LOGISTICS CENTER

PLANNED DEVELOPMENT DISTRICT DOCUMENT

PREPARED FOR:

THE SILVERMAN GROUP

SUBMITTED TO:

JASPER COUNTY

SOUTH CAROLINA

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I. INTRODUCTION AND NARRATIVE

1. **95 Logistics Center**("PDD") is comprised of that certain real property, Tax PIN 041-00-02-012 and Pin 041-00-02-010 located in Jasper County, "(the County)" South Carolina (the "property") as more particularly described in on the survey as attached in **Exhibit E** and will be developed by the Silverman Group "(Developer)".

2. The present Owner is Eagle Associates of Niagara Frontier, Inc., which is a N.Y. Corporation, and its principal address, 4155 Walden Avenue, Lancaster, N.Y.14086. The Assistant Vice President of the Company is Jonathan Taber, P.O. Box 3854, Bluffton, SC 29910.

3. The Developer is pursuing Rezoning of the Property to a Planned Development District ("PDD") designation through Jasper County Article 8.1 Ordinance for Special Purpose Districts and a future mutual agreement for Development Agreement ("Development Agreement") with the County. The Developer has the Property under contract to purchase from Eagle Associates, and that closing of the contract is conditioned upon approval of the PDD. Following closing Silverman Group will be the Owner.

A. PROPERTY

1. The Property is located within Jasper County, and we are proposing this PDD document. It is bounded by U.S. Highway US17 to the west, US Interstate 95 to the east, property located in the City Hardeeville to the South and a 22-acre parcel to the north, that is located in the City of Hardeeville zoned Community Commercial that is not a part of this PDD.

2. The adjoining property line to the northern adjacent parcel is approximately one thousand five hundred and nine lineal feet (1,509 LF). The western border along US 17 is three thousand four hundred twenty-six lineal feet (3426 LF) of which adjacent to the western boundary are privately owned parcels totaling two thousand eight hundred twenty nine lineal feet (2,829 LF) of frontage.

   On the southern side adjacent to Best Avenue is one thousand twelve lineal feet (1,012 LF) which adjoins the private property along the south side of Best Avenue. Along U.S. Highway US 17, Whyte-Hardee Boulevard, there are five parcels connecting to the development with a total distance of five hundred and ninety-seven (597.54 LF). A list of all adjacent property owners and the tax ID numbers have been supplied to the Jasper County Planning Staff.

On the southwest boundary adjoining McTeer Street, the property totals eight hundred thirty-two linear feet (832 LF).

On the West side of the property is four thousand one hundred and seventy-eight linear feet (4178 LF) of frontage along US Interstate I-95.

To the South the property line runs one thousand seven hundred sixty feet (1760 LF) adjoining approximate 25-acre tract located in the City of Hardeeville.

The Hardeeville Recreation Center land, was donated by the present owner of the Jasper County tract, Eagle Associates of Niagara Frontier, Inc

The attached **Exhibit D** and **Exhibit E** plat provides information of the Property and shows the following information:

a. Vicinity map
b. Boundary and dimensions
c. Existing adjacent streets
d. Adjacent property owners
e. Existing easements/ right of way.

3. The Property consists of approximately 226.94 AC total area broken down between 162.35 AC total upland and 64.59 AC of freshwater wetlands. The property does not have critical area of frontage on salt marsh or creeks. The wetlands delineation survey(s) attached as **Exhibit E** depicts the freshwater wetlands on the site(s). Verification of the delineation with the United States Army Corps of Engineers (USACOE) is ongoing at this time. Flood zones for the property are indicated on the boundary surveys attached as **Exhibit E.**

4. Project Narrative

Silverman Group, the developer and future owner, has vast experience in successful E-Commerce Distribution Center developments. It is the intent and goal of the Developer to create a Logistics and Distribution Center in Jasper County that is a PDD district that:

a. Is appropriately located in an area that is consistent with Jasper Counties long-range planning and the Comprehensive Plan. See Comprehensive Plan notes in the Appendix.

b. Begins improving the transportation network area at the two access points as per the Whyte - Hardee Boulevard Master Plan.

c. Strengthens Jasper County economic base and provides employment opportunities for residents and surrounding communities.

d. Protects and enhance the protection of freshwater wetlands and wildlife habitat for the gross acreage of the 226.94.

e. Becomes one of the important shareholders with the two entrances in regard to Whyte - Hardee Boulevard as envisioned in the Boulevard Masterplan.

f. Contributes to the overall economic stability of Jasper County through fees to be paid that will assure the continued high level of civic services provided by Jasper County.

g. Sets examples for smart light industrial and distribution and clean growth that is ever expanding due to e-commerce.

h. Brings national tenants to Jasper County along with their jobs and families.

i. It is estimated that the capital investment for this project is in excess of +/- $150,000,000. This size investment impacts positively the local economy.

j. The long-term impact on the project creating potentially +/- 2170 direct/indirect jobs that can only benefit the local economy.

k. The local and induced sales and output from this development are estimated to be over $196,763,570 per year.

l. The local impact from the employment compensation is estimated at $93,599,256 per year.

m. It should be noted that the development has already been responsible for a 5-acre tract donation on John Smith Rd. for the construction of the Hardeeville Recreation Center. This is an important contribution of the project to the community.

B. PLANNED DEVELOPMENT DISTRICT PROCESS

1. The Planned Development District (PDD) Zoning was adopted by Jasper County to permit and encourage the effective, efficient, and economic development of large tracts of land that are in the best interests of the long-range development plans of the County. Following zoning approval a Development Agreement will be mutually approved by the County and the Developer. The intent of which is to protect the rights and entitlements specified in the 95 Logistics Center PDD for the property from the effect of subsequently enacted local legislation or from the effects of changing policies and procedures of local government agencies which may conflict with any term or provision of the 95 Logistics PDD or in any way hinder, restrict, or prevent the development of the project. The Development Agreement will provide reasonable certainty as to the lawful requirements that must be met in protecting vested property rights, while maintaining the authority and duty of government to enforce laws and regulations which promote the public safety, health, and general welfare of the citizens of our State. The Development Agreement is being made and entered between Applicant and Jasper County, under the terms of the SC Code 6-31-10, et seq, for the purpose of providing assurances to the Applicant that it may proceed without encountering future changes in law which would materially affect the ability to develop under the plan, and for the purpose of providing important protection to the natural environment and long term financial stability and a viable tax base to the Jasper County.

2. The Conceptual plan and the provisions of the **95 Logistics Center** PDD will constitute the zoning for the Property and a waiver from the current County codes and regulations where differences occur. The Conceptual Plan may introduce land uses that do not exist in current zoning documents.

C. CONCEPTUAL MASTER PLAN

1. The goal of the PDD and Conceptual Master Plan is to provide guidelines to produce a high quality, light industrial and distribution development that raises the quality of life and development standards in the area while anticipating the future needs for commerce and services. The PDD designation is necessary to

accommodate the land uses and to provide for the responsible planning development of the property over time

2. The Conceptual Master Plan for the Property, prepared by HRC is attached as **Exhibit C**. This depicts the general roadway layout. These designations are general and may be modified under the terms and conditions of the PDD. Proposed land uses in the development are detailed under Section 2 – Land Use Designation and Definitions. The Conceptual Master Plan seeks to maintain open space requirements set forth in the Jasper County Ordinance and Land Development Regulations.

3. **Article 8.1** in the Special Purpose Districts, revised April 17, 2017 shall serve as the guide to zoning and unified planning and development. This PDD shall conform to the Jasper County Comprehensive Land Use Plan and Land Use Map unless any specific difference is approved by County Council within this document. The open space and amenities, if any, will be owned and maintained by the Owner/Developer, their successors or assigns or other legally designated entity. All property deeded to a governmental entity shall become the maintenance responsibility of that entity or as otherwise provide in accordance with the 95 Logistics Center Development Agreement with Jasper County.

4. This Application and Concept Plan meets all requirements of section, **Article 8.1** unless exceptions approved within this PDD.

5. The Conceptual Master Plan and the provisions of this PDD will constitute the zoning for the Property and a waiver from the current Jasper County Zoning and Development Ordinance where differences occur. The most current version of the Ordinance is not attached but is included as part of the PDD document.

D. ENVIRONMENTAL PROTECTION

1. Environmental protection is a priority for the applicant. As part of the development process, wetlands evaluation was conducted by Atlas Environmental in April of 2021 and revised in November 2021- see **Exhibit F.** The developers will meet the stormwater management requirements of Jasper County and the requirements of South

Carolina Department of Health and Environmental Control-Office of Ocean and Coastal Resource Management (SCDHEC-OCRM).

2. As part of the development process, the developers will meet or exceed the stormwater management requirements of the Jasper County and the requirements of South Carolina Department of Health and Environmental Control Office of Coastal Resource Management (SCDHEC-OCRM). The Applicant/Owner will prepare stormwater management plans for each phase of development in accordance with a stormwater drainage master plan to be prepared by a professional engineering firm licensed by the State of South Carolina prior to the development of any phase. The stormwater drainage master plan will address the hydrological characteristics of the entire site, as well as adjacent drainage patterns of relative importance. The plan will address pre-development conditions and post-development stormwater management for flood control and sediment reduction. This plan will also address storm water quality to enhance water quality and protect the surrounding freshwater wetlands.

3. Freshwater wetlands on the property are typical of the South Carolina Low Country. Approximately twenty-eight percent of the site consists of freshwater wetlands, a copy of the wetlands survey is included. A request for the Jurisdictional determination has been sent to the U.S. Army Corps of Engineers and their response is pending.

4. If any on-site wetland impacts are necessary during development of the Property, they will be permitted jointly through the U.S. Army Corps of Engineers and/or SCDHEC-OCRM. All impact mitigation will meet or exceed state or federal standards in effect at that time.

E. CULTURAL AND HISTORICAL RESOURCES

1. As part of a comprehensive study of the property, a cultural resources assessment was conducted by Atlas Environmental in April 2021 and revised in November 2021 for the Property. Prior to development, cultural resources issues, if any, will be addressed in accordance with the South Carolina Department of Archives and History regulations. No requirements in connection with historical or cultural resources pertaining to the Property, other than as may be

required by the State of South Carolina in accordance with applicable law shall be imposed on the Property.

F. WATER AND SEWER SERVICE

1. Water and sewer service will be provided to any development in the Property by Beaufort Jasper Water and Sewer Authority ("BJWSA") or other governmental utility provider in accordance with BJWSA's agreement of consolidation. Planning for the water and sewer systems will commence at the time of Development Agreement and Planned Development District Approval by the City. Preliminary discussions with BJWSA indicate a willingness to serve the property as evidenced by the Intent to Serve letter included as **Exhibit H**. BJWSA operates and maintains water and sewer systems within their service area upon completion by the developer and acceptance by the Authority. All development, with the exception of irrigation, incidental maintenance facilities, and small remote facilities will be provided with public potable water and sewer prior to occupancy except as may be exempted by provisions of the Development Agreement.

G. UTILITY SERVICE

1. The Property is in the service territory of Dominion Energy for electrical power. The Applicant will coordinate with Dominion Energy regarding planning for the Interstate Distribution Center at Hardeeville PDD. See attached letter in **Exhibit I**.

2. Hargray or another licensed provider will provide telephone service to the Property. The Applicant will coordinate with the provider regarding planning for the Property. All servicing is anticipated to be via fiber optics cable to include broadband capability. The Requirement for Letter of Intent to Provide Service Is currently being submitted to Hargray. See attached request letter in **Exhibit J**.

3. The Property is in the service territory of Dominion Energy for gas. The Applicant will coordinate with Dominion Energy regarding planning for the Interstate Distribution Center at Hardeeville PDD. See attached Letter in **Exhibit K**.

4. Other utility services shall be provided by legally established entities at the discretion of the Applicant or subsequent developers, provided such are in accordance with the franchising ordinances/licensing with the City.

5. Utilities must be underground, except as reasonably necessary for above ground support facilities.

H. TRANSPORTATION NARRATIVE AND SUMMARY

1. **95 LOGISTICS CENTER** development is proposed to be located on US 17 adjacent to US I 95 in Jasper County, SC. The development is planned to consist of a maximum of 2.6 million square feet of light industrial warehousing, and it is planned to have two new access points on US 17.

2. A previous detailed traffic impact analysis (TIA) was prepared including the 25 acres of land in the City of Hardeeville. A new TIA is being prepared and will be provided upon completion that is specific to this PDD.

3. The proposed development was assumed to be complete by 2026 in the TIA.

4. Existing Conditions

   a. Roadways in the project vicinity include I-95, US 17, US 278, and John Smith Road.

   b. I-95 is a four-lane, divided interstate with a posted speed limit of 70 miles per hour (mph) in the vicinity of the US 278 access ramps. Per South Carolina Department of Transportation (SCDOT) counts, I-95 has a 2019 annual average daily traffic (AADT) of 56,300 vehicles per day (vpd) north of US 278 and 62,700 vpd south of US 278. There is a diamond interchange at the US 278 exit.

   c. US 278 (Independence Boulevard) is a five-lane roadway with a two-way, left-turn lane (TWLTL) and a posted speed limit of 45

mph from US 17 to Medical Center Drive. US 278 is designated as a principal arterial roadway east of I-95 and a minor arterial west of I-95. US 278 transitions to a four-lane, divided principal arterial roadway with a landscaped median and a 60 mph speed limit east of Medical Center Drive. Per SCDOT counts, US 278 has a 2019 AADT of 30,000 vpd east of I-95 and 4,100 vpd west of I-95.

d. US 17 (Whyte Hardee Boulevard) is a two-lane, undivided, major collector roadway with a posted speed limit of 55 mph just north of John Smith Road and is 45 mph for the remainder of the study area. Per SCDOT counts, US 17 has a 2019 AADT of 2,600 vpd north of US 278 and 4,200 vpd south of US 278. The proposed development has two planned full access driveways (Site Driveway #1 and Site Driveway #2) on US 17. A masterplan for the Whyte-Hardee Boulevard has recently been developed.

5. Whyte-Hardee Masterplan

a. A masterplan was recently completed for the US 17 Corridor adjacent to the site-Whyte-Hardee Boulevard Master Plan. The access areas from US 17 primary improvements contemplated to set examples for others to follow in the future as visioned in the Masterplan.

i. "Streetscape improvements including street trees, side path (east side), and bioretention
ii. Sound abating wall at access points were adjacent to existing residences.
iii. Parking areas of existing businesses can be screened from Whyte-Hardee.
iv. New development with a consistent setback and limited up-front parking can create a more harmonious streetscape

6. Traffic Study Summary

a. The study area for the TIA included the following intersections:
i. US 17 at US 278 (unsignalized)

ii. US 278 at I-95 SB On-Ramp/Off-Ramp (signalized)
iii. US 278 at I-95 NB On-Ramp/Off Ramp (unsignalized)
iv. US 17 at Site Driveway #1 (unsignalized) (2026 Build conditions only)
v. US 17 at Site Driveway #2 (unsignalized) (2026 Build conditions only)

b. Based on results of the previous analysis the following transportation related improvements are recommended. Improvements may change based on the new TIA.

i. Completion of a detailed traffic signal warrant analysis when traffic volumes are realized
ii. US 17 at Site Driveway #1
    1. Installation of an exclusive southbound left-turn lane on US 17
    2. If this driveway becomes a major driveway during the site plan development, an exclusive southbound left-turn lane on US 17 could be considered
    3. Location and design details to be coordinated with the South Carolina Department of Transportation (SCDOT) and City of Hardeeville
iii. US 17 at Site Driveway #2
    1. Installation of an exclusive northbound right-turn lane on US 17
    2. Installation of an exclusive southbound left-turn lane on US 17
    3. Location and design details to be coordinated with SCDOT and City of Hardeeville

7. Results in this report are based solely on traffic studies and are considered input into final design considerations. The final design will be determined by the project engineer after other design elements (such as, but not limited to, utilities, stormwater, etc.) are taken into consideration.

I. LANDSCAPING STANDARDS

1. Owner or Developer shall adopt landscaping standards for the Property which shall be submitted to Jasper for approval prior to

each Master Plan Approval, for the development proposed under the Master Plan submittal.

2. Landscape Standards will comply with the Jasper County Landscaping and tree removal ordinances.

J. PARKING AND LOADING

1. Parking and Loading standards will comply with the requirements of Jasper County Ordinances unless modified during the Initial Master Plan Process.

a. The total number of required parking spaces for all land uses allowed herein shall conform to Jasper County Parking and Loading ordinances. Deviations may be allowed provided the applicant furnishes actual documentation that the new standard meets the parking needs of the proposed land uses and the County approves at each Master Plan approval.

K. STORMWATER MANAGEMENT

1. **95 Logistics Center** shall conform to the Stormwater Management Provisions of the Jasper County ordinances predating this PDD Agreement and applicable state and federal requirements. Stormwater best management practices will be employed in the development of the property to ensure runoff leaving the site meets SCDHEC-OCRM standards for water quality.

2. The Owner will prepare stormwater management plans for each master planned structure as it is developed in accordance with a stormwater master plan to be prepared by a professional engineering firm licensed in the State of South Carolina prior to the development of any Phase. The stormwater master drainage plan will address the hydrological characteristics of the entire site, as well as adjacent drainage patterns of relative importance. The plan will address pre-development conditions and post–development stormwater management for flood control and sediment reduction. See Topographic Map **Exhibit K** that will be used by the engineers for stormwater management to be submitted at masterplan and development permit.

L. TREE PRESERVATION

1. The minimum allowable post-development tree coverage for all development shall be 15 trees, two inches in dbh (diameter breast height) or larger per acre within the area of the Master Plan. Preserved wetlands and buffers can be used to meet this requirement. The minimum post development tree coverage requirement shall apply to the entire boundary of the PDD and shall not be phase-specific; however, tree coverage for **95 Logistic Center** tract shall be calculated. All minimum tree coverage and Tree Protection will meet or exceed the Jasper County tree ordinance.

a. In those cases where the minimum allowable tree coverage cannot be met by preservation within the area of the Master Plan, replacement trees shall be planted to meet the total number of trees per acre County requirement. Replacement trees must be planted within the boundaries of the area of the Master Plan. Replacement trees may also be provided by identifying existing hardwood trees between 2.5 inches and 7 inches in diameter of the same type being removed that will be preserved. These trees must be identified by a tree survey and may be located anywhere within the PDD.

2. In lieu of a tree survey, areas including pine trees existing as part of planted pine crop area shall be represented on an exhibit illustrating the area containing the planted pine tree pattern with row, tree spacing, and typical size. The information will be field verified to ensure accuracy of the exhibit's factor, but each tree in the pine crop area will not be physically located by standard survey methods. Hardwood trees twelve (12") inches DBH and greater will be located.

M. DEVELOPMENT STANDARDS

1. Site development within the **95 Logistics Center** Tract PDD will be controlled by the development standards set forth in this document, the Development Agreement, and the Jasper County Ordinances.

II. LAND USE DESIGNATION AND DEFINITIONS

A. INTRODUCTION AND NARRATIVE

1. The Property has two parcels with a total of 226.94 gross acres. The parcels, 041-00-02-010 and 041-00-02-012, are located in Jasper County. Both parcels are proposed to be rezoned according to this PDD.

2. **95 Logistics Center** PDD contains a total acreage of approximately 226.94 See **Exhibit B.**

3. The land uses areas indicated on the Conceptual Master Plan are not intended to be rigid and exact boundary lines for future land uses and improvements. The Conceptual Master Plan for the Property shall maintain reasonable flexibility as may be requested by Owner and its successors and assigns to accommodate specific soil conditions, environmental concerns, physical constraints, market conditions, and design parameters: and as such, the exact location of boundary lines and buildings and their subsequent location and size indicated within planning area shall be subject to change at the time of Master Planning of the specific tracts within the Property and at the time Development Permit plans are submitted for development, provided, however, that maximum densities and other conditions of this PDD and the Development Agreement between the County and Developer will be strictly adhered to, unless adjustment is requested by the Developer, its successors or assigns and approved by the County. The boundaries of the Property may be modified to included adjacent acreage subject to the approval of Jasper County by appropriate petition/application to the County to amend the PDD and the Development Agreement. The current boundary survey is attached in **Exhibit B.**

B. ALLOWED LAND USES

1. The following land uses, Distribution, Light Industrial, and Utility Substation shall be permitted in the **95 Logistics Center** PDD. The purpose of this portion of the document is to state which land uses shall be allowed within the **95 Logistics Center** PDD, however by allowing

these uses this does not obligate the Applicant or subsequent developer to provide the uses or facilities stated herein.

2. Any easement that occurs within the Property shall have the same allowed land uses as any of the adjacent land uses. Any restrictions shall be based on the legal definition of the easement.

3. Design Standards shall be submitted at each Master Plan stage and may have standards deviating from the Jasper County Zoning Ordinance and Land Development Regulations or this PDD, provided that health, safety, ingress/egress, and fire protection concerns are addressed to the satisfaction of the County, unless otherwise agreed at the Initial Master Plan approval or in this PDD, the standards for uses from the Land Development Regulations shall apply.

4. Business Park/Light Industrial/ Distribution Operations

This designation allows for a multi-use Business Park to meet regional demands for Light Industrial, Distribution, Office, and Services that pertain to Distribution. Permitted uses included:

a. Establishments involved in, regional warehouses, distribution operations, back-office operations and related service businesses, public utility facility, radio and/or television station and/or transmission tower, off-street parking or storage areas for customers, clients, or employee-owned vehicles and call centers.

b. Build-to property lines will be allowed to reduce cost of utilities and to create a more pedestrian friendly environment as long as fire protection between adjacent and party walls are strictly adhered to and visual design standards are met.

c. Light Industrial and permitted uses shall provide a minimum buffer of 50 feet from adjacent residential uses not separated by a road right-of-way or wetland of equal width (including wetland buffers)

5. Performance Standards for this district will be determined by the Design Regulations described at the time of Master Plan Submittal.

6. Light Industrial and Distribution Operations acreage shall also include the uses as included in the General Commercial Uses as defined by Jasper County and shall have no cap placed on unit density (building square footage per acre), provided such is in compliance with overall

PDD density, stormwater, parking, buffering, landscaping, and other site design other site requirements of the PDD and Land Development Regulations at the time of PDD approval. All development shall be subject to the provisions of this **95 Logistics Center** PDD.

C. DECLARATION OF RESTRICTIVE COVENANTS

1. There will be no covenants as the Silverman Group will own the entire parcel, roads, buildings, etc. Should the Silverman group, or future owner, wish to add covenants they will be submitted for approval to Jasper County to consider the PDD being amended.

D. ALLOWED DENSITY

1. The **95 Logistics Center** PDD consists of approximately 226.94 gross acres (including wetlands). This will be generally depicted on the Conceptual Master Plan.

2. **95 Logistics Center** Use and Density:

    a. The density is estimated to be a maximum of 2.6 million square feet of distribution warehouse.
    b. Light Industrial: The acreage will be shown at the Master Plan submittal.
    c. Three Billboard locations will be permitted where approved by Jasper County Sign Ordinance along US 95 and will be submitted for approval at the Master Plan submittal.
    d. There is no overall cap on general building square footage, provided the proposed Master Plans and Development Plans comply with stormwater, parking, open space, building setbacks, buffering, landscaping, traffic, and other site design requirements of the PDD.

E. DEFINITIONS OF LAND USE TERMS AND DENSITY TERMS

In the absence of a term definition in this PDD or in the proposed Development Agreement with Jasper County, the definitions of the Land Development Ordinance at the time of PDD approval shall apply in the interpretation of this Conceptual Master Plan. The locations of

specific land uses are not fixed and may vary. However, the definitions below shall generally describe the allowed uses within the **95 Logistics Center**.

1. Acre

a. Gross Acre shall mean the entire acreage within the site boundaries.
b. Net Acre shall mean the acre which remains after deduction of easements for existing utilities, wetland buffers, and onsite wetlands.
c. Build-to-property lines will be allowed to reduce cost of utilities and create a more pedestrian friendly environment as long as fire protection between adjacent and party-walls is strictly adhered to and visual design standards are met.

2. Open Space

Total open space for the parcels shall be calculated based on their combined acreage and not on a site-specific basis for each phase of development or project located therein. The open space shall provide at least 15% total open space based upon total gross acreage.

Passive open space shall consist of the following:

a. Landscape surface areas (areas not covered by buildings, parking, impervious surface)
b. Lagoons, ponds, impoundments, and lakes (detention, retention, or recreational)
c. Freshwater wetlands
    i. Only 50% of Freshwater wetlands, Lagoons, Ponds, and Lakes count towards open space
d. Wetland buffers
e. Forest, wildlife preserves/corridors, conservation areas and greenbelts
f. Perimeter buffers

3. Setbacks and Buffers

a. Building setbacks and buffers shall meet the minimum requirement established herein and, except as set forth in the PDD Standards, shall apply to the perimeter of the PDD only; provided, however, that any required wetlands setbacks shall apply according to law throughout the Property. All other internal setbacks and buffers shall be established at the time of Initial Master Plan approval for the specific phase.

b. Perimeter setbacks and buffer standards shall include:

   The building setback and natural buffer from SC Highway 17 shall be 50 feet and US I-95 and the North and South adjacent property lines shall be 25 feet with landscaping and no parking.

   Underground utilities and stormwater management facilities are allowed in the perimeter buffer area.

4. Signage Control

a. Any and all street signage and marketing signage within the property of **95 Logistics Center** PDD shall be governed by the Silverman Group as well as reviewed and approved by Jasper County Planning staff. Entrance monumentation fronting public ROWs will be governed by the ordinance existing at the time of PDD approval, but permanent monumentation at each entrance will be allowed at a minimum. Allowable signage SF will be per Jasper County Ordinance.

5. Silviculture

a. This designation allows for continuation of managed forestry. Silviculture includes the practice of planting, culture, and harvesting of trees for the purpose of producing wood fiber and timber. Generally accepted methods of forest management are permitted, including wildlife management, construction and use of forest roads, and practices to promote health and growth of trees. Silviculture uses may continue up to the time a subdivision plat is recorded and must be in accordance with standard forestry BMPs. The Silverman Group shall be permitted to plant and grow trees upon the Property

which may be used for tree farming for harvesting of such trees for purposes of replanting same in locations which are on or off the Property and may engage in farming operations which are indigenous to the area.

6. Wetlands

a. This designation allows the following uses within wetlands. Freshwater wetlands on the property shall be those areas over which the applicable governmental agencies claim jurisdiction for freshwater wetlands. The following are permitted uses:

i. Open space and buffers
ii. Conservation areas
iii. Activities in all wetland areas as permitted by the U.S. Army Corps of Engineers and the South Carolina Department of Health and Environmental Control, Office of Ocean, and Coastal Resource Management.
iv. Disposal of reclaimed water as permitted by SCDHEC.
v. Storm water management and recreational lakes.
vi. Boardwalks, trails, bridges and other permitted structures.
vii. Game Management

7. Business Park/Industrial Park

a. This designation allows for a multiuse business park to meet regional demands for industrial, office, and industrial services.

i. Permitted uses include:
   1. Regional warehouses
   2. Distribution cartage or express operations and facilities
   3. Back-office operations
   4. Office space
   5. Office/warehouse operations
   6. Public utility facility
   7. Radio and/or television stations and/or transmission tower
   8. Off street parking or storage area for customer, client, or employee-owned vehicles
   9. Call centers
   10. Motor freight terminals defined as facilities used for the transfer of goods
   11. Accessory uses which are necessary to the conduct of the permitted uses herein including but not limited to office

uses, indoor and outdoor storage of materials and maintenance facilities for permitted uses; provided however they are operated and maintained under the same ownership, on the same lot as the permitted use, and do not include structures or features inconsistent with the permitted uses.

12. Activities relating to the loading, unloading, storage, and processing of bulk products, within traditional or non-traditional buildings or in open air, with no limit on the amount of space so utilized.
13. Tractor trailer parking adjacent to buildings, as needed, and tractor trailer storage (coupled or uncoupled) areas containing up to 60 tractor trailers per acre.

ii. Build-to-property lines will be allowed to reduce cost of utilities and create a more pedestrian friendly environment as long as fire protection between adjacent and party-walls is strictly adhered to, and visual design standards are met. Industrial uses shall provide a minimum buffer of fifty feet (50') from adjacent residential uses not separated by a road right of way, or wetland of an equal width (including wetland buffer)., Performance Standards for this district will be determined by the Design Regulations at the time of Master Plan Submittal.

iii. An applicant must demonstrate, at the time of Master Plan submittal, that uses are approved in an appropriate manner to address traffic flow, safety, and compatibility of adjoining uses. Any use that may involve harmless chemical and handling or storage must demonstrate safety planning which meets all Federal and State standards and is acceptable to the County engineer.

8. Utilities

a. This designation allows for utility service to serve the Interstate Distribution Center at Hardeeville PDD. The following land uses shall be allowed only after written approval from the Applicant/developer and its consultants for location and design. Screening, buffering, and other aesthetic matters must meet or exceed the County Zoning and Land Development Regulations at the time of site development application.

i. Potable water supply and distribution
ii. Wastewater collection, treatment, and disposal

iii. Stormwater collection, treatment, and detention
iv. Irrigation
v. Communication towers
vi. Satellite antennas
vii. Cable television facilities
viii. Telephone facilities
ix. Power transmission and distribution
x. Fiber optic lines
xi. Other utility services i.e., Internet access and other telecommunication uses.

b. Certain community-wide infrastructure is required for the development of any large, master-planned community. This infrastructure may include, but is not limited to the following:

i. Arterial streets and primary access roads.
ii. Water supply.
iii. Wastewater Collection, Treatment and Effluent Disposal.
iv. Power substations.
v. Central telephone facilities.
vi. Stormwater Management Lagoons.
vii. Natural Gas Supply

EXHIBITS

EXHIBIT A: Jasper County Land Use Map

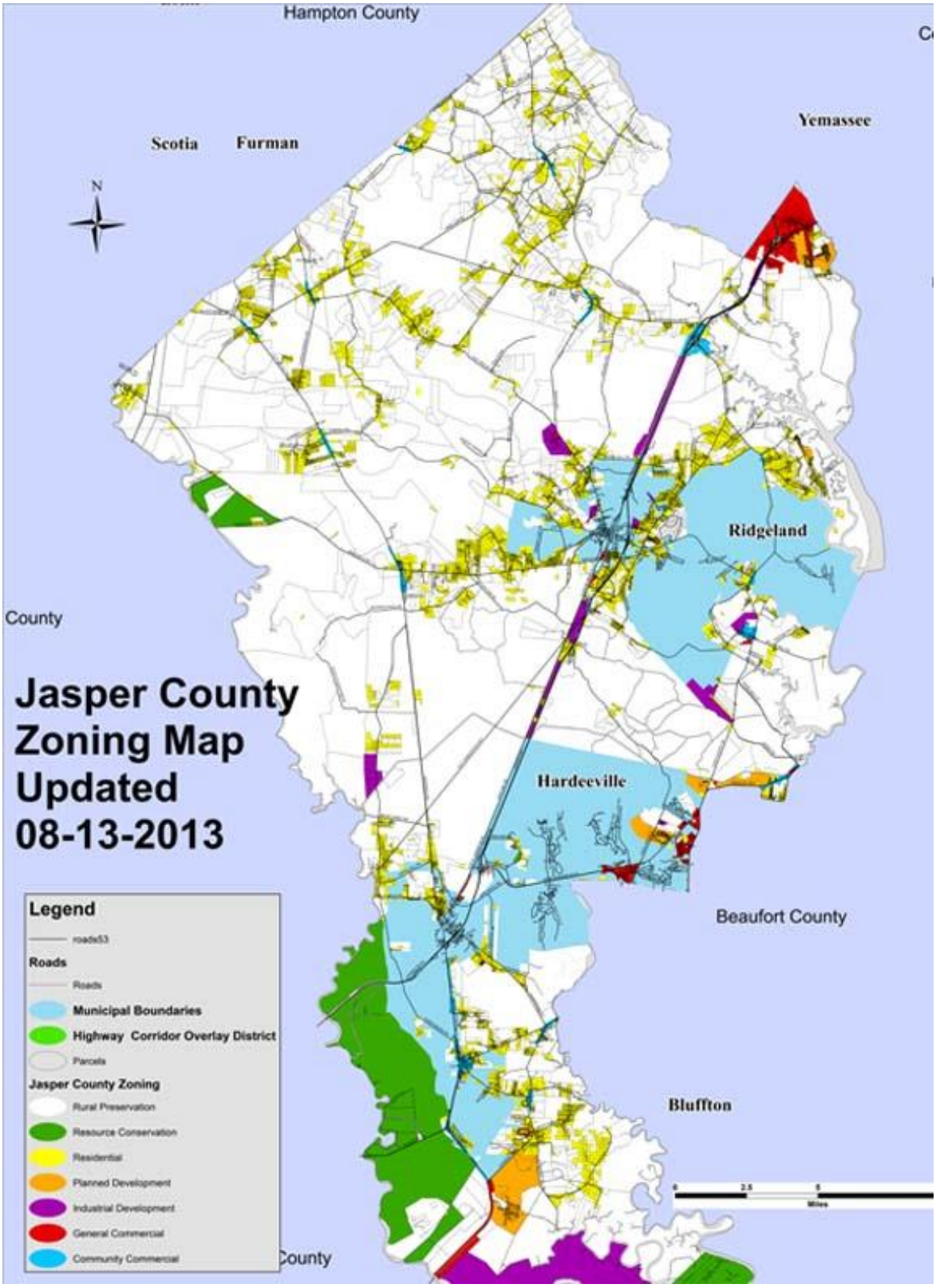


EXHIBIT B: Location Map

Location Map

Location Map

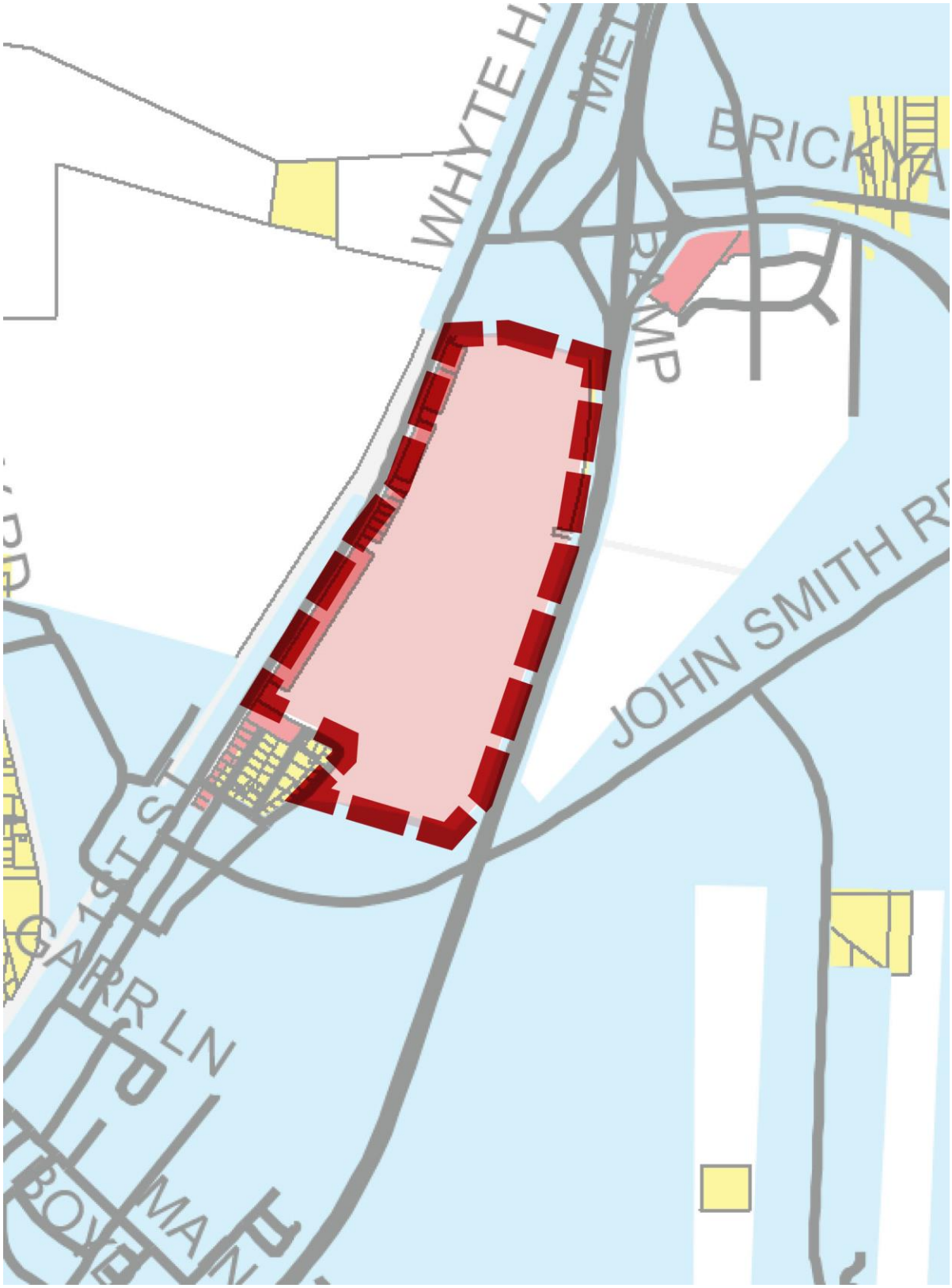


EXHIBIT C : Concept Master Plan

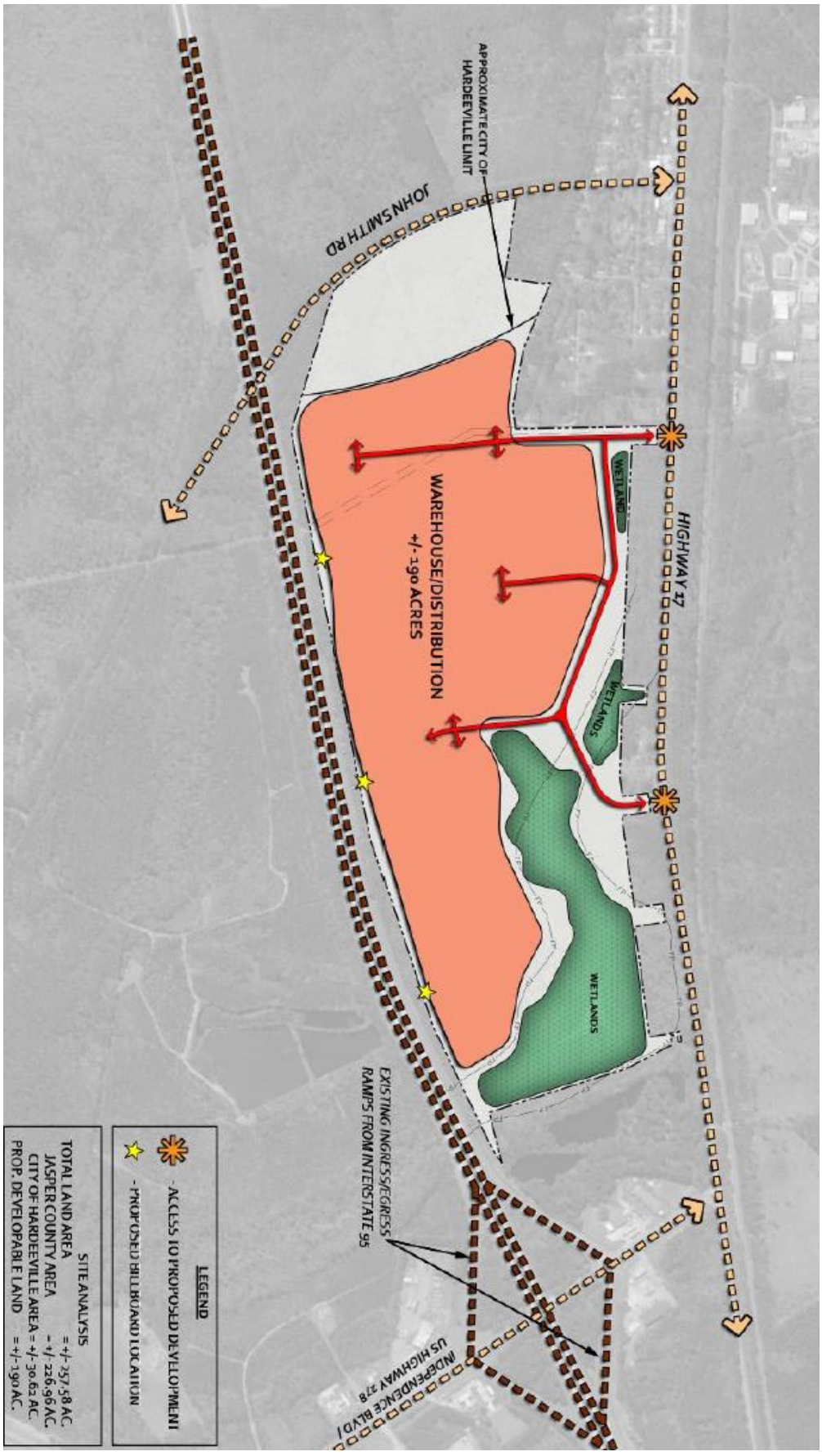
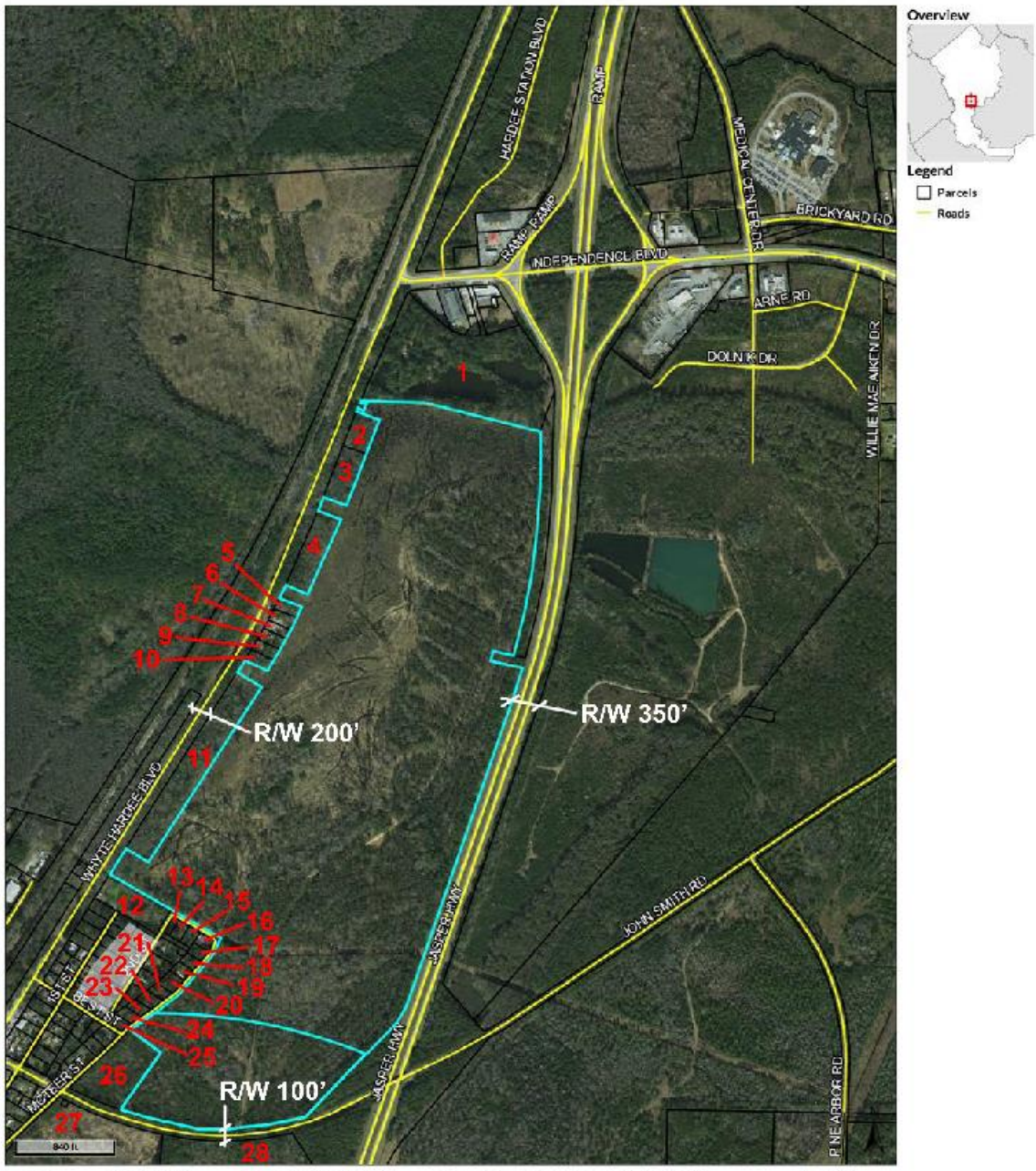


EXHIBIT D: PARCEL MAP AREA

qPublic.net™ Jasper County, SC



Parcel ID	041-00-02-010	Alternate ID	041-00-02-010	Owner Address	EAGLE ASSOCIATES OF NIAGARA	Last 2 Sales			
Sec/Twp/Rng	n/a	Class	Rural acres		4155 WALDEN AVE LANCASTER NY	Date	Price	Reason	Qual
Property Address		Acreage	237.04		14086	4/15/2016	$10	n/a	U
						n/a	0	n/a	n/a
District	01								
Brief Tax Description	HWY 17 & I-95								
	(Note: Not to be used on legal documents)								

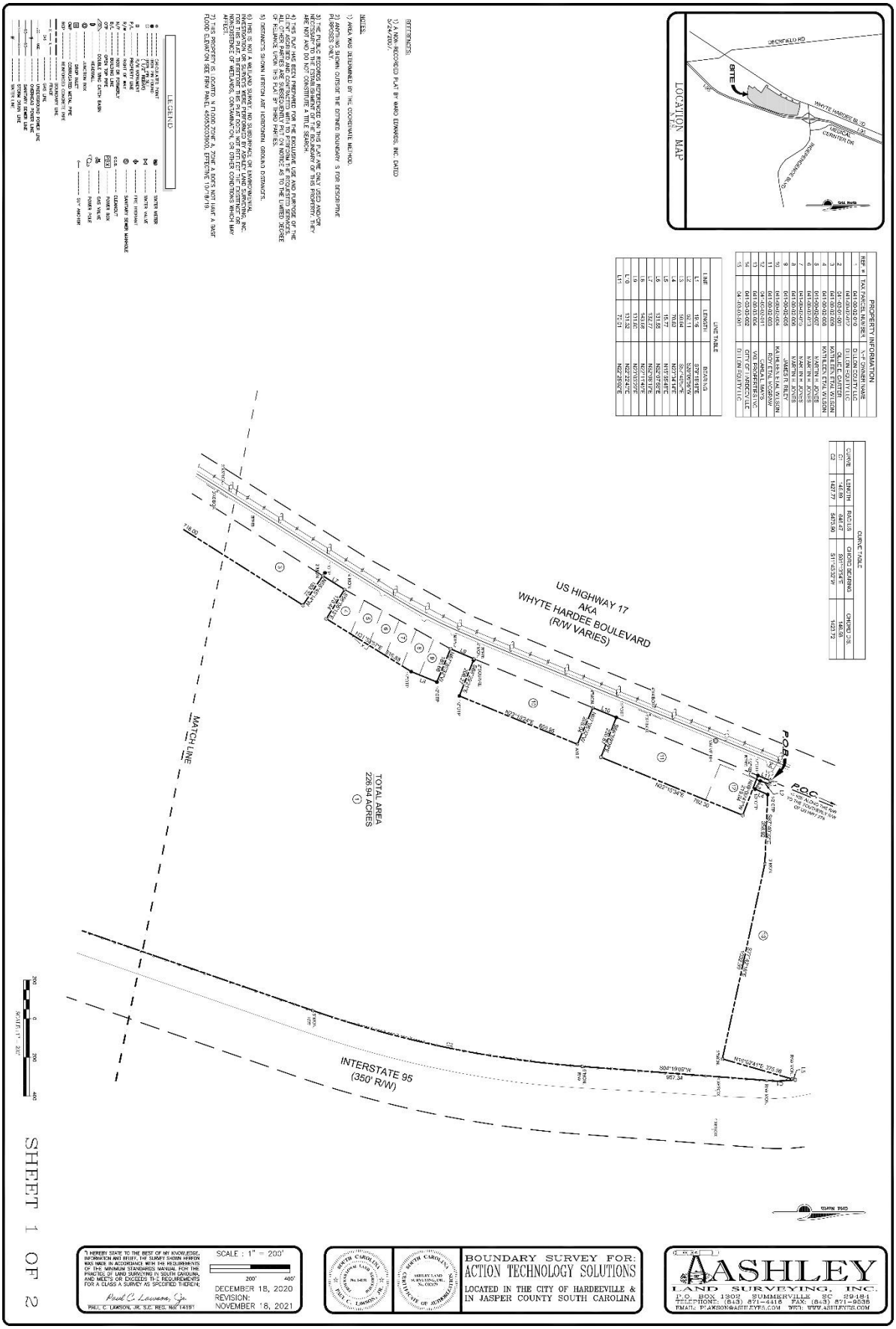
Date created: 2/12/2021
Last Data Uploaded: 2/12/2021 12:56:40 AM

Developed by Schneider GEOSPATIAL

PARCEL MAP AREA CHART

H20219- Silverman Hardeeville, SC Rezoning Adjacent Parcel Identifier Table			
Map Number	Owner	Parcel ID	Zoning
2	VKL Properties	042 00 03 004	HC
2	Mays, Carla I	041-00-02-011	GC
3	McGraw, Roy	041 00 02 003	GC
4	Wilson, Kathleen	041-00-02-004	GC
5	Riley, James R estate	041 00 02 005	GC
6	Jones, Martin H	041-00-02-006	GC
7	Jones, Martin H	041-00-02-015	GC
8	Jones, Martin H	041-00-02-013	GC
9	Jones, Martin H	041-00-02-007	GC
10	Wilson, Kathleen	041-00-02-008	GC
11	Wilson, Kathleen	041-00-02-009	GC
12	Carter, Ollie E	041-03-01-001	GC
13	Riley, Laura	041-03-02-001	Residential
14	Riley, Laura	041-03-02-002	Residential
15	Riley, Laura	041-03-02-003	Residential
16	Washington, Georgia	041-03-02-009	Residential
17	Stiney, R M Jr	041-03-02-010	Residential
18	Wiggins, Haskell Heirs	041 03 02 011	Residential
19	Riley, Diana	041-03-02-012	Residential
20	Stiney, R M Jr	041 03 02 013	Residential
21	Maxwell, Christine	041-03-02-014	Residential
22	Parker, Lizzie	041 03 02 015	Residential
23	Riley, James R	041-03-02-016	Residential
24	Frazier, Nathaniel	041 03 02 017	Residential
25	Dopson, Archie	041-03-02-018	Residential
26	City of Hardeeville	041 03 03 002	Residential
27	Royal Live Oaks Academy	029-46-10-031	PDD
28	Lazer LLC	029-46-10-022	PDD

Exhibit E: Survey Map



US HIGHWAY 17
AKA
WHYTE HARDEE BOULEVARD
(R/W VARIES)
BEST AVE (40' R/W)
INTERSTATE 95
(350' R/W)
TOTAL AREA
226.94 ACRES
MATCH LINE
CITY OF HARDEEVILLE LIMITS LINE
NON-ANNEXED
WARD EDWARDS, INC
DATED 02-24-2021
N27°20'58"E 1716.69'
S18°05'34"W
2466.64'
S46°31'05"W
252.70'
N62°39'17"E 1404.09'
N62°39'17"E 1404.09'
I=17°14'49"
R=1487.77'
C=N70°57'01"E
C=N70°57'01"E
I=17°14'49"
R=1487.77'
C=N70°57'01"E
C=N70°57'01"E
N27°20'58"E 1716.69'
S18°05'34"W
2466.64'
S46°31'05"W
252.70'
N62°39'17"E 1404.09'
N62°39'17"E 1404.09'
I=17°14'49"
R=1487.77'
C=N70°57'01"E
C=N70°57'01"E
I=17°14'49"
R=1487.77'
C=N70°57'01"E
C=N70°57'01"E
N27°20'58"E 1716.69'
S18°05'34"W
2466.64'
S46°31'05"W
252.70'
N62°39'17"E 1404.09'
N62°39'17"E 1404.09'

EXHIBIT F : SHPO Report

Waters of the US and State Delineation

Draft Report of Findings

November 17, 2021 February 17-19, 2021, April 9, 2021, and November 3-4, 2021 (Fieldwork)

Project Area: ~ 226.93 acres Jasper County PIN(s): 041-00-02-010

Attn: Mr. Holden Sabato 195 Morristown Road Basking Ridge, NJ 07920

Prepared By:

ATLAS ENVIRONMENTAL

S. Sharon Amity Road, #411 Charlotte, North Carolina 28211

Summary of Findings

Atlas Environmental Inc. staff conducted a pedestrian survey of the one Jasper County parcel of the Whyte Hardee Blvd review area. The project is located approximately 1.5 miles Northeast of Hardeeville between Interstate 95 and Highway 17 at 464 John Smith Road, Hardeeville, SC 29927. During the field evaluations in February, April, and November of 2021 Atlas staff observed one Corps jurisdictional wetland and eight isolated, non-Corps regulated, wetlands. No streams or impoundments were observed within the review area.

Stream and Wetland Delineation

Introduction

At the request of The Silverman Group staff from Atlas Environmental, Inc. (Atlas) performed a detailed pedestrian survey of the subject parcel(s) to identify the presence of surface waters and wetlands that are subject to Federal and State regulations. Surface waters such as perennial (pRPW's) and intermittent (s-RPW's) streams and their impoundments are subject to Section 401 and Section 404 of the Clean Water Act. An area is determined to be a jurisdictional wetland if it exhibits wetland hydrology, hydrophytic vegetation, and hydric soil characteristics. These characteristics are required to be in accordance with the definitions in the U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual from 1987. Federally non-jurisdictional wetlands may be subject to the South Carolina Department of Health & Environmental Control (DHEC) Coastal Zone Consistency Section.

Surface Waters

The field delineation of assessed jurisdictional stream features was conducted utilizing current methodologies which are consistent with those outlined in the 1987 US Army Corps Wetland Delineation Manual, the Regional Supplement of the Corps of Engineers Wetland Delineation

Manual: Eastern Mountains and Piedmont Region (Version2.0), April 2012, post Rapanos Supreme Court decision guidance (2007), other Regulatory Guidance Letters provided by the Corps, the latest SC DHEC Methodology for Identification of Intermittent and Perennial Streams, and SC DHEC Coastal Zone Consistency Wetlands Rules. Evaluations and assessments regarding jurisdictional limits, permitting requirements and allowances, mitigation ratios and plans, Section 7 consultation (protected species), and Section 6 consultation (historic and archaeological resources) made by consultants are subject to verification by the Corps, SC DHEC, and other appropriate state and local regulatory authorities.

Potential jurisdictional streams on site were evaluated based upon criteria outlined in the resources mentioned above. This includes assessment with regards to the geomorphology, hydrology, and aquatic biology of each feature. Typical indicators are presence of an "ordinary highwater mark", sediment sorting, evidence of flow, absence of vegetation, and presence of macro benthos or other aquatic wildlife. Upon review of the existing site conditions, Atlas has assessed that there are no relatively permanent jurisdictional waters (streams) present on the property. Other drainage features were determined to be non-jurisdictional non-relatively permanent waters.

Wetlands and Isolated

Wetlands

Potential wetland areas on the site were evaluated for the presence of hydric soils, evidence of wetland hydrology, and hydrophytic vegetation. In these areas, hydrologic proof would be the existence of hydric soils with oxidized root channels in the upper soil horizons that have low chroma matrix colors. Indicators of hydrology may include water borne deposits, drift lines, scour marks, the presence of crayfish borrows, redoximorphic concretions, or regional indicators of soil saturation. Hydrophytic vegetation can range from facultative to obligate wetland plant species.

One Corps jurisdictional wetland and eight federally non-regulated isolated wetlands were determined to exist within the review area. Wetland WL 1000 is Corps jurisdictional and is approximately 59.333 acres. Wetlands WL 2000, WL 3000, WL 4000, WL 4100, WL 5000, WL 6000, and WL 7000, and WL 8000 was determined to be isolated based on current regulations. Wetland WL 2000 is located within an overhead power right-of-way in the southeast portion of the review area and is approximately 0.751 acre. Wetland WL 3000 is also located within the overhead power right-of-way in the Southwest portion of the review area and is approximately 1.444 acres. Wetlands WL 4000 and WL 4100 are located along the Eastern boundary of the review area and are respectively 0.321 acre and 1.037 acres. Wetland WL 5000 is located in the Northeast portion of the review area is approximately 0.020 acre. Wetland WL 6000 is located directly North of Wetland WL 5000 along the Northeastern boundary and is approximately 0.089 acre. Wetland WL 7000 is located along the Western boundary of the review area and is approximately 1.579 acres. Wetland 8000 is located along the southern boundary of the review area and is approximately 0.020 acre in area.

All aquatic resources were flagged in the field around the perimeter or along the centerline if linear. Linear wetland centerlines and wetland perimeters were marked in the field with sequentially numbered pink flagging with notes that include the location number and the centerline width (where applicable) at each flag. For linear wetlands flags were hung directly over the centerlines where possible. Any flags not hung over the linear wetland centerline should be surveyed at the center of the wetland if a survey of the flags is desired. A survey will not be necessary for Corps/SC DHEC permitting. Other drainage features were determined to be uplands.

Open Waters

Impoundments of jurisdictional waters are also jurisdictional under Clean Water Act regulations. Impoundments that have been excavated in high ground are not jurisdictional. Impoundments that are not Corps jurisdictional may be captured by SC DHEC's isolated waters rules. No impoundments/open water, natural or man-made, were observed within the review areas.

The limits of any jurisdictional streams and wetlands are depicted on Figure 4, Aquatic Resources Sketch Map. This determination is subject to verification by the US Army Corps of Engineers and, in some cases, the State agencies charged with the protection of surface water resources. Figures 1, 2, 3, and 4 were obtained from County GIS and other public domain data services.

Atlas recommends that formal written concurrence of our assessments regarding the jurisdictional status of all drainage features onsite be obtained from the Corps and DHEC. An approved jurisdictional determination will be valid for five years and can be appealed by the applicant if the Corps does not concur with the consultant's findings and the consultant contends that the delineation is accurate. A preliminary jurisdictional determination does not have an expiration date but is not appealable. An approved jurisdictional determination will be required for this project to identify and remove isolated wetlands from Corps jurisdiction.

Public Sourced Natural Resource

Mapping County GIS Tax Parcel
(Figure1)
The map is helpful to illustrate the tax parcels that make up the project area.

County GIS Topographical Map (Figure 2)
The topographical map is used to illustrate where the likely presence of drainage features is located on site. These drainage features are field reviewed during the site evaluation.

County GIS Aerial (Figure 3)
Aerial maps help with site access and orientation in the field. These maps are also useful for determining likely stream corridors and floodplain areas.

Sketch Map of Jurisdictional Features (Figure 4)
Identifies general locations of jurisdictional features as accessed by Atlas staff during the site visit.

Delineation Findings Summary

In summary Atlas assessed that there is one Corps jurisdictional wetland, eight State jurisdictional coastal zone wetlands, no streams, and no impoundments. Atlas can obtain written concurrence of the findings from the Corps/State.

Permitting

In general (with some exceptions) the permitting process is regulatory and not prohibitory. A Corps 404 permit verification and/or a 401 water quality certification from SC DHEC is not required for work on the subject property that is restricted to high ground areas/activities. Construction activities within jurisdictional streams, open waters, and wetlands (collectively referred to as Waters of the US) and isolated waters require written authorization by the Corps and/or State water resources agencies prior to impacts. For most development projects a stormwater management plan will be required if impervious surfaces exceed 24% over the entire project and/or high-density areas and/or if stormwater is not treated with predominantly vegetated conveyances for low density projects.

Impacts of 0.005 acre and less to any identified streams and fills of less than 0.1 acre of jurisdictional open waters and wetlands are typically standard to permit under the Nationwide Permit program and may not require compensatory mitigation for impacts. Impacts to 0.0051 acre of stream up to 0.05 acre of stream and from 0.1 acre to 0.5 acre of open waters and wetlands impacts may be authorized under the Nationwide Permit program as well, but a more thorough review for avoidance and minimization of impacts will be conducted by both the Corps and the State. Compensatory mitigation will be required for stream, open water, and wetland losses under this permitting scenario. Unavoidable impacts that exceed these thresholds may likely only be authorized under an Individual Permit and Water Quality Certification, and these permits involve a public notice and comment periods and may involve a public hearing. Impacts to greater than 0.05 acre of intermittent stream may be allowed under a Nationwide Permit so long as the Corps district engineer and other regulatory agencies approve the waiver.

Once an acceptable site plan is produced, Atlas can assist with the preparation and submittal of a Pre-Construction Notification (permit application) to the Corps and SC DHEC if it is determined that impacts are unavoidable. The likely Nationwide Permit that is applicable for industrial/commercial development is Nationwide Permit (NWP) 39. The Corps will review the application for eligibility under NWP 39 which includes a review for impacts to cultural and historic resources, natural heritage resources, impacts within FEMA regulated floodplains, and threatened and endangered species. Upon their determination that the proposed development is not likely to adversely impact those resources, they will issue their permit verification. SC DHEC will review the application for impacts to water quality and aquatic life. Storm water control and treatment design

will be reviewed by the local delegated authority, if applicable, otherwise SC DHEC will need to review and approve storm water plans. Based on site plans an Individual Permit will be required for wetland impacts.

The following link to the full text of the Corps Nationwide Permit 39 is provided for your review:

2021 Nationwide Permit (oclc.org)

Permitting Summary

If impacts to Waters of the US and/or isolated wetlands are necessary for site development a Corps permit and/or SC DHEC water quality certification may be required. Nationwide permits are usually limited to ½ acre of stream/wetland/open water impacts as well as 0.05 acre of stream impacts. Individual permits require an elevated review process including a public notice, alternatives analysis, and environmental assessment.

Recommendations

The following is a very general summary of the recommended next steps.

1. Desktop and fieldwork review for Federal protected species (Section 107) and submittal package to FWS for the Corps and/or SC DHEC permit application.
2. Desktop and fieldwork review for historical and archaeological (Section 6) and submittal package to SC SHPO for the Corps and/or SC DHEC permit application.
3. Submit a delineation approval package to the Corps/ SC DHEC.
4. Conduct a site visit with the Corps to confirm their approval of the delineation.
5. Conduct a site visit with SC DHEC to confirm their approval of the delineation.
6. Obtain Corps verification of the Atlas delineation – valid for five years or unlimited.
7. Submit a permit application to the Corps and SC DHEC for wetland impacts, if necessary.

Conclusion

This concludes our project review and report of findings for the stream and wetland delineation. We appreciate the opportunity to provide these services. Please feel free to call with questions or to discuss this report.

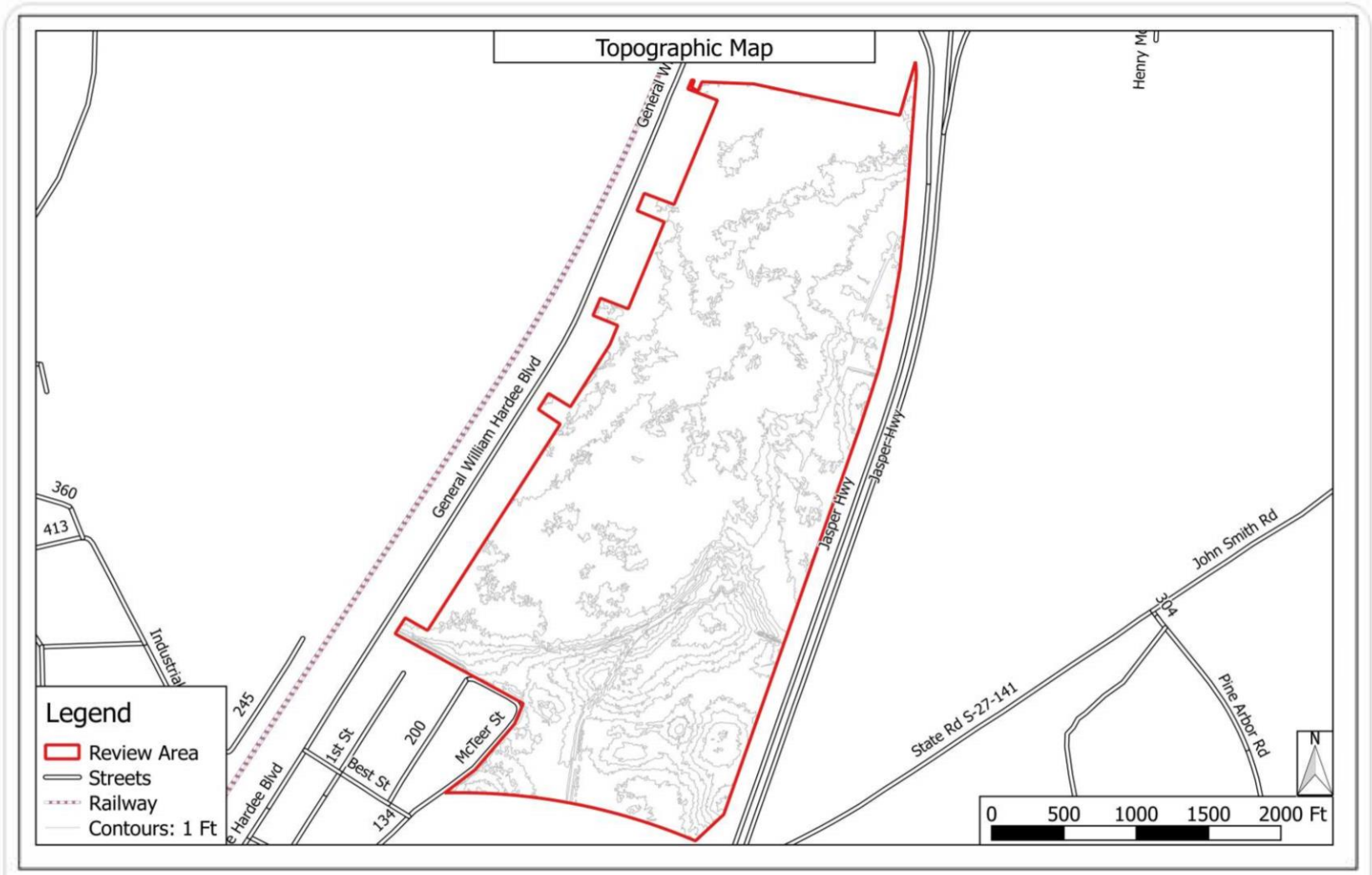
Best regards,

Jennifer L Robertson

Jennifer L Robertson, President

Jurisdictional Waters of the US and State

Figures



ATLAS ENVIRONMENTAL

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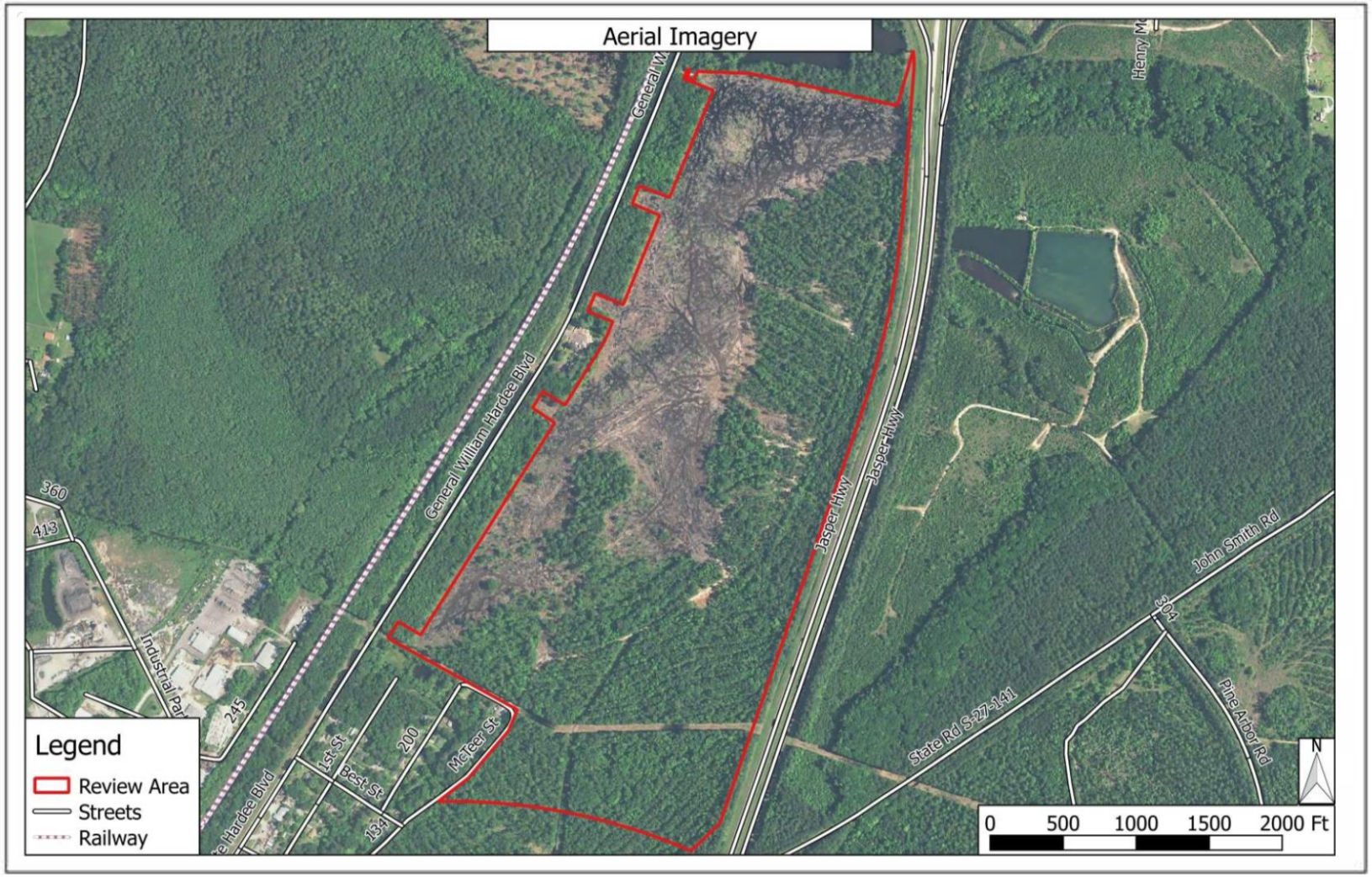
Location: Whyte Hardee Blvd	
For: Silverman Group Attn: Mr. Holden Sabato	
Coordinates: 32.30007, -81.06577	Date: November 17, 2021



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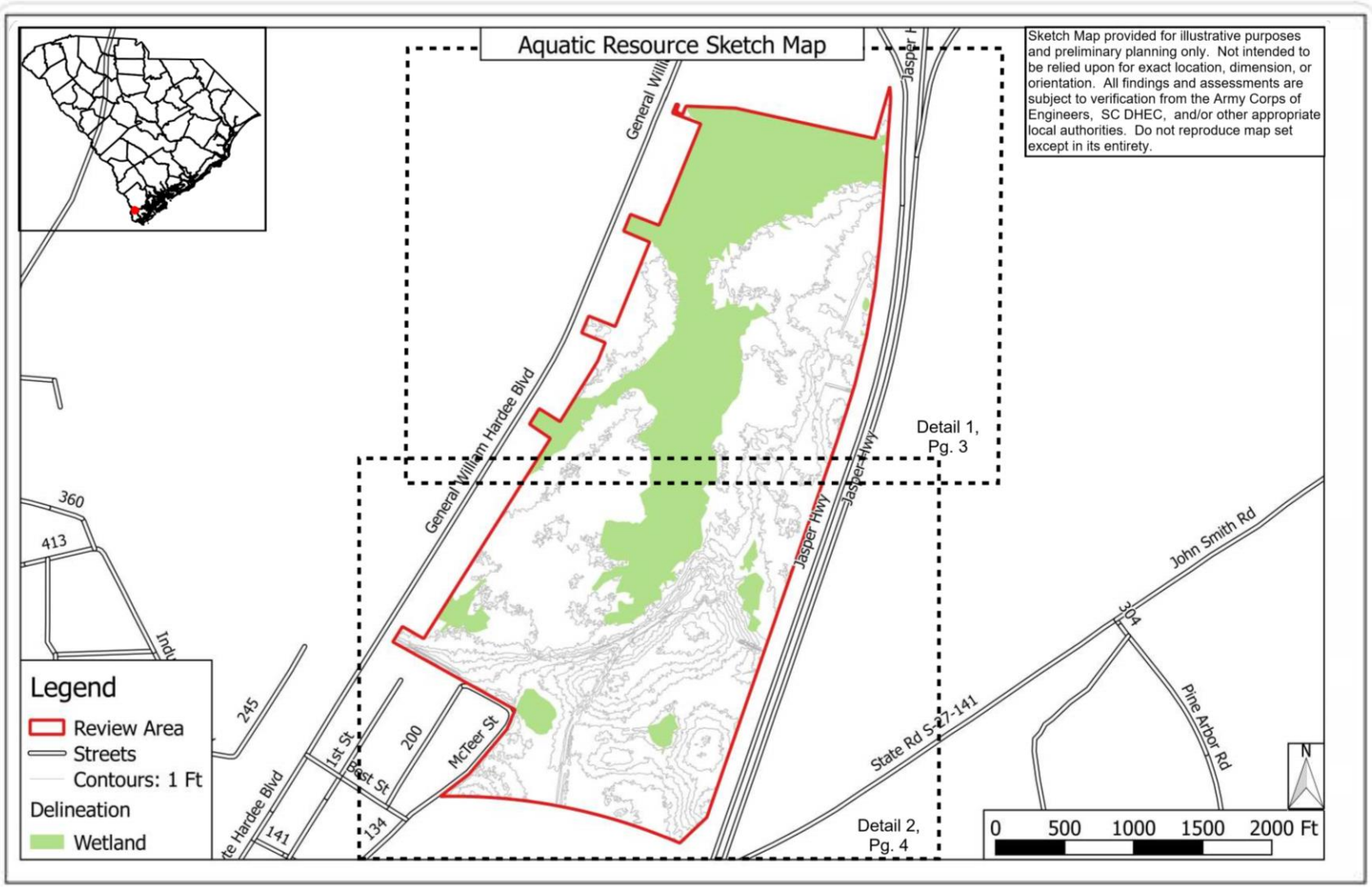

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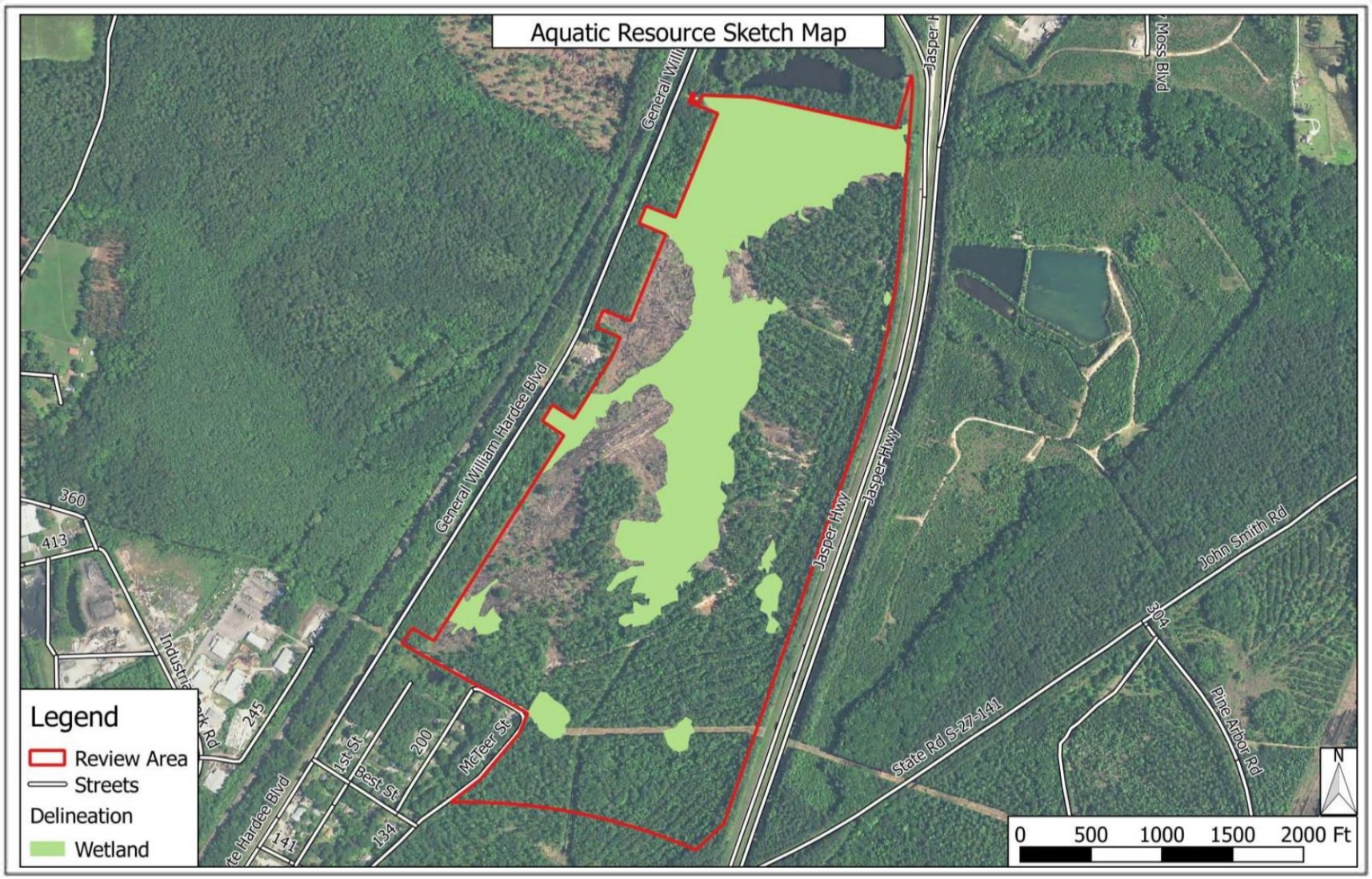

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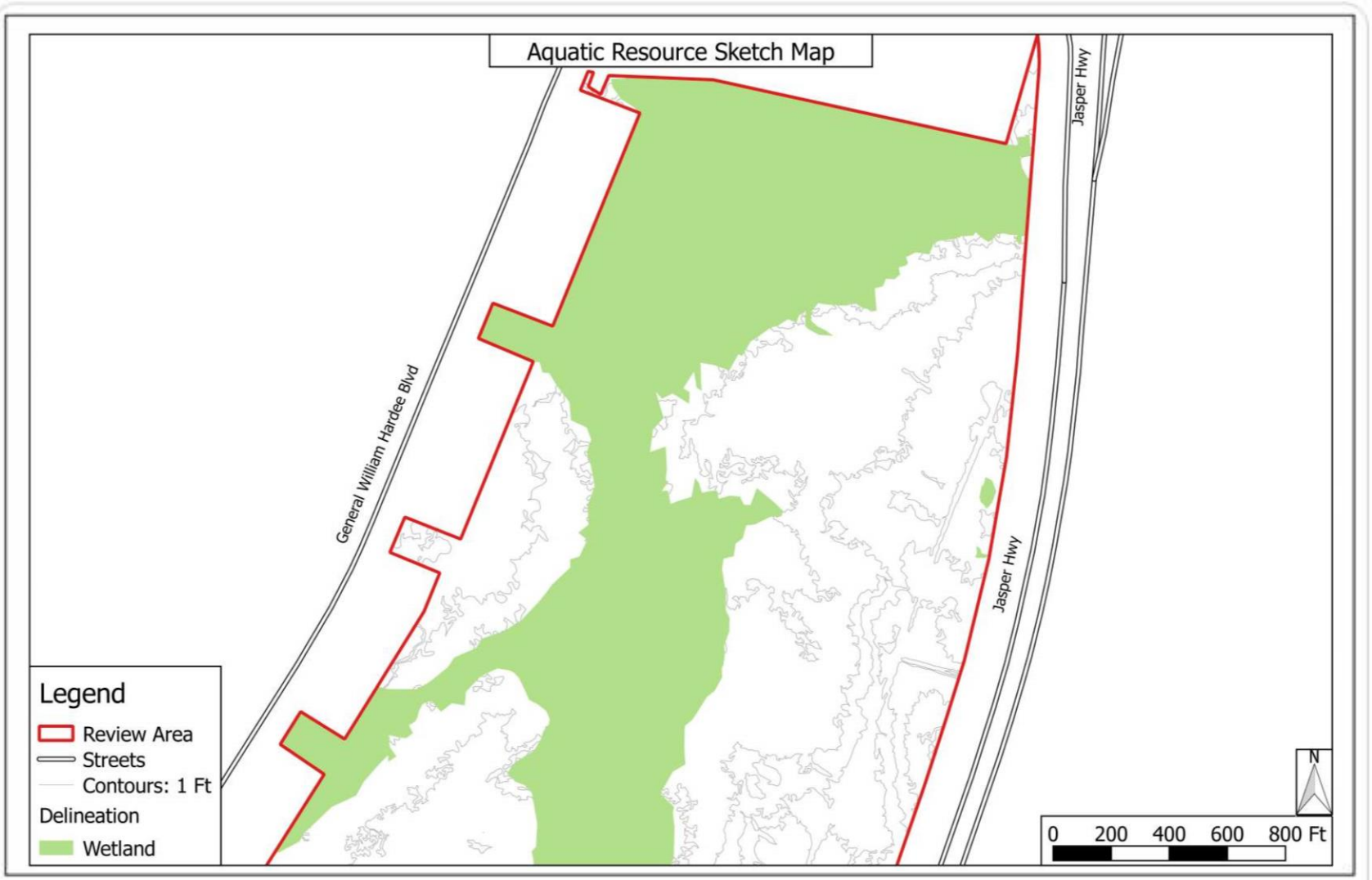

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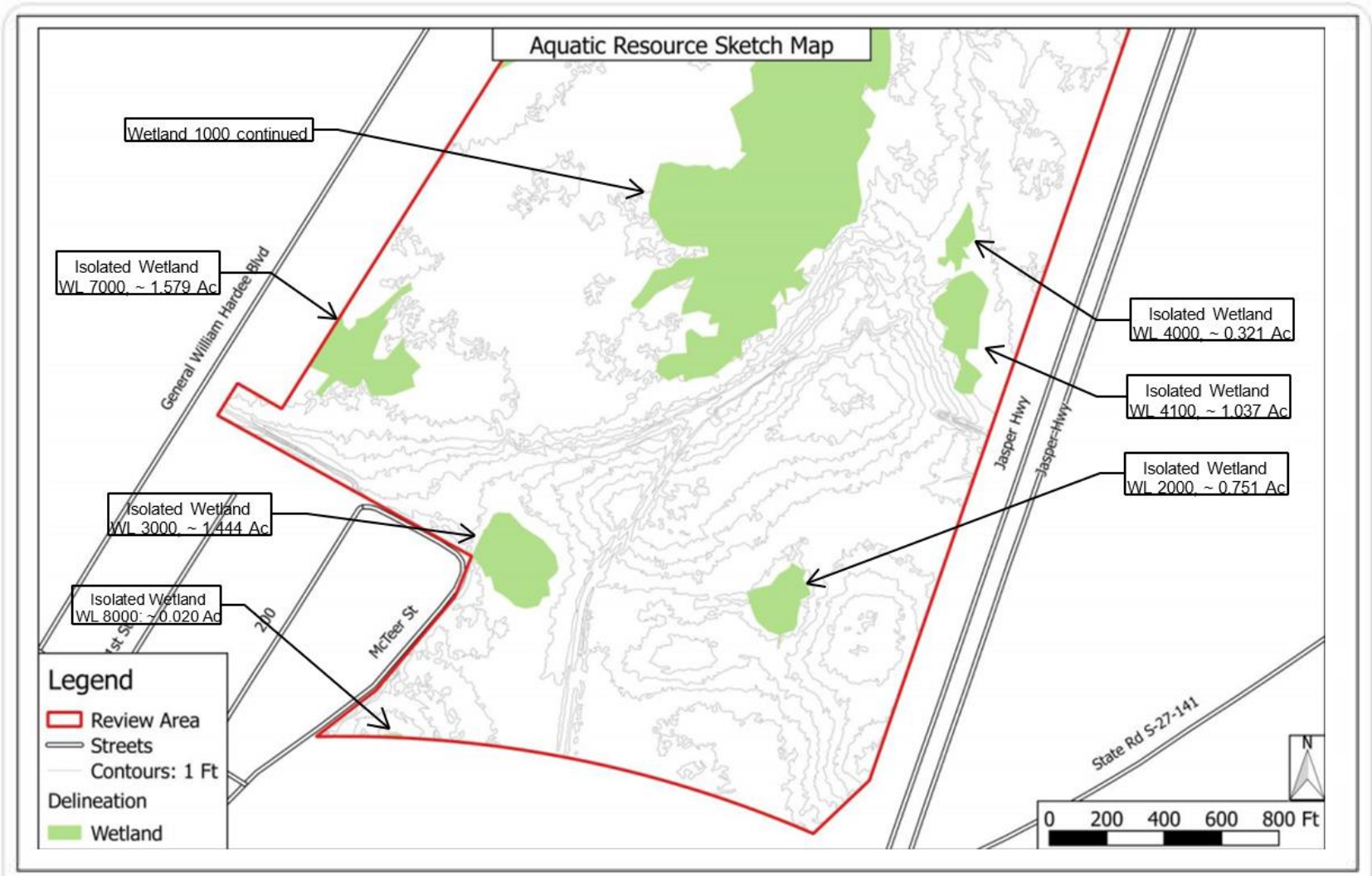
Coordinates: 32.30007, -81.06577	Date: November 17, 2021



ATLAS ENVIRONMENTAL

Project Name: 95 Logistics Center	
Location: Whyte Hardee Blvd	
For: Silverman Group Attn: Mr. Holden Sabato	
Coordinates: 32.30007, -81.06577	Date: November 17, 2021

WL 1000 near Northern End of Property

Previously logged area

Forested area near Northern End

Power Line Right-of-way

Previously logged area

Previously logged area near Jasper Highway

Exhibit G: Appendix D-National Register Criterion For Evaluation

60.4 Criteria for evaluation.

The criteria applied to evaluate properties (other than areas of the National Park System and National Historic Landmarks) for the National Register are listed below. These criteria are worded in a manner to provide for a wide diversity of resources. The following criteria shall be used in evaluating properties for nomination to the National Register, by NPS in reviewing nominations, and for evaluating National Register eligibility of properties. Guidance in applying the criteria is further discussed in the "How To" publications, Standards & Guidelines sheets and Keeper's opinions of the National Register. Such materials are available upon request.

National Register criteria for evaluation. The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

(a) that are associated with events that have made a significant contribution to the broad patterns of our history; or

(b) that are associated with the lives of persons significant in our past; or

(c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(d) that have yielded, or may be likely to yield, information important in prehistory or history.

Criteria considerations. Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria of if they fall within the following categories:

(a) A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

(b) A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

(c) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life.

(d) A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

(e) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

(f) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

(g) A property achieving significance within the past 50 years if it is of exceptional importance.

This exception is described further in NPS "How To" #2, entitled "How to Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years" which is available from the National Register of Historic Places Division, National Park Service, United States Department of the Interior, Washington, D.C. 20240.

EXHIBIT H: WATER & SEWER PROVIDER APPROVAL LETTER

BEAUFORT – JASPER WATER & SEWER AUTHORITY

6 SNAKE ROAD, OKATIE, SC 29909-3937
Phone 843.987.8100 | Fax 843.548.0096
Customer Service 843.987.9200
Operations & Maintenance 843.987.8046
Engineering 843.987.8065
www.bjwsa.org

Our mission: Inspire trust and enhance public health

JOE MANTUA, PE, GENERAL MANAGER
843.987.8044 (o) | 843.540.4002 (c)

January 26, 2021

Dan Lacz
The Silverman Group
195 Morristown Road
Basking Ridge, NJ 07920

Via Email: danlacz@silvermangroup.net, hray@hrcengineers.com

RE: Water and Sewer Availability – Whyte Hardee Boulevard TMS#s: 041-00-02-010 and 041-03-03-001.

Mr. Lacz,

This letter is in response to the water and sewer availability request for the above referenced property. Water is available from BJWSA's existing 8" water main located within the right of way of Whyte Hardee Boulevard. Concerning sanitary service, there is an 8" force main wastewater line, also within the Whyte Hardee Boulevard right way, as well as an 8" gravity main at the northwestern corner of the property. Please be advised that, depending on the amount of water and sewer capacity required to serve the proposed development, the developer may be responsible for offsite improvements or upgrades to BJWSA's existing infrastructure.

If or when you wish to proceed with this development, design drawings and calculations must be submitted to BJWSA's Engineering Department for review and approval. Upon approval, capacity and project fees will be determined based on the information provided. These fees must be paid in full before a capacity commitment can be issued or a pre-construction meeting may be held. If construction on the proposed water and sewer systems has not started within twelve (12) months from the date of this letter this availability will be invalid.

Should you have questions or require additional information, please contact me at 843-987-8082 or james.clardy@bjwsa.org.

Sincerely,

James Clardy
Development Projects Manager

jbc/mya

MICHAEL L. BELL, CHAIR
JAMES E. BAKER, JR, VICE CHAIR
GREGORY A. PADGETT, SECRETARY/TREASURER
DONNA L. ALTMAN, IMMEDIATE PAST CHAIR
LORRAINE W. BOND
R. THAYER RIVERS, JR
BRANDY M. GRAY
GERALD H. SCHULZE
ANDERSON M. KINGHORN, JR
WILLIAM SINGLETON, Ed.D
VACANT

EXHIBIT I: ELECTRIC PROVIDER APROVAL LETTER

Letter of Power Availability

April 20, 2021

Correspondence Sent Electronically

Gidget Crook
HRC Engineering
Douglasville, GA 30134

Re: Jasper Co., S.C. Parcel 0-41-00-02-12

Ms. Crook,

I am pleased to inform you that Dominion Energy will be able to provide electric service to the above referenced project. Electric service will be provided in accordance with Dominion Energy General Terms and Conditions, other documents on file with the South Carolina Public Service Commission, and the company's standard operating policies and procedures. To begin engineering work for the project, the following information will need to be provided:

1.) Detailed utility site plan (AutoCAD format preferred) showing water, sewer, and storm drainage as well as requested service point/transformer location.
2.) Additional drawings that indicate wetlands boundaries, tree survey with barricade plan and buffer zones (if required), as well as any existing or additional easements will also be needed.
3.) Electric load breakdown by type with riser diagrams and desired metering specifications.

Please note that for multi-occupancy residential developments per SC Public Service Commission Regulation 103-327(A): *All service delivered to new multi-occupancy residential premises at which units of such premises are separately rented, leased or owned shall be delivered by an electric utility based on individual meter measurement for each dwelling*

Dominion Energy construction standards and specifications are available here:
https://www.dominionenergy.com/south-carolina/start-stop-service/new-construction

If you have any questions, please contact me at 843-540-1315.

Sincerely,

Parks Moss

Parks Moss
Senior Key Account Manager
Dominion Energy South Carolina

EXHIBIT J: TELECOMMUNICATIONS PROVIDER LETTER

THE TELECOMMUNICATIONS PROVIDER LETTER REQUEST IS ATTACHED. THE APPROVAL LETTER WILL BE SUBMITTED WITH THE MASTER PLAN SUBMISSION.

Gidget Crook

From:	Gidget Crook
Sent:	Wednesday, March 03, 2021 10:58 AM
To:	'Michael.burton@htc.hargray.com'
Cc:	Jonathan Tilenis; Jared Norton
Subject:	Will Serve Letter Request
Attachments:	Hardeeville 041-00-02-010 & 041-03-03-001.pdf

To whom it may concern, We are working on a project located between I-95, US-17, and John Smith Road in Hardeeville, South Carolina. The parcel numbers for the property are 041-00-02-010 (Jasper County) and 041-03-03-001 (City of Hardeeville).
I have attached a copy of the tax records for the property as well. Can you please provide a will serve/intent to serve letter for the communication services. If possible can you also provide an area map of the service location.

Gidget Crook
6554 Church Street
Douglasville, GA 30134
Phone: 770-942-0196

ENGINEERS • SURVEYORS
HRC
LANDSCAPE ARCHITECTS

EXHIBIT K: GAS PROVIDER APPROVAL LETTER

Dominion Energy

Natural Gas Letter of Availability

3/4/2021

HRC
Parcel #'s 041-00-02-012 and 041-03-03-001
Hardeeville, SC 29927

I am pleased to inform you that Dominion Energy South Carolina will be able to provide natural gas service to the above referenced. Natural gas service can be provided in accordance with Dominion Energy's General Terms and Conditions, other documents on file with the South Carolina Public Service Commission, and the company's standard operating policies and procedures. **In order to begin the design process for the project, the following information will need to be provided:**

1. Site Plan / Cad File / PDF
2. Total natural gas BTU load of each piece of equipment per building
3. Delivery pressure
4. Estimated wanted by date for gas line installation
6. Permanent account established, please call 1-877-937-7234
7. All required Contribution in Aid of Construction must be received before scheduling can be arranged.

Thank you in advance for this information and I look forward to working with your company.

For more information or questions, don't hesitate to contact me.

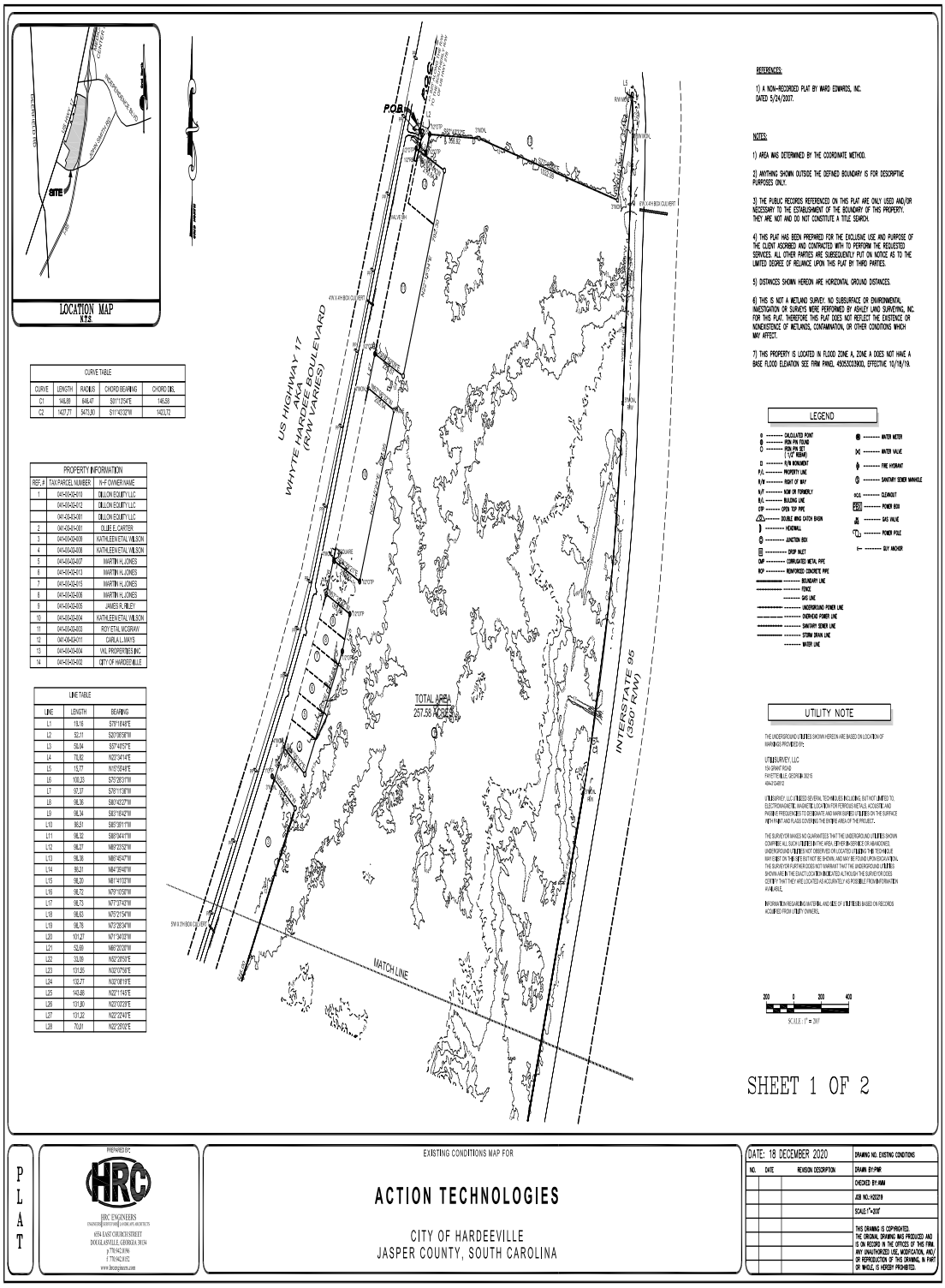
Sincerely,

Jake Baker

Account Manager – Natural Gas
Dominion Energy South Carolina

81 May River Rd. Bluffton, SC 29910
P (843) 576-8911 • M (843) 412-5178
jake.baker@dominionenergy.com

EXHIBIT L: SITE TOPOGRPAHIC MAPS (MAP A)



CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD BEARING	CHORD DIS.
C1	146.89	646.47	S31°17'54"E	146.55
C2	1427.71	5473.30	S11°45'32"W	1423.72

PROPERTY INFORMATION

REF. #	TAX PARCEL NUMBER	N-F OWNER NAME
1	041-043-43-018	DILLON EQUITY LLC
	041-043-43-012	DILLON EQUITY LLC
	041-43-43-001	DILLON EQUITY LLC
2	041-043-43-001	OLLIE E. CARTER
3	041-043-43-009	KATHLEEN ETAL WILSON
4	041-043-43-008	KATHLEEN ETAL WILSON
5	041-043-43-007	MARTIN H. JONES
6	041-043-43-013	MARTIN H. JONES
7	041-043-43-015	MARTIN H. JONES
8	041-043-43-006	MARTIN H. JONES
9	041-043-43-005	JAMES R. RILEY
10	041-043-43-004	KATHLEEN ETAL WILSON
11	041-043-43-003	ROY ETAL MCGRAW
12	041-43-43-011	CARLA L. MAYS
13	041-043-43-004	VAL PROPERTIES INC
14	041-043-43-002	CITY OF HARDEEVILLE

LINE TABLE

LINE	LENGTH	BEARING
L1	19.16	S78°18'49"E
L2	52.11	S32°08'08"W
L3	58.34	S37°43'07"E
L4	76.82	N23°54'14"E
L5	13.77	N15°52'49"E
L6	100.23	S75°28'51"W
L7	97.37	S76°11'58"W
L8	96.36	S80°42'27"W
L9	96.34	S83°18'42"W
L10	96.51	S85°39'11"W
L11	96.32	S89°04'41"W
L12	96.27	N89°23'52"W
L13	96.36	N86°48'47"W
L14	96.31	N84°38'48"W
L15	96.20	N81°41'03"W
L16	96.72	N79°10'58"W
L17	96.73	N77°37'47"W
L18	96.63	N75°31'54"W
L19	96.76	N73°26'54"W
L20	101.27	N71°34'03"W
L21	52.69	N69°20'20"W
L22	33.99	N32°28'58"E
L23	131.85	N32°07'58"E
L24	132.77	N33°08'19"E
L25	143.88	N33°11'45"E
L26	131.80	N33°03'29"E
L27	131.32	N33°22'49"E
L28	70.01	N33°28'02"E

REFERENCES:

1) A NON-RECORDED PLAT BY WARD EDWARDS, INC. DATED 5/24/2007.

NOTES:

1) AREA WAS DETERMINED BY THE COORDINATE METHOD.

2) ANYTHING SHOWN OUTSIDE THE DEFINED BOUNDARY IS FOR DESCRIPTIVE PURPOSES ONLY.

3) THE PUBLIC RECORDS REFERENCED ON THIS PLAT ARE ONLY USED AND/OR NECESSARY TO THE ESTABLISHMENT OF THE BOUNDARY OF THIS PROPERTY. THEY ARE NOT AND DO NOT CONSTITUTE A TITLE SEARCH.

4) THIS PLAT HAS BEEN PREPARED FOR THE EXCLUSIVE USE AND PURPOSE OF THE CLIENT ASCRIBED AND CONTRACTED WITH TO PERFORM THE REQUESTED SERVICES. ALL OTHER PARTIES ARE SUBSEQUENTLY PUT ON NOTICE AS TO THE LIMITED DEGREE OF RELIANCE UPON THIS PLAT BY THIRD PARTIES.

5) DISTANCES SHOWN HEREON ARE HORIZONTAL GROUND DISTANCES.

6) THIS IS NOT A WETLAND SURVEY. NO SUBSURFACE OR ENVIRONMENTAL INVESTIGATION OR SURVEYS WERE PERFORMED BY ASHLEY LAND SURVEYING, INC. FOR THIS PLAT. THEREFORE THIS PLAT DOES NOT REFLECT THE EXISTENCE OR NONEXISTENCE OF WETLANDS, CONTAMINATION, OR OTHER CONDITIONS WHICH MAY AFFECT.

7) THIS PROPERTY IS LOCATED IN FLOOD ZONE A, ZONE A DOES NOT HAVE A BASE FLOOD ELEVATION SEE FIRM PANEL 45053C0039D, EFFECTIVE 10/18/19.

LEGEND

- ○ ------- CALCULATED POINT
- ● ------- IRON PIN FOUND
- ○ ------- IRON PIN SET "CAP REBAR"
- ⊡ ------- R/W MONUMENT
- P/L ------- PROPERTY LINE
- R/W ------- RIGHT OF WAY
- N/F ------- NOW OR FORMERLY
- B/L ------- BUILDING LINE
- OTP ------ OPEN TOP PIPE
- ⌀ ------ DOUBLE RING CATCH BASIN
- ▶ ------- HEADWALL
- ⊕ ------- JUNCTION BOX
- ▤ ------- DROP INLET
- CMP ------- CORRUGATED METAL PIPE
- RCP ------- REINFORCED CONCRETE PIPE
- ------- BOUNDARY LINE
- ------- FENCE
- ------- GAS LINE
- ------- UNDERGROUND POWER LINE
- ------- OVERHEAD POWER LINE
- ------- SANITARY SEWER LINE
- ------- STORM DRAIN LINE
- ------- WATER LINE
- ● ------- WATER METER
- ⋈ ------- WATER VALVE
- ⧫ ------- FIRE HYDRANT
- Ⓢ ------- SANITARY SEWER MANHOLE
- ACU ------- CLEANOUT
- PBX ------- POWER BOX
- ⛽ ------- GAS VALVE
- ------- POWER POLE
- ⊢ ------- GUY ANCHOR

UTILITY NOTE

THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON LOCATION OF MARKINGS PROVIDED BY:

UTILISURVEY, LLC
101 GRANT ROAD
FAYETTEVILLE, GEORGIA 30215
404-210-8810

UTILISURVEY, LLC UTILIZED SEVERAL TECHNIQUES INCLUDING, BUT NOT LIMITED TO, ELECTROMAGNETIC, MAGNETIC LOCATION FOR REFERENCE METALS, ACOUSTIC AND PASSIVE FREQUENCIES TO DESIGNATE AND MARK BURIED UTILITIES ON THE SURFACE WITH PAINT AND FLAGS COVERING THE ENTIRE AREA OF THE PROJECT.

THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. UNDERGROUND UTILITIES NOT OBSERVED OR LOCATED DURING THE TECHNIQUE MAY EXIST ON THE SITE BUT MAY BE FOUND UPON EXCAVATION. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.

INFORMATION REGARDING MATERIAL AND SIZE OF UTILITIES BASED ON RECORDS ACQUIRED FROM UTILITY OWNERS.

PLAT

PREPARED BY:
HRC ENGINEERS
6054 EAST CHURCH STREET
DOUGLASVILLE, GEORGIA 30134
p 770.942.8186
f 770.942.8187
www.hrcengineers.com

EXISTING CONDITIONS MAP FOR

ACTION TECHNOLOGIES

CITY OF HARDEEVILLE
JASPER COUNTY, SOUTH CAROLINA

DATE: 18 DECEMBER 2020

NO.	DATE	REVISION DESCRIPTION

DRAWING NO. EXISTING CONDITIONS
DRAWN BY: PMR
CHECKED BY: AMM
JOB NO.: H20019
SCALE: 1"=200'

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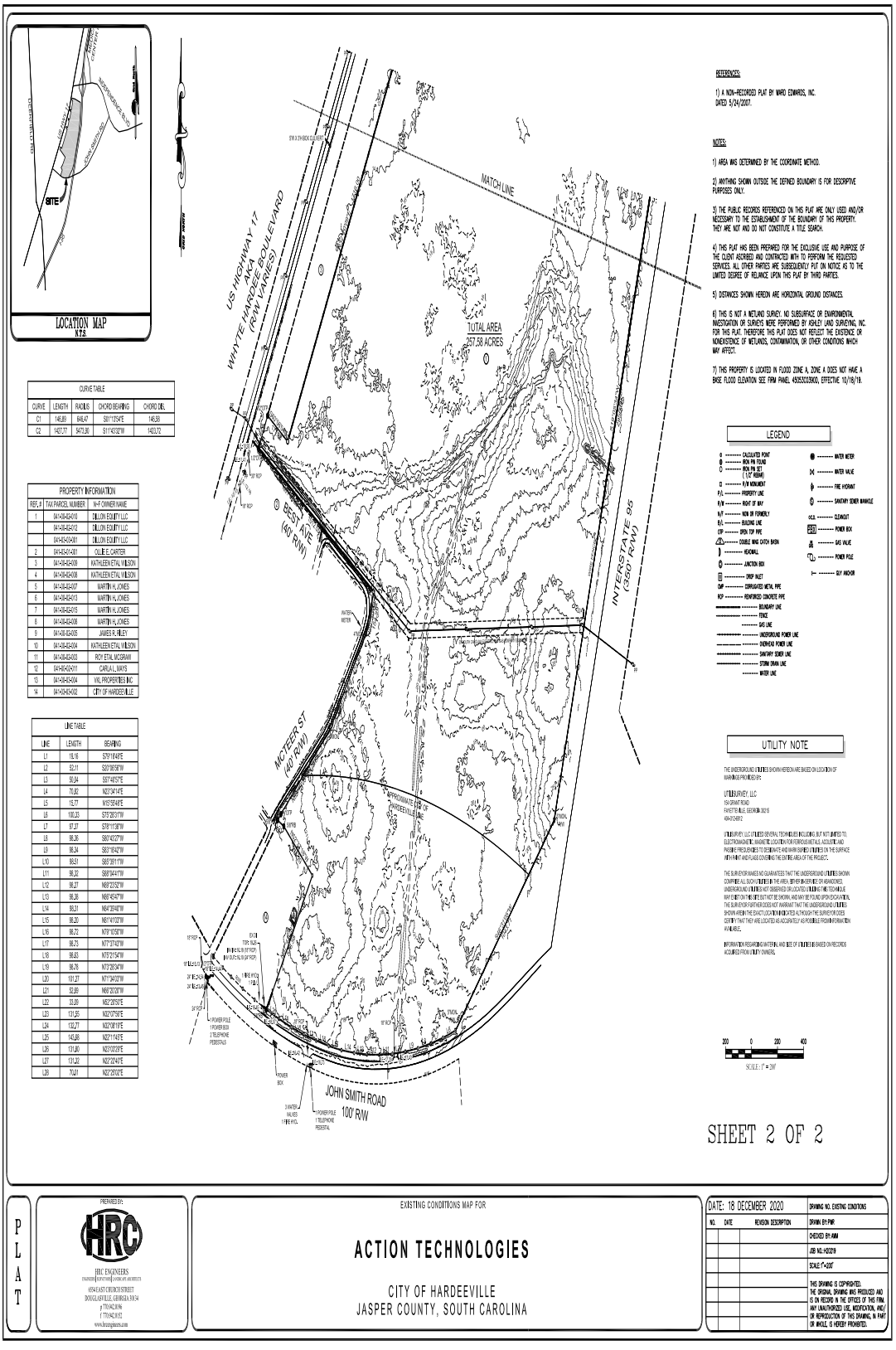
EXHIBIT L: SITE TOPOGRPAHIC MAPS (MAP B)



PLAT

PREPARED BY:
HRC ENGINEERS
4554 EAST CHURCH STREET
DOUGLASVILLE, GEORGIA 30134
T 770.942.8745
F 770.942.8125
www.hrcengineers.com

EXISTING CONDITIONS MAP FOR

ACTION TECHNOLOGIES

CITY OF HARDEEVILLE
JASPER COUNTY, SOUTH CAROLINA

DATE: 18 DECEMBER 2020
DRAWING NO. EXISTING CONDITIONS
NO. | DATE | REVISION DESCRIPTION
DRAWN BY: PMR
CHECKED BY: AMM
JOB NO.: H0219
SCALE: 1"=200'

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Traffic Impact Analysis

95 Logistics Center
Jasper County, SC

Prepared for:
SL Hardeeville Industrial Park LLC

Bihl Engineering, LLC 2022

BIHL ENGINEERING

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1.0 Executive Summary

The 95 Logistics Center development is proposed to be located on US 17 in Jasper County, SC. The development is planned to consist of a maximum of 2.6 million square feet of industrial warehousing, and it is planned to have two new full access driveways on US 17. For the purposes of this traffic impact analysis (TIA), the proposed development is assumed to be complete by 2026.

This report presents the trip generation, distribution, traffic analyses, and any recommendations for transportation improvements required to meet anticipated traffic demands.

The study area for the TIA included the following intersections:

- US 17 at US 278 (unsignalized)
- US 278 at I-95 SB On-Ramp/Off-Ramp (signalized)
- US 278 at I-95 NB On-Ramp/Off Ramp (unsignalized)
- US 17 at John Smith Road (unsignalized)
- US 17 at Site Driveway #1 (unsignalized) (2026 Build conditions only)
- US 17 at Site Driveway #2 (unsignalized) (2026 Build conditions only)

Due to the COVID-19 pandemic, traffic volumes and travel patterns have been impacted. All turning movements were adjusted using AM and PM adjustment factors as recommended by South Carolina Department of Transportation (SCDOT) District 6. These adjusted traffic volumes were used in the Existing conditions analysis.

Three 2026 Build conditions were studied: 2026 Build with no Improvements, 2026 Build with Improvements, and 2026 Build with improvements with the I-95 NB On-Ramp/Off-Ramp intersection signalized.

Based on the results of the analysis, the unsignalized intersection of US 17 at US 278 currently operates acceptably and is projected to continue to operate acceptably in the 2026 No Build and 2026 Build conditions.

The signalized intersection of US 278 at I-95 SB On-Ramp/Off-Ramp currently operates acceptably. In the 2026 No Build conditions, the intersection is projected to continue to operate acceptably. In the 2026 Build conditions, the intersection is projected to operate acceptably during the AM peak hour and with elevated delay during the PM peak hour. When coordinated with the US 278 at I-95 NB On-Ramp/Off-Ramp intersection in the 2026 Build with improvements with I-95 NB Off-Ramp Signalized conditions, the intersection is projected to operate acceptably.

The unsignalized intersection of US 278 at I-95 NB On-Ramp/Off-Ramp currently operates acceptably and is projected to continue to operate acceptably in the 2026 No Build conditions. In the 2026 Build conditions, the intersection is projected to operate with elevated delay during the AM and PM peak hours. It is recommended that a detailed traffic signal warrant analysis be performed at this intersection when traffic volumes are realized. Based on the analysis, the intersection is projected to operate

acceptably when signalized and coordinated with the intersection of US 278 at I-95 SB On-Ramp/Off-Ramp.

The unsignalized intersection of US 17 at John Smith Road currently operates with elevated delay during the AM peak hour and acceptably during the PM peak hour. In the 2026 No Build and 2026 Build conditions, the intersection is projected to operate with elevated delay during the AM and PM peak hour conditions. An exclusive northbound right-turn lane is recommended in the 2026 Build with Improvements conditions. With the exclusive northbound right-turn lane, the intersection is projected to improve but continue to operate with elevated delay in the 2026 Build with Improvements conditions.

The site driveways are projected to operate acceptably in the 2026 Build conditions with implementation of the recommended southbound left-turn lane improvements at both driveways.

Based on results of the analysis the following transportation related improvements are recommended.

- US 17 at US 278 ○ Refresh all pavement markings and striping on all approaches of the intersection
- US 278 at I-95 SB On-Ramp/Off-Ramp ○ Optimize traffic signal timings
- US 278 at I-95 NB On-Ramp/Off Ramp ○ Monitor intersection traffic volumes and perform traffic signal warrant analysis yearly or at a schedule requested by Jasper County and/or SCDOT
    - Signalize intersection once traffic signal warrants are met and coordinate signal timings with the US 278 at I-95 SB On-Ramp/Off-Ramp intersection
- US 17 at John Smith Road ○ Installation of an exclusive northbound right-turn lane on US 17
- US 17 at Site Driveway #1 ○ Installation of an exclusive southbound left-turn lane on US 17
    - Installation of exclusive left- and right-turn exiting lanes on Site Driveway #1 ○ Location and design details to be coordinated with the SCDOT and Jasper County
- US 17 at Site Driveway #2 ○ Installation of an exclusive southbound left-turn lane on US 17 ○ Installation of exclusive left- and right-turn exiting lanes on Site Driveway #2 ○ Location and design details to be coordinated with SCDOT and Jasper County

Results in this report are based solely on traffic studies and are considered input into final design considerations. The final design will be determined by the project engineer after other design elements (such as, but not limited to, utilities, stormwater, etc.) are taken into consideration.

2.0 Introduction

The 95 Logistics Center development is proposed to be located on US 17 in Jasper County, SC. The development is planned to consist of a maximum of 2.6 million square feet of industrial warehousing, and it is planned to have two new full access driveways on US 17. For the purposes of this TIA, the proposed development is assumed to be complete by 2026.

3.0 Inventory

3.1 Study Area

The study area for the TIA includes the following existing intersections:

- US 17 at US 278
- US 278 at I-95 SB On-Ramp/Off-Ramp
- US 278 at I-95 NB On-Ramp/Off Ramp
- US 17 at John Smith Road

Figure 1 (Appendix) shows the site location and **Figure 2 (Appendix)** shows the project conceptual site plan.

3.2 Existing Conditions

Roadways in the project vicinity include I-95, US 17, US 278, and John Smith Road.

I-95 is a four-lane, divided interstate with a posted speed limit of 70 miles per hour (mph) in the vicinity of the US 278 access ramps. Per SCDOT counts, I-95 has a 2019 annual average daily traffic (AADT) of 56,300 vehicles per day (vpd) north of US 278 and 62,700 vpd south of US 278. There is a diamond interchange at the US 278 exit.

US 278 (Independence Boulevard) is a five-lane roadway with a two-way, left-turn lane (TWLTL) and a posted speed limit of 45 mph from US 17 to Medical Center Drive. US 278 is designated as a principal arterial roadway east of I-95 and a minor arterial west of I-95. US 278 transitions to a four-lane, divided principal arterial roadway with a landscaped median and a 60 mph speed limit east of Medical Center Drive. Per SCDOT counts, US 278 has a 2019 AADT of 30,000 vpd east of I-95 and 4,100 vpd west of I-95. It is recommended that the pavement markings and striping in the vicinity of the intersections be refreshed.

US 17 (Whyte Hardee Boulevard) is a two-lane, undivided, major collector roadway with a posted speed limit of 55 mph just north of John Smith Road and is 45 mph for the remainder of the study area. Per SCDOT counts, US 17 has a 2019 AADT of 2,600 vpd north of US 278 and 4,200 vpd south of US 278. The proposed development has two planned full access driveways (Site Driveway #1 and Site Driveway

#2) on US 17. A masterplan for the Whyte-Hardee Boulevard has recently been developed. A summary of the masterplan is discussed in the following section.

John Smith Road (S-141) is a two-lane, undivided, major collector roadway with a posted speed limit of 55 mph east of Royal Live Oaks Academy Driveway and 35 mph west of Royal Live Oaks Academy Driveway. Per SCDOT counts, John Smith Road has a 2019 AADT of 5,700 vpd in the vicinity of the site. **Figure 3 (Appendix)** shows the existing roadway laneage in the study area.

3.3 Whyte-Hardee Masterplan

A masterplan was recently completed for the US 17 Corridor adjacent to the site – Whyte-Hardee Boulevard Master Plan. The area the corridor is located on is called, "The Business Park District." The primary improvements contemplated in this area are Streetscape improvements from Garr Road to Best Street and sidepath improvements from Garr Road to US 278. Based on the report, estimated costs for the streetscape are $510,000 and $1,120,000 for the sidepath. An illustrative scenario was created at the intersection of Whyte-Hardee at John Smith Road with the following conceptual components.

- "Streetscape improvements including street trees, sidepath (east side), and bioretention
- Sidepath that would serve as the East Coast Greenway as well as another side path on the north side of John Smith Road connecting the new Recreation Center and Royal Live Oaks Academy
- Parking area of existing businesses can be screened from Whyte-Hardee and John Smith while continuing to operate
- New development with a consistent setback and limited up-front parking can create a more harmonious streetscape
- Limited curb cuts and cross access helps to minimize pedestrian vehicle conflicts. Even if certain existing conditions force parking in the right-of-way, there are opportunities for it to be formalized with better design while accommodating through-traffic"

4.0 Traffic Generation

The trip generation of the proposed development was determined using trip generation rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation, 10th Edition* (2017).

Table 1 summarizes the AM and PM peak hour trips associated with the proposed site.

As shown in **Table 1**, the proposed development is projected to generate 337 new trips during the AM peak hour (259 entering and 78 exiting) and 340 trips during the PM peak hour (92 entering and 248 exiting).

Table 1: Trip Generation							
Land Use and Intensity	**ITE Land Use Code**	**AM Peak Hour**			**PM Peak Hour**		
		Total	**In**	**Out**	**Total**	**In**	**Out**
2,600,000 square feet of Industrial Warehousing	150	337	259	78	340	92	248
New Trips		**337**	**259**	**78**	**340**	**92**	**248**

Source: ITE *Trip Generation, 10th Edition*

5.0 Site Traffic Distribution

The proposed project traffic was assigned to the surrounding roadway network. The directional distribution and assignment were based on qualitative knowledge of the project area, quantitative application of existing traffic patterns, and expected trip length.

The following general trip distribution was applied to the project trips associated with the proposed development:

- 20% to/from the north on I-95
- 3% to/from the north on US 17
- 30% to/from the south on I-95
- 20% to/from the south on US 17
- 27% to/from the east on US 278

Figure 4 (**Appendix**) shows the traffic distribution for the site in the study area.

6.0 Traffic Volumes

6.1 Existing Traffic

Peak hour intersection turning movement counts including vehicular, pedestrian, and heavy vehicle traffic were performed in March 2021 from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM at the following intersection:

- US 17 at John Smith Road

Due to the COVID-19 pandemic, traffic volumes and travel patterns have been impacted. All turning movement counts performed in March 2021 were adjusted using AM and PM peak hour adjustment factors of 1.15 and 1.02 for the AM and PM peak hours, respectively, as stated in the SCDOT District 6 *Traffic Impact Analyses during COVID-19 Pandemic (Update)* memorandum (February 5, 2021). These adjusted traffic volumes were used in the Existing conditions analysis.

Historic peak hour intersection turning movement counts including vehicular, pedestrian, and heavy vehicle traffic collected in July 2020 from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM were used for the intersection of US 17 at US 278. Due to the COVID-19 pandemic, turning movement counts performed in July 2020 were adjusted using AM and PM peak hour adjustment factors of 1.16 and 1.11 for the AM and PM peak hours, respectively, as stated in the SCDOT District 6 *Traffic Impact Analyses during COVID-19 Pandemic* memorandum (April 23. 2020). The counts were then grown to the Year 2021 by applying an overall growth rate of 4.0% per year (based on historic growth trends) for use in the Existing conditions analysis.

Historic peak hour intersection turning movement counts including vehicular, pedestrian, and heavy vehicle traffic collected in August 2019 from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM were used for the intersections of US 278 at I-95 NB On-Ramp/Off-Ramp and US 278 at I-95 SB On-Ramp/Off-Ramp. The counts were grown to the Year 2021 by applying an overall growth rate of 4.0% per year (based on historic growth trends) for use in the Existing conditions analysis.

The grown Existing peak hour intersection turning movement volumes are shown on **Figure 5 (Appendix)**. The turning movement count data is included in the **Appendix.**

6.2 2026 No Build Traffic

Historic growth is the increase in existing traffic volumes due to usage increases and non-specific growth throughout the area. An overall growth rate of 4.0% was applied to the study area in the analysis. In addition to this non-specific growth, projected traffic associated with the Inspired Living at Hardeeville development, which is currently in the planning process, was also included in the background traffic.

The 2026 No Build traffic volumes include existing traffic grown to the buildout year. **Figure 6** (**Appendix**) and **Figure 7** (**Appendix**) show the 2026 No Build AM and PM peak hour traffic volumes, respectively.

6.3 Project Traffic

The AM peak hour and PM peak hour projected project trips were assigned based on the trip distribution discussed in **Section 5.**

6.4 2026 Build Traffic

The 2026 total traffic volumes include the 2026 background traffic and the proposed development traffic at buildout. The 2026 AM and PM peak hour total traffic volumes are shown in **Figure 6** (**Appendix**) and **Figure 7** (**Appendix**), respectively.

Three 2026 Build conditions were studied: 2026 Build with no Improvements, 2026 Build with Improvements, and 2026 Build with improvements with the I-95 NB On-Ramp/Off-Ramp intersection signalized.

Intersection volume development worksheets are included in the **Appendix**.

7.0 Capacity Analysis

Capacity analyses were performed for the AM and PM peak hours in the Existing, 2026 No Build, and 2026 Build conditions (no improvements, improvements, improvements with signalization of US 278 at I-95 NB On-Ramp/Off Ramp) using the Synchro, Version 10, software to determine the operating characteristics of the adjacent roadway network and the impacts of the proposed project. The analyses were conducted with methodologies contained in the *Highway Capacity Manual, 6th Edition* (HCM 6) (Transportation Research Board, 2016). The Synchro analysis worksheets are provided in the **Appendix**.

Capacity of an intersection is defined as the maximum number of vehicles that can pass through an intersection during a specified time, typically an hour. Capacity is described by level of service (LOS) for the operating characteristics of an intersection. LOS is a qualitative measure that describes operational conditions and motorist perceptions within a traffic stream. HCM 6 defines six levels of service, LOS A through LOS F, with A being the best and F being the worst.

LOS for signalized intersections is determined by the overall intersection operations and is reflected in average delay per vehicle. LOS D or better is typically considered acceptable for signalized intersections.

LOS for a two-way stop-controlled (TWSC) intersection is determined by the delay of the poorest performing minor approach, as LOS is not defined for TWSC intersections as a whole. It is typical for minor stop-controlled side streets and driveways on major streets to experience longer delays at LOS E and LOS F during peak hours while the majority of the traffic moving through the corridor typically experiences little or no delay.

Capacity analyses were performed for the Existing, 2026 No Build, 2026 Build, 2026 Build with Improvements, and 2026 Build with Improvements with Signalization of US 278 at I-95 NB On-Ramp/Off Ramp AM and PM peak hour traffic conditions for the following intersections:

- US 17 at US 278 (unsignalized)
- US 278 at I-95 SB On-Ramp/Off-Ramp (signalized)

- US 278 at I-95 NB On-Ramp/Off Ramp (unsignalized)
- US 17 at John Smith Road (unsignalized)
- US 17 at Site Driveway #1 (unsignalized) (All 2026 Build conditions only)
- US 17 at Site Driveway #2 (unsignalized) (All 2026 Build conditions only)

Any peak hour factors (PHF) above 0.95 were adjusted to 0.95 in all conditions for the purposes of the analysis.

Any heavy vehicle percentages (HV%) below 2.0% were adjusted to 2.0% in all conditions for the purposes of the analysis. Due to the industrial nature of the development, a HV% of 20% was assumed at Site Driveway #1 and Site Driveway #2. The HV% was adjusted in the 2026 Build conditions at the study area intersections to reflect the higher percentage of expected heavy vehicle traffic due to the projected site traffic.

Table 2 summarizes LOS and control delay (average seconds of delay per vehicle) for the projected Existing, 2026 No Build, 2026 Build, 2026 Build with Improvements, and 2026 Build with Improvements with Signalization of US 278 at I-95 NB On-Ramp/Off Ramp AM and PM peak hour conditions at the study area intersections.

7.1 US 17 at US 278

As shown in **Table 2**, the unsignalized intersection of US 17 at US 278 currently operates acceptably at LOS B during the AM and PM peak hours. In the 2026 No Build conditions, the intersection is projected to continue to operate at LOS B during the AM and PM peak hour conditions. In the 2026 Build conditions, the intersection is projected to operate acceptably at LOS D during the AM peak hour and at LOS B during the PM peak hour.

7.2 US 278 at I-95 SB On-Ramp/Off-Ramp

This intersection is fully actuated and operates in free mode. To reflect the free operation, the cycle length and splits were optimized for the Existing, 2026 No Build, and 2026 Build AM and PM peak hour conditions. As shown in **Table 2**, the signalized intersection of US 278 at I-95 SB On-Ramp/Off-Ramp currently operates acceptably at LOS B during the AM peak hour and at LOS C during the PM peak hour. In the 2026 No Build conditions, the intersection is projected to operate acceptably at LOS C during the AM peak hour and at LOS D during the PM peak hour. In the 2026 Build conditions and 2026 Build with Improvements conditions, the intersection is projected to operate acceptably at LOS D during the AM peak hour and with elevated delay at LOS E during the PM peak hour.

In the 2026 Build with Improvements with Signalization of US 278 at I-95 NB On-Ramp/Off Ramp conditions, the intersection was updated to actuated coordinated conditions and coordinated with the I-95 NB On-Ramp/Off Ramp intersection. As shown in **Table 2**, the signalized intersection is projected to operate at LOS C in the AM peak hour and LOS D in the PM peak hour conditions.

Table 2:
Level of Service and Delay (average seconds per vehicle)

Intersection	Traffic Control [1]	Existing Conditions		2026 No Build Conditions		2026 Build Conditions		2026 Build with Improvements Conditions		2026 Build with Improv. with I-95 NB Off- Ramp Signalized Conditions	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
US 17 at US 278	U	B (11.8) – WB	B (10.4) – WB	B (14.2) – WB	B (11.6) – WB	D (32.8) – WB	B (13.4) – WB	Same as Build conditions	Same as Build conditions	Same as Build conditions	Same as Build conditions
US 278 at I-95 SB OnRamp/ Off-Ramp[2,3]	S	B (19.0)	C (21.9)	C (34.6)	D (50.7)	D (35.5)	E (63.5)	Same as Build conditions	Same as Build conditions	C (33.1)	D (52.0)
US 278 at I-95 NB On-Ramp/ Off-Ramp[3]	U	C (21.4) – NB	C (16.7) – NB	D (29.9) – NB	C (22.0) – NB	F (96.1) – NB	E (44.7) – NB	Same as Build conditions	Same as Build conditions	A (6.2)	A (5.4)
US 17 at John Smith Road[4]	U	F (115.8) – WB	D (27.0) – WB	F (**) – WB	F (95.0) – WB	F (**) – WB	F (137.3) – WB	F (**) – WB	F (68.0) – WB	Same as Build conditions w/ Impr.	Same as Build conditions w/ Impr.
US 17 at Site Driveway #1	U	N/A	N/A	N/A	N/A	B (13.1) – WB	B (13.1) – WB	Same as Build conditions	Same as Build conditions	Same as Build conditions	Same as Build conditions
US 17 at Site Driveway #2	U	N/A	N/A	N/A	N/A	B (12.5) – WB	B (11.7) – WB	Same as Build conditions	Same as Build conditions	Same as Build conditions	Same as Build conditions

N/A – Not Applicable

1. S = Signalized, U = Unsignalized
2. AM and PM peak hour cycle lengths and splits were optimized in all scenarios to reflect free, fully actuated operation. Minimum cycle length of 120 seconds assumed.
3. In the 2026 Build with Improvements with I-95 NB Off Ramp Signalized conditions, signalized intersections were coordinated, and cycle length was optimized.
4. (**) indicates delay exceeds 300 seconds

7.3 US 278 at I-95 NB On-Ramp/Off-Ramp

As shown in **Table 2**, the unsignalized intersection of US 278 at I-95 NB On-Ramp/Off-Ramp currently operates acceptably at LOS C during the AM and PM peak hour conditions. In the 2026 No Build conditions, the intersection is projected to operate acceptably at LOS D during the AM peak hour and at LOS C during the PM peak hour. In the 2026 Build conditions, the intersection is projected to operate with elevated delay at LOS F during the AM peak hour and at LOS E during the PM peak hour.

The 95th percentile queue is considered the maximum number of vehicles that will queue while waiting to complete their maneuver at the intersection. The maximum queue on the northbound approach (I-95 OffRamp) is expected to be approximately five vehicles during the AM peak hour.

In the 2026 Build with Improvements with Signalization of US 278 at I-95 NB On-Ramp/Off Ramp conditions, the intersection was updated to actuated coordinated conditions and coordinated with the I-95 SB On-Ramp/Off Ramp intersection. As shown in **Table 2**, the signalized intersection is projected to operate at LOS A in the AM and PM peak hour conditions.

Based on the results of the analysis, it is recommended that the intersection traffic volumes be monitored and perform traffic signal warrant analysis yearly or at a schedule requested by Jasper County and/or SCDOT. Once traffic signal warrants are met, it is recommended that the intersection be signalized intersection. Once traffic signal warrants are met, traffic signal timings with US 278 at I-95 SB On Ramp/Off-Ramp intersection should be optimized.

7.4 US 17 at John Smith Road

As shown in **Table 2**, the unsignalized intersection of US 17 at John Smith Road currently operates with elevated delay at LOS F during the AM peak hour and acceptably at LOS D during the PM peak hour. In the 2026 No Build and Build conditions, the intersection is projected to operate with elevated delay at LOS F during the AM and PM peak hour conditions. Due to the number of projected northbound right turns (background trips) on US 17 in the 2026 Build conditions, an exclusive northbound right-turn lane is recommended and was included in the 2026 Build with Improvements analysis. With the addition of the exclusive northbound right-turn lane, the intersection is projected to continue to operate with elevated delay at LOS F during the AM and PM peak hours in the 2026 Build with Improvements conditions however the delay is reduced.

7.5 US 17 at Site Driveway #1

SCDOT *Roadway Design Manual* (2017) guidelines were reviewed at the unsignalized intersection of US 17 at Site Driveway #1 to determine if criteria were met for the consideration of an exclusive northbound right-turn lane or an exclusive southbound left-turn lane on US 17. Based on a comparison of the projected 2026 Build AM and PM peak hour traffic volumes to the criteria, it was determined that an exclusive southbound left-turn lane on US 17 at Site Driveway #1 “should be considered” for a two-lane roadway and is therefore recommended. It was also determined that an exclusive northbound right-turn

lane on US 17 at Site Driveway #1 “may not be necessary” for a two-lane roadway and is therefore not recommended. The exclusive southbound left-turn lane was included in the 2026 Build analysis and the turn lane analysis charts are included in the **Appendix**.

As shown in **Table 2**, the unsignalized intersection of US 17 at Site Driveway #1 is projected to operate acceptably at LOS B during the AM and PM peak hours in the 2026 Build conditions.

7.6 US 17 at Site Driveway #2

SCDOT *Roadway Design Manual* (2017) guidelines were reviewed at the unsignalized intersection of US 17 at Site Driveway #2 to determine if criteria were met for the consideration of an exclusive northbound right-turn lane or an exclusive southbound left-turn lane on US 17. Based on a comparison of the projected 2026 Build AM and PM peak hour traffic volumes to the criteria, it was determined that an exclusive southbound left-turn lane on US 17 at Site Driveway #2 “should be considered” for a two-lane roadway and is therefore recommended. It was also determined that an exclusive northbound right-turn lane on US 17 at Site Driveway #2 “may not be necessary” for a two-lane roadway and is therefore not recommended. The exclusive southbound left-turn lane was included in the 2026 Build analysis and the turn lane analysis charts are included in the **Appendix**.

As shown in **Table 2**, the unsignalized intersection of US 17 at Site Driveway #2 is projected to operate acceptably at LOS B during the AM and PM peak hours in the 2026 Build conditions.

8.0 Conclusion

The 95 Logistics Center development is proposed to be located on US 17 in Jasper County, SC. The development is planned to consist of a maximum of 2.6 million square feet of industrial warehousing, and it is planned to have two new full access driveways on US 17. For the purposes of this TIA, the proposed development is assumed to be complete by 2026.

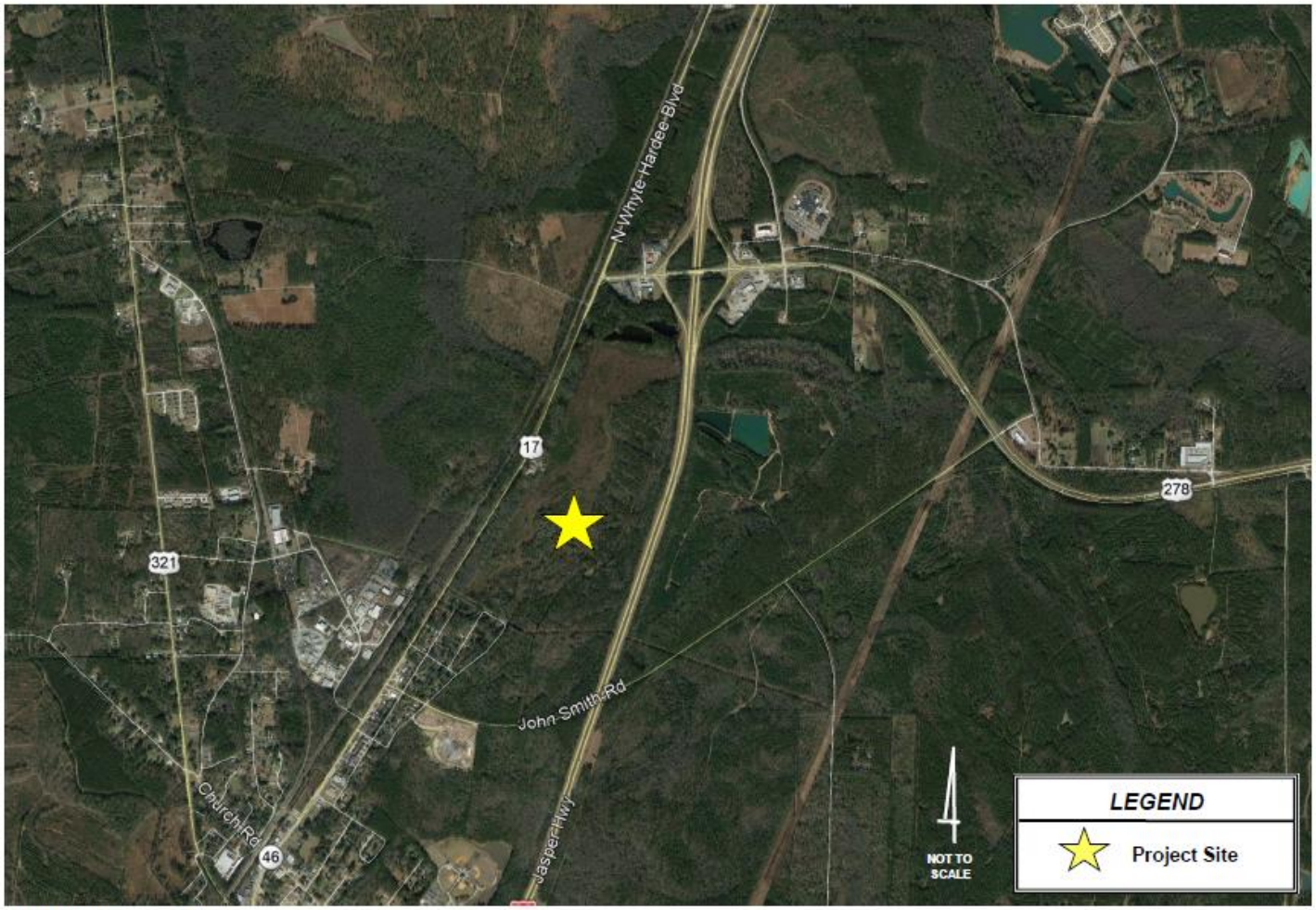
Based on results of the analysis the following transportation related improvements are recommended.

- US 17 at US 278 ○ Refresh all pavement markings and striping on all approaches of the intersection
- US 278 at I-95 SB On-Ramp/Off-Ramp ○ Optimize traffic signal timings
- US 278 at I-95 NB On-Ramp/Off Ramp ○ Monitor intersection traffic volumes and perform traffic signal warrant analysis yearly or at a schedule requested by Jasper County and/or SCDOT
    - ○ Signalize intersection once traffic signal warrants are met and coordinate signal timings with the US 278 at I-95 SB On-Ramp/Off-Ramp intersection
- US 17 at John Smith Road ○ Installation of an exclusive northbound right-turn lane on US 17

- US 17 at Site Driveway #1 ○ Installation of an exclusive southbound left-turn lane on US 17 ○ Installation of exclusive left- and right-turn exiting lanes on Site Driveway #1 ○ Location and design details to be coordinated with the SCDOT and Jasper County
- US 17 at Site Driveway #2 ○ Installation of an exclusive southbound left-turn lane on US 17 ○ Installation of exclusive left- and right-turn exiting lanes on Site Driveway #2 ○ Location and design details to be coordinated with SCDOT and Jasper County

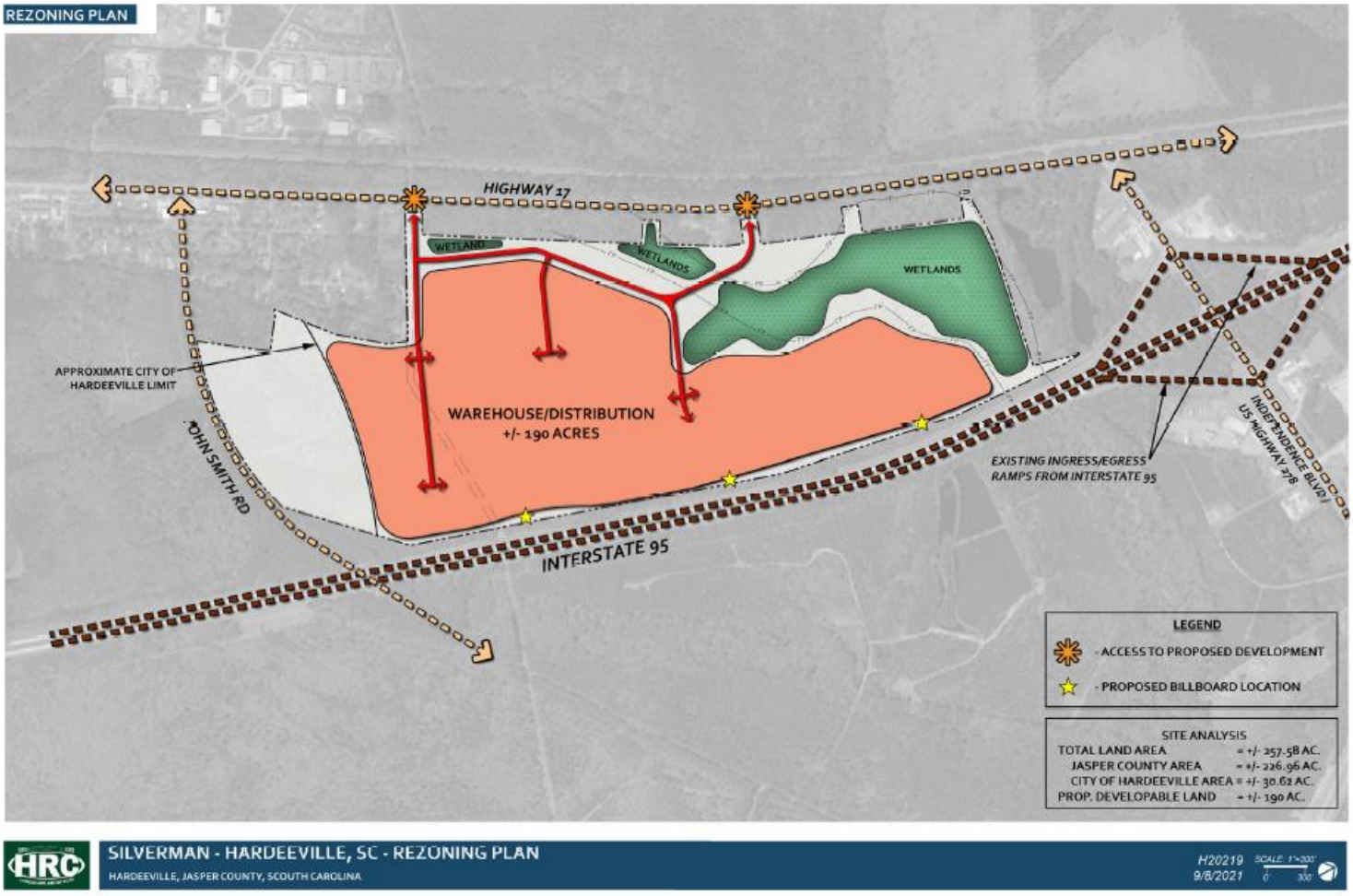
Results in this report are based solely on traffic studies and are considered input into final design considerations. The final design will be determined by the project engineer after other design elements (such as, but not limited to, utilities, stormwater, etc.) are taken into consideration.

Appendix

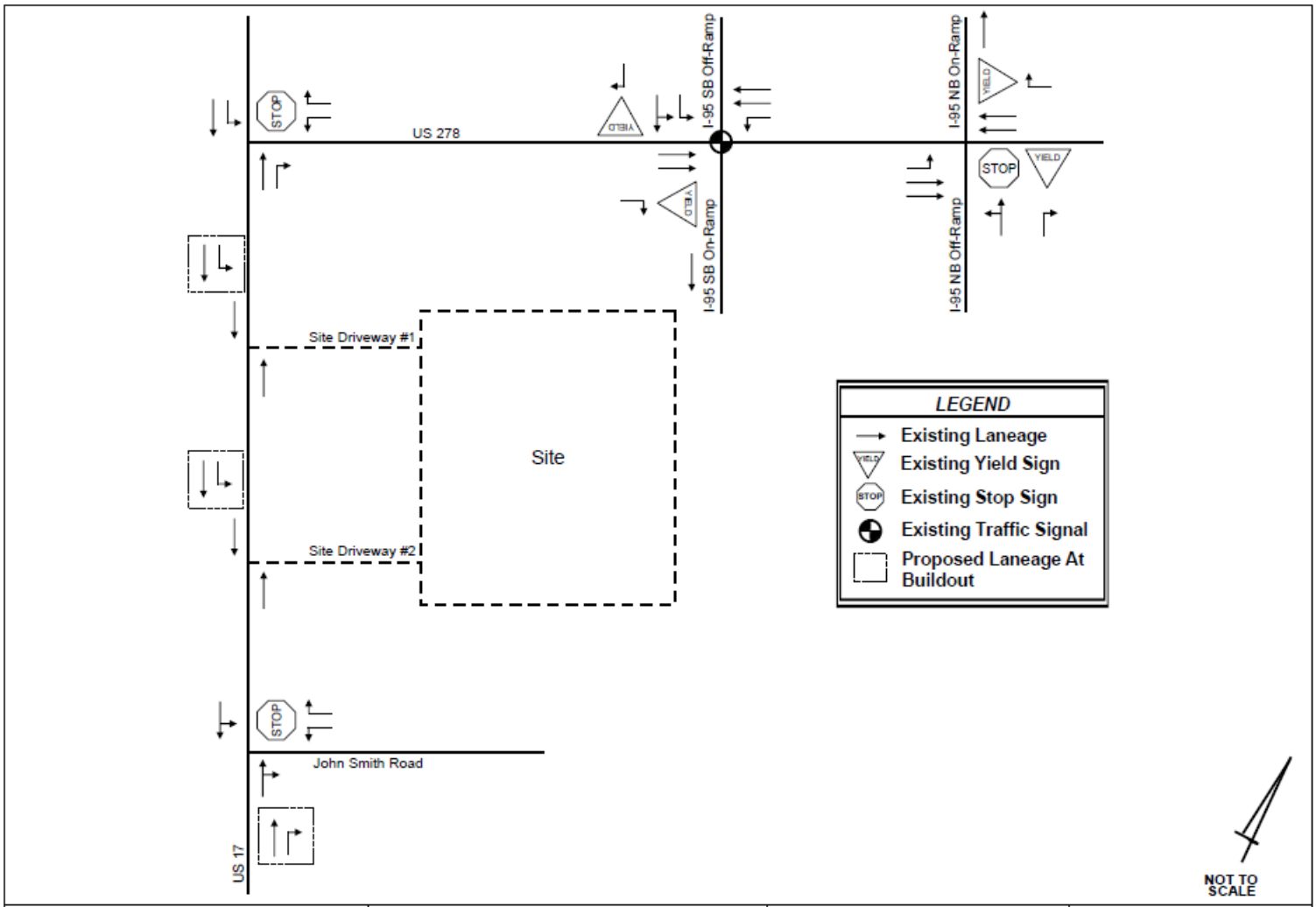


Aerial Source: Google Earth

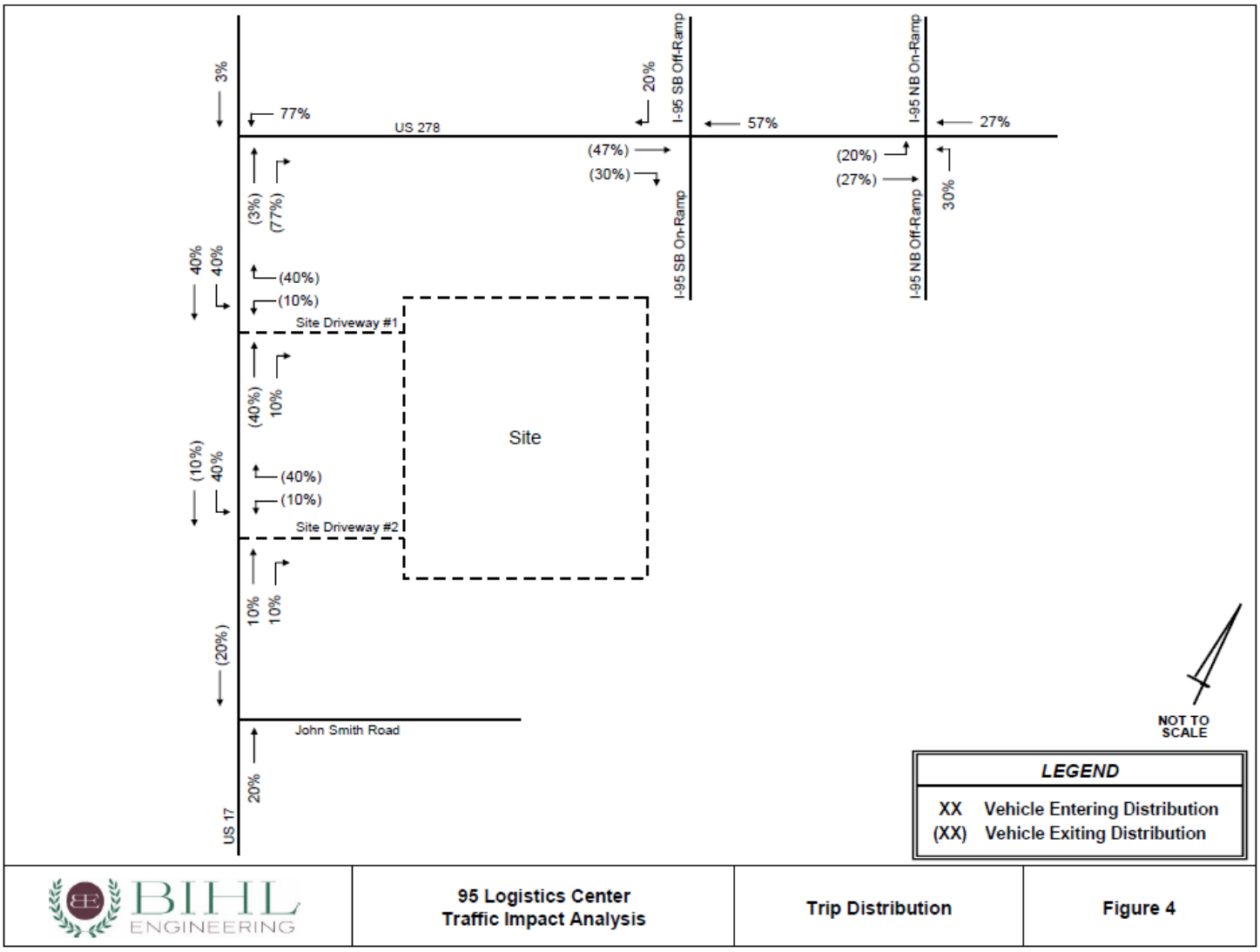
BIHL ENGINEERING	95 Logistics Center Traffic Impact Analysis	Site Location	Figure 1



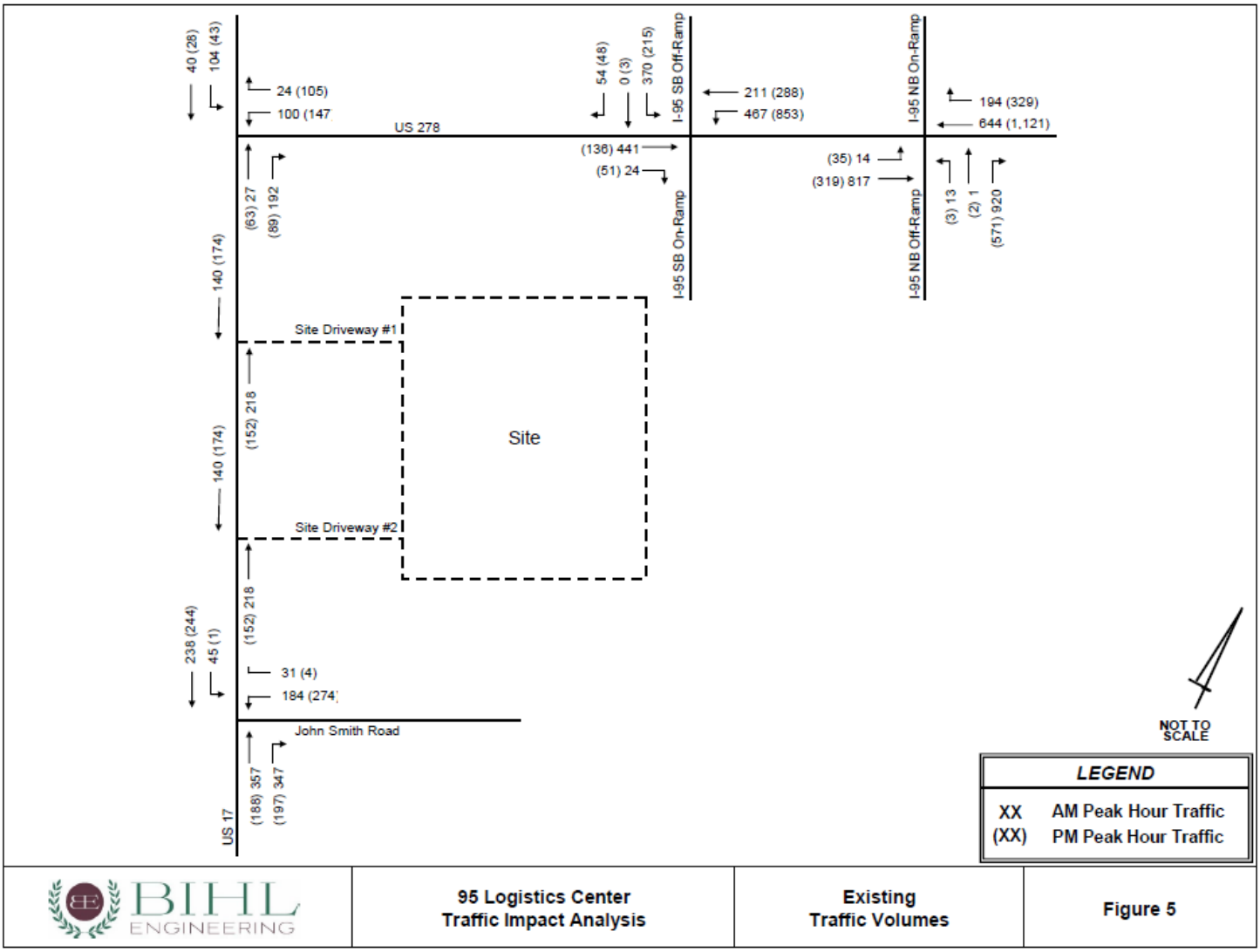
Source: HRC	**95 Logistics Center Traffic Impact Analysis**	**Conceptual Site Plan**	**Figure 2**



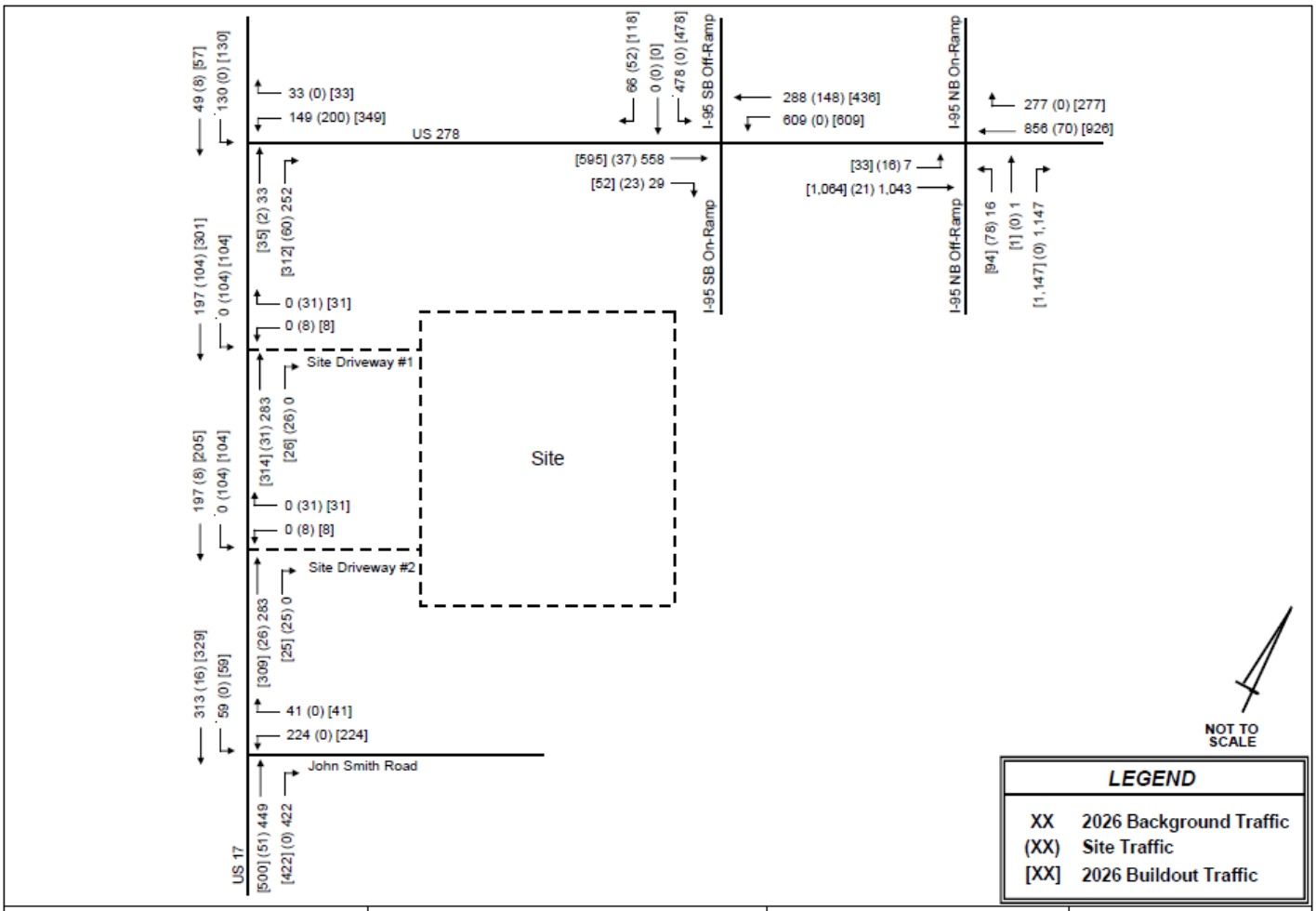
BIHL ENGINEERING	95 Logistics Center Traffic Impact Analysis	Existing Laneage	Figure 3



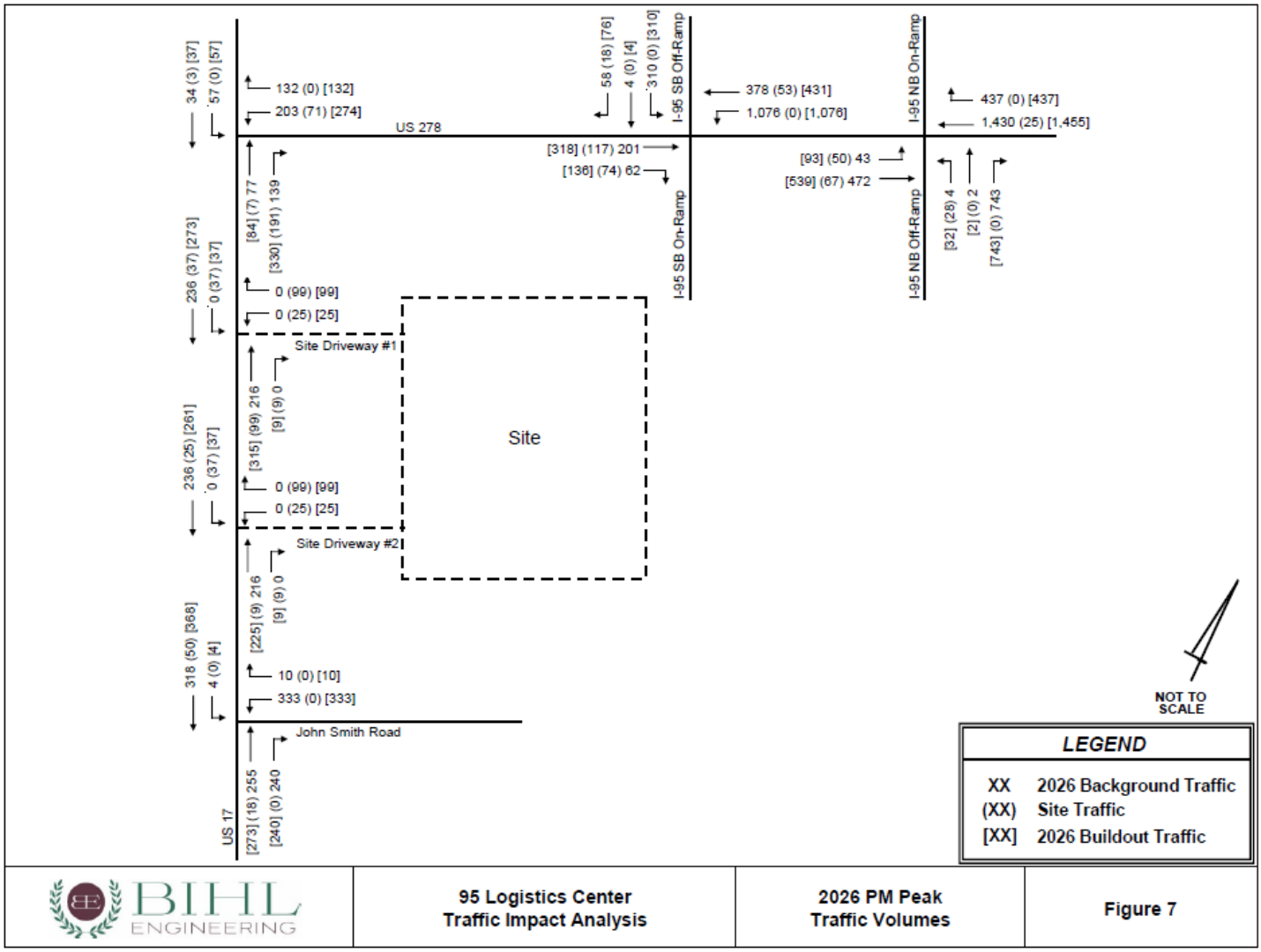
BIHL ENGINEERING	95 Logistics Center Traffic Impact Analysis	Trip Distribution	Figure 4



BIHL ENGINEERING	95 Logistics Center Traffic Impact Analysis	Existing Traffic Volumes	Figure 5



BIHL ENGINEERING	95 Logistics Center Traffic Impact Analysis	2026 AM Peak Traffic Volumes	Figure 6



BIHL ENGINEERING	95 Logistics Center Traffic Impact Analysis	2026 PM Peak Traffic Volumes	Figure 7

File Name : US 17 @ Hwy 278
Site Code :
Start Date : 7/21/2020
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Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	US 17 From North				Hwy 278 From East				US 17 From South				From West				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	21	9	0	0	16	0	4	0	0	2	49	0	0	0	0	0	101
07:15 AM	21	5	0	0	20	0	9	0	0	7	42	0	0	0	0	0	104
07:30 AM	27	10	0	0	24	0	4	0	0	6	28	0	0	0	0	0	99
07:45 AM	17	9	0	0	23	0	3	0	0	7	40	0	0	0	0	0	99
Total	86	33	0	0	83	0	20	0	0	22	159	0	0	0	0	0	403
08:00 AM	17	9	0	0	26	0	5	0	0	5	19	0	0	0	0	0	81
08:15 AM	13	9	0	0	24	0	8	0	0	10	19	0	0	0	0	0	83
08:30 AM	16	7	0	0	20	0	6	0	0	9	21	0	0	0	0	0	79
08:45 AM	13	7	0	0	18	0	3	0	0	9	26	0	0	0	0	0	76
Total	59	32	0	0	88	0	22	0	0	33	85	0	0	0	0	0	319
04:00 PM	10	6	0	0	29	0	22	0	0	18	26	0	0	0	0	0	111
04:15 PM	5	8	0	0	26	0	18	0	0	15	18	0	0	0	0	0	90
04:30 PM	13	3	0	0	36	0	18	0	0	11	17	0	0	0	0	0	98
04:45 PM	6	7	0	0	33	0	26	0	0	10	20	0	0	0	0	0	102
Total	34	24	0	0	124	0	84	0	0	54	81	0	0	0	0	0	401
05:00 PM	13	6	0	0	32	0	29	0	0	19	22	0	0	0	0	0	121
05:15 PM	6	3	0	0	26	0	15	0	0	18	18	0	0	0	0	0	86
05:30 PM	1	2	0	0	30	0	21	0	0	18	16	0	0	0	0	0	88
05:45 PM	6	1	0	0	35	0	21	0	0	10	18	0	0	0	0	0	91
Total	26	12	0	0	123	0	86	0	0	65	74	0	0	0	0	0	386
Grand Total	205	101	0	0	418	0	212	0	0	174	399	0	0	0	0	0	1509
Apprch %	67	33	0	0	66.3	0	33.7	0	0	30.4	69.6	0	0	0	0	0	
Total %	13.6	6.7	0	0	27.7	0	14	0	0	11.5	26.4	0	0	0	0	0	
Passenger Vehicles	195	78	0	0	384	0	210	0	0	166	366	0	0	0	0	0	1399
% Passenger Vehicles	95.1	77.2	0	0	91.9	0	99.1	0	0	95.4	91.7	0	0	0	0	0	92.7
Heavy Vehicles	10	23	0	0	34	0	2	0	0	8	33	0	0	0	0	0	110
% Heavy Vehicles	4.9	22.8	0	0	8.1	0	0.9	0	0	4.6	8.3	0	0	0	0	0	7.3
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name : US 17 @ Hwy 278
Site Code :
Start Date : 7/21/2020
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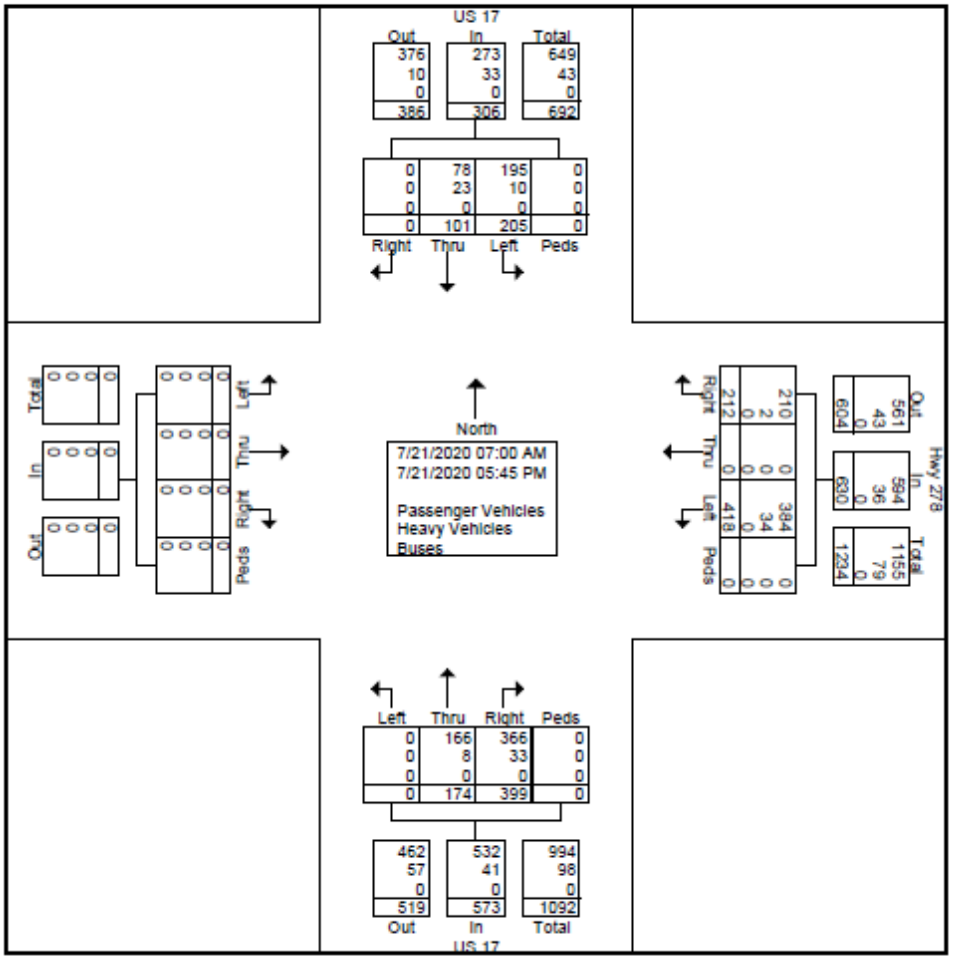

File Name : US 17 @ Hwy 278
Site Code :
Start Date : 7/21/2020
Page No : 3

	US 17 From North					Hwy 278 From East					US 17 From South					From West					
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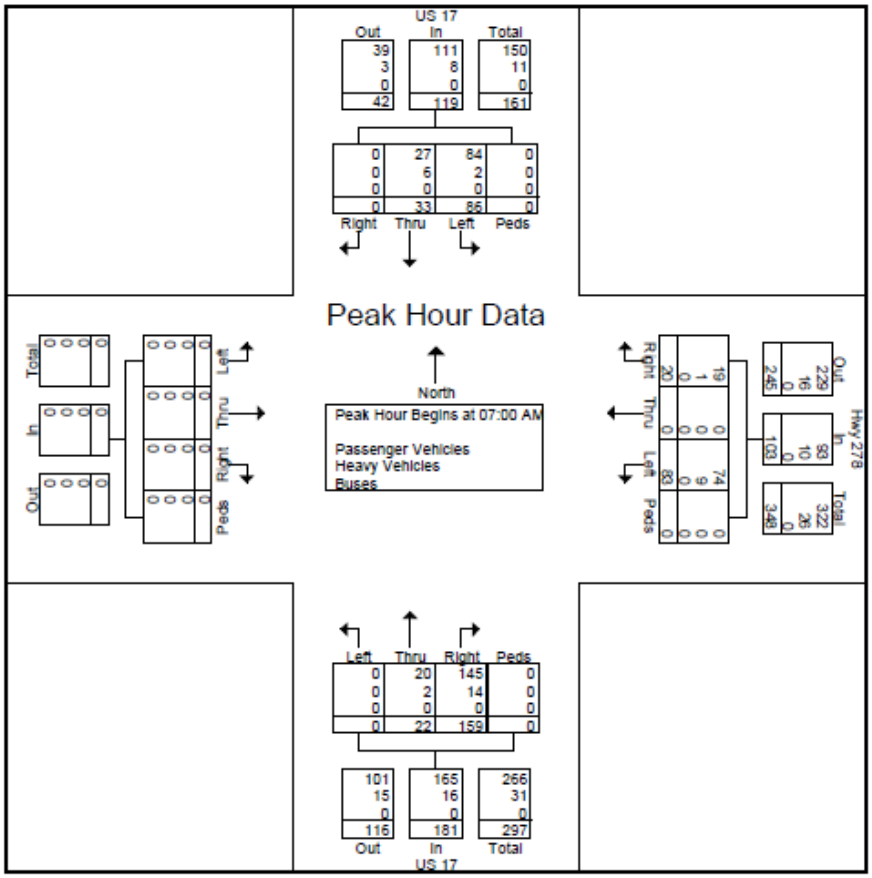
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	21	9	0	0	30	16	0	4	0	20	0	2	**49**	0	**51**	0	0	0	0	0	101
07:15 AM	21	5	0	0	26	20	0	**9**	0	**29**	0	**7**	42	0	49	0	0	0	0	0	**104**
07:30 AM	**27**	**10**	0	0	**37**	**24**	0	4	0	28	0	6	28	0	34	0	0	0	0	0	99
07:45 AM	17	9	0	0	26	23	0	3	0	26	0	7	40	0	47	0	0	0	0	0	99
Total Volume	86	33	0	0	119	83	0	20	0	103	0	22	159	0	181	0	0	0	0	0	403
% App. Total	72.3	27.7	0	0		80.6	0	19.4	0		0	12.2	87.8	0		0	0	0	0		
PHF	.796	.825	.000	.000	.804	.865	.000	.556	.000	.888	.000	.786	.811	.000	.887	.000	.000	.000	.000	.000	.969
Passenger Vehicles	84	27	0	0	111	74	0	19	0	93	0	20	145	0	165	0	0	0	0	0	369
% Passenger Vehicles																					
Heavy Vehicles	2	6	0	0	8	9	0	1	0	10	0	2	14	0	16	0	0	0	0	0	34
% Heavy Vehicles	2.3	18.2	0	0	6.7	10.8	0	5.0	0	9.7	0	9.1	8.8	0	8.8	0	0	0	0	0	8.4
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



File Name : US 17 @ Hwy 278
Site Code :
Start Date : 7/21/2020
Page No : 4

	US 17 From North					Hwy 278 From East					US 17 From South					From West					
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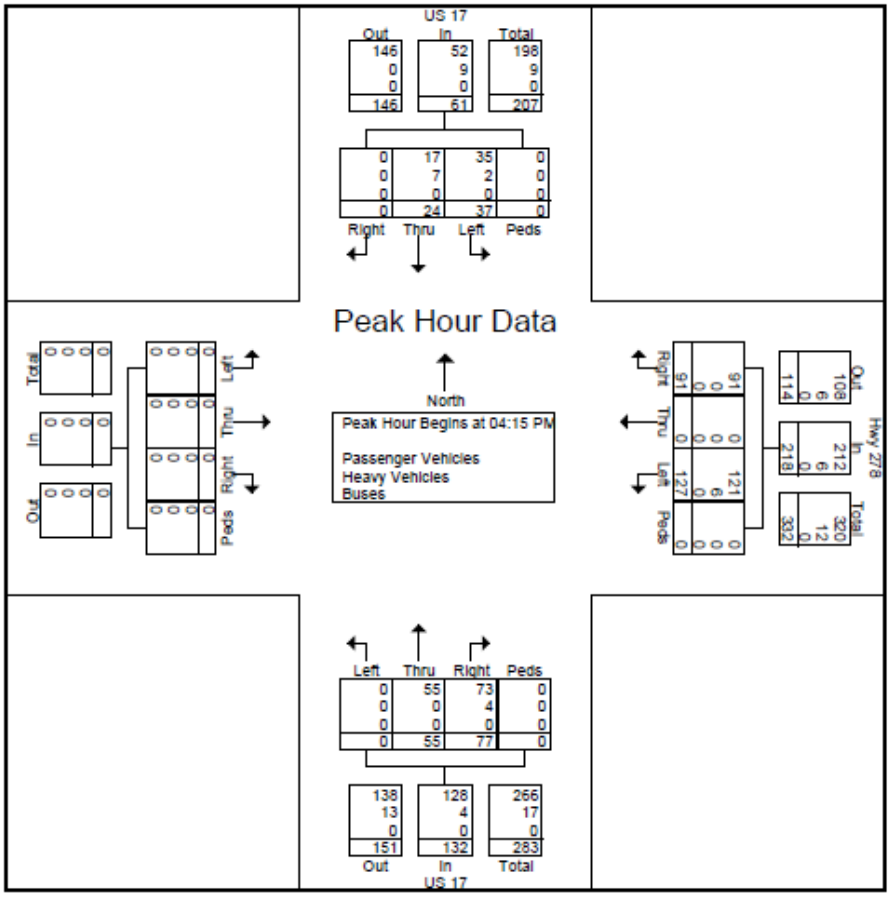
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	5	**8**	0	0	13	26	0	18	0	44	0	15	18	0	33	0	0	0	0	0	90
04:30 PM	**13**	3	0	0	16	**36**	0	18	0	54	0	11	17	0	28	0	0	0	0	0	98
04:45 PM	6	7	0	0	13	33	0	26	0	59	0	10	20	0	30	0	0	0	0	0	102
05:00 PM	13	6	0	0	**19**	32	0	**29**	0	**61**	0	**19**	**22**	0	**41**	0	0	0	0	0	**121**
Total Volume	37	24	0	0	61	127	0	91	0	218	0	55	77	0	132	0	0	0	0	0	411
% App. Total	60.7	39.3	0	0		58.3	0	41.7	0		0	41.7	58.3	0		0	0	0	0		
PHF	.712	.750	.000	.000	.803	.882	.000	.784	.000	.893	.000	.724	.875	.000	.805	.000	.000	.000	.000	.000	.849
Passenger Vehicles	35	17	0	0	52	121	0	91	0	212	0	55	73	0	128	0	0	0	0	0	392
% Passenger Vehicles																					
Heavy Vehicles	2	7	0	0	9	6	0	0	0	6	0	0	4	0	4	0	0	0	0	0	19
% Heavy Vehicles	5.4	29.2	0	0	14.8	4.7	0	0	0	2.8	0	0	5.2	0	3.0	0	0	0	0	0	4.6
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

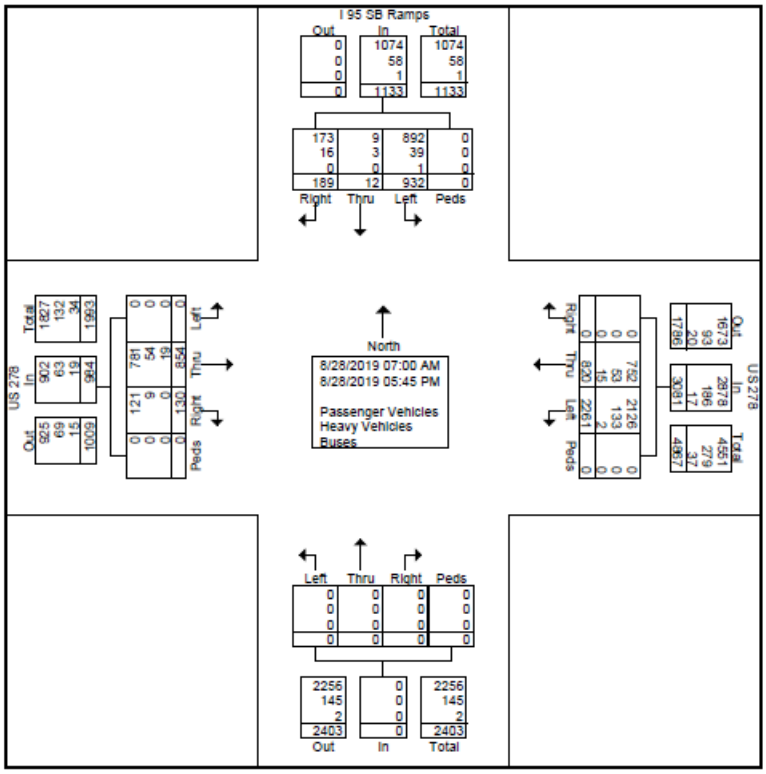


File Name : US 278 @ I 95 SB Ramps
Site Code :
Start Date : 8/28/2019
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

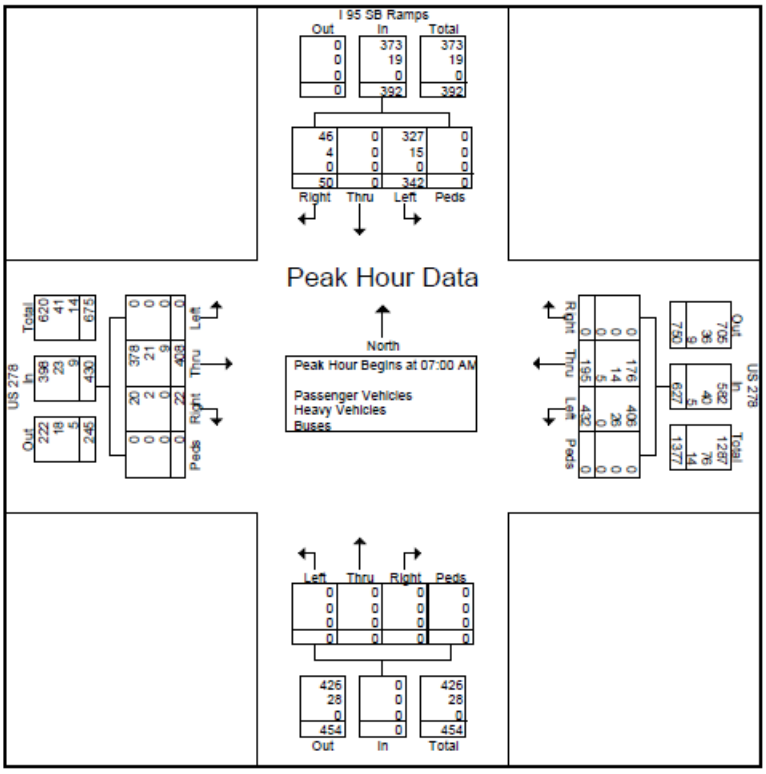
	I 95 SB Ramps From North				US 278 From East				From South				US 278 From West				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	78	0	17	0	92	45	0	0	0	0	0	0	0	121	8	0	361
07:15 AM	90	0	17	0	112	57	0	0	0	0	0	0	0	111	3	0	390
07:30 AM	99	0	8	0	114	65	0	0	0	0	0	0	0	92	2	0	380
07:45 AM	75	0	8	0	114	28	0	0	0	0	0	0	0	84	9	0	318
Total	342	0	50	0	432	195	0	0	0	0	0	0	0	408	22	0	1449
08:00 AM	68	1	12	0	95	33	0	0	0	0	0	0	0	61	9	0	279
08:15 AM	62	2	11	0	111	28	0	0	0	0	0	0	0	50	4	0	268
08:30 AM	54	0	15	0	108	29	0	0	0	0	0	0	0	51	3	0	260
08:45 AM	41	1	14	0	104	20	0	0	0	0	0	0	0	32	11	0	223
Total	225	4	52	0	418	110	0	0	0	0	0	0	0	194	27	0	1030
04:00 PM	43	2	11	0	146	52	0	0	0	0	0	0	0	33	7	0	294
04:15 PM	50	2	16	0	142	77	0	0	0	0	0	0	0	36	9	0	332
04:30 PM	45	1	9	0	168	63	0	0	0	0	0	0	0	28	11	0	325
04:45 PM	53	0	17	0	160	53	0	0	0	0	0	0	0	42	7	0	332
Total	191	5	53	0	616	245	0	0	0	0	0	0	0	139	34	0	1283
05:00 PM	38	2	9	0	220	80	0	0	0	0	0	0	0	26	13	0	388
05:15 PM	66	0	8	0	217	65	0	0	0	0	0	0	0	27	14	0	397
05:30 PM	42	1	10	0	191	68	0	0	0	0	0	0	0	31	13	0	356
05:45 PM	28	0	7	0	167	57	0	0	0	0	0	0	0	29	7	0	295
Total	174	3	34	0	795	270	0	0	0	0	0	0	0	113	47	0	1436
Grand Total	932	12	189	0	2261	820	0	0	0	0	0	0	0	854	130	0	5198
Apprch %	82.3	1.1	16.7	0	73.4	26.6	0	0	0	0	0	0	0	86.8	13.2	0	
Total %	17.9	0.2	3.6	0	43.5	15.8	0	0	0	0	0	0	0	16.4	2.5	0	
Passenger Vehicles	892	9	173	0	2126	752	0	0	0	0	0	0	0	781	121	0	4854
% Passenger Vehicles	95.7	75	91.5	0	94	91.7	0	0	0	0	0	0	0	91.5	93.1	0	93.4
Heavy Vehicles	39	3	16	0	133	53	0	0	0	0	0	0	0	54	9	0	307
% Heavy Vehicles	4.2	25	8.5	0	5.9	6.5	0	0	0	0	0	0	0	6.3	6.9	0	5.9
Buses	1	0	0	0	2	15	0	0	0	0	0	0	0	19	0	0	37
% Buses	0.1	0	0	0	0.1	1.8	0	0	0	0	0	0	0	2.2	0	0	0.7

File Name : US 278 @ I 95 SB Ramps
Site Code :
Start Date : 8/28/2019
Page No : 2



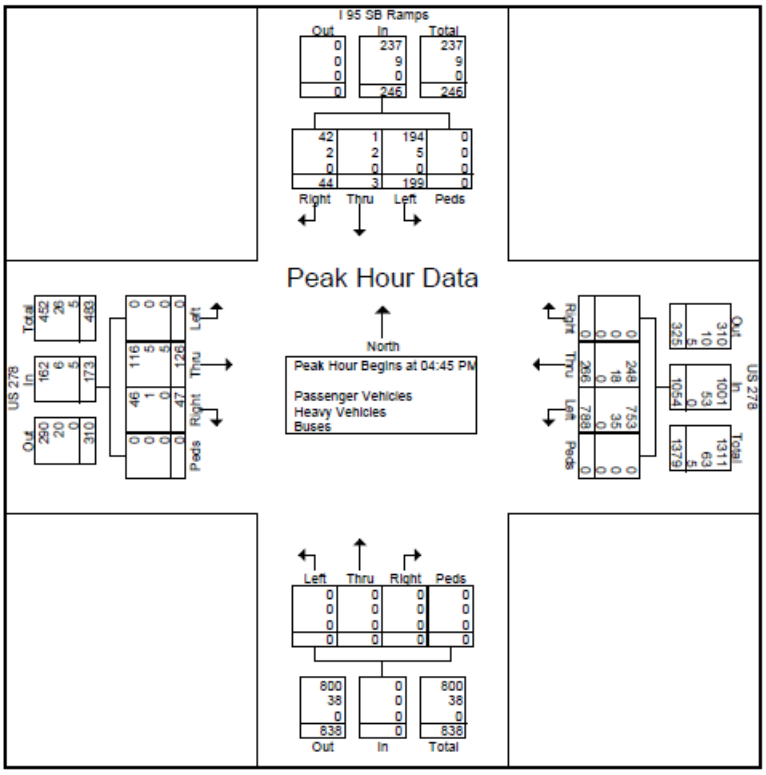
File Name : US 278 @ I 95 SB Ramps
Site Code :
Start Date : 8/28/2019
Page No : 3

	I 95 SB Ramps From North					US 278 From East					From South					US 278 From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	78	0	**17**	0	95	92	45	0	0	137	0	0	0	0	0	0	**121**	8	0	**129**	361
07:15 AM	90	0	17	0	**107**	112	57	0	0	169	0	0	0	0	0	0	111	3	0	114	**390**
07:30 AM	**99**	0	8	0	107	**114**	**65**	0	0	**179**	0	0	0	0	0	0	92	2	0	94	380
07:45 AM	75	0	8	0	83	114	28	0	0	142	0	0	0	0	0	0	84	**9**	0	93	318
Total Volume	342	0	50	0	392	432	195	0	0	627	0	0	0	0	0	0	408	22	0	430	1449
% App. Total	87.2	0	12.8	0		68.9	31.1	0	0		0	0	0	0		0	94.9	5.1	0		
PHF	.864	.000	.735	.000	.916	.947	.750	.000	.000	.876	.000	.000	.000	.000	.000	.000	.843	.611	.000	.833	.929
Passenger Vehicles	327	0	46	0	373	406	176	0	0	582	0	0	0	0	0	0	378	20	0	398	1353
% Passenger Vehicles																					
Heavy Vehicles	15	0	4	0	19	26	14	0	0	40	0	0	0	0	0	0	21	2	0	23	82
% Heavy Vehicles	4.4	0	8.0	0	4.8	6.0	7.2	0	0	6.4	0	0	0	0	0	0	5.1	9.1	0	5.3	5.7
Buses	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	9	0	0	9	14
% Buses	0	0	0	0	0	0	2.6	0	0	0.8	0	0	0	0	0	0	2.2	0	0	2.1	1.0



File Name : US 278 @ I 95 SB Ramps
Site Code :
Start Date : 8/28/2019
Page No : 4

	I 95 SB Ramps From North					US 278 From East					From South					US 278 From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	53	0	**17**	0	70	160	53	0	0	213	0	0	0	0	0	0	**42**	7	0	**49**	332
05:00 PM	38	**2**	9	0	49	**220**	**80**	0	0	**300**	0	0	0	0	0	0	26	13	0	39	388
05:15 PM	**66**	0	8	0	**74**	217	65	0	0	282	0	0	0	0	0	0	27	**14**	0	41	**397**
05:30 PM	42	1	10	0	53	191	68	0	0	259	0	0	0	0	0	0	31	13	0	44	356
Total Volume	199	3	44	0	246	788	266	0	0	1054	0	0	0	0	0	0	126	47	0	173	1473
% App. Total	80.9	1.2	17.9	0		74.8	25.2	0	0		0	0	0	0		0	72.8	27.2	0		
PHF	.754	.375	.647	.000	.831	.895	.831	.000	.000	.878	.000	.000	.000	.000	.000	.000	.750	.839	.000	.883	.928
Passenger Vehicles	194	1	42	0	237	753	248	0	0	1001	0	0	0	0	0	0	116	46	0	162	1400
% Passenger Vehicles																					
Heavy Vehicles	5	2	2	0	9	35	18	0	0	53	0	0	0	0	0	0	5	1	0	6	68
% Heavy Vehicles	2.5	66.7	4.5	0	3.7	4.4	6.8	0	0	5.0	0	0	0	0	0	0	4.0	2.1	0	3.5	4.6
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	5
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.0	0	0	2.9	0.3



SHORT COUNTS

File Name : US 278 @ I 95 NB Ramps
Site Code :
Start Date : 8/28/2019
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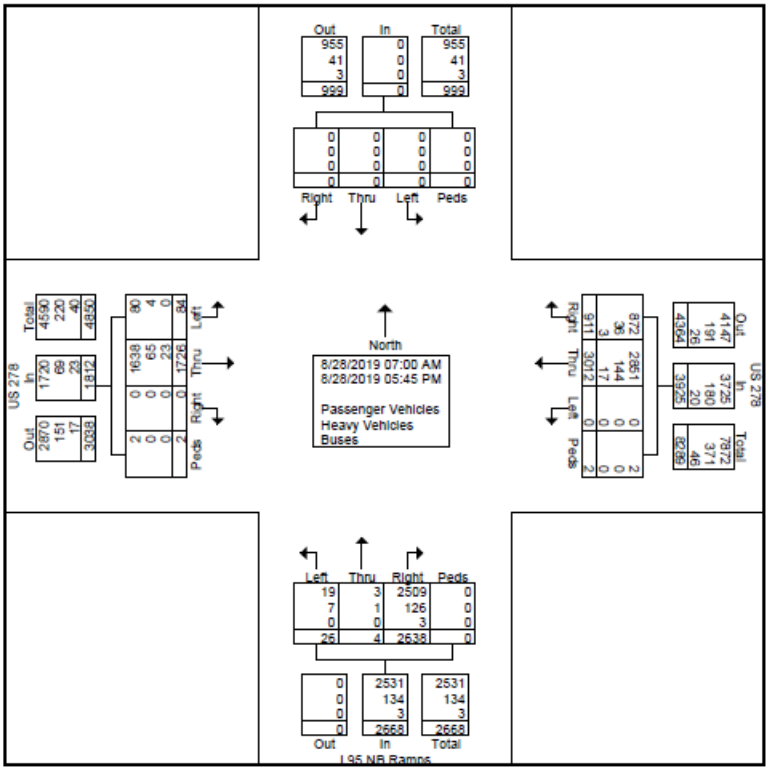
Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	From North				US 278 From East				I 95 NB Ramps From South				US 278 From West				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	0	0	0	0	0	128	43	0	1	1	177	0	1	185	0	0	536
07:15 AM	0	0	0	0	0	148	50	0	2	0	226	0	3	223	0	0	652
07:30 AM	0	0	0	0	0	179	56	0	4	0	218	0	4	187	0	0	648
07:45 AM	0	0	0	0	0	140	30	0	5	0	229	0	5	160	0	0	569
Total	0	0	0	0	0	595	179	0	12	1	850	0	13	755	0	0	2405
08:00 AM	0	0	0	0	0	118	32	0	3	0	226	0	4	124	0	0	507
08:15 AM	0	0	0	0	0	133	38	0	1	0	187	0	3	105	0	0	467
08:30 AM	0	0	0	0	0	140	45	0	0	0	205	0	3	111	0	0	504
08:45 AM	0	0	0	0	0	116	43	0	0	0	158	0	1	76	0	0	394
Total	0	0	0	0	0	507	158	0	4	0	776	0	11	416	0	0	1872
04:00 PM	0	0	0	0	0	207	62	0	2	1	106	0	6	61	0	0	445
04:15 PM	0	0	0	0	0	210	69	0	0	0	142	0	11	80	0	0	512
04:30 PM	0	0	0	0	0	222	75	0	3	0	123	0	5	70	0	0	498
04:45 PM	0	0	0	0	0	215	60	0	1	1	147	0	13	89	0	1	527
Total	0	0	0	0	0	854	266	0	6	2	518	0	35	300	0	1	1982
05:00 PM	0	0	0	0	0	281	74	0	1	0	145	0	5	48	0	0	554
05:15 PM	0	0	0	0	0	285	76	2	1	1	129	0	9	86	0	1	590
05:30 PM	0	0	0	0	0	255	94	0	0	0	107	0	5	72	0	0	533
05:45 PM	0	0	0	0	0	235	64	0	2	0	113	0	6	49	0	0	469
Total	0	0	0	0	0	1056	308	2	4	1	494	0	25	255	0	1	2146
Grand Total	0	0	0	0	0	3012	911	2	26	4	2638	0	84	1726	0	2	8405
Apprch %	0	0	0	0	0	76.7	23.2	0.1	1	0.1	98.9	0	4.6	95.3	0	0.1	
Total %	0	0	0	0	0	35.8	10.8	0	0.3	0	31.4	0	1	20.5	0	0	
Passenger Vehicles	0	0	0	0	0	2851	872	2	19	3	2509	0	80	1638	0	2	7976
% Passenger Vehicles	0	0	0	0	0	94.7	95.7	100	73.1	75	95.1	0	95.2	94.9	0	100	94.9
Heavy Vehicles	0	0	0	0	0	144	36	0	7	1	126	0	4	65	0	0	383
% Heavy Vehicles	0	0	0	0	0	4.8	4	0	26.9	25	4.8	0	4.8	3.8	0	0	4.6
Buses	0	0	0	0	0	17	3	0	0	0	3	0	0	23	0	0	46
% Buses	0	0	0	0	0	0.6	0.3	0	0	0	0.1	0	0	1.3	0	0	0.5

SHORT COUNTS

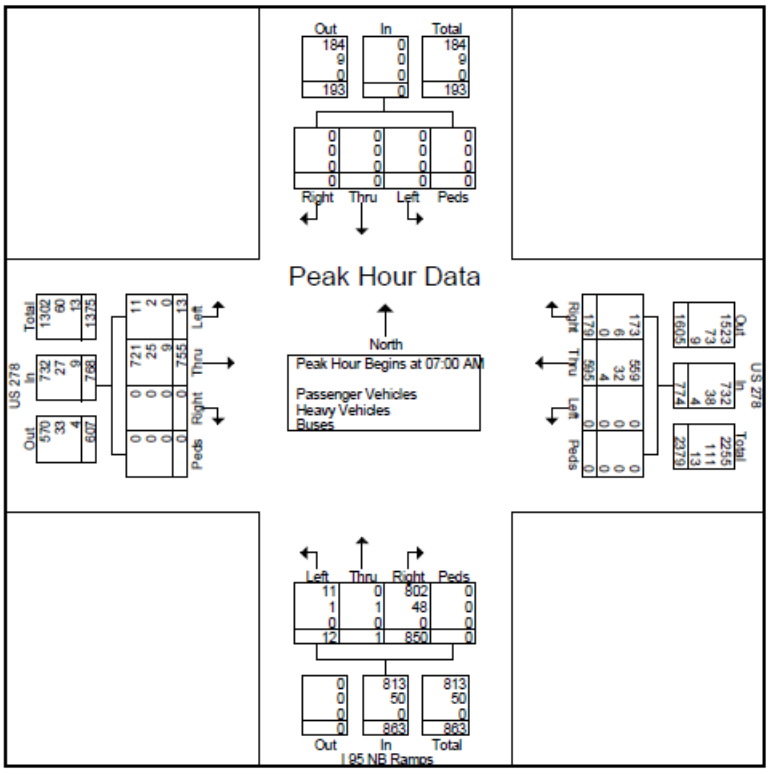
File Name : US 278 @ I 95 NB Ramps
Site Code :
Start Date : 8/28/2019
Page No : 2



SHORT COUNTS

File Name : US 278 @ I 95 NB Ramps
Site Code :
Start Date : 8/28/2019
Page No : 3

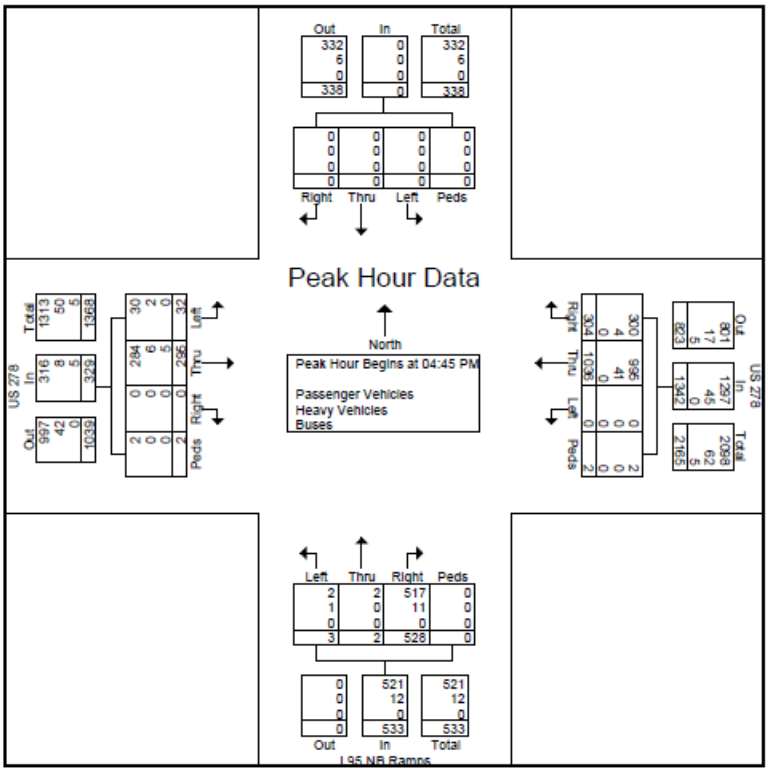
	From North					US 278 From East					I 95 NB Ramps From South					US 278 From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	128	43	0	171	1	**1**	177	0	179	1	185	0	0	186	536
07:15 AM	0	0	0	0	0	0	148	50	0	198	2	0	226	0	228	3	**223**	0	0	**226**	**652**
07:30 AM	0	0	0	0	0	0	**179**	**56**	0	**235**	4	0	218	0	222	4	187	0	0	191	648
07:45 AM	0	0	0	0	0	0	140	30	0	170	**5**	0	**229**	0	**234**	**5**	160	0	0	165	569
Total Volume	0	0	0	0	0	0	595	179	0	774	12	1	850	0	863	13	755	0	0	768	2405
% App. Total	0	0	0	0		0	76.9	23.1	0		1.4	0.1	98.5	0		1.7	98.3	0	0		
PHF	.000	.000	.000	.000	.000	.000	.831	.799	.000	.823	.600	.250	.928	.000	.922	.650	.846	.000	.000	.850	.922
Passenger Vehicles	0	0	0	0	0	0	559	173	0	732	11	0	802	0	813	11	721	0	0	732	2277
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	32	6	0	38	1	1	48	0	50	2	25	0	0	27	115
% Heavy Vehicles	0	0	0	0	0	0	5.4	3.4	0	4.9	8.3	100	5.6	0	5.8	15.4	3.3	0	0	3.5	4.8
Buses	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	9	0	0	9	13
% Buses	0	0	0	0	0	0	0.7	0	0	0.5	0	0	0	0	0	0	1.2	0	0	1.2	0.5



SHORT COUNTS

File Name : US 278 @ I 95 NB Ramps
Site Code :
Start Date : 8/28/2019
Page No : 4

	From North					US 278 From East					I 95 NB Ramps From South					US 278 From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	0	215	60	0	275	**1**	**1**	**147**	0	**149**	**13**	**89**	0	**1**	**103**	527
05:00 PM	0	0	0	0	0	0	281	74	0	355	1	0	145	0	146	5	48	0	0	53	554
05:15 PM	0	0	0	0	0	0	**285**	76	**2**	**363**	1	1	129	0	131	9	86	0	1	96	**590**
05:30 PM	0	0	0	0	0	0	255	**94**	0	349	0	0	107	0	107	5	72	0	0	77	533
Total Volume	0	0	0	0	0	0	1036	304	2	1342	3	2	528	0	533	32	295	0	2	329	2204
% App. Total	0	0	0	0		0	77.2	22.7	0.1		0.6	0.4	99.1	0		9.7	89.7	0	0.6		
PHF	.000	.000	.000	.000	.000	.000	.909	.809	.250	.924	.750	.500	.898	.000	.894	.615	.829	.000	.500	.799	.934
Passenger Vehicles	0	0	0	0	0	0	995	300	2	1297	2	2	517	0	521	30	284	0	2	316	2134
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	41	4	0	45	1	0	11	0	12	2	6	0	0	8	65
% Heavy Vehicles	0	0	0	0	0	0	4.0	1.3	0	3.4	33.3	0	2.1	0	2.3	6.3	2.0	0	0	2.4	2.9
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	5
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7	0	0	1.5	0.2



SHORT COUNTS

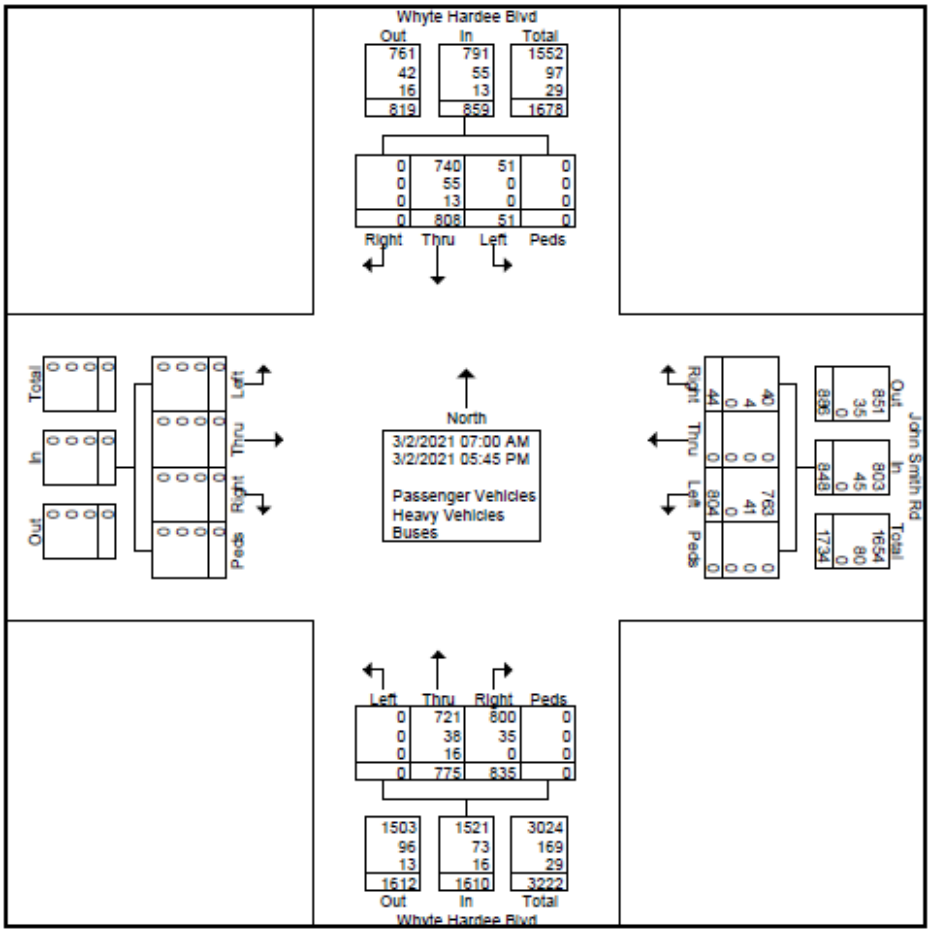
File Name : John Smith Rd @ Whyte Hardee Blvd
Site Code :
Start Date : 3/2/2021
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Whyte Hardee Blvd From North				John Smith Rd From East				Whyte Hardee Blvd From South				From West				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	5	44	0	0	27	0	1	0	0	89	75	0	0	0	0	0	241
07:15 AM	16	55	0	0	20	0	1	0	0	81	76	0	0	0	0	0	249
07:30 AM	7	59	0	0	48	0	16	0	0	75	83	0	0	0	0	0	288
07:45 AM	11	49	0	0	65	0	9	0	0	65	68	0	0	0	0	0	267
Total	39	207	0	0	160	0	27	0	0	310	302	0	0	0	0	0	1045
08:00 AM	3	37	0	0	42	0	3	0	0	43	45	0	0	0	0	0	173
08:15 AM	4	35	0	0	31	0	1	0	0	38	39	0	0	0	0	0	148
08:30 AM	1	22	0	0	26	0	4	0	0	35	57	0	0	0	0	0	145
08:45 AM	2	33	0	0	35	0	2	0	0	27	42	0	0	0	0	0	141
Total	10	127	0	0	134	0	10	0	0	143	183	0	0	0	0	0	607
04:00 PM	1	72	0	0	59	0	0	0	0	33	43	0	0	0	0	0	208
04:15 PM	0	51	0	0	66	0	0	0	0	34	40	0	0	0	0	0	191
04:30 PM	0	67	0	0	71	0	3	0	0	37	39	0	0	0	0	0	217
04:45 PM	1	53	0	0	67	0	0	0	0	44	50	0	0	0	0	0	215
Total	2	243	0	0	263	0	3	0	0	148	172	0	0	0	0	0	831
05:00 PM	0	64	0	0	59	0	1	0	0	55	59	0	0	0	0	0	238
05:15 PM	0	55	0	0	72	0	0	0	0	48	45	0	0	0	0	0	220
05:30 PM	0	59	0	0	66	0	0	0	0	34	36	0	0	0	0	0	195
05:45 PM	0	53	0	0	50	0	3	0	0	37	38	0	0	0	0	0	181
Total	0	231	0	0	247	0	4	0	0	174	178	0	0	0	0	0	834
Grand Total	51	808	0	0	804	0	44	0	0	775	835	0	0	0	0	0	3317
Apprch %	5.9	94.1	0	0	94.8	0	5.2	0	0	48.1	51.9	0	0	0	0	0	
Total %	1.5	24.4	0	0	24.2	0	1.3	0	0	23.4	25.2	0	0	0	0	0	
Passenger Vehicles	51	740	0	0	763	0	40	0	0	721	800	0	0	0	0	0	3115
% Passenger Vehicles	100	91.6	0	0	94.9	0	90.9	0	0	93	95.8	0	0	0	0	0	93.9
Heavy Vehicles	0	55	0	0	41	0	4	0	0	38	35	0	0	0	0	0	173
% Heavy Vehicles	0	6.8	0	0	5.1	0	9.1	0	0	4.9	4.2	0	0	0	0	0	5.2
Buses	0	13	0	0	0	0	0	0	0	16	0	0	0	0	0	0	29
% Buses	0	1.6	0	0	0	0	0	0	0	2.1	0	0	0	0	0	0	0.9

SHORT COUNTS

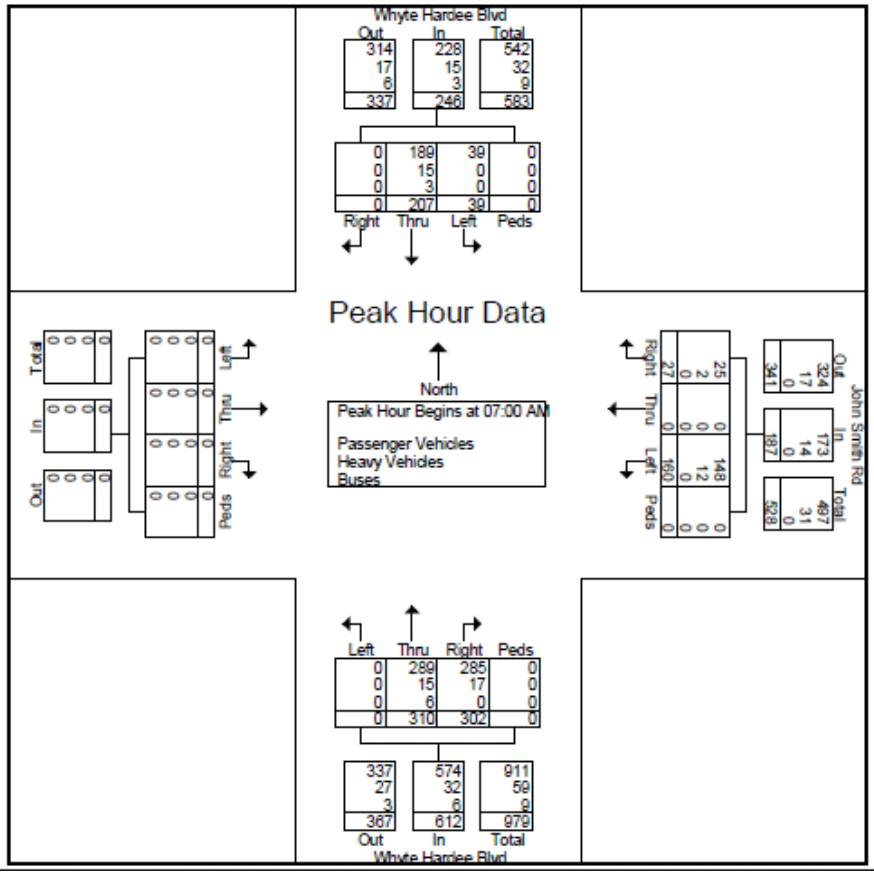
File Name : John Smith Rd @ Whyte Hardee Blvd
Site Code :
Start Date : 3/2/2021
Page No : 2



SHORT COUNTS

File Name : John Smith Rd @ Whyte Hardee Blvd
Site Code :
Start Date : 3/2/2021
Page No : 3

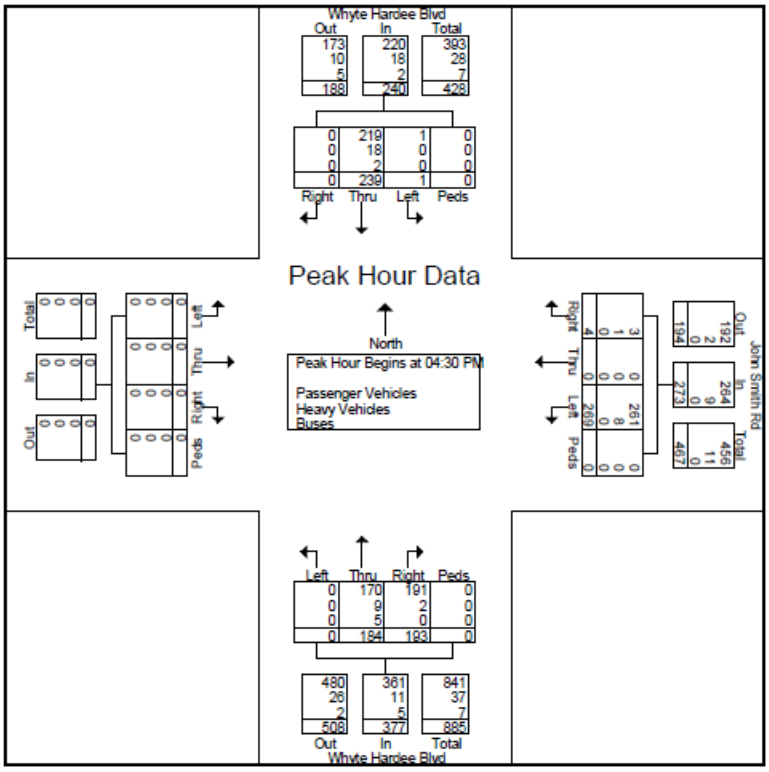
	Whyte Hardee Blvd From North					John Smith Rd From East					Whyte Hardee Blvd From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	5	44	0	0	49	27	0	1	0	28	0	89	75	0	164	0	0	0	0	0	241
07:15 AM	16	55	0	0	71	20	0	1	0	21	0	81	76	0	157	0	0	0	0	0	249
07:30 AM	7	59	0	0	66	48	0	16	0	64	0	75	83	0	158	0	0	0	0	0	288
07:45 AM	11	49	0	0	60	65	0	9	0	74	0	65	68	0	133	0	0	0	0	0	267
Total Volume	39	207	0	0	246	160	0	27	0	187	0	310	302	0	612	0	0	0	0	0	1045
% App. Total	15.9	84.1	0	0		85.6	0	14.4	0		0	50.7	49.3	0		0	0	0	0		
PHF	.609	.877	.000	.000	.866	.615	.000	.422	.000	.632	.000	.871	.910	.000	.933	.000	.000	.000	.000	.000	.907
Passenger Vehicles	39	189	0	0	228	148	0	25	0	173	0	269	265	0	574	0	0	0	0	0	975
% Passenger Vehicles		91.3				92.5		92.6				93.2	94.4								
Heavy Vehicles	0	15	0	0	15	12	0	2	0	14	0	15	17	0	32	0	0	0	0	0	61
% Heavy Vehicles	0	7.2	0	0	6.1	7.5	0	7.4	0	7.5	0	4.8	5.6	0	5.2	0	0	0	0	0	5.8
Buses	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	9
% Buses	0	1.4	0	0	1.2	0	0	0	0	0	0	1.9	0	0	1.0	0	0	0	0	0	0.9



SHORT COUNTS

File Name : John Smith Rd @ Whyte Hardee Blvd
Site Code :
Start Date : 3/2/2021
Page No : 4

	Whyte Hardee Blvd From North					John Smith Rd From East					Whyte Hardee Blvd From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	67	0	0	67	71	0	3	0	74	0	37	39	0	76	0	0	0	0	0	217
04:45 PM	1	53	0	0	54	67	0	0	0	67	0	44	50	0	94	0	0	0	0	0	215
05:00 PM	0	64	0	0	64	59	0	1	0	60	0	55	59	0	114	0	0	0	0	0	238
05:15 PM	0	55	0	0	55	72	0	0	0	72	0	48	45	0	93	0	0	0	0	0	220
Total Volume	1	239	0	0	240	269	0	4	0	273	0	184	193	0	377	0	0	0	0	0	890
% App. Total	0.4	99.6	0	0		98.5	0	1.5	0		0	48.8	51.2	0		0	0	0	0		
PHF	.250	.892	.000	.000	.896	.934	.000	.333	.000	.922	.000	.836	.818	.000	.827	.000	.000	.000	.000	.000	.935
Passenger Vehicles	1	219	0	0	220	261	0	3	0	264	0	170	191	0	361	0	0	0	0	0	845
% Passenger Vehicles		91.6				97.0		75.0				92.4	99.0								
Heavy Vehicles	0	18	0	0	18	8	0	1	0	9	0	9	2	0	11	0	0	0	0	0	38
% Heavy Vehicles	0	7.5	0	0	7.5	3.0	0	25.0	0	3.3	0	4.9	1.0	0	2.9	0	0	0	0	0	4.3
Buses	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
% Buses	0	0.8	0	0	0.8	0	0	0	0	0	0	2.7	0	0	1.3	0	0	0	0	0	0.8



INTERSECTION VOLUME DEVELOPMENT
95 Logistics Center
US 17 at US 278
AM PEAK HOUR (7:00 AM to 8:00 AM)

Description	US 17 Northbound			US 17 Southbound			- Eastbound			US 278 Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw 2020 AM Volumes	0	22	159	86	33	0	0	0	0	83	0	20
Grown Existing 2021 Traffic Count Volumes with 1.16 COVID Adjustment Factor Applied[1]	0	27	192	104	40	0	0	0	0	100	0	24
Pedestrians		0			0			0			0	
Heavy Vehicle %		8.8%			6.7%			0.0%			9.7%	
Peak Hour Factor		0.89			0.80			0.00			0.89	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	0	18	3	0	0	0	0	0	27	0	4
2026 Background Traffic	0	33	252	130	49	0	0	0	0	149	0	33
Trip Distribution												
New Trips IN					3%					77%		
New Trips OUT		3%	77%									
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	2	60	0	8	0	0	0	0	200	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	2	60	0	8	0	0	0	0	200	0	0
2026 Buildout Total	**0**	**35**	**312**	**130**	**57**	**0**	**0**	**0**	**0**	**349**	**0**	**33**

1. Traffic counts collected in July 2020 and adjusted by 1.16 COVID factor based on SCDOT guidance and 4% per year growth rate

PM PEAK HOUR (4:15 PM to 5:15 PM)

Description	US 17 Northbound			US 17 Southbound			- Eastbound			US 278 Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw 2020 PM Volumes	0	55	77	37	24	0	0	0	0	127	0	91
Grown Existing 2021 Traffic Count Volumes with 1.11 COVID Adjustment Factor Applied[1]	0	63	89	43	28	0	0	0	0	147	0	105
Pedestrians		0			0			0			0	
Heavy Vehicle %		3% (9.5%)			14.8%			0.0%			2.8% (4.7%)	
Peak Hour Factor		0.81			0.80			0.00			0.89	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	0	31	5	0	0	0	0	0	24	0	4
2026 Background Traffic	0	77	139	57	34	0	0	0	0	203	0	132
Trip Distribution												
New Trips IN					3%					77%		
New Trips OUT		3%	77%									
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	7	191	0	3	0	0	0	0	71	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	7	191	0	3	0	0	0	0	71	0	0
2026 Buildout Total	**0**	**84**	**330**	**57**	**37**	**0**	**0**	**0**	**0**	**274**	**0**	**132**

1. Traffic counts collected in July 2020 and adjusted by 1.11 COVID factor based on SCDOT guidance and 4% per year growth rate

1/11/2022 2:56

INTERSECTION VOLUME DEVELOPMENT
95 Logistics Center
US 278 at I-95 Southbound Ramp
AM PEAK HOUR (7:00 AM to 8:00 AM)

Description	- Northbound			I-95 Southbound Ramp Southbound			US 278 Eastbound			US 278 Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw 2019 AM Volumes	0	0	0	342	0	50	0	408	22	432	195	0
Grown Existing 2021 AM Volumes	0	0	0	370	0	54	0	441	24	467	211	0
Pedestrians		0			0			0			0	
Heavy Vehicle %		0.0%			4.8%			7.4% (8.3%)			7.2%	
Peak Hour Factor		0.00			0.92			0.83			0.88	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	0	0	28	0	0	0	21	0	41	31	0
2026 Background Traffic	0	0	0	478	0	66	0	558	29	609	288	0
Trip Distribution												
New Trips IN						20%					57%	
New Trips OUT								47%	30%			
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	0	0	0	0	52	0	37	23	0	148	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	0	52	0	37	23	0	148	0
2026 Buildout Total	**0**	**0**	**0**	**478**	**0**	**118**	**0**	**595**	**52**	**609**	**436**	**0**

PM PEAK HOUR (4:45 PM to 5:45 PM)

Description	- Northbound			I-95 Southbound Ramp Southbound			US 278 Eastbound			US 278 Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw 2019 PM Volumes	0	0	0	199	3	44	0	126	47	788	266	0
Grown Existing 2021 PM Volumes	0	0	0	215	3	48	0	136	51	853	288	0
Pedestrians		0			0			0			0	
Heavy Vehicle %		0.0%			3.7%			6.4% (10.9%)			5.0%	
Peak Hour Factor		0.00			0.83			0.88			0.88	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	0	0	48	0	0	0	36	0	38	28	0
2026 Background Traffic	0	0	0	310	4	58	0	201	62	1,076	378	0
Trip Distribution												
New Trips IN						20%					57%	
New Trips OUT								47%	30%			
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	0	0	0	0	18	0	117	74	0	53	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	0	18	0	117	74	0	53	0
2026 Buildout Total	**0**	**0**	**0**	**310**	**4**	**76**	**0**	**318**	**136**	**1,076**	**431**	**0**

INTERSECTION VOLUME DEVELOPMENT

95 Logistics Center

US 278 at I-95 Northbound Ramp

AM PEAK HOUR (7:00 AM to 8:00 AM)

Description	I-95 Northbound Ramp Northbound			- Southbound			US 278 Eastbound			US 278 Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw 2019 AM Volumes	12	1	850	0	0	0	13	755	0	0	595	179
Grown Existing 2021 AM Volumes	13	1	920	0	0	0	14	817	0	0	644	194
Pedestrians		0			0			0			0	
Heavy Vehicle %		5.8%			0.0%			4.7%			5.4%	
Peak Hour Factor		0.92			0.00			0.85			0.82	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	0	28	0	0	0	0	49	0	0	72	41
2026 Background Traffic	16	1	1,147	0	0	0	17	1,043	0	0	856	277
Trip Distribution												
New Trips IN	30%										27%	
New Trips OUT							20%	27%				
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	78	0	0	0	0	0	16	21	0	0	70	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	78	0	0	0	0	0	16	21	0	0	70	0
2026 Buildout Total	**94**	**1**	**1,147**	**0**	**0**	**0**	**33**	**1,064**	**0**	**0**	**926**	**277**

PM PEAK HOUR (4:45 PM to 5:45 PM)

Description	I-95 Northbound Ramp Northbound			- Southbound			US 278 Eastbound			US 278 Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw 2019 PM Volumes	3	2	528	0	0	0	32	295	0	0	1036	304
Grown Existing 2021 PM Volumes	3	2	571	0	0	0	35	319	0	0	1,121	329
Pedestrians		0			0			2			2	
Heavy Vehicle %		2.3%			0.0%			3.9%			3.4%	
Peak Hour Factor		0.89			0.00			0.80			0.92	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	0	48	0	0	0	0	84	0	0	66	37
2026 Background Traffic	4	2	743	0	0	0	43	472	0	0	1,430	437
Trip Distribution												
New Trips IN	30%										27%	
New Trips OUT							20%	27%				
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	28	0	0	0	0	0	50	67	0	0	25	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	28	0	0	0	0	0	50	67	0	0	25	0
2026 Buildout Total	**32**	**2**	**743**	**0**	**0**	**0**	**93**	**539**	**0**	**0**	**1,455**	**437**

INTERSECTION VOLUME DEVELOPMENT
95 Logistics Center
US 17 at John Smith Road
AM PEAK HOUR (7:00 AM to 8:00 AM)

Description	US 17 Northbound			US 17 Southbound			- Eastbound			John Smith Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw March 2021 Traffic Count Volumes	0	310	302	39	207	0	0	0	0	160	0	27
Existing 2021 Traffic Count Volumes with 1.15 COVID Adjustment Factor Applied[1]	0	357	347	45	238	0	0	0	0	184	0	31
Pedestrians		0			0			0			0	
Heavy Vehicle %		6.2% (7.8%)			7.3%			0.0%			7.5%	
Peak Hour Factor		0.93			0.87			0.00			0.63	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	15	0	4	23	0	0	0	0	0	0	3
2026 Background Traffic	0	449	422	59	313	0	0	0	0	224	0	41
Trip Distribution												
New Trips IN		20%										
New Trips OUT					20%							
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	51	0	0	16	0	0	0	0	0	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	51	0	0	16	0	0	0	0	0	0	0
2026 Buildout Total	**0**	**500**	**422**	**59**	**329**	**0**	**0**	**0**	**0**	**224**	**0**	**41**

1. Traffic counts collected in March 2021 and adjusted by 1.15 COVID factor based on SCDOT guidance

PM PEAK HOUR (4:30 PM to 5:30 PM)

Description	US 17 Northbound			US 17 Southbound			- Eastbound			John Smith Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw March 2021 Traffic Count Volumes	0	184	193	1	239	0	0	0	0	269	0	4
Existing 2021 Traffic Count Volumes with 1.02 COVID Adjustment Factor Applied[1]	0	188	197	1	244	0	0	0	0	274	0	4
Pedestrians		0			0			0			0	
Heavy Vehicle %		4.2% (5.6%)			8.3%			0.0%			3.3%	
Peak Hour Factor		0.83			0.90			0.00			0.92	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	26	0	3	21	0	0	0	0	0	0	5
2026 Background Traffic	0	255	240	4	318	0	0	0	0	333	0	10
Trip Distribution												
New Trips IN		20%										
New Trips OUT					20%							
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	18	0	0	50	0	0	0	0	0	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	18	0	0	50	0	0	0	0	0	0	0
2026 Buildout Total	**0**	**273**	**240**	**4**	**368**	**0**	**0**	**0**	**0**	**333**	**0**	**10**

1. Traffic counts collected in March 2021 and adjusted by 1.02 COVID factor based on SCDOT guidance

1/11/2022 2:36

INTERSECTION VOLUME DEVELOPMENT
95 Logistics Center
US 17 at Site Driveway #1
AM PEAK HOUR (7:00 AM to 8:00 AM)

Description	US 17 Northbound			US 17 Southbound			- Eastbound			Site Driveway #1 Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw 2020 AM Volumes	0	181	0	0	116	0	0	0	0	0	0	0
Grown Existing 2021 Traffic Count Volumes with 1.16 COVID Adjustment Factor Applied[1]	0	218	0	0	140	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Heavy Vehicle %		8.8%			12.9%			0.0%			20.0%	
Peak Hour Factor		0.89			0.85			0.00			0.90	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	18	0	0	27	0	0	0	0	0	0	0
2026 Background Traffic	0	283	0	0	197	0	0	0	0	0	0	0
Trip Distribution												
New Trips IN			10%	40%	40%							
New Trips OUT		40%								10%		40%
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	31	26	104	104	0	0	0	0	8	0	31
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	31	26	104	104	0	0	0	0	8	0	31
2026 Buildout Total	**0**	**314**	**26**	**104**	**301**	**0**	**0**	**0**	**0**	**8**	**0**	**31**

1. Traffic counts collected in July 2020 and adjusted by 1.16 COVID factor based on SCDOT guidance and 4% per year growth rate

PM PEAK HOUR (4:15 PM to 5:15 PM)

Description	US 17 Northbound			US 17 Southbound			- Eastbound			Site Driveway #1 Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw 2020 PM Volumes	0	132	0	0	151	0	0	0	0	0	0	0
Grown Existing 2021 Traffic Count Volumes with 1.11 COVID Adjustment Factor Applied[1]	0	152	0	0	174	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Heavy Vehicle %		3.0%			8.6%			0.0%			20.0%	
Peak Hour Factor		0.80			0.94			0.00			0.90	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	31	0	0	24	0	0	0	0	0	0	0
2026 Background Traffic	0	216	0	0	236	0	0	0	0	0	0	0
Trip Distribution												
New Trips IN			10%	40%	40%							
New Trips OUT		40%								10%		40%
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	99	9	37	37	0	0	0	0	25	0	99
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	99	9	37	37	0	0	0	0	25	0	99
2026 Buildout Total	**0**	**315**	**9**	**37**	**273**	**0**	**0**	**0**	**0**	**25**	**0**	**99**

1. Traffic counts collected in July 2020 and adjusted by 1.11 COVID factor based on SCDOT guidance and 4% per year growth rate

1/11/2022 2:36

INTERSECTION VOLUME DEVELOPMENT
95 Logistics Center
US 17 at Site Driveway #2
AM PEAK HOUR (7:00 AM to 8:00 AM)

Description	US 17 Northbound			US 17 Southbound			- Eastbound			Site Driveway #2 Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw 2020 AM Volumes	0	181	0	0	116	0	0	0	0	0	0	0
Grown Existing 2021 Traffic Count Volumes with 1.16 COVID Adjustment Factor Applied[1]	0	218	0	0	140	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Heavy Vehicle %		8.8%			12.9%			0.0%			20.0%	
Peak Hour Factor		0.89			0.85			0.00			0.90	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	18	0	0	27	0	0	0	0	0	0	0
2026 Background Traffic	0	283	0	0	197	0	0	0	0	0	0	0
Trip Distribution												
New Trips IN		10%	10%	40%								
New Trips OUT					10%					10%		40%
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	26	25	104	8	0	0	0	0	8	0	31
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	26	25	104	8	0	0	0	0	8	0	31
2026 Buildout Total	**0**	**309**	**25**	**104**	**205**	**0**	**0**	**0**	**0**	**8**	**0**	**31**

1. Traffic counts collected in July 2020 and adjusted by 1.16 COVID factor based on SCDOT guidance and 4% per year growth rate

PM PEAK HOUR (4:15 PM to 5:15 PM)

Description	US 17 Northbound			US 17 Southbound			- Eastbound			Site Driveway #2 Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Raw 2020 PM Volumes	0	132	0	0	151	0	0	0	0	0	0	0
Grown Existing 2021 Traffic Count Volumes with 1.11 COVID Adjustment Factor Applied[1]	0	152	0	0	174	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Heavy Vehicle %		3.0%			8.6%			0.0%			20.0%	
Peak Hour Factor		0.80			0.94			0.00			0.90	
Annual Growth Rate	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth Factor	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217	1.217
Approved Site Development Traffic	0	31	0	0	24	0	0	0	0	0	0	0
2026 Background Traffic	0	216	0	0	236	0	0	0	0	0	0	0
Trip Distribution												
New Trips IN		10%	10%	40%								
New Trips OUT					10%					10%		40%
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	9	9	37	25	0	0	0	0	25	0	99
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	9	9	37	25	0	0	0	0	25	0	99
2026 Buildout Total	**0**	**225**	**9**	**37**	**261**	**0**	**0**	**0**	**0**	**25**	**0**	**99**

1. Traffic counts collected in July 2020 and adjusted by 1.11 COVID factor based on SCDOT guidance and 4% per year growth rate

1/11/2022 2:56

Intersection	
Int Delay, s/veh	7.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	100	24	27	192	104	40
Future Vol, veh/h	100	24	27	192	104	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	80	80
Heavy Vehicles, %	10	10	9	9	7	7
Mvmt Flow	112	27	30	216	130	50

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	340	30	0	-	30	0
Stage 1	30	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.17	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.263	-
Pot Cap-1 Maneuver	640	1022	-	0	1551	-
Stage 1	972	-	-	0	-	-
Stage 2	726	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	586	1022	-	-	1551	-
Mov Cap-2 Maneuver	586	-	-	-	-	-
Stage 1	972	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	5.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	586	1022	1551	-
HCM Lane V/C Ratio	-	0.192	0.026	0.084	-
HCM Control Delay (s)	-	12.6	8.6	7.5	-
HCM Lane LOS	-	B	A	A	-
HCM 95th %tile Q(veh)	-	0.7	0.1	0.3	-

HCM 6th Signalized Intersection Summary
5: I-95 SB On-Ramp/I-95 SB Off-Ramp & US 278

Existing AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	441	24	467	211	0	0	0	0	370	0	54
Future Volume (veh/h)	0	441	24	467	211	0	0	0	0	370	0	54
Initial Q (Qb), veh	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
Parking Bus, Adj	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	0	1796	1796	1796	1796	0				1826	1826	1826
Adj Flow Rate, veh/h	0	531	0	531	240	0				402	0	0
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88				0.92	0.92	0.92
Percent Heavy Veh, %	0	7	7	7	7	0				5	5	5
Cap, veh/h	0	797		659	2127	0				574	0	
Arrive On Green	0.00	0.23	0.00	0.27	0.62	0.00				0.17	0.00	0.00
Sat Flow, veh/h	0	3503	1522	1711	3503	0				3478	0	1547
Grp Volume(v), veh/h	0	531	0	531	240	0				402	0	0
Grp Sat Flow(s),veh/h/ln	0	1706	1522	1711	1706	0				1739	0	1547
Q Serve(g_s), s	0.0	9.1	0.0	13.3	1.8	0.0				7.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.1	0.0	13.3	1.8	0.0				7.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	797		659	2127	0				574	0	
V/C Ratio(X)	0.00	0.67		0.81	0.11	0.00				0.70	0.00	
Avail Cap(c_a), veh/h	0	1827		1483	4801	0				1407	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	22.4	0.0	11.7	4.9	0.0				25.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	2.9	0.0	0.0				1.9	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	3.3	0.0	4.1	0.4	0.0				2.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.5	0.0	14.6	4.9	0.0				27.2	0.0	0.0
LnGrp LOS	A	C		B	A	A				C	A	
Approach Vol, veh/h		531	A		771						402	A
Approach Delay, s/veh		23.5			11.6						27.2	
Approach LOS		C			B						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.1	21.6		17.6		46.7
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6
Max Green Setting (Gmax), s	48.6	34.4		26.0		90.4
Max Q Clear Time (g_c+I1), s	15.3	11.1		9.0		3.8
Green Ext Time (p_c), s	2.3	3.9		1.6		1.9

Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

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

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	817	0	0	644	194	13	1	920	0	0	0
Future Vol, veh/h	14	817	0	0	644	194	13	1	920	0	0	0
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	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	82	82	82	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	6	6	6	2	2	2
Mvmt Flow	16	961	0	0	785	237	14	1	1000	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	785	0	-	-	-	0	1386	1778	-
Stage 1	-	-	-	-	-	-	993	993	-
Stage 2	-	-	-	-	-	-	393	785	-
Critical Hdwy	4.2	-	-	-	-	-	6.92	6.62	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.92	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.92	5.62	-
Follow-up Hdwy	2.25	-	-	-	-	-	3.56	4.06	-
Pot Cap-1 Maneuver	810	-	0	0	-	-	129	78	0
Stage 1	-	-	0	0	-	-	310	313	0
Stage 2	-	-	0	0	-	-	640	392	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	810	-	-	-	-	-	126	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	235	0	-
Stage 1	-	-	-	-	-	-	304	0	-
Stage 2	-	-	-	-	-	-	640	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	21.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	235	-	810	-	-	-
HCM Lane V/C Ratio	0.065	-	0.02	-	-	-
HCM Control Delay (s)	21.4	0	9.5	-	-	-
HCM Lane LOS	C	A	A	-	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	28.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	184	31	357	347	45	238
Future Vol, veh/h	184	31	357	347	45	238
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	93	93	87	87
Heavy Vehicles, %	8	8	6	6	7	7
Mvmt Flow	292	49	384	373	52	274

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	949	571	0	0	757	0
Stage 1	571	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Critical Hdwy	6.48	6.28	-	-	4.17	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.372	-	-	2.263	-
Pot Cap-1 Maneuver	~ 282	509	-	-	832	-
Stage 1	554	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 261	509	-	-	832	-
Mov Cap-2 Maneuver	~ 261	-	-	-	-	-
Stage 1	554	-	-	-	-	-
Stage 2	630	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	115.8	0	1.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	261	509	832	-
HCM Lane V/C Ratio	-	-	1.119	0.097	0.062	-
HCM Control Delay (s)	-	-	133.1	12.8	9.6	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	12.6	0.3	0.2	-

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

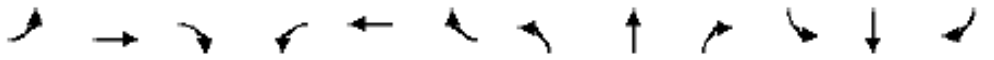
Intersection	
Int Delay, s/veh	7.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	147	105	63	89	43	28
Future Vol, veh/h	147	105	63	89	43	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	81	81	80	80
Heavy Vehicles, %	3	3	3	3	15	15
Mvmt Flow	165	118	78	110	54	35

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	221	78	0	-	78	0
Stage 1	78	-	-	-	-	-
Stage 2	143	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.25	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.335	-
Pot Cap-1 Maneuver	765	980	-	0	1442	-
Stage 1	943	-	-	0	-	-
Stage 2	882	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	737	980	-	-	1442	-
Mov Cap-2 Maneuver	737	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	849	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	4.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	737	980	1442	-
HCM Lane V/C Ratio	-	0.224	0.12	0.037	-
HCM Control Delay (s)	-	11.3	9.2	7.6	-
HCM Lane LOS	-	B	A	A	-
HCM 95th %tile Q(veh)	-	0.9	0.4	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	136	51	853	288	0	0	0	0	215	3	48
Future Volume (veh/h)	0	136	51	853	288	0	0	0	0	215	3	48
Initial Q (Qb), veh	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
Parking Bus, Adj	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	0	1811	1811	1826	1826	0				1841	1841	1841
Adj Flow Rate, veh/h	0	155	0	969	327	0				262	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.83	0.83	0.83
Percent Heavy Veh, %	0	6	6	5	5	0				4	4	4
Cap, veh/h	0	533		1072	2516	0				471	0	
Arrive On Green	0.00	0.15	0.00	0.49	0.73	0.00				0.13	0.00	0.00
Sat Flow, veh/h	0	3532	1535	1739	3561	0				3506	0	1560
Grp Volume(v), veh/h	0	155	0	969	327	0				262	0	0
Grp Sat Flow(s),veh/h/ln	0	1721	1535	1739	1735	0				1753	0	1560
Q Serve(g_s), s	0.0	3.9	0.0	40.3	2.8	0.0				6.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.9	0.0	40.3	2.8	0.0				6.8	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	533		1072	2516	0				471	0	
V/C Ratio(X)	0.00	0.29		0.90	0.13	0.00				0.56	0.00	
Avail Cap(c_a), veh/h	0	618		1444	3346	0				471	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	36.2	0.0	12.6	4.0	0.0				39.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	7.0	0.0	0.0				4.7	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	1.6	0.0	13.7	0.7	0.0				3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	36.6	0.0	19.6	4.1	0.0				43.9	0.0	0.0
LnGrp LOS	A	D		B	A	A				D	A	
Approach Vol, veh/h		155	A		1296						262	A
Approach Delay, s/veh		36.6			15.7						43.9	
Approach LOS		D			B						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	55.2	21.6		20.0		76.8
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6
Max Green Setting (Gmax), s	68.6	17.4		13.0		93.4
Max Q Clear Time (g_c+I1), s	42.3	5.9		8.8		4.8
Green Ext Time (p_c), s	5.6	0.6		0.4		2.6

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

Notes

User approved volume balancing among the lanes for turning movement.

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

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	319	0	0	1121	329	3	2	571	0	0	0
Future Vol, veh/h	35	319	0	0	1121	329	3	2	571	0	0	0
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	92	92	92	89	89	89	92	92	92
Heavy Vehicles, %	4	4	4	3	3	3	2	2	2	2	2	2
Mvmt Flow	44	399	0	0	1218	358	3	2	642	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1220	0	-	-	-	0	1096	1707	-
Stage 1	-	-	-	-	-	-	487	487	-
Stage 2	-	-	-	-	-	-	609	1220	-
Critical Hdwy	4.18	-	-	-	-	-	6.84	6.54	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.24	-	-	-	-	-	3.52	4.02	-
Pot Cap-1 Maneuver	556	-	0	0	-	-	208	90	0
Stage 1	-	-	0	0	-	-	583	549	0
Stage 2	-	-	0	0	-	-	505	251	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	556	-	-	-	-	-	192	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	313	0	-
Stage 1	-	-	-	-	-	-	537	0	-
Stage 2	-	-	-	-	-	-	505	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.2	0	16.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	313	-	556	-	-	-
HCM Lane V/C Ratio	0.018	-	0.079	-	-	-
HCM Control Delay (s)	16.7	0	12	-	-	-
HCM Lane LOS	C	A	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	7.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	274	4	188	197	1	244
Future Vol, veh/h	274	4	188	197	1	244
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	90	90
Heavy Vehicles, %	3	3	4	4	8	8
Mvmt Flow	298	4	227	237	1	271

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	619	346	0	0	464	0
Stage 1	346	-	-	-	-	-
Stage 2	273	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.18	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.272	-
Pot Cap-1 Maneuver	451	695	-	-	1066	-
Stage 1	714	-	-	-	-	-
Stage 2	771	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	451	695	-	-	1066	-
Mov Cap-2 Maneuver	451	-	-	-	-	-
Stage 1	714	-	-	-	-	-
Stage 2	770	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	451	695	1066	-
HCM Lane V/C Ratio	-	-	0.66	0.006	0.001	-
HCM Control Delay (s)	-	-	27.2	10.2	8.4	0
HCM Lane LOS	-	-	D	B	A	A
HCM 95th %tile Q(veh)	-	-	4.7	0	0	-

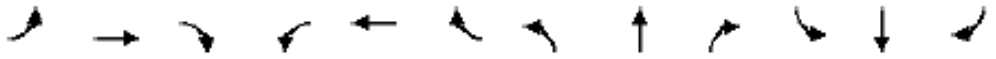
Intersection	
Int Delay, s/veh	8.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	149	33	33	252	130	49
Future Vol, veh/h	149	33	33	252	130	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	80	80
Heavy Vehicles, %	10	10	9	9	7	7
Mvmt Flow	167	37	37	283	163	61

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	424	37	0	-	37	0
Stage 1	37	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.17	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.263	-
Pot Cap-1 Maneuver	572	1013	-	0	1542	-
Stage 1	965	-	-	0	-	-
Stage 2	669	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	511	1013	-	-	1542	-
Mov Cap-2 Maneuver	511	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	598	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	5.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	511	1013	1542	-
HCM Lane V/C Ratio	-	0.328	0.037	0.105	-
HCM Control Delay (s)	-	15.4	8.7	7.6	-
HCM Lane LOS	-	C	A	A	-
HCM 95th %tile Q(veh)	-	1.4	0.1	0.4	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑					↰	↓	↱
Traffic Volume (veh/h)	0	558	29	609	288	0	0	0	0	478	0	66
Future Volume (veh/h)	0	558	29	609	288	0	0	0	0	478	0	66
Initial Q (Qb), veh	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
Parking Bus, Adj	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	0	1796	1796	1796	1796	0				1826	1826	1826
Adj Flow Rate, veh/h	0	672	0	692	327	0				520	0	0
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88				0.92	0.92	0.92
Percent Heavy Veh, %	0	7	7	7	7	0				5	5	5
Cap, veh/h	0	825		741	2332	0				618	0	
Arrive On Green	0.00	0.24	0.00	0.37	0.68	0.00				0.18	0.00	0.00
Sat Flow, veh/h	0	3503	1522	1711	3503	0				3478	0	1547
Grp Volume(v), veh/h	0	672	0	692	327	0				520	0	0
Grp Sat Flow(s),veh/h/ln	0	1706	1522	1711	1706	0				1739	0	1547
Q Serve(g_s), s	0.0	18.2	0.0	31.1	3.3	0.0				14.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	18.2	0.0	31.1	3.3	0.0				14.2	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	825		741	2332	0				618	0	
V/C Ratio(X)	0.00	0.81		0.93	0.14	0.00				0.84	0.00	
Avail Cap(c_a), veh/h	0	1060		929	2943	0				782	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	35.0	0.0	20.8	5.4	0.0				38.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.2	0.0	14.4	0.0	0.0				7.1	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	7.6	0.0	13.6	0.9	0.0				6.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	39.2	0.0	35.2	5.5	0.0				46.0	0.0	0.0
LnGrp LOS	A	D		D	A	A				D	A	
Approach Vol, veh/h		672	A		1019						520	A
Approach Delay, s/veh		39.2			25.6						46.0	
Approach LOS		D			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	43.2	30.2		24.4		73.5
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6
Max Green Setting (Gmax), s	46.6	30.4		22.0		84.4
Max Q Clear Time (g_c+I1), s	33.1	20.2		16.2		5.3
Green Ext Time (p_c), s	2.7	3.5		1.2		2.6

Intersection Summary	
HCM 6th Ctrl Delay	34.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

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

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	1043	0	0	856	277	16	1	1147	0	0	0
Future Vol, veh/h	17	1043	0	0	856	277	16	1	1147	0	0	0
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	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	82	82	82	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	6	6	6	2	2	2
Mvmt Flow	20	1227	0	0	1044	338	17	1	1247	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1044	0	-	-	-	0	1789	2311	-
Stage 1	-	-	-	-	-	-	1267	1267	-
Stage 2	-	-	-	-	-	-	522	1044	-
Critical Hdwy	4.2	-	-	-	-	-	6.92	6.62	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.92	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.92	5.62	-
Follow-up Hdwy	2.25	-	-	-	-	-	3.56	4.06	-
Pot Cap-1 Maneuver	644	-	0	0	-	-	69	36	0
Stage 1	-	-	0	0	-	-	221	231	0
Stage 2	-	-	0	0	-	-	549	296	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	644	-	-	-	-	-	67	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	163	0	-
Stage 1	-	-	-	-	-	-	214	0	-
Stage 2	-	-	-	-	-	-	549	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	29.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	163	-	644	-	-	-
HCM Lane V/C Ratio	0.113	-	0.031	-	-	-
HCM Control Delay (s)	29.9	0	10.8	-	-	-
HCM Lane LOS	D	A	B	-	-	-
HCM 95th %tile Q(veh)	0.4	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	108.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	224	41	449	422	59	313
Future Vol, veh/h	224	41	449	422	59	313
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	93	93	87	87
Heavy Vehicles, %	8	8	6	6	7	7
Mvmt Flow	356	65	483	454	68	360

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1206	710	0	0	937	0
Stage 1	710	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Critical Hdwy	6.48	6.28	-	-	4.17	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.372	-	-	2.263	-
Pot Cap-1 Maneuver	~ 197	424	-	-	711	-
Stage 1	476	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 173	424	-	-	711	-
Mov Cap-2 Maneuver	~ 173	-	-	-	-	-
Stage 1	476	-	-	-	-	-
Stage 2	528	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 457.3	0	1.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	173	424	711	-
HCM Lane V/C Ratio	-	-	2.055	0.153	0.095	-
HCM Control Delay (s)	-	-	$ 538.2	15	10.6	0
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	27.6	0.5	0.3	-

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

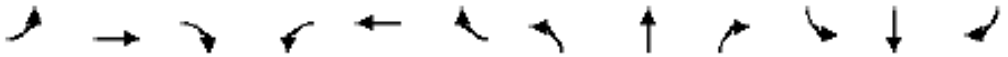
Intersection	
Int Delay, s/veh	8.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	132	77	139	57	34
Future Vol, veh/h	203	132	77	139	57	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	81	81	80	80
Heavy Vehicles, %	3	3	3	3	15	15
Mvmt Flow	228	148	95	172	71	43

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	280	95	0	-	95	0
Stage 1	95	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.25	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.335	-
Pot Cap-1 Maneuver	708	959	-	0	1421	-
Stage 1	926	-	-	0	-	-
Stage 2	844	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	673	959	-	-	1421	-
Mov Cap-2 Maneuver	673	-	-	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	802	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	4.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	673	959	1421	-
HCM Lane V/C Ratio	-	0.339	0.155	0.05	-
HCM Control Delay (s)	-	13.1	9.4	7.7	-
HCM Lane LOS	-	B	A	A	-
HCM 95th %tile Q(veh)	-	1.5	0.5	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑					↰	↑	↱
Traffic Volume (veh/h)	0	201	62	1076	378	0	0	0	0	310	4	58
Future Volume (veh/h)	0	201	62	1076	378	0	0	0	0	310	4	58
Initial Q (Qb), veh	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
Parking Bus, Adj	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	0	1811	1811	1826	1826	0				1841	1841	1841
Adj Flow Rate, veh/h	0	228	0	1223	430	0				377	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.83	0.83	0.83
Percent Heavy Veh, %	0	6	6	5	5	0				4	4	4
Cap, veh/h	0	372		1189	2728	0				405	0	
Arrive On Green	0.00	0.11	0.00	0.62	0.79	0.00				0.12	0.00	0.00
Sat Flow, veh/h	0	3532	1535	1739	3561	0				3506	0	1560
Grp Volume(v), veh/h	0	228	0	1223	430	0				377	0	0
Grp Sat Flow(s),veh/h/ln	0	1721	1535	1739	1735	0				1753	0	1560
Q Serve(g_s), s	0.0	8.8	0.0	86.6	4.2	0.0				14.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.8	0.0	86.6	4.2	0.0				14.8	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	372		1189	2728	0				405	0	
V/C Ratio(X)	0.00	0.61		1.03	0.16	0.00				0.93	0.00	
Avail Cap(c_a), veh/h	0	407		1189	2763	0				405	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	59.0	0.0	19.1	3.6	0.0				60.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	0.0	33.7	0.0	0.0				30.4	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	3.9	0.0	39.7	1.2	0.0				8.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	61.6	0.0	52.8	3.6	0.0				91.2	0.0	0.0
LnGrp LOS	A	E		F	A	A				F	A	
Approach Vol, veh/h		228	A		1653						377	A
Approach Delay, s/veh		61.6			40.0						91.2	
Approach LOS		E			D						F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	94.0	21.6		23.0		115.6
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6
Max Green Setting (Gmax), s	86.6	16.4		16.0		110.4
Max Q Clear Time (g_c+I1), s	88.6	10.8		16.8		6.2
Green Ext Time (p_c), s	0.0	0.6		0.0		3.5

Intersection Summary	
HCM 6th Ctrl Delay	50.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	472	0	0	1430	437	4	2	743	0	0	0
Future Vol, veh/h	43	472	0	0	1430	437	4	2	743	0	0	0
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	92	92	92	89	89	89	92	92	92
Heavy Vehicles, %	4	4	4	3	3	3	2	2	2	2	2	2
Mvmt Flow	54	590	0	0	1554	475	4	2	835	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1556	0	-	-	-	0	1475	2254	-
Stage 1	-	-	-	-	-	-	698	698	-
Stage 2	-	-	-	-	-	-	777	1556	-
Critical Hdwy	4.18	-	-	-	-	-	6.84	6.54	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.24	-	-	-	-	-	3.52	4.02	-
Pot Cap-1 Maneuver	412	-	0	0	-	-	117	41	0
Stage 1	-	-	0	0	-	-	455	440	0
Stage 2	-	-	0	0	-	-	414	172	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	412	-	-	-	-	-	102	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	218	0	-
Stage 1	-	-	-	-	-	-	395	0	-
Stage 2	-	-	-	-	-	-	414	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.3	0	22
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	218	-	412	-	-	-
HCM Lane V/C Ratio	0.031	-	0.13	-	-	-
HCM Control Delay (s)	22	0	15	-	-	-
HCM Lane LOS	C	A	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	26.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	333	10	255	240	4	318
Future Vol, veh/h	333	10	255	240	4	318
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	90	90
Heavy Vehicles, %	3	3	4	4	8	8
Mvmt Flow	362	11	307	289	4	353

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	813	452	0	0	596	0
Stage 1	452	-	-	-	-	-
Stage 2	361	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.18	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.272	-
Pot Cap-1 Maneuver	~ 347	605	-	-	952	-
Stage 1	639	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 345	605	-	-	952	-
Mov Cap-2 Maneuver	~ 345	-	-	-	-	-
Stage 1	639	-	-	-	-	-
Stage 2	699	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	95	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	345	605	952	-
HCM Lane V/C Ratio	-	-	1.049	0.018	0.005	-
HCM Control Delay (s)	-	-	97.5	11.1	8.8	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	12.8	0.1	0	-

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

Intersection	
Int Delay, s/veh	108.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	224	41	449	422	59	313
Future Vol, veh/h	224	41	449	422	59	313
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	93	93	87	87
Heavy Vehicles, %	8	8	6	6	7	7
Mvmt Flow	356	65	483	454	68	360

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1206	710	0	0	937	0
Stage 1	710	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Critical Hdwy	6.48	6.28	-	-	4.17	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.372	-	-	2.263	-
Pot Cap-1 Maneuver	~ 197	424	-	-	711	-
Stage 1	476	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 173	424	-	-	711	-
Mov Cap-2 Maneuver	~ 173	-	-	-	-	-
Stage 1	476	-	-	-	-	-
Stage 2	528	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 457.3	0	1.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	173	424	711	-
HCM Lane V/C Ratio	-	-	2.055	0.153	0.095	-
HCM Control Delay (s)	-	-	$ 538.2	15	10.6	0
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	27.6	0.5	0.3	-

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

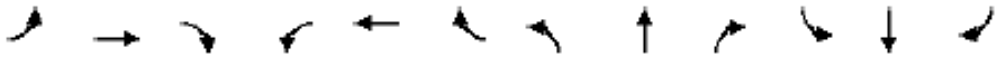
Intersection	
Int Delay, s/veh	8.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	132	77	139	57	34
Future Vol, veh/h	203	132	77	139	57	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	81	81	80	80
Heavy Vehicles, %	3	3	3	3	15	15
Mvmt Flow	228	148	95	172	71	43

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	280	95	0	-	95	0
Stage 1	95	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.25	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.335	-
Pot Cap-1 Maneuver	708	959	-	0	1421	-
Stage 1	926	-	-	0	-	-
Stage 2	844	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	673	959	-	-	1421	-
Mov Cap-2 Maneuver	673	-	-	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	802	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	4.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	673	959	1421	-
HCM Lane V/C Ratio	-	0.339	0.155	0.05	-
HCM Control Delay (s)	-	13.1	9.4	7.7	-
HCM Lane LOS	-	B	A	A	-
HCM 95th %tile Q(veh)	-	1.5	0.5	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑					↰	↑	↱
Traffic Volume (veh/h)	0	201	62	1076	378	0	0	0	0	310	4	58
Future Volume (veh/h)	0	201	62	1076	378	0	0	0	0	310	4	58
Initial Q (Qb), veh	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
Parking Bus, Adj	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	0	1811	1811	1826	1826	0				1841	1841	1841
Adj Flow Rate, veh/h	0	228	0	1223	430	0				377	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.83	0.83	0.83
Percent Heavy Veh, %	0	6	6	5	5	0				4	4	4
Cap, veh/h	0	372		1189	2728	0				405	0	
Arrive On Green	0.00	0.11	0.00	0.62	0.79	0.00				0.12	0.00	0.00
Sat Flow, veh/h	0	3532	1535	1739	3561	0				3506	0	1560
Grp Volume(v), veh/h	0	228	0	1223	430	0				377	0	0
Grp Sat Flow(s),veh/h/ln	0	1721	1535	1739	1735	0				1753	0	1560
Q Serve(g_s), s	0.0	8.8	0.0	86.6	4.2	0.0				14.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.8	0.0	86.6	4.2	0.0				14.8	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	372		1189	2728	0				405	0	
V/C Ratio(X)	0.00	0.61		1.03	0.16	0.00				0.93	0.00	
Avail Cap(c_a), veh/h	0	407		1189	2763	0				405	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	59.0	0.0	19.1	3.6	0.0				60.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	0.0	33.7	0.0	0.0				30.4	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	3.9	0.0	39.7	1.2	0.0				8.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	61.6	0.0	52.8	3.6	0.0				91.2	0.0	0.0
LnGrp LOS	A	E		F	A	A				F	A	
Approach Vol, veh/h		228	A		1653						377	A
Approach Delay, s/veh		61.6			40.0						91.2	
Approach LOS		E			D						F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	94.0	21.6		23.0		115.6
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6
Max Green Setting (Gmax), s	86.6	16.4		16.0		110.4
Max Q Clear Time (g_c+I1), s	88.6	10.8		16.8		6.2
Green Ext Time (p_c), s	0.0	0.6		0.0		3.5

Intersection Summary	
HCM 6th Ctrl Delay	50.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	472	0	0	1430	437	4	2	743	0	0	0
Future Vol, veh/h	43	472	0	0	1430	437	4	2	743	0	0	0
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	92	92	92	89	89	89	92	92	92
Heavy Vehicles, %	4	4	4	3	3	3	2	2	2	2	2	2
Mvmt Flow	54	590	0	0	1554	475	4	2	835	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1556	0	-	-	-	0	1475	2254	-
Stage 1	-	-	-	-	-	-	698	698	-
Stage 2	-	-	-	-	-	-	777	1556	-
Critical Hdwy	4.18	-	-	-	-	-	6.84	6.54	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.24	-	-	-	-	-	3.52	4.02	-
Pot Cap-1 Maneuver	412	-	0	0	-	-	117	41	0
Stage 1	-	-	0	0	-	-	455	440	0
Stage 2	-	-	0	0	-	-	414	172	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	412	-	-	-	-	-	102	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	218	0	-
Stage 1	-	-	-	-	-	-	395	0	-
Stage 2	-	-	-	-	-	-	414	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.3	0	22
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	218	-	412	-	-	-
HCM Lane V/C Ratio	0.031	-	0.13	-	-	-
HCM Control Delay (s)	22	0	15	-	-	-
HCM Lane LOS	C	A	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	26.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	333	10	255	240	4	318
Future Vol, veh/h	333	10	255	240	4	318
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	90	90
Heavy Vehicles, %	3	3	4	4	8	8
Mvmt Flow	362	11	307	289	4	353

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	813	452	0	0	596	0
Stage 1	452	-	-	-	-	-
Stage 2	361	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.18	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.272	-
Pot Cap-1 Maneuver	~ 347	605	-	-	952	-
Stage 1	639	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 345	605	-	-	952	-
Mov Cap-2 Maneuver	~ 345	-	-	-	-	-
Stage 1	639	-	-	-	-	-
Stage 2	699	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	95	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	345	605	952	-
HCM Lane V/C Ratio	-	-	1.049	0.018	0.005	-
HCM Control Delay (s)	-	-	97.5	11.1	8.8	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	12.8	0.1	0	-

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

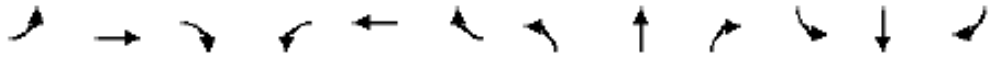
Intersection	
Int Delay, s/veh	21.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	349	33	35	312	130	57
Future Vol, veh/h	349	33	35	312	130	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	80	80
Heavy Vehicles, %	16	10	10	11	7	9
Mvmt Flow	392	37	39	351	163	71

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	436	39	0	-	39	0
Stage 1	39	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.56	6.3	-	-	4.17	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.39	-	-	2.263	-
Pot Cap-1 Maneuver	552	1010	-	0	1539	-
Stage 1	949	-	-	0	-	-
Stage 2	650	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	493	1010	-	-	1539	-
Mov Cap-2 Maneuver	493	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	581	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.8	0	5.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	493	1010	1539	-
HCM Lane V/C Ratio	-	0.795	0.037	0.106	-
HCM Control Delay (s)	-	35.1	8.7	7.6	-
HCM Lane LOS	-	E	A	A	-
HCM 95th %tile Q(veh)	-	7.4	0.1	0.4	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑					↰	↑	↱
Traffic Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Future Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Initial Q (Qb), veh	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
Parking Bus, Adj	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	0	1781	1707	1796	1737	0				1826	1826	1722
Adj Flow Rate, veh/h	0	717	0	692	495	0				520	0	0
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88				0.92	0.92	0.92
Percent Heavy Veh, %	0	8	13	7	11	0				5	5	12
Cap, veh/h	0	849		737	2284	0				610	0	
Arrive On Green	0.00	0.25	0.00	0.37	0.69	0.00				0.18	0.00	0.00
Sat Flow, veh/h	0	3474	1447	1711	3387	0				3478	0	1459
Grp Volume(v), veh/h	0	717	0	692	495	0				520	0	0
Grp Sat Flow(s),veh/h/ln	0	1692	1447	1711	1650	0				1739	0	1459
Q Serve(g_s), s	0.0	20.7	0.0	33.4	5.6	0.0				14.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.7	0.0	33.4	5.6	0.0				14.9	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	849		737	2284	0				610	0	
V/C Ratio(X)	0.00	0.84		0.94	0.22	0.00				0.85	0.00	
Avail Cap(c_a), veh/h	0	1003		882	2714	0				746	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	36.5	0.0	22.7	5.7	0.0				41.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.1	0.0	16.2	0.1	0.0				8.4	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	8.8	0.0	15.0	1.5	0.0				6.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	42.7	0.0	38.9	5.8	0.0				49.4	0.0	0.0
LnGrp LOS	A	D		D	A	A				D	A	
Approach Vol, veh/h		717	A		1187						520	A
Approach Delay, s/veh		42.7			25.1						49.4	
Approach LOS		D			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	45.3	32.3		25.0		77.6
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6
Max Green Setting (Gmax), s	46.6	30.4		22.0		84.4
Max Q Clear Time (g_c+I1), s	35.4	22.7		16.9		7.6
Green Ext Time (p_c), s	2.5	3.1		1.1		4.1

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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	33	1064	0	0	926	277	94	1	1147	0	0	0
Future Vol, veh/h	33	1064	0	0	926	277	94	1	1147	0	0	0
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	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	82	82	82	92	92	92	92	92	92
Heavy Vehicles, %	12	5	5	5	6	5	18	6	6	2	2	2
Mvmt Flow	39	1252	0	0	1129	338	102	1	1247	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1129	0	-	-	-	0	1895	2459	-
Stage 1	-	-	-	-	-	-	1330	1330	-
Stage 2	-	-	-	-	-	-	565	1129	-
Critical Hdwy	4.34	-	-	-	-	-	7.16	6.62	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.62	-
Follow-up Hdwy	2.32	-	-	-	-	-	3.68	4.06	-
Pot Cap-1 Maneuver	560	-	0	0	-	-	~ 51	29	0
Stage 1	-	-	0	0	-	-	184	215	0
Stage 2	-	-	0	0	-	-	490	269	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	560	-	-	-	-	-	~ 47	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	130	0	-
Stage 1	-	-	-	-	-	-	171	0	-
Stage 2	-	-	-	-	-	-	490	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	96.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	130	-	560	-	-	-
HCM Lane V/C Ratio	0.794	-	0.069	-	-	-
HCM Control Delay (s)	96.1	0	11.9	-	-	-
HCM Lane LOS	F	A	B	-	-	-
HCM 95th %tile Q(veh)	4.8	-	0.2	-	-	-

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

Intersection	
Int Delay, s/veh	125.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	224	41	500	422	59	329
Future Vol, veh/h	224	41	500	422	59	329
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	93	93	87	87
Heavy Vehicles, %	8	8	7	6	7	8
Mvmt Flow	356	65	538	454	68	378

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1279	765	0	0	992	0
Stage 1	765	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Critical Hdwy	6.48	6.28	-	-	4.17	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.372	-	-	2.263	-
Pot Cap-1 Maneuver	~ 178	394	-	-	678	-
Stage 1	449	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 155	394	-	-	678	-
Mov Cap-2 Maneuver	~ 155	-	-	-	-	-
Stage 1	449	-	-	-	-	-
Stage 2	513	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 551.1	0	1.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	155	394	678	-
HCM Lane V/C Ratio	-	-	2.294	0.165	0.1	-
HCM Control Delay (s)	-	-	$ 649.1	15.9	10.9	0
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	29.6	0.6	0.3	-

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

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	31	309	25	104	205
Future Vol, veh/h	8	31	309	25	104	205
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	100	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	20	20	9	20	20	13
Mvmt Flow	9	34	347	28	122	241

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	846	361	0	0	375	0
Stage 1	361	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	310	645	-	-	1091	-
Stage 1	667	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	275	645	-	-	1091	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	2.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	275	645	1091	-
HCM Lane V/C Ratio	-	-	0.032	0.053	0.112	-
HCM Control Delay (s)	-	-	18.5	10.9	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

Intersection	
Int Delay, s/veh	36.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	333	10	273	240	4	368
Future Vol, veh/h	333	10	273	240	4	368
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	90	90
Heavy Vehicles, %	3	3	5	4	8	10
Mvmt Flow	362	11	329	289	4	409

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	891	474	0	0	618	0
Stage 1	474	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.18	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.272	-
Pot Cap-1 Maneuver	~ 312	588	-	-	934	-
Stage 1	624	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Platoon blocked, %				-		-
Mov Cap-1 Maneuver	~ 310	588	-	-	934	-
Mov Cap-2 Maneuver	~ 310	-	-	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	659	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	137.3	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	310	588	934	-
HCM Lane V/C Ratio	-	-	1.168	0.018	0.005	-
HCM Control Delay (s)	-	-	141.1	11.2	8.9	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	15.3	0.1	0	-

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

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	99	225	9	37	261
Future Vol, veh/h	25	99	225	9	37	261
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	20	20	3	20	20	9
Mvmt Flow	28	110	281	11	39	278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	643	287	0	0	292	0
Stage 1	287	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	411	711	-	-	1174	-
Stage 1	722	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	397	711	-	-	1174	-
Mov Cap-2 Maneuver	397	-	-	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	649	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	397	711	1174	-
HCM Lane V/C Ratio	-	-	0.07	0.155	0.034	-
HCM Control Delay (s)	-	-	14.7	11	8.2	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.5	0.1	-

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	99	225	9	37	261
Future Vol, veh/h	25	99	225	9	37	261
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	20	20	3	20	20	9
Mvmt Flow	28	110	281	11	39	278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	643	287	0	0	292	0
Stage 1	287	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	411	711	-	-	1174	-
Stage 1	722	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	397	711	-	-	1174	-
Mov Cap-2 Maneuver	397	-	-	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	649	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	397	711	1174	-
HCM Lane V/C Ratio	-	-	0.07	0.155	0.034	-
HCM Control Delay (s)	-	-	14.7	11	8.2	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.5	0.1	-

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	99	315	9	37	273
Future Vol, veh/h	25	99	315	9	37	273
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	20	20	3	20	20	9
Mvmt Flow	28	110	394	11	39	290

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	768	400	0	0	405	0
Stage 1	400	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	345	613	-	-	1063	-
Stage 1	640	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	332	613	-	-	1063	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	332	613	1063	-
HCM Lane V/C Ratio	-	-	0.084	0.179	0.037	-
HCM Control Delay (s)	-	-	16.8	12.2	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.6	0.1	-

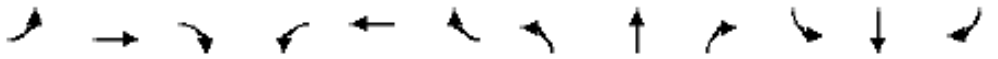
Intersection	
Int Delay, s/veh	21.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	349	33	35	312	130	57
Future Vol, veh/h	349	33	35	312	130	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	80	80
Heavy Vehicles, %	16	10	10	11	7	9
Mvmt Flow	392	37	39	351	163	71

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	436	39	0	-	39	0
Stage 1	39	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.56	6.3	-	-	4.17	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.39	-	-	2.263	-
Pot Cap-1 Maneuver	552	1010	-	0	1539	-
Stage 1	949	-	-	0	-	-
Stage 2	650	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	493	1010	-	-	1539	-
Mov Cap-2 Maneuver	493	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	581	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.8	0	5.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	493	1010	1539	-
HCM Lane V/C Ratio	-	0.795	0.037	0.106	-
HCM Control Delay (s)	-	35.1	8.7	7.6	-
HCM Lane LOS	-	E	A	A	-
HCM 95th %tile Q(veh)	-	7.4	0.1	0.4	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑					↰	↰	↱
Traffic Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Future Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Initial Q (Qb), veh	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
Parking Bus, Adj	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	0	1781	1707	1796	1737	0				1826	1826	1722
Adj Flow Rate, veh/h	0	717	0	692	495	0				520	0	0
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88				0.92	0.92	0.92
Percent Heavy Veh, %	0	8	13	7	11	0				5	5	12
Cap, veh/h	0	849		737	2284	0				610	0	
Arrive On Green	0.00	0.25	0.00	0.37	0.69	0.00				0.18	0.00	0.00
Sat Flow, veh/h	0	3474	1447	1711	3387	0				3478	0	1459
Grp Volume(v), veh/h	0	717	0	692	495	0				520	0	0
Grp Sat Flow(s),veh/h/ln	0	1692	1447	1711	1650	0				1739	0	1459
Q Serve(g_s), s	0.0	20.7	0.0	33.4	5.6	0.0				14.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.7	0.0	33.4	5.6	0.0				14.9	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	849		737	2284	0				610	0	
V/C Ratio(X)	0.00	0.84		0.94	0.22	0.00				0.85	0.00	
Avail Cap(c_a), veh/h	0	1003		882	2714	0				746	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	36.5	0.0	22.7	5.7	0.0				41.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.1	0.0	16.2	0.1	0.0				8.4	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	8.8	0.0	15.0	1.5	0.0				6.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	42.7	0.0	38.9	5.8	0.0				49.4	0.0	0.0
LnGrp LOS	A	D		D	A	A				D	A	
Approach Vol, veh/h		717	A		1187						520	A
Approach Delay, s/veh		42.7			25.1						49.4	
Approach LOS		D			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	45.3	32.3		25.0		77.6
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6
Max Green Setting (Gmax), s	46.6	30.4		22.0		84.4
Max Q Clear Time (g_c+I1), s	35.4	22.7		16.9		7.6
Green Ext Time (p_c), s	2.5	3.1		1.1		4.1

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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	33	1064	0	0	926	277	94	1	1147	0	0	0
Future Vol, veh/h	33	1064	0	0	926	277	94	1	1147	0	0	0
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	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	82	82	82	92	92	92	92	92	92
Heavy Vehicles, %	12	5	5	5	6	5	18	6	6	2	2	2
Mvmt Flow	39	1252	0	0	1129	338	102	1	1247	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1129	0	-	-	-	0	1895	2459	-
Stage 1	-	-	-	-	-	-	1330	1330	-
Stage 2	-	-	-	-	-	-	565	1129	-
Critical Hdwy	4.34	-	-	-	-	-	7.16	6.62	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.62	-
Follow-up Hdwy	2.32	-	-	-	-	-	3.68	4.06	-
Pot Cap-1 Maneuver	560	-	0	0	-	-	~ 51	29	0
Stage 1	-	-	0	0	-	-	184	215	0
Stage 2	-	-	0	0	-	-	490	269	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	560	-	-	-	-	-	~ 47	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	130	0	-
Stage 1	-	-	-	-	-	-	171	0	-
Stage 2	-	-	-	-	-	-	490	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	96.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	130	-	560	-	-	-
HCM Lane V/C Ratio	0.794	-	0.069	-	-	-
HCM Control Delay (s)	96.1	0	11.9	-	-	-
HCM Lane LOS	F	A	B	-	-	-
HCM 95th %tile Q(veh)	4.8	-	0.2	-	-	-

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

Intersection	
Int Delay, s/veh	69.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	224	41	500	422	59	329
Future Vol, veh/h	224	41	500	422	59	329
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	93	93	87	87
Heavy Vehicles, %	8	8	7	6	7	8
Mvmt Flow	356	65	538	454	68	378

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1052	538	0	0	992	0
Stage 1	538	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Critical Hdwy	6.48	6.28	-	-	4.17	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.372	-	-	2.263	-
Pot Cap-1 Maneuver	~ 244	532	-	-	678	-
Stage 1	573	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %				-		-
Mov Cap-1 Maneuver	~ 213	532	-	-	678	-
Mov Cap-2 Maneuver	~ 213	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	513	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 306.8	0	1.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	213	532	678	-
HCM Lane V/C Ratio	-	-	1.669	0.122	0.1	-
HCM Control Delay (s)	-	-	$ 360.6	12.7	10.9	0
HCM Lane LOS	-	-	F	B	B	A
HCM 95th %tile Q(veh)	-	-	23.5	0.4	0.3	-

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

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	31	309	25	104	205
Future Vol, veh/h	8	31	309	25	104	205
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	100	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	20	20	9	20	20	13
Mvmt Flow	9	34	347	28	122	241

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	846	361	0	0	375	0
Stage 1	361	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	310	645	-	-	1091	-
Stage 1	667	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	275	645	-	-	1091	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	2.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	275	645	1091	-
HCM Lane V/C Ratio	-	-	0.032	0.053	0.112	-
HCM Control Delay (s)	-	-	18.5	10.9	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	31	314	26	104	301
Future Vol, veh/h	8	31	314	26	104	301
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	100	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	20	20	9	20	20	13
Mvmt Flow	9	34	353	29	122	354

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	966	368	0	0	382	0
Stage 1	368	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	262	639	-	-	1085	-
Stage 1	662	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	233	639	-	-	1085	-
Mov Cap-2 Maneuver	233	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	458	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	2.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	233	639	1085	-
HCM Lane V/C Ratio	-	-	0.038	0.054	0.113	-
HCM Control Delay (s)	-	-	21.1	11	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

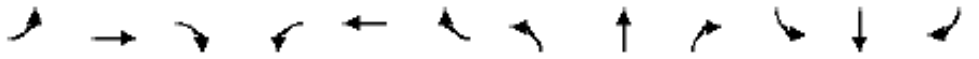
Intersection	
Int Delay, s/veh	9.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	274	132	84	330	57	37
Future Vol, veh/h	274	132	84	330	57	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	81	81	80	80
Heavy Vehicles, %	7	5	4	13	15	15
Mvmt Flow	308	148	104	407	71	46

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	292	104	0	-	104	0
Stage 1	104	-	-	-	-	-
Stage 2	188	-	-	-	-	-
Critical Hdwy	6.47	6.25	-	-	4.25	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.345	-	-	2.335	-
Pot Cap-1 Maneuver	688	943	-	0	1410	-
Stage 1	908	-	-	0	-	-
Stage 2	832	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	654	943	-	-	1410	-
Mov Cap-2 Maneuver	654	-	-	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	790	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	4.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	654	943	1410	-
HCM Lane V/C Ratio	-	0.471	0.157	0.051	-
HCM Control Delay (s)	-	15.3	9.5	7.7	-
HCM Lane LOS	-	C	A	A	-
HCM 95th %tile Q(veh)	-	2.5	0.6	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	318	136	1076	431	0	0	0	0	310	4	76
Future Volume (veh/h)	0	318	136	1076	431	0	0	0	0	310	4	76
Initial Q (Qb), veh	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
Parking Bus, Adj	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	0	1737	1693	1826	1796	0				1841	1841	1781
Adj Flow Rate, veh/h	0	361	0	1223	490	0				377	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.83	0.83	0.83
Percent Heavy Veh, %	0	11	14	5	7	0				4	4	8
Cap, veh/h	0	401		1148	2716	0				398	0	
Arrive On Green	0.00	0.12	0.00	0.62	0.80	0.00				0.11	0.00	0.00
Sat Flow, veh/h	0	3387	1434	1739	3503	0				3506	0	1510
Grp Volume(v), veh/h	0	361	0	1223	490	0				377	0	0
Grp Sat Flow(s),veh/h/ln	0	1650	1434	1739	1706	0				1753	0	1510
Q Serve(g_s), s	0.0	16.2	0.0	93.6	5.1	0.0				16.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	16.2	0.0	93.6	5.1	0.0				16.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	401		1148	2716	0				398	0	
V/C Ratio(X)	0.00	0.90		1.07	0.18	0.00				0.95	0.00	
Avail Cap(c_a), veh/h	0	405		1148	2720	0				398	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	64.9	0.0	23.6	3.6	0.0				66.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	22.5	0.0	45.8	0.0	0.0				33.7	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	7.9	0.0	47.8	1.4	0.0				8.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	87.3	0.0	69.4	3.7	0.0				99.7	0.0	0.0
LnGrp LOS	A	F		F	A	A				F	A	
Approach Vol, veh/h		361	A		1713						377	A
Approach Delay, s/veh		87.3			50.6						99.7	
Approach LOS		F			D						F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	101.0	24.8		24.0		125.8
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6
Max Green Setting (Gmax), s	93.6	18.4		17.0		119.4
Max Q Clear Time (g_c+I1), s	95.6	18.2		18.0		7.1
Green Ext Time (p_c), s	0.0	0.1		0.0		4.1

Intersection Summary	
HCM 6th Ctrl Delay	63.6
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

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

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	539	0	0	1455	437	32	2	743	0	0	0
Future Vol, veh/h	93	539	0	0	1455	437	32	2	743	0	0	0
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	92	92	92	89	89	89	92	92	92
Heavy Vehicles, %	13	6	4	3	3	3	18	2	2	2	2	2
Mvmt Flow	116	674	0	0	1582	475	36	2	835	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1584	0	-	-	-	0	1697	2490	-
Stage 1	-	-	-	-	-	-	906	906	-
Stage 2	-	-	-	-	-	-	791	1584	-
Critical Hdwy	4.36	-	-	-	-	-	7.16	6.54	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.54	-
Follow-up Hdwy	2.33	-	-	-	-	-	3.68	4.02	-
Pot Cap-1 Maneuver	363	-	0	0	-	-	70	29	0
Stage 1	-	-	0	0	-	-	318	353	0
Stage 2	-	-	0	0	-	-	369	167	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	363	-	-	-	-	-	48	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	128	0	-
Stage 1	-	-	-	-	-	-	216	0	-
Stage 2	-	-	-	-	-	-	369	0	-

Approach	EB	WB	NB
HCM Control Delay, s	2.9	0	44.7
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	128	-	363	-	-	-
HCM Lane V/C Ratio	0.298	-	0.32	-	-	-
HCM Control Delay (s)	44.7	0	19.5	-	-	-
HCM Lane LOS	E	A	C	-	-	-
HCM 95th %tile Q(veh)	1.2	-	1.4	-	-	-

Intersection	
Int Delay, s/veh	18.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	333	10	273	240	4	368
Future Vol, veh/h	333	10	273	240	4	368
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	90	90
Heavy Vehicles, %	3	3	5	4	8	10
Mvmt Flow	362	11	329	289	4	409

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	746	329	0	0	618	0
Stage 1	329	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.18	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.272	-
Pot Cap-1 Maneuver	380	710	-	-	934	-
Stage 1	727	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	378	710	-	-	934	-
Mov Cap-2 Maneuver	378	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	659	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	68	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	378	710	934	-
HCM Lane V/C Ratio	-	-	0.958	0.015	0.005	-
HCM Control Delay (s)	-	-	69.7	10.1	8.9	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	10.7	0	0	-

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	99	225	9	37	261
Future Vol, veh/h	25	99	225	9	37	261
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	20	20	3	20	20	9
Mvmt Flow	28	110	281	11	39	278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	643	287	0	0	292	0
Stage 1	287	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	411	711	-	-	1174	-
Stage 1	722	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	397	711	-	-	1174	-
Mov Cap-2 Maneuver	397	-	-	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	649	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	397	711	1174	-
HCM Lane V/C Ratio	-	-	0.07	0.155	0.034	-
HCM Control Delay (s)	-	-	14.7	11	8.2	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.5	0.1	-

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	99	315	9	37	273
Future Vol, veh/h	25	99	315	9	37	273
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	20	20	3	20	20	9
Mvmt Flow	28	110	394	11	39	290

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	768	400	0	0	405	0
Stage 1	400	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	345	613	-	-	1063	-
Stage 1	640	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	332	613	-	-	1063	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	332	613	1063	-
HCM Lane V/C Ratio	-	-	0.084	0.179	0.037	-
HCM Control Delay (s)	-	-	16.8	12.2	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.6	0.1	-

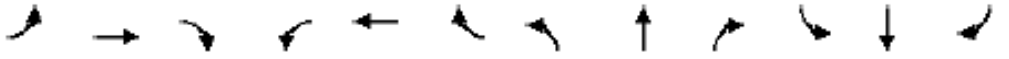
Intersection	
Int Delay, s/veh	21.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	349	33	35	312	130	57
Future Vol, veh/h	349	33	35	312	130	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	80	80
Heavy Vehicles, %	16	10	10	11	7	9
Mvmt Flow	392	37	39	351	163	71

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	436	39	0	-	39	0
Stage 1	39	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.56	6.3	-	-	4.17	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.39	-	-	2.263	-
Pot Cap-1 Maneuver	552	1010	-	0	1539	-
Stage 1	949	-	-	0	-	-
Stage 2	650	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	493	1010	-	-	1539	-
Mov Cap-2 Maneuver	493	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	581	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.8	0	5.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	493	1010	1539	-
HCM Lane V/C Ratio	-	0.795	0.037	0.106	-
HCM Control Delay (s)	-	35.1	8.7	7.6	-
HCM Lane LOS	-	E	A	A	-
HCM 95th %tile Q(veh)	-	7.4	0.1	0.4	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Future Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Initial Q (Qb), veh	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
Parking Bus, Adj	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	0	1781	1707	1796	1737	0				1826	1826	1722
Adj Flow Rate, veh/h	0	717	0	692	495	0				520	0	0
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88				0.92	0.92	0.92
Percent Heavy Veh, %	0	8	13	7	11	0				5	5	12
Cap, veh/h	0	1149		717	2371	0				585	0	
Arrive On Green	0.00	0.34	0.00	0.53	1.00	0.00				0.17	0.00	0.00
Sat Flow, veh/h	0	3474	1447	1711	3387	0				3478	0	1459
Grp Volume(v), veh/h	0	717	0	692	495	0				520	0	0
Grp Sat Flow(s),veh/h/ln	0	1692	1447	1711	1650	0				1739	0	1459
Q Serve(g_s), s	0.0	21.3	0.0	33.6	0.0	0.0				17.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	21.3	0.0	33.6	0.0	0.0				17.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1149		717	2371	0				585	0	
V/C Ratio(X)	0.00	0.62		0.96	0.21	0.00				0.89	0.00	
Avail Cap(c_a), veh/h	0	1149		839	2371	0				638	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.87	0.87	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	33.2	0.0	11.8	0.0	0.0				48.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	0.0	19.8	0.0	0.0				14.1	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	8.8	0.0	8.8	0.0	0.0				8.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	35.8	0.0	31.6	0.0	0.0				62.9	0.0	0.0
LnGrp LOS	A	D		C	A	A				E	A	
Approach Vol, veh/h		717	A		1187						520	A
Approach Delay, s/veh		35.8			18.4						62.9	
Approach LOS		D			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	45.5	47.3		27.2		92.8
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6
Max Green Setting (Gmax), s	46.6	30.4		22.0		84.4
Max Q Clear Time (g_c+I1), s	35.6	23.3		19.5		2.0
Green Ext Time (p_c), s	2.5	2.9		0.6		4.1

Intersection Summary		
HCM 6th Ctrl Delay		33.1
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1064	0	0	926	277	94	1	1147	0	0	0
Future Volume (veh/h)	33	1064	0	0	926	277	94	1	1147	0	0	0
Initial Q (Qb), veh	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			
Parking Bus, Adj	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	1722	1826	0	0	1811	1826	1633	1811	1811			
Adj Flow Rate, veh/h	39	1252	0	0	1129	0	102	1	0			
Peak Hour Factor	0.85	0.85	0.85	0.82	0.82	0.82	0.92	0.92	0.92			
Percent Heavy Veh, %	12	5	0	0	6	5	18	6	6			
Cap, veh/h	303	2371	0	0	2351		370	4				
Arrive On Green	1.00	1.00	0.00	0.00	0.68	0.00	0.22	0.22	0.00			
Sat Flow, veh/h	459	3561	0	0	3532	1547	1709	17	1535			
Grp Volume(v), veh/h	39	1252	0	0	1129	0	103	0	0			
Grp Sat Flow(s),veh/h/ln	459	1735	0	0	1721	1547	1726	0	1535			
Q Serve(g_s), s	2.6	0.0	0.0	0.0	18.6	0.0	6.0	0.0	0.0			
Cycle Q Clear(g_c), s	21.2	0.0	0.0	0.0	18.6	0.0	6.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	303	2371	0	0	2351		374	0				
V/C Ratio(X)	0.13	0.53	0.00	0.00	0.48		0.28	0.00				
Avail Cap(c_a), veh/h	303	2371	0	0	2351		374	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.46	0.46	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	2.4	0.0	0.0	0.0	9.0	0.0	39.2	0.0	0.0			
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.0	0.7	0.0	1.8	0.0	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			
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.0	0.0	6.1	0.0	2.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.8	0.4	0.0	0.0	9.7	0.0	41.0	0.0	0.0			
LnGrp LOS	A	A	A	A	A		D	A				
Approach Vol, veh/h		1291			1129	A		103	A			
Approach Delay, s/veh		0.5			9.7			41.0				
Approach LOS		A			A			D				

Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		88.0				88.0		32.0				
Change Period (Y+Rc), s		6.0				6.0		6.0				
Max Green Setting (Gmax), s		82.0				82.0		26.0				
Max Q Clear Time (g_c+I1), s		23.2				20.6		8.0				
Green Ext Time (p_c), s		12.7				9.9		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			6.2									
HCM 6th LOS			A									

Notes

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

Intersection	
Int Delay, s/veh	69.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	224	41	500	422	59	329
Future Vol, veh/h	224	41	500	422	59	329
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	93	93	87	87
Heavy Vehicles, %	8	8	7	6	7	8
Mvmt Flow	356	65	538	454	68	378

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1052	538	0	0	992	0
Stage 1	538	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Critical Hdwy	6.48	6.28	-	-	4.17	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.372	-	-	2.263	-
Pot Cap-1 Maneuver	~ 244	532	-	-	678	-
Stage 1	573	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 213	532	-	-	678	-
Mov Cap-2 Maneuver	~ 213	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	513	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 306.8	0	1.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	213	532	678	-
HCM Lane V/C Ratio	-	-	1.669	0.122	0.1	-
HCM Control Delay (s)	-	-	$ 360.6	12.7	10.9	0
HCM Lane LOS	-	-	F	B	B	A
HCM 95th %tile Q(veh)	-	-	23.5	0.4	0.3	-

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

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	31	309	25	104	205
Future Vol, veh/h	8	31	309	25	104	205
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	100	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	20	20	9	20	20	13
Mvmt Flow	9	34	347	28	122	241

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	846	361	0	0	375	0
Stage 1	361	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	310	645	-	-	1091	-
Stage 1	667	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	275	645	-	-	1091	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	2.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	275	645	1091	-
HCM Lane V/C Ratio	-	-	0.032	0.053	0.112	-
HCM Control Delay (s)	-	-	18.5	10.9	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	31	314	26	104	301
Future Vol, veh/h	8	31	314	26	104	301
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	100	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	20	20	9	20	20	13
Mvmt Flow	9	34	353	29	122	354

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	966	368	0	0	382	0
Stage 1	368	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	262	639	-	-	1085	-
Stage 1	662	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	233	639	-	-	1085	-
Mov Cap-2 Maneuver	233	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	458	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	2.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	233	639	1085	-
HCM Lane V/C Ratio	-	-	0.038	0.054	0.113	-
HCM Control Delay (s)	-	-	21.1	11	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

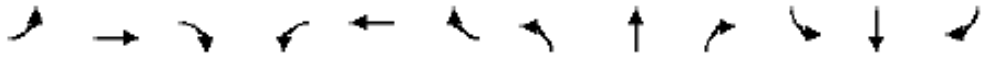
Intersection	
Int Delay, s/veh	9.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	274	132	84	330	57	37
Future Vol, veh/h	274	132	84	330	57	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	81	81	80	80
Heavy Vehicles, %	7	5	4	13	15	15
Mvmt Flow	308	148	104	407	71	46

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	292	104	0	-	104	0
Stage 1	104	-	-	-	-	-
Stage 2	188	-	-	-	-	-
Critical Hdwy	6.47	6.25	-	-	4.25	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.345	-	-	2.335	-
Pot Cap-1 Maneuver	688	943	-	0	1410	-
Stage 1	908	-	-	0	-	-
Stage 2	832	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	654	943	-	-	1410	-
Mov Cap-2 Maneuver	654	-	-	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	790	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	4.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	654	943	1410	-
HCM Lane V/C Ratio	-	0.471	0.157	0.051	-
HCM Control Delay (s)	-	15.3	9.5	7.7	-
HCM Lane LOS	-	C	A	A	-
HCM 95th %tile Q(veh)	-	2.5	0.6	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑					↰	↑	↱
Traffic Volume (veh/h)	0	318	136	1076	431	0	0	0	0	310	4	76
Future Volume (veh/h)	0	318	136	1076	431	0	0	0	0	310	4	76
Initial Q (Qb), veh	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
Parking Bus, Adj	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	0	1737	1693	1826	1796	0				1841	1841	1781
Adj Flow Rate, veh/h	0	361	0	1223	490	0				377	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.83	0.83	0.83
Percent Heavy Veh, %	0	11	14	5	7	0				4	4	8
Cap, veh/h	0	405		1148	2717	0				397	0	
Arrive On Green	0.00	0.12	0.00	1.00	1.00	0.00				0.11	0.00	0.00
Sat Flow, veh/h	0	3387	1434	1739	3503	0				3506	0	1510
Grp Volume(v), veh/h	0	361	0	1223	490	0				377	0	0
Grp Sat Flow(s),veh/h/ln	0	1650	1434	1739	1706	0				1753	0	1510
Q Serve(g_s), s	0.0	16.2	0.0	93.6	0.0	0.0				16.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	16.2	0.0	93.6	0.0	0.0				16.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	405		1148	2717	0				397	0	
V/C Ratio(X)	0.00	0.89		1.07	0.18	0.00				0.95	0.00	
Avail Cap(c_a), veh/h	0	405		1148	2717	0				397	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.80	0.80	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	64.8	0.0	3.7	0.0	0.0				66.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	24.4	0.0	43.3	0.0	0.0				33.9	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	8.1	0.0	16.4	0.0	0.0				8.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	89.2	0.0	47.0	0.0	0.0				100.0	0.0	0.0
LnGrp LOS	A	F		F	A	A				F	A	
Approach Vol, veh/h		361	A		1713						377	A
Approach Delay, s/veh		89.2			33.5						100.0	
Approach LOS		F			C						F	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	101.0	25.0		24.0		126.0
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6
Max Green Setting (Gmax), s	93.6	18.4		17.0		119.4
Max Q Clear Time (g_c+I1), s	95.6	18.2		18.0		2.0
Green Ext Time (p_c), s	0.0	0.1		0.0		4.1

Intersection Summary	
HCM 6th Ctrl Delay	52.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	539	0	0	1455	437	32	2	743	0	0	0
Future Volume (veh/h)	93	539	0	0	1455	437	32	2	743	0	0	0
Initial Q (Qb), veh	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			
Parking Bus, Adj	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	1707	1811	0	0	1856	1856	1633	1870	1870			
Adj Flow Rate, veh/h	116	674	0	0	1582	0	36	2	0			
Peak Hour Factor	0.80	0.80	0.80	0.92	0.92	0.92	0.89	0.89	0.89			
Percent Heavy Veh, %	13	6	0	0	3	3	18	2	2			
Cap, veh/h	236	2753	0	0	2820		203	11				
Arrive On Green	1.00	1.00	0.00	0.00	0.80	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	295	3532	0	0	3618	1572	1692	94	1585			
Grp Volume(v), veh/h	116	674	0	0	1582	0	38	0	0			
Grp Sat Flow(s),veh/h/ln	295	1721	0	0	1763	1572	1786	0	1585			
Q Serve(g_s), s	23.6	0.0	0.0	0.0	24.4	0.0	2.9	0.0	0.0			
Cycle Q Clear(g_c), s	48.0	0.0	0.0	0.0	24.4	0.0	2.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.95		1.00			
Lane Grp Cap(c), veh/h	236	2753	0	0	2820		214	0				
V/C Ratio(X)	0.49	0.24	0.00	0.00	0.56		0.18	0.00				
Avail Cap(c_a), veh/h	236	2753	0	0	2820		214	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.21	0.21	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	4.9	0.0	0.0	0.0	5.4	0.0	59.3	0.0	0.0			
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.0	0.8	0.0	1.8	0.0	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			
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.0	7.2	0.0	1.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.4	0.0	0.0	0.0	6.3	0.0	61.1	0.0	0.0			
LnGrp LOS	A	A	A	A	A		E	A				
Approach Vol, veh/h		790			1582	A		38	A			
Approach Delay, s/veh		1.0			6.3			61.1				
Approach LOS		A			A			E				

Timer - Assigned Phs	2			6		8			
Phs Duration (G+Y+Rc), s	126.0			126.0		24.0			
Change Period (Y+Rc), s	6.0			6.0		6.0			
Max Green Setting (Gmax), s	120.0			120.0		18.0			
Max Q Clear Time (g_c+I1), s	50.0			26.4		4.9			
Green Ext Time (p_c), s	9.3			18.8		0.1			

Intersection Summary									
HCM 6th Ctrl Delay		5.4							
HCM 6th LOS		A							

Notes

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

Intersection	
Int Delay, s/veh	18.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	333	10	273	240	4	368
Future Vol, veh/h	333	10	273	240	4	368
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	90	90
Heavy Vehicles, %	3	3	5	4	8	10
Mvmt Flow	362	11	329	289	4	409

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	746	329	0	0	618	0
Stage 1	329	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.18	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.272	-
Pot Cap-1 Maneuver	380	710	-	-	934	-
Stage 1	727	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	378	710	-	-	934	-
Mov Cap-2 Maneuver	378	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	659	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	68	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	378	710	934	-
HCM Lane V/C Ratio	-	-	0.958	0.015	0.005	-
HCM Control Delay (s)	-	-	69.7	10.1	8.9	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	10.7	0	0	-

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	99	225	9	37	261
Future Vol, veh/h	25	99	225	9	37	261
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	20	20	3	20	20	9
Mvmt Flow	28	110	281	11	39	278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	643	287	0	0	292	0
Stage 1	287	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	411	711	-	-	1174	-
Stage 1	722	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	397	711	-	-	1174	-
Mov Cap-2 Maneuver	397	-	-	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	649	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	397	711	1174	-
HCM Lane V/C Ratio	-	-	0.07	0.155	0.034	-
HCM Control Delay (s)	-	-	14.7	11	8.2	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.5	0.1	-

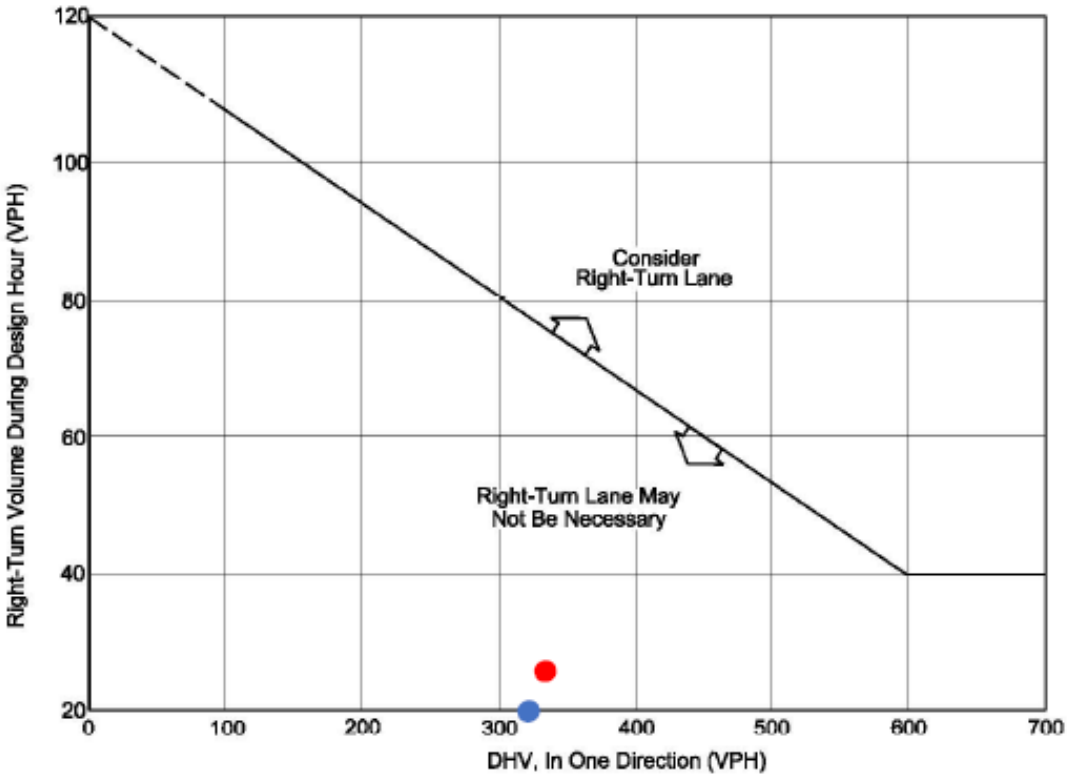
Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	99	315	9	37	273
Future Vol, veh/h	25	99	315	9	37	273
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	20	20	3	20	20	9
Mvmt Flow	28	110	394	11	39	290

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	768	400	0	0	405	0
Stage 1	400	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Critical Hdwy	6.6	6.4	-	-	4.3	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.48	-	-	2.38	-
Pot Cap-1 Maneuver	345	613	-	-	1063	-
Stage 1	640	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	332	613	-	-	1063	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	332	613	1063	-
HCM Lane V/C Ratio	-	-	0.084	0.179	0.037	-
HCM Control Delay (s)	-	-	16.8	12.2	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.6	0.1	-



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

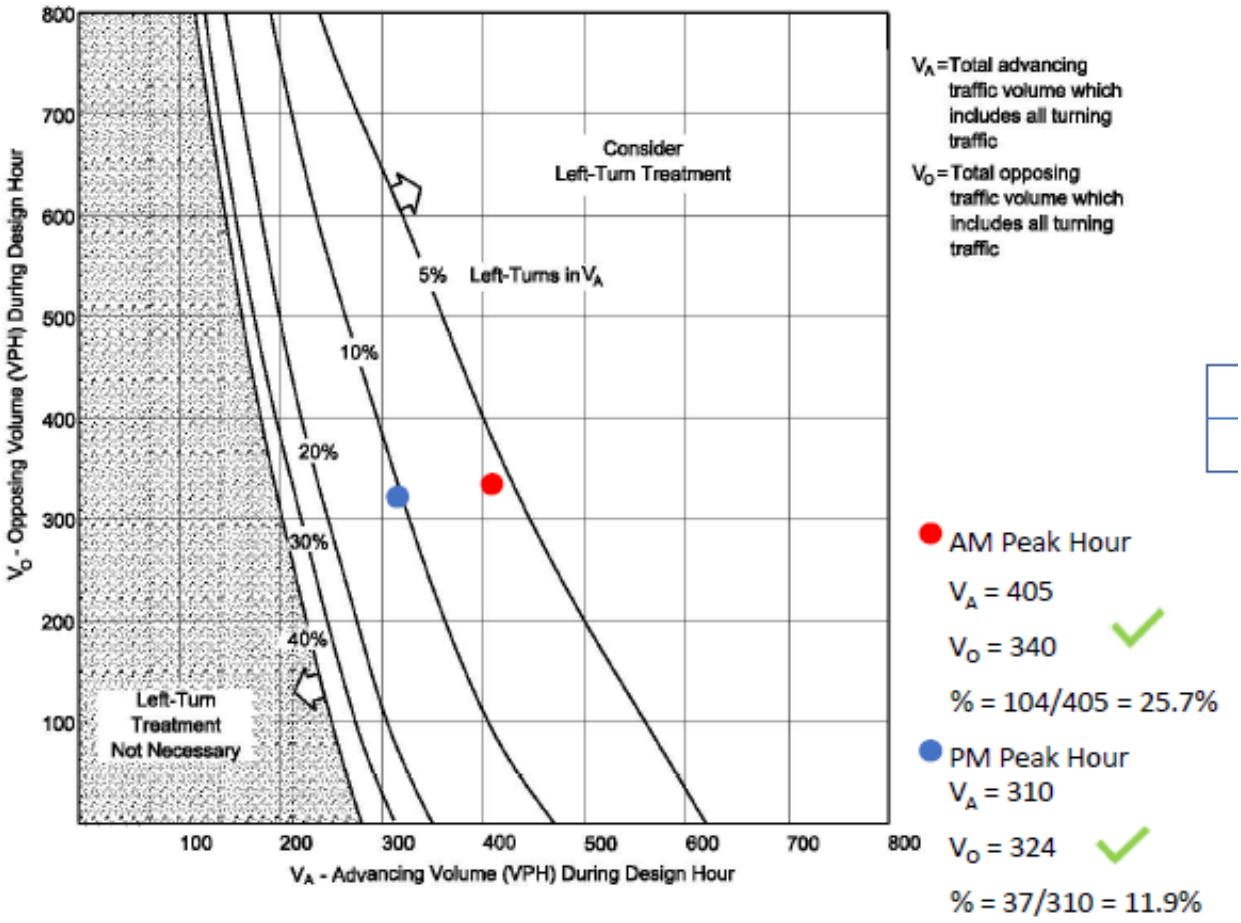
				AM Peak Hour	PM Peak Hour
Given:	Design Speed	=	35 miles per hour	Speed = 55 mph	Speed = 55 mph
	DHV	=	250 vehicles per hour	DHV =340	DHV = 324
	Right Turns	=	100 vehicles per hour	R-Turns = 26	R-Turns = 9

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

95 Logistics Center
US 17 at Site Driveway #1



Instructions:

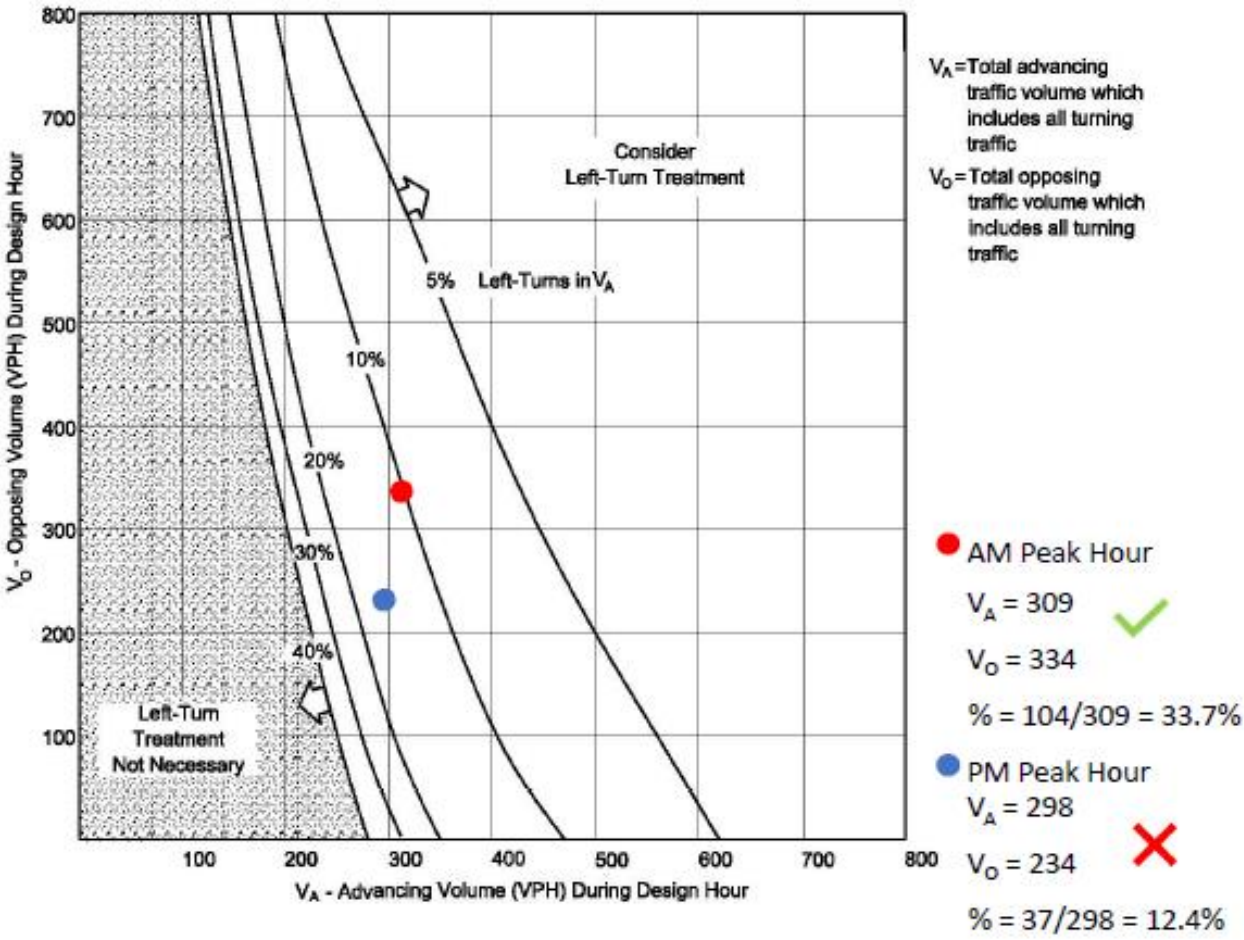
1. *The family of curves represents the percent of left turns in the advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.*

2. *Read V_A and V_O into the chart and locate the intersection of the two volumes.*

3. *Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.*

VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (55 mph)
Figure 9.5-D

95 Logistics Center
US 17 at Site Driveway #2



Instructions:

1. *The family of curves represents the percent of left turns in the advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.*

2. *Read V_A and V_O into the chart and locate the intersection of the two volumes.*

3. *Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.*

VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (55 mph)
Figure 9.5-D

APPENDIX:

95 Logistics Center and the Jasper County Comprehensive Plan

• Develop competitive industrial sites and buildings, particularly those focusing on communications, technology, distribution, energy and telecommunications.

• Establish links for vocational training in high schools with post-secondary technical training through shared facilities and programs. This has been done in the past with Silverman Group tenants in other similar developments.

• Increase budget to support needed staffing increases. Fees and taxes paid by Silverman Group and the new Tenants will help accomplish this.

• Seek opportunities to use access management and design treatments to improve the mobility of strategic corridors. With further study and DOT review and approval this will be look to improve 278 and US 17 as well as begin aesthetic improvements at the two access points on US 17 as envisioned by the Whyte-Hardee Master Plan.

• Improve existing water, sewer and road infrastructure.

• The project will improve the Employment Status of Jasper County. The estimated employment increase upon full development will be 2170 new jobs which will increase the 2016 Employment Status Estimates by 18%.

• The proposed development of a new port on the Savannah River has been a vision for Jasper County for many years. This project will strengthen the infrastructure for the Terminal project.

• The sellers donated 5 acres of land for the new Community Center on John Smith Road.

• The Comprehensive Plan states to give priority to transportation programs that retain existing businesses and attract new businesses to the area. This project does just that.

• Improve access to freight facilities (ports, airfields, industrial parks) for people and freight.

•Impact Fees: A one-time fee based on the cost associated with providing capital improvements to new homes or businesses. This fee is a per unit exaction paid at the time property is developed or purchased. These fees are placed into a special fund for system-wide capital facilities and are determined by fiscal impact analysis on the future demand a proposed development will have on the local infrastructure system. The project will be contributing according to the mutually negotiated Development Agreement.