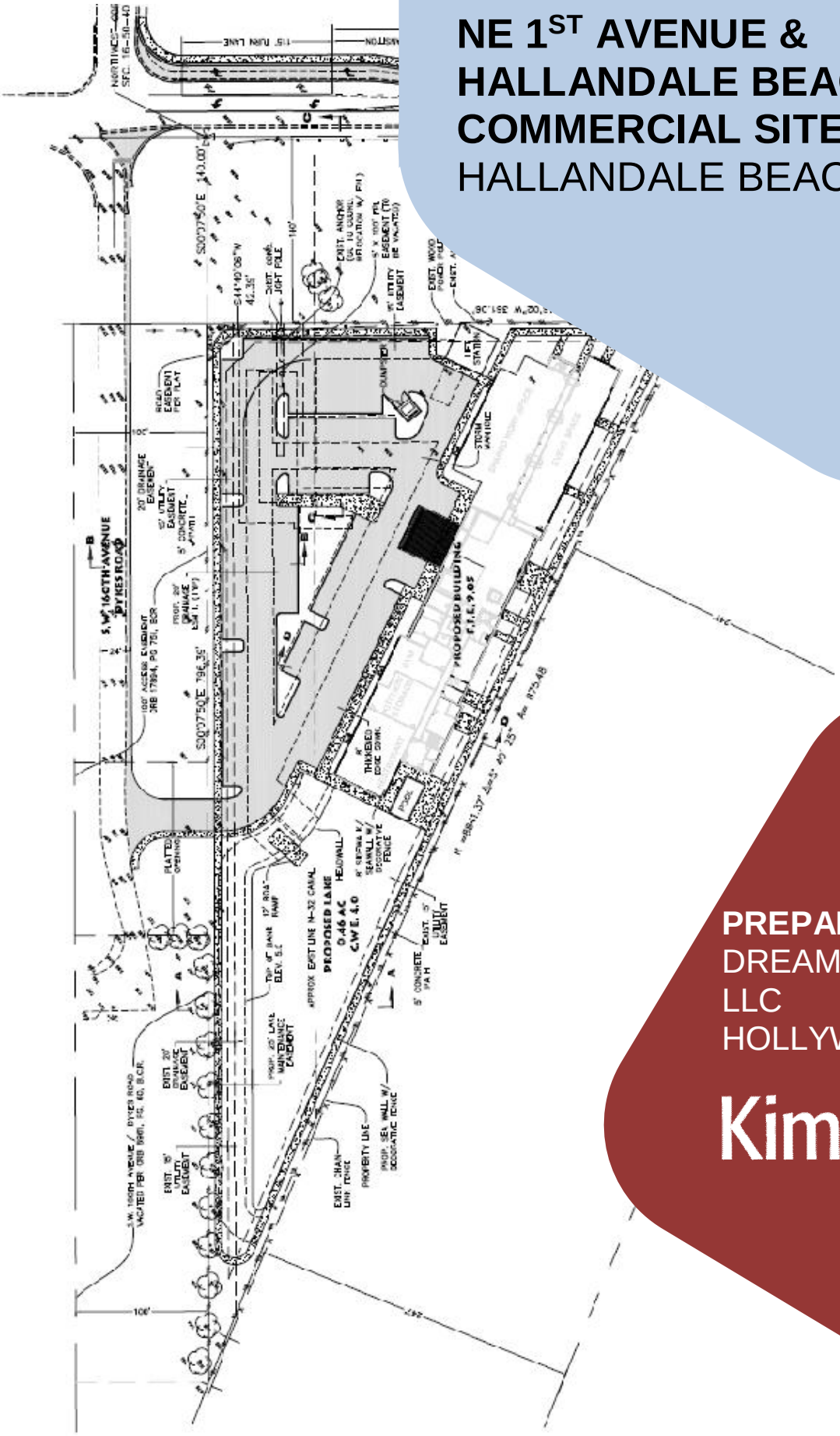
TRAFFIC IMPACT ANALYSIS

NE 1ST AVENUE & HALLANDALE BEACH BLVD COMMERCIAL SITE

HALLANDALE BEACH, FL



PREPARED FOR:
DREAM TEAM DEVELOPERS, LLC
HOLLYWOOD, FL

Kimley»Horn

Project #144992000
June 2015
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COMMERCIAL SITE
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Prepared by:
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West Palm Beach, Florida

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STATE OF FLORIDA
PROFESSIONAL ENGINEER

6/25/15

Christopher W. Heggen, P.E.
Florida Registration Number 58636

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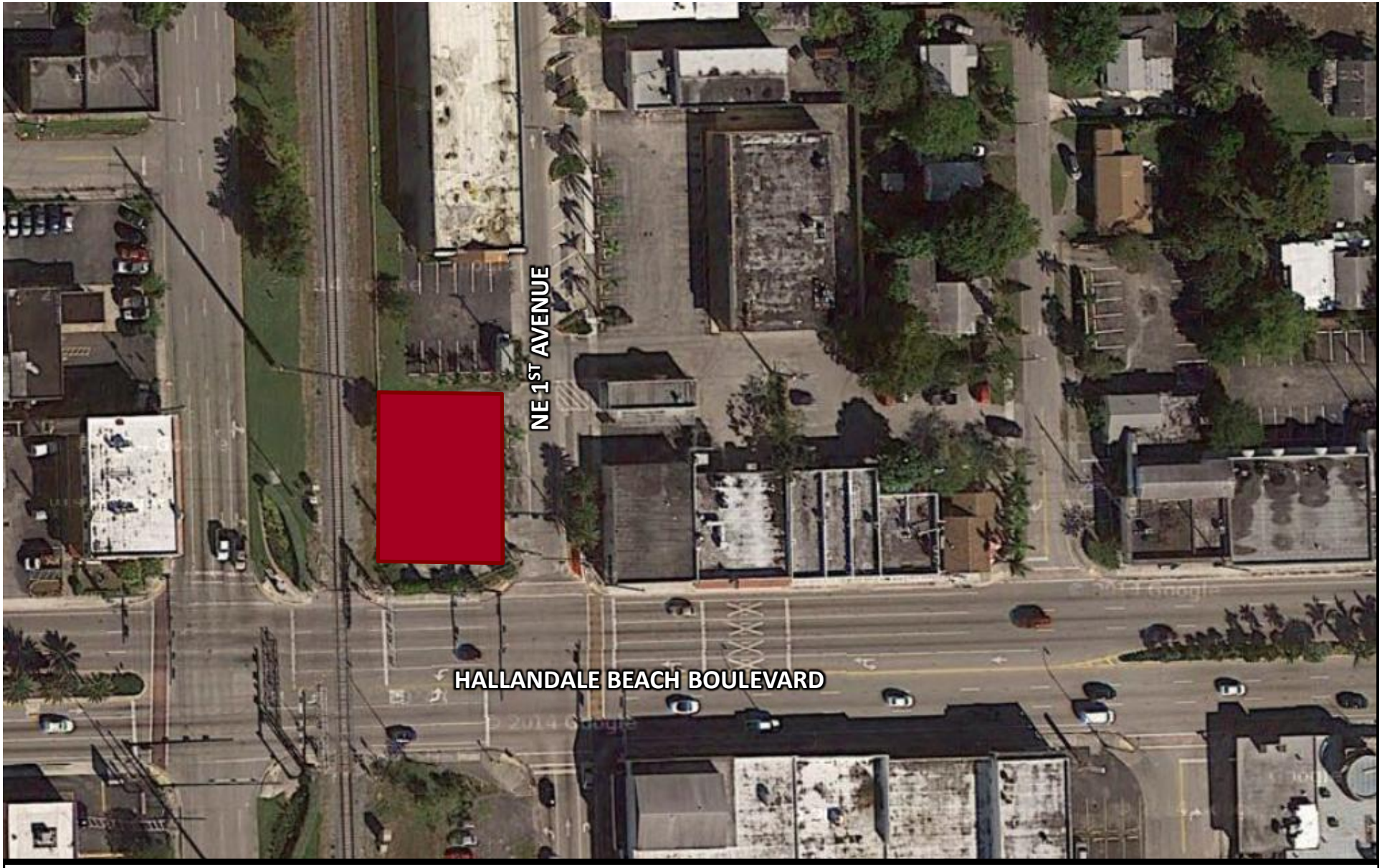
INTRODUCTION

A 1,855 square foot commercial building is proposed to be built on the northwest corner of Hallandale Beach Boulevard & East 1st Avenue in the City of Hallandale Beach, Florida. Figure 1 illustrates the location of the proposed development.

Kimley-Horn and Associates, Inc. has prepared this traffic impact statement 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. This report summarizes the data collection, project trip generation and distribution and link analysis.



NORTH

LEGEND

SITE LOCATION

FIGURE 1: SITE LOCATION
NE 1ST AVENUE & HALLANDALE BEACH BOULEVARD COMMERCIAL

Kimley»Horn

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 currently contains a paved parking lot. The site is proposed to be redeveloped with a one-story 1,855 square foot commercial building.

Trip Generation

The trip generation potential for amendment site was calculated using equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation, Ninth Edition*. For the purposes of this analysis, the ITE "Specialty Retail Center" land use (Land Use 826) was identified as most closely representing the characteristics of the proposed use. Table 1 summarizes the trip generation potential during the daily and PM peak hours.

TABLE 1
NE 1ST AVENUE & HALLANDALE BEACH BOULEVARD COMMERCIAL
TRIP GENERATION

Land Use	Intensity	Daily Trips	PM Peak Hour		
			Total	In	Out
Proposed Development					
Specialty Retail Center	1,855 s.f.	117	26	11	15
Pass-By Traffic					
Specialty Retail Center	34%	40	9	4	5
Net New External Trips		*77*	*17*	*7*	*10*

Note: Trip generation was calculated using the following data obtained from Institute of Transportation Engineers:

Daily Traffic Generation

Specialty Retail Center	[ITE 826]	=	T = 42.78(X)+ 37.66

PM Peak Hour Traffic Generation

Specialty Retail Center	[ITE 826]	=	T = 2.4(X) +21.48; (44% in, 56% out)

Pass-by

Specialty Retail Center	[ITE 826]	=	*ITE average rate of 34% [ITE 820] was used

k:\wpb_tpto\1449\144992000 hallandale & 1st\[6-24-15-tripgen.xlsx]tgen

Trip Distribution

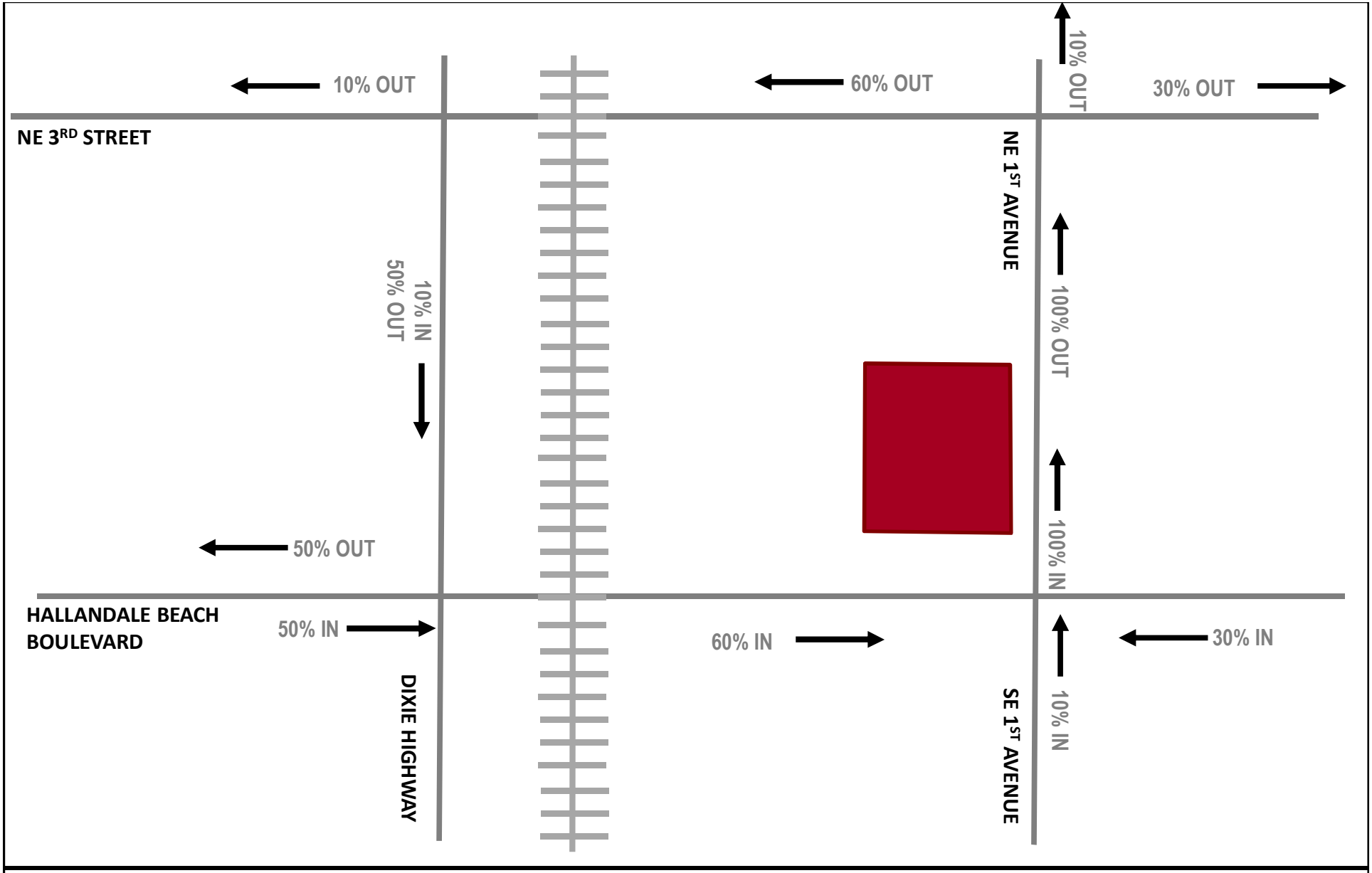
Project traffic was distributed to the external roadway network based on a review of the surrounding travel time characteristics and the location of various complementary land uses. The general distribution of the traffic traveling to and from the site was identified as:

- North – 25%
- East – 25%
- South –25%
- West – 25%

Traffic Assignment

The site traffic was assigned to the surrounding roadway network according to the trip distribution described above. The traffic assignment assumes that all of the project traffic will enter and exit the site on NE 1st Avenue.

Figure 2 illustrates the project traffic assignment percentages.



NORTH

LEGEND

SITE LOCATION

XX% TRIP ASSIGNMENT

FIGURE 2: TRIP ASSIGNMENT
NE 1ST AVENUE & HALLANDALE BEACH BOULEVARD COMMERCIAL

Kimley»Horn

EXISTING TRAFFIC

Existing traffic conditions on the surrounding roadway links were determined based upon 2013 peak season traffic volumes provided by the Broward County Metropolitan Planning Organization (MPO).

PM peak hour (4:00 PM to 6:00 PM) turning movement counts were conducted on Tuesday, January 13, 2015 at the following intersections:

- Hallandale Beach Boulevard & Dixie Highway
- Hallandale Beach Boulevard & East 1st Avenue

These counts were used as the basis for the analysis of these intersections. The MPO roadway link volumes and intersection turning movement count data is included in Appendix B.

FUTURE TRAFFIC

Future traffic conditions are defined as the expected traffic conditions in the year 2016 after project trips have been applied to the roadway network. Total traffic volumes considered in the analysis for this project are the sum of the 2016 background traffic volumes and the expected project traffic volumes. Background traffic volumes are the sum of the existing traffic and an additional amount of traffic to account for potential growth in the study area. An historical growth rate was calculated based on counts provided by the Broward County MPO. This growth rate was applied to the existing traffic before project traffic was added to the links.

LINK ANALYSIS

Based upon the requirements in Policy 1.3.7 of the City's Comprehensive Plan, projects generating less than 100 average net trips per day are required to provide an assessment of conditions within 1,000 feet of the subject site. As shown in the trip generation calculation in Table 1, the site is anticipated to generate 77 net new external daily trips. The analysis is evaluated for year 2016 traffic conditions. The project traffic was assigned to major roadway links within 1,000 feet to determine the project impacts in the immediate vicinity of the project. Based on this analysis, project traffic was only greater than a 1% impact of NE 1st Avenue north of the site. On other segments, the impact is less than less than a 1.0% impact and therefore is not anticipated to significantly impact those roadway segments. Furthermore, project traffic will not result in a change in level of service on any roadway segment.

TABLE 2
NE 1ST AVENUE & HALLANDALE BEACH BOULEVARD COMMERCIAL
PM TWO-WAY PEAK HOUR SIGNIFICANCE CALCULATIONS (2019)

Roadway From	To	Roadway Class	Existing Lanes	Existing LOS D* Service Volume	Committed Lanes	Committed LOS D* Service Volume	Existing Base Peak Hour Volume/LOS		Growth Rate (1)	2016 Background Growth (growth rate)	2016 Background Traffic	PM Peak Hour Project Traffic % Assignment	Project Trips	% Impact	2016 Peak Hour Volume/LOS With Proposed Proposed Project	
PM TWO-WAY PEAK HOUR																
NE 1st Ave																
Hallandale Beach Blvd	Project Site	Class II	1LO	900	1LO	900	758	D	2.80%	21	779	100%	7	0.78%	786	D
Project Site	NE 3rd Street	Class II	1LO	900	1LO	900	758	D	2.80%	21	779	100%	10	1.11%	789	D
Hallandale Beach Boulevard																
NW/SW 4th Ave	Dixie Highway	Class II	6LD	5,390	6LD	5,390	6275	F	2.86%	554	6,829	50%	9	0.17%	6,838	F
Dixie Highway	E 1st Ave	Class II	6LD	5,390	6LD	5,390	6275	F	2.86%	554	6,829	60%	10	0.19%	6,839	F
E 1st Ave	Federal Highway	Class II	6LD	5,390	6LD	5,390	6275	F	2.86%	554	6,829	30%	3	0.06%	6,832	F

* Roadway capacity and 2013 volumes provided by Broward County MPO

(1) Growth Rates based on historical data provided by Broward County MPO; a minimum of 1.0% growth was used for all links

INTERSECTION ANALYSIS

The operating conditions for three conditions (existing, background and future total) were analyzed using Trafficware's Synchro 8.0 Software, both of which apply methodologies outlined in the *Highway Capacity Manual, 2000 Edition*. For this analysis, the intersections of Hallandale Beach Boulevard & Dixie Highway and Hallandale Beach Boulevard & East 1st Avenue were analyzed. Project traffic is not anticipated to measurably impact any other intersections; therefore, no other intersections were analyzed. Table 3 summarizes the results of this analysis. As shown in Table 3, the intersection of Hallandale Beach Boulevard & Dixie Highway and the intersection of Hallandale Beach Boulevard & E 1st Avenue will both operate at level of service (LOS) F under existing, future background and future total conditions. The project traffic is anticipated to only minimally impact overall delay at the intersection of Hallandale Beach Boulevard & Dixie Highway and is not anticipated to impact delay at Hallandale Beach Boulevard & East 1st Avenue. Furthermore, the project will be required to contribute to a transportation mitigation payment to the City per the City's transportation mitigation payment schedule. The turning movement counts, signal timing sheets, HCS and Synchro worksheets are included in Appendix C.

TABLE 3
PM PEAK HOUR INTERSECTION ANALYSIS SUMMARY
NE 1ST AVENUE & HALLANDALE BEACH BOULEVARD COMMERCIAL

Hallandale Beach Blvd & Dixie Hwy						
	Overall		NB	SB	EB	WB
Existing	82.9	F	-	F	D	F
Future Background	85.8	F	-	F	D	F
Future Total	86.7	F	-	F	D	F
Hallandale Beach Blvd & E 1st Ave						
	Overall		NB	SB	EB	WB
Existing	80.4	F	F	-	F	C
Future Background	82.9	F	F	-	F	C
Future Total	82.9	F	F	-	F	C

CONCLUSION

A 1,885 square-foot commercial building is proposed to be built on the northwest corner of Hallandale Beach Boulevard & East 1st Avenue in the City of Hallandale Beach, Florida. Trip generation calculations were prepared to evaluate the volume of trips anticipated to be generated during the weekday PM peak period by the specialty retail building. As shown in this evaluation, the site will generate a total of 17 net new PM peak hour outbound trips. Project traffic results in minimal impact to surrounding roadways and adjacent intersections and will not change level of service conditions on any of these transportation facilities. Furthermore, the project will be required to contribute to a transportation mitigation payment to the City per the City's transportation mitigation payment schedule.

APPENDIX A: SITE PLAN

BUILDING DATA								
BUILDING STORY	BUILDING USE	GROSS BUILDING AREA (INCLUDES EXT. WALLS)	AREA FOR PARKING CALCULATIONS	PARKING RATIO	PARKING REQUIRED	PARKING PROVIDED	ADA PARKING	
							REQUIRED	PROVIDED
GROUND FLOOR	OFF/RET/ REST	1,855 S.F.	1,855 S.F. (GFA)	1/300 S.F	7 SPACES		FBC ACCESS TABLE 208.2	
TOTAL		1,855 S.F.	1,855 S.F.		7 SPACES	7 SPACES	1 SPACE	1 SPACE

SITE INFORMATION:

CURRENT ZONING: FASHION/ ART/ DESIGN
PROPOSED USE: RETAIL / OFFICE / RESTAURANT

UTILITIES:
ELECTRIC – FP & L
WATER AND SEWER – CITY OF HALLANDALE BEACH

SITE CALCULATIONS

TOTAL SITE AREA : (0.10 ACRES)	4,605 SQ. FT.	
TOTAL LANDSCAPE AREA :	563 SQ. FT.	12.23 %
TOTAL IMPERVIOUS AREA :	4,042 SQ. FT.	87.77 %

IMPERVIOUS AREA:

TOTAL PROVIDED:	4,042 SQ. FT.	87.77 %
BUILDING FOOTPRINT AREA:	1,855 SQ. FT.	40.28 %
WALKS:	866 SQ. FT.	18.81 %
VEHICULAR USE AREA (V. U. A.):	1,201 SQ. FT.	26.08 %
DUMPSTER AREA:	120 SQ. FT.	2.60 %

FASHION/ ART / DESIGN SUBDISTRICT REQUIREMENTS		
	REQUIRED	PROVIDED
LOT WIDTH	50' MIN.	50'
LOT AREA	5,000 S.F. MIN./ 100,000 S.F. MAX.	4,605 S.F. (RAM)
LOT COVERAGE	90% MAX.	42.08%
LANDSCAPE AREA	10% MIN.	12.23%
PRIMARY STREET SETBACK	10' MIN./ 15' MAX.	10'
SECONDARY STREET SETBACK	10' MIN.	24'-7"
INTERIOR SIDE SETBACK	0' MIN.	0'
REAR SETBACK	10' MIN.	0' (RAM)
MAX. BUILDING HEIGHT	4 STORIES	1 STORY

LEGAL DESCRIPTION

A PORTION OF THE DEPOT GROUNDS SHOWN ON THE PLAT OF TOWN OF HALLANDALE, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 13 OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA, LYING AND BEING IN THE CITY OF HALLANDALE BEACH, BROWARD COUNTY, FLORIDA; BEING BOUNDED AS FOLLOWS:

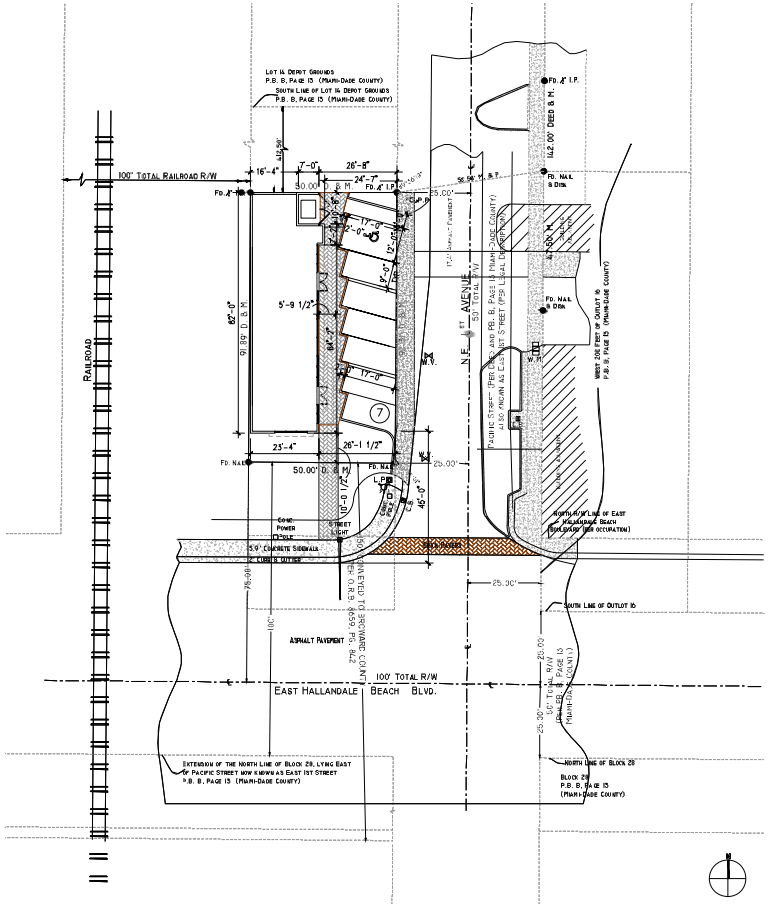
BOUNDARY NO. 1:
ON THE EAST BY THE WESTERLY RIGHT OF WAY LINE OF PACIFIC STREET, NOW KNOW AS EAST FIRST STREET, OR THE NORTHERLY AND SOUTHERLY PROLONGATIONS THEREOF;

BOUNDARY NO. 2:
ON THE SOUTH BY A LINE 100 FEET NORTH OF AND PARALLEL WITH THE WESTERLY PROLONGATION OF THE NORTH LINE OF BLOCK 28, ACCORDING TO THE AFORESAID PLAT, THIS BOUNDARY LINE BEING THE NORTH PROPERTY LINE OF LAND CONVEYED BY FLORIDA EAST COAST RAILWAY COMPANY TO BROWARD COUNTY BY SPECIAL WARRANTY DEED DATED NOVEMBER 10, 1979.

BOUNDARY NO. 3:
ON THE WEST BY A LINE 50 FEET WEST OF AND PARALLEL WITH THE WESTERLY RIGHT OF WAY LINE OF PACIFIC STREET, NOW KNOW AS EAST FIRST STREET OR THE NORTHERLY OR SOUTHERLY PROLONGATIONS THEREOF;

BOUNDARY NO. 4:
ON THE NORTH BY A LINE 412.50 FEET SOUTH OF AND PARALLEL TO THE SOUTH LINE OF LOT 4, ACCORDING TO THE AFORESAID PLAT, THIS BOUNDARY LINE BEING THE SOUTH PROPERTY LINE OF LAND CONVEYED BY FLORIDA EAST COAST RAILWAY COMPANY TO MATTHEW W. SPATES AND PHYLLIS W. SPATES BY SPECIAL WARRANTY DEED DATED MARCH 12, 1966.

LOCATION MAP



SITE PLAN
SCALE: 1" = 20'-0"
1

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Manuel Synalovski, AIA
AR 0011088
SEAL

LICENSE NO. AA26001863

HBB. / NE 1ST AVE.

N.E. 1ST AVENUE
HALLANDALE BEACH, FLORIDA

CLIENT: DREAM TEAM DEVELOPERS, LLC.

REV	DATE	DESCRIPTION
1	01-12-2015	DRC COMMENTS
2	06-24-2015	CONDITIONAL USE - STORY AS A TRUE

DESIGN DELIVERABLE: DRC SUBMITTAL
ISSUE DATE: 11/24/2014

PROJECT NUMBER: 1246-140812
DRAWN BY: JS
CHECKED BY: JS / MS

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SHEET TITLE:
SITE PLAN

SHEET NUMBER:
SP-101

APPENDIX B: TRAFFIC COUNTS, FDOT PEAK SEASON FACTORS AND GROWTH RATE CALCULATIONS

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

ANANTH PRASAD, P.E.
SECRETARY

November 20, 2014

THIS PRE-APPLICATION LETTER IS VALID UNTIL – **NOVEMBER 20, 2015**
THIS LETTER IS NOT A PERMIT APPROVAL

Jose Saye
Synalovski Romanik Saye, LLC
1800 Eller Drive, Suite 500
Fort Lauderdale, Florida 33316

Dear Mr. Saye:

RE: **November 20, 2014 -** Pre-application Meeting to review proposed site plan
Broward County – **Hallandale Beach** (Urban) **SR 858** **Sec. #; 86200** **MP – 3.7**
Access Class - 06 Posted Speed - 35 mph SIS – No REF PROJECT: 417031.5

Request: Review proposed project adjacent to Hallandale Beach Blvd. including the angled-back out on-street parking on NE 1st Ave., set-back 40' from the edge of Hallandale Bch. Blvd.

SITE SPECIFIC INFORMATION
Project Name & Address: **TBD - NE 1st Ave., Hallandale Beach, Florida 33009**
Applicant: Jose Saye.-Architects Property Owner; Dream Team Developers LLC.
Parcel Size: **0.10 Acres** Max. 5,000 Sq.ft: Proposed LU: **Freestanding Commercial**

WE AGREE WITH THE PROPOSED PARKING CONFIGURATION

This decision is based on your presentation of the facts, site plan and survey - please see the **conditions** and **comments** below.. You may choose to review this concept further with the District Access Management Review Committee (AMRC).

Conditions: - NONE

Comments: - NONE

- 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 for more than one acre of "disturbed area" as defined by the Florida Department of Environmental Protection (FDEP).
- The applicant shall donate the right-of-way to the Department if right-of-way dedication is required to implement the improvements,
- All driveways not approved in this letter must be fully removed and the area restored.
- Dimensions between driveways are measured from the near edge of pavement to near edge of pavement and for 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 required improvements, if any. This letter shall be submitted with any further reviews and for permitting. The Department's personnel shall review permit 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. **Note, 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://gis.dot.state.fl.us/OneStopPermitting; 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, P.E. at the District Permits Office with any questions regarding permits – Tel. # 954-777-4377, Fax # 954-677-7893 or e-mail: christine.bacomo@dot.state.fl.us.

Sincerely,

Rajendran Shanmugam, P.E.
District Traffic Access Manager

CNB/nyh
cc: Stan Williams
File: s:\Permits\Pre-app Letters\ Jose Saye– SR 858

APPENDIX B: East / West Roadways Capacity and Level of Service Analysis 2013 & 2035

			2013					2013				2035					2035			
			Design	Daily Conditions				Peak Hour Conditions					Daily Conditions				Peak Hour Conditions			
ID	E/W Roadway	Segment	Code	AADT	Capacity	V/C	LOS	Volume	Capacity	V/C	LOS	Code	Volume	Capacity	V/C	LOS	Volume	Capacity	V/C	LOS
1118	**Honey Hill Rd**	E of SW 148 Ave	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	474	17131	35820	0.48	C	1627	3222	0.50	C
1120	Honey Hill Rd	E of Flamingo Rd	264	10500	13320	0.79	D	998	1197	0.83	D	264	15839	13320	1.19	F	1505	1197	1.26	F
2	**Bass Crk Rd**	E of SW 184 Ave	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	464	1803	29160	0.06	C	171	2628	0.06	C
1152	Bass Crk Rd	E of SW 172 Ave	264	7200	13320	0.54	D	684	1197	0.57	D	464	3234	29160	0.11	C	307	2628	0.12	C
4	Bass Crk Rd	E of Dykes Rd	264	5700	13320	0.43	C	542	1197	0.45	C	464	10696	29160	0.37	C	1016	2628	0.39	C
6	**County Line Rd**	E of University Dr	422	25700	37810 r	0.68	C	2442	3401 r	0.72	C	422	25762	37810 r	0.68	C	2447	3401 r	0.72	C
8	County Line Rd	E of FTPK	422	32000	37810 r	0.85	C	3040	3401 r	0.89	C	422	23326	37810 r	0.62	C	2216	3401 r	0.65	C
10	County Line Rd	E of SR 7	264	16000	13320	1.20	F	1520	1197	1.27	F	264	15966	13320	1.20	F	1517	1197	1.27	F
1046	County Line Rd	E of SW 48 Ave	464	7600	29160	0.26	C	722	2628	0.27	C	464	13793	29160	0.47	D	1310	2628	0.50	D
12	County Line Rd	E of SW 40 Ave	264	7600	13320	0.57	D	722	1197	0.60	D	264	10019	13320	0.75	D	952	1197	0.79	D
1124	**SW 11 St**	E of I-95	264	800	13320	0.06	C	76	1197	0.06	C	264	3331	13320	0.25	C	316	1197	0.26	C
14	**Miramar Pkwy**	E of SW 196 Ave	474	3400	35820	0.09	C	323	3222	0.10	C	474	7006	35820	0.20	C	666	3222	0.21	C
18	Miramar Pkwy	E of SW 184 Ave	422	18000	37810 r	0.48	C	1710	3401 r	0.50	C	422	36737	37810 r	0.97	D	3490	3401 r	1.03	F
20	Miramar Pkwy	E of SW 172 Ave	622	44000	56905 r	0.77	C	4180	5121 r	0.82	C	622	44652	56905 r	0.78	C	4242	5121 r	0.83	C
22	Miramar Pkwy	E of SW 160 Ave	622	65000	56905 r	1.14	F	6175	5121 r	1.21	F	622	41440	56905 r	0.73	C	3937	5121 r	0.77	C
24	Miramar Pkwy	E of I-75	622	83500	59900	1.39	F	7933	5390	1.47	F	622	55918	59900	0.93	C	5312	5390	0.99	D
26	Miramar Pkwy	E of SW 148 Ave	622	50500	59900	0.84	C	4798	5390	0.89	C	622	51948	59900	0.87	C	4935	5390	0.92	C
28	Miramar Pkwy	E of SW 136 Ave	622	50500	59900	0.84	C	4798	5390	0.89	C	622	50947	59900	0.85	C	4840	5390	0.90	C
30	Miramar Pkwy	E of Flamingo Rd	622	32000	59900	0.53	C	3040	5390	0.56	C	622	56660	59900	0.95	C	5383	5390	1.00	D
32	Miramar Pkwy	E of Red Rd	622	36000	59900	0.60	C	3420	5390	0.63	C	622	48488	59900	0.81	C	4606	5390	0.85	C
34	Miramar Pkwy	E of Palm Ave	422	37500	39800	0.94	C	3563	3580	0.99	D	422	37880	39800	0.95	C	3599	3580	1.01	F
36	Miramar Pkwy	E of Douglas Rd	422	34500	39800	0.87	C	3278	3580	0.92	C	422	43278	39800	1.09	F	4111	3580	1.15	F
38	Miramar Pkwy	E of University Dr	422	29000	39800	0.73	C	2755	3580	0.77	C	422	43416	39800	1.09	F	4125	3580	1.15	F
40	**Hndle Bch Blvd**	E of SR 7	422	25000	39800	0.63	C	2375	3580	0.66	C	422	49929	39800	1.25	F	4743	3580	1.32	F
42	Hndle Bch Blvd	E of I-95	622	66053	59900	1.10	F	6275	5390	1.16	F	622	74948	59900	1.25	F	7120	5390	1.32	F
44	Hndle Bch Blvd	E of US 1	622	39500	59900	0.66	C	3753	5390	0.70	C	622	48788	49300	0.99	D	4635	5390	0.86	C
46	Hndle Bch Blvd	E of Diplomat Pkwy	622	35000	59900	0.58	C	3325	5390	0.62	C	622	38146	59900	0.64	C	3624	5390	0.67	C
1000	**Monarch Lakes Blvd**	N of Miramar Pkwy	464	5300	29160	0.18	C	504	2628	0.19	C	464	17766	29160	0.61	D	1688	2628	0.64	D
1002	**Miramar Blvd**	E of Flamingo Rd	264	5400	13320	0.41	C	513	1197	0.43	C	264	5482	13320	0.41	C	521	1197	0.43	C
1004	Miramar Blvd	E of Red Rd	264	5400	13320	0.41	C	513	1197	0.43	C	264	4276	13320	0.32	C	406	1197	0.34	C
1006	Miramar Blvd	E of Hiatus Rd	264	6000	13320	0.45	C	570	1197	0.48	C	464	16385	29160	0.56	D	1557	2628	0.59	D
50	Miramar Blvd	E of Palm Ave	464	33000	29160	1.13	F	3135	2628	1.19	F	464	22869	29160	0.78	D	2173	2628	0.83	D
52	Miramar Blvd	E of Douglas Rd	264	9000	13320	0.68	D	855	1197	0.71	D	264	11212	13320	0.84	D	1065	1197	0.89	D
56	**Pembroke Rd**	E of US 27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
58	Pembroke Rd	E of SW 196 Ave	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
60	Pembroke Rd	E of SW 184 Ave	264	7800	13320	0.59	D	741	1197	0.62	D	422	20444	37810 r	0.54	C	1942	3401 r	0.57	C
966	Pembroke Rd	E of SW 172 Ave	264	8800	13320	0.66	D	836	1197	0.70	D	422	27370	37810 r	0.72	C	2600	3401 r	0.76	C
1154	Pembroke Rd	E of SW 160 Ave	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	422	34625	37810 r	0.92	C	3289	3401 r	0.97	D
968	Pembroke Rd	E of SW 145 Ave	422	25500	37810 r	0.67	C	2423	3401 r	0.71	C	422	43149	37810 r	1.14	F	4099	3401 r	1.20	F
62	Pembroke Rd	E of SW 136 Ave	422	25500	37810 r	0.67	C	2423	3401 r	0.71	C	422	43932	37810 r	1.16	F	4174	3401 r	1.23	F
64	Pembroke Rd	E of Flamingo Rd	422	26500	39800	0.67	C	2518	3580	0.70	C	422	39550	39800	0.99	D	3757	3580	1.05	F
66	Pembroke Rd	E of Hiatus Rd	422	32500	39800	0.82	C	3088	3580	0.86	C	422	31208	39800	0.78	C	2965	3580	0.83	C
68	Pembroke Rd	E of Palm Ave	422	28500	39800	0.72	C	2708	3580	0.76	C	422	33142	39800	0.83	C	3148	3580	0.88	C
70	Pembroke Rd	E of Douglas Rd	422	33000	39800	0.83	C	3135	3580	0.88	C	622	54407	59900	0.91	C	5169	5390	0.96	C
72	Pembroke Rd	E of University Dr	622	40000	59900	0.67	C	3800	5390	0.70	C	622	51290	59900	0.86	C	4873	5390	0.90	C
74	Pembroke Rd	E of SW 68 Ave	422	43500	39800	1.09	F	4133	3580	1.15	F	622	49235	59900	0.82	C	4677	5390	0.87	C
1050	Pembroke Rd	E of SW 62 Ave	622	41500	59900	0.69	C	3943	5390	0.73	C	622	51220	59900	0.86	C	4866	5390	0.90	C
76	Pembroke Rd	E of SR 7	622	40500	59900	0.68	C	3848	5390	0.71	C	622	55694	59900	0.93	C	5291	5390	0.98	D
78	Pembroke Rd	E of I-95	432	37000	32400	1.14	F	3515	2920	1.20	F	432	49205	32400	1.52	F	4674	2920	1.60	F
80	**NE 9 St**	E of US 1	264	9300	13320	0.70	D	884	1197	0.74	D	264	9957	13320	0.75	D	946	1197	0.79	D

745	**SW 8 Ave**	N of Dade C L	264	8400	13320	0.63	D	798	1197	0.67	D	264	10154	13320	0.76	D	965	1197		0.81	D
747	**NW 8 Ave**	N of Hndle Bch Blvd	264	6900	13320	0.52	D	656	1197	0.55	D	264	11425	13320	0.86	D	1085	1197		0.91	D
749	**S 26 Ave**	N of Pembroke Rd	264	2100	13320	0.16	C	200	1197	0.17	C	264	4820	13320	0.36	C	458	1197		0.38	C
751	**N 26 Ave**	N of Hollywood Blvd	264	8200	13320	0.62	D	779	1197	0.65	D	264	11627	13320	0.87	D	1105	1197		0.92	D
1097	**SW 2 Ave**	N of I-595	464	5100	29160	0.17	C	485	2628	0.18	C	464	7042	29160	0.24	C	669	2628		0.25	C
753	**Andrews Ave**	N of Eller Dr	464	10300	29160	0.35	C	979	2628	0.37	C	464	13740	29160	0.47	D	1305	2628		0.50	D
755	Andrews Ave	N of SR 84	464	19000	29160	0.65	D	1805	2628	0.69	D	464	27850	29160	0.96	D	2646	2628		1.01	E
757	Andrews Ave	N of SE 17 St	464	18500	29160	0.63	D	1758	2628	0.67	D	464	24233	29160	0.83	D	2302	2628		0.88	D
759	Andrews Ave	N of Davie Blvd	464	17500	29160	0.60	D	1663	2628	0.63	D	464	27684	29160	0.95	D	2630	2628		1.00	E
761	Andrews Ave	N of SW 7 St-CBD	464	20500	29160	0.70	D	1948	2628	0.74	D	464	28466	29160	0.98	D	2704	2628		1.03	E
763	Andrews Ave	N of Broward Blvd-CBD	464	20500	29160	0.70	D	1948	2628	0.74	D	464	22978	29160	0.79	D	2183	2628		0.83	D
765	Andrews Ave	N of NE 6 St	464	18300	29160	0.63	D	1739	2628	0.66	D	464	21848	29160	0.75	D	2076	2628		0.79	D
767	Andrews Ave	N of Sunrise Blvd	464	19700	29160	0.68	D	1872	2628	0.71	D	464	37579	29160	1.29	F	3570	2628		1.36	F
769	Andrews Ave	N of Oakland Pk Blvd	464	21500	29160	0.74	D	2043	2628	0.78	D	464	35617	29160	1.22	F	3384	2628		1.29	F
771	Andrews Ave	N of Prospect Rd	464	18000	29160	0.62	D	1710	2628	0.65	D	464	25236	29160	0.87	D	2397	2628		0.91	D
773	Andrews Ave	N of Commercial Blvd	464	13000	29160	0.45	C	1235	2628	0.47	D	464	19044	29160	0.65	D	1809	2628		0.69	D
775	Andrews Ave	N of Cypress Crk Rd	622	17500	56905 r	0.31	C	1663	5121 r	0.32	C	622	30607	56905 r	0.54	C	2908	5121	r	0.57	C
777	Andrews Ave	N of McNab Rd	422	17000	37810 r	0.45	C	1615	3401 r	0.47	C	422	34625	37810 r	0.92	C	3289	3401	r	0.97	D
779	Andrews Ave	N of Pompano Pk Pl	222	10000	16815 r	0.59	C	950	1520 r	0.62	C	422	43449	37810 r	1.15	F	4128	3401	r	1.21	F
781	Andrews Ave	N of Atlantic Blvd	422	8300	37810 r	0.22	C	789	3401 r	0.23	C	422	34093	37810 r	0.90	C	3239	3401	r	0.95	C
1015	Andrews Ave	N of NW 15 St	264	8300	13320	0.62	D	789	1197	0.66	D	422	28144	37810 r	0.74	C	2674	3401	r	0.79	C
783	**Military Trail**	N of Copans Rd	422	16500	37810 r	0.44	C	1568	3401 r	0.46	C	422	23150	37810 r	0.61	C	2199	3401	r	0.65	C
785	Military Trail	N of Sample Rd	422	18500	37810 r	0.49	C	1758	3401 r	0.52	C	422	27072	37810 r	0.72	C	2572	3401	r	0.76	C
787	Military Trail	N of Green Rd	422	19400	37810 r	0.51	C	1843	3401 r	0.54	C	422	34238	37810 r	0.91	C	3253	3401	r	0.96	D
789	Military Trail	N of SW 15 St	422	19400	37810 r	0.51	C	1843	3401 r	0.54	C	422	33228	37810 r	0.88	C	3157	3401	r	0.93	C
791	Military Trail	N of SW 10 St	422	19000	37810 r	0.50	C	1805	3401 r	0.53	C	422	23190	37810 r	0.61	C	2203	3401	r	0.65	C
793	Military Trail	N of Hillsboro Blvd	422	22500	37810 r	0.60	C	2138	3401 r	0.63	C	422	27957	37810 r	0.74	C	2656	3401	r	0.78	C
1099	**N Dixie Hwy**	N of NE 13 St	264	5300	13320	0.40	C	504	1197	0.42	C	264	7715	13320	0.58	D	733	1197		0.61	D
1147	N Dixie Hwy	N of NE 16 St	264	5400	13320	0.41	C	513	1197	0.43	C	264	8170	13320	0.61	D	776	1197		0.65	D
795	**NE 6 Ave**	N of Dixie Hwy	264	8300	13320	0.62	D	789	1197	0.66	D	264	11940	13320	0.90	D	1134	1197		0.95	D
797	NE 6 Ave	N of Prospect Rd	264	7300	13320	0.55	D	694	1197	0.58	D	264	12015	13320	0.90	D	1141	1197		0.95	D
799	NE 6 Ave	N of Commercial Blvd	464	11000	29160	0.38	C	1045	2628	0.40	C	464	13957	29160	0.48	D	1326	2628		0.50	D
801	NE 6 Ave	N of NE 56 St	264	3600	13320	0.27	C	342	1197	0.28	C	264	5682	13320	0.43	C	540	1197		0.45	C
1101	**NW 6 Ave**	N of Atlantic Blvd	264	8000	13320	0.60	D	760	1197	0.63	D	264	10272	13320	0.77	D	976	1197		0.81	D
803	**NE 3 Ave**	N of Copans Rd	264	9500	13320	0.71	D	903	1197	0.75	D	464	29568	29160	1.01	E	2809	2628		1.07	F
805	NE 3 Ave	N of Sample Rd	264	10500	13320	0.79	D	998	1197	0.83	D	464	25073	29160	0.86	D	2382	2628		0.91	D
807	NE 3 Ave	N of NE 48 St	264	8400	13320	0.63	D	798	1197	0.67	D	464	19476	29160	0.67	D	1850	2628		0.70	D
1057	NE 3 Ave	N of NE 54 St / SW 15 St	264	8400	13320	0.63	D	798	1197	0.67	D	464	18600	29160	0.64	D	1767	2628		0.67	D
809	**Natura Blvd**	N of SE 10 St	464	7200	29160	0.25	C	684	2628	0.26	C	464	11240	29160	0.39	C	1068	2628		0.41	C
811	**Dixie Hwy/ 21 Ave**	N of Dade C L	463	8400	34992	0.24	C	798	3154	0.25	C	463	14012	34992	0.40	C	1331	3154		0.42	C
813	Dixie Hwy/ 21 Ave	N of Hndle Bch Blvd	463	9700	34992	0.28	C	922	3154	0.29	C	463	16576	34992	0.47	D	1575	3154		0.50	D
815	Dixie Hwy/ 21 Ave	N of Pembroke Rd	463	10900	34992	0.31	C	1036	3154	0.33	C	463	18329	34992	0.52	D	1741	3154		0.55	D
817	Dixie Hwy/ 21 Ave	N of Hollywood Blvd	463	10100	34992	0.29	C	960	3154	0.30	C	463	15753	34992	0.45	D	1497	3154		0.47	D
819	Dixie Hwy/ 21 Ave	N of Sheridan St	464	5000	29160	0.17	C	475	2628	0.18	C	464	6883	29160	0.24	C	654	2628		0.25	C
1049	Dixie Hwy/ 21 Ave	N of Phippen Rd	264	3200	13320	0.24	C	304	1197	0.25	C	264	4986	13320	0.37	C	474	1197		0.40	C
821	**SE 3 Ave**	N of SE 17 St	432	7100	32400	0.22	C	675	2920	0.23	C	432	15877	32400	0.49	D	1508	2920		0.52	D
823	SE 3 Ave	N of Davie Blvd	432	12000	32400	0.37	C	1140	2920	0.39	C	432	22048	32400	0.68	D	2095	2920		0.72	D
825	SE 3 Ave	N of SE 7 St-CBD	432	21000	32400	0.65	D	1995	2920	0.68	D	432	29020	32400	0.90	D	2757	2920		0.94	D
827	**NE 3 Ave**	N of Broward Blvd-CBD	432	21000	32400	0.65	D	1995	2920	0.68	D	432	23194	32400	0.72	D	2203	2920		0.75	D
829	NE 3 Ave	N of NE 6 St	432	11900	32400	0.37	C	1131	2920	0.39	C	432	25110	32400	0.77	D	2385	2920		0.82	D
831	**NE 4 Ave/Wilton Dr**	N of Sunrise Blvd	432	17900	32400	0.55	D	1701	2920	0.58	D	432	28216	32400	0.87	D	2681	2920		0.92	D
833	**Dixie Hwy**	N of Oakland Pk Blvd	432	21500	32400	0.66	D	2043	2920	0.70	D	432	28500	32400	0.88	D	2708	2920		0.93	D
835	Dixie Hwy	N of NE 38 St	422	23500	39800	0.59	C	2233	3580	0.62	C	422	32998	39800	0.83	C	3135	3580		0.88	C
837	Dixie Hwy	N of Commercial Blvd	422	19300	39800	0.48	C	1834	3580	0.51	C	422	25751	39800	0.65	C	2446	3580		0.68	C
839	Dixie Hwy	N of McNab Rd	633	20800	60000	0.35	B	1976	5400	0.37	B	633	29555	60000	0.49	C	2808	5400		0.52	C
841	Dixie Hwy	N of Pompano Park Pl	432	24000	32400	0.74	D	2280	2920	0.78	D	432	29049	32400	0.90	D	2760	2920		0.94	D
843	Dixie Hwy	N of Atlantic Blvd	432	24000	32400	0.74	D	2280	2920	0.78	D	432	30723	32400	0.95	D	2919	2920		1.00	D
845	Dixie Hwy	N of NW 15 St	422	24000	39800	0.60	C	2280	3580	0.64	C	422	33485	39800	0.84	C	3181	3580		0.89	C
847	Dixie Hwy	N of Copans Rd	422	19900	39800	0.50	C	1891	3580	0.53	C	422	26116	39800	0.66	C	2481	3580		0.69	C

849	Dixie Hwy	N of Sample Rd	422	22000	39800	0.55	C	2090	3580	0.58	C	422	18075	39800	0.45	C	1717	3580		0.48	C
851	Dixie Hwy	N of NE 48 St	422	17800	39800	0.45	C	1691	3580	0.47	C	422	25804	39800	0.65	C	2451	3580		0.68	C
853	Dixie Hwy	N of SW 10 St	422	11100	39800	0.28	C	1055	3580	0.29	C	422	14146	39800	0.36	C	1344	3580		0.38	C
855	Dixie Hwy	N of Hillsboro Blvd	422	15000	37810 r	0.40	C	1425	3401 r	0.42	C	422	35754	37810 r	0.95	C	3397	3401	r	1.00	D
857	**NE 15 Ave**	N of Las Olas Blvd	264	12500	13320	0.94	D	1188	1197	0.99	D	264	12789	13320	0.96	D	1215	1197		1.01	E
859	NE 15 Ave	N of Broward Blvd	264	4700	13320	0.35	C	447	1197	0.37	C	264	6095	13320	0.46	C	579	1197		0.48	C
861	NE 15 Ave	N of NE 6 St	264	9900	13320	0.74	D	941	1197	0.79	D	264	11465	13320	0.86	D	1089	1197		0.91	D
863	NE 15 Ave	N of Sunrise Blvd	464	13000	29160	0.45	C	1235	2628	0.47	D	464	24214	29160	0.83	D	2300	2628		0.87	D
865	NE 15 Ave	N of NE 13 St	464	12200	29160	0.42	C	1159	2628	0.44	C	464	15937	29160	0.55	D	1514	2628		0.58	D
1045	NE 15 Ave	N of NE 18 St	264	12200	13320	0.92	D	1159	1197	0.97	D	264	13899	13320	1.04	E	1320	1197		1.10	F
1105	**NE 16 Ave**	N of Oakland Pk Blvd	264	4300	13320	0.32	C	409	1197	0.34	C	264	6188	13320	0.46	C	588	1197		0.49	C
867	**Cypress Rd /18 Av**	N of Floranada Rd	264	13500	13320	1.01	E	1283	1197	1.07	F	264	17137	13320	1.29	F	1628	1197		1.36	F
869	Cypress Rd /18 Av	N of Commercial Blvd	464	13500	29160	0.46	D	1283	2628	0.49	D	464	23502	29160	0.81	D	2233	2628		0.85	D
871	Cypress Rd /18 Av	N of NE 62 St	464	17000	29160	0.58	D	1615	2628	0.61	D	464	30377	29160	1.04	E	2886	2628		1.10	F
873	**NE 5 Ave / 1 St / 2 Ave**	N of Atlantic Blvd	264	3300	13320	0.25	C	314	1197	0.26	C	264	5779	13320	0.43	C	549	1197		0.46	C
875	**NE 11 Ave**	N of Atlantic Blvd	264	4700	13320	0.35	C	447	1197	0.37	C	264	6197	13320	0.47	C	589	1197		0.49	C
1107	**SW 3 Ave (Deerfield Be**	N of SW 10 St	464	5800	29160	0.20	C	551	2628	0.21	C	464	10108	29160	0.35	C	960	2628		0.36	C
1167	**SE 2 Ave (Deerfield Bc**	N of SE 10 St	264	5100	13320	0.38	C	485	1197	0.40	C	264	9382	13320	0.70	D	891	1197		0.74	D
877	US 1	N of Dade C L	632	51000	50000	1.02	F	4845	4500	1.08	F	632	74665	50000	1.49	F	7093	4500		1.58	F
879	US 1	N of Hndle Bch Blvd	432	34000	32400	1.05	F	3230	2920	1.11	F	432	46422	32400	1.43	F	4410	2920		1.51	F
881	US 1	N of Pembroke Rd	432	27583	32400	0.85	D	2620	2920	0.90	D	432	41065	32400	1.27	F	3901	2920		1.34	F
883	US 1	N of Hollywood Blvd	432	27500	32400	0.85	D	2613	2920	0.89	D	432	41981	32400	1.30	F	3988	2920		1.37	F
885	US 1	N of Sheridan St	432	28000	32400	0.86	D	2660	2920	0.91	D	432	47361	32400	1.46	F	4499	2920		1.54	F
887	US 1	N of Stirling Rd	432	37500	32400	1.16	F	3563	2920	1.22	F	432	46288	32400	1.43	F	4397	2920		1.51	F
889	US 1	N of Griffin Rd	622	53500	59900	0.89	C	5083	5390	0.94	C	622	61045	59900	1.02	F	5799	5390		1.08	F
891	US 1	N of I-595	622	64000	59900	1.07	F	6080	5390	1.13	F	622	72246	59900	1.21	F	6863	5390		1.27	F
893	US 1	N of SR 84	622	60000	59900	1.00	F	5700	5390	1.06	F	622	66344	59900	1.11	F	6303	5390		1.17	F
895	US 1	N of Davie Blvd	622	47000	59900	0.78	C	4465	5390	0.83	C	622	58886	59900	0.98	D	5594	5390		1.04	F
897	US 1	N of SE 7 St-CBD	632	45000	50000	0.90	D	4275	4500	0.95	D	632	60033	50000	1.20	F	5703	4500		1.27	F
899	US 1	N of Broward Blvd-CBD	632	40600	50000	0.81	D	3857	4500	0.86	D	632	48345	50000	0.97	D	4593	4500		1.02	F
901	US 1	N of NE 6 St	632	40000	50000	0.80	D	3800	4500	0.84	D	632	44109	50000	0.88	D	4190	4500		0.93	D
903	US 1	E of Searstown (see 536	632	56000	50000	1.12	F	5320	4500	1.18	F	632	65574	50000	1.31	F	6230	4500		1.38	F
905	US 1	N of Gateway	622	42500	59900	0.71	C	4038	5390	0.75	C	622	56238	59900	0.94	C	5343	5390		0.99	D
907	US 1	N of Oakland Pk Blvd	622	49500	59900	0.83	C	4703	5390	0.87	C	622	55826	59900	0.93	C	5303	5390		0.98	D
909	US 1	N of Commercial Blvd	622	44500	59900	0.74	C	4228	5390	0.78	C	622	47710	59900	0.80	C	4532	5390		0.84	C
911	US 1	N of NE 62 St	622	43000	59900	0.72	C	4085	5390	0.76	C	622	55350	59900	0.92	C	5258	5390		0.98	D
913	US 1	N of McNab Rd	622	40000	59900	0.67	C	3800	5390	0.70	C	622	56433	59900	0.94	C	5361	5390		0.99	D
915	US 1	N of Atlantic Blvd	622	37500	59900	0.63	C	3563	5390	0.66	C	622	47432	59900	0.79	C	4506	5390		0.84	C
917	US 1	N of NE 10 St	622	44000	59900	0.73	C	4180	5390	0.78	C	622	55850	59900	0.93	C	5306	5390		0.98	D
919	US 1	N of Copans Rd	622	50500	59900	0.84	C	4798	5390	0.89	C	622	43846	59900	0.73	C	4165	5390		0.77	C
921	US 1	N of Sample Rd	622	43500	59900	0.73	C	4133	5390	0.77	C	622	46572	59900	0.78	C	4424	5390		0.82	C
923	US 1	N of SW 10 St	622	34500	59900	0.58	C	3278	5390	0.61	C	622	52207	59900	0.87	C	4960	5390		0.92	C
925	US 1	N of Hillsboro Blvd	622	26500	59900	0.44	C	2518	5390	0.47	C	622	29725	59900	0.50	C	2824	5390		0.52	C
927	**Miami Rd**	N of Eller Dr	464	3000 e	29160	0.10	C	285	2628	0.11	C	464	3345	29160	0.11	C	318	2628		0.12	C
929	Miami Rd	N of SR 84	264	4000	13320	0.30	C	380	1197	0.32	C	264	4902	13320	0.37	C	466	1197		0.39	C
1111	Miami Rd	N of SE 17 St	264	1700	13320	0.13	C	162	1197	0.13	C	264	1751	13320	0.13	C	166	1197		0.14	C
933	**Victoria Pk Rd**	N of Broward Blvd	264	5700	13320	0.43	C	542	1197	0.45	C	264	6666	13320	0.50	D	633	1197		0.53	D
935	**NE 20 Ave/7 St**	E of Victoria Pk Rd	264	5400	13320	0.41	C	513	1197	0.43	C	264	7489	13320	0.56	D	711	1197		0.59	D
937	**NE/S 14 Ave**	N of Hndle Bch Blvd	264	8400	13320	0.63	D	798	1197	0.67	D	264	8226	13320	0.62	D	781	1197		0.65	D
939	**N 14 Ave**	N of Hollywood Blvd	264	600	13320	0.04	C	57	1197	0.05	C	264	3609	13320	0.27	C	343	1197		0.29	C
1113	**SE 5 Ave**	N of Sheridan St	264	10000	13320	0.75	D	950	1197	0.79	D	264	14316	13320	1.07	F	1360	1197		1.14	F
941	**Diplomat Pkwy**	N of Hndle Bch Blvd	264	3100	13320	0.23	C	295	1197	0.25	C	264	4194	13320	0.31	C	398	1197		0.33	C
947	**Eisenhower Blvd**	N of Eller Dr	464	4300	29160	0.15	C	409	2628	0.16	C	464	10708	29160	0.37	C	1017	2628		0.39	C
999	Eisenhower Blvd	N of Spangler Rd	464	2300	29160	0.08	C	219	2628	0.08	C	464	25030	29160	0.86	D	2378	2628		0.90	D
949	**Bayview Dr**	N of Sunrise Blvd	264	10000	13320	0.75	D	950	1197	0.79	D	264	14731	13320	1.11	F	1399	1197		1.17	F
951	Bayview Dr	N of Oakland Pk Blvd	264	10000	13320	0.75	D	950	1197	0.79	D	264	13490	13320	1.01	E	1282	1197		1.07	F
953	Bayview Dr	N of Commercial Blvd	264	8600	13320	0.65	D	817	1197	0.68	D	264	8776	13320	0.66	D	834	1197		0.70	D
955	**NE 26 Ave / NE 10 St**	N of Atlantic Blvd	264	4700	13320	0.35	C	447	1197	0.37	C	264	4473	13320	0.34	C	425	1197		0.35	C
957	**NE 23 Ave**	N of Copans Rd	264	5100 e	13320	0.38	C	485	1197	0.40	C	264	7684	13320	0.58	D	730	1197		0.61	D

APPENDIX C: INTERSECTION ANALYSIS

Counts Conducted Tuesday, January 13, 2015 by Kimley-Horn and Associates, Inc.
Counts Conducted between 4:00 PM and 6:00 PM
Location: Intersections of Hallandale Beach Boulevard & Dixie Highway and Hallandale Beach Boulevard & East 1st Avenue

INTERSECTION OF HALLANDALE BEACH BOULEVARD & DIXIE HIGHWAY														
TIME INTERVAL		**SBL**	**SBT**	**SBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**EBL**	**EBT**	**EBR**	**TOTAL**
4:00	**4:15**	30	74	7	24	347	-	-	-	-	-	325	4	811
4:15	**4:30**	35	60	3	13	398	-	-	-	-	-	330	21	860
4:30	**4:45**	44	74	10	18	329	-	-	-	-	-	259	10	744
4:45	**5:00**	47	80	11	21	318	-	-	-	-	-	277	12	766
5:00	**5:15**	29	72	16	23	336	-	-	-	-	-	297	8	781
5:15	**5:30**	46	98	13	23	310	-	-	-	-	-	241	10	741
5:30	**5:45**	40	84	12	19	329	-	-	-	-	-	308	7	799
5:45	**6:00**	36	72	8	16	362	-	-	-	-	-	366	14	874
TOTAL PEAK HOUR VOLUMES		151	326	49	81	1337	0	0	0	0	0	1212	39	3195

INTERSECTION OF HALLANDALE BEACH BOULEVARD & EAST 1ST AVENUE														
TIME INTERVAL		**SBL**	**SBT**	**SBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**EBL**	**EBT**	**EBR**	**TOTAL**
4:00	**4:15**	-	-	-	-	293	3	78	91	21	7	348	0	841
4:15	**4:30**	-	-	-	-	336	4	75	78	16	6	359	0	874
4:30	**4:45**	-	-	-	-	259	2	88	108	20	6	297	0	780
4:45	**5:00**	-	-	-	-	244	2	95	107	22	6	318	1	795
5:00	**5:15**	-	-	-	-	279	3	80	109	14	7	319	0	811
5:15	**5:30**	-	-	-	-	238	5	95	104	22	13	274	0	751
5:30	**5:45**	-	-	-	-	245	4	103	89	30	6	342	0	819
5:45	**6:00**	-	-	-	-	327	6	51	48	13	9	393	0	847
TOTAL PEAK HOUR VOLUMES		0	0	0	0	1089	18	329	350	79	35	1328	0	3228

VOLUME DEVELOPMENT SHEET

HALLANDALE BEACH BOULEVARD & DIXIE HIGHWAY

Growth Rate =	1.00%	
Peak Season =	1	1
Buildout Year =	2016	2016
Years =	5	5

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 01/13/2015	0	0	0	165	691	142	0	567	237	457	945	0
Peak Season Volume	0	0	0	165	691	142	0	567	237	457	945	0
Traffic Volume Growth	0	0	0	2	7	1	0	6	2	5	9	0
Background Traffic Volumes	0	0	0	167	698	143	0	573	239	462	954	0
Project Traffic												
Inbound Traffic Assignment				10.0%				50.0%				
Inbound Traffic Volumes	0	0	0	1	0	0	0	4	0	0	0	0
Outbound Traffic Assignment						50.0%					50.0%	
Outbound Traffic Volumes	0	0	0	0	0	5	0	0	0	0	5	0
Project Traffic	0	0	0	1	0	5	0	4	0	0	5	0
TOTAL TRAFFIC	0	0	0	168	698	148	0	577	239	462	959	0

VOLUME DEVELOPMENT SHEET

HALLANDALE BEACH BOULEVARD & DIXIE HIGHWAY

Growth Rate =	1.00%	
Peak Season =	1	1
Buildout Year =	2016	2016
Years =	5	5

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 01/13/2015	329	350	79	0	0	0	35	1,328	0	0	1,089	18
Peak Season Volume	329	350	79	0	0	0	35	1,328	0	0	1,089	18
Traffic Volume Growth	3	4	1	0	0	0	0	13	0	0	11	0
Background Traffic Volumes	332	354	80	0	0	0	35	1,341	0	0	1,100	18
Project Traffic												
Inbound Traffic Assignment		10.0%					60.0%					30.0%
Inbound Traffic Volumes	0	1	0	0	0	0	4	0	0	0	0	2
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic	0	1	0	0	0	0	4	0	0	0	0	2
TOTAL TRAFFIC	332	355	80	0	0	0	39	1,341	0	0	1,100	20

BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	3085	**Initial Operation Date**	UNKNOWN
Controller Type	2070 LN	**System Number**	3085
Modification Number	13	**Modification Date**	11/25/2013
Drawing/Project No	413791-1-52-01	**FPL Grid Number**	87570901301
Intersection	HALLANDALE BEACH BLVD. and DIXIE HWY./E 1 AVENUE		
Municipality	HALLANDALE BEACH		

Controller Phase	1	2	3	4	5	6	7	8
Face Number								
Direction	WBL	E/W	EBL	SB	NB			
Initial Green(MIN)	5	10	5	6	6			
Vehicle Ext.(GAP)	0.0	3.0	0.0	0.0	0.0			
Maximum Green I	15	50	15	20	20			
Maximum Green II								
Yellow Clearance	4.0	4.0	4.0	4.5	4.0			
All Red Clearance	*.	*.	*.	2.0	2.0			
Phase Recall	OFF	MIN	OFF	OFF	OFF			
Detector Delay				20-RT	20-RT			
Walk		7		5	5			
Pedestrian Clearance		13		24	23			
Permissive	NO		NO					
Flash Operation	RED	YELLOW	RED	RED	RED			
Green Return								

Attachment **HBB and Dixie Mod 11 SOP.pdf**

Channel/Drop / **IP Address**

NOTES:

1. IP: 192.168.000.010, MASK: 255.255.255.000, GWAY: 192.168.000.001, PORT: 5049
2. * DOUBLE CLEARANCE EAST/WEST FARSIDE: 5 GREEN, 4 YELLOW, 1 ALL RED.
3. RAILROAD PRE-EMPTION (PHASES 9 +):
   (A) TIME BEFORE: 0.0 SECONDS.
   (B) TRACK CLEAR: 8 GREEN, 4 YELLOW, 1 ALL RED.
   (C) DWELL: NORTH/SOUTH.
   (D) RETURN PHASE: 2 (EAST/WEST).
4. PHOTO ENFORCEMENT, CITY OF HALLANDALE BEACH.
5. MOD. 13 UPDATES CLEARANCES PER FDOT ENFORCEMENT GUIDELINES.

Submitted By _____ **Approved By** _____

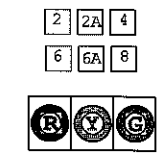
TRAFFIC ENGINEERING DIVISION
SIGNALIZED INTERSECTION

LOCATION **HALLANDALE BEACH BLVD & DIXIE HWY/SE 1 AVE**

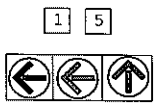
ORDER NO FDOT ISSUE DATE ---- REV NO. 6 COMPLETION DATE _____

DWG. NO. 09-04-02-01 FILE NO. 3085 CITY HALLANDALE BEACH SCALE: 1" = 40'

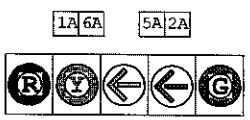
DWN BY: LARRY



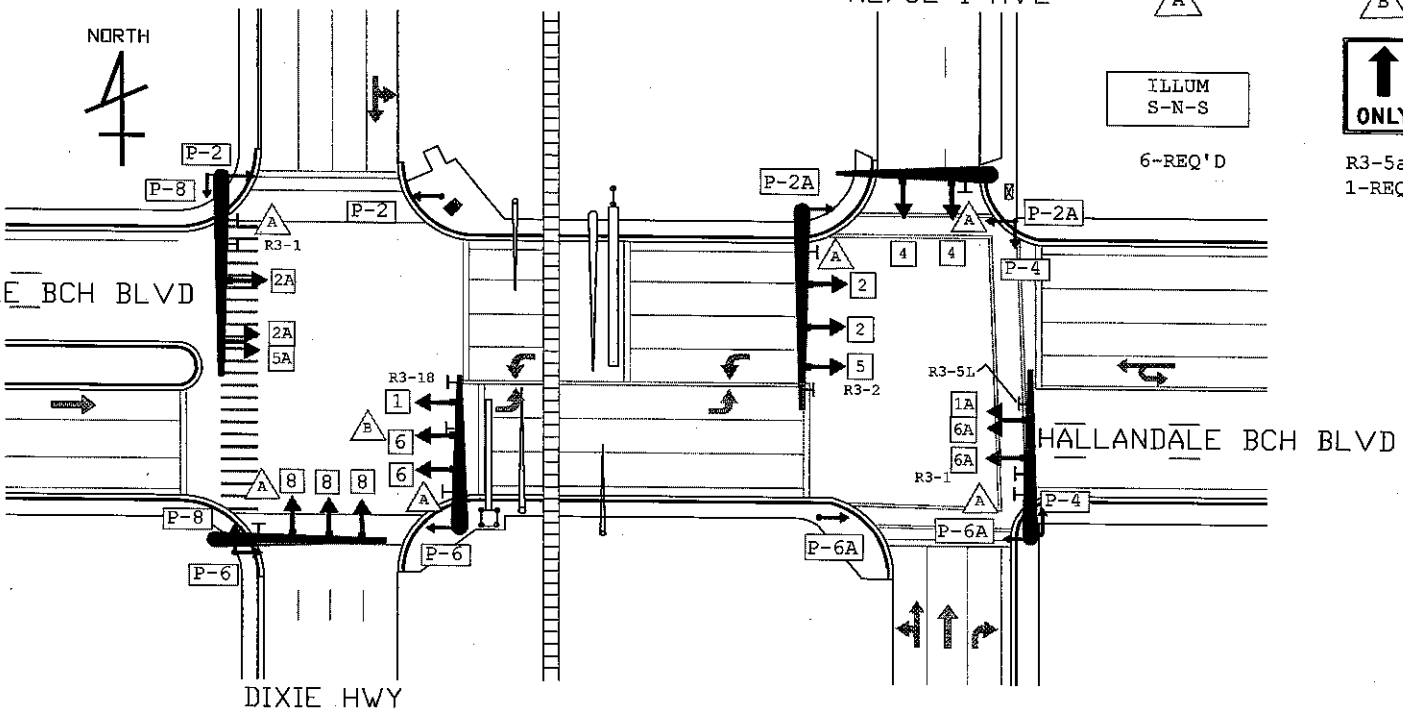
3-SECT
1-WAY
11-REQ'D

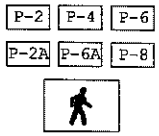


3-SECT
1-WAY
2-REQ'D



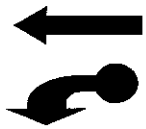
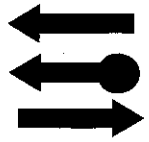
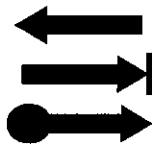
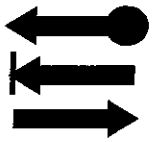
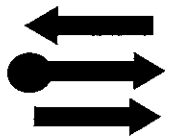
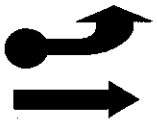
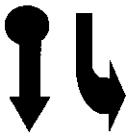
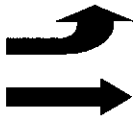
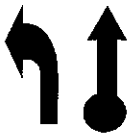
5-SECT
1-WAY
2-REQ'D

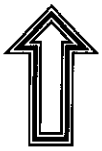




12-REQ'D

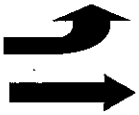
1. VIDEO DETECTION.
2. THIS REVISION INSTALLS R3-5A SIGN EB AT DIXIE HWY.

Sequence of Operation (Mod 11)		
HALLANDALE BEACH BLVD and DIXIE HWY/NE1 AVE 3085		
NORMAL OPERATION		
WEST side	Phase	EAST side
	Phase 1 WBL	
	Phase 2 EW*	
	Phase 3 EBL	
	Phase 4 SB	
	Phase 5 NB	



NORTH

* Double Clearance E/W Farside: 5 sec-Green, 4 sec-Yellow, 1 sec-All Red

	PREEMPTION	
	TRACK CLEARANCE	
	DWELL	
	AFTER PREEMPTION RETURN TO PHASE 2	

Broward County | Timing Sheet | 1/14/2015 3:20:19 PM

Station : 3085 - Hallandale Beach Blvd & Dixie Hwy (Standard File)

Phase	1 (WL)	2 (WT)	3 (EL)	4 (ST)	5 (NT)	6	7	8	9	10	11	12	13	14	15	16
Walk		7		5	5											
Ped Clearance		13		24	23											
Min Green	5	10	5	6	6											
Passage	1.5	3														
Max1	15	50	15	20	20											
Max2																
Yellow	4	4	4	4.5	4	3.5	3.5	3.5	4	4	3.5	3.5	3.5	3.5	3.5	3.5
Red	1		1	2	2						1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON											
Auto Entry					ON											
Auto Exit		ON														
Non Act1																
Non Act2																
Lock Call					ON						ON	ON	ON	ON	ON	ON
Min Recall		ON														
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON														
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash						
Override Higher	ON					
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green		6	6	6	6	6
Min Walk						
Ped Clear						
Track Green	8					
Min Dwell		8	8	8	8	8
Max Presence		180	180	180	180	180
Track R1	9					
Track R2						
Track R3						
Track R4						
Dwell Ped1						
Exit R1	2	3	5	2	1	4
Exit R2						
Exit R3						
Exit R4						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Type				
Lockout Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Priority P5				
Priority P6				
Priority P7				
Priority P8				
Priority P9				
Priority P10				
Priority P11				
Priority P12				
Max Lockout				

Prepared By	Date Implemented
Reviewed By	Traffic Engineer

Broward County | Timing Sheet | 1/14/2015 3:20:19 PM

Station : 3085 - Hallandale Beach Blvd & Dixie Hwy (Standard File)

Coordination

Hour	Minute	Action	Pattern	Cycle	Offset	Split	Seqnc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 1											**Easy**															
		100	254																							
6		2	2	160	31	2	1	10	50		16	61	20	32	31											
9		3	3	160	27	3	1	10	50		17	50	20	38	35											
15		4	4	160	8	4	1	10	50		15	50	20	38	37											
20		3	3	160	27	3	1	10	50		17	50	20	38	35											
Day Plan 2											**Easy**															
		3	3	160	27	3	1	10	50		17	50	20	38	35											
1		100	254																							
6	30	3	3	160	27	3	1	10	50		17	50	20	38	35											
Day Plan 3											**Easy**															
		3	3	160	27	3	1	10	50		17	50	20	38	35											
1		100	254																							
6	30	3	3	160	27	3	1	10	50		17	50	20	38	35											
23		100	254																							

Broward County | Timing Sheet | 1/14/2015 3:20:19 PM

Station : 3085 - Hallandale Beach Blvd & Dixie Hwy (Standard File)

Hour	Minute	Action	Pattern	Cycle	Offset	Split	Seqnc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 4											Easy															

Scheduler

	Month											Day of Week							Day of Month									1									2									3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4	1													1	1	1	1	1		1																																2
5	1													1							1																															2
6					1									1																																	1	1	1	1	1	1	1	2
7							1											1				1																														2
8							1							1	1	1	1	1					1																													2
9							1							1										1																													2
10									1					1						1	1	1	1	1	1	1																											2
11											1						1																								1	1	1	1	1	1	1					2
12											1							1																									1	1	1	1	1	1	1				2
13												1		1				1																										1									2
14												1		1	1	1	1	1																											1								2
15												1		1																																1							2
16												1		1				1																																		1	2
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User Comments:

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	567	237	457	945	0	0	0	0	165	691	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	
Lane Util. Factor		0.91		1.00	0.91						0.91	
Frt		0.96		1.00	1.00						0.98	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		4860		1770	5085						4936	
Flt Permitted		1.00		0.20	1.00						0.99	
Satd. Flow (perm)		4860		369	5085						4936	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	616	258	497	1027	0	0	0	0	179	751	154
RTOR Reduction (vph)	0	47	0	0	0	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	827	0	497	1027	0	0	0	0	0	1070	0
Turn Type		NA		pm+pt	NA					Split	NA	
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		56.8		81.8	71.7						32.2	
Effective Green, g (s)		56.8		81.8	71.7						32.2	
Actuated g/C Ratio		0.35		0.51	0.45						0.20	
Clearance Time (s)		4.0		4.0	4.0						4.0	
Vehicle Extension (s)		3.0		3.0	3.0						3.0	
Lane Grp Cap (vph)		1725		372	2278						993	
v/s Ratio Prot		0.17		c0.18	0.20						c0.22	
v/s Ratio Perm				c0.51								
v/c Ratio		0.48		1.34	0.45						1.08	
Uniform Delay, d1		40.1		28.9	30.5						63.9	
Progression Factor		1.00		1.91	0.59						1.00	
Incremental Delay, d2		0.2		164.9	0.1						51.7	
Delay (s)		40.3		220.1	18.2						115.6	
Level of Service		D		F	B						F	
Approach Delay (s)		40.3			84.0			0.0			115.6	
Approach LOS		D			F			A			F	

Intersection Summary			
HCM 2000 Control Delay	82.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	35	1328	0	0	0	1089	18	329	350	79	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0				4.0		4.0	4.0	4.0		
Lane Util. Factor	1.00	0.95				0.91		1.00	1.00	1.00		
Frt	1.00	1.00				1.00		1.00	1.00	0.85		
Flt Protected	0.95	1.00				1.00		0.95	1.00	1.00		
Satd. Flow (prot)	1770	3539				5073		1770	1863	1583		
Flt Permitted	0.18	1.00				1.00		0.95	1.00	1.00		
Satd. Flow (perm)	342	3539				5073		1770	1863	1583		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	1443	0	0	0	1184	20	358	380	86	0	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	0	68	0	0
Lane Group Flow (vph)	38	1443	0	0	0	1203	0	358	380	18	0	0
Turn Type	pm+pt	NA		Perm		NA		Split	NA	Perm		
Protected Phases	7	4				8		9	9			
Permitted Phases	4			8						9		
Actuated Green, G (s)	62.9	56.8				71.7		34.0	34.0	34.0		
Effective Green, g (s)	62.9	56.8				71.7		34.0	34.0	34.0		
Actuated g/C Ratio	0.39	0.35				0.45		0.21	0.21	0.21		
Clearance Time (s)	4.0	4.0				4.0		4.0	4.0	4.0		
Vehicle Extension (s)	3.0	3.0				3.0		3.0	3.0	3.0		
Lane Grp Cap (vph)	188	1256				2273		376	395	336		
v/s Ratio Prot	c0.01	c0.41				c0.24		0.20	c0.20			
v/s Ratio Perm	0.07									0.01		
v/c Ratio	0.20	1.15				0.53		0.95	0.96	0.05		
Uniform Delay, d1	30.4	51.6				31.9		62.2	62.4	50.2		
Progression Factor	0.63	0.74				1.00		1.00	1.00	1.00		
Incremental Delay, d2	0.5	76.3				0.2		35.8	36.7	0.3		
Delay (s)	19.8	114.7				32.2		98.0	99.0	50.5		
Level of Service	B	F				C		F	F	D		
Approach Delay (s)		112.3				32.2			93.5			0.0
Approach LOS		F				C			F			A

Intersection Summary			
HCM 2000 Control Delay	80.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Volume (vph)	0
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	0.92
Adj. Flow (vph)	0
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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	573	239	462	954	0	0	0	0	167	698	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	
Lane Util. Factor		0.91		1.00	0.91						0.91	
Frt		0.96		1.00	1.00						0.98	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		4861		1770	5085						4936	
Flt Permitted		1.00		0.19	1.00						0.99	
Satd. Flow (perm)		4861		362	5085						4936	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	623	260	502	1037	0	0	0	0	182	759	155
RTOR Reduction (vph)	0	47	0	0	0	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	836	0	502	1037	0	0	0	0	0	1082	0
Turn Type		NA		pm+pt	NA					Split	NA	
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		56.8		81.8	71.7						32.2	
Effective Green, g (s)		56.8		81.8	71.7						32.2	
Actuated g/C Ratio		0.35		0.51	0.45						0.20	
Clearance Time (s)		4.0		4.0	4.0						4.0	
Vehicle Extension (s)		3.0		3.0	3.0						3.0	
Lane Grp Cap (vph)		1725		369	2278						993	
v/s Ratio Prot		0.17		c0.18	0.20						c0.22	
v/s Ratio Perm				c0.52								
v/c Ratio		0.48		1.36	0.46						1.09	
Uniform Delay, d1		40.2		29.2	30.6						63.9	
Progression Factor		1.00		1.89	0.59						1.00	
Incremental Delay, d2		0.2		175.3	0.1						56.0	
Delay (s)		40.4		230.7	18.2						119.9	
Level of Service		D		F	B						F	
Approach Delay (s)		40.4			87.5			0.0			119.9	
Approach LOS		D			F			A			F	

Intersection Summary			
HCM 2000 Control Delay	85.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	35	1341	0	0	0	1100	18	332	354	80	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0				4.0		4.0	4.0	4.0		
Lane Util. Factor	1.00	0.95				0.91		1.00	1.00	1.00		
Frt	1.00	1.00				1.00		1.00	1.00	0.85		
Flt Protected	0.95	1.00				1.00		0.95	1.00	1.00		
Satd. Flow (prot)	1770	3539				5073		1770	1863	1583		
Flt Permitted	0.18	1.00				1.00		0.95	1.00	1.00		
Satd. Flow (perm)	335	3539				5073		1770	1863	1583		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	1458	0	0	0	1196	20	361	385	87	0	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	0	69	0	0
Lane Group Flow (vph)	38	1458	0	0	0	1215	0	361	385	18	0	0
Turn Type	pm+pt	NA		Perm		NA		Split	NA	Perm		
Protected Phases	7	4				8		9	9			
Permitted Phases	4			8						9		
Actuated Green, G (s)	62.9	56.8				71.7		34.0	34.0	34.0		
Effective Green, g (s)	62.9	56.8				71.7		34.0	34.0	34.0		
Actuated g/C Ratio	0.39	0.35				0.45		0.21	0.21	0.21		
Clearance Time (s)	4.0	4.0				4.0		4.0	4.0	4.0		
Vehicle Extension (s)	3.0	3.0				3.0		3.0	3.0	3.0		
Lane Grp Cap (vph)	186	1256				2273		376	395	336		
v/s Ratio Prot	c0.01	c0.41				c0.24		0.20	c0.21			
v/s Ratio Perm	0.07									0.01		
v/c Ratio	0.20	1.16				0.53		0.96	0.97	0.06		
Uniform Delay, d1	30.5	51.6				32.0		62.3	62.6	50.2		
Progression Factor	0.63	0.74				1.00		1.00	1.00	1.00		
Incremental Delay, d2	0.5	81.2				0.2		37.4	39.4	0.3		
Delay (s)	19.7	119.5				32.3		99.7	101.9	50.5		
Level of Service	B	F				C		F	F	D		
Approach Delay (s)		117.0				32.3			95.6			0.0
Approach LOS		F				C			F			A

Intersection Summary			
HCM 2000 Control Delay	82.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Volume (vph)	0
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	0.92
Adj. Flow (vph)	0
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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	577	239	462	959	0	0	0	0	168	698	148
Future Volume (vph)	0	577	239	462	959	0	0	0	0	168	698	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	
Lane Util. Factor		0.91		1.00	0.91						0.91	
Frt		0.96		1.00	1.00						0.98	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		4862		1770	5085						4933	
Flt Permitted		1.00		0.19	1.00						0.99	
Satd. Flow (perm)		4862		360	5085						4933	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	627	260	502	1042	0	0	0	0	183	759	161
RTOR Reduction (vph)	0	46	0	0	0	0	0	0	0	0	15	0
Lane Group Flow (vph)	0	841	0	502	1042	0	0	0	0	0	1088	0
Turn Type		NA		pm+pt	NA					Split	NA	
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		56.8		81.8	71.5						32.2	
Effective Green, g (s)		56.8		81.8	71.5						32.2	
Actuated g/C Ratio		0.35		0.51	0.45						0.20	
Clearance Time (s)		4.0		4.0	4.0						4.0	
Vehicle Extension (s)		3.0		3.0	3.0						3.0	
Lane Grp Cap (vph)		1726		369	2272						992	
v/s Ratio Prot		0.17		c0.18	0.20						c0.22	
v/s Ratio Perm				c0.52								
v/c Ratio		0.49		1.36	0.46						1.10	
Uniform Delay, d1		40.2		29.6	30.8						63.9	
Progression Factor		1.00		1.89	0.59						1.00	
Incremental Delay, d2		0.2		175.3	0.1						58.7	
Delay (s)		40.5		231.3	18.3						122.6	
Level of Service		D		F	B						F	
Approach Delay (s)		40.5			87.5			0.0			122.6	
Approach LOS		D			F			A			F	

Intersection Summary			
HCM 2000 Control Delay	86.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	39	1341	0	0	0	1100	20	332	355	80	0	0
Future Volume (vph)	39	1341	0	0	0	1100	20	332	355	80	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0				4.0		4.0	4.0	4.0		
Lane Util. Factor	1.00	0.95				0.91		1.00	1.00	1.00		
Frt	1.00	1.00				1.00		1.00	1.00	0.85		
Flt Protected	0.95	1.00				1.00		0.95	1.00	1.00		
Satd. Flow (prot)	1770	3539				5072		1770	1863	1583		
Flt Permitted	0.18	1.00				1.00		0.95	1.00	1.00		
Satd. Flow (perm)	332	3539				5072		1770	1863	1583		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	1458	0	0	0	1196	22	361	386	87	0	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	0	69	0	0
Lane Group Flow (vph)	42	1458	0	0	0	1217	0	361	386	18	0	0
Turn Type	pm+pt	NA		Perm		NA		Split	NA	Perm		
Protected Phases	7	4				8		9	9			
Permitted Phases	4			8						9		
Actuated Green, G (s)	63.1	56.8				71.5		34.0	34.0	34.0		
Effective Green, g (s)	63.1	56.8				71.5		34.0	34.0	34.0		
Actuated g/C Ratio	0.39	0.35				0.45		0.21	0.21	0.21		
Clearance Time (s)	4.0	4.0				4.0		4.0	4.0	4.0		
Vehicle Extension (s)	3.0	3.0				3.0		3.0	3.0	3.0		
Lane Grp Cap (vph)	187	1256				2266		376	395	336		
v/s Ratio Prot	c0.01	c0.41				c0.24		0.20	c0.21			
v/s Ratio Perm	0.08									0.01		
v/c Ratio	0.22	1.16				0.54		0.96	0.98	0.06		
Uniform Delay, d1	30.4	51.6				32.2		62.3	62.6	50.2		
Progression Factor	0.63	0.74				1.00		1.00	1.00	1.00		
Incremental Delay, d2	0.6	81.2				0.2		37.4	39.9	0.3		
Delay (s)	19.6	119.4				32.5		99.7	102.5	50.5		
Level of Service	B	F				C		F	F	D		
Approach Delay (s)		116.6				32.5			95.9			0.0
Approach LOS		F				C			F			A

Intersection Summary			
HCM 2000 Control Delay	82.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
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	0.92
Adj. Flow (vph)	0
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