

TOWN OF ATLANTIC BEACH TOWN COUNCIL DECISION MEMORANDUM RE: Black Pearl of the Atlantic WF2-FDD Rezoning Request DATE: August 29, 2024

<u>ISSUE</u>

Does Town Council approve of the rezoning request for the Black Pearl of the Atlantic Waterfront 2 (WF2) – Flexible Design District (FDD)?

RECOMMENDATION

On July 25, 2024, the Planning Commission held a public hearing on the rezoning request, and they recommended Town Council approve the rezoning request.

BACKGROUND

On January 23, 2024, the Town of Atlantic Beach received a formal rezoning application to rezone PIN 392-01-01-0167 from Waterfront 2 (WF2) to the Black Pearl of the Atlantic WF2-FDD. The rezoning application proposes a combined total of up to 108 hotel/multi-family/interval occupancy and short-term rental units within an 18-story building. All parking is internal to the building. The bottom two floors are proposed to consist of reception/check-in space, dining, retail, fitness area, pools, conference space and other areas consistent with hotels. The full request has been prepared in the form of an ordinance that can be found in this packet. This ordinance, if adopted, will be an Appendix of the Land Management Ordinance and provide development standards solely for this property.

On February 16, 2023, the Planning Commission conducted a Pre-Application Review of this project and recommended the applicant to submit a complete rezoning application. The initial proposal was for a 21-story tower with 168 hotel rooms, 36 short term rental units, and 24 condo units, in addition to an 11-story parking garage on another parcel.

The formal rezoning submission reduced the number of total units, and the conceptual plan shows a combination of 90 hotel rooms, interval occupancy/short term rentals, and multifamily units. As written, the ordinance allows for flexibility in the combination of the types of units but not to exceed 108 total units. Any multi-family units will require the approval of a Special Exception from the Board of Zoning Appeals. As written in the proposed ordinance, if multi-family units are not approved by the Board of Zoning Appeals, those units could then be developed as interval occupancy/short term rental or as hotel units. If approved, no more than 82 multi-family units can be constructed in order to not exceed the density cap of the Land Management Ordinance. Note that a Special Exception for multi-family units is not required prior to Council consideration for this rezoning; however, it will be required prior to construction plan approval if multi-family units are pursued by the developer, as opposed to just developing hotel or interval occupancy/short-term rental units.

ANALYSIS

The applicant has requested a Flexible Design District to obtain greater height, floor area ratio, density, and building coverage than the existing zoning allows. The following table details some of the dimensional differences between the existing zoning (Waterfront 2 (WF2) District) and what could be allowed with the requested zoning, Waterfront 2- Flexible Design

District (FDD) with Public Amenity Features equivalent to 3% or greater of the total project costs.

| | | 5 |
|---------------------------|----------------------------|--------------------------|
| | WF2 | WF2-FDD |
| | (Existing Zoning District) | (if 3% or Greater Public |
| | | Amenities Provided) |
| Minimum Lot Area (sq ft) | 22,500 | 20,000 |
| Minimum Lot Width (in ft) | 150 | 150 |
| Maximum Structure Height | 125 ft and no more than 12 | Up to 200 ft and no more |
| | stories | than 20 stories |
| Max Building Coverage | 50% | Up to 70% |
| Max Impervious Surface | 50% | Up to 80% |
| Min Open Space | 40% | 15% |
| Max Floor Area Ratio | 2.0 | Up to 4.0 |
| Density | 1 dwelling/1,500 sq ft | 1 dwelling/375 sq ft |

Summary of Allowed District Dimensional Standards per the Land Management Ordinance

The following table provides a crosswalk of the project proposal to indicate if and how the rezoning request meets the requirements of the Land Management Ordinance. Per the Land Management Ordinance, a Flexible Design District can be written to allow a project to veer from some provisions of the Land Management Ordinance, such as defining project specific setbacks or parking requirements. It cannot add uses beyond what is allowed by the underlying WF2 District. This project has requested variation from the setbacks, parking minimums, and on and off-site signage. It has also included provisions to allow for pools and patios to be allowed within the Shore Protection Area.

Crosswalk Review of District Requirements and Rezoning Submission

| | WF2-FDD Requirements | | |
|----------------|---------------------------|--|--------------|
| | (if 3% or Greater Public | Summary of Rezoning | Meets Zoning |
| | Amenities Provided) | Submission | Requirements |
| Uses | Multi-family, Second and | Hotel and uses | Yes |
| | Upper Floor Residential, | retail/dining/entertainm | |
| | Hotel/Motel/Inn, Interval | ent uses associated with | |
| | Occupancy and Short- | hotel | |
| | Term Rental Residential | • Multi-family (if a special | |
| | Units, Government | exception approved by | |
| | Offices, Parks, some | the Zoning Board of | |
| | Retail Uses, and most | Appeals) | |
| | Entertainment, | Interval Occupancy and | |
| | Recreation, and Dining. | Short-term Rentals | |
| Minimum Size | 20,000 sq ft | 30,827 sq ft | Yes |
| Min. Lot Width | 150 ft | 201.25′ | Yes |
| Min. Lot Depth | N/A | 148.94 - ~158 | N/A |

| Maximum | 200 feet and no more | 18 stories and no more | Yes |
|------------------|-----------------------------|--------------------------------|------------|
| Structure Height | than 20 stories; however, | than 169 feet above | |
| | per the FAA - No more | ground level or 181 feet | |
| | than 169 feet above | above sea level | |
| | ground level or 181 feet | | |
| | above sea level | | |
| Maximum | 70% | Not to exceed 70% | Yes |
| Building | | | |
| Coverage | | | |
| Maximum | 80% | Not to exceed 80%. | Yes |
| | | Pervious pavers, green | |
| Surface | | roois, and other low | |
| Coverage | | Impact development | |
| | | practices may be used to | |
| | | exceeding 80% impervious | |
| | 15% | Minimum of 15% | Vos |
| Space | 1576 | | 163 |
| Maximum Floor | 4.0 (4 x 52.899 sq ft = | Not to exceed 4.0 | Yes |
| Area Ratio | 211,596 sq ft) | | |
| | | | |
| Density, lot | 375 sa feet per multi- | 375 sg feet of lot area per | Yes |
| area per multi- | family dwelling unit | multi-family dwelling unit | |
| family dwelling | (translates to no more | and no more than 82 units. | |
| unit | than 82 multi-family units) | As designed, the project | |
| | _ | includes 54 multifamily | |
| | | units, if Special Exception is | |
| | | approved by the Zoning | |
| | | Board of Appeals. | |
| Setbacks | Front: 10', Sides 5', | Front: 15' | Provided |
| | Oceanfront: 30' | Side: 10' | variation |
| | | Rear (Oceanfront): 20' | from |
| | Tranti 10/ Sideo: 10/ | | Oceanironi |
| | FIOIIL: 10, SIGES: 10, | | SELDACKS |
| Shoro | Minimum of 20' from the | Provided a minimum 20' | Provided |
| Protection Line | | from the oceanfront | variation |
| | | property line: however | from Shore |
| | | included provisions to | Protection |
| | | allow for pools and patios | standards |
| | | within that area which | standards |
| | | otherwise would not be | |
| | | allowable. | |
| Public | Examples from the Land | (1) Streetscape | Yes |
| Amenities | Management Ordinance | Beautification; (2) Two | |
| | include beach accesses, | Public Beach Access | |
| | parks, sidewalks, | Improvements, including | |
| | streetscape features, | showers, dune walkovers, | |
| | public parking, | and improved public | |
| | restrooms, and shower | parking at one access (3) | |
| | | Sidewalks and Crosswalks | |

| Public Amenity Value | facilities associated with recreational uses. 3% of development costs | on Ocean Blvd and Upgrade Crosswalk at Atlantic St (4) Resurfacing Ocean Blvd, Atlantic, and 31 st \$1,697,630 - 1,867,393 or 3.075 - 3.38% of development costs | Yes |
|---|---|---|--|
| Parking | See Section 5.3.630 of Land Management Ordinance. The number of parking spaces required will depend on construction plans and uses (multi-family versus accommodations) once submitted. | Wrote own requirements: 1.5 spaces per Hotel/Multi- family/Interval Occupancy/Short-term rental unit Other Uses: 4 spaces per 1,000 sq ft heated space. As designed, project provides 180 parking spaces on floors 3-8 of the building. | Provided variation from parking standards |
| Traffic Impact Study | Required | Provided | Yes |
| Beach and Pedestrian Access Management Plan | Required | Provided | Yes |

STATE OF SOUTH CAROLINA)COUNTY OF HORRY)TOWN OF ATLANTIC BEACH)

ORDINANCE TO AMEND THE OFFICIAL ZONING MAP AND THE LAND MANAGEMENT ORDINANCE FOR THE TOWN OF ATLANTIC BEACH, SOUTH CAROLINA, SO AS TO AMEND THE ZONING FOR PIN 392-01-01-0167 FROM WATERFRONT DISTRICT 2 (WF2) TO THE BLACK PEARL OF THE ATLANTIC WF2-FLEXIBLE DESIGN DISTRICT (WF2-FDD)

WHEREAS, Ordinance Number 7-2019 authorizes the Town of Atlantic Beach to amend the Official Zoning Map for the Town; and

WHEREAS, the property owner(s) have requested to amend the maps for the above mentioned parcel of land; and

WHEREAS, the intent of the Flexible Design District(s) (FDD) is to provide for higher intensity development along the oceanfront, while providing for a higher level of design and public amenities consistent with the Town of Atlantic Beach Comprehensive Plan and 2007 Master Plan; and

WHEREAS, the Waterfront 2 Flexible Design District (WF2-FDD) is designed to complement the character and the uses allowable within the WF2 zoning district; however, the WF2-FDD district allows for greater height, floor area ratio, density, and building coverage than fixed zoning districts described in Section 5.3.400 through the use of incentivized flexible development standards; and

WHEREAS, Atlantic Beach Town Council finds that the request to amend the zoning from Waterfront Two (WF2) to the Black Pearl of the Atlantic WF2- Flexible Design District (FDD) is consistent with the Comprehensive Plan.

NOW THEREFORE by the power and authority granted to the Town of Atlantic Beach by the Constitution of the State of South Carolina and the powers granted to the Town by the General Assembly of the State, it is ordained and enacted that:

- 1) PIN 392-01-0167 is hereby rezoned from Waterfront Two (WF2) to the Black Pearl of the Atlantic WF2-Flexible Design District (FDD) as shown in Attachment A titled Official Zoning Map Amendment.
- 2) The Land Management Ordinance is hereby revised to incorporate the Black Pearl of the Atlantic WF2-FDD as detailed in Attachments B, C, D, E, F, and G.

SEVERABILITY. If a section, sub-section, or part of the Ordinance shall be deemed or found in conflict with a provision of South Carolina law, or other pre-emptive legal principle, then that section, sub-section or part of this Ordinance shall be deemed ineffective, but the remaining part of this Ordinance shall remain in full force and effect.

CONFLICT WITH PRECEDING ORDINANCES. If a section, sub-section or provisions of this Ordinance shall conflict with the provisions of a section, sub-section or part of a preceding Ordinance of the Town of Atlantic Beach, then the preceding section, sub-section or part shall be deemed repealed and no longer in effect.

EFFECTIVE DATE. This Ordinance shall become effective immediately upon adoption at second reading.

BE IT ORDERED AND ORDAINED by the Mayor and Town Council of the Town of Atlantic Beach, South Carolina, in assembly and by the authority thereof, this _____ day of _____, 2024.

Atlantic Beach Town Council

Jake Evans, Mayor

Josephine Isom, Mayor Protem

Edward Campbell, Councilmember

John David, Jr. Councilmember

Jacqueline Gore, Councilmember

Attest:

Town Clerk

Town Manager

Ordinance No. <u>4-2024</u> First Reading: <u>06/03/2024</u>

Second Reading: ______

ATTACHMENT A

OFFICIAL ZONING MAP AMENDMENT TO REZONE FROM WATERFRONT TWO (WF2) TO THE BLACK PEARL OF THE ATLANTIC WATERFRONT TWO – FLEXIBLE DESIGN DISTRICT PIN NUMBER: 392-01-01-0167



ATTACHMENT B DISTRICT STANDARDS FOR THE BLACK PEARL OF THE ATLANTIC WATERFRONT TWO – FLEXIBLE DESIGN DISTRICT PIN NUMBER: 392-01-01-0167

I. SUMMARY

A. LEGAL DESCRIPTION FOR LOTS 9 THROUGH 11 (PIN 392-01-01-0167), AS-SURVEYED AND SHOWN IN ATTACHMENT D.

ALL AND SINGULAR, THAT CERTAIN PIECE, PARCEL, OR LOT OF LAND WITH ANY IMPROVEMENTS THEREON, SITUATE, LYING, AND BEING IN THE TOWN OF ATLANTIC BEACH, PEARL BEACH SECTION, HORRY COUNTY, SOUTH CAROLINA, BEING BOUND OF THE NORTH BY FIRST AVENUE (40' PUBLIC R/W), ON THE EAST BY IRENE TAYLOR FAMILY, LP, ON THE SOUTH BY THE ATLANTIC OCEAN, ON THE WEST BY 31ST AVENUE SOUTH (50' PUBLIC R/W) AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 1/2" REBAR FOUND LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF FIRST AVENUE (40' PUBLIC R/W) AND 31ST AVENUE SOUTH (50' PUBLIC R/W), THENCE ALONG SAID FIRST AVENUE, A BEARING OF N 58°41'01" E, A DISTANCE OF 201.25 FEET TO A 1/2" REBAR FOUND, THENCE LEAVING SAID RIGHT-OF-WAY ALONG THE LANDS OF IRENE TAYLOR FAMILY, LP, A BEARING OF S 30°00'09" E, A DISTANCE OF 148.94 FEET TO A 1/2" REBAR FOUND, THENCE ALONG THE ATLANTIC OCEAN, A BEARING OF S 58°43'39" W, A DISTANCE OF 99.03 FEET TO A 1/2" REBAR FOUND, THENCE A BEARING OF S 30°48'53" E, A DISTANCE OF 11.15 FEET TO A 1/2" REBAR FOUND. THENCE A BEARING OF S 58°39'25" W. A DISTANCE OF 99.03 FEET TO A 1/2" REBAR FOUND, THENCE A BEARING OF N 30°59'25" E, A DISTANCE OF 11.12 FEET TO A 1/2" REBAR FOUND LOCATED ON EASTERN EDGE OF RIGHT-OF-WAY OF 31ST AVENUE SOUTH (50' PUBLIC R/W), THENCE ALONG SAID RIGHT-OF-WAY, A BEARING OF N 31°13'07" W, A DISTANCE OF 148.91 FEET TO A 1/2" REBAR FOUND LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF FIRST AVENUE (40' PUBLIC R/W) AND 31ST AVENUE SOUTH AND POINT OF BEGINNING AND CONTAINING 0.71 ACRES± (30,827 SQUARE FEET±).

B. STATEMENT OF INTENT AND OBJECTIVES FOR THE DISTRICT

The intent of The Black Pearl of the Atlantic Flexible Design District is to provide for pedestrian oriented, mixed-use, beachfront development. Uses are intended to be composed of a hotel, residential, and vacation units, retail, dining, nightclub, and cultural uses that are intended to bring the community together. Building height is permitted to reach 169 feet. The district incorporates development and height bonuses as permitted in the currently adopted Land Management Ordinance, while providing public amenities consistent with the Town of Atlantic Beach Comprehensive Plan, 2007 Master Plan, and Land Management Ordinance.

II. GENERAL PROVISIONS

A. PERMITTED LAND USES.

1. Uses.

| Schedule of Uses | | | |
|--|---|--|--|
| P = Permitted by Right | C = Conditional Use S = Special Exception N | = Not Permitted | |
| Use Classifications | PIN NUMBER: 392-01-01-0167 | Special Standards | |
| | The Black Pearl - Flexible Design District | | |
| Multi-family Dwelling | S | \$5.3.506 \$5.3.507 \$5.3.555 \$5.3.570 | |
| Eating Establishments, Low Seating Turnover | С | \$5.3.506 \$5.3.507 \$5.3.530 | |
| Entertainment, Outdoor | С | \$5.3.506 \$5.3.507 \$5.3.533 | |
| Health Club, Spa, or Gym | С | \$5.3.506 \$5.3.507 \$5.3.544 | |
| Nightclub or Bar | С | \$5.3.506 \$5.3.507 \$5.3.558 | |
| Eating Establishments, High Seating Turnover | С | \$5.3.506 \$5.3.507 \$5.3.530 | |
| Souvenir or T-shirt Store | С | §5.3.506 §5.3.507 §5.3.575 | |
| Retail Sales or Services | С | §5.3.506 §5.3.507 §5.3.525 | |
| Department Store, Discount Store, and Gift Shop | С | \$5.3.506 \$5.3.507 \$5.3.525 | |
| Hotel and Motel | С | §5.3.506 §5.3.549 | |
| Interval Occupancy and Short-Term Rental Residential Dwelling Units | С | \$5.3.506 \$5.3.507 \$5.3.550 | |

- a. Short-Term Rentals, as applicable to this development, shall be defined as the rental of all or part of a dwelling unit for a duration of occupancy of less than 30 days at a time. Such units are dedicated vacation rentals, where there are no primary occupants.
- b. Interval Occupancy and Short-Term Rental Units are not classified as permanent dwelling units.

2. **Densities.** Hotel, Multi-Family, and Interval Occupancy/Short-Term rental units shall not exceed 108 combined total units, allowing for flexibility in the combination of the type of units.

a. Units Permitted.

| USES | MIN. | MAX. |
|--|------|------|
| Multi-Family | 27 | 82 |
| Interval Occupancy/Short-Term Rental units | 36 | 108 |
| Hotel Units | 36 | 108 |

b. Interval Occupancy or Short-Term Rental Dwelling Units Special Provisions:

- i. If a special exception to allow for multi-family is not approved by the Zoning Board of Appeals, all units designated as multi-family may be developed as interval occupancy or short-term rental residential units.
- ii. The conversion of these hotel and multi-family units to interval occupancy or short-term rentals shall be permitted and supersede conversion restrictions as denoted in section 5.3.550D of the Land Management Ordinance.

B. DIMENSIONAL STANDARDS.

1. **Minimum Setbacks.** Minimum setbacks shall apply to the exterior boundaries of the property, as shown in Attachment C. These setbacks supersede the requirements of Table 5.3.420A.

Front – 15 ft Side – 10ft Rear (Oceanfront) – 20 ft

- 2. **Minimum separation distance.** Building separation shall meet the requirements of the International Building Code.
- 3. **Maximum Height.** The building shall not exceed 169 feet above ground level or 181 feet above sea level. With the appropriate FAA approval(s), necessary building appurtenances may extend beyond this height.
- 4. Floor Area Ratio (FAR): FAR for the entire project site shall not exceed 4.0.
- 5. **Maximum Building Coverage:** Maximum building coverage shall not exceed 70 percent.
- 6. **Maximum Impervious Surfaces:** Maximum impervious surfaces shall not exceed 80 percent. In order for this project to not exceed the 80 percent Impervious Surface Coverage limits, pervious pavers, green roofs, and other low impact design practices will be utilized.
- 7. **Minimum Open Space:** A minimum of 15 percent of the property shall be maintained as open space.

III. SPECIAL PROVISIONS

The following are special provisions that vary from the underlying requirements of the Land Management Ordinance. Unless expressly stated below or within this ordinance, the Black Pearl of the Atlantic WF2-FDD shall meet all other requirements of the Land Management Ordinance.

- A. LANDSCAPE AND TREE COVERAGE. The project will meet the post development landscape requirements. If all of the required landscaping cannot be provided onsite, the developer will install the remaining required plantings on an alternative publicly owned or maintained location chosen by the Town of Atlantic Beach.
- B. **BEACH AND SHORELINE PROTECTION.** In addition to the permitted structures denoted in section 5.3.802, this project will also allow for the following design features within the Shore Protection Area: terraces, pools, patios or flat areas allocated for outdoor entertainment, in addition to public amenities, such as public parking and showers, as identified within this ordinance. All requirements of the South Carolina Beachfront Jurisdictional Baseline and Setback line shall be met.

C. PARKING CALCULATIONS

- 1. Hotel / Multi-Family / Interval Occupancy/ Short Term Rental Units= 1.5 parking spaces per unit
- 2. Other Uses = 4 spaces per 1000 heated sf.

D. ON AND OFFSITE SIGNAGE.

1. Additional Permitted Sign Types. In addition to the permitted signs provided by Table 5.3.724(A)(11), this project will also allow for the following signs:

| window | restroom blade | banner |
|------------------------|-----------------------|----------------|
| small glass | banners | motion |
| horizontal blade | vehicular directional | vertical blade |
| monumental id | awning | street sign |
| parking id | flat | directory |
| pedestrian directional | big store sign | · |



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- 2. **Maximum Signage per Lot** shall not be limited to the cumulative maximum area of signage, provided by Table 5.3.724(A)(11). Individual sign area shall not exceed 800 sf.
- 3. **Wayfinding and Identity Signage.** Wayfinding and identity signage may be pursued offsite in the Town, within building setbacks, and in the public right of way with the proper permits and approvals. No wayfinding sign shall exceed 400 sf. See Attachment E for the Wayfinding Signage Plan.



Figure 2: Examples of Wayfinding and Identity Signage

4. **Public Art**, such as: sculpture(s), mosaic(s), fountains / water elements, fine art crafts, earthworks, environmental artworks, murals, drawings, and paintings, monuments shall be permitted, allowed onsite, and not considered signage.

IV. PUBLIC AMENITIES

A. **ESTIMATED PROJECT COSTS.** The following details the estimated project costs, including construction, land, demolition, utility relocation, and the percent required to develop public amenity facilities.

| Construction (without public amenity features) | \$ | 55,200,000 |
|---|----|------------|
| Demolition | \$ | 200,000 |
| Land | \$ | 1,450,000 |
| Total Project Cost Estimate | \$ | 58,717,393 |
| Percent Required to Development Public Amenity Features | | 3.38% |

B. **PUBLIC AMENITY FEATURES AND CONSTRUCTION COST ESTIMATES**. The following are the responsibility of the developer to provide as a benefit to the Town. Construction for public amenities shall begin upon commencement of project. In understanding construction sequencing / phasing, some items may begin before others. All public amenity features shall be completed prior to the issuance of a certificate of occupancy for the development. Public amenity features shall be completed, regardless of an increase or decrease in construction costs. Inability to provide an amenity or changes to the planned amenity features shall require an amendment of this ordinance for the project to proceed.

| Streetscape Beautification on Ocean Boulevard, provided SCDOT approval - | |
|---|---------------------------|
| - Brick pavers for intersections and crosswalks - | \$546,000.00 |
| - Landscaping (96 palms and 384 shrubs) - | \$115,680.00 |
| Improved ADA accessible beach Access and Boardwalk | \$229,000.00 |
| - Two public ADA beach access points. See beach access plan | |
| - Beach Access points shall be owned by the town, but maintained by Morant | |
| Properties or owner's representative | |
| - Any needed easements are owned by the town of Atlantic Beach | |
| - Developer will sign guarantee and/or legal instruments ensuring perpetual | |
| Public use and dedication agreements | |
| - Developer will sign a guarantee denoting maintenance schedule | |
| 25 community parking spaces (not included in the project parking calculations) - | \$80,000.00 |
| - Located on the West boundary property line of property. See conceptual site pla | an |
| - Community Parking lot will be owned by the town, but maintained by Morant | |
| Properties or owner's representative/delegate | |
| - Property is owned by the town of Atlantic Beach | |
| - Developer will sign guarantee and/or legal instruments ensuring perpetual | |
| Public use and dedication agreements | |
| - Developer will sign a guarantee denoting maintenance schedule | |
| Community Public Showers - | \$175,000.00 |
| - Located Alongside shore. See beach access plan | |
| - Beach Access point shall be owned by the town, but maintained by Morant | |
| Properties or owner's representative | |
| - Any needed easements are owned by the town of Atlantic Beach | |
| - Developer will sign guarantee and/or legal instruments ensuring perpetual | |
| Public use and dedication agreements | |
| - Developer will sign a guarantee denoting maintenance schedule | |
| Sidewalks and Crosswalks - | \$375,000.00 |
| - Ocean Blvd, 8' wide, both sides of street | |
| - Upgrade exist8ing crosswalk at Atlantic Street | |
| Asphalt milling and overlay on Ocean Boulevard, Atlantic, 31 st provided SCDOT a | pproval - \$176,950.00 |
| TOTAL PUBLIC AMENITY FEATURES COST(S) | \$176,950.00 |

\$1,697,630 + 10% contingency =

\$1,867,393.00

ATTACHMENT C

CONCEPTUAL SITE PLAN FOR THE BLACK PEARL OF THE ATLANTIC WF2-FDD PIN NUMBER: 392-01-01-0167



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ATTACHMENT D SURVEY FOR THE BLACK PEARL OF THE ATLANTIC WF2-FDD PIN NUMBER: 392-01-01-0167

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ATTACHMENT E CONCEPTUAL WAYFINDING SIGNAGE PLAN FOR THE BLACK PEARL OF THE ATLANTIC WF2-FDD PIN NUMBER: 392-01-01-0167



Signage Legend

II proposed wayfinding signage shall be located

in the public right of way or within t property boundary for the propos BLACK PEARL Oceanside Tower.



ATTACHMENT F

BEACH ACCESS AND SIDEWALK PLAN FOR THE BLACK PEARL OF THE ATLANTIC WF2-FDD



PIN NUMBER: 392-01-01-0167

Ordinance No.<u>4-2024</u>

First Reading: <u>06/03/2024</u> Second Reading: <u>08/29/2024</u>

ATTACHMENT G

ILLUSTRATIVE EAST, WEST, NORTH, SOUTH ELEVATIONS OF THE DISTRICT BOUNDARIES FOR THE BLACK PEARL OF THE ATLANTIC WF2-FDD PIN NUMBER: 392-01-01-0167



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Supplemental Submission Materials

Case Number:

| LOVE |
|------|
| REL |

TOWN OF ATLANTIC BEACH REZONING APPLICATION

| The second se | | 1 V / | |
|---|-----------------------------------|------------------------------|---------------|
| (PIN) Parcel ID | 392.01-01-01-7 | 292-01-01 40 | |
| Number/s Area in ff ² or acres | 30,827 | 22072 | |
| Describe the proposed use of the property | To build a CON E Conference, C | dotel Resort | Coudominium |
| Current Use of Property | will comprised 0. | 1641.4.3 | be dronn with |
| Current Zoning District | WFZ | Requested Zoning District | WF2-FDD-21 |
| Property Location | \$ 370 5 Oce | an Bivd | |

Ownership Information: (include all owners. If necessary, add additional pages)

| Name: 9 Thry 11 &1 | LLC | And a state of the |
|----------------------|----------------|--|
| Address: 17427 Adela | ide RD | |
| City: JAMAICA | State: NY | Zip: 11433-4010 |
| Phone: 917-396-0033 | Email address: | Cbm 12746@ aol. Com |

Agent Information: (if applicable)

| Name: Charles Mora | NI | |
|-----------------------|----------------|---------------------|
| Address: 112-11, 1754 | 34 . | |
| City: JAMAICA | State: NY | Zip: 11433.4011) |
| Phone: 917-396-0033 | Email address: | Cbm 12746@ 006. com |

| Office Use Only: | | | | |
|--------------------|-------------------------------------|-----------------------|---|---|
| Date Submitted | PINs verified Environmental Review: | | | |
| Receipt No. | Total Acreage | Wetlands | Y | N |
| Received By | Sketch Plan | Floodplain | Y | N |
| Ownership Verified | Master Plan | OCRM Baseline/Setback | Y | N |
| Signatures | Text | Topography | Y | N |

| Case Number: | |
|----------------|-----|
| ease mornibol. | 1 1 |

SIGNATURE PAGE

Applicant/Agent hereby certifies that the information provided in this application is correct and there are no covenants or deed restrictions in place that would prohibit this request.

Applicant/Agent hereby certifies that they understand that rezoning is only one step in the development process. The Applicant/Agent must also ensure that all development requirements are met and understands that rezoning the property does not alleviate other development requirements. Additionally, the applicant understands that a subdivision or combination plat during the rezoning process may result in inaccurate rezoning of the property.

Signature Blocks:

| Owners (include all owners. If necessary, add additional pages) |
|---|
| Byonca Lindquest Byonce hulget 1/18/24 |
| Print Name Signature |
| Charles MoraNT Charles Malant 1/18/24 |
| Print Name Signature Date |
| Corporation / Partnership |
| 9 Thrull+1, LLC |
| Print Corporation/Partnership Name (If in LLC or Corp. name, provide authorization to sign) |
| By BYONCA Lindquist Byonca Rundart 1/18/24 Print Name |
| |

Designation of Agent:

I hereby appoint the person listed below as agent to act on my behalf for the purpose of filing such application for rezoning, as he/she shall deem necessary and proper.

 Print agents name
 Date

 Signature of agent
 Date

 Signature of owner (include all owners. If necessary, add additional pages)
 Date

 Witness Signature
 Date

Proposed Internal Builidng Layout, including Parking

Conceptual for Illustration Purposes Only









Conceptual Floor Plan Shown for illustration purposes only

Agency Review Documenation, including:

- (1) FAA Determination Letters for All Four Corners of Proposed Building
- (2) SCDOT Conceptual Concurrence Letter
- (3) Email from Horry County Fire Rescue on Ability to Serve

Aeronautical Study No. 2023-ASO-24147-OE



Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 10101 Hillwood Parkway Fort Worth, TX 76177

Issued Date: 08/30/2023

Dwayne Dancy Charles Morant 112-11, 75th street Adelaide Park, NY 11433

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| Structure: | High Rise/Sky Scraper The Black Pearl Tower |
|------------|---|
| Location: | North Myrtle Beach, SC |
| Latitude: | 33-47-59.77N NAD 83 |
| Longitude: | 78-42-57.59W |
| Heights: | 12 feet site elevation (SE) |
| | 169 feet above ground level (AGL) |
| | 181 feet above mean sea level (AMSL) |

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1) ___X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 03/02/2025 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within

6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6504, or dale.kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-ASO-24147-OE.

Signature Control No: 594939844-597951824 Dale Kimmel Specialist (DNE)

Attachment(s) Additional Information Map(s)



Aeronautical Study No. 2023-ASO-24149-OE



Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 10101 Hillwood Parkway Fort Worth, TX 76177

Issued Date: 08/30/2023

Dwayne Dancy Charles Morant 112-11, 75th street Adelaide Park, NY 11433

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| Structure: | High Rise/Sky Scraper The Black Pearl Tower |
|------------|---|
| Location: | North Myrtle Beach, SC |
| Latitude: | 33-48-01.81N NAD 83 |
| Longitude: | 78-42-55.89W |
| Heights: | 12 feet site elevation (SE) |
| | 169 feet above ground level (AGL) |
| | 181 feet above mean sea level (AMSL) |

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

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See attachment for additional condition(s) or information.

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If we can be of further assistance, please contact our office at (404) 305-6504, or dale.kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-ASO-24149-OE.

Signature Control No: 594940719-597951825 Dale Kimmel Specialist (DNE)

Attachment(s) Additional Information Map(s)



Aeronautical Study No. 2023-ASO-24148-OE



Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 10101 Hillwood Parkway Fort Worth, TX 76177

Issued Date: 08/30/2023

Dwayne Dancy Charles Morant 112-11, 75th street Adelaide Park, NY 11433

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| High Rise/Sky Scraper The Black Pearl Tower |
|---|
| North Myrtle Beach, SC |
| 33-48-00.91N NAD 83 |
| 78-42-55.26W |
| 12 feet site elevation (SE) |
| 169 feet above ground level (AGL) |
| 181 feet above mean sea level (AMSL) |
| |

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If we can be of further assistance, please contact our office at (404) 305-6504, or dale.kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-ASO-24148-OE.

Signature Control No: 594940436-597951827 Dale Kimmel Specialist (DNE)

Attachment(s) Additional Information Map(s)



Aeronautical Study No. 2023-ASO-24153-OE



Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 10101 Hillwood Parkway Fort Worth, TX 76177

Issued Date: 08/30/2023

Dwayne Dancy Charles Morant 112-11, 75th street Adelaide Park, NY 11433

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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| Structure: | High Rise/Sky Scraper The Black Pearl Tower |
|------------|---|
| Location: | North Myrtle Beach, SC |
| Latitude: | 33-48-01.00N NAD 83 |
| Longitude: | 78-42-56.00W |
| Heights: | 12 feet site elevation (SE) |
| | 169 feet above ground level (AGL) |
| | 181 feet above mean sea level (AMSL) |

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

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See attachment for additional condition(s) or information.

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 03/02/2025 unless:

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If we can be of further assistance, please contact our office at (404) 305-6504, or dale.kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-ASO-24153-OE.

Signature Control No: 594942407-597951958 Dale Kimmel Specialist (DNE)

Attachment(s) Additional Information Map(s)





Darlington County Dillon County Florence County Georgetown County Horry County Marion County Marlboro County Williamsburg County

May 30, 2024

James H. Green G3 Engineering and Surveying 24 Commerce Drive Pawleys Island, SC 29585

> RE: Conceptual Concurrence for Black Pearl Project South Ocean Boulevard (S-26-370) – Atlantic Beach

Dear Mr. Green:

This letter is in follow-up to your May 30, 2024 email requesting *conceptual concurrence* to the above referenced project located at the intersection of South Ocean Boulevard (S-26-370) and 31st Avenue South (S-26-571) in the Town of Atlantic Beach, Horry County.

SCDOT agrees in concept to the improvement of the existing full access drive on South Ocean Boulevard (S-26-370) at 31st Avenue South (S-26-370) and to the future one way access driveway on South Ocean Boulevard (S-26-370) for the new proposed hotel. Proposed pedestrian accommodations will be contingent on final project design and shall meet applicable American with Disabilities Act (ADA) requirements. This *conceptual concurrence* is based upon a site plan prepared by G3 Engineering and Surveying dated May 30, 2024 showing the layout of the future hotel project. This site plan was labeled as the Black Pearl Rezoning Effort and shows the general layout of proposed driveway locations. This map has been attached to this letter for reference.

Final approval of any improvements within the SCDOT right of way shall be contingent upon an approved encroachment permit. An encroachment permit application must be submitted to SCDOT for the standard review process. All applications for encroachments upon roads in the state highway system shall comply with the latest edition of the SCDOT Access and Roadside Management Standards (ARMS) manual.

If you have any questions or need further assistance, please contact the SDCOT District 5 Office.

Sincerely,

Raley Wult

Raleigh "Tripp" Ward III Assistant District Traffic Engineer

Attachment

District Five Engineering Post Office Box 1911 3018 East Palemetto Street Florence, SC 29503 843-661-4710 | 843-661-4704 Fax



www.scdot.org An Equal Opportunity Affirmative Action Employer 855-GO-SCDOT (855-467-2368)



RE: Fire Rescue Capabilities - Atlantic Beach

1 message

Ammons, Nickolas <Ammons.Nickolas@horrycountysc.gov> Fri, Mar 15, 2024 at 3:29 PM To: Leigh Kane <Ikane@wrcog.org> Cc: Benjamin Quattlebaum <benjamin.quattlebaum@aol.com>, "Tanner, Joseph" <tannerj@horrycountysc.gov>

Leigh,

I can confirm that the Lake Arrowhead Fire Station is the closest county fire station with fire suppression apparatus. This station located at 10228 Kings Road is under 5 miles from the proposed site. This fire station houses a fire engine, an aerial ladder truck, an ambulance, and a quick response vehicle, all of which are career staffed. There is also an additional Horry County Fire Rescue station which is a little closer that houses an ambulance(this is career staffing that are firefighters as well). Horry County Fire Rescue also has an automatic aid agreement with the City of North Myrtle Beach, thus meaning in a larger scaled emergency, North Myrtle Beach Fire resources would assist as needed.

I can verify that Horry County Fire Rescue is capable of meeting the response needs of this proposed development. As I am sure you are aware, Horry County Fire Rescue is not the organization that would be handling the fire codes side of things during the pre-construction and construction phases; that would all be overseen by the local building official, or whomever is responsible for building codes enforcement for the town. Please let us know if you have any other questions or concerns.

Respectfully,

Nick Ammons, MPA | Captain | Planning & Accreditation Manager **Horry County Government** Fire Rescue 2560 Main Street, Conway, South Carolina 29526 Tel: (843) 915-5190 | Fax: (843) 915-6190 | Ammons.Nickolas@horrycountysc.gov www.horrycountysc.gov

From: Leigh Kane <lkane@wrcog.org> Sent: Thursday, March 14, 2024 9:44 PM To: Tanner, Joseph <tannerj@horrycountysc.gov> Cc: Benjamin Quattlebaum <benjamin.quattlebaum@aol.com>; Ammons, Nickolas <Ammons.Nickolas@ horrycountysc.gov> Subject: Fire Rescue Capabilities - Atlantic Beach

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good evening Chief Tanner,

After many long years with Horry County, I am now with the Waccamaw Regional Council of Governments. Our agency provides planning and zoning technical assistance to the Town of Atlantic Beach. The Town has received a rezoning request for an 18-story condo-tel located at 3005 3007 3009 and 3011 S Ocean Blvd (PIN 39201010167). As part of the rezoning review process, I would like to verify that Horry County Fire Rescue at your Lake Arrowhead Station is the responding team to Atlantic Beach.

Being that this site is 18-stories with up to 108 condo/hotel units, I wanted to verify that the fire trucks at this station are equipped to respond to a building of this scale. Please let Mr. Quattlebaum with the Town and I know if you have any questions or concerns about this rezoning request as it relates to your crews emergency response capabilities. Thank you for your insight. Best regards,

Leigh Kane, AICP

Local Planning Services Director *Waccamaw Regional Council of Governments* 1230 Highmarket Street Georgetown, SC 29440 843-436-6125 Office <u>https://wrcog.org/</u>

This e-mail, in its entirety and including all attachments, is intended solely for the use of the person or entity to whom it is addressed and may contain sensitive information which is privileged, confidential, and the disclosure of which is governed by applicable law. If you are not the intended recipient, you are hereby notified that disclosing, distributing, copying, or taking any action in relation to this e-mail is STRICTLY PROHIBITED. If you have received this e-mail in error, please notify the sender immediately and destroy the related message and any attachments.

WARNING: All e-mail correspondence to and from this address may be subject to public disclosure under the South Carolina Freedom of Information Act (FOIA), §30-410 SC Code of Laws



TRAFFIC IMPACT STUDY

for the

Black Pearl Development

Located in Atlantic Beach, South Carolina

Prepared for Morant Properties 112-11 175th Street Jamaica, NY 11433

Prepared by Access Engineering LLC



Project #24022



EXECUTIVE SUMMARY

A traffic impact study was conducted for the proposed Black Pearl development in accordance with the Town of Atlantic Beach and SCDOT guidelines. The site is located south of South Ocean Boulevard in Atlantic Beach, South Carolina. The development is planned to contain a mixed-use tower along the southern side of S. Ocean Boulevard. The tower is planned to contain 27 multifamily units, 63 hotel units, and 5,722 square feet of retail space. The development will have one access to a surface parking lot and a parking deck that will align with 31st Avenue South.

Site Access on South Ocean Boulevard

The site access point should function well. The access should be designed in accordance with SCDOT and the Town of Atlantic Beach standards and with one ingress and one egress lane.

Atlantic Avenue Intersections

Analysis indicates that both intersections will continue to function adequately in the future, with construction of the project. No changes are recommended as a result of the development.

US 17 & Atlantic Avenue Intersection

Analysis indicates that the intersection will continue to function adequately in the future, with construction of the project. No changes are recommended as a result of the development.



1. INTRODUCTION

This report will document a traffic impact study for the proposed Black Pearl development in Atlantic Beach, South Carolina in accordance with the Town of Atlantic Beach and SCDOT guidelines.

The site is located south of South Ocean Boulevard in Atlantic Beach, South Carolina. The development is planned to contain a mixed-use tower along the southern side of S. Ocean Boulevard. The tower is planned to contain 27 multifamily units, 63 hotel units, and 5,722 square feet of retail space. The development will have one access to a surface parking lot and a parking deck that will align with 31st Avenue South.

The traffic impact study considers the weekday AM peak period (between 7:00 AM and 9:00 AM) and the weekday PM peak period (between 4:00 PM and 6:00 PM) as the study time frames. The following intersections are studied:

- US 17 & Atlantic Avenue (S-26-1280)
- Atlantic Avenue & Seaview Street (S-26-1070)
- Atlantic Avenue & South Ocean Boulevard (S-26- 370)
- South Ocean Boulevard & 31st Avenue S / Site Access #1

Future-year analyses assume 2027 conditions as the Build scenario. Scoping correspondence is included in *Appendix A*.

The site location is shown in *Figure 1* and the conceptual site plan is shown in *Figure 2*.







Black Pearl - Traffic Impact Study Figure 1 - Project Location Map Page 2





2. EXISTING CONDITIONS

Roadway Inventory

The existing roadway conditions are summarized in *Table 1*. *Figure 3* illustrates the existing lane geometry.

| Facility | Route # | Typical Cross Section | Posted Speed Limit | Maintained By | 2022 AADT |
|---|-----------|---------------------------|-----------------------|------------------|---------------------|
| S. Highway 17 | US 17 | 7-Lane undivided TWLTL | 40 MPH | SCDOT | 37,500 ¹ |
| Atlantic Avenue/ 30 th Avenue S | S-26-1280 | 2-Lane undivided | 30 MPH | SCDOT | 500 ² |
| S. Ocean Boulevard | S-26-370 | 2-lane undivided | NP | SCDOT | 225 ³ |
| Seaview Street | S-26-1070 | 2-lane undivided | NP | SCDOT | N/A |

¹SCDOT Count Station 26-0115; ¹SCDOT Count Station 26-0323; ³SCDOT Count Station 26-0418

Current Traffic Volumes

Vehicle turning movement counts were collected for this study by Short Counts. *Table 2* contains the count location and date collected.

Table 2 – Traffic Data Collection

| Count Location | Date |
|--------------------------------------|----------|
| US 17 & Atlantic Avenue | 5/3/2023 |
| Atlantic Avenue & Seaview Street | 5/3/2023 |
| Atlantic Avenue & S. Ocean Boulevard | 5/3/2023 |

All counts were conducted while the local school district was in session. Existing traffic volumes are illustrated in *Figure 4.* The 2023 raw traffic volumes are provided in *Appendix B*.





ENGINEERING Traffic & Transportation Consultants

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ACCESS ENGINEERING Traffic & Transportation Consultants Figure 4 - Existing (2024) Peak-Hour Traffic Volumes Page 6

3. PROPOSED DEVELOPMENT

The development is planned to contain a mixed-use tower along the southern side of S. Ocean Boulevard. The tower is planned to contain 27 multifamily units, 63 hotel units, and 5,722 square feet of retail space.

Proposed Access Points

The development will have one access to a surface parking lot and to a parking deck that will align with 31st Avenue South. The proposed driveway appears to meet the SCDOT ARMS spacing requirements.

Trip Generation Estimates

The trip generation potential was estimated based on the most recent edition of the ITE *Trip Generation Manual*. The trip generation estimates for the weekday daily, the weekday AM peak-hour of the adjacent street, and the weekday PM peak-hour of the adjacent street time periods are shown in *Table 3*.

| | ITE | Size | Linit | Daily | А | M Pea | k | PM Peak | | | | | | |
|------------------------------------|-------------------------|---------------------|---------------------|------------|-------|-------|-------|---------|------|-------|--|--|--|--|
| Land Use | LUC | | Onn | Traffic | Enter | Exit | Total | Enter | Exit | Total | | | | |
| Multifamily Housing (High Rise) | 222 | 27 | DU | 479 | 6 | 19 | 25 | 19 | 11 | 30 | | | | |
| Hotel | 310 | 63 | DU | 259 | 13 | 13 11 | | 10 | 9 | 19 | | | | |
| Strip Retail Plaza (<40k) | 822 | 6 | KSF | 471 | 12 | 8 | 20 | 26 | 26 | 52 | | | | |
| Total Trips 31 38 69 55 46 10 | | | | | | | | | | | | | | |
| 222 - Multifamily | 222 - Multifamily | | | | | | | | | | | | | |
| Daily Trips: $I = 3.76(X) + 37$ | 7.04 (50% 22(X) + 1 | 6 IN; 50% | 5 Out) % In: 74% | O(t) | | | | | | | | | | |
| PM Peak Hour Trips: $T = 0.2$ | 22(X) + 1 26(X) + 23 | 3.12 (629 | % In; 38% | Out) | | | | | | | | | | |
| 310 - Hotel | . / | | | , | | | | | | | | | | |
| Daily Trips: T=10.84(X)-423. | 51 (50% I | n; 50% (| Dut) | | | | | | | | | | | |
| AM Peak Hour Trips: T=0.50 | 0(X)-7.45 | (56% In | ; 44% Ou | t) | | | | | | | | | | |
| PM Peak Hour Trips: T= 0.7 | 4 (X)-27.8 | 39 (51% | ln; 49% C | out) | | | | | | | | | | |
| 822 - Retail | | | | | | | | | | | | | | |
| Daily Trips: $T = 42.20(X) + 2$ | 29.68 (50 | % In; 50 | % Out) | | | | | | | | | | | |
| AM Peak Hour Trips: Ln(T) | = 0.66 Lr | ר(X) + 1. גען אר | 84 (60% l | n; 40% Ou | t) | | | | | | | | | |
| PIVI Peak Hour Trips: Ln(T) | = 0.71 Ln | I(X) + 2. | /2 (50% lr | n; 50% Out | [) | | | | | | | | | |

Table 3 – ITE Trip Generation Estimates

Vehicle Trip Distribution & Assignment

New external traffic expected to be generated was distributed and assigned to the roadway network based on the existing patterns and surrounding land uses. The general distribution of new external project trips was assumed to be:

- 50% to/from the east via US 17
- 50% to/from the west via US 17

The directional distribution assumptions are shown in *Figure 5*. The assignment of the project traffic is shown in *Figure 6*.







Black Pearl - Traffic Impact Study Figure 5 - Project Trip Distribution Page 8





Black Pearl - Traffic Impact Study Figure 6 - Project Trip Assignment

4. TRAFFIC VOLUMES

Background Conditions

The 2027 future No-Build traffic volumes were developed using a 1% annual background growth rate. This growth rate was adopted from reviewing historic count data at SCDOT Count Stations 26-0115, 26-0323, and 26-0418 and observations of the growth pattern in the surrounding area. The 2027 No-Build traffic volumes are shown in *Figure 7*.

Build Out Traffic Volumes

The 2027 Build traffic volumes were developed by adding the site generated traffic volumes to the 2027 No-Build traffic volumes. The 2027 Build volumes are illustrated in *Figure 8*.

Volume development worksheets are included in Appendix C.





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Page



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5. TRAFFIC IMPACT ANALYSIS

Auxiliary Turn-Lane Analysis

Auxiliary turn-lane analyses were conducted using the 2027 Build volumes. Turn-lane analyses were considered based on the SCDOT Roadway Design Manual (RDM) Section 9.5.1.

Based on the anticipated build out volumes, auxiliary turn-lanes on S. Ocean Boulevard are not warranted at the access.

Level of Service Criteria

The Transportation Research Board's Highway Capacity Manual (HCM) utilizes a term "level of service" to measure how traffic operates in intersections and on roadway segments. There are currently six levels of service ranging from A to F. Level of service "A" represents the best conditions and Level of Service "F" represents the worst. Synchro Traffic Modeling software was used to determine the level of service for studied intersections. Note for unsignalized intersection analysis, the level of service noted is for the worst approach of the intersection. This is typically the left turn movement for the side street approach, due to the number of opposing movements.

The Highway Capacity Manual thresholds are shown in Table 4.

| LOS | Control Delay per | Vehicle (seconds) |
|-----|----------------------------|--------------------------|
| | Unsignalized Intersections | Signalized Intersections |
| А | ≤ 10 | ≤ 10 |
| В | > 10 and ≤ 15 | > 10 and ≤ 20 |
| С | > 15 and ≤ 25 | > 20 and ≤ 35 |
| D | > 25 and ≤ 35 | > 35 and ≤ 55 |
| E | > 35 and ≤ 50 | > 55 and ≤ 80 |
| F | > 50 | > 80 |

Table 4 – HCM 6th Edition LOS Criteria for Unsignalized and Signalized Intersections

Intersection Capacity Analysis

Capacity analyses were conducted using *Synchro*, Version 11 software for the study intersections considering 2024 Existing conditions, 2027 No-Build conditions, and 2027 Build conditions. As part of the capacity analysis, SCDOT's default *Synchro* parameters were utilized. A constant PHF of 0.92 was applied for future year analysis. Existing heavy vehicle percentages were utilized for all analysis



scenarios, with a minimum percentage of 2% considered. Using the *Synchro* software, intersection analyses were conducted for the weekday AM peak-hour and weekday PM peak-hour time periods. The results of the intersection capacity analyses are summarized in *Table 5*.

| | | | | LOS/Delay | (seconds) | | | | |
|--------------------------|-----------------|--------|----------|-----------|-----------|------------|--------|--|--|
| Intersection | Approach | 2024 E | ixisting | 2027 N | o-Build | 2027 Build | | | |
| | | Cond | itions | Cond | itions | Conditions | | | |
| | | AM | PM | AM | PM | AM | PM | | |
| | EB | A/3.3 | A/3.9 | A/3.6 | A/3.9 | A/6.9 | A/5.8 | | |
| USI/& Atlantic Avenue | WB | A/3.2 | A/3.9 | A/3.6 | A/3.9 | A/6.8 | A/5.8 | | |
| (Signalized) | NB | C/25.8 | B/16.3 | C/26.1 | B/16.7 | B/10.6 | B/16.2 | | |
| (| Overall | A/3.4 | A/4.0 | A/3.7 | A/4.0 | A/7.0 | A/6.1 | | |
| | EB ² | A/9.3 | A/9.0 | A/9.3 | A/9.0 | A/9.8 | A/9.6 | | |
| Atlantic Avenue | WB ² | A/9.1 | A/8.8 | A/9.1 | A/8.8 | A/9.5 | A/9.3 | | |
| & Seaview Street | NB ¹ | A/0.0 | A/0.0 | A/0.0 | A/0.0 | A/0.0 | A/0.0 | | |
| | SB ¹ | A/0.0 | A/7.2 | A/0.0 | A/7.2 | A/0.0 | A/7.3 | | |
| Atlantic Avenue | EB ¹ | A/7.7 | A/7.2 | A/7.7 | A/7.2 | A/7.7 | A/7.3 | | |
| & S. Ocean Boulevard | SB ² | A/8.3 | A/8.5 | A/8.3 | A/8.5 | A/8.4 | A/8.6 | | |
| | EB ¹ | A/7.2 | A/7.2 | A/7.2 | A/7.2 | A/8.5 | A/8.5 | | |
| S. Ocean Boulevard & | WB ¹ | | | | | A/7.3 | A/7.3 | | |
| Access #1 | NB ² | | | | | A/8.5 | A/8.5 | | |
| | SB ² | A/8.5 | A/8.5 | A/8.5 | A/8.5 | A/8.9 | A/9.2 | | |

Table 5 – Intersection Capacity Analysis Results

¹LOS for major street left-turn movement; ²LOS for minor street approach

Site Access on South Ocean Boulevard

The site access point should function well. Access should be designed in accordance with SCDOT and the Town of Atlantic Beach standards and with one ingress and one egress lane.

Atlantic Avenue Intersections

Analysis indicates that both intersections will continue to function adequately in the future, with construction of the project. No changes are recommended as a result of the development.

US 17 & Atlantic Avenue Intersection

Analysis indicates that the intersection will continue to function adequately in the future, with construction of the project. No changes are recommended as a result of the development.

Capacity analysis worksheets are provided in Appendix D.



6. SUMMARY OF FINDINGS AND RECOMMENDATIONS

A traffic impact study was conducted for the proposed Black Pearl development in accordance with the Town of Atlantic Beach and SCDOT guidelines. The site is located south of South Ocean Boulevard in Atlantic Beach, South Carolina. The development is planned to contain a mixed-use tower along the southern side of S. Ocean Boulevard. The southern tower is planned to contain 27 multifamily units, 63 hotel units, and 5,722 square feet of retail space. The development will have one access to surface and to a parking deck that will align with 31st Avenue South.

Site Access on South Ocean Boulevard

The site access point should function well. Access should be designed in accordance with SCDOT and the Town of Atlantic Beach standards and with one ingress and one egress lane.

Atlantic Avenue Intersections

Analysis indicates that both intersections will continue to function adequately in the future, with construction of the project. No changes are recommended as a result of the development.

US 17 & Atlantic Avenue Intersection

Analysis indicates that the intersection will continue to function adequately in the future, with construction of the project. No changes are recommended as a result of the development.



APPENDIX A

Scoping Correspondence



Cliff Lawson

| Skipper, Joey H <skipperjh@scdot.org></skipperjh@scdot.org> |
|---|
| Tuesday, February 28, 2023 8:52 AM |
| Michael Dennis |
| Jeff Ingham; Ward, Raleigh O. |
| RE: The Black Pearl |
| 2022-12-06_22016-OSP Alleyway Exhibit (Drive Pavers).pdf |
| |

Hey Michael: Thanks for the follow-up; sorry but I thought I had replied...

We agree with the locations you noted. There's not a lot of background traffic in AB...

And yep, planning on the conference, so hope to see you

Thanks, Joey

From: Michael Dennis <mdennis@rameykemp.com> Sent: Tuesday, February 28, 2023 8:40 AM To: Skipper, Joey H <SkipperJH@scdot.org> Cc: Jeff Ingham <jingham@rameykemp.com> Subject: RE: The Black Pearl

*** This is an EXTERNAL email. Please do not click on a link or open any attachments unless you are confident it is from a trusted source. ***

Joey,

I was just following up on this email and my phone call. The client is itching to get this new highrise started on Atlantic Beach. There doesn't seem to be much traffic out there and I have talked to Stacy to get the factors for seasonal volumes, so I don't think there will be any trouble handling the traffic. I was thinking of getting a count on US 17 at 30th Avenue/Atlantic Street and then maybe Ocean Blvd and 2nd Avenue/Seaview Street at Atlantic/30th Ave since they are planning/wanting accesses on both of those streets.

If that sounds good to you let me know and I'll move forward with those counts.

Hope to see you in about 5 weeks at the conference.

Michael

From: Michael Dennis
Sent: Wednesday, February 22, 2023 7:31 AM
To: Skipper, Joey H <<u>skipperjh@scdot.org</u>>
Cc: Jeff Ingham <<u>jingham@rameykemp.com</u>>
Subject: The Black Pearl

Joey,

I hope you have been doing great and looking forward to the spring baseball season or has that part of your life passed like mine.

We have been asked to scope a TIA for a new high-rise hotel on S. Ocean Boulevard (S-26-370) in Atlantic Beach. The development will also have a parking garage that will access S. Ocean Blvd and Seaview Street/2nd Avenue (S-26-1070). Could you please review the attached site plan and provide me with what intersections you would like to see studied as part of this project.

Look forward to seeing you at the engineers conference next month.

Thanks, Michael A. Dennis, PE SC Public Sector Traffic Lead

D 803 234 6821 C 803 606 2834



Cliff Lawson

| From: | Skipper, Joey H <skipperjh@scdot.org></skipperjh@scdot.org> |
|--------------|---|
| Sent: | Thursday, May 11, 2023 10:41 AM |
| То: | Cliff Lawson |
| Cc: | Michael Dennis; Jeff Ingham; Ward, Raleigh O. |
| Subject: | RE: The Black Pearl TIS |
| Attachments: | 2022-12-06_22016-OSP Alleyway Exhibit (Drive Pavers-Garage).pdf |

Hey Cliff:

I don't think additional traffic counts are needed based on the small size of the parking lot and the existing volumes on 31st.

Thanks, Joey

From: Cliff Lawson <clawson@rameykemp.com>
Sent: Friday, May 5, 2023 11:55 AM
To: Skipper, Joey H <SkipperJH@scdot.org>
Cc: Michael Dennis <mdennis@rameykemp.com>; Jeff Ingham <jingham@rameykemp.com>; Ward, Raleigh O.
<WardRO@scdot.org>
Subject: The Black Pearl TIS

*** This is an EXTERNAL email. Please do not click on a link or open any attachments unless you are confident it is from a trusted source. ***

Joey,

I hope you are doing well. I wanted to follow up with you regarding the Black Pearl TIS. Per the attached email, you and Michael agreed on the study area intersections listed below. Per the updated site plan, there will be a small surface parking lot that will have its driveway as the fourth leg to the existing 31st Avenue / S. Ocean Boulevard intersection. We have already conducted counts at the intersections below. Would you like us to conduct counts at the 31st Avenue / S. Ocean Boulevard intersection or can we estimate volumes? Based on the intersection's surroundings, I would imagine only a few cars currently utilize the intersection. I was thinking of using a nominal value in the existing / no-build conditions (i.e. 5 vehicles per movement).

Current study area intersections:

- S Highway 17 (US 17) & 30th Avenue (S-26-1280)
- 30th Avenue (S-26-1280) & Seaview Street (S-26-1070)
- 30th Avenue (S-26-1280) & S. Ocean Boulevard (S-26-370)

Thanks,

Cliff

```
Cliff Lawson, PE, PTOE
South Carolina Traffic Operations Lead
```

Cliff Lawson

| is |
|----|
| |
| 1 |

Architect responses in blue

To answer some of the other questions that came in. We believe construction will take anywhere between 18-24 months. If all goes well we will begin before the end of this year.

Also, the parking will be 10 levels high (it previously was 11).

I am also going to send our last presentation. It may help answer some questions.

Timothy,

This is a follow-up to the voicemail I left you earlier. I am currently working through the traffic study, and I need a few items clarified before I can move forward. Please note hotel units have a different trip generation rate compared to multifamily units so I need those units broken out separately. I will ultimately need an updated site plan with finalized building program numbers, but for now just answering the questions below will suffice.

- Black Pearl Ocean Front Tower (south of S. Ocean Boulevard)
 - Building Program All of these items are best to be addressed by Dwayne Dancy, the project architect. He will have the most up to date information.
 - Hotel Units → Please provide the number of units 164 units
 - AirBNB Type Units → Please provide the number of units 137 units
 - Condos → Please provide the number of units 27 units (top 3 floors)
 - Retail Space → Please provide total square footage for the retail space for this tower. 5,018 sf
 - Total number of floors → 20 (Please verify) YES.. 20
- Black Pearl Second Row Tower (north of S. Ocean Boulevard)
 - Building Program
 - Parking Deck → Is it the intent that the parking deck will only be utilized by this development (i.e. this is not a public parking deck to be used by folks who just want to access the beach)?The parking garage will be private use.
 - Small Retail Space → Per the highlighted text (see image below), the parking deck will include "small retail spaces" that will be accessed via on-street parking along Atlantic Street (30th Avenue). Is this accurate? If so, please provide the total square footage for the retail space. 1,520 sf

- Access (see image below for clarification)
 - S Ocean Blvd / Hotel Access 2 (entrance only) → Does this access allow left-ins? Yes. The traffic along this road is negligible and next to none. The road is only 3-4 blocks long and gated off from NMB on both ends. These parking spaces will be open to the public.
 - S Ocean Blvd / Hotel Access 3 / Parking Deck Access 1 → Upon exiting Hotel Access 3, will vehicles be able to turn left or keep straight (i.e. travel directly into the deck via Deck Access 1)? What you describe is the intent. I think we will need some direction from you on this. Keep in mind that all we have on paper is conceptual at this time, so it can be changed.
 - General Observation: Based on my interpretation of the site plan and the flow arrows, it appears that the vast majority of patrons will enter and exit the parking deck via Deck Access 1 as the deck ramp dumps into Deck Access 1. It appears that only the 1st floor of the deck would be able to use Deck Accesses 2 and 3. Is that the case? It was my understanding that the intent was for people to enter the Parking Deck off S. Ocean Boulevard and exit via 2nd Avenue (Seaview Street). It would be ideal for traffic if more exiting vehicles could utilize the other two access points to alleviate potential conflicts at Deck Access 1. Please let me know if I am misinterpreting the site plan. See answer above.

On Tue, May 9, 2023 at 5:20 PM Jim Green <<u>Jim@g3engineering.org</u>> wrote:

Cliff,

See below in red.

Dwayne,

Please correct if I misspoke.



James H. Green, PE

Senior Partner and CFO

Phone 843-237-1001



24 Commerce Dr., Pawleys Island, SC 29585

FAMILY | FLEXIBILITY | PERSONAL DEVELOPMENT | PRODUCTIVITY | PROFESSIONALISM | TEAMWORK | QUALITY

APPENDIX B

Traffic Count Data

SHORT COUNTS, LLC

735 Maryland St Columbia, SC 29201 We can't say we're the Best, but you Can!

S. Highway 17 & 30th Avenue

File Name : US 17 @ Atlantic St Site Code : Start Date : 05/03/2023 Page No : 1

| | Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses | | | | | | | | | | | | | | | | |
|----------------------|---|-------|-------|------|------|-----------|-------|------|-------------------|-------|-------|------|------|------|-------|------|------------|
| | Business US 17 | | | | | | | | Atlantic St US 17 | | | | | | | | |
| | | South | bound | | | Westbound | | | | North | bound | | | | | | |
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Int. Total |
| 07:00 | 0 | 0 | 0 | 0 | 0 | 137 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 0 | 0 | 259 |
| 07:15 | 0 | 0 | 0 | 0 | 3 | 151 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 133 | 1 | 0 | 292 |
| 07:30 | 0 | 0 | 0 | 0 | 0 | 164 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 184 | 2 | 0 | 353 |
| 07:45 | 0 | 0 | 0 | 0 | 3 | 174 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 188 | 0 | 0 | 372 |
| Total | 0 | 0 | 0 | 0 | 6 | 626 | 0 | 0 | 1 | 0 | 12 | 1 | 0 | 627 | 3 | 0 | 1276 |
| 08.00 | 0 | ٥ | 0 | 0 | 1 | 186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 101 | 1 | ٥ | 370 |
| 08.00 | 0 | 0 | 0 | 0 | 3 | 174 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 182 | 2 | 0 | 362 |
| 08:30 | 0 | 0 | 0 | 0 | 1 | 221 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 245 | 1 | 0 | 471 |
| 08:45 | 0 | 0 | 0 | 0 | 0 | 207 | 0 | 0 | 1 | 0 | 2 | 1 | 1 | 205 | 2 | 0 | 419 |
| Total | 0 | 0 | 0 | 0 | 5 | 788 | 0 | 0 | 2 | 0 | 5 | 1 | 1 | 823 | 6 | 0 | 1631 |
| | Ŭ | | Ū | | Ū | | Ū | | - | Ū | Ū. | | · | 020 | Ũ | Ũ | |
| | | | | | | | | | | | | | | | | | |
| 16:00 | 0 | 0 | 0 | 0 | 5 | 273 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 276 | 7 | 0 | 565 |
| 16:15 | 0 | 0 | 2 | 0 | 2 | 290 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 338 | 3 | 1 | 639 |
| 16:30 | 0 | 1 | 0 | 0 | 3 | 298 | 0 | 0 | 1 | 0 | 4 | 0 | 1 | 302 | 1 | 0 | 611 |
| 16:45 | 0 | 0 | 2 | 0 | 2 | 322 | 0 | 0 | 4 | 0 | 2 | 1 | 1 | 293 | 0 | 0 | 627 |
| Total | 0 | 1 | 4 | 0 | 12 | 1183 | 0 | 0 | 7 | 0 | 10 | 1 | 3 | 1209 | 11 | 1 | 2442 |
| 17.00 | 0 | 0 | 1 | 0 | 2 | 200 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 215 | 4 | 0 | 615 |
| 17.00 | 1 | 0 | 1 | 1 | 2 | 209 | 1 | 0 | 2 | 0 | 3 | 0 | 1 | 315 | 4 | 0 | 657 |
| 17.13 | 0 | 0 | 0 | 0 | 3 | 300 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 280 | 4 | 0 | 580 |
| 17:45 | 0 | 0 | 1 | 2 | 2 | 266 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 200 | 4 | 0 | 554 |
| Total | 1 | 0 | 3 | 3 | 8 | 1180 | 1 | 3 | 7 | 0 | 5 | 0 | 3 | 1184 | 17 | 0 | 2415 |
| Total | | Ŭ | 0 | Ŭ | Ŭ | 1100 | | 0 | , | 0 | 0 | 0 | 0 | 1104 | | 0 | 2410 |
| Grand Total | 1 | 1 | 7 | 3 | 31 | 3777 | 1 | 3 | 17 | 0 | 32 | 3 | 7 | 3843 | 37 | 1 | 7764 |
| Apprch % | 8.3 | 8.3 | 58.3 | 25 | 0.8 | 99.1 | 0 | 0.1 | 32.7 | 0 | 61.5 | 5.8 | 0.2 | 98.8 | 1 | 0 | |
| Total % | 0 | 0 | 0.1 | 0 | 0.4 | 48.6 | 0 | 0 | 0.2 | 0 | 0.4 | 0 | 0.1 | 49.5 | 0.5 | 0 | |
| Passenger Vehicles | 1 | 1 | 7 | 3 | 28 | 3724 | 1 | 3 | 16 | 0 | 25 | 3 | 7 | 3793 | 35 | 1 | 7648 |
| % Passenger Vehicles | 100 | 100 | 100 | 100 | 90.3 | 98.6 | 100 | 100 | 94.1 | 0 | 78.1 | 100 | 100 | 98.7 | 94.6 | 100 | 98.5 |
| Heavy Vehicles | 0 | 0 | 0 | 0 | 3 | 45 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 44 | 2 | 0 | 99 |
| % Heavy Vehicles | 0 | 0 | 0 | 0 | 9.7 | 1.2 | 0 | 0 | 5.9 | 0 | 12.5 | 0 | 0 | 1.1 | 5.4 | 0 | 1.3 |
| Buses | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 6 | 0 | 0 | 17 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 9.4 | 0 | 0 | 0.2 | 0 | 0 | 0.2 |

735 Maryland St Columbia, SC 29201 We can't say we're the Best, but you Can! S. Highway 17 & 30th Avenue File Name : US 17 @ Atlantic St Site Code : Start Date : 05/03/2023 Page No : 2 Business Total 20 0 Out In 8 0 0 8 12 0 õ 0 12 20 7 0 3 0 0 0 0 0 0 0 7 1 3 1 Right ↓ Thru Left Peds 4 22 . 0 0 7689 1 Ę. 381 10 North 3793 44 6 05/03/2023 07:00 724 45 8 05/03/2023 17:45 35 2 0 37 56 48 Passenger Vehicles Heavy Vehicles <u>e</u>f Rig o ω 8 3801 - 0 0 Peds Buses Peds 10tal 7575 ω O O ω Peds 3 0 Thru Right _eft 16 0 25 1 0 4 0 3 0 17 32 3 64 5 0 44 5 3 52 108 10 3 121 69 Out Total In

SHORT COUNTS, LLC

SHORT COUNTS, LLC

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S. Highway 17 & 30th Avenue

File Name : US 17 @ Atlantic St Site Code : Start Date : 05/03/2023 Page No : 3

| | Business US 17 | | | | | | | | | Atlantic St US 17 | | | | | | | | | | | |
|---|----------------|------|---------|--------|------------|--------|------|--------|------|-------------------|------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| | | Sc | outhbo | und | | | N | /estbo | und | | Northbound | | | | | Eastbound | | | | | |
| 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 A | nalysis | From | 07:00 t | o 08:4 | 5 - Peak | 1 of 1 | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 08:00 | | | | | | | | | | | | | | | | | | | | | |
| 08:00 | 0 | 0 | 0 | 0 | 0 | 1 | 186 | 0 | 0 | 187 | 0 | 0 | 0 | 0 | 0 | 0 | 191 | 1 | 0 | 192 | 379 |
| 08:15 | 0 | 0 | 0 | 0 | 0 | 3 | 174 | 0 | 0 | 177 | 0 | 0 | 1 | 0 | 1 | 0 | 182 | 2 | 0 | 184 | 362 |
| 08:30 | 0 | 0 | 0 | 0 | 0 | 1 | 221 | 0 | 0 | 222 | 1 | 0 | 2 | 0 | 3 | 0 | 245 | 1 | 0 | 246 | 471 |
| 08:45 | 0 | 0 | 0 | 0 | 0 | 0 | 207 | 0 | 0 | 207 | 1 | 0 | 2 | 1 | 4 | 1 | 205 | 2 | 0 | 208 | 419 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 5 | 788 | 0 | 0 | 793 | 2 | 0 | 5 | 1 | 8 | 1 | 823 | 6 | 0 | 830 | 1631 |
| % App. Total | 0 | 0 | 0 | 0 | | 0.6 | 99.4 | 0 | 0 | | 25 | 0 | 62.5 | 12.5 | | 0.1 | 99.2 | 0.7 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .417 | .891 | .000 | .000 | .893 | .500 | .000 | .625 | .250 | .500 | .250 | .840 | .750 | .000 | .843 | .866 |
| Passenger Vehicles | 0 | 0 | 0 | 0 | 0 | 4 | 764 | 0 | 0 | 768 | 2 | 0 | 2 | 1 | 5 | 1 | 810 | 5 | 0 | 816 | 1589 |
| % Passenger Vehicles | | | | | | | | | | | | | | | | | | | | | |
| Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 1 | 22 | 0 | 0 | 23 | 0 | 0 | 3 | 0 | 3 | 0 | 11 | 1 | 0 | 12 | 38 |
| % Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 20.0 | 2.8 | 0 | 0 | 2.9 | 0 | 0 | 60.0 | 0 | 37.5 | 0 | 1.3 | 16.7 | 0 | 1.4 | 2.3 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 4 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0.2 | 0.2 |



SHORT COUNTS, LLC

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S. Highway 17 & 30th Avenue

File Name : US 17 @ Atlantic St Site Code : Start Date : 05/03/2023 Page No : 4

| | | E | Busine | ss | | US 17 | | | | | Atlantic St | | | | | US 17 | | | | | |
|--|--|------|--------|------|------------|-------|------|-------|------|------------|-------------|------|-------|------|------------|-------|------|-------|------|------------|------------|
| | | Sc | outhbo | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | | |
| 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 16:00 to 17:45 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour fo | eak Hour for Entire Intersection Begins at 16:30 | | | | | | | | | | | | | | | | | | | | |
| 16:30 | 0 | 1 | 0 | 0 | 1 | 3 | 298 | 0 | 0 | 301 | 1 | 0 | 4 | 0 | 5 | 1 | 302 | 1 | 0 | 304 | 611 |
| 16:45 | 0 | 0 | 2 | 0 | 2 | 2 | 322 | 0 | 0 | 324 | 4 | 0 | 2 | 1 | 7 | 1 | 293 | 0 | 0 | 294 | 627 |
| 17:00 | 0 | 0 | 1 | 0 | 1 | 2 | 289 | 0 | 0 | 291 | 2 | 0 | 1 | 0 | 3 | 1 | 315 | 4 | 0 | 320 | 615 |
| 17:15 | 1 | 0 | 1 | 1 | 3 | 1 | 325 | 1 | 0 | 327 | 5 | 0 | 3 | 0 | 8 | 0 | 315 | 4 | 0 | 319 | 657 |
| Total Volume | 1 | 1 | 4 | 1 | 7 | 8 | 1234 | 1 | 0 | 1243 | 12 | 0 | 10 | 1 | 23 | 3 | 1225 | 9 | 0 | 1237 | 2510 |
| % App. Total | 14.3 | 14.3 | 57.1 | 14.3 | | 0.6 | 99.3 | 0.1 | 0 | | 52.2 | 0 | 43.5 | 4.3 | | 0.2 | 99 | 0.7 | 0 | | |
| PHF | .250 | .250 | .500 | .250 | .583 | .667 | .949 | .250 | .000 | .950 | .600 | .000 | .625 | .250 | .719 | .750 | .972 | .563 | .000 | .966 | .955 |
| Passenger Vehicles | 1 | 1 | 4 | 1 | 7 | 8 | 1231 | | | | | | | | | | 1218 | | | | |
| % Passenger Vehicles | 100 | 100 | 100 | 100 | 100 | 100 | 99.8 | 100 | 0 | 99.8 | 100 | 0 | 90.0 | 100 | 95.7 | 100 | 99.4 | 100 | 0 | 99.4 | 99.6 |
| Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 | 7 |
| % Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0 | 0 | 0.4 | 0.3 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 4 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0.1 | 0 | 0 | 10.0 | 0 | 4.3 | 0 | 0.2 | 0 | 0 | 0.2 | 0.2 |


SHORT COUNTS, LLC 735 Maryland St Columbia, SC 29201 We can't say we're the Best, but you Can!

30th Avenue & Seaview Street

File Name : Atlantic St @ 2nd Ave Site Code : Start Date : 05/03/2023 Page No : 1

| | | | | G | oroups P | rinted- F | Passenge | er Vehic | les - Hea | avy Veh | icles - Bi | uses | | | | | |
|----------------------|------|-------|--------|------|----------|-----------|----------|----------|-----------|---------|------------|------|-------------|-------|-------|------|------------|
| | | Atlan | tic St | | | 2nd | Ave | | | Atlan | tic St | | | _2nd | Ave | | |
| | | South | bound | | | West | bound | | | North | bound | | | Eastb | ound | | |
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Int. Total |
| | | | | | | | | | | | | | | | | | i. |
| 07:15 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 |
| 07:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 07:45 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 10 |
| Total | 1 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 0 | 0 | 0 | 15 |
| 00.00 | 0 | 0 | | | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | • |
| 08:00 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| 00.15 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 1 | 0 | 0 | 0 | 3 |
| 00.30 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| 00.43 | 1 | 1 | 2 | 0 | 0 | 1 | 1 | <u> </u> | 0 | 3 | 0 | 1 | 2 | 0 | 0 | 1 | 10 |
| TOTAL | I | 1 | 5 | 0 | 0 | 1 | 1 | 4 | 0 | 5 | 0 | 11 | 2 | 0 | 0 | 1 | 10 |
| | | | | | | | | | | | | | | | | | |
| 16:00 | 1 | 5 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 11 |
| 16:15 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 16:30 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 4 |
| 16:45 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 6 |
| Total | 2 | 8 | 2 | 1 | 1 | 2 | 3 | 0 | 0 | 7 | 0 | 0 | 1 | 2 | 0 | 1 | 30 |
| | | | | | | | | | | | | | | | | | |
| 17:00 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 17:15 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 17:30 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 17:45 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 |
| Total | 3 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 12 |
| Grand Total | 7 | 16 | 11 | 2 | 1 | з | 1 | 4 | 0 | 13 | 0 | 2 | 7 | з | 0 | 2 | 75 |
| Appreh % | 10 1 | 44 4 | 30.6 | 56 | 83 | 25 | 33.3 | 333 | 0 | 86.7 | 0 | 13 3 | 58 3 | 25 | 0 | 16 7 | 15 |
| Total % | 03 | 21.3 | 14 7 | 27 | 13 | 20 | 53 | 53 | 0 | 17.3 | 0 | 27 | 00.0 Q 3 | 20 | 0 | 27 | |
| Passenger Vehicles | 6 | 16 | 8 | 2.1 | 1.0 | 2 | 3 | 4 | 0 | 12 | 0 | 2.1 | 1 | 2 | 0 | 2.1 | 61 |
| % Passenger Vehicles | 85 7 | 100 | 727 | 100 | 100 | 66 7 | 75 | 100 | 0 | 923 | 0 | 100 | 14 3 | 66 7 | Ő | 100 | 81.3 |
| Heavy Vehicles | 1 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 9 |
| % Heavy Vehicles | 14.3 | Ő | 27.3 | Ő | Ő | Õ | 25 | Õ | Ő | 7.7 | Ő | Ő | 42.9 | Ő | Õ | Õ | 12 |
| Buses | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 5 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 33.3 | 0 | 0 | 0 | 0 | 0 | 0 | 42.9 | 33.3 | 0 | 0 | 6.7 |

SHORT COUNTS, LLC 735 Maryland St Columbia, SC 29201 We can't say we're the Best, but you Can! 30th Avenue & Seaview Street File Name : Atlantic St @ 2nd Ave Site Code : Start Date : 05/03/2023 Page No : 2 Out 16 5 3 Atlantic St Total 48 9 4 0 3 24 36 60 8 3 0 16 6 2 0 0 1 0 0 0 16 11 2 Right ↓ Thru Left Peds 4 Total 15 6 26 26 Right 1 -eft Q ω <u>–</u> 0 4 6 ω North 0 0 3.0 05/03/2023 07:00 -hru N 2nd Ave L 05/03/2023 17:45 ⊨ 0000 AVC 6 Right ↓ ^Left -10 3 Passenger Vehicles Heavy Vehicles 00 4 Total 18 2 2 22 N 0 0 N Peds Buses Peds 4004 € Peds 2 0 Thru Right Left 0 0 12 1 0 0 0 0 0 0 0 13 0 2 17 14 31 0 0 17 1 0 1 0 32 15 Out In . Total

735 Maryland St Columbia, SC 29201

We can't say we're the Best, but you Can!

30th Avenue & Seaview Street

File Name : Atlantic St @ 2nd Ave Site Code : Start Date : 05/03/2023 Page No : 3

| | | A | tlantic | St | | | 10 | 2nd Av | /e | | | A | tlantic | St | | | - | 2nd Av | /e | | |
|----------------------|----------|--------|---------|--------|------------|--------|------|--------|------|------------|------|------|---------|------|------------|------|------|--------|------|------------|------------|
| | | 30 | oamuc | una | | | V | esiboi | una | | | IN | ounno | unu | | | | asibol | ina | | |
| 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 A | nalysis | From | 07:00 t | o 08:4 | 5 - Peak | 1 of 1 | | | | | | | | | | | | | | | |
| Peak Hour fo | r Entire | Inters | ection | Begins | s at 07:4 | 5 | | | | | | | | | | | | | | | |
| 07:45 | 0 | 2 | 4 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 2 | 10 |
| 08:00 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 08:15 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 3 |
| 08:30 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 2 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 6 |
| Total Volume | 0 | 2 | 7 | 0 | 9 | 0 | 1 | 0 | 2 | 3 | 0 | 3 | 0 | 2 | 5 | 4 | 0 | 0 | 0 | 4 | 21 |
| % App. Total | 0 | 22.2 | 77.8 | 0 | | 0 | 33.3 | 0 | 66.7 | | 0 | 60 | 0 | 40 | | 100 | 0 | 0 | 0 | | |
| PHF | .000 | .250 | .438 | .000 | .375 | .000 | .250 | .000 | .250 | .375 | .000 | .375 | .000 | .500 | .625 | .500 | .000 | .000 | .000 | .500 | .525 |
| Passenger Vehicles | 0 | 2 | 5 | 0 | 7 | 0 | 0 | 0 | 2 | 2 | 0 | 2 | 0 | 2 | 4 | 1 | 0 | 0 | 0 | 1 | 14 |
| % Passenger Vehicles | | | | | | | | | | | | | | | | | | | | | |
| Heavy Vehicles | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 3 | 6 |
| % Heavy Vehicles | 0 | 0 | 28.6 | 0 | 22.2 | 0 | 0 | 0 | 0 | 0 | 0 | 33.3 | 0 | 0 | 20.0 | 75.0 | 0 | 0 | 0 | 75.0 | 28.6 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 33.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.8 |



735 Maryland St Columbia, SC 29201

We can't say we're the Best, but you Can!

30th Avenue & Seaview Street

File Name : Atlantic St @ 2nd Ave Site Code : Start Date : 05/03/2023 Page No : 4

| | | A | tlantic | St | | | | 2nd Av | 'e | | | A | tlantic | St | | | _ | 2nd Av | /e | | |
|----------------------|----------|----------|---------|---------|------------|--------|------|--------|------|------------|------|------|---------|------|------------|------|------|--------|------|------------|------------|
| | | So | uthbol | ind | | | VV | estbol | ind | | | N | orthboi | und | | | E | astbol | ind | | |
| 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 Ar | nalysis | From 1 | 6:00 to | o 17:45 | 5 - Peak | 1 of 1 | | | | | | | | | | | | | | | |
| Peak Hour fo | r Entire | e Inters | ection | Begins | at 16:0 | 0 | | | | | | | | | | | | | | | |
| 16:00 | 1 | 5 | 1 | 1 | 8 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 11 |
| 16:15 | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 2 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 1 | 9 |
| 16:30 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 4 |
| 16:45 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 6 |
| Total Volume | 2 | 8 | 2 | 1 | 13 | 1 | 2 | 3 | 0 | 6 | 0 | 7 | 0 | 0 | 7 | 1 | 2 | 0 | 1 | 4 | 30 |
| % App. Total | 15.4 | 61.5 | 15.4 | 7.7 | | 16.7 | 33.3 | 50 | 0 | | 0 | 100 | 0 | 0 | | 25 | 50 | 0 | 25 | | |
| PHF | .500 | .400 | .500 | .250 | .406 | .250 | .250 | .375 | .000 | .750 | .000 | .438 | .000 | .000 | .438 | .250 | .500 | .000 | .250 | 1.00 | .682 |
| Passenger Vehicles | 2 | 8 | 2 | 1 | 13 | 1 | 2 | 2 | 0 | 5 | 0 | 7 | 0 | 0 | 7 | 0 | 1 | 0 | 1 | 2 | 27 |
| % Passenger Vehicles | | | | | | | | | | | | | | | | | | | | | |
| Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| % Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.3 | 0 | 16.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.3 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 2 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 50.0 | 0 | 0 | 50.0 | 6.7 |



SHORT COUNTS, LLC 735 Maryland St Columbia, SC 29201

We can't say we're the Best, but you Can!

30th Avenue & S. Ocean Boulevard

| File Name : Atl | antic St @ S Ocean Bivo |
|------------------|-------------------------|
| Site Code : | |
| Start Date : 05/ | /03/2023 |
| Page No : 1 | |

| | | | | G | Groups P | rinted- F | Passenge | er Vehic | les - Hea | avy Veh | icles - B | uses | | | | | |
|--------------------|-----------|-------|----------|------|----------|--------------|----------|----------|-----------|---------|-----------|------|-----------|--------|---------|------|------------|
| | | Atlan | tic St | | | S Ocea | an Blvd | | | Atlan | tic St | | | S Ocea | an Blvd | | |
| | | South | bound | | | West | bound | | | North | bound | | | Eastb | ound | | |
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Int. Total |
| | | | | | | | | | | | | | | | | | i. |
| 07:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 07.45 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Total | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| Totar | 0 | 0 | I | 2 | U | I | 0 | 0 | U | U | 0 | 01 | 0 | | 0 | 0 | 5 |
| | | | | | | | | | | | | | | | | | |
| 08:15 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 08:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 4 |
| 08:45 | Ō | Ō | Ō | Ō | Ō | Ō | Ō | ō | Ō | Ō | Ō | Ő | 1 | Ō | Ō | 1 | 2 |
| Total | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 7 |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | i. |
| 16:00 | 2 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 16:15 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 10 |
| 16:30 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 5 |
| 16:45 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total | 4 | 0 | 4 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 1 | 23 |
| . – | | | | | | | | | | _ | | | | | | - | |
| 17:00 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |
| 17:15 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |
| 17:30 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 |
| 17:45 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| Total | 4 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 11 |
| Crond Total | 0 | 0 | 6 | 2 | 0 | 7 | 2 | 2 | 0 | 0 | 0 | | 0 | 7 | 0 | 2 | 46 |
| | 0 47 1 | 0 | 25.2 | 176 | 0 | | 3 | 167 | 0 | 0 | 0 | 0 | 0 47 1 | / | 0 | 11 0 | 40 |
| Appron % | 47.1 | 0 | 30.3 | 17.0 | 0 | 00.0 15 0 | 20 | 10.7 | 0 | 0 | 0 | 0 | 47.1 | 41.2 | 0 | 11.0 | |
| | 0 | 0 | <u> </u> | 0.0 | 0 | 15.2 | 0.0 | 4.3 | 0 | 0 | 0 | 0 | 17.4 | 15.2 | 0 | 4.3 | 45 |
| Passenger Venicles | 100 | 0 | 100 | 100 | 0 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 97 5 | 100 | 0 | 100 | 40 |
| Heavy Vehicles | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | <u> </u> | 0 | 0 | 100 | 97.0 |
| % Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 5 | 0 | 0 | 0 | 22 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Buses | õ | 0 | 0 0 | ñ | 0 | 0 | 0 | 0 | 0 0 | 0 | 0 0 | ő | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | Ũ | , v |

735 Maryland St Columbia, SC 29201 We can't say we're the Best, but you Can!

30th Avenue & S. Ocean Boulevard

File Name : Atlantic St @ S Ocean Blvd Site Code : Start Date : 05/03/2023

Page No : 2



735 Maryland St Columbia, SC 29201 We can't say we're the Best, but you Can!

¹⁷⁷ 30th Avenue & S. Ocean Boulevard Name · Atlantic St @ S Ocean Blvd

| File Name | : Atlantic St @ S Ocean Bive |
|------------|------------------------------|
| Site Code | : |
| Start Date | : 05/03/2023 |
| Page No | : 3 |

| | | A | tlantic | St | | | SC | Dcean | Blvd | | | A | tlantic | St | | | s | Dcean | Blvd | | |
|----------------------|----------|--------|---------|--------|------------|--------|------|--------|------|------------|------|------|---------|------|------------|------|------|--------|------|------------|------------|
| | | Sc | outhbo | und | | | VV | estbol | und | | | N | orthbo | una | | | E | astbol | ind | | |
| 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 Ar | nalysis | From (| 07:00 t | o 08:4 | 5 - Peak | 1 of 1 | | | | | | | | | | | | | | | |
| Peak Hour fo | r Entire | Inters | ection | Begins | s at 07:4 | 5 | | | | | | | | | | | | | | | |
| 07:45 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 4 |
| 08:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 08:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 4 |
| Total Volume | 0 | 0 | 1 | 3 | 4 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 3 | 9 |
| % App. Total | 0 | 0 | 25 | 75 | | 0 | 0 | 0 | 100 | | 0 | 0 | 0 | 0 | | 66.7 | 33.3 | 0 | 0 | | |
| PHF | .000 | .000 | .250 | .375 | .333 | .000 | .000 | .000 | .250 | .250 | .000 | .000 | .000 | .000 | .000 | .250 | .250 | .000 | .000 | .375 | .563 |
| Passenger Vehicles | 0 | 0 | 1 | 3 | 4 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 8 |
| % Passenger Vehicles | | | | | | | | | | | | | | | | | | | | | |
| Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 |
| % Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50.0 | 0 | 0 | 0 | 33.3 | 11.1 |
| 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 |



735 Maryland St Columbia, SC 29201 We can't say we're the Best, but you Can!

30th Avenue & S. Ocean Boulevard File Name : Atlantic St @ S Ocean Blvd

Site Code : Start Date : 05/03/2023 Page No : 4

| | | A | tlantic | St | | | SC | Dcean | Blvd | | | Α | tlantic | St | | | SO | Dcean | Blvd | | |
|----------------------|----------|--------|---------|--------|------------|--------|------|---------|------|------------|------|------|---------|------|------------|------|------|--------|------|------------|------------|
| | | So | uthbou | und | | | N | /estboi | und | | | N | orthbo | und | | | E | astbou | und | | |
| 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 Ar | nalysis | From 1 | 6:00 to | o 17:4 | 5 - Peak | 1 of 1 | | | | | | | | | | | | | | | |
| Peak Hour fo | r Entire | Inters | ection | Begins | at 16:0 | 0 | | | | | | | | | | | | | | | |
| 16:00 | 2 | 0 | 2 | 0 | 4 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 16:15 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 5 | 10 |
| 16:30 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 3 | 5 |
| 16:45 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total Volume | 4 | 0 | 4 | 0 | 8 | 0 | 4 | 3 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 1 | 8 | 23 |
| % App. Total | 50 | 0 | 50 | 0 | | 0 | 57.1 | 42.9 | 0 | | 0 | 0 | 0 | 0 | | 37.5 | 50 | 0 | 12.5 | | |
| PHF | .500 | .000 | .500 | .000 | .500 | .000 | .500 | .750 | .000 | .583 | .000 | .000 | .000 | .000 | .000 | .375 | .500 | .000 | .250 | .400 | .575 |
| Passenger Vehicles | 4 | 0 | 4 | 0 | 8 | 0 | 4 | 3 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 1 | 8 | 23 |
| % Passenger Vehicles | | | | | | | | | | | | | | | | | | | | | |
| Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Heavy Vehicles | 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 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



APPENDIX C

Traffic Volume Development Worksheets & ITE Trip Generation Worksheets



US 17 & Atlantic Street

TRAFFIC CONTROL: Signalized DATE COUNTED: Wednesday, May 3, 2023

| AM PEAK HOUR (7:30-8:30 AM) | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------------------|-----|------|------|------|------|-----|------|-----|------|-----|-----|-----|
| 2023 TRAFFIC VOLUMES | | 823 | 6 | 5 | 788 | | 2 | | 6 | | | |
| Heavy Vehicle Percentage | | 2% | 17% | 20% | 3% | | 2% | | 60% | | | |
| Years To Current Year (2024) | | 1 | 1 | 1 | 1 | | 1 | | 1 | | | |
| Yearly Growth Rate | | 1.0% | 1.0% | 1.0% | 1.0% | | 1.0% | | 1.0% | | | |
| Background Traffic Growth | | 8 | 0 | 0 | 8 | | 0 | | 0 | | | |
| 2024 TRAFFIC VOLUMES | | 831 | 6 | 5 | 796 | | 2 | | 6 | | | |
| Years To Buildout (2027) | | 3 | 3 | 3 | 3 | | 3 | | 3 | | | |
| Yearly Growth Rate | | 1.0% | 1.0% | 1.0% | 1.0% | | 1.0% | | 1.0% | | | |
| Background Traffic Growth | | 25 | 0 | 0 | 24 | | 0 | | 0 | | | |
| 2027 NO-BUILD TRAFFIC VOLUMES | | 856 | 6 | 5 | 820 | | 2 | | 6 | | | |
| Inbound Trip Distribution Percentage | | | 50% | 50% | | | | | | | | |
| Outbound Trip Distribution Percentage | | | | | | | 50% | | 50% | | | |
| Inbound New Project Traffic | | | 16 | 16 | | | | | | | | |
| Outbound New Project Traffic | | | | | | | 19 | | 19 | | | |
| Pass-By Project Traffic | | | | | | | | | | | | |
| Total New Project Traffic | | | 16 | 16 | | | 19 | | 19 | | | |
| 2027 BUILD TRAFFIC VOLUMES | | 856 | 22 | 21 | 820 | | 21 | | 25 | | | |

| PM PEAK HOUR (5:00-6:00 PM) | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------------------|-----|-------|------|------|-------|-----|------|-----|------|-----|-----|-----|
| 2023 TRAFFIC VOLUMES | | 1,225 | 9 | 8 | 1,234 | | 12 | | 10 | | | |
| Heavy Vehicle Percentage | | 2% | 2% | 2% | 2% | | 2% | | 2% | | | |
| Years To Current Year (2024) | | 1 | 1 | 1 | 1 | | 1 | | 1 | | | |
| Yearly Growth Rate | | 1.0% | 1.0% | 1.0% | 1.0% | | 1.0% | | 1.0% | | | |
| Background Traffic Growth | | 12 | 0 | 0 | 12 | | 0 | | 0 | | | |
| 2024 TRAFFIC VOLUMES | | 1,237 | 9 | 8 | 1,246 | | 12 | | 10 | | | |
| Years To Buildout (2027) | | 3 | 3 | 3 | 3 | | 3 | | 3 | | | |
| Yearly Growth Rate | | 1.0% | 1.0% | 1.0% | 1.0% | | 1.0% | | 1.0% | | | |
| Background Traffic Growth | | 37 | 0 | 0 | 37 | | 0 | | 0 | | | |
| 2027 NO-BUILD TRAFFIC VOLUMES | | 1,274 | 9 | 8 | 1,283 | | 12 | | 10 | | | |
| Inbound Trip Distribution Percentage | | | 50% | 50% | | | | | | | | |
| Outbound Trip Distribution Percentage | | | | | | | 50% | | 50% | | | |
| Inbound New Project Traffic | | | 28 | 28 | | | | | | | | |
| Outbound New Project Traffic | | | | | | | 23 | | 23 | | | |
| Pass-by Project Traffic | | | | | | | | | | | | |
| Total New Project Traffic | | | 28 | 28 | | | 23 | | 23 | | | |
| 2027 BUILD TRAFFIC VOLUMES | | 1,274 | 37 | 36 | 1,283 | | 35 | | 33 | | | |



Atlantic Street & Seaview Street

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: Wednesday, May 3, 2023

| AM PEAK HOUR (7:30-8:30 AM) | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2023 TRAFFIC VOLUMES | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 7 |
| Heavy Vehicle Percentage | 75% | 2% | 2% | 2% | 2% | 2% | 2% | 33% | 2% | 2% | 2% | 29% |
| Years To Current Year (2024) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Yearly Growth Rate | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Background Traffic Growth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2024 TRAFFIC VOLUMES | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 7 |
| Years To Buildout (2027) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Yearly Growth Rate | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Background Traffic Growth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2027 NO-BUILD TRAFFIC VOLUMES | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 7 |
| Inbound Trip Distribution Percentage | | | | | | | | | | | 100% | |
| Outbound Trip Distribution Percentage | | | | | | | | 100% | | | | |
| Inbound New Project Traffic | | | | | | | | | | | 31 | |
| Outbound New Project Traffic | | | | | | | | 38 | | | | |
| Pass-By Project Traffic | | | | | | | | | | | | |
| Total New Project Traffic | | | | | | | | 38 | | | 31 | |
| 2027 BUILD TRAFFIC VOLUMES | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 41 | 0 | 0 | 33 | 7 |

| PM PEAK HOUR (5:00-6:00 PM) | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2023 TRAFFIC VOLUMES | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 7 | 0 | 2 | 8 | 2 |
| Heavy Vehicle Percentage | 2% | 2% | 2% | 2% | 2% | 33% | 2% | 2% | 2% | 2% | 2% | 2% |
| Years To Current Year (2024) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Yearly Growth Rate | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Background Traffic Growth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2024 TRAFFIC VOLUMES | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 7 | 0 | 2 | 8 | 2 |
| Years To Buildout (2027) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Yearly Growth Rate | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Background Traffic Growth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2027 NO-BUILD TRAFFIC VOLUMES | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 7 | 0 | 2 | 8 | 2 |
| Inbound Trip Distribution Percentage | | | | | | | | | | | 100% | |
| Outbound Trip Distribution Percentage | | | | | | | | 100% | | | | |
| Inbound New Project Traffic | | | | | | | | | | | 55 | |
| Outbound New Project Traffic | | | | | | | | 46 | | | | |
| Pass-by Project Traffic | | | | | | | | | | | | |
| Total New Project Traffic | | | | | | | | 46 | | | 55 | |
| 2027 BUILD TRAFFIC VOLUMES | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 53 | 0 | 2 | 63 | 2 |



Atlantic Street & S. Ocean Boulevard

TRAFFIC CONTROL: Unsignalized DATE COUNTED: Wednesday, May 3, 2023

| AM PEAK HOUR (7:30-8:30 AM) | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------------------|------|------|-----|-----|------|------|-----|-----|-----|------|-----|------|
| 2023 TRAFFIC VOLUMES | 2 | 1 | | | 0 | 0 | | | | 0 | | 1 |
| Heavy Vehicle Percentage | 50% | 2% | | | 2% | 2% | | | | 2% | | 2% |
| Years To Current Year (2024) | 1 | 1 | | | 1 | 1 | | | | 1 | | 1 |
| Yearly Growth Rate | 1.0% | 1.0% | | | 1.0% | 1.0% | | | | 1.0% | | 1.0% |
| Background Traffic Growth | 0 | 0 | | | 0 | 0 | | | | 0 | | 0 |
| 2024 TRAFFIC VOLUMES | 2 | 1 | | | 0 | 0 | | | | 0 | | 1 |
| Years To Buildout (2027) | 3 | 3 | | | 3 | 3 | | | | 3 | | 3 |
| Yearly Growth Rate | 1.0% | 1.0% | | | 1.0% | 1.0% | | | | 1.0% | | 1.0% |
| Background Traffic Growth | 0 | 0 | | | 0 | 0 | | | | 0 | | 0 |
| 2027 NO-BUILD TRAFFIC VOLUMES | 2 | 1 | | | 0 | 0 | | | | 0 | | 1 |
| Inbound Trip Distribution Percentage | | | | | | | | | | | | 100% |
| Outbound Trip Distribution Percentage | 100% | | | | | | | | | | | |
| Inbound New Project Traffic | | | | | | | | | | | | 31 |
| Outbound New Project Traffic | 38 | | | | | | | | | | | |
| Pass-By Project Traffic | | | | | | | | | | | | |
| Total New Project Traffic | 38 | | | | | | | | | | | 31 |
| 2027 BUILD TRAFFIC VOLUMES | 40 | 1 | | | 0 | 0 | | | | 0 | | 32 |

| PM PEAK HOUR (5:00-6:00 PM) | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------------------|------|------|-----|-----|------|------|-----|-----|-----|------|-----|------|
| 2023 TRAFFIC VOLUMES | 3 | 4 | | | 4 | 3 | | | | 4 | | 4 |
| Heavy Vehicle Percentage | 2% | 2% | | | 2% | 2% | | | | 2% | | 2% |
| Years To Current Year (2024) | 1 | 1 | | | 1 | 1 | | | | 1 | | 1 |
| Yearly Growth Rate | 1.0% | 1.0% | | | 1.0% | 1.0% | | | | 1.0% | | 1.0% |
| Background Traffic Growth | 0 | 0 | | | 0 | 0 | | | | 0 | | 0 |
| 2024 TRAFFIC VOLUMES | 3 | 4 | | | 4 | 3 | | | | 4 | | 4 |
| Years To Buildout (2027) | 3 | 3 | | | 3 | 3 | | | | 3 | | 3 |
| Yearly Growth Rate | 1.0% | 1.0% | | | 1.0% | 1.0% | | | | 1.0% | | 1.0% |
| Background Traffic Growth | 0 | 0 | | | 0 | 0 | | | | 0 | | 0 |
| 2027 NO-BUILD TRAFFIC VOLUMES | 3 | 4 | | | 4 | 3 | | | | 4 | | 4 |
| Inbound Trip Distribution Percentage | | | | | | | | | | | | 100% |
| Outbound Trip Distribution Percentage | 100% | | | | | | | | | | | |
| Inbound New Project Traffic | | | | | | | | | | | | 55 |
| Outbound New Project Traffic | 46 | | | | | | | | | | | |
| Pass-by Project Traffic | | | | | | | | | | | | |
| Total New Project Traffic | 46 | | | | | | | | | | | 55 |
| 2027 BUILD TRAFFIC VOLUMES | 49 | 4 | | | 4 | 3 | | | | 4 | | 59 |



31st Avenue & S. Ocean Boulevard/Site Access #1

TRAFFIC CONTROL: Unsignalized DATE COUNTED: Estimated

| AM PEAK HOUR (7:30-8:30 AM) | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2023 TRAFFIC VOLUMES | 5 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 5 | 0 | 5 |
| Heavy Vehicle Percentage | 2% | 2% | | | 2% | 2% | | | | 2% | | 2% |
| Years To Current Year (2024) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Yearly Growth Rate | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Background Traffic Growth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2024 TRAFFIC VOLUMES | 5 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 5 | 0 | 5 |
| Years To Buildout (2027) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Yearly Growth Rate | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Background Traffic Growth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2027 NO-BUILD TRAFFIC VOLUMES | 5 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 5 | 0 | 5 |
| Inbound Trip Distribution Percentage | | | | 100% | | | | | | | | |
| Outbound Trip Distribution Percentage | | | | | | | | | 100% | | | |
| Inbound New Project Traffic | | | | 31 | | | | | | | | |
| Outbound New Project Traffic | | | | | | | | | 38 | | | |
| Pass-By Project Traffic | | | | | | | | | | | | |
| Total New Project Traffic | | | | 31 | | | | | 38 | | | |
| 2027 BUILD TRAFFIC VOLUMES | 5 | 5 | 0 | 31 | 5 | 5 | 0 | 0 | 38 | 5 | 0 | 5 |

| PM PEAK HOUR (5:00-6:00 PM) | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2023 TRAFFIC VOLUMES | 5 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 5 | 0 | 5 |
| Heavy Vehicle Percentage | 2% | 2% | | | 2% | 2% | | | | 2% | | 2% |
| Years To Current Year (2024) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Yearly Growth Rate | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Background Traffic Growth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2024 TRAFFIC VOLUMES | 5 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 5 | 0 | 5 |
| Years To Buildout (2027) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Yearly Growth Rate | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Background Traffic Growth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2027 NO-BUILD TRAFFIC VOLUMES | 5 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 5 | 0 | 5 |
| Inbound Trip Distribution Percentage | | | | 100% | | | | | | | | |
| Outbound Trip Distribution Percentage | | | | | | | | | 100% | | | |
| Inbound New Project Traffic | | | | 55 | | | | | | | | |
| Outbound New Project Traffic | | | | | | | | | 46 | | | |
| Pass-by Project Traffic | | | | | | | | | | | | |
| Total New Project Traffic | | | | 55 | | | | | 46 | | | |
| 2027 BUILD TRAFFIC VOLUMES | 5 | 5 | 0 | 55 | 5 | 5 | 0 | 0 | 46 | 5 | 0 | 5 |



Multifamily Housing (High-Rise) Not Close to Rail Transit (222)

Vehicle Trip Ends vs: Dwelling Units On a: Weekday

| Setting/Location: | General Urban/Suburban |
|--|---------------------------|
| Number of Studies: | 8 |
| Avg. Num. of Dwelling Units: | 484 |
| Directional Distribution: | 50% entering, 50% exiting |
| Achiele Trip Concretion new Dwelling L | |

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 4.54 | 3.74 - 6.45 | 0.81 |

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

Multifamily Housing (High-Rise)

| Vehicle Trip Ends vs: On a: | Dwelling Units Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. |
|--------------------------------|--|
| Setting/Location: | General Urban/Suburban |
| Number of Studies: | 45 |
| Avg. Num. of Dwelling Units: | 372 |
| Directional Distribution: | 26% entering, 74% exiting |
| | |

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.27 | 0.09 - 0.67 | 0.11 |

Data Plot and Equation



• Institute of Transportation Engineers

Multifamily Housing (High-Rise)

| Vehicle Trip Ends vs: On a: | Dwelling Units Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. |
|--------------------------------|--|
| Setting/Location: | General Urban/Suburban |
| Number of Studies: | 45 |
| Avg. Num. of Dwelling Units: | 372 |
| Directional Distribution: | 62% entering, 38% exiting |
| | |

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.32 | 0.09 - 0.80 | 0.13 |

Data Plot and Equation



• Institute of Transportation Engineers

Hotel (310) Vehicle Trip Ends vs: Rooms On a: Weekday Setting/Location: General Urban/Suburban Number of Studies: 7

| Number of Studies: | 7 |
|---------------------------|---------------------------|
| Avg. Num. of Rooms: | 148 |
| Directional Distribution: | 50% entering, 50% exiting |

Vehicle Trip Generation per Room

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 7.99 | 5.31 - 9.53 | 1.92 |

Data Plot and Equation



• Institute of Transportation Engineers

| Hotel (310) | | |
|---------------------------|---------------------------------------|--|
| Vehicle Trip Ends vs: | Rooms | |
| On a: | Weekday, | |
| | Peak Hour of Adjacent Street Traffic, | |
| | One Hour Between 7 and 9 a.m. | |
| Setting/Location: | General Urban/Suburban | |
| Number of Studies: | 28 | |
| Avg. Num. of Rooms: | 182 | |
| Directional Distribution: | 56% entering, 44% exiting | |

Vehicle Trip Generation per Room

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.46 | 0.20 - 0.84 | 0.14 |

Data Plot and Equation



• Institute of Transportation Engineers

| Hotel (310) | | |
|---------------------------|---------------------------------------|--|
| Vehicle Trip Ends vs: | Rooms | |
| On a: | Weekday, | |
| | Peak Hour of Adjacent Street Traffic, | |
| | One Hour Between 4 and 6 p.m. | |
| Setting/Location: | General Urban/Suburban | |
| Number of Studies: | 31 | |
| Avg. Num. of Rooms: | 186 | |
| Directional Distribution: | 51% entering, 49% exiting | |

Vehicle Trip Generation per Room

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.59 | 0.26 - 1.06 | 0.22 |

Data Plot and Equation



• Institute of Transportation Engineers

Strip Retail Plaza (<40k)

(822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA On a: Weekday

| Setting/Location: | General Urban/Suburban |
|---------------------------|---------------------------|
| Number of Studies: | 4 |
| Avg. 1000 Sq. Ft. GLA: | 19 |
| Directional Distribution: | 50% entering, 50% exiting |
| | |

Vehicle Trip Generation per 1000 Sq. Ft. GLA

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 54.45 | 47.86 - 65.07 | 7.81 |

Data Plot and Equation

Caution – Small Sample Size



• Institute of Transportation Engineers

| Strip Retail Plaza (<40k) (822) | | |
|--|---------------------------|--|
| Vehicle Trip Ends vs: 1000 Sq. Ft. GLA On a: Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. | | |
| Setting/Location: | General Urban/Suburban | |
| Number of Studies: | 5 | |
| Avg. 1000 Sq. Ft. GLA: | 18 | |
| Directional Distribution: | 60% entering, 40% exiting | |
| | | |

Vehicle Trip Generation per 1000 Sq. Ft. GLA

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 2.36 | 1.60 - 3.73 | 0.94 |

Data Plot and Equation

Caution – Small Sample Size



• Institute of Transportation Engineers

| Strip Retail Plaza (<40k) (822) | | |
|------------------------------------|---------------------------------------|--|
| Vehicle Trip Ends vs: | 1000 Sq. Ft. GLA | |
| On a: | Weekday, | |
| | Peak Hour of Adjacent Street Traffic, | |
| | One Hour Between 4 and 6 p.m. | |
| Setting/Location: | General Urban/Suburban | |
| Number of Studies: | 25 | |
| Avg. 1000 Sq. Ft. GLA: | 21 | |
| Directional Distribution: | 50% entering, 50% exiting | |

Vehicle Trip Generation per 1000 Sq. Ft. GLA

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 6.59 | 2.81 - 15.20 | 2.94 |

Data Plot and Equation



• Institute of Transportation Engineers

APPENDIX D

Capacity Analysis



2024 Existing Conditions



| | - | \rightarrow | - | - | 1 | 1 | |
|------------------------------|--------------|---------------|----------|----------|------|------|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR | |
| Lane Configurations | 4 4 1 | | ľ | ^ | ľ | 1 | |
| Traffic Volume (veh/h) | 831 | 6 | 5 | 796 | 2 | 6 | |
| Future Volume (veh/h) | 831 | 6 | 5 | 796 | 2 | 6 | |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Work Zone On Approach | No | | | No | No | | |
| Adj Sat Flow, veh/h/ln | 1870 | 1648 | 1604 | 1856 | 1870 | 1011 | |
| Adj Flow Rate, veh/h | 903 | 7 | 5 | 865 | 2 | 7 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Percent Heavy Veh, % | 2 | 17 | 20 | 3 | 2 | 60 | |
| Cap, veh/h | 2912 | 23 | 512 | 2823 | 34 | 17 | |
| Arrive On Green | 0.56 | 0.56 | 0.56 | 0.56 | 0.02 | 0.02 | |
| Sat Flow, veh/h | 5395 | 41 | 526 | 5233 | 1781 | 857 | |
| Grp Volume(v), veh/h | 588 | 322 | 5 | 865 | 2 | 7 | |
| Grp Sat Flow(s),veh/h/ln | 1702 | 1863 | 526 | 1689 | 1781 | 857 | |
| Q Serve(g_s), s | 2.5 | 2.5 | 0.1 | 2.5 | 0.0 | 0.2 | |
| Cycle Q Clear(g_c), s | 2.5 | 2.5 | 2.6 | 2.5 | 0.0 | 0.2 | |
| Prop In Lane | | 0.02 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 1897 | 1038 | 512 | 2823 | 34 | 17 | |
| V/C Ratio(X) | 0.31 | 0.31 | 0.01 | 0.31 | 0.06 | 0.42 | |
| Avail Cap(c_a), veh/h | 6816 | 3730 | 1271 | 10142 | 1634 | 786 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Uniform Delay (d), s/veh | 3.2 | 3.2 | 3.9 | 3.2 | 13.0 | 13.1 | |
| Incr Delay (d2), s/veh | 0.1 | 0.2 | 0.0 | 0.1 | 0.7 | 16.2 | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| %ile BackOfQ(50%),veh/ln | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | |
| Unsig. Movement Delay, s/ve | n | <u> </u> | 0.0 | 0.0 | 407 | 00.0 | |
| LnGrp Delay(d),s/veh | 3.3 | 3.4 | 3.9 | 3.2 | 13.7 | 29.2 | |
| LINGRP LOS | A | A | A | A | В | С | |
| Approach Vol, veh/h | 910 | | | 870 | 9 | | |
| Approach Delay, s/veh | 3.3 | | | 3.2 | 25.8 | | |
| Approach LOS | A | | | A | С | | |
| Timer - Assigned Phs | | 2 | | | | 6 | 8 |
| Phs Duration (G+Y+Rc), s | | 21.1 | | | | 21.1 | 5.8 |
| Change Period (Y+Rc), s | | 6.1 | | | | 6.1 | 5.3 |
| Max Green Setting (Gmax), s | | 53.9 | | | | 53.9 | 24.7 |
| Max Q Clear Time (q_c+I1), s | ; | 4.5 | | | | 4.6 | 2.2 |
| Green Ext Time (p_c), s | | 6.6 | | | | 6.9 | 0.0 |
| Intersection Summary | | | | | | | |
| HCM 6th Ctrl Dolay | | | 2 / | | | | |
| HCM 6th LOS | | | 5.4 Λ | | | | |

2.7

Intersection

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | \$ | | | ÷ | | | ÷ | | | ¢ | |
| Traffic Vol, veh/h | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 7 |
| Future Vol, veh/h | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage | ,# - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 75 | 2 | 2 | 2 | 2 | 2 | 2 | 33 | 2 | 2 | 2 | 29 |
| Mvmt Flow | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 8 |

| Major/Minor | Minor2 | | Minor1 | | | | Major1 | | | Major2 | | | |
|----------------------|--------|-------|--------|-------|-------|-------|--------|---|---|-----------|---|---|--|
| Conflicting Flow All | 10 | 9 | 6 | 9 | 13 | 3 | 10 | 0 | 0 | 3 | 0 | 0 | |
| Stage 1 | 6 | 6 | - | 3 | 3 | - | - | - | - | - | - | - | |
| Stage 2 | 4 | 3 | - | 6 | 10 | - | - | - | - | - | - | - | |
| Critical Hdwy | 7.85 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - | |
| Critical Hdwy Stg 1 | 6.85 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - | |
| Critical Hdwy Stg 2 | 6.85 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - | |
| Follow-up Hdwy | 4.175 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - | |
| Pot Cap-1 Maneuver | 849 | 886 | 1077 | 1010 | 881 | 1081 | 1610 | - | - | 1619 | - | - | |
| Stage 1 | 855 | 891 | - | 1020 | 893 | - | - | - | - | - | - | - | |
| Stage 2 | 858 | 893 | - | 1016 | 887 | - | - | - | - | - | - | - | |
| Platoon blocked, % | | | | | | | | - | - | | - | - | |
| Mov Cap-1 Maneuver | 848 | 886 | 1077 | 1010 | 881 | 1081 | 1610 | - | - | 1619 | - | - | |
| Mov Cap-2 Maneuver | 848 | 886 | - | 1010 | 881 | - | - | - | - | - | - | - | |
| Stage 1 | 855 | 891 | - | 1020 | 893 | - | - | - | - | - | - | - | |
| Stage 2 | 857 | 893 | - | 1016 | 887 | - | - | - | - | - | - | - | |
| | | | | | | | | | | | | | |
| A 1 | | | | | | | ND | | | CD | | | |

| Approach | EB | WB | NB | SB | |
|----------------------|-----|-----|----|----|--|
| HCM Control Delay, s | 9.3 | 9.1 | 0 | 0 | |
| HCM LOS | Α | А | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | VBLn1 | SBL | SBT | SBR |
|-----------------------|------|-----|-----|-------|-------|------|-----|-----|
| Capacity (veh/h) | 1610 | - | - | 848 | 881 | 1619 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.005 | 0.001 | - | - | - |
| HCM Control Delay (s) | 0 | - | - | 9.3 | 9.1 | 0 | - | - |
| HCM Lane LOS | А | - | - | А | Α | Α | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0 | 0 | - | - |

Intersection

| Int Delay, s/veh | 4.7 | | | | | | |
|------------------------|-------|------|------|------|------|------|--|
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | |
| Lane Configurations | | - सी | 4 | | ۰¥ | | |
| Traffic Vol, veh/h | 2 | 1 | 0 | 0 | 0 | 1 | |
| Future Vol, veh/h | 2 | 1 | 0 | 0 | 0 | 1 | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop | |
| RT Channelized | - | None | - | None | - | None | |
| Storage Length | - | - | - | - | 0 | - | |
| Veh in Median Storage | e,# - | 0 | 0 | - | 0 | - | |
| Grade, % | - | 0 | 0 | - | 0 | - | |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | |
| Heavy Vehicles, % | 50 | 2 | 2 | 2 | 2 | 2 | |
| Mvmt Flow | 2 | 1 | 0 | 0 | 0 | 1 | |

| Major/Minor | Major1 | Ν | /lajor2 | | Minor ₂ | |
|----------------------|--------|-------|---------|-----|--------------------|-------|
| Conflicting Flow All | 1 | 0 | - | 0 | 6 | 1 |
| Stage 1 | - | - | - | - | 1 | - |
| Stage 2 | - | - | - | - | 5 | - |
| Critical Hdwy | 4.6 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.65 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1357 | - | - | - | 1015 | 1084 |
| Stage 1 | - | - | - | - | 1022 | - |
| Stage 2 | - | - | - | - | 1018 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1357 | - | - | - | 1014 | 1084 |
| Mov Cap-2 Maneuver | · - | - | - | - | 1014 | - |
| Stage 1 | - | - | - | - | 1021 | - |
| Stage 2 | - | - | - | - | 1018 | - |
| | | | | | | |
| Approach | EB | | WB | | SB | |
| HCM Control Delay | 51 | | 0 | | 83 | |
| HCM LOS | 0.1 | | U | | 0.0 A | |
| | | | | | ,, | |
| NA' 1 /NA ' 1 | | EDI | EDT | MDT | | |
| Minor Lane/Major Mvi | mt | EBL | FRL | WBL | WBR : | SBLn1 |
| Capacity (veh/h) | | 1357 | - | - | - | 1084 |
| HCM Lane V/C Ratio | | 0.002 | - | - | - | 0.001 |
| HCM Control Delay (s | 5) | 7.7 | 0 | - | - | 8.3 |
| HCM Lane LOS | | А | А | - | - | А |
| HCM 95th %tile Q(ve | h) | 0 | - | - | - | 0 |

Intersection

| Int Delay, s/veh | 4 | | | | | | |
|------------------------|------|------|------|------|------|------|--|
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | |
| Lane Configurations | | ्र | 4 | | ۰¥ | | |
| Traffic Vol, veh/h | 5 | 5 | 5 | 5 | 5 | 5 | |
| Future Vol, veh/h | 5 | 5 | 5 | 5 | 5 | 5 | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop | |
| RT Channelized | - | None | - | None | - | None | |
| Storage Length | - | - | - | - | 0 | - | |
| Veh in Median Storage | ,# - | 0 | 0 | - | 0 | - | |
| Grade, % | - | 0 | 0 | - | 0 | - | |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | |
| Mvmt Flow | 5 | 5 | 5 | 5 | 5 | 5 | |

| Major/Minor | Major1 | Ν | /lajor2 | 1 | Vinor2 | |
|----------------------|--------|-------|---------|-----|--------|-------|
| Conflicting Flow All | 10 | 0 | - | 0 | 23 | 8 |
| Stage 1 | - | - | - | - | 8 | - |
| Stage 2 | - | - | - | - | 15 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1610 | - | - | - | 993 | 1074 |
| Stage 1 | - | - | - | - | 1015 | - |
| Stage 2 | - | - | - | - | 1008 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1610 | - | - | - | 990 | 1074 |
| Mov Cap-2 Maneuver | - | - | - | - | 990 | - |
| Stage 1 | - | - | - | - | 1012 | - |
| Stage 2 | - | - | - | - | 1008 | - |
| | | | | | | |
| Approach | FR | | WB | | SB | |
| HCM Control Delay | 3.6 | | 0 | | 85 | |
| HCM LOS | 0.0 | | U | | Δ | |
| | | | | | | |
| | | | | | | |
| Minor Lane/Major Mvr | nt | EBL | EBT | WBT | WBR | SBLn1 |
| Capacity (veh/h) | | 1610 | - | - | - | 1030 |
| HCM Lane V/C Ratio | | 0.003 | - | - | - | 0.011 |
| HCM Control Delay (s | 5) | 7.2 | 0 | - | - | 8.5 |
| HCM Lane LOS | | А | А | - | - | А |
| HCM 95th %tile Q(vel | n) | 0 | - | - | - | 0 |

| | - | \rightarrow | 1 | - | 1 | 1 | |
|------------------------------|-------------|---------------|------------|----------|------------|-----------|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR | |
| Lane Configurations | 4† Ъ | | ٦ | ^ | ٦ | 1 | |
| Traffic Volume (veh/h) | 1237 | 9 | 8 | 1246 | 12 | 10 | |
| Future Volume (veh/h) | 1237 | 9 | 8 | 1246 | 12 | 10 | |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Work Zone On Approach | No | | | No | No | | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | |
| Adj Flow Rate, veh/h | 1345 | 10 | 9 | 1354 | 13 | 11 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | |
| Cap, veh/h | 3114 | 23 | 395 | 3041 | 85 | 76 | |
| Arrive On Green | 0.60 | 0.60 | 0.60 | 0.60 | 0.05 | 0.05 | |
| Sat Flow, veh/h | 5397 | 39 | 402 | 5274 | 1/81 | 1585 | |
| Grp Volume(v), veh/h | 876 | 479 | 9 | 1354 | 13 | 11 | |
| Grp Sat Flow(s),veh/h/ln | 1702 | 1863 | 402 | 1702 | 1781 | 1585 | |
| Q Serve(g_s), s | 4.8 | 4.8 | 0.4 | 5.0 | 0.2 | 0.2 | |
| Cycle Q Clear(g_c), s | 4.8 | 4.8 | 5.2 | 5.0 | 0.2 | 0.2 | |
| Prop In Lane | 0007 | 0.02 | 1.00 | 0044 | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 2027 | 1110 | 395 | 3041 | 85 | /6 | |
| V/C Ratio(X) | 0.43 | 0.43 | 0.02 | 0.45 | 0.15 | 0.15 | |
| Avall Cap(c_a), ven/n | 5410 | 2961 | /95 | 8114 | 1260 | 1122 | |
| | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Upstream Filter(I) | 1.00 | 1.00 | I.UU | 1.00 | 1.00 | 1.00 | |
| Uniform Delay (d), s/ven | 3.7 | 3.7 | 5.1 | 3.8 | 15.5 | 15.5 | |
| Incr Delay (02), S/Ven | 0.1 | 0.3 | 0.0 | 0.1 | 0.0 | 0.9 | |
| Mila Delay(03),S/Ven | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| June Daukuru (30%), Ven/III | 0.3 | 0.4 | 0.0 | 0.3 | 0.1 | 0.1 | |
| InGrn Delay(d) shuch | 20 | 10 | Б 2 | 2.0 | 16.2 | 16.4 | |
| LINGTP Delay(d), si veli | ο.9 Λ | 4.0 A | - J.Ζ Λ | ο.9 Λ | 10.3 R | 10.4 R | |
| Approach Vol. voh/h | 1255 | <u></u> | <u>A</u> | 1262 | 24 | D | |
| Approach Delay shop | 2.0 | | | 2.0 | 24 16 2 | | |
| Approach LOS | J.9 A | | | J.9 A | 10.3 R | | |
| | A | | | A | D | | |
| Timer - Assigned Phs | | 2 | | | | 6 | 8 |
| Phs Duration (G+Y+Rc), s | | 26.3 | | | | 26.3 | 7.6 |
| Change Period (Y+Rc), s | | 6.1 | | | | 6.1 | 6.0 |
| Max Green Setting (Gmax), s | ; | 53.9 | | | | 53.9 | 24.0 |
| Max Q Clear Time (g_c+I1), s | 5 | 6.8 | | | | 7.2 | 2.2 |
| Green Ext Time (p_c), s | | 11.7 | | | | 13.0 | 0.0 |
| Intersection Summary | | | | | | | |
| HCM 6th Ctrl Delay | | | 4.0 | | | | |
| HCM 6th LOS | | | Α | | | | |

3.4

Intersection

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ÷ | | | ÷ | | | ÷ | | | ÷ | |
| Traffic Vol, veh/h | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 7 | 0 | 2 | 8 | 2 |
| Future Vol, veh/h | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 7 | 0 | 2 | 8 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage | ,# - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 33 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 8 | 0 | 2 | 9 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | Ν | /lajor2 | | | |
|----------------------|--------|-------|-------|--------|-------|-------|--------|---|---|---------|---|---|--|
| Conflicting Flow All | 25 | 22 | 10 | 23 | 23 | 8 | 11 | 0 | 0 | 8 | 0 | 0 | |
| Stage 1 | 14 | 14 | - | 8 | 8 | - | - | - | - | - | - | - | |
| Stage 2 | 11 | 8 | - | 15 | 15 | - | - | - | - | - | - | - | |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.53 | 4.12 | - | - | 4.12 | - | - | |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - | |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - | |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.597 | 2.218 | - | - | 2.218 | - | - | |
| Pot Cap-1 Maneuver | 986 | 872 | 1071 | 989 | 870 | 990 | 1608 | - | - | 1612 | - | - | |
| Stage 1 | 1006 | 884 | - | 1013 | 889 | - | - | - | - | - | - | - | |
| Stage 2 | 1010 | 889 | - | 1005 | 883 | - | - | - | - | - | - | - | |
| Platoon blocked, % | | | | | | | | - | - | | - | - | |
| Mov Cap-1 Maneuver | 980 | 871 | 1071 | 986 | 869 | 990 | 1608 | - | - | 1612 | - | - | |
| Mov Cap-2 Maneuver | 980 | 871 | - | 986 | 869 | - | - | - | - | - | - | - | |
| Stage 1 | 1006 | 883 | - | 1013 | 889 | - | - | - | - | - | - | - | |
| Stage 2 | 1004 | 889 | - | 1002 | 882 | - | - | - | - | - | - | - | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| Approach | EB | WB | NB | SB | |
|----------------------|----|-----|----|-----|--|
| HCM Control Delay, s | 9 | 8.8 | 0 | 1.2 | |
| HCM LOS | А | А | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1\ | WBLn1 | SBL | SBT | SBR | |
|-----------------------|------|-----|-----|--------|-------|-------|-----|-----|--|
| Capacity (veh/h) | 1608 | - | - | 905 | 945 | 1612 | - | - | |
| HCM Lane V/C Ratio | - | - | - | 0.004 | 0.007 | 0.001 | - | - | |
| HCM Control Delay (s) | 0 | - | - | 9 | 8.8 | 7.2 | 0 | - | |
| HCM Lane LOS | А | - | - | А | А | А | А | - | |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0 | 0 | - | - | |

Intersection

| Int Delay, s/veh | 4.1 | | | | | | |
|------------------------|------|------|------|------|------|------|--|
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | |
| Lane Configurations | | - सी | 4 | | ۰¥ | | |
| Traffic Vol, veh/h | 3 | 4 | 4 | 3 | 4 | 4 | |
| Future Vol, veh/h | 3 | 4 | 4 | 3 | 4 | 4 | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop | |
| RT Channelized | - | None | - | None | - | None | |
| Storage Length | - | - | - | - | 0 | - | |
| Veh in Median Storage | ,# - | 0 | 0 | - | 0 | - | |
| Grade, % | - | 0 | 0 | - | 0 | - | |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | |
| Mvmt Flow | 3 | 4 | 4 | 3 | 4 | 4 | |

| Major/Minor | Major1 | Ν | /lajor2 | | Minor ₂ | |
|-----------------------|------------|-------|---------|-------|--------------------|----------|
| Conflicting Flow All | 7 | 0 | - | 0 | 16 | 6 |
| Stage 1 | - | - | - | - | 6 | - |
| Stage 2 | - | - | - | - | 10 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1614 | - | - | - | 1002 | 1077 |
| Stage 1 | - | - | - | - | 1017 | - |
| Stage 2 | - | - | - | - | 1013 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1614 | - | - | - | 1000 | 1077 |
| Mov Cap-2 Maneuver | - | - | - | - | 1000 | - |
| Stage 1 | - | - | - | - | 1015 | - |
| Stage 2 | - | - | - | - | 1013 | - |
| | | | | | | |
| Approach | EB | | WB | | SB | |
| HCM Control Delay, s | 3.1 | | 0 | | 8.5 | |
| HCM LOS | | | | | А | |
| | | | | | | |
| Minor Lano/Major Myr | nt | FRI | FRT | \M/RT | W/RD | CRI n1 |
| Consolity (yee/h) | ш | 1/1/ | LDI | VVDT | VVDR - | 1027 |
| Capacity (ven/n) | | 1014 | - | - | - | 1037 |
| HCIVI Lane V/C Ralio | 1 | 0.002 | - | - | - | 0.008 |
| HCM Long LOS |) | /.Z | 0 | - | - | 0.0 A |
| HCM 05th % tile O(vol | 1) | A | A | - | - | A |
| | 1) | 0 | - | - | - | 0 |

Intersection

| Int Delay, s/veh | 4 | | | | | | |
|------------------------|------|------|------|------|------|------|--|
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | |
| Lane Configurations | | ्र | 4 | | ۰¥ | | |
| Traffic Vol, veh/h | 5 | 5 | 5 | 5 | 5 | 5 | |
| Future Vol, veh/h | 5 | 5 | 5 | 5 | 5 | 5 | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop | |
| RT Channelized | - | None | - | None | - | None | |
| Storage Length | - | - | - | - | 0 | - | |
| Veh in Median Storage | ,# - | 0 | 0 | - | 0 | - | |
| Grade, % | - | 0 | 0 | - | 0 | - | |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | |
| Mvmt Flow | 5 | 5 | 5 | 5 | 5 | 5 | |

| Major/Minor | Major1 | Ν | /lajor2 | 1 | Vinor2 | |
|----------------------|--------|-------|---------|-----|--------|-------|
| Conflicting Flow All | 10 | 0 | - | 0 | 23 | 8 |
| Stage 1 | - | - | - | - | 8 | - |
| Stage 2 | - | - | - | - | 15 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1610 | - | - | - | 993 | 1074 |
| Stage 1 | - | - | - | - | 1015 | - |
| Stage 2 | - | - | - | - | 1008 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1610 | - | - | - | 990 | 1074 |
| Mov Cap-2 Maneuver | - | - | - | - | 990 | - |
| Stage 1 | - | - | - | - | 1012 | - |
| Stage 2 | - | - | - | - | 1008 | - |
| | | | | | | |
| Approach | FR | | WB | | SB | |
| HCM Control Delay | 3.6 | | 0 | | 85 | |
| HCM LOS | 0.0 | | U | | Δ | |
| | | | | | | |
| | | | | | | |
| Minor Lane/Major Mvr | nt | EBL | EBT | WBT | WBR | SBLn1 |
| Capacity (veh/h) | | 1610 | - | - | - | 1030 |
| HCM Lane V/C Ratio | | 0.003 | - | - | - | 0.011 |
| HCM Control Delay (s | 5) | 7.2 | 0 | - | - | 8.5 |
| HCM Lane LOS | | А | А | - | - | А |
| HCM 95th %tile Q(vel | n) | 0 | - | - | - | 0 |

2027 No-Build Conditions



| | → | \mathbf{r} | 1 | - | 1 | 1 | |
|------------------------------|------------|--------------|------------|------|------|------|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR | |
| Lane Configurations | ##% | | 5 | *** | 5 | 1 | |
| Traffic Volume (veh/h) | 856 | 6 | 5 | 820 | 2 | 6 | |
| Future Volume (veh/h) | 856 | 6 | 5 | 820 | 2 | 6 | |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Work Zone On Approach | No | | | No | No | | |
| Adj Sat Flow, veh/h/ln | 1870 | 1648 | 1604 | 1856 | 1870 | 1011 | |
| Adj Flow Rate, veh/h | 930 | 7 | 5 | 891 | 2 | 7 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Percent Heavy Veh, % | 2 | 17 | 20 | 3 | 2 | 60 | |
| Cap, veh/h | 2838 | 21 | 488 | 2750 | 34 | 17 | |
| Arrive On Green | 0.54 | 0.54 | 0.54 | 0.54 | 0.02 | 0.02 | |
| Sat Flow, ven/h | 5396 | 39 | 513 | 5233 | 1/81 | 857 | |
| Grp Volume(v), veh/h | 605 | 332 | 5 | 891 | 2 | 7 | |
| Grp Sat Flow(s),veh/h/ln | 1/02 | 1863 | 513 | 1689 | 1/81 | 857 | |
| Q Serve(g_s), s | 2.7 | 2.7 | 0.2 | 2.7 | 0.0 | 0.2 | |
| Cycle Q Clear(g_c), s | 2.7 | 2.7 | 2.9 | 2.7 | 0.0 | 0.2 | |
| Prop in Lane | 1040 | 0.02 | 1.00 | 2750 | 1.00 | 1.00 | |
| Lane Grp Cap(c), ven/n | 1848 | 1011 | 488 | 2/50 | 34 | 1/ | |
| V/C Rallo(X) | 0.33 | 0.33 | 0.01 | 0.32 | 0.00 | 0.42 | |
| Avall Cap(C_a), Vell/II | 1 00 | 3034 | 1209 | 9000 | 1047 | 1 00 | |
| How Platouti Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Upsiledin Filler(I) | 2.5 | 2.5 | 1.00 | 2.5 | 12.2 | 12 / | |
| Incr Delay (d2) shiph | 0.0 | 0.0 | 4.3 0.0 | 0.0 | 0.7 | 16.2 | |
| Initial O Delay(d3) s/veh | 0.0 | 0.2 | 0.0 | 0.0 | 0.7 | 0.0 | |
| %ile BackOfO(50%) veh/ln | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Unsig. Movement Delay s/ve | eh | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | |
| LnGrp Delay(d).s/veh | 3.6 | 3.7 | 4.3 | 3.6 | 14.0 | 29.6 | |
| LnGrp LOS | A | A | A | A | В | C | |
| Approach Vol. veh/h | 937 | | | 896 | 9 | - | |
| Approach Delay, s/veh | 3.6 | | | 3.6 | 26.1 | | |
| Approach LOS | A | | | A | C | | |
| Timer - Assigned Phs | | 2 | | | | 6 | 8 |
| Phs Duration (G+Y+Rc), s | | 21.1 | | | | 21.1 | 6.5 |
| Change Period (Y+Rc), s | | 6.1 | | | | 6.1 | 6.0 |
| Max Green Setting (Gmax), s | | 53.9 | | | | 53.9 | 24.0 |
| Max Q Clear Time (q_c+l1), s | 5 | 4.7 | | | | 4.9 | 2.2 |
| Green Ext Time (p_c), s | | 6.9 | | | | 7.2 | 0.0 |
| Intersection Summary | | | | | | | |
| HCM 6th Ctrl Delay | | | 3.7 | | | | |
| HCM 6th LOS | | | А | | | | |

2.7

Intersection

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | \$ | | | ÷ | | | ÷ | | | ¢ | |
| Traffic Vol, veh/h | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 7 |
| Future Vol, veh/h | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage | ,# - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 75 | 2 | 2 | 2 | 2 | 2 | 2 | 33 | 2 | 2 | 2 | 29 |
| Mvmt Flow | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 8 |

| Major/Minor | Minor2 | | ļ | Minor1 | | | Major1 | | ļ | Major2 | | | |
|----------------------|--------|-------|-------|--------|-------|-------|--------|---|---|--------|---|---|--|
| Conflicting Flow All | 10 | 9 | 6 | 9 | 13 | 3 | 10 | 0 | 0 | 3 | 0 | 0 | |
| Stage 1 | 6 | 6 | - | 3 | 3 | - | - | - | - | - | - | - | |
| Stage 2 | 4 | 3 | - | 6 | 10 | - | - | - | - | - | - | - | |
| Critical Hdwy | 7.85 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - | |
| Critical Hdwy Stg 1 | 6.85 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - | |
| Critical Hdwy Stg 2 | 6.85 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - | |
| Follow-up Hdwy | 4.175 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - | |
| Pot Cap-1 Maneuver | 849 | 886 | 1077 | 1010 | 881 | 1081 | 1610 | - | - | 1619 | - | - | |
| Stage 1 | 855 | 891 | - | 1020 | 893 | - | - | - | - | - | - | - | |
| Stage 2 | 858 | 893 | - | 1016 | 887 | - | - | - | - | - | - | - | |
| Platoon blocked, % | | | | | | | | - | - | | - | - | |
| Mov Cap-1 Maneuver | 848 | 886 | 1077 | 1010 | 881 | 1081 | 1610 | - | - | 1619 | - | - | |
| Mov Cap-2 Maneuver | 848 | 886 | - | 1010 | 881 | - | - | - | - | - | - | - | |
| Stage 1 | 855 | 891 | - | 1020 | 893 | - | - | - | - | - | - | - | |
| Stage 2 | 857 | 893 | - | 1016 | 887 | - | - | - | - | - | - | - | |
| | | | | | | | | | | | | | |
| A 1 | | | | | | | ND | | | 00 | | | |

| Approach | EB | WB | NB | SB | |
|----------------------|-----|-----|----|----|--|
| HCM Control Delay, s | 9.3 | 9.1 | 0 | 0 | |
| HCM LOS | А | А | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | VBLn1 | SBL | SBT | SBR |
|-----------------------|------|-----|-----|-------|-------|------|-----|-----|
| Capacity (veh/h) | 1610 | - | - | 848 | 881 | 1619 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.005 | 0.001 | - | - | - |
| HCM Control Delay (s) | 0 | - | - | 9.3 | 9.1 | 0 | - | - |
| HCM Lane LOS | А | - | - | А | Α | Α | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0 | 0 | - | - |

Intersection

| Int Delay, s/veh | 4.7 | | | | | | |
|------------------------|------|------|------------|------|------|------|--|
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | |
| Lane Configurations | | ्स | 1 + | | ۰¥ | | |
| Traffic Vol, veh/h | 2 | 1 | 0 | 0 | 0 | 1 | |
| Future Vol, veh/h | 2 | 1 | 0 | 0 | 0 | 1 | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop | |
| RT Channelized | - | None | - | None | - | None | |
| Storage Length | - | - | - | - | 0 | - | |
| Veh in Median Storage | ,# - | 0 | 0 | - | 0 | - | |
| Grade, % | - | 0 | 0 | - | 0 | - | |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | |
| Heavy Vehicles, % | 50 | 2 | 2 | 2 | 2 | 2 | |
| Mvmt Flow | 2 | 1 | 0 | 0 | 0 | 1 | |

| Major/Minor | Major1 | Ν | lajor2 | | Vinor2 | |
|--------------------------|--------|-------|--------|------|--------|----------|
| Conflicting Flow All | 1 | 0 | - | 0 | 6 | 1 |
| Stage 1 | - | - | - | - | 1 | - |
| Stage 2 | - | - | - | - | 5 | - |
| Critical Hdwy | 4.6 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.65 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1357 | - | - | - | 1015 | 1084 |
| Stage 1 | - | - | - | - | 1022 | - |
| Stage 2 | - | - | - | - | 1018 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1357 | - | - | - | 1014 | 1084 |
| Mov Cap-2 Maneuver | - | - | - | - | 1014 | - |
| Stage 1 | - | - | - | - | 1021 | - |
| Stage 2 | - | - | - | - | 1018 | - |
| | | | | | | |
| Approach | EB | | WB | | SB | |
| HCM Control Delay, s | 5.1 | | 0 | | 8.3 | |
| HCM LOS | | | | | A | |
| | | | | | | |
| Minor Lano/Major Mur | nt | FRI | FRT | W/RT | WRP | SRI n1 |
| Capacity (yeh/h) | m | 1257 | LDT | VVDT | VVDR - | 1004 |
| Capacity (ven/n) | | 1357 | - | - | - | 1084 |
| HUNI Lane V/C Ratio | 1 | 0.002 | - | - | - | 0.001 |
| HCIVI CONITOI Delay (S |) | 1.1 | 0 | - | - | ŏ.3 ۸ |
| HCM OF the Office Office | 2) | A | А | - | - | A |
| | 1) | 0 | - | - | - | U |
| Int Delay, s/veh | 4 | | | | | | |
|------------------------|------|------|------|------|------|------|--|
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | |
| Lane Configurations | | ÷ | 4 | | Y | | |
| Traffic Vol, veh/h | 5 | 5 | 5 | 5 | 5 | 5 | |
| Future Vol, veh/h | 5 | 5 | 5 | 5 | 5 | 5 | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop | |
| RT Channelized | - | None | - | None | - | None | |
| Storage Length | - | - | - | - | 0 | - | |
| Veh in Median Storage | ,# - | 0 | 0 | - | 0 | - | |
| Grade, % | - | 0 | 0 | - | 0 | - | |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | |
| Mvmt Flow | 5 | 5 | 5 | 5 | 5 | 5 | |

| Major/Minor | Major1 | Ν | /lajor2 | | Vinor2 | |
|----------------------|--------|-------|---------|-----|--------|-------|
| Conflicting Flow All | 10 | 0 | - | 0 | 23 | 8 |
| Stage 1 | - | - | - | - | 8 | - |
| Stage 2 | - | - | - | - | 15 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1610 | - | - | - | 993 | 1074 |
| Stage 1 | - | - | - | - | 1015 | - |
| Stage 2 | - | - | - | - | 1008 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1610 | - | - | - | 990 | 1074 |
| Mov Cap-2 Maneuver | - | - | - | - | 990 | - |
| Stage 1 | - | - | - | - | 1012 | - |
| Stage 2 | - | - | - | - | 1008 | - |
| | | | | | | |
| Approach | EB | | WB | | SB | |
| HCM Control Delay, s | 3.6 | | 0 | | 8.5 | |
| HCM LOS | | | | | А | |
| | | | | | | |
| Minor Lane/Major Mvr | nt | EBL | EBT | WBT | WBR | SBLn1 |
| Capacity (veh/h) | | 1610 | - | - | - | 1030 |
| HCM Lane V/C Ratio | | 0.003 | - | - | - | 0.011 |
| HCM Control Delay (s | ;) | 7.2 | 0 | - | - | 8.5 |
| HCM Lane LOS | | А | А | - | - | А |
| HCM 95th %tile Q(vel | า) | 0 | - | - | - | 0 |

| | - | \mathbf{r} | 1 | - | 1 | 1 | |
|--|--------------|--------------|------|------|------------|-------------|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR | |
| Lane Configurations | ##% | | 5 | *** | 5 | 1 | |
| Traffic Volume (veh/h) | 1274 | 9 | 8 | 1283 | 12 | 10 | |
| Future Volume (veh/h) | 1274 | 9 | 8 | 1283 | 12 | 10 | |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Work Zone On Approach | No | | | No | No | | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | |
| Adj Flow Rate, veh/h | 1385 | 10 | 9 | 1395 | 13 | 11 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | |
| Cap, veh/h | 3162 | 23 | 386 | 3087 | 85 | /5 | |
| Arrive On Green | 0.60 | 0.60 | 0.60 | 0.60 | 0.05 | 0.05 | |
| Sal Flow, ven/h | 5398 | 38 | 387 | 52/4 | 1/81 | 1585 | |
| Grp Volume(v), veh/h | 901 | 494 | 9 | 1395 | 13 | 11 | |
| Grp Sat Flow(s), veh/h/ln | 1/02 | 1864 | 387 | 1/02 | 1/81 | 1585 | |
| \Box Serve(g_s), s | 5.0 | 5.0 | U.4 | 5.2 | 0.2 | 0.2 | |
| Cycle Q Clear(g_c), s | 5.0 | 5.0 | 5.4 | 5.2 | 0.2 | 0.2 | |
| Prop In Lane | 2050 | 0.02 | 1.00 | 2007 | 1.00 05 | 1.00 | |
| | 2008 | 0.44 | 300 | 3087 | 00 0.15 | / 5 0 15 | |
| V/C Rall $U(\Lambda)$ Avail Can(c, a) voh/h | 0.44 5274 | 0.44 | 0.02 | 7011 | 1220 | 100/ | |
| HCM Platoon Patio | 1 00 | 1 00 | 1 00 | 1 00 | 1229 | 1074 | |
| Instream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Uniform Delay (d) s/veh | 3.7 | 3.7 | 5.2 | 3.7 | 15.0 | 15.0 | |
| Incr Delay (d2) s/veh | 0.1 | 0.3 | 0.0 | 0.1 | 0.8 | 0.9 | |
| Initial O Delav(d3).s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| %ile BackOfQ(50%),veh/ln | 0.3 | 0.4 | 0.0 | 0.3 | 0.1 | 0.1 | |
| Unsig. Movement Delay, s/ve | h | | | | | | |
| LnGrp Delay(d),s/veh | 3.8 | 4.0 | 5.2 | 3.8 | 16.7 | 16.8 | |
| LnGrp LOS | А | Α | А | А | В | В | |
| Approach Vol, veh/h | 1395 | | | 1404 | 24 | | |
| Approach Delay, s/veh | 3.9 | | | 3.9 | 16.7 | | |
| Approach LOS | А | | | А | В | | |
| Timer - Assigned Phs | | 2 | | | | 6 | |
| Phs Duration (G+Y+Rc), s | | 27.1 | | | | 27.1 | 7. |
| Change Period (Y+Rc), s | | 6.1 | | | | 6.1 | 6.0 |
| Max Green Setting (Gmax), s | 5 | 53.9 | | | | 53.9 | 24.0 |
| Max Q Clear Time (g_c+l1), s | 5 | 7.0 | | | | 7.4 | 2.2 |
| Green Ext Time (p_c), s | | 12.3 | | | | 13.6 | 0.0 |
| Intersection Summary | | | | | | | |
| HCM 6th Ctrl Delay | | | 4.0 | | | | |
| HCM 6th LOS | | | А | | | | |

Intersection

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | \$ | | | ÷ | | | ÷ | | | ¢ | |
| Traffic Vol, veh/h | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 7 | 0 | 2 | 8 | 2 |
| Future Vol, veh/h | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 7 | 0 | 2 | 8 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage | ,# - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 33 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 8 | 0 | 2 | 9 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | Ν | /lajor2 | | | |
|----------------------|--------|-------|-------|--------|-------|-------|--------|---|---|---------|---|---|--|
| Conflicting Flow All | 25 | 22 | 10 | 23 | 23 | 8 | 11 | 0 | 0 | 8 | 0 | 0 | |
| Stage 1 | 14 | 14 | - | 8 | 8 | - | - | - | - | - | - | - | |
| Stage 2 | 11 | 8 | - | 15 | 15 | - | - | - | - | - | - | - | |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.53 | 4.12 | - | - | 4.12 | - | - | |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - | |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - | |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.597 | 2.218 | - | - | 2.218 | - | - | |
| Pot Cap-1 Maneuver | 986 | 872 | 1071 | 989 | 870 | 990 | 1608 | - | - | 1612 | - | - | |
| Stage 1 | 1006 | 884 | - | 1013 | 889 | - | - | - | - | - | - | - | |
| Stage 2 | 1010 | 889 | - | 1005 | 883 | - | - | - | - | - | - | - | |
| Platoon blocked, % | | | | | | | | - | - | | - | - | |
| Mov Cap-1 Maneuver | 980 | 871 | 1071 | 986 | 869 | 990 | 1608 | - | - | 1612 | - | - | |
| Mov Cap-2 Maneuver | 980 | 871 | - | 986 | 869 | - | - | - | - | - | - | - | |
| Stage 1 | 1006 | 883 | - | 1013 | 889 | - | - | - | - | - | - | - | |
| Stage 2 | 1004 | 889 | - | 1002 | 882 | - | - | - | - | - | - | - | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| Approach | EB | WB | NB | SB | |
|----------------------|----|-----|----|-----|--|
| HCM Control Delay, s | 9 | 8.8 | 0 | 1.2 | |
| HCM LOS | Α | A | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR I | EBLn1V | VBLn1 | SBL | SBT | SBR |
|-----------------------|------|-----|-------|--------|-------|-------|-----|-----|
| Capacity (veh/h) | 1608 | - | - | 905 | 945 | 1612 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.004 | 0.007 | 0.001 | - | - |
| HCM Control Delay (s) | 0 | - | - | 9 | 8.8 | 7.2 | 0 | - |
| HCM Lane LOS | А | - | - | А | А | Α | А | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0 | 0 | - | - |

| Int Delay, s/veh | 4.1 | | | | | | | |
|------------------------|------|------|--------------|------|------|------|--|--|
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | | |
| Lane Configurations | | ୍ କ | - 1 2 | | ۰¥ | | | |
| Traffic Vol, veh/h | 3 | 4 | 4 | 3 | 4 | 4 | | |
| Future Vol, veh/h | 3 | 4 | 4 | 3 | 4 | 4 | | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Sign Control | Free | Free | Free | Free | Stop | Stop | | |
| RT Channelized | - | None | - | None | - | None | | |
| Storage Length | - | - | - | - | 0 | - | | |
| Veh in Median Storage | ,# - | 0 | 0 | - | 0 | - | | |
| Grade, % | - | 0 | 0 | - | 0 | - | | |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | | |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | | |
| Mvmt Flow | 3 | 4 | 4 | 3 | 4 | 4 | | |

| Major/Minor | Major1 | Ν | /lajor2 | [| Vinor2 | |
|----------------------|--------|-------|---------|-----|--------|-------|
| Conflicting Flow All | 7 | 0 | - | 0 | 16 | 6 |
| Stage 1 | - | - | - | - | 6 | - |
| Stage 2 | - | - | - | - | 10 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1614 | - | - | - | 1002 | 1077 |
| Stage 1 | - | - | - | - | 1017 | - |
| Stage 2 | - | - | - | - | 1013 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1614 | - | - | - | 1000 | 1077 |
| Mov Cap-2 Maneuver | - | - | - | - | 1000 | - |
| Stage 1 | - | - | - | - | 1015 | - |
| Stage 2 | - | - | - | - | 1013 | - |
| | | | | | | |
| Annroach | FR | | W/R | | SR | |
| HCM Control Dolay | 21 | | 0 | | 0 5 | |
| HCM LOS | 5 3.1 | | 0 | | 0.5 | |
| | | | | | A | |
| | | | | | | |
| Minor Lane/Major Mvr | nt | EBL | EBT | WBT | WBR S | SBLn1 |
| Capacity (veh/h) | | 1614 | - | - | - | 1037 |
| HCM Lane V/C Ratio | | 0.002 | - | - | - | 800.0 |
| HCM Control Delay (s | 5) | 7.2 | 0 | - | - | 8.5 |
| HCM Lane LOS | | А | А | - | - | А |
| HCM 95th %tile Q(vel | h) | 0 | - | - | - | 0 |

| Int Delay, s/veh | 4 | | | | | | |
|------------------------|------|------|------|------|------|------|--|
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | |
| Lane Configurations | | ÷ | 4 | | Y | | |
| Traffic Vol, veh/h | 5 | 5 | 5 | 5 | 5 | 5 | |
| Future Vol, veh/h | 5 | 5 | 5 | 5 | 5 | 5 | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop | |
| RT Channelized | - | None | - | None | - | None | |
| Storage Length | - | - | - | - | 0 | - | |
| Veh in Median Storage | ,# - | 0 | 0 | - | 0 | - | |
| Grade, % | - | 0 | 0 | - | 0 | - | |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | |
| Mvmt Flow | 5 | 5 | 5 | 5 | 5 | 5 | |

| Major/Minor | Major1 | Ν | /lajor2 | 1 | Vinor2 | |
|----------------------|--------|-------|---------|-----|--------|-------|
| Conflicting Flow All | 10 | 0 | - | 0 | 23 | 8 |
| Stage 1 | - | - | - | - | 8 | - |
| Stage 2 | - | - | - | - | 15 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1610 | - | - | - | 993 | 1074 |
| Stage 1 | - | - | - | - | 1015 | - |
| Stage 2 | - | - | - | - | 1008 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1610 | - | - | - | 990 | 1074 |
| Mov Cap-2 Maneuver | - | - | - | - | 990 | - |
| Stage 1 | - | - | - | - | 1012 | - |
| Stage 2 | - | - | - | - | 1008 | - |
| | | | | | | |
| Approach | FR | | WB | | SB | |
| HCM Control Delay | 3.6 | | 0 | | 85 | |
| HCM LOS | 0.0 | | U | | Δ | |
| | | | | | | |
| | | | | | | |
| Minor Lane/Major Mvr | nt | EBL | EBT | WBT | WBR | SBLn1 |
| Capacity (veh/h) | | 1610 | - | - | - | 1030 |
| HCM Lane V/C Ratio | | 0.003 | - | - | - | 0.011 |
| HCM Control Delay (s | 5) | 7.2 | 0 | - | - | 8.5 |
| HCM Lane LOS | | А | А | - | - | А |
| HCM 95th %tile Q(vel | n) | 0 | - | - | - | 0 |

2027 Build Conditions



| | - | \rightarrow | - | - | 1 | 1 | |
|------------------------------|--------|---------------|------|----------|------|--------------|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR | |
| Lane Configurations | ተተኈ | | 5 | ^ | ሻ | 1 | |
| Traffic Volume (veh/h) | 856 | 22 | 21 | 820 | 21 | 25 | |
| Future Volume (veh/h) | 856 | 22 | 21 | 820 | 21 | 25 | |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Work Zone On Approach | No | | | No | No | | |
| Adj Sat Flow, veh/h/ln | 1870 | 1648 | 1604 | 1856 | 1870 | 1011 | |
| Adj Flow Rate, veh/h | 930 | 24 | 23 | 891 | 23 | 27 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Percent Heavy Veh, % | 2 | 17 | 20 | 3 | 2 | 60 | |
| Cap, veh/h | 2232 | 58 | 366 | 2209 | 414 | 199 | |
| Arrive On Green | 0.44 | 0.44 | 0.44 | 0.44 | 0.23 | 0.23 | |
| Sat Flow, veh/h | 5287 | 132 | 504 | 5233 | 1781 | 857 | |
| Grp Volume(v), veh/h | 618 | 336 | 23 | 891 | 23 | 27 | |
| Grp Sat Flow(s),veh/h/ln | 1702 | 1847 | 504 | 1689 | 1781 | 857 | |
| Q Serve(g_s), s | 4.3 | 4.3 | 1.1 | 4.1 | 0.3 | 0.9 | |
| Cycle Q Clear(g_c), s | 4.3 | 4.3 | 5.4 | 4.1 | 0.3 | 0.9 | |
| Prop In Lane | | 0.07 | 1.00 | | 1.00 | 1.00 | |
| Lane Grp Cap(c), veh/h | 1484 | 805 | 366 | 2209 | 414 | 199 | |
| V/C Ratio(X) | 0.42 | 0.42 | 0.06 | 0.40 | 0.06 | 0.14 | |
| Avail Cap(c_a), veh/h | 5334 | 2893 | 936 | 7937 | 1279 | 615 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Uniform Delay (d), s/veh | 6.7 | 6.7 | 8.6 | 6.6 | 10.3 | 10.5 | |
| Incr Delay (d2), s/veh | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.3 | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| %IIE BackUIU(50%), Ven/In | 0.8 | 0.9 | 0.1 | 0.8 | 0.1 | 0.1 | |
| Unsig. Wovement Delay, s/ve | en (o | 7.0 | 0.4 | / 0 | 10.0 | 10.0 | |
| LIGIP Delay(d), S/Ven | 6.9 | 7.0 | 8.6 | 6.8 | 10.3 | 10.8 | |
| | A | A | A | A | B | В | |
| Approach Vol, veh/h | 954 | | | 914 | 50 | | |
| Approach Delay, s/ven | 6.9 | | | 6.8 | 10.6 | | |
| Approach LUS | A | | | A | В | | |
| Timer - Assigned Phs | | 2 | | | | 6 | 8 |
| Phs Duration (G+Y+Rc), s | | 21.1 | | | | 21.1 | 13.3 |
| Change Period (Y+Rc), s | | 6.1 | | | | 6.1 | 5.3 |
| Max Green Setting (Gmax), s | | 53.9 | | | | 53. 9 | 24.7 |
| Max Q Clear Time (g_c+I1), s | 5 | 6.3 | | | | 7.4 | 2.9 |
| Green Ext Time (p_c), s | | 7.1 | | | | 7.5 | 0.1 |
| Intersection Summary | | | | | | | |
| HCM 6th Ctrl Delay | | | 7.0 | | | | |
| HCM 6th LOS | | | А | | | | |

Intersection

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | \$ | | | ÷ | | | ÷ | | | ÷ | |
| Traffic Vol, veh/h | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 41 | 0 | 0 | 33 | 7 |
| Future Vol, veh/h | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 41 | 0 | 0 | 33 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage | ,# - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 75 | 2 | 2 | 2 | 2 | 2 | 2 | 33 | 2 | 2 | 2 | 29 |
| Mvmt Flow | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 45 | 0 | 0 | 36 | 8 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Ν | Najor2 | | | |
|----------------------|--------|-------|-------|--------|-------|-------|--------|---|---|---|--------|---|---|--|
| Conflicting Flow All | 86 | 85 | 40 | 85 | 89 | 45 | 44 | 0 |) | 0 | 45 | 0 | 0 | |
| Stage 1 | 40 | 40 | - | 45 | 45 | - | - | - | | - | - | - | - | |
| Stage 2 | 46 | 45 | - | 40 | 44 | - | - | - | | - | - | - | - | |
| Critical Hdwy | 7.85 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | | - | 4.12 | - | - | |
| Critical Hdwy Stg 1 | 6.85 | 5.52 | - | 6.12 | 5.52 | - | - | - | | - | - | - | - | |
| Critical Hdwy Stg 2 | 6.85 | 5.52 | - | 6.12 | 5.52 | - | - | - | | - | - | - | - | |
| Follow-up Hdwy | 4.175 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | | - | 2.218 | - | - | |
| Pot Cap-1 Maneuver | 751 | 805 | 1031 | 901 | 801 | 1025 | 1564 | - | | - | 1563 | - | - | |
| Stage 1 | 818 | 862 | - | 969 | 857 | - | - | - | | - | - | - | - | |
| Stage 2 | 811 | 857 | - | 975 | 858 | - | - | - | | - | - | - | - | |
| Platoon blocked, % | | | | | | | | - | | - | | - | - | |
| Mov Cap-1 Maneuver | 750 | 805 | 1031 | 901 | 801 | 1025 | 1564 | - | | - | 1563 | - | - | |
| Mov Cap-2 Maneuver | 750 | 805 | - | 901 | 801 | - | - | - | | - | - | - | - | |
| Stage 1 | 818 | 862 | - | 969 | 857 | - | - | - | | - | - | - | - | |
| Stage 2 | 810 | 857 | - | 975 | 858 | - | - | - | | - | - | - | - | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

| Approach | EB | WB | NB | SB | |
|----------------------|-----|-----|----|----|--|
| HCM Control Delay, s | 9.8 | 9.5 | 0 | 0 | |
| HCM LOS | Α | А | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1\ | VBLn1 | SBL | SBT | SBR | |
|-----------------------|------|-----|-----|--------|-------|------|-----|-----|--|
| Capacity (veh/h) | 1564 | - | - | 750 | 801 | 1563 | - | - | |
| HCM Lane V/C Ratio | - | - | - | 0.006 | 0.001 | - | - | - | |
| HCM Control Delay (s) | 0 | - | - | 9.8 | 9.5 | 0 | - | - | |
| HCM Lane LOS | А | - | - | А | Α | А | - | - | |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0 | 0 | - | - | |

| Int Delay, s/veh | 7.8 | | | | | | |
|------------------------|------|------|------|------|------|------|--|
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | |
| Lane Configurations | | ୍ କ | - î÷ | | ۰¥ | | |
| Traffic Vol, veh/h | 40 | 1 | 0 | 0 | 0 | 32 | |
| Future Vol, veh/h | 40 | 1 | 0 | 0 | 0 | 32 | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop | |
| RT Channelized | - | None | - | None | - | None | |
| Storage Length | - | - | - | - | 0 | - | |
| Veh in Median Storage | ,# - | 0 | 0 | - | 0 | - | |
| Grade, % | - | 0 | 0 | - | 0 | - | |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | |
| Heavy Vehicles, % | 50 | 2 | 2 | 2 | 2 | 2 | |
| Mvmt Flow | 43 | 1 | 0 | 0 | 0 | 35 | |

| Major/Minor | Major1 | Ν | lajor2 | [| Minor2 | |
|----------------------|--------|-------|--------|-----|--------|-------|
| Conflicting Flow All | 1 | 0 | - | 0 | 88 | 1 |
| Stage 1 | - | - | - | - | 1 | - |
| Stage 2 | - | - | - | - | 87 | - |
| Critical Hdwy | 4.6 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.65 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1357 | - | - | - | 913 | 1084 |
| Stage 1 | - | - | - | - | 1022 | - |
| Stage 2 | - | - | - | - | 936 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1357 | - | - | - | 884 | 1084 |
| Mov Cap-2 Maneuver | · - | - | - | - | 884 | - |
| Stage 1 | - | - | - | - | 989 | - |
| Stage 2 | - | - | - | - | 936 | - |
| | | | | | | |
| Annroach | FR | | WB | | SB | |
| HCM Control Delay | : 76 | | 0 | | 8.4 | |
| HCM LOS | 5 7.0 | | 0 | | Δ | |
| | | | | | Л | |
| | | | | | | |
| Minor Lane/Major Mvi | mt | EBL | EBT | WBT | WBR | SBLn1 |
| Capacity (veh/h) | | 1357 | - | - | - | 1084 |
| HCM Lane V/C Ratio | | 0.032 | - | - | - | 0.032 |
| HCM Control Delay (s | 5) | 7.7 | 0 | - | - | 8.4 |
| HCM Lane LOS | | А | А | - | - | А |
| HCM 95th %tile Q(vel | h) | 0.1 | - | - | - | 0.1 |

Intersection

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | \$ | | | \$ | | | \$ | | | \$ | |
| Traffic Vol, veh/h | 5 | 5 | 0 | 31 | 5 | 5 | 0 | 0 | 38 | 5 | 0 | 5 |
| Future Vol, veh/h | 5 | 5 | 0 | 31 | 5 | 5 | 0 | 0 | 38 | 5 | 0 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, | # - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 0 | 2 |
| Mvmt Flow | 5 | 5 | 0 | 34 | 5 | 5 | 0 | 0 | 41 | 5 | 0 | 5 |

| Major/Minor | Major1 | | Ν | /lajor2 | | ſ | Vinor1 | | | Minor2 | | | |
|---|--------------------------|---------------------|-------------|------------------|-----|-------------|-----------------------|-------|---------------------|----------------|-----|-------|--|
| Conflicting Flow All | 10 | 0 | 0 | 5 | 0 | 0 | 93 | 93 | 5 | 112 | 91 | 8 | |
| Stage 1 | - | - | - | - | - | - | 15 | 15 | - | 76 | 76 | - | |
| Stage 2 | - | - | - | - | - | - | 78 | 78 | - | 36 | 15 | - | |
| Critical Hdwy | 4.12 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.12 | 6.5 | 6.22 | |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.5 | - | |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.5 | - | |
| Follow-up Hdwy | 2.218 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.518 | 4 | 3.318 | |
| Pot Cap-1 Maneuver | 1610 | - | - | 1630 | - | - | 895 | 801 | 1084 | 866 | 803 | 1074 | |
| Stage 1 | - | - | - | - | - | - | 1010 | 887 | - | 933 | 836 | - | |
| Stage 2 | - | - | - | - | - | - | 936 | 834 | - | 980 | 887 | - | |
| Platoon blocked, % | | - | - | | - | - | | | | | | | |
| Mov Cap-1 Maneuver | 1610 | - | - | 1630 | - | - | 874 | 782 | 1084 | 818 | 784 | 1074 | |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 874 | 782 | - | 818 | 784 | - | |
| Stage 1 | - | - | - | - | - | - | 1007 | 884 | - | 930 | 818 | - | |
| Stage 2 | - | - | - | - | - | - | 912 | 816 | - | 940 | 884 | - | |
| | | | | | | | | | | | | | |
| Approach | EB | | | WB | | | NB | | | SB | | | |
| HCM Control Delay, s | 3.6 | | | 5.5 | | | 8.5 | | | 8.9 | | | |
| HCM LOS | | | | | | | А | | | А | | | |
| | | | | | | | | | | | | | |
| Minor Lane/Major Mvn | nt N | BLn1 | EBL | EBT | EBR | WBL | WBT | WBR S | SBLn1 | | | | |
| Capacity (veh/h) | | 1084 | 1610 | - | - | 1630 | - | - | 929 | | | | |
| Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvn Capacity (veh/h) | <u>EB</u> 3.6 nt N | <u>BLn1</u> 1084 | EBL 1610 | WB 5.5 EBT | EBR | WBL 1630 | NB 8.5 A WBT | WBR S | <u>SBLn1</u> 929 | SB 8.9 A | | | |

| HCM Lane V/C Ratio | 0.038 0 |).003 | - | - (| 0.021 | - | - (| 0.012 | |
|-----------------------|---------|-------|---|-----|-------|---|-----|-------|--|
| HCM Control Delay (s) | 8.5 | 7.2 | 0 | - | 7.3 | 0 | - | 8.9 | |
| HCM Lane LOS | А | А | А | - | Α | А | - | Α | |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.1 | - | - | 0 | |

| | - | \mathbf{r} | - | + | 1 | 1 | | |
|-----------------------------|--------------|--------------|------|----------|------|------|------|--|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR | | |
| Lane Configurations | <u> ተተ</u> ኑ | | ٦ | <u> </u> | ሻ | 1 | | |
| Traffic Volume (veh/h) | 1274 | 37 | 36 | 1283 | 35 | 33 | | |
| Future Volume (veh/h) | 1274 | 37 | 36 | 1283 | 35 | 33 | | |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Work Zone On Approach | No | | | No | No | | | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | | |
| Adj Flow Rate, veh/h | 1385 | 40 | 39 | 1395 | 38 | 36 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | | |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | | |
| Cap, veh/h | 2947 | 85 | 315 | 2950 | 310 | 276 | | |
| Arrive On Green | 0.58 | 0.58 | 0.58 | 0.58 | 0.17 | 0.17 | | |
| Sat Flow, veh/h | 5269 | 147 | 376 | 5274 | 1781 | 1585 | | |
| Grp Volume(v), veh/h | 924 | 501 | 39 | 1395 | 38 | 36 | | |
| Grp Sat Flow(s),veh/h/In | 1702 | 1844 | 376 | 1702 | 1781 | 1585 | | |
| Q Serve(g_s), s | 7.2 | 7.2 | 3.1 | 7.3 | 0.8 | 0.9 | | |
| Cycle Q Clear(g_c), s | 7.2 | 7.2 | 10.3 | 7.3 | 0.8 | 0.9 | | |
| Prop In Lane | | 0.08 | 1.00 | | 1.00 | 1.00 | | |
| Lane Grp Cap(c), veh/h | 1967 | 1065 | 315 | 2950 | 310 | 276 | | |
| V/C Ratio(X) | 0.47 | 0.47 | 0.12 | 0.47 | 0.12 | 0.13 | | |
| Avail Cap(c_a), veh/h | 3994 | 2163 | 539 | 5990 | 958 | 852 | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Uniform Delay (d), s/veh | 5.6 | 5.6 | 8.6 | 5.6 | 16.0 | 16.0 | | |
| Incr Delay (d2), s/veh | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| %IIE BackOfQ(50%),veh/In | 1.3 | 1.5 | 0.2 | 1.3 | 0.3 | 0.3 | | |
| Unsig. Wovement Delay, s/ve | en F o | ГО | 0.0 | ГО | 1/ 0 | 1/ 0 | | |
| LINGIP Delay(d), S/Ven | 5.8 | 5.9 | 8.8 | 5.8 | 16.2 | 16.2 | | |
| | A | A | A | A | B | В | | |
| Approach Vol, veh/h | 1425 | | | 1434 | /4 | | | |
| Approach Delay, s/veh | 5.8 | | | 5.8 | 16.2 | | | |
| Approach LOS | A | | | A | В | | | |
| Timer - Assigned Phs | | 2 | | | | 6 | 8 | |
| Phs Duration (G+Y+Rc), s | | 32.6 | | | | 32.6 | 13.3 | |
| Change Period (Y+Rc), s | | 6.1 | | | | 6.1 | 5.3 | |
| Max Green Setting (Gmax), s | 6 | 53.9 | | | | 53.9 | 24.7 | |
| Max Q Clear Time (g_c+l1), | S | 9.2 | | | | 12.3 | 2.9 | |
| Green Ext Time (p_c), s | | 12.6 | | | | 14.2 | 0.2 | |
| Intersection Summary | | | | | | | | |
| HCM 6th Ctrl Delay | | | 6.1 | | | | | |
| HCM 6th LOS | | | А | | | | | |

Intersection

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | \$ | | | ÷ | | | ÷ | | | ¢ | |
| Traffic Vol, veh/h | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 53 | 0 | 2 | 63 | 2 |
| Future Vol, veh/h | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 53 | 0 | 2 | 63 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage | ,# - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 33 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 58 | 0 | 2 | 68 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Ν | /lajor2 | | | |
|----------------------|--------|-------|-------|--------|-------|-------|--------|---|---|---|---------|---|---|--|
| Conflicting Flow All | 134 | 131 | 69 | 132 | 132 | 58 | 70 | (|) | 0 | 58 | 0 | 0 | |
| Stage 1 | 73 | 73 | - | 58 | 58 | - | - | | - | - | - | - | - | |
| Stage 2 | 61 | 58 | - | 74 | 74 | - | - | | - | - | - | - | - | |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.53 | 4.12 | | - | - | 4.12 | - | - | |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | | - | - | - | - | - | |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | | - | - | - | - | - | |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.597 | 2.218 | | - | - | 2.218 | - | - | |
| Pot Cap-1 Maneuver | 838 | 760 | 994 | 840 | 759 | 927 | 1531 | | - | - | 1546 | - | - | |
| Stage 1 | 937 | 834 | - | 954 | 847 | - | - | | - | - | - | - | - | |
| Stage 2 | 950 | 847 | - | 935 | 833 | - | - | | - | - | - | - | - | |
| Platoon blocked, % | | | | | | | | | - | - | | - | - | |
| Mov Cap-1 Maneuver | 833 | 759 | 994 | 837 | 758 | 927 | 1531 | | - | - | 1546 | - | - | |
| Mov Cap-2 Maneuver | 833 | 759 | - | 837 | 758 | - | - | | - | - | - | - | - | |
| Stage 1 | 937 | 833 | - | 954 | 847 | - | - | | - | - | - | - | - | |
| Stage 2 | 944 | 847 | - | 932 | 832 | - | - | | - | - | - | - | - | |
| | | | | | | | | | | | | | | |

| Approach | EB | WB | NB | SB | |
|----------------------|-----|-----|----|-----|--|
| HCM Control Delay, s | 9.6 | 9.3 | 0 | 0.2 | |
| HCM LOS | А | А | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1\ | VBLn1 | SBL | SBT | SBR | |
|-----------------------|------|-----|-----|--------|-------|-------|-----|-----|--|
| Capacity (veh/h) | 1531 | - | - | 782 | 849 | 1546 | - | - | |
| HCM Lane V/C Ratio | - | - | - | 0.004 | 0.008 | 0.001 | - | - | |
| HCM Control Delay (s) | 0 | - | - | 9.6 | 9.3 | 7.3 | 0 | - | |
| HCM Lane LOS | А | - | - | А | А | А | А | - | |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0 | 0 | - | - | |

| Int Delay, s/veh | 7.3 | | | | | | | | |
|------------------------|------|------|------|------|------|------|--|--|--|
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | | | |
| Lane Configurations | | ्रभ | ef 👘 | | ۰¥ | | | | |
| Traffic Vol, veh/h | 49 | 4 | 4 | 3 | 4 | 59 | | | |
| Future Vol, veh/h | 49 | 4 | 4 | 3 | 4 | 59 | | | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Sign Control | Free | Free | Free | Free | Stop | Stop | | | |
| RT Channelized | - | None | - | None | - | None | | | |
| Storage Length | - | - | - | - | 0 | - | | | |
| Veh in Median Storage | ,# - | 0 | 0 | - | 0 | - | | | |
| Grade, % | - | 0 | 0 | - | 0 | - | | | |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | | | |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| Mvmt Flow | 53 | 4 | 4 | 3 | 4 | 64 | | | |

| Major/Minor | Major1 | Ν | /lajor2 | | Minor2 | |
|----------------------|--------|-------|---------|-----|--------|-------|
| Conflicting Flow All | 7 | 0 | - | 0 | 116 | 6 |
| Stage 1 | - | - | - | - | 6 | - |
| Stage 2 | - | - | - | - | 110 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1614 | - | - | - | 880 | 1077 |
| Stage 1 | - | - | - | - | 1017 | - |
| Stage 2 | - | - | - | - | 915 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1614 | - | - | - | 851 | 1077 |
| Mov Cap-2 Maneuver | · - | - | - | - | 851 | - |
| Stage 1 | - | - | - | - | 983 | - |
| Stage 2 | - | - | - | - | 915 | - |
| | | | | | | |
| Approach | FB | | WB | | SB | |
| HCM Control Delay, s | 6.8 | | 0 | | 8.6 | |
| HCM LOS | 0.0 | | Ū | | A | |
| | | | | | | |
| | | | EDT | | | CDI1 |
| Minor Lane/Major MV | mt | FRF | FRI | WRI | WRK : | SRFUI |
| Capacity (veh/h) | | 1614 | - | - | - | 1059 |
| HCM Lane V/C Ratio | | 0.033 | - | - | - | 0.065 |
| HCM Control Delay (s | 5) | 7.3 | 0 | - | - | 8.6 |
| HCM Lane LOS | | Α | А | - | - | А |
| HCM 95th %tile Q(vel | h) | 0.1 | - | - | - | 0.2 |

7

Intersection

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | \$ | | | \$ | | | \$ | | | \$ | |
| Traffic Vol, veh/h | 5 | 5 | 0 | 55 | 5 | 5 | 0 | 0 | 46 | 5 | 0 | 5 |
| Future Vol, veh/h | 5 | 5 | 0 | 55 | 5 | 5 | 0 | 0 | 46 | 5 | 0 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, | # - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 0 | 2 |
| Mvmt Flow | 5 | 5 | 0 | 60 | 5 | 5 | 0 | 0 | 50 | 5 | 0 | 5 |

| Major/Minor | Major1 | | Ν | Najor2 | | 1 | Minor1 | | ļ | Vinor2 | | | |
|----------------------|--------|-------|-------|--------|-----|-------|--------|-------|-------|--------|-----|-------|--|
| Conflicting Flow All | 10 | 0 | 0 | 5 | 0 | 0 | 145 | 145 | 5 | 168 | 143 | 8 | |
| Stage 1 | - | - | - | - | - | - | 15 | 15 | - | 128 | 128 | - | |
| Stage 2 | - | - | - | - | - | - | 130 | 130 | - | 40 | 15 | - | |
| Critical Hdwy | 4.12 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.12 | 6.5 | 6.22 | |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.5 | - | |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.5 | - | |
| Follow-up Hdwy | 2.218 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.518 | 4 | 3.318 | |
| Pot Cap-1 Maneuver | 1610 | - | - | 1630 | - | - | 828 | 750 | 1084 | 796 | 752 | 1074 | |
| Stage 1 | - | - | - | - | - | - | 1010 | 887 | - | 876 | 794 | - | |
| Stage 2 | - | - | - | - | - | - | 878 | 792 | - | 975 | 887 | - | |
| Platoon blocked, % | | - | - | | - | - | | | | | | | |
| Mov Cap-1 Maneuver | 1610 | - | - | 1630 | - | - | 799 | 720 | 1084 | 736 | 722 | 1074 | |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 799 | 720 | - | 736 | 722 | - | |
| Stage 1 | - | - | - | - | - | - | 1007 | 884 | - | 873 | 765 | - | |
| Stage 2 | - | - | - | - | - | - | 841 | 763 | - | 927 | 884 | - | |
| | | | | | | | | | | | | | |
| Approach | EB | | | WB | | | NB | | | SB | | | |
| HCM Control Delay, s | 3.6 | | | 6.2 | | | 8.5 | | | 9.2 | | | |
| HCM LOS | | | | | | | А | | | А | | | |
| | | | | | | | | | | | | | |
| Minor Lane/Major Mvn | nt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR S | SBLn1 | | | | |
| Capacity (veh/h) | | 1084 | 1610 | - | - | 1630 | - | - | 873 | | | | |
| HCM Lane V/C Ratio | | 0.046 | 0.003 | - | - | 0.037 | - | - | 0.012 | | | | |

| | 0.010 | 0.000 | | | | | | 0.012 | |
|-----------------------|-------|-------|---|---|-----|---|---|-------|--|
| HCM Control Delay (s) | 8.5 | 7.2 | 0 | - | 7.3 | 0 | - | 9.2 | |
| HCM Lane LOS | А | А | А | - | А | А | - | А | |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.1 | - | - | 0 | |