Traffic Impact Analysis
for Submittal to the
City of Hallandale Beach

Gulfstream Point
Hallandale Beach, Florida

Kimley-Horn
and Associates, Inc.

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September 2013
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Traffic Impact Analysis for Submittal to the City of Hallandale Beach

Gulfstream Point
Hallandale Beach, Florida

Prepared for:

Hallandale First, LLC
Hallandale Beach, Florida

Prepared by:

Kimley-Horn and Associates, Inc.
Fort Lauderdale, Florida

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EXECUTIVE SUMMARY

Hallandale First, LLC proposes a mixed-use development located at 918 South Federal Highway(US 1/SR 5), south of SE 9th Street in the City of Hallandale Beach. Currently, the area proposed for development is vacant. Access to the site is provided from South Federal Highway. The proposed development will consist of 391 apartment units, a 117-room hotel, and a 3,700 square-foot restaurant. The project is expected to be completed and opened by year 2015.

A traffic impact analysis was conducted for the project consistent with City of Hallandale Beach requirements. Trip generation calculations for the proposed development were performed using the Institute of Transportation Engineer's (ITE's) *Trip Generation*, 9th Edition. ITE Land Use Codes (LUC): 222 (High-Rise Apartment), 310 (Hotel), and 932 (High-Turnover [Sit-Down] Restaurant) were utilized for the proposed development. This project is expected to generate 2,522 new daily trips, 191 new trips during the A.M. peak hour and 215 new trips during the P.M. peak hour.

The existing conditions multi-modal facilities along South Federal Highway and SE 9th Street were evaluated for pedestrians and transit users near the proposed site. There are currently 6-foot wide sidewalks on both sides of South Federal Highway south of within the study area limits of SE 10th Street to the south and SE 3rd Street to the north. Sidewalks are generally provided at study intersections on the east side of South Federal Highway with the exception of SE 10th Street. Sidewalks are not provided along SE 5th Street west of South Federal Highway, SE 9th Street west of South Federal Highway, and SE 10th Street west of South Federal Highway. Sidewalks are also not provided along SE 1st Avenue. Bus stops are located in both the northbound and southbound directions on South Federal Highway near the project. A southbound bus stop is located adjacent to the south project driveway and includes a bus pull-out bay. Passenger amenities at the southbound bus stop include a shelter, trash receptacle, and additional passenger benches. In the northbound direction, a bus stop is provided just north of the SE 9th Street and South Federal Highway intersection. The only amenity provided at this location is a bus stop sign.

Intersection capacity analyses indicate that all the study intersections are expected to continue to operate at LOS D or better, with the exception of the minor street stop-controlled approaches at South Federal Highway at SE 5th Street and South Federal Highway at SE 10th Street. The eastbound stop-controlled minor approach at the intersection of South Federal Highway at SE 5th Street is expected to operate at LOS F in the A.M. and P.M. peak hours under existing, future background, and future total conditions. The eastbound stop-controlled minor approach at the intersection of South Federal Highway at SE 10th Street is expected to operate at LOS E during the A.M. peak hour under future total conditions. During the P.M. peak hour both the eastbound and westbound approaches are expected to operate at LOS E under existing and background conditions and LOS F under future total conditions. This result is common during peak periods where a high traffic volume free-flowing major street intersects with a stop controlled minor-street.

The results for the roadway segment analysis indicate that the roadway segments South Federal Highway from Hallandale Beach Boulevard to Miami-Dade County Line and South Federal Highway from Pembroke Road to Hallandale Beach Boulevard operate below adopted level of service for several analysis periods during existing, background, and future total conditions. South Federal Highway, from Hallandale Beach Boulevard to Miami-Dade County line operates at LOS F during daily conditions under existing, future background and future total conditions. South Federal Highway from Pembroke Road to Hallandale Beach Boulevard operates at LOS F during daily and P.M. peak hour under existing, future background, and future total conditions. However, roadway segment analysis results with the proposed project constructed indicated that the project is not expected to account for 5 percent or more of the adopted daily or peak hour level of service maximum service volume.

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INTRODUCTION

Hallandale First, LLC proposes a mixed-use development located at 918 South Federal Highway (US 1/SR 5), south of SE 9th Street in the City of Hallandale Beach. Currently, the area proposed for development is vacant. Access to the site is provided from South Federal Highway. The proposed development will consist of 391 apartment units, a 117-room hotel, and a 3,700 square-foot restaurant. The project is expected to be completed and opened by year 2015. Figure 1 illustrates the project location and a site plan is provided in Appendix A.

The roadways within the immediate vicinity of the site include the following:

- South Federal Highway: six-lane divided north/south roadway
- SE 3rd Street: two-lane undivided east/west roadway
- SE 5th Street: two-lane undivided east/west roadway
- SE 9th Street: two-lane undivided east/west roadway
- SE 10th Street: two-lane undivided east/west roadway
- SE 1st Avenue: two-lane undivided north/south roadway south of SE 9th Street and a two-lane one-way northbound roadway north of SE 9th Street

Kimley-Horn and Associates, Inc. has completed this traffic impact analysis for submittal to the City of Hallandale Beach. The purpose of the study is to assess the project's impact on the surrounding roadway network and determine if adequate capacity is available to support future traffic volumes. The study's methodology is consistent with the requirements of the City of Hallandale Beach. Methodology correspondence detailing the traffic study requirements is included in Appendix B. This report summarizes the data collection, project trip generation and distribution, and capacity analyses.

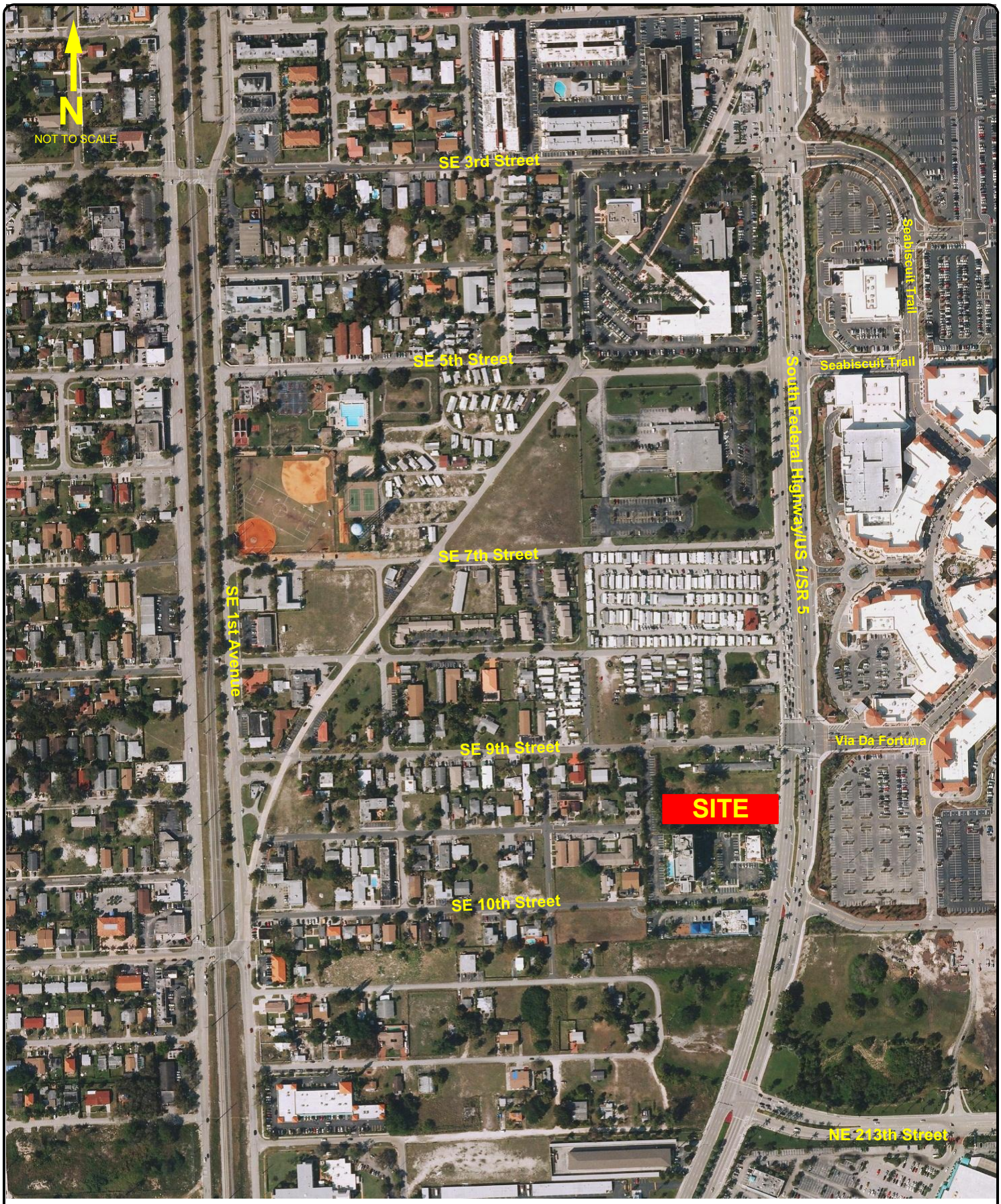

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Figure 1
Project Location Map
Gulfstream Point
Hallandale Beach, Florida

PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the project and the distribution and assignment of that traffic over the study roadway network.

Existing and Proposed Land Uses

The project site is currently vacant. The proposed development will consist of 391 high-rise apartment units, 117 hotel rooms, and a 3,700 square-foot restaurant.

Project Access

Access to the site is provided by a right-in only driveway and a right-out only driveway along South Federal Highway. A site plan and Florida Department of Transportation (FDOT) Pre-Application Letter are provided in Appendix A.

Trip Generation

Trip generation calculations for the proposed development were performed using the Institute of Transportation Engineer's (ITE's) *Trip Generation*, 9th Edition. Trip generation was determined using ITE Land Use Codes (LUC): 222 (High-Rise Apartment), 310 (Hotel), and 932 (High-Turnover [Sit-Down] Restaurant).

Internal Capture

Internal capture is expected between the complementary land uses within a project. Internal capture trips are trips made among the on-site uses, which in the case of this project are trips between the restaurant, hotel, and restaurant. Trips between there uses will be made by walking and will not result in additional vehicle trip on the roadway network. Internal capture trips for the project were determined based upon methodology contained in the Institute of Transportation Engineers' (ITE), Trip Generation Handbook, June 2004. The daily, A.M. peak hour, and P.M. peak internal capture rates are expected to be 6.5 percent (6.5%), 7.3 percent (7.3%), and 6.6 percent (6.6%).

Pass-By Capture Volumes

Pass-by capture volumes were calculated for site using rates outlined in the ITE's *Trip Generation Handbook*, 2nd Edition. The average pass-by capture rate of 43 percent (43%) was used for the restaurant. The applied pass-by percentage is presented in Table 1.

Net New Project Trips

Table 1 summarizes the project's trip generation potential for the daily weekday, weekday A.M. (7:00 to 9:00 A.M.), and P.M. (4:00 to 6:00 P.M.) peak hours. As shown in Table 1, this project is expected to generate 2,522 new daily trips, 191 new trips during the A.M. peak hour, and 215 new trips during the P.M. peak hour. Detailed trip generation information is included in Appendix C.

Table 1: Trip Generation

Proposed Land Use	ITE Code	Scale	External Trips			Internal Capture		Pass-By Capture		New Project Trips		
			Enter	Exit	Total	Percent	IC Trips	Percent	PB Trips	Enter	Exit	Total
Daily(A.M. Peak Hour)[P.M. Peak Hour]												
High-Rise Apartment	222	391 dwelling units	840 (28) [82]	840 (86) [51]	1,680 (114) [133]	2.7% (3.4%) [2.9%]	46 (4) [4]	0.0%	0 (0) [0]	840 28 (82)	840 86 (51)	1,680 (114) [133]
Hotel	310	117 rooms	314 (35) [34]	314 (23) [32]	628 (58) [66]	7.0% (6.5%) [5.7%]	46 (4) [4]	0.0%	0 (0) [0]	314 (35) [34]	314 (23) [32]	628 (58) [66]
High-Turnover (Sit-Down) Restaurant	932	3,700 square feet	188 (18) [18]	188 (14) [10]	376 (32) [28]	20.0% (20.0%) [22.2%]	94 (8) [8]	43.0%	162 (14) [12]	107 (11) [12]	107 (7) [4]	214 (18) [16]
TOTAL	**-**	**-**	**1,342 (81) [134]**	**1,342 (124) [93]**	**2,684 (205) [227]**	**6.5% (7.3%) [6.6%]**	**186 (16) [16]**	**-**	**162 (14) [12]**	**1,261 (74) [128]**	**1,261 (117) [87]**	**2,522 (191) [215]**

Trip Distribution and Assignment

Trip distribution for project traffic was determined based on the percentage of turning movement entering and exiting the study area at each study intersection approach. These calculations were performed for the weekday A.M. and P.M. peak hours. The calculated trip distribution was compared to the Florida Standard Urban Transportation Model Structure (FSUTMS). The FSUTMS South East Florida Regional Planning Model (SERPM) was used. Figures 2 and 3 present the project's net new traffic distribution for the A.M. peak hour and P.M. peak hour. Figure 4 presents the project's pass-by capture distribution for the A.M. and P.M. peak hours. Figures 5 and 6 present the project's traffic and pass-by assignment for the A.M. peak hour and P.M. peak hour.

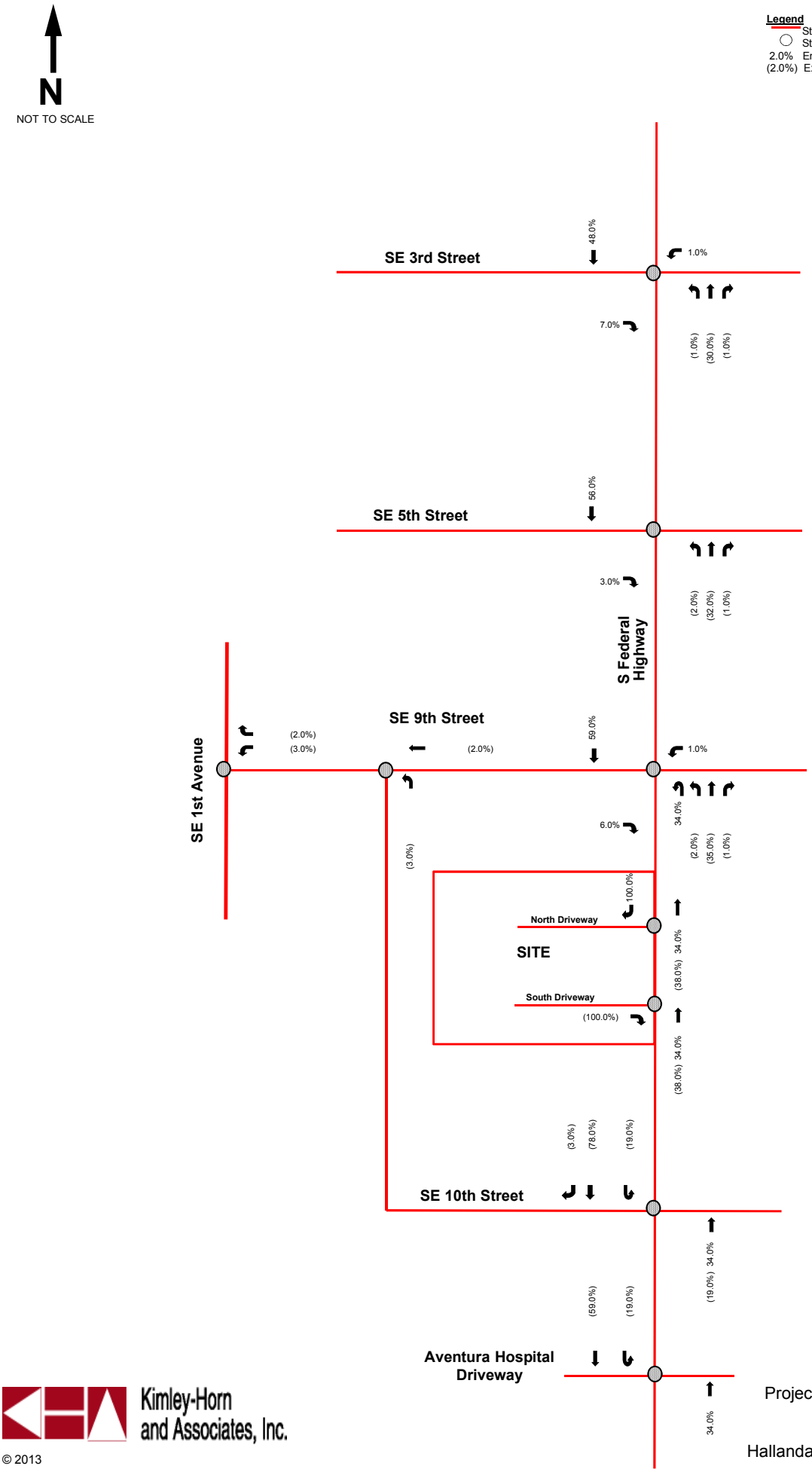

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Figure 2
Project Trip Distribution
A.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

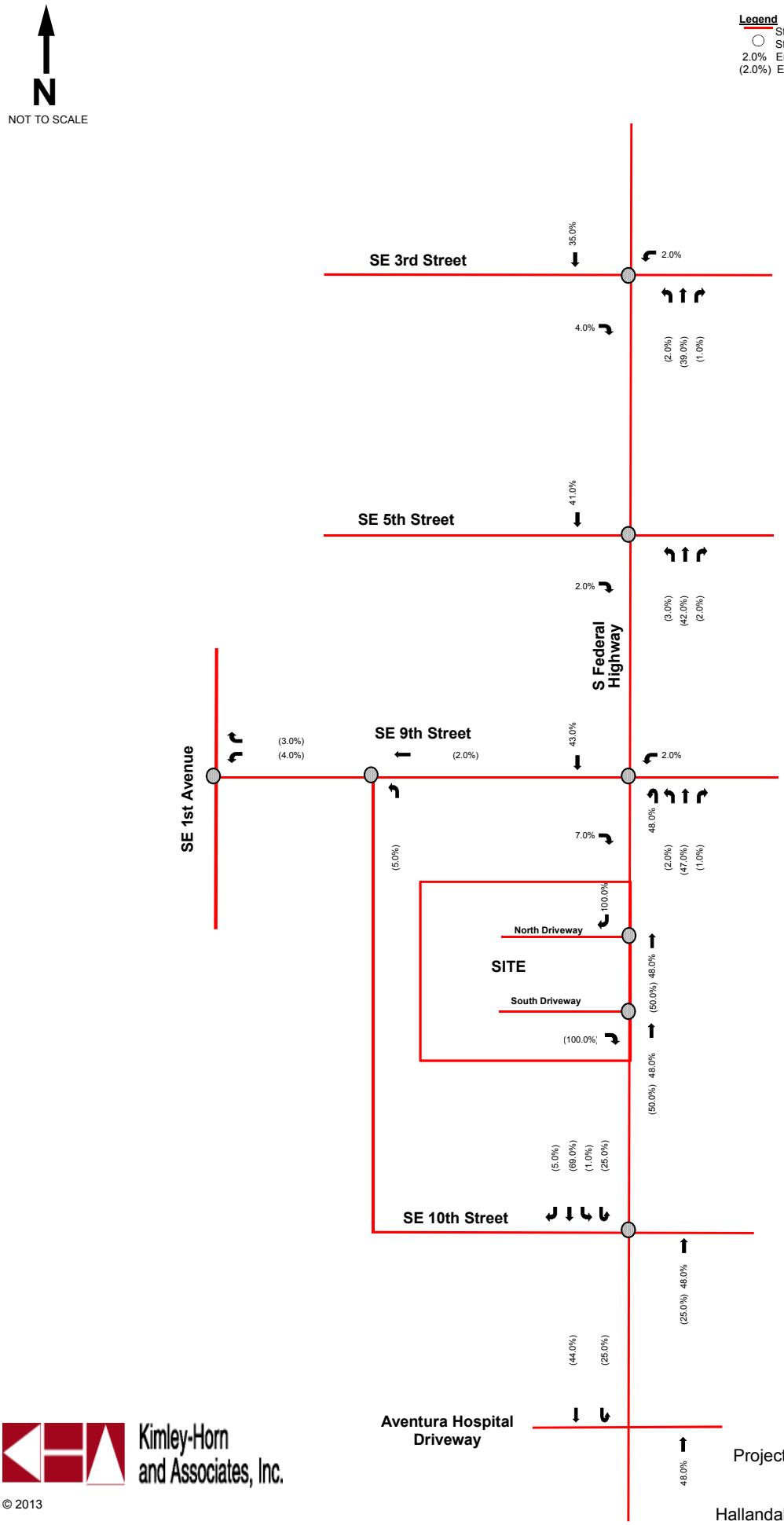

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Figure 3
Project Trip Distribution
P.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

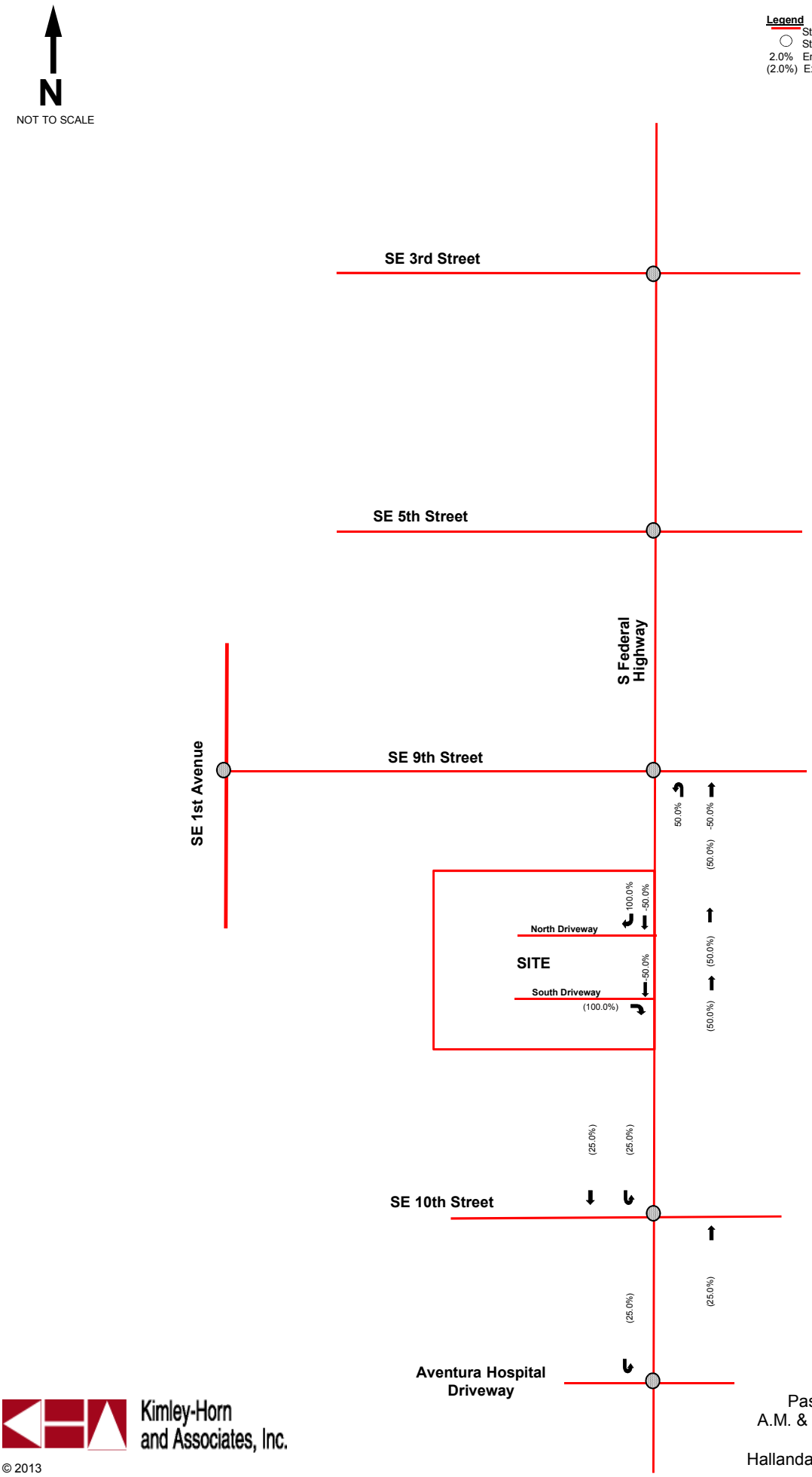

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Figure 4
Pass-By Distribution
A.M. & P.M. Peak Hours
Gulfstream Point
Hallandale Beach, Florida

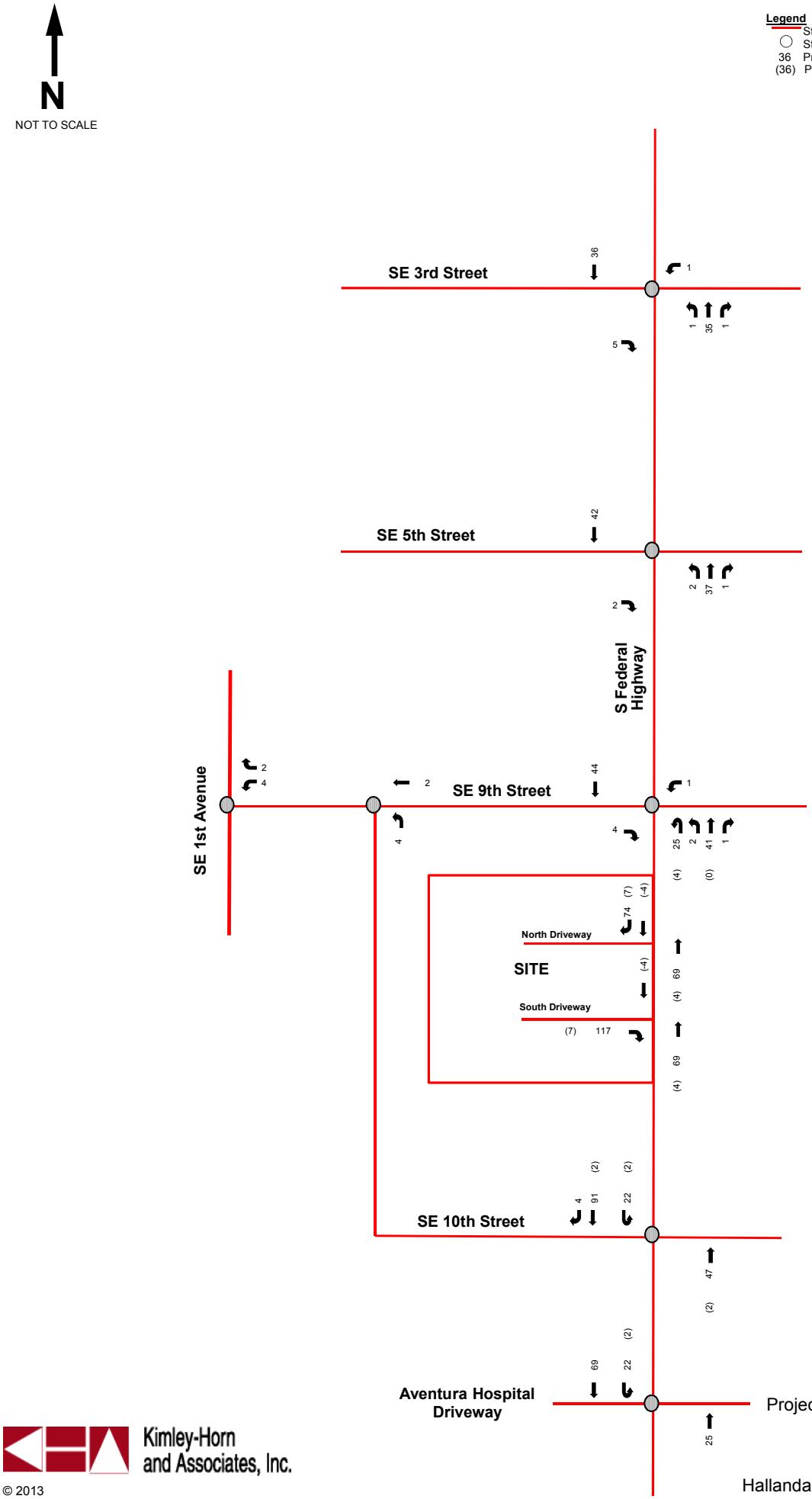

Figure 5
Project Trip & Pass-By Assignment
A.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

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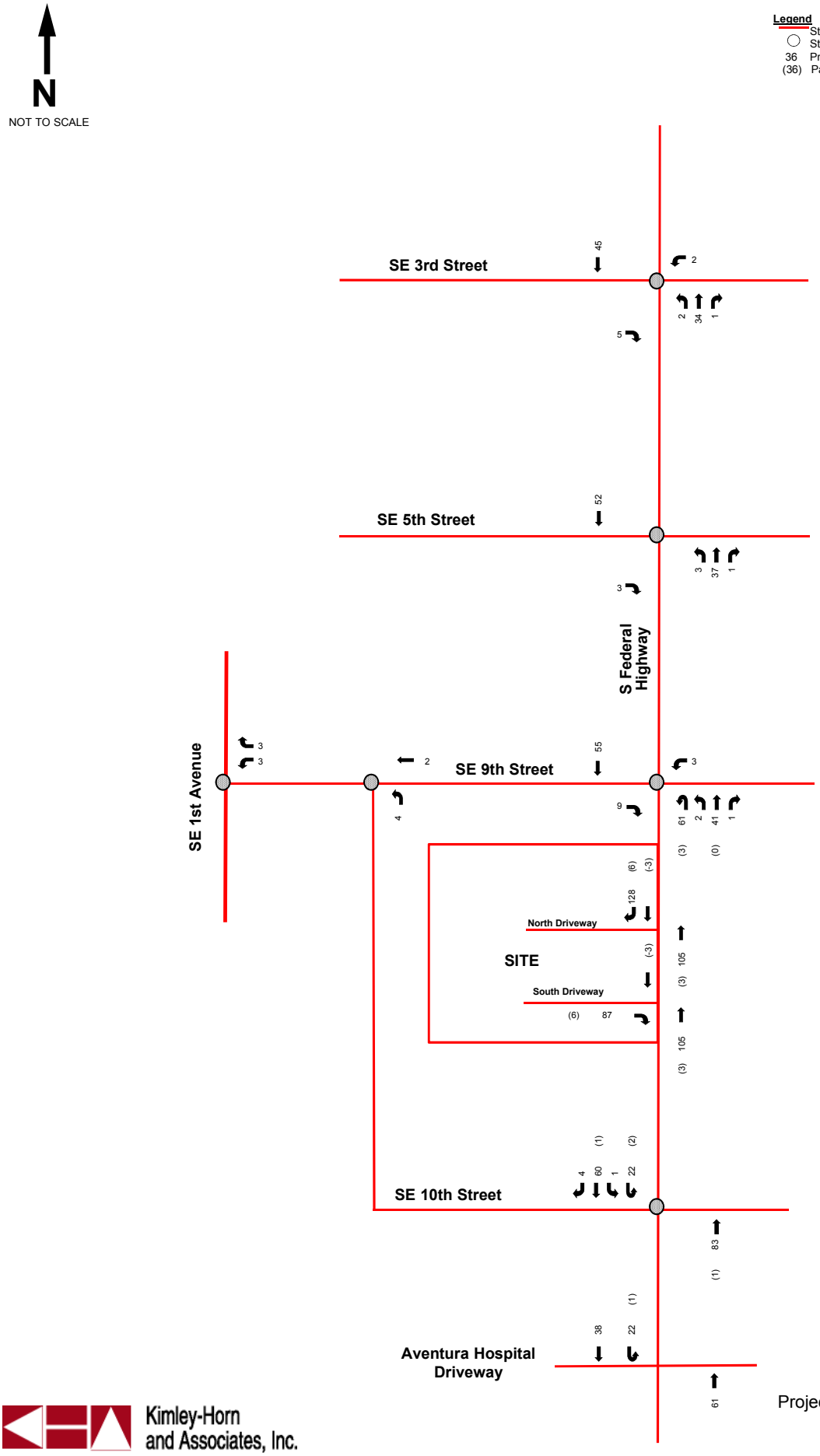

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Figure 6
Project Trip & Pass-By Assignment
P.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

EXISTING TRAFFIC

A.M. peak period (7:00 to 9:00 A.M.) and P.M. peak period (4:00 to 6:00 P.M.) turning movement counts were collected on August 15, 2013 (Thursday) at the following intersections:

- South Federal Highway at SE 3rd Street
- South Federal Highway at SE 5th Street
- South Federal Highway at SE 9th Street
- South Federal Highway at SE 10th Street
- SE 1st Avenue at SE 9th Street

The volumes were collected in 15-minute intervals and the peak hour was determined for each intersection. The Florida Department of Transportation (FDOT) peak season conversion factor was applied to the traffic counts to adjust the traffic to peak season volumes. The appropriate peak season conversion factor for the week when the traffic counts were collected is 1.21. The turning movement counts, FDOT peak season factor category report, and signal timing data provided by Broward County Traffic Engineering Division (BCTED) are included in Appendix E. Figures 7 and 8 present the existing turning movement volumes at the study intersections during the weekday A.M. and P.M. peak hours.

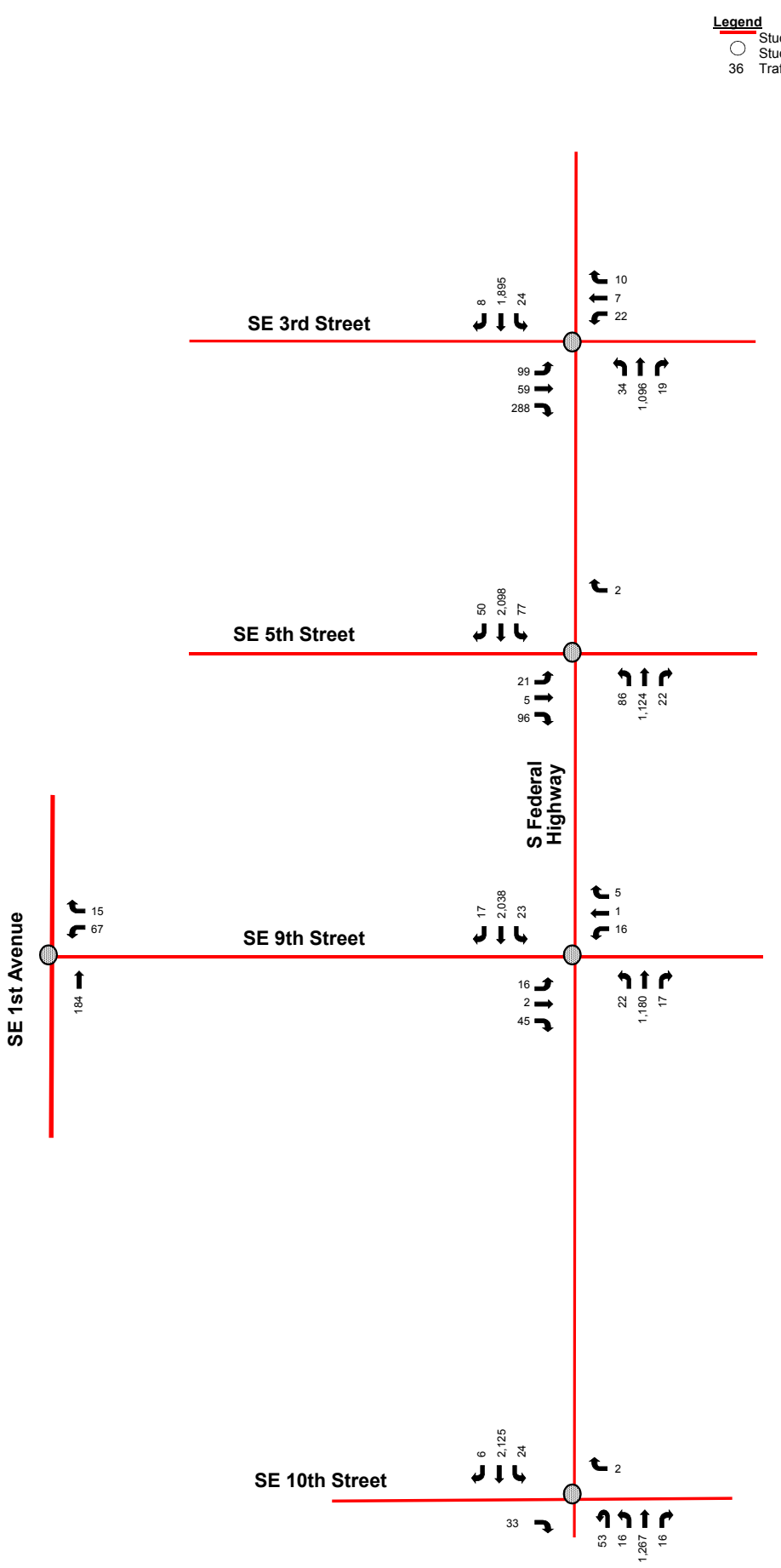

Figure 7
Existing Traffic
A.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

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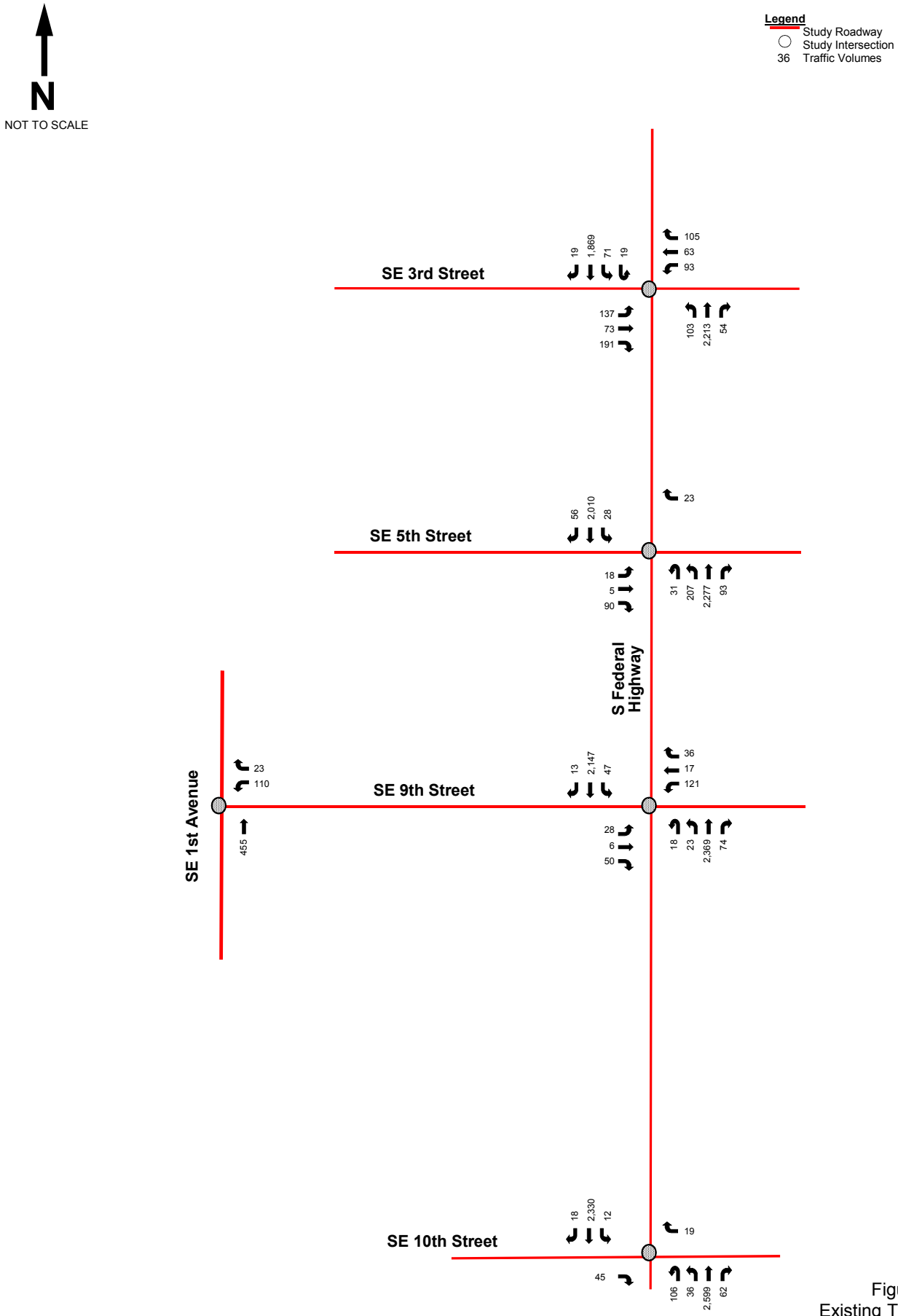

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Figure 8
Existing Traffic
P.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

EXISTING MULTIMODAL FACILITIES

The existing conditions multi-modal facilities along South Federal Highway and SE 9th Street were evaluated for pedestrians and transit users near the proposed site.

Pedestrian Facilities

There are currently 6-foot wide sidewalks on both sides of South Federal Highway south of within the study area limits of SE 10th Street to the south and SE 3rd Street to the north. The sidewalks are generally in good condition within the study area. The signalized intersection of SE 9th Street and South Federal Highway has marked crosswalks across all four legs of the intersection with countdown pedestrian signals and push button detectors. The signalized intersection of SE 3rd Street and South Federal Highway also has marked crosswalks across all four legs of the intersection with pedestrian signals and push button detectors.

At the unsignalized intersections of SE 5th Street at South Federal Highway and SE 10th Street at South Federal Highway marked crosswalks are provided across the minor street approaches. Sidewalks are generally provided at study intersections on the east side of South Federal Highway with the exception of SE 10th Street. Sidewalks are not provided along SE 5th Street west of South Federal Highway, SE 9th Street west of South Federal Highway, and SE 10th Street west of South Federal Highway. Sidewalks are also not provided along SE 1st Avenue.

Bus Routes

Bus stops are located in both the northbound and southbound directions on South Federal Highway near the project. A southbound bus stop is located adjacent to the south project driveway and includes a bus pull-out bay. Passenger amenities at the southbound bus stop include a shelter, trash receptacle, and additional passenger benches. In the northbound direction, a bus stop is provided just north of the SE 9th Street and South Federal Highway intersection. The only amenity provided at this location is a bus stop sign. The study area is

served by two (2) Broward County Transit routes and one (1) Miami-Dade County bus route. Broward County Transit (BCT) provides bus service via two (2) routes in the vicinity of the site:

- Route 1 operates on Federal Highway/US 1 within the vicinity of the project. This route serves the Aventura Mall, Young Circle, Fort Lauderdale International Airport, and Broward Central Terminal. This route operates at 15-minute headways throughout the day.
- Route 5 operates on Pembroke Road within the vicinity of the project. This route serves the Pembroke Lakes Mall, Miramar Town Center, and Hallandale Beach City Hall. This route operates at 30-minute headways throughout the day.

Miami-Dade County Transit (MDT) provides bus service via one (1) route in the vicinity of the site:

- Route 105/Route E operates on Federal Highway/US 1 within the vicinity of the project. This route serves the Golden Glades Park & Ride Lot, The Mall at 163rd Street, City of North Miami Beach, Winston Towers, Aventura Mall, Turnberry Isle, and Diplomat Mall. This route operates at 30-minute headways throughout the day and provides connecting service to 13 additional Miami-Dade Transit bus routes.

Detailed route information and headway data is provided in Appendix D.

FUTURE BACKGROUND TRAFFIC

Future background traffic conditions are defined as expected traffic conditions on the roadway network in the year 2015 without the construction of the proposed project. Future background traffic volumes used in the analysis are the sum of the existing traffic and an additional amount of traffic generated by growth in the study area. Refer to Figures 9 and 10 for the year 2015 peak hour background traffic volumes during the weekday A.M. and P.M. peak hours.

Background Area Growth

Future traffic growth on the transportation network was determined based upon historic growth trends at nearby FDOT traffic count stations. FDOT count stations referenced in this analysis include Count Station 5029 (SR 858/Hallandale Beach Boulevard – E of SR 5/US 1), 0268 (SR 5/US 1 – Dade/Broward County Line), 0268 (SR5/US1 – 200' south of Dade/Broward County Line), 0590 (SR 858/Hallandale Beach Boulevard – W of SR 5/US 1), and 0349 (SR 858/Hallandale Beach Boulevard – W of Intracoastal Waterway (ICWW) Bridge).

The growth rate analysis examined the most recent 5-year and 10-year periods. The 5-year period yielded a growth rate of 0.57 percent (0.57%) and the 10-year period yielded a growth rate of 0.55 percent (0.55%). The higher growth rate of 0.57 percent (0.57%) was applied annually to the existing traffic volumes to attain future (2015) background traffic conditions. The worksheets used to analyze the historic growth trends are included in Appendix F.

Committed Developments

No committed developments were identified by the City of Hallandale Beach to be included as background conditions.

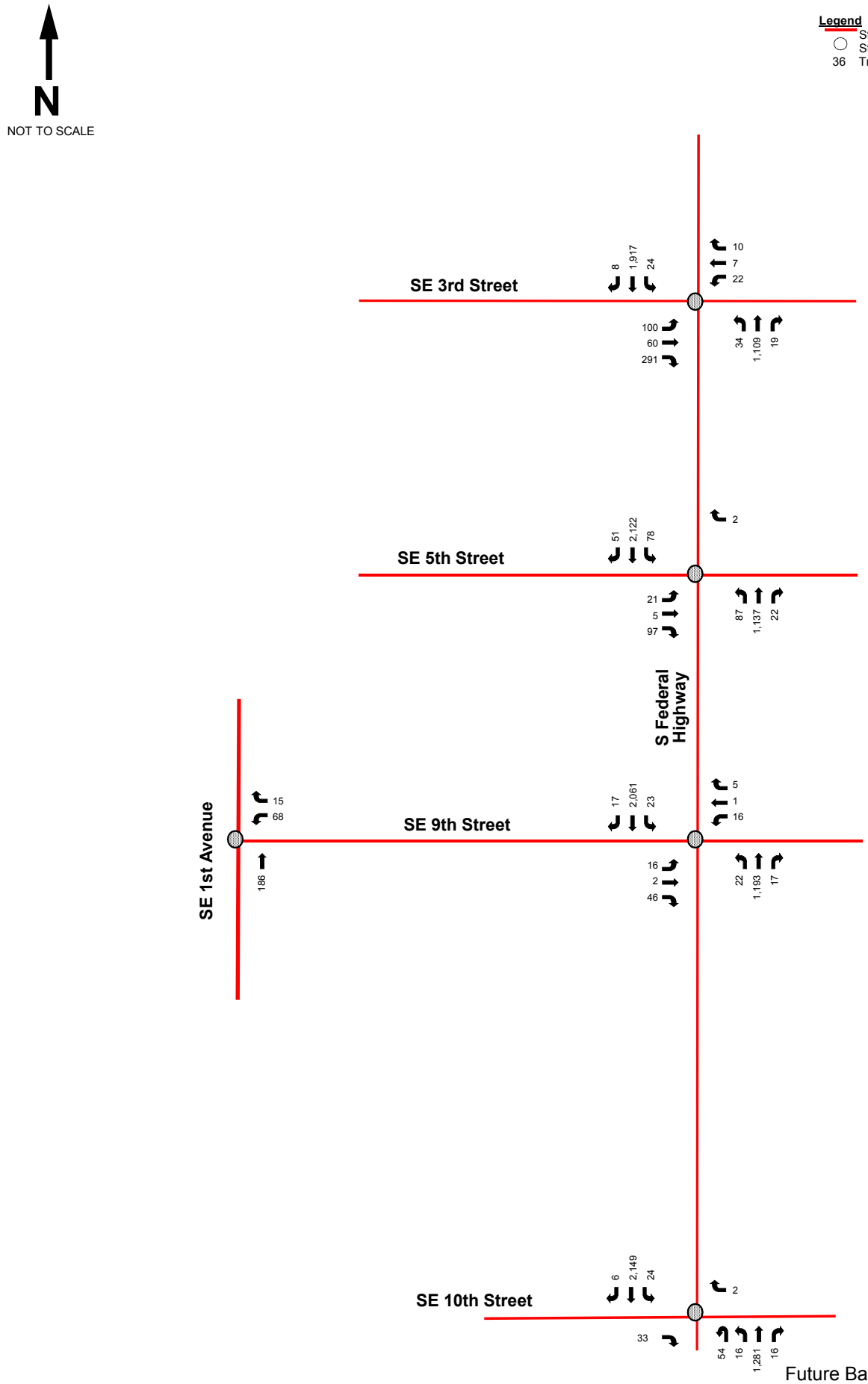

Figure 9
Future Background Traffic
A.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

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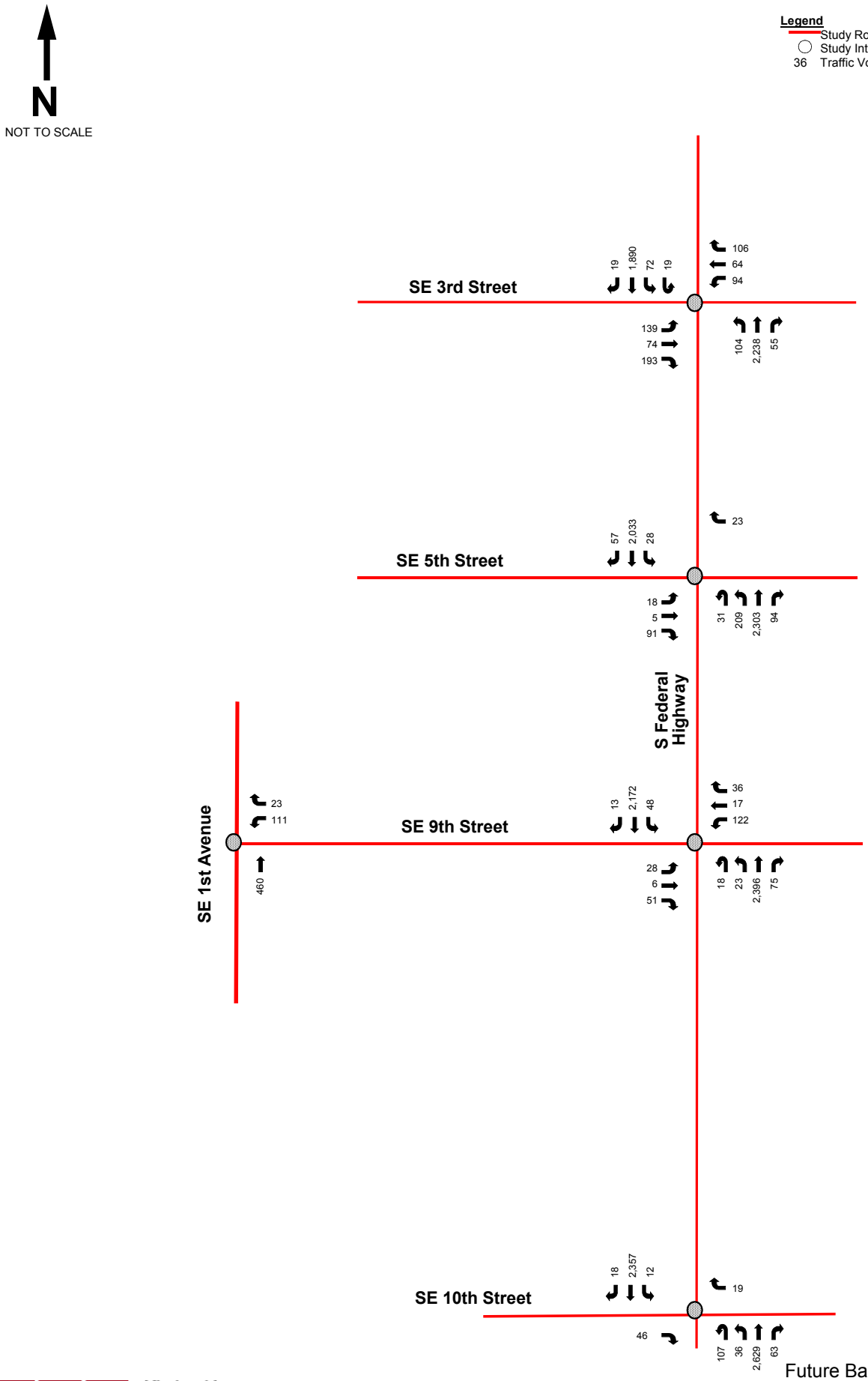

Figure 10
Future Background Traffic
P.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

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FUTURE TOTAL TRAFFIC

Future total traffic conditions are defined as the expected traffic conditions in the year 2015 after the opening of the project. Total traffic volumes considered in the analysis for this project are the sum of the year 2015 background traffic volumes and the expected project traffic volumes. The peak hour future traffic volumes for the A.M. and P.M. peak hours are shown in Figures 11 and 12. Volume development worksheets for the study intersections are included in Appendix G.

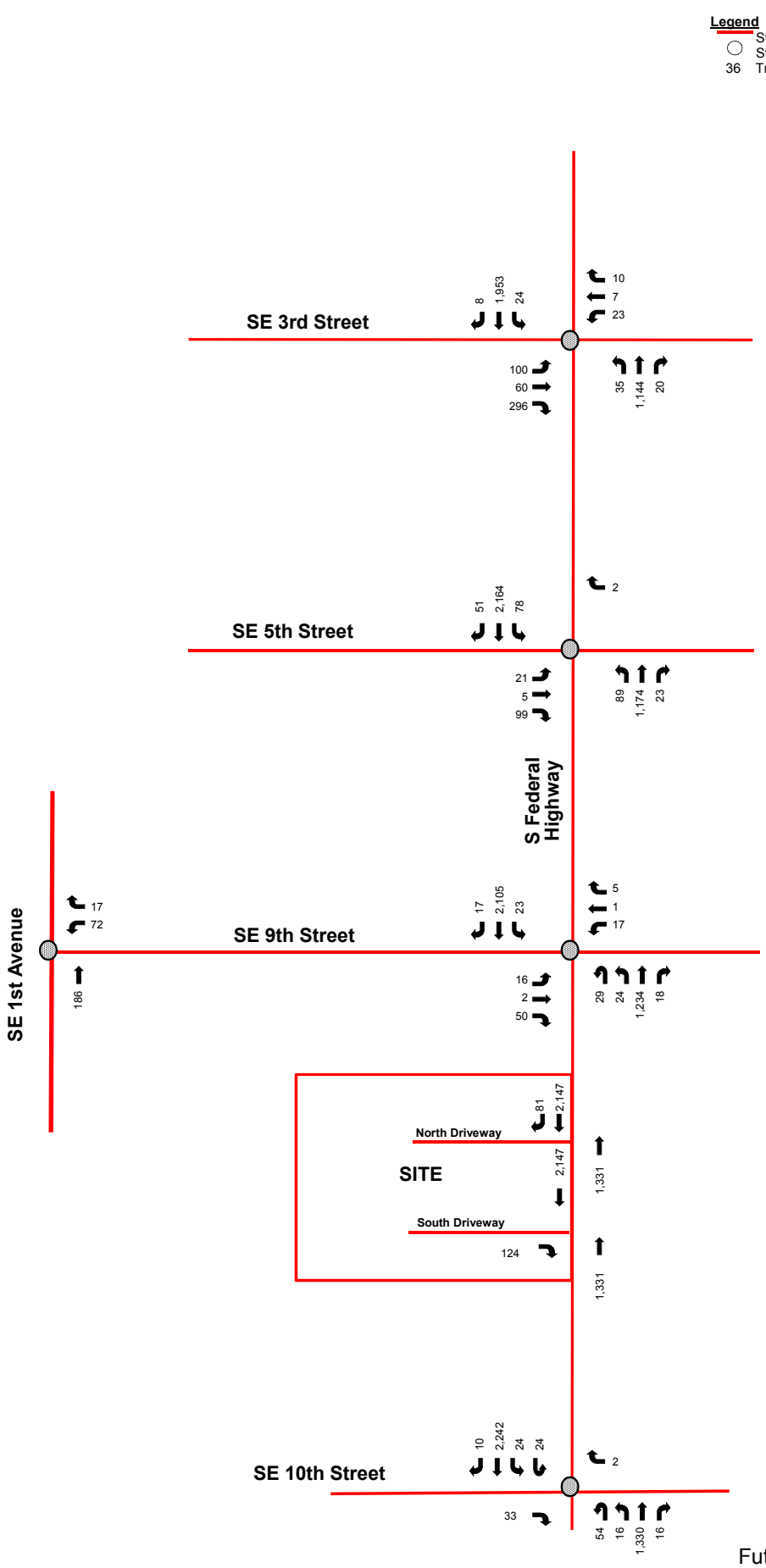

Figure 11
Future Total Traffic
A.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

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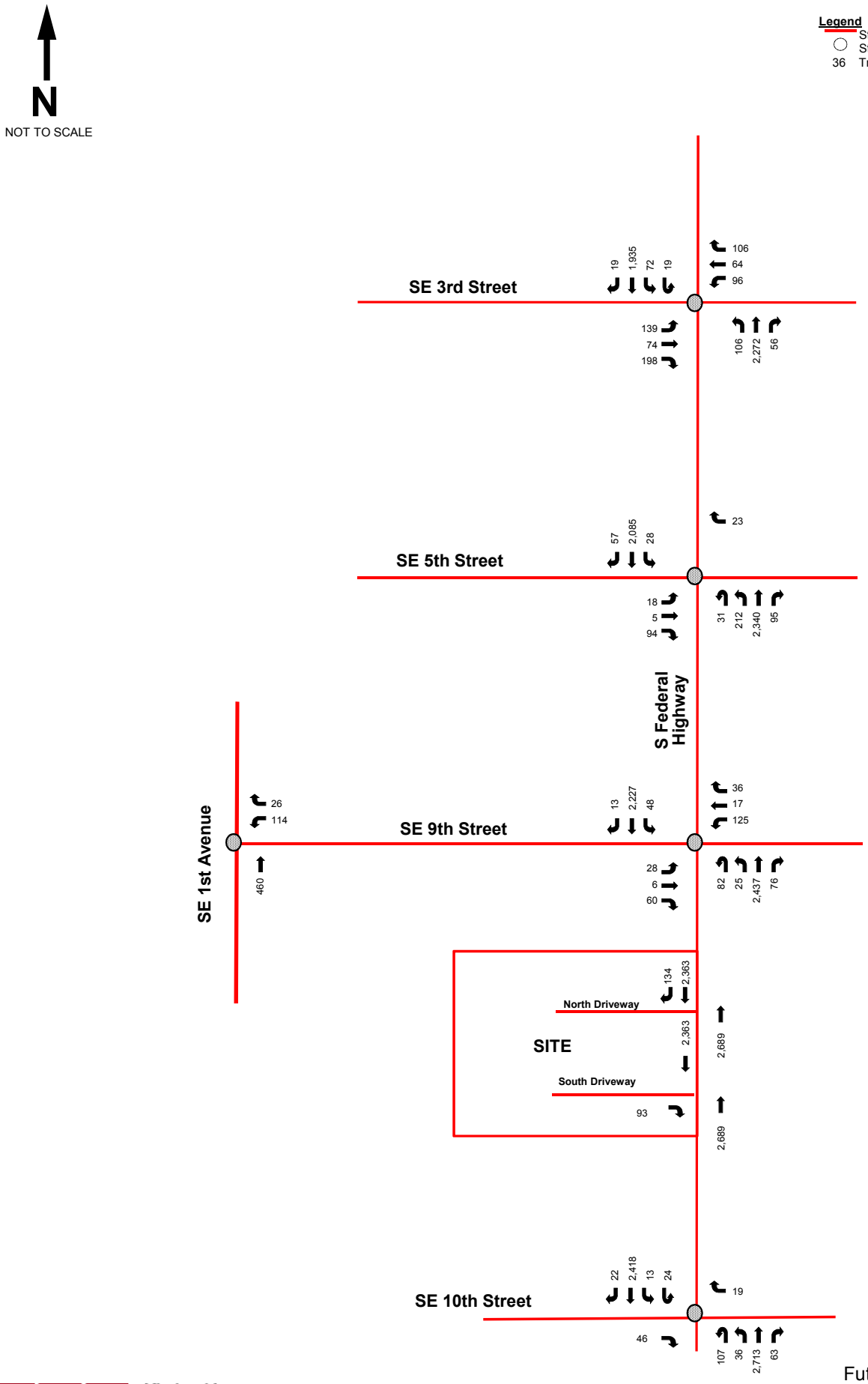

Figure 12
Future Total Traffic
P.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

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INTERSECTION CAPACITY ANALYSIS

The operating conditions were analyzed for study intersections, for three (3) scenarios (existing conditions, future background conditions, and future total conditions) were analyzed using *Trafficware's SYNCHRO 8.0 Software*, which applies methodologies outlined in the *Highway Capacity Manual, 2010 Edition*. Synchro worksheets and signal timing data for the study intersections are included in Appendix H. A summary of the intersection analyses for the A.M. and P.M. peak hours is presented in Table 2. As this table indicates, all the study intersections are expected to operate at adopted levels of service (LOS D or better) overall during the A.M. and P.M. peak hours under all analysis conditions with the exception of the minor street stop-controlled approaches at the intersections Federal Highway at SE 5th Street and South Federal Highway at SE 10th Street.

The eastbound stop-controlled minor approach at the intersection of South Federal Highway at SE 5th Street is expected to operate at LOS F in the A.M. and P.M. peak hours under existing, future background, and future total conditions. The eastbound stop-controlled minor approach at the intersection of South Federal Highway at SE 10th Street is expected to operate at LOS E during the A.M. peak hour under future total conditions. During the P.M. peak hour both the eastbound and westbound approaches are expected to operate at LOS E under existing and background conditions and LOS F under future total conditions. This result is common during peak periods where a high traffic volume free-flowing major street intersects with a stop controlled minor street.

Table 2: Intersection Capacity Analysis

Intersection	Traffic Control	Overall LOS/Delay	Approach LOS			
			NB	SB	EB	WB
A.M. Peak Hour *Existing Conditions (Background Conditions) [Future Total Conditions]*						
S Federal Highway at SE 3rd Street	Signalized	B/16.3 (B/16.5) [B/16.8]	A (A) [A]	B (B) [B]	C (C) [C]	C (C) [C]
S Federal Highway at SE 5th Street	Two-Way Stop-Controlled	(1)	(3)	(3)	F (F) [F]	B (B) [C]
S Federal Highway at SE 9th Street	Signalized(2)	B/13.9 (B/13.9) [C/31.7]	A (A) [B]	B (B) [D]	E (E) [E]	E (E) [E]
S Federal Highway at SE 10th Street	Two-Way Stop-Controlled	(1)	(3)	(3)	D (D) [E]	C (C) [C]
SE 1st Avenue at SE 9th Street	One-Way Stop-Controlled	(1)	(3)	N/A	N/A	A (B) [B]
S Federal Highway at North Driveway	One-Way Stop-Controlled	(1)	N/A	N/A	N/A	N/A
S Federal Highway at South Driveway	One-Way Stop-Controlled	(1)	N/A	N/A	[B]	N/A
P.M. Peak Hour *Existing Conditions (Background Conditions) [Future Total Conditions]*						
S Federal Highway at SE 3rd Street	Signalized	C/22.3 (C/22.6) [C/23.2]	C (C) [C]	B (B) [B]	C (C) [C]	C (C) [C]
S Federal Highway at SE 5th Street	Two-Way Stop-Controlled	(1)	(3)	(3)	F (F) [F]	A (A) [D]
S Federal Highway at SE 9th Street	Signalized(2)	C/22.8 (C/23.0) [C/27.6]	B (C) [C]	B (B) [C]	E (E) [E]	E (E) [E]
S Federal Highway at SE 10th Street	Two-Way Stop-Controlled	(1)	(3)	(3)	E (E) [F]	E (E) [F]
SE 1st Avenue at SE 9th Street	One-Way Stop-Controlled	(1)	(3)	N/A	N/A	C (C) [C]
S Federal Highway at North Driveway	One-Way Stop-Controlled	(1)	N/A	N/A	N/A	N/A
S Federal Highway at South Driveway	One-Way Stop-Controlled	(1)*	N/A	N/A	[B]	N/A

Notes: (1) Overall intersection LOS is not defined, as intersection operates under stop-control conditions.
(2) HCM 2000 utilized for analysis as the intersection does not strictly adhere to NEMA/HCM 2010 evaluation requirements and cannot be analyzed in HCM 2010.
(3) Approach operates as free-flow. Therefore, approach level of service is not provided.

ROADWAY SEGMENT ANALYSIS

In addition to the intersection capacity analyses, an analysis was prepared for segments within the vicinity of the proposed project.

Data Collection

FDOT twenty-four hour continuous count data was used for roadway segments (1) South Federal Highway between Hallandale Beach Boulevard to Miami-Dade County Line and (2) South Federal Highway between Pembroke Road to Hallandale Beach Boulevard. The FDOT data was collected in 2012. Therefore, an annual growth rate of 0.57 percent (0.57%) was applied to the 2012 data to establish 2013 volumes.

Twenty-four hour continuous counts were collected at SE 9th Street from SE 1st Avenue to South Federal Highway on Thursday, August 15, 2013. The FDOT seasonal factor was applied to the 24-hour traffic counts to adjust the traffic volumes to peak season. The appropriate peak season conversion factor for the weeks when the traffic counts were collected is 1.21.

The annual growth rate of 0.57 percent (0.57%) was applied to 2013 data to develop the 2015 traffic volumes. The City of Hallandale Beach identified no committed (not yet built) development. Twenty-four hour traffic volume counts can be found in Appendix D.

Capacity Analysis

Tables 3, 4, and 5 provide a summary of the daily, A.M. peak hour, and P.M. peak hour roadway segment analysis for existing traffic conditions, future background conditions, and future total conditions, respectively. The results indicate that the study roadway segments South Federal Highway from Hallandale Beach Boulevard to Miami-Dade County Line and South Federal Highway from Pembroke Road to Hallandale Beach Boulevard operate below adopted level of

service for several analysis periods during existing, background, and future total conditions. South Federal Highway, from Hallandale Beach Boulevard to Miami-Dade County line operates at LOS F during daily conditions under existing, future background and future total conditions. South Federal Highway from Pembroke Road to Hallandale Beach Boulevard operates at LOS F during daily and P.M. peak hour under existing, future background, and future total conditions. However, roadway segment analysis results with the proposed project constructed indicated that the project is not expected to account for 5 percent or more of the adopted daily or peak hour level of service maximum service volume.

Table 3: Peak Hour Roadway Segment Capacity Analysis
Existing Traffic Conditions

Roadway	Segment		Facility Type[1]	Adopted LOS Standard	Period	Existing Raw 2012 Volumes	Existing Raw 2013 Volumes	Peak Season Conversion Factor	Seasonally Adjusted Existing Volumes	FDOT LOS C Standard Capacity	FDOT LOS D Standard Capacity	FDOT LOS E Standard Capacity	2013 LOS
	From	To											
SE 9th Street	SE 1st Avenue	South Federal Highway/US 1/SR 5	2L [2]	D	AM	-	106	1.21	128	475	958	1,015	C
					PM	-	159		192	475	958	1,015	C
					Daily	-	1,462		1,769	5,256	10,656	11,232	C
South Federal Highway/US 1/SR 5	Hallandale Beach Boulevard	Miami-Dade County Line	6LD [3]	D	AM	3,772	3,794 [5]	1.21	4,590	5,250	5,390	N/A	C
					PM	4,021	4,044 [5]		4,893	5,250	5,390	N/A	C
					Daily	53,972	54,280 [5]		65,678	58,400	59,900	N/A	F
South Federal Highway/US 1/SR 5	Pembroke Road	Hallandale Beach Boulevard	4LD [4]	D	AM	2,632	2,647 [5]	1.21	3,203	3,420	3,580	N/A	C
					PM	3,447	3,467 [5]		4,195	3,420	3,580	N/A	F
					Daily	43,360	43,607 [5]		52,765	37,900	39,800	N/A	F

Note:

(1) 4LD - Four-lane divided, 6LD - Six-Lane divided, 2L - Two-lane undivided

N/A - FDOT does not provide capacity in the LOS tables

(2) Based on FDOT Class I Roadway with 10 percent volume reduction for "Non-State Signalized Roadways" and 20 percent reduction for 2-lane undivided roadway with no exclusive left or right-turn lanes

(3) Based on FDOT Class I Roadway

(4) Based on FDOT Class I Roadway

(5) 0.57% annual growth rate applied to 2012 volumes to establish 2013 volumes

Table 4: Peak Hour Roadway Segment Capacity Analysis without Project Traffic
Future (2015) Traffic Conditions

Roadway	Segment		Facility Type[1]	Adopted LOS Standard	Period	Seasonally Adjusted Existing Volumes	Growth Rate	2015 Seasonally Adjusted Volumes	FDOT LOS C Standard Capacity	FDOT LOS D Standard Capacity	FDOT LOS E Standard Capacity	2013 LOS
	From	To										
SE 9th Street	SE 1st Avenue	South Federal Highway/US 1/SR 5	2L [2]	D	AM	128	0.57%	129	475	958	1,015	C
					PM	192		194	475	958	1,015	C
					Daily	1,769		1,789	5,256	10,656	11,232	C
South Federal Highway/US 1/SR 5	Hallandale Beach Boulevard	Miami-Dade County Line	6LD [3]	D	AM	4,590	0.57%	4,642	5,250	5,390	N/A	C
					PM	4,893		4,949	5,250	5,390	N/A	C
					Daily	65,678		66,429	58,400	59,900	N/A	F
South Federal Highway/US 1/SR 5	Pembroke Road	Hallandale Beach Boulevard	4LD [4]	D	AM	3,203	0.57%	3,240	3,420	3,580	N/A	C
					PM	4,195		4,243	3,420	3,580	N/A	F
					Daily	52,765		53,368	37,900	39,800	N/A	F

Note:

(1) 4LD - Four-lane divided, 6LD - Six-Lane divided, 2L - Two-lane undivided

N/A - FDOT does not provide capacity in the LOS tables

(2) Based on FDOT Class I Roadway with 10 percent volume reduction for "Non-State Signalized Roadways" and 20 percent reduction for 2-lane undivided roadway with no exclusive left or right-turn lanes

(3) Based on FDOT Class I Roadway

(4) Based on FDOT Class I Roadway

(5) 0.57% annual growth rate applied to 2012 volumes to establish 2013 volumes

Table 5: Peak Hour Roadway Segment Capacity Analysis with Project Traffic
Future (2015) Traffic Conditions

Roadway	Segment		Facility Type[1]	Adopted LOS Standard	Period	2015 Background Traffic	Project Traffic Assignment		Project Traffic	Project Traffic Contribution	2015 Total Traffic	FDOT LOS C Standard Capacity	FDOT LOS D Standard Capacity	FDOT LOS E Standard Capacity	2015 LOS
	From	To					IN	OUT							
SE 9th Street	SE 1st Avenue	South Federal Highway/US 1/SR 5	2L [2]	D	AM	129	6%	5%	6	0.63%	135	475	958	1,015	C
					PM	194	7%	7%	12	1.25%	206	475	958	1,015	C
					Daily	1,789	7%	6%	164	1.54%	1,953	5,256	10,656	11,232	C
South Federal Highway/US 1/SR 5	Hallandale Beach Boulevard	Miami-Dade County Line	6LD [3]	D	AM	4,642	34%	100%	186	3.45%	4,828	5,250	5,390	N/A	C
					PM	4,949	48%	100%	233	4.32%	5,182	5,250	5,390	N/A	C
					Daily	66,429	41%	100%	1866	3.12%	68,295	58,400	59,900	N/A	F
South Federal Highway/US 1/SR 5	Pembroke Road	Hallandale Beach Boulevard	4LD [4]	D	AM	3,240	15%	15%	28	0.78%	3,268	3,420	3,580	N/A	C
					PM	4,243	20%	11%	36	1.01%	4,279	3,420	3,580	N/A	F
					Daily	53,368	18%	13%	391	0.98%	53,759	37,900	39,800	N/A	F

Note:

(1) 4LD - Four-lane divided, 6LD - Six-Lane divided, 2L - Two-lane undivided

N/A - FDOT does not provide capacity in the LOS tables

(2) Based on FDOT Class I Roadway with 10 percent volume reduction for "Non-State Signalized Roadways" and 20 percent reduction for 2-lane undivided roadway with no exclusive left or right-turn lanes

(3) Based on FDOT Class I Roadway

(4) Based on FDOT Class I Roadway

(5) 0.57% annual growth rate applied to 2012 volumes to establish 2013 volumes

CONCLUSIONS

This analysis has addressed traffic-related impacts associated with the proposed development project consisting of 391 high-rise apartment units, 117 hotel rooms, and a 3,700 square-foot restaurant. Based on the results of the analysis, the following is concluded:

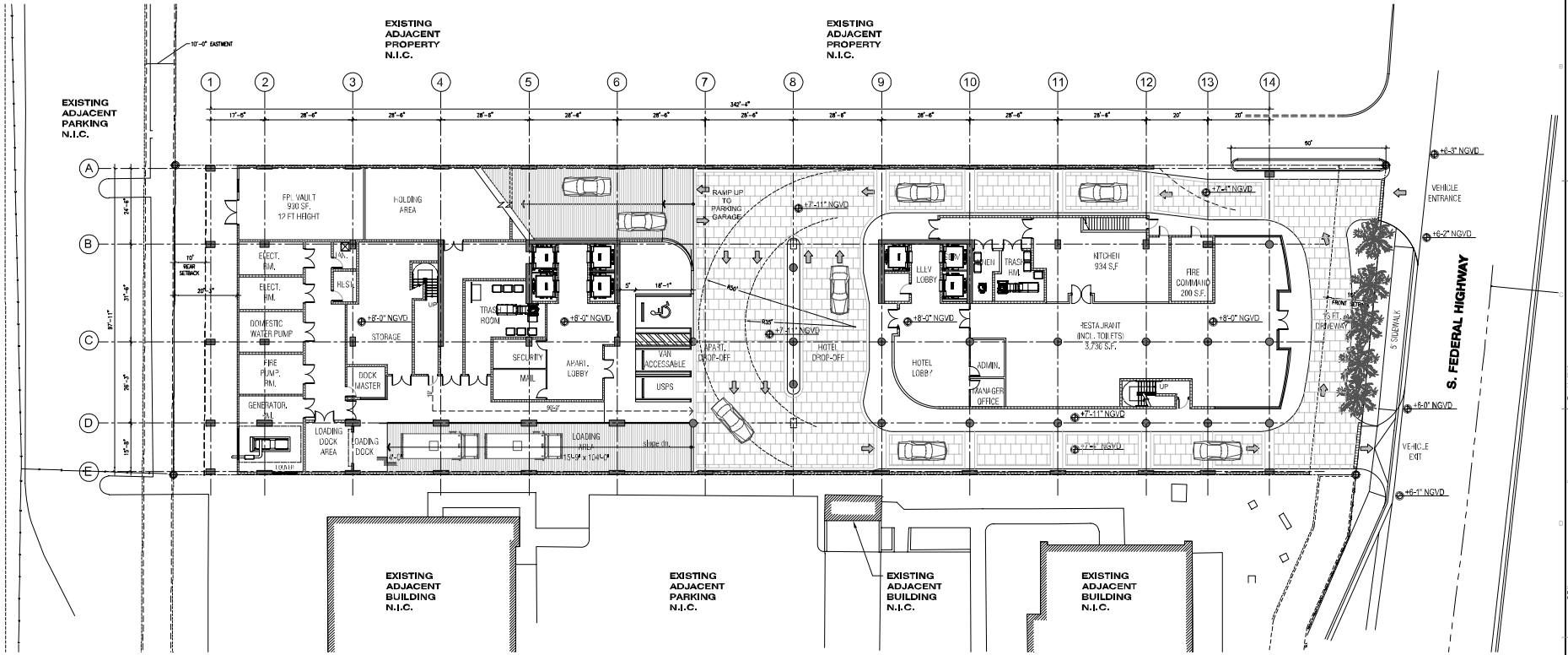
- Access to the site is provided by a right-in only driveway and a right-out only driveway along South Federal Highway.
- The existing conditions multi-modal facilities along South Federal Highway and SE 9th Street were evaluated for pedestrians and transit users near the proposed site. There are currently 6-foot wide sidewalks on both sides of South Federal Highway south of within the study area limits of SE 10th Street to the south and SE 3rd Street to the north. Sidewalks are generally provided at study intersections on the east side of South Federal Highway with the exception of SE 10th Street. Sidewalks are not provided along SE 5th Street west of South Federal Highway, SE 9th Street west of South Federal Highway, and SE 10th Street west of South Federal Highway. Sidewalks are also not provided along SE 1st Avenue. Bus stops are located in both the northbound and southbound directions on South Federal Highway near the project. A southbound bus stop is located adjacent to the south project driveway and includes a bus pull-out bay. Passenger amenities at the southbound bus stop include a shelter, trash receptacle, and additional passenger benches. In the northbound direction, a bus stop is provided just north of the SE 9th Street and South Federal Highway intersection. The only amenity provided at this location is a bus stop sign.
- The project is expected to generate 2,522 new daily trips, 191 new trips during the A.M. peak hour and 215 new trips during the P.M. peak hour.
- Intersection capacity analyses indicate that all the study intersections are expected to continue to operate at LOS D or better, with the exception of the minor street stop-

controlled approaches at the intersections South Federal Highway at SE 5th Street and South Federal Highway at SE 10th Street. The eastbound stop-controlled minor approach at the intersection of South Federal Highway at SE 5th Street is expected to operate at LOS F in the A.M. and P.M. peak hours under existing, future background, and future total conditions. The eastbound stop-controlled minor approach at the intersection of South Federal Highway at SE 10th Street is expected to operate at LOS E during the A.M. peak hour under future total conditions. During the P.M. peak hour both the eastbound and westbound approaches are expected to operate at LOS E under existing and background conditions and LOS F under future total conditions. This result is common during peak periods where a high traffic volume free-flowing major street intersects with a stop controlled minor street.

- The results for the roadway segment analysis indicate that the roadway segments South Federal Highway from Hallandale Beach Boulevard to Miami-Dade County Line and South Federal Highway from Pembroke Road to Hallandale Beach Boulevard operate below adopted level of service for several analysis periods during existing, background, and future total conditions. South Federal Highway, from Hallandale Beach Boulevard to Miami-Dade County line operates at LOS F during daily conditions under existing, future background and future total conditions. South Federal Highway from Pembroke Road to Hallandale Beach Boulevard operates at LOS F during daily and P.M. peak hour under existing, future background, and future total conditions. However, roadway segment analysis results with the proposed project constructed indicated that the project is not expected to account for 5 percent or more of the adopted daily or peak hour level of service maximum service volume.

APPENDIX A:
Site Plan

LEGEND
☐ VERTICAL CIRCULATION
☐ LANSCAPE



GROUND LEVEL - FLOOR PLAN

Scale:1/16"=1'-0"

N

DRC SUBMISSION (NOT FOR CONSTRUCTION) 08.23.2013

GULFSTREAM POINT
918 S. FEDERAL HIGHWAY
HALLANDALE, FLORIDA

PERMUY ARCHITECTURE
PLANNING - INTERIORS
802 S. BISCAYNE BLVD.
Suite 1000
Miami, Florida 33131
Phone: 305-379-2333

HALLANDALE FIRST, LLC.
FLORIDA EAST COAST REALTY INC
100 S. BISCAYNE BLVD. SUITE 900
MIAMI, FLORIDA 33131
305-358-7746 TEL.
305-358-1112 FAX

ENGINEERING DISCIPLINE
Delmonte Consulting Engineers
802 SOUTH BISCAYNE, 4th Floor
MIAMI, FLORIDA 33131
305-541-2155 TEL.

STRUCTURAL DISCIPLINE
STEVEN FELLER, P.E.
550 N.E. 77 Avenue
Ft. Lauderdale, FL 33101
954-467-0412 TEL.

CIVIL DISCIPLINE
Biscayne Engineering Co.
538 West Maple Street
Miami Beach FL 33139
TEL. 305-532-0809
CL-29

LANDSCAPE ARCHITECT
M.A. MARTIN
5965 SW. 38 Street
Miami Florida 33155
TEL. 786-794-4177

KEY PLAN

SEAL / SIGNATURE / DATE

STATE OF FLORIDA
HELIO MIGUEL ARCHITECT
REGISTERED ARCHITECT
DESIGN DEVELOPMENT

DESCRIPTION	DATE

DATE

PROJECT NO.: 1412

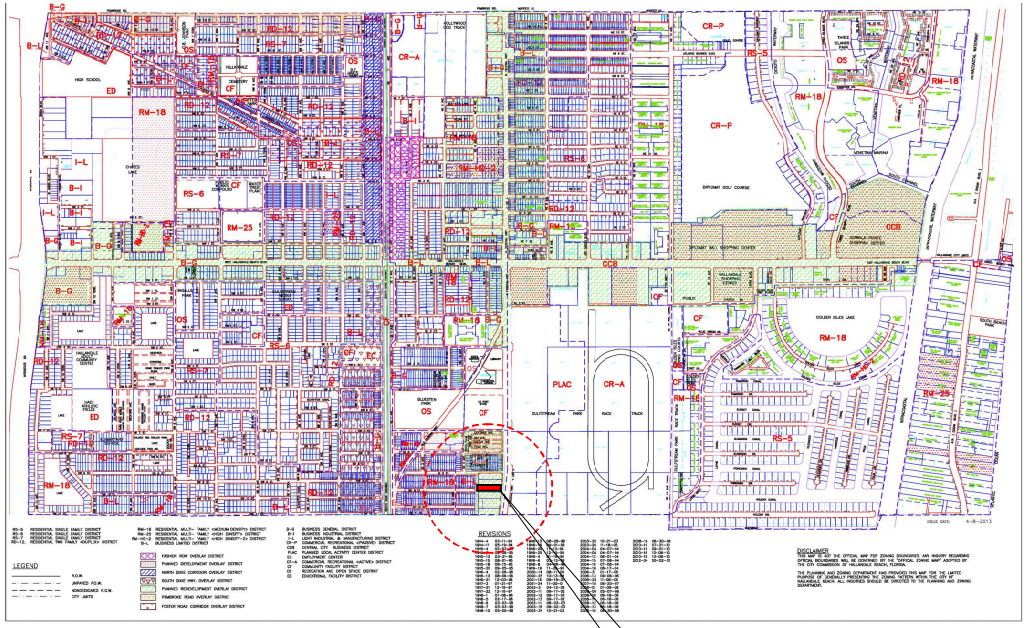
SHEET INDEX:

SCALE:

SHEET NO.: A-200

CITY OF HALLANDALE BEACH, FLORIDA

ZONING MAP



GULFSTREAM POINT
918 SOUTH FEDERAL HIGHWAY
HALLANDALE BEACH, FL. 33009

LOCATION MAP

DRC SUBMISSION (NOT FOR CONSTRUCTION) 08.23.2013

GULFSTREAM POINT
918 S. FEDERAL HIGHWAY
HALLANDALE, FLORIDA

PERMUY ARCHITECTURE
PLANNING - INTERIORS
801 S. BISCAYNE BLVD.
SUITE 1204
MIAMI, FLORIDA 33131
PHONE: 305.379.2313

HALLANDALE FIRST, LLC.
FLORIDA EAST COAST REALTY INC
150 S. BISCAYNE BLVD. SUITE 900
MIAMI, FLORIDA 33131
305-358-7744 TEL.
305-358-2310 FAX

STRUCTURAL ENGINEER
Delisenza Consulting Engineers
522 SOUTH AVE. 4th Floor
MIAMI, FLORIDA 33131
305-371-4733 TEL.

MEP / FP / ELEC / CIVIL
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550 S.E. 3rd Avenue
Ft. Lauderdale, FL 33301
954-817-0412 TEL.

CIVIL ENGINEER
Biscayne Engineering Co.
536 West Hagler Street
Miami, Florida 33130
TEL. 305.326.9829
FX. 29

LANDSCAPE ARCHITECT
M.A. MARTIN
5965 SW. 38 Street
Miami, Florida 33155
TEL. 786.785.4577

KEY PLAN

SEAL / SIGNATURE / DATE

STATE OF FLORIDA
HELEI HOLMIK ARCHITECT
REGISTRATION AR0012451

DESIGN DEVELOPMENT

DESCRIPTION	DATE

DATE

PROJECT NO.: 1412

SHEET INDEX:

SCALE:

SHEET NO.
GN-003

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

ANANTH PRASAD, P.E.
SECRETARY

August 1, 2013

THIS PRE-APPLICATION LETTER IS VALID UNTIL AUGUST 1, 2014
THIS LETTER IS NOT A PERMIT APPROVAL

Mr. John McWilliams
Kimley-Horn and Associates Inc.
5200 Northwest 33rd Avenue, Suite 109
Fort Lauderdale, Florida 33309

Dear Mr. McWilliams:

RE: Broward County, Urban, In the City of Hallandale Beach
State Road 5, State Section 86010, Milepost 0.135, Access Class 5, Posted Speed 35 mph
Reference Project 403585-1, Location: South of SE 9th Street, West Side of SR 5
Site Acreage: .89, Proposed Land Use: Office, Restaurant and Lodging
Maximum Square Footage: Restaurant 4,000, Residential-apartments, 400 and Lodging 150 Rooms
Applicant: Hallandale First, LLC, Property Owner: Hallandale First, LLC, Plat Name: Gulfstream Point
Proposed Project Name & Address: Gulfstream Point, 918 South Federal Highway

Your Request: Driveway #1: Joint use right-in only driveway 200 feet south of SE 9th Street.

Driveway #2: Right-out only driveway 285 feet south of SE 9th Street.

WE APPROVE YOUR REQUEST. Please see the conditions and comments below.

This ruling is based on your presentation of the facts and site plan.

Conditions: **A minimum driveway length of 25 feet, as measured from the ultimate right-of-way line to the first conflict point, shall be provided at Driveway #1. A joint-use access agreement shall be recorded with the property to the north.**

Channelize Driveway #1 and internal circulation, also provide signing and pavement marking to prevent outbound traffic movement.

Drainage mitigation is required for any impacts within FDOT right-of-way (i.e. increased runoff or reduction of existing storage).

- A Storm Water Pollution Prevention Plan must be submitted with the application if there will be more than one acre of "disturbed area" (as defined by the Florida Department of Environmental Protection (FDEP)
- If right-of-way dedication is required to implement the proposed improvements, the applicant shall donate the right-of-way to the Department.
- All driveways not approved in this letter must be removed.

Comments: **When the property on the north develops, the applicant shall schedule a Pre Application Meeting to change access to Driveway #1 to a right-in, right-out driveway. The Driveway length required will be 50-feet and a right-turn lane may be required.**

Please note that the dimensions between driveways are measured from the near edge of pavement to near edge of pavement and dimensions between median openings are measured from centerline to centerline unless otherwise indicated.

The purpose of this Pre-Application letter is to document the conceptual review of the approximate location of driveway(s) to the State Highway system and to note any required improvements. This letter shall be submitted with any further reviews. If conceptually approved, the applicant may submit engineering plans to the Department for permitting. The Department's personnel shall review these plans for compliance with this letter as well as current Department standards and/or specifications. Final design must consider the existing roadway profile and any impacts to the existing drainage system. **Please note that this letter does not guarantee permit approval.** The permit may be denied based on the review of the submitted engineering plans. Be aware that any approved median openings may be modified (or closed) in the future, at the sole discretion of the Department.

For right-of-way dedication requirements go to: https://www3.dot.state.fl.us/OneStopPermitting/Home.aspx:
Click on Statewide Permit News. Scroll down to District 4. Scroll down to Additional Information and Examples and choose Right-of-way Donations/Dedications.

Please contact Christine Nabong Bacomo at the District Permits Office with any questions at telephone number 954-777-4377, fax number 954-677-7893 or e-mail: christine.bacomo@dot.state.fl.us. Thank you.

Sincerely,

Geysa Y. Sosa

Geysa Y. Sosa, P.E.
District Traffic Access Manager

CNB/nyh
cc: Geysa Sosa/Stan Williams SW
File: s:\Permits\Pre-app Letters\Broward County\Hallandale First LLC – SR 5.doc

APPENDIX B:
Methodology Correspondence

Kimley-Horn
and Associates, Inc.

Memorandum

To: Christy Dominguez
City of Hallandale Beach

From: John J. McWilliams, P.E.
Adrian K. Dabkowski, P.E. (LA), PTOE

5200 NW 33rd Avenue
Suite 109
Fort Lauderdale, Florida
33309

CC: Ignacio Permuy, Hallandale First, LLC

Date: August 23, 2013

Subject: Gulfstream Point
918 South Federal Highway/US 1/SR 5
Traffic Impact Study Methodology

The purpose of this memorandum is to summarize the traffic impact study methodology for the proposed Gulfstream Point development located at 918 South Federal Highway/US 1/SR 5, south of SE 9th Street in the City of Hallandale Beach. Currently, the area proposed for development is vacant. Access to the site is provided on South Federal Highway/US 1/SR 5. A preliminary site plan is provided in Attachment A. The proposed development will consist of 391 apartment units, a 117-room hotel, and a 3,700 square foot restaurant. The following study parameters are proposed.

Data Collection

The peak periods selected for this study are 7:00 to 9:00 A.M. and 4:00 to 6:00 P.M. on a typical weekday (Tuesday, Wednesday, or Thursday). Turning movement counts will be collected in 15-minute intervals during the peak periods.

Roadway segment data will be obtained from the Florida Department of Transportation (FDOT) for daily, A.M. and P.M. peak periods.

All traffic counts will be adjusted to peak season conditions using the appropriate FDOT peak season category factors. Traffic signal timing information will be obtained from Broward County Traffic Engineering Division. All traffic data collected will be provided in the Appendix of the traffic impact study.

Trip Generation

Trip generation calculations for the proposed development was performed using Institute of Transportation Engineer's (ITE) *Trip Generation*, 9th Edition. ITE Land Use Code 222 (High-Rise Apartment) was utilized for the proposed apartment portion of the development. For the hotel component, ITE Land Use Code 310 (Hotel) was used and for the restaurant, ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) was used.

TEL 954 535 5100

A portion of the trips generated by the development will be captured internally on the site. Internal capture trips were determined based upon values contained in the Institute of Transportation Engineers' (ITE), *Trip Generation Handbook*, 2nd Edition. The internal capture rate for the project is 6.5 percent on a daily basis, 7.2 percent during the A.M. peak hour, and 6.6 percent during the P.M. peak hour. Internal capture volumes were subtracted from the gross project trips to determine the driveway volumes for the site. In addition to the internal capture, pass-by capture trips were also determined based on average rates provided in the *Trip Generation Handbook*. The pass-by capture rate for the high-turnover restaurant is 43.0 percent during on a daily basis, A.M. peak hour, and P.M. peak hour.

The trip generation calculations indicate that the proposed development will generate 2,522 new trips on a daily basis, 190 new trips during the weekday A.M. peak hour, and 215 new trips during the weekday P.M. peak hour. Detailed trip generation calculations are contained in Attachment B.

Trip Distribution

Trip distribution will be determined based on actual turning movements counts collected at the study area intersections. The traffic impact study will include graphics of the project traffic assignment at the project's driveways and the study intersections.

Background Growth Rate/Major Committed Development

A background growth rate will be calculated based on historic growth trends at nearby Florida Department of Transportation (FDOT) traffic count stations.

At this time the City has not indicated any committed projects to be included as part of background conditions. The City's review of this document will determine any committed projects to include in background conditions. The City will provide the corresponding approved traffic study for any committed projects identified.

Multimodal Amenities Evaluation

Transit route information will be documented in the report. Additionally, a field review will be conducted to assess the area sidewalks and pedestrian facilities.

Access Configuration

FDOT has approved the proposed access configuration. Attachment C contains the FDOT pre-application letter.

Study Area

The following intersections, in addition to project driveways will be examined as part of the study area:

- SE 3rd Street and South Federal Highway/US 1/SR 5
- SE 5th Street and South Federal Highway/US 1/SR 5

- SE 9th Street and South Federal Highway/US 1/SR 5
- SE 9th Street and SE 1st Avenue
- SE 10th Street/Gulfstream south driveway and Biscayne Boulevard/ US 1/SR 5

The following roadway segments were identified for analysis:

- South Federal Highway/US 1/SR 5 between Hallandale Beach Boulevard to Miami Dade County Line
- South Federal Highway/US 1/SR 5 between Pembroke Road to Hallandale Beach Boulevard
- SE 9th Street from SE 1st Avenue to South Federal Highway/US 1/SR 5

Capacity Analysis

Capacity analyses will be conducted for the A.M. and P.M. peak hours at the study intersections. Intersection analyses will be performed using Trafficware's *Synchro 8.0* traffic engineering analysis software, which applies Highway Capacity Manual 2010 (HCM) methodology. Roadway segment daily, A.M. and P.M. analyses will be conducted using information from FDOT's *Quality/LOS Handbook* 2013.

Capacity analyses will be conducted for three (3) scenarios: existing, build-out without project, and build-out with project. The build-out year will be specified in the analysis. The build-out year will be specified in the analysis. If intersection or roadway segment deficiencies are identified, strategies and improvements will be developed as mitigation measures.

The following graphics will be included for the study intersections:

1. Existing conditions
2. Trip distribution
3. Trip assignment
4. Future background traffic conditions (with growth rate and committed development traffic)
5. Future total traffic conditions (with project)

Documentation

The results of the traffic analysis will be summarized in a report. The report will include supporting documents including signal timings, lane geometry, and software output sheets. The report will also include text and graphics necessary to summarize the assumptions and analysis. If intersection capacity deficiencies are identified, strategies and improvements will be developed to attain City of Hallandale Beach adopted levels of service.

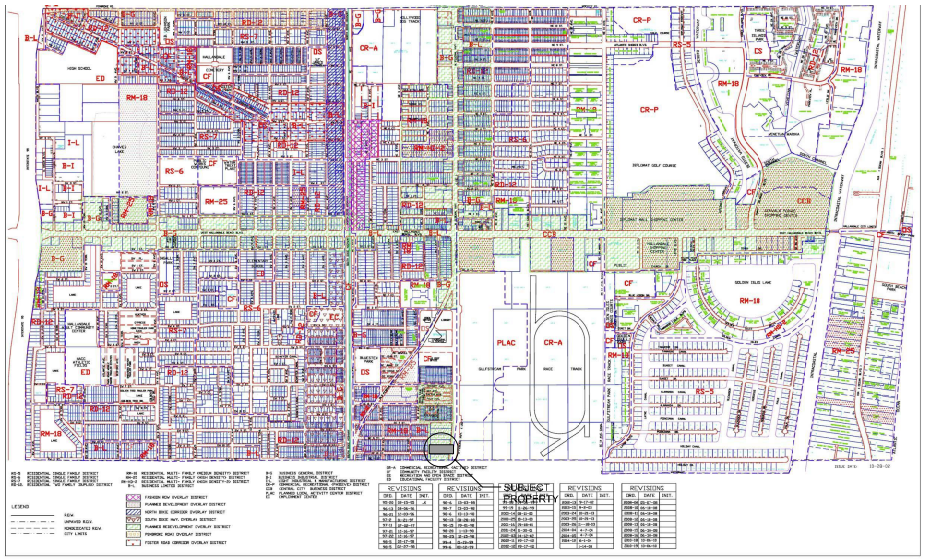
A CD and electronic copy of the reports will be provided as part of the submittal package.

Attachment A

GULFSTREAM POINT

918 S. FEDERAL HIGHWAY
HALLANDALE BEACH, FL. 33009

SITE ZONING MAP



LOCATION MAP

SITE ZONING MAP/ AERIAL

N/A"

PROGRESS SET NOT FOR CONSTRUCTION

GULFSTREAM POINT
918 S. FEDERAL HIGHWAY
HALLANDALE, FLORIDA

PERMUY ARCHITECTURE
PLANNING · INTERIORS

TROPICANA REDEVELOPMENT LLC
FLORIDA EAST COAST REALTY INC

STRUCTURAL ENGINEER
DeStefano Consulting Engineers

MEP & C.P. ENGINEER
STEVEN FELLER, P.E.

CIVIL ENGINEER
CHERONIZE CONSULTING INC.

LANDSCAPE ARCHITECT
LANDSCAPE DESIGN WORKSHOP

KEY PLAN

SEAL / SIGNATURE / DATE

STATE OF FLORIDA
HELEO MOLINA ARCHITECT
REGISTRATION NUMBER AR0010641

DESIGN DEVELOPMENT

DESCRIPTION	DATE

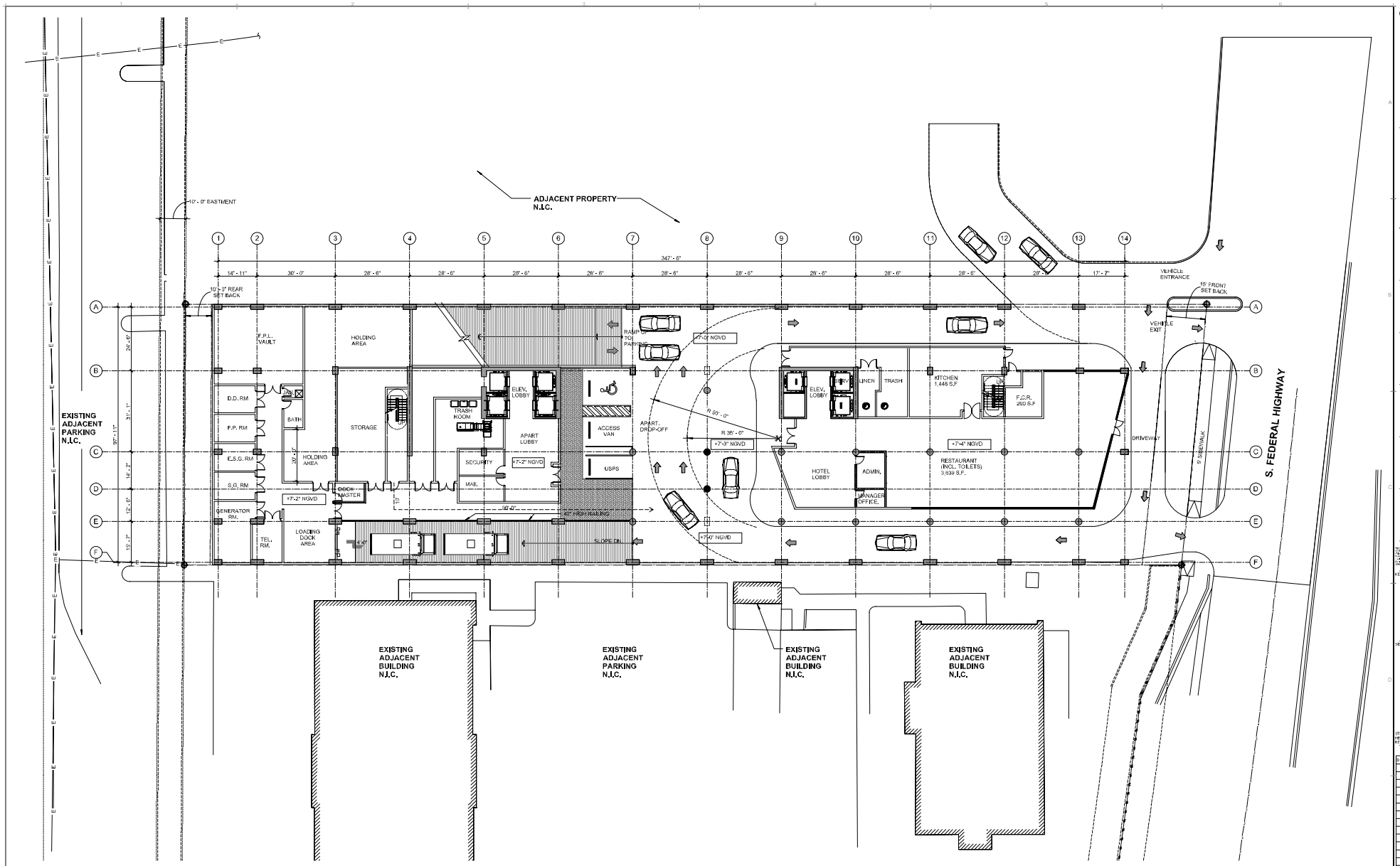
DATE:

PROJECT NO.: 1412

SHEET INDEX:

SCALE:

SHEET NO.: GN-003



GROUND LEVEL - FLOOR PLAN

Scale:1/16"=1'-0"

PROGRESS SET NOT FOR CONSTRUCTION 04.06.2013

GULFSTREAM POINT

918 S. FEDERAL HIGHWAY
HALLANDALE, FLORIDA

PERMUY ARCHITECTURE

PLANNING - INTERIORS

DESIGN DEVELOPMENT

DESCRIPTION	DATE

DATE:

PROJECT NO.: 1412

SHEET INDEX:

SCALE:

SHEET NO.: A-100

Attachment B

TRIP GENERATION

DAILY TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	High-Rise Apartment	9	222	391	DU	50%	50%	863	863	1,726	2.7%	46	840	840	1,680	0.0%	0	840	840	1,680
2	Hotel	9	310	117	ROOM	50%	50%	337	337	674	7.0%	46	314	314	628	0.0%	0	314	314	628
3	High-Turnover (Sit-Down) Restaurant	9	932	3.7	ksf	50%	50%	235	235	470	20.0%	94	188	188	376	43.0%	162	107	107	214
4																				
5																				
6																				
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14																				
15																				
							Total:	1,435	1,435	2,870	6.5%	186	1,342	1,342	2,684	6.0%	162	1,261	1,261	2,522

LUC	RATE/EQUATION
222	LN(Y) = 0.83*LN(X)+2.5
310	Y=8.95*(X)+-373.16
932	Y=127.15(X)

AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	High-Rise Apartment	9	222	391	DU	25%	75%	30	89	118	3.4%	4	28	87	114	0.0%	0	28	87	114
2	Hotel	9	310	117	ROOM	59%	41%	37	25	62	6.5%	4	35	23	58	0.0%	0	35	23	58
3	High-Turnover (Sit-Down) Restaurant	9	932	3.7	ksf	55%	45%	22	18	40	20.0%	8	18	14	32	43.0%	14	11	7	18
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	89	132	220	7.3%	16	81	124	204	6.9%	14	74	117	190

LUC	RATE/EQUATION
222	LN(Y) = 0.99*LN(X)+-1.14
310	Y=0.53(X)
932	Y=10.81(X)

PM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		DRIVEWAY VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	High-Rise Apartment	9	222	391	DU	61%	39%	84	53	137	2.9%	4	82	51	133	0.0%	0	82	51	133
2	Hotel	9	310	117	ROOM	51%	49%	36	34	70	5.7%	4	34	32	66	0.0%	0	34	32	66
3	High-Turnover (Sit-Down) Restaurant	9	932	3.7	ksf	60%	40%	22	14	36	22.2%	8	18	10	28	43.0%	12	12	4	16
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	142	101	243	6.6%	16	134	93	227	5.3%	12	128	87	215

LUC	RATE/EQUATION
222	Y=0.32*(X)+12.3
310	Y=0.6(X)
932	Y=9.85(X)

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(Source: Chapter 7, ITE Trip Generation Handbook, June 2004)

Project Number:
Project Name:
Scenario:
Analysis Period: Daily
Analyst:

Land Use A: Residential (High-Rise Apartment)

ITE Land Use Code 222
Size:

	Total	Internal	External
Enter	863	26	837
Exit	863	21	842
Total	1,726	47	1,679
%	100%	**3%**	97%

Enter from External: 837
Exit to External: 842

Land Use B: Residential (Hotel)

ITE Land Use Code 310
Size:

	Total	Internal	External
Enter	337	26	311
Exit	337	21	316
Total	674	47	627
%	100%	**7%**	93%

Enter from External: 311
Exit to External: 316

Land Use C: Retail (High-Turnover (Sit-Do

ITE Land Use Code 932
Size:

	Total	Internal	External
Enter	235	42	193
Exit	235	52	183
Total	470	94	376
%	100%	**20%**	80%

Enter from External: 193
Exit to External: 183

Land Use D: Retail

ITE Land Use Code
Size:

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

Enter from External: 0
Exit to External: 0

Demand	0.0%	0	
Balanced		0	
Demand	0.0%	0	
	0.0%	0	Demand
		0	Balanced
	0.0%	0	Demand
	33.0%	111	Demand
		26	Balanced
	11.0%	26	Demand
Demand	38.0%	128	
Balanced		21	
Demand	9.0%	21	
	33.0%	285	Demand
		0	Balanced
	11.0%	0	Demand
	28.0%	0	Demand
		0	Balanced
	30.0%	71	Demand

Demand	38.0%	328
Balanced		21
Demand	9.0%	21
Demand	38.0%	328
Balanced		0
Demand	9.0%	0
Demand	33.0%	111
Balanced		0
Demand	11.0%	0
Demand	9.0%	0
		0
	38.0%	128
Demand	33.0%	285
Balanced		26
Demand	11.0%	26
Demand	30.0%	0
Balanced		0
Demand	28.0%	66

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A	B	C	D	Total
Enter	837	311	183	0	1,331
Exit	842	316	193	0	1,351
Total	1,679	627	376	0	**2,682**
Single Use Trip Gen Estimate	1,726	674	470	0	**2,870**
	2.72%	6.97%	20.00%	#DIV/0!	

Overall Internal Capture = 6.55%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(Source: Chapter 7, ITE Trip Generation Handbook, June 2004)

Project Number:
Project Name:
Scenario:
Analysis Period: AM Peak
Analyst:

Land Use A: Residential (High-Rise Apartment)

ITE Land Use Code 222
Size:

	Total	Internal	External
Enter	30	2	28
Exit	89	2	87
Total	119	4	115
%	100%	**3%**	97%

Enter from External: 28
Exit to External: 87

Land Use B: Residential (Hotel)

ITE Land Use Code 310
Size:

	Total	Internal	External
Enter	37	2	35
Exit	25	2	23
Total	62	4	58
%	100%	**6%**	94%

Enter from External: 35
Exit to External: 23

Land Use C: Retail (High-Turnover (Sit-Do

ITE Land Use Code 932
Size:

	Total	Internal	External
Enter	22	4	18
Exit	18	4	14
Total	40	8	32
%	100%	**20%**	80%

Enter from External: 18
Exit to External: 14

Land Use D: Retail

ITE Land Use Code
Size:

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

Enter from External: 0
Exit to External: 0

Demand	0.0%	0	
Balanced		0	
Demand	0.0%	0	
	0.0%	0	Demand
		0	Balanced
	0.0%	0	Demand
	33.0%	10	Demand
		0	Balanced
	11.0%	0	Demand
Demand	38.0%	34	
Balanced		2	
Demand	9.0%	2	
Demand	38.0%	34	
Balanced		0	
Demand	9.0%	0	
Demand	9.0%	0	
		0	Balanced
	38.0%	10	Demand
Demand	33.0%	12	
Balanced		0	
Demand	11.0%	0	
	33.0%	12	Demand
		2	Balanced
	11.0%	2	Demand
Demand	33.0%	10	
Balanced		2	
Demand	11.0%	2	
Demand	30.0%	0	
Balanced		0	
Demand	28.0%	6	
Demand	38.0%	10	
Balanced		2	
Demand	9.0%	2	
	28.0%	0	Demand
		0	Balanced
	30.0%	5	Demand

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	28	35	14	0	77
Exit	87	23	18	0	128
Total	115	58	32	0	**205**
Single Use Trip Gen Estimate	119	62	40	0	**221**
	3.36%	6.45%	20.00%	#DIV/0!	

Overall Internal Capture = 7.24%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(Source: Chapter 7, ITE Trip Generation Handbook, June 2004)

Project Number:
Project Name:
Scenario:
Analysis Period: PM Peak
Analyst:

Land Use A: Residential (High-Rise Apartment)

ITE Land Use Code 222
Size:

	Total	Internal	External
Enter	84	2	82
Exit	53	2	51
Total	137	4	133
%	100%	**3%**	97%

Enter from External: 82
Exit to External: 51

Land Use B: Residential (Hotel)

ITE Land Use Code 310
Size:

	Total	Internal	External
Enter	36	2	34
Exit	34	2	32
Total	70	4	66
%	100%	**6%**	94%

Enter from External: 34
Exit to External: 32

Land Use C: Retail (High-Turnover (Sit-Do

ITE Land Use Code 932
Size:

	Total	Internal	External
Enter	22	4	18
Exit	14	4	10
Total	36	8	28
%	100%	**22%**	78%

Enter from External: 18
Exit to External: 10

Land Use D: Retail

ITE Land Use Code
Size:

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

Enter from External: 0
Exit to External: 0

Demand	0.0%	0	
Balanced		0	
Demand	0.0%	0	
	0.0%	0	Demand
		0	Balanced
	0.0%	0	Demand
Demand	53.0%	28	
Balanced		2	
Demand	9.0%	2	
Demand	53.0%	28	
Balanced		0	
Demand	9.0%	0	
31.0%	26	Demand	
	0	Balanced	
12.0%	0	Demand	
Demand	9.0%	0	
	0	Balanced	
53.0%	18	Demand	
Demand	31.0%	11	
Balanced		0	
Demand	12.0%	0	
31.0%	11	Demand	
	2	Balanced	
	12.0%	2	Demand
Demand	31.0%	26	
Balanced		2	
Demand	12.0%	2	Demand
Demand	20.0%	0	
Balanced		0	
Demand	20.0%	4	
Demand	53.0%	18	
Balanced		2	
Demand	9.0%	2	
20.0%	0	Demand	
	0	Balanced	
20.0%	3	Demand	

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	82	34	10	0	126
Exit	51	32	18	0	101
Total	133	66	28	0	**227**
Single Use Trip Gen Estimate	137	70	36	0	**243**
	2.92%	5.71%	22.22%	#DIV/0!	

Overall Internal Capture = 6.58%

Attachment C

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

ANANTH PRASAD, P.E.
SECRETARY

August 1, 2013

THIS PRE-APPLICATION LETTER IS VALID UNTIL AUGUST 1, 2014
THIS LETTER IS NOT A PERMIT APPROVAL

Mr. John McWilliams
Kimley-Horn and Associates Inc.
5200 Northwest 33rd Avenue, Suite 109
Fort Lauderdale, Florida 33309

Dear Mr. McWilliams:

RE: Broward County, Urban, In the City of Hallandale Beach
State Road 5, State Section 86010, Milepost 0.135, Access Class 5, Posted Speed 35 mph
Reference Project 403585-1, Location: South of SE 9th Street, West Side of SR 5
Site Acreage: .89, Proposed Land Use: Office, Restaurant and Lodging
Maximum Square Footage: Restaurant 4,000, Residential-apartments, 400 and Lodging 150 Rooms
Applicant: Hallandale First, LLC, Property Owner: Hallandale First, LLC, Plat Name: Gulfstream Point
Proposed Project Name & Address: Gulfstream Point, 918 South Federal Highway

Your Request: Driveway #1: Joint use right-in only driveway 200 feet south of SE 9th Street.

Driveway #2: Right-out only driveway 285 feet south of SE 9th Street.

WE APPROVE YOUR REQUEST. Please see the conditions and comments below.

This ruling is based on your presentation of the facts and site plan.

Conditions: **A minimum driveway length of 25 feet, as measured from the ultimate right-of-way line to the first conflict point, shall be provided at Driveway #1. A joint-use access agreement shall be recorded with the property to the north.**

Channelize Driveway #1 and internal circulation, also provide signing and pavement marking to prevent outbound traffic movement.

Drainage mitigation is required for any impacts within FDOT right-of-way (i.e. increased runoff or reduction of existing storage).

- A Storm Water Pollution Prevention Plan must be submitted with the application if there will be more than one acre of "disturbed area" (as defined by the Florida Department of Environmental Protection (FDEP)
- If right-of-way dedication is required to implement the proposed improvements, the applicant shall donate the right-of-way to the Department.
- All driveways not approved in this letter must be removed.

Comments: **When the property on the north develops, the applicant shall schedule a Pre Application Meeting to change access to Driveway #1 to a right-in, right-out driveway. The Driveway length required will be 50-feet and a right-turn lane may be required.**

Please note that the dimensions between driveways are measured from the near edge of pavement to near edge of pavement and dimensions between median openings are measured from centerline to centerline unless otherwise indicated.

The purpose of this Pre-Application letter is to document the conceptual review of the approximate location of driveway(s) to the State Highway system and to note any required improvements. This letter shall be submitted with any further reviews. If conceptually approved, the applicant may submit engineering plans to the Department for permitting. The Department's personnel shall review these plans for compliance with this letter as well as current Department standards and/or specifications. Final design must consider the existing roadway profile and any impacts to the existing drainage system. **Please note that this letter does not guarantee permit approval.** The permit may be denied based on the review of the submitted engineering plans. Be aware that any approved median openings may be modified (or closed) in the future, at the sole discretion of the Department.

For right-of-way dedication requirements go to: https://www3.dot.state.fl.us/OneStopPermitting/Home.aspx:
Click on Statewide Permit News. Scroll down to District 4. Scroll down to Additional Information and Examples and choose Right-of-way Donations/Dedications.

Please contact Christine Nabong Bacomo at the District Permits Office with any questions at telephone number 954-777-4377, fax number 954-677-7893 or e-mail: christine.bacomo@dot.state.fl.us. Thank you.

Sincerely,

Geysa Y. Sosa

Geysa Y. Sosa, P.E.
District Traffic Access Manager

CNB/nyh
cc: Geysa Sosa/Stan Williams SW
File: s:\Permits\Pre-app Letters\Broward County\Hallandale First LLC – SR 5.doc

APPENDIX C:
Project Trip Generation

TRIP GENERATION

DAILY TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	High-Rise Apartment	9	222	391	DU	50%	50%	863	863	1,726	2.7%	46	840	840	1,680	0.0%	0	840	840	1,680
2	Hotel	9	310	117	ROOM	50%	50%	337	337	674	7.0%	46	314	314	628	0.0%	0	314	314	628
3	High-Turnover (Sit-Down) Restaurant	9	932	3.7	ksf	50%	50%	235	235	470	20.0%	94	188	188	376	43.0%	162	107	107	214
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	1,435	1,435	2,870	6.5%	186	1,342	1,342	2,684	6.0%	162	1,261	1,261	2,522

LUC	RATE/EQUATION
222	LN(Y) = 0.83*LN(X)+2.5
310	Y=8.95*(X)+-373.16
932	Y=127.15(X)

AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	High-Rise Apartment	9	222	391	DU	25%	75%	30	89	118	3.4%	4	28	87	115	0.0%	0	28	87	115
2	Hotel	9	310	117	ROOM	59%	41%	37	25	62	6.5%	4	35	23	58	0.0%	0	35	23	58
3	High-Turnover (Sit-Down) Restaurant	9	932	3.7	ksf	55%	45%	22	18	40	20.0%	8	18	14	32	43.0%	14	11	7	18
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	89	132	220	7.3%	16	81	124	205	6.8%	14	74	117	191

LUC	RATE/EQUATION
222	LN(Y) = 0.99*LN(X)+-1.14
310	Y=0.53(X)
932	Y=10.81(X)

PM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		DRIVEWAY VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	High-Rise Apartment	9	222	391	DU	61%	39%	84	53	137	2.9%	4	82	51	133	0.0%	0	82	51	133
2	Hotel	9	310	117	ROOM	51%	49%	36	34	70	5.7%	4	34	32	66	0.0%	0	34	32	66
3	High-Turnover (Sit-Down) Restaurant	9	932	3.7	ksf	60%	40%	22	14	36	22.2%	8	18	10	28	43.0%	12	12	4	16
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	142	101	243	6.6%	16	134	93	227	5.3%	12	128	87	215

LUC	RATE/EQUATION
222	Y=0.32*(X)+12.3
310	Y=0.6(X)
932	Y=9.85(X)

APPENDIX D:
Multimodal Amenities

TIMETABLE

ROUTE 1

Monday - Friday

Effective 5/26/13

Aventura Mall to
Broward Central Terminal

via Federal Highway/US 1

BROWARD COUNTY Transit
A service of the
Broward County Commission

facebook

YouTube

Download & Print at broward.org/bct

Wheelchair Accessible

Bike Racks

Customer Service

Monday - Friday.....7 am - 7:45 pm
Saturday, Sunday and Holidays.....8:30 am - 4:45 pm

Transit Operations Agents help with:

- Trip planning
- Routes, times and transfer information
- Identifying Bus Pass sales locations
- Special event information

Lost and Found: 954-357-6414, Monday - Friday, 9:00 am - 4:00 pm

Holiday Bus Service

Sunday bus service is provided on the following observed holidays:

New Year's Day	Labor Day	Memorial Day
Independence Day	Thanksgiving Day	Christmas Day

Fares

Exact fare, dollar bill or coins required. Operators do not carry change.

Fares are: Regular, Premium Express, Senior/Youth/Disabled/Medicare.* Children (under 40 inches ride FREE)

Fare Deals

All Day Bus Pass offers unlimited rides on all routes. On sale aboard all BCT buses.

NOTE: Other cost saving passes cannot be purchased on BCT buses, but are available at the Central Bus Terminal and at authorized distributors.

10 Ride Pass: 10 Rides any time, any day. Expires after the tenth ride is taken.

7 Day Pass: Unlimited rides for seven consecutive days. Starts on the first day card is used. Expires after the seventh day.

31 Day Adult Pass: Unlimited rides for 31 consecutive days. Starts on the first day card is used.

31 Day Reduced Pass: Youth*, Seniors*, Disabled*, Medicare*, College Student*. Unlimited rides for 31 consecutive days. Starts on the first day card is used.

****Premium Express 10 Ride Pass:** 10 rides any time, any day. Expires after tenth ride is taken.

****Premium Express 31 Day Pass:** Unlimited rides for 31 consecutive days. Starts on the first day card is used.

Bus Passes are not redeemable, refundable or transferrable. Damaged cards are invalid. Lost, stolen or damaged cards will not be replaced.

*NOTICE: Proof of age is required for Youth fare (18 years or younger) and for Senior fare (65 years or older). For College Student Bus Pass, a college photo ID card is required. For Disabled and Medicare fare, proof of disability (Medicare card) and photo I.D. is required. Eligible Senior fare patrons are encouraged to acquire their BCT Reduced Fare Photo ID cards.

** Premium Bus Pass can be purchased online at broward.org/bct and at select Broward County library locations.

MONDAY-FRIDAY

There are additional bus stops in between those listed.

NORTHBOUND

To Broward Central Terminal

AVENTURA MALL 1	HALLANDALE BCH BLV & US 1 2	YOUNG CIRCLE 3	FTL/HWD INTERNATIONAL AIRPORT 4	BROWARD CENTRAL TERMINAL 5
		5:05a	5:25a	5:45a
		5:22a	5:42a	6:02a
5:17a	5:29a	5:39a	5:59a	6:20a
5:34a	5:46a	5:56a	6:17a	6:38a
5:51a	6:03a	6:14a	6:35a	6:57a
6:08a	6:21a	6:32a	6:54a	7:16a
6:25a	6:39a	6:51a	7:13a	7:35a
6:42a	6:56a	7:08a	7:30a	7:53a
6:59a	7:13a	7:25a	7:48a	8:11a
7:16a	7:30a	7:43a	8:06a	8:29a
7:33a	7:48a	8:01a	8:24a	8:47a
7:50a	8:05a	8:18a	8:41a	9:04a
8:07a	8:22a	8:35a	8:58a	9:20a
8:24a	8:39a	8:52a	9:14a	9:36a
8:41a	8:56a	9:08a	9:30a	9:52a
8:58a	9:12a	9:24a	9:46a	10:08a
9:15a	9:29a	9:41a	10:03a	10:25a
9:32a	9:46a	9:58a	10:20a	10:42a
9:49a	10:03a	10:15a	10:37a	10:59a
10:06a	10:20a	10:32a	10:54a	11:16a
10:23a	10:37a	10:49a	11:11a	11:33a
10:40a	10:54a	11:06a	11:28a	11:50a
10:57a	11:11a	11:23a	11:45a	12:07p
11:14a	11:28a	11:40a	12:02p	12:24p
11:31a	11:45a	11:57a	12:19p	12:41p
11:48a	12:02p	12:14p	12:36p	12:58p
12:05p	12:19p	12:31p	12:53p	1:15p
12:22p	12:36p	12:48p	1:10p	1:32p
12:39p	12:53p	1:05p	1:27p	1:49p
12:56p	1:10p	1:22p	1:44p	2:06p
1:13p	1:27p	1:39p	2:01p	2:23p
1:30p	1:44p	1:56p	2:18p	2:40p
1:47p	2:01p	2:13p	2:35p	2:57p
2:04p	2:18p	2:30p	2:52p	3:15p
2:21p	2:35p	2:47p	3:09p	3:32p
2:38p	2:52p	3:04p	3:27p	3:50p
2:55p	3:10p	3:23p	3:46p	4:09p
3:12p	3:27p	3:40p	4:03p	4:27p
3:30p	3:45p	3:58p	4:22p	4:46p
3:48p	4:03p	4:17p	4:41p	5:05p
4:06p	4:22p	4:36p	5:00p	5:24p
4:24p	4:40p	4:54p	5:18p	5:42p
4:42p	4:58p	5:12p	5:36p	6:00p
5:00p	5:16p	5:30p	5:54p	6:17p
5:18p	5:34p	5:48p	6:12p	6:35p
5:36p	5:52p	6:06p	6:29p	6:52p
5:54p	6:09p	6:22p	6:45p	7:08p
6:12p	6:27p	6:40p	7:03p	7:25p
6:30p	6:45p	6:58p	7:20p	7:42p
6:48p	7:03p	7:15p	7:37p	7:59p
7:06p	7:20p	7:32p	7:54p	8:15pG
7:24p	7:38p	7:50p	8:11p	8:32p
7:42p	7:56p	8:07p	8:28p	8:49pG
8:00p	8:13p	8:24p	8:45p	9:06p
8:30p	8:43p	8:54p	9:14p	9:34p
9:00p	9:12p	9:22p	9:42p	10:02p
9:30p	9:42p	9:52p	10:12p	10:32p
10:00p	10:12p	10:22p	10:42p	11:02p
10:30p	10:42p	10:52p	11:12p	11:32pG
11:00p	11:12p	11:22p	11:42p	12:02aG

SOUTHBOUND

To Aventura Mall

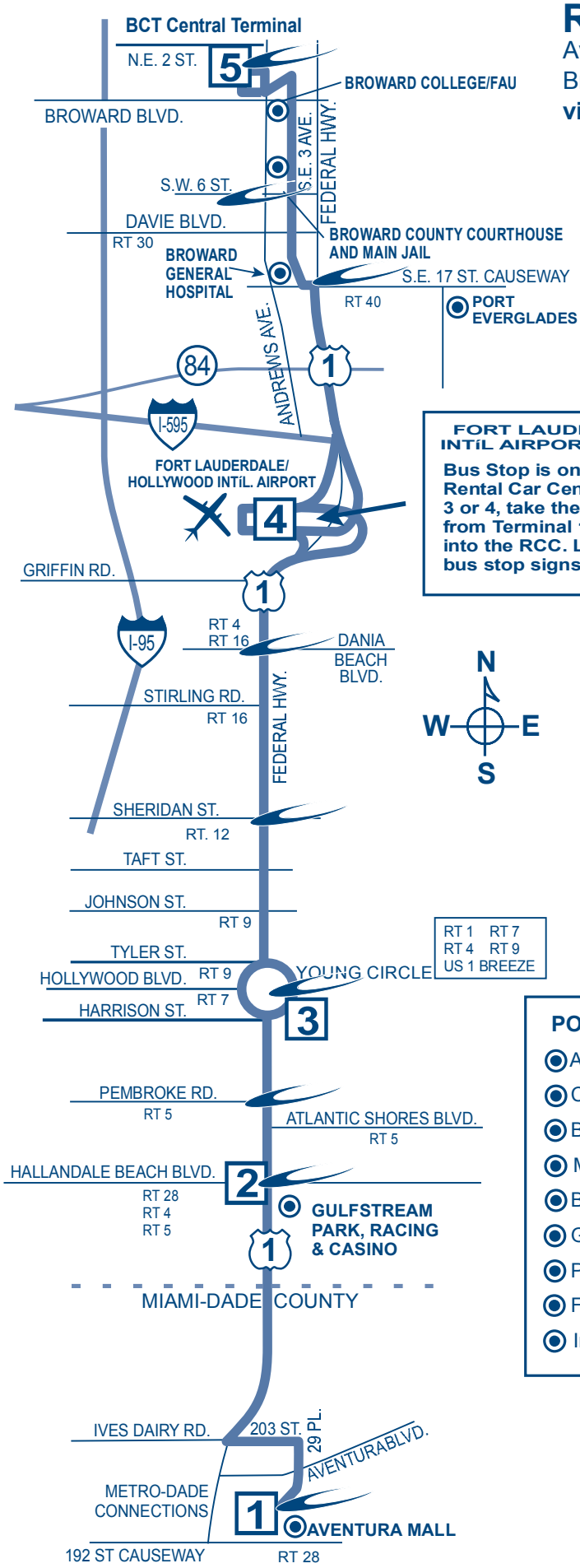
BROWARD CENTRAL TERMINAL 5	FTL/HWD INTERNATIONAL AIRPORT 4	YOUNG CIRCLE 3	HALLANDALE BCH BLV & US 1 2	AVENTURA MALL 1
5:14a	5:32a	6:00a	6:11a	6:24a
5:31a	5:49a	6:18a	6:29a	6:43a
5:48a	6:06a	6:35a	6:47a	7:01a
6:05a	6:24a	6:54a	7:06a	7:20a
6:22a	6:42a	7:12a	7:24a	7:39a
6:39a	6:59a	7:29a	7:42a	7:57a
6:56a	7:16a	7:47a	8:00a	8:15a
7:13a	7:33a	8:04a	8:17a	8:32a
7:30a	7:51a	8:22a	8:35a	8:50a
7:47a	8:08a	8:39a	8:52a	9:07a
8:04a	8:25a	8:56a	9:08a	9:22a
8:21a	8:42a	9:13a	9:25a	9:39a
8:38a	8:59a	9:29a	9:41a	9:55a
8:55a	9:15a	9:45a	9:57a	10:11a
9:12a	9:32a	10:02a	10:14a	10:28a
9:29a	9:49a	10:19a	10:31a	10:45a
9:46a	10:06a	10:36a	10:48a	11:02a
10:03a	10:23a	10:53a	11:05a	11:19a
10:20a	10:40a	11:10a	11:22a	11:36a
10:37a	10:57a	11:27a	11:39a	11:53a
10:54a	11:14a	11:44a	11:56a	12:10p
11:11a	11:31a	12:01p	12:13p	12:27p
11:28a	11:48a	12:18p	12:30p	12:44p
11:45a	12:05p	12:35p	12:47p	1:01p
12:02p	12:22p	12:52p	1:04p	1:18p
12:19p	12:39p	1:09p	1:21p	1:35p
12:36p	12:56p	1:26p	1:38p	1:52p
12:53p	1:13p	1:43p	1:55p	2:09p
1:10p	1:30p	2:00p	2:12p	2:26p
1:27p	1:47p	2:17p	2:29p	2:43p
1:44p	2:04p	2:34p	2:46p	3:00p
2:01p	2:21p	2:51p	3:03p	3:18p
2:18p	2:38p	3:08p	3:21p	3:36p
2:35p	2:55p	3:26p	3:39p	3:54p
2:52p	3:13p	3:44p	3:57p	4:13p
3:09p	3:30p	4:01p	4:15p	4:31p
3:27p	3:48p	4:20p	4:34p	4:50p
3:45p	4:06p	4:38p	4:52p	5:08p
4:03p	4:25p	4:57p	5:11p	5:27p
4:21p	4:43p	5:15p	5:29p	5:45p
4:39p	5:01p	5:33p	5:47p	6:03p
4:57p	5:19p	5:51p	6:05p	6:20p
5:15p	5:37p	6:09p	6:22p	6:37p
5:33p	5:55p	6:26p	6:39p	6:54p
5:51p	6:12p	6:43p	6:56p	7:10p
6:09p	6:30p	7:01p	7:13p	7:27p
6:27p	6:48p	7:18p	7:30p	7:44p
6:45p	7:06p	7:36p	7:48p	8:02pG
7:03p	7:23p	7:53p	8:05p	8:18p
7:21p	7:41p	8:11p	8:22p	8:35pG
7:39p	7:59p	8:28p	8:39p	8:52p
7:57p	8:16p	8:45p	8:56p	9:08pG
8:15p	8:34p	9:03p	9:13p	9:25p
8:45p	9:04p	9:32p	9:42p	9:54p
9:15p	9:33p	10:01p	10:11p	10:23p
9:45p	10:03p	10:31p	10:41p	10:53p
10:15p	10:33p	11:01p	11:11p	11:23pG
10:45p	11:03p	11:31p	11:41p	11:53pG
11:15p	11:33p	12:01a	12:11a	12:23aG

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP

Times with the letter "G" before them indicate bus returns to garage.

ROUTE 1

Aventura Mall to
Broward Central Terminal
via Federal Highway/US 1



BROWARD CENTRAL TERMINAL			
RT 1	RT 11	RT 30	RT 60
RT 6	RT 14	RT 31	RT 81
RT 9	RT 20	RT 40	
RT 10	RT 22	RT 50	
U.S. 1 BREEZE			

FORT LAUDERDALE/HOLLYWOOD INTíL AIRPORT TERMINAL COMPLEX

Bus Stop is on upper departure level at the Rental Car Center (RCC). From Terminal 2, 3 or 4, take the shuttle bus to the RCC; from Terminal 1, access moving sidewalk into the RCC. Look for BCT and Stop 7 bus stop signs.

LEGEND

CONNECTING ROUTES — RT #

0 MAIN ROUTE

TIMEPOINTS

The Breeze stop location

RT 1	RT 7
RT 4	RT 9
US 1 BREEZE	

POINTS OF INTEREST

- Aventura Mall
- Courthouse/Jail
- Broward General
- Medical Center
- Broward College/FAU
- Gulfstream Park, Racing Casino
- Port Everglades
- Fort Lauderdale/Hollywood
- International Airport

For more details on our fares please visit our web site at broward.org/bct or call customer service: 954.357.8400.

Reading A Timetable - It's Easy

1. The map shows the exact bus route.
2. Major route intersections are called time points. Time points are shown with the symbol ☐.
3. The timetable lists major time points for bus route. Listed under time points are scheduled departure times.
4. Reading from left to right, indicates the time for each bus trip.
5. The bus picks up and drops off riders at all BCT bus stop signs along the route where there is a Broward County bus stop sign.
6. Arrive at the bus stop five minutes early. Buses operate as close to published timetables as traffic conditions allow.

Not paying your fare is a crime per Florida Statute 812.015. Violation constitutes a misdemeanor, punishable by jail time and/or a fine.

Information: 954.357.8400

Hearing-speech impaired/TTY: 954.357.8302

This publication can be made available in large print, tape cassette, or Braille, by request.

This symbol is used on bus stop signs to indicate accessible bus stops.

BROWARD COUNTY FLORIDA
BROWARD COUNTY
BOARD OF COUNTY COMMISSIONERS
An equal opportunity employer and provider of services.

PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager, 1 N. University Drive, Suite 3100A, Plantation, FL 33324.

TRANSFER POLICY 7/10/11

TRANSFERS BETWEEN REGULAR BUS ROUTE SERVICE AND PREMIUM EXPRESS BUS SERVICE

A BCT 31-Day Premium Express Bus Pass is acceptable on all BCT regular bus service. Passengers transferring from regular route bus service to express bus service with an All Day, 7-Day or 31-Day bus pass, must pay a premium upgrade fee of $1.00. Passengers with a regular 10-Ride bus pass or paying by cash on regular service will not be able to transfer between bus services and must pay the full premium fare when boarding the Express bus.

TRANSFERS FROM BCT TO OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When boarding a BCT bus, passenger pays the appropriate BCT fare and may request a transfer from the bus operator if transferring to Miami-Dade Transit (MDT), Palm Tran or Tri-Rail.

TRANSFERS TO BCT FROM OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When transferring from MDT, Palm Tran and Tri-Rail to BCT regular fixed-route bus service, passenger pays $.50 with a transfer issued by MDT or Palm Tran and proof of fare payment such as Easy Card and receipt issued by Tri-Rail. Tri-Rail passengers boarding BCT at any locations other than at a Tri-Rail station will be required to pay the full fare.

TRANSFERS BETWEEN OTHER SOUTH FLORIDA TRANSIT SYSTEMS AND PREMIUM EXPRESS BUS SERVICE

Transfers to MDT or Tri-Rail from Express, a transfer is issued and passenger must pay appropriate MDT or Tri-Rail fare.

Transfer from MDT or Tri-Rail to Express, a $ .50 transfer fee is required with the appropriate transfer from MDT or Tri-Rail.

The Express does not connect with Palm Tran.

The Easy Card issued by MDT and Tri-Rail is not accepted as payment on any BCT bus.

TRANSIT WATCH

WHEN IT COMES TO OUR SAFETY, WE CAN ALWAYS USE AN EXTRA PAIR OF EYES AND EARS. BE ALERT. CALL 954-357-LOOK (5665). TELL US.

TIMETABLE

ROUTE 5

Monday - Sunday

Effective 4/7/13

Pembroke Lakes Mall to
Hallandale Beach City Hall
via Pembroke Road

BROWARD COUNTY Transit

A service of the
Broward County Commission

facebook

YouTube

Download & Print at broward.org/bct
Wheelchair Accessible
Bike Racks

Customer Service

Monday - Friday.....7 am - 8 pm
Saturday, Sunday and Holidays.....8:30 am - 5 pm

Transit Operations Agents help with:

- Trip planning
- Routes, times and transfer information
- Identifying Bus Pass sales locations
- Special event information

Lost and Found: 954-357-6414, Monday - Friday, 8:30 am - 4:30 pm

Holiday Bus Service

Sunday bus service is provided on the following observed holidays:

New Year's Day	Labor Day	Memorial Day
Independence Day	Thanksgiving Day	Christmas Day

Fares

Exact fare, dollar bill or coins required. Operators do not carry change.

Fares are: Regular, Premium Express, Senior/Youth/Disabled/Medicare.* Children (under 40 inches ride FREE)

Fare Deals

All Day Bus Pass offers unlimited rides on all routes. On sale aboard all BCT buses.

NOTE: Other cost saving passes cannot be purchased on BCT buses, but are available at the Central Bus Terminal and at authorized distributors.

10 Ride Pass: 10 Rides any time, any day. Expires after the tenth ride is taken.

7 Day Pass: Unlimited rides for seven consecutive days. Starts on the first day card is used. Expires after the seventh day.

31 Day Adult Pass: Unlimited rides for 31 consecutive days. Starts on the first day card is used.

31 Day Reduced Pass: Youth*, Seniors*, Disabled*, Medicare*, College Student*. Unlimited rides for 31 consecutive days. Starts on the first day card is used.

****Premium Express 10 Ride Pass:** 10 rides any time, any day. Expires after tenth ride is taken.

****Premium Express 31 Day Pass:** Unlimited rides for 31 consecutive days. Starts on the first day card is used.

Bus Passes are not redeemable, refundable or transferrable. Damaged cards are invalid. Lost, stolen or damaged cards will not be replaced.

*NOTICE: Proof of age is required for Youth fare (18 years or younger) and for Senior fare (65 years or older). For College Student Bus Pass, a college photo ID card is required. For Disabled and Medicare fare, proof of disability (Medicare card) and photo I.D. is required. Eligible Senior fare patrons are encouraged to acquire their BCT Reduced Fare Photo ID cards.

** Premium Bus Pass can be purchased online at broward.org/bct and at select Broward County library locations.

Route 5

MONDAY-FRIDAY

There are additional bus stops in between those listed.

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP
Times with the letter "G" before them indicate bus returns to garage.

EASTBOUND

To Hallandale Beach City Hall

PEMBROKE LAKES MALL	MIRAMAR TOWN CENTER	PEMBROKE RD. & UNIVERSITY DR.	PEMBROKE RD. & HWY. 441	PEMBROKE RD. & S. 26 AVE.	SE 3 ST & US 1
1	2	3	4	5	6
6:00a	6:15a	6:27a	6:36a	6:46a	7:00a
6:30a	6:45a	6:57a	7:07a	7:18a	7:33a
7:00a	7:16a	7:29a	7:39a	7:50a	8:05a
7:30a	7:46a	7:59a	8:09a	8:20a	8:35a
8:00a	8:16a	8:29a	8:39a	8:50a	9:05a
8:30a	8:46a	8:59a	9:09a	9:20a	9:35aG
9:00a	9:15a	9:27a	9:36a	9:46a	10:00a
9:45a	10:00a	10:12a	10:21a	10:31a	10:45a
10:30a	10:45a	10:57a	11:06a	11:16a	11:30a
11:15a	11:30a	11:42a	11:51a	12:01p	12:15p
12:00p	12:15p	12:27p	12:36p	12:46p	1:00p
12:45p	1:00p	1:12p	1:21p	1:31p	1:45p
1:30p	1:45p	1:57p	2:06p	2:16p	2:30p
2:15p	2:30p	2:42p	2:51p	3:01p	3:15p
3:00p	3:15p	3:27p	3:36p	3:46p	4:00p
3:30p	3:45p	3:57p	4:06p	4:16p	4:30p
4:00p	4:15p	4:27p	4:36p	4:46p	5:00p
4:30p	4:45p	4:57p	5:06p	5:16p	5:30p
5:00p	5:15p	5:27p	5:36p	5:46p	6:00p
5:30p	5:45p	5:57p	6:06p	6:16p	6:30pG
6:00p	6:15p	6:27p	6:36p	6:46p	7:00p
6:45p	7:00p	7:12p	7:21p	7:31p	7:45p
7:30p	7:45p	7:57p	8:05p	8:14p	8:27p
8:15p	8:29p	8:40p	8:48p	8:57p	9:10p
9:00p	9:14p	9:25p	9:33p	9:42p	9:55pG

WESTBOUND

To Pembroke Lakes Mall

SE 3 ST & US 1	PEMBROKE RD. & S. 26 AVE.	PEMBROKE RD. & HWY. 441	PEMBROKE RD. & UNIVERSITY DR.	MIRAMAR TOWN CENTER	PEMBROKE LAKES MALL
6	5	4	3	2	1
6:15a	6:28a	6:38a	6:47a	7:01a	7:15a
6:45a	6:58a	7:08a	7:17a	7:31a	7:45a
7:15a	7:28a	7:38a	7:47a	8:01a	8:15a
7:45a	7:58a	8:08a	8:17a	8:31a	8:45a
8:15a	8:28a	8:38a	8:47a	9:01a	9:15aG
8:45a	8:58a	9:08a	9:17a	9:31a	9:45a
9:25a	9:38a	9:48a	9:57a	10:11a	10:25a
10:10a	10:23a	10:33a	10:42a	10:56a	11:10a
10:55a	11:08a	11:18a	11:27a	11:41a	11:55a
11:40a	11:53a	12:03p	12:12p	12:26p	12:40p
12:25p	12:38p	12:48p	12:57p	1:11p	1:25p
1:10p	1:23p	1:33p	1:42p	1:56p	2:10p
1:55p	2:08p	2:18p	2:27p	2:41p	2:55p
2:40p	2:53p	3:03p	3:12p	3:26p	3:40p
3:15p	3:28p	3:38p	3:47p	4:01p	4:16p
3:45p	3:58p	4:09p	4:19p	4:34p	4:49p
4:15p	4:29p	4:40p	4:50p	5:05p	5:20p
4:45p	4:59p	5:10p	5:20p	5:35p	5:50p
5:15p	5:29p	5:40p	5:50p	6:05p	6:19p
5:45p	5:58p	6:08p	6:17p	6:32p	6:45pG
6:20p	6:33p	6:43p	6:52p	7:06p	7:20p
7:05p	7:18p	7:28p	7:37p	7:51p	8:05p
7:50p	8:03p	8:12p	8:20p	8:33p	8:46p
8:35p	8:47p	8:56p	9:04p	9:17p	9:30pG
9:20p	9:32p	9:41p	9:49p	10:02p	10:15pG

Route 5

SATURDAY

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP
Times with the letter "G" before them indicate bus returns to garage.

EASTBOUND

To Hallandale Beach City Hall

PEMBROKE LAKES MALL	PEMBROKE RD. & HIATUS RD.	PEMBROKE RD. & UNIVERSITY DR.	PEMBROKE RD. & HWY. 441	PEMBROKE RD. & S. 26 AVE.	SE 3 ST & US 1
1	2	3	4	5	6
7:00a	7:11a	7:20a	7:28a	7:37a	7:50a
8:00a	8:11a	8:20a	8:28a	8:37a	8:50a
9:00a	9:12a	9:22a	9:31a	9:41a	9:55a
10:00a	10:12a	10:22a	10:31a	10:41a	10:55a
11:00a	11:12a	11:22a	11:31a	11:41a	11:55a
12:00p	12:12p	12:22p	12:31p	12:41p	12:55p
1:00p	1:12p	1:22p	1:31p	1:41p	1:55p
2:00p	2:12p	2:22p	2:31p	2:41p	2:55p
3:00p	3:12p	3:22p	3:31p	3:41p	3:55p
4:00p	4:12p	4:22p	4:31p	4:41p	4:55p
5:00p	5:12p	5:22p	5:31p	5:41p	5:55p
6:00p	6:11p	6:20p	6:28p	6:37p	6:50p
7:00p	7:11p	7:20p	7:28p	7:37p	7:50p
8:00p	8:11p	8:20p	8:28p	8:37p	8:50p
9:00p	9:11p	9:20p	9:28p	9:37p	9:50pG

WESTBOUND

To Pembroke Lakes Mall

SE 3 ST & US 1	PEMBROKE RD. & S. 26 AVE.	PEMBROKE RD. & HWY. 441	PEMBROKE RD. & UNIVERSITY DR.	PEMBROKE RD. & HIATUS RD.	PEMBROKE LAKES MALL
6	5	4	3	2	1
7:00a	7:12a	7:21a	7:29a	7:38a	7:50a
8:00a	8:12a	8:21a	8:29a	8:38a	8:50a
9:00a	9:13a	9:23a	9:32a	9:42a	9:55a
10:00a	10:13a	10:23a	10:32a	10:42a	10:55a
11:00a	11:13a	11:23a	11:32a	11:42a	11:55a
12:00p	12:13p	12:23p	12:32p	12:42p	12:55p
1:00p	1:13p	1:23p	1:32p	1:42p	1:55p
2:00p	2:13p	2:23p	2:32p	2:42p	2:55p
3:00p	3:13p	3:23p	3:32p	3:42p	3:55p
4:00p	4:13p	4:23p	4:32p	4:42p	4:55p
5:00p	5:13p	5:23p	5:32p	5:42p	5:55p
6:00p	6:12p	6:21p	6:29p	6:38p	6:50p
7:00p	7:12p	7:21p	7:29p	7:38p	7:50p
8:00p	8:12p	8:21p	8:29p	8:38p	8:50p
9:00p	9:12p	9:21p	9:29p	9:38p	9:50pG

Route 5

SUNDAY

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP
Times with the letter "G" before them indicate bus returns to garage.

EASTBOUND

To Hallandale Beach City Hall

PEMBROKE LAKES MALL	PEMBROKE RD & HIATUS RD	PEMBROKE RD. & UNIVERSITY DR.	PEMBROKE RD. & HWY. 441	PEMBROKE RD. & S. 26 AVE.	SE 3 ST & US 1
1	2	3	4	5	6
8:00a	8:11a	8:20a	8:28a	8:37a	8:50a
9:00a	9:11a	9:20a	9:28a	9:37a	9:50a
10:00a	10:11a	10:20a	10:28a	10:37a	10:50a
11:00a	11:11a	11:20a	11:28a	11:37a	11:50a
12:00p	12:11p	12:20p	12:28p	12:37p	12:50p
1:00p	1:11p	1:20p	1:28p	1:37p	1:50p
2:00p	2:11p	2:20p	2:28p	2:37p	2:50p
3:00p	3:11p	3:20p	3:28p	3:37p	3:50p
4:00p	4:11p	4:20p	4:28p	4:37p	4:50p
5:00p	5:11p	5:20p	5:28p	5:37p	5:50p
6:00p	6:11p	6:20p	6:28p	6:37p	6:50p
7:00p	7:11p	7:20p	7:28p	7:37p	7:50p
8:00p	8:11p	8:20p	8:28p	8:37p	8:50p G
8:00p	8:11p	8:20p	8:28p	8:37p	8:50p G

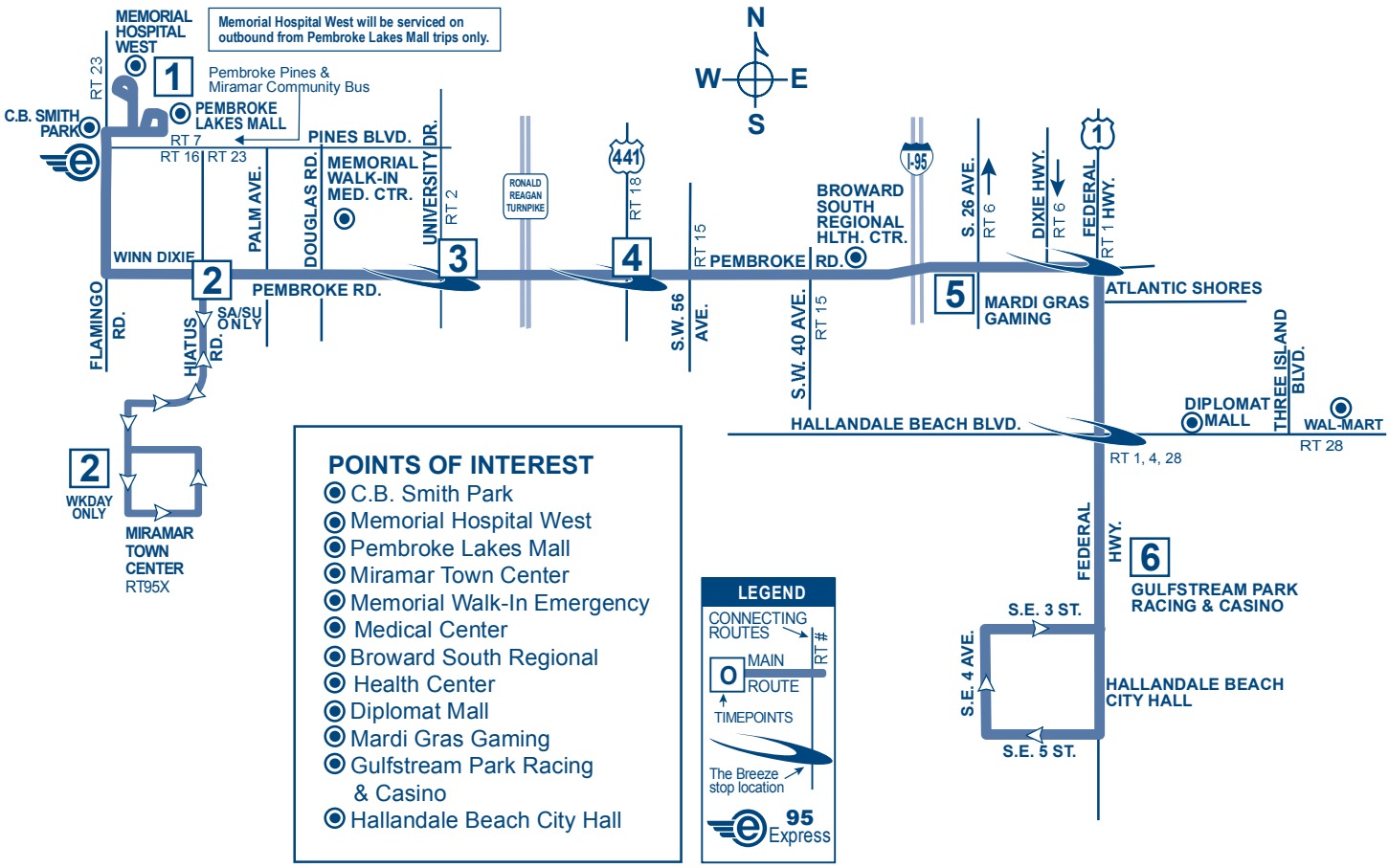
WESTBOUND

To Pembroke Lakes Mall

SE 3 ST & US 1	PEMBROKE RD. & S. 26 AVE.	PEMBROKE RD. & HWY. 441	PEMBROKE RD. & UNIVERSITY DR.	PEMBROKE RD & HIATUS RD	PEMBROKE LAKES MALL
6	5	4	3	2	1
8:00a	8:12a	8:21a	8:29a	8:38a	8:50a
9:00a	9:12a	9:21a	9:29a	9:38a	9:50a
10:00a	10:12a	10:21a	10:29a	10:38a	10:50a
11:00a	11:12a	11:21a	11:29a	11:38a	11:50a
12:00p	12:12p	12:21p	12:29p	12:38p	12:50p
1:00p	1:12p	1:21p	1:29p	1:38p	1:50p
2:00p	2:12p	2:21p	2:29p	2:38p	2:50p
3:00p	3:12p	3:21p	3:29p	3:38p	3:50p
4:00p	4:12p	4:21p	4:29p	4:38p	4:50p
5:00p	5:12p	5:21p	5:29p	5:38p	5:50p
6:00p	6:12p	6:21p	6:29p	6:38p	6:50p
7:00p	7:12p	7:21p	7:29p	7:38p	7:50p
8:00p	8:12p	8:21p	8:29p	8:38p	8:50pG

ROUTE 5

Pembroke Lakes Mall to
Hallandale Beach City Hall
via Pembroke Road



For more details on our fares please visit our web site at broward.org/bct or call customer service: 954.357.8400.

Reading A Timetable - It's Easy

1. The map shows the exact bus route.
2. Major route intersections are called time points. Time points are shown with the symbol ☐.
3. The timetable lists major time points for bus route. Listed under time points are scheduled departure times.
4. Reading from left to right, indicates the time for each bus trip.
5. The bus picks up and drops off riders at all BCT bus stop signs along the route where there is a Broward County bus stop sign.
6. Arrive at the bus stop five minutes early. Buses operate as close to published timetables as traffic conditions allow.

Not paying your fare is a crime per Florida Statute 812.015. Violation constitutes a misdemeanor, punishable by jail time and/or a fine.

Information: 954.357.8400

Hearing-speech impaired/TTY: 954.357.8302

This publication can be made available in large print, tape cassette, or Braille, by request.

This symbol is used on bus stop signs to indicate accessible bus stops.

BROWARD COUNTY FLORIDA
BROWARD COUNTY
BOARD OF COUNTY COMMISSIONERS
An equal opportunity employer and provider of services.

PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager, 1 N. University Drive, Suite 3100A, Plantation, FL 33324.

TRANSFER POLICY 7/10/11

TRANSFERS BETWEEN REGULAR BUS ROUTE SERVICE AND PREMIUM EXPRESS BUS SERVICE

A BCT 31-Day Premium Express Bus Pass is acceptable on all BCT regular bus service. Passengers transferring from regular route bus service to express bus service with an All Day, 7-Day or 31-Day bus pass, must pay a premium upgrade fee of $1.00. Passengers with a regular 10-Ride bus pass or paying by cash on regular service will not be able to transfer between bus services and must pay the full premium fare when boarding the Express bus.

TRANSFERS FROM BCT TO OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When boarding a BCT bus, passenger pays the appropriate BCT fare and may request a transfer from the bus operator if transferring to Miami-Dade Transit (MDT), Palm Tran or Tri-Rail.

TRANSFERS TO BCT FROM OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When transferring from MDT, Palm Tran and Tri-Rail to BCT regular fixed-route bus service, passenger pays $.50 with a transfer issued by MDT or Palm Tran and proof of fare payment such as Easy Card and receipt issued by Tri-Rail. Tri-Rail passengers boarding BCT at any locations other than at a Tri-Rail station will be required to pay the full fare.

TRANSFERS BETWEEN OTHER SOUTH FLORIDA TRANSIT SYSTEMS AND PREMIUM EXPRESS BUS SERVICE

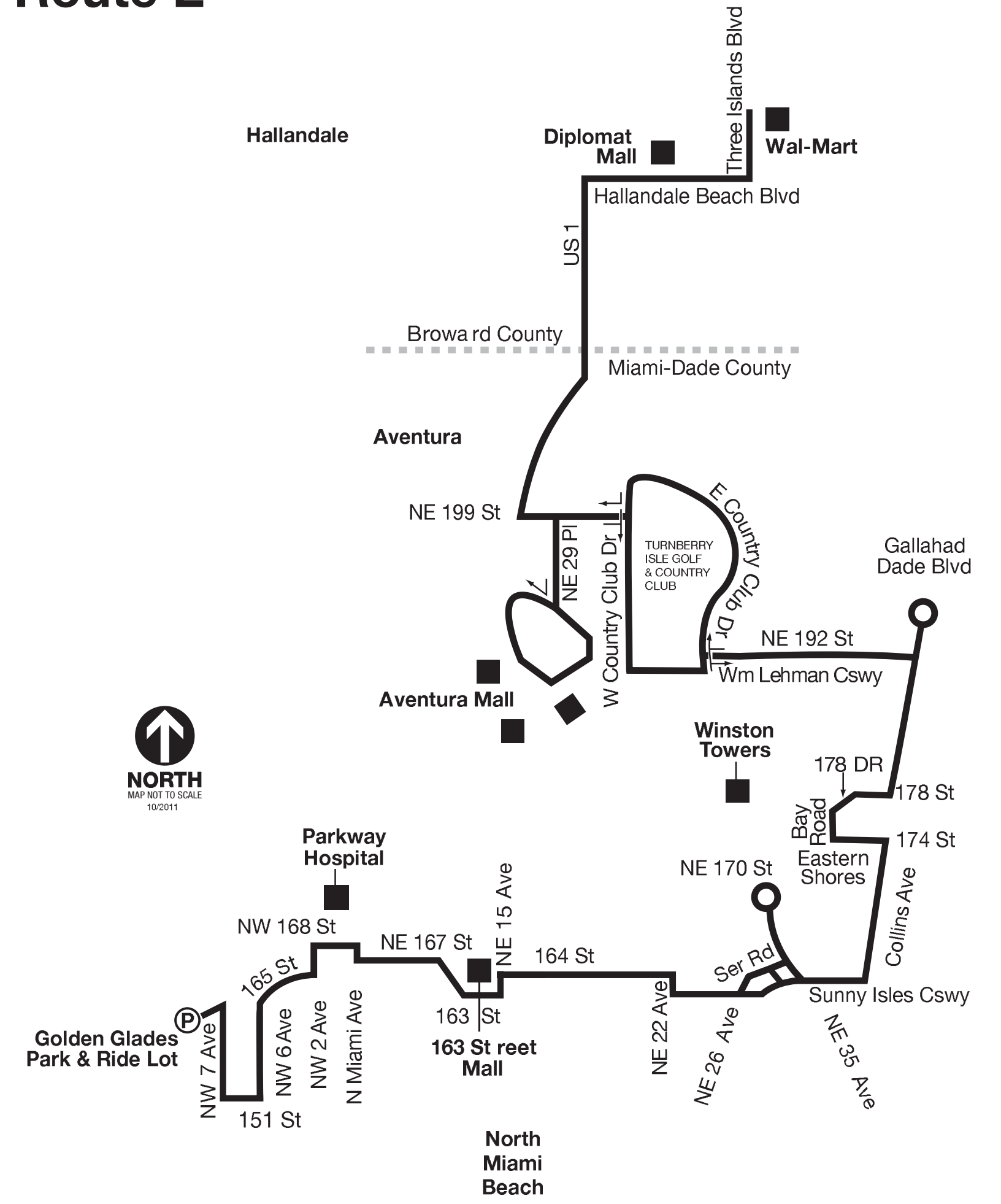
Transfers to MDT or Tri-Rail from Express, a transfer is issued and passenger must pay appropriate MDT or Tri-Rail fare.

Transfer from MDT or Tri-Rail to Express, a $ .50 transfer fee is required with the appropriate transfer from MDT or Tri-Rail.

The Express does not connect with Palm Tran.

The Easy Card issued by MDT and Tri-Rail is not accepted as payment on any BCT bus.

Route E


Hallandale
Diplomat Mall
Three Islands Blvd
Wal-Mart
Hallandale Beach Blvd
US 1
Broward County
Miami-Dade County
Aventura
NE 199 St
NE 29 Pl
W Country Club Dr
TURNBERRY ISLE GOLF & COUNTRY CLUB
E Country Club Dr
Gallahad Dade Blvd
NE 192 St
Wm Lehman Cswy
Aventura Mall
NORTH
MAP NOT TO SCALE
10/2011
Winston Towers
178 DR
178 St
Bay Road
174 St
Eastern Shores
Parkway Hospital
NE 170 St
NE 15 Ave
Collins Ave
NW 168 St
NE 167 St
164 St
Ser Rd
165 St
Sunny Isles Cswy
163 St
163 St reet Mall
Golden Glades Park & Ride Lot
NW 7 Ave
NW 6 Ave
NW 2 Ave
N Miami Ave
NE 22 Ave
NE 26 Ave
NE 35 Ave
151 St
North Miami Beach

Miami-Dade County Miami-Dade Transit

Routes Schedule

Schedule

Back to previous page *(javascript: history.go(-1))*

Service: WEEKDAY **Direction:** EASTBOUND

Golden Glades West P.Lot	NW 168 St & 2 Ave	NE 164 St & 15 Ave	NE 163 St & Biscayne Blvd	163 St & Collins Ave	North Bay Rd & 174 St	185 St & Collins Ave	E. Country Club Dr & Yacht Club	Aventura Mall	3 Island Blvd Wal Mart
05:55AM	06:06AM	06:16AM	06:24AM	06:45AM	06:49AM	06:54AM	:	07:09AM	07:30AM
06:33AM	06:44AM	06:54AM	07:02AM	07:23AM	07:27AM	07:32AM	:	07:47AM	08:08AM
07:10AM	07:21AM	07:31AM	07:39AM	08:00AM	08:04AM	08:09AM	:	08:24AM	08:45AM
07:40AM	07:51AM	08:01AM	08:09AM	08:30AM	08:34AM	08:39AM	:	08:54AM	09:18AM
08:10AM	08:21AM	08:31AM	08:39AM	09:00AM	09:05AM	09:10AM	:	09:25AM	09:49AM
08:44AM	08:55AM	09:06AM	09:14AM	09:35AM	09:40AM	09:45AM	:	10:00AM	10:24AM
09:25AM	09:35AM	09:46AM	09:54AM	10:15AM	10:20AM	10:25AM	:	10:40AM	11:04AM
10:10AM	10:20AM	10:31AM	10:39AM	11:00AM	11:05AM	11:10AM	:	11:25AM	11:49AM
11:00AM	11:10AM	11:21AM	11:29AM	11:50AM	11:55AM	12:00PM	:	12:15PM	12:39PM
11:50AM	12:00PM	12:11PM	12:19PM	12:40PM	12:45PM	12:50PM	:	01:05PM	01:29PM
12:35PM	12:45PM	12:56PM	01:04PM	01:25PM	01:30PM	01:35PM	:	01:50PM	02:14PM
01:25PM	01:35PM	01:46PM	01:54PM	02:15PM	02:20PM	02:25PM	:	02:40PM	03:07PM
02:15PM	02:25PM	02:36PM	02:44PM	03:05PM	03:10PM	03:15PM	:	03:30PM	03:57PM
02:50PM	03:01PM	03:13PM	03:21PM	03:42PM	03:47PM	03:52PM	:	04:07PM	04:34PM
03:25PM	03:36PM	03:48PM	03:56PM	04:17PM	04:22PM	04:27PM	:	04:42PM	05:09PM
03:55PM	04:06PM	04:18PM	04:26PM	04:47PM	04:52PM	04:57PM	:	05:12PM	05:39PM
04:25PM	04:36PM	04:48PM	04:56PM	05:17PM	05:22PM	05:27PM	:	05:42PM	06:09PM
04:55PM	05:06PM	05:18PM	05:26PM	05:47PM	05:52PM	05:57PM	:	06:12PM	06:39PM
05:30PM	05:41PM	05:53PM	06:01PM	06:22PM	06:27PM	06:32PM	:	06:47PM	07:14PM
06:00PM	06:11PM	06:23PM	06:31PM	06:52PM	06:57PM	07:02PM	:	07:17PM	07:38PM
06:30PM	06:41PM	06:53PM	07:01PM	07:20PM	07:25PM	07:29PM	:	07:44PM	08:05PM
07:30PM	07:40PM	07:50PM	07:57PM	08:16PM	08:21PM	08:25PM	:	08:40PM	09:01PM
08:30PM	08:40PM	08:50PM	08:57PM	09:16PM	09:21PM	09:25PM	:	09:40PM	10:01PM
:	:	:	:	:	:	:	11:15PM	11:24PM	:
:	:	:	:	:	:	:	12:10AM	12:19AM	:

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APPENDIX E:
Intersection Turning Movement Counts, Peak Season Factor Category Report, and Signal Timing Data

Turning Movement Counts

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

SE 3RD STREET & S FEDERAL HIGHWAY/US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: M. CRUZ & L. PALOMINO
SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 3STR_US1
Page : 1

ALL VEHICLES

	S FEDERAL HWY/US 1 From North				SEA BISCUIT TRAIL From East				S FEDERAL HWY/US 1 From South				SE 3RD STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
07:00	0	0	161	0	0	0	0	0	0	5	98	2	0	7	1	13	287
07:15	0	0	224	0	0	2	0	0	0	0	148	2	0	6	2	11	395
07:30	1	2	231	0	0	1	1	0	0	1	161	2	0	15	6	28	449
07:45	1	4	315	4	0	0	1	0	1	10	207	5	0	15	10	36	609
Hr Total	2	6	931	4	0	3	2	0	1	16	614	11	0	43	19	88	1740
08:00	1	2	370	0	0	3	4	3	0	5	205	4	0	16	3	49	665
08:15	0	3	425	1	0	5	0	1	0	12	233	2	0	20	7	61	770
08:30	3	5	377	4	0	8	0	4	1	5	231	4	0	24	13	61	740
08:45	2	4	394	2	0	2	2	0	0	5	237	6	0	22	26	67	769
Hr Total	6	14	1566	7	0	18	6	8	1	27	906	16	0	82	49	238	2944
* BREAK *																	
16:00	2	15	374	3	0	11	5	12	2	14	453	7	0	24	11	34	967
16:15	5	6	358	1	0	16	10	20	3	14	482	12	0	27	15	34	1003
16:30	3	12	398	0	0	15	9	21	0	10	450	9	0	31	10	26	994
16:45	4	11	415	2	0	11	8	20	0	17	481	11	0	25	14	25	1044
Hr Total	14	44	1545	6	0	53	32	73	5	55	1866	39	0	107	50	119	4008
17:00	5	10	374	0	0	20	14	22	5	20	379	12	0	41	18	53	973
17:15	6	12	392	9	0	24	15	25	2	23	498	13	0	28	16	44	1107
17:30	1	26	364	5	0	22	15	20	2	16	471	9	0	19	12	36	1018
17:45	3	17	367	3	0	34	15	29	2	16	442	14	0	27	18	54	1041
Hr Total	15	65	1497	17	0	100	59	96	11	75	1790	48	0	115	64	187	4139
TOTAL	37	129	5539	34	0	174	99	177	18	173	5176	114	0	347	182	632	12831

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
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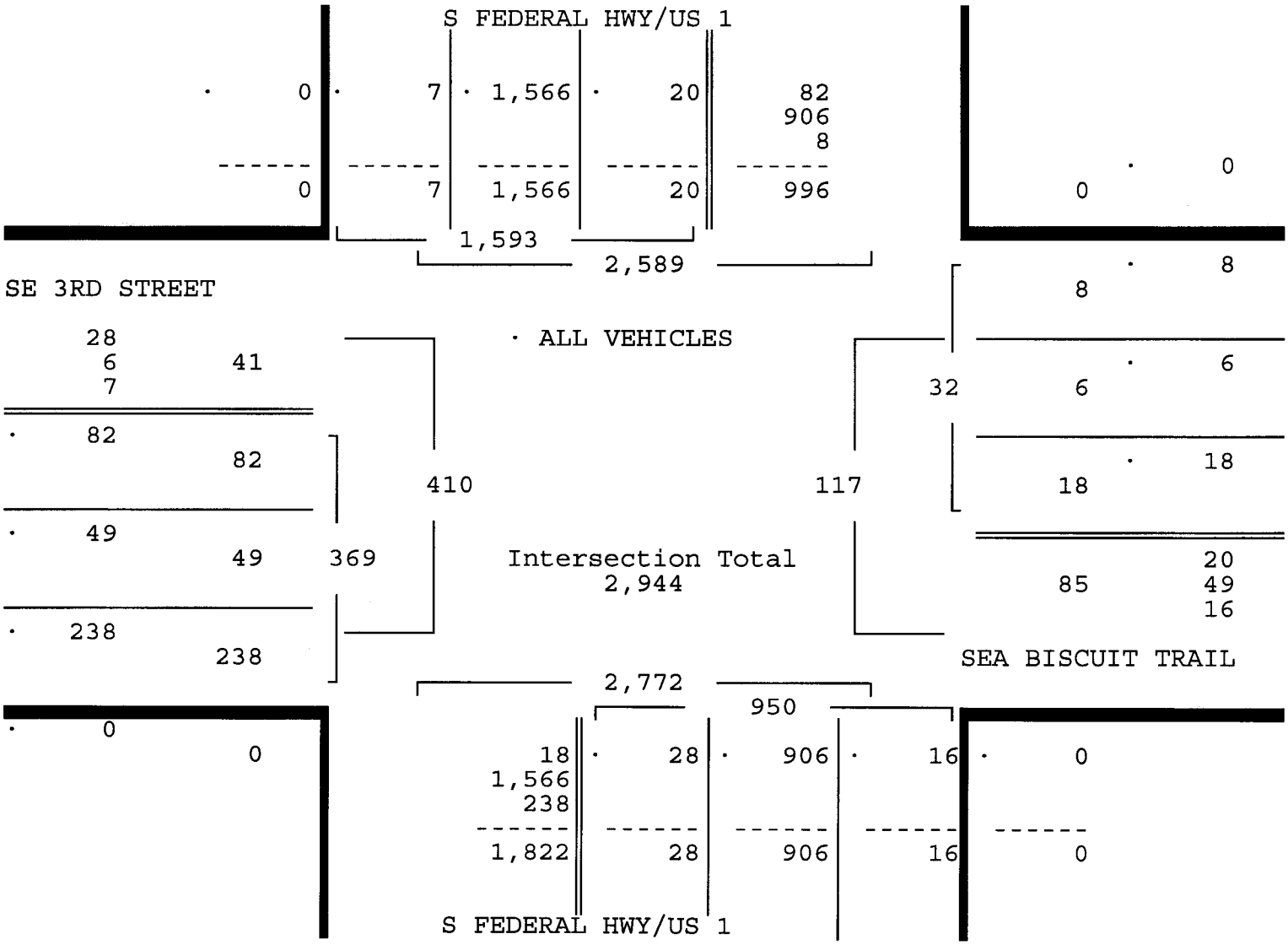
SE 3RD STREET & S FEDERAL HIGHWAY/US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: M. CRUZ & L. PALOMINO
SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 3STR_US1
Page : 2

ALL VEHICLES

	S FEDERAL HWY/US 1 From North				SEA BISCUIT TRAIL From East				S FEDERAL HWY/US 1 From South				SE 3RD STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 08/15/13																	
Peak start 08:00					08:00				08:00				08:00				
Volume	6	14	1566	7	0	18	6	8	1	27	906	16	0	82	49	238	
Percent	0%	1%	98%	0%	0%	56%	19%	25%	0%	3%	95%	2%	0%	22%	13%	64%	
Pk total	1593				32				950				369				
Highest	08:15				08:30				08:45				08:45				
Volume	0	3	425	1	0	8	0	4	0	5	237	6	0	22	26	67	
Hi total	429				12				248				115				
PHF	.93				.67				.96				.80				



Traffic Survey Specialists, Inc.
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Delray Beach, Florida 33444
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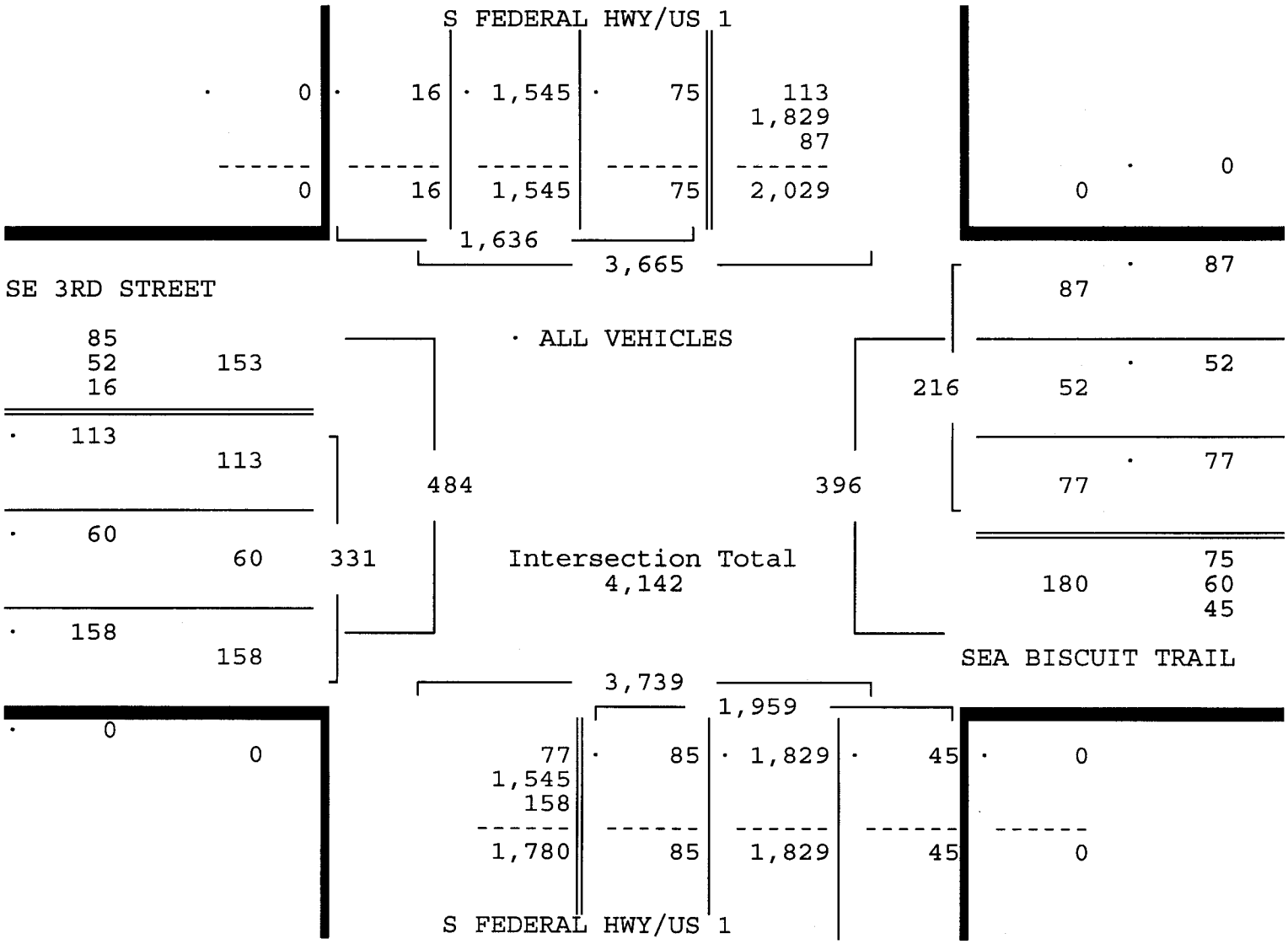
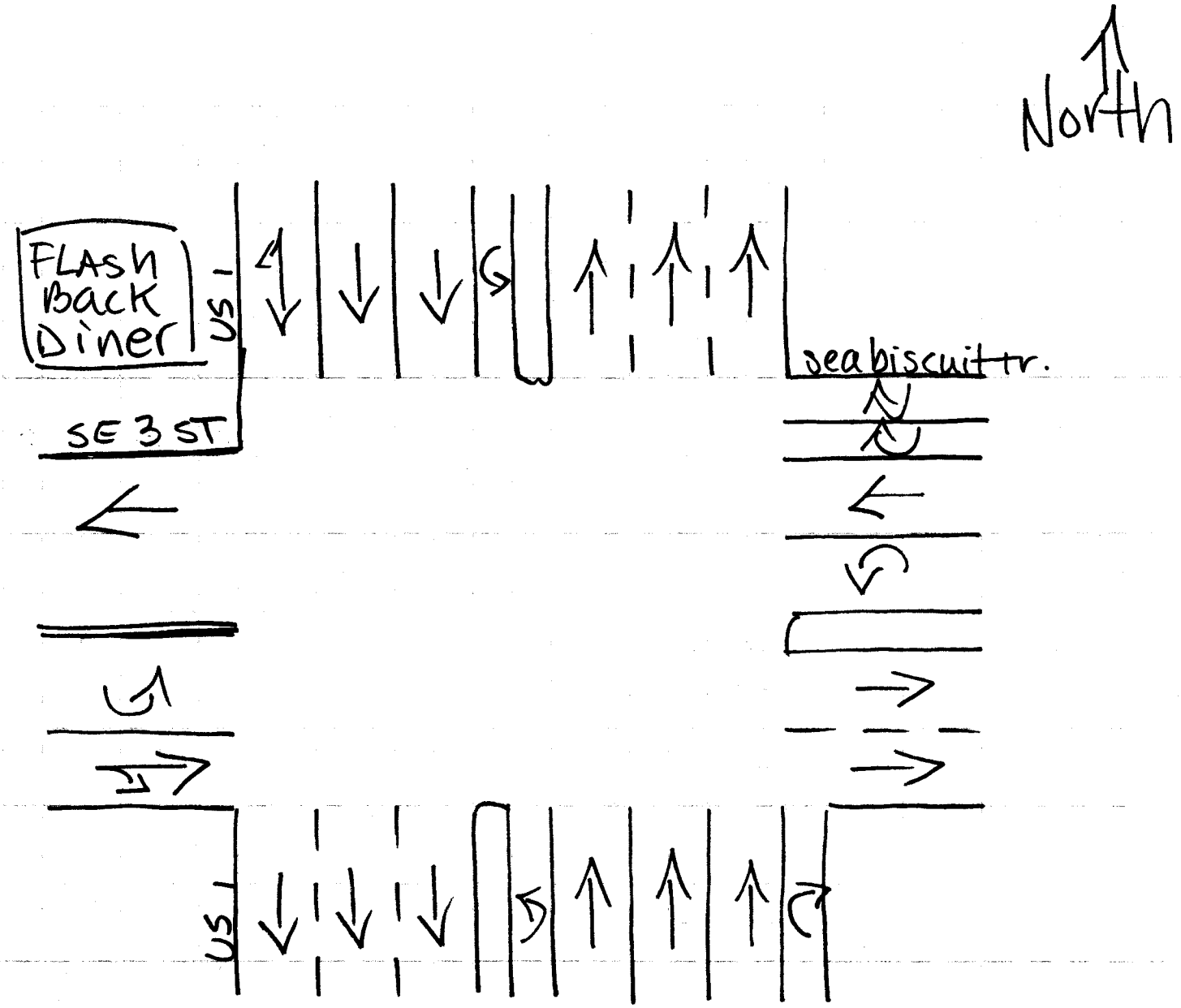
SE 3RD STREET & S FEDERAL HIGHWAY/US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: M. CRUZ & L. PALOMINO
SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 3STR_US1
Page : 3

ALL VEHICLES

	S FEDERAL HWY/US 1 From North				SEA BISCUIT TRAIL From East				S FEDERAL HWY/US 1 From South				SE 3RD STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 08/15/13																	
Peak start 16:45					16:45				16:45				16:45				
Volume	16	59	1545	16	0	77	52	87	9	76	1829	45	0	113	60	158	
Percent	1%	4%	94%	1%	0%	36%	24%	40%	0%	4%	93%	2%	0%	34%	18%	48%	
Pk total	1636				216				1959				331				
Highest	16:45				17:15				17:15				17:00				
Volume	4	11	415	2	0	24	15	25	2	23	498	13	0	41	18	53	
Hi total	432				64				536				112				
PHF	.95				.84				.91				.74				





Hallandale beach, Florida
August 15, 2013
drawn by: Luis Palomino
Signalized

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

SE 5TH STREET & S FEDERAL HIGHWAY/US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: WAYNE ASSAM
NOT SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 5STR_US1
Page : 1

ALL VEHICLES

	S FEDERAL HWY/US 1 From North				SEA BISCUIT TRAIL From East				S FEDERAL HWY/US 1 From South				SE 5TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
07:00	0	4	159	5	0	0	0	1	0	8	110	3	0	0	0	4	294
07:15	0	4	218	7	0	0	0	2	0	4	139	2	0	1	0	2	379
07:30	0	5	245	4	0	0	0	0	0	7	164	0	0	6	2	9	442
07:45	1	9	317	2	0	0	0	1	0	20	210	6	0	7	0	18	591
Hr Total	1	22	939	18	0	0	0	4	0	39	623	11	0	14	2	33	1706
08:00	2	16	417	8	0	0	0	0	2	13	209	6	0	4	1	10	688
08:15	2	15	422	8	0	0	0	0	3	12	240	6	0	2	2	14	726
08:30	0	10	440	16	0	0	0	1	1	20	226	2	0	7	1	23	747
08:45	1	18	455	9	0	0	0	1	2	18	254	4	0	4	0	32	798
Hr Total	5	59	1734	41	0	0	0	2	8	63	929	18	0	17	4	79	2959
* BREAK *																	
16:00	4	7	370	18	0	1	0	4	2	19	443	14	0	7	1	13	903
16:15	1	7	374	15	0	1	0	4	4	44	493	19	0	3	1	20	986
16:30	2	3	461	9	0	1	1	3	8	34	467	21	0	6	1	17	1034
16:45	0	2	413	9	0	0	0	4	5	48	490	26	0	3	1	19	1020
Hr Total	7	19	1618	51	0	3	1	15	19	145	1893	80	0	19	4	69	3943
17:00	0	8	413	13	0	0	0	8	9	45	432	11	0	3	1	18	961
17:15	1	4	404	14	0	0	1	4	3	29	452	16	0	0	0	9	937
17:30	0	3	396	16	0	0	0	6	7	26	457	17	0	1	0	9	938
17:45	1	14	490	7	0	0	0	4	4	30	460	22	0	4	1	17	1054
Hr Total	2	29	1703	50	0	0	1	22	23	130	1801	66	0	8	2	53	3890
TOTAL	15	129	5994	160	0	3	2	43	50	377	5246	175	0	58	12	234	12498

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
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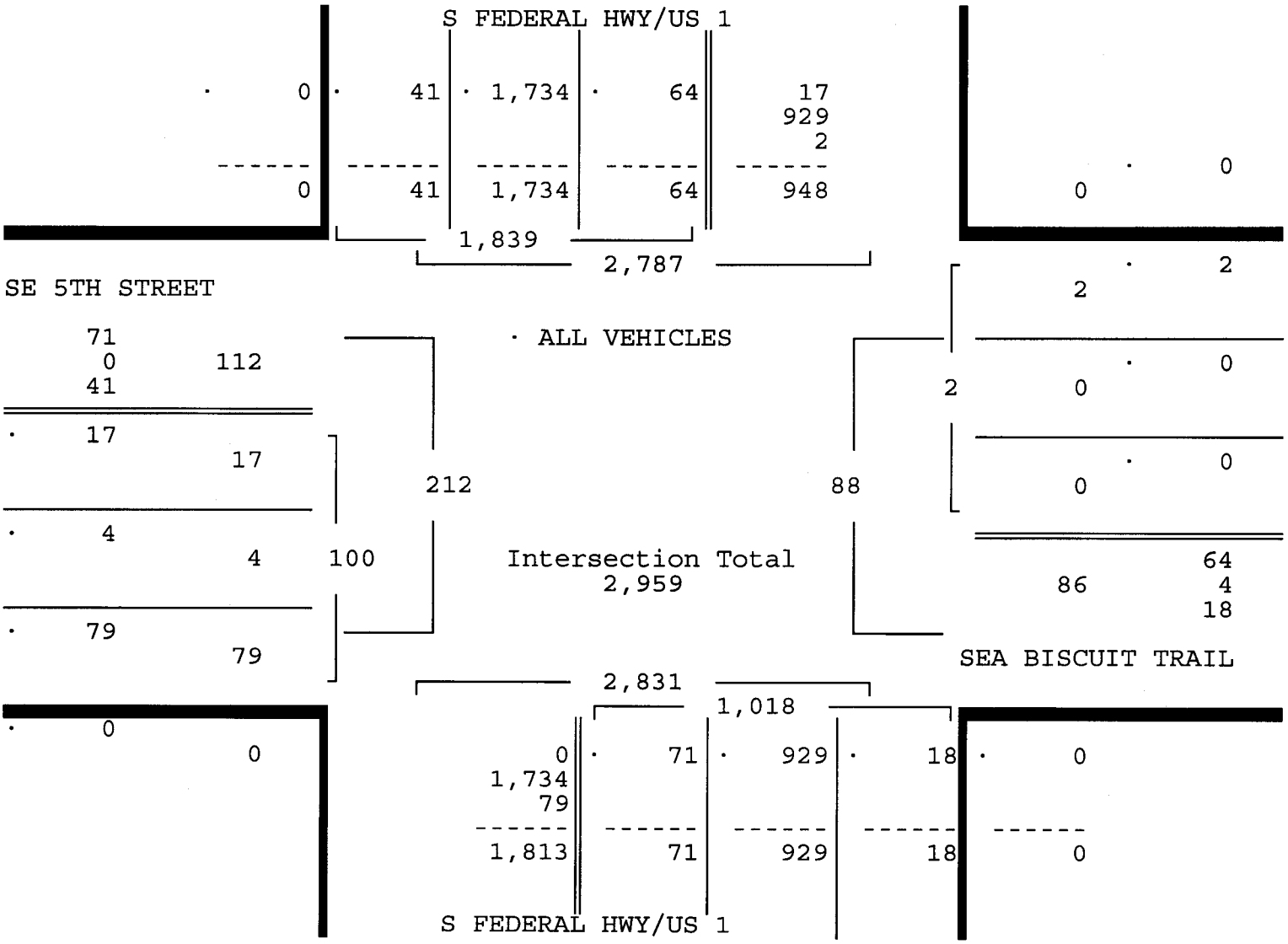
SE 5TH STREET & S FEDERAL HIGHWAY/US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: WAYNE ASSAM
NOT SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 5STR_US1
Page : 2

ALL VEHICLES

	S FEDERAL HWY/US 1 From North				SEA BISCUIT TRAIL From East				S FEDERAL HWY/US 1 From South				SE 5TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 08/15/13																	
Peak start 08:00					08:00				08:00				08:00				
Volume	5	59	1734	41	0	0	0	2	8	63	929	18	0	17	4	79	
Percent	0%	3%	94%	2%	0%	0%	0%	100%	1%	6%	91%	2%	0%	17%	4%	79%	
Pk total	1839				2				1018				100				
Highest	08:45				08:30				08:45				08:45				
Volume	1	18	455	9	0	0	0	1	2	18	254	4	0	4	0	32	
Hi total	483				1				278				36				
PHF	.95				.50				.92				.69				



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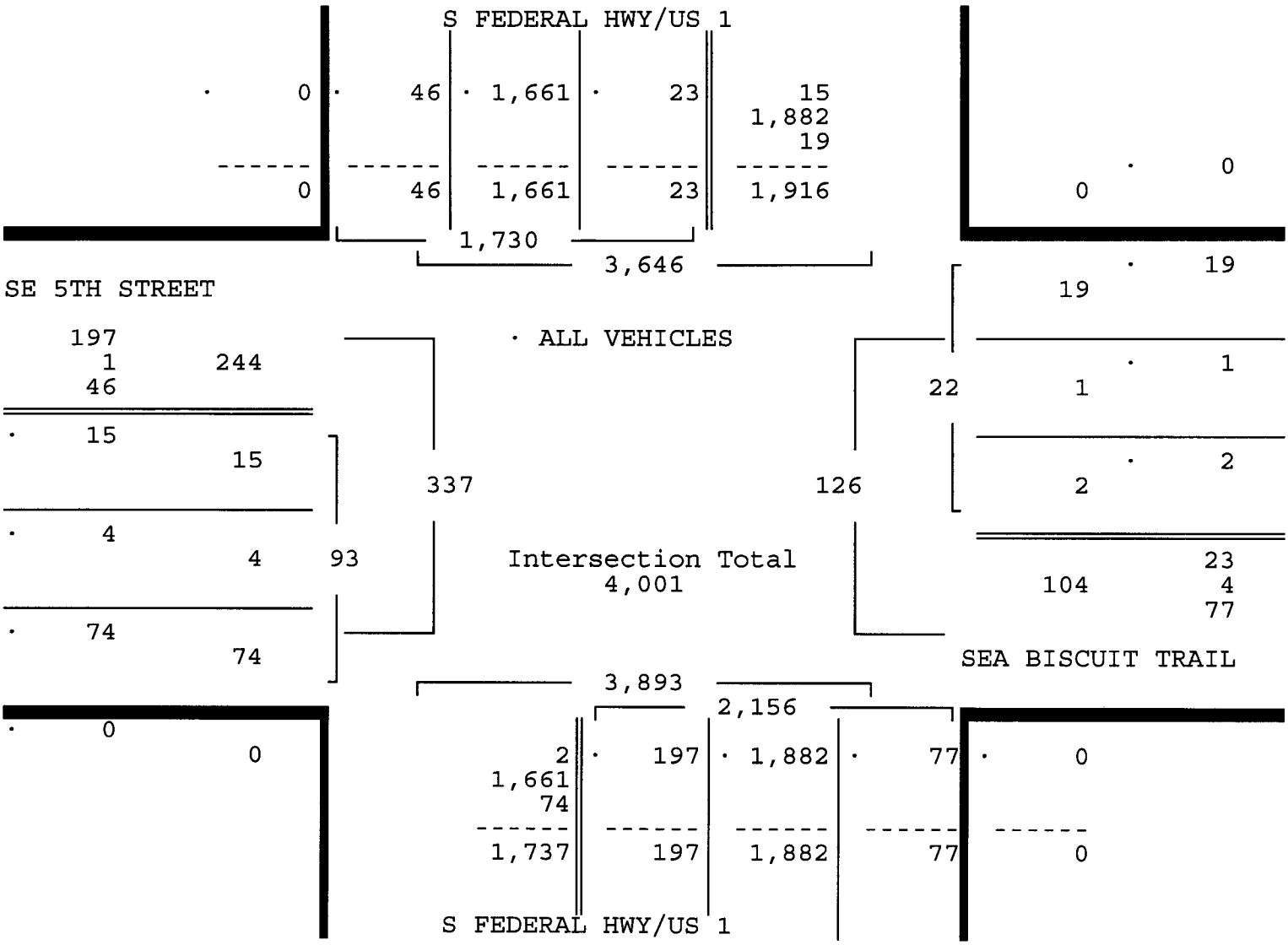
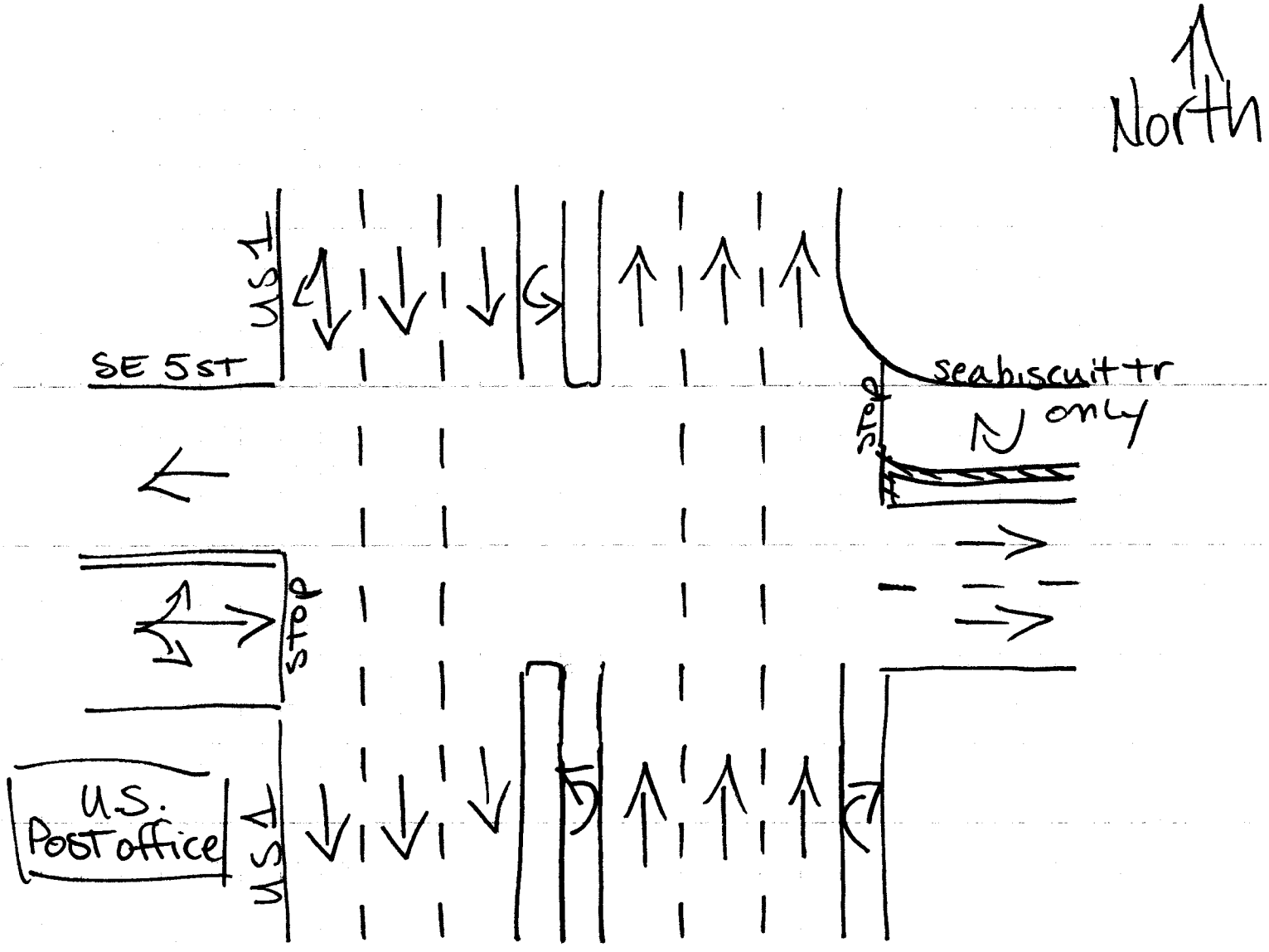
SE 5TH STREET & S FEDERAL HIGHWAY/US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: WAYNE ASSAM
NOT SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 5STR_US1
Page : 3

ALL VEHICLES

	S FEDERAL HWY/US 1 From North				SEA BISCUIT TRAIL From East				S FEDERAL HWY/US 1 From South				SE 5TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 08/15/13																	
Peak start	16:15				16:15				16:15				16:15				
Volume	3	20	1661	46	0	2	1	19	26	171	1882	77	0	15	4	74	
Percent	0%	1%	96%	3%	0%	9%	5%	86%	1%	8%	87%	4%	0%	16%	4%	80%	
Pk total	1730				22				2156				93				
Highest	16:30				17:00				16:45				16:15				
Volume	2	3	461	9	0	0	0	8	5	48	490	26	0	3	1	20	
Hi total	475				8				569				24				
PHF	.91				.69				.95				.97				





Hallandale beach, Florida
August 15, 2013
drawn by: Luis Palomino
not signalized

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

SE 9TH STREET & S FEDERAL HIGHWAY/US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: C. PALOMINO & A. PALOMINO
SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 9STR_US1
Page : 1

ALL VEHICLES

	S FEDERAL HWY/US 1 From North				VIA DE FORTUNA From East				S FEDERAL HWY/US 1 From South				SE 9TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
07:00	0	2	170	1	0	0	0	0	0	2	120	0	0	0	0	4	299
07:15	0	0	213	1	0	0	0	0	0	0	153	0	0	0	0	5	372
07:30	0	4	248	2	0	2	0	0	1	1	171	3	0	2	1	6	441
07:45	0	1	335	2	0	2	0	2	0	3	223	5	0	2	1	4	580
Hr Total	0	7	966	6	0	4	0	2	1	6	667	8	0	4	2	19	1692
08:00	1	3	400	4	0	4	1	2	0	5	212	1	0	2	0	7	642
08:15	0	4	408	2	0	0	0	0	1	8	246	3	0	1	2	5	680
08:30	0	4	458	6	0	1	0	1	0	1	254	3	0	2	0	9	739
08:45	0	7	418	2	0	8	0	1	0	3	263	7	0	8	0	16	733
Hr Total	1	18	1684	14	0	13	1	4	1	17	975	14	0	13	2	37	2794
* BREAK *																	
16:00	1	7	344	3	0	22	2	9	2	4	423	11	0	6	4	10	848
16:15	0	4	415	1	0	19	0	9	9	5	516	11	0	3	0	6	998
16:30	1	12	434	3	0	17	3	12	5	10	498	13	0	5	2	9	1024
16:45	1	4	424	10	0	17	4	4	3	6	498	9	0	9	2	13	1004
Hr Total	3	27	1617	17	0	75	9	34	19	25	1935	44	0	23	8	38	3874
17:00	2	3	432	6	0	14	3	5	5	4	467	20	0	6	3	11	981
17:15	0	12	421	2	0	28	1	13	5	5	479	9	0	11	0	8	994
17:30	1	11	405	2	0	35	3	5	4	4	499	17	0	1	1	9	997
17:45	1	9	516	1	0	23	7	7	1	6	513	15	0	5	1	13	1118
Hr Total	4	35	1774	11	0	100	14	30	15	19	1958	61	0	23	5	41	4090
TOTAL	8	87	6041	48	0	192	24	70	36	67	5535	127	0	63	17	135	12450

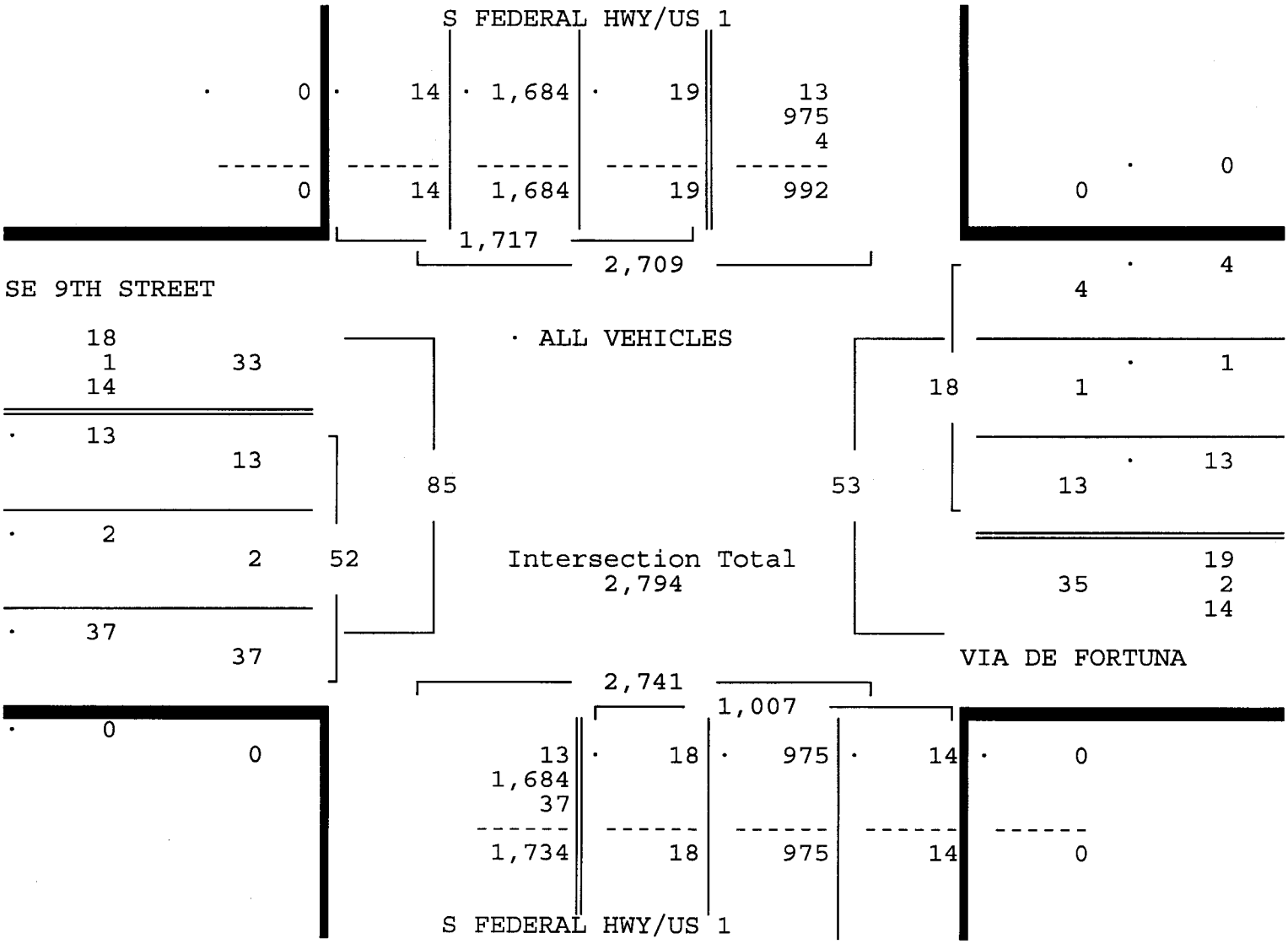
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

SE 9TH STREET & S FEDERAL HIGHWAY/US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: C. PALOMINO & A. PALOMINO
SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 9STR_US1
Page : 2

ALL VEHICLES

	S FEDERAL HWY/US 1 From North				VIA DE FORTUNA From East				S FEDERAL HWY/US 1 From South				SE 9TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 08/15/13																	
Peak start 08:00					08:00				08:00				08:00				
Volume	1	18	1684	14	0	13	1	4	1	17	975	14	0	13	2	37	
Percent	0%	1%	98%	1%	0%	72%	6%	22%	0%	2%	97%	1%	0%	25%	4%	71%	
Pk total	1717				18				1007				52				
Highest	08:30				08:45				08:45				08:45				
Volume	0	4	458	6	0	8	0	1	0	3	263	7	0	8	0	16	
Hi total	468				9				273				24				
PHF	.92				.50				.92				.54				



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SE 9TH STREET & S FEDERAL HIGHWAY/US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: C. PALOMINO & A. PALOMINO
SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 9STR_US1
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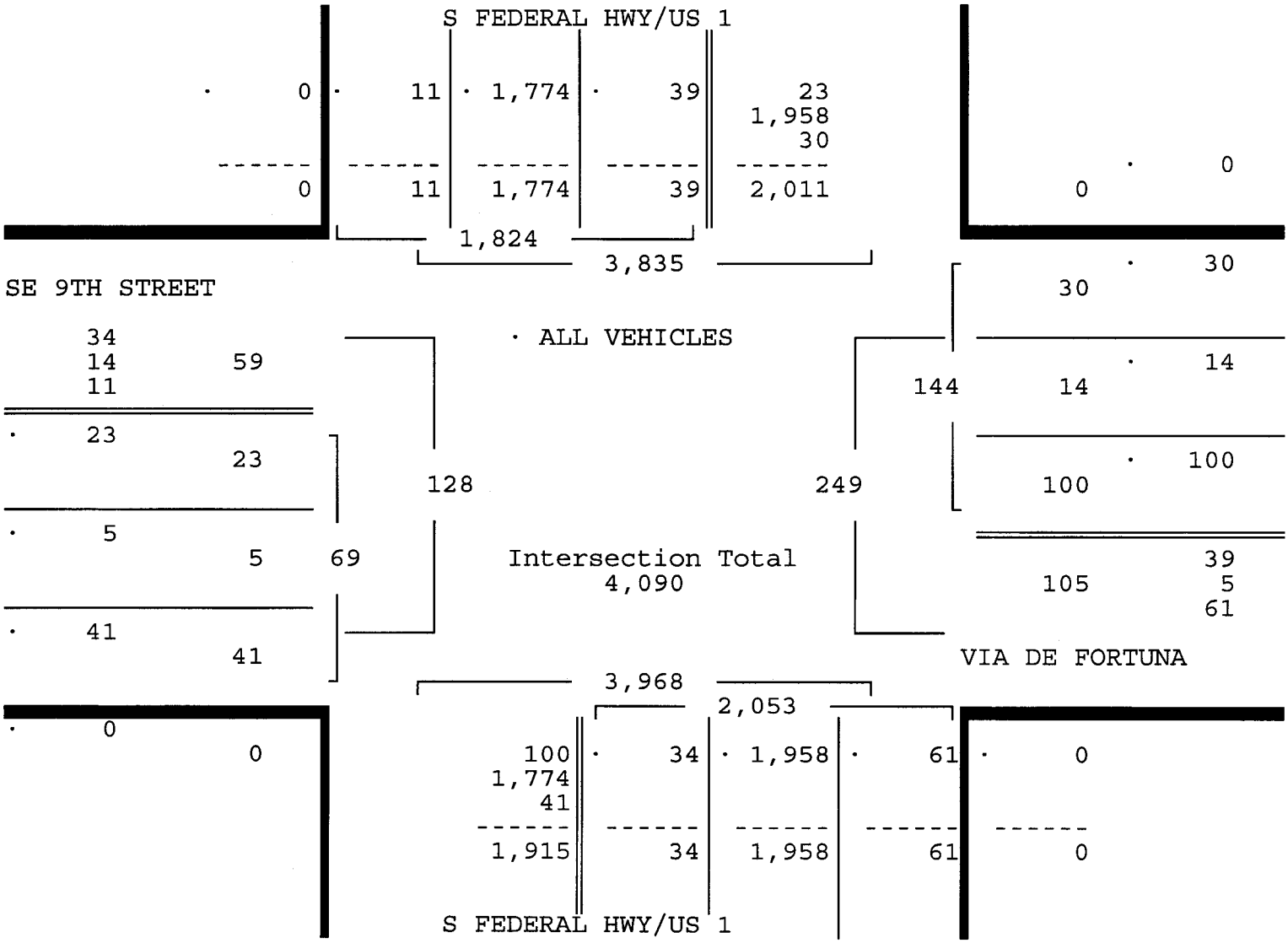
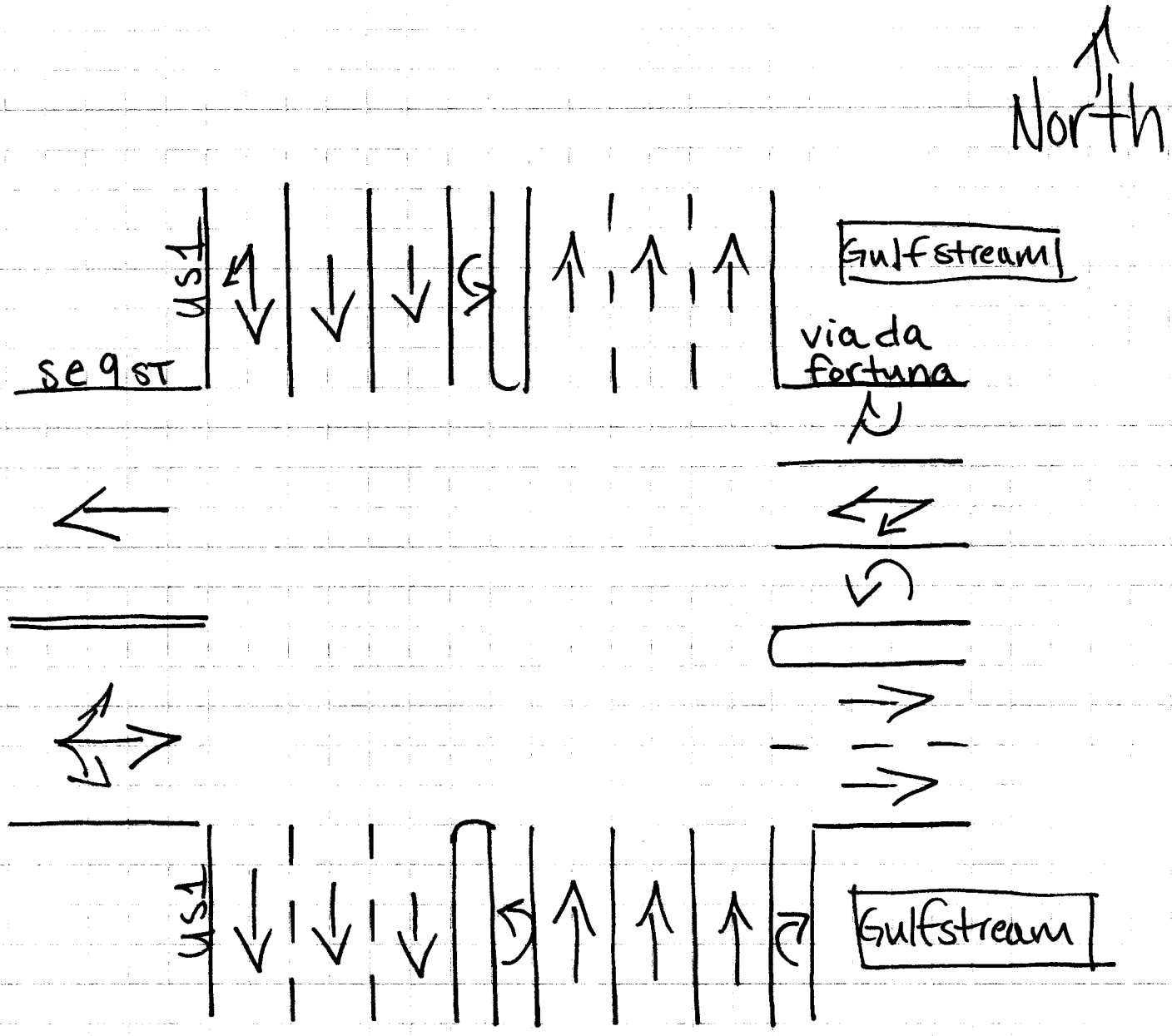
ALL VEHICLES

	S FEDERAL HWY/US 1 From North				VIA DE FORTUNA From East				S FEDERAL HWY/US 1 From South				SE 9TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 08/15/13																	
Peak start	17:00				17:00				17:00				17:00				
Volume	4	35	1774	11	0	100	14	30	15	19	1958	61	0	23	5	41	
Percent	0%	2%	97%	1%	0%	69%	10%	21%	1%	1%	95%	3%	0%	33%	7%	59%	
Pk total	1824				144				2053				69				
Highest	17:45				17:30				17:45				17:00				
Volume	1	9	516	1	0	35	3	5	1	6	513	15	0	6	3	11	
Hi total	527				43				535				20				
PHF	.87				.84				.96				.86				





Hallandale beach, Florida
August 15, 2013
drawn by: Luis Palomino
signalized

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624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

SE 10TH STREET & BISCAYNE BLVD/S FEDERAL HWY, HALLANDALE BEACH, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 10ST_US1
Page : 1

ALL VEHICLES

	S FEDERAL HWY/BISCAYNE BLVD From North				GULFSTREAM DWY From East				S FEDERAL HWY/BISCAYNE BLVD From South				SE 10TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
07:00	0	0	178	3	0	0	0	1	6	6	127	2	0	0	0	1	324
07:15	0	3	221	0	0	0	0	3	3	2	141	1	0	1	0	4	379
07:30	2	2	247	2	0	0	0	0	3	4	182	3	0	0	0	2	447
07:45	1	3	338	4	0	0	0	1	3	2	225	0	0	1	0	7	585
Hr Total	3	8	984	9	0	0	0	5	15	14	675	6	0	2	0	14	1735
08:00	3	5	408	3	0	0	0	1	7	0	219	1	0	0	0	7	654
08:15	0	5	432	0	0	0	0	0	9	7	272	2	0	0	0	6	733
08:30	0	4	473	2	0	0	0	0	12	1	245	5	0	0	0	9	751
08:45	0	3	443	0	0	0	0	1	16	5	311	5	0	0	0	5	789
Hr Total	3	17	1756	5	0	0	0	2	44	13	1047	13	0	0	0	27	2927
---------- * BREAK * ----------																	
16:00	1	1	381	6	0	0	0	8	35	5	489	18	0	0	0	10	954
16:15	2	7	444	6	0	0	0	10	24	6	528	15	0	0	0	11	1053
16:30	1	1	437	8	0	0	0	8	16	6	565	18	0	1	0	12	1073
16:45	2	1	462	4	0	0	0	7	19	14	526	21	0	0	0	4	1060
Hr Total	6	10	1724	24	0	0	0	33	94	31	2108	72	0	1	0	37	4140
17:00	2	0	461	2	0	0	0	3	24	9	524	11	0	0	0	9	1045
17:15	1	2	451	6	0	0	0	8	21	9	550	11	0	0	0	10	1069
17:30	0	0	468	2	0	0	0	2	16	3	520	17	0	0	0	10	1038
17:45	0	5	546	5	0	0	0	3	27	9	554	12	0	0	0	8	1169
Hr Total	3	7	1926	15	0	0	0	16	88	30	2148	51	0	0	0	37	4321
TOTAL	15	42	6390	53	0	0	0	56	241	88	5978	142	0	3	0	115	13123

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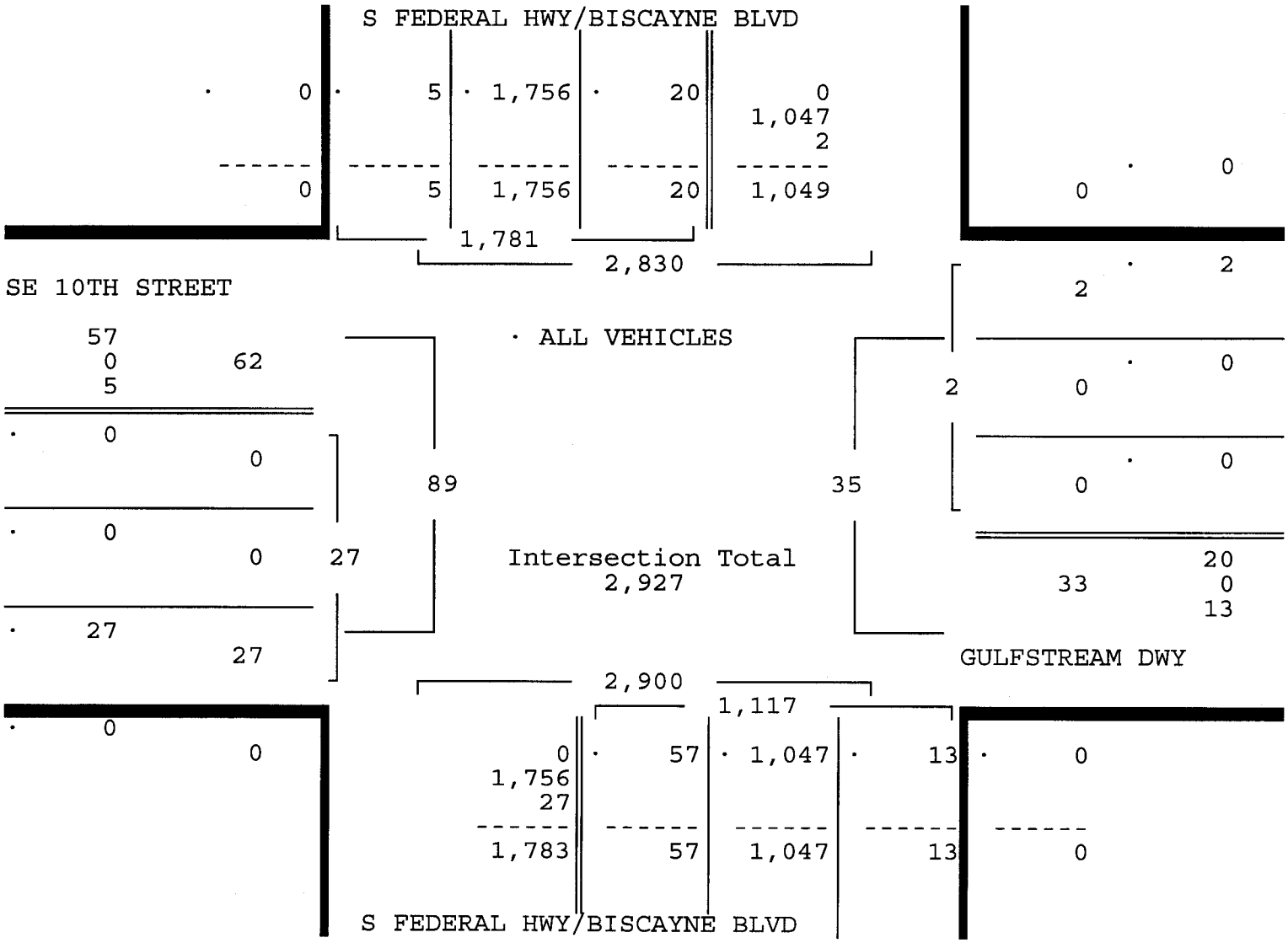
SE 10TH STREET & BISCAYNE BLVD/S FEDERAL HWY, HALLANDALE BEACH, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 10ST_US1
Page : 2

ALL VEHICLES

	S FEDERAL HWY/BISCAYNE BLVD From North				GULFSTREAM DWY From East				S FEDERAL HWY/BISCAYNE BLVD From South				SE 10TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 08/15/13																	
Peak start 08:00					08:00				08:00				08:00				
Volume	3	17	1756	5	0	0	0	2	44	13	1047	13	0	0	0	27	
Percent	0%	1%	99%	0%	0%	0%	0%	100%	4%	1%	94%	1%	0%	0%	0%	100%	
Pk total	1781				2				1117				27				
Highest	08:30				08:00				08:45				08:30				
Volume	0	4	473	2	0	0	0	1	16	5	311	5	0	0	0	9	
Hi total	479				1				337				9				
PHF	.93				.50				.83				.75				



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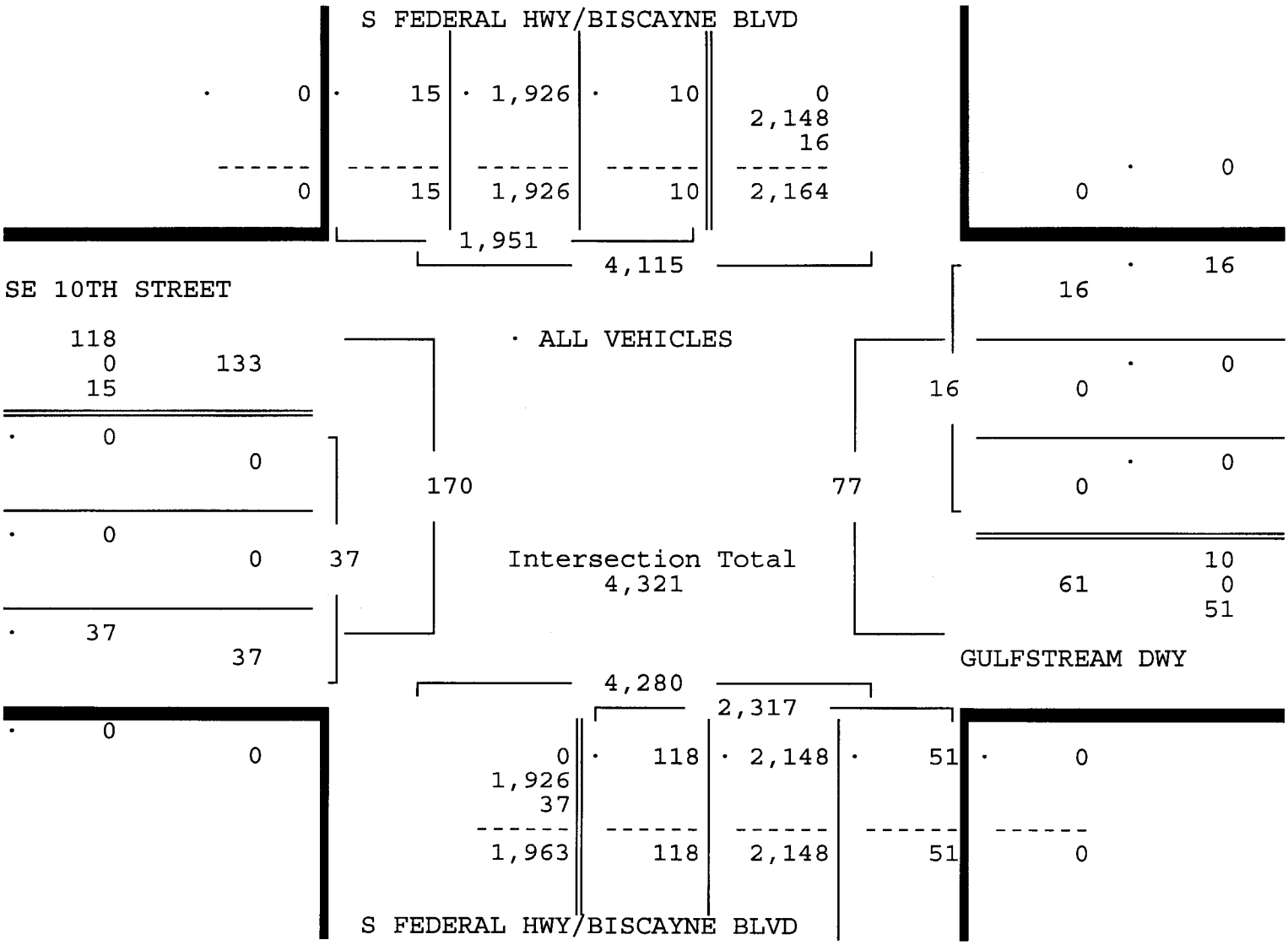
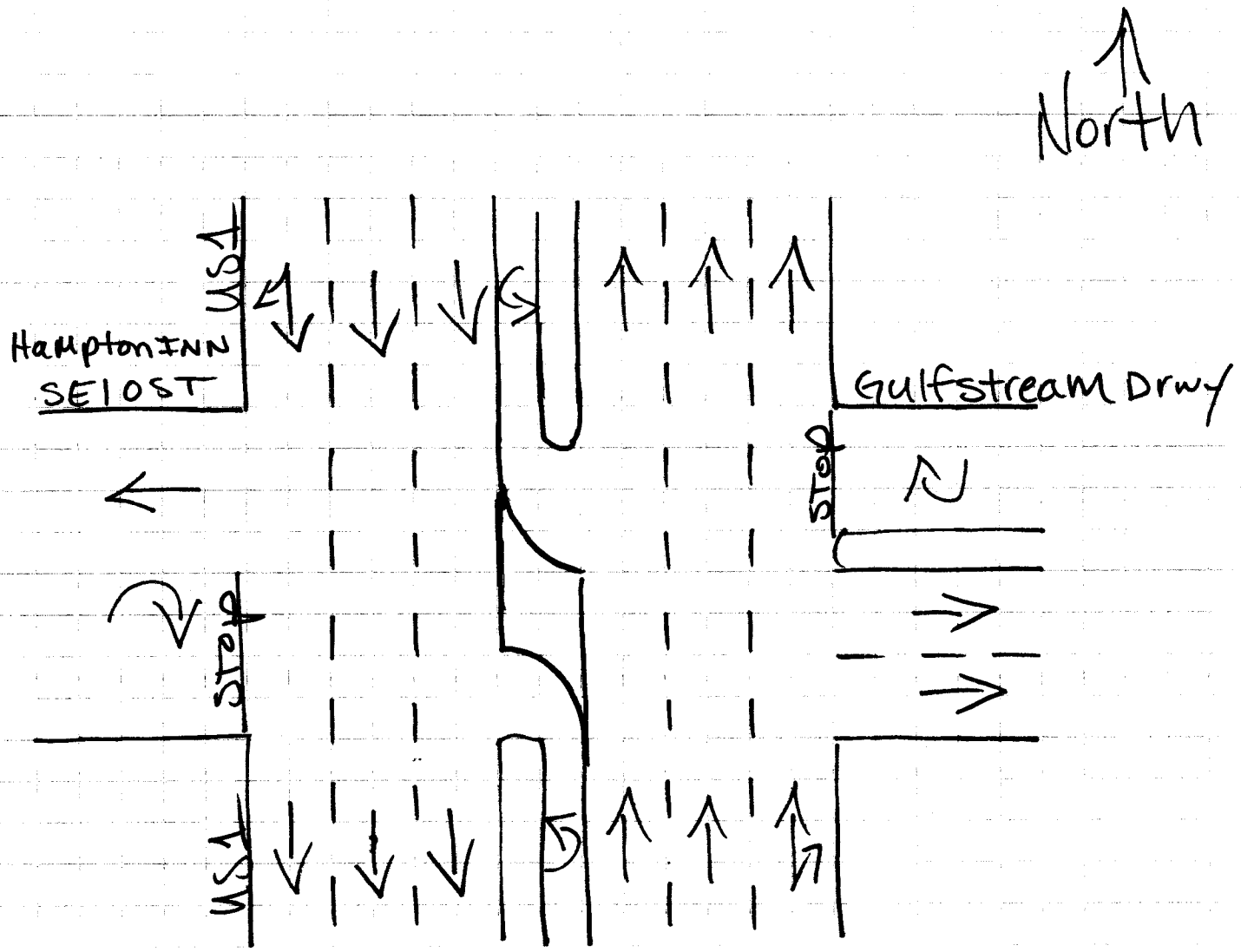
SE 10TH STREET & BISCAYNE BLVD/S FEDERAL HWY, HALLANDALE BEACH, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 10ST_US1
Page : 3

ALL VEHICLES

	S FEDERAL HWY/BISCAYNE BLVD From North				GULFSTREAM DWY From East				S FEDERAL HWY/BISCAYNE BLVD From South				SE 10TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 08/15/13																	
Peak start 17:00					17:00				17:00				17:00				
Volume	3	7	1926	15	0	0	0	16	88	30	2148	51	0	0	0	37	
Percent	0%	0%	99%	1%	0%	0%	0%	100%	4%	1%	93%	2%	0%	0%	0%	100%	
Pk total	1951				16				2317				37				
Highest	17:45				17:15				17:45				17:15				
Volume	0	5	546	5	0	0	0	8	27	9	554	12	0	0	0	10	
Hi total	556				8				602				10				
PHF	.88				.50				.96				.92				





Hallandale beach, Florida
August 15, 2013
drawn by: Luis Palomino
not Signalized

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

SE 9TH STREET & SE 1ST AVENUE
HALLANDALE BEACH, FLORIDA
COUNTED BY: RICHARD MENDEZ
NOT SIGNALIZED

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 9ST_1AVE
Page : 1

ALL VEHICLES

	SE 1ST AVENUE From North				SE 9TH STREET From East				SE 1ST AVENUE From South				----- From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
07:00	0	0	0	0	0	4	0	1	0	0	17	0	0	0	0	0	22
07:15	0	0	0	0	0	9	0	2	0	0	18	0	0	0	0	0	29
07:30	0	0	0	0	0	8	0	3	0	0	31	0	0	0	0	0	42
07:45	0	0	0	0	0	9	0	2	0	0	22	0	0	0	0	0	33
Hr Total	0	0	0	0	0	30	0	8	0	0	88	0	0	0	0	0	126
08:00	0	0	0	0	0	14	0	3	0	0	34	0	0	0	0	0	51
08:15	0	0	0	0	0	19	0	4	0	0	36	0	0	0	0	0	59
08:30	0	0	0	0	0	11	0	4	0	0	44	0	0	0	0	0	59
08:45	0	0	0	0	0	11	0	1	0	0	38	0	0	0	0	0	50
Hr Total	0	0	0	0	0	55	0	12	0	0	152	0	0	0	0	0	219
---------- * BREAK * ----------																	
16:00	0	0	0	0	0	11	0	4	0	0	89	0	0	0	0	0	104
16:15	0	0	0	0	0	15	0	6	0	0	92	0	0	0	0	0	113
16:30	0	0	0	0	0	17	0	11	0	0	72	0	0	0	0	0	100
16:45	0	0	0	0	0	25	0	10	0	0	67	0	0	0	0	0	102
Hr Total	0	0	0	0	0	68	0	31	0	0	320	0	0	0	0	0	419
17:00	0	0	0	0	0	12	0	5	0	0	126	0	0	0	0	0	143
17:15	0	0	0	0	0	29	0	5	0	0	94	0	0	0	0	0	128
17:30	0	0	0	0	0	24	0	4	0	0	77	0	0	0	0	0	105
17:45	0	0	0	0	0	26	0	5	0	0	79	0	0	0	0	0	110
Hr Total	0	0	0	0	0	91	0	19	0	0	376	0	0	0	0	0	486
TOTAL	0	0	0	0	0	244	0	70	0	0	936	0	0	0	0	0	1250

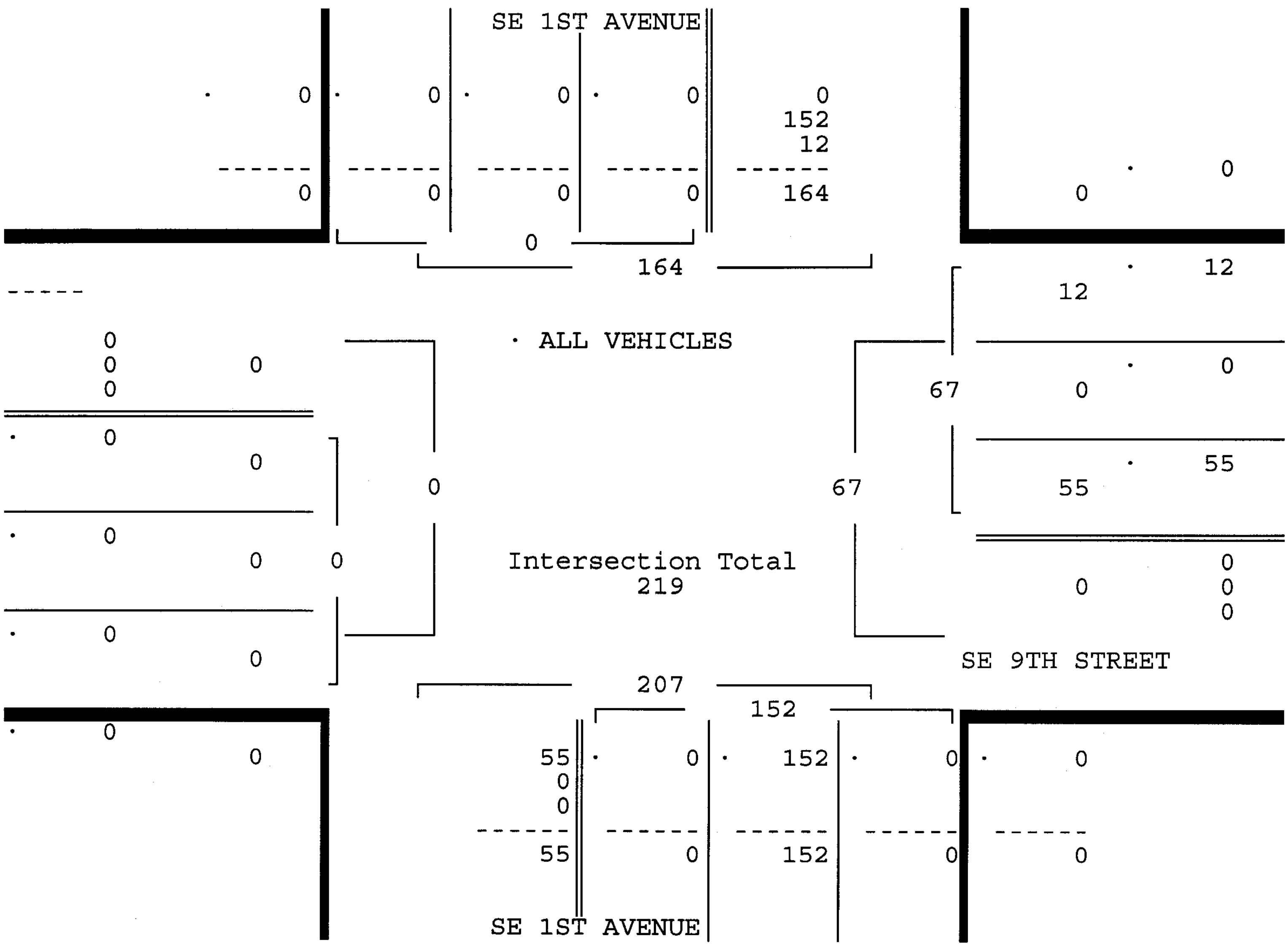
SE 9TH STREET & SE 1ST AVENUE
HALLANDALE BEACH, FLORIDA
COUNTED BY: RICHARD MENDEZ
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 9ST_1AVE

ALL VEHICLES

	SE 1ST AVENUE From North				SE 9TH STREET From East				SE 1ST AVENUE From South				----- From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 08/15/13																	
Peak start	08:00				08:00				08:00				08:00				
Volume	0	0	0	0	0	55	0	12	0	0	152	0	0	0	0	0	
Percent	0%	0%	0%	0%	0%	82%	0%	18%	0%	0%	100%	0%	0%	0%	0%	0%	
Pk total	0				67				152				0				
Highest	07:00				08:15				08:30				07:00				
Volume	0	0	0	0	0	19	0	4	0	0	44	0	0	0	0	0	
Hi total	0				23				44				0				
PHF	.0				.73				.86				.0				



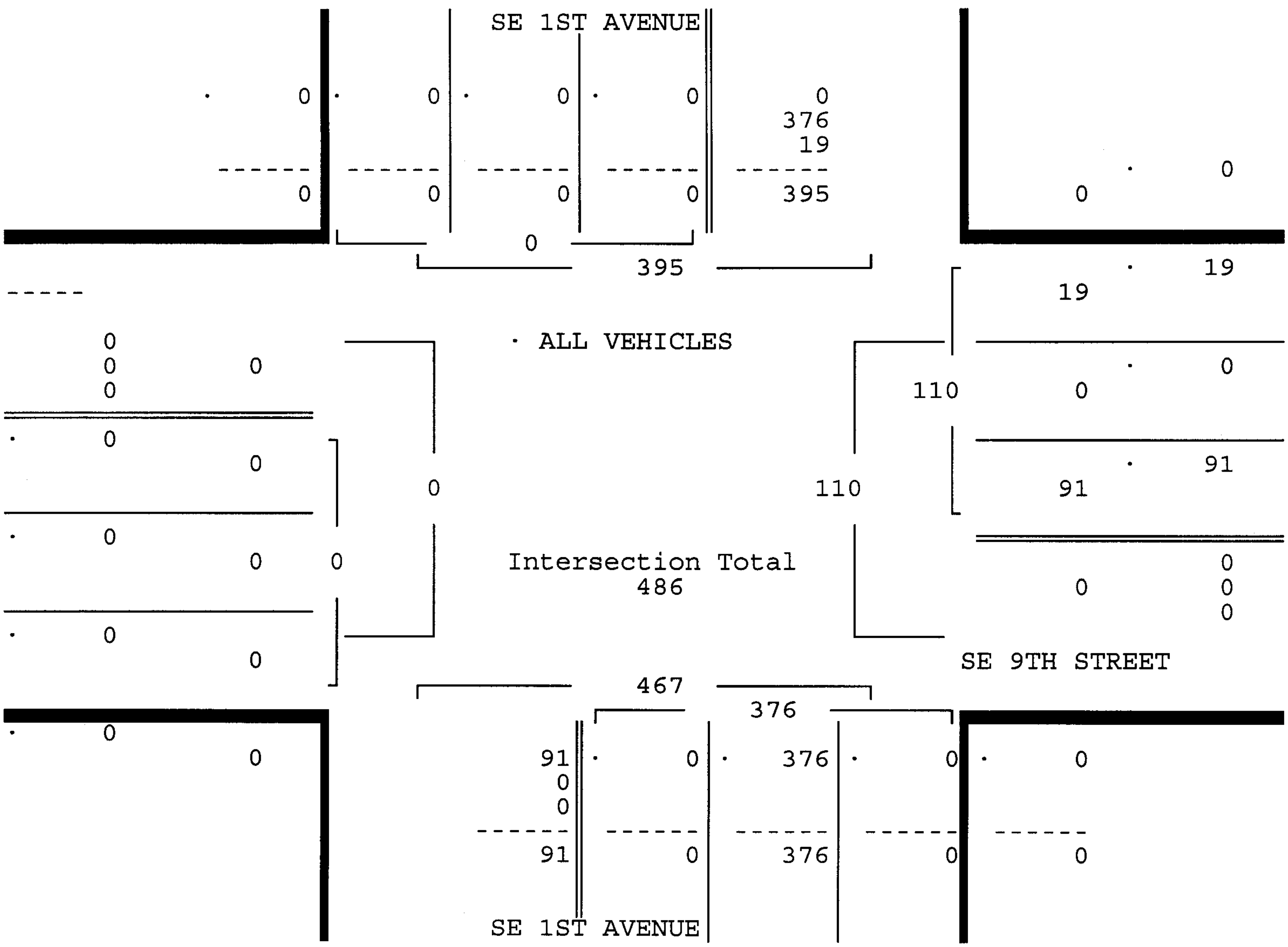
SE 9TH STREET & SE 1ST AVENUE
HALLANDALE BEACH, FLORIDA
COUNTED BY: RICHARD MENDEZ
NOT SIGNALIZED

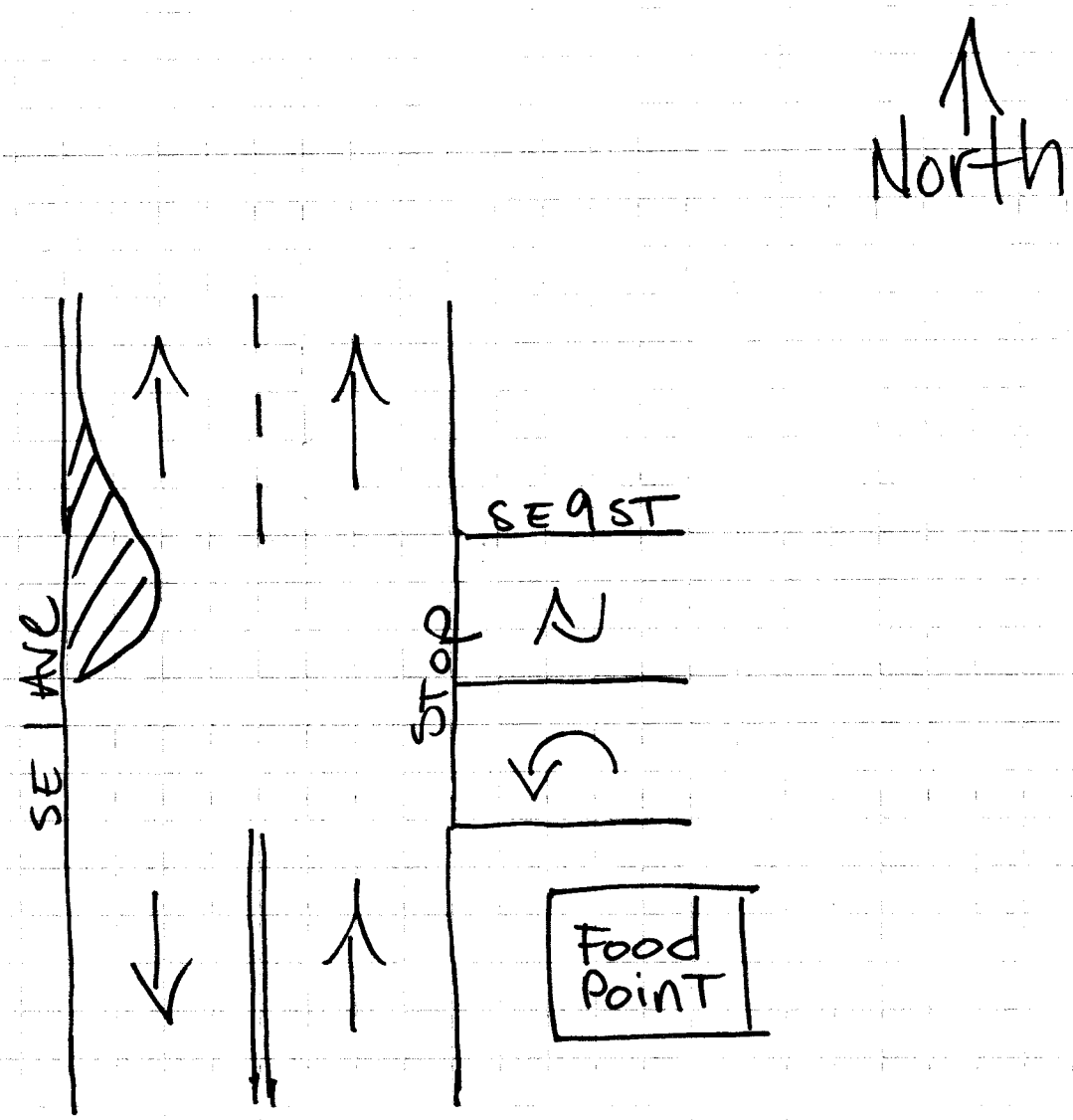
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00130136
Start Date: 08/15/13
File I.D. : 9ST_1AVE
Page : 3

ALL VEHICLES

	SE 1ST AVENUE From North				SE 9TH STREET From East				SE 1ST AVENUE From South				----- From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/15/13																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 08/15/13																	
Peak start	17:00				17:00				17:00				17:00				
Volume	0	0	0	0	0	91	0	19	0	0	376	0	0	0	0	0	
Percent	0%	0%	0%	0%	0%	83%	0%	17%	0%	0%	100%	0%	0%	0%	0%	0%	
Pk total	0				110				376				0				
Highest	07:00				17:15				17:00				07:00				
Volume	0	0	0	0	0	29	0	5	0	0	126	0	0	0	0	0	
Hi total	0				34				126				0				
PHF	.0				.81				.75				.0				





Hallandale beach, Florida
August 15, 2013
drawn by: Luis Palomino
not signalized

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
Delray Beach, Florida 33444 Phone (561) 272-3255
Volume Report with 24 Hour Totals

****

Data File : D0815001.PRN
Station : 000000081401
Identification : 009601100039
Start date : Aug 15, 13
Stop date : Aug 15, 13
City/Town : Hallandale, Florida
Location : SE 9 Street East of SE 4 Avenue

Interval : 15 minutes
Start time : 00:00
Stop time : 24:00
County : Broward

****

Aug 15 Eastbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	1	0	1	0	4	13	18	9	8
30	1	0	1	0	0	0	4	6	13	20	8	9
45	2	0	1	0	0	1	4	7	15	9	9	12
00	2	2	0	0	0	5	7	8	23	9	10	4
Hr Total	5	2	2	1	0	7	15	25	64	56	36	33

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	10	9	17	8	20	25	14	10	4	4	4	1
30	11	7	14	12	11	20	10	9	5	4	3	2
45	13	8	12	13	14	12	4	8	12	5	7	2
00	16	16	9	13	19	22	5	9	7	1	5	3
Hr Total	50	40	52	46	64	79	33	36	28	14	19	8

24 Hour Total : 715
AM peak hour begins : 08:30 AM peak volume : 76 Peak hour factor : 0.83
PM peak hour begins : 17:00 PM peak volume : 79 Peak hour factor : 0.79

****

Aug 15 Westbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	3	2	1	1	0	1	5	9	11	2	9
30	5	0	1	0	0	0	0	1	13	7	10	17
45	5	2	0	1	0	1	5	4	6	9	5	7
00	6	1	0	1	0	2	2	5	6	2	4	12
Hr Total	21	6	3	3	1	3	8	15	34	29	21	45

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	8	14	17	15	10	17	17	15	8	5	14	5
30	13	5	12	20	11	18	10	15	14	10	7	6
45	6	10	9	15	18	10	14	11	10	8	9	6
00	6	11	13	19	28	17	12	12	5	11	4	8
Hr Total	33	40	51	69	67	62	53	53	37	34	34	25

24 Hour Total : 747
AM peak hour begins : 11:00 AM peak volume : 45 Peak hour factor : 0.66
PM peak hour begins : 16:30 PM peak volume : 81 Peak hour factor : 0.72

****

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
Delray Beach, Florida 33444 Phone (561) 272-3255
Volume Report with 24 Hour Totals

****

Data File : D0815001.PRN
Station : 000000081401
Identification : 009601100039
Start date : Aug 15, 13
Stop date : Aug 15, 13
City/Town : Hallandale, Florida
Location : SE 9 Street East of SE 4 Avenue

Interval : 15 minutes
Start time : 00:00
Stop time : 24:00
County : Broward

****

Aug 15 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	3	2	2	1	1	1	9	22	29	11	17
30	6	0	2	0	0	0	4	7	26	27	18	26
45	7	2	1	1	0	2	9	11	21	18	14	19
00	8	3	0	1	0	7	9	13	29	11	14	16
Hr Total	26	8	5	4	1	10	23	40	98	85	57	78

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	18	23	34	23	30	42	31	25	12	9	18	6
30	24	12	26	32	22	38	20	24	19	14	10	8
45	19	18	21	28	32	22	18	19	22	13	16	8
00	22	27	22	32	47	39	17	21	12	12	9	11
Hr Total	83	80	103	115	131	141	86	89	65	48	53	33

24 Hour Total : 1462
AM peak hour begins : 08:30 AM peak volume : 106 Peak hour factor : 0.91
PM peak hour begins : 16:30 PM peak volume : 159 Peak hour factor : 0.85

****

COUNTY: 86
STATION: 0268
DESCRIPTION: SR 5 / US 1 AT DADE/BROWARD CO LINE
START DATE: 10/17/2012
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	92	83	66	53	294	92	68	69	81	310	604
0100	39	31	23	27	120	56	47	32	33	168	288
0200	27	19	19	13	78	22	20	25	26	93	171
0300	12	17	15	12	56	23	17	15	24	79	135
0400	14	23	16	24	77	31	22	22	27	102	179
0500	22	23	33	63	141	30	44	53	96	223	364
0600	57	63	93	113	326	73	114	183	227	597	923
0700	163	228	252	322	965	205	251	293	450	1199	2164
0800	326	414	365	470	1575	416	508	602	535	2061	3636
0900	325	341	353	381	1400	553	399	431	456	1839	3239
1000	365	358	333	351	1407	311	356	342	387	1396	2803
1100	347	339	405	422	1513	383	367	355	400	1505	3018
1200	430	440	475	437	1782	415	424	460	460	1759	3541
1300	476	486	460	482	1904	428	372	458	437	1695	3599
1400	453	445	524	498	1920	389	414	392	454	1649	3569
1500	449	543	558	508	2058	445	406	448	421	1720	3778
1600	502	556	565	530	2153	400	436	400	458	1694	3847
1700	540	542	583	506	2171	389	437	471	466	1763	3934
1800	510	544	487	486	2027	467	474	465	444	1850	3877
1900	449	438	430	374	1691	418	345	385	327	1475	3166
2000	362	384	341	317	1404	318	280	287	225	1110	2514
2100	297	261	233	289	1080	276	195	220	193	884	1964
2200	259	210	187	173	829	200	199	177	160	736	1565
2300	187	133	122	123	565	154	131	120	124	529	1094
24-HOUR TOTALS:					27536					26436	53972

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	800	1575	815	2198	815	3772
P.M.	1645	2195	1730	1878	1730	4021
DAILY	1645	2195	815	2198	1730	4021

TRUCK PERCENTAGE 3.93 5.76 4.83

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
N	166	23830	2108	96	277	287	82	77	145	89	0	0	30	0	349	1083	27536
S	222	22208	2180	307	586	206	100	72	102	115	1	0	33	0	304	1522	26436

GENERATED BY SPS 5.0.30P

COUNTY: 86
STATION: 5028
DESCRIPTION: SR 5 / US 1 - S OF SR 824/PEMBROKE RD
START DATE: 02/14/2012
START TIME: 0000

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	100	71	55	55	281	46	60	46	37	189	470
0100	39	43	37	36	155	40	39	33	34	146	301
0200	39	31	24	27	121	25	38	26	23	112	233
0300	14	23	18	13	68	24	20	18	23	85	153
0400	16	26	20	27	89	17	26	26	31	100	189
0500	31	36	41	48	156	24	45	50	64	183	339
0600	71	64	118	133	386	68	90	120	169	447	833
0700	183	212	226	263	884	126	190	242	316	874	1758
0800	237	286	279	297	1099	386	326	438	383	1533	2632
0900	281	276	280	248	1085	307	324	339	324	1294	2379
1000	299	247	249	275	1070	322	278	345	302	1247	2317
1100	265	310	330	293	1198	288	315	326	336	1265	2463
1200	324	298	314	319	1255	346	293	337	293	1269	2524
1300	298	347	379	302	1326	268	312	326	302	1208	2534
1400	405	335	332	347	1419	305	292	415	410	1422	2841
1500	345	389	411	408	1553	391	339	375	383	1488	3041
1600	426	429	471	447	1773	371	330	401	360	1462	3235
1700	417	474	459	424	1774	432	415	402	411	1660	3434
1800	485	390	454	435	1764	377	417	376	395	1565	3329
1900	358	350	289	261	1258	330	352	282	276	1240	2498
2000	270	285	215	236	1006	271	246	206	243	966	1972
2100	206	185	199	190	780	187	175	174	181	717	1497
2200	204	186	150	167	707	167	147	158	150	622	1329
2300	159	138	140	110	547	143	135	127	107	512	1059
24-HOUR TOTALS:					21754					21606	43360

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	815	1143	800	1533	800	2632
P.M.	1715	1842	1700	1660	1715	3447
DAILY	1715	1842	1700	1660	1715	3447

GENERATED BY SPS 5.0.29

Peak Season Factor

2012 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 8600 EAST-A1A TO US1

MOCF: 0.90

WEEK	DATES	SF	PSCF
1	01/01/2012 - 01/07/2012	1.02	1.13
2	01/08/2012 - 01/14/2012	0.98	1.09
* 3	01/15/2012 - 01/21/2012	0.94	1.04
* 4	01/22/2012 - 01/28/2012	0.93	1.03
* 5	01/29/2012 - 02/04/2012	0.91	1.01
* 6	02/05/2012 - 02/11/2012	0.90	1.00
* 7	02/12/2012 - 02/18/2012	0.89	0.99
* 8	02/19/2012 - 02/25/2012	0.88	0.98
* 9	02/26/2012 - 03/03/2012	0.88	0.98
*10	03/04/2012 - 03/10/2012	0.87	0.97
*11	03/11/2012 - 03/17/2012	0.86	0.96
*12	03/18/2012 - 03/24/2012	0.88	0.98
*13	03/25/2012 - 03/31/2012	0.90	1.00
*14	04/01/2012 - 04/07/2012	0.92	1.02
*15	04/08/2012 - 04/14/2012	0.94	1.04
16	04/15/2012 - 04/21/2012	0.96	1.07
17	04/22/2012 - 04/28/2012	0.98	1.09
18	04/29/2012 - 05/05/2012	0.99	1.10
19	05/06/2012 - 05/12/2012	1.01	1.12
20	05/13/2012 - 05/19/2012	1.02	1.13
21	05/20/2012 - 05/26/2012	1.03	1.14
22	05/27/2012 - 06/02/2012	1.04	1.16
23	06/03/2012 - 06/09/2012	1.04	1.16
24	06/10/2012 - 06/16/2012	1.05	1.17
25	06/17/2012 - 06/23/2012	1.04	1.16
26	06/24/2012 - 06/30/2012	1.03	1.14
27	07/01/2012 - 07/07/2012	1.02	1.13
28	07/08/2012 - 07/14/2012	1.01	1.12
29	07/15/2012 - 07/21/2012	1.00	1.11
30	07/22/2012 - 07/28/2012	1.02	1.13
31	07/29/2012 - 08/04/2012	1.05	1.17
32	08/05/2012 - 08/11/2012	1.07	1.19
33	08/12/2012 - 08/18/2012	1.09	1.21
34	08/19/2012 - 08/25/2012	1.10	1.22
35	08/26/2012 - 09/01/2012	1.11	1.23
36	09/02/2012 - 09/08/2012	1.12	1.24
37	09/09/2012 - 09/15/2012	1.13	1.26
38	09/16/2012 - 09/22/2012	1.12	1.24
39	09/23/2012 - 09/29/2012	1.12	1.24
40	09/30/2012 - 10/06/2012	1.11	1.23
41	10/07/2012 - 10/13/2012	1.10	1.22
42	10/14/2012 - 10/20/2012	1.09	1.21
43	10/21/2012 - 10/27/2012	1.08	1.20
44	10/28/2012 - 11/03/2012	1.08	1.20
45	11/04/2012 - 11/10/2012	1.07	1.19
46	11/11/2012 - 11/17/2012	1.06	1.18
47	11/18/2012 - 11/24/2012	1.05	1.17
48	11/25/2012 - 12/01/2012	1.04	1.16
49	12/02/2012 - 12/08/2012	1.03	1.14
50	12/09/2012 - 12/15/2012	1.02	1.13
51	12/16/2012 - 12/22/2012	0.99	1.10
52	12/23/2012 - 12/29/2012	0.96	1.07
53	12/30/2012 - 12/31/2012	0.94	1.04

* PEAK SEASON

Signal Timing Data

Laukaitis, Benjamin

From: Doug.Cobb@kimley-horn.com
Sent: Thursday, August 22, 2013 9:40 AM
To: Laukaitis, Benjamin
Subject: Signal Timing Request

Brian,

I was wondering if I could have the signal timings for the following intersections:

- SE 3rd Street and South Federal Highway/US 1/SR 5 3395 | HALLANDALE
- SE 9th Street and South Federal Highway/US 1/SR 5 3540

Thanks for your help!

Thanks,
Doug

BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	3395	**Initial Operation Date**	1/24/90
Controller Type	2070	**System Number**	3395
Modification Number	7	**Modification Date**	12/19/2012
Drawing/Project No	86010	**FPL Grid Number**	87669298900
Intersection	FEDERAL HWY. (US 1/SR 5) and SE 3 STREET		
Municipality	HALLANDALE BEACH		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1,8R	2			5	6	4,7	3,8
Direction	SBL	NB			NBL	SB	EB	WB
Initial Green(MIN)	5	12			5	12	6	6
Vehicle Ext.(GAP)	1.5	3.0			1.5	3.0	2.0	2.0
Maximum Green I	20	60			18	60	35	35
Maximum Green II								
Yellow Clearance	4.0	4.0			4.0	4.0	4.0	4.0
All Red Clearance	2.0	2.0			2.0	2.0	2.0	2.0
Phase Recall	OFF	MIN			OFF	MIN	OFF	OFF
Detector Delay								
Walk		7				7	7	7
Pedestrian Clearance		25				25	32	29
Permissive	DUAL				NO			
Flash Operation	RED	YELLOW			RED	YELLOW	RED	RED
Green Return								

Attachment

Channel/Drop / **IP Address**

NOTES:

1. IP: 192.168.000.010, MASK: 255.255.255.000, GWAY: 192.168.000.001, PORT: 5024
2. HEADS 8R (WBR) OVERLAPPED WITH SBL (PHASE 1) AND WB (PHASE 8).
3. 8R OMITTED WHEN P8 ACTIVE.
4. FLASH OPERATION: 0000-0600, 7 DAYS.
5. MOD. 7 DEPLOYS SIGNAL ONTO ATMS.NOW.

Submitted By _____ **Approved By** _____

3395 - Federal Highway & SE 3 St
Patterns Table 1

Pattern	Cycle Time	Offset Time (EOG)	Split Number	Seq Number	
Pattern 1	0	0	0	1	
Pattern 2	160	113	2	1	AM
Pattern 3	160	153	3	1	MD
Pattern 4	160	156	4	1	PM
Pattern 5	0	0	0	1	
Pattern 6	0	0	0	1	
Pattern 7	0	0	0	1	
Pattern 8	0	0	0	1	
Pattern 9	0	0	0	1	
Pattern 10	0	0	0	1	
Pattern 11	0	0	0	1	
Pattern 12	0	0	0	1	
Pattern 13	0	0	0	1	
Pattern 14	0	0	0	1	
Pattern 15	0	0	0	1	
Pattern 16	0	0	0	1	
Pattern 17	0	0	0	1	
Pattern 18	0	0	0	1	
Pattern 19	0	0	0	1	
Pattern 20	0	0	0	1	
Pattern 21	0	0	0	1	
Pattern 22	0	0	0	1	
Pattern 23	0	0	0	1	
Pattern 24	0	0	0	1	
Pattern 25	0	0	0	1	
Pattern 26	0	0	0	1	
Pattern 27	0	0	0	1	
Pattern 28	0	0	0	1	
Pattern 29	0	0	0	1	
Pattern 30	0	0	0	1	
Pattern 31	0	0	0	1	
Pattern 32	0	0	0	1	
Pattern 33	0	0	0	1	
Pattern 34	0	0	0	1	
Pattern 35	0	0	0	1	
Pattern 36	0	0	0	1	
Pattern 37	0	0	0	1	
Pattern 38	0	0	0	1	
Pattern 39	0	0	0	1	
Pattern 40	0	0	0	1	
Pattern 41	0	0	0	1	
Pattern 42	0	0	0	1	
Pattern 43	0	0	0	1	
Pattern 44	0	0	0	1	
Pattern 45	0	0	0	1	
Pattern 46	0	0	0	1	
Pattern 47	0	0	0	1	
Pattern 48	0	0	0	1	

3395 - Federal Highway & SE 3 St
Splits Expanded Table 2 PATTERN 2, AM-PEAK HOUR (6AM-9AM)

Split Expanded	Time	Model	Coord Phase	
Split Expanded 1	16	NON	OFF	SBL
Split Expanded 2	53	MxP	ON	NB
Split Expanded 3	0	NON	OFF	
Split Expanded 4	91	NON	OFF	← REQ'D BY ATMS
Split Expanded 5	16	NON	OFF	NBL
Split Expanded 6	53	MxP	OFF	SB
Split Expanded 7	47	NON	OFF	EB
Split Expanded 8	44	NON	OFF	WB
Split Expanded 9	0	NON	OFF	
Split Expanded 10	0	NON	OFF	
Split Expanded 11	0	NON	OFF	
Split Expanded 12	0	NON	OFF	
Split Expanded 13	0	NON	OFF	
Split Expanded 14	0	NON	OFF	
Split Expanded 15	0	NON	OFF	
Split Expanded 16	0	NON	OFF	

3395 - Federal Highway & SE 3 St
Splits Expanded Table 3 PAT 3, MD (9AM-3PM)

Split Expanded	Time	Mode	Coord Phase	
Split Expanded 1	27	NON	OFF	SBL
Split Expanded 2	57	MxP	ON	NB
Split Expanded 3	0	NON	OFF	
Split Expanded 4	76	NON	OFF	← REQ'D BY ATMS
Split Expanded 5	27	NON	OFF	NBL
Split Expanded 6	57	MxP	OFF	SB
Split Expanded 7	28	NON	OFF	EB
Split Expanded 8	48	NON	OFF	WB
Split Expanded 9	0	NON	OFF	
Split Expanded 10	0	NON	OFF	
Split Expanded 11	0	NON	OFF	
Split Expanded 12	0	NON	OFF	
Split Expanded 13	0	NON	OFF	
Split Expanded 14	0	NON	OFF	
Split Expanded 15	0	NON	OFF	
Split Expanded 16	0	NON	OFF	

3395 - Federal Highway & SE 3 St
Splits Expanded Table 4 PAT 4, PM (3 PM - 8 PM)

Split Expanded	Time	Mode	Coord Phase
Split Expanded 1	24	NON	OFF
Split Expanded 2	46	MxP	ON
Split Expanded 3	0	NON	OFF
Split Expanded 4	90	NON	OFF
Split Expanded 5	24	NON	OFF
Split Expanded 6	46	MxP	OFF
Split Expanded 7	46	NON	OFF
Split Expanded 8	44	NON	OFF
Split Expanded 9	0	NON	OFF
Split Expanded 10	0	NON	OFF
Split Expanded 11	0	NON	OFF
Split Expanded 12	0	NON	OFF
Split Expanded 13	0	NON	OFF
Split Expanded 14	0	NON	OFF
Split Expanded 15	0	NON	OFF
Split Expanded 16	0	NON	OFF

BROWARD COUNTY TRAFFIC ENGINEERING DIVISION

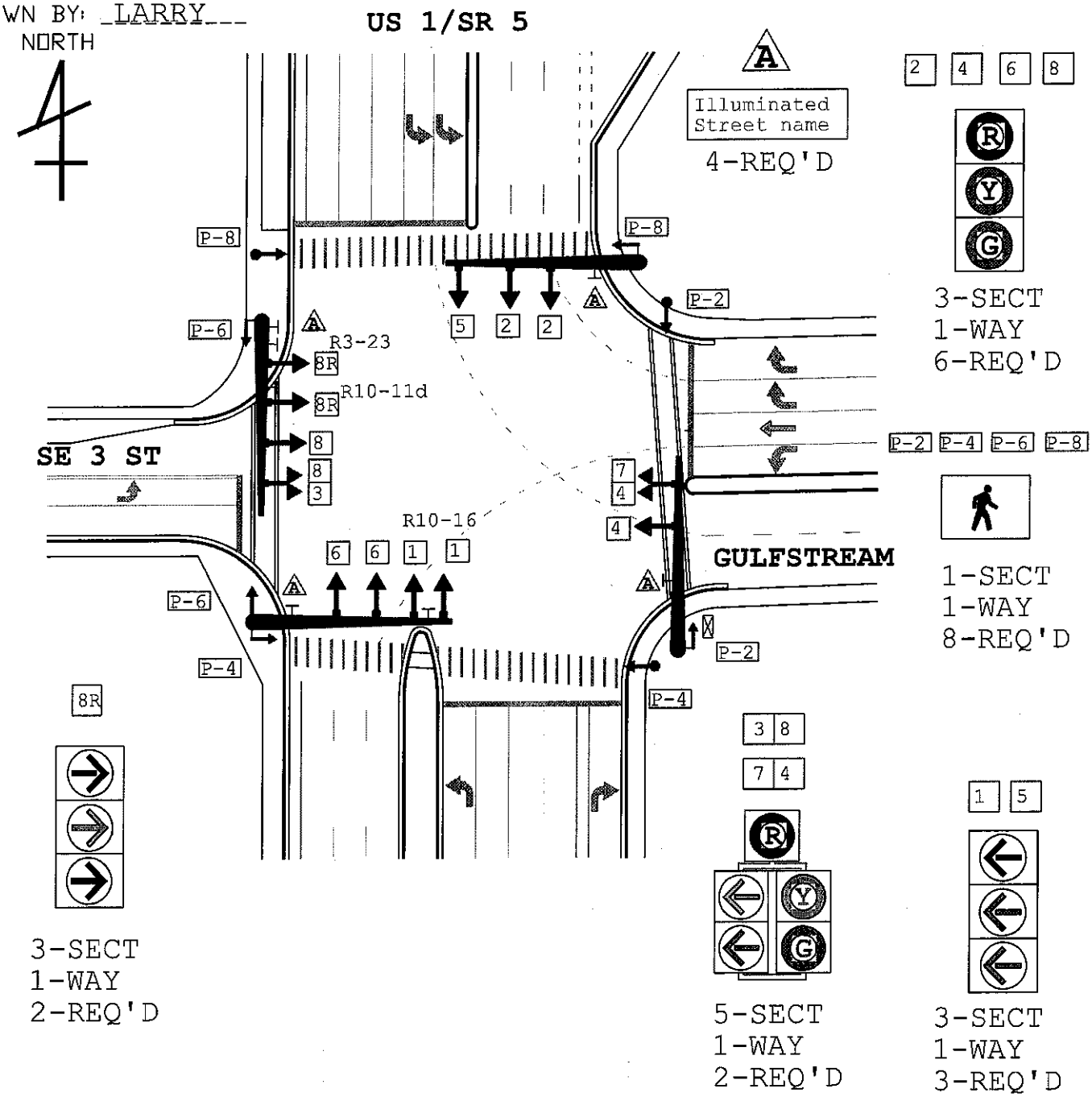
TRAFFIC SIGNAL LOCATION

LOCATION **FEDERAL HWY (US 1) & SE 3 STREET**

ORDER NO 111162 ISSUE DATE 11-18-10 REV NO. 4 COMPLETION DATE 11-19-10

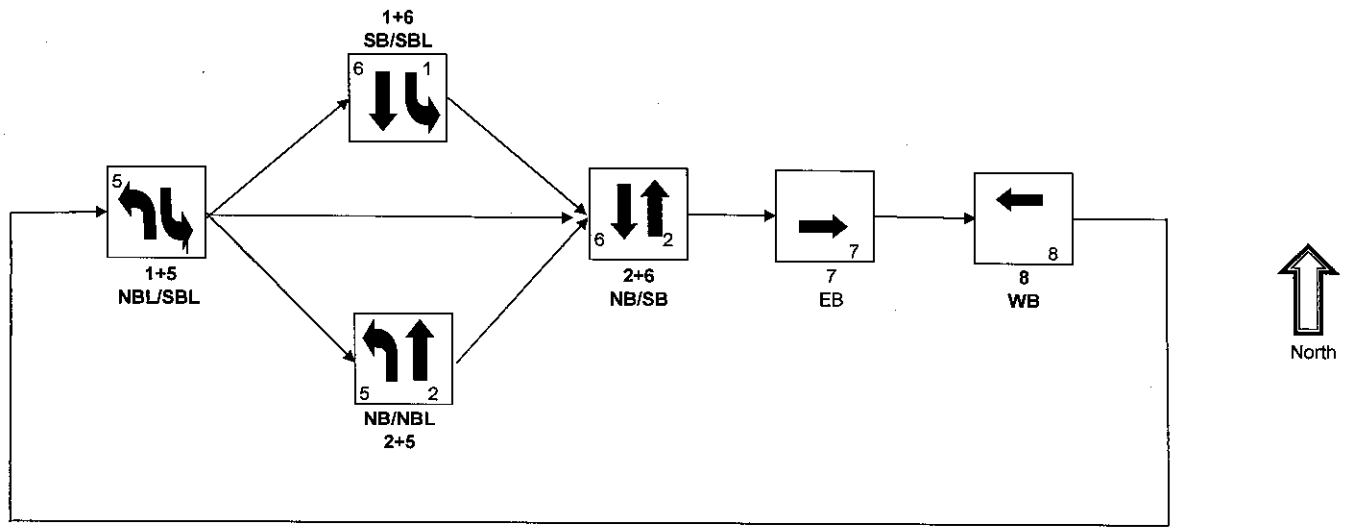
DWG. NO. 10-01-04-01 FILE NO. 3395 CITY **HALLANDALE BEACH** SCALE: 1" = 50'

DWN BY: LARRY



1. VIDEO DETECTION
2. THIS REVISION TO EB LANE ASSIGNMENTS, REMOVES EB LANE CONTROL SIGNS.

Sequence of Operation for (3395) Federal Hwy (US 1 / SR 5) and SE 3 Street, Hallandale Beach



BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	3540	**Initial Operation Date**	3/4/2009
Controller Type	2070	**System Number**	3540
Modification Number	2	**Modification Date**	12/19/2012
Drawing/Project No		**FPL Grid Number**	99999999999
Intersection	FEDERAL HIGHWAY (US 1/SR 5) and SE 9 STREET		
Municipality	HALLANDALE BEACH		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1,8R	2			5	6	4,7	3,8,2R
Direction	SBL	NB			NBL	SB	EB	WB
Initial Green(MIN)	5	10			5	10	6	6
Vehicle Ext.(GAP)	1.5	3.0			1.5	3.0	2.0	2.0
Maximum Green I	30	60			20	60	15	35
Maximum Green II								
Yellow Clearance	4.0	4.0			4.0	4.0	4.0	4.0
All Red Clearance	2.0	2.0			2.0	2.0	2.5	2.5
Phase Recall	OFF	MIN			OFF	MIN	OFF	OFF
Detector Delay								
Walk		7				7	7	7
Pedestrian Clearance		26				26	35	34
Permissive	DUAL				NO			
Flash Operation	RED	YELLOW			RED	YELLOW	RED	RED
Green Return								

Attachment

Channel/Drop /

IP Address

NOTES:

1. IP: 192.168.000.010, MASK: 255.255.255.000, GWAY: 192.168.000.001, PORT: 5024
2. HEAD 8R IS OMITTED WHEN P8 IS ACTIVE & HEAD 2R IS OMITTED WHEN P2 IS ACTIVE.
3. HEAD 8R [WBR] HARDWIRED WITH PH.1 [SBL], AND HEAD 2R [NBR] OVERLAPPED WITH PH.3 [WBL].
4. MOD. 2 DEPLOYS SIGNAL ONTO ATMS.NOW.

Submitted By _____ **Approved By** _____

3540 - US 1 & SE 9 St
Patterns Table 1

EOG

Pattern	Cycle Time	Offset Time	Split Number	Seq Number
Pattern 1	0	0	0	1
Pattern 2	160	40	2	1
Pattern 3	160	70	3	1
Pattern 4	160	80	4	1
Pattern 5	0	0	0	1
Pattern 6	0	0	0	1
Pattern 7	0	0	0	1
Pattern 8	0	0	0	1
Pattern 9	0	0	0	1
Pattern 10	0	0	0	1
Pattern 11	0	0	0	1
Pattern 12	0	0	0	1
Pattern 13	0	0	0	1
Pattern 14	0	0	0	1
Pattern 15	0	0	0	1
Pattern 16	0	0	0	1
Pattern 17	0	0	0	1
Pattern 18	0	0	0	1
Pattern 19	0	0	0	1
Pattern 20	0	0	0	1
Pattern 21	0	0	0	1
Pattern 22	0	0	0	1
Pattern 23	0	0	0	1
Pattern 24	0	0	0	1
Pattern 25	0	0	0	1
Pattern 26	0	0	0	1
Pattern 27	0	0	0	1
Pattern 28	0	0	0	1
Pattern 29	0	0	0	1
Pattern 30	0	0	0	1
Pattern 31	0	0	0	1
Pattern 32	0	0	0	1
Pattern 33	0	0	0	1
Pattern 34	0	0	0	1
Pattern 35	0	0	0	1
Pattern 36	0	0	0	1
Pattern 37	0	0	0	1
Pattern 38	0	0	0	1
Pattern 39	0	0	0	1
Pattern 40	0	0	0	1
Pattern 41	0	0	0	1
Pattern 42	0	0	0	1
Pattern 43	0	0	0	1
Pattern 44	0	0	0	1
Pattern 45	0	0	0	1
Pattern 46	0	0	0	1
Pattern 47	0	0	0	1
Pattern 48	0	0	0	1

3540 - US 1 & SE 9 St
Splits Expanded Table 2 AM

Split Expanded	Time	Mode	Coord Phase	
Split Expanded 1	20	NON	OFF	SBL
Split Expanded 2	80	MxP	ON	NB
Split Expanded 3	0	NON	OFF	
Split Expanded 4	60	NON	OFF	
Split Expanded 5	20	NON	OFF	NBL
Split Expanded 6	80	MxP	OFF	SB
Split Expanded 7	24	NON	OFF	EB
Split Expanded 8	36	NON	OFF	WB
Split Expanded 9	0	NON	OFF	
Split Expanded 10	0	NON	OFF	
Split Expanded 11	0	NON	OFF	
Split Expanded 12	0	NON	OFF	
Split Expanded 13	0	NON	OFF	
Split Expanded 14	0	NON	OFF	
Split Expanded 15	0	NON	OFF	
Split Expanded 16	0	NON	OFF	

3540 - US 1 & SE 9 St
Splits Expanded Table 3 MD

Split Expanded	Time	Mode	Coord Phase
Split Expanded 1	24	NON	OFF
Split Expanded 2	59	MxP	ON
Split Expanded 3	0	NON	OFF
Split Expanded 4	77	NON	OFF
Split Expanded 5	24	NON	OFF
Split Expanded 6	59	MxP	OFF
Split Expanded 7	32	NON	OFF
Split Expanded 8	45	NON	OFF
Split Expanded 9	0	NON	OFF
Split Expanded 10	0	NON	OFF
Split Expanded 11	0	NON	OFF
Split Expanded 12	0	NON	OFF
Split Expanded 13	0	NON	OFF
Split Expanded 14	0	NON	OFF
Split Expanded 15	0	NON	OFF
Split Expanded 16	0	NON	OFF

3540 - US 1 & SE 9 St
Splits Expanded Table 4 PM

Split Expanded	Time	Mode	Coord Phase
Split Expanded 1	24	NON	OFF
Split Expanded 2	85	MxP	ON
Split Expanded 3	0	NON	OFF
Split Expanded 4	51	NON	OFF
Split Expanded 5	24	NON	OFF
Split Expanded 6	85	MxP	OFF
Split Expanded 7	21	NON	OFF
Split Expanded 8	30	NON	OFF
Split Expanded 9	0	NON	OFF
Split Expanded 10	0	NON	OFF
Split Expanded 11	0	NON	OFF
Split Expanded 12	0	NON	OFF
Split Expanded 13	0	NON	OFF
Split Expanded 14	0	NON	OFF
Split Expanded 15	0	NON	OFF
Split Expanded 16	0	NON	OFF

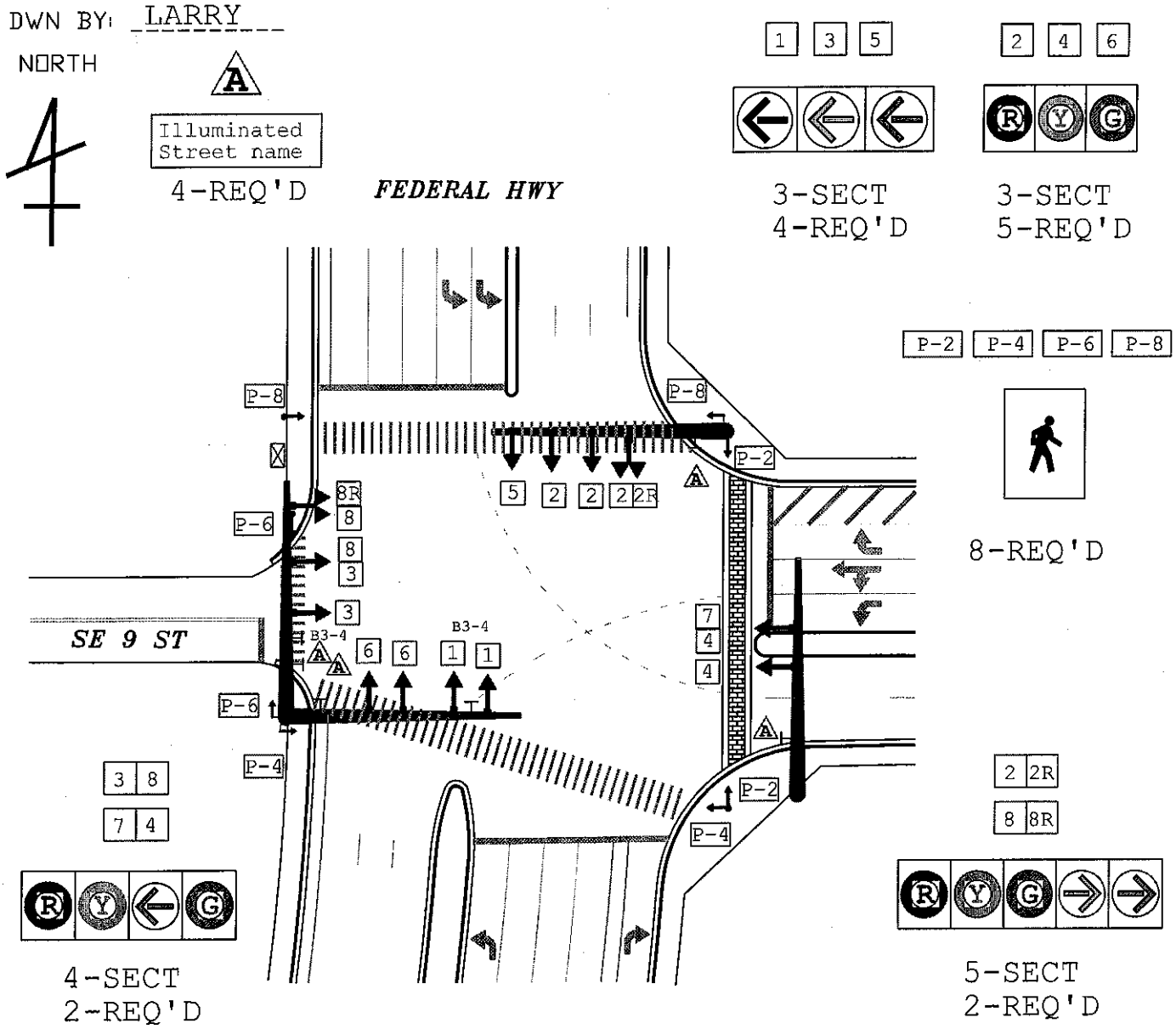
BROWARD COUNTY TRAFFIC ENGINEERING DIVISION
TRAFFIC SIGNAL LOCATION SKETCH

LOCATION **FEDERAL HIGHWAY & SE 9 STREET**

ORDER NO FDOT ISSUE DATE --- REVISION NO. 0 COMPLETION DATE 3-4-09

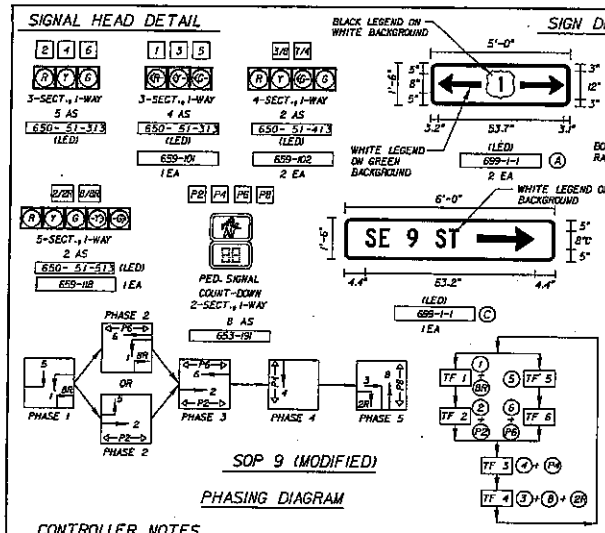
DWG. NO. 12-08-06-01 FILE NO. 3540 CITY HALLANDALE BEACH SCALE: 1" = 50'

DWN BY: LARRY



1. *VIDEO DETECTION*
2. *THIS REVISION INSTALLS TRAFFIC SIGNAL*

SIGNAL HEAD DETAIL

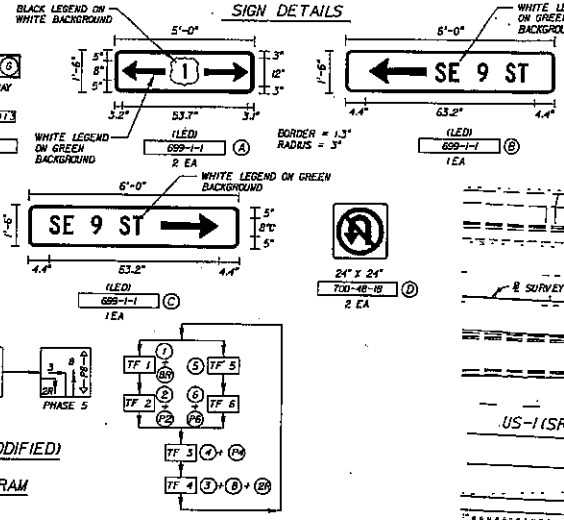


SOP 9 (MODIFIED)

PHASING DIAGRAM

RING DIAGRAM

SIGN DETAILS



CONTROLLER NOTES

1. TIMINGS SHOWN ARE INITIAL. BROWARD COUNTY TRAFFIC ENGINEERING DIVISION (BCTED) TO PROVIDE FINAL SIGNAL TIMINGS AFTER ACCEPTANCE.
2. US 1 IS MAJOR STREET AND SE 9th STREET IS MINOR STREET.
3. CONFLICT: HEADS 2 & 6 TO FLASH YELLOW, ALL OTHER HEADS TO FLASH RED.
4. SIGNAL CONTROLLER SHALL OPERATE AS SOP 9 AS SHOWN ABOVE. THIS SHALL BE PAID FOR UNDER PAY ITEM NO. 670-5-131.
5. VIDEO DETECTION SHALL BE COMPATIBLE WITH BROWARD COUNTY TRAFFIC ENGINEERING REQUIREMENTS.
6. CONTRACTOR SHALL COORDINATE WITH FPL PRIOR TO THE INSTALLATION OF SIGNAL MAST ARM IN THE SW CORNER (US 1 AND SE 9 ST). APPROPRIATE SAFETY MEASURES SHALL BE TAKEN TO COMPLETE THIS INSTALLATION.
7. CONTRACTOR SHALL COORDINATE WITH FPL FOR POWER SERVICE CONNECTION TO SIGNAL CONTROLLER.
8. PRIOR TO ORDERING MAST ARM SIGNAL POLES, CONTRACTOR SHALL VERIFY ALL ELEVATIONS RELATED TO THE MAST ARM SIGNAL POLES.
9. ALL PEDESTRIAN PEDESTALS SHALL INCLUDE TRANSFORMER BASE.
10. MAST ARM (A) SHALL REQUIRE USE OF LOW PROFILE EQUIPMENT TO INSTALL DUE TO THE CLOSE PROXIMITY OF ARM 2 WITH RESPECT TO OVERHEAD ELECTRIC (1).

CONTROLLER TIMINGS

TIMING FUNCTION									
MOVEMENT NUMBER		1	2	3	4	5	6	7	8
TIMING FUNCTION	MINIMUM GREEN	6	30	6	6	6	30	-	6
	EXTENSION	3	3	3	3	3	3	-	3
	MAXIMUM GREEN 1	10	40	19	16	10	40	-	19
	MAXIMUM GREEN 2	-	-	-	-	-	-	-	-
	YELLOW CLEARANCE	4	4	4	4	4	4	-	4
	ALL RED	2	2	2	2	2	2	-	2
	PEDESTRIAN WALK	-	7	7	7	-	7	-	7
	PED. CLEARANCE	-	17	23	23	-	17	-	23
	RECALL	-	MIN	-	-	-	MIN	-	-

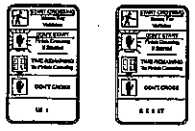
VIDEO DETECTOR ASSIGNMENT

DETECTOR NO.	DETECTOR FOR MOVEMENT
V2	5, 2, 2R
V4	4
V6	1, 6,
V8	3, 8, 8R

REMOVAL ITEMS

700-46-11 (2 AS)

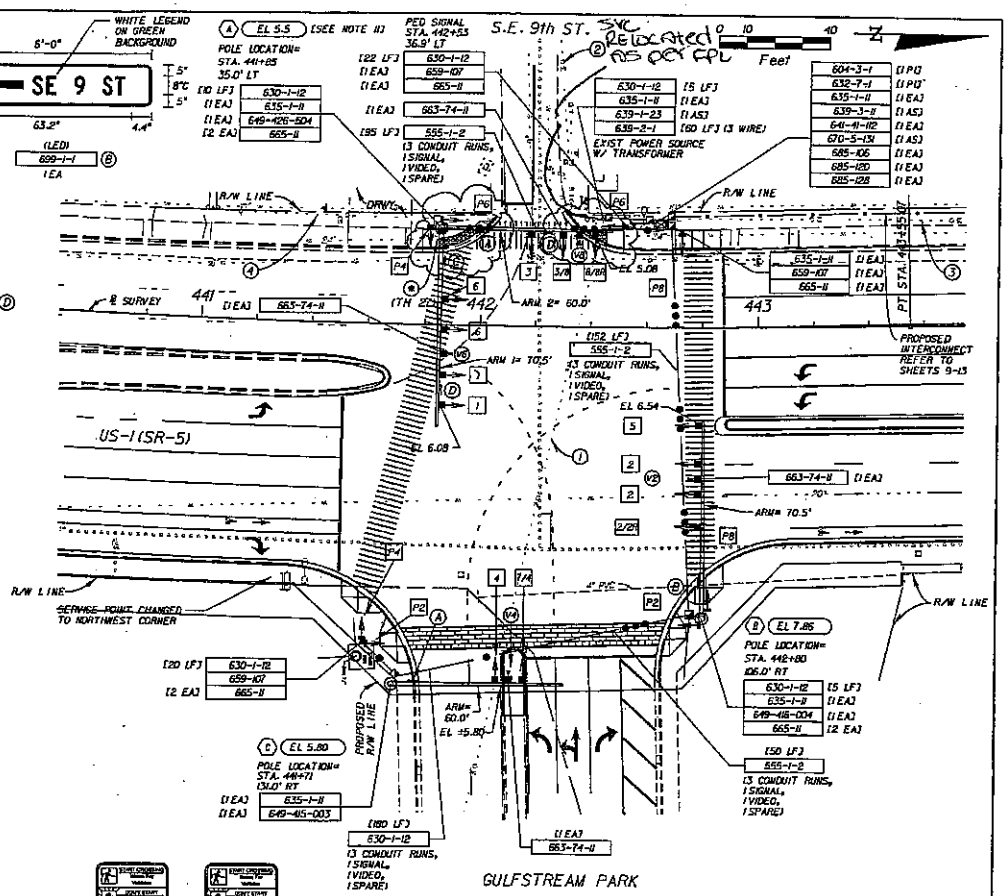
CONTRACTOR SHALL REMOVE STOP SIGNS ONLY AFTER TRAFFIC SIGNAL IS FULLY OPERATIONAL.



4 EA MODIFIED R10-3a

4 EA MODIFIED R10-3e

PAID FOR UNDER 665-11



UTILITY NOTES

(A) TH (TEST HOLE) 27 STA 441+85 WATER MAIN AT 5.7' DEPTH.
(1) VERTICAL MEASUREMENTS PER FPL FROM PAVT SURFACE (24' TO NEUTRAL) (33' TO PRIMARY).
(2) VERTICAL MEASUREMENTS PER FPL FROM PAVT SURFACE (31' TO NEUTRAL) (37' TO PRIMARY).
(3) VERTICAL MEASUREMENTS PER FPL FROM PAVT SURFACE (28' TO TRIPLEX) (17' TO BELL SOUTH)
(4) VERTICAL MEASUREMENT PER FPL FROM PAVT SURFACE (28' TO SPAN GUY, NEUTRAL LINE, NO POWER)

US-1 (SR-5) / S.E. 9th STREET

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley-Horn and Associates, Inc.
Certificate Of Authorization No. 696
Mohan Gopalakrishnan, P.E.
P.E. License No. 60720
4431 Embarcadero Drive
West Palm Beach, Florida 33407

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	BROWARD	

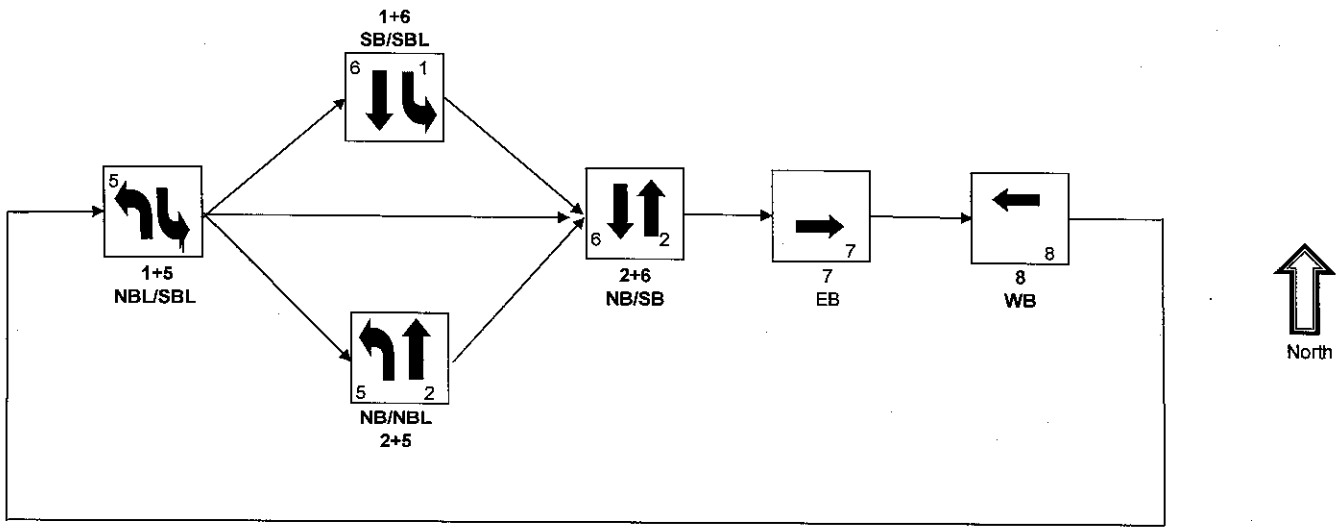
3540

SIGNALIZATION PLAN

SHEET NO. T-4

12/23/2008 3:44:47 PM K:\BCD_Roadway\0478\3000_US-1_Sub1\0478\3000\sigplan\sigplan02_fdot.dgn

Sequence of Operation for (3540) Federal Hwy (US 1 / SR 5) and SE 9 Street, Hallandale Beach



APPENDIX F:
Background Area Growth

FDOT Historical Data

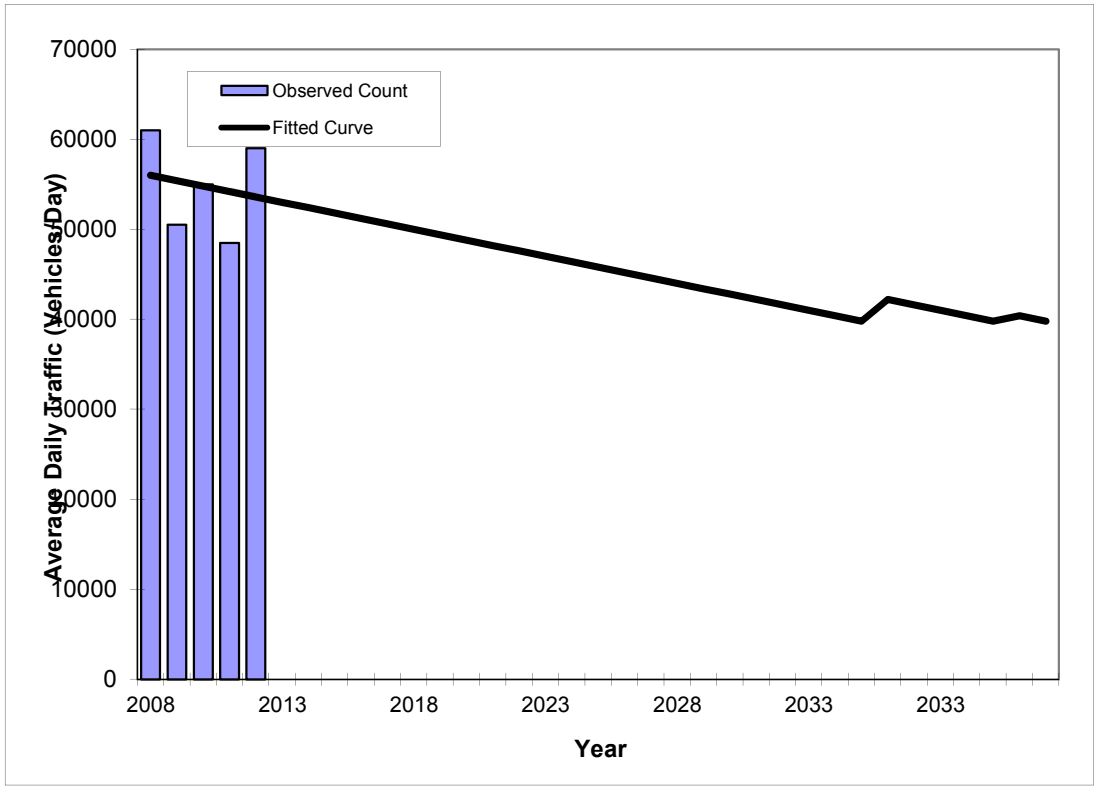
Growth Rate Calculations from FDOT Historic Traffic Data

Station Number	Location	Historic Growth	
		5-year	10-year
5029	SR 858/Hallandale Beach Boulevard	-4.79%	-1.10%
268	SR 5/US 1 -- Dade/Broward County Line	-1.07%	1.94%
268	SR 5/US 1 -- 200' south of Dade/Broward County Line	1.14%	0.62%
590	SR 858/Hallandale Beach Boulevard -- W of SR 5/US 1	0.00%	0.11%
349	SR 858/Hallandale Beach Boulevard -- W of ICWW Bridge	7.55%	1.18%
	Total	**0.57%**	**0.55%**

TRAFFIC TRENDS

SR 5/US 1 -- Dade/Broward County Line

County:	Broward
Station #:	268
Highway:	SR 5/US 1



Year	Traffic (ADT/AADT) Count*	Trend**
2008	61000	56000
2009	50500	55400
2010	55000	54800
2011	48500	54200
2012	59000	53600
2015 Opening Year Trend		
2015	N/A	51800
2025 Mid-Year Trend		
2025	N/A	45800
2035 Design Year Trend		
2035	N/A	39800
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

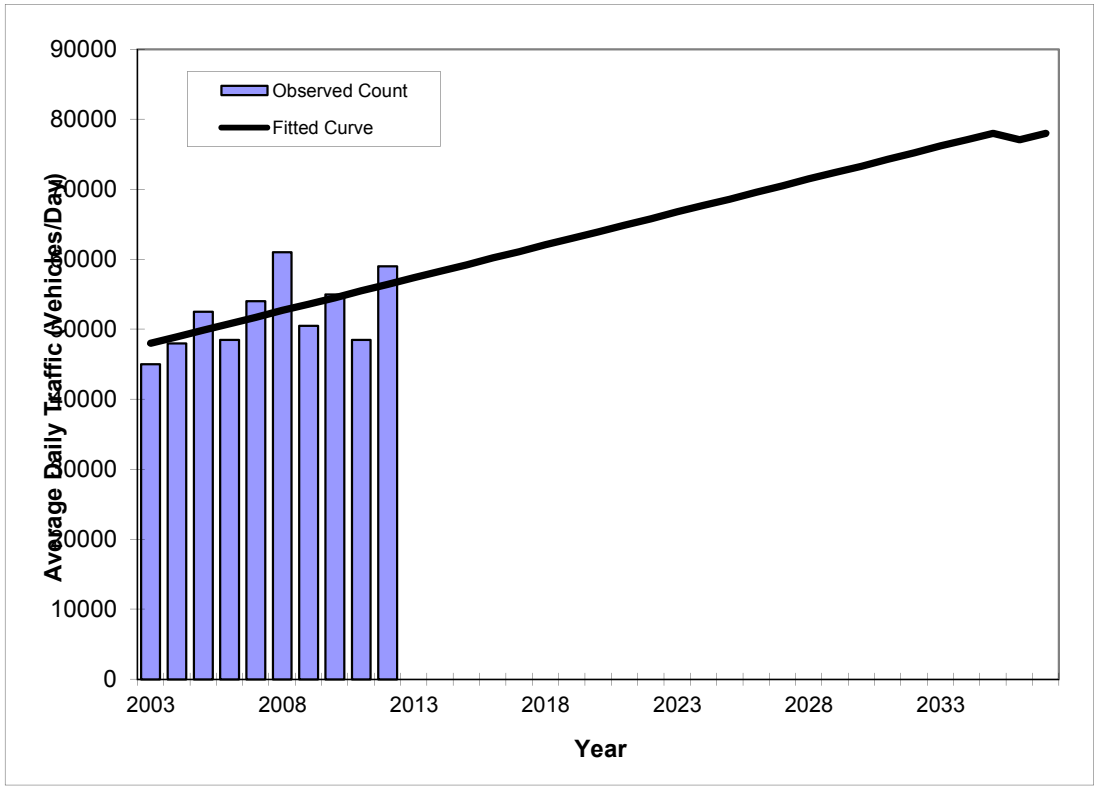
** Annual Trend Increase:	-600
Trend R-squared:	3.1%
Trend Annual Historic Growth Rate:	-1.07%
Trend Growth Rate (2012 to Design Year):	-1.12%
Printed:	22-Aug-13

Straight Line Growth Option

TRAFFIC TRENDS

SR 5/US 1 -- Dade/Broward County Line

County:	Broward
Station #:	268
Highway:	SR 5/US 1



Year	Traffic (ADT/AADT) Count*	Trend**
2003	45000	48000
2004	48000	48900
2005	52500	49900
2006	48500	50800
2007	54000	51700
2008	61000	52700
2009	50500	53600
2010	55000	54500
2011	48500	55500
2012	59000	56400
2015 Opening Year Trend		
2015	N/A	59200
2025 Mid-Year Trend		
2025	N/A	68600
2035 Design Year Trend		
2035	N/A	78000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

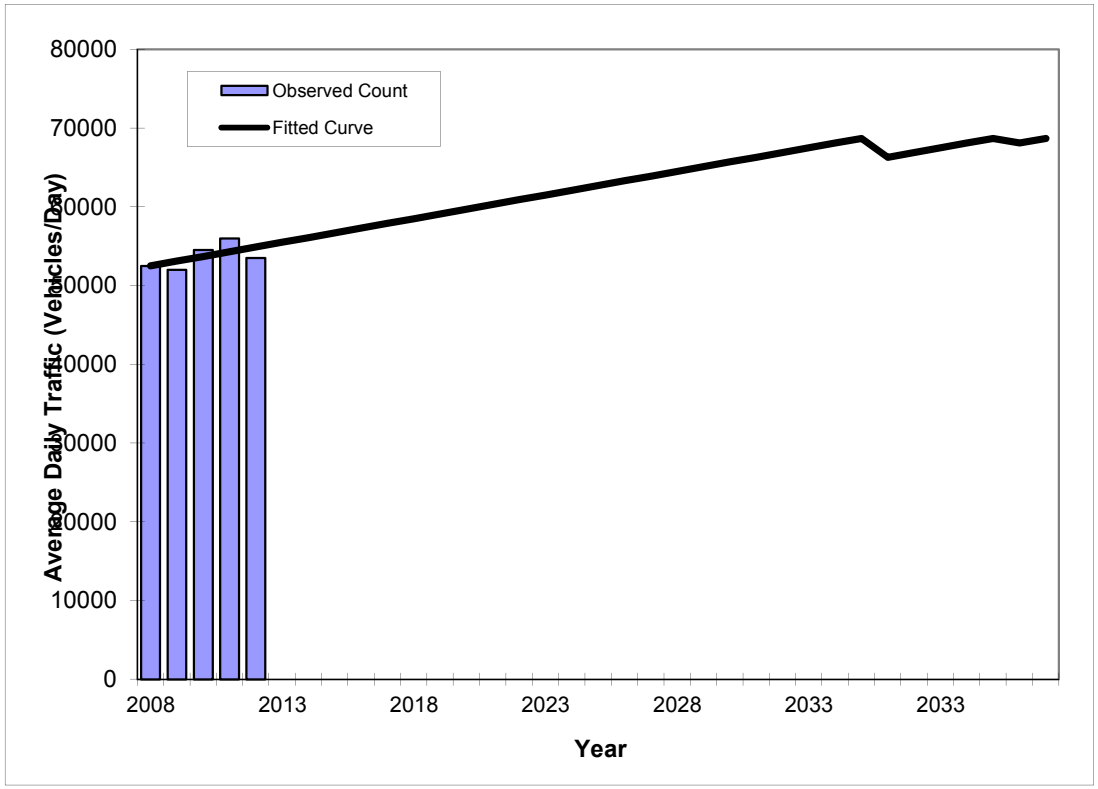
** Annual Trend Increase:	939
Trend R-squared:	31.0%
Trend Annual Historic Growth Rate:	1.94%
Trend Growth Rate (2012 to Design Year):	1.67%
Printed:	22-Aug-13

Straight Line Growth Option

TRAFFIC TRENDS

SR 5/US 1 -- 200' S of Dade/Broward County Line

County:	Miami Dade
Station #:	268
Highway:	SR 5/US 1



Year	Traffic (ADT/AADT) Count*	Trend**
2008	52500	52500
2009	52000	53100
2010	54500	53700
2011	56000	54300
2012	53500	54900
2015 Opening Year Trend		
2015	N/A	56700
2025 Mid-Year Trend		
2025	N/A	62700
2035 Design Year Trend		
2035	N/A	68700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

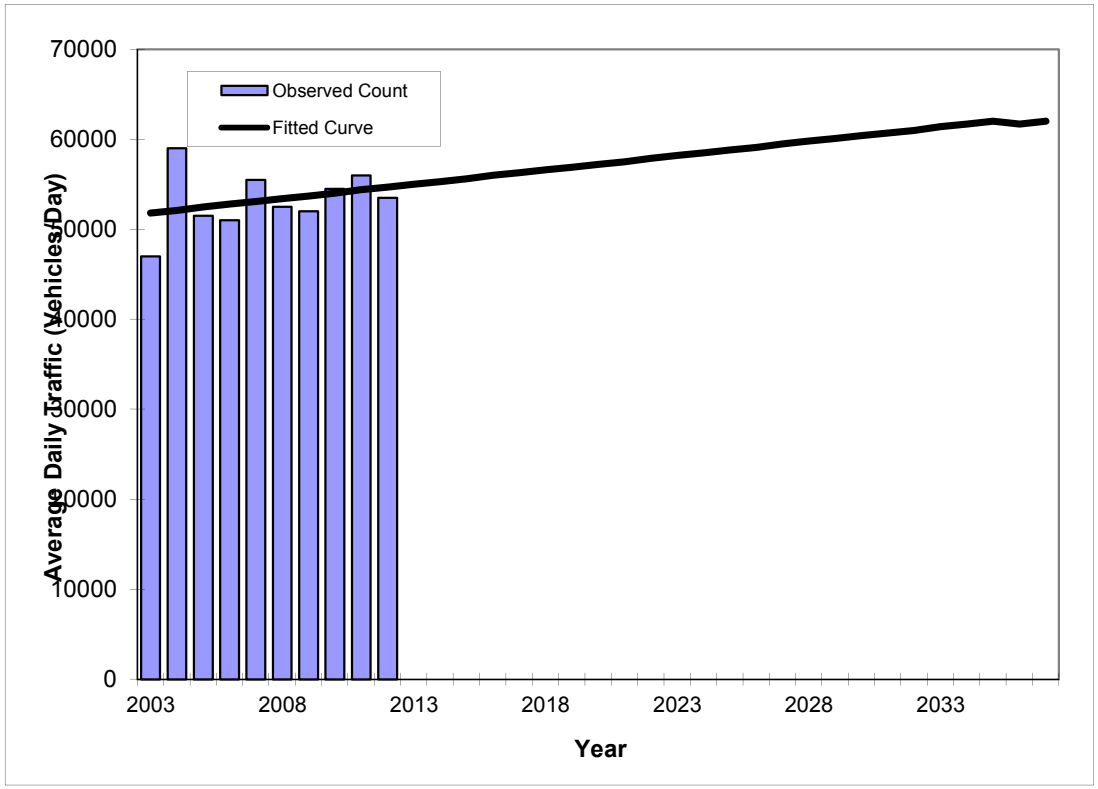
** Annual Trend Increase:	600
Trend R-squared:	35.0%
Trend Annual Historic Growth Rate:	1.14%
Trend Growth Rate (2012 to Design Year):	1.09%
Printed:	22-Aug-13

Straight Line Growth Option

TRAFFIC TRENDS

SR 5/US 1 -- 200' S of Broward/Dade County Line

County:	Miami Dade
Station #:	268
Highway:	SR 5/US 1



Year	Traffic (ADT/AADT) Count*	Trend**
2003	47000	51800
2004	59000	52100
2005	51500	52500
2006	51000	52800
2007	55500	53100
2008	52500	53400
2009	52000	53700
2010	54500	54000
2011	56000	54400
2012	53500	54700
2015 Opening Year Trend		
2015	N/A	55600
2025 Mid-Year Trend		
2025	N/A	58800
2035 Design Year Trend		
2035	N/A	62000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

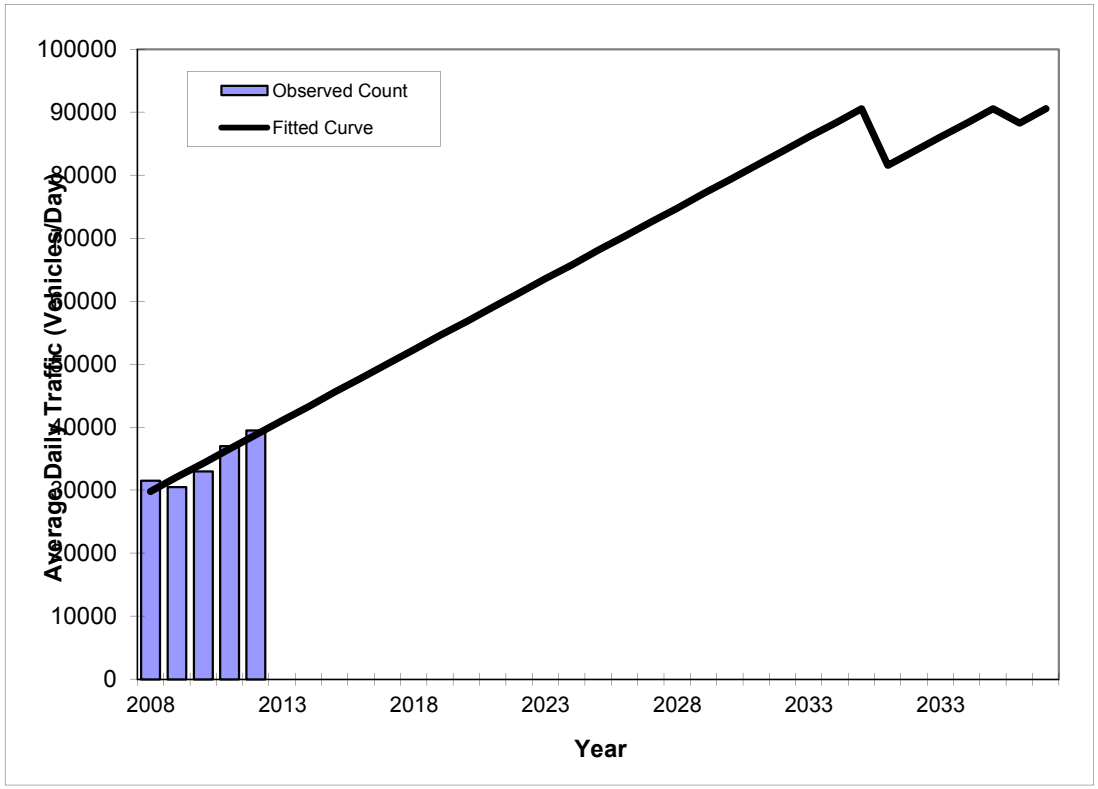
** Annual Trend Increase:	318
Trend R-squared:	8.6%
Trend Annual Historic Growth Rate:	0.62%
Trend Growth Rate (2012 to Design Year):	0.58%
Printed:	22-Aug-13

Straight Line Growth Option

TRAFFIC TRENDS

SR 858/Hallandale Beach Boulevard -- W of ICWW Bridge

County:	Broward
Station #:	349
Highway:	SR 858/Hallandale Beach Boulevard



Year	Traffic (ADT/AADT) Count*	Trend**
2008	31500	29800
2009	30500	32100
2010	33000	34300
2011	37000	36600
2012	39500	38800
2015 Opening Year Trend		
2015	N/A	45600
2025 Mid-Year Trend		
2025	N/A	68100
2035 Design Year Trend		
2035	N/A	90600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

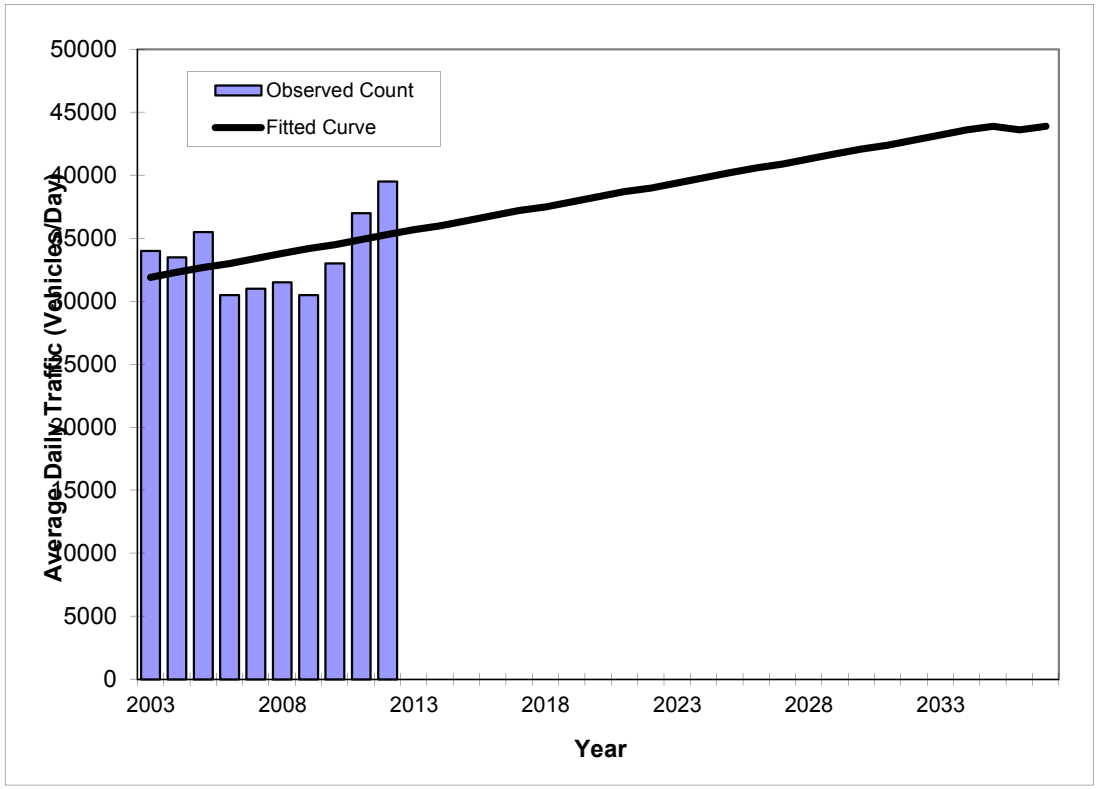
** Annual Trend Increase:	2,250
Trend R-squared:	86.8%
Trend Annual Historic Growth Rate:	7.55%
Trend Growth Rate (2012 to Design Year):	5.80%
Printed:	22-Aug-13

Straight Line Growth Option

TRAFFIC TRENDS

SR 858/Hallandale Beach Boulevard -- W of ICWW Bridge

County:	Broward
Station #:	349
Highway:	SR 858/Hallandale Beach Boulevard



Year	Traffic (ADT/AADT) Count*	Trend**
2003	34000	31900
2004	33500	32300
2005	35500	32700
2006	30500	33000
2007	31000	33400
2008	31500	33800
2009	30500	34200
2010	33000	34500
2011	37000	34900
2012	39500	35300
2015 Opening Year Trend		
2015	N/A	36400
2025 Mid-Year Trend		
2025	N/A	40200
2035 Design Year Trend		
2035	N/A	43900
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

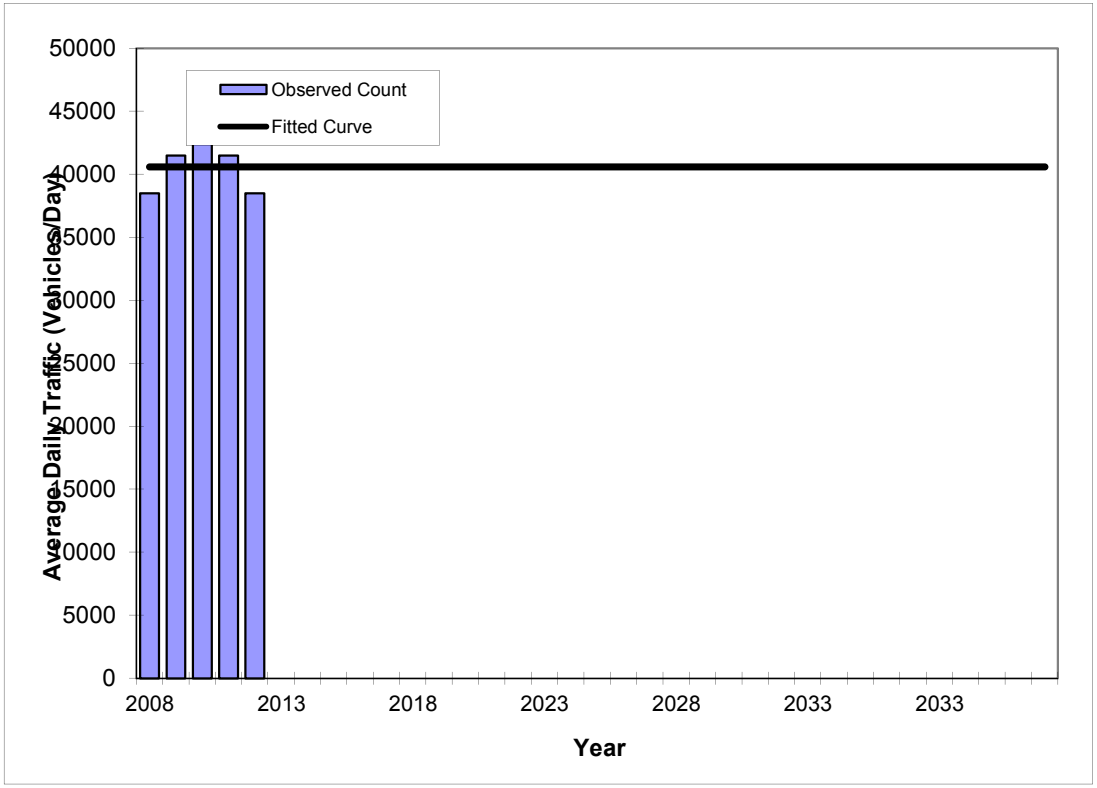
** Annual Trend Increase:	376
Trend R-squared:	14.4%
Trend Annual Historic Growth Rate:	1.18%
Trend Growth Rate (2012 to Design Year):	1.06%
Printed:	22-Aug-13

Straight Line Growth Option

TRAFFIC TRENDS

SR 858/Hallandale Beach Boulevard -- W of SR 5/US 1

County:	Broward
Station #:	590
Highway:	SR 858/Hallandale Beach Boulevard



Year	Traffic (ADT/AADT) Count*	Trend**
2008	38500	40600
2009	41500	40600
2010	43000	40600
2011	41500	40600
2012	38500	40600
2015 Opening Year Trend		
2015	N/A	40600
2025 Mid-Year Trend		
2025	N/A	40600
2035 Design Year Trend		
2035	N/A	40600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

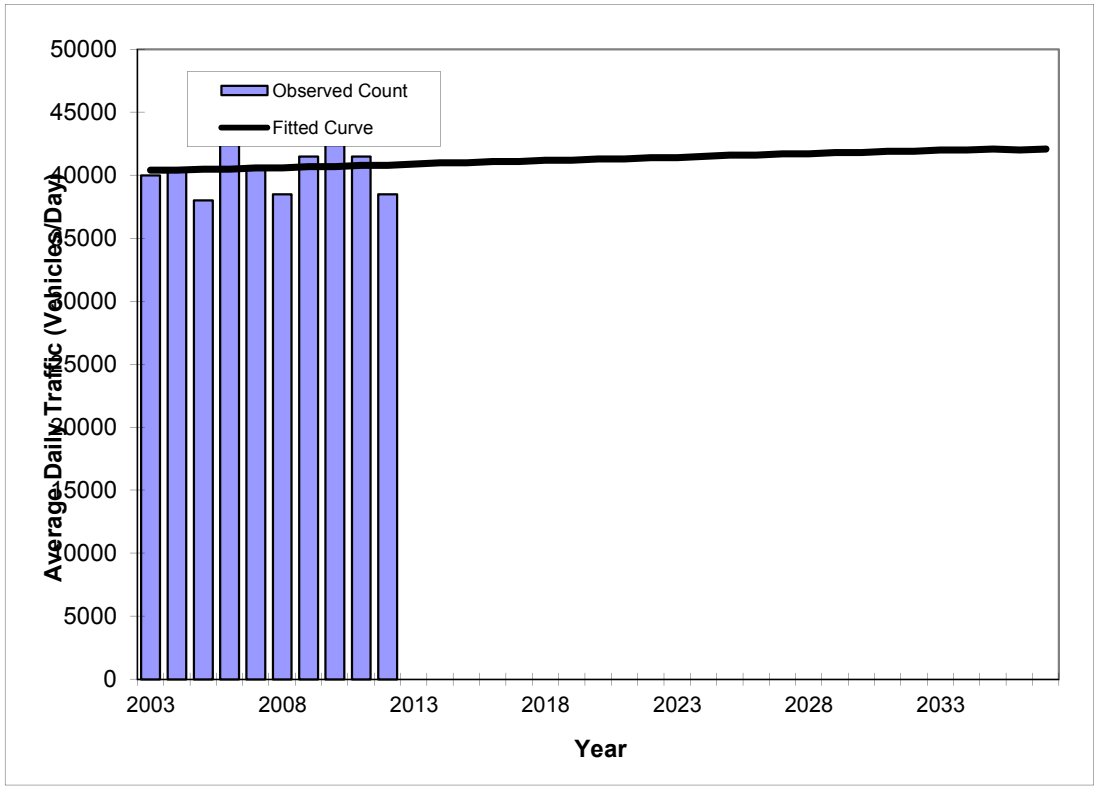
** Annual Trend Increase:	0
Trend R-squared:	0.0%
Trend Annual Historic Growth Rate:	0.00%
Trend Growth Rate (2012 to Design Year):	0.00%
Printed:	22-Aug-13

Straight Line Growth Option

TRAFFIC TRENDS

SR 858/Hallandale Beach Boulevard -- W of SR 5/US 1

County:	Broward
Station #:	590
Highway:	SR 858/Hallandale Beach Boulevard



Year	Traffic (ADT/AADT) Count*	Trend**
2003	40000	40400
2004	40500	40400
2005	38000	40500
2006	44000	40500
2007	40500	40600
2008	38500	40600
2009	41500	40700
2010	43000	40700
2011	41500	40800
2012	38500	40800
2015 Opening Year Trend		
2015	N/A	41000
2025 Mid-Year Trend		
2025	N/A	41600
2035 Design Year Trend		
2035	N/A	42100
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

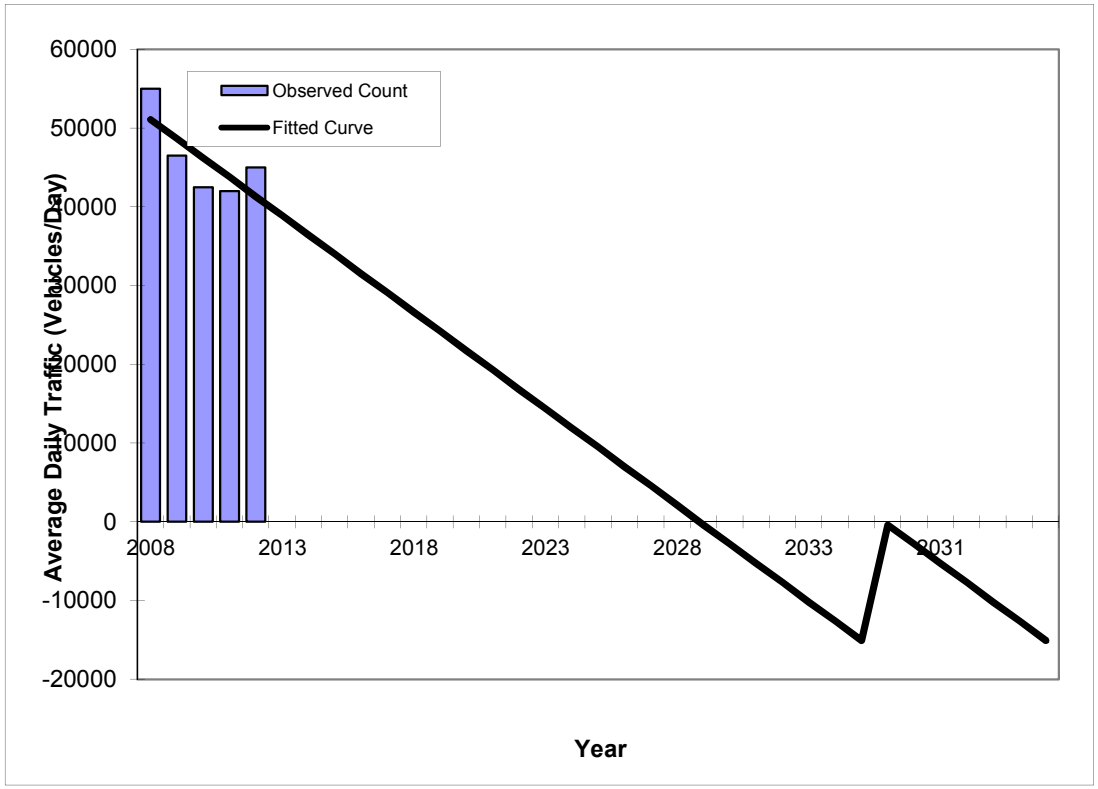
** Annual Trend Increase:	55
Trend R-squared:	0.7%
Trend Annual Historic Growth Rate:	0.11%
Trend Growth Rate (2012 to Design Year):	0.14%
Printed:	22-Aug-13

Straight Line Growth Option

TRAFFIC TRENDS

SR 858/Hallandale Beach Boulevard -- E of SR 5/US 1

County:	Broward
Station #:	5029
Highway:	SR 858/Hallandale Beach Boulevard



Year	Traffic (ADT/AADT) Count*	Trend**
2008	55000	51100
2009	46500	48700
2010	42500	46200
2011	42000	43800
2012	45000	41300
2015 Opening Year Trend		
2015	N/A	34000
2025 Mid-Year Trend		
2025	N/A	9500
2035 Design Year Trend		
2035	N/A	-15100
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

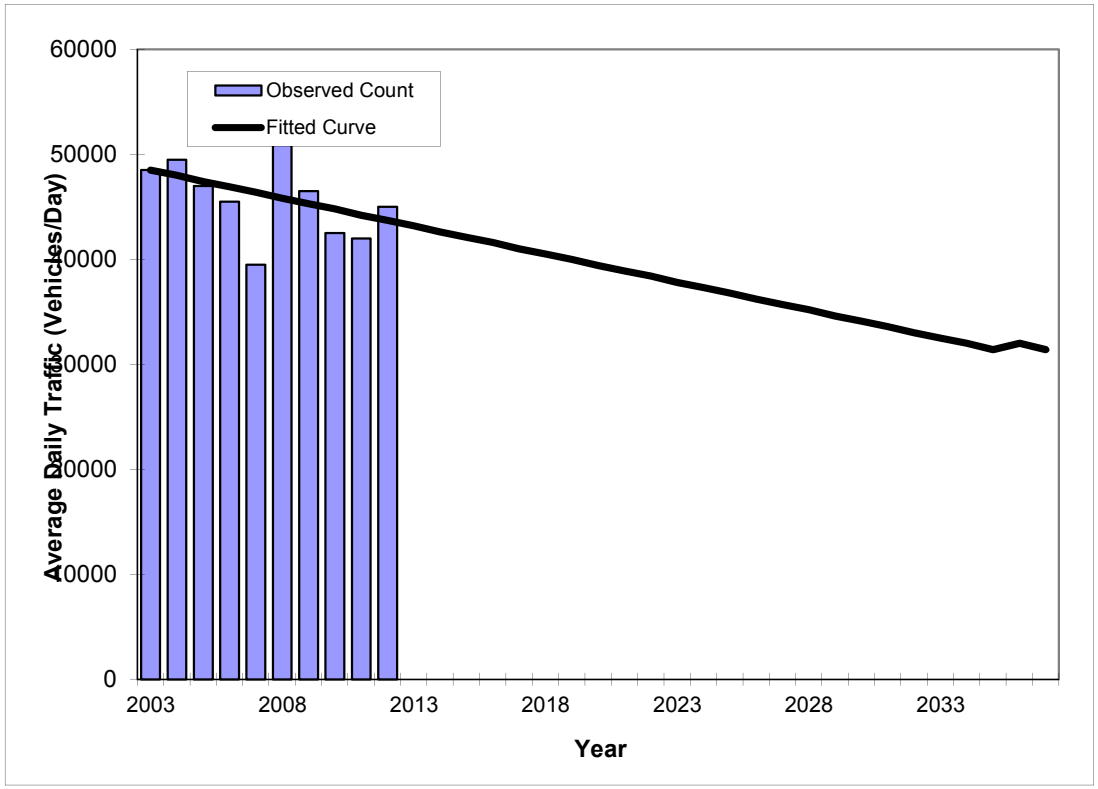
** Annual Trend Increase:	-2,450
Trend R-squared:	54.4%
Trend Annual Historic Growth Rate:	-4.79%
Trend Growth Rate (2012 to Design Year):	-5.94%
Printed:	22-Aug-13

Straight Line Growth Option

TRAFFIC TRENDS

SR 858/Hallandale Beach Boulevard -- E of SR 5/US 1

County:	Broward
Station #:	5029
Highway:	SR 858/Hallandale Beach Boulevard



Year	Traffic (ADT/AADT) Count*	Trend**
2003	48500	48500
2004	49500	48000
2005	47000	47400
2006	45500	46900
2007	39500	46400
2008	55000	45800
2009	46500	45300
2010	42500	44800
2011	42000	44200
2012	45000	43700
2015 Opening Year Trend		
2015	N/A	42100
2025 Mid-Year Trend		
2025	N/A	36800
2035 Design Year Trend		
2035	N/A	31400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-533
Trend R-squared:	13.6%
Trend Annual Historic Growth Rate:	-1.10%
Trend Growth Rate (2012 to Design Year):	-1.22%
Printed:	22-Aug-13

Straight Line Growth Option

APPENDIX G:
Volume Development Worksheets

AM

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 3rd Street at South Federal Highway/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		82	49	238		18	6	8		28	906	16		20	1,566	7
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS		**99**	**59**	**288**		**22**	**7**	**10**		**34**	**1,096**	**19**		**24**	**1,895**	**8**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH		1	1	3		0	0	0		0	13	0		0	22	0
NON-PROJECT TRAFFIC		**100**	**60**	**291**		**22**	**7**	**10**		**34**	**1,109**	**19**		**24**	**1,917**	**8**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering				7.0%		1.0%									48.0%	
	Exiting										1.0%	30.0%	1.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				5		1				1	35	1			36	
TOTAL PROJECT TRAFFIC			**0**	**0**	**5**		**1**	**0**	**0**		**1**	**35**	**1**		**0**	**36**	**0**
TOTAL TRAFFIC			**100**	**60**	**296**		**23**	**7**	**10**		**35**	**1,144**	**20**		**24**	**1,953**	**8**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 5th Street at South Federal Highway/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		17	4	79				2		71	929	18		64	1,734	41
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS		**21**	**5**	**96**				**2**		**86**	**1,124**	**22**		**77**	**2,098**	**50**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0				0		0	0	0		0	0	0
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH		0	0	1				0		1	13	0		1	24	1
NON-PROJECT TRAFFIC		**21**	**5**	**97**				**2**		**87**	**1,137**	**22**		**78**	**2,122**	**51**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering				3.0%											56.0%	
	Exiting										2.0%	32.0%	1.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				2						2	37	1			42	
TOTAL PROJECT TRAFFIC			**0**	**0**	**2**				**0**		**2**	**37**	**1**		**0**	**42**	**0**
TOTAL TRAFFIC			**21**	**5**	**99**				**2**		**89**	**1,174**	**23**		**78**	**2,164**	**51**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 9th Street at South Federal Highway/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		13	2	37		13	1	4		18	975	14		19	1,684	14
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS		**16**	**2**	**45**		**16**	**1**	**5**		**22**	**1,180**	**17**		**23**	**2,038**	**17**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH		0	0	1		0	0	0		0	13	0		0	23	0
NON-PROJECT TRAFFIC		**16**	**2**	**46**		**16**	**1**	**5**		**22**	**1,193**	**17**		**23**	**2,061**	**17**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering									50.0%		-50.0%					
	Exiting											50.0%					
Net New Distribution	Entering				6.0%		1.0%			34.0%						59.0%	
	Exiting										2.0%	35.0%	1.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By									4		0					
	Net New				4		1			25	2	41	1			44	
TOTAL PROJECT TRAFFIC			**0**	**0**	**4**		**1**	**0**	**0**	**29**	**2**	**41**	**1**		**0**	**44**	**0**
TOTAL TRAFFIC			**16**	**2**	**50**		**17**	**1**	**5**	**29**	**24**	**1,234**	**18**		**23**	**2,105**	**17**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 10th Street/Gulfstream South Driveway at Biscayne Boulevard/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				27				2	44	13	1,047	13		20	1,756	5
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS				**33**				**2**	**53**	**16**	**1,267**	**16**		**24**	**2,125**	**6**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC				0				0	0	0	0	0		0	0	0
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH				0				0	1	0	14	0		0	24	0
NON-PROJECT TRAFFIC				**33**				**2**	**54**	**16**	**1,281**	**16**		**24**	**2,149**	**6**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting											25.0%		25.0%		25.0%	
Net New Distribution	Entering											34.0%					
	Exiting											19.0%		19.0%		78.0%	3.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By											2		2		2	
	Net New											47		22		91	4
TOTAL PROJECT TRAFFIC					**0**				**0**	**0**	**0**	**49**	**0**	**24**	**0**	**93**	**4**
TOTAL TRAFFIC					**33**				**2**	**54**	**16**	**1,330**	**16**	**24**	**24**	**2,242**	**10**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 9th Street at SE 1st Avenue
COUNT DATE: August 15, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						55		12			152					
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS						**67**		**15**			**184**					

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC						0		0			0					
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH						1		0			2					
NON-PROJECT TRAFFIC						**68**		**15**			**186**					

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting						3.0%		2.0%								

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New						4		2								
TOTAL PROJECT TRAFFIC							**4**		**2**			**0**					
TOTAL TRAFFIC							**72**		**17**			**186**					

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: North Driveway at South Federal Highway/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements											1,028				1,758	
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS											**1,244**				**2,127**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC											0				0	
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH											14				24	
NON-PROJECT TRAFFIC											**1,258**				**2,151**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering															-50.0%	100.0%
	Exiting											50.0%					
Net New Distribution	Entering											34.0%					100.0%
	Exiting											38.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By											4				-4	7
	Net New											69					74
TOTAL PROJECT TRAFFIC												**73**				**-4**	**81**
TOTAL TRAFFIC												**1,331**				**2,147**	**81**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: South Driveway at South Federal Highway/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: AM Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements											1,028				1,758	
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS											**1,244**				**2,127**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC											0				0	
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH											14				24	
NON-PROJECT TRAFFIC											**1,258**				**2,151**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering															-50.0%	
	Exiting				100.0%							50.0%					
Net New Distribution	Entering											34.0%					
	Exiting				100.0%							38.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By				7							4				-4	
	Net New				117							69					
TOTAL PROJECT TRAFFIC					**124**							**73**				**-4**	
TOTAL TRAFFIC					**124**							**1,331**				**2,147**	

PM

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 3rd Street at South Federal Highway/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		113	60	158		77	52	87		85	1,829	45	16	59	1,545	16
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS		**137**	**73**	**191**		**93**	**63**	**105**		**103**	**2,213**	**54**	**19**	**71**	**1,869**	**19**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0	0	0	0	0
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH		2	1	2		1	1	1		1	25	1	0	1	21	0
NON-PROJECT TRAFFIC		**139**	**74**	**193**		**94**	**64**	**106**		**104**	**2,238**	**55**	**19**	**72**	**1,890**	**19**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering				4.0%		2.0%									35.0%	
	Exiting										2.0%	39.0%	1.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				5		2				2	34	1			45	
TOTAL PROJECT TRAFFIC			**0**	**0**	**5**		**2**	**0**	**0**		**2**	**34**	**1**	**0**	**0**	**45**	**0**
TOTAL TRAFFIC			**139**	**74**	**198**		**96**	**64**	**106**		**106**	**2,272**	**56**	**19**	**72**	**1,935**	**19**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 5th Street at South Federal Highway/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		15	4	74				19	26	171	1,882	77		23	1,661	46
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS		**18**	**5**	**90**				**23**	**31**	**207**	**2,277**	**93**		**28**	**2,010**	**56**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0				0	0	0	0	0		0	0	0
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH		0	0	1				0	0	2	26	1		0	23	1
NON-PROJECT TRAFFIC		**18**	**5**	**91**				**23**	**31**	**209**	**2,303**	**94**		**28**	**2,033**	**57**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering				2.0%											41.0%	
	Exiting										3.0%	42.0%	2.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New				3						3	37	1			52	
TOTAL PROJECT TRAFFIC			**0**	**0**	**3**				**0**	**0**	**3**	**37**	**1**		**0**	**52**	**0**
TOTAL TRAFFIC			**18**	**5**	**94**				**23**	**31**	**212**	**2,340**	**95**		**28**	**2,085**	**57**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 9th Street at South Federal Highway/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.91

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		23	5	41		100	14	30	15	19	1,958	61		39	1,774	11
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS		**28**	**6**	**50**		**121**	**17**	**36**	**18**	**23**	**2,369**	**74**		**47**	**2,147**	**13**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0	0	0	0	0		0	0	0
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH		0	0	1		1	0	0	0	0	27	1		1	25	0
NON-PROJECT TRAFFIC		**28**	**6**	**51**		**122**	**17**	**36**	**18**	**23**	**2,396**	**75**		**48**	**2,172**	**13**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering									50.0%		-50.0%					
Distribution	Exiting											50.0%					
Net New	Entering				7.0%		2.0%			48.0%						43.0%	
Distribution	Exiting										2.0%	47.0%	1.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By									3		0					
Trips	Net New				9		3			61	2	41	1			55	
TOTAL PROJECT TRAFFIC			**0**	**0**	**9**		**3**	**0**	**0**	**64**	**2**	**41**	**1**		**0**	**55**	**0**
TOTAL TRAFFIC			**28**	**6**	**60**		**125**	**17**	**36**	**82**	**25**	**2,437**	**76**		**48**	**2,227**	**13**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 10th Street/Gulfstream South Driveway at Biscayne Boulevard/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				37				16	88	30	2,148	51		10	1,926	15
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS				**45**				**19**	**106**	**36**	**2,599**	**62**		**12**	**2,330**	**18**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC				0				0	0	0	0	0		0	0	0
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH				1				0	1	0	30	1		0	27	0
NON-PROJECT TRAFFIC				**46**				**19**	**107**	**36**	**2,629**	**63**		**12**	**2,357**	**18**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting											25.0%		25.0%		25.0%	
Net New Distribution	Entering											48.0%					
	Exiting											25.0%		25.0%	1.0%	69.0%	5.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By											1		2		1	
	Net New											83		22	1	60	4
TOTAL PROJECT TRAFFIC					**0**				**0**	**0**	**0**	**84**	**0**	**24**	**1**	**61**	**4**
TOTAL TRAFFIC					**46**				**19**	**107**	**36**	**2,713**	**63**	**24**	**13**	**2,418**	**22**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: SE 9th Street at SE 1st Avenue
COUNT DATE: August 15, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.85

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						91		19			376					
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS						**110**		**23**			**455**					

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC						0		0			0					
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH						1		0			5					
NON-PROJECT TRAFFIC						**111**		**23**			**460**					

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting						4.0%		3.0%								

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New						3		3								
TOTAL PROJECT TRAFFIC							**3**		**3**			**0**					
TOTAL TRAFFIC							**114**		**26**			**460**					

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: North Driveway at South Federal Highway/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements											2,109				1,933	
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS											**2,552**				**2,339**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC											0				0	
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH											29				27	
NON-PROJECT TRAFFIC											**2,581**				**2,366**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering															-50.0%	100.0%
	Exiting											50.0%					
Net New Distribution	Entering											48.0%					100.0%
	Exiting											50.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By											3				-3	6
	Net New											105					128
TOTAL PROJECT TRAFFIC												**108**				**-3**	**134**
TOTAL TRAFFIC												**2,689**				**2,363**	**134**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: South Driveway at South Federal Highway/US 1/SR 5
COUNT DATE: August 15, 2013
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements											2,109				1,933	
Peak Season Correction Factor	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
EXISTING CONDITIONS											**2,552**				**2,339**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC											0				0	
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
BACKGROUND TRAFFIC GROWTH											29				27	
NON-PROJECT TRAFFIC											**2,581**				**2,366**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering															-50.0%	
Distribution	Exiting				100.0%							50.0%					
Net New	Entering											48.0%					
Distribution	Exiting				100.0%							50.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By				6							3				-3	
Trips	Net New				87							105					
TOTAL PROJECT TRAFFIC					**93**							**108**				**-3**	
TOTAL TRAFFIC					**93**							**2,689**				**2,363**	

APPENDIX H:
Intersection Capacity Analyses

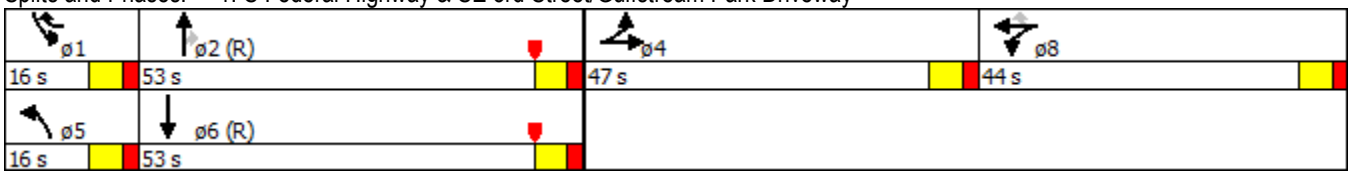
Existing Conditions

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	59	22	7	10	34	1096	19	24	1895
Turn Type	NA	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	4	8	8	1	5	2		1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	45.0	42.0	42.0	11.0	11.0	38.0	38.0	11.0	38.0
Total Split (s)	47.0	44.0	44.0	16.0	16.0	53.0	53.0	16.0	53.0
Total Split (%)	29.4%	27.5%	27.5%	10.0%	10.0%	33.1%	33.1%	10.0%	33.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag				Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 113 (71%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: S Federal Highway & SE 3rd Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	99	59	288	22	7	10	34	1096	19	24	1895	8
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	190.0	186.3	190.0	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	190.0
Lanes	0	2	0	1	1	2	1	3	1	2	3	0
Cap, veh/h	258	153	360	404	424	804	59	2982	845	90	2929	12
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.04	0.71	0.71	0.03	0.53	0.53
Sat Flow, veh/h	1134	672	1583	1774	1863	3167	1774	5588	1583	3442	5562	23
Grp Volume(v), veh/h	164	0	300	23	7	10	35	1142	20	25	1322	660
Grp Sat Flow(s),veh/h/ln	1806	0	1583	1774	1863	1583	1774	1863	1583	1721	1863	1859
Q Serve(g_s), s	6.5	0.0	15.3	0.9	0.2	0.2	1.6	6.9	0.3	0.6	22.0	22.1
Cycle Q Clear(g_c), s	6.5	0.0	15.3	0.9	0.2	0.2	1.6	6.9	0.3	0.6	22.0	22.1
Prop In Lane	0.63		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	411	0	360	404	424	804	59	2982	845	90	1962	979
V/C Ratio(X)	0.40	0.00	0.83	0.06	0.02	0.01	0.60	0.38	0.02	0.28	0.67	0.67
Avail Cap(c_a), veh/h	875	0	767	796	836	1504	210	3102	879	407	2068	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	27.8	0.0	31.2	25.6	25.4	23.6	39.9	6.7	5.8	40.4	14.7	14.7
Incr Delay (d2), s/veh	0.2	0.0	1.9	0.0	0.0	0.0	3.5	0.4	0.1	0.6	1.9	3.7
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 Back of Q (50%), veh/ln	2.9	0.0	6.2	0.4	0.1	0.1	0.8	2.5	0.1	0.3	10.1	10.5
Lane Grp Delay (d), s/veh	28.0	0.0	33.1	25.6	25.4	23.6	43.4	7.1	5.8	41.0	16.6	18.4
Lane Grp LOS	C		C	C	C	C	D	A	A	D	B	B
Approach Vol, veh/h		464			40			1197			2007	
Approach Delay, s/veh		31.3			25.1			8.1			17.5	
Approach LOS		C			C			A			B	

Timer								
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		25.3			25.3		8.8	51.2		8.2	50.6	
Change Period (Y+Rc), s		6.0			6.0		6.0	6.0		6.0	6.0	
Max Green Setting (Gmax), s		41.0			38.0		10.0	47.0		10.0	47.0	
Max Q Clear Time (g_c+I1), s		17.3			2.9		3.6	8.9		2.6	24.1	
Green Ext Time (p_c), s		2.0			2.1		0.0	32.1		0.0	20.5	

Intersection Summary	
HCM 2010 Ctrl Delay	16.3
HCM 2010 LOS	B

Notes

Intersection

Intersection Delay, s/veh	29.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	21	5	96	0	0	2	86	1124	22	77	2098	50
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	275	-	200	250	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	5	103	0	0	2	92	1209	24	83	2256	54

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3116	3842	1155	2465	3869	604	2310	0	0	1209	0	0
Stage 1	2448	2448	-	1394	1394	-	-	-	-	-	-	-
Stage 2	668	1394	-	1071	2475	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	# 12	# 4	163	32	3	378	# 87	-	-	310	-	-
Stage 1	# 18	61	-	105	207	-	-	-	-	-	-	-
Stage 2	377	207	-	212	59	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	# 9	# 3	163	8	2	378	# 87	-	-	310	-	-
Mov Capacity-2 Maneuver	# 16	31	-	-	-	-	-	-	-	-	-	-
Stage 1	# 18	45	-	105	207	-	-	-	-	-	-	-
Stage 2	375	207	-	50	43	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 711.2	14.6	14.1	0.7
HCM LOS	F	B		

Minor Lane / Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	# 87	-	-	59	378	310	-	-
HCM Lane V/C Ratio	1.063	-	-	2.223	0.006	0.267	-	-
HCM Control Delay (s)	201.929	-	-	$ 711.2	14.6	20.792	-	-
HCM Lane LOS	F			F	B	C		
HCM 95th %tile Q(veh)	6.241	-	-	12.851	0.017	1.054	-	-

Notes

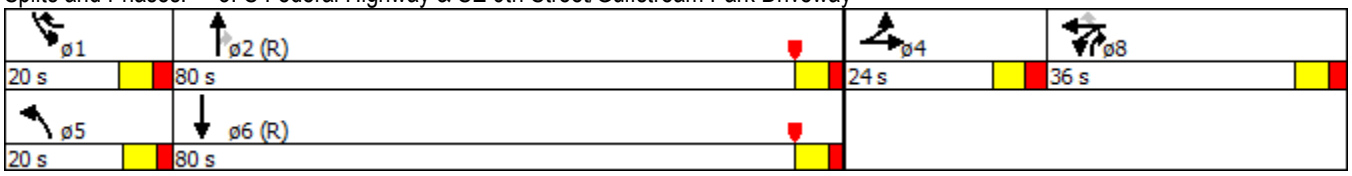
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	2	16	1	5	22	1180	17	23	2038
Turn Type	NA	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	8	8	1	5	2	8	1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	10.0	6.0	5.0	10.0
Minimum Split (s)	24.0	36.0	36.0	11.5	11.0	39.0	36.0	11.5	39.0
Total Split (s)	24.0	36.0	36.0	20.0	20.0	80.0	36.0	20.0	80.0
Total Split (%)	15.0%	22.5%	22.5%	12.5%	12.5%	50.0%	22.5%	12.5%	50.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	2.0	2.5	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.0	6.0	6.5	6.5	6.0
Lead/Lag				Lead	Lead	Lag		Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 40 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated

Splits and Phases: 3: S Federal Highway & SE 9th Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	2	45	16	1	5	22	1180	17	23	2038	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5	6.0	6.0	6.5	6.5	6.0	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.90		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1662		1681	1694	1583	1770	5085	1583	3433	5079	
Flt Permitted		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1662		1681	1694	1583	1770	5085	1583	3433	5079	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	17	2	47	17	1	5	23	1242	18	24	2145	18
RTOR Reduction (vph)	0	45	0	0	0	5	0	0	4	0	0	0
Lane Group Flow (vph)	0	21	0	9	9	0	23	1242	14	24	2163	0
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		8	8	1	5	2	8	1	6	
Permitted Phases						8			2			
Actuated Green, G (s)		7.5		3.8	3.8	7.2	4.3	119.8	123.6	3.4	119.4	
Effective Green, g (s)		7.5		3.8	3.8	7.2	4.3	119.8	123.6	3.4	119.4	
Actuated g/C Ratio		0.05		0.02	0.02	0.05	0.03	0.75	0.77	0.02	0.75	
Clearance Time (s)		6.5		6.5	6.5	6.5	6.0	6.0	6.5	6.5	6.0	
Vehicle Extension (s)		2.0		2.0	2.0	1.5	1.5	3.0	2.0	1.5	3.0	
Lane Grp Cap (vph)		77		39	40	135	47	3807	1222	72	3790	
v/s Ratio Prot		c0.01		c0.01	0.01	0.00	c0.01	0.24	0.00	0.01	c0.43	
v/s Ratio Perm						0.00			0.01			
v/c Ratio		0.28		0.23	0.23	0.00	0.49	0.33	0.01	0.33	0.57	
Uniform Delay, d1		73.6		76.7	76.7	73.0	76.8	6.7	4.2	77.2	9.0	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.13	1.49	
Incremental Delay, d2		0.7		1.1	1.0	0.0	2.9	0.2	0.0	0.9	0.6	
Delay (s)		74.3		77.8	77.7	73.0	79.7	6.9	4.2	88.3	13.9	
Level of Service		E		E	E	E	E	A	A	F	B	
Approach Delay (s)		74.3			76.7			8.2			14.7	
Approach LOS		E			E			A			B	

Intersection Summary

HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection

Intersection Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	33	0	0	2	16	1267	16	24	2125	6
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	250	-	175	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	35	0	0	2	17	1362	17	26	2285	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3033	3851	1146	2477	3854	681	2291	0	0	1362	0	0
Stage 1	2340	2340	-	1511	1511	-	-	-	-	-	-	-
Stage 2	693	1511	-	966	2343	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	14	4	166	32	4	337	89	-	-	261	-	-
Stage 1	22	69	-	87	181	-	-	-	-	-	-	-
Stage 2	364	181	-	247	69	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	13	4	166	23	4	337	89	-	-	261	-	-
Mov Capacity-2 Maneuver	20	42	-	53	-	-	-	-	-	-	-	-
Stage 1	22	62	-	87	181	-	-	-	-	-	-	-
Stage 2	362	181	-	175	62	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	32.5	15.8	3.6	0.2
HCM LOS	D	C		

Minor Lane / Major Mvmt	NBU	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	141	89	-	-	166	337	261	-	-
HCM Lane V/C Ratio	0.404	0.193	-	-	0.214	0.006	0.099	-	-
HCM Control Delay (s)	-	69.9	-	-	32.5	15.8	20.301	-	-
HCM Lane LOS	F				D	C	C		
HCM 95th %tile Q(veh)	1.745	0.669	-	-	0.778	0.019	0.326	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	67	15	184	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	16	198	0	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	198	98	0	0
Stage 1	198	-	-	-
Stage 2	0	-	-	-
Follow-up Headway	3.52	3.32	-	-
Pot Capacity-1 Maneuver	743	939	-	-
Stage 1	785	-	-	-
Stage 2	-	-	-	-
Time blocked-Platoon, %			-	-
Mov Capacity-1 Maneuver	743	939	-	-
Mov Capacity-2 Maneuver	785	-	-	-
Stage 1	785	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	9.8	0
HCM LOS	A	

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	WBLn2
Capacity (veh/h)	-	-	785	939
HCM Lane V/C Ratio	-	-	0.092	0.017
HCM Control Delay (s)	-	-	10	8.9
HCM Lane LOS			B	A
HCM 95th %tile Q(veh)	-	-	0.302	0.052

Notes

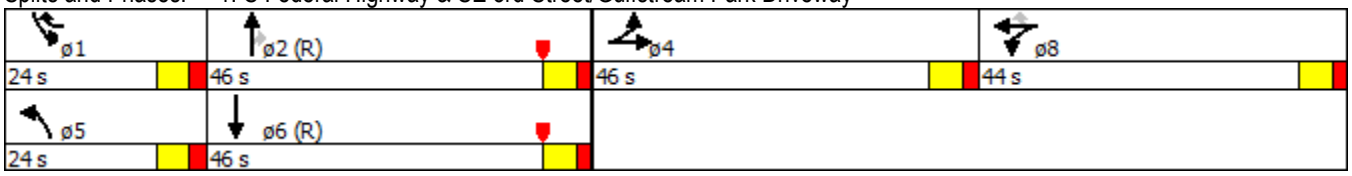
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	73	93	63	105	103	2213	54	90	1869
Turn Type	NA	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	4	8	8	1	5	2		1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	45.0	42.0	42.0	11.0	11.0	38.0	38.0	11.0	38.0
Total Split (s)	46.0	44.0	44.0	24.0	24.0	46.0	46.0	24.0	46.0
Total Split (%)	28.8%	27.5%	27.5%	15.0%	15.0%	28.8%	28.8%	15.0%	28.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag				Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 156 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: S Federal Highway & SE 3rd Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	137	73	191	93	63	105	103	2213	54	90	1869	19
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	190.0	186.3	190.0	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	190.0
Lanes	0	2	0	1	1	2	1	3	1	2	3	0
Cap, veh/h	209	112	282	316	332	742	141	2988	847	193	2824	28
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.36	0.36	0.06	0.51	0.51
Sat Flow, veh/h	1176	628	1583	1774	1863	3167	1774	5588	1583	3442	5523	56
Grp Volume(v), veh/h	224	0	203	99	67	112	110	2354	57	96	1341	667
Grp Sat Flow(s),veh/h/ln	1804	0	1583	1774	1863	1583	1774	1863	1583	1721	1863	1853
Q Serve(g_s), s	9.1	0.0	9.4	3.8	2.4	2.2	4.8	29.3	1.8	2.1	21.4	21.4
Cycle Q Clear(g_c), s	9.1	0.0	9.4	3.8	2.4	2.2	4.8	29.3	1.8	2.1	21.4	21.4
Prop In Lane	0.65		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	321	0	282	316	332	742	141	2988	847	193	1905	947
V/C Ratio(X)	0.70	0.00	0.72	0.31	0.20	0.15	0.78	0.79	0.07	0.50	0.70	0.70
Avail Cap(c_a), veh/h	927	0	813	866	909	1723	410	2988	847	796	1914	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	30.0	0.0	30.2	27.9	27.3	23.7	36.2	21.0	12.2	35.7	14.5	14.5
Incr Delay (d2), s/veh	1.0	0.0	1.3	0.2	0.1	0.0	3.5	2.2	0.2	0.7	2.2	4.4
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 Back of Q (50%), veh/ln	4.2	0.0	3.8	1.7	1.1	0.8	2.3	14.6	0.7	0.9	9.7	10.4
Lane Grp Delay (d), s/veh	31.1	0.0	31.5	28.1	27.4	23.7	39.7	23.2	12.4	36.4	16.7	18.9
Lane Grp LOS	C		C	C	C	C	D	C	B	D	B	B
Approach Vol, veh/h		427			278			2521			2104	
Approach Delay, s/veh		31.3			26.1			23.7			18.3	
Approach LOS		C			C			C			B	

Timer								
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		19.9			19.9		12.2	47.6		10.4	45.8	
Change Period (Y+Rc), s		6.0			6.0		6.0	6.0		6.0	6.0	
Max Green Setting (Gmax), s		40.0			38.0		18.0	40.0		18.0	40.0	
Max Q Clear Time (g_c+I1), s		11.4			5.8		6.8	31.3		4.1	23.4	
Green Ext Time (p_c), s		2.4			2.5		0.1	8.6		0.1	16.4	

Intersection Summary	
HCM 2010 Ctrl Delay	22.3
HCM 2010 LOS	C

Notes

Intersection

Intersection Delay, s/veh	150.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	18	5	90	0	0	23	207	2277	93	28	2010	56
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	275	-	200	250	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	5	93	0	0	24	213	2347	96	29	2072	58

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3589	4997	1065	3727	5026	1174	2130	0	0	2347	0	0
Stage 1	2159	2159	-	2838	2838	-	-	-	-	-	-	-
Stage 2	1430	2838	-	889	2188	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	# 6	# 1	188	5	1	159	# 107	-	-	83	-	-
Stage 1	29	86	-	9	38	-	-	-	-	-	-	-
Stage 2	126	38	-	276	83	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	# 4	# 1	188	-	1	159	# 107	-	-	83	-	-
Mov Capacity-2 Maneuver	# 4	# 1	-	-	1	-	-	-	-	-	-	-
Stage 1	29	56	-	9	38	-	-	-	-	-	-	-
Stage 2	107	38	-	83	54	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 4983.3	+	62.5	0.9
HCM LOS	F	-		

Minor Lane / Major Mvmt	NBU	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	100	# 107	-	-	11	+	83	-	-
HCM Lane V/C Ratio	0.32	1.994	-	-	10.59	+	0.348	-	-
HCM Control Delay (s)	-	$ 685	-	-	$ 4983.3	+	69.92	-	-
HCM Lane LOS	F				F	+	F		
HCM 95th %tile Q(veh)	1.231	17.797	-	-	15.929	+	1.336	-	-

Notes

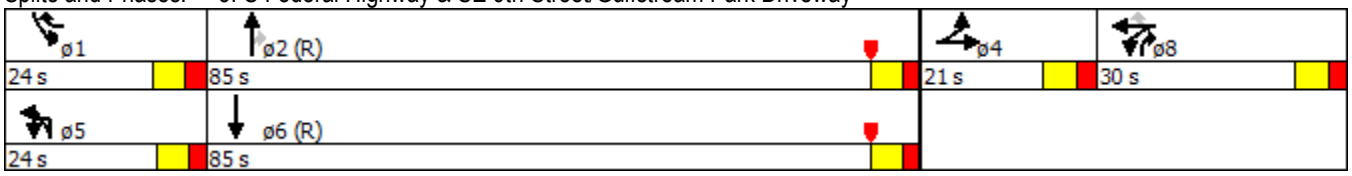
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	6	121	17	36	23	2369	74	47	2147
Turn Type	NA	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	8	8	1	5	2	8	1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	10.0	6.0	5.0	10.0
Minimum Split (s)	21.0	30.0	30.0	11.5	11.0	39.0	30.0	11.5	39.0
Total Split (s)	21.0	30.0	30.0	24.0	24.0	85.0	30.0	24.0	85.0
Total Split (%)	13.1%	18.8%	18.8%	15.0%	15.0%	53.1%	18.8%	15.0%	53.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	2.0	2.5	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.0	6.0	6.5	6.5	6.0
Lead/Lag				Lead	Lead	Lag		Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 80 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 135
Control Type: Actuated-Coordinated

Splits and Phases: 3: S Federal Highway & SE 9th Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	28	6	50	121	17	36	18	23	2369	74	47	2147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5		6.0	6.0	6.5	6.5	6.0
Lane Util. Factor		1.00		0.95	0.95	1.00		1.00	0.91	1.00	0.97	0.91
Frt		0.92		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.98		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1686		1681	1706	1583		1770	5085	1583	3433	5081
Flt Permitted		0.98		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1686		1681	1706	1583		1770	5085	1583	3433	5081
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	31	7	55	133	19	40	20	25	2603	81	52	2359
RTOR Reduction (vph)	0	34	0	0	0	36	0	0	0	20	0	0
Lane Group Flow (vph)	0	59	0	76	76	4	0	45	2603	61	52	2373
Turn Type	Split	NA		Split	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4		8	8	1	5	5	2	8	1	6
Permitted Phases						8				2		
Actuated Green, G (s)		10.0		11.6	11.6	17.1		7.1	107.4	119.0	5.5	106.3
Effective Green, g (s)		10.0		11.6	11.6	17.1		7.1	107.4	119.0	5.5	106.3
Actuated g/C Ratio		0.06		0.07	0.07	0.11		0.04	0.67	0.74	0.03	0.66
Clearance Time (s)		6.5		6.5	6.5	6.5		6.0	6.0	6.5	6.5	6.0
Vehicle Extension (s)		2.0		2.0	2.0	1.5		1.5	3.0	2.0	1.5	3.0
Lane Grp Cap (vph)		105		121	123	233		78	3413	1177	118	3375
v/s Ratio Prot		c0.04		c0.05	0.04	0.00		c0.03	c0.51	0.00	0.02	0.47
v/s Ratio Perm						0.00				0.03		
v/c Ratio		0.56		0.63	0.62	0.02		0.58	0.76	0.05	0.44	0.70
Uniform Delay, d1		72.9		72.1	72.0	63.9		75.0	17.7	5.5	75.7	16.9
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.26	1.00
Incremental Delay, d2		4.1		7.1	6.3	0.0		6.3	1.7	0.0	0.8	1.0
Delay (s)		77.0		79.2	78.4	64.0		81.3	19.4	5.5	95.9	18.0
Level of Service		E		E	E	E		F	B	A	F	B
Approach Delay (s)		77.0			75.7				20.0			19.7
Approach LOS		E			E				B			B

Intersection Summary

HCM 2000 Control Delay	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	13
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	14
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Intersection

Intersection Delay, s/veh	15.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	45	0	0	19	36	2599	62	12	2330	18
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	250	-	175	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	49	0	0	21	39	2825	67	13	2533	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	4007	5702	1276	4173	5712	1413	2552	0	0	2825	0	0
Stage 1	2568	2568	-	3134	3134	-	-	-	-	-	-	-
Stage 2	1439	3134	-	1039	2578	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	3	0	135	2	0	109	65	-	-	47	-	-
Stage 1	15	52	-	5	26	-	-	-	-	-	-	-
Stage 2	124	26	-	222	52	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	2	0	135	1	0	109	65	-	-	47	-	-
Mov Capacity-2 Maneuver	2	0	-	1	0	-	-	-	-	-	-	-
Stage 1	15	38	-	5	26	-	-	-	-	-	-	-
Stage 2	101	26	-	102	38	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	46.1	45.6	26.6	0.6
HCM LOS	E	E		

Minor Lane / Major Mvmt	NBU	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	# 90	65	-	-	135	109	47	-	-
HCM Lane V/C Ratio	1.28	0.602	-	-	0.362	0.189	0.278	-	-
HCM Control Delay (s)	-	$ 524.1	-	-	46.1	45.6	108.75	-	-
HCM Lane LOS	F				E	E	F		
HCM 95th %tile Q(veh)	8.336	2.541	-	-	1.496	0.662	0.943	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	110	23	455	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	27	535	0	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	535	267	0	0
Stage 1	535	-	-	-
Stage 2	0	-	-	-
Follow-up Headway	3.52	3.32	-	-
Pot Capacity-1 Maneuver	428	731	-	-
Stage 1	497	-	-	-
Stage 2	-	-	-	-
Time blocked-Platoon, %			-	-
Mov Capacity-1 Maneuver	428	731	-	-
Mov Capacity-2 Maneuver	428	-	-	-
Stage 1	497	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	15.8	0
HCM LOS	C	

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	WBLn2
Capacity (veh/h)	-	-	428	731
HCM Lane V/C Ratio	-	-	0.302	0.037
HCM Control Delay (s)	-	-	17	10.1
HCM Lane LOS			C	B
HCM 95th %tile Q(veh)	-	-	1.258	0.115

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Future Background Conditions

1: S Federal Highway & SE 3rd Street/Gulfstream Park Driveway

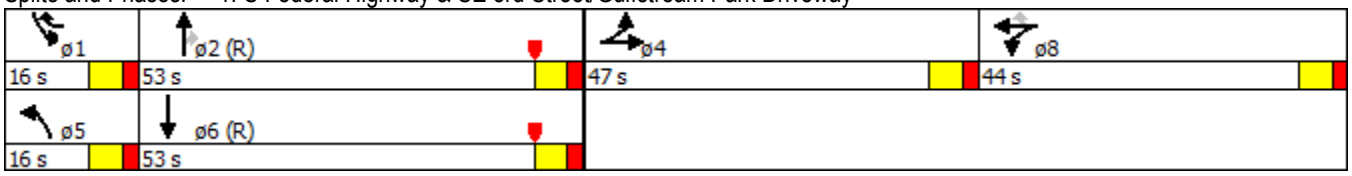
AM Peak Hour

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	60	22	7	10	34	1109	19	24	1917
Turn Type	NA	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	4	8	8	1	5	2		1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	45.0	42.0	42.0	11.0	11.0	38.0	38.0	11.0	38.0
Total Split (s)	47.0	44.0	44.0	16.0	16.0	53.0	53.0	16.0	53.0
Total Split (%)	29.4%	27.5%	27.5%	10.0%	10.0%	33.1%	33.1%	10.0%	33.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag				Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 113 (71%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: S Federal Highway & SE 3rd Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	60	291	22	7	10	34	1109	19	24	1917	8
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	190.0	186.3	190.0	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	190.0
Lanes	0	2	0	1	1	2	1	3	1	2	3	0
Cap, veh/h	260	155	363	407	427	809	59	2979	844	90	2927	12
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.04	0.71	0.71	0.03	0.53	0.53
Sat Flow, veh/h	1132	675	1583	1774	1863	3167	1774	5588	1583	3442	5562	22
Grp Volume(v), veh/h	166	0	303	23	7	10	35	1155	20	25	1337	668
Grp Sat Flow(s),veh/h/ln	1806	0	1583	1774	1863	1583	1774	1863	1583	1721	1863	1859
Q Serve(g_s), s	6.6	0.0	15.5	0.9	0.2	0.2	1.6	7.1	0.3	0.6	22.6	22.6
Cycle Q Clear(g_c), s	6.6	0.0	15.5	0.9	0.2	0.2	1.6	7.1	0.3	0.6	22.6	22.6
Prop In Lane	0.63		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	414	0	363	407	427	809	59	2979	844	90	1960	978
V/C Ratio(X)	0.40	0.00	0.83	0.06	0.02	0.01	0.60	0.39	0.02	0.28	0.68	0.68
Avail Cap(c_a), veh/h	870	0	762	792	831	1496	208	3085	874	404	2057	1026
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	27.8	0.0	31.3	25.6	25.4	23.7	40.1	6.8	5.8	40.7	14.9	14.9
Incr Delay (d2), s/veh	0.2	0.0	2.0	0.0	0.0	0.0	3.6	0.4	0.1	0.6	1.9	3.9
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 Back of Q (50%), veh/ln	3.0	0.0	6.3	0.4	0.1	0.1	0.8	2.6	0.1	0.3	10.4	10.9
Lane Grp Delay (d), s/veh	28.1	0.0	33.2	25.6	25.4	23.7	43.7	7.2	5.9	41.3	16.9	18.8
Lane Grp LOS	C		C	C	C	C	D	A	A	D	B	B
Approach Vol, veh/h		469			40			1210			2030	
Approach Delay, s/veh		31.4			25.1			8.2			17.8	
Approach LOS		C			C			A			B	

Timer								
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		25.5			25.5		8.8	51.4		8.2	50.8	
Change Period (Y+Rc), s		6.0			6.0		6.0	6.0		6.0	6.0	
Max Green Setting (Gmax), s		41.0			38.0		10.0	47.0		10.0	47.0	
Max Q Clear Time (g_c+I1), s		17.5			2.9		3.6	9.1		2.6	24.6	
Green Ext Time (p_c), s		2.0			2.1		0.0	32.2		0.0	20.2	

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Notes

Intersection

Intersection Delay, s/veh	32.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	21	5	97	0	0	2	87	1137	22	78	2122	51
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	275	-	200	250	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	5	104	0	0	2	94	1223	24	84	2282	55

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3153	3887	1168	2493	3914	611	2337	0	0	1223	0	0
Stage 1	2477	2477	-	1410	1410	-	-	-	-	-	-	-
Stage 2	676	1410	-	1083	2504	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	# 12	# 3	160	31	3	374	# 84	-	-	305	-	-
Stage 1	# 17	58	-	103	203	-	-	-	-	-	-	-
Stage 2	372	203	-	209	57	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	# 9	# 2	160	7	2	374	# 84	-	-	305	-	-
Mov Capacity-2 Maneuver	# 15	29	-	-	-	-	-	-	-	-	-	-
Stage 1	# 17	42	-	103	203	-	-	-	-	-	-	-
Stage 2	370	203	-	46	41	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 778.4	14.7	15.5	0.7
HCM LOS	F	B		

Minor Lane / Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	# 84	-	-	56	374	305	-	-
HCM Lane V/C Ratio	1.114	-	-	2.362	0.006	0.275	-	-
HCM Control Delay (s)	222.202	-	-	$ 778.4	14.7	21.22	-	-
HCM Lane LOS	F			F	B	C		
HCM 95th %tile Q(veh)	6.55	-	-	13.27	0.017	1.095	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

3: S Federal Highway & SE 9th Street/Gulfstream Park Driveway

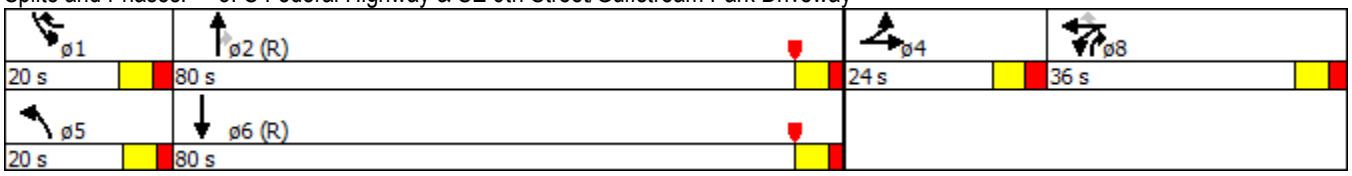
AM Peak Hour

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	2	16	1	5	22	1193	17	23	2061
Turn Type	NA	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	8	8	1	5	2	8	1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	10.0	6.0	5.0	10.0
Minimum Split (s)	24.0	36.0	36.0	11.5	11.0	39.0	36.0	11.5	39.0
Total Split (s)	24.0	36.0	36.0	20.0	20.0	80.0	36.0	20.0	80.0
Total Split (%)	15.0%	22.5%	22.5%	12.5%	12.5%	50.0%	22.5%	12.5%	50.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	2.0	2.5	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.0	6.0	6.5	6.5	6.0
Lead/Lag				Lead	Lead	Lag		Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 40 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated

Splits and Phases: 3: S Federal Highway & SE 9th Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	2	46	16	1	5	22	1193	17	23	2061	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5	6.0	6.0	6.5	6.5	6.0	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.90		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1662		1681	1694	1583	1770	5085	1583	3433	5079	
Flt Permitted		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1662		1681	1694	1583	1770	5085	1583	3433	5079	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	17	2	48	17	1	5	23	1256	18	24	2169	18
RTOR Reduction (vph)	0	46	0	0	0	5	0	0	4	0	0	0
Lane Group Flow (vph)	0	21	0	9	9	0	23	1256	14	24	2187	0
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		8	8	1	5	2	8	1	6	
Permitted Phases						8			2			
Actuated Green, G (s)		7.6		3.8	3.8	7.2	4.3	119.7	123.5	3.4	119.3	
Effective Green, g (s)		7.6		3.8	3.8	7.2	4.3	119.7	123.5	3.4	119.3	
Actuated g/C Ratio		0.05		0.02	0.02	0.05	0.03	0.75	0.77	0.02	0.75	
Clearance Time (s)		6.5		6.5	6.5	6.5	6.0	6.0	6.5	6.5	6.0	
Vehicle Extension (s)		2.0		2.0	2.0	1.5	1.5	3.0	2.0	1.5	3.0	
Lane Grp Cap (vph)		78		39	40	135	47	3804	1221	72	3787	
v/s Ratio Prot		c0.01		c0.01	0.01	0.00	c0.01	0.25	0.00	0.01	c0.43	
v/s Ratio Perm						0.00			0.01			
v/c Ratio		0.27		0.23	0.23	0.00	0.49	0.33	0.01	0.33	0.58	
Uniform Delay, d1		73.5		76.7	76.7	73.0	76.8	6.7	4.2	77.2	9.1	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.13	1.47	
Incremental Delay, d2		0.7		1.1	1.0	0.0	2.9	0.2	0.0	0.9	0.6	
Delay (s)		74.2		77.8	77.7	73.0	79.7	7.0	4.2	88.5	13.9	
Level of Service		E		E	E	E	E	A	A	F	B	
Approach Delay (s)		74.2			76.7			8.2			14.7	
Approach LOS		E			E			A			B	

Intersection Summary

HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection

Intersection Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	33	0	0	2	16	1281	16	24	2149	6
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	250	-	175	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	35	0	0	2	17	1377	17	26	2311	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3068	3894	1159	2504	3897	689	2317	0	0	1377	0	0
Stage 1	2366	2366	-	1528	1528	-	-	-	-	-	-	-
Stage 2	702	1528	-	976	2369	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	13	3	162	31	3	333	86	-	-	256	-	-
Stage 1	21	67	-	84	178	-	-	-	-	-	-	-
Stage 2	359	178	-	243	67	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	12	3	162	22	3	333	86	-	-	256	-	-
Mov Capacity-2 Maneuver	19	40	-	51	-	-	-	-	-	-	-	-
Stage 1	21	60	-	84	178	-	-	-	-	-	-	-
Stage 2	357	178	-	171	60	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	33.3	15.9	3.8	0.2
HCM LOS	D	C		

Minor Lane / Major Mvmt	NBU	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	137	86	-	-	162	333	256	-	-
HCM Lane V/C Ratio	0.424	0.2	-	-	0.219	0.006	0.101	-	-
HCM Control Delay (s)	-	74.9	-	-	33.3	15.9	20.633	-	-
HCM Lane LOS	F				D	C	C		
HCM 95th %tile Q(veh)	1.857	0.694	-	-	0.801	0.019	0.332	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	68	15	186	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	73	16	200	0	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	200	99	0	0
Stage 1	200	-	-	-
Stage 2	0	-	-	-
Follow-up Headway	3.52	3.32	-	-
Pot Capacity-1 Maneuver	741	937	-	-
Stage 1	783	-	-	-
Stage 2	-	-	-	-
Time blocked-Platoon, %			-	-
Mov Capacity-1 Maneuver	741	937	-	-
Mov Capacity-2 Maneuver	741	-	-	-
Stage 1	783	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	10.1	0
HCM LOS	B	

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	WBLn2
Capacity (veh/h)	-	-	741	937
HCM Lane V/C Ratio	-	-	0.099	0.017
HCM Control Delay (s)	-	-	10.4	8.9
HCM Lane LOS			B	A
HCM 95th %tile Q(veh)	-	-	0.327	0.053

Notes

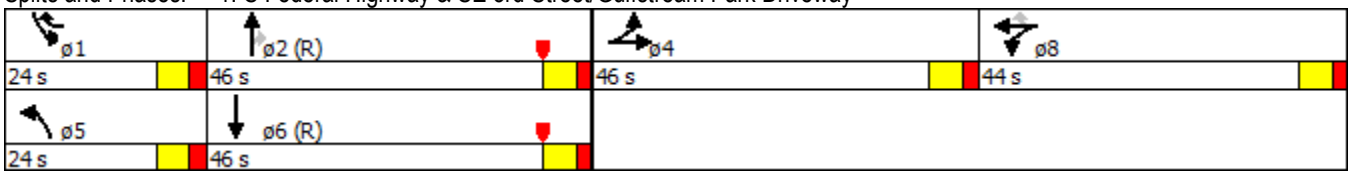
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	74	94	64	106	104	2238	55	91	1890
Turn Type	NA	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	4	8	8	1	5	2		1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	45.0	42.0	42.0	11.0	11.0	38.0	38.0	11.0	38.0
Total Split (s)	46.0	44.0	44.0	24.0	24.0	46.0	46.0	24.0	46.0
Total Split (%)	28.8%	27.5%	27.5%	15.0%	15.0%	28.8%	28.8%	15.0%	28.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag				Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 156 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: S Federal Highway & SE 3rd Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	139	74	193	94	64	106	104	2238	55	91	1890	19
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	190.0	186.3	190.0	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	190.0
Lanes	0	2	0	1	1	2	1	3	1	2	3	0
Cap, veh/h	211	113	284	318	334	746	142	2984	845	193	2817	28
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.36	0.36	0.06	0.51	0.51
Sat Flow, veh/h	1176	628	1583	1774	1863	3167	1774	5588	1583	3442	5524	55
Grp Volume(v), veh/h	227	0	205	100	68	113	111	2381	59	97	1356	675
Grp Sat Flow(s),veh/h/ln	1804	0	1583	1774	1863	1583	1774	1863	1583	1721	1863	1853
Q Serve(g_s), s	9.2	0.0	9.5	3.8	2.4	2.2	4.8	29.9	1.9	2.1	21.9	21.9
Cycle Q Clear(g_c), s	9.2	0.0	9.5	3.8	2.4	2.2	4.8	29.9	1.9	2.1	21.9	21.9
Prop In Lane	0.65		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	324	0	284	318	334	746	142	2984	845	193	1900	945
V/C Ratio(X)	0.70	0.00	0.72	0.31	0.20	0.15	0.78	0.80	0.07	0.50	0.71	0.71
Avail Cap(c_a), veh/h	924	0	811	863	906	1718	409	2984	845	793	1908	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	30.1	0.0	30.2	27.9	27.3	23.7	36.3	21.3	12.3	35.8	14.7	14.8
Incr Delay (d2), s/veh	1.0	0.0	1.3	0.2	0.1	0.0	3.5	2.3	0.2	0.7	2.3	4.6
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 Back of Q (50%), veh/ln	4.3	0.0	3.9	1.7	1.1	0.8	2.3	14.8	0.7	0.9	10.0	10.6
Lane Grp Delay (d), s/veh	31.1	0.0	31.5	28.1	27.4	23.7	39.7	23.6	12.5	36.5	17.1	19.4
Lane Grp LOS	C		C	C	C	C	D	C	B	D	B	B
Approach Vol, veh/h		432			281			2551			2128	
Approach Delay, s/veh		31.3			26.2			24.1			18.7	
Approach LOS		C			C			C			B	

Timer								
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		20.0			20.0		12.3	47.7		10.4	45.8	
Change Period (Y+Rc), s		6.0			6.0		6.0	6.0		6.0	6.0	
Max Green Setting (Gmax), s		40.0			38.0		18.0	40.0		18.0	40.0	
Max Q Clear Time (g_c+I1), s		11.5			5.8		6.8	31.9		4.1	23.9	
Green Ext Time (p_c), s		2.5			2.5		0.1	8.0		0.1	15.9	

Intersection Summary	
HCM 2010 Ctrl Delay	22.6
HCM 2010 LOS	C

Notes

Intersection

Intersection Delay, s/veh	153.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	18	5	91	0	0	23	209	2303	94	28	2033	57
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	275	-	200	250	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	5	94	0	0	24	215	2374	97	29	2096	59

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3628	5052	1077	3768	5081	1187	2155	0	0	2374	0	0
Stage 1	2183	2183	-	2869	2869	-	-	-	-	-	-	-
Stage 2	1445	2869	-	899	2212	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	# 6	# 1	184	5	0	155	# 104	-	-	80	-	-
Stage 1	28	83	-	9	36	-	-	-	-	-	-	-
Stage 2	123	36	-	272	80	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	# 4	# 1	184	-	0	155	# 104	-	-	80	-	-
Mov Capacity-2 Maneuver	# 4	# 1	-	-	0	-	-	-	-	-	-	-
Stage 1	28	53	-	9	36	-	-	-	-	-	-	-
Stage 2	104	36	-	77	51	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 5025.4	+	66.5	1
HCM LOS	F	-		

Minor Lane / Major Mvmt	NBU	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	94	# 104	-	-	11	+	80	-	-
HCM Lane V/C Ratio	0.34	2.072	-	-	10.684	+	0.361	-	-
HCM Control Delay (s)	-	$ 730.5	-	-	$ 5025.4	+	73.486	-	-
HCM Lane LOS	F				F	+	F		
HCM 95th %tile Q(veh)	1.321	18.339	-	-	16.06	+	1.391	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

3: S Federal Highway & SE 9th Street/Gulfstream Park Driveway

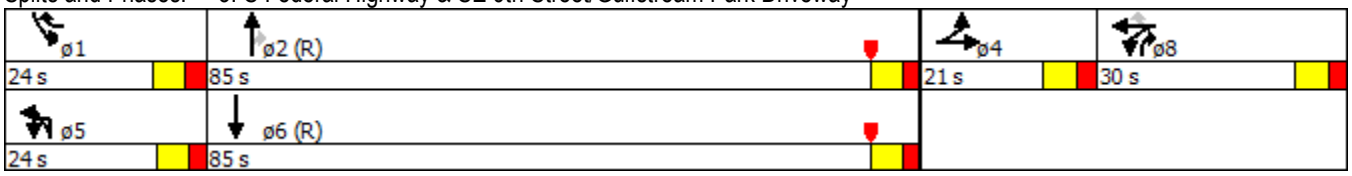
PM Peak Hour

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	6	122	17	36	23	2396	75	48	2172
Turn Type	NA	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	8	8	1	5	2	8	1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	10.0	6.0	5.0	10.0
Minimum Split (s)	21.0	30.0	30.0	11.5	11.0	39.0	30.0	11.5	39.0
Total Split (s)	21.0	30.0	30.0	24.0	24.0	85.0	30.0	24.0	85.0
Total Split (%)	13.1%	18.8%	18.8%	15.0%	15.0%	53.1%	18.8%	15.0%	53.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	2.0	2.5	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.0	6.0	6.5	6.5	6.0
Lead/Lag				Lead	Lead	Lag		Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 80 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 135
Control Type: Actuated-Coordinated

Splits and Phases: 3: S Federal Highway & SE 9th Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	28	6	51	122	17	36	18	23	2396	75	48	2172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5		6.0	6.0	6.5	6.5	6.0
Lane Util. Factor		1.00		0.95	0.95	1.00		1.00	0.91	1.00	0.97	0.91
Frt		0.92		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.98		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1685		1681	1705	1583		1770	5085	1583	3433	5081
Flt Permitted		0.98		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1685		1681	1705	1583		1770	5085	1583	3433	5081
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	31	7	56	134	19	40	20	25	2633	82	53	2387
RTOR Reduction (vph)	0	34	0	0	0	36	0	0	0	20	0	0
Lane Group Flow (vph)	0	60	0	76	77	4	0	45	2633	62	53	2401
Turn Type	Split	NA		Split	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4		8	8	1	5	5	2	8	1	6
Permitted Phases						8				2		
Actuated Green, G (s)		10.1		11.6	11.6	17.1		7.1	107.3	118.9	5.5	106.2
Effective Green, g (s)		10.1		11.6	11.6	17.1		7.1	107.3	118.9	5.5	106.2
Actuated g/C Ratio		0.06		0.07	0.07	0.11		0.04	0.67	0.74	0.03	0.66
Clearance Time (s)		6.5		6.5	6.5	6.5		6.0	6.0	6.5	6.5	6.0
Vehicle Extension (s)		2.0		2.0	2.0	1.5		1.5	3.0	2.0	1.5	3.0
Lane Grp Cap (vph)		106		121	123	233		78	3410	1176	118	3372
v/s Ratio Prot		c0.04		c0.05	0.05	0.00		c0.03	c0.52	0.00	0.02	0.47
v/s Ratio Perm						0.00				0.04		
v/c Ratio		0.57		0.63	0.63	0.02		0.58	0.77	0.05	0.45	0.71
Uniform Delay, d1		72.8		72.1	72.1	63.9		75.0	18.0	5.5	75.8	17.1
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.26	1.00
Incremental Delay, d2		4.1		7.1	7.0	0.0		6.3	1.8	0.0	0.8	1.1
Delay (s)		77.0		79.2	79.1	64.0		81.3	19.8	5.5	96.5	18.2
Level of Service		E		E	E	E		F	B	A	F	B
Approach Delay (s)		77.0			76.0				20.3			19.9
Approach LOS		E			E				C			B

Intersection Summary

HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	13
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	14
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Intersection

Intersection Delay, s/veh	16.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	46	0	0	19	36	2629	63	12	2357	18
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	250	-	175	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	50	0	0	21	39	2858	68	13	2562	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	4052	5766	1291	4219	5776	1429	2582	0	0	2858	0	0
Stage 1	2598	2598	-	3168	3168	-	-	-	-	-	-	-
Stage 2	1454	3168	-	1051	2608	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	3	0	132	2	0	106	63	-	-	45	-	-
Stage 1	14	50	-	5	25	-	-	-	-	-	-	-
Stage 2	122	25	-	219	50	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	2	0	132	1	0	106	63	-	-	45	-	-
Mov Capacity-2 Maneuver	2	0	-	1	0	-	-	-	-	-	-	-
Stage 1	14	36	-	5	25	-	-	-	-	-	-	-
Stage 2	98	25	-	97	36	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	48	47	29	0.6
HCM LOS	E	E		

Minor Lane / Major Mvmt	NBU	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	# 85	63	-	-	132	106	45	-	-
HCM Lane V/C Ratio	1.368	0.621	-	-	0.379	0.195	0.29	-	-
HCM Control Delay (s)	-	$ 575	-	-	48	47	114.862	-	-
HCM Lane LOS	F				E	E	F		
HCM 95th %tile Q(veh)	8.844	2.619	-	-	1.584	0.682	0.983	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	111	23	460	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	131	27	541	0	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	541	270	0	0
Stage 1	541	-	-	-
Stage 2	0	-	-	-
Follow-up Headway	3.52	3.32	-	-
Pot Capacity-1 Maneuver	424	728	-	-
Stage 1	493	-	-	-
Stage 2	-	-	-	-
Time blocked-Platoon, %			-	-
Mov Capacity-1 Maneuver	424	728	-	-
Mov Capacity-2 Maneuver	424	-	-	-
Stage 1	493	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	16	0
HCM LOS	C	

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	WBLn2
Capacity (veh/h)	-	-	424	728
HCM Lane V/C Ratio	-	-	0.308	0.037
HCM Control Delay (s)	-	-	17.2	10.1
HCM Lane LOS			C	B
HCM 95th %tile Q(veh)	-	-	1.29	0.116

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

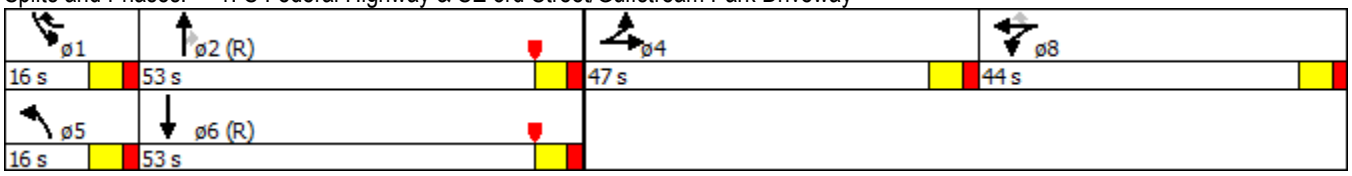
Future Total Conditions

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	60	23	7	10	35	1144	20	24	1953
Turn Type	NA	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	4	8	8	1	5	2		1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	45.0	42.0	42.0	11.0	11.0	38.0	38.0	11.0	38.0
Total Split (s)	47.0	44.0	44.0	16.0	16.0	53.0	53.0	16.0	53.0
Total Split (%)	29.4%	27.5%	27.5%	10.0%	10.0%	33.1%	33.1%	10.0%	33.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag				Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 113 (71%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: S Federal Highway & SE 3rd Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	60	296	23	7	10	35	1144	20	24	1953	8
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	190.0	186.3	190.0	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	190.0
Lanes	0	2	0	1	1	2	1	3	1	2	3	0
Cap, veh/h	263	157	368	412	432	818	59	2975	843	90	2920	11
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.04	0.71	0.71	0.03	0.53	0.53
Sat Flow, veh/h	1132	675	1583	1774	1863	3167	1774	5588	1583	3442	5563	22
Grp Volume(v), veh/h	166	0	308	24	7	10	36	1192	21	25	1362	680
Grp Sat Flow(s),veh/h/ln	1806	0	1583	1774	1863	1583	1774	1863	1583	1721	1863	1859
Q Serve(g_s), s	6.7	0.0	15.9	0.9	0.2	0.2	1.7	7.5	0.3	0.6	23.5	23.6
Cycle Q Clear(g_c), s	6.7	0.0	15.9	0.9	0.2	0.2	1.7	7.5	0.3	0.6	23.5	23.6
Prop In Lane	0.63		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	419	0	368	412	432	818	59	2975	843	90	1956	976
V/C Ratio(X)	0.40	0.00	0.84	0.06	0.02	0.01	0.61	0.40	0.02	0.28	0.70	0.70
Avail Cap(c_a), veh/h	861	0	755	784	823	1482	206	3054	865	400	2036	1016
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	27.9	0.0	31.5	25.7	25.4	23.7	40.5	7.0	5.9	41.1	15.3	15.3
Incr Delay (d2), s/veh	0.2	0.0	2.0	0.0	0.0	0.0	3.6	0.4	0.1	0.6	2.1	4.1
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 Back of Q (50%), veh/ln	3.1	0.0	6.5	0.4	0.1	0.1	0.8	2.8	0.1	0.3	10.6	11.1
Lane Grp Delay (d), s/veh	28.1	0.0	33.5	25.7	25.5	23.7	44.2	7.4	6.0	41.7	17.4	19.4
Lane Grp LOS	C		C	C	C	C	D	A	A	D	B	B
Approach Vol, veh/h		474			41			1249			2067	
Approach Delay, s/veh		31.6			25.2			8.4			18.3	
Approach LOS		C			C			A			B	

Timer								
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		26.0			26.0		8.9	51.8		8.2	51.2	
Change Period (Y+Rc), s		6.0			6.0		6.0	6.0		6.0	6.0	
Max Green Setting (Gmax), s		41.0			38.0		10.0	47.0		10.0	47.0	
Max Q Clear Time (g_c+I1), s		17.9			2.9		3.7	9.5		2.6	25.6	
Green Ext Time (p_c), s		2.0			2.1		0.0	32.4		0.0	19.6	

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B

Notes

Intersection

Intersection Delay, s/veh	34.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	21	5	99	0	0	2	89	1174	23	78	2164	51
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	275	-	200	250	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	5	106	0	0	2	96	1262	25	84	2327	55

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3218	3976	1191	2555	4003	631	2382	0	0	1262	0	0
Stage 1	2522	2522	-	1454	1454	-	-	-	-	-	-	-
Stage 2	696	1454	-	1101	2549	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	# 11	# 3	154	28	3	363	# 80	-	-	292	-	-
Stage 1	# 16	55	-	95	193	-	-	-	-	-	-	-
Stage 2	362	193	-	203	54	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	# 9	# 2	154	6	2	363	# 80	-	-	292	-	-
Mov Capacity-2 Maneuver	# 14	27	-	-	-	-	-	-	-	-	-	-
Stage 1	# 16	39	-	95	193	-	-	-	-	-	-	-
Stage 2	360	193	-	38	38	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 839	15	17.7	0.8
HCM LOS	F	C		

Minor Lane / Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	# 80	-	-	54	363	292	-	-
HCM Lane V/C Ratio	1.196	-	-	2.489	0.006	0.287	-	-
HCM Control Delay (s)	255.935	-	-	$ 839	15	22.222	-	-
HCM Lane LOS	F			F	C	C		
HCM 95th %tile Q(veh)	7.052	-	-	13.724	0.018	1.157	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

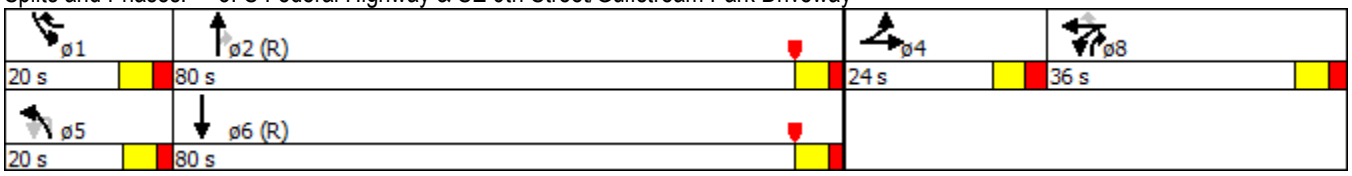
3: S Federal Highway & SE 9th Street/Gulfstream Park Driveway

Lane Group	EBT	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Volume (vph)	2	17	1	5	29	24	1234	18	23	2105
Turn Type	NA	Split	NA	pm+ov	custom	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	8	8	1		5	2	8	1	6
Permitted Phases				8	5			2		
Detector Phase	4	8	8	1	5	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	5.0	10.0	6.0	5.0	10.0
Minimum Split (s)	24.0	36.0	36.0	11.5	11.0	11.0	39.0	36.0	11.5	39.0
Total Split (s)	24.0	36.0	36.0	20.0	20.0	20.0	80.0	36.0	20.0	80.0
Total Split (%)	15.0%	22.5%	22.5%	12.5%	12.5%	12.5%	50.0%	22.5%	12.5%	50.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.5	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5		6.0	6.0	6.5	6.5	6.0
Lead/Lag				Lead	Lead	Lead	Lag		Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 40 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 135
Control Type: Actuated-Coordinated

Splits and Phases: 3: S Federal Highway & SE 9th Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	16	2	50	17	1	5	29	24	1234	18	23	2105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5		6.0	6.0	6.5	6.5	6.0
Lane Util. Factor		1.00		0.95	0.95	1.00		1.00	0.91	1.00	0.97	0.91
Frt		0.90		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.99		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1658		1681	1694	1583		1770	5085	1583	3433	5079
Flt Permitted		0.99		0.95	0.96	1.00		0.13	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1658		1681	1694	1583		237	5085	1583	3433	5079
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	17	2	53	18	1	5	32	25	1299	19	24	2216
RTOR Reduction (vph)	0	50	0	0	0	5	0	0	0	4	0	0
Lane Group Flow (vph)	0	22	0	10	9	0	0	57	1299	15	24	2234
Turn Type	Split	NA		Split	NA	pm+ov	custom	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4		8	8	1		5	2	8	1	6
Permitted Phases						8	5			2		
Actuated Green, G (s)		7.6		3.9	3.9	7.3		31.5	119.6	123.5	3.4	92.0
Effective Green, g (s)		7.6		3.9	3.9	7.3		31.5	119.6	123.5	3.4	92.0
Actuated g/C Ratio		0.05		0.02	0.02	0.05		0.20	0.75	0.77	0.02	0.58
Clearance Time (s)		6.5		6.5	6.5	6.5		6.0	6.0	6.5	6.5	6.0
Vehicle Extension (s)		2.0		2.0	2.0	1.5		1.5	3.0	2.0	1.5	3.0
Lane Grp Cap (vph)		78		40	41	136		46	3801	1221	72	2920
v/s Ratio Prot		c0.01		c0.01	0.01	0.00			0.26	0.00	0.01	c0.44
v/s Ratio Perm						0.00		c0.24		0.01		
v/c Ratio		0.28		0.25	0.22	0.00		1.24	0.34	0.01	0.33	0.76
Uniform Delay, d1		73.5		76.6	76.6	72.9		64.2	6.9	4.2	77.2	25.8
Progression Factor		1.00		1.00	1.00	1.00		1.01	1.00	1.00	1.13	1.39
Incremental Delay, d2		0.7		1.2	1.0	0.0		211.0	0.2	0.0	0.9	1.7
Delay (s)		74.2		77.8	77.5	72.9		276.1	7.1	4.2	87.9	37.6
Level of Service		E		E	E	E		F	A	A	F	D
Approach Delay (s)		74.2			76.7				18.2			38.1
Approach LOS		E			E				B			D

Intersection Summary

HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	17
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	18
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Intersection

Intersection Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	33	0	0	2	16	1330	16	24	2242	10
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	250	-	175	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	35	0	0	2	17	1430	17	26	2411	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3243	4101	1211	2649	4106	715	2422	0	0	1430	0	0
Stage 1	2520	2520	-	1581	1581	-	-	-	-	-	-	-
Stage 2	723	1581	-	1068	2525	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	10	2	150	25	2	320	76	-	-	241	-	-
Stage 1	16	55	-	77	167	-	-	-	-	-	-	-
Stage 2	349	167	-	213	55	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	10	2	150	19	2	320	76	-	-	241	-	-
Mov Capacity-2 Maneuver	10	2	-	19	2	-	-	-	-	-	-	-
Stage 1	16	55	-	77	167	-	-	-	-	-	-	-
Stage 2	347	167	-	163	55	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	36.3	16.3	4.7	0.4
HCM LOS	E	C		

Minor Lane / Major Mvmt	NBU	NBL	NBT	NBR	EBLn1	WBLn1	SBU	SBL	SBT	SBR
Capacity (veh/h)	122	76	-	-	150	320	411	241	-	-
HCM Lane V/C Ratio	0.476	0.226	-	-	0.237	0.007	0.063	0.107	-	-
HCM Control Delay (s)	-	94.5	-	-	36.3	16.3	-	19.2	-	-
HCM Lane LOS	F				E	C	C			
HCM 95th %tile Q(veh)	2.147	0.792	-	-	0.876	0.02	0.202	0.355	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	72	17	186	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	18	200	0	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	200	99	0	0
Stage 1	200	-	-	-
Stage 2	0	-	-	-
Follow-up Headway	3.52	3.32	-	-
Pot Capacity-1 Maneuver	741	937	-	-
Stage 1	783	-	-	-
Stage 2	-	-	-	-
Time blocked-Platoon, %			-	-
Mov Capacity-1 Maneuver	741	937	-	-
Mov Capacity-2 Maneuver	741	-	-	-
Stage 1	783	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	10.1	0
HCM LOS	B	

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	WBLn2
Capacity (veh/h)	-	-	741	937
HCM Lane V/C Ratio	-	-	0.104	0.02
HCM Control Delay (s)	-	-	10.4	8.9
HCM Lane LOS			B	A
HCM 95th %tile Q(veh)	-	-	0.349	0.06

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	1331	2147	81
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	1447	2334	88
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					231	
pX, platoon unblocked	0.68	0.68	0.68			
vC, conflicting volume	2860	627	2422			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1396	0	753			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	90	740	581			

Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	482	482	482	667	667	667	421
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	88
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.28	0.28	0.28	0.39	0.39	0.39	0.25
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	124	0	1331	2147	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	135	0	1447	2334	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					337	
pX, platoon unblocked	0.69	0.69	0.69			
vC, conflicting volume	2816	583	2334			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1400	0	703			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	82	100			
cM capacity (veh/h)	91	751	616			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	135	482	482	482	583	583	583	583
Volume Left	0	0	0	0	0	0	0	0
Volume Right	135	0	0	0	0	0	0	0
cSH	751	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.18	0.28	0.28	0.28	0.34	0.34	0.34	0.34
Queue Length 95th (ft)	13	0	0	0	0	0	0	0
Control Delay (s)	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B							
Approach Delay (s)	10.8	0.0			0.0			
Approach LOS	B							

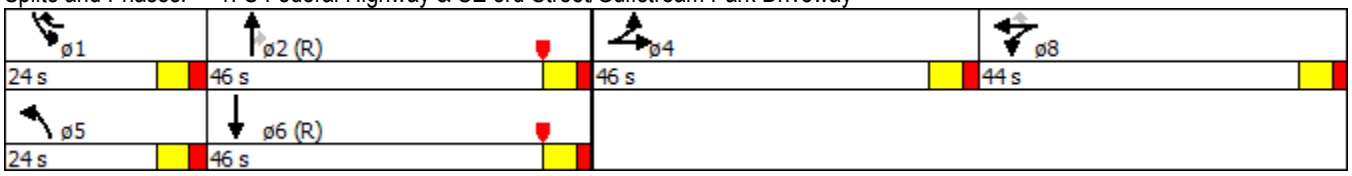
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	74	96	64	106	106	2272	56	91	1935
Turn Type	NA	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	4	8	8	1	5	2		1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	12.0	12.0	5.0	12.0
Minimum Split (s)	45.0	42.0	42.0	11.0	11.0	38.0	38.0	11.0	38.0
Total Split (s)	46.0	44.0	44.0	24.0	24.0	46.0	46.0	24.0	46.0
Total Split (%)	28.8%	27.5%	27.5%	15.0%	15.0%	28.8%	28.8%	15.0%	28.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag				Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 156 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: S Federal Highway & SE 3rd Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	139	74	198	96	64	106	106	2272	56	91	1935	19
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	190.0	186.3	190.0	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	190.0
Lanes	0	2	0	1	1	2	1	3	1	2	3	0
Cap, veh/h	215	115	290	325	341	756	145	2975	843	192	2800	27
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.36	0.36	0.06	0.51	0.51
Sat Flow, veh/h	1176	628	1583	1774	1863	3167	1774	5588	1583	3442	5525	54
Grp Volume(v), veh/h	227	0	211	102	68	113	113	2417	60	97	1388	691
Grp Sat Flow(s),veh/h/ln	1804	0	1583	1774	1863	1583	1774	1863	1583	1721	1863	1853
Q Serve(g_s), s	9.3	0.0	9.9	3.9	2.4	2.2	4.9	30.8	2.0	2.2	23.0	23.1
Cycle Q Clear(g_c), s	9.3	0.0	9.9	3.9	2.4	2.2	4.9	30.8	2.0	2.2	23.0	23.1
Prop In Lane	0.65		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	330	0	290	325	341	756	145	2975	843	192	1888	939
V/C Ratio(X)	0.69	0.00	0.73	0.31	0.20	0.15	0.78	0.81	0.07	0.50	0.74	0.74
Avail Cap(c_a), veh/h	917	0	805	857	900	1706	406	2975	843	787	1894	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	30.0	0.0	30.3	27.9	27.3	23.6	36.5	21.8	12.5	36.1	15.3	15.3
Incr Delay (d2), s/veh	1.0	0.0	1.3	0.2	0.1	0.0	3.4	2.5	0.2	0.8	2.6	5.1
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 Back of Q (50%), veh/ln	4.2	0.0	4.0	1.7	1.1	0.8	2.4	15.2	0.7	0.9	10.5	11.1
Lane Grp Delay (d), s/veh	31.0	0.0	31.6	28.1	27.4	23.7	39.9	24.3	12.6	36.8	17.8	20.4
Lane Grp LOS	C		C	C	C	C	D	C	B	D	B	C
Approach Vol, veh/h		438			283			2590			2176	
Approach Delay, s/veh		31.3			26.1			24.7			19.5	
Approach LOS		C			C			C			B	

Timer												
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		20.4			20.4		12.4	47.9		10.4	45.9	
Change Period (Y+Rc), s		6.0			6.0		6.0	6.0		6.0	6.0	
Max Green Setting (Gmax), s		40.0			38.0		18.0	40.0		18.0	40.0	
Max Q Clear Time (g_c+I1), s		11.9			5.9		6.9	32.8		4.2	25.1	
Green Ext Time (p_c), s		2.5			2.5		0.1	7.1		0.1	14.8	

Intersection Summary												
HCM 2010 Ctrl Delay			23.2									
HCM 2010 LOS			C									

Notes

Intersection

Intersection Delay, s/veh	115.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	18	5	94	0	0	23	212	2340	95	28	2085	57
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	275	-	200	250	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	5	97	0	0	24	219	2412	98	29	2149	59

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3703	5150	1104	3833	5179	1206	2208	0	0	2412	0	0
Stage 1	2237	2237	-	2913	2913	-	-	-	-	-	-	-
Stage 2	1466	2913	-	920	2266	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	# 5	# 0	177	4	0	151	# 98	-	-	77	-	-
Stage 1	26	78	-	8	34	-	-	-	-	-	-	-
Stage 2	119	34	-	264	75	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	# 3	# 0	177	1	0	151	# 98	-	-	77	-	-
Mov Capacity-2 Maneuver	# 3	# 0	-	1	0	-	-	-	-	-	-	-
Stage 1	26	49	-	8	34	-	-	-	-	-	-	-
Stage 2	100	34	-	67	47	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 3187.2	33.2	74.9	1
HCM LOS	F	D		

Minor Lane / Major Mvmt	NBU	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	83	# 98	-	-	17	151	77	-	-
HCM Lane V/C Ratio	0.385	2.23	-	-	7.095	0.157	0.375	-	-
HCM Control Delay (s)	-	$ 825.9	-	-	$ 3187.2	33.2	77.445	-	-
HCM Lane LOS	F				F	D	F		
HCM 95th %tile Q(veh)	1.517	19.313	-	-	15.813	0.54	1.45	-	-

Notes

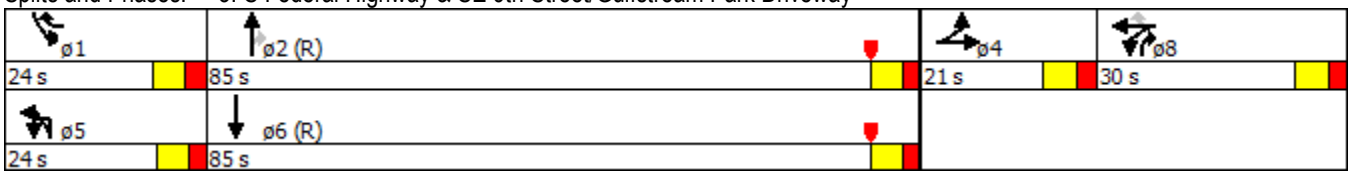
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	6	125	17	36	25	2437	76	48	2227
Turn Type	NA	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	8	8	1	5	2	8	1	6
Permitted Phases				8			2		
Detector Phase	4	8	8	1	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	5.0	5.0	10.0	6.0	5.0	10.0
Minimum Split (s)	21.0	30.0	30.0	11.5	11.0	39.0	30.0	11.5	39.0
Total Split (s)	21.0	30.0	30.0	24.0	24.0	85.0	30.0	24.0	85.0
Total Split (%)	13.1%	18.8%	18.8%	15.0%	15.0%	53.1%	18.8%	15.0%	53.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	2.0	2.5	2.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.0	6.0	6.5	6.5	6.0
Lead/Lag				Lead	Lead	Lag		Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 80 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 3: S Federal Highway & SE 9th Street/Gulfstream Park Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	28	6	60	125	17	36	82	25	2437	76	48	2227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5		6.0	6.0	6.5	6.5	6.0
Lane Util. Factor		1.00		0.95	0.95	1.00		1.00	0.91	1.00	0.97	0.91
Frt		0.91		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.99		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1678		1681	1705	1583		1770	5085	1583	3433	5081
Flt Permitted		0.99		0.95	0.96	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1678		1681	1705	1583		1770	5085	1583	3433	5081
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	31	7	66	137	19	40	90	27	2678	84	53	2447
RTOR Reduction (vph)	0	40	0	0	0	36	0	0	0	21	0	0
Lane Group Flow (vph)	0	64	0	78	78	4	0	117	2678	63	53	2461
Turn Type	Split	NA		Split	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4		8	8	1	5	5	2	8	1	6
Permitted Phases						8				2		
Actuated Green, G (s)		10.3		11.8	11.8	17.3		14.4	106.9	118.7	5.5	98.5
Effective Green, g (s)		10.3		11.8	11.8	17.3		14.4	106.9	118.7	5.5	98.5
Actuated g/C Ratio		0.06		0.07	0.07	0.11		0.09	0.67	0.74	0.03	0.62
Clearance Time (s)		6.5		6.5	6.5	6.5		6.0	6.0	6.5	6.5	6.0
Vehicle Extension (s)		2.0		2.0	2.0	1.5		1.5	3.0	2.0	1.5	3.0
Lane Grp Cap (vph)		108		123	125	235		159	3397	1174	118	3127
v/s Ratio Prot		c0.04		c0.05	0.05	0.00		c0.07	c0.53	0.00	0.02	0.48
v/s Ratio Perm						0.00				0.04		
v/c Ratio		0.59		0.63	0.62	0.02		0.74	0.79	0.05	0.45	0.79
Uniform Delay, d1		72.8		72.0	71.9	63.8		70.9	18.6	5.6	75.8	22.9
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.27	1.05
Incremental Delay, d2		5.6		7.6	6.8	0.0		14.1	1.9	0.0	0.8	1.7
Delay (s)		78.4		79.6	78.7	63.8		85.0	20.6	5.6	96.9	25.7
Level of Service		E		E	E	E		F	C	A	F	C
Approach Delay (s)		78.4			76.0				22.7			27.2
Approach LOS		E			E				C			C

Intersection Summary

HCM 2000 Control Delay	27.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	13
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	14
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Intersection

Intersection Delay, s/veh	19

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	46	0	0	19	36	2713	63	13	2418	22
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	250	-	175	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	50	0	0	21	39	2949	68	14	2628	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	4211	5981	1326	4392	5993	1474	2652	0	0	2949	0	0
Stage 1	2721	2721	-	3260	3260	-	-	-	-	-	-	-
Stage 2	1490	3260	-	1132	2733	-	-	-	-	-	-	-
Follow-up Headway	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Capacity-1 Maneuver	2	0	125	2	0	99	58	-	-	40	-	-
Stage 1	11	43	-	4	22	-	-	-	-	-	-	-
Stage 2	115	22	-	194	43	-	-	-	-	-	-	-
Time blocked-Platoon, %								-	-		-	-
Mov Capacity-1 Maneuver	2	0	125	1	0	99	58	-	-	40	-	-
Mov Capacity-2 Maneuver	2	0	-	1	0	-	-	-	-	-	-	-
Stage 1	11	43	-	4	22	-	-	-	-	-	-	-
Stage 2	91	22	-	116	43	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	51.8	50.7	32.4	2.3
HCM LOS	F	F		

Minor Lane / Major Mvmt	NBU	NBL	NBT	NBR	EBLn1	WBLn1	SBU	SBL	SBT	SBR
Capacity (veh/h)	# 78	58	-	-	125	99	78	40	-	-
HCM Lane V/C Ratio	1.491	0.675	-	-	0.4	0.209	0.334	0.353	-	-
HCM Control Delay (s)	-	$ 660.5	-	-	51.8	50.7	-	151.2	-	-
HCM Lane LOS	F				F	F	F			
HCM 95th %tile Q(veh)	9.419	2.829	-	-	1.694	0.736	1.262	1.196	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	114	26	460	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	134	31	541	0	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	541	270	0	0
Stage 1	541	-	-	-
Stage 2	0	-	-	-
Follow-up Headway	3.52	3.32	-	-
Pot Capacity-1 Maneuver	424	728	-	-
Stage 1	493	-	-	-
Stage 2	-	-	-	-
Time blocked-Platoon, %			-	-
Mov Capacity-1 Maneuver	424	728	-	-
Mov Capacity-2 Maneuver	424	-	-	-
Stage 1	493	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	16.1	0
HCM LOS	C	

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	WBLn2
Capacity (veh/h)	-	-	424	728
HCM Lane V/C Ratio	-	-	0.316	0.042
HCM Control Delay (s)	-	-	17.4	10.2
HCM Lane LOS			C	B
HCM 95th %tile Q(veh)	-	-	1.339	0.131

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	2689	2363	134
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	2923	2568	146
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					231	
pX, platoon unblocked	0.65	0.65	0.65			
vC, conflicting volume	3616	715	2714			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2356	0	978			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	19	710	459			

Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	974	974	974	734	734	734	513
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	146
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.57	0.57	0.57	0.43	0.43	0.43	0.30
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	93	0	2689	2363	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	101	0	2923	2568	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					309	
pX, platoon unblocked	0.67	0.67	0.67			
vC, conflicting volume	3543	642	2568			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2308	0	844			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	86	100			
cM capacity (veh/h)	21	722	525			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	101	974	974	974	642	642	642	642
Volume Left	0	0	0	0	0	0	0	0
Volume Right	101	0	0	0	0	0	0	0
cSH	722	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.14	0.57	0.57	0.57	0.38	0.38	0.38	0.38
Queue Length 95th (ft)	12	0	0	0	0	0	0	0
Control Delay (s)	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B							
Approach Delay (s)	10.8	0.0			0.0			
Approach LOS	B							

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		