Application for
Rezoning

OFFICE USE ONLY
Date Received:

APRIL 23, 2025

Case Number: RZ 25 - 0148

Complete this application in its entirety and submit pages 4 and 5 along with the required materials (including any required supplements) as listed on page 2 to the address below:

City of Hampton
Community Development Department, Planning Division
22 Lincoln Street, 5th Floor
Hampton, Virginia 23669

1. PROPERTY INFORMATION

Address or Location 183 & 183-A East Mercury Blvd., 261 and 265 Woodland Road
12003432, 12003435, 12003433,12003434
LRSN _____ Current Zoning District C-3, R-11 Proposed Zoning District MD-4

Current Land Use Agriculture and Residential

Proposed Land Use Multi-Family

The proposed use will be in: ❑ an existing building ❑ a new addition ☒ a new building

2. PROPERTY OWNER INFORMATION (an individual or a legal entity may be listed as owner)

Owner's Name BWDS LLC 183 & 183-A East Mercury Blvd., 261 and Woodland Road / Gerald Clarington 265 Woodland Road

Address _____ City Hampton State VA Zip 23669

Phone _____ Email _____

3. APPLICANT INFORMATION (if different from owner)

Applicant's Name Orchard Oaks LLC

Address 2 Eaton Street - Suite 901 City Hampton State VA Zip 23669

Phone 757 967-9500 Email braab@thewhitmoreco.com

4. APPLICANT AGENT INFORMATION (if different from applicant)

Agent's Name Brennan Raab

Address 2 Eaton Street - Suite 901 City Hampton State VA Zip 23669

Phone 757 967 9500 Email braab@thewhitmoreco.com

5. CERTIFICATION FOR LEGAL ENTITY PROPERTY OWNERS

*Complete this section only if the property owner is **not** an individual but rather a legal entity such as a corporation, trust, LLC, partnership, diocese, etc. as specified in Step 2 above.*

"I hereby submit that I am legally authorized to execute this application on behalf of the fee-simple owner of this property. I have read this application and it is submitted with my full knowledge and consent. I authorize city staff and representatives to have access to this property for inspection. The information contained in this application is accurate and correct to the best of my knowledge."

Name(s), title(s), signature(s), and date(s) of authorized representative(s) of the legal entity (attach additional page if necessary):

Name of Legal Entity BWDS, LLC

Signed by:

Name (printed) STEVEN L. WOOD, Its (title) MEMBER

Signature Steven Wood Date 4/16/2025

Name (printed) _____, Its (title) _____

Signature _____ Date _____

Name (printed) _____, Its (title) _____

Signature _____ Date _____

6. CERTIFICATION FOR INDIVIDUAL PROPERTY OWNERS

Complete this section only if the property owner is an individual or individuals.

"I hereby submit that I am the fee-simple owner of this property. I have read this application and it is submitted with my full knowledge and consent. I authorize city staff and representatives to have access to this property for inspection. The information contained in this application is accurate and correct to the best of my knowledge."

Name(s), signature(s), and date(s) of owner(s) (attach additional page if necessary):

Name (printed) Gerald Clarington

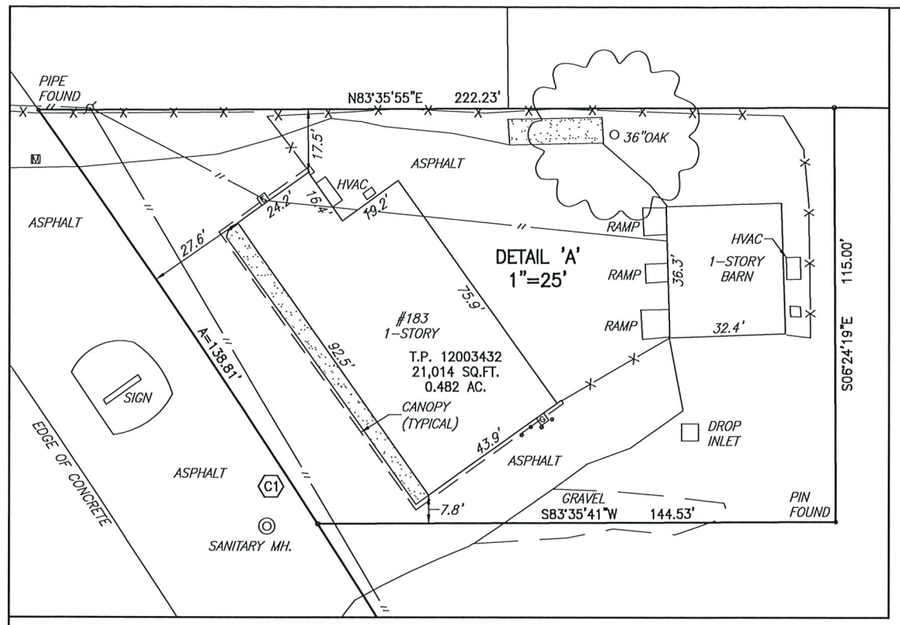
Signature [signature] Date 4/17/2025

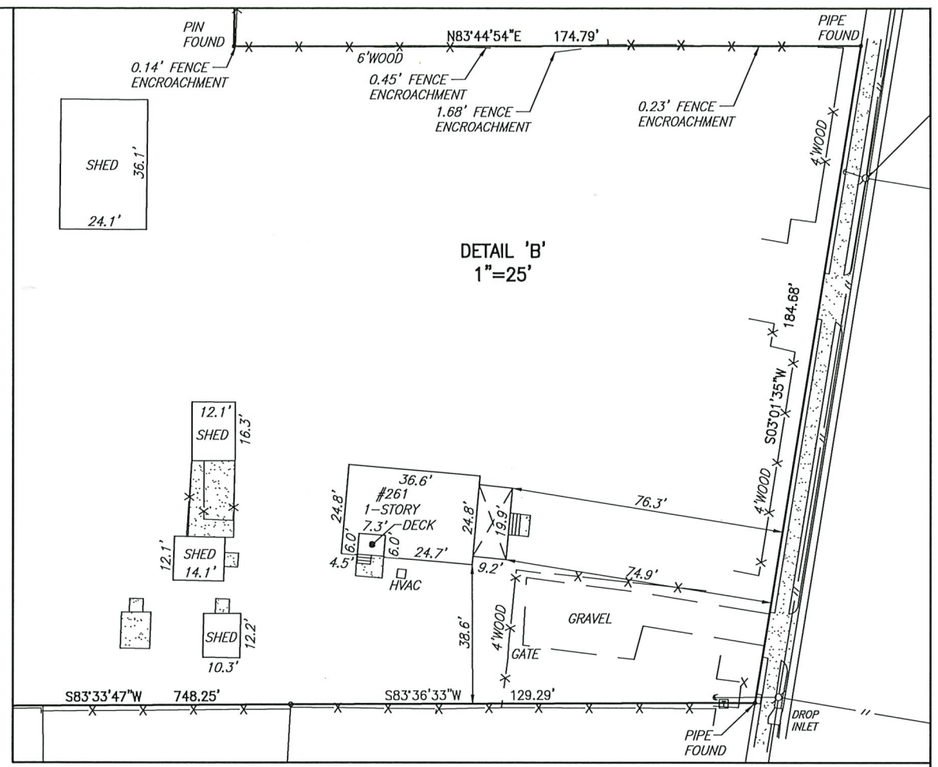
Name (printed) _____

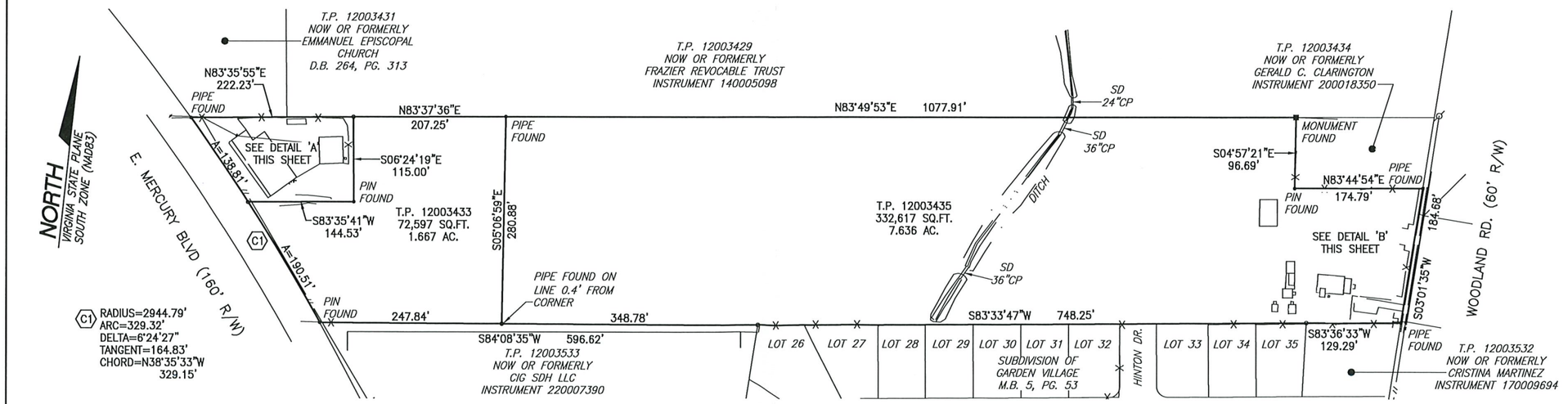
Signature _____ Date _____

OFFICE USE ONLY

❑ Application Form	❑ Narrative Statement	❑ Proffer Statement
❑ Application Fee	❑ Survey Plat	❑ Additional materials (if required)







C1 RADIUS=2944.79'
ARC=329.32'
DELTA=6°24'27"
TANGENT=164.83'
CHORD=N38°35'33"W 329.15'

SURVEY NOTES:

1. THIS SURVEY PERFORMED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT AND MAY NOT REFLECT ALL MATTERS AFFECTING TITLE.

2. THE PROPERTY SHOWN HEREON IS LOCATED INSIDE ZONE "X" AND 'AE' (BFE=7.0') AS SHOWN ON THE NFIP MAP FOR THE CITY OF HAMPTON, VIRGINIA (BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY). MAP NUMBER: 51552700191H EFFECTIVE DATE: MAY 16, 2016

THIS IS TO CERTIFY THAT ON SEPTEMBER 11, 2024, I SURVEYED THE PROPERTY SHOWN ON THIS PLAT AND THE TITLE LINES AND THE WALLS OF THE BUILDINGS ARE AS SHOWN ON THIS PLAT. THE BUILDINGS STAND STRICTLY WITHIN THE TITLE LINES AND THERE ARE NO ENCROACHMENTS OR OTHER BUILDINGS EXCEPT AS SHOWN.

- TELEPHONE PEDESTAL
- (SCO) SANITARY CLEAN OUT
- ELECTRIC METER/BOX
- GAS METER
- PIN FOUND
- MONUMENT FOUND
- SD STORM DRAIN
- CP CONCRETE PIPE

COMMONWEALTH OF VIRGINIA
STEPHEN RHODES
Lic. No. 002851
9-12-24
LAND SURVEYOR

25 0 25 50 scale feet

100 50 0 100 200 scale feet

PHYSICAL SURVEY OF 261 WOODLAND ROAD (T.P. 12003435) AND 183 E. MERCURY BOULEVARD (T.P. 12003432 & 12003433)

HAMPTON, VIRGINIA

DRAWN BY:	SPR
COMP. BY:	SPR
CHECKED BY:	JSF
SCALE:	1"=100'
DATE:	9-12-24
REV.:	
SHEET NO.	1 OF 1

Hoggard-Eure Associates, P.C.
ENGINEERS-SURVEYORS-PLANNERS
901 PortCentre Parkway, Suite 5
Portsmouth, Virginia 23704 757-484-9670

Woodland Road Physical.dwg

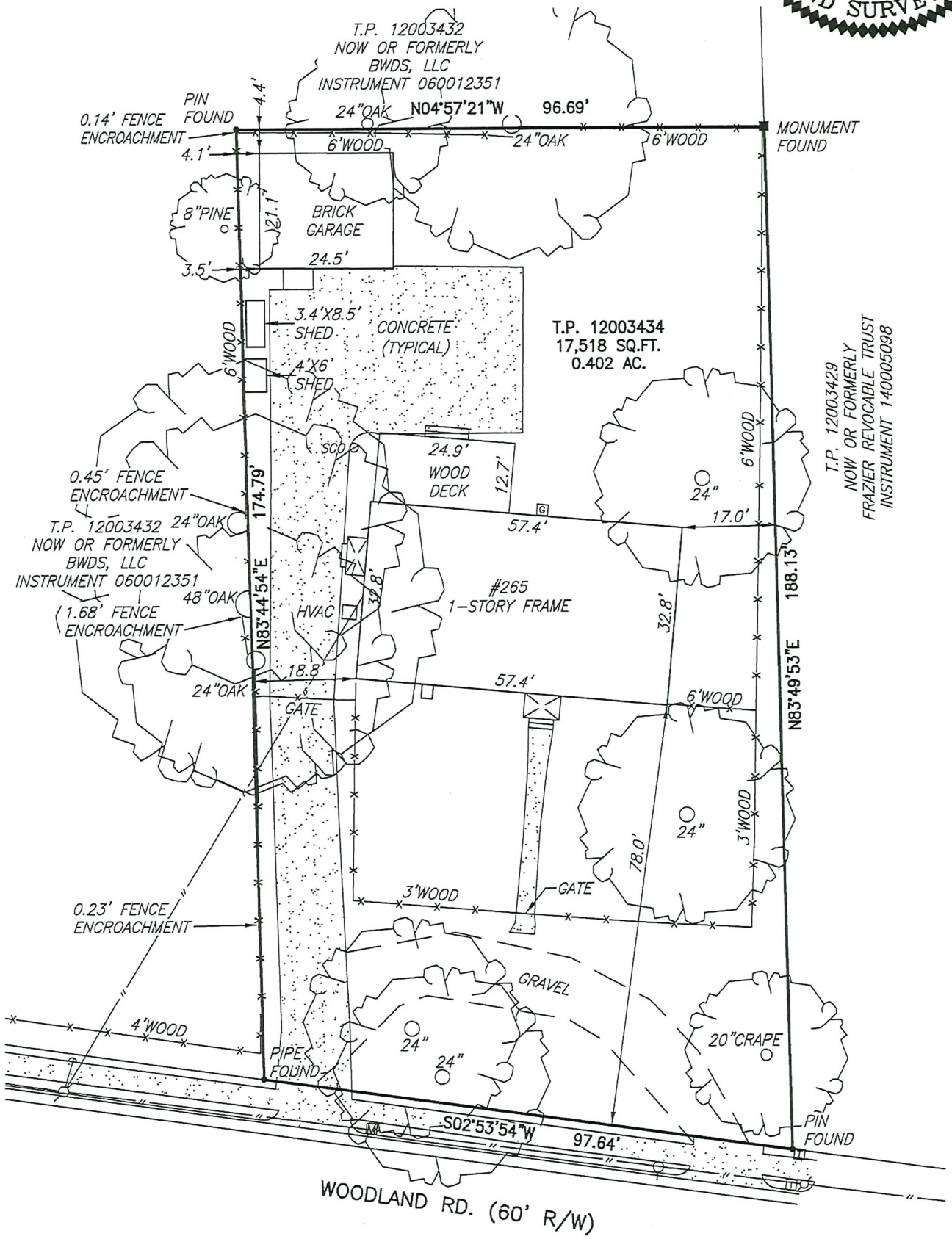
PROJECT No. 6308.00.24

THIS IS TO CERTIFY THAT ON APRIL 4, 2025, I SURVEYED THE PROPERTY SHOWN ON THIS PLAT AND THE TITLE LINES AND THE WALLS OF THE BUILDINGS ARE AS SHOWN ON THIS PLAT. THE BUILDINGS STAND STRICTLY WITHIN THE TITLE LINES AND THERE ARE NO ENCROACHMENTS OR OTHER BUILDINGS EXCEPT AS SHOWN.

- T TELEPHONE PEDESTAL
- ○ (SCO) SANITARY CLEAN OUT
- POWER POLE
- G GAS METER
- M WATER METER
- FIRE HYDRANT

COMMONWEALTH OF VIRGINIA
STEPHEN RHODES
Lic. No. 002851
4-8-25
LAND SURVEYOR

NORTH
VIRGINIA STATE PLANE
SOUTH ZONE (NAD83)



SURVEY NOTES:

1. THIS SURVEY PERFORMED WITHOUT THE BENEFIT OF

PHYSICAL SURVEY OF

Rezoning from C-3/R-11 to MD-4 of 183 E. Mercury Blvd., 183 E. Mercury Blvd. A, 261 Woodland Rd., and 265 Woodland Rd., Hampton, VA 23669

LRSN 12003432, 12003433, 12003435 & 12003434

Rev. 6/5/25

Need for the Rezoning

The request for rezoning of the four parcels is due to the present zoning as C-3 and R-11, changing it to MD-4 for the purpose of changing the use of the property to Multifamily Residential.

Proposed Use of the Site/Description of New Structures

The purpose of this narrative is to offer insight into the proposed transformation of the former Woods Produce and Farm into a luxury apartment community that pays homage to the former use of the site. From the modern farmhouse styling of architecture to the revitalization of the old Woods Orchard barn located under the majestic oaks along Woodland Road, the property will be transformed into a new use that supports the need for housing in the Hampton area.

Spread throughout four apartment buildings, 316 apartments will provide residents with market-rate rental housing, whether in one- or two-bedroom apartment units. A total of 50 studio, 204 one-bedroom, and 62 two-bedroom units will be constructed, ranging in size from approximately 600 square feet for a studio unit to 1,200 square feet for a two-bedroom unit. Our projected rents are $1,590 to $2,190 per month. The total estimated gross SF of all four buildings, garages, and clubhouses will be approximately 300,000 square feet. All buildings will be elevator accessible to ensure equitable access to the interior hallway buildings. The residents will park within the center of the property in either the 396 surface parking spaces or in one of 24 garage spaces. Based on the number and type of units, the minimum required number of parking spaces is 411, including 64 spaces for visitors. The property will have a total of 420 parking spaces. The buildings will shield the automobiles from view from the street. Bicycle parking will be provided on-site. Parking areas and sidewalks will be illuminated with downward facing energy-efficient LED cutoff lights. With the possibility of future expansion to the north, access connections have been designed where dumpsters presently are located. These will be relocated if the opportunity to expand occurs. All existing property lines will be vacated, creating one single property.

The leasing office will be open from 8:30 AM to 5:00 PM Monday through Friday, with optional hours, based on demand, on Saturday from 9:00 AM to 1:00 PM and will be located at the center of the property. Within this same clubhouse/leasing building, other amenities included are a leasing office with package room, clubrooms, business center, billiards and game rooms, and a large fitness center. Exterior amenities will include a resort-style pool, exterior grilling and dining areas, fire pits, and lawn areas for relaxing. Mailboxes for USPS will be located within the lobbies of each of the four apartment buildings for the purposes of security and weather convenience. The stormwater retention pond will become a focal point of the property, as you will be able to walk the perimeter walking trail on the heavily landscaped property.

Architecturally, the modern farmhouse style shall honor the history of Woods Orchard, incorporating a combination of cementitious board and batten siding with shiplap siding over the top of the stone water table veneer and brick veneer at the base of the buildings, and also used as an accent on various locations of the buildings. Large dark color trim windows, along with the compliments of standing seam metal and slate-style architectural asphalt shingle roofs. Roughly 75% of the units will have either porches or balconies to not only break up the verticality of the three- and four-story buildings but to provide animation that comes with residents enjoying the outside. The ground floor porches create a connection to the street level. In addition, detached garage buildings will be located along the landscape buffer of the southern property line to provide additional screening of the parking lot and covered parking for the residents.

The units will feature stainless steel appliances, granite or quartz countertops, luxury vinyl plank flooring, 10' ceilings on the first floor, and 9' ceilings on the upper floors. All windows shall be double-pane glass. The roofs will be sloped with all air conditioner units hidden within a roof well. Shared walls shall be double insulated for sound.

Vehicular circulation would enter from either Mercury Blvd. or the Woodland Road entrances. The Mercury Blvd. entrance will incorporate deceleration and turn lanes as per the recommendation of the traffic engineer coming from both directions. These entrances would be electronically gated, with the entrance at Mercury Blvd. left in the open position during business hours for future residents or package delivery. By incorporating controlled access to the site and a serpentine road, cut-through traffic will be eliminated. A traffic study has been conducted in strict coordination with the city to ensure that any improvements, such as turning lanes on each of these roads, will be added to accommodate the traffic. Apartments create 1/5 of the amount of traffic versus commercial use, which is the present site zoning. Traffic will continue through the property on drive aisles with a minimum of 24' width. If the opportunity exists to further expand the development of the property to the north, access points have been created where the dumpsters are presently located. These dumpsters will have to be relocated if this expansion occurs. The installation of electrical service will be installed adjacent to each of the four apartment buildings and the clubhouse for future installation of car charging stations as the demand arises.

Orchard Oaks will include a multitude of resiliency and sustainability elements. The buildings will be designed and constructed to meet the 115-mile-per-hour wind load design requirements of the applicable building code. Energy Star certified hot water heaters, refrigerators, and dishwashers will be installed in the apartment units. All buildings will be designed and constructed to meet the following Energy Star Multifamily New Construction Requirements; LED lighting, 15 SEER-rated heat pumps with electric backup heat, and programmable thermostats. Within the parking area, we will be provisioned for five electric vehicle charging stations and will be installed at a later date once demand exists. These stations will be located adjacent to each of the four apartment buildings and one at the clubhouse. Incorporation of Low Impact Development Techniques as it relates to stormwater management, including installation of an open BMP that will assist in controlled release of rainwater to minimize impact on adjacent stormwater systems and to address the water quality of stormwater before entering the Chesapeake Bay watershed.

Many of the existing large oak trees on the eastern portion of the property will be retained where possible, that do not conflict with the construction of the buildings.

It is our intent to take the existing Woods Orchard Barn and revitalize it as an outdoor amenity for the residents with fire pits and outdoor seating, creating a place to gather and socialize under the large oaks along Woodland Road. The oaks along Woodland Road will remain, and the grounds around them will be improved as they have become a staple of the neighborhood.

Anticipated Impact to Adjacent Properties

In the past, the property of Woods Produce and Farm was a vibrant operating farm. However, over time, with food production moving to larger corporate-owned farms, the Woods Farm began to see less and less use. Much of the property has not been used for farming in years and has been allowed to become overgrown with time. The majestic oak trees along Woodland Road have become neglected, and the older outbuildings have fallen into disrepair. Through the transformation of the property from a former farm to residential usage, the adjacent residential properties will benefit from an increase in property value along with an increase in the overall neighborhood aesthetic. The new construction of Modern farmhouse-style buildings will become the catalyst for new development in the Woodland Park neighborhood. These apartments will introduce young professional adults to the community, just as we have seen occur at Monroe Gates Apartments in Phoebus. Adjacent homes will become their next purchase as they transition from apartment resident to homeowner, helping to revitalize the neighborhoods. In addition, many of our older residents who are ready to downsize will become residents of Orchard Oaks, as they prefer to reside where the home maintenance is taken care of for them.

Present homes adjacent to the property have an assessed value of below $200,000. With the construction of these units costing over $230,000 each for construction and a market value close to $300,000 each when completed, the overall neighborhood of Woodland Park will have a positive impact on property value. In addition, local businesses, whether restaurants, dry cleaners, or retail stores along Mercury Blvd., will gain new clients from Orchard Oaks, and quite possibly, additional businesses will move to the area.

One of the largest positive impacts is on the Chesapeake Bay Watershed due to the improvement of the stormwater quality as it exits this property. Presently, an open drainage ditch collects water from the outfall pipe of the properties to the south and east, carrying the water to the north into a creek that feeds the Hampton Creek and Hampton River. In its present condition, runoff material from the existing farm fields enters the system without processing. The proposed storm system collects the water from the properties from this existing pipe from the south and transverses it through the site via a large pipe without picking up the existing runoff, while the onsite stormwater will be retained in an open BMP pond, allowing for all sediments to settle, separating them from the stormwater. A more controlled release of water from nearly ten acres will occur, which will help with unwanted flooding downstream. While we will not be able to alleviate any existing stormwater issues within the adjoining neighborhoods, as that system exists already on those properties, we will be able to ensure that their stormwater transverses our property without

restriction. Once the location of this transversing stormwater pipe is engineered, an easement will be recorded.

Finally, a landscape buffer of 20' in width along the adjacent residential properties to the north and south will be installed. Both canopy and understory trees, along with bushes will be planted in this area to screen the property from the neighbors.

Anticipated Impact to City Services

The impact to the city services will be very minimal. While it is the intent to create much-needed quality housing, this will unlikely bring child-age families to the community who will utilize the local schools as the units are all one- and two-bedroom apartment units. Typically, families look for three-bedroom apartments, which we will not have.

The existing city water provided through Newport News Waterworks (NNWW) will be able to support the new apartment community. The water service, following the requirements and recommendations of Newport News Waterworks, will be run from the water main on Woodland to the water main on Mercury through the center of the site. This will provide additional redundancy of the water service in the neighborhood, connecting the present parallel water mains on the main streets and providing more flow for fire hydrants in the neighborhood. It has been confirmed with NNWW that we have plenty of pressure from both Mercury Blvd. and Woodland Road.

With regards to the sanitary sewer, an onsite sewer lift/pump station will be installed near the center of the site. Sewer water will be collected at this point, and a force main line will run north along Woodland Road, where it will be connected to the existing HRSD force main line located at Andrews Blvd.

Trash collection will be handled by a private company through the use of multiple screened dumpsters located on-site. Trash pickup occurs midday so as not to disturb the community or neighbors.

As it relates to life safety, all buildings will be fully sprinkled with individual fire alarm systems, all per NFPA 13R. FDCs will be located outside of the collapse zones, additional hydrants will be located onsite, Knox boxes at the front entries, and smoke detectors connected to the HVAC units for immediate shutdown of mechanical systems in the event of a fire.

With regards to security, the property will be fully fenced and gated as a deterrent, along with both interior and exterior security cameras. All buildings will have electronically controlled access with interior hallways accessing the apartment units. The parking areas and the perimeter of the buildings are well-lit with LED downward-directed lighting within the footcandle requirements of the city.

Rezoning Conforming to Hampton Community Plan

The Hampton Community Plan presently has the property planned for Low-Density Residential along both the heavily traveled Mercury Blvd. and Woodland Road. Because of the adjacency to business, specifically a self-storage facility on Mercury Blvd. and residential on Woodland Road, the use of multi-family provides a more transitional use from these two opposing uses. The request is to make the property MD-4, which is the current direction that the Hampton Community Plan is proposing for this property.

Rezoning With Proffers

The Property shall be developed in substantial conformance with the conceptual site plan entitled "Orchard Oaks on the Boulevard: Architectural Site Plan; A201" Dated June 4, 2025. Prepared by DBA Architects, a copy which is on file with the Community Development Department and has been exhibited to the Hampton Planning Commission and Hampton City Council for illustrative purposes and to provide justification for the rezoning action. Minor changes in the Concept Plan will be made to accommodate environmental, engineering architectural, topographic, or other development conditions, or site/subdivision plan approval requirements as required by appliable law and/or regulation and subject to approval of the Director of Community Development or their designee for consistency with the terms of this proffer. A copy of the final approved Concept Plan shall be placed in the file with the Planning Division of the Department of Community Development and shall supersede any previous Concept Plan.

Please see the Proffers Agreement for the specific Proffers for the project.

SITE DATA:

TOTAL SITE AREA:	10.18 ACRES
EXISTING ZONING:	C-3 & R-11
PROPOSED ZONING:	MD-4
TOTAL UNITS SHOWN:	316
STUDIO UNITS:	50
1 BEDROOM UNITS:	204
2 BEDROOM UNITS:	62
TOTAL PARKING REQUIRED:	411 SPACES
1 SPACE PER STUDIO/1 BEDROOM UNIT:	254 SPACES
1.5 SPACES PER 2 BEDROOM UNIT:	93 SPACES
1 SPACE PER 5 UNITS (VISITOR PARKING):	64 SPACES

TOTAL PARKING SHOWN: (INCLUDING 9 H/C SPACES & 24 GARAGE SPACES) (MAXIMUM COMPACT SPACES ALLOWED: 33% OR 135 SPACES)	420 SPACES
BICYCLE PARKING REQUIRED: (1 BICYCLE PARKING PER 50 VEHICLE SPACES)	9 SPACES
BICYCLE PARKING SHOWN:	10 SPACES
TOTAL PARKING LOT AREA:	3.40 ACRES
TOTAL REQUIRED INTERIOR PARKING LOT GREEN AREA:	7% OR 0.238 AC.
TOTAL INTERIOR PARKING LOT GREEN AREA SHOWN:	7.34% OR 0.250 AC.
TOTAL REQUIRED GREEN AREA:	0.00 AC.

TABULATIONS - ORCHARD OAKS ON THE BOULEVARD HAMPTON, VA

3 AND 4 STORY RESIDENTIAL

UNIT TYPE	UNIT TYPE	# OF UNITS	NET S.F.	TOTAL RENTABLE S.F.	PERCENTAGE	TOTAL PERCENTAGE
E1	STUDIO	50	604	30,200	16%	16%
A1	1br/1ba	96	679	65,184	30%	65%
A2	1br/1ba	71	718	50,978	22%	
A3	1br/1ba	15	789	11,835	5%	
A4	1br/1ba	22	661	14,542	7%	
B1	2br/2ba	14	1,114	15,596	4%	20%
B2	2br/2ba	48	1,079	51,792	15%	
TOTALS		**316**	**TOTAL UNITS**	**240,127**	**TOTAL NET S.F**	**100%**
		760	**UNIT S.F. AVG.**	**300,159**	**ESTIMATED GROSS S.F.**	
CLUB / LEASING / FITNESS				5,500	S.F.	

(Approximate Square Footages.)

CANOE BROOK DEVELOPMENT

THE WHITMORE COMPANY, LLC

Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Architectural Site Plan

NORTH

SCALE: 1" = 60'-0"

0 60 120 240

A201

Hampton, VA
June 4, 2025

HOGGARD-EURE ASSOCIATES, P.C.
Engineers • Surveyors • Planners

DBA ARCHITECTS

CANOE BROOK
DEVELOPMENT

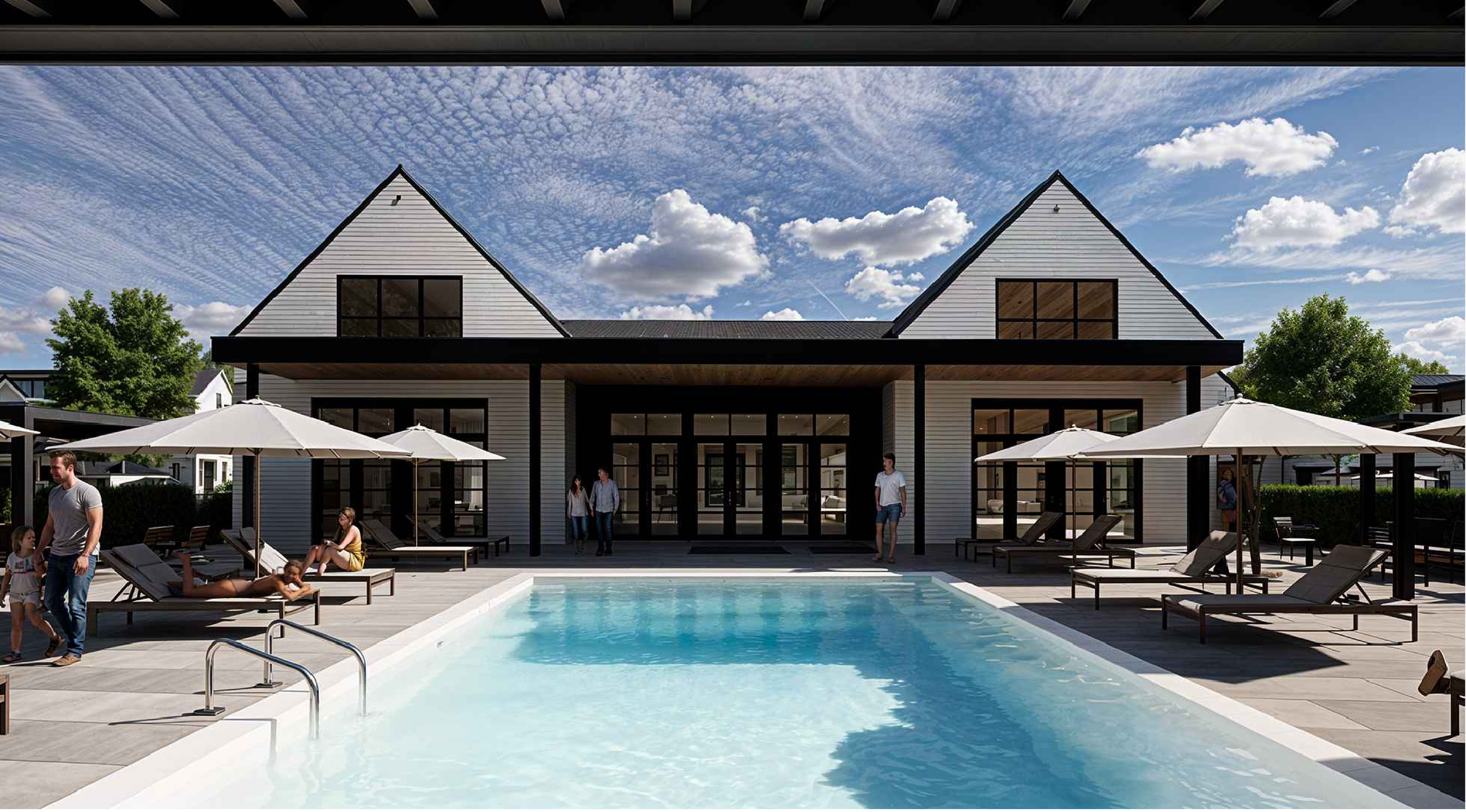
THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Perspective Rendering

Hampton, VA
February 24, 2025

DBA
ARCHITECTS



CANOE BROOK
DEVELOPMENT

THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

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Hampton, VA
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DBA
ARCHITECTS

BUILDING 1 - WEST ELEVATION
scale: 1"=20'

BUILDING 1 - NORTH ELEVATION
scale: 1"=20'

CANOE BROOK
DEVELOPMENT

THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Building Elevations

SCALE: 1" = 10'-0"
0 10 20 40

A415

Hampton, VA
May 14, 2025

DBA
ARCHITECTS

BUILDING 1 - EAST ELEVATION
scale: 1"=20'

BUILDING 1 - SOUTH ELEVATION
scale: 1"=20'

CANOE BROOK
DEVELOPMENT

THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Building Elevations

SCALE: 1" = 10'-0"
0 10 20 40

A416

Hampton, VA
May 14, 2025

DBA
ARCHITECTS

BUILDING 2 - NORTH ELEVATION
scale: 1"=20'

BUILDING 2 - EAST ELEVATION
scale: 1"=20'

CANOE BROOK
DEVELOPMENT

THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Building Elevations

SCALE: 1" = 10'-0"
0 10 20 40

A426

Hampton, VA
May 14, 2025

DBA
ARCHITECTS

BUILDING 2 - SOUTH ELEVATION
scale: 1"=20'

BUILDING 2 - WEST ELEVATION
scale: 1"=20'

CANOE BROOK
DEVELOPMENT

THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Building Elevations

SCALE: 1" = 10'-0"
0 10 20 40

A425

Hampton, VA
May 14, 2025

DBA
ARCHITECTS

BUILDING 3 - NORTH ELEVATION
scale: 1"=20'

BUILDING 3 - EAST ELEVATION
scale: 1"=20'

CANOE BROOK
DEVELOPMENT

THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Building Elevations

SCALE: 1" = 10'-0"
0 10 20 40

A436

Hampton, VA
May 14, 2025

DBA
ARCHITECTS

BUILDING 3 - SOUTH ELEVATION
scale: 1"=20'

BUILDING 3 - WEST ELEVATION
scale: 1"=20'

CANOE BROOK
DEVELOPMENT

THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Building Elevations

SCALE: 1" = 10'-0"
0 10 20 40

A435

Hampton, VA
May 14, 2025

DBA
ARCHITECTS

BUILDING 4 - EAST ELEVATION
scale: 1"=20'

BUILDING 4 - NORTH ELEVATION
scale: 1"=20'

CANOE BROOK
DEVELOPMENT

THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Building Elevations

SCALE: 1" = 10'-0"
0 10 20 40

A446

Hampton, VA
May 14, 2025

DBA
ARCHITECTS

BUILDING 4 - WEST ELEVATION
scale: 1"=20'

BUILDING 4 - SOUTH ELEVATION
scale: 1"=20'

CANOE BROOK
DEVELOPMENT

THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Building Elevations

SCALE: 1" = 10'-0"
0 10 20 40

A445

Hampton, VA
May 14, 2025

DBA
ARCHITECTS

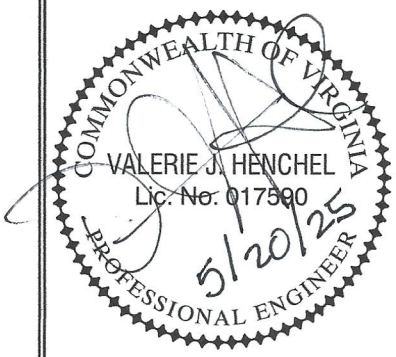
TRAFFIC IMPACT STUDY

FOR

Orchard Oaks on the Boulevard

IN

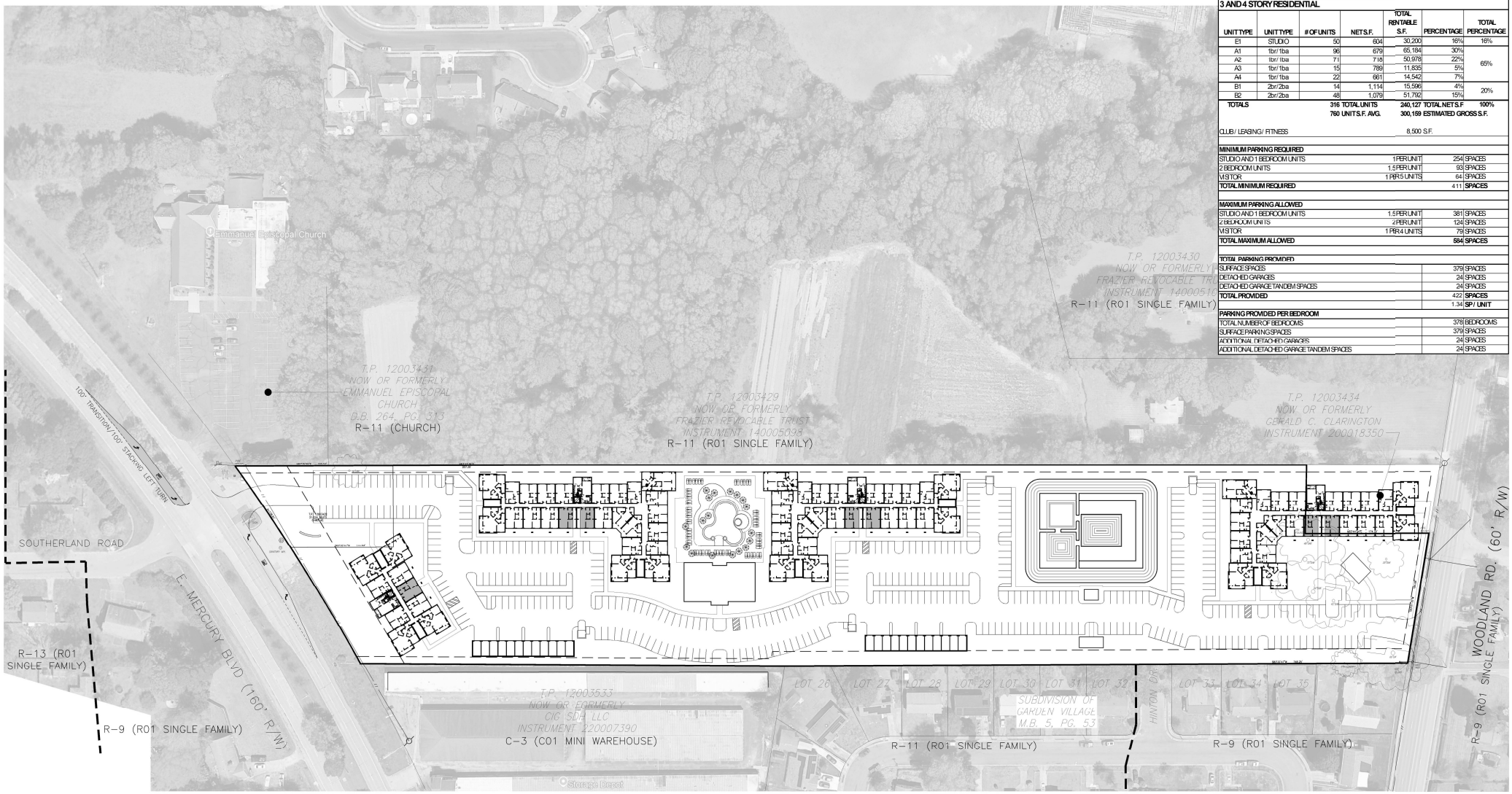
Hampton, VA



INTERMODAL ENGINEERING, P.C.

MAY 2025

rev 6/6/2025



TABULATIONS - ORCHARD OAKS ON THE BOULEVARD HAMPTON, VA

3 AND 4 STORY RESIDENTIAL

UNIT TYPE	UNIT TYPE	# OF UNITS	NET S.F.	TOTAL RENTABLE S.F.	PERCENTAGE	TOTAL PERCENTAGE
E1	STUDIO	50	604	30,200	16%	16%
A1	1br/ 1ba	96	679	65,184	30%	65%
A2	1br/ 1ba	71	716	50,978	22%	
A3	1br/ 1ba	15	789	11,835	5%	
A4	1br/ 1ba	22	661	14,542	7%	
B1	2br/ 2ba	14	1,114	15,596	4%	20%
B2	2br/ 2ba	48	1,079	51,792	15%	
TOTALS		**316 TOTAL UNITS**		**240,127 TOTAL NET S.F**		**100%**
		760 UNIT S.F. AVG.		**300,159 ESTIMATED GROSS S.F.**		
CLUB/ LEASING/ FITNESS				8,500 S.F.		

MINIMUM PARKING REQUIRED			
STUDIO AND 1 BEDROOM UNITS	1 PER UNIT	254	SPACES
2 BEDROOM UNITS	1.5 PER UNIT	93	SPACES
VISITOR	1 PER 5 UNITS	64	SPACES
TOTAL MINIMUM REQUIRED		411	**SPACES**
MAXIMUM PARKING ALLOWED			
STUDIO AND 1 BEDROOM UNITS	1.5 PER UNIT	381	SPACES
2 BEDROOM UNITS	2 PER UNIT	124	SPACES
VISITOR	1 PER 4 UNITS	79	SPACES
TOTAL MAXIMUM ALLOWED		**584**	**SPACES**
TOTAL PARKING PROVIDED			
SURFACE SPACES		379	SPACES
DETACHED GARAGES		24	SPACES
DETACHED GARAGE TANDEM SPACES		24	SPACES
TOTAL PROVIDED		422	**SPACES**
		1.34	**SP/ UNIT**
PARKING PROVIDED PER BEDROOM			
TOTAL NUMBER OF BEDROOMS		378	BEDROOMS
SURFACE PARKING SPACES		379	SPACES
ADDITIONAL DETACHED GARAGES		24	SPACES
ADDITIONAL DETACHED GARAGE TANDEM SPACES		24	SPACES

SCALE: 1" = 60'-0"
0 60 120 240

CANOE BROOK
DEVELOPMENT

THE WHITMORE COMPANY, LLC
Commercial Real Estate Services, Development and Investments

Orchard Oaks on the Boulevard

Architectural Site Plan

A201
Hampton, VA
March 17, 2025

DBA ARCHITECTS

Orchard Oaks on the Boulevard is a proposed apartment development to be located off of E Mercury Boulevard in Hampton, VA. Intermodal Engineering, P.C. was retained by Orchard Oaks LLC to perform a traffic impact analysis for this development to determine its impact on the existing road system. The analysis considers existing conditions and post development impacts on the adjacent roadways, as well as, identifies any needed modifications to minimize these impacts and provide adequate access to the development.

This memorandum summarizes the traffic impact analysis, identifies the procedures and assumptions used in its development and identifies the road system requirements.

PROJECT DESCRIPTION

Orchard Oaks on the Boulevard is a proposed apartment complex to be located off of E Mercury Boulevard approximately 1,900 feet north of E Pembroke Boulevard

The proposed rezoning of the property is to enable the development of 316 apartments. The existing zoning is 5.70 acres of R11 and 4.45 acres of Commercial and is proposed to be rezoned to MD-4 Multi-family to accommodate apartments.

There are proposed to be two access points: a main access on E Mercury Boulevard across from Southerland Drive and an additional access point on Woodland Road.

EXISTING ROADWAY NETWORK

The existing major roadways adjacent to the site are as follows:

1) E Mercury Boulevard is a four-lane divided principal arterial roadway with a 45 mph speed limit. Its intersections with both E Pembroke Avenue and Andrews Boulevard are signalized.
2) Woodland Road is a four-lane undivided minor arterial with a 35 mph speed limit. Its intersections with both E Pembroke Avenue and Andrews Boulevard are signalized.

TRAFFIC COUNT DATA

Present traffic demand in the study area was determined from a review of traffic count data at the following intersections:

a. E Mercury Boulevard & E Pembroke Avenue
b. E Mercury Boulevard & Southerland Drive
c. E Mercury Boulevard & Andrews Boulevard
d. Woodland Road & E Pembroke Avenue
e. Woodland Road & vicinity of site driveway
f. Woodland Road & Andrews Boulevard

Counts were performed from 6am to 9am and from 3pm to 6pm during the week of April 28, 2025. A common peak hour for the system was determine to be 7:30a for

the am peak hour and 3:45p for the PM peak hour. These peak hour counts are indicated on Figures 1 and 2.

While these volumes provide a measure of activity on the area road system, it is also important to evaluate how well that system can accommodate these volumes. A comparison of the amount of delay experienced by vehicles is commonly used and determines the levels of service at those intersections.

EXISTING CAPACITY ANALYSIS

The delay for the intersections were analyzed under existing conditions for morning and afternoon peak hours utilizing SYNCHRO, an overlay program for the Highway Capacity Manual (FHWA) software. The approximate existing cycle lengths were utilized in all conditions but the PM peak hour at E Mercury Boulevard and Pembroke Avenue as it was not functioning optimally. The revised cycle length achieved the optimal level of service result at this intersection. The results of this analysis indicate the following levels of service and corresponding approach delay in seconds:

Orchard Oaks Apartments

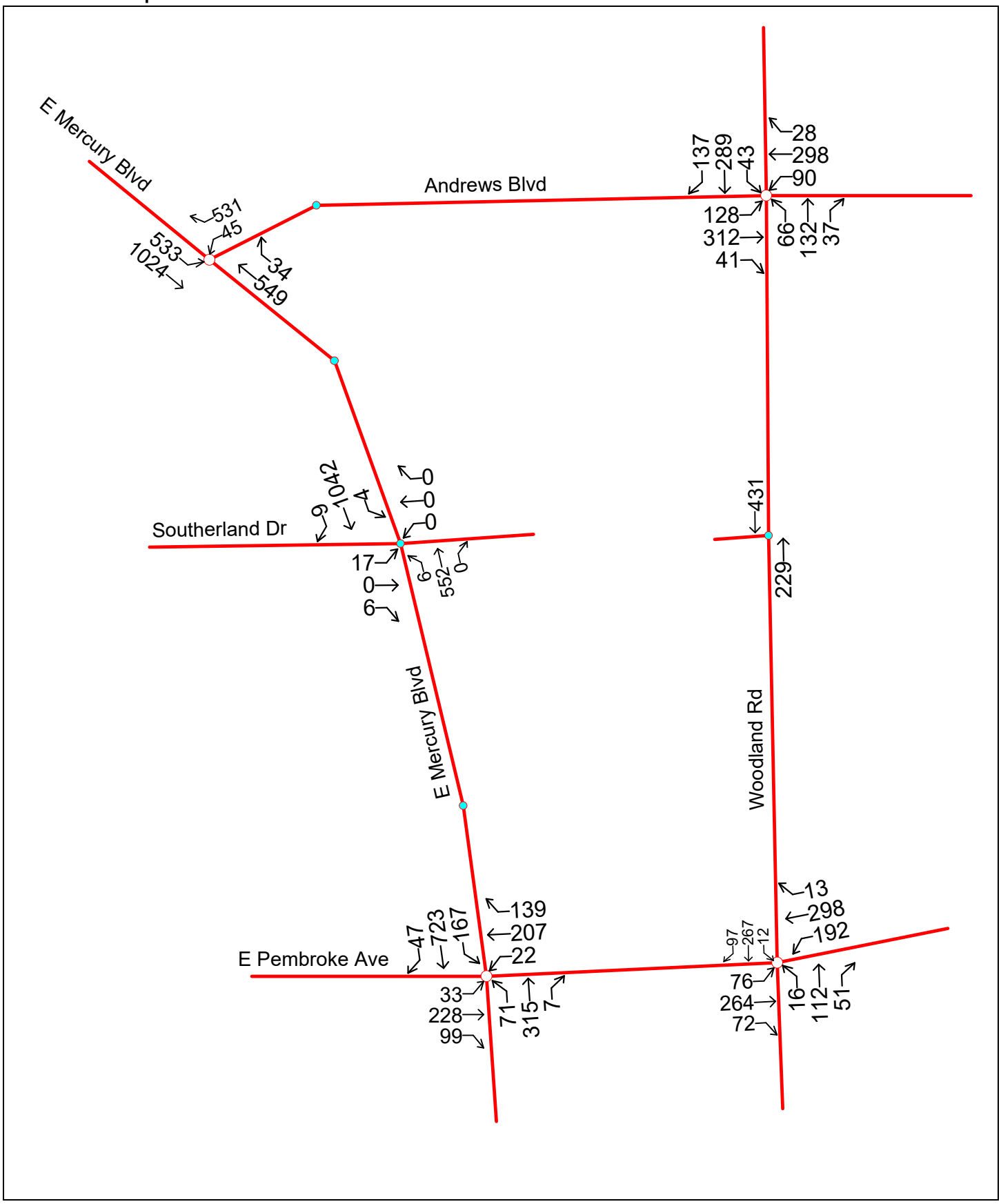


Figure 1 **AM EXISTING**

Orchard Oaks Apartments

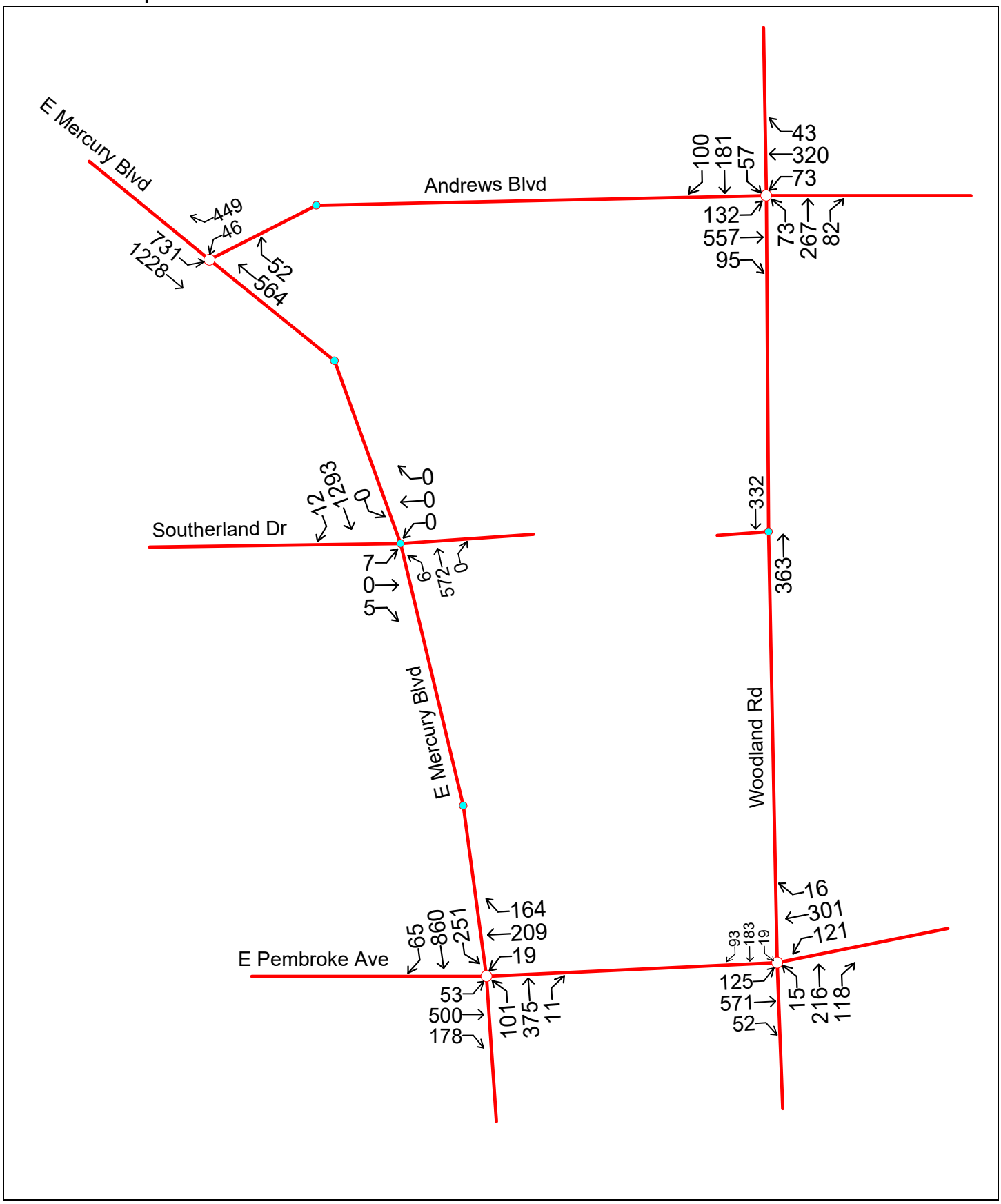


Figure 2 **PM EXISTING**

EXISTING

SIGNALIZED	Peak	Overall	NB	SB	EB	WB
E Mercury Blvd/ E Pembroke Ave	AM	**C (25.0 s)**	C (24.8 s)	C (22.8 s)	C (26.5 s)	C (29.5 s)
	PM	**D (54.0 s)**	D (47.6 s)	D (44.3 s)	E (71.7 s)	E (58.3 s)
E Mercury Blvd/ Andrews Blvd	AM	**B (14.7 s)**	C (18.6 s)	B (12.4 s)		B (17.0 s)
	PM	**B (20.6 s)**	C (26.2 s)	B (16.6 s)		B (19.8 s)
Woodland Rd/ E Pembroke Ave	AM	**B (15.2 s)**	B (13.7 s)	B (15.2 s)	B (15.9 s)	B (15.0 s)
	PM	**B (17.9 s)**	B (18.8 s)	B (18.2 s)	B (16.2 s)	B (19.7 s)
Woodland Rd/ Andrews Blvd	AM	**B (16.5 s)**	B (13.4 s)	B (16.4 s)	B (17.0 s)	B (17.8 s)
	PM	**B (17.1 s)**	B (17.7 s)	B (17.6 s)	B (16.7 s)	B (17.0 s)

UNSIGNALIZED	Peak	NB Left	SB Left	EB	WB
E Mercury Blvd/ Southerland Dr	AM	B (10.9 s)		E (44.8 s)	
	PM	B (12.5 s)		F (53.5 s)	

Under existing conditions, the unsignalized intersection at E Mercury Boulevard and Southerland Drive does indicate an unacceptable level of service in peak hours, however, observations of this intersection find that the actual performance is much

better than the HCS analysis results with vehicles not experiencing long delays and only once was there more than two vehicles queued with three vehicles waiting to turn off of Southerland Boulevard. It is noted that the median width is 33 feet and, according to FWWA, median widths greater than 30 feet actually operate more like two intersections since vehicles can easily traverse to the median before turning left.

Also, under existing conditions all the signalized intersections operate acceptably the AM and the PM peak hours, however with optimized signal timings the following levels of service are achieved:

Orchard Oaks Apartments

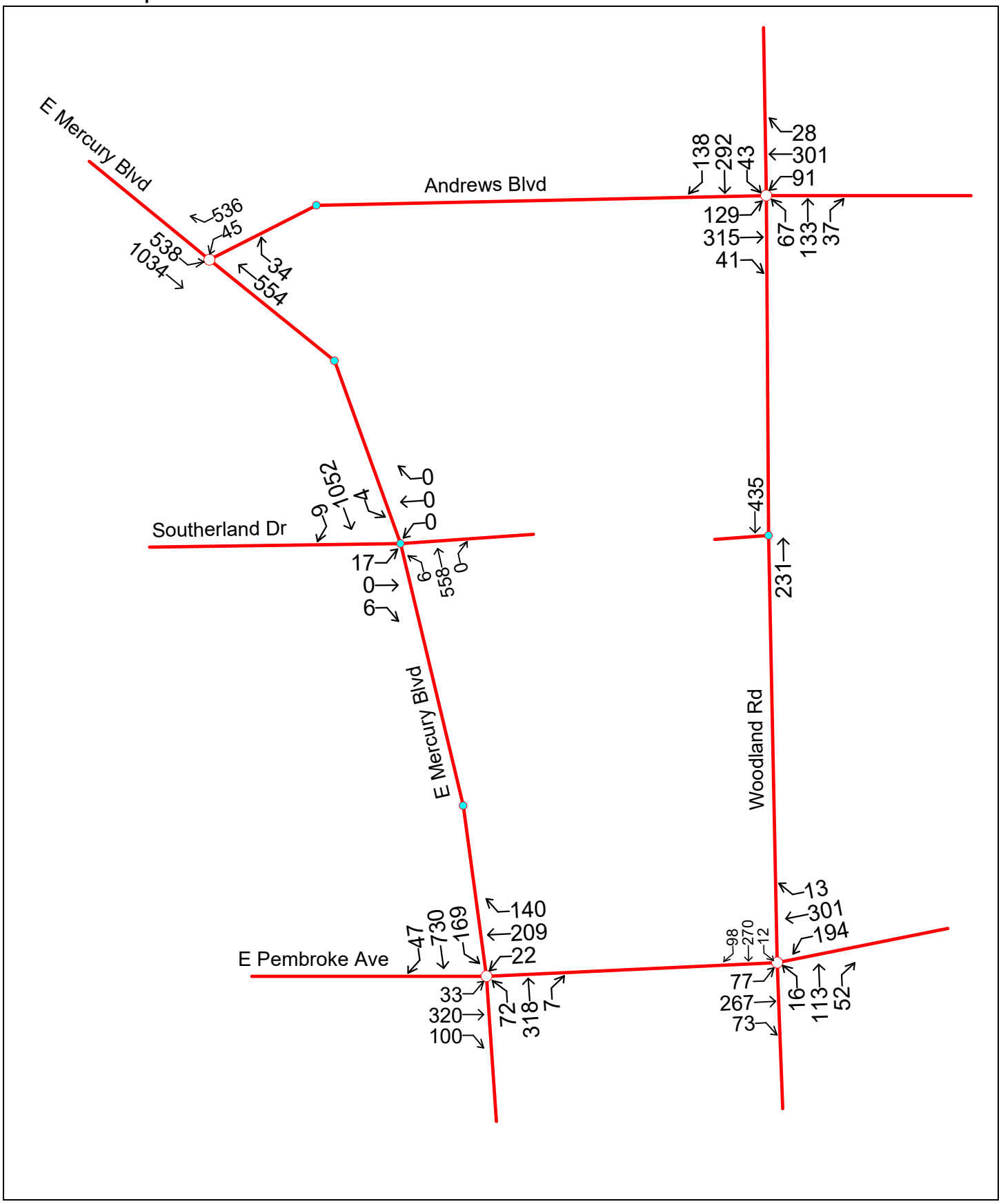


Figure 3

AM FUTURE (2027)
NO BUILD

Orchard Oaks Apartments

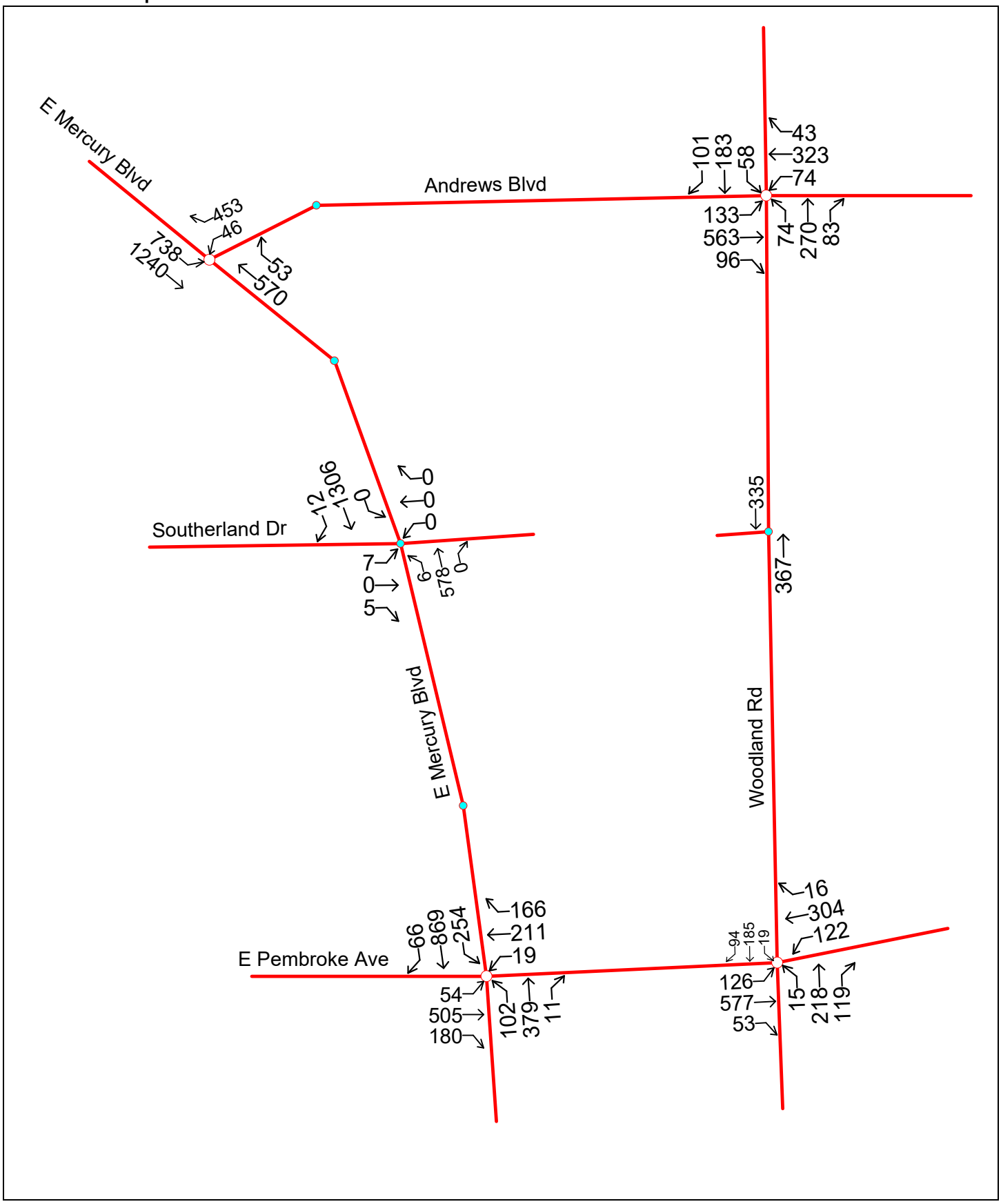


Figure 4

PM FUTURE (2027)
NO BUILD

EXISTING (OPTIMIZED)

SIGNALIZED	Peak	Overall	NB	SB	EB	WB
E Mercury Blvd/ E Pembroke Ave	AM	**C (25.1 s)**	C (24.8 s)	C (22.9 s)	C (26.1 s)	C (29.8 s)
	PM	**D (52.4 s)**	D (49.8 s)	D (54.0 s)	D (50.4 s)	D (54.9 s)
E Mercury Blvd/ Andrews Blvd	AM	**B (15.1 s)**	C (20.7 s)	B (13.7 s)		B (13.0 s)
	PM	**B (18.2 s)**	C (26.0 s)	B (16.6 s)		B (14.9 s)
Woodland Rd/ E Pembroke Ave	AM	**B (15.2 s)**	B (13.7 s)	B (15.2 s)	B (16.0 s)	B (15.0 s)
	PM	**B (17.9 s)**	B (18.9 s)	B (18.3 s)	B (16.2 s)	B (19.7 s)
Woodland Rd/ Andrews Blvd	AM	**B (16.5 s)**	B (13.2 s)	B (16.0 s)	B (17.1 s)	B (18.2 s)
	PM	**B (17.3 s)**	B (18.0 s)	B (17.8 s)	B (16.7 s)	B (17.2 s)

FUTURE (2027) NO BUILD CAPACITY ANALYSIS

The build-out year for the Orchard Oaks on the Boulevard apartments to be constructed is 2027. To determine the future traffic conditions in 2027 under No Build, the City provided a future growth rate of 0.5%, or rather 1% for the two years to 2027, was applied to the traffic volumes. These future volumes are shown on Figures 3 and 4.

Using the future traffic volumes without the development of Orchard Oaks on the Boulevard, the intersections were again analyzed utilizing SYNCHRO. The results of this analysis indicate the following levels of service and corresponding approach delay in seconds:

FUTURE (2027) NO BUILD

SIGNALIZED	Peak	Overall	NB	SB	EB	WB
E Mercury Blvd/ E Pembroke Ave	AM	**C (28.9 s)**	C (28.7 s)	C (26.9 s)	C (28.6 s)	C (34.5 s)
	PM	**D (53.0 s)**	D (52.1 s)	D (52.8 s)	D (52.7 s)	E (55.3 s)
E Mercury Blvd/ Andrews Blvd	AM	**B (15.2 s)**	C (20.9 s)	B (13.8 s)		B (13.2 s)
	PM	**B (18.4 s)**	C (26.4 s)	B (16.8 s)		B (15.0 s)
Woodland Rd/ E Pembroke Ave	AM	**B (15.3 s)**	B (13.9 s)	B (15.4 s)	B (16.1 s)	B (15.1 s)
	PM	**B (18.0 s)**	B (19.1 s)	B (18.5 s)	B (16.3 s)	B (19.9 s)
Woodland Rd/ Andrews Blvd	AM	**B (16.6 s)**	B (13.2 s)	B (16.1 s)	B (17.2 s)	B (18.3 s)
	PM	**B (17.3 s)**	B (18.0 s)	B (17.8 s)	B (16.8 s)	B (17.2 s)

UNSIGNALIZED	Peak	NB Left	SB Left	EB	WB
E Mercury Blvd/ Southerland Dr	AM	B (10.9 s)		E (45.7 s)	
	PM	B (12.6 s)		F (54.9 s)	

Under Future No Build conditions, all the signalized intersections continue to operate acceptably with little to no change from existing conditions in the overall Levels of Service. In addition, the unsignalized intersection at E Mercury Boulevard and Southerland Drive also had little change from existing conditions, but as pointed out under existing conditions it's performance would be much better than calculated because the median is greater than 30 feet and operates as if it were two intersections where the vehicles can easily traverse to the median before turning left.

TRIP GENERATION COMPARISON

Orchard Oaks on the Boulevard

The development plan for the property at Orchard Oaks on the Boulevard is to be rezoned to MD-4 Multi-family to allow for the construction of a 316-unit apartment complex. In order to forecast future traffic conditions upon the completion of the

apartments, it is necessary to determine the amount of new traffic which will be generated by its development. To accomplish this, trip rates were based upon the Trip Generation: An ITE Informational Report (Institute of Transportation Engineers, 11th Edition) for 221 - Multifamily Housing (Mid-Rise) utilizing the fitted curve equations. The trip generation is as follows:

Orchard Oaks on the Blvd - 316 apartments	**TOTAL**	**IN**	**OUT**
Weekday Total	1,460 vpd	730 vpd	730 vpd
Weekday AM Peak Hour	127 vph	29 vph	98 vph
Weekday PM Peak Hour	124 vph	76 vph	48 vph

By-Right Development of Property

Currently the property that Orchard Oaks on the Boulevard is proposed to be constructed has 5.70 acres zoned R11 and 4.45 acres zoned Commercial. To truly determine the change in trip generations, trips for the existing zoning needs to be compared to those being generated by Orchard Oaks on the Boulevard. To accomplish this, trip rates were based upon ITE for 210 - Single Family Detached Housing for the R11 and 822 - Strip Retail Plaza (<40k) for the Commercial. Because these parcels are not developed, the acreage needs to be converted to units usable to apply the ITE trip generation rates. For the R11, the conversion is as follows:

Single Family Detached Housing

Yield: 9,000 sf property/house

5.70 acres x 43,560 sf/acre = 248,292 sf

Yield: 80% developable as houses = 198,633 sf

198,633 sf /9,000 sf/house = **22 houses**

Strip Retail Plaza (<40k)

Yield: 7,750 sf/acre

4.45 acres x 7,500 sf/acre = **33,375 sf**

The trip generation by-right development is as follows:

Single Family Detached - 22 homes	**TOTAL**	**IN**	**OUT**
Weekday Total	250 vpd	125 vpd	125 vpd
Weekday AM Peak Hour	19 vph	5 vph	14 vph
Weekday PM Peak Hour	24 vph	15 vph	9 vph

Commercial - 33,375 sf	**TOTAL**	**IN**	**OUT**
Weekday Total	1,410 vpd	705 vpd	705 vpd
Weekday AM Peak Hour	63 vph	38 vph	25 vph
Weekday PM Peak Hour	184 vph	92 vph	92 vph

The combined trip generation as follows:

TOTAL BY-RIGHT (Residential & Commercial)	**TOTAL**	**IN**	**OUT**
Weekday Total	1,660 vpd	830 vpd	830 vpd
Weekday AM Peak Hour	82 vph	43 vph	39 vph
Weekday PM Peak Hour	124 vph	76 vph	48 vph

Comparison

Following is a comparison of Orchard Oaks on the Boulevard to the by-right development allowed for the property to determine the change in trips if Orchard Oaks on the Boulevard is approved:

Difference: Proposed vs By-right	**TOTAL**	**IN**	**OUT**
Weekday Total	**-189 vpd**	**-95 vpd**	**-95 vpd**
Weekday AM Peak Hour	46 vph	**-14 vph**	59 vph
Weekday PM Peak Hour	**-83 vph**	**-31 vph**	**-52 vph**

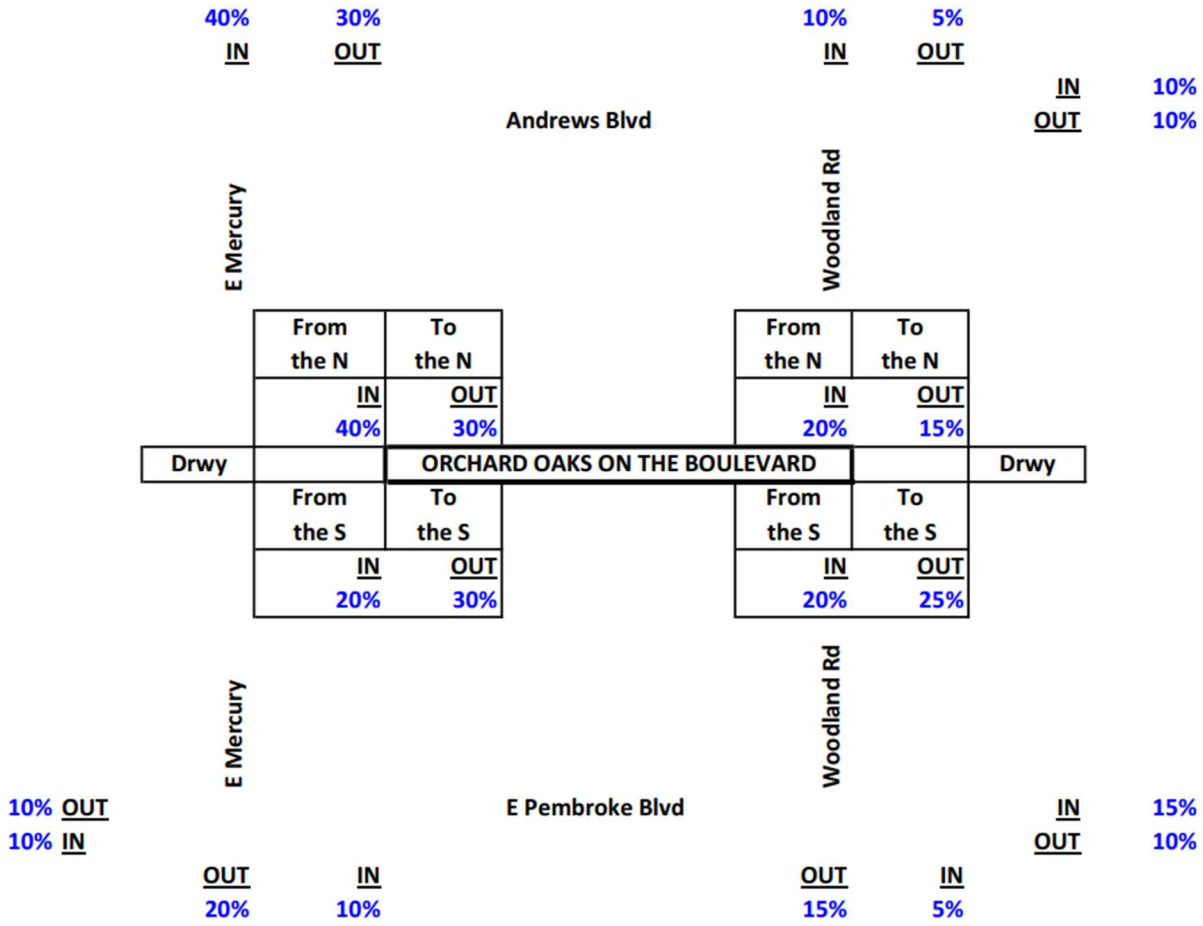
green = decrease from existing zoning

As can be seen, the overall trips generated by Orchard Oaks on the Boulevard is less than what could be developed by-right. In addition, it also significantly decreases trips in the PM peak hour, which is the greater of the two peaks. Consequently, this indicates that the rezoning to MD-4 Multi-family for Orchard Oaks on the Boulevard generates less trips than what could otherwise occur on the property and should be considered a downzoning.

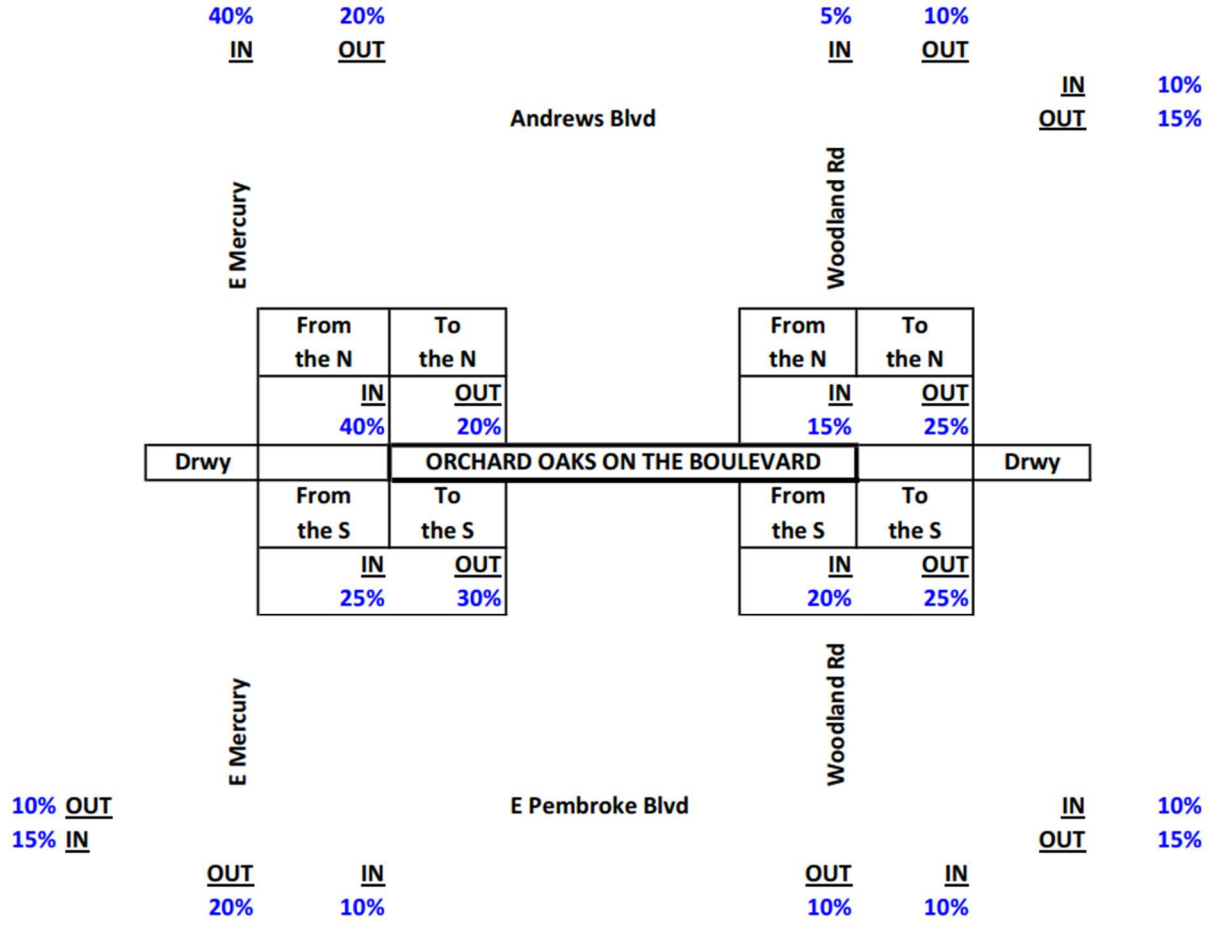
FUTURE + ORCHARD OAKS ON THE BOULEVARD CAPACITY ANALYSIS

The trips generated by Orchard Oaks on the Boulevard were distributed to the existing road system based on the following distribution assumptions agreed to by the City of Hampton:

AM PEAK


40%
IN
30%
OUT
10%
IN
5%
OUT
IN
10%
OUT
10%
Andrews Blvd
E Mercury
Woodland Rd
From the N
To the N
IN
40%
OUT
30%
From the N
To the N
IN
20%
OUT
15%
Drwy
ORCHARD OAKS ON THE BOULEVARD
Drwy
From the S
To the S
IN
20%
OUT
30%
From the S
To the S
IN
20%
OUT
25%
E Mercury
Woodland Rd
10% OUT
10% IN
E Pembroke Blvd
IN
15%
OUT
10%
OUT
20%
IN
10%
OUT
15%
IN
5%

PM PEAK



The generated trips were then distributed to and from the site based on these percentages. The distribution is shown on Figures 5 and 6. The generated trips from the site were combined with future traffic volumes and are shown on Figures 7 and 8. Using the future traffic volumes without the development of Orchard Oaks on the Boulevard, the intersections were again analyzed utilizing SYNCHRO. The results of

Orchard Oaks Apartments

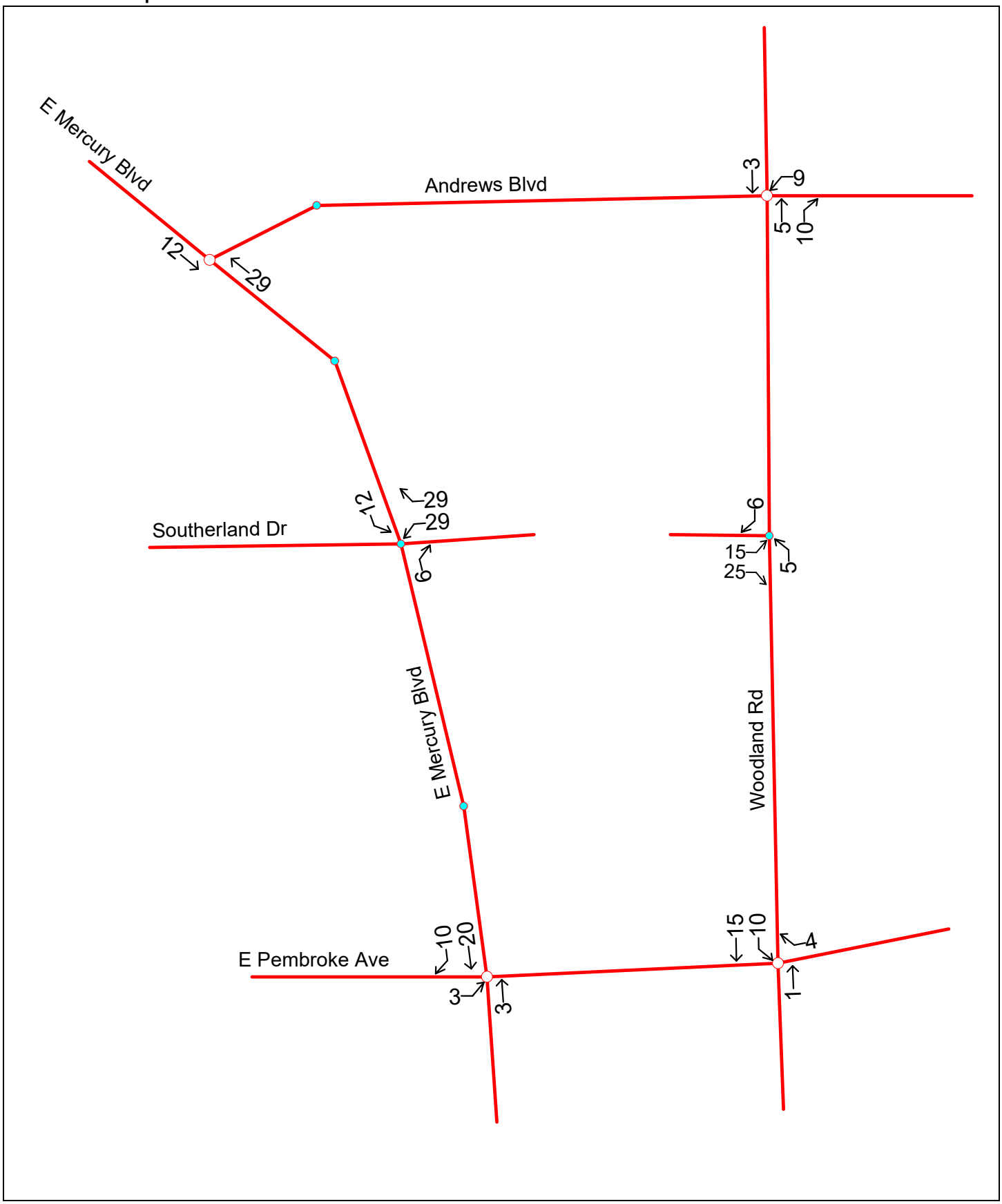


Figure 5 **AM DISTRIBUTION**

Orchard Oaks Apartments

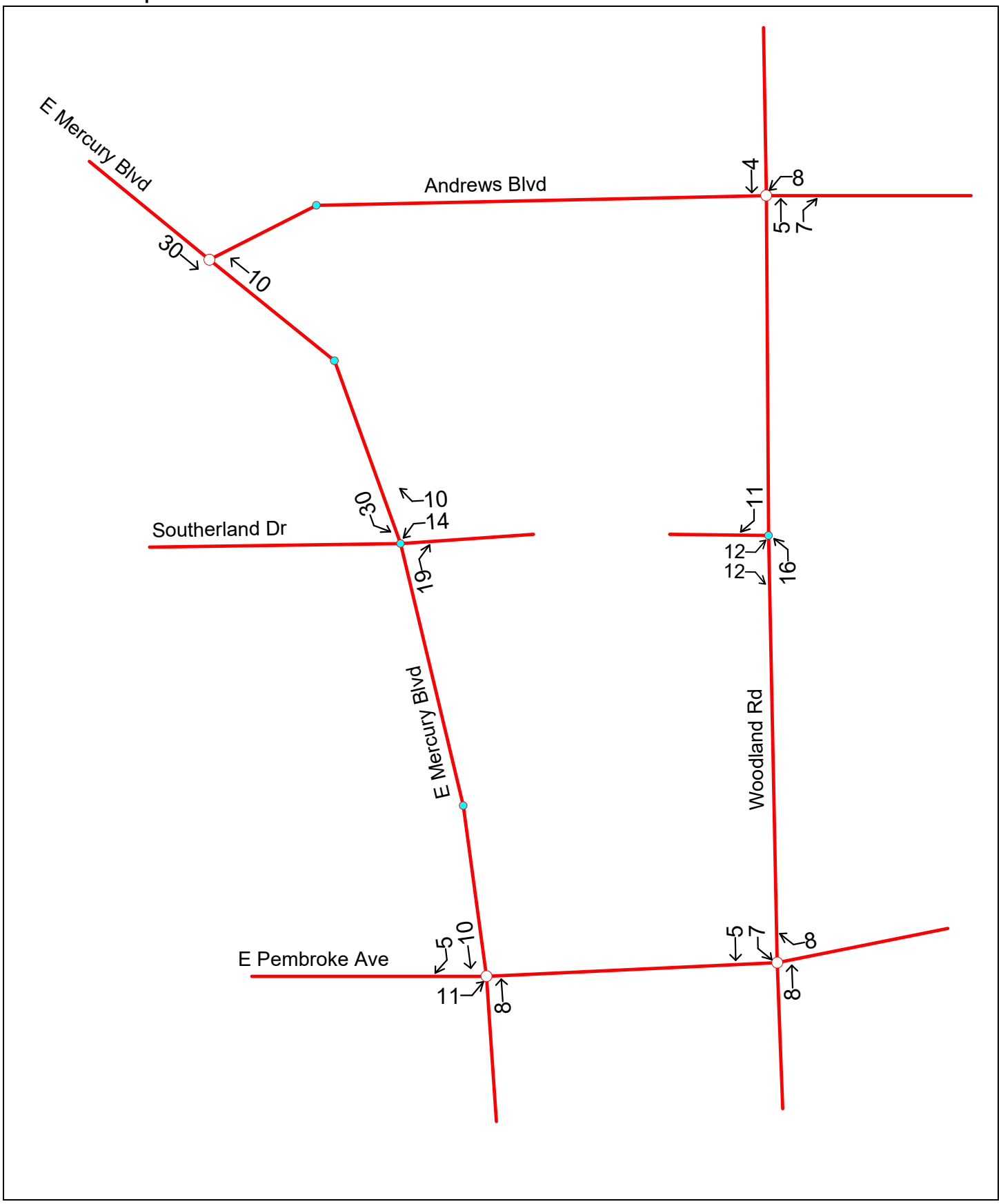


Figure 6 **PM DISTRIBUTION**

Orchard Oaks Apartments

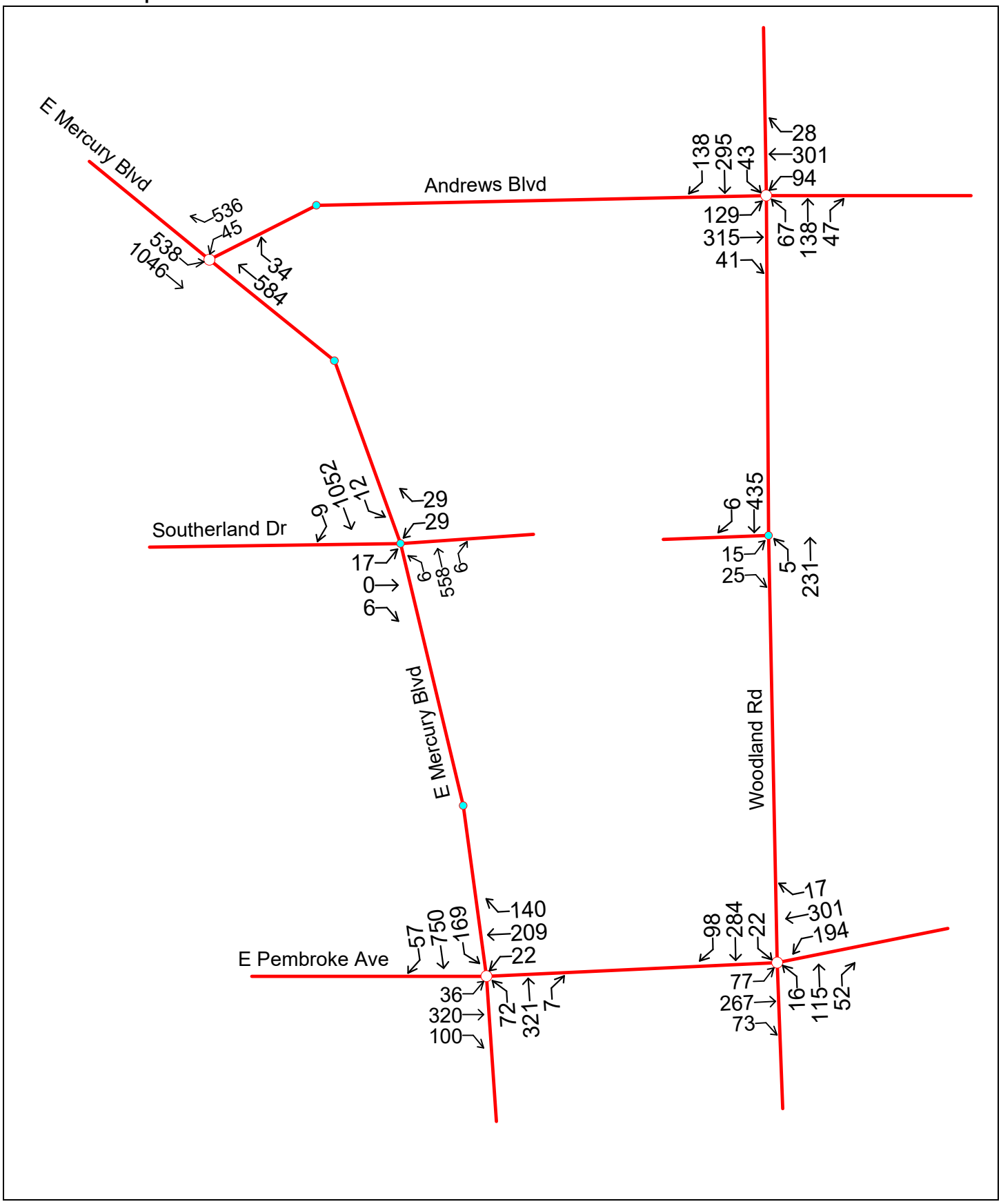


Figure 7 **AM FUTURE + ORCHARD OAKS**

Orchard Oaks Apartments

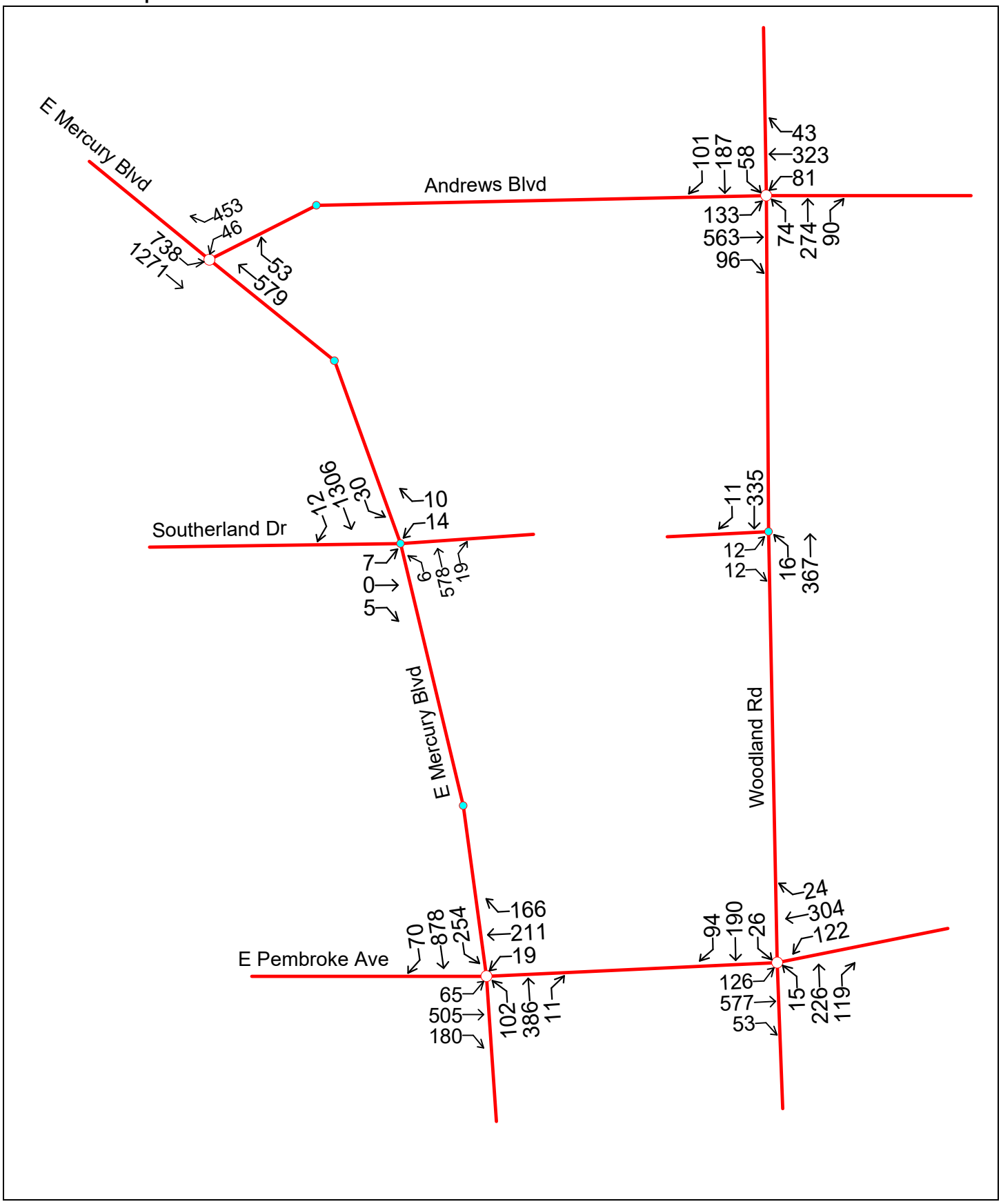


Figure 8 **PM FUTURE + ORCHARD OAKS**

this analysis indicate the following levels of service and corresponding approach delay in seconds:

FUTURE + SITE

SIGNALIZED	Peak	Overall	NB	SB	EB	WB
E Mercury Blvd/ E Pembroke Ave	AM	**C (29.7 s)**	C (29.0 s)	C (27.2 s)	C (31.2 s)	C (35.0 s)
	PM	**D (53.9 s)**	D (52.6 s)	D (50.3 s)	E (61.6 s)	D (52.2 s)
E Mercury Blvd/ Andrews Blvd	AM	**B (15.5 s)**	C (21.6 s)	B (13.9 s)		B (13.4 s)
	PM	**B (18.6 s)**	C (26.6 s)	B (16.9 s)		B (15.3 s)
Woodland Rd/ E Pembroke Ave	AM	**B (16.7 s)**	B (13.3 s)	B (16.1 s)	B (17.4 s)	B (18.4 s)
	PM	**B (18.4 s)**	B (19.2 s)	B (18.7 s)	B (16.7 s)	B (20.2 s)
Woodland Rd/ Andrews Blvd	AM	**B (16.7 s)**	B (13.3 s)	B (16.1 s)	B (17.4 s)	B (18.4 s)
	PM	**B (17.7 s)**	B (18.4 s)	B (18.2 s)	B (17.2 s)	B (17.5 s)

UNSIGNALIZED	Peak	NB Left	SB Left	EB	WB
E Mercury Blvd/ Southerland/SITE	AM	B (10.4 s)	A (8.7 s)	F (50.8 s)	D (39.9 s)
	PM	B (10.4s)	A (8.9 s)	F (63.8 s)	D (34.5 s)
Woodland Rd & SITE	AM	B (8.3 s)		B (12.1 s)	
	PM	B (8.1 s)		B (12.3 s)	

Under future conditions with the development of Orchard Oaks on the Boulevard, all the signalized intersections continue to operate acceptably with little to no change from existing or future conditions in the overall Levels of Service. In addition, the newly created intersection of Woodland Road and the driveway for Orchard Oaks operates acceptable. However, the unsignalized intersection at E Mercury Boulevard and Southerland Drive continues to operate unacceptably for the eastbound direction as it did under both the existing and future conditions. While again it will operate better than anticipated due to the median being greater than 30 feet, it is worth a closer review. In particular, the eastbound direction only has a maximum left turning volume of 17 vehicles which is not very many vehicles and is not enough to even consider a traffic signal. In addition, these 17 left turning vehicles do have the option of utilizing Stonehurst Road to turn left which is only 400 feet to the north, in the

direction they intend to go. As such, traffic can easily mitigate itself to achieve better traffic flow.

But finally, it is further noted, that these levels of service results will be much better than the by-right development that could occur, especially because the commercial development, which is the higher generating use, is oriented to E Mercury Boulevard.

TURN LANE ANALYSIS

A review of turn lane requirements at the proposed entrance for the property at Orchard Oaks on the Boulevard was done to determine what, if any, improvements may be needed in accordance with requirements in the based on VDOT Access Management Design Standards.

Right Turn Lane Review

The need for a right turn lane on E Mercury Boulevard at Orchard Oaks and on Woodland Road at Orchard Oaks were reviewed utilizing VDOT Access Management Design Standards, Figure 3-24 Guidelines for Right Turn Treatment (4-Lane Highway). A summary of this review is presented below:

E Mercury Blvd & Orchard Oaks Drwy
Right Turn Review

	NB Rights	Adj Rts	Appch Vol	Meet Criteria?
AM Peak – Future + SITE	6 vph	n/a	564 vph	no
PM Peak – Future + SITE	19 vph	n/a	597 vph	no

Woodland Rd & Orchard Oaks Drwy
Right Turn Review

	SB Rights	Adj Rts	Appch Vol	Meet Criteria?
AM Peak – Future + SITE	6 vph	n/a	441 vph	no
PM Peak – Future + SITE	11 vph	n/a	346 vph	no

Based on VDOT Standards, no right turn lane is needed neither on northbound E Mercury Boulevard at the Orchard Oaks driveway nor southbound on Woodland Road at the Orchard Oaks driveway with the development of Orchard Oaks on the Boulevard.

Left Turn Lane Review

The need for a left turn lane was reviewed utilizing VDOT Access Management Design Standards Figure 3-3 Warrants for Left Turn Storage Lanes on Four-Lane Highways. A summary of this review is presented below:

E Mercury Blvd & Orchard Oaks Drwy/Southerland Dr
Left Turn Lane Review

	SB Lefts	Opp. Vol	Meet Criteria?
AM Peak – Future + SITE	12 vph	570 vph	no
PM Peak – Future + SITE	30 vph	1,348 vph	**YES**

Woodland Rd & Orchard Oaks Drwy
Left Turn Review

	NB Lefts	Opp. Vol	Meet Criteria?
AM Peak – Future + SITE	5 vph	236 vph	no
PM Peak – Future + SITE	16 vph	383 vph	no

Based on VDOT Standards, a southbound left turn lane is needed on E Mercury Boulevard at the Orchard Oaks driveway and no northbound left turn is needed on Woodland Road at the Orchard Oaks driveway. The southbound left turn lane on E Mercury Boulevard should be 125 feet turn lane with a 100 foot taper based VDOT turn lane design standards Figure 3-1 Right and Left Turn Lane Criteria for Single and Dual Lanes utilizing urban criteria.

PEDESTRIANS AND TRANSIT

Based on the traffic counts, there were not any pedestrians that cross E Mercury Boulevard or Woodland Road, nor currently are there any attractors to make a crossing. On Woodland Road there is sidewalk and that will be maintained with the construction of Orchard Oaks on the Boulevard. But currently there are no other pedestrian facilities to connect.

As for transit, the Hampton Roads Transit Route 405 does run down Woodland Road. While currently there are no stops along this section of Woodland Road, an opportunity exists to add a bus stop on either side of Woodland Road for residents of Orchard Oaks on the Boulevard. This route provides service to the places such as Peninsula Town Center and the Newport News Shipyard. By adding this service, it would reduce the number of trips generated by Orchard Oaks on the Boulevard. It is recommended for HRT to add bus stops on either side of Woodland Road at Orchard Oaks on the Boulevard after construction is complete.

RECOMMENDATIONS

In conclusion, this report finds that:

1) The rezoning of the 5.70 acres of R11 and 4.45 acres of Commercial to the proposed zoning of MD-4 Multi-family generates less trips than what could otherwise occur on the property and should be considered a downzoning.

2) Orchard Oaks on the Boulevard can be developed with little to no impact to existing intersections.

3) The entrance to Orchard Oaks on the Boulevard needs a 125 foot southbound left turn lane with a 100 foot taper on E Mercury Blvd at Orchards Oak driveway.

4) For HRT to add bus stops on either side of Woodland Road at Orchard Oaks on the Boulevard after construction is complete.

APPENDIX:

TRAFFIC COUNTS
TURN LANE ANALYSES
CAPACITY ANALYSES

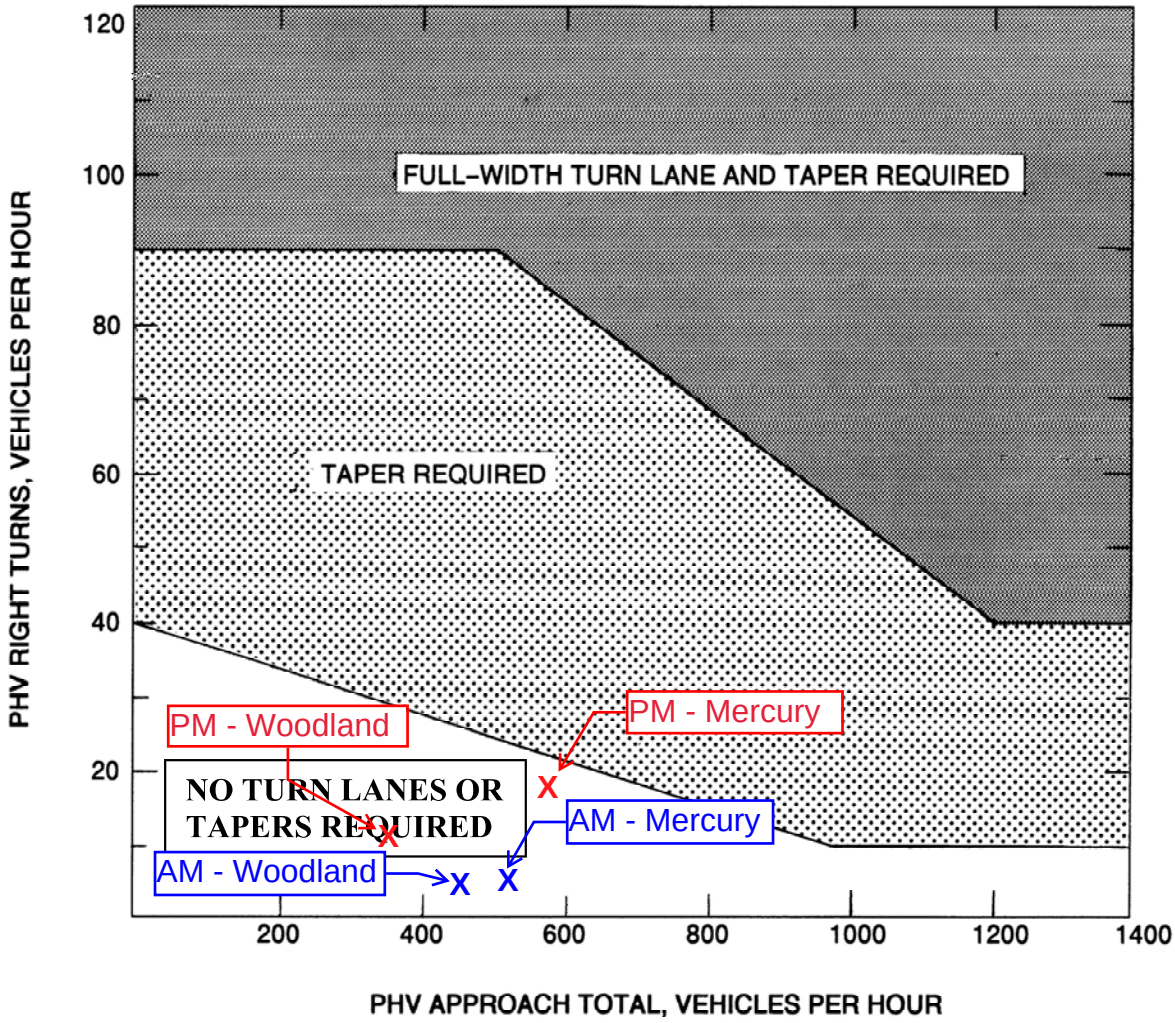


FIGURE 3-27 WARRANTS FOR RIGHT TURN TREATMENT (4-LANE HIGHWAY)

Appropriate Radius required at all Intersections and Entrances (Commercial or Private).

LEGEND

PHV- - Peak Hour Volume (also Design Hourly Volume equivalent)

Adjustment for Right Turns

If PHV is not known use formula: PHV = ADT x K x D

K = the percent of AADT occurring in the peak hour
D = the percent of traffic in the peak direction of flow

Note: An average of 11% for K x D will suffice.

When right turn facilities are warranted, see Figure 3-1 for design criteria.*

* Rev. 1/15

Warrants for Left Turn Storage Lanes on Four-Lane Highways

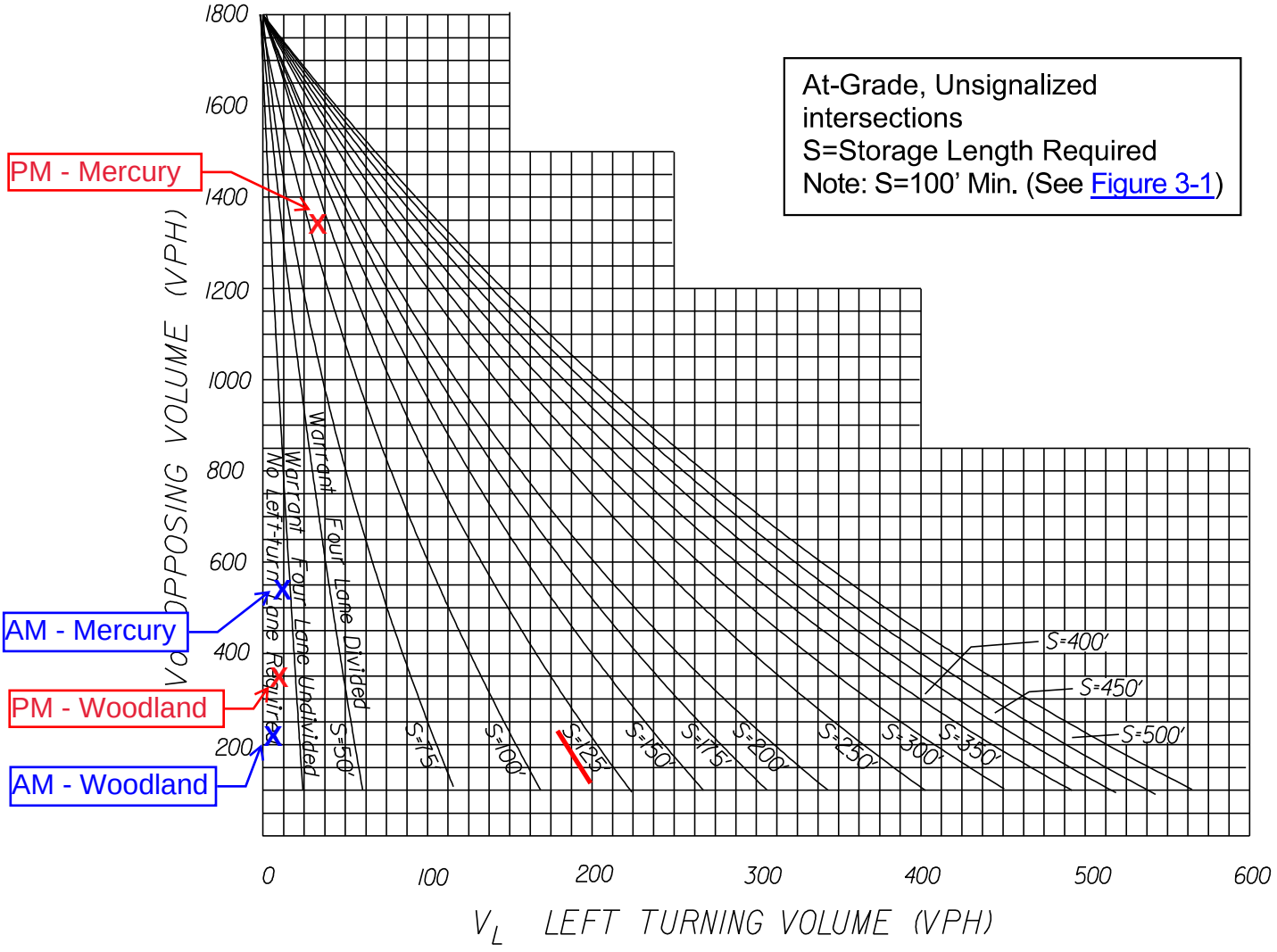


FIGURE 3-3 WARRANTS FOR LEFT TURN STORAGE LANES ON FOUR LANE HIGHWAYS

Figure 3-3 was derived from *Highway Research Report No. 211*.

Opposing volume and left turning volume in vehicles per hour (VPH) are used for left turn storage lane warrants on four-lane highways.

For plan detail requirements when curb and/or gutter are used, see VDOT's *Road Design Manual, Section 2E.3* on the VDOT web site: *http://www.virginiadot.org/business/locdes/rdmanual-index.asp.*

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Orchard Oaks Apts TIA

File Name : Mercury Blvd & Pembroke Ave
Site Code : 250405
Start Date : 5/1/2025
Page No : 1

Groups Printed- Cars + - Lg Trks

	E Mercury Blvd Southbound			E Pembroke Ave Westbound			E Mercury Blvd Northbound			E Pembroke Ave Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
06:00 AM	15	60	5	3	21	26	6	43	1	2	12	11	205
06:15 AM	9	78	4	2	27	32	6	62	0	5	22	13	260
06:30 AM	16	114	4	0	36	33	13	87	1	2	21	14	341
06:45 AM	15	200	4	5	31	30	8	100	3	8	33	16	453
Total	55	452	17	10	115	121	33	292	5	17	88	54	1259
07:00 AM	19	213	13	5	44	28	16	81	1	10	44	19	493
07:15 AM	21	202	13	5	34	34	16	67	1	11	53	18	475
07:30 AM	33	225	11	1	51	32	18	60	0	6	41	27	505
07:45 AM	55	220	11	9	39	26	13	74	2	5	65	37	556
Total	128	860	48	20	168	120	63	282	4	32	203	101	2029
08:00 AM	37	162	12	8	61	35	26	102	3	7	60	19	532
08:15 AM	42	116	13	4	56	46	14	79	2	15	62	16	465
08:30 AM	30	106	15	6	55	55	17	73	2	12	57	12	440
08:45 AM	31	97	15	4	66	41	14	63	4	12	35	18	400
Total	140	481	55	22	238	177	71	317	11	46	214	65	1837
03:00 PM	58	199	10	11	34	28	29	96	1	13	89	28	596
03:15 PM	63	226	15	6	50	45	8	117	6	13	67	29	645
03:30 PM	59	208	11	7	52	28	39	91	3	16	113	33	660
03:45 PM	69	219	11	4	55	45	25	86	1	17	134	38	704
Total	249	852	47	28	191	146	101	390	11	59	403	128	2605
04:00 PM	59	205	11	3	51	56	30	99	2	12	123	36	687
04:15 PM	64	191	23	4	59	35	16	90	5	11	127	66	691
04:30 PM	59	245	20	8	44	28	30	100	3	13	116	38	704
04:45 PM	46	215	12	6	52	35	32	104	2	12	133	33	682
Total	228	856	66	21	206	154	108	393	12	48	499	173	2764
05:00 PM	84	229	21	3	48	43	39	133	1	8	94	50	753
05:15 PM	61	145	14	12	52	38	43	130	6	17	89	48	655
05:30 PM	55	204	18	4	53	45	31	82	6	8	107	35	648
05:45 PM	67	243	10	6	43	29	19	84	7	6	102	31	647
Total	267	821	63	25	196	155	132	429	20	39	392	164	2703
Grand Total	1067	4322	296	126	1114	873	508	2103	63	241	1799	685	13197
Apprch %	18.8	76	5.2	6	52.7	41.3	19	78.6	2.4	8.8	66	25.1	
Total %	8.1	32.7	2.2	1	8.4	6.6	3.8	15.9	0.5	1.8	13.6	5.2	
Cars +	1061	4307	296	125	1112	872	504	2099	63	240	1797	679	13155
% Cars +	99.4	99.7	100	99.2	99.8	99.9	99.2	99.8	100	99.6	99.9	99.1	99.7
Lg Trks	6	15	0	1	2	1	4	4	0	1	2	6	42
% Lg Trks	0.6	0.3	0	0.8	0.2	0.1	0.8	0.2	0	0.4	0.1	0.9	0.3

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Orchard Oaks Apts TIA

File Name : Mercury Blvd & Pembroke Ave
Site Code : 250405
Start Date : 5/1/2025

	E Mercury Blvd Southbound				E Pembroke Ave Westbound				E Mercury Blvd Northbound				E Pembroke Ave Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	33	225	11	269	1	51	32	84	18	60	0	78	6	41	27	74	505
07:45 AM	55	220	11	286	9	39	26	74	13	74	2	89	5	65	37	107	556
08:00 AM	37	162	12	211	8	61	35	104	26	102	3	131	7	60	19	86	532
08:15 AM	42	116	13	171	4	56	46	106	14	79	2	95	15	62	16	93	465
Total Volume	167	723	47	937	22	207	139	368	71	315	7	393	33	228	99	360	2058
% App. Total	17.8	77.2	5		6	56.2	37.8		18.1	80.2	1.8		9.2	63.3	27.5		
PHF	.759	.803	.904	.819	.611	.848	.755	.868	.683	.772	.583	.750	.550	.877	.669	.841	.925
Peak Hour Analysis From 03:45 PM to 04:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:45 PM																	
03:45 PM	69	219	11	299	4	55	45	104	25	86	1	112	17	134	38	189	704
04:00 PM	59	205	11	275	3	51	56	110	30	99	2	131	12	123	36	171	687
04:15 PM	64	191	23	278	4	59	35	98	16	90	5	111	11	127	66	204	691
04:30 PM	59	245	20	324	8	44	28	80	30	100	3	133	13	116	38	167	704
Total Volume	251	860	65	1176	19	209	164	392	101	375	11	487	53	500	178	731	2786
% App. Total	21.3	73.1	5.5		4.8	53.3	41.8		20.7	77	2.3		7.3	68.4	24.4		
PHF	.909	.878	.707	.907	.594	.886	.732	.891	.842	.938	.550	.915	.779	.933	.674	.896	.989

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Orchard Oaks Apts TIA

File Name : Mercury Blvd & Andrews Blvd
Site Code : 250402
Start Date : 4/29/2025
Page No : 1

Groups Printed- Cars + - Lg Trks

	E Mercury Blvd Southbound			Andrews Blvd Westbound			E Mercury Blvd Northbound			Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
06:00 AM	26	66	0	7	0	61	0	56	0	0	0	0	216
06:15 AM	28	105	0	2	0	59	0	59	0	0	0	0	253
06:30 AM	62	146	0	4	0	106	0	74	3	0	0	0	395
06:45 AM	81	251	0	6	0	97	0	82	11	0	0	0	528
Total	197	568	0	19	0	323	0	271	14	0	0	0	1392
07:00 AM	67	304	0	10	0	130	0	82	4	0	0	0	597
07:15 AM	91	266	0	12	0	127	0	123	7	0	0	0	626
07:30 AM	103	323	0	10	0	123	0	139	6	0	0	0	704
07:45 AM	140	259	0	11	0	139	0	136	5	0	0	0	690
Total	401	1152	0	43	0	519	0	480	22	0	0	0	2617
08:00 AM	143	242	0	10	0	139	0	134	10	0	0	0	678
08:15 AM	147	200	0	14	0	130	0	140	13	0	0	0	644
08:30 AM	156	171	0	8	0	154	0	127	10	0	0	0	626
08:45 AM	101	150	0	14	0	124	0	113	8	0	0	0	510
Total	547	763	0	46	0	547	0	514	41	0	0	0	2458
03:00 PM	163	224	0	8	0	79	0	149	8	0	0	0	631
03:15 PM	139	218	0	11	0	97	0	159	11	0	0	0	635
03:30 PM	163	209	0	13	0	87	0	138	13	0	0	0	623
03:45 PM	215	291	0	14	0	120	0	135	16	0	0	0	791
Total	680	942	0	46	0	383	0	581	48	0	0	0	2680
04:00 PM	162	289	0	19	0	146	0	153	13	0	0	0	782
04:15 PM	184	318	0	6	0	84	0	148	9	0	0	0	749
04:30 PM	170	330	0	7	0	99	0	128	14	0	0	0	748
04:45 PM	209	313	0	10	0	95	0	112	17	0	0	0	756
Total	725	1250	0	42	0	424	0	541	53	0	0	0	3035
05:00 PM	205	266	0	11	0	114	0	144	17	0	0	0	757
05:15 PM	194	292	0	4	0	89	0	135	15	0	0	0	729
05:30 PM	201	303	0	14	0	123	0	154	9	0	0	0	804
05:45 PM	205	301	0	11	0	76	0	111	9	0	0	0	713
Total	805	1162	0	40	0	402	0	544	50	0	0	0	3003
Grand Total	3355	5837	0	236	0	2598	0	2931	228	0	0	0	15185
Apprch %	36.5	63.5	0	8.3	0	91.7	0	92.8	7.2	0	0	0	
Total %	22.1	38.4	0	1.6	0	17.1	0	19.3	1.5	0	0	0	
Cars +	3343	5812	0	235	0	2596	0	2922	227	0	0	0	15135
% Cars +	99.6	99.6	0	99.6	0	99.9	0	99.7	99.6	0	0	0	99.7
Lg Trks	12	25	0	1	0	2	0	9	1	0	0	0	50
% Lg Trks	0.4	0.4	0	0.4	0	0.1	0	0.3	0.4	0	0	0	0.3

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Orchard Oaks Apts TIA

File Name : Mercury Blvd & Andrews Blvd
Site Code : 250402
Start Date : 4/29/2025

	E Mercury Blvd Southbound				Andrews Blvd Westbound				E Mercury Blvd Northbound				Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	103	323	0	426	10	0	123	133	0	139	6	145	0	0	0	0	704
07:45 AM	140	259	0	399	11	0	139	150	0	136	5	141	0	0	0	0	690
08:00 AM	143	242	0	385	10	0	139	149	0	134	10	144	0	0	0	0	678
08:15 AM	147	200	0	347	14	0	130	144	0	140	13	153	0	0	0	0	644
Total Volume	533	1024	0	1557	45	0	531	576	0	549	34	583	0	0	0	0	2716
% App. Total	34.2	65.8	0		7.8	0	92.2		0	94.2	5.8		0	0	0		
PHF	.906	.793	.000	.914	.804	.000	.955	.960	.000	.980	.654	.953	.000	.000	.000	.000	.964
Peak Hour Analysis From 03:45 PM to 04:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:45 PM																	
03:45 PM	215	291	0	506	14	0	120	134	0	135	16	151	0	0	0	0	791
04:00 PM	162	289	0	451	19	0	146	165	0	153	13	166	0	0	0	0	782
04:15 PM	184	318	0	502	6	0	84	90	0	148	9	157	0	0	0	0	749
04:30 PM	170	330	0	500	7	0	99	106	0	128	14	142	0	0	0	0	748
Total Volume	731	1228	0	1959	46	0	449	495	0	564	52	616	0	0	0	0	3070
% App. Total	37.3	62.7	0		9.3	0	90.7		0	91.6	8.4		0	0	0		
PHF	.850	.930	.000	.968	.605	.000	.769	.750	.000	.922	.813	.928	.000	.000	.000	.000	.970

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Orchard Oaks Apts TIA

File Name : Woodland Rd & Pembroke Ave
Site Code : 2504046
Start Date : 5/1/2025
Page No : 1

Groups Printed- Cars + - Lg Trks

	Woodland Rd Southbound			E Pembroke Blvd Westbound			Woodland Rd Northbound			E Pembroke Blvd Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
06:00 AM	0	66	12	37	55	2	3	8	5	3	16	7	214
06:15 AM	0	58	15	54	56	2	1	13	10	6	26	4	245
06:30 AM	0	77	12	48	66	1	1	12	7	7	22	6	259
06:45 AM	2	61	9	41	55	6	2	7	5	13	29	6	236
Total	2	262	48	180	232	11	7	40	27	29	93	23	954
07:00 AM	1	86	19	49	76	4	0	22	2	17	44	1	321
07:15 AM	2	73	12	51	70	1	0	29	10	26	38	15	327
07:30 AM	1	71	28	56	65	3	2	16	12	20	44	14	332
07:45 AM	2	64	16	47	63	2	7	28	8	19	69	19	344
Total	6	294	75	203	274	10	9	95	32	82	195	49	1324
08:00 AM	3	73	26	45	85	3	4	32	8	22	77	22	400
08:15 AM	6	59	27	44	85	5	3	36	23	15	74	17	394
08:30 AM	5	76	34	60	81	5	6	29	19	21	56	6	398
08:45 AM	2	60	22	53	77	1	2	34	17	21	52	9	350
Total	16	268	109	202	328	14	15	131	67	79	259	54	1542
03:00 PM	2	47	7	44	49	5	6	59	18	24	115	13	389
03:15 PM	3	52	13	24	83	8	4	51	24	18	113	8	401
03:30 PM	3	48	17	43	66	6	6	61	25	26	131	17	449
03:45 PM	4	39	20	24	79	3	1	49	36	34	142	8	439
Total	12	186	57	135	277	22	17	220	103	102	501	46	1678
04:00 PM	7	56	36	36	82	6	6	40	29	30	138	12	478
04:15 PM	3	51	19	32	73	3	6	65	30	29	136	15	462
04:30 PM	5	37	18	29	67	4	2	62	23	32	155	17	451
04:45 PM	10	61	25	29	59	1	1	54	28	27	126	20	441
Total	25	205	98	126	281	14	15	221	110	118	555	64	1832
05:00 PM	3	62	19	35	68	2	5	51	24	28	147	11	455
05:15 PM	3	40	21	18	93	4	7	50	28	24	128	17	433
05:30 PM	2	48	24	23	75	2	8	59	30	26	134	20	451
05:45 PM	2	50	9	30	66	7	3	56	31	27	142	15	438
Total	10	200	73	106	302	15	23	216	113	105	551	63	1777
Grand Total	71	1415	460	952	1694	86	86	923	452	515	2154	299	9107
Apprch %	3.6	72.7	23.6	34.8	62	3.1	5.9	63.2	30.9	17.4	72.6	10.1	
Total %	0.8	15.5	5.1	10.5	18.6	0.9	0.9	10.1	5	5.7	23.7	3.3	
Cars +	71	1415	460	949	1687	86	85	919	451	508	2144	299	9074
% Cars +	100	100	100	99.7	99.6	100	98.8	99.6	99.8	98.6	99.5	100	99.6
Lg Trks	0	0	0	3	7	0	1	4	1	7	10	0	33
% Lg Trks	0	0	0	0.3	0.4	0	1.2	0.4	0.2	1.4	0.5	0	0.4

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Orchard Oaks Apts TIA

File Name : Woodland Rd & Pembroke Ave
Site Code : 2504046
Start Date : 5/1/2025

	Woodland Rd Southbound				E Pembroke Blvd Westbound				Woodland Rd Northbound				E Pembroke Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	71	28	100	56	65	3	124	2	16	12	30	20	44	14	78	332
07:45 AM	2	64	16	82	47	63	2	112	7	28	8	43	19	69	19	107	344
08:00 AM	3	73	26	102	45	85	3	133	4	32	8	44	22	77	22	121	400
08:15 AM	6	59	27	92	44	85	5	134	3	36	23	62	15	74	17	106	394
Total Volume	12	267	97	376	192	298	13	503	16	112	51	179	76	264	72	412	1470
% App. Total	3.2	71	25.8		38.2	59.2	2.6		8.9	62.6	28.5		18.4	64.1	17.5		
PHF	.500	.914	.866	.922	.857	.876	.650	.938	.571	.778	.554	.722	.864	.857	.818	.851	.919
Peak Hour Analysis From 03:45 PM to 04:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:45 PM																	
03:45 PM	4	39	20	63	24	79	3	106	1	49	36	86	34	142	8	184	439
04:00 PM	7	56	36	99	36	82	6	124	6	40	29	75	30	138	12	180	478
04:15 PM	3	51	19	73	32	73	3	108	6	65	30	101	29	136	15	180	462
04:30 PM	5	37	18	60	29	67	4	100	2	62	23	87	32	155	17	204	451
Total Volume	19	183	93	295	121	301	16	438	15	216	118	349	125	571	52	748	1830
% App. Total	6.4	62	31.5		27.6	68.7	3.7		4.3	61.9	33.8		16.7	76.3	7		
PHF	.679	.817	.646	.745	.840	.918	.667	.883	.625	.831	.819	.864	.919	.921	.765	.917	.957

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Orchard Oaks Apts TIA

File Name : Woodland Rd & Andrews Blvd
Site Code : 250404
Start Date : 4/30/2025
Page No : 1

Groups Printed- Cars + - Lg Trks

	Woodland Rd Southbound			Andrews Blvd Westbound			Woodland Rd Northbound			Andrews Blvd Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
06:00 AM	2	53	13	19	56	4	5	8	4	7	21	1	193
06:15 AM	0	52	17	24	44	5	5	9	6	4	20	4	190
06:30 AM	0	50	16	25	73	5	9	13	10	14	40	5	260
06:45 AM	4	45	16	17	75	5	11	28	6	26	59	3	295
Total	6	200	62	85	248	19	30	58	26	51	140	13	938
07:00 AM	16	73	41	20	83	11	9	55	8	32	37	1	386
07:15 AM	14	86	39	21	99	21	9	27	7	35	48	6	412
07:30 AM	9	57	34	21	85	6	12	20	11	23	60	6	344
07:45 AM	6	71	35	23	73	6	11	51	11	40	81	11	419
Total	45	287	149	85	340	44	41	153	37	130	226	24	1561
08:00 AM	17	79	42	14	68	12	21	24	3	42	80	12	414
08:15 AM	11	82	26	32	72	4	22	37	12	23	91	12	424
08:30 AM	6	97	32	37	76	3	20	37	10	25	96	10	449
08:45 AM	6	50	28	23	78	4	24	32	8	23	74	10	360
Total	40	308	128	106	294	23	87	130	33	113	341	44	1647
03:00 PM	11	40	23	20	56	7	11	50	15	30	90	11	364
03:15 PM	14	72	40	16	57	7	8	47	16	27	115	15	434
03:30 PM	15	51	25	21	77	7	11	54	28	20	116	16	441
03:45 PM	12	50	23	24	88	8	14	71	23	38	141	31	523
Total	52	213	111	81	278	29	44	222	82	115	462	73	1762
04:00 PM	15	44	29	22	98	16	28	76	32	33	147	23	563
04:15 PM	13	40	19	10	70	13	18	51	14	30	146	29	453
04:30 PM	17	47	29	17	64	6	13	69	13	31	123	12	441
04:45 PM	15	47	21	15	60	6	14	43	16	27	153	21	438
Total	60	178	98	64	292	41	73	239	75	121	569	85	1895
05:00 PM	11	44	20	16	74	5	11	71	21	36	168	21	498
05:15 PM	15	53	19	23	64	7	7	70	25	34	146	12	475
05:30 PM	8	53	21	35	63	1	11	46	24	32	158	27	479
05:45 PM	13	53	15	15	59	3	29	58	19	34	123	26	447
Total	47	203	75	89	260	16	58	245	89	136	595	86	1899
Grand Total	250	1389	623	510	1712	172	333	1047	342	666	2333	325	9702
Apprch %	11.1	61.4	27.5	21.3	71.5	7.2	19.3	60.8	19.9	20	70.2	9.8	
Total %	2.6	14.3	6.4	5.3	17.6	1.8	3.4	10.8	3.5	6.9	24	3.3	
Cars +	250	1389	621	509	1709	172	333	1043	339	663	2330	325	9683
% Cars +	100	100	99.7	99.8	99.8	100	100	99.6	99.1	99.5	99.9	100	99.8
Lg Trks	0	0	2	1	3	0	0	4	3	3	3	0	19
% Lg Trks	0	0	0.3	0.2	0.2	0	0	0.4	0.9	0.5	0.1	0	0.2

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Orchard Oaks Apts TIA

File Name : Woodland Rd & Andrews Blvd
Site Code : 250404
Start Date : 4/30/2025
Page No : 2

	Woodland Rd Southbound				Andrews Blvd Westbound				Woodland Rd Northbound				Andrews Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	9	57	34	100	21	85	6	112	12	20	11	43	23	60	6	89	344
07:45 AM	6	71	35	112	23	73	6	102	11	51	11	73	40	81	11	132	419
08:00 AM	17	79	42	138	14	68	12	94	21	24	3	48	42	80	12	134	414
08:15 AM	11	82	26	119	32	72	4	108	22	37	12	71	23	91	12	126	424
Total Volume	43	289	137	469	90	298	28	416	66	132	37	235	128	312	41	481	1601
% App. Total	9.2	61.6	29.2		21.6	71.6	6.7		28.1	56.2	15.7		26.6	64.9	8.5		
PHF	.632	.881	.815	.850	.703	.876	.583	.929	.750	.647	.771	.805	.762	.857	.854	.897	.944
Peak Hour Analysis From 03:45 PM to 04:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:45 PM																	
03:45 PM	12	50	23	85	24	88	8	120	14	71	23	108	38	141	31	210	523
04:00 PM	15	44	29	88	22	98	16	136	28	76	32	136	33	147	23	203	563
04:15 PM	13	40	19	72	10	70	13	93	18	51	14	83	30	146	29	205	453
04:30 PM	17	47	29	93	17	64	6	87	13	69	13	95	31	123	12	166	441
Total Volume	57	181	100	338	73	320	43	436	73	267	82	422	132	557	95	784	1980
% App. Total	16.9	53.6	29.6		16.7	73.4	9.9		17.3	63.3	19.4		16.8	71	12.1		
PHF	.838	.905	.862	.909	.760	.816	.672	.801	.652	.878	.641	.776	.868	.947	.766	.933	.879

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Orchard Oaks Apts TIA

File Name : Mercury Blvd & Southerland Dr
Site Code : 250401
Start Date : 4/29/2025
Page No : 1

Groups Printed- Cars + - Lg Trks

	E Mercury Blvd Southbound			Westbound			E Mercury Blvd Northbound			Southerland Dr Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
06:00 AM	0	77	0	0	0	0	0	55	0	0	0	0	132
06:15 AM	0	100	0	0	0	0	0	54	0	1	0	2	157
06:30 AM	0	150	0	0	0	0	0	84	0	0	0	0	234
06:45 AM	0	267	0	0	0	0	0	79	0	0	0	2	348
Total	0	594	0	0	0	0	0	272	0	1	0	4	871
07:00 AM	0	319	2	0	0	0	1	86	0	1	0	2	411
07:15 AM	0	291	0	0	0	0	0	125	0	6	0	0	422
07:30 AM	1	329	3	0	0	0	1	141	0	5	0	1	481
07:45 AM	0	259	4	0	0	0	1	137	0	3	0	2	406
Total	1	1198	9	0	0	0	3	489	0	15	0	5	1720
08:00 AM	1	261	0	0	0	0	2	136	0	5	0	2	407
08:15 AM	2	193	2	0	0	0	2	138	0	4	0	1	342
08:30 AM	0	204	1	0	0	0	0	136	0	5	0	0	346
08:45 AM	1	163	0	0	0	0	1	111	0	2	0	2	280
Total	4	821	3	0	0	0	5	521	0	16	0	5	1375
03:00 PM	0	233	4	0	0	0	3	154	0	2	0	1	397
03:15 PM	0	226	5	0	0	0	1	168	0	4	0	0	404
03:30 PM	0	207	2	0	0	0	3	140	0	4	0	1	357
03:45 PM	0	313	1	0	0	0	0	158	0	1	0	3	476
Total	0	979	12	0	0	0	7	620	0	11	0	5	1634
04:00 PM	0	314	3	0	0	0	2	133	0	4	0	1	457
04:15 PM	0	313	6	0	0	0	1	145	0	2	0	1	468
04:30 PM	0	353	2	0	0	0	3	136	0	0	0	0	494
04:45 PM	0	342	3	0	0	0	2	123	0	4	0	2	476
Total	0	1322	14	0	0	0	8	537	0	10	0	4	1895
05:00 PM	0	267	4	0	0	0	4	148	0	4	0	5	432
05:15 PM	0	294	1	0	0	0	4	135	0	0	0	0	434
05:30 PM	0	324	3	0	0	0	2	161	0	2	0	0	492
05:45 PM	2	303	6	0	0	0	2	104	0	5	0	0	422
Total	2	1188	14	0	0	0	12	548	0	11	0	5	1780
Grand Total	7	6102	52	0	0	0	35	2987	0	64	0	28	9275
Apprch %	0.1	99	0.8	0	0	0	1.2	98.8	0	69.6	0	30.4	
Total %	0.1	65.8	0.6	0	0	0	0.4	32.2	0	0.7	0	0.3	
Cars +	7	6074	52	0	0	0	35	2977	0	64	0	28	9237
% Cars +	100	99.5	100	0	0	0	100	99.7	0	100	0	100	99.6
Lg Trks	0	28	0	0	0	0	0	10	0	0	0	0	38
% Lg Trks	0	0.5	0	0	0	0	0	0.3	0	0	0	0	0.4

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Orchard Oaks Apts TIA

File Name : Mercury Blvd & Southerland Dr
Site Code : 250401
Start Date : 4/29/2025

	E Mercury Blvd Southbound				Westbound				E Mercury Blvd Northbound				Southerland Dr Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	329	3	333	0	0	0	0	1	141	0	142	5	0	1	6	481
07:45 AM	0	259	4	263	0	0	0	0	1	137	0	138	3	0	2	5	406
08:00 AM	1	261	0	262	0	0	0	0	2	136	0	138	5	0	2	7	407
08:15 AM	2	193	2	197	0	0	0	0	2	138	0	140	4	0	1	5	342
Total Volume	4	1042	9	1055	0	0	0	0	6	552	0	558	17	0	6	23	1636
% App. Total	0.4	98.8	0.9		0	0	0		1.1	98.9	0		73.9	0	26.1		
PHF	.500	.792	.563	.792	.000	.000	.000	.000	.750	.979	.000	.982	.850	.000	.750	.821	.850
Peak Hour Analysis From 03:45 PM to 04:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:45 PM																	
03:45 PM	0	313	1	314	0	0	0	0	0	158	0	158	1	0	3	4	476
04:00 PM	0	314	3	317	0	0	0	0	2	133	0	135	4	0	1	5	457
04:15 PM	0	313	6	319	0	0	0	0	1	145	0	146	2	0	1	3	468
04:30 PM	0	353	2	355	0	0	0	0	3	136	0	139	0	0	0	0	494
Total Volume	0	1293	12	1305	0	0	0	0	6	572	0	578	7	0	5	12	1895
% App. Total	0	99.1	0.9		0	0	0		1	99	0		58.3	0	41.7		
PHF	.000	.916	.500	.919	.000	.000	.000	.000	.500	.905	.000	.915	.438	.000	.417	.600	.959

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Orchard Oaks Apts TIA

File Name : Woodland Rd & Morgan Dr
Site Code : 250403
Start Date : 4/30/2025
Page No : 1

Groups Printed- Cars + - Lg Trks

	Woodland Rd Southbound			Morgan Dr Westbound			Woodland Rd Northbound			Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
06:00 AM	1	72	0	2	0	1	0	15	0	0	0	0	91
06:15 AM	1	81	0	1	0	0	0	14	0	0	0	0	97
06:30 AM	2	93	0	2	0	2	0	23	0	0	0	0	122
06:45 AM	1	70	0	2	0	1	0	37	1	0	0	0	112
Total	5	316	0	7	0	4	0	89	1	0	0	0	422
07:00 AM	1	88	0	2	0	4	0	67	0	0	0	0	162
07:15 AM	4	114	0	4	0	5	0	36	1	0	0	0	164
07:30 AM	1	88	0	1	0	3	0	43	1	0	0	0	137
07:45 AM	0	102	0	0	0	1	0	58	4	0	0	0	165
Total	6	392	0	7	0	13	0	204	6	0	0	0	628
08:00 AM	0	107	0	1	0	1	0	42	1	0	0	0	152
08:15 AM	2	123	0	0	0	2	0	79	1	0	0	0	207
08:30 AM	1	134	0	2	0	3	0	59	2	0	0	0	201
08:45 AM	2	91	0	0	0	4	0	46	2	0	0	0	145
Total	5	455	0	3	0	10	0	226	6	0	0	0	705
03:00 PM	2	63	0	1	0	2	0	71	1	0	0	0	140
03:15 PM	2	93	0	1	0	0	0	89	0	0	0	0	185
03:30 PM	2	59	0	0	0	2	0	96	2	0	0	0	161
03:45 PM	4	84	0	1	0	3	0	103	2	0	0	0	197
Total	10	299	0	3	0	7	0	359	5	0	0	0	683
04:00 PM	7	103	0	0	0	1	0	91	3	0	0	0	205
04:15 PM	3	67	0	0	0	6	0	78	3	0	0	0	157
04:30 PM	2	78	0	0	0	2	0	91	3	0	0	0	176
04:45 PM	5	61	0	1	0	1	0	76	4	0	0	0	148
Total	17	309	0	1	0	10	0	336	13	0	0	0	686
05:00 PM	5	82	0	0	0	0	0	100	4	1	0	0	192
05:15 PM	4	84	0	0	0	2	0	87	1	0	0	0	178
05:30 PM	9	84	0	1	0	2	0	97	2	0	0	0	195
05:45 PM	8	73	0	1	0	5	0	99	4	0	0	0	190
Total	26	323	0	2	0	9	0	383	11	1	0	0	755
Grand Total	69	2094	0	23	0	53	0	1597	42	1	0	0	3879
Apprch %	3.2	96.8	0	30.3	0	69.7	0	97.4	2.6	100	0	0	
Total %	1.8	54	0	0.6	0	1.4	0	41.2	1.1	0	0	0	
Cars +	69	2091	0	23	0	53	0	1592	42	0	0	0	3870
% Cars +	100	99.9	0	100	0	100	0	99.7	100	0	0	0	99.8
Lg Trks	0	3	0	0	0	0	0	5	0	1	0	0	9
% Lg Trks	0	0.1	0	0	0	0	0	0.3	0	100	0	0	0.2

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Orchard Oaks Apts TIA

File Name : Woodland Rd & Morgan Dr
Site Code : 250403
Start Date : 4/30/2025

	Woodland Rd Southbound				Morgan Dr Westbound				Woodland Rd Northbound				Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	88	0	89	1	0	3	4	0	43	1	44	0	0	0	0	137
07:45 AM	0	102	0	102	0	0	1	1	0	58	4	62	0	0	0	0	165
08:00 AM	0	107	0	107	1	0	1	2	0	42	1	43	0	0	0	0	152
08:15 AM	2	123	0	125	0	0	2	2	0	79	1	80	0	0	0	0	207
Total Volume	3	420	0	423	2	0	7	9	0	222	7	229	0	0	0	0	661
% App. Total	0.7	99.3	0		22.2	0	77.8		0	96.9	3.1		0	0	0		
PHF	.375	.854	.000	.846	.500	.000	.583	.563	.000	.703	.438	.716	.000	.000	.000	.000	.798
Peak Hour Analysis From 03:45 PM to 04:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:45 PM																	
03:45 PM	4	84	0	88	1	0	3	4	0	103	2	105	0	0	0	0	197
04:00 PM	7	103	0	110	0	0	1	1	0	91	3	94	0	0	0	0	205
04:15 PM	3	67	0	70	0	0	6	6	0	78	3	81	0	0	0	0	157
04:30 PM	2	78	0	80	0	0	2	2	0	91	3	94	0	0	0	0	176
Total Volume	16	332	0	348	1	0	12	13	0	363	11	374	0	0	0	0	735
% App. Total	4.6	95.4	0		7.7	0	92.3		0	97.1	2.9		0	0	0		
PHF	.571	.806	.000	.791	.250	.000	.500	.542	.000	.881	.917	.890	.000	.000	.000	.000	.896

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	228	99	22	207	139	71	315	7	167	723	47
Future Volume (veh/h)	33	228	99	22	207	139	71	315	7	167	723	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	36	248	108	24	225	151	77	342	8	182	786	51
Adj No. of Lanes	0	1	1	0	2	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	48	333	438	36	336	236	125	893	21	257	1157	518
Arrive On Green	0.20	0.20	0.20	0.17	0.17	0.16	0.07	0.25	0.24	0.14	0.32	0.32
Sat Flow, veh/h	237	1632	1599	206	1943	1363	1792	3570	83	1792	3574	1599
Grp Volume(v), veh/h	284	0	108	218	0	182	77	171	179	182	786	51
Grp Sat Flow(s),veh/h/ln	1869	0	1599	1871	0	1641	1792	1787	1866	1792	1787	1599
Q Serve(g_s), s	9.9	0.0	3.7	7.6	0.0	7.2	2.9	5.5	5.6	6.7	13.3	1.6
Cycle Q Clear(g_c), s	9.9	0.0	3.7	7.6	0.0	7.2	2.9	5.5	5.6	6.7	13.3	1.6
Prop In Lane	0.13		1.00	0.11		0.83	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	381	0	438	323	0	284	125	447	467	257	1157	518
V/C Ratio(X)	0.75	0.00	0.25	0.67	0.00	0.64	0.61	0.38	0.38	0.71	0.68	0.10
Avail Cap(c_a), veh/h	671	0	685	698	0	612	308	1000	1044	617	2615	1170
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	19.7	27.0	0.0	27.2	31.5	21.7	21.7	28.4	20.4	16.5
Incr Delay (d2), s/veh	2.9	0.0	0.3	2.5	0.0	2.4	4.8	0.5	0.5	3.5	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	1.6	4.2	0.0	3.4	1.6	2.8	2.9	3.6	6.7	0.7
LnGrp Delay(d),s/veh	29.0	0.0	20.0	29.4	0.0	29.6	36.3	22.2	22.2	32.0	21.1	16.5
LnGrp LOS	C		C	C		C	D	C	C	C	C	B
Approach Vol, veh/h		392			400			427			1019	
Approach Delay, s/veh		26.5			29.5			24.8			22.8	
Approach LOS		C			C			C			C	

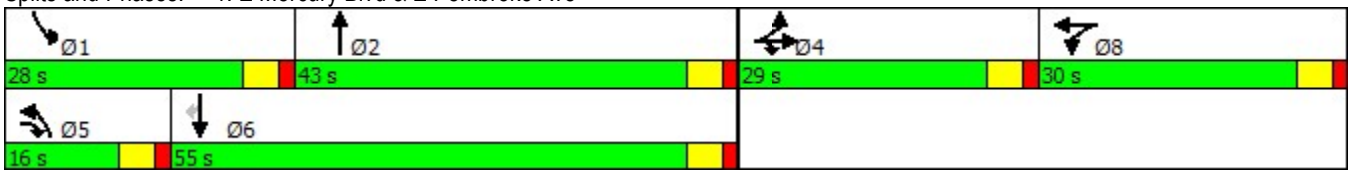
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	21.4		18.2	8.9	26.6		16.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	23.0	38.0		24.0	11.0	50.0		25.0
Max Q Clear Time (g_c+I1), s	8.7	7.6		11.9	4.9	15.3		9.6
Green Ext Time (p_c), s	0.5	6.2		1.3	0.1	6.3		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	25.0
HCM 2010 LOS	C

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	28	43	29	16	55	30
Maximum Split (%)	21.5%	33.1%	22.3%	12.3%	42.3%	23.1%
Minimum Split (s)	9	20	20	9	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		1	1		1	1
Flash Dont Walk (s)		1	1		1	1
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	28	71	0	16	100
End Time (s)	28	71	100	16	71	0
Yield/Force Off (s)	23	66	95	11	66	125
Yield/Force Off 170(s)	23	66	94	11	66	124
Local Start Time (s)	102	0	43	102	118	72
Local Yield (s)	125	38	67	113	38	97
Local Yield 170(s)	125	38	66	113	38	96

Intersection Summary	
Cycle Length	130
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 1: E Mercury Blvd & E Pembroke Ave



Movement	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	45	531	533	1024	549	34
Future Volume (veh/h)	45	531	533	1024	549	34
Number	3	18	1	6	2	12
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	49	577	579	1113	597	37
Adj No. of Lanes	1	1	2	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	446	782	835	2240	1109	69
Arrive On Green	0.25	0.25	0.24	0.63	0.32	0.31
Sat Flow, veh/h	1792	1599	3476	3668	3513	212
Grp Volume(v), veh/h	49	577	579	1113	312	322
Grp Sat Flow(s),veh/h/ln	1792	1599	1738	1787	1787	1844
Q Serve(g_s), s	1.4	16.0	9.8	10.9	9.2	9.2
Cycle Q Clear(g_c), s	1.4	16.0	9.8	10.9	9.2	9.2
Prop In Lane	1.00	1.00	1.00			0.11
Lane Grp Cap(c), veh/h	446	782	835	2240	580	598
V/C Ratio(X)	0.11	0.74	0.69	0.50	0.54	0.54
Avail Cap(c_a), veh/h	446	782	1675	3668	861	889
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	18.7	13.1	22.3	6.5	17.8	17.8
Incr Delay (d2), s/veh	0.1	3.7	1.0	0.2	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	8.8	4.8	5.3	4.6	4.8
LnGrp Delay(d),s/veh	18.8	16.8	23.3	6.7	18.6	18.6
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	626			1692	634	
Approach Delay, s/veh	17.0			12.4	18.6	
Approach LOS	B			B	B	

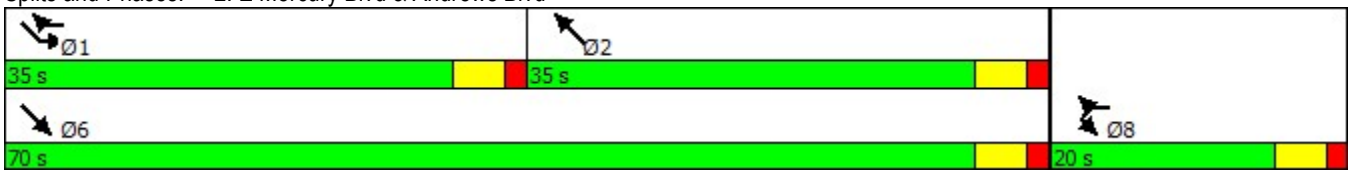
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	19.5	24.9				44.3		20.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	30.0	30.0				65.0		15.0
Max Q Clear Time (g_c+I1), s	11.8	11.2				12.9		18.0
Green Ext Time (p_c), s	2.7	8.6				11.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

Phase Number	1	2	6	8
Movement	SEL	NWT	SET	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	Min	Min	None
Maximum Split (s)	35	35	70	20
Maximum Split (%)	38.9%	38.9%	77.8%	22.2%
Minimum Split (s)	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		1	1	1
Flash Dont Walk (s)		1	1	1
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	35	0	70
End Time (s)	35	70	70	0
Yield/Force Off (s)	30	65	65	85
Yield/Force Off 170(s)	30	65	65	84
Local Start Time (s)	55	0	55	35
Local Yield (s)	85	30	30	50
Local Yield 170(s)	85	30	30	49

Intersection Summary		
Cycle Length		90
Control Type	Actuated-Uncoordinated	
Natural Cycle		60

Splits and Phases: 2: E Mercury Blvd & Andrews Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	264	72	192	298	13	16	112	51	12	267	97
Future Volume (veh/h)	76	264	72	192	298	13	16	112	51	12	267	97
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	83	287	78	209	324	14	17	122	55	13	290	105
Adj No. of Lanes	0	2	0	0	2	0	0	2	0	0	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	146	524	149	347	581	26	130	523	222	101	586	205
Arrive On Green	0.23	0.23	0.20	0.26	0.26	0.24	0.24	0.24	0.21	0.24	0.24	0.21
Sat Flow, veh/h	644	2314	657	1338	2241	99	139	2221	943	52	2488	871
Grp Volume(v), veh/h	238	0	210	283	0	264	104	0	90	220	0	188
Grp Sat Flow(s),veh/h/ln	1849	0	1765	1814	0	1864	1758	0	1545	1853	0	1558
Q Serve(g_s), s	4.9	0.0	4.5	5.9	0.0	5.3	0.0	0.0	2.1	0.0	0.0	4.6
Cycle Q Clear(g_c), s	4.9	0.0	4.5	5.9	0.0	5.3	1.9	0.0	2.1	4.4	0.0	4.6
Prop In Lane	0.35		0.37	0.74		0.05	0.16		0.61	0.06		0.56
Lane Grp Cap(c), veh/h	419	0	400	471	0	483	511	0	364	525	0	367
V/C Ratio(X)	0.57	0.00	0.52	0.60	0.00	0.55	0.20	0.00	0.25	0.42	0.00	0.51
Avail Cap(c_a), veh/h	1717	0	1639	1558	0	1601	1687	0	1471	1830	0	1483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.8	0.0	14.8	14.0	0.0	13.8	13.3	0.0	13.6	14.3	0.0	14.6
Incr Delay (d2), s/veh	1.2	0.0	1.1	1.2	0.0	1.0	0.2	0.0	0.4	0.5	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	2.3	3.1	0.0	2.8	1.0	0.0	0.9	2.3	0.0	2.1
LnGrp Delay(d),s/veh	16.0	0.0	15.9	15.2	0.0	14.7	13.5	0.0	14.0	14.8	0.0	15.7
LnGrp LOS	B		B	B		B	B		B	B		B
Approach Vol, veh/h		448			547			194			408	
Approach Delay, s/veh		15.9			15.0			13.7			15.2	
Approach LOS		B			B			B			B	

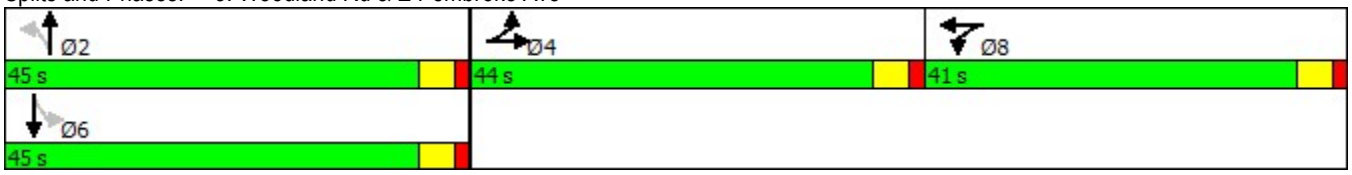
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		14.2		13.8		14.2		15.2
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		40.0		39.0		40.0		36.0
Max Q Clear Time (g_c+I1), s		4.1		6.9		6.6		7.9
Green Ext Time (p_c), s		2.6		1.9		2.6		2.3

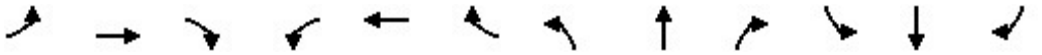
Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Min	None	Min	None
Maximum Split (s)	45	44	45	41
Maximum Split (%)	34.6%	33.8%	34.6%	31.5%
Minimum Split (s)	20	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	1	1	1	1
Flash Dont Walk (s)	1	1	1	1
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	45	0	89
End Time (s)	45	89	45	0
Yield/Force Off (s)	40	84	40	125
Yield/Force Off 170(s)	40	83	40	124
Local Start Time (s)	0	45	0	89
Local Yield (s)	40	84	40	125
Local Yield 170(s)	40	83	40	124

Intersection Summary		
Cycle Length		130
Control Type	Actuated-Uncoordinated	
Natural Cycle		60

Splits and Phases: 3: Woodland Rd & E Pembroke Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	312	41	90	298	28	66	132	37	43	289	137
Future Volume (veh/h)	128	312	41	90	298	28	66	132	37	43	289	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	139	339	45	98	324	30	72	143	40	47	314	149
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	223	788	104	169	721	66	396	689	187	514	556	258
Arrive On Green	0.12	0.25	0.23	0.09	0.22	0.20	0.07	0.25	0.23	0.06	0.23	0.21
Sat Flow, veh/h	1792	3176	418	1792	3310	305	1792	2781	754	1792	2372	1102
Grp Volume(v), veh/h	139	190	194	98	174	180	72	90	93	47	235	228
Grp Sat Flow(s),veh/h/ln	1792	1787	1807	1792	1787	1827	1792	1787	1748	1792	1787	1687
Q Serve(g_s), s	3.4	4.1	4.2	2.4	3.9	3.9	1.3	1.8	2.0	0.9	5.3	5.5
Cycle Q Clear(g_c), s	3.4	4.1	4.2	2.4	3.9	3.9	1.3	1.8	2.0	0.9	5.3	5.5
Prop In Lane	1.00		0.23	1.00		0.17	1.00		0.43	1.00		0.65
Lane Grp Cap(c), veh/h	223	443	448	169	389	398	396	443	433	514	419	396
V/C Ratio(X)	0.62	0.43	0.43	0.58	0.45	0.45	0.18	0.20	0.21	0.09	0.56	0.58
Avail Cap(c_a), veh/h	625	1208	1222	821	1403	1435	889	1013	991	835	819	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	14.5	14.6	19.9	15.5	15.6	11.8	13.7	13.9	11.7	15.5	15.8
Incr Delay (d2), s/veh	2.8	0.7	0.7	3.1	0.8	0.8	0.2	0.2	0.2	0.1	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.1	2.1	1.3	2.0	2.0	0.7	0.9	1.0	0.4	2.7	2.7
LnGrp Delay(d),s/veh	21.9	15.2	15.3	23.0	16.3	16.4	12.0	13.9	14.1	11.8	16.6	17.2
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		523			452			255			510	
Approach Delay, s/veh		17.0			17.8			13.4			16.4	
Approach LOS		B			B			B			B	

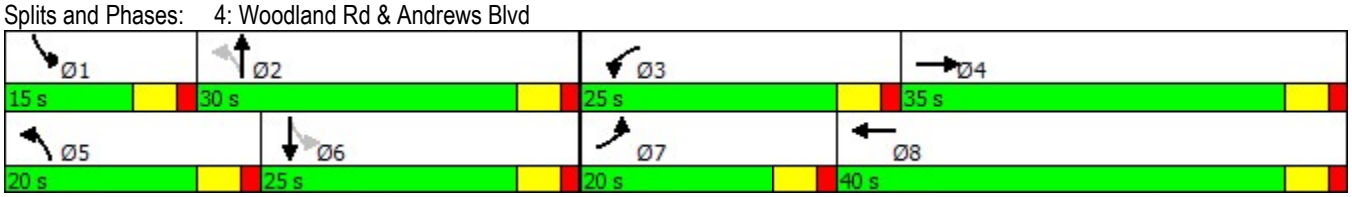
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	15.4	8.3	15.4	7.4	14.8	9.7	14.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	10.0	25.0	20.0	30.0	15.0	20.0	15.0	35.0
Max Q Clear Time (g_c+I1), s	2.9	4.0	4.4	6.2	3.3	7.5	5.4	5.9
Green Ext Time (p_c), s	0.0	2.6	0.2	3.0	0.1	2.2	0.3	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	None	Min	None	None
Maximum Split (s)	15	30	25	35	20	25	20	40
Maximum Split (%)	14.3%	28.6%	23.8%	33.3%	19.0%	23.8%	19.0%	38.1%
Minimum Split (s)	9	20	9	20	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		1		1		1	1	1
Flash Dont Walk (s)		1		1		1	1	1
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	15	45	70	0	20	45	65
End Time (s)	15	45	70	0	20	45	65	0
Yield/Force Off (s)	10	40	65	100	15	40	60	100
Yield/Force Off 170(s)	10	40	65	99	15	40	59	99
Local Start Time (s)	85	100	25	50	85	0	25	45
Local Yield (s)	95	20	45	80	100	20	40	80
Local Yield 170(s)	95	20	45	79	100	20	39	79

Intersection Summary	
Cycle Length	105
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 4: Woodland Rd & Andrews Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	500	178	19	209	164	101	375	11	251	860	65
Future Volume (veh/h)	53	500	178	19	209	164	101	375	11	251	860	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	58	543	193	21	227	178	110	408	12	273	935	71
Adj No. of Lanes	0	1	1	0	2	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	56	528	632	26	281	231	149	792	23	320	1140	510
Arrive On Green	0.31	0.31	0.31	0.15	0.15	0.15	0.08	0.22	0.22	0.18	0.32	0.32
Sat Flow, veh/h	181	1691	1599	168	1823	1498	1792	3546	104	1792	3574	1599
Grp Volume(v), veh/h	601	0	193	234	0	192	110	205	215	273	935	71
Grp Sat Flow(s),veh/h/ln	1872	0	1599	1873	0	1617	1792	1787	1863	1792	1787	1599
Q Serve(g_s), s	38.0	0.0	10.1	14.7	0.0	13.9	7.3	12.3	12.3	18.0	29.4	3.9
Cycle Q Clear(g_c), s	38.0	0.0	10.1	14.7	0.0	13.9	7.3	12.3	12.3	18.0	29.4	3.9
Prop In Lane	0.10		1.00	0.09		0.93	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	585	0	632	289	0	249	149	399	416	320	1140	510
V/C Ratio(X)	1.03	0.00	0.31	0.81	0.00	0.77	0.74	0.51	0.52	0.85	0.82	0.14
Avail Cap(c_a), veh/h	585	0	632	385	0	332	177	426	444	471	1439	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	0.0	25.3	49.7	0.0	49.9	54.5	41.5	41.5	48.4	38.2	29.5
Incr Delay (d2), s/veh	44.6	0.0	0.3	9.2	0.0	7.6	12.6	1.0	1.0	9.6	3.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.7	0.0	4.5	8.3	0.0	6.7	4.1	6.2	6.4	9.7	14.9	1.7
LnGrp Delay(d),s/veh	86.5	0.0	25.6	59.0	0.0	57.5	67.1	42.5	42.5	58.0	41.4	29.7
LnGrp LOS	F		C	E		E	E	D	D	E	D	C
Approach Vol, veh/h		794			426			530			1279	
Approach Delay, s/veh		71.7			58.3			47.6			44.3	
Approach LOS		E			E			D			D	

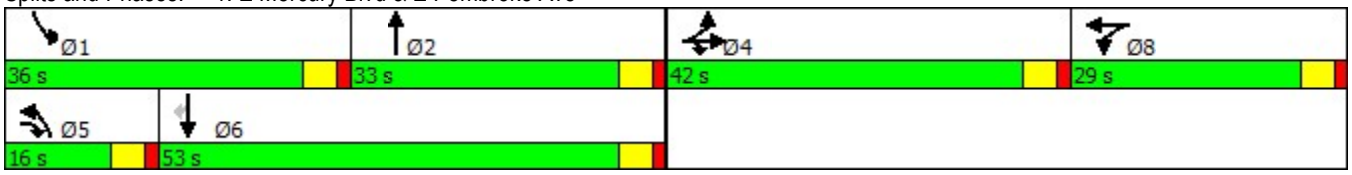
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.8	31.2		42.0	14.1	42.8		22.8
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	31.0	28.0		37.0	11.0	48.0		24.0
Max Q Clear Time (g_c+I1), s	20.0	14.3		40.0	9.3	31.4		16.7
Green Ext Time (p_c), s	0.8	5.9		0.0	0.0	6.5		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	54.0
HCM 2010 LOS	D

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	36	33	42	16	53	29
Maximum Split (%)	25.7%	23.6%	30.0%	11.4%	37.9%	20.7%
Minimum Split (s)	9	20	20	9	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		1	1		1	1
Flash Dont Walk (s)		1	1		1	1
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	36	69	0	16	111
End Time (s)	36	69	111	16	69	0
Yield/Force Off (s)	31	64	106	11	64	135
Yield/Force Off 170(s)	31	64	105	11	64	134
Local Start Time (s)	104	0	33	104	120	75
Local Yield (s)	135	28	70	115	28	99
Local Yield 170(s)	135	28	69	115	28	98

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 1: E Mercury Blvd & E Pembroke Ave



Movement	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	46	449	731	1228	564	52
Future Volume (veh/h)	46	449	731	1228	564	52
Number	3	18	1	6	2	12
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	50	488	795	1335	613	57
Adj No. of Lanes	1	1	2	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	467	853	949	2344	1127	105
Arrive On Green	0.26	0.26	0.27	0.66	0.34	0.33
Sat Flow, veh/h	1792	1599	3476	3668	3401	307
Grp Volume(v), veh/h	50	488	795	1335	331	339
Grp Sat Flow(s),veh/h/ln	1792	1599	1738	1787	1787	1827
Q Serve(g_s), s	2.0	19.6	20.6	19.6	14.3	14.4
Cycle Q Clear(g_c), s	2.0	19.6	20.6	19.6	14.3	14.4
Prop In Lane	1.00	1.00	1.00			0.17
Lane Grp Cap(c), veh/h	467	853	949	2344	609	623
V/C Ratio(X)	0.11	0.57	0.84	0.57	0.54	0.54
Avail Cap(c_a), veh/h	694	1056	1128	3930	1310	1339
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	26.9	15.0	32.7	9.0	25.5	25.5
Incr Delay (d2), s/veh	0.1	0.6	4.9	0.2	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.8	10.5	9.5	7.2	7.4
LnGrp Delay(d),s/veh	27.0	15.6	37.6	9.2	26.2	26.3
LnGrp LOS	C	B	D	A	C	C
Approach Vol, veh/h	538			2130	670	
Approach Delay, s/veh	16.6			19.8	26.2	
Approach LOS	B			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	30.1	36.6				66.6		28.9
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	30.0	69.0				104.0		36.0
Max Q Clear Time (g_c+I1), s	22.6	16.4				21.6		21.6
Green Ext Time (p_c), s	2.5	15.2				16.0		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Phase Number	1	2	6	8
Movement	SEL	NWT	SET	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	Min	Min	None
Maximum Split (s)	35	74	109	41
Maximum Split (%)	23.3%	49.3%	72.7%	27.3%
Minimum Split (s)	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		1	1	1
Flash Dont Walk (s)		1	1	1
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	35	0	109
End Time (s)	35	109	109	0
Yield/Force Off (s)	30	104	104	145
Yield/Force Off 170(s)	30	104	104	144
Local Start Time (s)	115	0	115	74
Local Yield (s)	145	69	69	110
Local Yield 170(s)	145	69	69	109

Intersection Summary		
Cycle Length		150
Control Type	Actuated-Uncoordinated	
Natural Cycle		60

Splits and Phases: 2: E Mercury Blvd & Andrews Blvd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	571	52	121	301	16	15	216	118	19	183	93
Future Volume (veh/h)	125	571	52	121	301	16	15	216	118	19	183	93
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	136	621	57	132	327	17	16	235	128	21	199	101
Adj No. of Lanes	0	2	0	0	2	0	0	2	0	0	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	195	937	90	212	559	30	90	474	246	102	472	228
Arrive On Green	0.33	0.33	0.31	0.22	0.22	0.20	0.22	0.22	0.20	0.22	0.22	0.20
Sat Flow, veh/h	588	2826	271	975	2576	138	70	2157	1118	112	2145	1038
Grp Volume(v), veh/h	428	0	386	248	0	228	206	0	173	172	0	149
Grp Sat Flow(s),veh/h/ln	1852	0	1833	1832	0	1857	1830	0	1515	1767	0	1529
Q Serve(g_s), s	10.4	0.0	9.3	6.4	0.0	5.7	0.0	0.0	5.3	0.0	0.0	4.4
Cycle Q Clear(g_c), s	10.4	0.0	9.3	6.4	0.0	5.7	5.0	0.0	5.3	5.3	0.0	4.4
Prop In Lane	0.32		0.15	0.53		0.07	0.08		0.74	0.12		0.68
Lane Grp Cap(c), veh/h	614	0	608	398	0	403	477	0	333	466	0	336
V/C Ratio(X)	0.70	0.00	0.63	0.62	0.00	0.57	0.43	0.00	0.52	0.37	0.00	0.44
Avail Cap(c_a), veh/h	1893	0	1874	1202	0	1218	1493	0	1198	1441	0	1209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.1	0.0	14.7	18.4	0.0	18.2	17.7	0.0	18.2	17.4	0.0	17.8
Incr Delay (d2), s/veh	1.4	0.0	1.1	1.6	0.0	1.3	0.6	0.0	1.3	0.5	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	4.8	3.3	0.0	3.1	2.7	0.0	2.3	2.2	0.0	1.9
LnGrp Delay(d),s/veh	16.5	0.0	15.8	20.0	0.0	19.4	18.3	0.0	19.4	17.9	0.0	18.7
LnGrp LOS	B		B	B		B	B		B	B		B
Approach Vol, veh/h		814			476			379			321	
Approach Delay, s/veh		16.2			19.7			18.8			18.2	
Approach LOS		B			B			B			B	

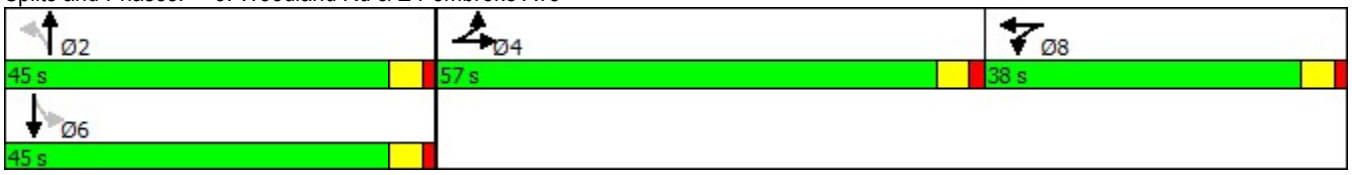
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		15.4		21.2		15.4		15.2
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		40.0		52.0		40.0		33.0
Max Q Clear Time (g_c+I1), s		7.3		12.4		7.3		8.4
Green Ext Time (p_c), s		3.1		3.8		3.1		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Min	None	Min	None
Maximum Split (s)	45	57	45	38
Maximum Split (%)	32.1%	40.7%	32.1%	27.1%
Minimum Split (s)	20	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	1	1	1	1
Flash Dont Walk (s)	1	1	1	1
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	45	0	102
End Time (s)	45	102	45	0
Yield/Force Off (s)	40	97	40	135
Yield/Force Off 170(s)	40	96	40	134
Local Start Time (s)	0	45	0	102
Local Yield (s)	40	97	40	135
Local Yield 170(s)	40	96	40	134

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 3: Woodland Rd & E Pembroke Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	557	95	73	320	43	73	267	82	57	181	100
Future Volume (veh/h)	132	557	95	73	320	43	73	267	82	57	181	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	143	605	103	79	348	47	79	290	89	62	197	109
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	225	985	167	139	870	117	410	573	172	379	461	245
Arrive On Green	0.13	0.32	0.30	0.08	0.27	0.25	0.07	0.21	0.19	0.07	0.20	0.18
Sat Flow, veh/h	1792	3057	519	1792	3169	425	1792	2709	816	1792	2259	1198
Grp Volume(v), veh/h	143	353	355	79	195	200	79	189	190	62	154	152
Grp Sat Flow(s),veh/h/ln	1792	1787	1790	1792	1787	1806	1792	1787	1737	1792	1787	1670
Q Serve(g_s), s	3.8	8.3	8.4	2.1	4.4	4.5	1.7	4.6	4.8	1.3	3.7	4.0
Cycle Q Clear(g_c), s	3.8	8.3	8.4	2.1	4.4	4.5	1.7	4.6	4.8	1.3	3.7	4.0
Prop In Lane	1.00		0.29	1.00		0.24	1.00		0.47	1.00		0.72
Lane Grp Cap(c), veh/h	225	576	577	139	491	496	410	378	367	379	365	341
V/C Ratio(X)	0.64	0.61	0.62	0.57	0.40	0.40	0.19	0.50	0.52	0.16	0.42	0.45
Avail Cap(c_a), veh/h	577	1116	1117	758	1296	1310	856	936	910	657	756	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	14.2	14.4	22.1	14.7	14.8	13.7	17.3	17.5	13.9	17.2	17.6
Incr Delay (d2), s/veh	3.0	1.1	1.1	3.6	0.5	0.5	0.2	1.0	1.1	0.2	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.2	4.2	1.2	2.2	2.3	0.8	2.4	2.4	0.6	1.9	1.9
LnGrp Delay(d),s/veh	23.6	15.3	15.4	25.7	15.2	15.3	13.9	18.3	18.7	14.1	18.0	18.5
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		851			474			458			368	
Approach Delay, s/veh		16.7			17.0			17.7			17.6	
Approach LOS		B			B			B			B	

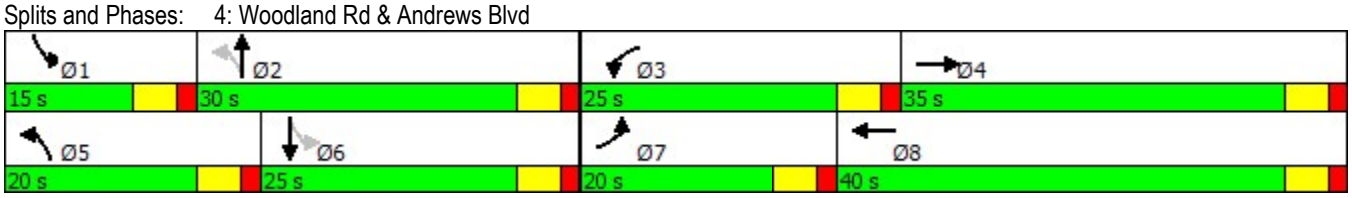
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	14.5	7.9	20.0	7.7	14.1	10.2	17.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	10.0	25.0	20.0	30.0	15.0	20.0	15.0	35.0
Max Q Clear Time (g_c+I1), s	3.3	6.8	4.1	10.4	3.7	6.0	5.8	6.5
Green Ext Time (p_c), s	0.1	2.7	0.2	4.6	0.1	2.5	0.3	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	None	Min	None	None
Maximum Split (s)	15	30	25	35	20	25	20	40
Maximum Split (%)	14.3%	28.6%	23.8%	33.3%	19.0%	23.8%	19.0%	38.1%
Minimum Split (s)	9	20	9	20	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		1		1		1	1	1
Flash Dont Walk (s)		1		1		1	1	1
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	15	45	70	0	20	45	65
End Time (s)	15	45	70	0	20	45	65	0
Yield/Force Off (s)	10	40	65	100	15	40	60	100
Yield/Force Off 170(s)	10	40	65	99	15	40	59	99
Local Start Time (s)	85	100	25	50	85	0	25	45
Local Yield (s)	95	20	45	80	100	20	40	80
Local Yield 170(s)	95	20	45	79	100	20	39	79

Intersection Summary	
Cycle Length	105
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 4: Woodland Rd & Andrews Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	228	99	22	207	139	71	315	7	167	723	47
Future Volume (veh/h)	33	228	99	22	207	139	71	315	7	167	723	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	36	248	108	24	225	151	77	342	8	182	786	51
Adj No. of Lanes	0	1	1	0	2	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	49	338	443	35	332	233	125	887	21	258	1152	515
Arrive On Green	0.21	0.21	0.21	0.17	0.17	0.16	0.07	0.25	0.23	0.14	0.32	0.32
Sat Flow, veh/h	237	1632	1599	206	1943	1363	1792	3570	83	1792	3574	1599
Grp Volume(v), veh/h	284	0	108	218	0	182	77	171	179	182	786	51
Grp Sat Flow(s),veh/h/ln	1869	0	1599	1871	0	1641	1792	1787	1866	1792	1787	1599
Q Serve(g_s), s	9.9	0.0	3.6	7.6	0.0	7.2	2.9	5.5	5.6	6.7	13.3	1.6
Cycle Q Clear(g_c), s	9.9	0.0	3.6	7.6	0.0	7.2	2.9	5.5	5.6	6.7	13.3	1.6
Prop In Lane	0.13		1.00	0.11		0.83	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	387	0	443	319	0	280	125	444	464	258	1152	515
V/C Ratio(X)	0.73	0.00	0.24	0.68	0.00	0.65	0.61	0.38	0.39	0.71	0.68	0.10
Avail Cap(c_a), veh/h	913	0	893	591	0	518	309	873	911	617	2361	1056
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	19.5	27.1	0.0	27.3	31.5	21.7	21.8	28.4	20.5	16.5
Incr Delay (d2), s/veh	2.7	0.0	0.3	2.6	0.0	2.5	4.8	0.5	0.5	3.5	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	1.6	4.2	0.0	3.4	1.6	2.8	2.9	3.6	6.7	0.7
LnGrp Delay(d),s/veh	28.5	0.0	19.8	29.7	0.0	29.9	36.3	22.3	22.3	32.0	21.2	16.6
LnGrp LOS	C		B	C		C	D	C	C	C	C	B
Approach Vol, veh/h		392			400			427			1019	
Approach Delay, s/veh		26.1			29.8			24.8			22.9	
Approach LOS		C			C			C			C	

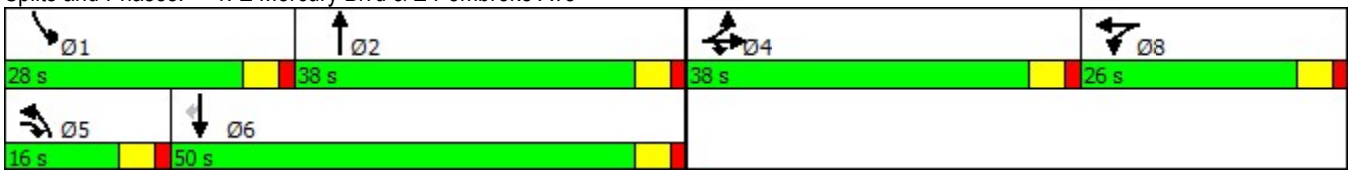
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	21.3		18.4	8.9	26.4		15.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	23.0	33.0		33.0	11.0	45.0		21.0
Max Q Clear Time (g_c+I1), s	8.7	7.6		11.9	4.9	15.3		9.6
Green Ext Time (p_c), s	0.5	6.0		1.5	0.1	6.1		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.1
HCM 2010 LOS	C

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	28	38	38	16	50	26
Maximum Split (%)	21.5%	29.2%	29.2%	12.3%	38.5%	20.0%
Minimum Split (s)	9	20	20	9	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		1	1		1	1
Flash Dont Walk (s)		1	1		1	1
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	28	66	0	16	104
End Time (s)	28	66	104	16	66	0
Yield/Force Off (s)	23	61	99	11	61	125
Yield/Force Off 170(s)	23	61	98	11	61	124
Local Start Time (s)	102	0	38	102	118	76
Local Yield (s)	125	33	71	113	33	97
Local Yield 170(s)	125	33	70	113	33	96

Intersection Summary	
Cycle Length	130
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 1: E Mercury Blvd & E Pembroke Ave



Movement	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	45	531	533	1024	549	34
Future Volume (veh/h)	45	531	533	1024	549	34
Number	3	18	1	6	2	12
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	49	577	579	1113	597	37
Adj No. of Lanes	1	1	2	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	535	830	765	2003	923	57
Arrive On Green	0.30	0.30	0.22	0.56	0.27	0.25
Sat Flow, veh/h	1792	1599	3476	3668	3513	212
Grp Volume(v), veh/h	49	577	579	1113	312	322
Grp Sat Flow(s),veh/h/ln	1792	1599	1738	1787	1787	1844
Q Serve(g_s), s	1.1	15.4	8.9	11.3	8.8	8.8
Cycle Q Clear(g_c), s	1.1	15.4	8.9	11.3	8.8	8.8
Prop In Lane	1.00	1.00	1.00			0.11
Lane Grp Cap(c), veh/h	535	830	765	2003	483	498
V/C Ratio(X)	0.09	0.70	0.76	0.56	0.65	0.65
Avail Cap(c_a), veh/h	535	830	855	2199	534	551
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	14.4	10.3	20.8	8.0	18.4	18.4
Incr Delay (d2), s/veh	0.1	2.5	3.5	0.3	2.3	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	7.2	4.6	5.5	4.6	4.8
LnGrp Delay(d),s/veh	14.4	12.8	24.3	8.2	20.7	20.7
LnGrp LOS	B	B	C	A	C	C
Approach Vol, veh/h	626			1692	634	
Approach Delay, s/veh	13.0			13.7	20.7	
Approach LOS	B			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	16.5	19.4				35.9		21.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0				34.0		16.0
Max Q Clear Time (g_c+I1), s	10.9	10.8				13.3		17.4
Green Ext Time (p_c), s	0.7	3.6				9.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.1
HCM 2010 LOS	B

Phase Number	1	2	6	8
Movement	SEL	NWT	SET	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	Min	Min	None
Maximum Split (s)	18	21	39	21
Maximum Split (%)	30.0%	35.0%	65.0%	35.0%
Minimum Split (s)	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		1	1	1
Flash Dont Walk (s)		1	1	1
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	18	0	39
End Time (s)	18	39	39	0
Yield/Force Off (s)	13	34	34	55
Yield/Force Off 170(s)	13	34	34	54
Local Start Time (s)	42	0	42	21
Local Yield (s)	55	16	16	37
Local Yield 170(s)	55	16	16	36

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 2: E Mercury Blvd & Andrews Blvd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	264	72	192	298	13	16	112	51	12	267	97
Future Volume (veh/h)	76	264	72	192	298	13	16	112	51	12	267	97
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	83	287	78	209	324	14	17	122	55	13	290	105
Adj No. of Lanes	0	2	0	0	2	0	0	2	0	0	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	146	523	148	348	583	26	130	522	222	101	585	205
Arrive On Green	0.23	0.23	0.20	0.26	0.26	0.24	0.24	0.24	0.21	0.24	0.24	0.21
Sat Flow, veh/h	644	2314	657	1338	2241	99	139	2221	943	52	2488	871
Grp Volume(v), veh/h	238	0	210	283	0	264	104	0	90	220	0	188
Grp Sat Flow(s),veh/h/ln	1849	0	1765	1814	0	1864	1757	0	1545	1853	0	1558
Q Serve(g_s), s	4.9	0.0	4.5	5.9	0.0	5.3	0.0	0.0	2.1	0.0	0.0	4.6
Cycle Q Clear(g_c), s	4.9	0.0	4.5	5.9	0.0	5.3	1.9	0.0	2.1	4.4	0.0	4.6
Prop In Lane	0.35		0.37	0.74		0.05	0.16		0.61	0.06		0.56
Lane Grp Cap(c), veh/h	418	0	399	472	0	485	511	0	364	524	0	367
V/C Ratio(X)	0.57	0.00	0.53	0.60	0.00	0.54	0.20	0.00	0.25	0.42	0.00	0.51
Avail Cap(c_a), veh/h	1588	0	1516	1811	0	1860	1573	0	1363	1703	0	1374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.8	0.0	14.8	14.0	0.0	13.8	13.3	0.0	13.6	14.3	0.0	14.6
Incr Delay (d2), s/veh	1.2	0.0	1.1	1.2	0.0	1.0	0.2	0.0	0.4	0.5	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	2.3	3.1	0.0	2.8	1.0	0.0	0.9	2.3	0.0	2.1
LnGrp Delay(d),s/veh	16.0	0.0	15.9	15.2	0.0	14.7	13.5	0.0	14.0	14.8	0.0	15.7
LnGrp LOS	B		B	B		B	B		B	B		B
Approach Vol, veh/h		448			547			194			408	
Approach Delay, s/veh		16.0			15.0			13.7			15.2	
Approach LOS		B			B			B			B	

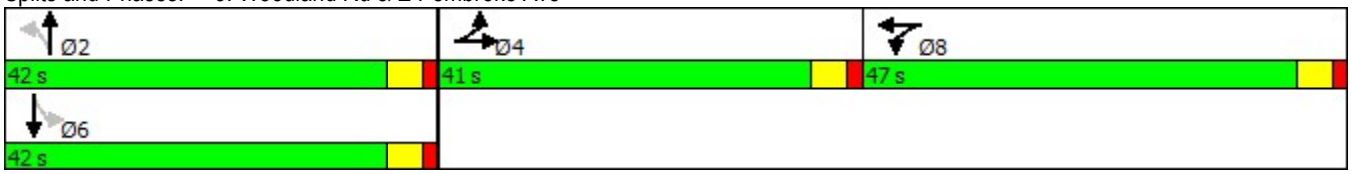
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		14.1		13.7		14.1		15.2
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		37.0		36.0		37.0		42.0
Max Q Clear Time (g_c+I1), s		4.1		6.9		6.6		7.9
Green Ext Time (p_c), s		2.6		1.9		2.6		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Min	None	Min	None
Maximum Split (s)	42	41	42	47
Maximum Split (%)	32.3%	31.5%	32.3%	36.2%
Minimum Split (s)	20	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	1	1	1	1
Flash Dont Walk (s)	1	1	1	1
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	42	0	83
End Time (s)	42	83	42	0
Yield/Force Off (s)	37	78	37	125
Yield/Force Off 170(s)	37	77	37	124
Local Start Time (s)	0	42	0	83
Local Yield (s)	37	78	37	125
Local Yield 170(s)	37	77	37	124

Intersection Summary	
Cycle Length	130
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 3: Woodland Rd & E Pembroke Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	312	41	90	298	28	66	132	37	43	289	137
Future Volume (veh/h)	128	312	41	90	298	28	66	132	37	43	289	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	139	339	45	98	324	30	72	143	40	47	314	149
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	226	768	101	167	691	64	404	709	192	523	574	266
Arrive On Green	0.13	0.24	0.22	0.09	0.21	0.19	0.07	0.25	0.23	0.06	0.24	0.22
Sat Flow, veh/h	1792	3176	418	1792	3310	305	1792	2781	754	1792	2372	1102
Grp Volume(v), veh/h	139	190	194	98	174	180	72	90	93	47	235	228
Grp Sat Flow(s),veh/h/ln	1792	1787	1807	1792	1787	1827	1792	1787	1748	1792	1787	1687
Q Serve(g_s), s	3.4	4.1	4.2	2.4	3.9	4.0	1.3	1.8	1.9	0.9	5.3	5.5
Cycle Q Clear(g_c), s	3.4	4.1	4.2	2.4	3.9	4.0	1.3	1.8	1.9	0.9	5.3	5.5
Prop In Lane	1.00		0.23	1.00		0.17	1.00		0.43	1.00		0.65
Lane Grp Cap(c), veh/h	226	432	437	167	373	381	404	456	446	523	432	408
V/C Ratio(X)	0.61	0.44	0.44	0.59	0.47	0.47	0.18	0.20	0.21	0.09	0.54	0.56
Avail Cap(c_a), veh/h	860	1092	1104	586	819	837	545	1131	1106	688	1131	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	14.7	14.9	19.9	15.9	16.0	11.5	13.4	13.6	11.5	15.2	15.5
Incr Delay (d2), s/veh	2.7	0.7	0.7	3.3	0.9	0.9	0.2	0.2	0.2	0.1	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.1	2.1	1.3	2.0	2.1	0.6	0.9	1.0	0.4	2.7	2.7
LnGrp Delay(d),s/veh	21.7	15.4	15.6	23.2	16.8	16.9	11.7	13.6	13.8	11.5	16.2	16.7
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		523			452			255			510	
Approach Delay, s/veh		17.1			18.2			13.2			16.0	
Approach LOS		B			B			B			B	

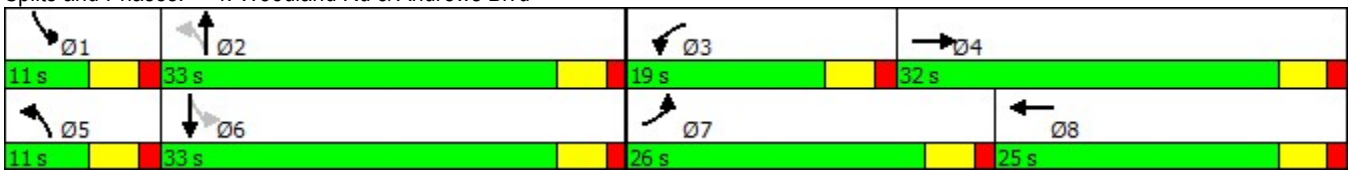
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	15.7	8.3	15.1	7.4	15.1	9.8	13.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	6.0	28.0	14.0	27.0	6.0	28.0	21.0	20.0
Max Q Clear Time (g_c+I1), s	2.9	3.9	4.4	6.2	3.3	7.5	5.4	6.0
Green Ext Time (p_c), s	0.0	2.7	0.2	2.9	0.0	2.6	0.4	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	None	Min	None	None
Maximum Split (s)	11	33	19	32	11	33	26	25
Maximum Split (%)	11.6%	34.7%	20.0%	33.7%	11.6%	34.7%	27.4%	26.3%
Minimum Split (s)	9	20	9	20	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		1		1		1	1	1
Flash Dont Walk (s)		1		1		1	1	1
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	44	63	0	11	44	70
End Time (s)	11	44	63	0	11	44	70	0
Yield/Force Off (s)	6	39	58	90	6	39	65	90
Yield/Force Off 170(s)	6	39	58	89	6	39	64	89
Local Start Time (s)	84	0	33	52	84	0	33	59
Local Yield (s)	90	28	47	79	90	28	54	79
Local Yield 170(s)	90	28	47	78	90	28	53	78

Intersection Summary	
Cycle Length	95
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 4: Woodland Rd & Andrews Blvd



Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	0	6	0	0	0	6	552	0	4	1042	9
Future Vol, veh/h	17	0	6	0	0	0	6	552	0	4	1042	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
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, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	18	0	7	0	0	0	7	600	0	4	1133	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1459	1759	571	1188	1764	300	1142	0	0	600	0	0
Stage 1	1146	1146	-	613	613	-	-	-	-	-	-	-
Stage 2	313	613	-	575	1151	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	92	86	469	146	85	702	619	-	-	987	-	-
Stage 1	215	276	-	451	486	-	-	-	-	-	-	-
Stage 2	678	486	-	475	275	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	91	85	469	142	84	702	619	-	-	987	-	-
Mov Cap-2 Maneuver	91	85	-	142	84	-	-	-	-	-	-	-
Stage 1	213	275	-	446	481	-	-	-	-	-	-	-
Stage 2	670	481	-	466	274	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	44.8	0	0.1	0
HCM LOS	E	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	619	-	-	115	-	987	-	-
HCM Lane V/C Ratio	0.011	-	-	0.217	-	0.004	-	-
HCM Control Delay (s)	10.9	-	-	44.8	0	8.7	-	-
HCM Lane LOS	B	-	-	E	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	500	178	19	209	164	101	375	11	251	860	65
Future Volume (veh/h)	53	500	178	19	209	164	101	375	11	251	860	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	58	543	193	21	227	178	110	408	12	273	935	71
Adj No. of Lanes	0	1	1	0	2	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	60	563	645	26	279	230	126	679	20	289	1009	451
Arrive On Green	0.33	0.33	0.33	0.15	0.15	0.14	0.07	0.19	0.18	0.16	0.28	0.28
Sat Flow, veh/h	181	1691	1599	168	1823	1498	1792	3546	104	1792	3574	1599
Grp Volume(v), veh/h	601	0	193	234	0	192	110	205	215	273	935	71
Grp Sat Flow(s),veh/h/ln	1872	0	1599	1873	0	1617	1792	1787	1863	1792	1787	1599
Q Serve(g_s), s	31.3	0.0	8.1	12.0	0.0	11.4	6.0	10.4	10.5	15.0	25.2	3.3
Cycle Q Clear(g_c), s	31.3	0.0	8.1	12.0	0.0	11.4	6.0	10.4	10.5	15.0	25.2	3.3
Prop In Lane	0.10		1.00	0.09		0.93	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	623	0	645	287	0	248	126	342	357	289	1009	451
V/C Ratio(X)	0.96	0.00	0.30	0.82	0.00	0.78	0.87	0.60	0.60	0.94	0.93	0.16
Avail Cap(c_a), veh/h	623	0	645	302	0	261	126	342	357	289	1009	451
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	20.1	40.6	0.0	40.8	45.6	36.6	36.7	41.2	34.6	26.7
Incr Delay (d2), s/veh	27.5	0.0	0.3	15.1	0.0	13.0	43.5	2.9	2.8	38.3	14.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.9	0.0	3.6	7.4	0.0	6.0	4.5	5.4	5.6	10.4	14.4	1.5
LnGrp Delay(d),s/veh	60.0	0.0	20.3	55.8	0.0	53.9	89.2	39.5	39.5	79.5	48.6	26.9
LnGrp LOS	E		C	E		D	F	D	D	E	D	C
Approach Vol, veh/h		794			426			530			1279	
Approach Delay, s/veh		50.4			54.9			49.8			54.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.0	23.0		37.0	11.0	32.0		19.2
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	15.0	18.0		32.0	6.0	27.0		15.0
Max Q Clear Time (g_c+I1), s	17.0	12.5		33.3	8.0	27.2		14.0
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	0.0		0.2

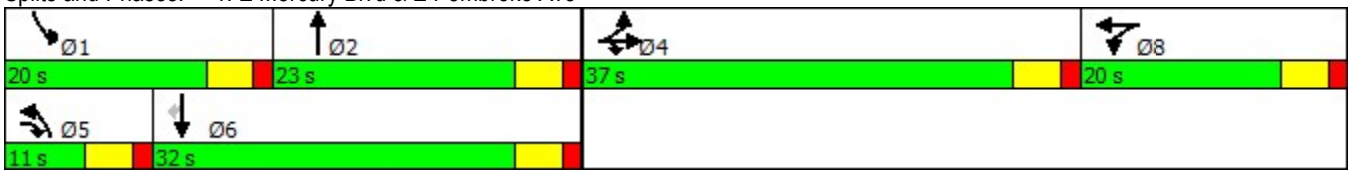
Intersection Summary	
HCM 2010 Ctrl Delay	52.4
HCM 2010 LOS	D

(Optimized Timings)

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	20	23	37	11	32	20
Maximum Split (%)	20.0%	23.0%	37.0%	11.0%	32.0%	20.0%
Minimum Split (s)	9	20	20	9	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		1	1		1	1
Flash Dont Walk (s)		1	1		1	1
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	20	43	0	11	80
End Time (s)	20	43	80	11	43	0
Yield/Force Off (s)	15	38	75	6	38	95
Yield/Force Off 170(s)	15	38	74	6	38	94
Local Start Time (s)	80	0	23	80	91	60
Local Yield (s)	95	18	55	86	18	75
Local Yield 170(s)	95	18	54	86	18	74

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 1: E Mercury Blvd & E Pembroke Ave



Movement	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	46	449	731	1228	564	52
Future Volume (veh/h)	46	449	731	1228	564	52
Number	3	18	1	6	2	12
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	50	488	795	1335	613	57
Adj No. of Lanes	1	1	2	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	452	870	1013	2348	1058	98
Arrive On Green	0.25	0.25	0.29	0.66	0.32	0.31
Sat Flow, veh/h	1792	1599	3476	3668	3401	307
Grp Volume(v), veh/h	50	488	795	1335	331	339
Grp Sat Flow(s),veh/h/ln	1792	1599	1738	1787	1787	1827
Q Serve(g_s), s	1.9	17.7	18.5	18.0	13.6	13.7
Cycle Q Clear(g_c), s	1.9	17.7	18.5	18.0	13.6	13.7
Prop In Lane	1.00	1.00	1.00			0.17
Lane Grp Cap(c), veh/h	452	870	1013	2348	572	584
V/C Ratio(X)	0.11	0.56	0.78	0.57	0.58	0.58
Avail Cap(c_a), veh/h	569	974	1774	3607	811	829
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	25.3	13.2	28.7	8.3	25.0	25.1
Incr Delay (d2), s/veh	0.1	0.6	1.4	0.2	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.9	9.0	8.8	6.9	7.0
LnGrp Delay(d),s/veh	25.5	13.8	30.1	8.5	26.0	26.0
LnGrp LOS	C	B	C	A	C	C
Approach Vol, veh/h	538			2130	670	
Approach Delay, s/veh	14.9			16.6	26.0	
Approach LOS	B			B	C	

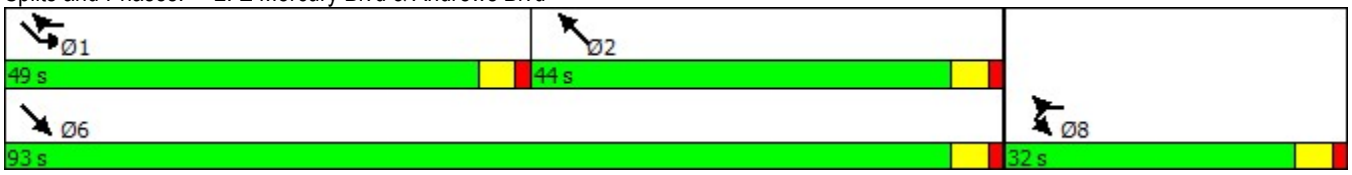
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	29.7	32.2				61.9		26.3
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	44.0	39.0				88.0		27.0
Max Q Clear Time (g_c+I1), s	20.5	15.7				20.0		19.7
Green Ext Time (p_c), s	4.2	11.5				15.7		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

Phase Number	1	2	6	8
Movement	SEL	NWT	SET	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	Min	Min	None
Maximum Split (s)	49	44	93	32
Maximum Split (%)	39.2%	35.2%	74.4%	25.6%
Minimum Split (s)	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		1	1	1
Flash Dont Walk (s)		1	1	1
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	49	0	93
End Time (s)	49	93	93	0
Yield/Force Off (s)	44	88	88	120
Yield/Force Off 170(s)	44	88	88	119
Local Start Time (s)	76	0	76	44
Local Yield (s)	120	39	39	71
Local Yield 170(s)	120	39	39	70

Intersection Summary	
Cycle Length	125
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 2: E Mercury Blvd & Andrews Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	571	52	121	301	16	15	216	118	19	183	93
Future Volume (veh/h)	125	571	52	121	301	16	15	216	118	19	183	93
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	136	621	57	132	327	17	16	235	128	21	199	101
Adj No. of Lanes	0	2	0	0	2	0	0	2	0	0	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	195	938	90	212	560	30	90	473	245	102	469	227
Arrive On Green	0.33	0.33	0.31	0.22	0.22	0.20	0.22	0.22	0.20	0.22	0.22	0.20
Sat Flow, veh/h	588	2826	271	975	2576	138	70	2157	1118	111	2141	1038
Grp Volume(v), veh/h	428	0	386	248	0	228	206	0	173	172	0	149
Grp Sat Flow(s),veh/h/ln	1852	0	1833	1832	0	1857	1830	0	1515	1762	0	1529
Q Serve(g_s), s	10.4	0.0	9.2	6.3	0.0	5.7	0.0	0.0	5.3	0.0	0.0	4.4
Cycle Q Clear(g_c), s	10.4	0.0	9.2	6.3	0.0	5.7	5.0	0.0	5.3	5.3	0.0	4.4
Prop In Lane	0.32		0.15	0.53		0.07	0.08		0.74	0.12		0.68
Lane Grp Cap(c), veh/h	615	0	608	398	0	404	476	0	332	464	0	335
V/C Ratio(X)	0.70	0.00	0.63	0.62	0.00	0.56	0.43	0.00	0.52	0.37	0.00	0.44
Avail Cap(c_a), veh/h	2001	0	1982	1273	0	1290	1322	0	1052	1276	0	1062
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	14.7	18.4	0.0	18.1	17.7	0.0	18.2	17.4	0.0	17.8
Incr Delay (d2), s/veh	1.4	0.0	1.1	1.6	0.0	1.2	0.6	0.0	1.3	0.5	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	4.8	3.3	0.0	3.1	2.7	0.0	2.3	2.2	0.0	1.9
LnGrp Delay(d),s/veh	16.5	0.0	15.8	20.0	0.0	19.4	18.4	0.0	19.5	17.9	0.0	18.7
LnGrp LOS	B		B	B		B	B		B	B		B
Approach Vol, veh/h		814			476			379			321	
Approach Delay, s/veh		16.2			19.7			18.9			18.3	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		15.4		21.2		15.4		15.3
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0		55.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		7.3		12.4		7.3		8.3
Green Ext Time (p_c), s		3.1		3.8		3.1		1.9

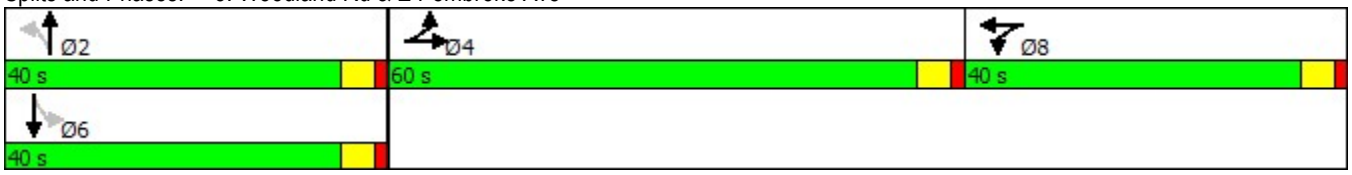
Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

(Optimized Timings)

Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Min	None	Min	None
Maximum Split (s)	40	60	40	40
Maximum Split (%)	28.6%	42.9%	28.6%	28.6%
Minimum Split (s)	20	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	1	1	1	1
Flash Dont Walk (s)	1	1	1	1
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	40	0	100
End Time (s)	40	100	40	0
Yield/Force Off (s)	35	95	35	135
Yield/Force Off 170(s)	35	94	35	134
Local Start Time (s)	0	40	0	100
Local Yield (s)	35	95	35	135
Local Yield 170(s)	35	94	35	134

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 3: Woodland Rd & E Pembroke Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	557	95	73	320	43	73	267	82	57	181	100
Future Volume (veh/h)	132	557	95	73	320	43	73	267	82	57	181	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	143	605	103	79	348	47	79	290	89	62	197	109
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	229	1004	171	138	880	118	408	577	174	377	465	247
Arrive On Green	0.13	0.33	0.31	0.08	0.28	0.26	0.07	0.21	0.19	0.07	0.21	0.19
Sat Flow, veh/h	1792	3057	519	1792	3169	425	1792	2709	816	1792	2259	1198
Grp Volume(v), veh/h	143	353	355	79	195	200	79	189	190	62	154	152
Grp Sat Flow(s),veh/h/ln	1792	1787	1790	1792	1787	1806	1792	1787	1737	1792	1787	1670
Q Serve(g_s), s	3.8	8.4	8.4	2.2	4.5	4.6	1.7	4.7	4.9	1.3	3.8	4.1
Cycle Q Clear(g_c), s	3.8	8.4	8.4	2.2	4.5	4.6	1.7	4.7	4.9	1.3	3.8	4.1
Prop In Lane	1.00		0.29	1.00		0.24	1.00		0.47	1.00		0.72
Lane Grp Cap(c), veh/h	229	587	588	138	496	502	408	380	370	377	368	344
V/C Ratio(X)	0.63	0.60	0.60	0.57	0.39	0.40	0.19	0.50	0.51	0.16	0.42	0.44
Avail Cap(c_a), veh/h	991	1836	1838	637	1483	1498	632	1200	1167	613	1200	1121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	14.2	14.4	22.6	14.8	15.0	14.0	17.5	17.8	14.1	17.5	17.9
Incr Delay (d2), s/veh	2.8	1.0	1.0	3.7	0.5	0.5	0.2	1.0	1.1	0.2	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	4.3	4.3	1.2	2.2	2.4	0.8	2.4	2.4	0.7	2.0	2.0
LnGrp Delay(d),s/veh	23.7	15.2	15.4	26.3	15.3	15.5	14.2	18.6	18.9	14.3	18.2	18.8
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		851			474			458			368	
Approach Delay, s/veh		16.7			17.2			18.0			17.8	
Approach LOS		B			B			B			B	

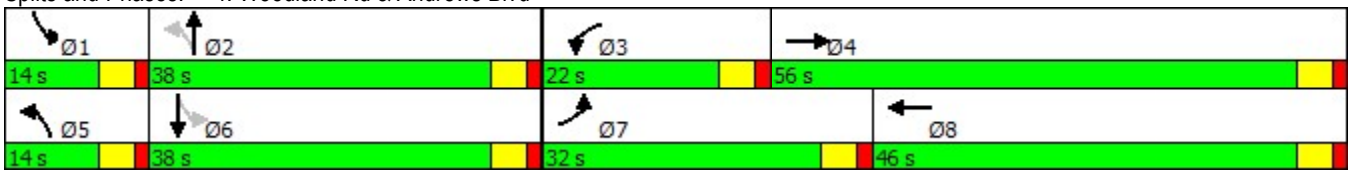
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	14.8	7.9	20.6	7.7	14.4	10.5	18.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	9.0	33.0	17.0	51.0	9.0	33.0	27.0	41.0
Max Q Clear Time (g_c+I1), s	3.3	6.9	4.2	10.4	3.7	6.1	5.8	6.6
Green Ext Time (p_c), s	0.1	2.9	0.2	5.2	0.1	2.9	0.5	5.1

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	None	Min	None	None
Maximum Split (s)	14	38	22	56	14	38	32	46
Maximum Split (%)	10.8%	29.2%	16.9%	43.1%	10.8%	29.2%	24.6%	35.4%
Minimum Split (s)	9	20	9	20	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		1		1		1	1	1
Flash Dont Walk (s)		1		1		1	1	1
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	14	52	74	0	14	52	84
End Time (s)	14	52	74	0	14	52	84	0
Yield/Force Off (s)	9	47	69	125	9	47	79	125
Yield/Force Off 170(s)	9	47	69	124	9	47	78	124
Local Start Time (s)	116	0	38	60	116	0	38	70
Local Yield (s)	125	33	55	111	125	33	65	111
Local Yield 170(s)	125	33	55	110	125	33	64	110

Intersection Summary	
Cycle Length	130
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 4: Woodland Rd & Andrews Blvd



Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	5	0	0	0	6	572	0	0	1293	12
Future Vol, veh/h	7	0	5	0	0	0	6	572	0	0	1293	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
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, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	8	0	5	0	0	0	7	622	0	0	1405	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1736	2047	709	1338	2053	311	1418	0	0	622	0	0
Stage 1	1412	1412	-	635	635	-	-	-	-	-	-	-
Stage 2	324	635	-	703	1418	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	57	57	381	113	56	691	487	-	-	969	-	-
Stage 1	148	206	-	438	476	-	-	-	-	-	-	-
Stage 2	668	476	-	399	205	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	56	56	381	110	55	691	487	-	-	969	-	-
Mov Cap-2 Maneuver	56	56	-	110	55	-	-	-	-	-	-	-
Stage 1	146	206	-	432	469	-	-	-	-	-	-	-
Stage 2	658	469	-	393	205	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	53.5	0	0.1	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	487	-	-	87	-	969	-	-
HCM Lane V/C Ratio	0.013	-	-	0.15	-	-	-	-
HCM Control Delay (s)	12.5	-	-	53.5	0	0	-	-
HCM Lane LOS	B	-	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	320	100	22	209	140	72	318	7	169	730	47
Future Volume (veh/h)	33	320	100	22	209	140	72	318	7	169	730	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	36	348	109	24	227	152	78	346	8	184	793	51
Adj No. of Lanes	0	1	1	0	2	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	45	431	516	34	320	224	124	856	20	252	1113	498
Arrive On Green	0.25	0.25	0.25	0.16	0.16	0.15	0.07	0.24	0.23	0.14	0.31	0.31
Sat Flow, veh/h	176	1697	1599	204	1946	1362	1792	3571	82	1792	3574	1599
Grp Volume(v), veh/h	384	0	109	220	0	183	78	173	181	184	793	51
Grp Sat Flow(s),veh/h/ln	1872	0	1599	1871	0	1641	1792	1787	1867	1792	1787	1599
Q Serve(g_s), s	15.3	0.0	3.9	8.8	0.0	8.4	3.4	6.5	6.5	7.8	15.6	1.8
Cycle Q Clear(g_c), s	15.3	0.0	3.9	8.8	0.0	8.4	3.4	6.5	6.5	7.8	15.6	1.8
Prop In Lane	0.09		1.00	0.11		0.83	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	475	0	516	307	0	270	124	428	448	252	1113	498
V/C Ratio(X)	0.81	0.00	0.21	0.72	0.00	0.68	0.63	0.40	0.40	0.73	0.71	0.10
Avail Cap(c_a), veh/h	802	0	795	519	0	455	271	766	800	542	2072	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	0.0	19.5	31.4	0.0	31.6	36.0	25.4	25.4	32.7	24.2	19.4
Incr Delay (d2), s/veh	3.3	0.0	0.2	3.1	0.0	3.0	5.2	0.6	0.6	4.1	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	1.7	4.8	0.0	4.0	1.8	3.2	3.4	4.2	7.8	0.8
LnGrp Delay(d),s/veh	31.1	0.0	19.7	34.5	0.0	34.6	41.2	26.0	26.0	36.7	25.0	19.5
LnGrp LOS	C		B	C		C	D	C	C	D	C	B
Approach Vol, veh/h		493			403			432			1028	
Approach Delay, s/veh		28.6			34.5			28.7			26.9	
Approach LOS		C			C			C			C	

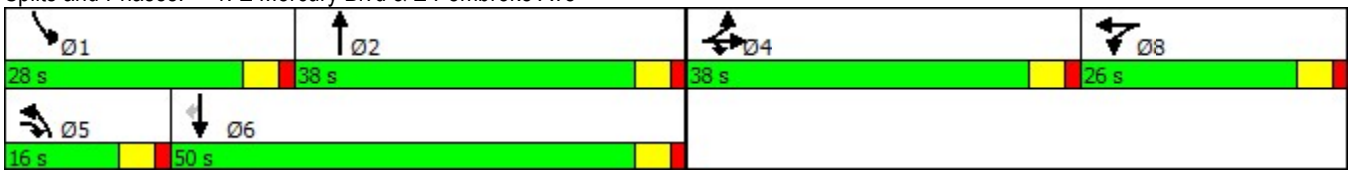
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.2	23.0		24.1	9.5	28.7		17.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	23.0	33.0		33.0	11.0	45.0		21.0
Max Q Clear Time (g_c+I1), s	9.8	8.5		17.3	5.4	17.6		10.8
Green Ext Time (p_c), s	0.5	6.0		1.9	0.1	6.1		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	28.9
HCM 2010 LOS	C

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	28	38	38	16	50	26
Maximum Split (%)	21.5%	29.2%	29.2%	12.3%	38.5%	20.0%
Minimum Split (s)	9	20	20	9	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		1	1		1	1
Flash Dont Walk (s)		1	1		1	1
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	28	66	0	16	104
End Time (s)	28	66	104	16	66	0
Yield/Force Off (s)	23	61	99	11	61	125
Yield/Force Off 170(s)	23	61	98	11	61	124
Local Start Time (s)	102	0	38	102	118	76
Local Yield (s)	125	33	71	113	33	97
Local Yield 170(s)	125	33	70	113	33	96

Intersection Summary	
Cycle Length	130
Control Type	Actuated-Uncoordinated
Natural Cycle	75

Splits and Phases: 1: E Mercury Blvd & E Pembroke Ave



Movement	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	45	536	538	1034	554	34
Future Volume (veh/h)	45	536	538	1034	554	34
Number	3	18	1	6	2	12
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	49	583	585	1124	602	37
Adj No. of Lanes	1	1	2	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	534	830	769	2008	925	57
Arrive On Green	0.30	0.30	0.22	0.56	0.27	0.25
Sat Flow, veh/h	1792	1599	3476	3668	3515	210
Grp Volume(v), veh/h	49	583	585	1124	314	325
Grp Sat Flow(s),veh/h/ln	1792	1599	1738	1787	1787	1844
Q Serve(g_s), s	1.1	15.7	9.0	11.5	8.9	8.9
Cycle Q Clear(g_c), s	1.1	15.7	9.0	11.5	8.9	8.9
Prop In Lane	1.00	1.00	1.00			0.11
Lane Grp Cap(c), veh/h	534	830	769	2008	483	499
V/C Ratio(X)	0.09	0.70	0.76	0.56	0.65	0.65
Avail Cap(c_a), veh/h	534	830	853	2193	533	550
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	14.5	10.4	20.8	8.0	18.4	18.5
Incr Delay (d2), s/veh	0.1	2.7	3.7	0.3	2.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	7.5	4.7	5.7	4.7	4.8
LnGrp Delay(d),s/veh	14.5	13.0	24.5	8.3	20.8	20.9
LnGrp LOS	B	B	C	A	C	C
Approach Vol, veh/h	632			1709	639	
Approach Delay, s/veh	13.2			13.8	20.9	
Approach LOS	B			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	16.6	19.4				36.0		21.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0				34.0		16.0
Max Q Clear Time (g_c+I1), s	11.0	10.9				13.5		17.7
Green Ext Time (p_c), s	0.6	3.5				9.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Phase Number	1	2	6	8
Movement	SEL	NWT	SET	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	Min	Min	None
Maximum Split (s)	18	21	39	21
Maximum Split (%)	30.0%	35.0%	65.0%	35.0%
Minimum Split (s)	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		1	1	1
Flash Dont Walk (s)		1	1	1
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	18	0	39
End Time (s)	18	39	39	0
Yield/Force Off (s)	13	34	34	55
Yield/Force Off 170(s)	13	34	34	54
Local Start Time (s)	42	0	42	21
Local Yield (s)	55	16	16	37
Local Yield 170(s)	55	16	16	36

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 2: E Mercury Blvd & Andrews Blvd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	267	73	194	301	13	16	113	52	12	270	98
Future Volume (veh/h)	77	267	73	194	301	13	16	113	52	12	270	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	84	290	79	211	327	14	17	123	57	13	293	107
Adj No. of Lanes	0	2	0	0	2	0	0	2	0	0	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	146	525	149	349	585	26	128	521	227	100	586	207
Arrive On Green	0.23	0.23	0.20	0.26	0.26	0.24	0.24	0.24	0.21	0.24	0.24	0.21
Sat Flow, veh/h	645	2312	658	1339	2241	98	136	2204	961	51	2482	877
Grp Volume(v), veh/h	241	0	212	286	0	266	106	0	91	223	0	190
Grp Sat Flow(s),veh/h/ln	1849	0	1765	1814	0	1864	1759	0	1542	1853	0	1557
Q Serve(g_s), s	5.0	0.0	4.6	6.0	0.0	5.4	0.0	0.0	2.1	0.0	0.0	4.7
Cycle Q Clear(g_c), s	5.0	0.0	4.6	6.0	0.0	5.4	2.0	0.0	2.1	4.5	0.0	4.7
Prop In Lane	0.35		0.37	0.74		0.05	0.16		0.62	0.06		0.56
Lane Grp Cap(c), veh/h	420	0	401	473	0	486	512	0	364	525	0	368
V/C Ratio(X)	0.57	0.00	0.53	0.60	0.00	0.55	0.21	0.00	0.25	0.42	0.00	0.52
Avail Cap(c_a), veh/h	1573	0	1501	1793	0	1843	1559	0	1347	1687	0	1360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	14.9	14.1	0.0	13.9	13.4	0.0	13.8	14.4	0.0	14.7
Incr Delay (d2), s/veh	1.2	0.0	1.1	1.2	0.0	1.0	0.2	0.0	0.4	0.5	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	2.4	3.2	0.0	2.9	1.1	0.0	0.9	2.4	0.0	2.1
LnGrp Delay(d),s/veh	16.2	0.0	16.0	15.4	0.0	14.8	13.6	0.0	14.1	14.9	0.0	15.8
LnGrp LOS	B		B	B		B	B		B	B		B
Approach Vol, veh/h		453			552			197			413	
Approach Delay, s/veh		16.1			15.1			13.9			15.4	
Approach LOS		B			B			B			B	

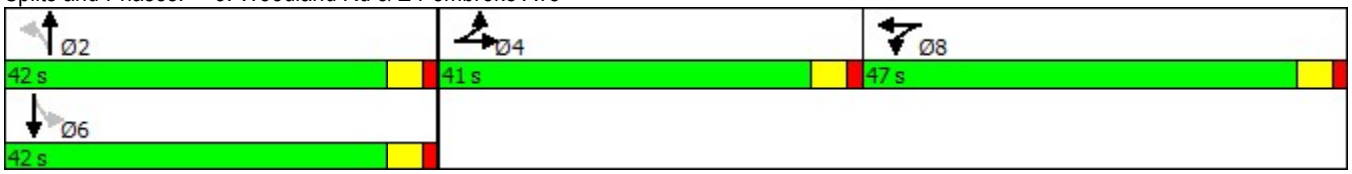
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		14.3		13.9		14.3		15.3
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		37.0		36.0		37.0		42.0
Max Q Clear Time (g_c+I1), s		4.1		7.0		6.7		8.0
Green Ext Time (p_c), s		2.6		1.9		2.6		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B

Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Min	None	Min	None
Maximum Split (s)	42	41	42	47
Maximum Split (%)	32.3%	31.5%	32.3%	36.2%
Minimum Split (s)	20	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	1	1	1	1
Flash Dont Walk (s)	1	1	1	1
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	42	0	83
End Time (s)	42	83	42	0
Yield/Force Off (s)	37	78	37	125
Yield/Force Off 170(s)	37	77	37	124
Local Start Time (s)	0	42	0	83
Local Yield (s)	37	78	37	125
Local Yield 170(s)	37	77	37	124

Intersection Summary	
Cycle Length	130
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 3: Woodland Rd & E Pembroke Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	315	41	91	301	28	67	133	37	43	292	138
Future Volume (veh/h)	129	315	41	91	301	28	67	133	37	43	292	138
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	140	342	45	99	327	30	73	145	40	47	317	150
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	227	770	101	168	693	63	403	714	191	523	576	267
Arrive On Green	0.13	0.24	0.22	0.09	0.21	0.19	0.07	0.26	0.23	0.06	0.24	0.22
Sat Flow, veh/h	1792	3180	415	1792	3313	302	1792	2790	747	1792	2374	1100
Grp Volume(v), veh/h	140	191	196	99	175	182	73	91	94	47	237	230
Grp Sat Flow(s),veh/h/ln	1792	1787	1808	1792	1787	1828	1792	1787	1749	1792	1787	1687
Q Serve(g_s), s	3.4	4.2	4.3	2.4	4.0	4.0	1.3	1.8	2.0	0.9	5.3	5.6
Cycle Q Clear(g_c), s	3.4	4.2	4.3	2.4	4.0	4.0	1.3	1.8	2.0	0.9	5.3	5.6
Prop In Lane	1.00		0.23	1.00		0.17	1.00		0.43	1.00		0.65
Lane Grp Cap(c), veh/h	227	433	438	168	374	382	403	458	448	523	434	409
V/C Ratio(X)	0.62	0.44	0.45	0.59	0.47	0.47	0.18	0.20	0.21	0.09	0.55	0.56
Avail Cap(c_a), veh/h	855	1085	1098	583	814	832	542	1124	1100	686	1124	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	14.8	15.0	20.0	16.0	16.1	11.6	13.4	13.7	11.5	15.2	15.6
Incr Delay (d2), s/veh	2.7	0.7	0.7	3.3	0.9	0.9	0.2	0.2	0.2	0.1	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.2	2.2	1.4	2.0	2.1	0.7	0.9	1.0	0.4	2.8	2.7
LnGrp Delay(d),s/veh	21.8	15.5	15.7	23.3	16.9	17.0	11.8	13.7	13.9	11.6	16.3	16.8
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		527			456			258			514	
Approach Delay, s/veh		17.2			18.3			13.2			16.1	
Approach LOS		B			B			B			B	

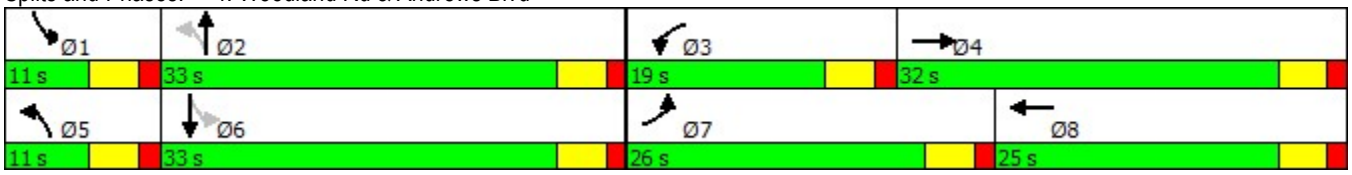
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	15.8	8.3	15.2	7.4	15.2	9.8	13.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	6.0	28.0	14.0	27.0	6.0	28.0	21.0	20.0
Max Q Clear Time (g_c+I1), s	2.9	4.0	4.4	6.3	3.3	7.6	5.4	6.0
Green Ext Time (p_c), s	0.0	2.7	0.2	2.9	0.0	2.6	0.4	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	None	Min	None	None
Maximum Split (s)	11	33	19	32	11	33	26	25
Maximum Split (%)	11.6%	34.7%	20.0%	33.7%	11.6%	34.7%	27.4%	26.3%
Minimum Split (s)	9	20	9	20	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		1		1		1	1	1
Flash Dont Walk (s)		1		1		1	1	1
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	44	63	0	11	44	70
End Time (s)	11	44	63	0	11	44	70	0
Yield/Force Off (s)	6	39	58	90	6	39	65	90
Yield/Force Off 170(s)	6	39	58	89	6	39	64	89
Local Start Time (s)	84	0	33	52	84	0	33	59
Local Yield (s)	90	28	47	79	90	28	54	79
Local Yield 170(s)	90	28	47	78	90	28	53	78

Intersection Summary	
Cycle Length	95
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 4: Woodland Rd & Andrews Blvd



Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	0	6	0	0	0	6	558	0	4	1052	9
Future Vol, veh/h	17	0	6	0	0	0	6	558	0	4	1052	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
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, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	18	0	7	0	0	0	7	607	0	4	1143	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1473	1777	577	1200	1782	303	1153	0	0	607	0	0
Stage 1	1157	1157	-	620	620	-	-	-	-	-	-	-
Stage 2	316	620	-	580	1162	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	90	83	465	143	83	699	613	-	-	981	-	-
Stage 1	212	273	-	447	483	-	-	-	-	-	-	-
Stage 2	675	483	-	472	272	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	89	82	465	139	82	699	613	-	-	981	-	-
Mov Cap-2 Maneuver	89	82	-	139	82	-	-	-	-	-	-	-
Stage 1	210	272	-	442	477	-	-	-	-	-	-	-
Stage 2	667	477	-	463	271	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	45.7	0	0.1	0
HCM LOS	E	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	613	-	-	113	-	981	-	-
HCM Lane V/C Ratio	0.011	-	-	0.221	-	0.004	-	-
HCM Control Delay (s)	10.9	-	-	45.7	0	8.7	-	-
HCM Lane LOS	B	-	-	E	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	505	180	19	211	166	102	379	11	254	869	66
Future Volume (veh/h)	54	505	180	19	211	166	102	379	11	254	869	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	59	549	196	21	229	180	111	412	12	276	945	72
Adj No. of Lanes	0	1	1	0	2	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	60	562	644	26	281	231	126	643	19	307	1008	451
Arrive On Green	0.33	0.33	0.33	0.15	0.15	0.14	0.07	0.18	0.17	0.17	0.28	0.28
Sat Flow, veh/h	182	1690	1599	166	1821	1501	1792	3547	103	1792	3574	1599
Grp Volume(v), veh/h	608	0	196	236	0	194	111	207	217	276	945	72
Grp Sat Flow(s),veh/h/ln	1872	0	1599	1873	0	1616	1792	1787	1863	1792	1787	1599
Q Serve(g_s), s	31.9	0.0	8.3	12.1	0.0	11.5	6.1	10.7	10.7	15.0	25.6	3.4
Cycle Q Clear(g_c), s	31.9	0.0	8.3	12.1	0.0	11.5	6.1	10.7	10.7	15.0	25.6	3.4
Prop In Lane	0.10		1.00	0.09		0.93	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	622	0	644	289	0	249	126	324	338	307	1008	451
V/C Ratio(X)	0.98	0.00	0.30	0.82	0.00	0.78	0.88	0.64	0.64	0.90	0.94	0.16
Avail Cap(c_a), veh/h	622	0	644	302	0	260	126	324	338	307	1008	451
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	0.0	20.2	40.7	0.0	40.8	45.7	37.7	37.7	40.3	34.8	26.8
Incr Delay (d2), s/veh	30.3	0.0	0.3	15.6	0.0	13.4	45.6	4.2	4.1	27.6	15.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.6	0.0	3.7	7.5	0.0	6.1	4.6	5.6	5.9	9.8	14.8	1.5
LnGrp Delay(d),s/veh	63.1	0.0	20.4	56.2	0.0	54.2	91.4	41.8	41.8	67.9	50.4	27.0
LnGrp LOS	E		C	E		D	F	D	D	E	D	C
Approach Vol, veh/h		804			430			535			1293	
Approach Delay, s/veh		52.7			55.3			52.1			52.8	
Approach LOS		D			E			D			D	

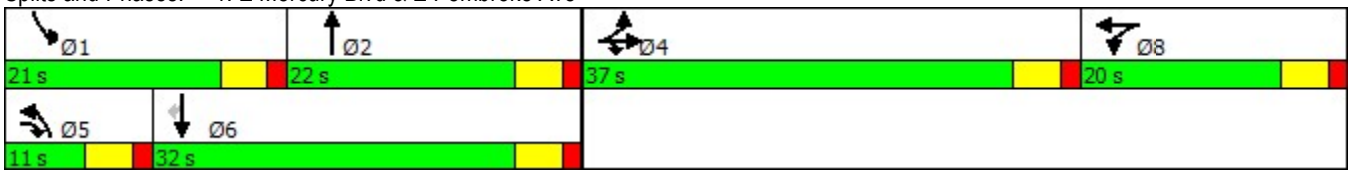
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.0	22.0		37.0	11.0	32.0		19.3
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	16.0	17.0		32.0	6.0	27.0		15.0
Max Q Clear Time (g_c+I1), s	17.0	12.7		33.9	8.1	27.6		14.1
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	0.0		0.2

Intersection Summary		
HCM 2010 Ctrl Delay		53.0
HCM 2010 LOS		D

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	21	22	37	11	32	20
Maximum Split (%)	21.0%	22.0%	37.0%	11.0%	32.0%	20.0%
Minimum Split (s)	9	20	20	9	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		1	1		1	1
Flash Dont Walk (s)		1	1		1	1
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	21	43	0	11	80
End Time (s)	21	43	80	11	43	0
Yield/Force Off (s)	16	38	75	6	38	95
Yield/Force Off 170(s)	16	38	74	6	38	94
Local Start Time (s)	79	0	22	79	90	59
Local Yield (s)	95	17	54	85	17	74
Local Yield 170(s)	95	17	53	85	17	73

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 1: E Mercury Blvd & E Pembroke Ave



Movement	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	46	453	738	1240	570	53
Future Volume (veh/h)	46	453	738	1240	570	53
Number	3	18	1	6	2	12
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	50	492	802	1348	620	58
Adj No. of Lanes	1	1	2	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	453	872	1017	2351	1058	99
Arrive On Green	0.25	0.25	0.29	0.66	0.32	0.31
Sat Flow, veh/h	1792	1599	3476	3668	3399	309
Grp Volume(v), veh/h	50	492	802	1348	335	343
Grp Sat Flow(s),veh/h/ln	1792	1599	1738	1787	1787	1827
Q Serve(g_s), s	1.9	18.1	19.0	18.5	14.0	14.1
Cycle Q Clear(g_c), s	1.9	18.1	19.0	18.5	14.0	14.1
Prop In Lane	1.00	1.00	1.00			0.17
Lane Grp Cap(c), veh/h	453	872	1017	2351	572	585
V/C Ratio(X)	0.11	0.56	0.79	0.57	0.59	0.59
Avail Cap(c_a), veh/h	561	968	1748	3555	799	817
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	25.7	13.3	29.1	8.4	25.4	25.5
Incr Delay (d2), s/veh	0.1	0.6	1.4	0.2	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.0	9.2	9.1	7.0	7.2
LnGrp Delay(d),s/veh	25.8	13.9	30.5	8.6	26.4	26.5
LnGrp LOS	C	B	C	A	C	C
Approach Vol, veh/h	542			2150	678	
Approach Delay, s/veh	15.0			16.8	26.4	
Approach LOS	B			B	C	

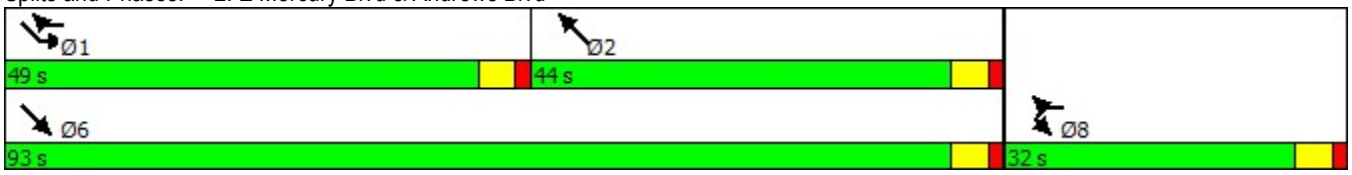
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	30.2	32.7				62.8		26.6
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	44.0	39.0				88.0		27.0
Max Q Clear Time (g_c+I1), s	21.0	16.1				20.5		20.1
Green Ext Time (p_c), s	4.2	11.6				16.0		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

Phase Number	1	2	6	8
Movement	SEL	NWT	SET	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	Min	Min	None
Maximum Split (s)	49	44	93	32
Maximum Split (%)	39.2%	35.2%	74.4%	25.6%
Minimum Split (s)	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		1	1	1
Flash Dont Walk (s)		1	1	1
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	49	0	93
End Time (s)	49	93	93	0
Yield/Force Off (s)	44	88	88	120
Yield/Force Off 170(s)	44	88	88	119
Local Start Time (s)	76	0	76	44
Local Yield (s)	120	39	39	71
Local Yield 170(s)	120	39	39	70

Intersection Summary	
Cycle Length	125
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 2: E Mercury Blvd & Andrews Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	577	53	122	304	16	15	218	119	19	185	94
Future Volume (veh/h)	126	577	53	122	304	16	15	218	119	19	185	94
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	137	627	58	133	330	17	16	237	129	21	201	102
Adj No. of Lanes	0	2	0	0	2	0	0	2	0	0	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	196	942	91	212	562	30	89	473	245	101	469	228
Arrive On Green	0.33	0.33	0.31	0.22	0.22	0.20	0.22	0.22	0.20	0.22	0.22	0.20
Sat Flow, veh/h	587	2825	273	974	2578	137	69	2158	1118	110	2139	1038
Grp Volume(v), veh/h	432	0	390	250	0	230	207	0	175	174	0	150
Grp Sat Flow(s),veh/h/ln	1852	0	1833	1832	0	1857	1830	0	1515	1758	0	1529
Q Serve(g_s), s	10.6	0.0	9.4	6.5	0.0	5.8	0.0	0.0	5.4	0.0	0.0	4.5
Cycle Q Clear(g_c), s	10.6	0.0	9.4	6.5	0.0	5.8	5.1	0.0	5.4	5.4	0.0	4.5
Prop In Lane	0.32		0.15	0.53		0.07	0.08		0.74	0.12		0.68
Lane Grp Cap(c), veh/h	618	0	611	399	0	405	476	0	332	463	0	335
V/C Ratio(X)	0.70	0.00	0.64	0.63	0.00	0.57	0.44	0.00	0.53	0.38	0.00	0.45
Avail Cap(c_a), veh/h	1981	0	1961	1260	0	1277	1309	0	1042	1262	0	1051
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	14.8	18.5	0.0	18.3	17.9	0.0	18.4	17.6	0.0	18.0
Incr Delay (d2), s/veh	1.5	0.0	1.1	1.6	0.0	1.3	0.6	0.0	1.3	0.5	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	5.0	3.4	0.0	3.1	2.7	0.0	2.4	2.2	0.0	2.0
LnGrp Delay(d),s/veh	16.6	0.0	15.9	20.2	0.0	19.6	18.6	0.0	19.7	18.1	0.0	18.9
LnGrp LOS	B		B	C		B	B		B	B		B
Approach Vol, veh/h		822			480			382			324	
Approach Delay, s/veh		16.3			19.9			19.1			18.5	
Approach LOS		B			B			B			B	

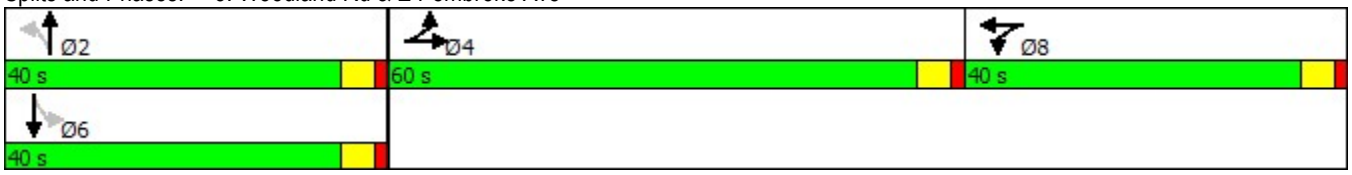
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		15.5		21.5		15.5		15.4
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0		55.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		7.4		12.6		7.4		8.5
Green Ext Time (p_c), s		3.1		3.8		3.1		1.9

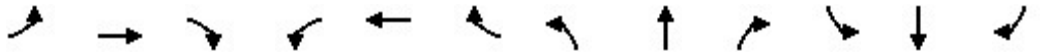
Intersection Summary	
HCM 2010 Ctrl Delay	18.0
HCM 2010 LOS	B

Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Min	None	Min	None
Maximum Split (s)	40	60	40	40
Maximum Split (%)	28.6%	42.9%	28.6%	28.6%
Minimum Split (s)	20	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	1	1	1	1
Flash Dont Walk (s)	1	1	1	1
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	40	0	100
End Time (s)	40	100	40	0
Yield/Force Off (s)	35	95	35	135
Yield/Force Off 170(s)	35	94	35	134
Local Start Time (s)	0	40	0	100
Local Yield (s)	35	95	35	135
Local Yield 170(s)	35	94	35	134

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 3: Woodland Rd & E Pembroke Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	563	96	74	323	43	74	270	83	58	183	101
Future Volume (veh/h)	133	563	96	74	323	43	74	270	83	58	183	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	145	612	104	80	351	47	80	293	90	63	199	110
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	229	1002	170	139	879	117	407	572	172	375	462	245
Arrive On Green	0.13	0.33	0.31	0.08	0.28	0.26	0.07	0.21	0.19	0.07	0.20	0.18
Sat Flow, veh/h	1792	3058	519	1792	3172	421	1792	2708	816	1792	2260	1197
Grp Volume(v), veh/h	145	357	359	80	197	201	80	191	192	63	156	153
Grp Sat Flow(s),veh/h/ln	1792	1787	1790	1792	1787	1807	1792	1787	1737	1792	1787	1670
Q Serve(g_s), s	3.9	8.5	8.5	2.2	4.5	4.6	1.7	4.8	5.0	1.3	3.8	4.1
Cycle Q Clear(g_c), s	3.9	8.5	8.5	2.2	4.5	4.6	1.7	4.8	5.0	1.3	3.8	4.1
Prop In Lane	1.00		0.29	1.00		0.23	1.00		0.47	1.00		0.72
Lane Grp Cap(c), veh/h	229	586	587	139	495	501	407	378	367	375	365	341
V/C Ratio(X)	0.63	0.61	0.61	0.58	0.40	0.40	0.20	0.51	0.52	0.17	0.43	0.45
Avail Cap(c_a), veh/h	746	1311	1313	497	1063	1075	559	922	896	505	886	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	14.2	14.4	22.5	14.8	14.9	14.0	17.6	17.8	14.1	17.5	17.9
Incr Delay (d2), s/veh	2.9	1.0	1.0	3.8	0.5	0.5	0.2	1.1	1.1	0.2	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.3	4.4	1.2	2.3	2.3	0.8	2.5	2.5	0.7	1.9	2.0
LnGrp Delay(d),s/veh	23.7	15.3	15.4	26.2	15.3	15.5	14.2	18.6	19.0	14.3	18.3	18.8
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		861			478			463			372	
Approach Delay, s/veh		16.8			17.2			18.0			17.8	
Approach LOS		B			B			B			B	

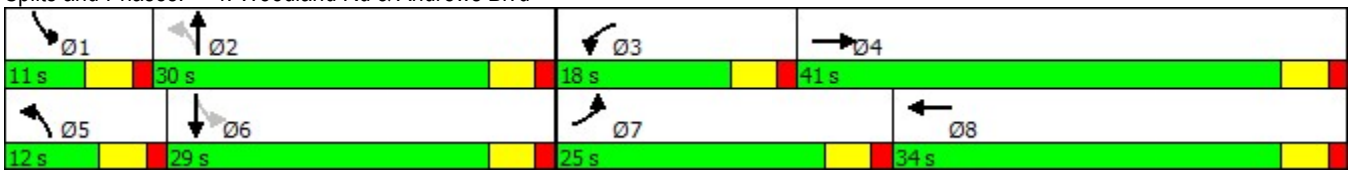
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	14.7	7.9	20.5	7.7	14.3	10.4	18.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	6.0	25.0	13.0	36.0	7.0	24.0	20.0	29.0
Max Q Clear Time (g_c+I1), s	3.3	7.0	4.2	10.5	3.7	6.1	5.9	6.6
Green Ext Time (p_c), s	0.0	2.7	0.1	5.0	0.1	2.7	0.4	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	None	Min	None	None
Maximum Split (s)	11	30	18	41	12	29	25	34
Maximum Split (%)	11.0%	30.0%	18.0%	41.0%	12.0%	29.0%	25.0%	34.0%
Minimum Split (s)	9	20	9	20	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		1		1		1	1	1
Flash Dont Walk (s)		1		1		1	1	1
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	41	59	0	12	41	66
End Time (s)	11	41	59	0	12	41	66	0
Yield/Force Off (s)	6	36	54	95	7	36	61	95
Yield/Force Off 170(s)	6	36	54	94	7	36	60	94
Local Start Time (s)	88	99	29	47	88	0	29	54
Local Yield (s)	94	24	42	83	95	24	49	83
Local Yield 170(s)	94	24	42	82	95	24	48	82

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 4: Woodland Rd & Andrews Blvd



Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	5	0	0	0	6	578	0	0	1306	12
Future Vol, veh/h	7	0	5	0	0	0	6	578	0	0	1306	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
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, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	8	0	5	0	0	0	7	628	0	0	1420	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1753	2067	716	1351	2074	314	1433	0	0	628	0	0
Stage 1	1426	1426	-	641	641	-	-	-	-	-	-	-
Stage 2	327	641	-	710	1433	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	56	55	377	111	54	688	480	-	-	964	-	-
Stage 1	145	203	-	434	473	-	-	-	-	-	-	-
Stage 2	665	473	-	395	201	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	55	54	377	108	53	688	480	-	-	964	-	-
Mov Cap-2 Maneuver	55	54	-	108	53	-	-	-	-	-	-	-
Stage 1	143	203	-	428	466	-	-	-	-	-	-	-
Stage 2	655	466	-	389	201	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	54.9	0	0.1	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	480	-	-	85	-	964	-	-
HCM Lane V/C Ratio	0.014	-	-	0.153	-	-	-	-
HCM Control Delay (s)	12.6	-	-	54.9	0	0	-	-
HCM Lane LOS	B	-	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	320	100	22	209	140	72	321	7	169	750	57
Future Volume (veh/h)	36	320	100	22	209	140	72	321	7	169	750	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	39	348	109	24	227	152	78	349	8	184	815	62
Adj No. of Lanes	0	1	1	0	2	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	47	423	512	34	323	226	123	878	20	251	1133	507
Arrive On Green	0.25	0.25	0.25	0.17	0.17	0.15	0.07	0.25	0.23	0.14	0.32	0.32
Sat Flow, veh/h	189	1683	1599	204	1946	1362	1792	3572	82	1792	3574	1599
Grp Volume(v), veh/h	387	0	109	220	0	183	78	174	183	184	815	62
Grp Sat Flow(s),veh/h/ln	1872	0	1599	1871	0	1641	1792	1787	1867	1792	1787	1599
Q Serve(g_s), s	15.8	0.0	4.0	9.0	0.0	8.5	3.4	6.6	6.6	8.0	16.4	2.2
Cycle Q Clear(g_c), s	15.8	0.0	4.0	9.0	0.0	8.5	3.4	6.6	6.6	8.0	16.4	2.2
Prop In Lane	0.10		1.00	0.11		0.83	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	470	0	512	310	0	272	123	439	459	251	1133	507
V/C Ratio(X)	0.82	0.00	0.21	0.71	0.00	0.67	0.63	0.40	0.40	0.73	0.72	0.12
Avail Cap(c_a), veh/h	669	0	682	623	0	546	265	749	783	530	2028	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	0.0	20.1	32.0	0.0	32.2	36.8	25.6	25.6	33.4	24.5	19.7
Incr Delay (d2), s/veh	5.6	0.0	0.2	3.0	0.0	2.9	5.3	0.6	0.6	4.1	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	0.0	1.8	4.9	0.0	4.1	1.9	3.3	3.5	4.2	8.2	1.0
LnGrp Delay(d),s/veh	34.3	0.0	20.3	34.9	0.0	35.0	42.1	26.1	26.2	37.6	25.4	19.8
LnGrp LOS	C		C	C		D	D	C	C	D	C	B
Approach Vol, veh/h		496			403			435			1061	
Approach Delay, s/veh		31.2			35.0			29.0			27.2	
Approach LOS		C			C			C			C	

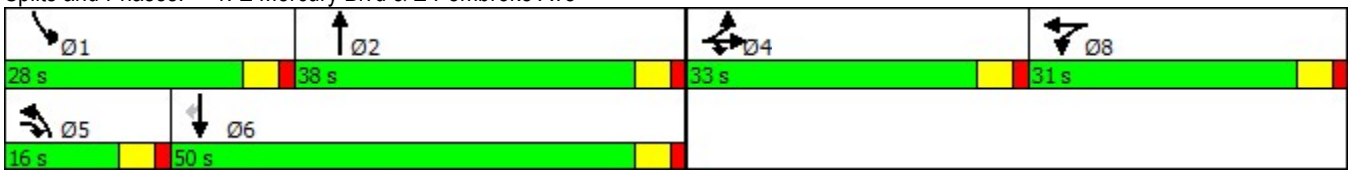
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.3	23.9		24.4	9.6	29.7		17.4
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	23.0	33.0		28.0	11.0	45.0		26.0
Max Q Clear Time (g_c+I1), s	10.0	8.6		17.8	5.4	18.4		11.0
Green Ext Time (p_c), s	0.5	6.2		1.6	0.1	6.3		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	28	38	33	16	50	31
Maximum Split (%)	21.5%	29.2%	25.4%	12.3%	38.5%	23.8%
Minimum Split (s)	9	20	20	9	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		1	1		1	1
Flash Dont Walk (s)		1	1		1	1
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	28	66	0	16	99
End Time (s)	28	66	99	16	66	0
Yield/Force Off (s)	23	61	94	11	61	125
Yield/Force Off 170(s)	23	61	93	11	61	124
Local Start Time (s)	102	0	38	102	118	71
Local Yield (s)	125	33	66	113	33	97
Local Yield 170(s)	125	33	65	113	33	96

Intersection Summary	
Cycle Length	130
Control Type	Actuated-Uncoordinated
Natural Cycle	75

Splits and Phases: 1: E Mercury Blvd & E Pembroke Ave



Movement	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	45	536	538	1046	584	34
Future Volume (veh/h)	45	536	538	1046	584	34
Number	3	18	1	6	2	12
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	49	583	585	1137	635	37
Adj No. of Lanes	1	1	2	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	531	827	767	2017	940	55
Arrive On Green	0.30	0.30	0.22	0.56	0.27	0.26
Sat Flow, veh/h	1792	1599	3476	3668	3527	200
Grp Volume(v), veh/h	49	583	585	1137	330	342
Grp Sat Flow(s),veh/h/ln	1792	1599	1738	1787	1787	1846
Q Serve(g_s), s	1.1	15.9	9.0	11.7	9.4	9.5
Cycle Q Clear(g_c), s	1.1	15.9	9.0	11.7	9.4	9.5
Prop In Lane	1.00	1.00	1.00			0.11
Lane Grp Cap(c), veh/h	531	827	767	2017	489	505
V/C Ratio(X)	0.09	0.71	0.76	0.56	0.67	0.68
Avail Cap(c_a), veh/h	531	827	848	2181	530	547
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	14.6	10.5	20.9	8.0	18.6	18.6
Incr Delay (d2), s/veh	0.1	2.7	3.7	0.3	3.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	7.5	4.7	5.8	5.0	5.2
LnGrp Delay(d),s/veh	14.7	13.3	24.7	8.3	21.6	21.6
LnGrp LOS	B	B	C	A	C	C
Approach Vol, veh/h	632			1722	672	
Approach Delay, s/veh	13.4			13.9	21.6	
Approach LOS	B			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	16.7	19.7				36.4		21.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0				34.0		16.0
Max Q Clear Time (g_c+I1), s	11.0	11.5				13.7		17.9
Green Ext Time (p_c), s	0.6	3.2				9.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B

Phase Number	1	2	6	8
Movement	SEL	NWT	SET	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	Min	Min	None
Maximum Split (s)	18	21	39	21
Maximum Split (%)	30.0%	35.0%	65.0%	35.0%
Minimum Split (s)	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		1	1	1
Flash Dont Walk (s)		1	1	1
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	18	0	39
End Time (s)	18	39	39	0
Yield/Force Off (s)	13	34	34	55
Yield/Force Off 170(s)	13	34	34	54
Local Start Time (s)	42	0	42	21
Local Yield (s)	55	16	16	37
Local Yield 170(s)	55	16	16	36

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 2: E Mercury Blvd & Andrews Blvd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	315	41	94	301	28	67	138	47	43	295	138
Future Volume (veh/h)	129	315	41	94	301	28	67	138	47	43	295	138
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	140	342	45	102	327	30	73	150	51	47	321	150
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	227	761	99	172	691	63	403	683	224	516	584	267
Arrive On Green	0.13	0.24	0.22	0.10	0.21	0.19	0.07	0.26	0.24	0.06	0.24	0.22
Sat Flow, veh/h	1792	3180	415	1792	3313	302	1792	2646	869	1792	2384	1091
Grp Volume(v), veh/h	140	191	196	102	175	182	73	100	101	47	239	232
Grp Sat Flow(s),veh/h/ln	1792	1787	1808	1792	1787	1828	1792	1787	1728	1792	1787	1689
Q Serve(g_s), s	3.4	4.2	4.3	2.5	4.0	4.1	1.3	2.0	2.2	0.9	5.4	5.6
Cycle Q Clear(g_c), s	3.4	4.2	4.3	2.5	4.0	4.1	1.3	2.0	2.2	0.9	5.4	5.6
Prop In Lane	1.00		0.23	1.00		0.17	1.00		0.50	1.00		0.65
Lane Grp Cap(c), veh/h	227	428	433	172	373	382	403	461	446	516	438	413
V/C Ratio(X)	0.62	0.45	0.45	0.59	0.47	0.48	0.18	0.22	0.23	0.09	0.55	0.56
Avail Cap(c_a), veh/h	851	1081	1093	580	811	829	541	1119	1082	678	1119	1058
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	15.0	15.1	20.1	16.1	16.2	11.6	13.5	13.7	11.5	15.2	15.6
Incr Delay (d2), s/veh	2.7	0.7	0.7	3.2	0.9	0.9	0.2	0.2	0.3	0.1	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.2	2.2	1.4	2.0	2.1	0.7	1.0	1.1	0.4	2.8	2.7
LnGrp Delay(d),s/veh	21.9	15.7	15.9	23.3	17.0	17.1	11.8	13.7	14.0	11.6	16.3	16.8
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		527			459			274			518	
Approach Delay, s/veh		17.4			18.4			13.3			16.1	
Approach LOS		B			B			B			B	

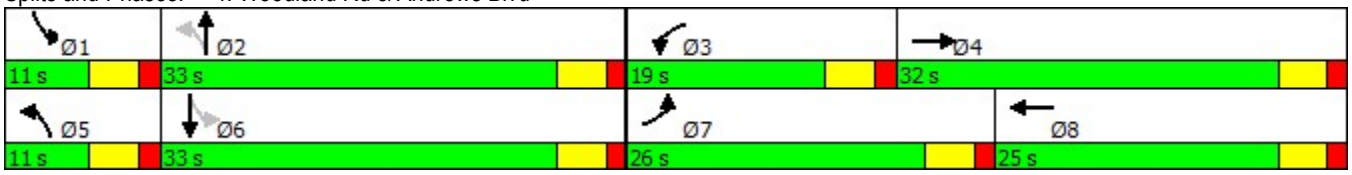
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	16.0	8.4	15.1	7.4	15.3	9.9	13.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	6.0	28.0	14.0	27.0	6.0	28.0	21.0	20.0
Max Q Clear Time (g_c+I1), s	2.9	4.2	4.5	6.3	3.3	7.6	5.4	6.1
Green Ext Time (p_c), s	0.0	2.8	0.2	2.9	0.0	2.7	0.4	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.7
HCM 2010 LOS	B

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	None	Min	None	None
Maximum Split (s)	11	33	19	32	11	33	26	25
Maximum Split (%)	11.6%	34.7%	20.0%	33.7%	11.6%	34.7%	27.4%	26.3%
Minimum Split (s)	9	20	9	20	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		1		1		1	1	1
Flash Dont Walk (s)		1		1		1	1	1
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	44	63	0	11	44	70
End Time (s)	11	44	63	0	11	44	70	0
Yield/Force Off (s)	6	39	58	90	6	39	65	90
Yield/Force Off 170(s)	6	39	58	89	6	39	64	89
Local Start Time (s)	84	0	33	52	84	0	33	59
Local Yield (s)	90	28	47	79	90	28	54	79
Local Yield 170(s)	90	28	47	78	90	28	53	78

Intersection Summary	
Cycle Length	95
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 4: Woodland Rd & Andrews Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	315	41	94	301	28	67	138	47	43	295	138
Future Volume (veh/h)	129	315	41	94	301	28	67	138	47	43	295	138
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	140	342	45	102	327	30	73	150	51	47	321	150
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	227	761	99	172	691	63	403	683	224	516	584	267
Arrive On Green	0.13	0.24	0.22	0.10	0.21	0.19	0.07	0.26	0.24	0.06	0.24	0.22
Sat Flow, veh/h	1792	3180	415	1792	3313	302	1792	2646	869	1792	2384	1091
Grp Volume(v), veh/h	140	191	196	102	175	182	73	100	101	47	239	232
Grp Sat Flow(s),veh/h/ln	1792	1787	1808	1792	1787	1828	1792	1787	1728	1792	1787	1689
Q Serve(g_s), s	3.4	4.2	4.3	2.5	4.0	4.1	1.3	2.0	2.2	0.9	5.4	5.6
Cycle Q Clear(g_c), s	3.4	4.2	4.3	2.5	4.0	4.1	1.3	2.0	2.2	0.9	5.4	5.6
Prop In Lane	1.00		0.23	1.00		0.17	1.00		0.50	1.00		0.65
Lane Grp Cap(c), veh/h	227	428	433	172	373	382	403	461	446	516	438	413
V/C Ratio(X)	0.62	0.45	0.45	0.59	0.47	0.48	0.18	0.22	0.23	0.09	0.55	0.56
Avail Cap(c_a), veh/h	851	1081	1093	580	811	829	541	1119	1082	678	1119	1058
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	15.0	15.1	20.1	16.1	16.2	11.6	13.5	13.7	11.5	15.2	15.6
Incr Delay (d2), s/veh	2.7	0.7	0.7	3.2	0.9	0.9	0.2	0.2	0.3	0.1	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.2	2.2	1.4	2.0	2.1	0.7	1.0	1.1	0.4	2.8	2.7
LnGrp Delay(d),s/veh	21.9	15.7	15.9	23.3	17.0	17.1	11.8	13.7	14.0	11.6	16.3	16.8
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		527			459			274			518	
Approach Delay, s/veh		17.4			18.4			13.3			16.1	
Approach LOS		B			B			B			B	

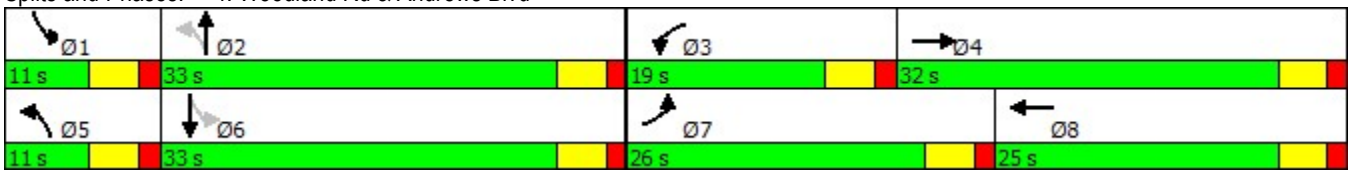
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	16.0	8.4	15.1	7.4	15.3	9.9	13.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	6.0	28.0	14.0	27.0	6.0	28.0	21.0	20.0
Max Q Clear Time (g_c+I1), s	2.9	4.2	4.5	6.3	3.3	7.6	5.4	6.1
Green Ext Time (p_c), s	0.0	2.8	0.2	2.9	0.0	2.7	0.4	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.7
HCM 2010 LOS	B

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	None	Min	None	None
Maximum Split (s)	11	33	19	32	11	33	26	25
Maximum Split (%)	11.6%	34.7%	20.0%	33.7%	11.6%	34.7%	27.4%	26.3%
Minimum Split (s)	9	20	9	20	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		1		1		1	1	1
Flash Dont Walk (s)		1		1		1	1	1
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	44	63	0	11	44	70
End Time (s)	11	44	63	0	11	44	70	0
Yield/Force Off (s)	6	39	58	90	6	39	65	90
Yield/Force Off 170(s)	6	39	58	89	6	39	64	89
Local Start Time (s)	84	0	33	52	84	0	33	59
Local Yield (s)	90	28	47	79	90	28	54	79
Local Yield 170(s)	90	28	47	78	90	28	53	78

Intersection Summary	
Cycle Length	95
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 4: Woodland Rd & Andrews Blvd



Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	0	6	29	0	29	6	558	6	12	1052	9
Future Vol, veh/h	17	0	6	29	0	29	6	558	6	12	1052	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	0	-	-	0	-	-
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, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	18	0	7	32	0	32	7	607	7	13	1143	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1490	1800	577	1221	1802	307	1153	0	0	613	0	0
Stage 1	1174	1174	-	623	623	-	-	-	-	-	-	-
Stage 2	316	626	-	598	1179	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	87	81	465	138	80	695	613	-	-	976	-	-
Stage 1	207	268	-	445	481	-	-	-	-	-	-	-
Stage 2	675	480	-	461	267	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	81	79	465	134	78	695	613	-	-	976	-	-
Mov Cap-2 Maneuver	81	79	-	134	78	-	-	-	-	-	-	-
Stage 1	205	264	-	440	476	-	-	-	-	-	-	-
Stage 2	637	475	-	448	263	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	50.8	25.2	0.1	0.1
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	613	-	-	103	134	695	976	-	-
HCM Lane V/C Ratio	0.011	-	-	0.243	0.235	0.045	0.013	-	-
HCM Control Delay (s)	10.9	-	-	50.8	39.9	10.4	8.7	-	-
HCM Lane LOS	B	-	-	F	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.9	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	25	5	231	435	6
Future Vol, veh/h	15	25	5	231	435	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	27	5	251	473	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	612	240	479	0	-	0
Stage 1	476	-	-	-	-	-
Stage 2	136	-	-	-	-	-
Critical Hdwy	7.54	6.94	4.14	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	377	761	1080	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	853	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	376	761	1080	-	-	-
Mov Cap-2 Maneuver	376	-	-	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	849	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.1	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1080	-	550	-	-
HCM Lane V/C Ratio	0.005	-	0.079	-	-
HCM Control Delay (s)	8.3	0	12.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	505	180	19	211	166	102	386	11	254	878	70
Future Volume (veh/h)	65	505	180	19	211	166	102	386	11	254	878	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	71	549	196	21	229	180	111	420	12	276	954	76
Adj No. of Lanes	0	1	1	0	2	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	70	539	634	26	285	235	127	623	18	323	1017	455
Arrive On Green	0.33	0.33	0.33	0.16	0.16	0.15	0.07	0.18	0.17	0.18	0.28	0.28
Sat Flow, veh/h	214	1656	1599	166	1821	1501	1792	3549	101	1792	3574	1599
Grp Volume(v), veh/h	620	0	196	236	0	194	111	211	221	276	954	76
Grp Sat Flow(s),veh/h/ln	1870	0	1599	1873	0	1616	1792	1787	1863	1792	1787	1599
Q Serve(g_s), s	32.0	0.0	8.3	12.0	0.0	11.3	6.0	10.9	10.9	14.7	25.6	3.5
Cycle Q Clear(g_c), s	32.0	0.0	8.3	12.0	0.0	11.3	6.0	10.9	10.9	14.7	25.6	3.5
Prop In Lane	0.11		1.00	0.09		0.93	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	608	0	634	293	0	253	127	314	327	323	1017	455
V/C Ratio(X)	1.02	0.00	0.31	0.81	0.00	0.77	0.87	0.67	0.67	0.86	0.94	0.17
Avail Cap(c_a), veh/h	608	0	634	324	0	279	127	314	327	328	1017	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	0.0	20.4	40.1	0.0	40.2	45.2	37.9	37.9	39.1	34.3	26.4
Incr Delay (d2), s/veh	41.4	0.0	0.3	12.9	0.0	11.0	43.4	5.5	5.4	19.2	15.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.4	0.0	3.7	7.2	0.0	5.8	4.5	5.8	6.1	9.0	14.8	1.6
LnGrp Delay(d),s/veh	74.6	0.0	20.7	53.0	0.0	51.3	88.7	43.4	43.3	58.3	49.8	26.6
LnGrp LOS	F		C	D		D	F	D	D	E	D	C
Approach Vol, veh/h		816			430			543			1306	
Approach Delay, s/veh		61.6			52.2			52.6			50.3	
Approach LOS		E			D			D			D	

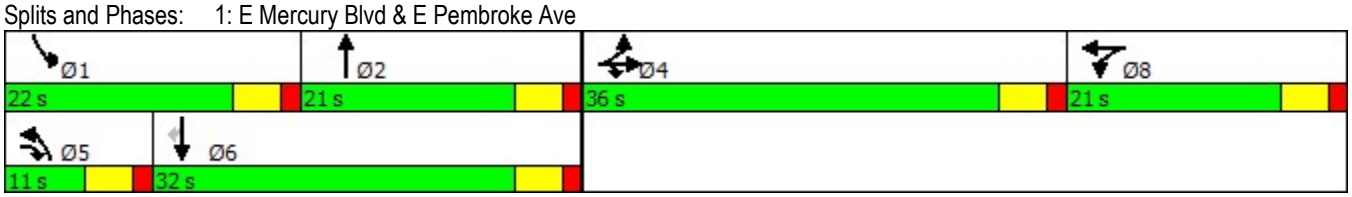
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.7	21.3		36.0	11.0	32.0		19.4
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	16.0		31.0	6.0	27.0		16.0
Max Q Clear Time (g_c+I1), s	16.7	12.9		34.0	8.0	27.6		14.0
Green Ext Time (p_c), s	0.0	2.0		0.0	0.0	0.0		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	53.9
HCM 2010 LOS	D

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	22	21	36	11	32	21
Maximum Split (%)	22.0%	21.0%	36.0%	11.0%	32.0%	21.0%
Minimum Split (s)	9	20	20	9	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		1	1		1	1
Flash Dont Walk (s)		1	1		1	1
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	22	43	0	11	79
End Time (s)	22	43	79	11	43	0
Yield/Force Off (s)	17	38	74	6	38	95
Yield/Force Off 170(s)	17	38	73	6	38	94
Local Start Time (s)	78	0	21	78	89	57
Local Yield (s)	95	16	52	84	16	73
Local Yield 170(s)	95	16	51	84	16	72

Intersection Summary	
Cycle Length	100
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 1: E Mercury Blvd & E Pembroke Ave



Movement	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	46	453	738	1271	579	53
Future Volume (veh/h)	46	453	738	1271	579	53
Number	3	18	1	6	2	12
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	50	492	802	1382	629	58
Adj No. of Lanes	1	1	2	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	452	871	1015	2356	1069	98
Arrive On Green	0.25	0.25	0.29	0.66	0.32	0.31
Sat Flow, veh/h	1792	1599	3476	3668	3404	305
Grp Volume(v), veh/h	50	492	802	1382	339	348
Grp Sat Flow(s),veh/h/ln	1792	1599	1738	1787	1787	1827
Q Serve(g_s), s	1.9	18.3	19.2	19.4	14.4	14.4
Cycle Q Clear(g_c), s	1.9	18.3	19.2	19.4	14.4	14.4
Prop In Lane	1.00	1.00	1.00			0.17
Lane Grp Cap(c), veh/h	452	871	1015	2356	577	590
V/C Ratio(X)	0.11	0.57	0.79	0.59	0.59	0.59
Avail Cap(c_a), veh/h	555	962	1729	3516	790	808
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	26.0	13.6	29.5	8.6	25.6	25.7
Incr Delay (d2), s/veh	0.1	0.6	1.4	0.2	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.1	9.4	9.5	7.2	7.4
LnGrp Delay(d),s/veh	26.1	14.2	30.9	8.8	26.6	26.6
LnGrp LOS	C	B	C	A	C	C
Approach Vol, veh/h	542			2184	687	
Approach Delay, s/veh	15.3			16.9	26.6	
Approach LOS	B			B	C	

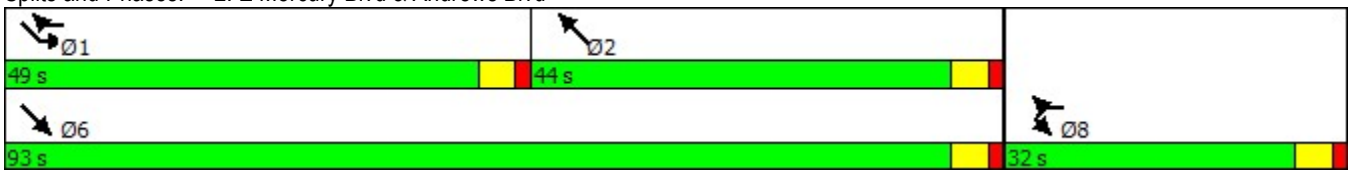
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	30.4	33.2				63.6		26.8
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	44.0	39.0				88.0		27.0
Max Q Clear Time (g_c+I1), s	21.2	16.4				21.4		20.3
Green Ext Time (p_c), s	4.2	11.8				16.7		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Phase Number	1	2	6	8
Movement	SEL	NWT	SET	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	Min	Min	None
Maximum Split (s)	49	44	93	32
Maximum Split (%)	39.2%	35.2%	74.4%	25.6%
Minimum Split (s)	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		1	1	1
Flash Dont Walk (s)		1	1	1
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	49	0	93
End Time (s)	49	93	93	0
Yield/Force Off (s)	44	88	88	120
Yield/Force Off 170(s)	44	88	88	119
Local Start Time (s)	76	0	76	44
Local Yield (s)	120	39	39	71
Local Yield 170(s)	120	39	39	70

Intersection Summary	
Cycle Length	125
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 2: E Mercury Blvd & Andrews Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	577	53	122	304	24	15	226	119	26	190	94
Future Volume (veh/h)	126	577	53	122	304	24	15	226	119	26	190	94
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	137	627	58	133	330	26	16	246	129	28	207	102
Adj No. of Lanes	0	2	0	0	2	0	0	2	0	0	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	195	938	91	210	554	45	88	488	244	109	457	220
Arrive On Green	0.33	0.33	0.31	0.22	0.22	0.20	0.22	0.22	0.20	0.22	0.22	0.20
Sat Flow, veh/h	587	2825	273	955	2518	205	67	2189	1094	138	2051	989
Grp Volume(v), veh/h	432	0	390	255	0	234	212	0	179	178	0	159
Grp Sat Flow(s),veh/h/ln	1852	0	1833	1833	0	1845	1831	0	1519	1640	0	1537
Q Serve(g_s), s	10.8	0.0	9.6	6.7	0.0	6.0	0.0	0.0	5.6	0.1	0.0	4.8
Cycle Q Clear(g_c), s	10.8	0.0	9.6	6.7	0.0	6.0	5.3	0.0	5.6	5.7	0.0	4.8
Prop In Lane	0.32		0.15	0.52		0.11	0.08		0.72	0.16		0.64
Lane Grp Cap(c), veh/h	615	0	608	403	0	406	481	0	339	444	0	343
V/C Ratio(X)	0.70	0.00	0.64	0.63	0.00	0.58	0.44	0.00	0.53	0.40	0.00	0.46
Avail Cap(c_a), veh/h	1948	0	1928	1240	0	1247	1288	0	1027	1195	0	1039
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	15.2	18.8	0.0	18.6	18.1	0.0	18.6	17.8	0.0	18.2
Incr Delay (d2), s/veh	1.5	0.0	1.1	1.7	0.0	1.3	0.6	0.0	1.3	0.6	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	5.0	3.6	0.0	3.2	2.8	0.0	2.4	2.3	0.0	2.1
LnGrp Delay(d),s/veh	17.0	0.0	16.3	20.5	0.0	19.9	18.8	0.0	19.8	18.4	0.0	19.2
LnGrp LOS	B		B	C		B	B		B	B		B
Approach Vol, veh/h		822			489			391			337	
Approach Delay, s/veh		16.7			20.2			19.2			18.7	
Approach LOS		B			C			B			B	

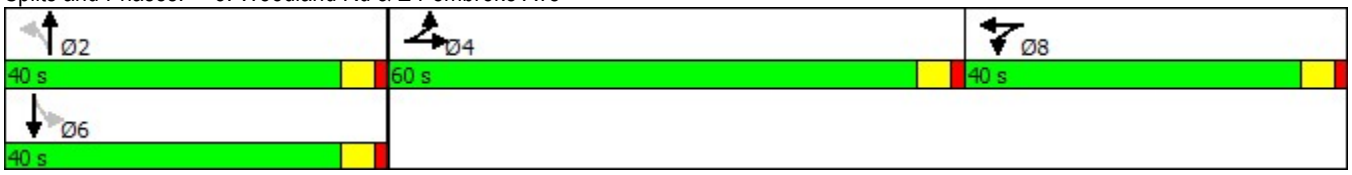
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		15.9		21.7		15.9		15.7
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0		55.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		7.6		12.8		7.7		8.7
Green Ext Time (p_c), s		3.2		3.8		3.2		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Min	None	Min	None
Maximum Split (s)	40	60	40	40
Maximum Split (%)	28.6%	42.9%	28.6%	28.6%
Minimum Split (s)	20	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	1	1	1	1
Flash Dont Walk (s)	1	1	1	1
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	40	0	100
End Time (s)	40	100	40	0
Yield/Force Off (s)	35	95	35	135
Yield/Force Off 170(s)	35	94	35	134
Local Start Time (s)	0	40	0	100
Local Yield (s)	35	95	35	135
Local Yield 170(s)	35	94	35	134

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 3: Woodland Rd & E Pembroke Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	563	96	81	323	43	74	270	90	58	187	101
Future Volume (veh/h)	133	563	96	81	323	43	74	270	90	58	187	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	145	612	104	88	351	47	80	293	98	63	203	110
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	230	1003	170	150	898	119	403	570	187	370	474	247
Arrive On Green	0.13	0.33	0.31	0.08	0.28	0.26	0.07	0.22	0.20	0.07	0.21	0.19
Sat Flow, veh/h	1792	3058	519	1792	3172	421	1792	2647	868	1792	2276	1184
Grp Volume(v), veh/h	145	357	359	88	197	201	80	196	195	63	158	155
Grp Sat Flow(s),veh/h/ln	1792	1787	1790	1792	1787	1807	1792	1787	1728	1792	1787	1672
Q Serve(g_s), s	4.0	8.7	8.8	2.5	4.6	4.7	1.7	5.0	5.2	1.4	4.0	4.3
Cycle Q Clear(g_c), s	4.0	8.7	8.8	2.5	4.6	4.7	1.7	5.0	5.2	1.4	4.0	4.3
Prop In Lane	1.00		0.29	1.00		0.23	1.00		0.50	1.00		0.71
Lane Grp Cap(c), veh/h	230	586	587	150	506	512	403	385	372	370	373	349
V/C Ratio(X)	0.63	0.61	0.61	0.59	0.39	0.39	0.20	0.51	0.52	0.17	0.42	0.45
Avail Cap(c_a), veh/h	966	1755	1757	655	1445	1461	619	1170	1131	598	1170	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	14.7	14.8	22.9	15.0	15.1	14.3	18.0	18.3	14.4	17.8	18.3
Incr Delay (d2), s/veh	2.8	1.0	1.0	3.6	0.5	0.5	0.2	1.0	1.1	0.2	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.4	4.5	1.4	2.3	2.4	0.9	2.6	2.6	0.7	2.0	2.0
LnGrp Delay(d),s/veh	24.3	15.7	15.8	26.5	15.5	15.6	14.5	19.0	19.4	14.7	18.6	19.2
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		861			486			471			376	
Approach Delay, s/veh		17.2			17.5			18.4			18.2	
Approach LOS		B			B			B			B	

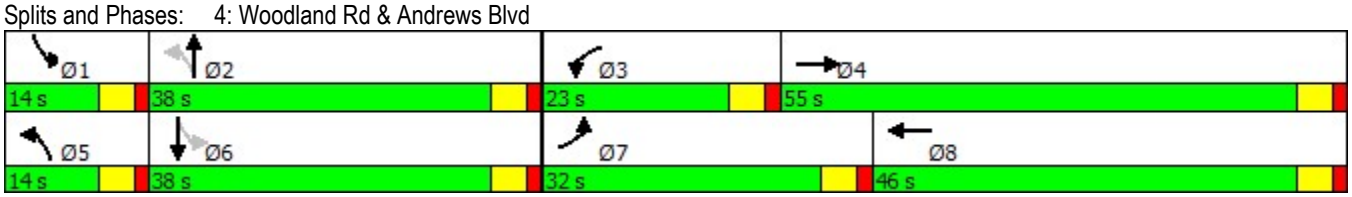
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	15.2	8.3	21.0	7.7	14.8	10.7	18.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	9.0	33.0	18.0	50.0	9.0	33.0	27.0	41.0
Max Q Clear Time (g_c+I1), s	3.4	7.2	4.5	10.8	3.7	6.3	6.0	6.7
Green Ext Time (p_c), s	0.1	3.0	0.2	5.2	0.1	3.0	0.5	5.2

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	None	Min	None	None
Maximum Split (s)	14	38	23	55	14	38	32	46
Maximum Split (%)	10.8%	29.2%	17.7%	42.3%	10.8%	29.2%	24.6%	35.4%
Minimum Split (s)	9	20	9	20	9	20	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		1		1		1	1	1
Flash Dont Walk (s)		1		1		1	1	1
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	14	52	75	0	14	52	84
End Time (s)	14	52	75	0	14	52	84	0
Yield/Force Off (s)	9	47	70	125	9	47	79	125
Yield/Force Off 170(s)	9	47	70	124	9	47	78	124
Local Start Time (s)	116	0	38	61	116	0	38	70
Local Yield (s)	125	33	56	111	125	33	65	111
Local Yield 170(s)	125	33	56	110	125	33	64	110

Intersection Summary	
Cycle Length	130
Control Type	Actuated-Uncoordinated
Natural Cycle	70

Splits and Phases: 4: Woodland Rd & Andrews Blvd



Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	5	14	0	10	6	578	19	30	1306	12
Future Vol, veh/h	7	0	5	14	0	10	6	578	19	30	1306	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	0	-	-	0	-	-
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, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	8	0	5	15	0	11	7	628	21	33	1420	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1818	2153	716	1427	2150	324	1433	0	0	649	0	0
Stage 1	1491	1491	-	652	652	-	-	-	-	-	-	-
Stage 2	327	662	-	775	1498	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	50	49	377	97	49	678	480	-	-	947	-	-
Stage 1	132	189	-	428	467	-	-	-	-	-	-	-
Stage 2	665	462	-	361	187	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	47	47	377	92	47	678	480	-	-	947	-	-
Mov Cap-2 Maneuver	47	47	-	92	47	-	-	-	-	-	-	-
Stage 1	130	182	-	422	460	-	-	-	-	-	-	-
Stage 2	645	455	-	343	180	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	63.8	34.5	0.1	0.2
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	480	-	-	74	92	678	947	-	-
HCM Lane V/C Ratio	0.014	-	-	0.176	0.165	0.016	0.034	-	-
HCM Control Delay (s)	12.6	-	-	63.8	51.7	10.4	8.9	-	-
HCM Lane LOS	B	-	-	F	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.6	0	0.1	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	12	16	367	335	11
Future Vol, veh/h	12	12	16	367	335	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	13	17	399	364	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	604	188	376	0	-	0
Stage 1	370	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	430	822	1179	-	-	-
Stage 1	669	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	422	822	1179	-	-	-
Mov Cap-2 Maneuver	422	-	-	-	-	-
Stage 1	669	-	-	-	-	-
Stage 2	768	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.8	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1179	-	558	-	-
HCM Lane V/C Ratio	0.015	-	0.047	-	-
HCM Control Delay (s)	8.1	0.1	11.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

TITLE CERTIFICATION OF
261 WOODLAND ROAD &
183 E. MERCURY BOULEVARD
HAMPTON, VIRGINIA

The undersigned, attorney for the contract owner of the real property set forth in Exhibit A, hereto (the "Property") located in the City of Hampton, Virginia, as shown on a proposed physical survey entitled "PHYSICAL SURVEY OF 261 WOODLAND ROAD, (T.P. #12003435) AND 183 E. MERCURY (T.P. 12003432 & 12003433) HAMPTON, VIRGINIA," dated September 12, 2024, prepared by Hoggard-Eure & Associates, P.C. 901 Port Centre Parkway, Suite 5, Portsmouth, Virginia 23704 (the "Survey"), hereby certifies, as required by Section 14-24 of the Code of the City of Hampton. The Property was acquired by the current owner, BWDS, LLC, a Virginia limited liability company, by instrument of record in the Clerk's Office of the Circuit Court of Hampton, Virginia, as Instrument No. 060012351. The title as reported herein has been examined through June 3, 2025.

Based solely on the Survey, I certify that there are as of the date of this certification no deed restrictions or covenants of record, title defects, or encumbrances affecting or potentially affecting any portion of the Property shown as proposed to be dedicated to public use on the Survey, other than the following:

1. All matters shown on the Survey, other than the following: NONE
2. All matters not shown in the Title Report.

I further certify that based solely on the Title Report, there are no deeds of trust encumbering the Property.

LIMITATIONS ON CERTIFICATION BY KONIKOFF LAW, PC:

I. Any and all information and certifications as to the applicability and/or location of easements and other matters set forth above are based on a survey prepared by Stephen Rhodes, land surveyor, of Hoggard-Eure & Associates, P.C. dated September 12, 2024, entitled "PHYSICAL SURVEY OF 261 WOODLAND ROAD, (T.P. #12003435) AND 183 E. MERCURY (T.P. 12003432 & 12003433) HAMPTON, VIRGINIA" (the "Survey").

3. Konikoff Law, P.C. make no certification as to locations, effects, impacts or applicability of matters of survey because they have relied upon said Survey in rendering this certification.

4. This certification is made to the City of Hampton, Virginia for purposes of plan approval only and is not transferable or applicable to any other party.

KONIKOFF LAW, P.C.

Signature: _____
Attorney at Law

Date: June 3, 2025

Print Name: Scott B. Konikoff
VSB No. 66639
Address: 223 E. City Hall Avenue, Ste. 309
Norfolk, Virginia 23510
Telephone: (757) 581-6214

EXHIBIT A

Legal Description for 183 E Mercury Blvd A (12003433)

All that certain lot, piece or parcel of land located in the City of Hampton, Virginia, which said parcel of land fronts on the easterly side of East Mercury Boulevard and contains one and one-half (1 1/2) acres, more or less, and is bounded on the North by other property of William L. Wood and the property now or formerly of Frazier, on the East by other property of William L. Wood, on the South by the property now or formerly of J. T. Cox, and on the by West East Mercury Boulevard and other property of William L. Wood.

Legal Description for 261 Woodland Rd (12003435)

All that certain lot, piece or parcel of land located in the City of Hampton, Virginia, containing eight (8) acres, more or less, and being more particularly described as follows:

Beginning at a point located on the westerly side of Woodland Road, where the northerly boundary line of the property now or formerly belonging to Outten intersects with the said westerly side of Woodland Road; from the point of beginning thus established, running thence along the northerly line of the property now or formerly belonging to Outten N. 89 ½° W. to a pipe; thence N. ½° E. a distance of 279 feet along the easterly boundary line of other property of William L. Wood (formerly the property of Elizabeth Sinclair) to a pipe; thence S. 89 ½° E. along the southerly line of the property now or formerly known as the "Fulton Farm" to Woodland Road; thence in a southerly direction along the westerly side of Woodland Road to the point or place of beginning.

Legal Description for 183 E Mercury Blvd (12003432)

All that certain lot, piece or parcel of land located in the City of Hampton, Virginia, fronting on the easterly side of East Mercury Boulevard and is shown on a certain plat entitled "PLAT OF CHARLES H. WOOD'S PROPERTY, PURCHASED FROM MRS. ELIZ C. SINCLAIR," made by Girard Chambers & Son, dated May 19, 1949, which plat is attached to the deed from Elizabeth C. Sinclair, et vir, to Charles H. Wood, dated June 6, 1949, and recorded in the aforesaid Clerk's Office in Deed Book 165, page 245; and reference to said plat is here made for a more particular description of the property.

TITLE CERTIFICATION OF
265 WOODLAND ROAD
HAMPTON, VIRGINIA

The undersigned, attorney for the contract owner of the real property set forth in Exhibit A hereto (the "Property"), located in the City of Hampton, Virginia, as shown on a proposed physical survey entitled "PHYSICAL SURVEY OF #265 WOODLAND ROAD, TAX PARCE #12003434, HAMPTON, VIRGINIA," dated April 4, 2025, prepared by Hoggard-Eure & Associates, P.C. 901 Port Centre Parkway, Suite 5, Portsmouth, Virginia 23704 (the "Survey"), hereby certifies, as required by Section 14-24 of the Code of the City of Hampton. The Property was acquired by the current owner, Gerald C. Clarington, by instrument of record in the Clerk's Office of the Circuit Court of Hampton, Virginia, as Instrument No. 200018350. The title as reported herein has been examined through April 11, 2025.

Based solely on the Survey, I certify that there are as of the date of this certification no deed restrictions or covenants of record, title defects, or encumbrances affecting or potentially affecting any portion of the Property shown as proposed to be dedicated to public use on the Survey, other than the following:

1. All matters shown on the Survey, other than the following: None
2. All matters not shown in the Title Report.

I further certify that based solely on the Title Report, there are no deeds of trust encumbering the Property.

LIMITATIONS ON CERTIFICATION BY KONIKOFF LAW, PC:

1. Any and all information and certifications as to the applicability and/or location of easements and other matters set forth above are based on a survey prepared by Stephen Rhodes, land surveyor, of Hoggard-Eure & Associates, P.C. dated April 4, 2025, entitled "PHYSICAL SURVEY OF #265 WOODLAND ROAD, TAX PARCEL #12003434, HAMPTON, VIRGINIA" (the "Survey").

2. Konikoff Law, P.C. make no certification as to locations, effects, impacts or applicability of matters of survey because they have relied upon said Survey in rendering this certification.

3. This certification is made to the City of Hampton, Virginia for purposes of plan approval only and is not transferable or applicable to any other party.

KONIKOFF LAW, P.C.

Signature: _____
Attorney at Law

Date: June 3, 2025

Print Name: Scott B. Konikoff
VSB No. 66639
Address: 223 E. City Hall Avenue, Ste. 309
Norfolk, Virginia 23510
Telephone: (757) 581-6214

EXHIBIT A

Legal Description for 265 Woodland Road

ALL THAT certain lot, piece or parcel of land situate, lying and being in the City of Hampton, Virginia, and described as follows: Commencing from the northwesterly intersection of Woodland Road and Woodcrest Drive; thence, in a northerly direction along the westerly right-of-way of Woodland Road a distance of 501' more or less, to a pipe found, which is the point of beginning; thence N. 88 degrees 20' 00" W. at a distance of 174.66' to a point; thence, N. 2 degrees 49' 00" E. at a distance of 96.30' to a point; thence, S. 88 degrees 20' 00" E. at a distance of 188.27; to a point in the western right- of way of Woodland Road; thence along the western right-of□way of Woodland Road S. 10 degrees 50' 23" W. a distance of 97.53' to a pipe found, which is the point of beginning, having an area of 17,471 square feet. IT BEING the same property conveyed to Gerald C. Clarington, by Deed from Rosa C. Flores, dated December 9, 2020 and recorded December 11, 2020 in the Clerks' Office of the Circuit Court of the City of Hampton, Virginia as Instrument No. 200018350