OKATIE HWY Northbound				OKATIE HWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	7	0	8	0	0	380	22	0	30	290	0	737	2,729	0	0	0	0
4:15 PM	0	0	0	0	0	2	0	13	1	0	301	7	0	28	314	0	666	2,707	0	0	0	0
4:30 PM	0	0	0	0	0	5	0	11	0	0	286	15	0	31	322	0	670	2,786	0	0	0	0
4:45 PM	0	0	0	0	0	3	0	12	0	0	268	10	0	26	337	0	656	2,826	0	0	0	0
5:00 PM	0	0	0	0	0	7	0	13	0	0	279	15	0	36	365	0	715	2,794	0	0	0	0
5:15 PM	0	0	0	0	0	9	0	14	0	0	298	10	1	34	379	0	745		0	0	0	0
5:30 PM	0	0	0	0	0	2	0	19	0	0	289	5	0	36	359	0	710		0	0	0	0
5:45 PM	0	0	0	0	0	8	0	6	0	0	254	5	0	32	319	0	624		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	8	0	0	0	1	0	9
Lights	0	0	0	0	0	21	0	58	0	0	1,102	40	1	132	1,420	0	2,774
Mediums	0	0	0	0	0	0	0	0	0	0	24	0	0	0	19	0	43
Total	0	0	0	0	0	21	0	58	0	0	1,134	40	1	132	1,440	0	2,826

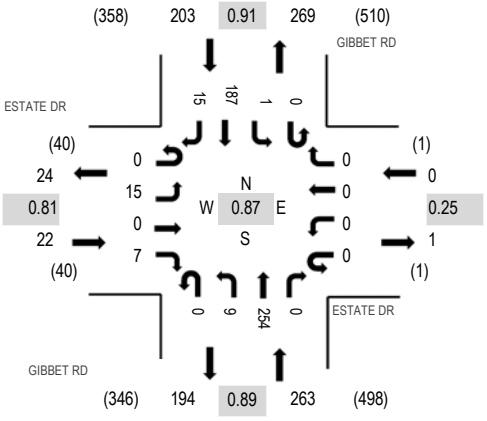
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.0%				0.7%				0.1%			0.3%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.1%	0.0%	0.3%
Peak Hour Factor		0.00				0.86				0.80				0.95			0.95
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.76	0.25	0.00	0.81	0.61	0.25	0.96	0.95	0.00	0.95

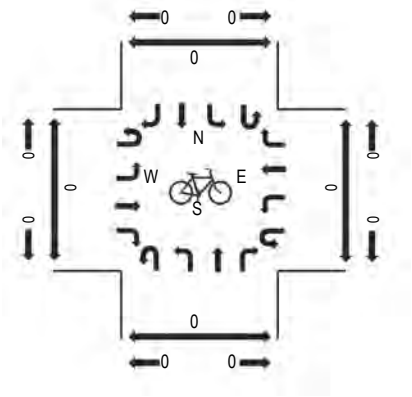
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 GIBBET RD & ESTATE DR PM
Date: Thursday, November 10, 2022
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

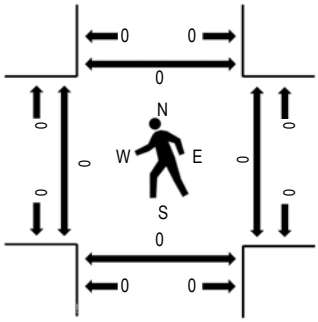
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ESTATE DR Eastbound				ESTATE DR Westbound				GIBBET RD Northbound				GIBBET RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	2	0	2	0	0	0	0	0	1	63	0	0	0	39	2	109	415	0	0	0	0
4:15 PM	0	4	0	0	0	0	0	0	0	4	45	0	0	0	40	2	95	427	0	0	0	0
4:30 PM	0	5	0	3	0	0	0	0	0	0	54	0	0	0	33	3	98	472	0	0	0	0
4:45 PM	0	4	0	2	0	0	0	0	0	3	57	0	0	0	42	5	113	488	0	0	0	0
5:00 PM	0	4	0	0	0	0	0	0	0	4	69	0	0	0	40	4	121	482	0	0	0	0
5:15 PM	0	6	0	2	0	0	0	0	0	0	76	0	0	0	51	5	140		0	0	0	0
5:30 PM	0	1	0	3	0	0	0	0	0	2	52	0	0	1	54	1	114		0	0	0	0
5:45 PM	0	1	0	1	0	0	0	1	0	2	66	0	0	0	34	2	107		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Lights	0	15	0	7	0	0	0	0	0	9	253	0	0	1	187	15	487
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	15	0	7	0	0	0	0	0	9	254	0	0	1	187	15	488

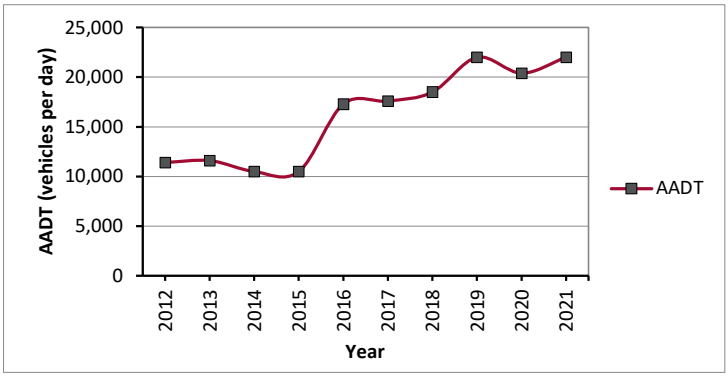
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.0%				0.4%				0.0%			0.2%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Peak Hour Factor		0.81				0.25				0.89				0.91			0.87
Peak Hour Factor	0.00	0.79	0.00	0.58	0.00	0.00	0.00	0.25	0.00	0.69	0.87	0.00	0.00	0.25	0.87	0.85	0.87

Appendix E – Historical Growth Rate Data

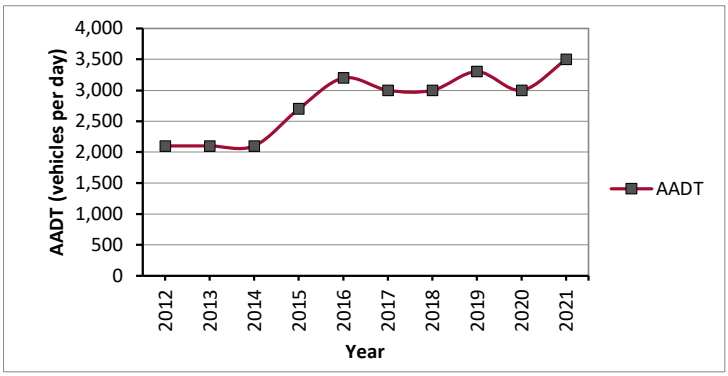
Annual Average Daily Traffic (AADT) from the South Carolina Department of Transportation (SCDOT)

Station	070165
Route	SC 170
Location	SC 46 (OKATIE HWY) TO US 278 (W FORDING ISLAND RD)
2012	11,400
2013	11,600
2014	10,500
2015	10,500
2016	17,300
2017	17,600
2018	18,500
2019	22,000
2020	20,400
2021	22,000



Annual Growth for Last Five (5) Years --- SC 170 is 4.6%
Annual Growth for Last Ten (10) Years --- SC 170 is 6.8%

Station	070325
Route	S- 34
Location	SC 170 (OKATIE HWY) TO SC 46 (MAY RIVER RD)
2012	2,100
2013	2,100
2014	2,100
2015	2,700
2016	3,200
2017	3,000
2018	3,000
2019	3,300
2020	3,000
2021	3,500



Annual Growth for Last Five (5) Years --- S- 34 is 3.1%
Annual Growth for Last Ten (10) Years --- S- 34 is 5.2%

Appendix F – Capacity Analysis Worksheets

2022 EXISTING CONDITIONS

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	66	1425	34	49	1122
Future Vol, veh/h	55	66	1425	34	49	1122
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	3	2	6
Mvmt Flow	56	67	1454	35	50	1145

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2127	727	0	0	1454	0
Stage 1	1454	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 43	366	-	-	461	-
Stage 1	181	-	-	-	-	-
Stage 2	468	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 38	366	-	-	461	-
Mov Cap-2 Maneuver	159	-	-	-	-	-
Stage 1	181	-	-	-	-	-
Stage 2	417	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.2	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	159	366	461	-
HCM Lane V/C Ratio	-	-	0.353	0.184	0.108	-
HCM Control Delay (s)	-	-	39.5	17	13.8	-
HCM Lane LOS	-	-	E	C	B	-
HCM 95th %tile Q(veh)	-	-	1.5	0.7	0.4	-

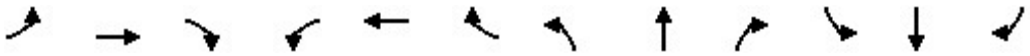
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Queues

Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road

2022 Existing AM



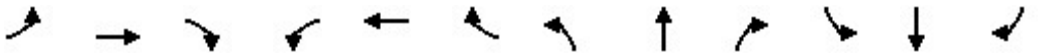
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	258	16	110	49	10	222	47	1011	21	171	1013	23
v/c Ratio	0.76	0.04	0.21	0.15	0.02	0.30	0.17	0.79	0.03	0.55	0.60	0.03
Control Delay	47.2	28.5	1.2	29.6	28.5	13.5	10.0	29.4	0.1	17.1	19.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.2	28.5	1.2	29.6	28.5	13.5	10.0	29.4	0.1	17.1	19.0	0.0
Queue Length 50th (ft)	129	7	0	21	4	56	10	251	0	41	230	0
Queue Length 95th (ft)	#283	26	3	59	19	128	26	371	0	80	316	0
Internal Link Dist (ft)		776			677			1441			2596	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	449	560	624	434	549	873	272	1925	952	442	2326	1117
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.03	0.18	0.11	0.02	0.25	0.17	0.53	0.02	0.39	0.44	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary — Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road — 2022 Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	15	106	47	10	213	45	971	20	164	972	22
Future Volume (veh/h)	248	15	106	47	10	213	45	971	20	164	972	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1781	1856	1841	1752	1885	1767	1856	1870	1811	1811	1870
Adj Flow Rate, veh/h	258	16	0	49	10	222	47	1011	21	171	1012	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	8	3	4	10	1	9	3	2	6	6	2
Cap, veh/h	354	438		403	431	514	278	1569	706	323	1664	
Arrive On Green	0.25	0.25	0.00	0.25	0.25	0.25	0.04	0.45	0.45	0.08	0.48	0.00
Sat Flow, veh/h	1158	1781	1572	1375	1752	1598	1682	3526	1585	1725	3441	1585
Grp Volume(v), veh/h	258	16	0	49	10	222	47	1011	21	171	1012	0
Grp Sat Flow(s),veh/h/ln	1158	1781	1572	1375	1752	1598	1682	1763	1585	1725	1721	1585
Q Serve(g_s), s	21.0	0.7	0.0	2.7	0.4	10.6	1.3	21.5	0.7	5.1	20.7	0.0
Cycle Q Clear(g_c), s	21.4	0.7	0.0	3.4	0.4	10.6	1.3	21.5	0.7	5.1	20.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	354	438		403	431	514	278	1569	706	323	1664	
V/C Ratio(X)	0.73	0.04		0.12	0.02	0.43	0.17	0.64	0.03	0.53	0.61	
Avail Cap(c_a), veh/h	384	484		439	476	555	305	1652	743	480	2005	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.7	27.7	0.0	29.0	27.6	25.8	13.8	20.8	15.0	15.8	18.2	0.0
Incr Delay (d2), s/veh	6.3	0.0	0.0	0.1	0.0	0.6	0.3	0.9	0.0	1.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.3	0.0	0.9	0.2	3.8	0.5	8.0	0.2	1.8	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.0	27.7	0.0	29.1	27.6	26.4	14.1	21.7	15.1	17.2	18.7	0.0
LnGrp LOS	D	C		C	C	C	B	C	B	B	B	
Approach Vol, veh/h		274	A		281			1079			1183	A
Approach Delay, s/veh		41.2			26.9			21.2			18.4	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.2	50.7		31.5	10.5	54.5		31.5				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	45.2		26.2	5.1	56.2		26.2				
Max Q Clear Time (g_c+I1), s	7.1	23.5		23.4	3.3	22.7		12.6				
Green Ext Time (p_c), s	0.3	16.8		0.3	0.0	23.9		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		22.6	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	158	14	4	225	45	5
Future Vol, veh/h	158	14	4	225	45	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	4	21	2	2	5	20
Mvmt Flow	184	16	5	262	52	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	200	0	464	192
Stage 1	-	-	-	-	192	-
Stage 2	-	-	-	-	272	-
Critical Hdwy	-	-	4.12	-	6.45	6.4
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.218	-	3.545	3.48
Pot Cap-1 Maneuver	-	-	1372	-	551	806
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	767	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1372	-	549	806
Mov Cap-2 Maneuver	-	-	-	-	549	-
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	764	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	11.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	549	806	-	-	1372	-
HCM Lane V/C Ratio	0.095	0.007	-	-	0.003	-
HCM Control Delay (s)	12.2	9.5	-	-	7.6	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-

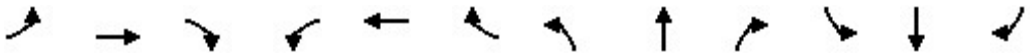
Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	58	1135	40	133	1440
Future Vol, veh/h	21	58	1135	40	133	1440
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	22	61	1195	42	140	1516

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2233	598	0	0	1195	0
Stage 1	1195	-	-	-	-	-
Stage 2	1038	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	36	445	-	-	580	-
Stage 1	250	-	-	-	-	-
Stage 2	302	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	27	445	-	-	580	-
Mov Cap-2 Maneuver	160	-	-	-	-	-
Stage 1	250	-	-	-	-	-
Stage 2	229	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.8	0	1.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	160	445	580	-
HCM Lane V/C Ratio	-	-	0.138	0.137	0.241	-
HCM Control Delay (s)	-	-	31.1	14.4	13.2	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	0.5	0.5	0.9	-



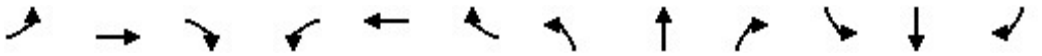
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	129	8	48	27	35	235	71	918	27	197	1165	65
v/c Ratio	0.53	0.02	0.10	0.11	0.10	0.39	0.23	0.64	0.03	0.45	0.58	0.07
Control Delay	38.8	28.4	0.4	29.4	28.9	14.1	7.4	19.4	0.1	9.6	15.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.8	28.4	0.4	29.4	28.9	14.1	7.4	19.4	0.1	9.6	15.6	0.1
Queue Length 50th (ft)	53	3	0	10	13	50	11	172	0	32	215	0
Queue Length 95th (ft)	#130	16	0	35	42	118	24	249	0	58	288	0
Internal Link Dist (ft)		776			677			1441			2596	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	283	387	507	290	387	783	309	2066	1041	639	2607	1203
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.02	0.09	0.09	0.09	0.30	0.23	0.44	0.03	0.31	0.45	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary — Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road — 2022 Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	7	44	25	32	214	65	835	25	179	1060	59
Future Volume (veh/h)	117	7	44	25	32	214	65	835	25	179	1060	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1826	1870	1885	1870	1870
Adj Flow Rate, veh/h	129	8	0	27	35	235	71	918	27	197	1165	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	1	2	5	2	1	2	2
Cap, veh/h	241	292		300	292	377	315	1719	785	417	1873	
Arrive On Green	0.16	0.16	0.00	0.16	0.16	0.16	0.05	0.50	0.50	0.08	0.53	0.00
Sat Flow, veh/h	1109	1870	1585	1407	1870	1598	1781	3469	1585	1795	3554	1585
Grp Volume(v), veh/h	129	8	0	27	35	235	71	918	27	197	1165	0
Grp Sat Flow(s),veh/h/ln	1109	1870	1585	1407	1870	1598	1781	1735	1585	1795	1777	1585
Q Serve(g_s), s	9.5	0.3	0.0	1.4	1.3	11.0	1.5	15.2	0.7	4.4	19.3	0.0
Cycle Q Clear(g_c), s	10.8	0.3	0.0	1.7	1.3	11.0	1.5	15.2	0.7	4.4	19.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	292		300	292	377	315	1719	785	417	1873	
V/C Ratio(X)	0.53	0.03		0.09	0.12	0.62	0.23	0.53	0.03	0.47	0.62	
Avail Cap(c_a), veh/h	243	295		303	295	380	337	1719	785	619	2089	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.0	29.9	0.0	30.7	30.4	28.7	10.5	14.5	10.8	10.5	13.9	0.0
Incr Delay (d2), s/veh	2.2	0.0	0.0	0.1	0.2	3.1	0.4	0.4	0.0	0.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.1	0.0	0.5	0.6	4.2	0.5	5.1	0.2	1.4	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.3	30.0	0.0	30.8	30.6	31.8	10.8	14.9	10.9	11.4	14.5	0.0
LnGrp LOS	D	C		C	C	C	B	B	B	B	B	
Approach Vol, veh/h		137	A		297			1016			1362	A
Approach Delay, s/veh		36.9			31.6			14.5			14.0	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.6	49.3		20.9	10.9	51.9		20.9				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	38.2		13.2	5.1	49.2		13.2				
Max Q Clear Time (g_c+I1), s	6.4	17.2		12.8	3.5	21.3		13.0				
Green Ext Time (p_c), s	0.4	15.3		0.0	0.0	22.8		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		17.2	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	187	15	9	256	15	7
Future Vol, veh/h	187	15	9	256	15	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	0	2	2
Mvmt Flow	215	17	10	294	17	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	232	0	538	224
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	314	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1336	-	504	815
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	741	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1336	-	499	815
Mov Cap-2 Maneuver	-	-	-	-	499	-
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	734	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	499	815	-	-	1336	-
HCM Lane V/C Ratio	0.035	0.01	-	-	0.008	-
HCM Control Delay (s)	12.5	9.5	-	-	7.7	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-

2025 NO BUILD CONDITIONS

Intersection	
Int Delay, s/veh	3.3

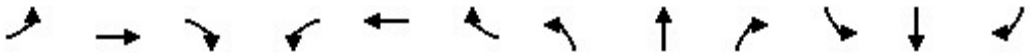
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	81	1806	42	60	1450
Future Vol, veh/h	67	81	1806	42	60	1450
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	3	2	6
Mvmt Flow	71	85	1901	44	63	1526

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2790	951	0	0	1901	0
Stage 1	1901	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 15	260	-	-	309	-
Stage 1	103	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 12	260	-	-	309	-
Mov Cap-2 Maneuver	91	-	-	-	-	-
Stage 1	103	-	-	-	-	-
Stage 2	288	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	69.1	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	91	260	309	-
HCM Lane V/C Ratio	-	-	0.775	0.328	0.204	-
HCM Control Delay (s)	-	-	121.8	25.5	19.6	-
HCM Lane LOS	-	-	F	D	C	-
HCM 95th %tile Q(veh)	-	-	4	1.4	0.8	-

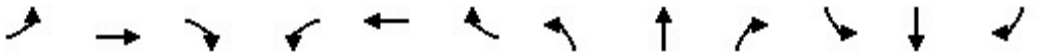
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	320	27	137	61	21	329	58	1261	26	274	1272	28
v/c Ratio	0.94	0.06	0.26	0.19	0.05	0.43	0.30	0.90	0.04	0.88	0.72	0.03
Control Delay	77.0	32.9	3.1	35.1	32.8	18.7	12.3	40.3	0.1	55.8	23.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.0	32.9	3.1	35.1	32.8	18.7	12.3	40.3	0.1	55.8	23.0	0.1
Queue Length 50th (ft)	224	15	0	34	12	130	15	423	0	136	354	0
Queue Length 95th (ft)	#401	38	21	72	32	207	31	523	0	#285	440	0
Internal Link Dist (ft)		776			677			1441			2596	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	348	437	528	336	429	777	194	1505	784	327	1818	899
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.06	0.26	0.18	0.05	0.42	0.30	0.84	0.03	0.84	0.70	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	304	26	130	58	20	313	55	1198	25	260	1208	27
Future Volume (veh/h)	304	26	130	58	20	313	55	1198	25	260	1208	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1781	1856	1841	1752	1885	1767	1856	1870	1811	1811	1870
Adj Flow Rate, veh/h	320	27	0	61	21	329	58	1261	26	274	1272	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	8	3	4	10	1	9	3	2	6	6	2
Cap, veh/h	315	440		388	433	572	219	1516	682	306	1729	
Arrive On Green	0.25	0.25	0.00	0.25	0.25	0.25	0.04	0.43	0.43	0.11	0.50	0.00
Sat Flow, veh/h	1039	1781	1572	1361	1752	1598	1682	3526	1585	1725	3441	1585
Grp Volume(v), veh/h	320	27	0	61	21	329	58	1261	26	274	1272	0
Grp Sat Flow(s),veh/h/ln	1039	1781	1572	1361	1752	1598	1682	1763	1585	1725	1721	1585
Q Serve(g_s), s	25.2	1.2	0.0	3.8	1.0	17.7	1.7	33.7	1.0	9.4	31.0	0.0
Cycle Q Clear(g_c), s	26.2	1.2	0.0	5.0	1.0	17.7	1.7	33.7	1.0	9.4	31.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	440		388	433	572	219	1516	682	306	1729	
V/C Ratio(X)	1.02	0.06		0.16	0.05	0.58	0.26	0.83	0.04	0.89	0.74	
Avail Cap(c_a), veh/h	315	440		388	433	572	235	1516	682	376	1822	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.2	30.6	0.0	32.5	30.5	27.5	16.8	26.8	17.5	22.7	20.8	0.0
Incr Delay (d2), s/veh	54.9	0.1	0.0	0.2	0.0	1.4	0.6	4.2	0.0	20.1	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	0.5	0.0	1.2	0.4	6.6	0.6	13.6	0.3	5.0	11.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.1	30.6	0.0	32.7	30.5	29.0	17.5	31.0	17.6	42.9	22.4	0.0
LnGrp LOS	F	C		C	C	C	B	C	B	D	C	
Approach Vol, veh/h		347	A		411			1345			1546	A
Approach Delay, s/veh		92.8			29.6			30.2			26.0	
Approach LOS		F			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.7	53.4		34.0	11.0	61.1		34.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	45.2		26.2	5.1	56.2		26.2				
Max Q Clear Time (g_c+I1), s	11.4	35.7		28.2	3.7	33.0		19.7				
Green Ext Time (p_c), s	0.4	8.8		0.0	0.0	20.4		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		34.3	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	194	84	5	276	115	6
Future Vol, veh/h	194	84	5	276	115	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	21	2	2	5	20
Mvmt Flow	216	93	6	307	128	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	309	0	535	216
Stage 1	-	-	-	-	216	-
Stage 2	-	-	-	-	319	-
Critical Hdwy	-	-	4.12	-	6.45	6.4
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.218	-	3.545	3.48
Pot Cap-1 Maneuver	-	-	1252	-	501	781
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	730	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1252	-	498	781
Mov Cap-2 Maneuver	-	-	-	-	498	-
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	726	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	498	781	-	-	1252	-
HCM Lane V/C Ratio	0.257	0.009	-	-	0.004	-
HCM Control Delay (s)	14.7	9.6	-	-	7.9	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	1	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.6

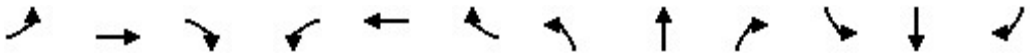
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	71	1439	49	163	1830
Future Vol, veh/h	26	71	1439	49	163	1830
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	27	75	1515	52	172	1926

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2822	758	0	0	1515	0
Stage 1	1515	-	-	-	-	-
Stage 2	1307	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 14	350	-	-	437	-
Stage 1	168	-	-	-	-	-
Stage 2	217	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 8	350	-	-	437	-
Mov Cap-2 Maneuver	96	-	-	-	-	-
Stage 1	168	-	-	-	-	-
Stage 2	132	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.5	0	1.5
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	96	350	437	-
HCM Lane V/C Ratio	-	-	0.285	0.214	0.393	-
HCM Control Delay (s)	-	-	56.8	18.1	18.5	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	1.8	-

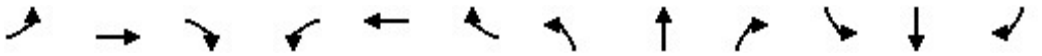
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	157	18	59	34	49	334	88	1132	34	297	1444	79
v/c Ratio	0.74	0.06	0.14	0.16	0.17	0.48	0.42	0.82	0.04	0.77	0.76	0.09
Control Delay	58.5	33.3	0.6	34.9	34.4	17.8	12.7	27.6	0.1	30.3	18.7	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.5	33.3	0.6	34.9	34.4	17.8	12.7	27.6	0.1	30.3	18.7	0.4
Queue Length 50th (ft)	81	8	0	16	23	104	14	270	0	85	310	0
Queue Length 95th (ft)	#190	28	0	45	58	188	31	364	0	176	395	3
Internal Link Dist (ft)		776			677			1441			2596	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	225	310	451	231	310	763	208	1659	880	466	2199	1037
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.06	0.13	0.15	0.16	0.44	0.42	0.68	0.04	0.64	0.66	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	16	54	31	45	304	80	1030	31	270	1314	72
Future Volume (veh/h)	143	16	54	31	45	304	80	1030	31	270	1314	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1826	1870	1885	1870	1870
Adj Flow Rate, veh/h	157	18	0	34	49	334	88	1132	34	297	1444	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	1	2	5	2	1	2	2
Cap, veh/h	209	281		280	281	414	257	1682	769	392	1932	
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.15	0.05	0.48	0.48	0.11	0.54	0.00
Sat Flow, veh/h	1000	1870	1585	1395	1870	1598	1781	3469	1585	1795	3554	1585
Grp Volume(v), veh/h	157	18	0	34	49	334	88	1132	34	297	1444	0
Grp Sat Flow(s),veh/h/ln	1000	1870	1585	1395	1870	1598	1781	1735	1585	1795	1777	1585
Q Serve(g_s), s	11.2	0.7	0.0	1.9	2.0	13.2	1.9	21.9	1.0	7.1	27.5	0.0
Cycle Q Clear(g_c), s	13.2	0.7	0.0	2.6	2.0	13.2	1.9	21.9	1.0	7.1	27.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	281		280	281	414	257	1682	769	392	1932	
V/C Ratio(X)	0.75	0.06		0.12	0.17	0.81	0.34	0.67	0.04	0.76	0.75	
Avail Cap(c_a), veh/h	209	281		280	281	414	271	1682	769	525	1988	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.4	32.1	0.0	33.2	32.6	30.5	13.3	17.3	11.9	15.0	15.4	0.0
Incr Delay (d2), s/veh	14.0	0.1	0.0	0.2	0.3	11.2	0.8	1.1	0.0	4.4	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.3	0.0	0.6	0.9	7.4	0.6	7.6	0.3	2.6	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.5	32.2	0.0	33.4	32.9	41.7	14.0	18.4	11.9	19.4	17.0	0.0
LnGrp LOS	D	C		C	C	D	B	B	B	B	B	
Approach Vol, veh/h		175	A		417			1254			1741	A
Approach Delay, s/veh		51.3			40.0			18.0			17.4	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.5	50.4		21.0	11.3	55.6		21.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	38.2		13.2	5.1	49.2		13.2				
Max Q Clear Time (g_c+I1), s	9.1	23.9		15.2	3.9	29.5		15.2				
Green Ext Time (p_c), s	0.5	12.3		0.0	0.0	18.4		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	21.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	230	76	11	314	66	9
Future Vol, veh/h	230	76	11	314	66	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	0	2	2
Mvmt Flow	256	84	12	349	73	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	340	0	629	256
Stage 1	-	-	-	-	256	-
Stage 2	-	-	-	-	373	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1219	-	446	783
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	696	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1219	-	441	783
Mov Cap-2 Maneuver	-	-	-	-	441	-
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	688	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	441	783	-	-	1219	-
HCM Lane V/C Ratio	0.166	0.013	-	-	0.01	-
HCM Control Delay (s)	14.8	9.7	-	-	8	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-

2025 BUILD PHASE 1 CONDITIONS

Intersection	
Int Delay, s/veh	3.4

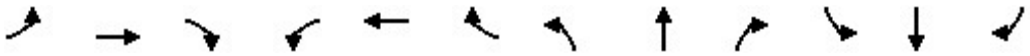
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	81	1832	42	60	1459
Future Vol, veh/h	67	81	1832	42	60	1459
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	3	2	6
Mvmt Flow	71	85	1928	44	63	1536

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2822	964	0	0	1928	0
Stage 1	1928	-	-	-	-	-
Stage 2	894	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 14	255	-	-	302	-
Stage 1	100	-	-	-	-	-
Stage 2	360	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 11	255	-	-	302	-
Mov Cap-2 Maneuver	89	-	-	-	-	-
Stage 1	100	-	-	-	-	-
Stage 2	285	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	72	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	89	255	302	-
HCM Lane V/C Ratio	-	-	0.792	0.334	0.209	-
HCM Control Delay (s)	-	-	127.6	26	20	-
HCM Lane LOS	-	-	F	D	C	-
HCM 95th %tile Q(veh)	-	-	4.1	1.4	0.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



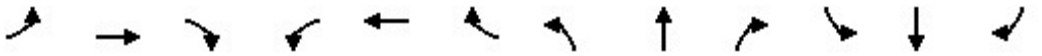
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	320	27	137	80	21	333	58	1264	28	283	1272	28
v/c Ratio	0.94	0.06	0.26	0.24	0.05	0.43	0.30	0.91	0.04	0.90	0.72	0.03
Control Delay	77.8	33.0	3.1	36.1	32.8	18.8	12.3	40.7	0.1	59.9	22.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.8	33.0	3.1	36.1	32.8	18.8	12.3	40.7	0.1	59.9	22.9	0.1
Queue Length 50th (ft)	224	15	0	46	12	132	15	424	0	145	354	0
Queue Length 95th (ft)	#401	38	21	90	32	210	31	524	0	#301	440	0
Internal Link Dist (ft)		776			302			1441			1136	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	346	435	526	335	427	775	194	1497	781	325	1809	895
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.06	0.26	0.24	0.05	0.43	0.30	0.84	0.04	0.87	0.70	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary — Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road — 2025 Phase 1 Build AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	304	26	130	76	20	316	55	1201	27	269	1208	27
Future Volume (veh/h)	304	26	130	76	20	316	55	1201	27	269	1208	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1781	1856	1841	1752	1885	1767	1856	1870	1811	1811	1870
Adj Flow Rate, veh/h	320	27	0	80	21	333	58	1264	28	283	1272	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	8	3	4	10	1	9	3	2	6	6	2
Cap, veh/h	314	440		388	433	585	219	1487	669	314	1729	
Arrive On Green	0.25	0.25	0.00	0.25	0.25	0.25	0.04	0.42	0.42	0.12	0.50	0.00
Sat Flow, veh/h	1035	1781	1572	1361	1752	1598	1682	3526	1585	1725	3441	1585
Grp Volume(v), veh/h	320	27	0	80	21	333	58	1264	28	283	1272	0
Grp Sat Flow(s),veh/h/ln	1035	1781	1572	1361	1752	1598	1682	1763	1585	1725	1721	1585
Q Serve(g_s), s	25.2	1.2	0.0	5.1	1.0	17.7	1.7	34.3	1.1	10.3	31.0	0.0
Cycle Q Clear(g_c), s	26.2	1.2	0.0	6.3	1.0	17.7	1.7	34.3	1.1	10.3	31.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	440		388	433	585	219	1487	669	314	1729	
V/C Ratio(X)	1.02	0.06		0.21	0.05	0.57	0.26	0.85	0.04	0.90	0.74	
Avail Cap(c_a), veh/h	314	440		388	433	585	235	1502	675	370	1822	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.2	30.6	0.0	33.0	30.5	26.9	16.8	27.7	18.1	24.3	20.8	0.0
Incr Delay (d2), s/veh	55.7	0.1	0.0	0.3	0.0	1.3	0.6	4.9	0.0	21.9	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.3	0.5	0.0	1.6	0.4	6.6	0.6	14.1	0.4	5.6	11.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.9	30.6	0.0	33.2	30.5	28.2	17.5	32.6	18.1	46.2	22.4	0.0
LnGrp LOS	F	C		C	C	C	B	C	B	D	C	
Approach Vol, veh/h		347			434			1350			1555	
Approach Delay, s/veh		93.6			29.3			31.6			26.7	
Approach LOS		F			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.6	52.6		34.0	11.0	61.1		34.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	45.2		26.2	5.1	56.2		26.2				
Max Q Clear Time (g_c+I1), s	12.3	36.3		28.2	3.7	33.0		19.7				
Green Ext Time (p_c), s	0.3	8.3		0.0	0.0	20.4		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		35.1	
HCM 6th LOS		D	

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗		↰		↰	↳		↰	↳	
Traffic Vol, veh/h	4	194	84	5	277	1	115	1	6	5	3	3
Future Vol, veh/h	4	194	84	5	277	1	115	1	6	5	3	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	0	-	75	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	4	21	2	2	2	5	2	20	2	2	2
Mvmt Flow	4	216	93	6	308	1	128	1	7	6	3	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	309	0	0	309	0	0	548	545	216	596	638	309
Stage 1	-	-	-	-	-	-	224	224	-	321	321	-
Stage 2	-	-	-	-	-	-	324	321	-	275	317	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.15	6.52	6.4	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.545	4.018	3.48	3.518	4.018	3.318
Pot Cap-1 Maneuver	1252	-	-	1252	-	-	443	446	781	415	394	731
Stage 1	-	-	-	-	-	-	772	718	-	691	652	-
Stage 2	-	-	-	-	-	-	682	652	-	731	654	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1252	-	-	1252	-	-	435	442	781	408	390	731
Mov Cap-2 Maneuver	-	-	-	-	-	-	435	442	-	408	390	-
Stage 1	-	-	-	-	-	-	769	715	-	688	648	-
Stage 2	-	-	-	-	-	-	671	648	-	721	651	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	16.3	13
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	435	704	1252	-	-	1252	-	-	408	509
HCM Lane V/C Ratio	0.294	0.011	0.004	-	-	0.004	-	-	0.014	0.013
HCM Control Delay (s)	16.7	10.2	7.9	-	-	7.9	0	-	13.9	12.2
HCM Lane LOS	C	B	A	-	-	A	A	-	B	B
HCM 95th %tile Q(veh)	1.2	0	0	-	-	0	-	-	0	0

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	23	1851	10	0	1526
Future Vol, veh/h	0	23	1851	10	0	1526
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	6
Mvmt Flow	0	26	2057	11	0	1696

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1034	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	229	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	229	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	229	-
HCM Lane V/C Ratio	-	-	0.112	-
HCM Control Delay (s)	-	-	22.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	282	394	1	0	18
Future Vol, veh/h	0	282	394	1	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	5	2	2	2	2
Mvmt Flow	0	313	438	1	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	439
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	618
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	618
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	618
HCM Lane V/C Ratio	-	-	-	0.032
HCM Control Delay (s)	-	-	-	11
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	71	1455	49	163	1856
Future Vol, veh/h	26	71	1455	49	163	1856
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	27	75	1532	52	172	1954

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2853	766	0	0	1532	0
Stage 1	1532	-	-	-	-	-
Stage 2	1321	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 13	345	-	-	430	-
Stage 1	164	-	-	-	-	-
Stage 2	214	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 8	345	-	-	430	-
Mov Cap-2 Maneuver	93	-	-	-	-	-
Stage 1	164	-	-	-	-	-
Stage 2	128	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.2	0	1.5
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	93	345	430	-
HCM Lane V/C Ratio	-	-	0.294	0.217	0.399	-
HCM Control Delay (s)	-	-	59.1	18.3	18.8	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	1.9	-

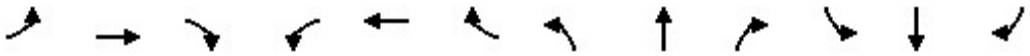
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Queues

Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road

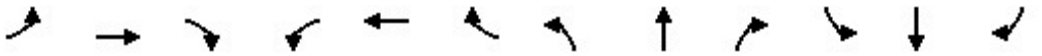
2025 Phase 1 Build PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	157	18	59	46	49	336	88	1144	43	325	1444	79
v/c Ratio	0.75	0.06	0.14	0.21	0.17	0.47	0.42	0.84	0.06	0.81	0.76	0.09
Control Delay	59.7	33.5	0.6	36.1	34.7	17.5	12.5	29.3	0.2	36.1	18.4	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	33.5	0.6	36.1	34.7	17.5	12.5	29.3	0.2	36.1	18.4	0.4
Queue Length 50th (ft)	84	9	0	23	24	105	14	286	0	107	310	0
Queue Length 95th (ft)	#190	28	0	56	58	189	31	370	0	#236	395	3
Internal Link Dist (ft)		776			302			1441			1136	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	222	307	449	228	307	756	209	1640	872	455	2174	1027
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.06	0.13	0.20	0.16	0.44	0.42	0.70	0.05	0.71	0.66	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	16	54	42	45	306	80	1041	39	296	1314	72
Future Volume (veh/h)	143	16	54	42	45	306	80	1041	39	296	1314	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1826	1870	1885	1870	1870
Adj Flow Rate, veh/h	157	18	0	46	49	336	88	1144	43	325	1444	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	1	2	5	2	1	2	2
Cap, veh/h	209	281		280	281	429	257	1649	753	398	1932	
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.15	0.05	0.48	0.48	0.12	0.54	0.00
Sat Flow, veh/h	998	1870	1585	1395	1870	1598	1781	3469	1585	1795	3554	1585
Grp Volume(v), veh/h	157	18	0	46	49	336	88	1144	43	325	1444	0
Grp Sat Flow(s),veh/h/ln	998	1870	1585	1395	1870	1598	1781	1735	1585	1795	1777	1585
Q Serve(g_s), s	11.2	0.7	0.0	2.6	2.0	13.2	1.9	22.7	1.3	7.9	27.5	0.0
Cycle Q Clear(g_c), s	13.2	0.7	0.0	3.3	2.0	13.2	1.9	22.7	1.3	7.9	27.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	281		280	281	429	257	1649	753	398	1932	
V/C Ratio(X)	0.75	0.06		0.16	0.17	0.78	0.34	0.69	0.06	0.82	0.75	
Avail Cap(c_a), veh/h	209	281		280	281	429	271	1649	753	514	1988	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.4	32.1	0.0	33.5	32.6	29.8	13.3	18.1	12.4	15.7	15.4	0.0
Incr Delay (d2), s/veh	14.1	0.1	0.0	0.3	0.3	9.1	0.8	1.3	0.0	7.8	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.3	0.0	0.8	0.9	7.2	0.6	8.0	0.4	3.4	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.6	32.2	0.0	33.8	32.9	38.9	14.0	19.4	12.5	23.5	17.0	0.0
LnGrp LOS	D	C		C	C	D	B	B	B	C	B	
Approach Vol, veh/h		175			431			1275			1769	
Approach Delay, s/veh		51.4			37.6			18.8			18.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.3	49.6		21.0	11.3	55.6		21.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	38.2		13.2	5.1	49.2		13.2				
Max Q Clear Time (g_c+I1), s	9.9	24.7		15.2	3.9	29.5		15.2				
Green Ext Time (p_c), s	0.5	11.8		0.0	0.0	18.4		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	230	76	11	317	3	66	3	9	3	1	2
Future Vol, veh/h	13	230	76	11	317	3	66	3	9	3	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	0	-	75	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	0	2	2	2	2	2	2	2
Mvmt Flow	14	256	84	12	352	3	73	3	10	3	1	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	355	0	0	340	0	0	663	663	256	711	746	354
Stage 1	-	-	-	-	-	-	284	284	-	378	378	-
Stage 2	-	-	-	-	-	-	379	379	-	333	368	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1204	-	-	1219	-	-	375	382	783	348	342	690
Stage 1	-	-	-	-	-	-	723	676	-	644	615	-
Stage 2	-	-	-	-	-	-	643	615	-	681	621	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1204	-	-	1219	-	-	365	372	783	334	333	690
Mov Cap-2 Maneuver	-	-	-	-	-	-	365	372	-	334	333	-
Stage 1	-	-	-	-	-	-	712	666	-	634	608	-
Stage 2	-	-	-	-	-	-	632	608	-	659	612	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.3	16.3	14
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	365	614	1204	-	-	1219	-	-	334	508
HCM Lane V/C Ratio	0.201	0.022	0.012	-	-	0.01	-	-	0.01	0.007
HCM Control Delay (s)	17.3	11	8	-	-	8	0	-	15.9	12.1
HCM Lane LOS	C	B	A	-	-	A	A	-	C	B
HCM 95th %tile Q(veh)	0.7	0.1	0	-	-	0	-	-	0	0

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	14	1490	32	0	1882
Future Vol, veh/h	0	14	1490	32	0	1882
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	0	16	1656	36	0	2091

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	846	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	306	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	306	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	306	-
HCM Lane V/C Ratio	-	-	0.051	-
HCM Control Delay (s)	-	-	17.4	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	319	382	3	0	11
Future Vol, veh/h	0	319	382	3	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	1	1	2	2	2
Mvmt Flow	0	354	424	3	0	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	426
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	628
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	628
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	628
HCM Lane V/C Ratio	-	-	-	0.019
HCM Control Delay (s)	-	-	-	10.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

2027 NO-BUILD CONDITIONS

Intersection	
Int Delay, s/veh	5.8

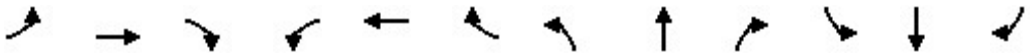
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	77	93	2059	48	69	1650
Future Vol, veh/h	77	93	2059	48	69	1650
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	3	2	6
Mvmt Flow	79	95	2101	49	70	1684

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3083	1051	0	0	2101	0
Stage 1	2101	-	-	-	-	-
Stage 2	982	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 9	223	-	-	258	-
Stage 1	80	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 7	223	-	-	258	-
Mov Cap-2 Maneuver	~ 71	-	-	-	-	-
Stage 1	80	-	-	-	-	-
Stage 2	235	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	126.7	0	1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	71	223	258	-
HCM Lane V/C Ratio	-	-	1.107	0.426	0.273	-
HCM Control Delay (s)	-	-	240.4	32.6	24.1	-
HCM Lane LOS	-	-	F	D	C	-
HCM 95th %tile Q(veh)	-	-	5.9	2	1.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	363	30	155	69	23	366	66	1427	29	301	1438	32
v/c Ratio	1.09	0.07	0.30	0.21	0.06	0.49	0.42	0.99	0.04	0.96	0.79	0.04
Control Delay	117.1	33.2	4.5	35.8	33.0	20.6	16.6	54.4	0.1	74.2	25.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	117.1	33.2	4.5	35.8	33.0	20.6	16.6	54.4	0.1	74.2	25.6	0.1
Queue Length 50th (ft)	~290	16	0	39	13	152	17	517	0	163	435	0
Queue Length 95th (ft)	#474	42	34	79	34	237	34	#685	0	#338	537	0
Internal Link Dist (ft)		776			677			1441			2596	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	332	418	513	321	411	754	159	1440	758	313	1814	897
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.07	0.30	0.21	0.06	0.49	0.42	0.99	0.04	0.96	0.79	0.04

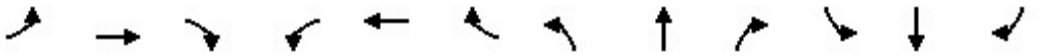
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary — Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road — 2027 Phase 2 No-Build AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	348	29	149	66	22	351	63	1370	28	289	1380	31
Future Volume (veh/h)	348	29	149	66	22	351	63	1370	28	289	1380	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1781	1856	1841	1752	1885	1767	1856	1870	1811	1811	1870
Adj Flow Rate, veh/h	362	30	0	69	23	366	66	1427	29	301	1438	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	8	3	4	10	1	9	3	2	6	6	2
Cap, veh/h	294	424		371	417	614	192	1449	651	322	1782	
Arrive On Green	0.24	0.24	0.00	0.24	0.24	0.24	0.04	0.41	0.41	0.15	0.52	0.00
Sat Flow, veh/h	1003	1781	1572	1358	1752	1598	1682	3526	1585	1725	3441	1585
Grp Volume(v), veh/h	362	30	0	69	23	366	66	1427	29	301	1438	0
Grp Sat Flow(s),veh/h/ln	1003	1781	1572	1358	1752	1598	1682	1763	1585	1725	1721	1585
Q Serve(g_s), s	25.1	1.4	0.0	4.6	1.1	20.1	2.0	44.1	1.2	14.5	38.1	0.0
Cycle Q Clear(g_c), s	26.2	1.4	0.0	6.0	1.1	20.1	2.0	44.1	1.2	14.5	38.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	424		371	417	614	192	1449	651	322	1782	
V/C Ratio(X)	1.23	0.07		0.19	0.06	0.60	0.34	0.99	0.04	0.94	0.81	
Avail Cap(c_a), veh/h	294	424		371	417	614	204	1449	651	322	1782	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.2	32.5	0.0	34.8	32.3	27.0	19.3	32.1	19.4	33.4	22.0	0.0
Incr Delay (d2), s/veh	130.0	0.1	0.0	0.2	0.1	1.6	1.1	20.1	0.0	33.9	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.8	0.6	0.0	1.5	0.5	7.5	0.7	21.1	0.4	6.6	14.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	175.2	32.5	0.0	35.0	32.4	28.6	20.4	52.1	19.5	67.3	24.9	0.0
LnGrp LOS	F	C		D	C	C	C	D	B	E	C	
Approach Vol, veh/h		392	A		458			1522			1739	A
Approach Delay, s/veh		164.3			29.8			50.2			32.2	
Approach LOS		F			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.0	53.0		34.0	11.2	64.8		34.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	45.2		26.2	5.1	56.2		26.2				
Max Q Clear Time (g_c+I1), s	16.5	46.1		28.2	4.0	40.1		22.1				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	15.1		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		51.2
HCM 6th LOS		D

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	221	87	6	316	123	7
Future Vol, veh/h	221	87	6	316	123	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	4	21	2	2	5	20
Mvmt Flow	257	101	7	367	143	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	358	0	638	257
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	381	-
Critical Hdwy	-	-	4.12	-	6.45	6.4
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.218	-	3.545	3.48
Pot Cap-1 Maneuver	-	-	1201	-	436	740
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	684	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1201	-	433	740
Mov Cap-2 Maneuver	-	-	-	-	433	-
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	679	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	17
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	433	740	-	-	1201	-
HCM Lane V/C Ratio	0.33	0.011	-	-	0.006	-
HCM Control Delay (s)	17.4	9.9	-	-	8	0
HCM Lane LOS	C	A	-	-	A	A
HCM 95th %tile Q(veh)	1.4	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.4

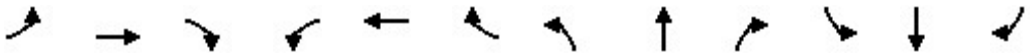
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	81	1641	56	187	2086
Future Vol, veh/h	29	81	1641	56	187	2086
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	31	85	1727	59	197	2196

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3219	864	0	0	1727	0
Stage 1	1727	-	-	-	-	-
Stage 2	1492	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 7	297	-	-	362	-
Stage 1	129	-	-	-	-	-
Stage 2	173	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 3	297	-	-	362	-
Mov Cap-2 Maneuver	62	-	-	-	-	-
Stage 1	129	-	-	-	-	-
Stage 2	79	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	45.1	0	2.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	62	297	362	-
HCM Lane V/C Ratio	-	-	0.492	0.287	0.544	-
HCM Control Delay (s)	-	-	109.8	21.9	26.2	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	1.9	1.2	3.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



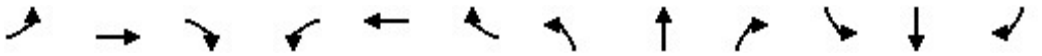
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	180	19	68	38	56	376	100	1295	38	332	1651	91
v/c Ratio	0.88	0.07	0.16	0.18	0.20	0.54	0.53	0.91	0.05	0.85	0.84	0.10
Control Delay	78.1	33.9	0.8	36.1	35.7	19.8	19.5	34.4	0.1	43.0	21.4	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.1	33.9	0.8	36.1	35.7	19.8	19.5	34.4	0.1	43.0	21.4	0.7
Queue Length 50th (ft)	102	9	0	19	28	132	16	347	0	125	393	0
Queue Length 95th (ft)	#227	29	0	48	64	219	52	#485	0	#266	502	7
Internal Link Dist (ft)		776			677			1441			2596	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	205	286	433	212	286	721	190	1526	828	419	2024	966
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.07	0.16	0.18	0.20	0.52	0.53	0.85	0.05	0.79	0.82	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary — Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road — 2027 Phase 2 No-Build PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	17	62	35	51	342	91	1178	35	302	1502	83
Future Volume (veh/h)	164	17	62	35	51	342	91	1178	35	302	1502	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1826	1870	1885	1870	1870
Adj Flow Rate, veh/h	180	19	0	38	56	376	100	1295	38	332	1651	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	1	2	5	2	1	2	2
Cap, veh/h	197	277		275	277	438	219	1643	751	373	1948	
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.15	0.05	0.47	0.47	0.13	0.55	0.00
Sat Flow, veh/h	956	1870	1585	1393	1870	1598	1781	3469	1585	1795	3554	1585
Grp Volume(v), veh/h	180	19	0	38	56	376	100	1295	38	332	1651	0
Grp Sat Flow(s),veh/h/ln	956	1870	1585	1393	1870	1598	1781	1735	1585	1795	1777	1585
Q Serve(g_s), s	10.9	0.8	0.0	2.2	2.3	13.2	2.1	28.0	1.2	8.7	35.0	0.0
Cycle Q Clear(g_c), s	13.2	0.8	0.0	2.9	2.3	13.2	2.1	28.0	1.2	8.7	35.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	277		275	277	438	219	1643	751	373	1948	
V/C Ratio(X)	0.91	0.07		0.14	0.20	0.86	0.46	0.79	0.05	0.89	0.85	
Avail Cap(c_a), veh/h	197	277		275	277	438	230	1643	751	471	1961	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.1	32.7	0.0	33.9	33.3	30.7	17.7	19.7	12.7	18.7	17.0	0.0
Incr Delay (d2), s/veh	40.5	0.1	0.0	0.2	0.4	15.6	1.5	2.7	0.0	15.8	3.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.4	0.0	0.7	1.0	9.0	1.0	10.2	0.4	4.4	12.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.6	32.8	0.0	34.2	33.7	46.4	19.2	22.4	12.7	34.5	20.7	0.0
LnGrp LOS	F	C		C	C	D	B	C	B	C	C	
Approach Vol, veh/h		199	A		470			1433			1983	A
Approach Delay, s/veh		76.9			43.9			21.9			23.0	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.1	50.0		21.0	11.5	56.7		21.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	38.2		13.2	5.1	49.2		13.2				
Max Q Clear Time (g_c+I1), s	10.7	30.0		15.2	4.1	37.0		15.2				
Green Ext Time (p_c), s	0.5	7.7		0.0	0.0	11.9		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		27.7	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	262	79	13	359	69	10
Future Vol, veh/h	262	79	13	359	69	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	0	2	2
Mvmt Flow	301	91	15	413	79	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	392	0	744	301
Stage 1	-	-	-	-	301	-
Stage 2	-	-	-	-	443	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1167	-	382	739
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	647	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1167	-	376	739
Mov Cap-2 Maneuver	-	-	-	-	376	-
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	636	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	16.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	376	739	-	-	1167	-
HCM Lane V/C Ratio	0.211	0.016	-	-	0.013	-
HCM Control Delay (s)	17.1	9.9	-	-	8.1	0
HCM Lane LOS	C	A	-	-	A	A
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-

2027 BUILD PHASE 2 CONDITIONS

Intersection	
Int Delay, s/veh	6.3

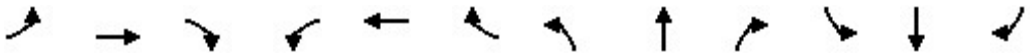
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	77	93	2106	48	69	1679
Future Vol, veh/h	77	93	2106	48	69	1679
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	3	2	6
Mvmt Flow	79	95	2149	49	70	1713

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3146	1075	0	0	2149	0
Stage 1	2149	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 8	215	-	-	247	-
Stage 1	~ 75	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 6	215	-	-	247	-
Mov Cap-2 Maneuver	~ 67	-	-	-	-	-
Stage 1	~ 75	-	-	-	-	-
Stage 2	228	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	141.2	0	1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	67	215	247	-
HCM Lane V/C Ratio	-	-	1.173	0.441	0.285	-
HCM Control Delay (s)	-	-	270.4	34.3	25.3	-
HCM Lane LOS	-	-	F	D	D	-
HCM 95th %tile Q(veh)	-	-	6.2	2.1	1.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

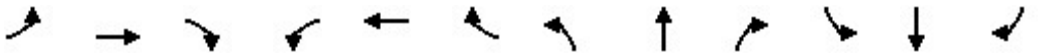


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	342	51	155	139	23	371	66	1443	35	367	1402	32
v/c Ratio	1.03	0.12	0.30	0.44	0.06	0.49	0.40	1.00	0.05	1.17	0.77	0.04
Control Delay	99.5	33.9	4.5	40.9	33.0	20.8	15.6	57.1	0.1	137.4	24.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.5	33.9	4.5	40.9	33.0	20.8	15.6	57.1	0.1	137.4	24.8	0.1
Queue Length 50th (ft)	~259	28	0	84	13	155	17	~529	0	~262	416	0
Queue Length 95th (ft)	#439	61	34	147	34	241	34	#697	0	#449	513	0
Internal Link Dist (ft)		776			302			1441			236	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	332	418	513	315	411	754	166	1440	758	313	1814	897
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.12	0.30	0.44	0.06	0.49	0.40	1.00	0.05	1.17	0.77	0.04

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	328	49	149	133	22	356	63	1385	34	352	1346	31
Future Volume (veh/h)	328	49	149	133	22	356	63	1385	34	352	1346	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1781	1856	1841	1752	1885	1767	1856	1870	1811	1811	1870
Adj Flow Rate, veh/h	342	51	0	139	23	371	66	1443	35	367	1402	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	8	3	4	10	1	9	3	2	6	6	2
Cap, veh/h	293	424		353	417	614	199	1449	651	319	1782	
Arrive On Green	0.24	0.24	0.00	0.24	0.24	0.24	0.04	0.41	0.41	0.15	0.52	0.00
Sat Flow, veh/h	998	1781	1572	1332	1752	1598	1682	3526	1585	1725	3441	1585
Grp Volume(v), veh/h	342	51	0	139	23	371	66	1443	35	367	1402	0
Grp Sat Flow(s),veh/h/ln	998	1781	1572	1332	1752	1598	1682	1763	1585	1725	1721	1585
Q Serve(g_s), s	25.1	2.5	0.0	10.0	1.1	20.5	2.0	44.9	1.5	16.1	36.5	0.0
Cycle Q Clear(g_c), s	26.2	2.5	0.0	12.5	1.1	20.5	2.0	44.9	1.5	16.1	36.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	424		353	417	614	199	1449	651	319	1782	
V/C Ratio(X)	1.17	0.12		0.39	0.06	0.60	0.33	1.00	0.05	1.15	0.79	
Avail Cap(c_a), veh/h	293	424		353	417	614	211	1449	651	319	1782	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.3	32.9	0.0	37.8	32.3	27.1	18.6	32.3	19.5	35.1	21.6	0.0
Incr Delay (d2), s/veh	105.7	0.1	0.0	0.7	0.1	1.7	1.0	22.7	0.0	97.8	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.8	1.1	0.0	3.2	0.5	7.7	0.7	21.9	0.5	12.5	13.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	151.0	33.0	0.0	38.5	32.4	28.8	19.6	55.0	19.6	133.0	24.1	0.0
LnGrp LOS	F	C		D	C	C	B	D	B	F	C	
Approach Vol, veh/h		393			533			1544			1769	
Approach Delay, s/veh		135.6			31.5			52.7			46.7	
Approach LOS		F			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.0	53.0		34.0	11.2	64.8		34.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	45.2		26.2	5.1	56.2		26.2				
Max Q Clear Time (g_c+I1), s	18.1	46.9		28.2	4.0	38.5		22.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	16.4		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		55.2	
HCM 6th LOS		E	

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗		↰		↰	↱		↰	↱	
Traffic Vol, veh/h	76	214	87	6	319	3	123	3	7	16	5	5
Future Vol, veh/h	76	214	87	6	319	3	123	3	7	16	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	0	-	75	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	4	21	2	2	2	5	2	20	2	2	2
Mvmt Flow	88	249	101	7	371	3	143	3	8	19	6	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	374	0	0	350	0	0	818	813	249	868	913	373
Stage 1	-	-	-	-	-	-	425	425	-	387	387	-
Stage 2	-	-	-	-	-	-	393	388	-	481	526	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.15	6.52	6.4	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.545	4.018	3.48	3.518	4.018	3.318
Pot Cap-1 Maneuver	1184	-	-	1209	-	-	291	313	748	273	273	673
Stage 1	-	-	-	-	-	-	601	586	-	637	610	-
Stage 2	-	-	-	-	-	-	626	609	-	566	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1184	-	-	1209	-	-	262	282	748	247	246	673
Mov Cap-2 Maneuver	-	-	-	-	-	-	262	282	-	247	246	-
Stage 1	-	-	-	-	-	-	545	531	-	577	606	-
Stage 2	-	-	-	-	-	-	610	605	-	504	479	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	0.1	32.5	18.7
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	262	500	1184	-	-	1209	-	-	247	360
HCM Lane V/C Ratio	0.546	0.023	0.075	-	-	0.006	-	-	0.075	0.032
HCM Control Delay (s)	34.1	12.4	8.3	-	-	8	0	-	20.8	15.3
HCM Lane LOS	D	B	A	-	-	A	A	-	C	C
HCM 95th %tile Q(veh)	3	0.1	0.2	-	-	0	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	23	2131	26	0	1756
Future Vol, veh/h	0	23	2131	26	0	1756
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	6
Mvmt Flow	0	26	2368	29	0	1951

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3359	1199	0	0	2397	0
Stage 1	2383	-	-	-	-	-
Stage 2	976	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	6	178	-	-	197	-
Stage 1	55	-	-	-	-	-
Stage 2	326	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	6	178	-	-	197	-
Mov Cap-2 Maneuver	51	-	-	-	-	-
Stage 1	55	-	-	-	-	-
Stage 2	326	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.6	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	178	197	-
HCM Lane V/C Ratio	-	-	-	0.144	-	-
HCM Control Delay (s)	-	-	0	28.6	0	-
HCM Lane LOS	-	-	A	D	A	-
HCM 95th %tile Q(veh)	-	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	377	431	16	0	80
Future Vol, veh/h	0	377	431	16	0	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	5	2	2	2	2
Mvmt Flow	0	419	479	18	0	89

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	488
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	580
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	580
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	580
HCM Lane V/C Ratio	-	-	-	0.153
HCM Control Delay (s)	-	-	-	12.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.5

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	100	2057	70	0	1729
Future Vol, veh/h	0	100	2057	70	0	1729
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	6
Mvmt Flow	0	111	2286	78	0	1921

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1182	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	182	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	182	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	51.7	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	182	-
HCM Lane V/C Ratio	-	-	0.611	-
HCM Control Delay (s)	-	-	51.7	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	3.4	-

Intersection	
Int Delay, s/veh	2.5

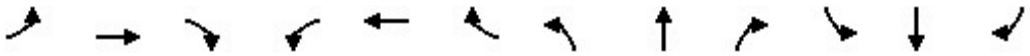
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	81	1669	56	187	2127
Future Vol, veh/h	29	81	1669	56	187	2127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	31	85	1757	59	197	2239

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3271	879	0	0	1757	0
Stage 1	1757	-	-	-	-	-
Stage 2	1514	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 7	291	-	-	352	-
Stage 1	124	-	-	-	-	-
Stage 2	168	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 3	291	-	-	352	-
Mov Cap-2 Maneuver	58	-	-	-	-	-
Stage 1	124	-	-	-	-	-
Stage 2	74	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	48.6	0	2.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	58	291	352	-
HCM Lane V/C Ratio	-	-	0.526	0.293	0.559	-
HCM Control Delay (s)	-	-	121.9	22.4	27.4	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	2.1	1.2	3.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	162	37	68	91	56	379	100	1316	47	408	1620	91
v/c Ratio	0.84	0.14	0.16	0.46	0.21	0.54	0.54	0.92	0.06	1.00	0.80	0.09
Control Delay	73.3	35.0	0.8	43.7	36.1	20.0	21.0	35.9	0.1	70.4	19.8	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.3	35.0	0.8	43.7	36.1	20.0	21.0	35.9	0.1	70.4	19.8	0.7
Queue Length 50th (ft)	91	19	0	48	28	134	16	357	0	~183	380	0
Queue Length 95th (ft)	#199	46	0	96	64	222	#57	#499	0	#374	485	7
Internal Link Dist (ft)		776			302			1441			236	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	201	280	429	205	280	698	186	1494	815	410	2024	966
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.13	0.16	0.44	0.20	0.54	0.54	0.88	0.06	1.00	0.80	0.09

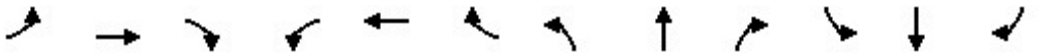
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary — Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road — 2027 Phase 2 Build PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	34	62	83	51	345	91	1198	43	371	1474	83
Future Volume (veh/h)	147	34	62	83	51	345	91	1198	43	371	1474	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1826	1870	1885	1870	1870
Adj Flow Rate, veh/h	162	37	0	91	56	379	100	1316	47	408	1620	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	1	2	5	2	1	2	2
Cap, veh/h	195	275		258	275	521	226	1468	671	430	1959	
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.15	0.05	0.42	0.42	0.18	0.55	0.00
Sat Flow, veh/h	954	1870	1585	1371	1870	1598	1781	3469	1585	1795	3554	1585
Grp Volume(v), veh/h	162	37	0	91	56	379	100	1316	47	408	1620	0
Grp Sat Flow(s),veh/h/ln	954	1870	1585	1371	1870	1598	1781	1735	1585	1795	1777	1585
Q Serve(g_s), s	10.8	1.5	0.0	5.6	2.4	13.2	2.1	31.7	1.6	14.6	33.8	0.0
Cycle Q Clear(g_c), s	13.2	1.5	0.0	7.1	2.4	13.2	2.1	31.7	1.6	14.6	33.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	195	275		258	275	521	226	1468	671	430	1959	
V/C Ratio(X)	0.83	0.13		0.35	0.20	0.73	0.44	0.90	0.07	0.95	0.83	
Avail Cap(c_a), veh/h	195	275		258	275	521	236	1476	674	430	1959	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.0	33.3	0.0	36.4	33.7	26.7	16.9	24.1	15.4	24.6	16.6	0.0
Incr Delay (d2), s/veh	24.8	0.2	0.0	0.8	0.4	5.0	1.4	7.7	0.1	30.4	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.7	0.0	1.8	1.0	7.3	0.9	12.8	0.5	11.6	11.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.9	33.5	0.0	37.2	34.0	31.8	18.2	31.7	15.5	55.0	19.8	0.0
LnGrp LOS	E	C		D	C	C	B	C	B	D	B	
Approach Vol, veh/h		199			526			1463			2028	
Approach Delay, s/veh		59.9			32.9			30.3			26.8	
Approach LOS		E			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.0	45.8		21.0	11.5	57.3		21.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	38.2		13.2	5.1	49.2		13.2				
Max Q Clear Time (g_c+I1), s	16.6	33.7		15.2	4.1	35.8		15.2				
Green Ext Time (p_c), s	0.0	4.3		0.0	0.0	13.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		30.4
HCM 6th LOS		C

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗		↰		↰	↱		↰	↱	
Traffic Vol, veh/h	69	257	79	13	363	4	69	4	10	11	3	3
Future Vol, veh/h	69	257	79	13	363	4	69	4	10	11	3	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	0	-	75	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	0	2	2	2	2	2	2	2
Mvmt Flow	79	295	91	15	417	5	79	5	11	13	3	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	422	0	0	386	0	0	906	905	295	957	994	420
Stage 1	-	-	-	-	-	-	453	453	-	450	450	-
Stage 2	-	-	-	-	-	-	453	452	-	507	544	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1137	-	-	1172	-	-	257	276	744	237	245	633
Stage 1	-	-	-	-	-	-	586	570	-	589	572	-
Stage 2	-	-	-	-	-	-	586	570	-	548	519	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1137	-	-	1172	-	-	232	247	744	211	219	633
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	247	-	211	219	-
Stage 1	-	-	-	-	-	-	533	519	-	536	562	-
Stage 2	-	-	-	-	-	-	569	560	-	487	472	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.3	25.8	20.7
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	232	472	1137	-	-	1172	-	-	211	325
HCM Lane V/C Ratio	0.342	0.034	0.07	-	-	0.013	-	-	0.06	0.021
HCM Control Delay (s)	28.4	12.9	8.4	-	-	8.1	0	-	23.1	16.3
HCM Lane LOS	D	B	A	-	-	A	A	-	C	C
HCM 95th %tile Q(veh)	1.4	0.1	0.2	-	-	0	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	14	1711	36	0	2156
Future Vol, veh/h	0	14	1711	36	0	2156
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	0	16	1901	40	0	2396

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3119	971	0	0	1941	0
Stage 1	1921	-	-	-	-	-
Stage 2	1198	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	9	252	-	-	298	-
Stage 1	101	-	-	-	-	-
Stage 2	249	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	9	252	-	-	298	-
Mov Cap-2 Maneuver	87	-	-	-	-	-
Stage 1	101	-	-	-	-	-
Stage 2	249	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	252	298	-
HCM Lane V/C Ratio	-	-	-	0.062	-	-
HCM Control Delay (s)	-	-	0	20.2	0	-
HCM Lane LOS	-	-	A	C	A	-
HCM 95th %tile Q(veh)	-	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	405	420	15	0	59
Future Vol, veh/h	0	405	420	15	0	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	1	1	2	2	2
Mvmt Flow	0	450	467	17	0	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	476
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	589
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	589
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	589
HCM Lane V/C Ratio	-	-	-	0.111
HCM Control Delay (s)	-	-	-	11.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.4

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	77	1670	63	0	1928
Future Vol, veh/h	0	77	1670	63	0	1928
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	0	86	1856	70	0	2142

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	963	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	256	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	256	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	256	-
HCM Lane V/C Ratio	-	-	0.334	-
HCM Control Delay (s)	-	-	26	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	1.4	-

2029 NO-BUILD CONDITIONS

Intersection	
Int Delay, s/veh	13.3

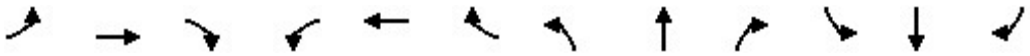
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	88	106	2348	55	79	1878
Future Vol, veh/h	88	106	2348	55	79	1878
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	3	2	6
Mvmt Flow	90	108	2396	56	81	1916

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3516	1198	0	0	2396	0
Stage 1	2396	-	-	-	-	-
Stage 2	1120	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 5	178	-	-	197	-
Stage 1	~ 54	-	-	-	-	-
Stage 2	274	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 3	178	-	-	197	-
Mov Cap-2 Maneuver	~ 48	-	-	-	-	-
Stage 1	~ 54	-	-	-	-	-
Stage 2	161	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	298.3	0	1.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	48	178	197	-
HCM Lane V/C Ratio	-	-	1.871	0.608	0.409	-
HCM Control Delay (s)	-	-	$ 594.5	52.4	35.4	-
HCM Lane LOS	-	-	F	F	E	-
HCM 95th %tile Q(veh)	-	-	9	3.4	1.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

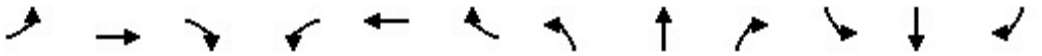


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	415	33	177	78	25	410	75	1632	33	335	1644	36
v/c Ratio	1.25	0.08	0.35	0.24	0.06	0.54	0.54	1.13	0.04	1.07	0.91	0.04
Control Delay	171.7	33.3	6.6	36.4	33.0	22.2	27.2	100.7	0.1	103.1	32.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	171.7	33.3	6.6	36.4	33.0	22.2	27.2	100.7	0.1	103.1	32.7	0.1
Queue Length 50th (ft)	~367	18	0	45	14	179	19	~706	0	~214	555	0
Queue Length 95th (ft)	#560	44	50	88	37	276	#55	#845	0	#395	#738	0
Internal Link Dist (ft)		776			677			1441			2596	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	332	418	513	320	411	754	140	1440	758	313	1814	897
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.08	0.35	0.24	0.06	0.54	0.54	1.13	0.04	1.07	0.91	0.04

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	398	32	170	75	24	394	72	1567	32	322	1578	35
Future Volume (veh/h)	398	32	170	75	24	394	72	1567	32	322	1578	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1781	1856	1841	1752	1885	1767	1856	1870	1811	1811	1870
Adj Flow Rate, veh/h	415	33	0	78	25	410	75	1632	33	335	1644	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	8	3	4	10	1	9	3	2	6	6	2
Cap, veh/h	284	424		369	417	614	155	1449	651	318	1777	
Arrive On Green	0.24	0.24	0.00	0.24	0.24	0.24	0.04	0.41	0.41	0.15	0.52	0.00
Sat Flow, veh/h	961	1781	1572	1354	1752	1598	1682	3526	1585	1725	3441	1585
Grp Volume(v), veh/h	415	33	0	78	25	410	75	1632	33	335	1644	0
Grp Sat Flow(s),veh/h/ln	961	1781	1572	1354	1752	1598	1682	1763	1585	1725	1721	1585
Q Serve(g_s), s	25.0	1.6	0.0	5.2	1.2	23.4	2.3	45.2	1.4	16.1	48.7	0.0
Cycle Q Clear(g_c), s	26.2	1.6	0.0	6.8	1.2	23.4	2.3	45.2	1.4	16.1	48.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	424		369	417	614	155	1449	651	318	1777	
V/C Ratio(X)	1.46	0.08		0.21	0.06	0.67	0.48	1.13	0.05	1.05	0.93	
Avail Cap(c_a), veh/h	284	424		369	417	614	165	1449	651	318	1777	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.4	32.5	0.0	35.2	32.4	28.0	24.8	32.4	19.5	35.3	24.6	0.0
Incr Delay (d2), s/veh	226.5	0.1	0.0	0.3	0.1	2.8	2.3	66.4	0.0	65.3	8.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.8	0.7	0.0	1.7	0.5	8.9	1.0	30.9	0.5	9.6	19.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	271.9	32.6	0.0	35.4	32.4	30.8	27.1	98.8	19.5	100.6	33.5	0.0
LnGrp LOS	F	C		D	C	C	C	F	B	F	C	
Approach Vol, veh/h		448	A		513			1740			1979	A
Approach Delay, s/veh		254.3			31.6			94.2			44.8	
Approach LOS		F			C			F			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.0	53.0		34.0	11.4	64.6		34.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	45.2		26.2	5.1	56.2		26.2				
Max Q Clear Time (g_c+I1), s	18.1	47.2		28.2	4.3	50.7		25.4				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	5.4		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		81.8
HCM 6th LOS		F

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	253	89	6	361	132	8
Future Vol, veh/h	253	89	6	361	132	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	4	21	2	2	5	20
Mvmt Flow	294	103	7	420	153	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	397	0	728	294
Stage 1	-	-	-	-	294	-
Stage 2	-	-	-	-	434	-
Critical Hdwy	-	-	4.12	-	6.45	6.4
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.218	-	3.545	3.48
Pot Cap-1 Maneuver	-	-	1162	-	386	705
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	647	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1162	-	383	705
Mov Cap-2 Maneuver	-	-	-	-	383	-
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	642	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	383	705	-	-	1162	-
HCM Lane V/C Ratio	0.401	0.013	-	-	0.006	-
HCM Control Delay (s)	20.5	10.2	-	-	8.1	0
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	1.9	0	-	-	0	-

Intersection	
Int Delay, s/veh	6.5

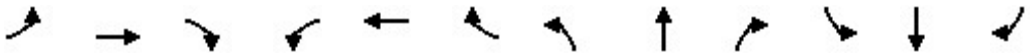
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	93	1872	64	214	2378
Future Vol, veh/h	34	93	1872	64	214	2378
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	36	98	1971	67	225	2503

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3673	986	0	0	1971	0
Stage 1	1971	-	-	-	-	-
Stage 2	1702	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 4	247	-	-	290	-
Stage 1	94	-	-	-	-	-
Stage 2	133	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 1	247	-	-	290	-
Mov Cap-2 Maneuver	~ 27	-	-	-	-	-
Stage 1	94	-	-	-	-	-
Stage 2	~ 30	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	155.8	0	4.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	27	247	290	-
HCM Lane V/C Ratio	-	-	1.326	0.396	0.777	-
HCM Control Delay (s)	-	-	$ 503	28.8	50	-
HCM Lane LOS	-	-	F	D	F	-
HCM 95th %tile Q(veh)	-	-	4.3	1.8	6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	207	20	78	44	63	424	114	1481	44	371	1887	104
v/c Ratio	1.06	0.07	0.18	0.22	0.23	0.62	0.62	1.01	0.05	0.93	0.98	0.11
Control Delay	121.3	34.0	1.0	37.0	36.5	22.5	26.9	52.0	0.1	56.4	36.4	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	121.3	34.0	1.0	37.0	36.5	22.5	26.9	52.0	0.1	56.4	36.4	1.1
Queue Length 50th (ft)	~130	10	0	22	32	159	19	~447	0	154	514	0
Queue Length 95th (ft)	#267	31	0	54	69	259	#80	#605	0	#322	#715	12
Internal Link Dist (ft)		776			677			1441			2596	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	195	273	424	203	273	693	184	1472	806	405	1934	929
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.07	0.18	0.22	0.23	0.61	0.62	1.01	0.05	0.92	0.98	0.11

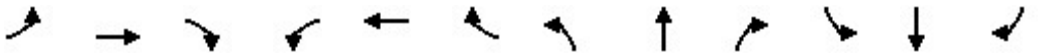
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary — Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road — 2029 Phase 3 No-Build PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	18	71	40	57	386	104	1348	40	338	1717	95
Future Volume (veh/h)	188	18	71	40	57	386	104	1348	40	338	1717	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1826	1870	1885	1870	1870
Adj Flow Rate, veh/h	207	20	0	44	63	424	114	1481	44	371	1887	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	1	2	5	2	1	2	2
Cap, veh/h	186	274		271	274	520	183	1472	673	401	1958	
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.15	0.05	0.42	0.42	0.18	0.55	0.00
Sat Flow, veh/h	909	1870	1585	1392	1870	1598	1781	3469	1585	1795	3554	1585
Grp Volume(v), veh/h	207	20	0	44	63	424	114	1481	44	371	1887	0
Grp Sat Flow(s),veh/h/ln	909	1870	1585	1392	1870	1598	1781	1735	1585	1795	1777	1585
Q Serve(g_s), s	10.5	0.8	0.0	2.5	2.7	13.2	2.4	38.2	1.5	14.2	45.8	0.0
Cycle Q Clear(g_c), s	13.2	0.8	0.0	3.4	2.7	13.2	2.4	38.2	1.5	14.2	45.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	274		271	274	520	183	1472	673	401	1958	
V/C Ratio(X)	1.11	0.07		0.16	0.23	0.82	0.62	1.01	0.07	0.92	0.96	
Avail Cap(c_a), veh/h	186	274		271	274	520	191	1472	673	401	1958	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.0	33.1	0.0	34.6	33.9	27.9	21.1	25.9	15.3	26.9	19.3	0.0
Incr Delay (d2), s/veh	98.9	0.1	0.0	0.3	0.4	9.7	5.7	24.9	0.0	27.0	12.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	0.4	0.0	0.8	1.2	9.1	1.4	18.6	0.5	5.9	18.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	140.9	33.2	0.0	34.9	34.3	37.6	26.8	50.8	15.4	54.0	32.2	0.0
LnGrp LOS	F	C		C	C	D	C	F	B	D	C	
Approach Vol, veh/h		227	A		531			1639			2258	A
Approach Delay, s/veh		131.4			37.0			48.1			35.8	
Approach LOS		F			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.0	46.0		21.0	11.6	57.4		21.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	38.2		13.2	5.1	49.2		13.2				
Max Q Clear Time (g_c+I1), s	16.2	40.2		15.2	4.4	47.8		15.2				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	1.4		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		45.0
HCM 6th LOS		D

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	300	82	14	411	72	11
Future Vol, veh/h	300	82	14	411	72	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	0	2	2
Mvmt Flow	345	94	16	472	83	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	439	0	849	345
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	504	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1121	-	331	698
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	607	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1121	-	325	698
Mov Cap-2 Maneuver	-	-	-	-	325	-
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	595	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	18.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	325	698	-	-	1121	-
HCM Lane V/C Ratio	0.255	0.018	-	-	0.014	-
HCM Control Delay (s)	19.8	10.3	-	-	8.3	0
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	1	0.1	-	-	0	-

2029 BUILD PHASE 3 CONDITIONS

Intersection	
Int Delay, s/veh	14.4

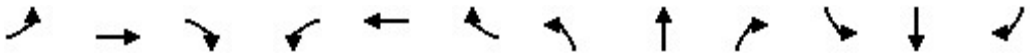
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	88	106	2402	55	79	1921
Future Vol, veh/h	88	106	2402	55	79	1921
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	3	2	6
Mvmt Flow	90	108	2451	56	81	1960

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3593	1226	0	0	2451	0
Stage 1	2451	-	-	-	-	-
Stage 2	1142	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 4	170	-	-	188	-
Stage 1	~ 51	-	-	-	-	-
Stage 2	266	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 2	170	-	-	188	-
Mov Cap-2 Maneuver	~ 45	-	-	-	-	-
Stage 1	~ 51	-	-	-	-	-
Stage 2	151	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 329.9	0	1.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	45	170	188	-
HCM Lane V/C Ratio	-	-	1.995	0.636	0.429	-
HCM Control Delay (s)	-	-	$ 658.3	57.3	37.8	-
HCM Lane LOS	-	-	F	F	E	-
HCM 95th %tile Q(veh)	-	-	9.2	3.6	2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	394	54	177	152	25	416	75	1655	43	416	1608	36
v/c Ratio	1.19	0.13	0.35	0.48	0.06	0.55	0.54	1.15	0.06	1.33	0.89	0.04
Control Delay	148.3	34.0	6.6	42.2	33.0	22.4	27.2	107.1	0.1	197.9	31.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	148.3	34.0	6.6	42.2	33.0	22.4	27.2	107.1	0.1	197.9	31.0	0.1
Queue Length 50th (ft)	~336	30	0	93	14	184	19	~724	0	~335	532	0
Queue Length 95th (ft)	#526	64	50	159	37	281	#55	#863	0	#532	#711	0
Internal Link Dist (ft)		776			302			1441			236	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	332	418	513	314	411	754	140	1440	758	313	1814	897
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.19	0.13	0.35	0.48	0.06	0.55	0.54	1.15	0.06	1.33	0.89	0.04

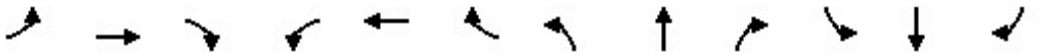
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary — Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road — 2029 Phase 3 Build AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	378	52	170	146	24	399	72	1589	41	399	1544	35
Future Volume (veh/h)	378	52	170	146	24	399	72	1589	41	399	1544	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1781	1856	1841	1752	1885	1767	1856	1870	1811	1811	1870
Adj Flow Rate, veh/h	394	54	0	152	25	416	75	1655	43	416	1608	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	8	3	4	10	1	9	3	2	6	6	2
Cap, veh/h	283	424		350	417	614	162	1449	651	318	1777	
Arrive On Green	0.24	0.24	0.00	0.24	0.24	0.24	0.04	0.41	0.41	0.15	0.52	0.00
Sat Flow, veh/h	956	1781	1572	1329	1752	1598	1682	3526	1585	1725	3441	1585
Grp Volume(v), veh/h	394	54	0	152	25	416	75	1655	43	416	1608	0
Grp Sat Flow(s),veh/h/ln	956	1781	1572	1329	1752	1598	1682	1763	1585	1725	1721	1585
Q Serve(g_s), s	25.0	2.6	0.0	11.2	1.2	23.8	2.3	45.2	1.8	16.1	46.7	0.0
Cycle Q Clear(g_c), s	26.2	2.6	0.0	13.8	1.2	23.8	2.3	45.2	1.8	16.1	46.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	283	424		350	417	614	162	1449	651	318	1777	
V/C Ratio(X)	1.39	0.13		0.43	0.06	0.68	0.46	1.14	0.07	1.31	0.90	
Avail Cap(c_a), veh/h	283	424		350	417	614	171	1449	651	318	1777	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.4	32.9	0.0	38.3	32.4	28.2	24.1	32.4	19.6	35.3	24.1	0.0
Incr Delay (d2), s/veh	197.7	0.1	0.0	0.8	0.1	3.0	2.1	72.9	0.1	159.7	7.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.4	1.2	0.0	3.6	0.5	9.1	1.0	32.1	0.6	17.9	18.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	243.1	33.1	0.0	39.2	32.4	31.1	26.2	105.3	19.7	195.0	31.2	0.0
LnGrp LOS	F	C		D	C	C	C	F	B	F	C	
Approach Vol, veh/h		448			593			1773			2024	
Approach Delay, s/veh		217.8			33.3			99.8			64.9	
Approach LOS		F			C			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.0	53.0		34.0	11.4	64.6		34.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	45.2		26.2	5.1	56.2		26.2				
Max Q Clear Time (g_c+I1), s	18.1	47.2		28.2	4.3	48.7		25.8				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	7.4		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			88.0									
HCM 6th LOS			F									

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	78	246	89	6	365	4	132	4	8	18	5	5
Future Vol, veh/h	78	246	89	6	365	4	132	4	8	18	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	-	-	-	0	-	75	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	4	21	2	2	2	5	2	20	2	2	2
Mvmt Flow	91	286	103	7	424	5	153	5	9	21	6	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	429	0	0	389	0	0	915	911	286	968	1012	427
Stage 1	-	-	-	-	-	-	468	468	-	441	441	-
Stage 2	-	-	-	-	-	-	447	443	-	527	571	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.15	6.52	6.4	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.545	4.018	3.48	3.518	4.018	3.318
Pot Cap-1 Maneuver	1130	-	-	1170	-	-	250	274	712	233	239	628
Stage 1	-	-	-	-	-	-	570	561	-	595	577	-
Stage 2	-	-	-	-	-	-	585	576	-	535	505	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1130	-	-	1170	-	-	227	250	712	212	218	628
Mov Cap-2 Maneuver	-	-	-	-	-	-	227	250	-	212	218	-
Stage 1	-	-	-	-	-	-	524	516	-	547	572	-
Stage 2	-	-	-	-	-	-	569	571	-	481	464	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0.1	45.8	21.2
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	227	441	1130	-	-	1170	-	-	212	324
HCM Lane V/C Ratio	0.676	0.032	0.08	-	-	0.006	-	-	0.099	0.036
HCM Control Delay (s)	48.7	13.4	8.5	-	-	8.1	0	-	23.8	16.5
HCM Lane LOS	E	B	A	-	-	A	A	-	C	C
HCM 95th %tile Q(veh)	4.3	0.1	0.3	-	-	0	-	-	0.3	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	22	2437	35	0	2009
Future Vol, veh/h	0	22	2437	35	0	2009
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	150	-	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	6
Mvmt Flow	0	24	2708	39	0	2232

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1354	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	140	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	140	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	36.1	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	140	-
HCM Lane V/C Ratio	-	-	0.175	-
HCM Control Delay (s)	-	-	36.1	-
HCM Lane LOS	-	-	E	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	414	486	17	0	84
Future Vol, veh/h	0	414	486	17	0	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	5	2	2	2	2
Mvmt Flow	0	460	540	19	0	93

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	550
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	535
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	535
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	535
HCM Lane V/C Ratio	-	-	-	0.174
HCM Control Delay (s)	-	-	-	13.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.6

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	96	2376	69	0	1978
Future Vol, veh/h	0	96	2376	69	0	1978
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	6
Mvmt Flow	0	107	2640	77	0	2198

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1320	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	147	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	147	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	76.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	147	-
HCM Lane V/C Ratio	-	-	0.726	-
HCM Control Delay (s)	-	-	76.4	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	4.3	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	11	2446	13	0	2009
Future Vol, veh/h	0	11	2446	13	0	2009
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	6
Mvmt Flow	0	12	2718	14	0	2232

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1366	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	137	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	137	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.8	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	137	-
HCM Lane V/C Ratio	-	-	0.089	-
HCM Control Delay (s)	-	-	33.8	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Intersection	
Int Delay, s/veh	8

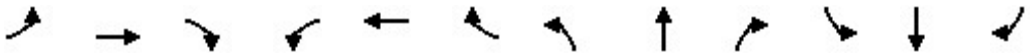
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	93	1922	64	214	2436
Future Vol, veh/h	34	93	1922	64	214	2436
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Yield	-	None
Storage Length	0	0	-	275	450	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	36	98	2023	67	225	2564

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3755	1012	0	0	2023	0
Stage 1	2023	-	-	-	-	-
Stage 2	1732	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 3	237	-	-	277	-
Stage 1	88	-	-	-	-	-
Stage 2	128	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 1	237	-	-	277	-
Mov Cap-2 Maneuver	~ 22	-	-	-	-	-
Stage 1	88	-	-	-	-	-
Stage 2	~ 24	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	205.3	0	4.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	22	237	277	-
HCM Lane V/C Ratio	-	-	1.627	0.413	0.813	-
HCM Control Delay (s)	-	-	$ 683.4	30.5	56.7	-
HCM Lane LOS	-	-	F	D	F	-
HCM 95th %tile Q(veh)	-	-	4.6	1.9	6.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	188	38	78	112	63	430	114	1513	57	466	1856	104
v/c Ratio	0.96	0.14	0.18	0.56	0.23	0.62	0.62	1.04	0.07	1.15	0.96	0.11
Control Delay	96.8	35.0	1.0	47.5	36.5	22.6	26.9	60.7	0.2	119.3	33.4	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.8	35.0	1.0	47.5	36.5	22.6	26.9	60.7	0.2	119.3	33.4	1.1
Queue Length 50th (ft)	108	19	0	60	32	163	19	~492	0	~262	496	0
Queue Length 95th (ft)	#239	48	0	115	69	264	#80	#626	0	#453	#696	12
Internal Link Dist (ft)		776			302			1441			236	
Turn Bay Length (ft)			100	225		225	350		200	450		400
Base Capacity (vph)	195	273	424	200	273	693	184	1459	801	405	1934	929
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.14	0.18	0.56	0.23	0.62	0.62	1.04	0.07	1.15	0.96	0.11

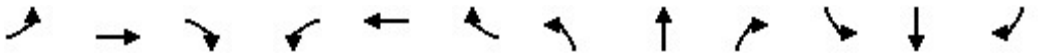
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary — Gibbet Road Multifamily De

2: SC 170 (Okatie Hwy) & Mill Creek Blvd/Gibbet Road — 2029 Phase 3 Build PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	171	35	71	102	57	391	104	1377	52	424	1689	95
Future Volume (veh/h)	171	35	71	102	57	391	104	1377	52	424	1689	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1826	1870	1885	1870	1870
Adj Flow Rate, veh/h	188	38	0	112	63	430	114	1513	57	466	1856	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	1	2	5	2	1	2	2
Cap, veh/h	186	274		257	274	520	188	1472	673	401	1958	
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.15	0.05	0.42	0.42	0.18	0.55	0.00
Sat Flow, veh/h	904	1870	1585	1370	1870	1598	1781	3469	1585	1795	3554	1585
Grp Volume(v), veh/h	188	38	0	112	63	430	114	1513	57	466	1856	0
Grp Sat Flow(s),veh/h/ln	904	1870	1585	1370	1870	1598	1781	1735	1585	1795	1777	1585
Q Serve(g_s), s	10.5	1.6	0.0	7.0	2.7	13.2	2.4	38.2	1.9	16.1	44.2	0.0
Cycle Q Clear(g_c), s	13.2	1.6	0.0	8.6	2.7	13.2	2.4	38.2	1.9	16.1	44.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	274		257	274	520	188	1472	673	401	1958	
V/C Ratio(X)	1.01	0.14		0.44	0.23	0.83	0.61	1.03	0.08	1.16	0.95	
Avail Cap(c_a), veh/h	186	274		257	274	520	196	1472	673	401	1958	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.0	33.4	0.0	37.2	33.9	28.0	20.9	25.9	15.5	28.2	19.0	0.0
Incr Delay (d2), s/veh	69.3	0.2	0.0	1.2	0.4	10.6	4.9	30.8	0.1	96.9	10.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	0.7	0.0	2.3	1.2	9.4	1.4	19.8	0.6	14.3	17.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	111.3	33.7	0.0	38.3	34.3	38.6	25.8	56.7	15.5	125.1	29.6	0.0
LnGrp LOS	F	C		D	C	D	C	F	B	F	C	
Approach Vol, veh/h		226			605			1684			2322	
Approach Delay, s/veh		98.3			38.1			53.2			48.8	
Approach LOS		F			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.0	46.0		21.0	11.6	57.4		21.0				
Change Period (Y+Rc), s	6.9	7.8		7.8	6.9	7.8		7.8				
Max Green Setting (Gmax), s	16.1	38.2		13.2	5.1	49.2		13.2				
Max Q Clear Time (g_c+I1), s	18.1	40.2		15.2	4.4	46.2		15.2				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	51.3
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	294	82	14	417	6	72	5	11	15	5	5
Future Vol, veh/h	74	294	82	14	417	6	72	5	11	15	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	-	-	-	0	-	75	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	0	2	2	2	2	2	2	2
Mvmt Flow	85	338	94	16	479	7	83	6	13	17	6	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	486	0	0	432	0	0	1029	1026	338	1080	1117	483
Stage 1	-	-	-	-	-	-	508	508	-	515	515	-
Stage 2	-	-	-	-	-	-	521	518	-	565	602	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1077	-	-	1128	-	-	212	235	704	196	207	584
Stage 1	-	-	-	-	-	-	547	539	-	543	535	-
Stage 2	-	-	-	-	-	-	539	533	-	510	489	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1077	-	-	1128	-	-	190	212	704	175	187	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	190	212	-	175	187	-
Stage 1	-	-	-	-	-	-	504	496	-	500	525	-
Stage 2	-	-	-	-	-	-	518	523	-	456	450	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.3	33.5	24
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	190	408	1077	-	-	1128	-	-	175	283
HCM Lane V/C Ratio	0.436	0.045	0.079	-	-	0.014	-	-	0.099	0.041
HCM Control Delay (s)	37.8	14.2	8.6	-	-	8.2	0	-	27.8	18.3
HCM Lane LOS	E	B	A	-	-	A	A	-	D	C
HCM 95th %tile Q(veh)	2	0.1	0.3	-	-	0	-	-	0.3	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	1973	47	0	2470
Future Vol, veh/h	0	20	1973	47	0	2470
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	150	-	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	0	22	2192	52	0	2744

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1096	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	208	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	208	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	208	-
HCM Lane V/C Ratio	-	-	0.107	-
HCM Control Delay (s)	-	-	24.4	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	450	477	17	0	73
Future Vol, veh/h	0	450	477	17	0	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	1	1	2	2	2
Mvmt Flow	0	500	530	19	0	81

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	540
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	542
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	542
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	542
HCM Lane V/C Ratio	-	-	-	0.15
HCM Control Delay (s)	-	-	-	12.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	82	1938	62	0	2208
Future Vol, veh/h	0	82	1938	62	0	2208
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	0	91	2153	69	0	2453

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1077	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	215	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	215	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.5	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	215	-
HCM Lane V/C Ratio	-	-	0.424	-
HCM Control Delay (s)	-	-	33.5	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	2	-

Intersection	
Int Delay, s/veh	0.1

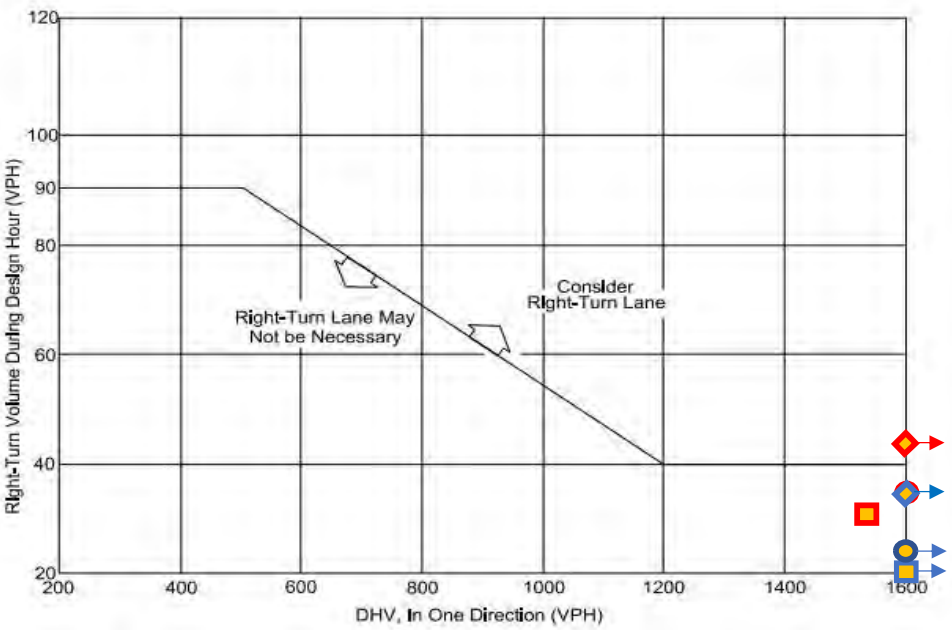
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	10	1976	17	0	2470
Future Vol, veh/h	0	10	1976	17	0	2470
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	0	11	2196	19	0	2744

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1108	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	204	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	204	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	204	-
HCM Lane V/C Ratio	-	-	0.054	-
HCM Control Delay (s)	-	-	23.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Appendix G – Turn Lane Warrant Analysis

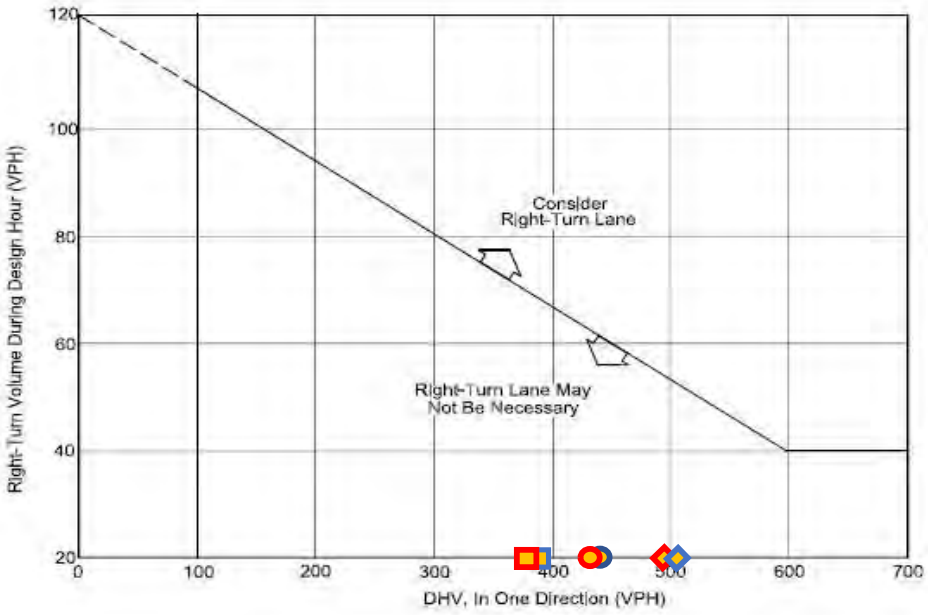


Note: Figure is only applicable on highways with a design speed of 50 miles per hour or greater.

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON FOUR-LANE HIGHWAYS
Figure 9.5-B

Gibbet Road at Site Access #1

Northbound	Right	DHV	RTs
	2025 Phase 1 Build AM	1861	10
	2025 Phase 1 Build PM	1522	32
	2027 Phase 2 Build AM	2157	26
	2027 Phase 2 Build PM	1747	36
	2029 Phase 3 Build AM	2382	35
	2029 Phase 3 Build PM	2020	47



Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

Example

Given:	Design Speed	=	35 miles per hour
	DHV	=	250 vehicles per hour
	Right Turns	=	100 vehicles per hour

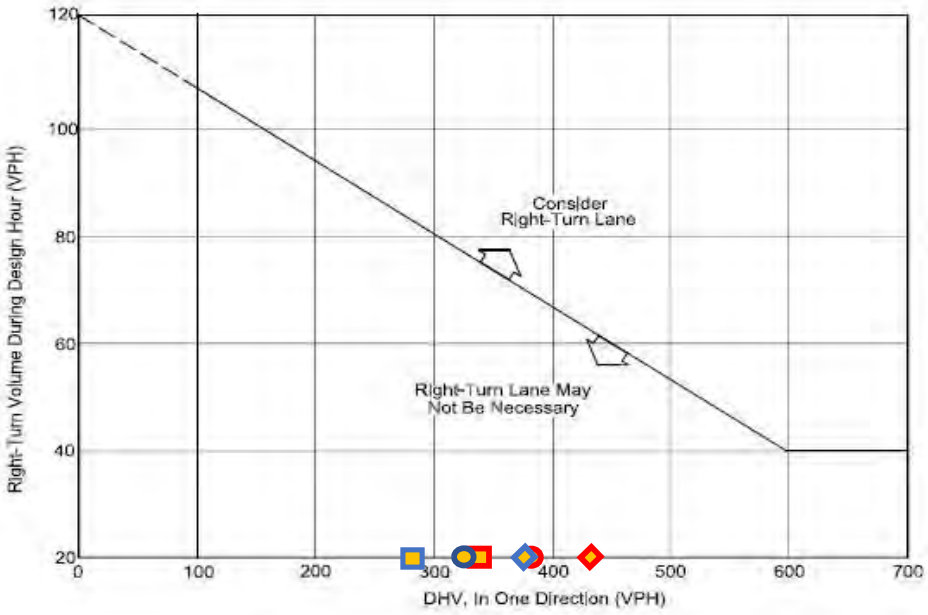
Problem: Determine if a right-turn lane is necessary.

Solution: To read the vertical axis, use 100 – 20 = 80 vehicles per hour. The figure indicates that a right-turn lane is not necessary, unless other factors (e.g., high crash rate) indicate a lane is needed.

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS
Figure 9.5-A

Gibbet Road at Site Access #2

Southbound	Right	DHV	RTs
	2025 Phase 1 Build AM	395	1
	2025 Phase 1 Build PM	385	3
	2027 Phase 2 Build AM	447	16
	2027 Phase 2 Build PM	435	15
	2029 Phase 3 Build AM	503	17
	2029 Phase 3 Build PM	494	17



Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

Example

Given:	Design Speed	=	35 miles per hour
	DHV	=	250 vehicles per hour
	Right Turns	=	100 vehicles per hour

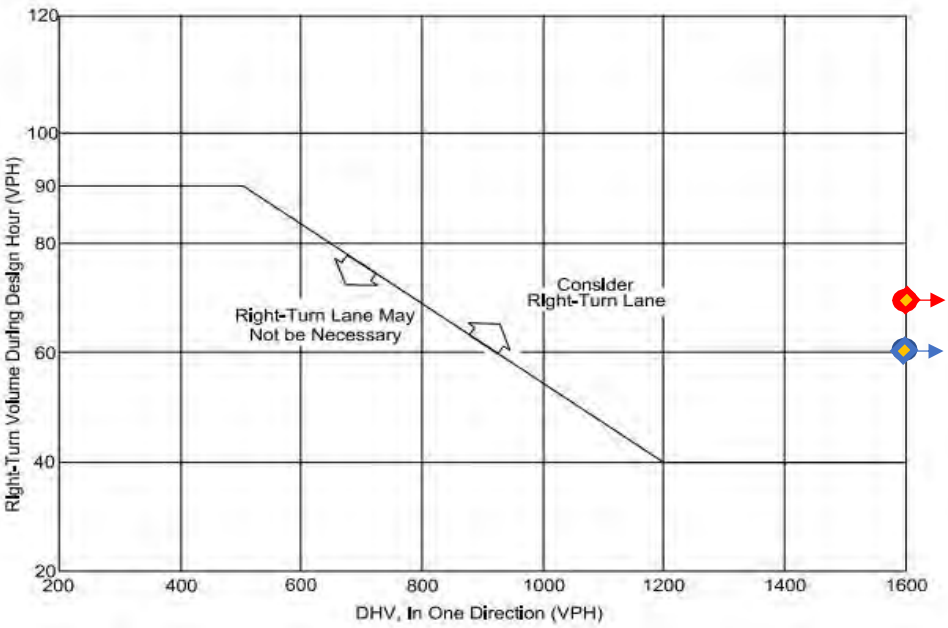
Problem: Determine if a right-turn lane is necessary.

Solution: To read the vertical axis, use 100 – 20 = 80 vehicles per hour. The figure indicates that a right-turn lane is not necessary, unless other factors (e.g., high crash rate) indicate a lane is needed.

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS
Figure 9.5-A

Gibbet Road at Site Access #3

Westbound	Right	DHV	RTs
	2025 Phase 1 Build AM	283	1
	2025 Phase 1 Build PM	331	3
	2027 Phase 2 Build AM	328	3
	2027 Phase 2 Build PM	380	4
	2029 Phase 3 Build AM	375	4
	2029 Phase 3 Build PM	437	6

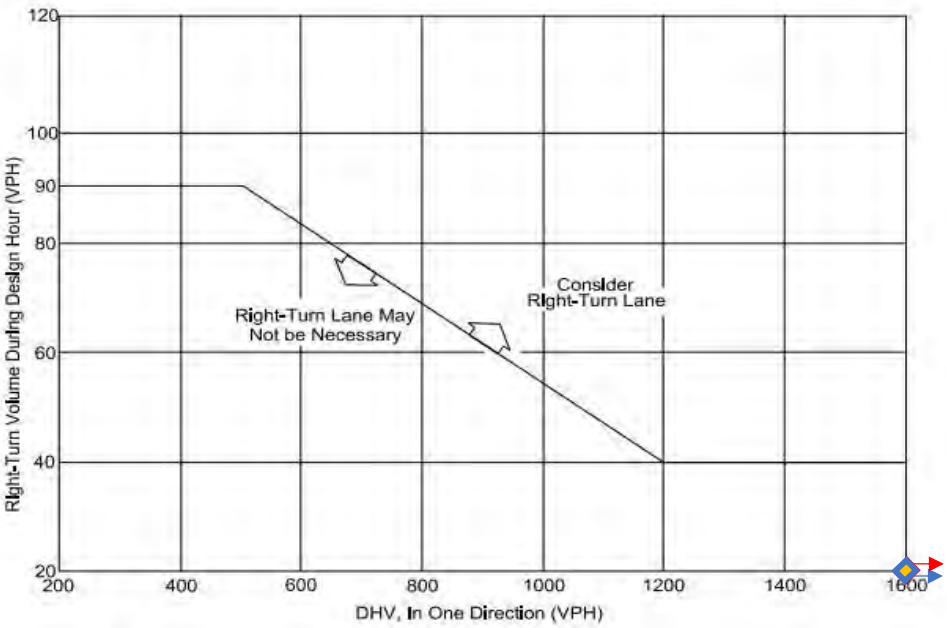


Note: Figure is only applicable on highways with a design speed of 50 miles per hour or greater.

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON FOUR-LANE HIGHWAYS
Figure 9.5-B

Gibbet Road at Site Access #4

Northbound	Right	DHV	RTs
	2027 Phase 2 Build AM	2127	70
	2027 Phase 2 Build PM	1733	63
	2029 Phase 3 Build AM	2445	69
	2029 Phase 3 Build PM	2000	62



Note: Figure is only applicable on highways with a design speed of 50 miles per hour or greater.

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON FOUR-LANE HIGHWAYS
Figure 9.5-B

Gibbet Road at Site Access #5

Northbound	Right	DHV	RTs
◆	2029 Phase 3 Build AM	2459	13
◆	2029 Phase 3 Build PM	1993	17

PLAN REVIEW COMMENTS FOR MP-06-23-018137

Town of Bluffton
Department of Growth Management
20 Bridge Street P.O. Box 386 Bluffton, South Carolina 29910
Telephone 843-706-4522

Plan Type: NA
Apply Date: 06/06/2023
Plan Status: Hold
Plan Address:
Case Manager: Dan Frazier
Plan PIN #: R610 028 000 0921 0000
Plan Description: **A request by Brian Witmer of Witmer Jones Keefer, Ltd, on behalf of Millstone Ventures, LLC, and with the approval of the property owner, Parcel 8A, LLC, for approval of an initial master plan application. The project proposes 16.02 acres of residential development and 5.9 acres of commercial development. The property is zoned Buckwalter PUD and consists of 21.92 acres identified by tax map number R610 028 000 0921 0000 and located at the northeast corner of the intersection of SC Highway 170 and Gibbet Road.**
STATUS: Staff comments on the initial master plan will be heard at the June 28, 2023 meeting of the DRC.

Development Review Committee

Submission #: 1 Received: 06/06/2023 Completed: 06/23/2023

Reviewing Dept.	*Complete Date*	*Reviewer*	*Status*
Watershed Management Review DRC	06/15/2023	Samantha Crotty	Revisions Required

Comments:
1. Re-label stormwater lagoon (typical) as Stormwater BMP on the Stormwater Master Plan Exhibit F to allow for Low Impact Development practices.
2. Revise flow patterns for the BMP at Gibbet Rd right-in right-out to verify inflow/outflow locations.

Building Safety Review	06/14/2023	Richard Spruce	Not Required
Beaufort Jasper Water and Sewer Review	06/20/2023	James Clardy	Approved with Conditions

Comments:
Pending formal submittal of preliminary water and sewer plans to BJWSA in accordance with the 2023 Development Policy and Procedures Manual.

Fire Department Review	06/23/2023	Dan Wiltse	Approved with Conditions

Comments:
1. Additional fire hydrants will be required at time of development plan submittal.

Planning Commission Review	06/23/2023	Dan Frazier	Approved with Conditions

Comments:
1. Site layouts for all parcels are subject to full Town review and approval at time of development plan submittal.
2. The parking requirements for the multi-family development totals 338 spaces. The five parallel parking spaces adjacent to Gibbet Road cannot count towards the multi-family development parking requirements.
3. A statement shall be placed on the master plan declaring that all development within the Parcel B-1 Master Plan shall conform to the requirements and recommendations of the Beaufort County CONNECTS 2021 Bicycle and Pedestrian Plan.
4. Whether located on- or off-site, it shall be the responsibility of developers to install a 10-foot-wide bicycle and pedestrian path along SC Highway 170 frontage consistent with the requirements and recommendations of the Beaufort County CONNECTS 2021 Bicycle and Pedestrian Plan. The required path shall be installed at time of individual site development.

Planning Review - SR	06/23/2023	Jordan Holloway	Approved with Conditions

Comments:

See Planning Commission Review comments.

Police Department Review	06/23/2023	Bill Bonhag	Approved
Planning Review - Address	06/12/2023	Diego Farias	Approved

Comments:

The propose addresses are:
Building A: 3381 Okatie Hwy.
Building 1: 3379 Okatie Hwy.
Building 2: 3371 Okatie Hwy.
Building 3: 3353 Okatie Hwy.
Building 4: 3349 Okatie Hwy.
Building 5: 3341 Okatie Hwy.
Building 6: 3323 Okatie Hwy.
Building 7: 3375 Okatie Hwy.
Building 8: 3357 Okatie Hwy.
Building 9: 3337 Okatie Hwy.
Building 10: 3329 Okatie Hwy.
Club House: 3345 Okatie Hwy.
Building B1: 3325 Okatie Hwy.
Building B2: 3321 Okatie Hwy.
Building B3: 3319 Okatie Hwy.

Transportation Department Review	06/07/2023	Megan James	Approved

Comments:

No comments

Plan Review Case Notes:

PLANNING COMMISSION

STAFF REPORT
Department of Growth Management

MEETING DATE:	July 26, 2023
PROJECT:	CarVillage Preliminary Development Plan
APPLICANT:	Dan Keefer of Witmer Jones Keefer, Ltd
PROJECT NUMBER:	DP-08-22-017076
PROJECT MANAGER:	Dan Frazier Principal Planner Department of Growth Management

REQUEST: The Applicant, Dan Keefer of Witmer Jones Keefer, Ltd on behalf of the property owner, Charlie and Brown, LLC is requesting approval of a Preliminary Development Plan. The project proposes the construction of a +/-20,000 sq. ft. two-story Clubhouse and 5 buildings divided into +/- 31 high-end garage condominium units (Attachment 1).

INTRODUCTION: The property is zoned Village at Verdier Planned Unit Development (PUD) and consists of approximately 5.00 acres, identified by tax map number R610-021-000-0808-0000 and located within the Village at Verdier Master Plan on Highway 170 approximately 1,200 feet south of Seagrass Station Road (Attachments 2 and 3).

BACKGROUND: On March 14, 2023, the Town of Bluffton Town Council tabled a request by the applicant and property owner to amend the Village at Verdier Master Plan to replace a previously approved residential road connection between Parcels Y and Z with a gated, emergency access road. Town Council asked that the applicant meet with the Seagrass Station Single-Family Property Owners Association to receive feedback from owners on the request to replace the residential road connection with a gated emergency access road.

On April 27, 2023, the applicant attended a regularly scheduled Seagrass Station Single-Family POA meeting. At the meeting, individual homeowners and POA board members unanimously expressed their approval of the amendment request, further requesting that a pedestrian connection not be made between the internal residential sidewalk and the existing asphalt multi-use trail that parallels SC 170. Town Staff attended this meeting.

On May 9, 2023, the Town of Bluffton Town Council voted to approve the request by the applicant and property owner. The replacement of the road connection with a gated entry aligns with the CarVillage business model of providing controlled access to the proposed clubhouse and high-end garage condominium units (Attachment 4).

A technical memorandum analyzing the traffic impacts of the proposed roadway changes was provided as part of the master plan amendment application (Attachment 5). The finding of the analysis was that "based on the capacity analysis, removing access to Hager

Street will have a minimal impact on the surrounding roadway network".

Additional information provided by the applicant includes a tree and topographic land survey, existing conditions site photos, a fence plan, and by request from Town Staff, a rear buffer cross section (Attachment 6).

Staff comments on the Preliminary Development Plan were reviewed at the June 21, 2023, Development Review Committee meeting (Attachment 7). The Applicant provided a response to comments on June 28, 2023 (Attachments 8).

REVIEW CRITERIA & ANALYSIS: The Planning Commission shall consider the criteria set forth in Section 3.10.3.A of the Unified Development Ordinance in assessing an application for a Preliminary Development Plan. The applicable criteria are provided below followed by Staff Finding(s) based upon review of the application submittals to date.

1. Section 3.10.3.A.1. Conformance with the applicable provisions provided in Article 5, Design Standards.

   Finding. The property lies within the Village at Verdier PUD and therefore is not subject to the Design Standards set forth in Article 5 of the UDO.

2. Section 3.10.3.A.2. The proposed development shall be in conformance with any approved Development Agreement, PUD Concept Plan, PUD Master Plan, Subdivision Plan, or any other agreements or plans that are applicable.

   Finding: The proposed development is in conformance with the Village at Verdier Development Agreement and the Village at Verdier Master Plan.

   Finding: At the time of Final Development Plan submittal, the Applicant shall provide a letter from the Declarant or the Architectural Standards Committee, if such organization has been established, stating that the design meets the covenants and restrictions of this agreement.

3. Section 3.10.3.A.3. If the proposed development is associated with a previously approved Master Plan, then the traffic and access plans shall adhere to the previously approved traffic impact analysis or assessment, where applicable. If an application is not associated with a previously approved PUD Master Plan, then a traffic impact analysis shall be required at final development plan submittal.

   Finding: A technical memorandum analyzing the traffic impacts of the proposed roadway changes was provided as part of the master plan amendment application. The finding of the analysis was that "based on the capacity analysis, removing access to Hager Street will have a minimal impact on the surrounding roadway network".

4. Section 3.10.3.A.4. The proposed development must be able to be served by adequate public services, including, but not limited to, water, sanitary sewer, roads, police, fire, and school services. For developments that have the potential for significant impact on infrastructure and services, the applicant shall be required

to provide an analysis and mitigation of the impact on transportation, utilities, and community services.

Finding. Letters from the agencies providing public services will be required at time of Final Development Plan submittal per the Applications Manual.

5. **Section 3.10.3.A.5. The phasing plan, if applicable, is logical and is designed in a manner that allows each phase to fully function independently regarding services, utilities, circulation, facilities, and open space, irrespective of the completion of other proposed phases.**

   Finding. The project is proposed to be completed in a single phase of construction.

6. **Section 3.10.3.A.6. The application must comply with applicable requirements in the Applications Manual.**

   Finding. The application has been reviewed by Town Staff and has been determined to be complete.

PLANNING COMMISSION ACTIONS: The Planning Commission has the authority to take the following actions with respect to the application as authorized by Section 2.2.6.C.5 of the UDO:

1. Approve the application as submitted;
2. Approve the application with conditions; or
3. Deny the application as submitted.

RECOMMENDATION: Town Staff finds that the requirements of Section 3.10.3.A of the Unified Development Ordinance are met and recommends that the Planning Commission approve the application as submitted.

ATTACHMENTS:

1. Application and Project Narrative
2. Vicinity Map
3. Village at Verdier Master Plan
4. Preliminary Site Plan
5. Technical Memorandum (Traffic Impacts)
6. Additional Submittal Items
7. DRC Comments 6-21-23
8. Response to DRC Comments

TOWN OF BLUFFTON
DEVELOPMENT PLAN APPLICATION

Growth Management Customer Service Center
20 Bridge Street
Bluffton, SC 29910
(843)706-4522
www.townofbluffton.sc.gov
applicationfeedback@townofbluffton.com

Applicant	Property Owner
Name: Dan Keefer	Name: Charlie and Brown, LLC
Phone: 843-757-7411	Phone:
Mailing Address: 23 Promenade Street, Suite 201 Bluffton, SC 29910	Mailing Address:
E-mail: Dan@wjkltd.com	E-mail:
Town Business License # (if applicable):	

Project Information

Project Name: CarVillage	☒ Preliminary	☐ Final
Project Location: Seagrass Station / Village of Verdier PU	☐ New	☐ Amendment
Zoning District: PUD- mixed use	Acreage: 5.0	
Tax Map Number(s): R-610-021-000-0808-0000		
Project Description: Automotive Enthusiasts Club, including buildings for private and common use by members of the club. Individual units with the Club may be sold to members.		

Minimum Requirements for Submittal

☒ 1. Two (2) full sized copies and digital files of the Preliminary or Final Development Plans.
☒ 2. Project Narrative and digital file describing reason for application and compliance with the criteria in Article 3 of the UDO.
☒ 3. All information required on the attached Application Checklist.
☒ 4. An Application Review Fee as determined by the Town of Bluffton Master Fee Schedule. Checks made payable to the Town of Bluffton.

Note: **A Pre-Application Meeting is required prior to Application submittal.**

Disclaimer: **The Town of Bluffton assumes no legal or financial liability to the applicant or any third party whatsoever by approving the plans associated with this permit.**

I hereby acknowledge by my signature below that the foregoing application is complete and accurate and that I am the owner of the subject property. As applicable, I authorize the subject property to be posted and inspected.

Property Owner Signature: [signature] MEMBER Date: 8/10/22

Applicant Signature: [signature] Date: 8-10-22

For Office Use

Application Number:	*Date Received:*
Received By:	*Date Approved:*

TOWN OF BLUFFTON
DEVELOPMENT PLAN APPLICATION
PROCESS NARRATIVE

The following Process Narrative is intended to provide Applicants with an understanding of the respective application process, procedures and Unified Development Ordinance (UDO) requirements for obtaining application approval in the Town of Bluffton. While intended to explain the process, it is not intended to repeal, eliminate or otherwise limit any requirements, regulations or provisions of the Town of Bluffton's UDO. Compliance with these procedures will minimize delays and assure expeditious application review.

Step 1. Pre-Application Meeting	**Applicant & Staff**
Prior to the filing of a Preliminary Development Plan Application, the Applicant is required to consult with the UDO Administrator at a Pre-Application Meeting for comments and advice on the appropriate application process and the required procedures, specifications, and applicable standards required by the UDO.	
Step 2. Application Check-In Meeting - Preliminary Development Plan Submission	**Applicant & Staff**
Upon receiving input from Staff at the Pre-Application Meeting, the Applicant may submit a Preliminary Development Plan Application and required submittal materials during a mandatory Application Check-In Meeting where the UDO Administrator will review the submission for completeness.	
Step 3. Review by UDO Administrator & Development Review Committee	**Staff**
If the UDO Administrator determines that the Preliminary Development Plan Application is complete, it shall be forwarded to the Development Review Committee (DRC). The DRC shall review the application and prepare written comments for review with the Applicant.	
Step 4. Development Review Committee Meeting - Preliminary Development Plan Review	**Applicant & Staff**
A public meeting shall be held with the Applicant to review the DRC Staff Report and discuss the application. The DRC shall review the Preliminary Development Plan Application for compliance with the criteria and provisions in the UDO. The Applicant will be directed to address comments, if any, and resubmit the application materials. If applicable, upon resubmittal, the application materials will be reviewed for compliance with the DRC Staff Report. The UDO Administrator may approve, approve with conditions, or deny the application based on whether or not the application is in compliance with the UDO and the DRC comments. Preliminary Development Plan Application approval shall authorize the Applicant to prepare a Final Development Plan Application for administrative review and approval.	
Step 5. Application Check-In Meeting - Final Development Plan Submission	**Applicant & Staff**
The Applicant shall submit the completed Final Development Plan Application and required submittal materials during a mandatory Application Check-In Meeting where the UDO Administrator will review the submission for completeness.	
Step 6. Review by UDO Administrator & Development Review Committee	**Staff**
If the UDO Administrator determines that the Final Development Plan application is complete, it shall be forwarded to the DRC. The DRC shall review the application and prepare written comments for review with the Applicant.	
Step 7. Development Review Committee Meeting – Final Development Plan Review	**Applicant & Staff**
A public meeting shall be held with the Applicant to review the DRC Staff Report and discuss the application. The DRC shall review the Preliminary Development Plan Application for compliance with the criteria and provisions in the UDO. The Applicant will be directed to address comments, if any, and resubmit the application materials. If applicable, upon resubmittal, the application materials will be reviewed for compliance with the DRC Staff Report. The UDO Administrator may approve, approve with conditions, or deny the application based on whether or not the application is in compliance with the UDO and the DRC comments.	
Step 8. Issue Final Development Permit	**Staff**
If the application is in compliance with the UDO, DRC Staff Report, Preliminary Development Plan approval, and, if all comments are addressed, the UDO Administrator shall issue the Final Development Permit.	

TOWN OF BLUFFTON
DEVELOPMENT PLAN
APPLICATION CHECKLIST

In accordance with the Town of Bluffton Unified Development Ordinance (UDO), the following information shall be included as part of a Development Plan application submitted for review. Depending on the proposal, the amount and type of documentation will vary. This checklist is intended to assist in the provision of the minimum documentation necessary to demonstrate compliance with the UDO. Upon review of the submitted application by Town Staff, additional information may be required. The use of this checklist by Town Staff or the Applicant shall not constitute a waiver of any requirement contained in the UDO. Applicants are encouraged to work closely with Town Staff in preparing any application prior to submittal.

Prelim Plan	Final Plan	NOTE: Depending on the activities proposed, Development Plan documentation will vary. At minimum, each plan must contain the General Information and Site & Existing Conditions Documentation in addition to information required for the other specific activities listed below, as applicable. Please contact Town Staff for questions and additional information.
General Information.		
x	x	1. Name and address of property owner(s) and applicant.
x	x	2. If the applicant is not the property owner, a letter of agency from the property owner authorizing the applicant to act on behalf of the property owner.
x	x	3. A detailed narrative describing the existing site conditions and uses, proposed development, proposed uses and activities that will be conducted on the site, statement of conformance with the UDO, description of any energy conservation or green technologies proposed on the site, the maintenance responsibility of any common or public areas, and publically dedicated improvements to be completed.
x	x	4. A listing of any past development permit approval numbers associated with the site and existing conditions placed on the development property by the Town of Bluffton through past approvals including a detailed description of how the condition will be met.
x	x	5. An explanation of why any items on this checklist are not included with the application materials.
x	x	6. Project name and/or name of development.
x	x	7. All plans must include the following: name of county; municipality; project location; parcel identification number(s); date of original design; all dates of revisions; north arrow; graphic scale; and legend identifying all symbology.
x	x	8. Vicinity map.
WJK SITE PLAN x	x	9. Site data table to include; total acreage, pervious versus impervious cover, required and proposed open space calculations, number and area of proposed lots, residential density, number and area of each proposed structure, area of each use of the property and buildings, and required and proposed parking calculations.
x	x	10. Signature over seal of registered engineer or landscape architect licensed to practice in South Carolina.
x	x	11. Phasing plan if the development is proposed to be developed in phases.
	x	12. Letters of approval, including any applicable permits, from the following agencies (as necessary for the project): a) United States Army Corp of Engineers; b) South Carolina Department of Health & Environmental Control; c) South Carolina Department of Transportation; d) Beaufort County Engineering; e) Beaufort County EMS; f) Beaufort County School District; g) Bluffton Township Fire District; h) Beaufort Jasper Water Sewer Authority; i) Town of Bluffton; j) Electric Provider; k) Natural Gas provider; and

TOWN OF BLUFFTON
DEVELOPMENT PLAN
APPLICATION CHECKLIST

Prelim Plan	Final Plan	NOTE: Depending on the activities proposed, Development Plan documentation will vary. At minimum, each plan must contain the General Information and Site & Existing Conditions Documentation in addition to information required for the other specific activities listed below, as applicable. Please contact Town Staff for questions and additional information.
		l) Cable, telephone, and data provider.
Site and Existing Conditions Documentation.		
x	x	1. Comprehensive color photograph documentation of site and existing conditions. If digital, images should be at a minimum of 300 dpi resolution.
x	x	2. Names of the owners of contiguous parcels and an indication of adjacent existing and proposed (if known) land uses and zoning.
x	x	3. Location of all property lines.
x	x	4. Location of municipal limits or county lines, zoning, overlay or special district boundaries, if they traverse the development property, form a part of the boundary of the development property, or are contiguous to such boundary.
x	x	5. Location of all existing access points and intersections along both sides of any frontage or access roadway(s) within a minimum of 1,000 feet of the site boundaries.
x	x	6. Location, dimensions, name, and descriptions of all existing or recorded roadways, alleys, reservations, railroads, easements, or other public rights-of-way on or within 200 feet of the development property.
x	x	7. Location, size, and type of all existing easements, rights-of-way, or utility infrastructure on or within a minimum of 200 feet of the development property.
x	x	8. Existing topography and land cover of project site and adjacent and nearby sites that are impacted. Contours shall be shown in intervals of 1 foot or less.
x	x	9. Location, dimensions, area, descriptions, and flow line of existing watercourses, drainage structures, ditches, one-hundred (100) year flood elevation, OCRM critical line, wetlands or riparian corridors top of bank locations, and protected lands on the development property.
x	x	10. Location of any existing buildings, structures, parking lots, impervious areas, public and private infrastructure, or other manmade objects located on the development property.
x	x	11. Boundary survey with bearings and distances of all property lines, tract/lot acreage, location of property markers, and seal of a Registered Land Surveyor, as well as a legal description of the property.
	x	12. Location of benchmarks/primary control points or descriptions and ties to such control points to which all dimensions, angles, bearings, block numbers, and similar data shall be referred.
	x	13. Existing deed covenants, conditions, and restrictions, including any requirements from a POA or ARB.
	x	14. Proposed deed covenants, conditions, and restrictions, including any design or architectural standards.
	x	15. Legal documents for proposed public dedications.
Lot and Building Pattern.		
x		1. Schematic layout and design indicating overall site configuration; roadway design, building location(s), building size(s); general setbacks, and building orientation(s).
	x	2. Detailed layout and design indicating site layout, building location(s), building type(s)/ use(s), building orientation(s), conceptual building elevations, and setbacks.
	x	3. If a PUD, subdivision, office complex, or shopping center, a Master Sign Plan providing unity in sign design and describing the location, types, materials, shapes, sizes, and compatibility with the architecture of the development.
Parking.		
x		1. General location and ingress/egress of parking areas on the site.
	x	2. Location, layout, number of spaces, bicycle parking, and ensuring design shows ADA accessibility compliance.
	x	3. Location of proposed ingress/egress, circulation, loading, parking and pedestrian circulation elements, and ensuring design shows ADA accessibility compliance.

WJK SITE PLAN

WJK SITE PLAN

TOWN OF BLUFFTON
DEVELOPMENT PLAN
APPLICATION CHECKLIST

Prelim Plan	Final Plan	NOTE: Depending on the activities proposed, Development Plan documentation will vary. At minimum, each plan must contain the General Information and Site & Existing Conditions Documentation in addition to information required for the other specific activities listed below, as applicable. Please contact Town Staff for questions and additional information.
	x	4. A parking study documenting the reasons for any increase in the maximum amount of parking or a similar study documenting the ability of the site to accommodate a reduction of 20% or more to the maximum parking requirements.
	x	5. A parking study documenting the ability of a site(s) to accommodate a shared parking arrangement. A shared parking easement must also be provided.
	x	6. Detailed engineering information identifying the location of vehicular and bicycle parking facilities and the construction specifications, geometrics, arrangement, character, width, grade, circulation/maneuvering facilities and areas, landscape islands, loading areas, and including detailed dimensions as are necessary and appropriate to demonstrate compliance with all applicable standards and requirements.
Transportation Networks.		
x		1. General layout of transportation networks including access to the site, internal roadways, and access to adjacent properties.
x	x	2. A map or sketch showing the general relationship of the development to the surrounding areas with existing and proposed access roadways referenced to the intersection of the nearest primary or secondary paved roadway.
	x	3. Existing and proposed non-motorized vehicle lanes, paths, sidewalks, and other facilities, including transit facilities, on and within 200 feet of the development property including detailed dimensions as are necessary and appropriate to demonstrate compliance with all applicable standards and requirements.
	x	4. Proposed roadway alignment plan showing right-of-way widths with specific reference to the roadway type and design assembly.
	x	5. Proposed access indicating any access management plans, connectivity, roadway extensions, proposed stub roads, dead-end roadways, and roadway names including detailed dimensions as are necessary and appropriate to demonstrate compliance with all applicable standards and requirements.
	x	6. Emergency access provisions.
	x	7. A Traffic Assessment demonstrating adherence to MUTCD standards and/or other applicable requirements.
	x	8. A Traffic Impact Analysis (TIA), if warranted by the Traffic Assessment.
	x	9. Engineering plan of proposed traffic mitigation measures, including assessment of individual phase, or approved payments in-lieu of such that will be provided to the Town of Bluffton or applicable agency. Plan must ensure adequate transportation network is in place to support development at time of construction.
	x	10. Vehicular and pedestrian signage plan including crosswalk and pavement marking details.
	x	11. Shared access agreements.
	x	12. Detailed engineering information identifying the location, construction specifications, typical sections, geometrics, arrangement, character, width, and grade of existing and proposed roadways and non-motorized vehicle facilities including detailed dimensions and calculations as are necessary and appropriate to demonstrate compliance with all applicable standards and requirements.
Natural Resources, Tree Conservation, Planting, and Landscaping.		
x	x	1. Location of existing tree canopy coverage including table summarizing canopy lot coverage area, lot area not covered by tree canopy, and tree canopy expressed as percentage of lot coverage.
x	x	2. Location and table summarizing trees listed on America's Historic Tree Register as maintained by American Forests.

TOWN OF BLUFFTON
DEVELOPMENT PLAN
APPLICATION CHECKLIST

Prelim Plan	Final Plan	NOTE: Depending on the activities proposed, Development Plan documentation will vary. At minimum, each plan must contain the General Information and Site & Existing Conditions Documentation in addition to information required for the other specific activities listed below, as applicable. Please contact Town Staff for questions and additional information.
	x	3. Location of groups of trees that connect to other vegetated and/or treed areas on adjacent sites helping to create or extend a wildlife or natural corridor.
	x	4. Location and table summarizing trees that have a significant characteristic such as, but not limited to, allees and hedgerow trees, trees of unique character such as those with unique or unusual growth habitat, endangered species, or species rarely found in the area.
	x	5. Location and table summarizing trees designated as protected to be removed.
	x	6. The location and description of existing and proposed landscaping, screening, buffering, and tree preservation areas, including setbacks from natural resource areas.
	x	7. Graphic illustration of the existing tree canopy and mature tree canopy of the proposed tree plantings including a table summarizing the mature canopy of each tree species planted, canopy lot coverage area, lot area not covered by tree canopy, and tree canopy expressed as percentage of lot coverage (all calculations are excluding rooftop area).
	x	8. Detailed landscaping information containing the scientific and common names, quantity and size of each plant species to be planted, typical installation and maintenance drawings/notes, and location and description of irrigation systems.
	x	9. Tree protection zones (TPZ) and tree protection fencing and signage locations and installation specifications.
	x	10. Habitat management plan.
	x	11. Proposed topographic features, including basic contours at one foot or less intervals.
	x	12. Bank stabilization and erosion control measures.
	x	13. If applicable, a Forest Management Plan.
Open Space.		
x	x	1. Proposed open space areas, habitat areas, types, and access trails both on and off-site.
	x	2. Proposed public lands and methods of dedication and access.
	x	3. Proposed ownership and method of transfer through deed restrictions, covenants, public dedication, or other method acceptable to the UDO Administrator.
	x	4. Proposed use for all portions of dedicated open space.
Stormwater Management.		
x	x	1. Acknowledgement of compliance with Bluffton Stormwater Design Manual.
x	x	2. Description of proposed methods and general layout of stormwater drainage.
x	x	3. Proposed drainage system layouts.
x	x	4. Proposed methods to remove pollutants.
x	x	5. Soil types and permeability characteristics from National Resource Conservation Service.
	x	6. Stormwater Drainage Plan with drainage easements.
	x	7. Location and area of proposed impervious coverage.
	x	8. Pre- and post-development runoff volumes, velocities, hydrographs, with Watershed Maps and Link Node Diagrams.
	x	9. Methods to record and report installation and maintenance activities.
	x	10. Stormwater quality monitoring program and pre-development pollutant loading calculations.
	x	11. Notarized Operation and Maintenance Agreement signed by responsible party.
Utilities and Services.		
x		1. Statement by the Applicant/ Engineer/ Design Professional confirming that they believe the site can be supplied with adequate utilities.
	x	2. Proposed water system layout, or individual well locations.
	x	3. Proposed sewer system layout, or individual septic tank locations.

TOWN OF BLUFFTON
DEVELOPMENT PLAN
APPLICATION CHECKLIST

Prelim Plan	Final Plan	NOTE: Depending on the activities proposed, Development Plan documentation will vary. At minimum, each plan must contain the General Information and Site & Existing Conditions Documentation in addition to information required for the other specific activities listed below, as applicable. Please contact Town Staff for questions and additional information.
	x	4. Location of solid waste/trash disposal units/dumpsters.
	x	5. Location of proposed water, sewer, electric, telephone, cable, data, and gas service layouts, and proposed easements and connections.
	x	6. Location of proposed fire lane, hydrant location(s), FDC(s), and apparatus access to the site and building(s).
	x	7. Location of service and meter areas.
	x	8. Location of mail delivery boxes.
	x	9. Capacity and service studies and/or calculations.
	x	10. Detailed engineering information identifying the location, construction specifications, typical sections, service connections, meters, valves, manholes, inverts, transformers, service pedestals/boxes, and any other utility information.
Lighting.		
x		1. Narrative or plan notes describing the proposed exterior lighting scheme for the property.
	x	2. Location, specifications, and details for existing and proposed exterior site and building light fixtures including the total lumen output, type of lamp, method of shielding, pole and mounting height, and verification that there are no conflicts between lighting and landscaping.
	x	3. Photometric grid overlaid on the proposed site plan indicating the overall light intensity throughout the site (in footcandles) including existing and proposed lighting. Photometric calculations must consider all exterior lighting including building lighting.
	x	4. Notes describing lighting limitations, prohibitions, and methods of enforcement.

SIGN AND RETURN THIS CHECKLIST WITH THE APPLICATION SUBMITTAL
ALL SUBMITTALS MUST BE COLLATED AND FOLDED TO 8-1/2" X 11"

By signature below I certify that I have reviewed and provided the minimum submittal requirements listed above, including any additional items requested by the Town of Bluffton Staff. Any items not provided have been listed in the project narrative with an explanation as to why the required submittal item has not been provided or is not applicable. Further, I understand that failure to provide a complete, quality application or erroneous information may result in the delay of processing my application(s).

MEMBER 8/10/22

Signature of Property Owner or Authorized Agent Date

CHARLES MONTANO

Printed Name

Witmer Jones Keefer Ltd.
landscape architecture
land planning

June 27, 2023

Kevin P. Icard, AICP
Planning & Community Development Manager

RE: Preliminary Development plan submittal for CarVillage Bluffton

Dear Mr. Icard-

On behalf of the applicant, Charlie and Brown, LLC we are submitting the attached Updated *Preliminary Development Plan* for **CarVillage** Bluffton.

Project Narrative:

Site

CarVillage is located within the south-west portion of the Seagrass Station/Village of Verdier PUD along Highway 170. The proposed use is an ***Automotive Enthusiasts Club***, including buildings for private and common use by members of the club. Individual units of the Club may be sold to members.

The CarVillage project involves the construction of a ±20,000 SF two-story Clubhouse and 5 buildings divided into +/- 31 high-end garage condominium units. The garage units are accessory uses to the Club. The total proposed commercial square footage is 80,000 square feet.

The Clubhouse first floor will include a showroom, lounge area, offices, vehicle detailing, and light automotive maintenance. The second floor will include the common gathering spaces, lounging areas, offices, dining and kitchen facilities for Club members. The second floor areas are a shared space only open to Club Members.

The individually owned Garage Condominium's are approximately 1680 Square feet and will include storage for collector and/or classic motor vehicles. Each unit will have a front 'courtyard' for owner parking providing a village streetscape aesthetic.

Traffic and Access

Access to the site will be provided from Highway 170. A dedicated right-in / right-out turn lane is planned per the highway 170 access requirements. See attached 'Traffic Access Memo' provided by Kimley Horn. A second 'emergency access point' is planned to connect to the property line adjacent to Hager Road.

23 Promenade Street, Suite 201
Bluffton, SC 29910
Tel: 843-757-7411

Storm Drainage, Infrastructure, and Utilities

The proposed project is being development within the Seagrass Station Planned Unit Development. The PUD has an approved stormwater management plan and the existing drainage system to handle the post-development run-off from this development. All drainage will be routed to the existing stormwater pond located on the eastern side of the property. The existing pond is adequately constructed to attenuate the 2, 10, 25, 50- & 100-year 24-hour design storm events.

This site uses a mix of bio-retention areas, grassed swales, disconnected impervious runoff and pervious paving as Better Site Design Principals to reduce storm water runoff. The excess stormwater run off will also be directed towards an interconnected wet detention system for further treatment.

Beaufort-Jasper Water and Sewer Authority (BJWSA) will provide water and sewer service to the project.

Dominion Power will provide power and site lighting, and Hargray will provide telephone and cable service.

Parking

Parking for the Club guest will be located within the +/-11 spaces to the west of the clubhouse at the entrance adjacent to highway 170. All other parking for the Club Members/ Guest will be centrally located within the gated courtyard adjacent to the clubhouse and garage condominiums.

Following is the breakdown of required and proposed parking:

Clubhouse 1st floor: ±10,000 SF
(Calculated as 'commercial services' at 4 spaces per 1,000 SF)
Requires 40 spaces

Clubhouse 2nd floor: ±10,000 SF
(Calculated at one space per unit for shared club use)
Requires 31 spaces

Total Parking required: 71
Total Parking provided: 73

Each unit is located to allow for 1-2 additional owner spaces within the front courtyard of each unit. Parking in front of the unit is intended for short term day use.

Architectural

The architectural plans will be submitted for Highway Corridor overlay review.

Exterior Lighting

Exterior Lighting will be provided by Dominion Power and fixtures mounted on the building. The. Lighting specifications and locations will be included on the Corridor overlay submittal plans.

Landscaping

The site will be enhanced with native and indigenous plantings. Overstory trees meeting the minimum tree coverage will include Live Oaks, Shumard Oaks, Bald Cypress, and Southern Magnolias. Understory trees, shrubs, grasses, groundcovers and other accent plantings will be included on the final landscape plans. The buffer to the east adjacent will be enhanced to minimize visibility from the adjacent residential properties. Open space is provided within the site through the various landscape areas, plaza space and buffers. The open space exceeds the required 20% as indicated on the preliminary submittal site plan.

Signage

CarVillage Identification Signage will be located along the Highway 170. All signage will be submitted under separate application per Town of Bluffton ordinance.

Submittal items attached:

a. Project survey
b. Existing Conditions Photo's
c. Preliminary Site plan including site data
d. Traffic – site access

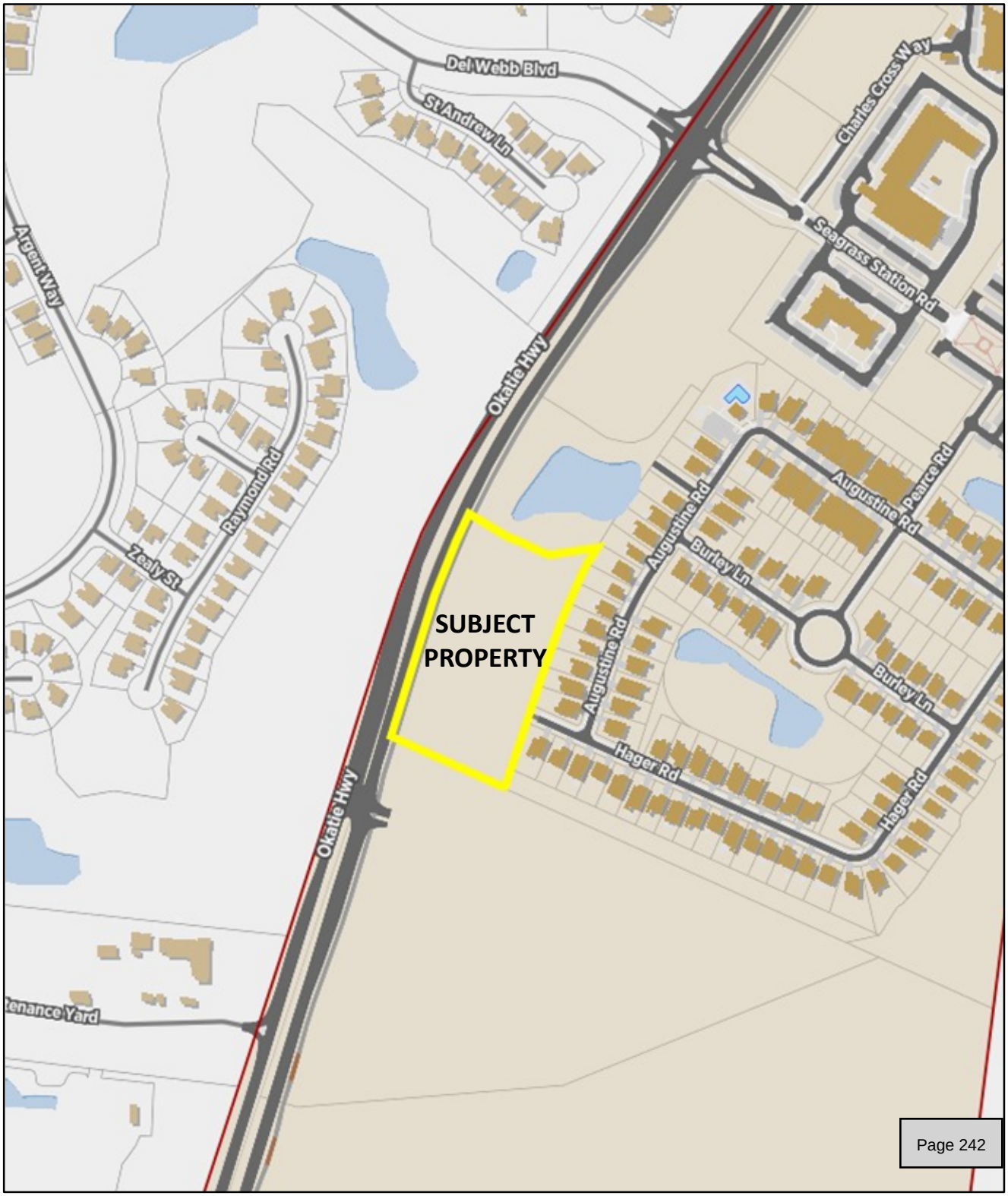
If you require additional submittal documents, please contact our team.

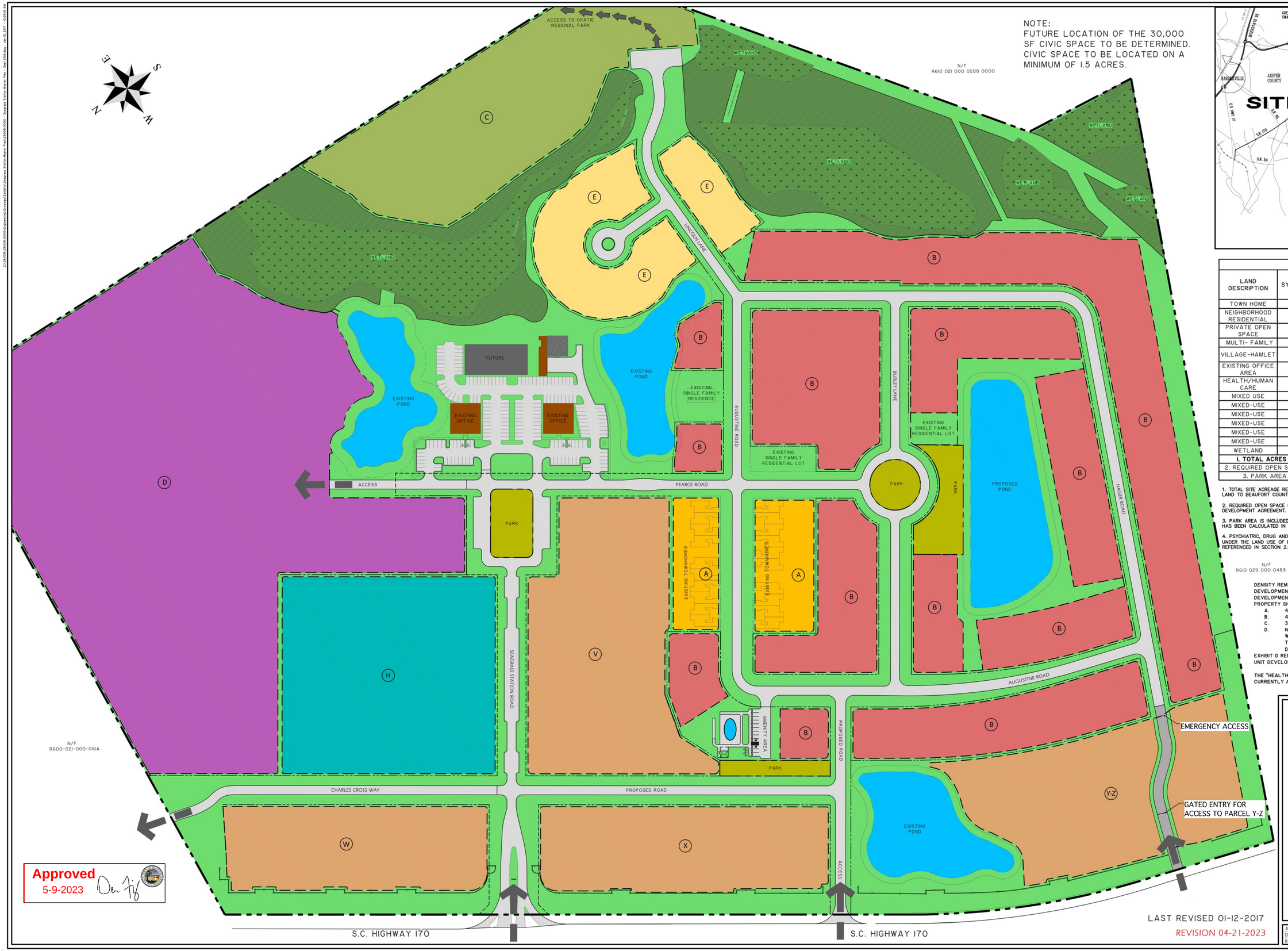
Sincerely,
Witmer◆Jones◆Keefer, Ltd.

Daniel Keefer, ASLA
Principal

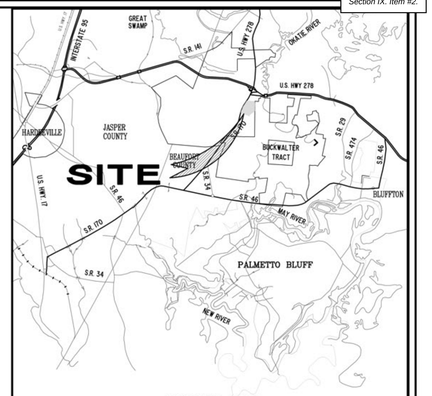
Cc: Jeff Ackerman
Kevin Biebel

VICINITY MAP
CARVILLAGE BLUFFTON
DEVELOPMENT PLAN





NOTE:
FUTURE LOCATION OF THE 30,000 SF CIVIC SPACE TO BE DETERMINED. CIVIC SPACE TO BE LOCATED ON A MINIMUM OF 1.5 ACRES.



VICINITY MAP
N.T.S.

LAND USE KEY			
LAND DESCRIPTION	SYMBOL	MPA REVISION APPROVED AUGUST 2015	PROPOSED MPA REVISION
		ACREAGE	ACREAGE
TOWN HOME	A	2.9	2.9
NEIGHBORHOOD RESIDENTIAL	B	36.0	36.0
PRIVATE OPEN SPACE	C	6.4	6.4
MULTI- FAMILY	D	22.7	20.9
VILLAGE-HAMLET	E	5.1	5.1
EXISTING OFFICE AREA	-	6.6	6.6
HEALTH/HUMAN CARE	H	0.0	6.8
MIXED USE	T	5.0	0.0
MIXED-USE	V	6.6	6.6
MIXED-USE	W	5.5	5.5
MIXED-USE	X	5.6	5.6
MIXED-USE	Y	7.1	7.1
MIXED-USE	Z	1.9	1.9
WETLAND	-	12.8	12.8
1. TOTAL ACRES =		124.2	**124.2**
2. REQUIRED OPEN SPACE		12.4	12.43
3. PARK AREA		3.49	3.49

1. TOTAL SITE ACREAGE REDUCED FROM THE ORIGINAL MASTER PLAN BY DONATION OF LAND TO BEAUFORT COUNTY FOR HIGHWAY 170 WIDENING.

2. REQUIRED OPEN SPACE PER SECTION 2.D.2 OPEN SPACE (PRIVATE OR PUBLIC) OF THE DEVELOPMENT AGREEMENT.

3. PARK AREA IS INCLUDED IN ADJACENT LAND USE AREA AND HAS BEEN CALCULATED IN THE TOTAL AREA ABOVE.

4. PSYCHIATRIC, DRUG AND ALCOHOL REHABILITATION SERVICES WOULD NOT BE ALLOWED UNDER THE LAND USE OF HOSPITAL IN LAND DESCRIPTION HEALTH/HUMAN CARE AS REFERENCED IN SECTION 2.B.7 OF THE PLANNED UNIT DEVELOPMENT AGREEMENT.

N/F
R610 029 000 0483 0000

DENSITY AND LAND USE:

DENSITY REMAINS CONSISTENT WITH PREVIOUSLY APPROVED DEVELOPMENT AGREEMENT. THE FOLLOWING IS AN EXCERPT FROM THE DEVELOPMENT AGREEMENT: MIXED USE DEVELOPMENT ON THE PROPERTY SHALL BE LIMITED TO THE FOLLOWING:

A. 404,000 SQUARE FEET OF COMMERCIAL;
B. 404 RESIDENTIAL DWELLING UNITS; AND
C. 30,000 SQUARE FEET OF CIVIC DEVELOPMENT
D. NOTWITHSTANDING ANY OTHER PROVISIONS CONTAINED WITHIN THE UNIFIED ORDINANCE, COMMERCIAL USES WITHIN THE PROPERTY SHALL BE LIMITED TO THOSE MORE FULLY DESCRIBED IN EXHIBIT "D"

EXHIBIT D REFERS TO THE VILLAGE AT VERDIER PLANTATION PLANNED UNIT DEVELOPMENT AMENDED DECEMBER 29, 2010

THE "HEALTH/HUMAN CARE" LAND USE TO BE INCLUDED WITHIN THE CURRENTLY APPROVED 404,000 SQUARE FEET OF COMMERCIAL.

Approved
5-9-2023

MASTER PLAN

VILLAGE AT VERDIER PLANTATION

BLUFFTON, SC

PREPARED FOR:

HEALTHSOUTH REHABILITATION HOSPITAL OF LOWCOUNTRY, LLC

PREPARED BY:

THOMAS & HUTTON
Engineering | Surveying | Planning | GIS | Consulting

50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300

www.thomasandhutton.com

LAST REVISED 01-12-2017
REVISION 04-21-2023

JOB NO:	J-26038.0000	DATE:	01-12-17
DRAWN:	JRS	SCALE:	1" = 100'
REVIEWED:	JRS	SHEET:	1 OF 1

RELOCATED BIKE PATH (±275 LF)

SC HIGHWAY 170

DECELERATION LANE

PEDESTRIAN PATH

EXISTING BERM AND VEGETATION TO REMAIN OUTSIDE OF PROPERTY LINE

ENHANCED BUFFER:
- LIVE OAK
- MAGNOLIA
- RED CEDAR
- AMERICAN HOLLY
- CABBAGE PALMETTO
- WAX MYRTLE
- YELLOW ANISE

PROPERTY LINE

25' B.S.L./H.C.O.D. BUFFER

10' MULTI-USE TRAIL

GUEST PARKING

150'

25'

FLAGPOLE

GATED ACCESS

20,000 SF CLUBHOUSE
- 10,000 SF COMMERCIAL (1ST FLOOR)
- 10,000 SF CLUBHOUSE (2ND FLOOR)

50' BUFFER

10' B.S.L.

BUILDING A
- 10,080 SF (1ST FLOOR)
- 8,900 SF (2ND FLOOR)

CAR LIFT ±700 SF

BUILDING B
8,400 SF FOOTPRINT

15'-2"

26'

21'-9"

25'-7"

FOUNTAIN

12'

48'

APPROXIMATE LOCATION OF STREET LIGHTS, TYP.

ALUMINUM FENCE, TYP.

PERVIOUS PAVERS, TYP.

DUMPSTER

WOOD PRIVACY FENCE, TYP.

EXISTING TREE TO REMAIN, TYP.

BUILDING E
8,400 SF FOOTPRINT

20'

22'

BUILDING D
11,760 SF FOOTPRINT

19'-2"

15'-10"

BUILDING C
11,760 SF FOOTPRINT

16'-5"

15'

30' B.S.L.

TOP OF BANK

10' B.S.L.

POND

BIOSWALE

BIOSWALE

RAIN GARDEN

STUCCO WALLS, TYP.

GATED ACCESS (EMERGENCY ACCESS ONLY)

DENSELY PLANTED BUFFER AND 8' WOOD PRIVACY FENCE, TYP.

HAGER RD.

AUGUSTINE RD.

SITE DESCRIPTION	
COUNTY	**BEAUFORT**
MUNICIPALITY	**TOWN OF BLUFFTON**
LOCATION	**OKATIE HIGHWAY**
PARCEL IDENTIFICATION NUMBER	**R610-021-000-0808-0000**
EXISTING ZONING	**PUD**
TOTAL SITE AREA (ACRES)	**5.0 A.C.**

SITE COVERAGE	
IMPERVIOUS COVERAGE	ACTUAL COVERAGE (SF)
BUILDING FOOTPRINT(S)	61,100
IMPERVIOUS HARDSCAPE	20,094
PERVIOUS HARDSCAPE (50%) (44,045 SF/2 = 22,023)	22,023
TOTAL IMPERVIOUS	103,217
TOTAL SITE AREA	217,800
% SITE COVERAGE	47%

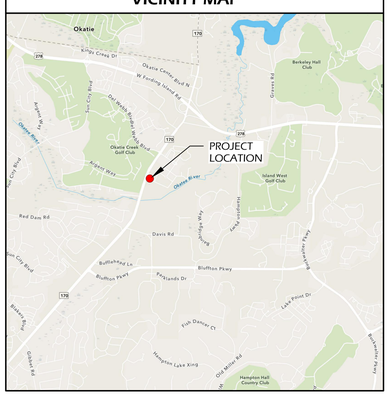
OPEN SPACE SUMMARY			
DESCRIPTION	S.F.	ACTUAL %	REQUIRED %
TOTAL SITE AREA	217,800		
OPEN SPACE	±92,561	42%	
TOTAL OPEN SPACE %		**42%**	20%

REQUIRED PARKING			
DESCRIPTION		REQUIREMENTS	PARKING SPACES
COMMERCIAL SERVICES	10,000 SF	4 SPACE/1,000 SF	40
CLUBHOUSE SHARED	31 UNITS*	1 SPACES/UNIT	31
TOTAL REQUIRED SPACES			**71**

PARKING SUMMARY	
DESCRIPTION	PARKING SPACES
CAR	73
ACCESSIBLE CAR / VAN	3
TOTAL PROPOSED SPACES	76
TOTAL EXISTING SPACES	0
TOTAL PARKING SPACES	**76**

NOTE:
1. *INCLUDES 8,900 SF SECOND FLOOR UNIT IN BUILDING A.
2. TOTAL BUILDING SQUARE FOOTAGE NOT TO EXCEED 80,000 SF.

VICINITY MAP



Wilmer Jones Keefer Ltd.
landscape architecture
land planning
www.wjkltd.com
23 Promenade Street, Suite 301 | Bluffton, South Carolina | 29910 | ph 843.707.7411

JUNE 2023

SOUTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 837 DANIEL PATRICK KEEFER

PRELIMINARY SITE PLAN

FOR

Car Village Bluffton ™

BLUFFTON, SOUTH CAROLINA

N W E S

0 15 30 45 60 75 90 105 120

Scale 1 " = 30'

Note: Plan is conceptual in nature and subject to change

Kimley»Horn

TECHNICAL MEMORANDUM

To: Dan Frazier, AICP
Principal Planner
Town of Bluffton

From: Dillon Turner, PE, PTOE
Kimley-Horn

Date: January 10, 2022

Subject: Village at Verdier Plantation IMP Amendment, Bluffton, South Carolina

---

The purpose of this technical memorandum is to show traffic impacts of the proposed roadway changes compared to the initial Masterplan for the Village at Verdier Planation. The Village at Verdier Plantation is located in the southeast quadrant of the SC 170 (Okatie Highway) at Seagrass Station intersection in Bluffton, South Carolina. The proposed roadway changes include:

- An emergency access gate at Hager Road, internal to the proposed DBA – CarVillage
- A proposed full access road with a pedestrian connection to Parcel X, north of the DBA – CarVillage
- Removal of the frontage road in the southeast quadrant of the SC 170 at Seagrass Station intersection

This technincal memorandum will compare the capacity analysis at the following study area intersections:

- SC 170 (Okatie Highway) at Seagrass Station Road/Del Webb Boulevard
- Seagrass Station at Charles Cross Way/7C Access 2
    - Please note 7C is the access to Parcel X
- Pearce Road at Augustine Road
- Augustine Road at Amanda Road
- Hager Road at Augustine Road
- SC 170 (Okatie Highway) at Hager Road
- SC 170 (Okatie Highway) at Amanda Road
- Amanda Road at 7C Access 1
    - Please note 7C is the access to Parcel X

This technical memorandum considers two scenarios in the AM and PM peak hours:

- Access to Hager Road is limited to CarVillage visitors and only allowed as an emergency exit for Seagrass Station, referred to as “No Access.”
- Access to Hager Road is provided for the Seagrass Station neighborhood referred to as “Access.”

Existing Conditions

SC 170 (Okatie Highway) is a four-lane, divided principal arterial with a posted speed limit of 45 mph in the vicinity of the site. SC 170 (Okatie Highway) had an Annual Average Daily Traffic (AADT) of 25,100 vehicles per day in 2021. Seagrass Station Road provides access to the Seagrass Station residential development on the east side of SC 170 (Okatie Highway). Seagrass Station Road is a local roadway with a posted speed limit of 15 mph. Hager Road and Augustine Road are both local roadways that provide internal access to the Seagrass Station residential development and currently do not provide access to SC 170 (Okatie Highway).

Existing Traffic Volumes

Peak-period turning movement counts were collected at the following intersections on Thursday, November 10th, 2022 from 7:00 AM to 9:00 AM and 4:00 PM to 6:00PM:

- Seagrass Station Road and Charles Cross Way
- Hager Road and Augustine Road
- Pearce Road and Augustine Road
- Pearce Road and Amanda Road
- SC 170 (Okatie Highway) and Seagrass Station

The raw turning-movement count data are included in **Attachment B** and the traffic volume development worksheets are included in **Attachment C**.

Seagrass Station homes are considered fully built-out and occupied, and trips from this residential development are captured in the turning-movement counts.

The counts were distributed throughout the network for proposed intersections in the Village at Verdier Masterplan.

Trip Generation

Two additional developments were considered as part of this comparison. The CarVillage site and the Parcel X site were considered, with their locations and site plans provided in **Attachment A**. As determined in the CarVillage Bluffton Traffic Memo (Kimley-Horn, August 2022), low intensities and unique land uses did not require a traffic impact study. To provide a conservative estimate for this site's trip generation, 20 total trips (10 in/10 out) in the AM peak hour and 20 trips (10 in/10 out) in the PM peak hour were considered. These trips utilize SC 170 (Okatie Highway) to access the right-in right-out Hager Road to access the CarVillage site.

The development at Parcel X is projected to include the following land uses and intensities, shown in **Table 1**. It is expected to produce 80 trips in the AM peak hour (47 in/33 out) and 106 trips in the PM peak hour (49 in/57 out). Full detail on the trip generation is provided in **Attachment C**.

Kimley»Horn

Table 1 – Parcel X Trip Generation Estimates

Land Use	ITE LUC	Intensity	AM Peak-Hour Trips	PM Peak-Hour Trips
Small Office Building	712	10,000 square feet	17 (14 in/3 out)	22 (7 in/15 out)
Furniture Store	890	18,000 square feet	5 (4 in/1 out)	10 (5 in/5 out)
Convenience Store/Gas Station	945	3,800 square feet / 2-8 vehicle fueling positions	154 (77 in/77 out)	184 (92 in/92 out)
		Subtotal	176 (95 in/81 out)	216 (104 in/112 out)
		Internal Capture	*-4 (2 in/2 out)*	*-4 (2 in/2 out)*
		ITE Pass-By	*-92 (46 in/46 out)*	*-106 (53 in/53 out)*
		Total Net New External Trips	80 (47 in/33 out)	106 (49 in/57 out)

Trip Distribution Comparison

For the existing masterplan, it was assumed that homes south of Burley Lane within the Seagrass Station neighborhood would utilize Hager Road off of SC 170 (Okatie Highway) and homes north of Burley Lane would utilize Amanda Road off of SC 170 (Okatie Highway).

Hager Road and Amanda Road are both anticipated to be right-in/right-out accesses off of SC 170 (Okatie Highway), therefore southbound trips accessing the Seagrass Station neighborhood would not be redistributed from their existing assignment.

The amended masterplan for the Village of Verdier removes the public access from Hager Road. Therefore, the inbound northbound trips which initially were planned to utilize Hager Road were redistributed to Amanda Road and Seagrass Station based on the exiting volume counts and existing travel patterns. The calculations are attached for this redistribution.

2027 Traffic Volumes

The analysis year for the comparison was 2027. Based upon available South Carolina Department of Transportation (SCDOT) Average Annual Daily Traffic (AADT) data for Beaufort County count stations #165, #554, and #325, an annual growth rate of 6% was assumed for this project and applied to the existing peak-hour traffic volumes for five years to develop 2027 horizon year volumes. The trip generation projections for CarVillage and Parcel X were applied to these grown traffic volumes to perform the capacity analysis comparison.

Capacity Analysis Comparison

Level-of-service (LOS) analyses were conducted using the Synchro, Version 11, traffic analysis software for the AM and PM peak hours for the intersections of study. The program uses methodologies contained in the Highway Capacity Manual (HCM), 6th Edition, to determine the operating characteristics of an intersection. **Table 2** summarizes the LOS and longest control delay on the side street approaches for the study intersections of:

- SC 170 (Okatie Highway) at Seagrass Station Road/Del Webb Boulevard
- Seagrass Station at Charles Cross Way/7C Access 2
- Pearce Road at Augustine Road
- Augustine Road at Amanda Road
- Hager Road at Augustine Road
- SC 170 (Okatie Highway) at Hager Road
- SC 170 (Okatie Highway) at Amanda Road
- Amanda Road at 7C Access 1

Table 2 – Capacity Analysis Results (LOS/Delay)

Intersection	Scenario			
	2027 Access		2027 No Access	
	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)	AM Peak Hour (LOS Delay)	PM Peak Hour LOS (Delay)
Okatie Highway and Seagrass Station Road (TWSC)	F ($)	F ($)	F ($)	F ($)
Okatie Highway and Seagrass Station Road (Signal)	A (6.5)*	A (5.9)*	A (6.5)*	A (6.2)*
Seagrass Station Road at Charles Cross Way	A (9.1)	A (9.2)	A (9.1)	A (9.2)
Pearce Road at Augustine Road	A (9.5)	A (9.5)	A (9.5)	A (9.5)
Augustine Road at Amanda Road	A (8.7)	A (8.8)	A (8.8)	A (8.8)
Hager Road at Augustine Road	A (8.5)	A (8.6)	A (8.6)	A (8.7)
SC 170 (Okatie Highway) at Hager Road	C (18.9)	C (17.1)	C (17.2)	C (16.3)
SC 170 (Okatie Highway) at Amanda Road	C (19.9)	C (18.0)	C (22.1)	C (19.1)
Amanda Road at 7C Access 1	A (8.8)	A (8.7)	A (8.9)	A (8.8)

$- Delay Exceeds 300 Seconds

* Overall Intersection Reported

The results of the analysis presented in **Table 2** indicate that under the No Access scenario, all intersections are expected to operate with similar if not the same LOS and delay under both AM and PM peak hours. The intersection of SC 170 (Okatie Highway) is projected to operate with significant delays (LOSF F). With these undesirable delays, a signalized intersection was analyzed as an alternative to the existing minor street stop control. With signalized control this intersection is expected to operate at LOS A during both the AM and PM peak hours with and without access to Hager.

The Town of Bluffton recently did a signal warrant analysis at the interseciton of SC 170 (Okatie Highway) at Seagrass station and it was not warranted per a discussion with SCDOT. It is recommended to continue to monitor this intersection for signalization.

Summary

The purpose of this technical memorandum is to show traffic impacts of the proposed roadway changes compared to the initial Masterplan for the Village at Verdier. The proposed roadway changes include

- An emergency access gate at Hager Road, internal to the proposed DBA – CarVillage
- A proposed full access road with a pedestrian connection to Parcel X, north of the DBA – CarVillage
- Removal of the frontage road in the southeast quadrant of the SC 170 at Seagrass Station intersection

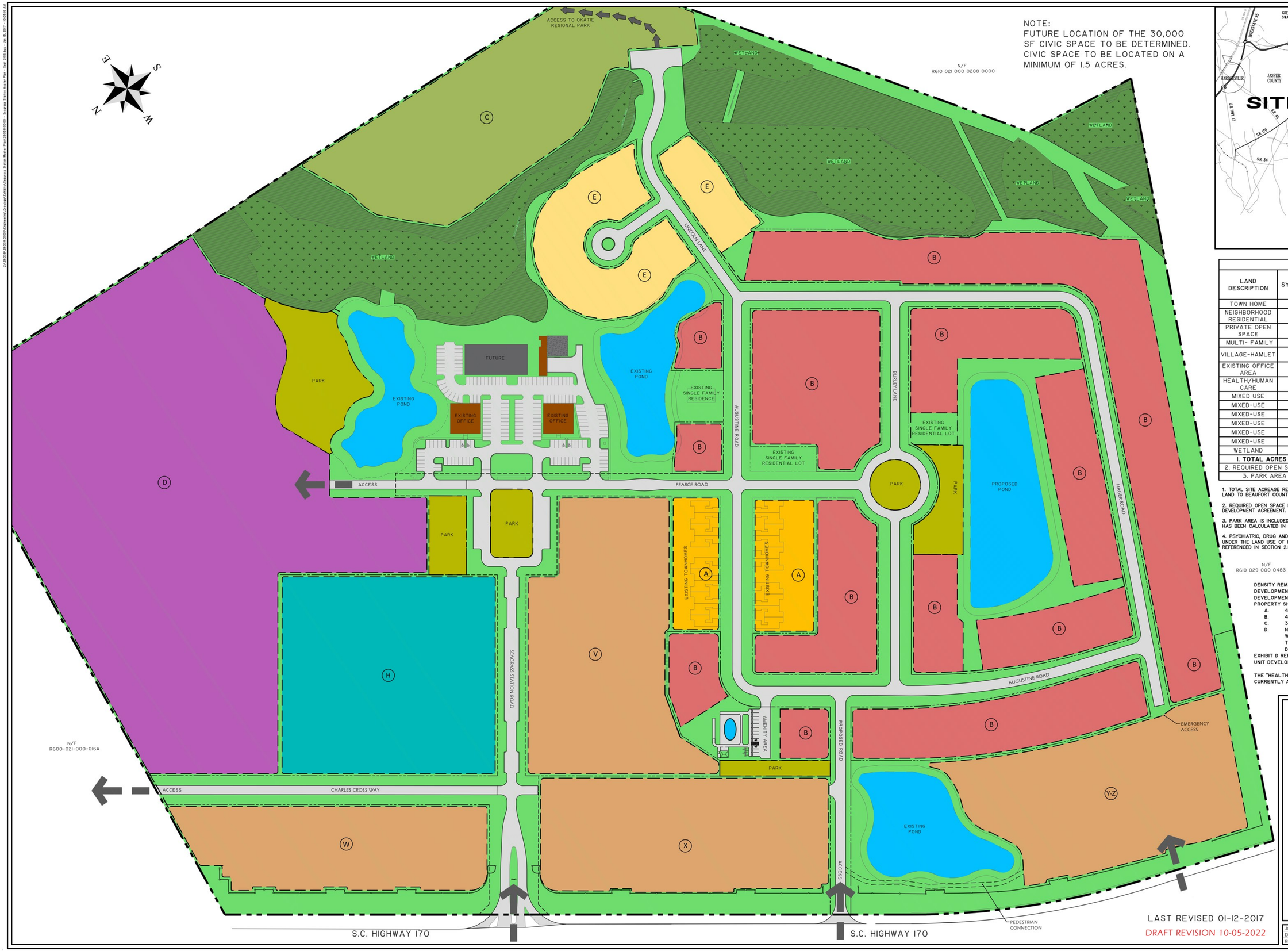
Based on the capacity analysis, removing access to Hager Street will have a minimal impact on the surrounding roadway network. The Town of Bluffton recently did a signal warrant analysis at the interseciton of SC 170 (Okatie Highway) at Seagrass station and it was not warranted per a discussion with SCDOT. It is recommended to continue to monitor this intersection for signalization.

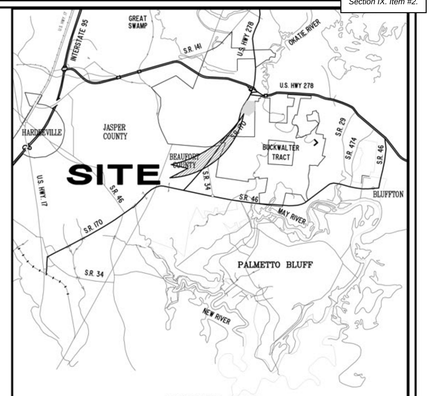
Attachments

Attachment A – Site Plans
Attachment B – Existing Counts
Attachment C – Trip Generation and Traffic Volume Development Worksheets
Attachment D – HCM 6 Capacity Analysis Reports

Kimley»Horn

Attachment A – Site Plans





VICINITY MAP
N.T.S.

LAND USE KEY

LAND DESCRIPTION	SYMBOL	MPA REVISION APPROVED AUGUST 2015	PROPOSED MPA REVISION
		ACREAGE	ACREAGE
TOWN HOME	A	2.9	2.9
NEIGHBORHOOD RESIDENTIAL	B	36.0	36.0
PRIVATE OPEN SPACE	C	6.4	6.4
MULTI- FAMILY	D	22.7	20.9
VILLAGE-HAMLET	E	5.1	5.1
EXISTING OFFICE AREA	-	6.6	6.6
HEALTH/HUMAN CARE	H	0.0	6.8
MIXED USE	T	5.0	0.0
MIXED-USE	V	6.6	6.6
MIXED-USE	W	5.5	5.5
MIXED-USE	X	5.6	5.6
MIXED-USE	Y	7.1	7.1
MIXED-USE	Z	1.9	1.9
WETLAND	-	12.8	12.8
1. TOTAL ACRES =		124.2	**124.2**
2. REQUIRED OPEN SPACE		12.4	12.43
3. PARK AREA		3.49	3.49

1. TOTAL SITE ACREAGE REDUCED FROM THE ORIGINAL MASTER PLAN BY DONATION OF LAND TO BEAUFORT COUNTY FOR HIGHWAY 170 WIDENING.

2. REQUIRED OPEN SPACE PER SECTION 2.D.2 OPEN SPACE (PRIVATE OR PUBLIC) OF THE DEVELOPMENT AGREEMENT.

3. PARK AREA IS INCLUDED IN ADJACENT LAND USE AREA AND HAS BEEN CALCULATED IN THE TOTAL AREA ABOVE.

4. PSYCHIATRIC, DRUG AND ALCOHOL REHABILITATION SERVICES WOULD NOT BE ALLOWED UNDER THE LAND USE OF HOSPITAL IN LAND DESCRIPTION HEALTH/HUMAN CARE AS REFERENCED IN SECTION 2.B.7 OF THE PLANNED UNIT DEVELOPMENT AGREEMENT.

N/F
R610 029 000 0483 0000

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EXHIBIT D REFERS TO THE VILLAGE AT VERDIER PLANTATION PLANNED UNIT DEVELOPMENT AMENDED DECEMBER 29, 2010

THE "HEALTH/HUMAN CARE" LAND USE TO BE INCLUDED WITHIN THE CURRENTLY APPROVED 404,000 SQUARE FEET OF COMMERCIAL.

MASTER PLAN

VILLAGE AT VERDIER PLANTATION

BLUFFTON, SC

PREPARED FOR:

HEALTHSOUTH REHABILITATION HOSPITAL OF LOWCOUNTRY, LLC

PREPARED BY:

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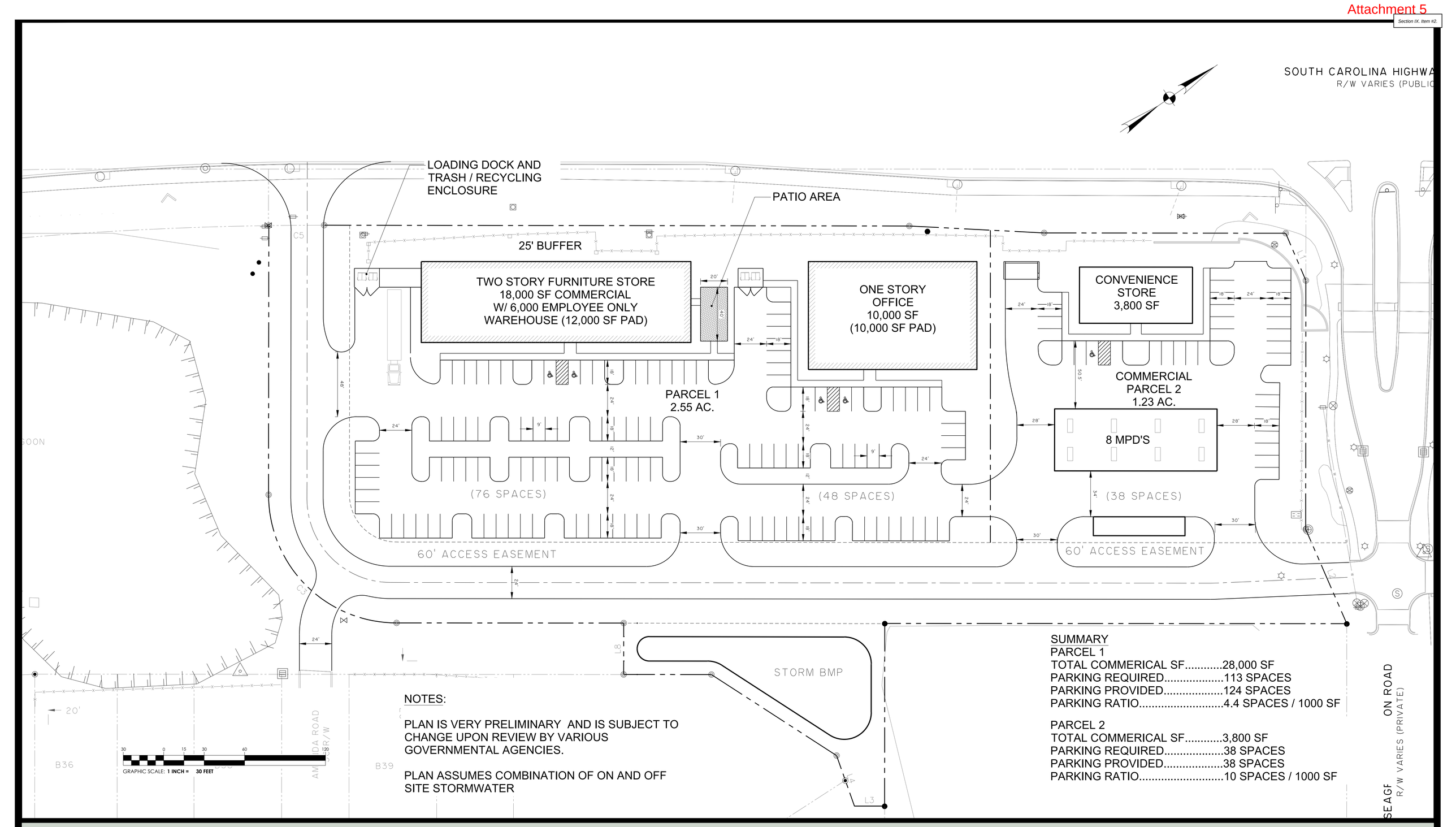


NOTES:

PLAN IS VERY PRELIMINARY AND IS SUBJECT TO CHANGE UPON REVIEW BY VARIOUS GOVERNMENTAL AGENCIES.

PLAN ASSUMES COMBINATION OF ON AND OFF SITE STORMWATER

SUMMARY

PARCEL 1
TOTAL COMMERICAL SF.....28,000 SF
PARKING REQUIRED.....113 SPACES
PARKING PROVIDED.....124 SPACES
PARKING RATIO.....4.4 SPACES / 1000 SF

PARCEL 2
TOTAL COMMERICAL SF.....3,800 SF
PARKING REQUIRED.....38 SPACES
PARKING PROVIDED.....38 SPACES
PARKING RATIO.....10 SPACES / 1000 SF

CONCEPTUAL LAYOUT EXHIBIT 2

VERDIER COMMERIAL STUDY

BLUFFTON, SOUTH CAROLINA

June 23, 2021

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

PARKING SUMMARY

COMMERCIAL SERVICES - 10,000 SF (4 SPACES/1,000 SF REQUIRED)	40 SPACES
CLUBHOUSE SHARED - 28 UNITS (1 SPACE/UNIT REQUIRED)	29 SPACES

*EACH UNIT HAS ±2 OWNER/GUEST SPACES ON PERMEABLE PAVER DRIVEWAYS

CONCEPTUAL PLAN
FOR
CAR VILLAGE - SEAGRASS
BLUFFTON, SOUTH CAROLINA

Wilmer Jones Keefer Ltd.
landscape architecture
land planning
www.wjkltd.com
23 Promenade Street, Suite 201 • Bluffton, South Carolina • 29910 • ph 843.757.7411

JULY 2022

Scale 1 " = 30'

Note: Plan is conceptual in nature and subject to change

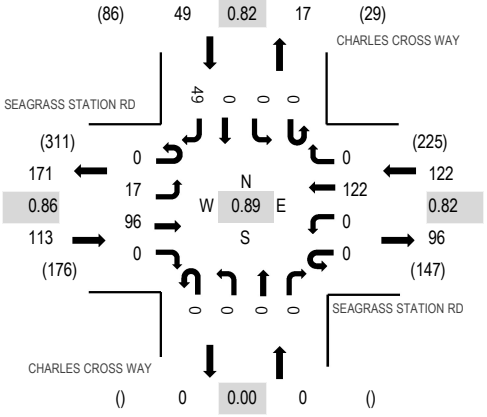
Kimley»Horn

Attachment B – Existing Counts

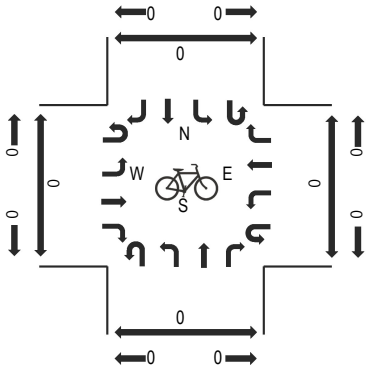
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 CHARLES CROSS WAY & SEAGRASS STATION RD AM
Date: Thursday, November 10, 2022
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

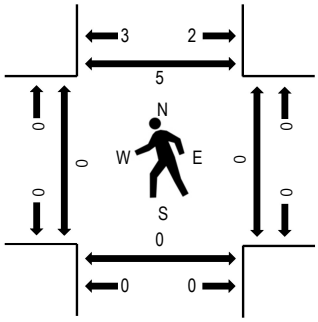
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SEAGRASS STATION RD Eastbound				SEAGRASS STATION RD Westbound				CHARLES CROSS WAY Northbound				CHARLES CROSS WAY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	1	9	0	0	0	23	0	0	0	0	0	0	0	0	11	44	244	0	0	0	2
7:15 AM	0	2	9	0	0	0	30	0	0	0	0	0	0	0	0	11	52	278	0	0	0	1
7:30 AM	0	1	29	0	0	0	24	0	0	0	0	0	0	0	0	14	68	284	0	0	0	1
7:45 AM	0	7	26	0	0	0	37	0	0	0	0	0	0	0	0	10	80	270	0	0	0	3
8:00 AM	0	6	22	0	0	0	40	0	0	0	0	0	0	0	0	10	78	243	0	0	0	1
8:15 AM	0	3	19	0	0	0	21	0	0	0	0	0	0	0	0	15	58		0	0	0	0
8:30 AM	0	5	12	0	0	0	26	0	0	0	0	0	0	0	0	11	54		0	0	0	0
8:45 AM	0	4	21	0	0	0	24	0	0	0	0	0	0	0	0	4	53		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	17	92	0	0	0	118	0	0	0	0	0	0	0	0	49	276
Mediums	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8
Total	0	17	96	0	0	0	122	0	0	0	0	0	0	0	0	49	284

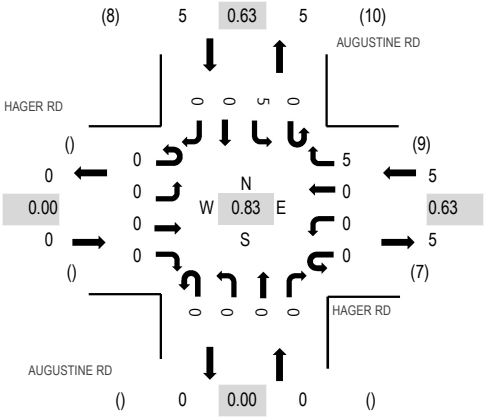
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		3.5%				3.3%				0.0%				0.0%			2.8%
Heavy Vehicle %	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%
Peak Hour Factor		0.86				0.82				0.00				0.82			0.89
Peak Hour Factor	0.00	0.75	0.83	0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.89

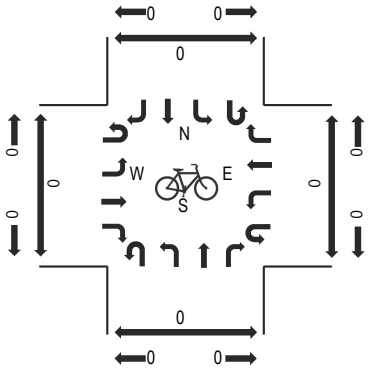
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 AUGUSTINE RD & HAGER RD AM
Date: Thursday, November 10, 2022
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

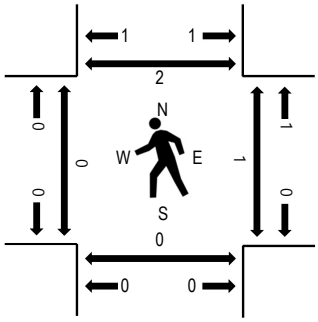
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HAGER RD Eastbound				HAGER RD Westbound				AUGUSTINE RD Northbound				AUGUSTINE RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	8	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	10	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	8	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3	9	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3	9	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	1	0	0
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3		0	2	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	3		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	0	5	0	0	0	0	0	5	0	0	10
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	5	0	0	0	0	0	5	0	0	10

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %			0.0%				0.0%				0.0%				0.0%		0.0%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor			0.00				0.63				0.00				0.63		0.83
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.25	0.63	0.00	0.00	0.83

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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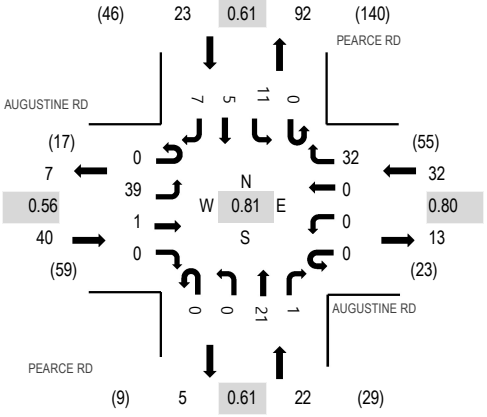
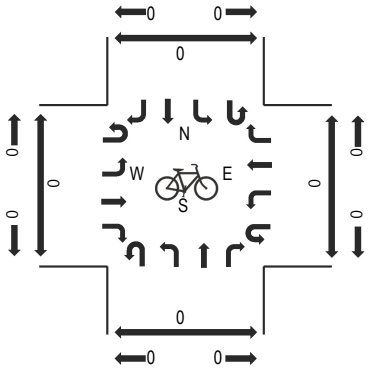
Location: 3 PEARCE RD & AUGUSTINE RD AM
Date: Thursday, November 10, 2022
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

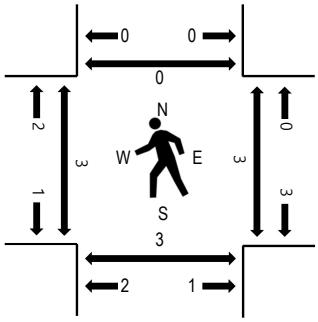
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	AUGUSTINE RD Eastbound				AUGUSTINE RD Westbound				PEARCE RD Northbound				PEARCE RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	4	0	0	0	0	0	4	0	0	2	0	0	3	0	0	13	94	0	0	0	0
7:15 AM	0	6	0	0	0	0	0	10	0	0	2	0	0	3	0	1	22	117	2	1	2	0
7:30 AM	0	4	0	0	0	0	0	6	0	0	8	1	0	1	3	2	25	112	0	1	0	0
7:45 AM	0	18	0	0	0	0	0	6	0	0	4	0	0	3	1	2	34	107	0	0	1	0
8:00 AM	0	11	1	0	0	0	0	10	0	0	7	0	0	4	1	2	36	95	1	1	0	0
8:15 AM	0	2	0	0	0	0	0	7	0	1	1	0	0	2	2	2	17		0	0	0	0
8:30 AM	0	8	0	0	0	0	0	8	0	0	1	0	0	2	1	0	20		0	0	1	1
8:45 AM	0	5	0	0	0	0	0	4	0	0	2	0	0	3	1	7	22		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	39	1	0	0	0	0	32	0	0	19	1	0	11	3	7	113
Mediums	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4
Total	0	39	1	0	0	0	0	32	0	0	21	1	0	11	5	7	117

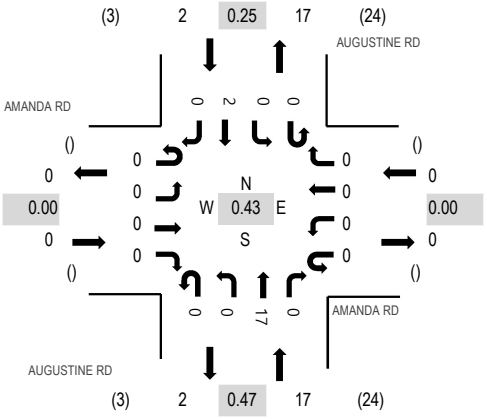
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.0%				9.1%				8.7%			3.4%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.5%	0.0%	0.0%	0.0%	40.0%	0.0%	3.4%
Peak Hour Factor		0.56				0.80				0.61				0.61			0.81
Peak Hour Factor	0.00	0.54	0.25	0.00	0.00	0.00	0.00	0.80	0.00	0.25	0.66	0.25	0.00	0.69	0.58	0.39	0.81

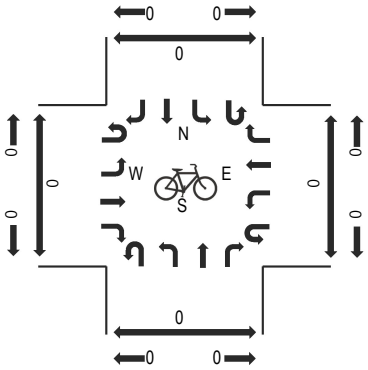
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 AUGUSTINE RD & AMANDA RD AM
Date: Thursday, November 10, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

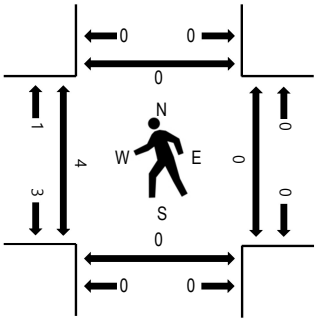
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	AMANDA RD Eastbound				AMANDA RD Westbound				AUGUSTINE RD Northbound				AUGUSTINE RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	9	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	9	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	10	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	19	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4		1	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2		1	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	2	0	11		1	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	0	0	0	0	17	0	0	0	2	0	19
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	17	0	0	0	2	0	19

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %			0.0%				0.0%				0.0%				0.0%		0.0%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor			0.00				0.00				0.47				0.25		0.43
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.25	0.00	0.43

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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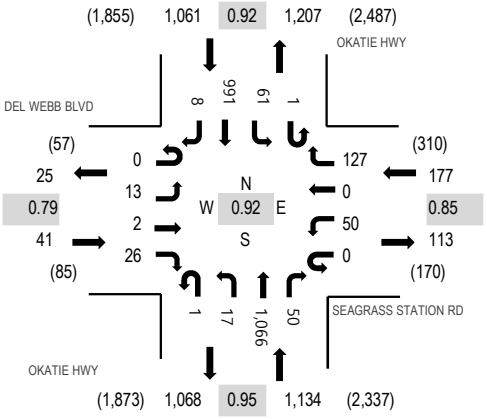
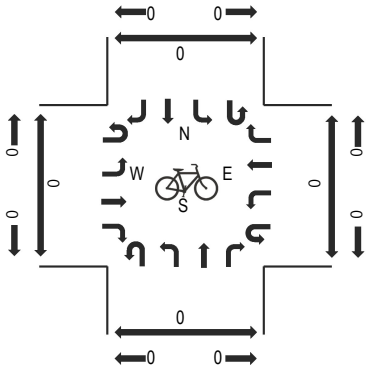
Location: 5 OKATIE HWY & SEAGRASS STATION RD AM
Date: Thursday, November 10, 2022
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

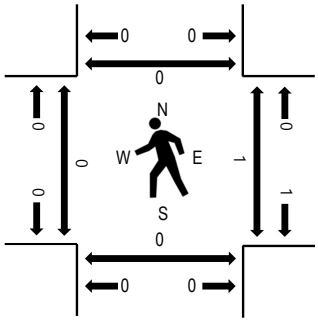
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	DEL WEBB BLVD Eastbound				SEAGRASS STATION RD Westbound				OKATIE HWY Northbound				OKATIE HWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	1	0	8	0	6	0	26	0	2	267	7	0	3	169	2	491	2,298	0	0	0	0
7:15 AM	0	2	0	6	0	7	0	31	1	2	296	5	0	7	185	0	542	2,397	0	0	0	0
7:30 AM	0	1	1	5	0	12	0	29	0	5	296	11	1	17	225	3	606	2,413	0	0	0	0
7:45 AM	0	3	1	3	0	8	0	37	0	4	303	13	0	20	265	2	659	2,347	0	1	0	0
8:00 AM	0	1	0	11	0	18	0	34	0	4	243	10	0	18	249	2	590	2,289	0	0	0	0
8:15 AM	0	8	0	7	0	12	0	27	1	4	224	16	0	6	252	1	558		0	0	0	0
8:30 AM	0	5	0	5	0	6	0	26	0	7	275	7	1	9	197	2	540		0	0	0	0
8:45 AM	0	10	0	7	0	5	0	26	1	13	314	6	0	13	202	4	601		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	7	0	0	0	14	0	21
Lights	0	13	2	25	0	49	0	124	1	17	1,047	47	1	60	930	8	2,324
Mediums	0	0	0	1	0	1	0	3	0	0	12	3	0	1	47	0	68
Total	0	13	2	26	0	50	0	127	1	17	1,066	50	1	61	991	8	2,413

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		2.4%				2.3%				1.9%				5.8%			3.7%
Heavy Vehicle %	0.0%	0.0%	0.0%	3.8%	0.0%	2.0%	0.0%	2.4%	0.0%	0.0%	1.8%	6.0%	0.0%	1.6%	6.2%	0.0%	3.7%
Peak Hour Factor		0.79				0.85				0.95				0.92			0.92
Peak Hour Factor	0.00	0.60	0.50	0.68	0.00	0.69	0.00	0.89	0.50	0.54	0.96	0.78	0.25	0.78	0.93	0.56	0.92

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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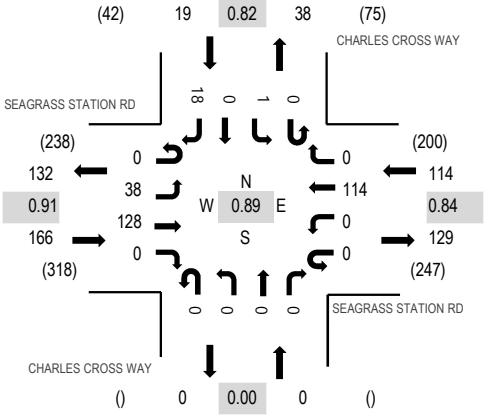
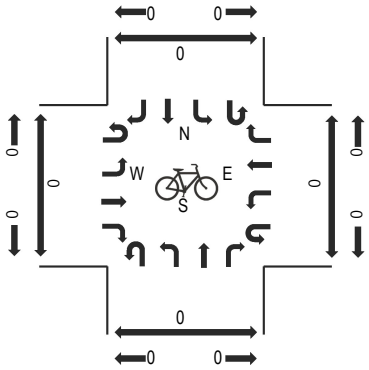
Location: 1 CHARLES CROSS WAY & SEAGRASS STATION RD PM
Date: Thursday, November 10, 2022
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

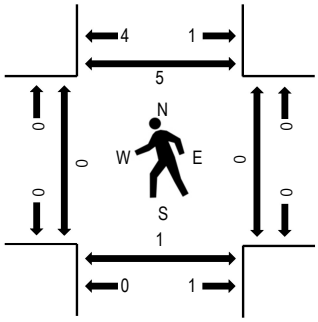
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SEAGRASS STATION RD Eastbound				SEAGRASS STATION RD Westbound				CHARLES CROSS WAY Northbound				CHARLES CROSS WAY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	8	26	0	0	0	26	0	0	0	0	0	0	1	0	5	66	291	0	0	0	0
4:15 PM	0	6	38	0	0	0	34	0	0	0	0	0	0	0	0	6	84	299	0	0	0	0
4:30 PM	0	12	27	0	0	0	28	0	0	0	0	0	0	0	0	6	73	288	0	0	1	3
4:45 PM	0	11	31	0	0	0	25	0	0	0	0	0	0	0	0	1	68	268	0	0	0	0
5:00 PM	0	9	32	0	0	0	27	0	0	0	0	0	0	1	0	5	74	269	0	0	0	2
5:15 PM	0	10	36	0	0	0	21	1	0	0	0	0	0	0	0	5	73		0	0	0	1
5:30 PM	0	8	21	0	0	0	19	0	0	0	0	0	0	1	0	4	53		1	0	0	0
5:45 PM	0	10	33	0	0	0	19	0	0	0	0	0	0	0	0	7	69		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	37	125	0	0	0	110	0	0	0	0	0	0	1	0	18	291
Mediums	0	1	3	0	0	0	4	0	0	0	0	0	0	0	0	0	8
Total	0	38	128	0	0	0	114	0	0	0	0	0	0	1	0	18	299

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		2.4%				3.5%				0.0%				0.0%			2.7%
Heavy Vehicle %	0.0%	2.6%	2.3%	0.0%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%
Peak Hour Factor		0.91				0.84				0.00				0.82			0.89
Peak Hour Factor	0.00	0.88	0.84	0.00	0.00	0.00	0.84	0.25	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.75	0.89

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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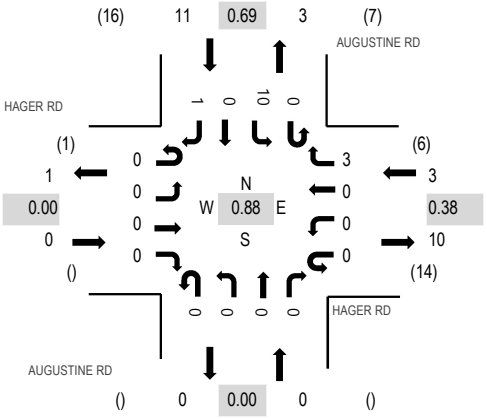
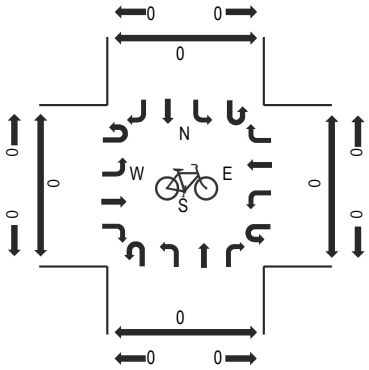
Location: 2 AUGUSTINE RD & HAGER RD PM
Date: Thursday, November 10, 2022
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

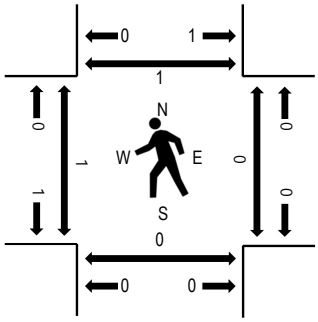
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HAGER RD Eastbound				HAGER RD Westbound				AUGUSTINE RD Northbound				AUGUSTINE RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	4	14	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	12	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	4	11	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	4	9	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2	8	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1		0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2		0	0	0	0
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	0	2	0	0	0	0	0	10	0	1	13
Mediums	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	3	0	0	0	0	0	10	0	1	14

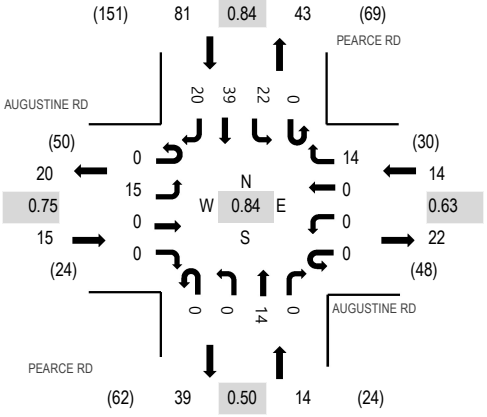
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				33.3%				0.0%				0.0%			7.1%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%
Peak Hour Factor		0.00				0.38				0.00				0.69			0.88
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.25	0.83	0.00	0.25	0.88

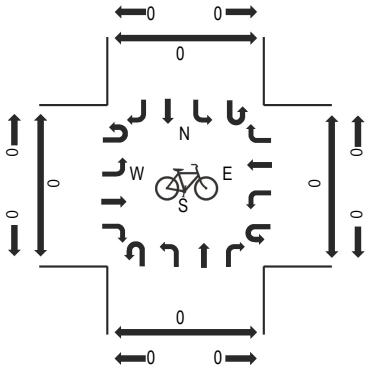
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 PEARCE RD & AUGUSTINE RD PM
Date: Thursday, November 10, 2022
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

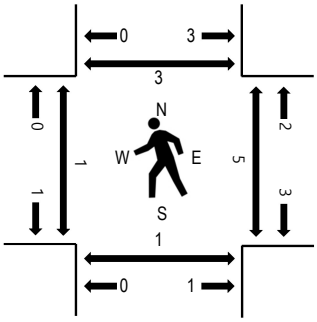
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	AUGUSTINE RD Eastbound				AUGUSTINE RD Westbound				PEARCE RD Northbound				PEARCE RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	2	0	0	0	1	0	2	0	0	0	1	0	4	3	8	21	112	0	0	0	0
4:15 PM	0	4	0	0	0	0	0	3	0	0	7	0	0	5	12	6	37	124	0	4	0	3
4:30 PM	0	4	0	0	0	0	0	4	0	0	1	0	0	6	6	6	27	117	1	0	0	0
4:45 PM	0	2	0	0	0	0	0	5	0	0	4	0	0	3	9	4	27	112	0	1	1	0
5:00 PM	0	5	0	0	0	0	0	2	0	0	2	0	0	8	12	4	33	117	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	2	0	1	1	2	0	5	11	7	30		0	5	1	0
5:30 PM	0	2	0	1	0	1	0	4	0	0	1	0	0	6	2	5	22		0	4	1	1
5:45 PM	0	2	0	1	0	0	0	6	0	1	3	0	0	8	3	8	32		0	0	2	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	14	0	0	0	0	0	14	0	0	12	0	0	22	37	20	119
Mediums	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	5
Total	0	15	0	0	0	0	0	14	0	0	14	0	0	22	39	20	124

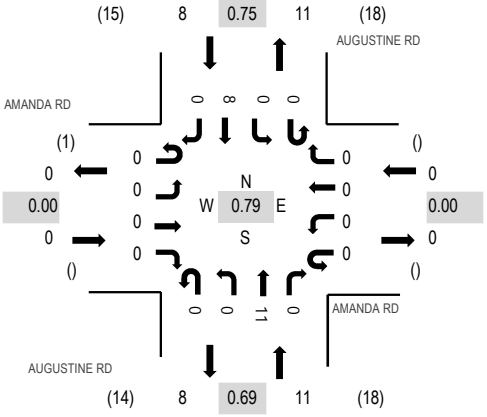
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		6.7%				0.0%				14.3%				2.5%			4.0%
Heavy Vehicle %	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	5.1%	0.0%	4.0%
Peak Hour Factor		0.75				0.63				0.50				0.84			0.84
Peak Hour Factor	0.00	0.75	0.00	0.50	0.00	0.25	0.00	0.58	0.00	0.50	0.50	0.25	0.00	0.84	0.81	0.75	0.84

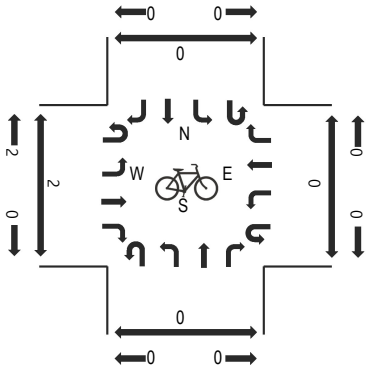
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 AUGUSTINE RD & AMANDA RD PM
Date: Thursday, November 10, 2022
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

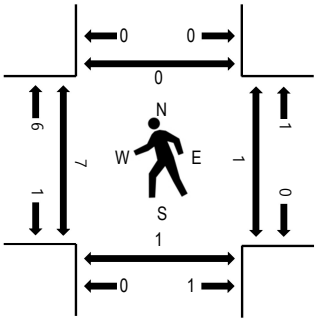
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	AMANDA RD Eastbound				AMANDA RD Westbound				AUGUSTINE RD Northbound				AUGUSTINE RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	15	1	1	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	16	1	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	18	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	6	19	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	18	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4		4	1	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4		2	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	5		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	0	0	0	0	0	10	0	0	0	8	0	18
Mediums	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	11	0	0	0	8	0	19

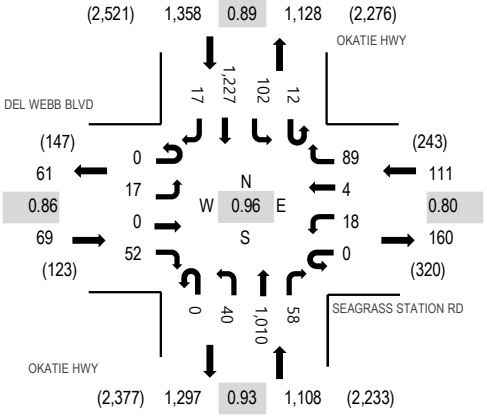
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.0%				9.1%				0.0%			5.3%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%
Peak Hour Factor		0.00				0.00				0.69				0.75			0.79
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.75	0.25	0.79

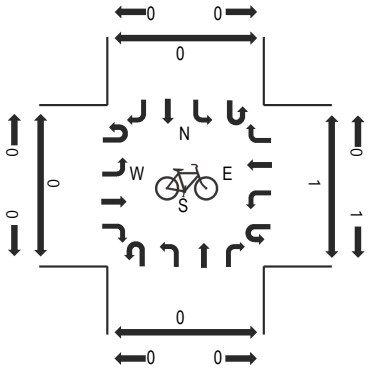
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 OKATIE HWY & SEAGRASS STATION RD PM
Date: Thursday, November 10, 2022
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

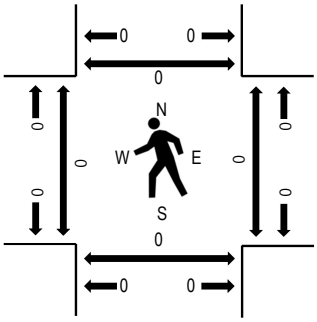
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	DEL WEBB BLVD Eastbound				SEAGRASS STATION RD Westbound				OKATIE HWY Northbound				OKATIE HWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	4	0	11	0	5	0	26	0	16	280	21	5	12	266	9	655	2,533	0	0	0	0
4:15 PM	0	6	0	6	0	7	0	36	0	22	250	15	2	30	241	12	627	2,570	0	0	0	0
4:30 PM	0	1	0	11	0	8	1	25	0	2	246	14	0	25	261	9	603	2,634	0	0	0	0
4:45 PM	0	2	0	15	0	5	1	18	0	16	282	14	1	27	265	2	648	2,646	0	0	0	0
5:00 PM	0	3	0	13	0	6	1	29	0	7	235	18	8	26	339	7	692	2,587	0	0	0	0
5:15 PM	0	7	0	13	0	3	1	23	0	7	249	16	1	30	336	5	691		0	0	0	0
5:30 PM	0	5	0	11	0	4	1	19	0	10	244	10	2	19	287	3	615		0	0	0	0
5:45 PM	0	6	0	9	0	4	0	20	0	11	240	8	1	35	251	4	589		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	7	0	0	0	1	0	8
Lights	0	17	0	51	0	18	4	88	0	40	974	58	12	100	1,212	17	2,591
Mediums	0	0	0	1	0	0	0	1	0	0	29	0	0	2	14	0	47
Total	0	17	0	52	0	18	4	89	0	40	1,010	58	12	102	1,227	17	2,646

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		1.4%				0.9%				3.2%				1.3%			2.1%
Heavy Vehicle %	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	3.6%	0.0%	0.0%	2.0%	1.2%	0.0%	2.1%
Peak Hour Factor		0.86				0.80				0.93				0.89			0.96
Peak Hour Factor	0.00	0.75	0.00	0.87	0.00	0.81	1.00	0.75	0.00	0.64	0.94	0.76	0.38	0.79	0.90	0.67	0.96

Kimley»Horn

Attachment C – Traffic Volume Development Worksheet

Village at Verider Parcel X Trip Generation									
Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Office Land Uses			**144**	**17**	**14**	**3**	**22**	**7**	**15**
712 - Small Office Building	10.0	KSF	144	17	14	3	22	7	15
Retail Land Uses			**2,512**	**159**	**81**	**78**	**194**	**97**	**97**
890 - Furniture Store	18.0	KSF	140	5	4	1	10	5	5
945 - Convenience Store/Gas Station (2-8 Fueling Positions)	3.8	KSF	2,372	154	77	77	184	92	92
Subtotal			**2,656**	**176**	**95**	**81**	**216**	**104**	**112**
Internal Capture			**60**	**4**	**2**	**2**	**4**	**2**	**2**
ITE Pass-By			***2,194***	***92***	***46***	***46***	***106***	***53***	***53***
Adjacent Street Traffic			*25,100*	*1,930*			*2,407*		
10% Adjacent Street Traffic			*2,510*	*194*	*97*	*97*	*242*	*121*	*121*
Pass-By			**2,194**	**92**	**46**	**46**	**106**	**53**	**53**
Multimodal Reduction			**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total Net New External Trips			**402**	**80**	**47**	**33**	**106**	**49**	**57**

Note: Trip generation was calculated using the following data:

Daily Traffic Generation

Office Land Uses

712 - Small Office Building	ITE 712	=	T = 14.39 (X); (50 % In; 50 % Out)

Retail Land Uses

890 - Furniture Store	ITE 890	=	T = 5.17 * (X) + (46.56); (50 % In; 50 % Out)
945 - Convenience Store/Gas Station (2-8 Fueling Positions)	ITE 945	=	T= 624.2 * (X) (50 % In; 50 % Out)

AM Peak-Hour Traffic Generation

Office Land Uses

712 - Small Office Building	ITE 712	=	T = 1.67 (X); (82 % In; 18 % Out)

Retail Land Uses

890 - Furniture Store	ITE 890	=	T = 0.24 * (X) + (0.94); (71 % In; 29 % Out)
945 - Convenience Store/Gas Station (2-8 Fueling Positions)	ITE 945	=	T= 40.59 * (X) (50 % In; 50 % Out)

PM Peak-Hour Traffic Generation

Office Land Uses

712 - Small Office Building	ITE 712	=	T = 2.16 (X); (34 % In; 68 % Out)

Retail Land Uses

890 - Furniture Store	ITE 890	=	LN (T) = 0.85 * LN (X) + (-0.18); (47 % In; 53 % Out)
945 - Convenience Store/Gas Station (2-8 Fueling Positions)	ITE 945	=	T= 48.48 * (X) (50 % In; 50 % Out)

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Hager Access

INTERSECTION: Intersection 1 - Okatie Highway and Seagrass Station Road
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.92 **AM FUTURE PEAK HOUR FACTOR:** 0.92
PM PEAK HOUR FACTOR: 0.96 **PM FUTURE PEAK HOUR FACTOR:** 0.95

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	13	2	26	0	50	0	127	1	17	1,066	50	1	61	991	8
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**13**	**2**	**26**	**0**	**50**	**0**	**127**	**1**	**17**	**1,066**	**50**	**1**	**61**	**991**	**8**
AM Heavy Vehicle Percentage	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	6%	2%

AM 2027 NO-BUILD TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	4	1	9	0	17	0	43	0	6	361	17	0	21	335	3
AM 2027 NO-BUILD TRAFFIC (No AD)	0	17	3	35	0	67	0	170	1	23	1,427	67	1	82	1,326	11
Approved Development 1: Car Village											10					
Approved Development 2: Amanda Redistribution								-37			37	-6				
Approved Development 3: Hager Redistribution								-29			29	-5				
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	-66	0	0	76	-11	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**17**	**3**	**35**	**0**	**67**	**0**	**104**	**1**	**23**	**1,503**	**56**	**1**	**82**	**1,326**	**11**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering											-10%	10%		50%	-50%	
	Exiting						50%		20%								
Net New Distribution	Entering												10%		50%		
	Exiting						50%		20%			30%					

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By						23		9			-5	5		23	-23	
	Net New	0	0	0	0	0	17	0	6	0	0	10	5	0	23	0	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**40**	**0**	**15**	**0**	**0**	**5**	**10**	**0**	**46**	**-23**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**17**	**3**	**35**	**0**	**107**	**0**	**119**	**1**	**23**	**1,508**	**66**	**1**	**128**	**1,303**	**11**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	17	0	52	0	18	4	89	0	40	1,010	58	12	102	1,227	17
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**17**	**0**	**52**	**0**	**18**	**4**	**89**	**0**	**40**	**1,010**	**58**	**12**	**102**	**1,227**	**17**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	1%	2%	2%	4%	2%	2%	2%	1%	2%

PM 2027 NO-BUILD TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	6	0	18	0	6	1	30	0	14	342	20	4	34	415	6
PM 2027 NO-BUILD TRAFFIC (No AD)	0	23	0	70	0	24	5	119	0	54	1,352	78	16	136	1,642	23
Approved Development 1: Car Village											10					
Approved Development 2: Amanda Redistribution								-21			21	-17				
Approved Development 3: Hager Redistribution								-15			15	-13				
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	-36	0	0	46	-30	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**23**	**0**	**70**	**0**	**24**	**5**	**83**	**0**	**54**	**1,398**	**48**	**16**	**136**	**1,642**	**23**
PM 2027 NO-BUILD TRAFFIC	**0**	**23**	**0**	**70**	**0**	**24**	**5**	**83**	**0**	**54**	**1,398**	**48**	**16**	**136**	**1,642**	**23**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering											-10%	10%		50%	-50%	
	Exiting						50%		20%								
Net New Distribution	Entering												10%		50%		
	Exiting						50%		20%			30%					

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By						27		11			-5	5		27	-27	
	Net New	0	0	0	0	0	29	0	11	0	0	17	5	0	24	0	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**56**	**0**	**22**	**0**	**0**	**12**	**10**	**0**	**51**	**-27**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**23**	**0**	**70**	**0**	**80**	**5**	**105**	**0**	**54**	**1,410**	**58**	**16**	**187**	**1,615**	**23**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Hager Access

INTERSECTION: Intersection 2 - Seagrass Station Road and Charles Cross Way
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.89 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.89 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	17	96	0	0	0	122	0	0	0	0	0	0	0	0	49
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**17**	**96**	**0**	**0**	**0**	**122**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**49**
AM Heavy Vehicle Percentage	2%	2%	4%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	6	32	0	0	0	41	0	0	0	0	0	0	0	0	17
AM 2027 NO-BUILD TRAFFIC (No AD)	0	23	128	0	0	0	163	0	0	0	0	0	0	0	0	66
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution			-6				-37									
Approved Development 3: Hager Redistribution			-5				-29									
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	-11	0	0	0	-66	0	0	0	0	0	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**23**	**117**	**0**	**0**	**0**	**97**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**66**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering				**60%**												
	Exiting										**70%**						
Net New Distribution	Entering				**60%**												
	Exiting										**70%**						

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By				**28**						**32**						
	Net New	0	0	0	**28**	0	0	0	0	0	**23**	0	0	0	0	0	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**56**	**0**	**0**	**0**	**0**	**0**	**55**	**0**	**0**	**0**	**0**	**0**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**23**	**117**	**56**	**0**	**0**	**97**	**0**	**0**	**55**	**0**	**0**	**0**	**0**	**0**	**66**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	38	128	0	0	0	114	0	0	0	0	0	0	1	0	18
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**38**	**128**	**0**	**0**	**0**	**114**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**18**
PM Heavy Vehicle Percentage	2%	3%	2%	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	13	43	0	0	0	39	0	0	0	0	0	0	0	0	6
PM 2027 NO-BUILD TRAFFIC (No AD)	0	51	171	0	0	0	153	0	0	0	0	0	0	1	0	24
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution			-17				-21									
Approved Development 3: Hager Redistribution			-13				-15									
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	-30	0	0	0	-36	0	0	0	0	0	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**51**	**141**	**0**	**0**	**0**	**117**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**24**
PM 2027 NO-BUILD TRAFFIC	**0**	**51**	**141**	**0**	**0**	**0**	**117**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**24**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering				**60%**												
	Exiting										**70%**						
Net New Distribution	Entering				**60%**												
	Exiting										**70%**						

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By				**32**						**37**						
	Net New	0	0	0	**29**	0	0	0	0	0	**40**	0	0	0	0	0	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**61**	**0**	**0**	**0**	**0**	**0**	**77**	**0**	**0**	**0**	**0**	**0**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**51**	**141**	**61**	**0**	**0**	**117**	**0**	**0**	**77**	**0**	**0**	**0**	**1**	**0**	**24**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Hager Access

INTERSECTION: Intersection 3 - Augustine Road and Pearce Road
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.81 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.84 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	39	1	0	0	0	0	32	0	0	21	1	0	11	5	7
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**39**	**1**	**0**	**0**	**0**	**0**	**32**	**0**	**0**	**21**	**1**	**0**	**11**	**5**	**7**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	10%	2%	2%	2%	40%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	13	0	0	0	0	0	11	0	0	7	0	0	4	2	2
AM 2027 NO-BUILD TRAFFIC (No AD)	0	52	1	0	0	0	0	43	0	0	28	1	0	15	7	9
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution		-16	3	1			13	-13		8	-8			-3	-1	-2
Approved Development 3: Hager Redistribution		-12	2	1			10	-10		7	-7			-2	-1	-2
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	-28	5	2	0	0	23	-23	0	15	-15	0	0	-5	-2	-4
AM 2027 NO-BUILD TRAFFIC	**0**	**24**	**6**	**2**	**0**	**0**	**23**	**20**	**0**	**15**	**13**	**1**	**0**	**10**	**5**	**5**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**24**	**6**	**2**	**0**	**0**	**23**	**20**	**0**	**15**	**13**	**1**	**0**	**10**	**5**	**5**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	15	0	0	0	0	0	14	0	0	14	0	0	22	39	20
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**14**	**0**	**0**	**22**	**39**	**20**
PM Heavy Vehicle Percentage	2%	7%	2%	2%	2%	2%	2%	2%	2%	2%	14%	2%	2%	2%	5%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	5	0	0	0	0	0	5	0	0	5	0	0	7	13	7
PM 2027 NO-BUILD TRAFFIC (No AD)	0	20	0	0	0	0	0	19	0	0	19	0	0	29	52	27
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution		-7	5	8			7	-7		7	-7			-5	-8	-4
Approved Development 3: Hager Redistribution		-5	4	6			5	-5		5	-5			-4	-6	-3
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	-12	9	14	0	0	12	-12	0	12	-12	0	0	-9	-14	-7
PM 2027 NO-BUILD TRAFFIC	**0**	**8**	**9**	**14**	**0**	**0**	**12**	**7**	**0**	**12**	**7**	**0**	**0**	**20**	**38**	**20**
PM 2027 NO-BUILD TRAFFIC	**0**	**8**	**9**	**14**	**0**	**0**	**12**	**7**	**0**	**12**	**7**	**0**	**0**	**20**	**38**	**20**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**8**	**9**	**14**	**0**	**0**	**12**	**7**	**0**	**12**	**7**	**0**	**0**	**20**	**38**	**20**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Hager Access

INTERSECTION: Intersection 4 - Augustine Road and Amanda Road
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.43 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.79 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	17	0	0	0	2	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**0**	**0**	**2**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	23	0	0	0	3	0
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution		4		2						16	-16				-2	21
Approved Development 3: Hager Redistribution											-9				15	
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	4	0	2	0	0	0	0	0	16	-25	0	0	0	13	21
AM 2027 NO-BUILD TRAFFIC	**0**	**4**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**16**	**-2**	**0**	**0**	**0**	**16**	**21**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering										10%						
	Exiting				10%												
Net New Distribution	Entering																
	Exiting																

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By				5						5						
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**4**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**21**	**-2**	**0**	**0**	**0**	**16**	**21**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	11	0	0	0	8	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**8**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	9%	2%	2%	2%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	15	0	0	0	11	0
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution		13		4						7	-7				-4	14
Approved Development 3: Hager Redistribution											2				7	
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	13	0	4	0	0	0	0	0	7	-5	0	0	0	3	14
PM 2027 NO-BUILD TRAFFIC	**0**	**13**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**7**	**10**	**0**	**0**	**0**	**14**	**14**
PM 2027 NO-BUILD TRAFFIC	**0**	**13**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**7**	**10**	**0**	**0**	**0**	**14**	**14**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering										10%						
	Exiting				10%												
Net New Distribution	Entering																
	Exiting																

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By				5						5						
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**13**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**12**	**10**	**0**	**0**	**0**	**14**	**14**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Hager Access

INTERSECTION: Intersection 5 - Augustine Road and Hager Road
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.83 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.88 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution																
Approved Development 3: Hager Redistribution		3	2				12	-12						-2		17
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	3	2	0	0	0	12	-12	0	0	0	0	0	-2	0	17
AM 2027 NO-BUILD TRAFFIC	**0**	**3**	**2**	**0**	**0**	**0**	**12**	**-12**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**17**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		**10%**														
	Exiting																**10%**
Net New Distribution	Entering																
	Exiting																

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		**5**														**5**
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AM TOTAL PROJECT TRIPS		**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
AM 2027 BUILD-OUT TRAFFIC		**0**	**8**	**2**	**0**	**0**	**0**	**12**	**-12**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**22**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	3	0	0	0	0	0	10	0	14
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**14**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	33%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	5
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	4	0	0	0	0	0	13	0	19
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution																
Approved Development 3: Hager Redistribution		10	3				5	-5								
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	10	3	0	0	0	5	-5	0	0	0	0	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**10**	**3**	**0**	**0**	**0**	**5**	**-1**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**19**
PM 2027 NO-BUILD TRAFFIC	**0**	**10**	**3**	**0**	**0**	**0**	**5**	**-1**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**19**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		**10%**														
	Exiting																**10%**
Net New Distribution	Entering																
	Exiting																

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		**5**														**5**
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PM TOTAL PROJECT TRIPS		**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
PM 2027 BUILD-OUT TRAFFIC		**0**	**15**	**3**	**0**	**0**	**0**	**5**	**-1**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**24**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Hager Access

INTERSECTION: Intersection 6 - Okatie Highway and Hager Road
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.92 **AM FUTURE PEAK HOUR FACTOR:** 0.92
PM PEAK HOUR FACTOR: 0.96 **PM FUTURE PEAK HOUR FACTOR:** 0.95

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,133	0	0	0	1,067	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,133**	**0**	**0**	**0**	**1,067**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	383	0	0	0	361	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,516	0	0	0	1,428	0
Approved Development 1: Car Village								10				10				
Approved Development 2: Amanda Redistribution																
Approved Development 3: Hager Redistribution								29			-5	5				
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	39	0	0	-5	15	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**	**0**	**1,511**	**15**	**0**	**0**	**1,428**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering											**-10%**	**10%**				
	Exiting								**10%**								
Net New Distribution	Entering											**50%**					
	Exiting															**50%**	

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By								5			-5	5				
	Net New	0	0	0	0	0	0	0	0	0	0	24	0	0	0	17	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**19**	**5**	**0**	**0**	**17**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**44**	**0**	**0**	**1,530**	**20**	**0**	**0**	**1,445**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,108	0	0	0	1,297	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,108**	**0**	**0**	**0**	**1,297**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	375	0	0	0	439	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,483	0	0	0	1,736	0
Approved Development 1: Car Village								10				10				
Approved Development 2: Amanda Redistribution																
Approved Development 3: Hager Redistribution								15			-13	13				
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	25	0	0	-13	23	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**0**	**1,470**	**23**	**0**	**0**	**1,736**	**0**
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**0**	**1,470**	**23**	**0**	**0**	**1,736**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering											**-10%**	**10%**				
	Exiting								**10%**								
Net New Distribution	Entering											**50%**					
	Exiting															**50%**	

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By								5			-5	5				
	Net New	0	0	0	0	0	0	0	0	0	0	25	0	0	0	29	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**20**	**5**	**0**	**0**	**29**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	**0**	**0**	**1,490**	**28**	**0**	**0**	**1,765**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Hager Access

INTERSECTION: Intersection 7 - Okatie Highway and Amanda Road
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.92 **AM FUTURE PEAK HOUR FACTOR:** 0.92
PM PEAK HOUR FACTOR: 0.96 **PM FUTURE PEAK HOUR FACTOR:** 0.95

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,133	0	0	0	1,067	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,133**	**0**	**0**	**0**	**1,067**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	383	0	0	0	361	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,516	0	0	0	1,428	0
Approved Development 1: Car Village											10					
Approved Development 2: Amanda Redistribution								37			-6	6				
Approved Development 3: Hager Redistribution											24					
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	37	0	0	28	6	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**37**	**0**	**0**	**1,544**	**6**	**0**	**0**	**1,428**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering											-30%	30%				
	Exiting								20%								
Net New Distribution	Entering											10%	40%				
	Exiting								30%							50%	

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By								9			-14	14				
	Net New	0	0	0	0	0	0	0	10	0	0	5	19	0	0	17	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**0**	**-9**	**33**	**0**	**0**	**17**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**56**	**0**	**0**	**1,535**	**39**	**0**	**0**	**1,445**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,108	0	0	0	1,297	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,108**	**0**	**0**	**0**	**1,297**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	375	0	0	0	439	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,483	0	0	0	1,736	0
Approved Development 1: Car Village											10					
Approved Development 2: Amanda Redistribution								21			-17	17				
Approved Development 3: Hager Redistribution											2					
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	21	0	0	-5	17	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**1,478**	**17**	**0**	**0**	**1,736**	**0**
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**1,478**	**17**	**0**	**0**	**1,736**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering											-30%	30%				
	Exiting								20%								
Net New Distribution	Entering											10%	40%				
	Exiting								30%							50%	

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By								11			-16	16				
	Net New	0	0	0	0	0	0	0	17	0	0	5	20	0	0	29	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**0**	**-11**	**36**	**0**	**0**	**29**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**49**	**0**	**0**	**1,467**	**53**	**0**	**0**	**1,765**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Hager Access

INTERSECTION: Intersection 8 - Amanda Road and 7C Access Driveway
COUNT DATE: November 10, 2022
AM PEAK HOUR FACTOR: 0.89 **AM FUTURE PEAK HOUR FACTOR:** 0.90
PM PEAK HOUR FACTOR: 0.89 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution			6				37									
Approved Development 3: Hager Redistribution																
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	6	0	0	0	37	0	0	0	0	0	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**6**	**0**	**0**	**0**	**37**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		**30%**						**10%**								
	Exiting														**10%**		**20%**
Net New Distribution	Entering		**40%**														
	Exiting																**30%**

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		**14**						**5**						**5**		**9**
	Net New	0	**19**	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
AM TOTAL PROJECT TRIPS		**0**	**33**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**19**
AM 2027 BUILD-OUT TRAFFIC		**0**	**33**	**6**	**0**	**0**	**0**	**37**	**5**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**19**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution			17				21									
Approved Development 3: Hager Redistribution																
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	17	0	0	0	21	0	0	0	0	0	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**17**	**0**	**0**	**0**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**17**	**0**	**0**	**0**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		**30%**						**10%**								
	Exiting														**10%**		**20%**
Net New Distribution	Entering		**40%**														
	Exiting																**30%**

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		**16**						**5**						**5**		**11**
	Net New	0	**20**	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
PM TOTAL PROJECT TRIPS		**0**	**36**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**28**
PM 2027 BUILD-OUT TRAFFIC		**0**	**36**	**17**	**0**	**0**	**0**	**21**	**5**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**28**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

No Hager Access

INTERSECTION: Intersection 1 - Okatie Highway and Seagrass Station Road
COUNT DATE: November 10, 2022
PM PEAK HOUR FACTOR: 0.96 **PM FUTURE PEAK HOUR FACTOR:** 0.95

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	13	2	26	0	50	0	127	1	17	1,066	50	1	61	991	8
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**13**	**2**	**26**	**0**	**50**	**0**	**127**	**1**	**17**	**1,066**	**50**	**1**	**61**	**991**	**8**
AM Heavy Vehicle Percentage	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	6%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	4	1	9	0	17	0	43	0	6	361	17	0	21	335	3
AM 2027 NO-BUILD TRAFFIC (No AD)	0	17	3	35	0	67	0	170	1	23	1,427	67	1	82	1,326	11
Approved Development 1: Car Village											10					
Approved Development 2: Amanda Redistribution								-37			37	-6				
Approved Development 3: Hager Redistribution								-29			29	-5				
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	-66	0	0	76	-11	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**17**	**3**	**35**	**0**	**67**	**0**	**104**	**1**	**23**	**1,503**	**56**	**1**	**82**	**1,326**	**11**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering											**-10%**	**10%**		**50%**	**-50%**	
Distribution	Exiting						**50%**		**20%**								
Net New	Entering												**10%**		**50%**		
Distribution	Exiting						**50%**		**20%**			**30%**					

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By						**23**		**9**			**-5**	**5**		**23**	**-23**	
	Net New	0	0	0	0	0	**17**	0	**6**	0	0	**10**	**5**	0	**23**	0	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**40**	**0**	**15**	**0**	**0**	**5**	**10**	**0**	**46**	**-23**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**17**	**3**	**35**	**0**	**107**	**0**	**119**	**1**	**23**	**1,508**	**66**	**1**	**128**	**1,303**	**11**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	17	0	52	0	18	4	89	0	40	1,010	58	12	102	1,227	17
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**17**	**0**	**52**	**0**	**18**	**4**	**89**	**0**	**40**	**1,010**	**58**	**12**	**102**	**1,227**	**17**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	1%	2%	2%	4%	2%	2%	2%	1%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	6	0	18	0	6	1	30	0	14	342	20	4	34	415	6
PM 2027 NO-BUILD TRAFFIC (No AD)	0	23	0	70	0	24	5	119	0	54	1,352	78	16	136	1,642	23
Approved Development 1: Car Village											10					
Approved Development 2: Amanda Redistribution								-21			21	-17				
Approved Development 3: Hager Redistribution								-15			15	-13				
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	-36	0	0	46	-30	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**23**	**0**	**70**	**0**	**24**	**5**	**83**	**0**	**54**	**1,398**	**48**	**16**	**136**	**1,642**	**23**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering											**-10%**	**10%**		**50%**	**-50%**	
Distribution	Exiting						**50%**		**20%**								
Net New	Entering												**10%**		**50%**		
Distribution	Exiting						**50%**		**20%**			**30%**					

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By						**27**		**11**			**-5**	**5**		**27**	**-27**	
	Net New	0	0	0	0	0	**29**	0	**11**	0	0	**17**	**5**	0	**24**	0	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**56**	**0**	**22**	**0**	**0**	**12**	**10**	**0**	**51**	**-27**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**23**	**0**	**70**	**0**	**80**	**5**	**105**	**0**	**54**	**1,410**	**58**	**16**	**187**	**1,615**	**23**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

No Hager Access

INTERSECTION: Intersection 2 - Seagrass Station Road and Charles Cross Way
COUNT DATE: November 10, 2022
PM PEAK HOUR FACTOR: 0.89 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	17	96	0	0	0	122	0	0	0	0	0	0	0	0	49
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**17**	**96**	**0**	**0**	**0**	**122**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**49**
AM Heavy Vehicle Percentage	2%	2%	4%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%

AM 2027 NO-BUILD TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	6	32	0	0	0	41	0	0	0	0	0	0	0	0	17
AM 2027 NO-BUILD TRAFFIC (No AD)	0	23	128	0	0	0	163	0	0	0	0	0	0	0	0	66
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution			-6				-37									
Approved Development 3: Hager Redistribution			-5				-29									
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	-11	0	0	0	-66	0	0	0	0	0	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**23**	**117**	**0**	**0**	**0**	**97**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**66**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering				60%												
Distribution	Exiting										70%						
Net New	Entering				60%												
Distribution	Exiting										70%						

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By				28						32						
	Net New	0	0	0	28	0	0	0	0	0	23	0	0	0	0	0	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**56**	**0**	**0**	**0**	**0**	**0**	**55**	**0**	**0**	**0**	**0**	**0**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**23**	**117**	**56**	**0**	**0**	**97**	**0**	**0**	**55**	**0**	**0**	**0**	**0**	**0**	**66**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	38	128	0	0	0	114	0	0	0	0	0	0	1	0	18
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**38**	**128**	**0**	**0**	**0**	**114**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**18**
PM Heavy Vehicle Percentage	2%	3%	2%	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%

PM 2027 NO-BUILD TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	13	43	0	0	0	39	0	0	0	0	0	0	0	0	6
PM 2027 NO-BUILD TRAFFIC (No AD)	0	51	171	0	0	0	153	0	0	0	0	0	0	1	0	24
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution			-17				-21									
Approved Development 3: Hager Redistribution			-13				-15									
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	-30	0	0	0	-36	0	0	0	0	0	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**51**	**141**	**0**	**0**	**0**	**117**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**24**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering				60%												
Distribution	Exiting										70%						
Net New	Entering				60%												
Distribution	Exiting										70%						

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By				32						37						
	Net New	0	0	0	29	0	0	0	0	0	40	0	0	0	0	0	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**61**	**0**	**0**	**0**	**0**	**0**	**77**	**0**	**0**	**0**	**0**	**0**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**51**	**141**	**61**	**0**	**0**	**117**	**0**	**0**	**77**	**0**	**0**	**0**	**1**	**0**	**24**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

No Hager Access

INTERSECTION: Intersection 3 - Augustine Road and Pearce Road

COUNT DATE: November 10, 2022

PM PEAK HOUR FACTOR: 0.84 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	39	1	0	0	0	0	32	0	0	21	1	0	11	5	7
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**39**	**1**	**0**	**0**	**0**	**0**	**32**	**0**	**0**	**21**	**1**	**0**	**11**	**5**	**7**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	10%	2%	2%	2%	40%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	13	0	0	0	0	0	11	0	0	7	0	0	4	2	2
AM 2027 NO-BUILD TRAFFIC (No AD)	0	52	1	0	0	0	0	43	0	0	28	1	0	15	7	9
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution		-16	3	1			13	-13		8	-8			-3	-1	-2
Approved Development 3: Hager Redistribution		-12	2	1			10	-10		7	-7			-2	-1	-2
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	-28	5	2	0	0	23	-23	0	15	-15	0	0	-5	-2	-4
AM 2027 NO-BUILD TRAFFIC	**0**	**24**	**6**	**2**	**0**	**0**	**23**	**20**	**0**	**15**	**13**	**1**	**0**	**10**	**5**	**5**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**24**	**6**	**2**	**0**	**0**	**23**	**20**	**0**	**15**	**13**	**1**	**0**	**10**	**5**	**5**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	15	0	0	0	0	0	14	0	0	14	0	0	22	39	20
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**14**	**0**	**0**	**22**	**39**	**20**
PM Heavy Vehicle Percentage	2%	7%	2%	2%	2%	2%	2%	2%	2%	2%	14%	2%	2%	2%	5%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	5	0	0	0	0	0	5	0	0	5	0	0	7	13	7
PM 2027 NO-BUILD TRAFFIC (No AD)	0	20	0	0	0	0	0	19	0	0	19	0	0	29	52	27
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution		-7	5	8			7	-7		7	-7			-5	-8	-4
Approved Development 3: Hager Redistribution		-5	4	6			5	-5		5	-5			-4	-6	-3
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	-12	9	14	0	0	12	-12	0	12	-12	0	0	-9	-14	-7
PM 2027 NO-BUILD TRAFFIC	**0**	**8**	**9**	**14**	**0**	**0**	**12**	**7**	**0**	**12**	**7**	**0**	**0**	**20**	**38**	**20**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**8**	**9**	**14**	**0**	**0**	**12**	**7**	**0**	**12**	**7**	**0**	**0**	**20**	**38**	**20**

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	17	0	0	0	2	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**0**	**0**	**2**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	23	0	0	0	3	0
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution		4		2						16	-16				-2	21
Approved Development 3: Hager Redistribution		3		2						12	-12				-2	17
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	7	0	4	0	0	0	0	0	28	-28	0	0	0	-4	38
AM 2027 NO-BUILD TRAFFIC	**0**	**7**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**0**	**0**	**0**	**0**	**38**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**7**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**0**	**0**	**0**	**0**	**38**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	11	0	0	0	8	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**8**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	9%	2%	2%	2%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	15	0	0	0	11	0
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution		13		4						7	-7				-4	14
Approved Development 3: Hager Redistribution		10		3						5	-5				-3	10
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	23	0	7	0	0	0	0	0	12	-12	0	0	0	-7	24
PM 2027 NO-BUILD TRAFFIC	**0**	**23**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**12**	**3**	**0**	**0**	**0**	**4**	**24**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**23**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**12**	**3**	**0**	**0**	**0**	**4**	**24**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

No Hager Access

INTERSECTION: Intersection 5 - Augustine Road and Hager Road
COUNT DATE: November 10, 2022
PM PEAK HOUR FACTOR: 0.88 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution																
Approved Development 3: Hager Redistribution																
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	3	0	0	0	0	0	10	0	14
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**14**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	33%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	5
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	4	0	0	0	0	0	13	0	19
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution																
Approved Development 3: Hager Redistribution														19		-19
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	-19
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**32**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**32**	**0**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

No Hager Access

INTERSECTION: Intersection 6 - Okatie Highway and Hager Road
COUNT DATE: November 10, 2022
PM PEAK HOUR FACTOR: 0.96 **PM FUTURE PEAK HOUR FACTOR:** 0.95

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,133	0	0	0	1,067	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,133**	**0**	**0**	**0**	**1,067**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	383	0	0	0	361	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,516	0	0	0	1,428	0
Approved Development 1: Car Village								10				10				
Approved Development 2: Amanda Redistribution																
Approved Development 3: Hager Redistribution																
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**1,516**	**10**	**0**	**0**	**1,428**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											**50%**					
	Exiting															**50%**	

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	0	0	0	**24**	0	0	0	**17**	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**0**	**17**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**1,540**	**10**	**0**	**0**	**1,445**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,108	0	0	0	1,297	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,108**	**0**	**0**	**0**	**1,297**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	375	0	0	0	439	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,483	0	0	0	1,736	0
Approved Development 1: Car Village								10				10				
Approved Development 2: Amanda Redistribution																
Approved Development 3: Hager Redistribution																
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**1,483**	**10**	**0**	**0**	**1,736**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering											**50%**					
	Exiting															**50%**	

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By																
	Net New	0	0	0	0	0	0	0	0	0	0	**25**	0	0	0	**29**	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**0**	**0**	**29**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**1,508**	**10**	**0**	**0**	**1,765**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

No Hager Access

INTERSECTION: Intersection 7 - Okatie Highway and Amanda Road
COUNT DATE: November 10, 2022
PM PEAK HOUR FACTOR: 0.96 **PM FUTURE PEAK HOUR FACTOR:** 0.95

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,133	0	0	0	1,067	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,133**	**0**	**0**	**0**	**1,067**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	383	0	0	0	361	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,516	0	0	0	1,428	0
Approved Development 1: Car Village											10					
Approved Development 2: Amanda Redistribution								37			-6	6				
Approved Development 3: Hager Redistribution								29			-5	5				
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	66	0	0	-1	11	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**66**	**0**	**0**	**1,515**	**11**	**0**	**0**	**1,428**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering											-40%	40%				
Distribution	Exiting								30%								
Net New	Entering											10%	40%				
Distribution	Exiting								30%							50%	

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By								14			-18	18				
	Net New	0	0	0	0	0	0	0	10	0	0	5	19	0	0	17	0
AM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**-13**	**37**	**0**	**0**	**17**	**0**
AM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**90**	**0**	**0**	**1,502**	**48**	**0**	**0**	**1,445**	**0**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	1,108	0	0	0	1,297	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,108**	**0**	**0**	**0**	**1,297**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	1%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	375	0	0	0	439	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	1,483	0	0	0	1,736	0
Approved Development 1: Car Village											10					
Approved Development 2: Amanda Redistribution								21			-17	17				
Approved Development 3: Hager Redistribution								15			-13	13				
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	0	0	0	0	0	36	0	0	-20	30	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**36**	**0**	**0**	**1,463**	**30**	**0**	**0**	**1,736**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering											-40%	40%				
Distribution	Exiting								30%								
Net New	Entering											10%	40%				
Distribution	Exiting								30%							50%	

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By								16			-21	21				
	Net New	0	0	0	0	0	0	0	17	0	0	5	20	0	0	29	0
PM TOTAL PROJECT TRIPS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**33**	**0**	**0**	**-16**	**41**	**0**	**0**	**29**	**0**
PM 2027 BUILD-OUT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**69**	**0**	**0**	**1,447**	**71**	**0**	**0**	**1,765**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

No Hager Access

INTERSECTION: Intersection 8 - Amanda Road and 7C Access Driveway

COUNT DATE: November 10, 2022

PM PEAK HOUR FACTOR: 0.89 **PM FUTURE PEAK HOUR FACTOR:** 0.90

AM Peak Hour

AM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
AM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
AM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution			6				37									
Approved Development 3: Hager Redistribution			5				29									
TOTAL AM APPROVED DEVELOPMENT TRAFFIC	0	0	11	0	0	0	66	0	0	0	0	0	0	0	0	0
AM 2027 NO-BUILD TRAFFIC	**0**	**0**	**11**	**0**	**0**	**0**	**66**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		**40%**														
	Exiting														**10%**		**30%**
Net New Distribution	Entering		**40%**														
	Exiting																**30%**

"AM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		**18**												**5**		**14**
	Net New	0	**19**	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
AM TOTAL PROJECT TRIPS		**0**	**37**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**24**
AM 2027 BUILD-OUT TRAFFIC		**0**	**37**	**11**	**0**	**0**	**0**	**66**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**24**

PM Peak Hour

PM 2022 EXISTING TRAFFIC	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Adjusted Turning Movement Counts[1]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Volume Balancing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2022 EXISTING TRAFFIC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PM 2027 NO-BUILD TRAFFIC	**EBU**	**EBL**	**EBT**	**EBR**	**WBU**	**WBL**	**WBT**	**WBR**	**NBU**	**NBL**	**NBT**	**NBR**	**SBU**	**SBL**	**SBT**	**SBR**
Annual Growth Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
PM 2027 NO-BUILD TRAFFIC GROWTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 2027 NO-BUILD TRAFFIC (No AD)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved Development 1: Car Village																
Approved Development 2: Amanda Redistribution			17				21									
Approved Development 3: Hager Redistribution			13				15									
TOTAL PM APPROVED DEVELOPMENT TRAFFIC	0	0	30	0	0	0	36	0	0	0	0	0	0	0	0	0
PM 2027 NO-BUILD TRAFFIC	**0**	**0**	**30**	**0**	**0**	**0**	**36**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

"SITE TRAFFIC DISTRUBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering		**40%**														
	Exiting														**10%**		**30%**
Net New Distribution	Entering		**40%**														
	Exiting																**30%**

"PM PROJECT TRIPS"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trip	Pass - By		**21**												**5**		**16**
	Net New	0	**20**	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
PM TOTAL PROJECT TRIPS		**0**	**41**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**33**
PM 2027 BUILD-OUT TRAFFIC		**0**	**41**	**30**	**0**	**0**	**0**	**36**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**33**

Kimley»Horn

Attachment D – HCM6 Capacity Analysis Reports

Intersection	
Int Delay, s/veh	81.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	17	3	35	107	0	119	1	23	1508	66	1	128	1303	11
Future Vol, veh/h	17	3	35	107	0	119	1	23	1508	66	1	128	1303	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	-	Yield	-	-	-	Yield
Storage Length	-	-	0	-	-	280	-	430	-	400	-	430	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	2	2	2	2	6	2	2	6	2
Mvmt Flow	18	3	38	116	0	129	1	25	1639	72	1	139	1416	12

Major/Minor	Minor2			Minor1			Major1				Major2			
Conflicting Flow All	2568	3387	708	2681	3387	820	1416	1416	0	0	1639	1639	0	0
Stage 1	1696	1696	-	1691	1691	-	-	-	-	-	-	-	-	-
Stage 2	872	1691	-	990	1696	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.98	7.54	6.54	6.94	6.44	4.14	-	-	6.44	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.34	3.52	4.02	3.32	2.52	2.22	-	-	2.52	2.22	-	-
Pot Cap-1 Maneuver	~ 13	7	373	~ 11	7	318	179	477	-	-	128	391	-	-
Stage 1	96	147	-	~ 97	148	-	-	-	-	-	-	-	-	-
Stage 2	312	148	-	264	147	-	-	-	-	-	-	-	-	-
Platoon blocked, %									-	-			-	-
Mov Cap-1 Maneuver	~ 5	4	373	~ 21	4	318	441	441	-	-	380	380	-	-
Mov Cap-2 Maneuver	30	-	-	~ 21	4	-	-	-	-	-	-	-	-	-
Stage 1	90	93	-	~ 91	139	-	-	-	-	-	-	-	-	-
Stage 2	174	139	-	144	93	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	108.3	$ 1153.6	0.2	1.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	441	-	-	30	373	21	318	380	-	-
HCM Lane V/C Ratio	0.059	-	-	0.725	0.102	5.538	0.407	0.369	-	-
HCM Control Delay (s)	13.7	-	-	270.3	15.7	$ 2410	23.9	19.9	-	-
HCM Lane LOS	B	-	-	F	C	F	C	C	-	-
HCM 95th %tile Q(veh)	0.2	-	-	2.4	0.3	14.8	1.9	1.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	117	56	0	97	0	55	0	0	0	0	66
Future Vol, veh/h	23	117	56	0	97	0	55	0	0	0	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	4	2	2	3	2	2	2	2	2	2	2
Mvmt Flow	26	130	62	0	108	0	61	0	0	0	0	73

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	108	0	0	192	0	0	327	290	-	321	352	108
Stage 1	-	-	-	-	-	-	182	182	-	108	108	-
Stage 2	-	-	-	-	-	-	145	108	-	213	244	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	-	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1483	-	-	1381	-	0	626	620	0	632	573	946
Stage 1	-	-	-	-	-	0	820	749	0	897	806	-
Stage 2	-	-	-	-	-	0	858	806	0	789	704	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	1483	-	-	1381	-	-	568	608	-	623	562	946
Mov Cap-2 Maneuver	-	-	-	-	-	-	568	608	-	623	562	-
Stage 1	-	-	-	-	-	-	804	734	-	879	806	-
Stage 2	-	-	-	-	-	-	791	806	-	773	690	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	0	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	1483	-	-	1381	-	946
HCM Lane V/C Ratio	-	0.017	-	-	-	-	0.078
HCM Control Delay (s)	0	7.5	0	-	0	-	9.1
HCM Lane LOS	A	A	A	-	A	-	A
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	0.3

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	6	2	0	23	20	15	13	1	10	5	5
Future Vol, veh/h	24	6	2	0	23	20	15	13	1	10	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	10	2	2	40	2
Mvmt Flow	27	7	2	0	26	22	17	14	1	11	6	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	104	80	9	85	83	15	12	0	0	15	0	0
Stage 1	31	31	-	49	49	-	-	-	-	-	-	-
Stage 2	73	49	-	36	34	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	876	810	1073	901	807	1065	1607	-	-	1603	-	-
Stage 1	986	869	-	964	854	-	-	-	-	-	-	-
Stage 2	937	854	-	980	867	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	825	795	1073	881	792	1065	1607	-	-	1603	-	-
Mov Cap-2 Maneuver	825	795	-	881	792	-	-	-	-	-	-	-
Stage 1	975	863	-	953	845	-	-	-	-	-	-	-
Stage 2	880	845	-	964	861	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	9.2	3.8	3.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1607	-	-	831	899	1603	-	-
HCM Lane V/C Ratio	0.01	-	-	0.043	0.053	0.007	-	-
HCM Control Delay (s)	7.3	0	-	9.5	9.2	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	7	21	0	16	21
Future Vol, veh/h	4	7	21	0	16	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	8	23	0	18	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	76	30	41	0	-	0
Stage 1	30	-	-	-	-	-
Stage 2	46	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	927	1044	1568	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	976	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	913	1044	1568	-	-	-
Mov Cap-2 Maneuver	913	-	-	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	976	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	7.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1568	-	992	-	-
HCM Lane V/C Ratio	0.015	-	0.012	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	2	12	0	5	22
Future Vol, veh/h	8	2	12	0	5	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	2	13	0	6	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	13	0	-	0	33	13
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	20	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1606	-	-	-	980	1067
Stage 1	-	-	-	-	1010	-
Stage 2	-	-	-	-	1003	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1606	-	-	-	974	1067
Mov Cap-2 Maneuver	-	-	-	-	974	-
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	1003	-

Approach	EB	WB	SB
HCM Control Delay, s	5.8	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1606	-	-	-	1048
HCM Lane V/C Ratio	0.006	-	-	-	0.029
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	44	1530	20	0	1445
Future Vol, veh/h	0	44	1530	20	0	1445
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	6
Mvmt Flow	0	48	1663	22	0	1571

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	843	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	307	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	307	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	307	-
HCM Lane V/C Ratio	-	-	0.156	-
HCM Control Delay (s)	-	-	18.9	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.5	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	56	1535	39	0	1445
Future Vol, veh/h	0	56	1535	39	0	1445
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	6
Mvmt Flow	0	61	1668	42	0	1571

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	855	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	302	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	302	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	302	-
HCM Lane V/C Ratio	-	-	0.202	-
HCM Control Delay (s)	-	-	19.9	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.7	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	6	37	5	5	19
Future Vol, veh/h	33	6	37	5	5	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	7	41	6	6	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	47	0	-	0	125	44
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	81	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1560	-	-	-	870	1026
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	942	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1560	-	-	-	849	1026
Mov Cap-2 Maneuver	-	-	-	-	849	-
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	942	-

Approach	EB	WB	SB
HCM Control Delay, s	6.2	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1560	-	-	-	983
HCM Lane V/C Ratio	0.024	-	-	-	0.027
HCM Control Delay (s)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	23	0	70	80	5	105	54	1410	58	16	187	1615	23
Future Vol, veh/h	23	0	70	80	5	105	54	1410	58	16	187	1615	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	-	Yield
Storage Length	-	-	0	-	-	280	430	-	400	-	430	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	1	2	4	2	2	2	1	2
Mvmt Flow	24	0	74	84	5	111	57	1484	61	17	197	1700	24

Major/Minor	Minor2			Minor1			Major1			Major2			
Conflicting Flow All	2987	3726	850	2876	3726	742	1700	0	0	1484	1484	0	0
Stage 1	2128	2128	-	1598	1598	-	-	-	-	-	-	-	-
Stage 2	859	1598	-	1278	2128	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.92	4.14	-	-	6.44	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.31	2.22	-	-	2.52	2.22	-	-
Pot Cap-1 Maneuver	~ 6	4	304	~ 7	~ 4	360	371	-	-	162	449	-	-
Stage 1	51	89	-	111	164	-	-	-	-	-	-	-	-
Stage 2	317	164	-	176	89	-	-	-	-	-	-	-	-
Platoon blocked, %								-	-			-	-
Mov Cap-1 Maneuver	~ 2	1	304	~ 3	~ 1	360	371	-	-	365	365	-	-
Mov Cap-2 Maneuver	~ 2	1	-	~	~ -22	-	-	-	-	-	-	-	-
Stage 1	43	37	-	94	139	-	-	-	-	-	-	-	-
Stage 2	179	139	-	~ 55	37	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay,$	2070.6	~	0.6	3.1
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	371	-	-	2	304	~	~	365	-	-
HCM Lane V/C Ratio	0.153	-	-	-12.105	0.242	~	~	0.585	-	-
HCM Control Delay (s)	16.5	-	-	$ 8309.8	20.6	~	~	27.8	-	-
HCM Lane LOS	C	-	-	F	C	-	-	D	-	-
HCM 95th %tile Q(veh)	0.5	-	-	4.7	0.9	~	~	3.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	141	61	0	117	0	77	0	0	1	0	24
Future Vol, veh/h	51	141	61	0	117	0	77	0	0	1	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	2	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	57	157	68	0	130	0	86	0	0	1	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	130	0	0	225	0	0	415	401	-	435	469	130
Stage 1	-	-	-	-	-	-	271	271	-	130	130	-
Stage 2	-	-	-	-	-	-	144	130	-	305	339	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	-	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1449	-	-	1344	-	0	548	538	0	531	492	920
Stage 1	-	-	-	-	-	0	735	685	0	874	789	-
Stage 2	-	-	-	-	-	0	859	789	0	705	640	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	1449	-	-	1344	-	-	514	514	-	513	470	920
Mov Cap-2 Maneuver	-	-	-	-	-	-	514	514	-	513	470	-
Stage 1	-	-	-	-	-	-	702	654	-	835	789	-
Stage 2	-	-	-	-	-	-	834	789	-	673	611	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0	0	9.2
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	1449	-	-	1344	-	892
HCM Lane V/C Ratio	-	0.039	-	-	-	-	0.031
HCM Control Delay (s)	0	7.6	0	-	0	-	9.2
HCM Lane LOS	A	A	A	-	A	-	A
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	0.1

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	9	14	0	12	7	12	7	0	20	38	20
Future Vol, veh/h	8	9	14	0	12	7	12	7	0	20	38	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	2	2	2	2	2	2	14	2	2	5	2
Mvmt Flow	9	10	16	0	13	8	13	8	0	22	42	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	142	131	53	144	142	8	64	0	0	8	0	0
Stage 1	97	97	-	34	34	-	-	-	-	-	-	-
Stage 2	45	34	-	110	108	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	816	760	1014	825	749	1074	1538	-	-	1612	-	-
Stage 1	897	815	-	982	867	-	-	-	-	-	-	-
Stage 2	956	867	-	895	806	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	786	743	1014	790	733	1074	1538	-	-	1612	-	-
Mov Cap-2 Maneuver	786	743	-	790	733	-	-	-	-	-	-	-
Stage 1	890	804	-	974	860	-	-	-	-	-	-	-
Stage 2	927	860	-	858	795	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.5	4.6	1.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1538	-	-	859	830	1612	-	-
HCM Lane V/C Ratio	0.009	-	-	0.04	0.025	0.014	-	-
HCM Control Delay (s)	7.4	0	-	9.4	9.5	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	9	12	10	14	14
Future Vol, veh/h	13	9	12	10	14	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	9	2	2
Mvmt Flow	14	10	13	11	16	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	61	24	32	0	-	0
Stage 1	24	-	-	-	-	-
Stage 2	37	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	945	1052	1580	-	-	-
Stage 1	999	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	937	1052	1580	-	-	-
Mov Cap-2 Maneuver	937	-	-	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	985	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1580	-	981	-	-
HCM Lane V/C Ratio	0.008	-	0.025	-	-
HCM Control Delay (s)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	3	5	0	13	24
Future Vol, veh/h	15	3	5	0	13	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	33	2	2
Mvmt Flow	17	3	6	0	14	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	6	0	-	0	43	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	37	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1615	-	-	-	968	1077
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	985	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1615	-	-	-	957	1077
Mov Cap-2 Maneuver	-	-	-	-	957	-
Stage 1	-	-	-	-	1006	-
Stage 2	-	-	-	-	985	-

Approach	EB	WB	SB
HCM Control Delay, s	6	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1615	-	-	-	1032
HCM Lane V/C Ratio	0.01	-	-	-	0.04
HCM Control Delay (s)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	30	1490	28	0	1765
Future Vol, veh/h	0	30	1490	28	0	1765
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	0	32	1568	29	0	1858

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	799	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	328	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	328	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	328	-
HCM Lane V/C Ratio	-	-	0.096	-
HCM Control Delay (s)	-	-	17.1	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	49	1467	53	0	1765
Future Vol, veh/h	0	49	1467	53	0	1765
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	0	52	1544	56	0	1858

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	800	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	328	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	328	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	328	-
HCM Lane V/C Ratio	-	-	0.157	-
HCM Control Delay (s)	-	-	18	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	17	21	5	5	28
Future Vol, veh/h	36	17	21	5	5	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	19	23	6	6	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	29	0	-	0	125	26
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	99	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1584	-	-	-	870	1050
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	925	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1584	-	-	-	847	1050
Mov Cap-2 Maneuver	-	-	-	-	847	-
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	925	-

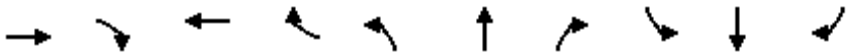
Approach	EB	WB	SB
HCM Control Delay, s	5	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1584	-	-	-	1013
HCM Lane V/C Ratio	0.025	-	-	-	0.036
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Queues

Hager Access

1: Okatie Highway & Del Webb Blvd/Seagrass Station Rd



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	21	38	116	129	26	1639	72	140	1416	12
v/c Ratio	0.10	0.14	0.54	0.45	0.12	0.61	0.06	0.85	0.54	0.01
Control Delay	34.5	12.2	46.8	26.9	5.2	6.8	1.1	56.0	6.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.5	12.2	46.8	26.9	5.2	6.8	1.1	56.0	6.1	0.4
Queue Length 50th (ft)	11	0	65	42	3	192	0	48	153	0
Queue Length 95th (ft)	32	27	120	97	14	306	11	#104	245	1
Internal Link Dist (ft)	391		300			720			1168	
Turn Bay Length (ft)				280	430		400	430		500
Base Capacity (vph)	286	347	283	363	224	2702	1180	164	2600	1216
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.11	0.41	0.36	0.12	0.61	0.06	0.85	0.54	0.01

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

1: Okatie Highway & Del Webb Blvd/Seagrass Station Rd

Hager Access

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	17	3	35	107	0	119	1	23	1508	66	1	128
Future Volume (veh/h)	17	3	35	107	0	119	1	23	1508	66	1	128
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0		0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00		1.00		1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Work Zone On Approach		No			No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870		1870	1870	1811		1870
Adj Flow Rate, veh/h	18	3	0	116	0	0		25	1639	0		139
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92	0.92		0.92
Percent Heavy Veh, %	2	2	4	2	2	2		2	2	6		2
Cap, veh/h	246	37		256	0			323	2809			266
Arrive On Green	0.10	0.12	0.00	0.10	0.00	0.00		0.79	0.79	0.00		0.79
Sat Flow, veh/h	1419	305	1560	1452	0	1585		379	3554	1535		306
Grp Volume(v), veh/h	21	0	0	116	0	0		25	1639	0		139
Grp Sat Flow(s),veh/h/ln	1724	0	1560	1452	0	1585		379	1777	1535		306
Q Serve(g_s), s	0.0	0.0	0.0	6.1	0.0	0.0		2.3	16.3	0.0		29.5
Cycle Q Clear(g_c), s	1.0	0.0	0.0	7.1	0.0	0.0		15.6	16.3	0.0		45.8
Prop In Lane	0.86		1.00	1.00		1.00		1.00		1.00		1.00
Lane Grp Cap(c), veh/h	245	0		224	0			323	2809			266
V/C Ratio(X)	0.09	0.00		0.52	0.00			0.08	0.58			0.52
Avail Cap(c_a), veh/h	389	0		362	0			323	2809			266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00		1.00	1.00	0.00		1.00
Uniform Delay (d), s/veh	36.3	0.0	0.0	39.1	0.0	0.0		6.2	3.7	0.0		12.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.8	0.0	0.0		0.5	0.9	0.0		7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	2.7	0.0	0.0		0.2	3.0	0.0		2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	0.0	0.0	40.9	0.0	0.0		6.7	4.6	0.0		19.8
LnGrp LOS	D	A		D	A			A	A			B
Approach Vol, veh/h		21	A		116	A			1664	A		
Approach Delay, s/veh		36.5			40.9				4.6			
Approach LOS		D			D				A			

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	76.0	15.1	76.0	15.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	70.0	18.0	70.0	18.0
Max Q Clear Time (g_c+I1), s	18.3	3.0	47.8	9.1
Green Ext Time (p_c), s	19.3	0.0	13.6	0.3

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

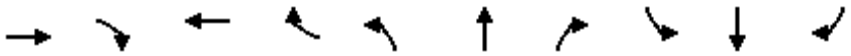
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1303	11
Future Volume (veh/h)	1303	11
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1811	1870
Adj Flow Rate, veh/h	1416	0
Peak Hour Factor	0.92	0.92
Percent Heavy Veh, %	6	2
Cap, veh/h	2720	
Arrive On Green	0.79	0.00
Sat Flow, veh/h	3441	1585
Grp Volume(v), veh/h	1416	0
Grp Sat Flow(s),veh/h/ln	1721	1585
Q Serve(g_s), s	13.4	0.0
Cycle Q Clear(g_c), s	13.4	0.0
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	2720	
V/C Ratio(X)	0.52	
Avail Cap(c_a), veh/h	2720	
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	1.00	0.00
Uniform Delay (d), s/veh	3.4	0.0
Incr Delay (d2), s/veh	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	4.1	0.0
LnGrp LOS	A	
Approach Vol, veh/h	1555	A
Approach Delay, s/veh	5.5	
Approach LOS	A	
Timer - Assigned Phs		

Queues

Hager Access

1: Okatie Highway & Del Webb Blvd/Seagrass Station Rd



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	24	74	89	111	57	1484	61	214	1700	24
v/c Ratio	0.16	0.29	0.52	0.41	0.34	0.53	0.05	0.95	0.59	0.02
Control Delay	46.3	19.5	57.9	20.0	10.1	5.1	0.9	64.4	5.7	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.3	19.5	57.9	20.0	10.1	5.1	0.9	64.4	5.7	1.0
Queue Length 50th (ft)	16	12	62	20	9	161	0	106	200	0
Queue Length 95th (ft)	42	56	116	73	37	252	9	#159	313	5
Internal Link Dist (ft)	391		300			720			1168	
Turn Bay Length (ft)				280	430		400	430		500
Base Capacity (vph)	203	317	229	340	168	2790	1284	225	2873	1277
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.23	0.39	0.33	0.34	0.53	0.05	0.95	0.59	0.02

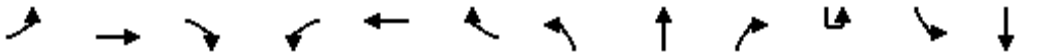
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

1: Okatie Highway & Del Webb Blvd/Seagrass Station Rd

Hager Access



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	23	0	70	80	5	105	54	1410	58	16	187	1615
Future Volume (veh/h)	23	0	70	80	5	105	54	1410	58	16	187	1615
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach		No			No			No				No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1841	1870		1870	1885
Adj Flow Rate, veh/h	24	0	0	84	5	0	57	1484	0		197	1700
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	1	2	4	2		2	1
Cap, veh/h	224	0		196	8		262	2916			318	2987
Arrive On Green	0.08	0.00	0.00	0.08	0.09	0.00	0.83	0.83	0.00		0.83	0.83
Sat Flow, veh/h	1690	0	1585	1412	84	1598	288	3497	1585		355	3582
Grp Volume(v), veh/h	24	0	0	89	0	0	57	1484	0		197	1700
Grp Sat Flow(s),veh/h/ln	1690	0	1585	1496	0	1598	288	1749	1585		355	1791
Q Serve(g_s), s	0.0	0.0	0.0	5.0	0.0	0.0	8.6	13.5	0.0		39.6	16.6
Cycle Q Clear(g_c), s	1.4	0.0	0.0	6.4	0.0	0.0	25.2	13.5	0.0		53.1	16.6
Prop In Lane	1.00		1.00	0.94		1.00	1.00		1.00		1.00	
Lane Grp Cap(c), veh/h	193	0		176	0		262	2916			318	2987
V/C Ratio(X)	0.12	0.00		0.50	0.00		0.22	0.51			0.62	0.57
Avail Cap(c_a), veh/h	317	0		302	0		262	2916			318	2987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00		1.00	1.00
Uniform Delay (d), s/veh	46.9	0.0	0.0	49.0	0.0	0.0	6.9	2.6	0.0		10.3	2.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	2.2	0.0	0.0	1.9	0.6	0.0		8.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	2.6	0.0	0.0	0.6	3.1	0.0		3.1	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.2	0.0	0.0	51.2	0.0	0.0	8.8	3.3	0.0		19.1	3.7
LnGrp LOS	D	A		D	A		A	A			B	A
Approach Vol, veh/h		24	A		89	A		1541	A			1897
Approach Delay, s/veh		47.2			51.2			3.5				5.3
Approach LOS		D			D			A				A

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		96.0		14.3		96.0		14.3				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		90.0		18.0		90.0		18.0				
Max Q Clear Time (g_c+I1), s		27.2		3.4		55.1		8.4				
Green Ext Time (p_c), s		22.3		0.0		22.3		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		5.9
HCM 6th LOS		A

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	23
Future Volume (veh/h)	23
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.95
Percent Heavy Veh, %	2
Cap, veh/h	
Arrive On Green	0.00
Sat Flow, veh/h	1585
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	1585
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	
V/C Ratio(X)	
Avail Cap(c_a), veh/h	
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	
Approach Vol, veh/h	A
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection	
Int Delay, s/veh	81.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	17	3	35	107	0	119	1	23	1508	66	1	128	1303	11
Future Vol, veh/h	17	3	35	107	0	119	1	23	1508	66	1	128	1303	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	-	Yield	-	-	-	Yield
Storage Length	-	-	0	-	-	280	-	430	-	400	-	430	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	2	2	2	2	6	2	2	6	2
Mvmt Flow	18	3	38	116	0	129	1	25	1639	72	1	139	1416	12

Major/Minor	Minor2			Minor1			Major1				Major2			
Conflicting Flow All	2568	3387	708	2681	3387	820	1416	1416	0	0	1639	1639	0	0
Stage 1	1696	1696	-	1691	1691	-	-	-	-	-	-	-	-	-
Stage 2	872	1691	-	990	1696	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.98	7.54	6.54	6.94	6.44	4.14	-	-	6.44	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.34	3.52	4.02	3.32	2.52	2.22	-	-	2.52	2.22	-	-
Pot Cap-1 Maneuver	~ 13	7	373	~ 11	7	318	179	477	-	-	128	391	-	-
Stage 1	96	147	-	~ 97	148	-	-	-	-	-	-	-	-	-
Stage 2	312	148	-	264	147	-	-	-	-	-	-	-	-	-
Platoon blocked, %									-	-			-	-
Mov Cap-1 Maneuver	~ 5	4	373	~ 21	4	318	441	441	-	-	380	380	-	-
Mov Cap-2 Maneuver	30	-	-	~ 21	4	-	-	-	-	-	-	-	-	-
Stage 1	90	93	-	~ 91	139	-	-	-	-	-	-	-	-	-
Stage 2	174	139	-	144	93	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	108.3	$ 1153.6	0.2	1.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	441	-	-	30	373	21	318	380	-	-
HCM Lane V/C Ratio	0.059	-	-	0.725	0.102	5.538	0.407	0.369	-	-
HCM Control Delay (s)	13.7	-	-	270.3	15.7	$ 2410	23.9	19.9	-	-
HCM Lane LOS	B	-	-	F	C	F	C	C	-	-
HCM 95th %tile Q(veh)	0.2	-	-	2.4	0.3	14.8	1.9	1.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	117	56	0	97	0	55	0	0	0	0	66
Future Vol, veh/h	23	117	56	0	97	0	55	0	0	0	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	4	2	2	3	2	2	2	2	2	2	2
Mvmt Flow	26	130	62	0	108	0	61	0	0	0	0	73

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	108	0	0	192	0	0	327	290	-	321	352	108
Stage 1	-	-	-	-	-	-	182	182	-	108	108	-
Stage 2	-	-	-	-	-	-	145	108	-	213	244	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	-	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1483	-	-	1381	-	0	626	620	0	632	573	946
Stage 1	-	-	-	-	-	0	820	749	0	897	806	-
Stage 2	-	-	-	-	-	0	858	806	0	789	704	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	1483	-	-	1381	-	-	568	608	-	623	562	946
Mov Cap-2 Maneuver	-	-	-	-	-	-	568	608	-	623	562	-
Stage 1	-	-	-	-	-	-	804	734	-	879	806	-
Stage 2	-	-	-	-	-	-	791	806	-	773	690	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	0	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	1483	-	-	1381	-	946
HCM Lane V/C Ratio	-	0.017	-	-	-	-	0.078
HCM Control Delay (s)	0	7.5	0	-	0	-	9.1
HCM Lane LOS	A	A	A	-	A	-	A
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	0.3

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	6	2	0	23	20	15	13	1	10	5	5
Future Vol, veh/h	24	6	2	0	23	20	15	13	1	10	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	10	2	2	40	2
Mvmt Flow	27	7	2	0	26	22	17	14	1	11	6	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	104	80	9	85	83	15	12	0	0	15	0	0
Stage 1	31	31	-	49	49	-	-	-	-	-	-	-
Stage 2	73	49	-	36	34	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	876	810	1073	901	807	1065	1607	-	-	1603	-	-
Stage 1	986	869	-	964	854	-	-	-	-	-	-	-
Stage 2	937	854	-	980	867	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	825	795	1073	881	792	1065	1607	-	-	1603	-	-
Mov Cap-2 Maneuver	825	795	-	881	792	-	-	-	-	-	-	-
Stage 1	975	863	-	953	845	-	-	-	-	-	-	-
Stage 2	880	845	-	964	861	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	9.2	3.8	3.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1607	-	-	831	899	1603	-	-
HCM Lane V/C Ratio	0.01	-	-	0.043	0.053	0.007	-	-
HCM Control Delay (s)	7.3	0	-	9.5	9.2	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	4	28	0	0	38
Future Vol, veh/h	7	4	28	0	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	4	31	0	0	42

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	83	21	42	0	-	0
Stage 1	21	-	-	-	-	-
Stage 2	62	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	919	1056	1567	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	961	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	901	1056	1567	-	-	-
Mov Cap-2 Maneuver	901	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	961	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	7.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1567	-	952	-	-
HCM Lane V/C Ratio	0.02	-	0.013	-	-
HCM Control Delay (s)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	7	0
Future Vol, veh/h	0	0	0	0	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	8	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	1022	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	1022	1084
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	1022
HCM Lane V/C Ratio	-	-	-	-	0.008
HCM Control Delay (s)	0	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	10	1540	10	0	1445
Future Vol, veh/h	0	10	1540	10	0	1445
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	6
Mvmt Flow	0	11	1674	11	0	1571

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	843	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	307	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	307	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	307	-
HCM Lane V/C Ratio	-	-	0.035	-
HCM Control Delay (s)	-	-	17.2	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	90	1502	48	0	1445
Future Vol, veh/h	0	90	1502	48	0	1445
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	6
Mvmt Flow	0	98	1633	52	0	1571

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	843	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	307	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	307	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	307	-
HCM Lane V/C Ratio	-	-	0.319	-
HCM Control Delay (s)	-	-	22.1	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	1.3	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	11	66	0	5	24
Future Vol, veh/h	37	11	66	0	5	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	12	73	0	6	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	73	0	-	0	167	73
Stage 1	-	-	-	-	73	-
Stage 2	-	-	-	-	94	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1527	-	-	-	823	989
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1527	-	-	-	801	989
Mov Cap-2 Maneuver	-	-	-	-	801	-
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	SB
HCM Control Delay, s	5.7	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1527	-	-	-	951
HCM Lane V/C Ratio	0.027	-	-	-	0.034
HCM Control Delay (s)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	359.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	23	0	70	80	5	105	54	1410	58	16	187	1615	23
Future Vol, veh/h	23	0	70	80	5	105	54	1410	58	16	187	1615	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	-	Yield
Storage Length	-	-	0	-	-	280	430	-	400	-	430	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	1	2	4	2	2	2	1	2
Mvmt Flow	24	0	74	84	5	111	57	1484	61	17	197	1700	24

Major/Minor	Minor2			Minor1			Major1			Major2			
Conflicting Flow All	2987	3726	850	2876	3726	742	1700	0	0	1484	1484	0	0
Stage 1	2128	2128	-	1598	1598	-	-	-	-	-	-	-	-
Stage 2	859	1598	-	1278	2128	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.92	4.14	-	-	6.44	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.31	2.22	-	-	2.52	2.22	-	-
Pot Cap-1 Maneuver	~ 6	4	304	~ 7	~ 4	360	371	-	-	162	449	-	-
Stage 1	51	89	-	111	164	-	-	-	-	-	-	-	-
Stage 2	317	164	-	176	89	-	-	-	-	-	-	-	-
Platoon blocked, %								-	-			-	-
Mov Cap-1 Maneuver	-	1	304	~ 3	~ 1	360	371	-	-	365	365	-	-
Mov Cap-2 Maneuver	-	1	-	~ 3	~ 1	-	-	-	-	-	-	-	-
Stage 1	43	37	-	94	139	-	-	-	-	-	-	-	-
Stage 2	179	139	-	~ 55	37	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		$ 6863.2	0.6	3.1
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	371	-	-	-	304	3	360	365	-	-
HCM Lane V/C Ratio	0.153	-	-	-	0.242	29.825	0.307	0.585	-	-
HCM Control Delay (s)	16.5	-	-	-	20.1	$ 15317.3	19.4	27.8	-	-
HCM Lane LOS	C	-	-	-	C	F	C	D	-	-
HCM 95th %tile Q(veh)	0.5	-	-	-	0.9	13.3	1.3	3.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	141	61	0	117	0	77	0	0	1	0	24
Future Vol, veh/h	51	141	61	0	117	0	77	0	0	1	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	2	2	2	4	2	2	2	2	2	2	2
Mvmt Flow	57	157	68	0	130	0	86	0	0	1	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	130	0	0	225	0	0	415	401	-	435	469	130
Stage 1	-	-	-	-	-	-	271	271	-	130	130	-
Stage 2	-	-	-	-	-	-	144	130	-	305	339	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	-	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1449	-	-	1344	-	0	548	538	0	531	492	920
Stage 1	-	-	-	-	-	0	735	685	0	874	789	-
Stage 2	-	-	-	-	-	0	859	789	0	705	640	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	1449	-	-	1344	-	-	514	514	-	513	470	920
Mov Cap-2 Maneuver	-	-	-	-	-	-	514	514	-	513	470	-
Stage 1	-	-	-	-	-	-	702	654	-	835	789	-
Stage 2	-	-	-	-	-	-	834	789	-	673	611	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0	0	9.2
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	1449	-	-	1344	-	892
HCM Lane V/C Ratio	-	0.039	-	-	-	-	0.031
HCM Control Delay (s)	0	7.6	0	-	0	-	9.2
HCM Lane LOS	A	A	A	-	A	-	A
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	0.1

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	9	14	0	12	7	12	7	0	20	38	20
Future Vol, veh/h	8	9	14	0	12	7	12	7	0	20	38	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	7	2	2	2	2	2	2	14	2	2	5	2
Mvmt Flow	9	10	16	0	13	8	13	8	0	22	42	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	142	131	53	144	142	8	64	0	0	8	0	0
Stage 1	97	97	-	34	34	-	-	-	-	-	-	-
Stage 2	45	34	-	110	108	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	816	760	1014	825	749	1074	1538	-	-	1612	-	-
Stage 1	897	815	-	982	867	-	-	-	-	-	-	-
Stage 2	956	867	-	895	806	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	786	743	1014	790	733	1074	1538	-	-	1612	-	-
Mov Cap-2 Maneuver	786	743	-	790	733	-	-	-	-	-	-	-
Stage 1	890	804	-	974	860	-	-	-	-	-	-	-
Stage 2	927	860	-	858	795	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.5	4.6	1.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1538	-	-	859	830	1612	-	-
HCM Lane V/C Ratio	0.009	-	-	0.04	0.025	0.014	-	-
HCM Control Delay (s)	7.4	0	-	9.4	9.5	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	7	12	3	4	24
Future Vol, veh/h	23	7	12	3	4	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	9	2	2
Mvmt Flow	26	8	13	3	4	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	47	18	31	0	-	0
Stage 1	18	-	-	-	-	-
Stage 2	29	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	963	1061	1582	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	994	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	955	1061	1582	-	-	-
Mov Cap-2 Maneuver	955	-	-	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	994	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	5.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1582	-	978	-	-
HCM Lane V/C Ratio	0.008	-	0.034	-	-
HCM Control Delay (s)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	4	32	0
Future Vol, veh/h	0	0	0	4	32	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	33	2	2
Mvmt Flow	0	0	0	4	36	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	4	0	-	0	2	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1618	-	-	-	1021	1082
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1618	-	-	-	1021	1082
Mov Cap-2 Maneuver	-	-	-	-	1021	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1618	-	-	-	1021
HCM Lane V/C Ratio	-	-	-	-	0.035
HCM Control Delay (s)	0	-	-	-	8.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	10	1508	10	0	1765
Future Vol, veh/h	0	10	1508	10	0	1765
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	0	11	1587	11	0	1858

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	799	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	328	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	328	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	328	-
HCM Lane V/C Ratio	-	-	0.032	-
HCM Control Delay (s)	-	-	16.3	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	69	1447	71	0	1765
Future Vol, veh/h	0	69	1447	71	0	1765
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	1
Mvmt Flow	0	73	1523	75	0	1858

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	799	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	328	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	328	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	328	-
HCM Lane V/C Ratio	-	-	0.221	-
HCM Control Delay (s)	-	-	19.1	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.8	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	30	36	0	5	33
Future Vol, veh/h	41	30	36	0	5	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	33	40	0	6	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	40	0	-	0	165	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	125	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1570	-	-	-	826	1031
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	901	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1570	-	-	-	801	1031
Mov Cap-2 Maneuver	-	-	-	-	801	-
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	901	-

Approach	EB	WB	SB
HCM Control Delay, s	4.3	0	8.8
HCM LOS			A

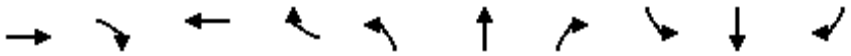
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1570	-	-	-	993
HCM Lane V/C Ratio	0.029	-	-	-	0.043
HCM Control Delay (s)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Queues

No Hac

1: Okatie highway & Del Webb Blvd/Seagrass Station Rd

No Hager Access AM



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	21	38	116	129	26	1639	72	140	1416	12
v/c Ratio	0.10	0.14	0.54	0.45	0.12	0.61	0.06	0.85	0.54	0.01
Control Delay	34.5	12.2	46.8	26.6	5.2	6.8	1.1	56.0	6.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.5	12.2	46.8	26.6	5.2	6.8	1.1	56.0	6.1	0.4
Queue Length 50th (ft)	11	0	65	42	3	192	0	48	153	0
Queue Length 95th (ft)	32	27	120	96	14	306	11	#104	245	1
Internal Link Dist (ft)	391		300			720			1168	
Turn Bay Length (ft)				280	430		400	430		500
Base Capacity (vph)	286	347	283	364	224	2702	1180	164	2600	1216
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.11	0.41	0.35	0.12	0.61	0.06	0.85	0.54	0.01

Intersection Summary

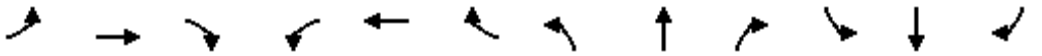
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

No Hac

1: Okatie highway & Del Webb Blvd/Seagrass Station Rd

No Hager Access AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	3	35	107	0	119	24	1508	66	129	1303	11
Future Volume (veh/h)	17	3	35	107	0	119	24	1508	66	129	1303	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870	1870	1870	1811	1870	1811	1870
Adj Flow Rate, veh/h	18	3	0	116	0	0	26	1639	0	140	1416	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	4	2	2	2	2	2	6	2	6	2
Cap, veh/h	246	37		256	0		323	2809		266	2720	
Arrive On Green	0.10	0.12	0.00	0.10	0.00	0.00	0.79	0.79	0.00	0.79	0.79	0.00
Sat Flow, veh/h	1419	305	1560	1452	0	1585	379	3554	1535	306	3441	1585
Grp Volume(v), veh/h	21	0	0	116	0	0	26	1639	0	140	1416	0
Grp Sat Flow(s),veh/h/ln	1724	0	1560	1452	0	1585	379	1777	1535	306	1721	1585
Q Serve(g_s), s	0.0	0.0	0.0	6.1	0.0	0.0	2.4	16.3	0.0	29.9	13.4	0.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	7.1	0.0	0.0	15.7	16.3	0.0	46.2	13.4	0.0
Prop In Lane	0.86		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	0		224	0		323	2809		266	2720	
V/C Ratio(X)	0.09	0.00		0.52	0.00		0.08	0.58		0.53	0.52	
Avail Cap(c_a), veh/h	389	0		362	0		323	2809		266	2720	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.3	0.0	0.0	39.1	0.0	0.0	6.2	3.7	0.0	12.7	3.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.8	0.0	0.0	0.5	0.9	0.0	7.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	2.7	0.0	0.0	0.2	3.0	0.0	2.3	3.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	0.0	0.0	40.9	0.0	0.0	6.7	4.6	0.0	20.0	4.1	0.0
LnGrp LOS	D	A		D	A		A	A		B	A	
Approach Vol, veh/h		21	A		116	A		1665	A		1556	A
Approach Delay, s/veh		36.5			40.9			4.6			5.5	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		76.0		15.1		76.0		15.1				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		70.0		18.0		70.0		18.0				
Max Q Clear Time (g_c+I1), s		18.3		3.0		48.2		9.1				
Green Ext Time (p_c), s		19.4		0.0		14.4		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			6.5									
HCM 6th LOS			A									

Notes

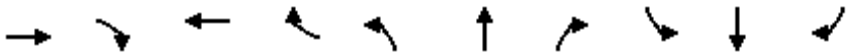
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Queues

No Hac

1: Okatie highway & Del Webb Blvd/Seagrass Station Rd

No Hager Access PM



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	24	74	89	111	57	1484	61	214	1700	24
v/c Ratio	0.16	0.29	0.52	0.40	0.34	0.53	0.05	0.95	0.59	0.02
Control Delay	46.3	19.5	57.9	19.5	10.1	5.1	0.9	64.4	5.7	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.3	19.5	57.9	19.5	10.1	5.1	0.9	64.4	5.7	1.0
Queue Length 50th (ft)	16	12	62	19	9	161	0	106	200	0
Queue Length 95th (ft)	42	56	116	71	37	252	9	#159	313	5
Internal Link Dist (ft)	391		300			720			1168	
Turn Bay Length (ft)				280	430		400	430		500
Base Capacity (vph)	203	317	229	342	168	2790	1284	225	2873	1277
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.23	0.39	0.32	0.34	0.53	0.05	0.95	0.59	0.02

Intersection Summary

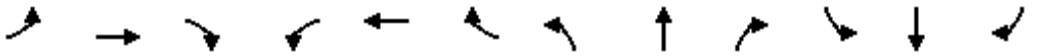
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary

1: Okatie highway & Del Webb Blvd/Seagrass Station Rd

No Hac

No Hager Access PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	0	70	80	5	105	54	1410	58	203	1615	23
Future Volume (veh/h)	23	0	70	80	5	105	54	1410	58	203	1615	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1841	1870	1870	1885	1870
Adj Flow Rate, veh/h	24	0	0	84	5	0	57	1484	0	214	1700	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	1	2	4	2	2	1	2
Cap, veh/h	224	0		196	8		262	2916		318	2987	
Arrive On Green	0.08	0.00	0.00	0.08	0.09	0.00	0.83	0.83	0.00	0.83	0.83	0.00
Sat Flow, veh/h	1690	0	1585	1412	84	1598	288	3497	1585	355	3582	1585
Grp Volume(v), veh/h	24	0	0	89	0	0	57	1484	0	214	1700	0
Grp Sat Flow(s),veh/h/ln	1690	0	1585	1496	0	1598	288	1749	1585	355	1791	1585
Q Serve(g_s), s	0.0	0.0	0.0	5.0	0.0	0.0	8.6	13.5	0.0	48.2	16.6	0.0
Cycle Q Clear(g_c), s	1.4	0.0	0.0	6.4	0.0	0.0	25.2	13.5	0.0	61.7	16.6	0.0
Prop In Lane	1.00		1.00	0.94		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	193	0		176	0		262	2916		318	2987	
V/C Ratio(X)	0.12	0.00		0.50	0.00		0.22	0.51		0.67	0.57	
Avail Cap(c_a), veh/h	317	0		302	0		262	2916		318	2987	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.9	0.0	0.0	49.0	0.0	0.0	6.9	2.6	0.0	11.6	2.9	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	2.2	0.0	0.0	1.9	0.6	0.0	10.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	2.6	0.0	0.0	0.6	3.1	0.0	4.2	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.2	0.0	0.0	51.2	0.0	0.0	8.8	3.3	0.0	22.4	3.7	0.0
LnGrp LOS	D	A		D	A		A	A		C	A	
Approach Vol, veh/h		24	A		89	A		1541	A		1914	A
Approach Delay, s/veh		47.2			51.2			3.5			5.8	
Approach LOS		D			D			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		96.0		14.3		96.0		14.3				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		90.0		18.0		90.0		18.0				
Max Q Clear Time (g_c+I1), s		27.2		3.4		63.7		8.4				
Green Ext Time (p_c), s		22.3		0.0		19.8		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			6.2									
HCM 6th LOS			A									

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

LINE TABLE		
L#	LENGTH	DIRECTION
L2	66.53'	S31°30'25"W
L3	50.29'	S17°57'15"W

CURVE TABLE					
C#	ARC	RADIUS	DELTA	DIRECTION	CHORD
C1	381.98'	2620.01'	8°21'12"	N21°11'52"E	381.64'
C2	389.92'	2620.01'	8°31'37"	N29°38'17"E	389.56'
C3	149.23'	95.00'	90°00'00"	S79°46'18"W	134.35'
C4	315.78'	1571.17'	11°30'56"	S25°12'24"W	315.25'

LEGEND

B.S.L.	BUILDING SETBACK LINE
CATV	CABLE TELEVISION
CB	CATCH BASIN
FC	FENCE
FOSO	FIBER OPTIC STUBOUT
GI	GRATE INLET
GUM	GUM
IPF	IRON PIN (OLD) FOUND
LO	LIVE OAK
MAP	MAPLE
PN	PINE
STMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
TELE PED	TELEPHONE PEDESTAL
UG OPTIC	UNDERGROUND FIBER OPTIC LINE
WO	WATER OAK

NOTES :

1. THIS LOT LIES IN ZONE "X-SHADED", NO B.F.E. PER F.I.R.M. PANEL 45013C 0265-G, COMMUNITY NO. 450251, EFFECTIVE: 03/23/21.
2. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. NO INVESTIGATIONS FOR EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS HAVE BEEN MADE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
3. ALL BUILDING SETBACK REQUIREMENTS SHOULD BE VERIFIED WITH THE PROPER AUTHORITIES PRIOR TO DESIGN AND CONSTRUCTION.
4. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

REFERENCE PLAT:

AN ALTA LAND TITLE SURVEY 7.55 ACRES PORTION OF VERDIER PLANTATION, A 5.46 ACRES PARCEL KNOWN AS"REMAINDER A", 1.17 ACRES PARCEL KNOWN AS "OUTPARCEL" AND A 3.29 ACRES PARCEL KNOWN AS PARCEL A-3 BEING A PORTION OF VERDIER PLANTATION
By: THOMAS & HUTTON ENG. CO.
DATED: 12/19/19
FILE: 28196
RECORDED: P.B. 155 PG. 132

LABEL DESCRIPTIONS (TYP.)

⊗ 18.4 → TREE LOCATION / GROUND ELEVATION
PN 18 → TREE SPECIES & DIAMETER (IN.)

PREPARED FOR: SKYHB 1 INVESTMENTS LLC

" I HEREBY STATE THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND IS AN ACCURATE DEPICTION OF THE IMPROVEMENTS WITHIN THE LIMITS ESTABLISHED BY THE CLIENT. THIS SURVEY SHALL NOT BE USED FOR LOAN, CLOSING OR MORTGAGE PURPOSES AND IS NOT FOR RECORDING."

MICHAEL R. DUNIGAN
S.C.R.L.S. NO. 11905

08/09/22: This Drawing is for an Exhibit only.

A TREE AND TOPOGRAPHIC LAND SURVEY
OF

R610-021-000-0808

JUSTIN DRIVE

A PORTION OF

SEAGRASS, VERDIER PLANTATION

OKATIE, BEAUFORT COUNTY, SOUTH CAROLINA

SCALE: 1" = 40' SURVEYED BY: LD
DATE: 09/13/21 DRAWN BY: JTG
JOB No.: 70,947 CHECKED BY: MRD

COASTAL SURVEYING CO., INC.
49 RIVERWALK BLVD.
BUILDING 8
RIDGELAND, SC 29936
(843) 645-4446

T&T\2020s\2021 68615-71731\70947 SEAGRASS\70947 SEAGRASS T&T-080922-exhibit only.dwg, 8/9/2022 9:16:39 AM, DWG To PDF.pc3


PHOTO A


PHOTO B


PHOTO C


PHOTO D

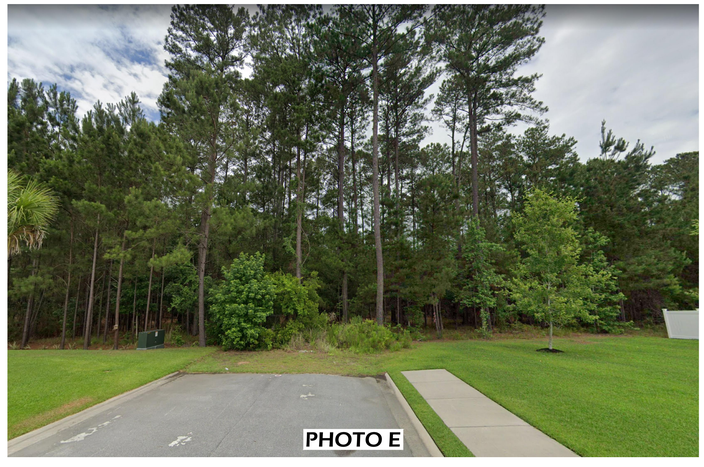
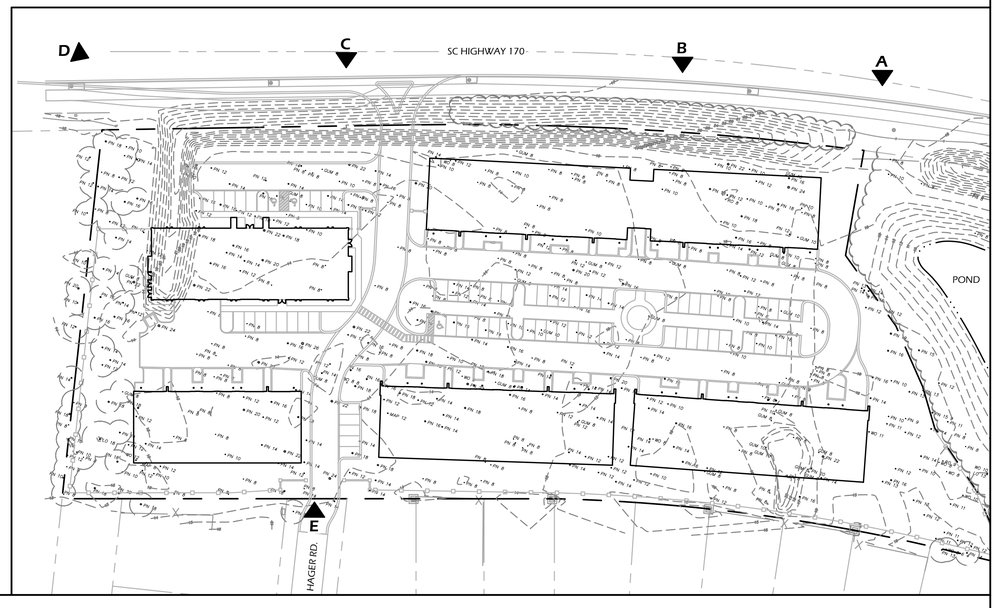


PHOTO E



SITE PHOTOS - EXISTING CONDITIONS

FOR

Car Village Bluffton ™

BLUFFTON, SOUTH CAROLINA

Wilmer Jones Keefer Ltd.
landscape architecture
land planning
www.wjkltd.com
23 Promenade Street, Suite 201 ♦ Bluffton, South Carolina ♦ 29910 ♦ ph 843.757.7411

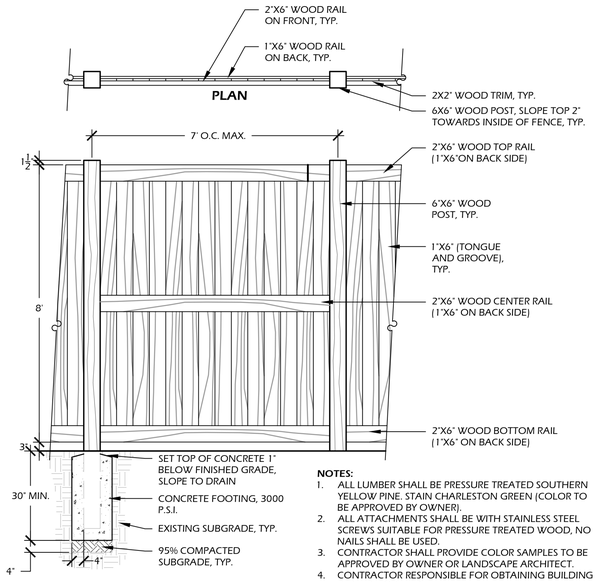
JUNE 2023

W E S Z

0 30 60 90 120 150 180 210 240

Scale 1 " = 60'

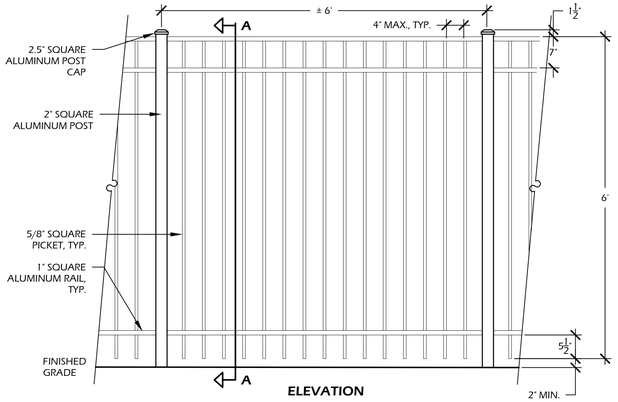
Note: Plan is conceptual in nature and subject to change



NOTES:

1. ALL LUMBER SHALL BE PRESSURE TREATED SOUTHERN YELLOW PINE. STAIN CHARLESTON GREEN (COLOR TO BE APPROVED BY OWNER).
2. ALL ATTACHMENTS SHALL BE WITH STAINLESS STEEL SCREWS SUITABLE FOR PRESSURE TREATED WOOD, NO NAILS SHALL BE USED.
3. CONTRACTOR SHALL PROVIDE COLOR SAMPLES TO BE APPROVED BY OWNER OR LANDSCAPE ARCHITECT.
4. CONTRACTOR RESPONSIBLE FOR OBTAINING BUILDING PERMITS FOR FENCE.

1 / L2 WOOD PRIVACY FENCE
SCALE: 1/2" - 1'-0"



ELEVATION

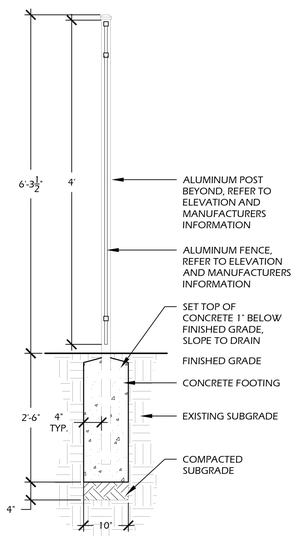
FENCE MANUFACTURER INFORMATION:

MANUFACTURER:
JERITH MANUFACTURING LLC
14400 MCNULTY RD,
PHILADELPHIA, PA, 19154
PHONE: (800) 344.2242
WEB: WWW.JERITH.COM

FENCE: RESIDENTIAL FENCE STYLE 202 - 48" HEIGHT
MATERIAL: ALUMINUM
COLOR: POWDER COATED BLACK
OTHER INFORMATION:
CONCRETE: 3,000 P.S.I. AT 28 DAYS
SOIL COMPACTION: 95% STANDARD PROCTOR

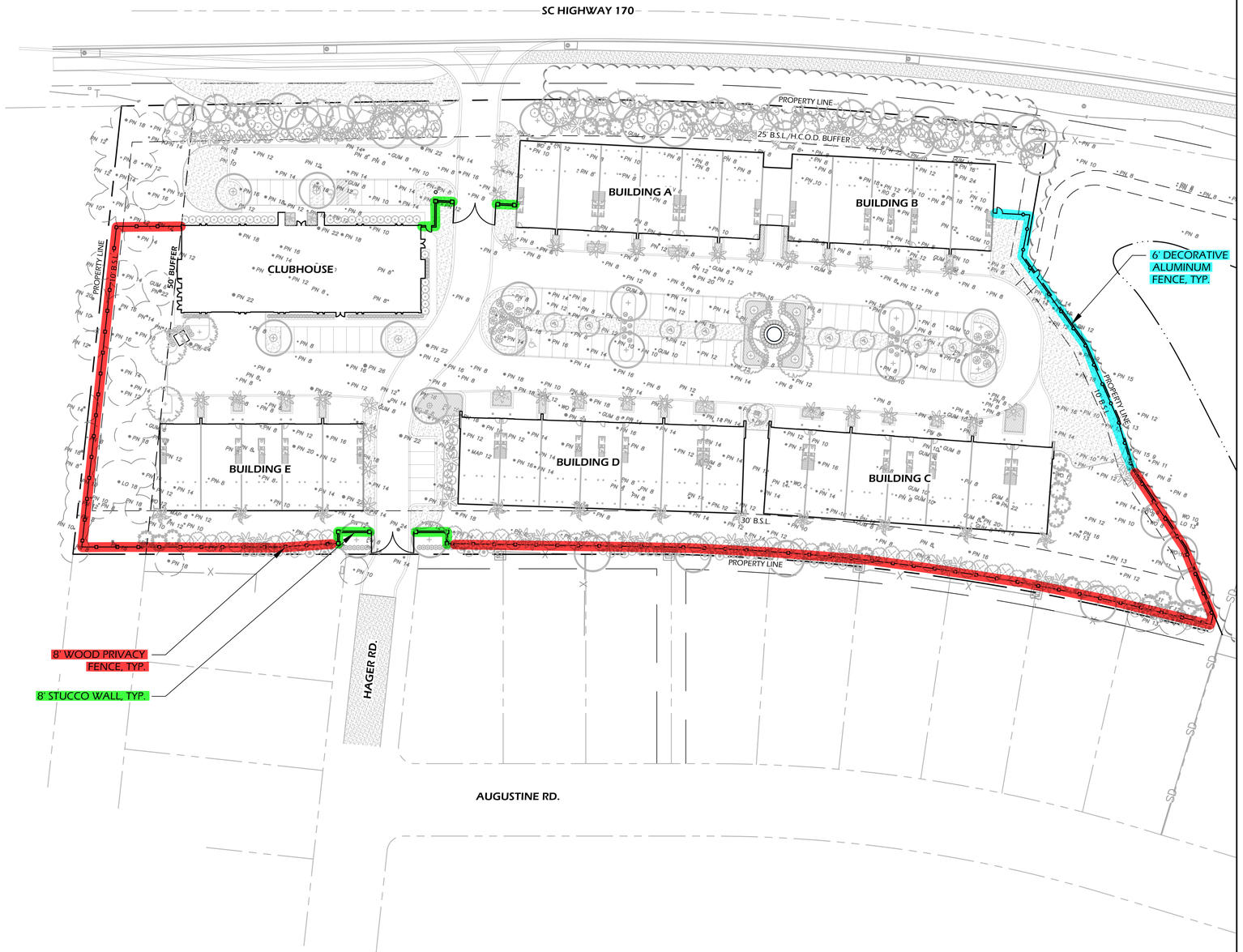
NOTES:

1. INSTALLATION TO BE COMPLETED PER MANUFACTURERS SPECIFICATIONS
2. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO OWNER, OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT.
3. CONTRACTOR SHALL PROVIDE COLOR SAMPLES PRIOR TO CONSTRUCTION FOR APPROVAL BY OWNER OR LANDSCAPE ARCHITECT.



SECTION - A

2 / L2 DECORATIVE ALUMINUM FENCE
SCALE: 3/4" - 1'-0"



PRELIMINARY SITE PLAN - FENCING EXHIBIT

FOR

Car Village Bluffton ™

BLUFFTON, SOUTH CAROLINA

Wilmer Jones Keefer Ltd.
landscape architecture
land planning
www.wjkltd.com
23 Promenade Street, Suite 201 | Bluffton, South Carolina | 29910 | ph 843.757.7411

SOUTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 837 DANIEL PATRICK KEEFER

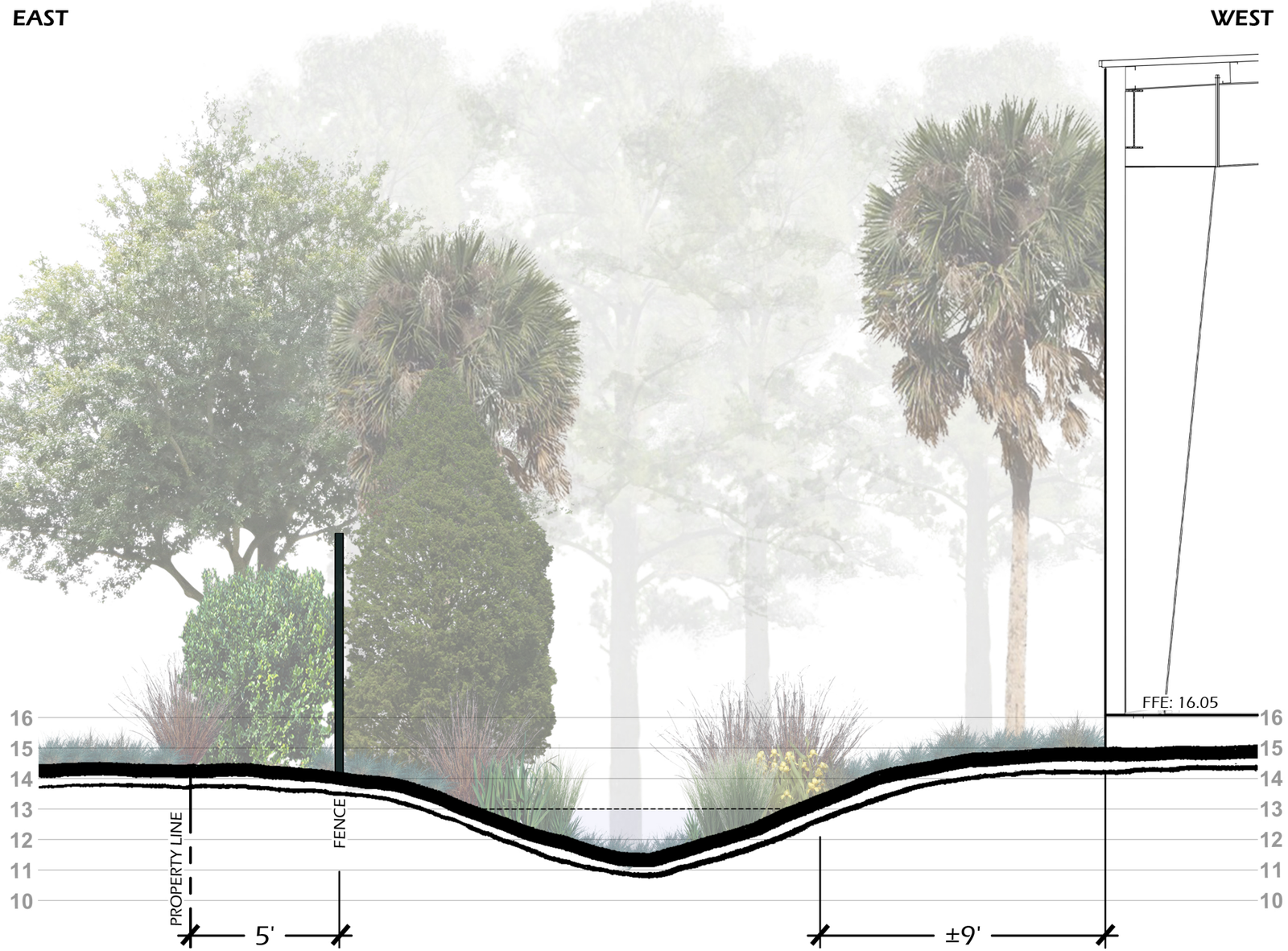
JUNE 2023

N W E

0 20 40 60 80 100 120 140 160

Scale 1" = 40'

Note: Plan is conceptual in nature and subject to change



REAR BUFFER SECTION

FOR

Car Village Bluffton ™

BLUFFTON, SOUTH CAROLINA

Witmer Jones Keefer Ltd.
landscape architecture
land planning
www.wjkltd.com
23 Promenade Street, Suite 201 ♦ Bluffton, South Carolina ♦ 29910 ♦ ph 843.757.7411

0 2 4 6 8 10 12 14 16

Scale 1 / 4" = 1' - 0"

PLAN REVIEW COMMENTS FOR DP-08-22-017076

Town of Bluffton
Department of Growth Management
20 Bridge Street P.O. Box 386 Bluffton, South Carolina 29910
Telephone 843-706-4522

Plan Type: Development Plan
Apply Date: 08/15/2022
Plan Status: Active
Plan Address:
Case Manager: Dan Frazier
Plan PIN #: R610 021 000 0808 0000

Plan Description: **A request by Dan Keefer of Witmer Jones Keefer, Ltd, on behalf of the property owner, Charlie and Brown, LL for approval of a preliminary development plan. The project consists of the construction of a +/-20,000 sq. ft. two-story Clubhouse and 5 buildings divided into +/- 31 high-end garage condominium units. The property is zoned Village at Verdier PUD and consists of approximately 5.00 acres, identified by tax map number R610-021-000-0808-0000 and located on Highway 170 approximately 1,200 feet south of Seagrass Station Road.**
STATUS 9-14-22: Staff courtesy review comments were reviewed at the September 21 meeting of the DRC.
STATUS: Staff comments will be reviewed at the June 21, 2023 meeting of the DRC.

Technical Review

Submission #: 2 Received: 06/16/2023 Completed: 06/16/2023

Reviewing Dept.	*Complete Date*	*Reviewer*	*Status*
Planning Commission Review	06/16/2023	Dan Frazier	Revisions Required

Comments:
1. The drive connection from SC 170 to Hagar Road shall meet SCDOT roadway standards, including the extension of the Hagar Road sidewalk to SC 170.
2. The subject property is within the Highway Corridor Overlay District and will require a Certificate of Appropriateness reviewing landscaping, lighting and architecture prior to Final Development Plan approval.
3. Revise the site plan to address all items listed in #7, #8 and #10 under General Information on the Development Plan Application Checklist.
4. At time of final development plan approval, provide an easement for the required off-site improvements to construct the extension of Hagar Road.
5. Provide a 25-foot highway corridor overlay district (HCOD) buffer along the SC170 frontage.
6. No grading can occur within the HCOD Buffer, including installation of a bioswale.

Planning Review - SR	06/16/2023	Jordan Holloway	Revisions Required

Comments:
1. Provide information on hatched area on the southern end of the plan parallel to Rt. 170.
2. Remove HCOD buffer that is shown beyond your property line as this does not count towards the buffer requirement.
3. The HCOD buffer may need to be enhanced if it does not meet buffer requirements of the following: For every one hundred (100) linear feet (or portion thereof) of frontage or the highway, a minimum of six (6) broad-leaved over story trees, seven (7) under story trees, and thirty (30) shrubs are required in the buffer. The plant materials shall be generally distributed along and throughout the buffer in order that there not be significant gaps without plantings (except when required at sight triangles at road intersections). This will be required at time of Final Development Plan.
4. Provide 8' wooden fence detail in plan set.
5. Change line weight to clearly show property line, setback lines, and proposed fencing.

Beaufort Jasper Water and Sewer Review	06/16/2023	James Clardy	Approved with Conditions

Comments:
1. Pending resubmittal of water and sewer design based on comments provided by Design Review Team on 2023-05-19.

Fire Department Review	06/16/2023	Dan Wiltse	Approved with Conditions

Comments:

1. For final development, a full utility plan will need to be provided showing proposed hydrants. Details of the bu
construction type, total square footage and fire protection features will need to be provided.
2. Both gated access points will need to be equipped with emergency override controls approved and tested by the Fire District.

Watershed Management Review DRC	06/16/2023	Samantha Crotty	Approved with Conditions

Comments:

1. At the time of Stormwater submittal, provide BMP details on the site plans for the bioretention and permeable pavement.
2. Provide a geotechnical report at the time of Stormwater submittal.

PLAN REVIEW COMMENTS FOR DP-08-22-017076

Town of Bluffton
Department of Growth Management
20 Bridge Street P.O. Box 386 Bluffton, South Carolina 29910
Telephone 843-706-4522

Plan Type: Development Plan
Apply Date: 08/15/2022
Plan Status: Active
Plan Address:
Case Manager: Dan Frazier
Plan PIN #: R610 021 000 0808 0000

Plan Description: **A request by Dan Keefer of Witmer Jones Keefer, Ltd, on behalf of the property owner, Charlie and Brown, LL for approval of a preliminary development plan. The project consists of the construction of a +/-20,000 sq. ft. two-story Clubhouse and 5 buildings divided into +/- 31 high-end garage condominium units. The property is zoned Village at Verdier PUD and consists of approximately 5.00 acres, identified by tax map number R610-021-000-0808-0000 and located on Highway 170 approximately 1,200 feet south of Seagrass Station Road.**
STATUS 9-14-22: Staff courtesy review comments were reviewed at the September 21 meeting of the DRC.
STATUS: Staff comments will be reviewed at the June 21, 2023 meeting of the DRC.

Technical Review

Submission #: 2 Received: 06/16/2023 Completed: 06/16/2023

Reviewing Dept.	*Complete Date*	*Reviewer*	*Status*
Planning Commission Review	06/16/2023	Dan Frazier	Revisions Required

Comments:

1. The drive connection from SC 170 to Hagar Road shall meet SCDOT roadway standards, including the extension of the Hagar Road sidewalk to SC 170. NO SIDEWALK PROPOSED FOR CONNECTION ROAD
2. The subject property is within the Highway Corridor Overlay District and will require a Certificate of Appropriateness reviewing landscaping, lighting and architecture prior to Final Development Plan approval. OK
3. Revise the site plan to address all items listed in #7, #8 and #10 under General Information on the Development Plan Application Checklist. SITE INFO TO BE ADDED TO PLAN
4. At time of final development plan approval, provide an easement for the required off-site improvements to construct the extension of Hagar Road. OK
5. Provide a 25-foot highway corridor overlay district (HCOD) buffer along the SC170 frontage. ADDED TO PLAN
6. No grading can occur within the HCOD Buffer, including installation of a bioswale.

Planning Review - SR	06/16/2023	GRADING TO OCCUR WITHIN THE BUFFER TO ACCOMMODATE TURN LANE AND RE-GRADING OF THE EXISTING BERM. HCOD TO BE REPLANTED PER BUFFER REQUIREMENTS.	

Comments:

1. Provide information on hatched area on the southern end of the plan parallel to Rt. 170. HCOD PLANTED AREA
2. Remove HCOD buffer that is shown beyond your property line as this does not count towards the buffer requirement. OK
3. The HCOD buffer may need to be enhanced if it does not meet buffer requirements of the following: For every one hundred (100) linear feet (or portion thereof) of frontage or the highway, a minimum of six (6) broad-leaved over story trees, seven (7) under story trees, and thirty (30) shrubs are required in the buffer. The plant materials shall be generally distributed along and throughout the buffer in order that there not be significant gaps without plantings (except when required at sight triangles at road intersections). This will be required at time of Final Development Plan.
4. Provide 8' wooden fence detail in plan set. DETAIL ADDED TO RESUBMITTAL
5. Change line weight to clearly show property line, setback lines, and proposed fencing. UPDATED

Beaufort Jasper Water and Sewer Review	06/16/2023	James Clardy	Approved with Conditions

Comments:

1. Pending resubmittal of water and sewer design based on comments provided by Design Review Team on 2023-05-19. OK

Fire Department Review	06/16/2023	Dan Wiltse	Approved with Conditions

Comments:

1. For final development, a full utility plan will need to be provided showing proposed hydrants. Details of the bu
construction type, total square footage and fire protection features will need to be provided.
2. Both gated access points will need to be equipped with emergency override controls approved and tested by the Fire District.

Watershed Management Review DRC	06/16/2023	Samantha Crotty	Approved with Conditions

Comments:

1. At the time of Stormwater submittal, provide BMP details on the site plans for the bioretention and permeable pavement.
2. Provide a geotechnical report at the time of Stormwater submittal.