

# **ATTACHMENT 7**

## Composite of Transportation Analyses

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# CDMP AMENDMENT TRANSPORTATION ANALYSIS

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## Coral Reef Commons UM South Campus Property

November 2011  
Revised February 2012

Prepared for:  
RAM Development Company

CATHY SWEETAPPLE & ASSOCIATES  
TRANSPORTATION AND MOBILITY PLANNING

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November 2011

Prepared for:  
RAM Development Company



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Coral Reef Commons – UM South Campus Property  
CDMP Amendment Transportation Analysis

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Coral Reef Commons – UM South Campus Property  
CDMP Amendment Transportation Analysis

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Coral Reef Commons – UM South Campus Property  
CDMP Amendment Transportation Analysis

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## Coral Reef Commons – UM South Campus Property CDMP Amendment Transportation Analysis

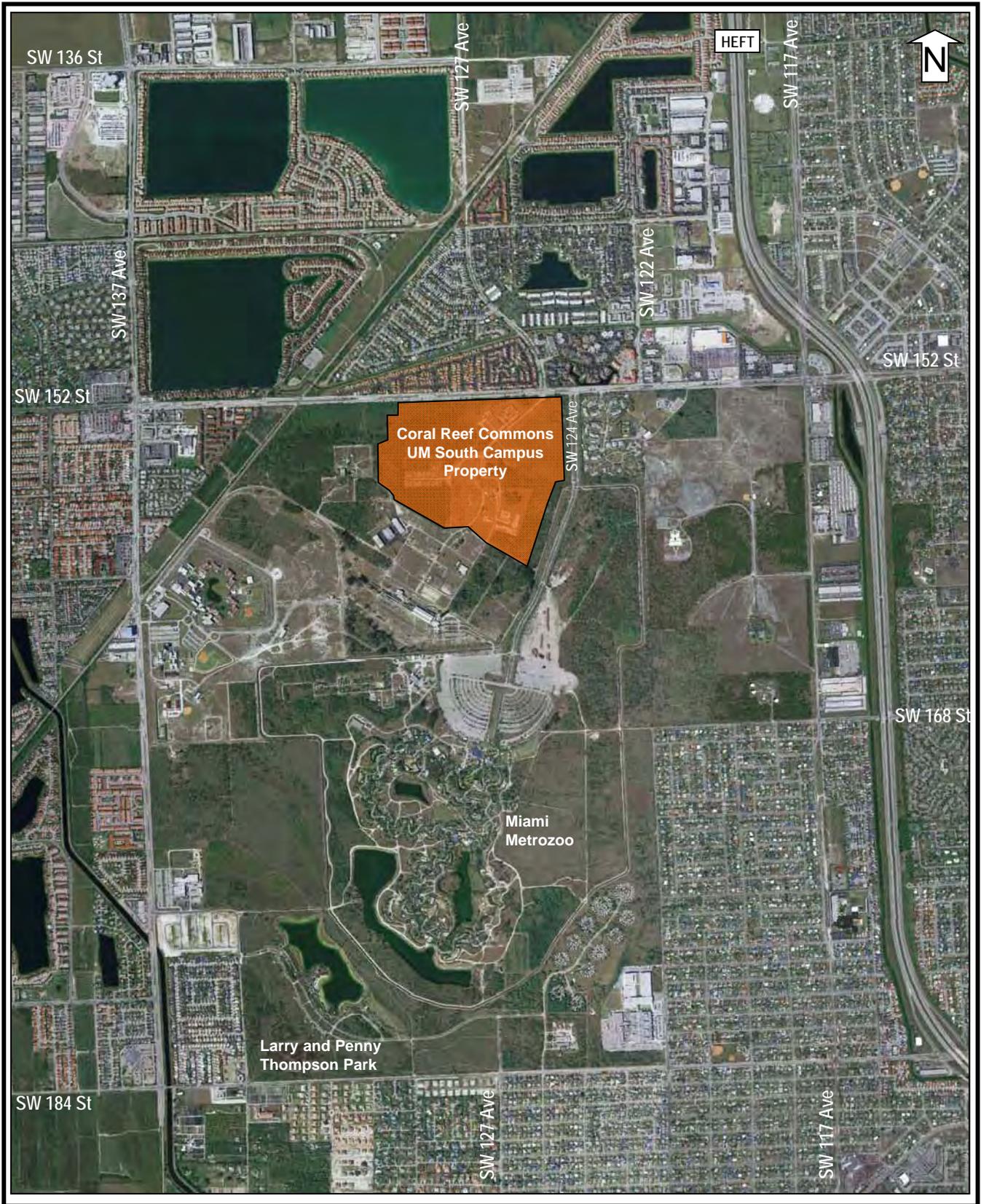
### Introduction and Site Location

This proposed change to the Miami-Dade County Comprehensive Development Master Plan (CDMP) has been submitted by Ram Development Company for 68.41 gross acres of land (64.73 net acres) which reflects a portion of the subject property formerly known as the UM South Campus, consisting of 141.57 gross acres (137.89 net acres), located in Sections 25 and 26, Township 55, Range 39, in unincorporated Miami-Dade County, bounded by SW 152 Street on the north, SW 124 Avenue on the east, US Coast Guard lands on the south and US Government lands on the west (see **Figures 1A and 1B**). This proposed change to the CDMP seeks to redesignate 68.41 gross acres from Low Medium Density Residential to Business and Office to enable the development of neighborhood serving retail and business uses that will be nestled within a unique site surrounded by Natural Forest Community preserves and hammocks and will share the site with uses currently permitted under the existing Low Medium Density Residential designation consisting of residential garden style apartments, a public high school and a public library. The subject property includes the following two areas outlined in **Table 1A** below and as illustrated in **Figures 1C and 1D**.

Table 1A – Existing and Proposed Land Use Designations for the Subject Property				
Gross Acres	Net Acres	Current Land Use Designation	Proposed Land Use Designation	Proposed Mix of Land Uses
68.41	64.73	Low Medium Density Residential	Business and Office (Northern portion of Property)	Shopping Center Retail and Business Uses School and Library Environmental Lands
73.16	73.16	Low Medium Density Residential	Low Medium Density Residential (Southern portion of Property)	Residential Environmental Lands
141.57	137.89	Total for Subject Property		Note: Residential, School and Library uses already permitted under existing Low Medium Density Land Use Designation

The current land use designation for the subject property is Low Medium Density Residential which is governed by the Declaration of Restrictions approved for the property in 2005 (found in the Official Records Book 23413, page 1477, Miami-Dade County - CFN #20050539897), which permits up to 1200 residential units, a public school, a public library, a health and fitness center and retail and office uses permitted under Miami-Dade County TND zoning regulations. As outlined above, the southern portion of the subject property will retain the Low Medium Density Residential land use, while the northern portion of the subject property will request a change to Business and Office. The Applicant is requesting the release of the existing Declaration of Restrictions, and has proposed a new Declaration of Restrictions to accommodate up to 900 residential units, a public school, a public library and 370,000 square feet of shopping center retail and business uses. The change in the proposed development program permitted by the existing and proposed Declaration of Restrictions is outlined below in **Table 1B**.

Table 1B – Underlying Allowable and Proposed Development for the Amendment Site			
Development Program Permitted by the Existing Covenant - Low Medium Density Residential	Development Program Permitted by the Proposed Covenant - Low Medium Density Residential and Business and Office	Development Program Uses Already Allowed	Development Program Uses Newly Proposed
1200 residential units 1350 student public high school 17,400 sf public library Retail, office, health- fitness as permitted by TND zoning Preservation of NFC and Hammock	900 residential units 1350 student public high school 17,400 sf public library 370,000 sf Shopping Center Retail/Business Preservation of NFC and Hammock	900 residential units 1350 student public high school 17,400 sf public library	370,000 sf of Retail and Business Uses
<b>AM Peak Hour Net External Trips</b>	<b>Net External Trips for Entire Site = 1,068</b>	<b>Trips for Uses Allowed = 867</b>	<b>New Retail Trips = 201</b>
<b>PM Peak Hour Net External Trips</b>	<b>Net External Trips for Entire Site = 1,660</b>	<b>Trips for Uses Allowed = 723</b>	<b>New Retail Trips = 937</b>
Notes: See Table 2A for Trip Generation			



 Coral Reef Commons - UM South Campus Property

Figure 1A  
Site Location  
Coral Reef Commons - UM South Campus Property



- UM South Campus Property
- Zoo Miami Entertainment Area I – MDC Parks and Recreation
- Zoo Miami Entertainment Area II – MDC and Coast Guard Properties
- Miami Metrozoo DRI Boundary

Figure 1B  
Adjacent Properties  
Coral Reef Commons - UM South Campus Property



Legend



Existing Land Use = Low Medium Density Residential – NOT CHANGING



Proposed Land Use = Business and Office – SUBJECT OF PROPOSED CDMP CHANGE

Figure 1C  
Existing and Proposed Land Use  
Coral Reef Commons - UM South Campus Property



Legend



- Existing Land Use = Low Medium Density Residential – NOT CHANGING
- Proposed Land Use = Business and Office – SUBJECT OF PROPOSED CDMP CHANGE
- Environmental Lands (NFC Preserves or Hammocks)

Figure 1D  
 Environmental Lands  
 Coral Reef Commons - UM South Campus Property

## **Project Access to the Regional Roadway Network**

The Amendment site is located adjacent to SW 152 Street, an east-west Urban Principal Arterial that extends 4.6 miles connecting other significant north-south Urban Principal Arterials (SW 137 Avenue, Florida's Turnpike and US-1). Primary access to the Amendment Site is provided by the proposed expansion of the existing signalized intersection of SW 152 Street at SW 127 Avenue, with secondary site access provided by the proposed creation of two directional median openings onto SW 152 Street as illustrated in **Figure 1E** and as described in detail below.

**Project Access 1** - Access to and from the Amendment site will be provided through the expansion of the signalized project access intersection at SW 152 Street and SW 127 Avenue, improving the south leg of the intersection to extend SW 127 Avenue as an improved local access road into the heart of the Amendment Site. The geometric expansion at this intersection includes the following:

- The extension of the storage for the westbound left turn lane (from  $\pm 100$  feet to  $\pm 300$  feet) increasing the westbound vehicular storage from 4 cars to 12;
- The reconstruction of the south leg of the intersection (SW 127 Avenue) to accommodate (at a minimum) 2 left turn lanes and 1 shared through/right turn lane;
- The restriping of the north leg of the intersection to compliment the geometric improvements on the south leg and to accommodate proposed changes to the signal phasing and signal timing; and
- The expansion of the eastbound approach to accommodate a proposed fourth eastbound travel lane on SW 152 Street which will be constructed initially as an exclusive EB right turn lane.

**Project Access 2** - Directional Access to and from the south will be provided off of SW 152 Street located  $\pm 850$  feet west of SW 127 Avenue, aligning with theoretical SW 127 Place. This access location will accommodate the following:

- The provision of right in, right out and left in movements to Project Access 2;
- A westbound left turn lane with  $\pm 350$  feet of storage (accommodating 14 cars) will be carved out of the existing median along SW 152 Street;
- The local access roadway that will intersect with SW 152 Street will accommodate (at a minimum) two inbound lanes and one outbound lane, and will be setback to the first cross access by  $\pm 150$  feet.

**Project Access 3** - Directional Access to and from the south will be provided off of SW 152 Street located  $\pm 550$  feet west of SW 129 Avenue, aligning with theoretical SW 129 Place. This access location will accommodate the following:

- The provision of right in, right out and left in movements to Project Access 3;
- A westbound left turn lane with  $\pm 150$  feet of storage (accommodating 6 cars) will be carved out of the existing median along SW 152 Street;
- The local access roadway that will intersect with SW 152 Street will accommodate (at a minimum) two inbound lanes and one outbound lane, and will be setback to the first cross access by  $\pm 150$  feet.

## **SW 127 Avenue as a Local Access Roadway**

SW 127 Avenue (which is an Urban Collector north of SW 152 Street) will be constructed as a four lane divided local access roadway (south of SW 152 Street) at the entry into the Amendment Site, and will taper back to a two lane divided local access roadway to serve the residential portion of the site. SW 127 Avenue is not a designated roadway from SW 152 Street to SW 184 Street (pursuant to the CDMP map series or the 2035 LRTP) and terminates at a gated access to US Government Property at the southern edge of the Amendment Site. Several obstacles exist which prevent this roadway from being extended to the south, since it would bisect several existing and planned Miami-Dade County attractions. These include the Gold Coast Railroad Museum, Zoo Miami Entertainment Area I, the Zoo Miami property and Larry and Penny Thompson Park.



- Legend
- ① Proposed Project Access Locations
  - Conceptual Internal Local Roadway Network
  - Existing Land Use = Low Medium Density Residential – NOT CHANGING
  - Proposed Land Use = Business and Office – SUBJECT OF PROPOSED CDMP CHANGE
  - Environmental Lands (NFC Preserves or Hammocks)

Figure 1E  
 Proposed Project Access Locations  
 Coral Reef Commons - UM South Campus Property

**Trip Generation for the Amendment Site**

The trip generation analysis for the uses proposed on the subject property has been prepared to estimate the daily, AM peak hour and PM peak hour trip impact using the rates and equations from ITE Trip Generation, 8<sup>th</sup> Edition. The analysis uses the rates and/or formulas for the following ITE land use codes:

- ITE LUC 220 for 900 residential apartments;
- ITE LUC 530 for the 1350 student public high school;
- ITE LUC 590 for the 17,400 square foot library; and
- ITE LUC 820 for the 370,000 square foot shopping center accommodating retail and business uses.

The trip generation analysis for the subject property has been prepared on attached **Table 2A**. Due to the mixture of uses proposed, internalization has been estimated for the site based upon the guidelines established in *Tables 7.1 and 7.2 (pages 93 and 94) from the ITE Trip Generation Handbook, 2<sup>nd</sup> Edition, June 2004*. Internalization for daily, AM peak hour and PM peak hour has been provided by using the **ITE Multi-Use Development Trip Generation and Internal Capture Summary Worksheets provided as Tables 2B, 2C and 2D** included herein and as outlined below.

- **Table 2A** identifies the trip generation analysis for the uses proposed on the subject property.
- **Table 2B** identifies the ITE Multi-Use Development Internal Capture Summary for the Daily timeframe = 15%
- **Table 2C** identifies the ITE Multi-Use Development Internal Capture Summary for the AM peak hour = 17%
- **Table 2D** identifies the ITE Multi-Use Development Internal Capture Summary for the PM peak hour = 16%

Based upon the retail and business uses proposed, pass-by capture has been calculated for the 370,000 square foot shopping center using the pass-by capture formula from ITE which has been applied to the external trips from the retail use as detailed in **Table 2A**. The pass-by reduction for 370,000 square feet of shopping center equates to 27% using the ITE pass-by formula outlined below:

- $\ln(TP) = -0.291 \ln(X) + 5.001 = 27\%$

A summary of the trip generation results as detailed on **Table 2A** are provided in **Table 2E** below. The information includes the net external trips generated by the entire subject property, the net external trips generated by the proposed uses already permitted by the existing Low Medium Density Residential land use and the net external trips generated by the proposed uses made possible by the change to business and office.

Table 2E - Trip Generation Summary				
Timeframe	Net External Trips for the Development Program Uses Permitted by the Existing Land Use as Low Medium Density Residential	Net External Trips for the Development Program Uses Proposed by the Change in Land Use to Business and Office	Net External Trips for the Entire Subject Property	Net New External Trips Resulting from the Change in Land Use to Business and Office
	Residential, High School, Library	Retail Shopping Center		
Daily	7,881	9,863	17,744	9,863
AM Peak Hour	867	201	1,068	201
PM Peak Hour	723	937	1,660	937

**TABLE 2A  
CORAL REEF COMMONS - UM SOUTH CAMPUS PROPERTY  
TRIP GENERATION FOR THE MIX OF USES PROPOSED**

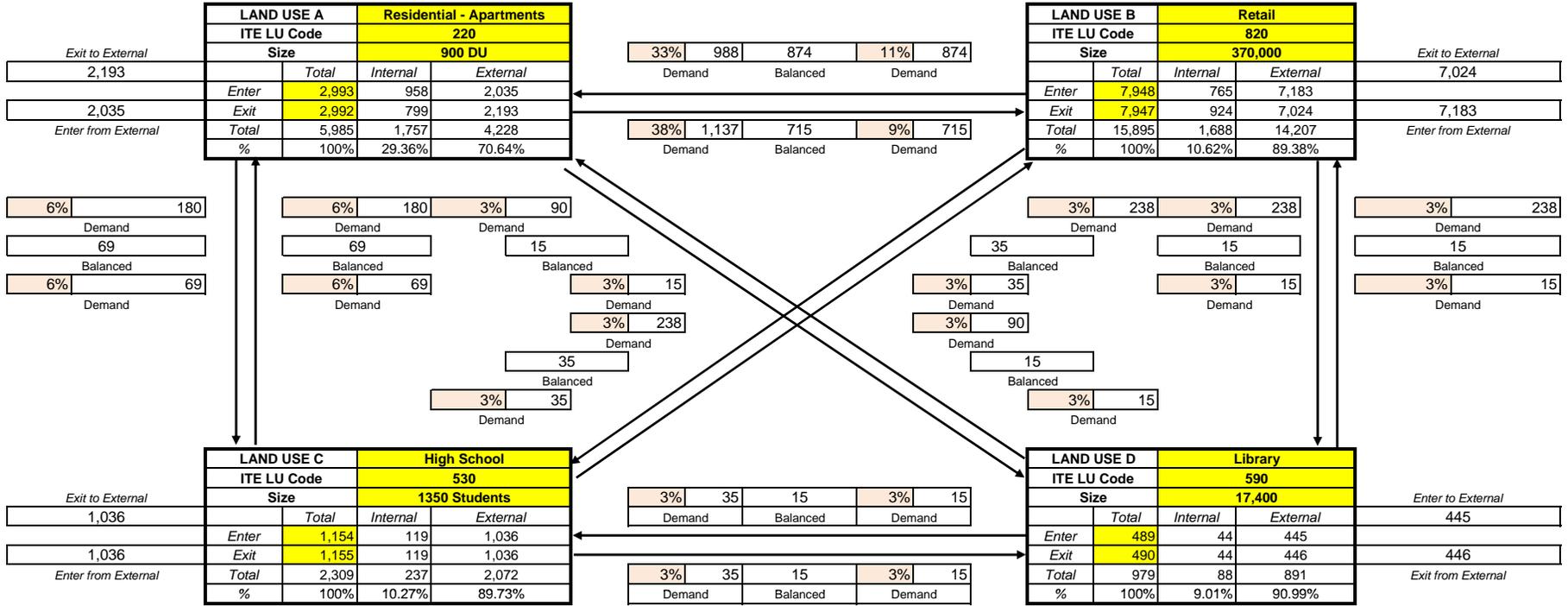
11/20/2011

LAND USE	UNITS	ITE LUC	ITE 8TH ED TRIP RATES	DAILY	% IN	TRIPS	% OUT	TRIPS
APARTMENTS	900 DU	220	$T = 6.65 (X)$	5,985	50%	2,993	50%	2,992
RETAIL SHOPPING CENTER	370,000 SQ. FT.	820	$\ln (T) = 0.65 \ln (X) + 5.83$	15,895	50%	7,948	50%	7,947
HIGH SCHOOL	1,350 Students	530	$T = 1.71 (X)$	2,309	50%	1,154	50%	1,155
LIBRARY	17,400 SQ. FT.	590	$T = 56.24 (X)$	979	50%	489	50%	490
<b>GROSS TOTAL TRIPS</b>				25,167	50%	12,584	50%	12,583
INTERNAL CAPTURE OF GROSS TRIPS		15.00%	Internalization per ITE - See Table 2B	3,775	50%	1,888	50%	1,888
PASS BY CAPTURE FOR EXTERNAL TRIPS OF RETAIL		27.00%	$\ln (TP) = -0.291 \ln (X) + 5.001$	3,648	50%	1,824	50%	1,824
<b>NET EXTERNAL TRIPS FOR ENTIRE SITE</b>				17,744	50%	8,872	50%	8,872
<b>NET EXTERNAL TRIPS FOR THE RETAIL USE</b>			Amendment to Business and Office	9,863	50%	4,932	50%	4,931
<b>NET EXTERNAL TRIPS FOR RESIDENTIAL, SCHOOL, LIBRARY</b>			Allowed per the Underlying Land Use	7,881	50%	3,941	50%	3,941
LAND USE	UNITS	ITE LUC	ITE 8TH ED TRIP RATES	AM TRIPS	% IN	TRIPS	% OUT	TRIPS
APARTMENTS	900 DU	220	$T = 0.51 (X)$	459	20%	92	80%	367
RETAIL SHOPPING CENTER	370,000 SQ. FT.	820	$\ln (T) = 0.59 \ln (X) + 2.32$	333	61%	203	39%	130
HIGH SCHOOL	1,350 Students	530	$T = 0.42 (X)$	567	68%	386	32%	181
LIBRARY	17,400 SQ. FT.	590	$T = 1.04 (X)$	18	71%	13	29%	5
<b>GROSS TOTAL TRIPS</b>				1,377	50%	694	50%	683
INTERNAL CAPTURE OF GROSS TRIPS		17.00%	Internalization per ITE - See Table 2C	234	50%	118	50%	116
PASS BY CAPTURE FOR EXTERNAL TRIPS OF RETAIL		27.00%	$\ln (TP) = -0.291 \ln (X) + 5.001$	75	50%	37	50%	38
<b>NET EXTERNAL TRIPS FOR ENTIRE SITE</b>				1,068	50%	539	50%	529
<b>NET EXTERNAL TRIPS FOR THE RETAIL USE</b>			Amendment to Business and Office	201	65%	131	35%	70
<b>NET EXTERNAL TRIPS FOR RESIDENTIAL, SCHOOL, LIBRARY</b>			Allowed per the Underlying Land Use	867	47%	408	53%	459
LAND USE	UNITS	ITE LUC	ITE 8TH ED TRIP RATES	PM TRIPS	% IN	TRIPS	% OUT	TRIPS
APARTMENTS	900 DU	220	$T = 0.62 (X)$	558	65%	363	35%	195
RETAIL SHOPPING CENTER	370,000 SQ. FT.	820	$\ln (T) = 0.67 \ln (X) + 3.37$	1,529	49%	749	51%	780
HIGH SCHOOL	1,350 Students	530	$T = 0.13 (X)$	176	47%	82	53%	94
LIBRARY	17,400 SQ. FT.	590	$T = 7.3 (X)$	127	48%	61	52%	66
<b>GROSS TOTAL TRIPS</b>				2,390	53%	1,255	47%	1,135
INTERNAL CAPTURE OF GROSS TRIPS		16.00%	Internalization per ITE - See Table 2D	383	52%	201	48%	182
PASS BY CAPTURE FOR EXTERNAL TRIPS OF RETAIL		27.00%	$\ln (TP) = -0.291 \ln (X) + 5.001$	347	50%	173	50%	174
<b>NET EXTERNAL TRIPS FOR ENTIRE SITE</b>				1,660	53%	881	47%	779
<b>NET EXTERNAL TRIPS FOR THE RETAIL USE</b>			Amendment to Business and Office	937	49%	456	51%	481
<b>NET EXTERNAL TRIPS FOR RESIDENTIAL, SCHOOL, LIBRARY</b>			Allowed per the Underlying Land Use	723	59%	425	41%	298
SUMMARY				PM TRIPS	% IN	TRIPS	% OUT	TRIPS
<b>NET EXTERNAL TRIPS FOR THE RETAIL USE PROPOSED</b>				937	49%	456	51%	481
<b>NET EXTERNAL TRIPS FOR RESIDENTIAL, SCHOOL, LIBRARY</b>				723	59%	425	41%	298
<b>NET EXTERNAL TRIPS APPROVED FOR 2004 CDMP AMENDMENT</b>				881	66%	585	34%	296
<b>NET NEW AMENDMENT TRIPS</b>				779	38%	296	62%	483

Analyst Sweetapple  
Date October 27, 2011

### MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

Project UM South Campus  
Time Period Daily



Net External Trips for Multi-Use Developments						
	LAND USE A	LAND USE B	LAND USE C	LAND USE D	Total	
Enter	2,035	7,183	1,036	445	0	10,699
Exit	2,193	7,024	1,036	446	0	10,699
Total	4,228	14,207	2,072	891	0	21,397
Single Use	5,985	15,895	2,309	979	0	25,168
	Residential	Retail	School	Library		INTERNAL CAPTURE 15.0%

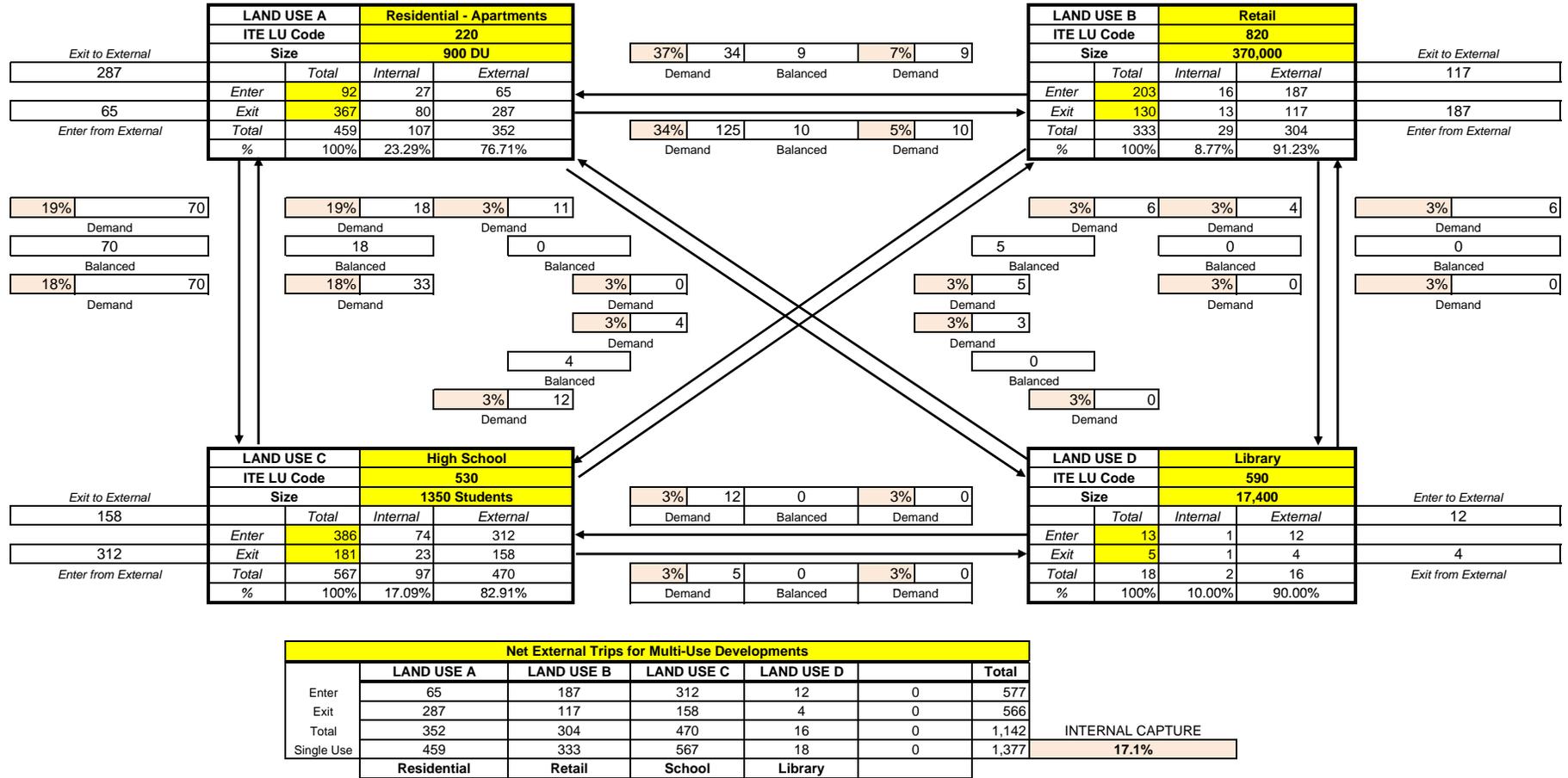
Source: Tables 7.1 and 7.2 from the ITE Trip Generation Handbook, 2nd Edition, 2004

Table 2B - ITE Multi-Use Development Internal Capture Summary - Daily  
Coral Reef Commons - UM South Campus Property

Analyst Sweetapple  
Date October 27, 2011

### MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

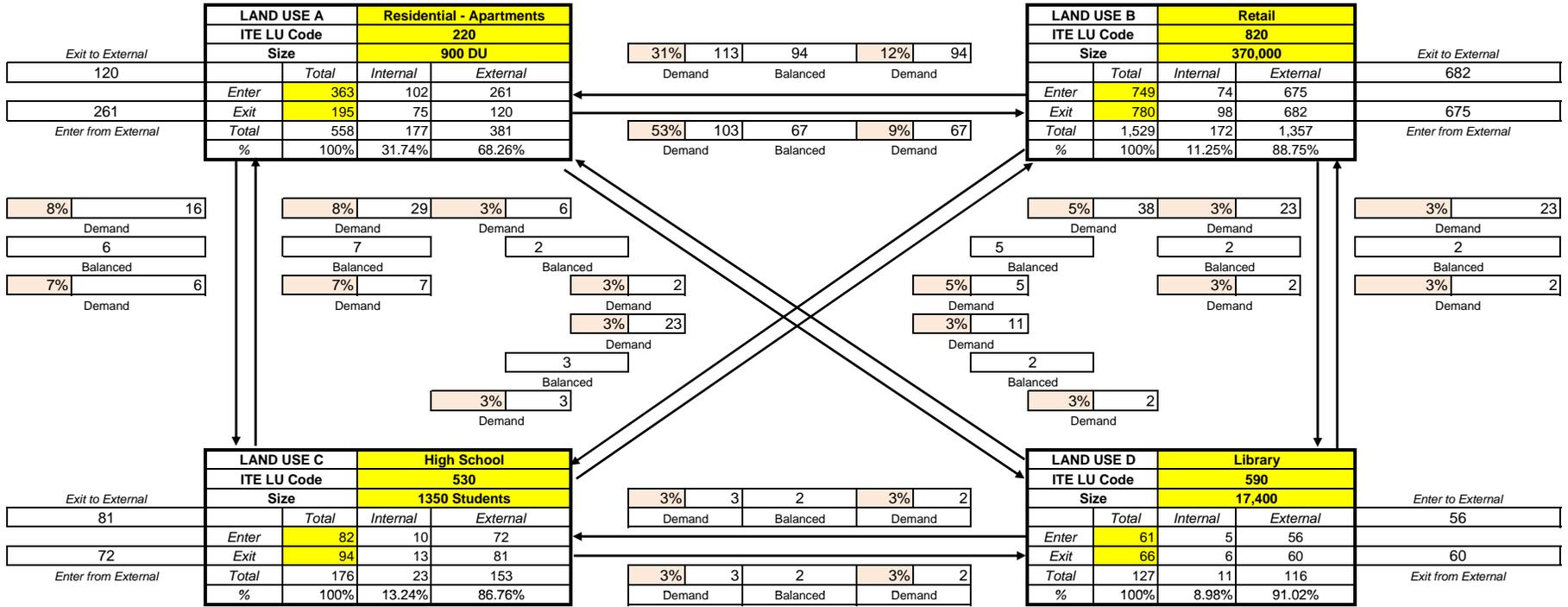
Project UM South Campus  
Time Period AM Peak Hour



Source: Tables 7.1 and 7.2 from the ITE Trip Generation Handbook, 2nd Edition, 2004

Table 2C - ITE Multi-Use Development Internal Capture Summary - AM Peak Hour  
Coral Reef Commons - UM South Campus Property

### MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Developments					
	LAND USE A	LAND USE B	LAND USE C	LAND USE D	Total
Enter	261	675	72	56	1,063
Exit	120	682	81	60	943
Total	381	1,357	153	116	2,006
Single Use	558	1,529	176	127	2,390
	Residential	Retail	School	Library	

INTERNAL CAPTURE 16.1%

## Analysis Timeframe

Using the results of the trip generation analysis, and after reviewing background traffic for the roadways adjacent to the Amendment site, the weekday PM peak hour period has been selected as the appropriate analysis peak hour period for the evaluation of Year 2016 short term and Year 2025 long term traffic conditions. This evaluation is supported by the Transportation Element in the CDMP and the state definitions of the PM peak hour as outlined below.

- The designation in the Transportation Element of the Miami-Dade County CDMP identifies the adopted level of service as the "Peak Period LOS Standard", where peak period is defined as the average of the two highest consecutive hours of traffic volume during a weekday;
- The definitions of Peak Hour by the State pursuant to FDOT Rule 14-94.002(6) and (9) FAC, and the 2009 FDOT Quality/LOS Handbook, where the Peak Hour means the 100<sup>th</sup> highest volume hour of the year in the predominant traffic flow direction, and where the 100<sup>th</sup> highest volume hour of the year represents the typical weekday peak traffic hour during the peak travel season which usually occurs in the late afternoon for most state roadways. Per the 2009 FDOT Quality/LOS Handbook, the 100<sup>th</sup> highest hour of the year is representative of the typical rush hour during the peak traffic season.

A summary of the net external trips for the subject property for the weekday PM peak hour is summarized in **Table 2F** below. The analyses in the sections of the report to follow will address PM peak hour traffic conditions for the Short Term (Year 2016) and Long Term (Year 2025) planning horizons.

Table 2F – Net External PM Peak Hour Trip Generation Summary								
Uses Proposed	ITE LUC	Scale of Development	Gross PM Trips	Internalization at 16%	Pass-by Reduction	Net External PM Trips	PM Trips In	PM Trips Out
Apartments	220	900 DU	558	90	0	468	304	164
Retail Shopping Center	820	370,000 SF	1,529	245	347	937	456	481
High School	530	1350 students	176	28	0	148	70	78
Library	590	17,400 SF	127	20	0	107	51	56
<b>Total</b>			<b>2,390</b>	<b>383</b>	<b>347</b>	<b>1,660</b>	<b>881</b>	<b>779</b>

For the Year 2016 Short Term Planning Horizon, the net external PM peak hour trip impacts of the entire site (**1,660 net external PM peak hour trips**) will be incorporated into the Traffic Concurrency Analysis. This analysis measures the ability of the surrounding transportation infrastructure to accommodate the trip impacts for the short term – five year timeframe, recognizing the cumulative effects of existing peak hour period traffic, committed development traffic and project traffic to establish total traffic conditions. For the concurrency analysis, the uses permitted by the underlying land use for the subject property are not yet platted or included in the Traffic Concurrency Database, therefore the trip impacts for the entire site will be analyzed to ensure that adequate infrastructure exists to accommodate the impacts of development in the short term planning horizon.

For the Year 2025 Long Term Planning Horizon, the net external PM peak hour trip impact for the development program permitted by the underlying land use (**723 net external PM peak hour trips**) will be grouped as Committed Development based upon the fact that a portion of the subject property will retain its underlying land use designation which already permits (based on land use) the development of 900 Residential Apartments, a 1350 Student Public High School and a 17,400 square foot library pursuant to the 2004 CDMP Amendment approved for the subject property in 2005. The Year 2025 analysis will still measure the cumulative traffic impact onto the surrounding roadway network consisting of the existing peak hour period traffic, committed development traffic and project traffic to establish total traffic conditions, however the **723 net external PM peak hour trips** for the subject property uses permitted under the existing land use will be grouped with other committed development projects in the study area based upon their prior approval in the CDMP, while the **937 net new external PM peak hour trips** for the new uses proposed by the change in land use to Business and Office will be identified as Project Traffic for the Year 2025 analysis.

## CDMP Amendment Transportation Analysis

A CDMP Amendment Transportation Analysis has been prepared to examine the future transportation impacts resulting from the proposed modifications to the CDMP, examining the adequacy of the transportation infrastructure within the short term (Year 2016) and long term (Year 2025) planning horizons. The transportation analysis includes an expanded traffic concurrency analysis for an evaluation of short term (Year 2016) traffic conditions and an extensive Year 2025 roadway network analysis for an evaluation of long term traffic conditions. The study area includes the arterial and collector roadway network extending to SW 88 Street on the north, SR 821, SR 874 and US-1 on the east, SW 216 Street on the south and SW 157 Avenue on the west. The transportation analysis evaluates the adequacy of the existing, committed and planned public facilities to support the infrastructure demand for the Amendment incorporating the following:

- The transportation improvements currently under construction in the study area;
- The transportation improvements from TIP 2012 identifying funded improvements for the Short Term Planning Horizon;
- The planned transportation improvements from Priorities II and III of the LRTP 2035 for the Long Term Planning Horizon;
- The existing and programmed local and regional transit service in the study area; and
- The proposed transportation improvements funded by the Amendment.

### Programmed Transportation Improvements

Programmed transportation improvements from TIP 2012 reflect funded roadway projects that will result in network lane expansion in the study area between the Years 2011 and 2016. These improvements are identified in **Figure 2A** and are outlined in **Table 3A**. Of significance to this study area are the funded ramp and intersection modifications to the HEFT interchange at SW 152 Street and SW 117 Avenue programmed for FY 2011-2012 by Florida's Turnpike.

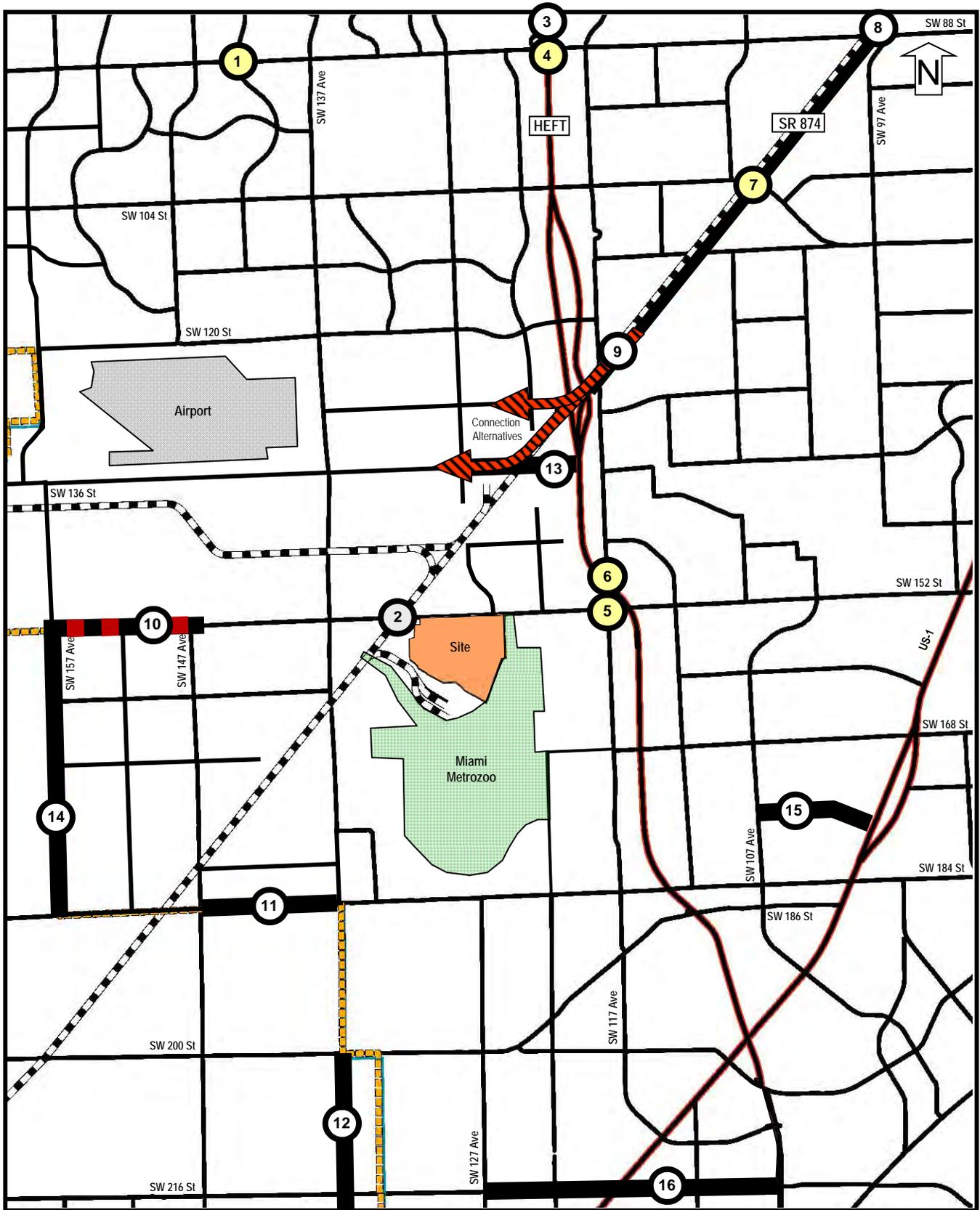
### Planned Transportation Improvements

Planned transportation improvements from Priorities II and III of the Long Range Transportation Plan (LRTP) 2035 have been established by Miami-Dade County as the cost feasible transportation infrastructure that will be in place by the Year 2025. The Priority II and III planned transportation improvements are identified on **Figure 2B** and are listed in detail on **Table 3B**. Of significance to this study area is the 4 lane expansion (and connection) of SW 127 Avenue from SW 120 Street to SW 144 Street, inclusive of the CSX rail crossing to create a continuous 4 lane divided north-south corridor from SW 88 Street to SW 152 Street.

### Existing Miami-Dade Transit Service

Existing Miami-Dade Transit Service (as reported by the *Transit Development Plan* dated September 2011) provides local and regional transit access to the Amendment site as outlined in **Table 3C** and as illustrated on **Figures 2C and 2D**. The Coral Reef Max Bus Route 252 currently provides express bus service (and service at 15 and 20 minute headways during the AM and PM peak hours) between the Dadeland South Metrorail Station, the Busway Corridor and SW 152 Street.

Table 3C – Existing Transit Service in the Study Area			
Transit Routes Serving the Amendment	Major Roadways Served By Metrobus Routes	AM and PM Peak Hour Service Headways – Dec. 2010	Saturday/Sunday Service Headway – Dec. 2010
Route 34 – Busway Flyer	Busway Corridor	7.5 minutes	n/a
Route 38 – Busway Max	Busway Corridor	12 minutes	15-20 minutes
Route 137 – West Dade Connection	SW 137 Avenue	30 minutes	40-45 minutes
Route 252 – Coral Reef Max	SW 152 Street	15-20 minutes	60-60 minutes
Route 288 – Kendall Cruiser	SW 88 Street	12 minutes	n/a



Source: TIP 2012 adopted by the MPO on 6-23-2011



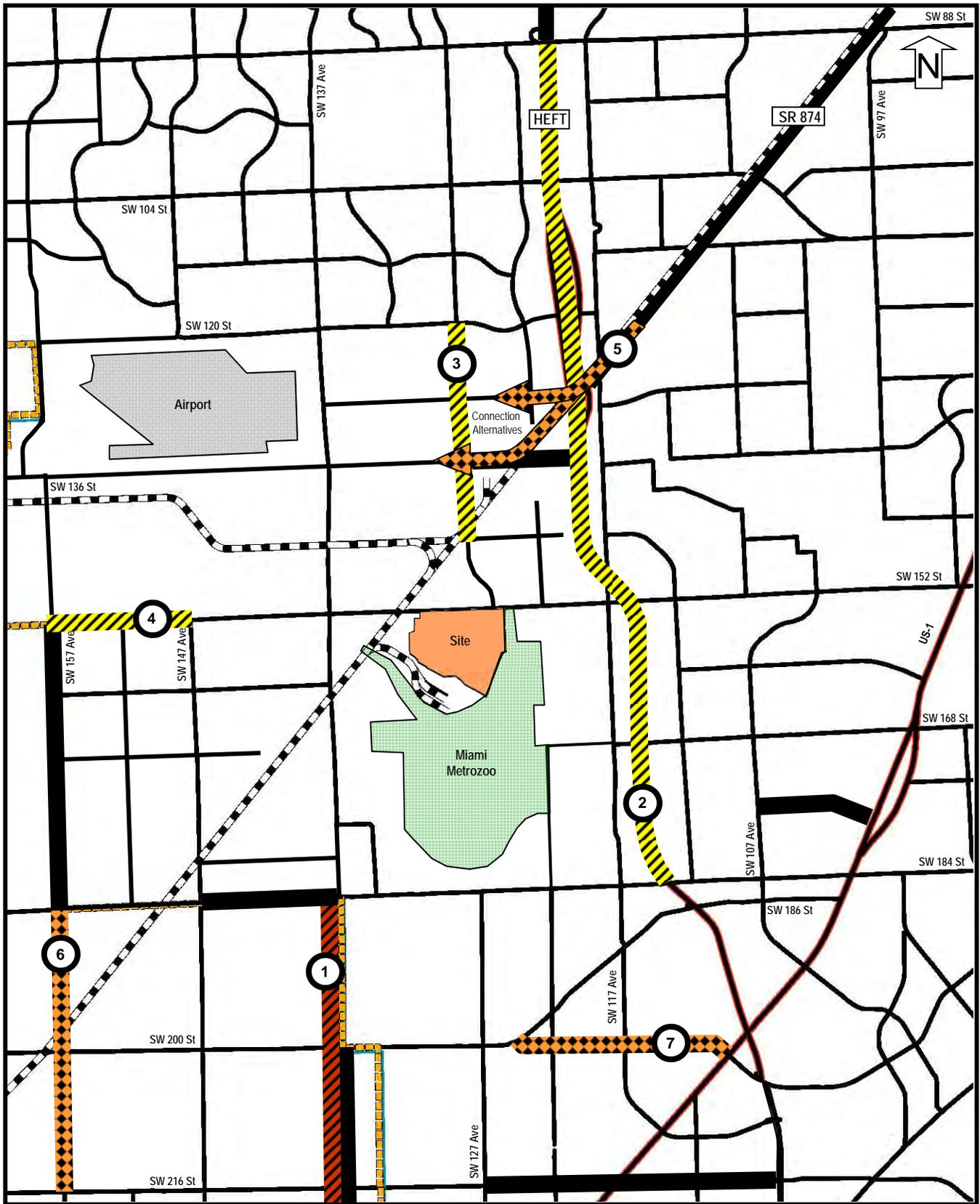
Figure 2A  
 Programmed Transportation Improvements – TIP 2012  
 Coral Reef Commons - UM South Campus Property

**TABLE 3A  
PROGRAMMED TRANSPORTATION IMPROVEMENTS  
MIAMI-DADE COUNTY TIP 2012 - FY 2012 TO FY 2016**

02/21/2012

<b>TIP 2012 No.</b>	<b>TIP 2012 Page No.</b>	<b>Location</b>	<b>Improvement</b>	<b>TIP 2012 Project Phase</b>	<b>TIP 2012 Project Costs</b>	<b>TIP 2012 Year Funded</b>	<b>Fig. 2A Ref. No.</b>
DT4270321	Section A1 Page 88	<b>SR 94/SW 88 Street</b> At SW 142 Avenue	Intersection Improvement	Construction	\$267,000	2011-2013	<b>#1</b>
DT2496143	Section A1 Page 101	<b>SR 997/Krome Avenue</b> SR 94/Kendall Dr to 1 mile N. of SW 8 St	Add Lanes and Reconstruct 6.976 miles	Construction	\$22,959,000	2014-2015	Not Mapped
DT4295441	Section A1 Page 114	<b>SW 152 Street</b> At Railroad Crossing	Rail Safety Project	Construction	\$22,000	2011-2012	<b>#2</b>
DT4271461	Section A2 Page 2	<b>HEFT Auxiliary Lanes</b> Kendall Drive to Bird Road	Add 1 Auxiliary Lane in each Direction	Construction	\$26,957,000	2013-2014	<b>#3</b>
TP4276891	Section A2 Page 3	<b>HEFT at Kendall Drive</b> Kendall Drive Ramps	Ramp, Intersection and Interchange Improvements	Construction	\$5,871,000	2013-2014	<b>#4</b>
TP4277001	Section A2 Page 3	<b>HEFT at Coral Reef Dr/SW 117 Ave</b> HEFT to SW 152 Street	Ramp and Intersection Turn Lane Improvements	Construction	\$798,000	2011-2012	<b>#5</b>
TP4277011	Section A2 Page 4	<b>HEFT at Coral Reef Dr/CD Road</b> SW 152 Street to HEFT	Ramp and Intersection Improvements	Construction	\$107,000	2011-2012	<b>#6</b>
XA83618	Section A3 Page 5	<b>SR 836 Southwest Extension</b> NW 137 Avenue to SW 136 Street	Project Development Concept Report	Project Development	\$7,402,000	2011-2015	Not Mapped
XA87404	Section A3 Page 7	<b>SR 874 / Killian Parkway Interchange</b> HEFT to Kendall Drive	Modifications to Interchanges, toll plazas ramp plazas and new construction	Construction	\$4,692,000	2011-2012	<b>#7</b>
XA87409	Section A3 Page 7	<b>SR 874 Mainline Construction</b> Kendall Drive to SR 826	Modifications to Mainline Roadway	Construction	\$87,762,000	2011-2014	<b>#8</b>
XA87410	Section A3 Page 7	<b>SR 874 Ramp Connector</b> SW 136 St or SW 128 St to SR 874	Extension of SR 874 to SW 136 St or SW 128 St	Project Development	\$195,000	2011-2012	<b>#9</b>
PW0000131	Section A5 Page 23	<b>SW 152 Street</b> SW 147 Avenue to SW 157 Avenue	Widening from 2 to 4 lanes	PE	\$200,000	2011-2012	<b>#10</b>
PW671572B	Section A5 Page 30	<b>SW 184 Street</b> SW 137 Avenue to SW 147 Avenue	Widening from 2 to 4 lanes	Construction	In progress	Underway	<b>#11</b>
PW20040343	Section A7 Page 12	<b>SW 137 Avenue</b> SW 200 Street to US-1	New 2 lane roadway	Construction	\$20,732,000	2011-2015	<b>#12</b>
PW20040344	Section A7 Page 12	<b>SW 137 Avenue</b> From HEFT to US-1	Widening from 2 to 4 lanes	Construction	\$9,167,000	2011-2015	Not Mapped
PW20040346A	Section A7 Page 14	<b>SW 136 Street</b> SW 127 Ave to Florida's Turnpike	Widening from 2 to 4 lanes	Under Study	In progress	Underway	<b>#13</b>
PW20040372	Section A7 Page 14	<b>SW 157 Avenue</b> SW 152 Street to SW 184 Street	New 4 Lane Road	Construction	\$10,040,000	2011-2014	<b>#14</b>
PW20040349	Section A7 Page 15	<b>SW 176 Street</b> SW 107 Avenue to US-1	Curb and Gutter Traffic Operational Improvements	Construction	\$4,525,000	2011-2015	<b>#15</b>
PW20040348	Section A7 Page 15	<b>SW 216 Street</b> SW 127 Avenue to HEFT	Curb and Gutter Traffic Operational Improvements	Construction	\$8,777,000	2011-2015	<b>#16</b>
TA0000094	Section A11 Page 15	<b>Kendall Enhanced Bus Service</b> Dadeland North to SW 167 Ave	Bus Acquisition and Roadway Construction	Capital	\$3,357,000	2011-2013	Not Mapped

Source: TIP 2012 - FY 2012-2016 Transportation Improvement Program, Metropolitan Planning Organization for the Miami Urbanized Area, adopted June 23, 2011.



Source: LRTP 2035 adopted by the MPO on 10-29-09

- Legend
-  TIP 2012 – FY 2012 – 2016 (See Figure 2A)
  -  Site
  -  LRTP 2035 PRIORITY II – 2015-2020
  -  LRTP 2035 PRIORITY III – 2021-2025
  -  LRTP 2035 PRIORITY IV – 2026-2035

Figure 2B  
 Planned Transportation Improvements – LRTP 2035  
 Coral Reef Commons - UM South Campus Property

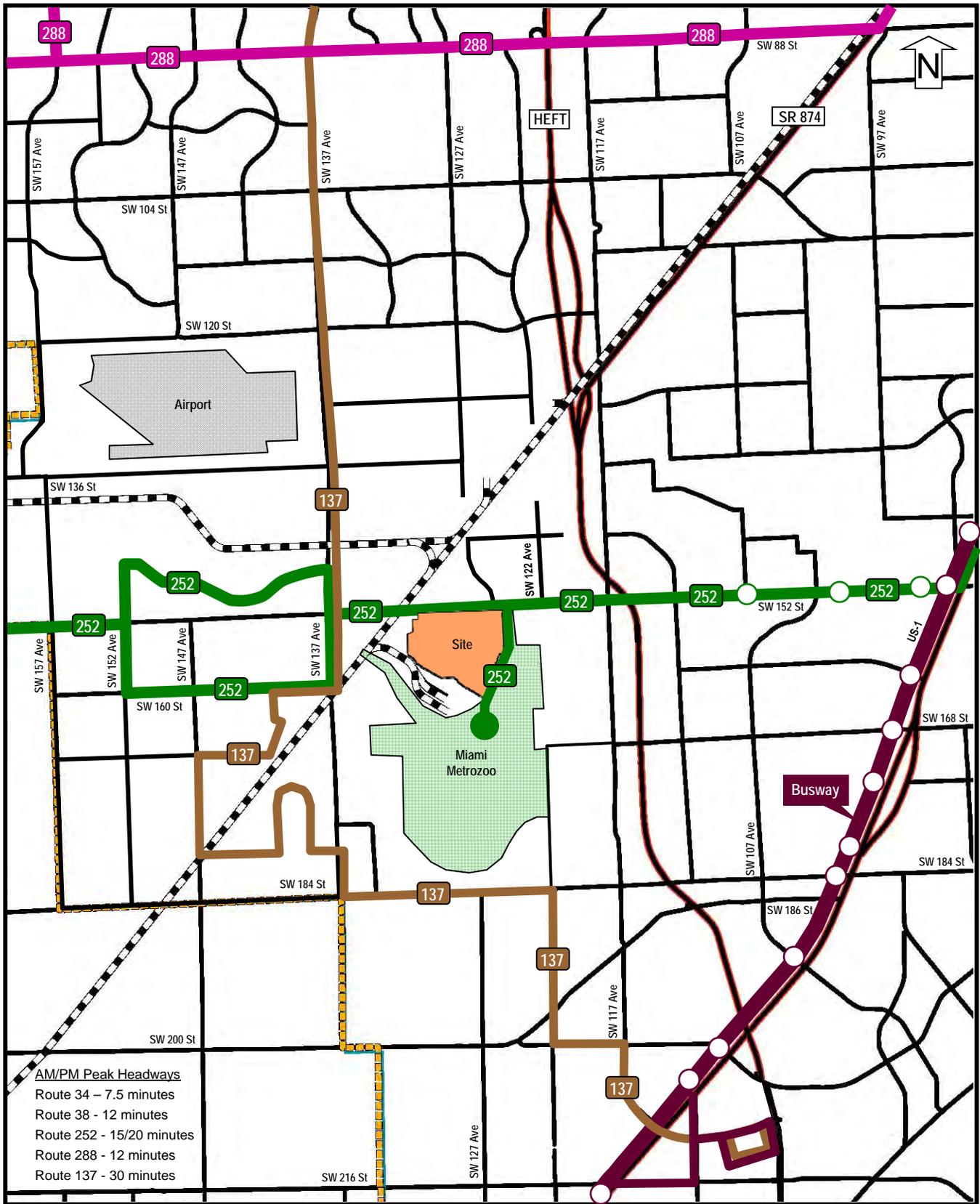
**TABLE 3B  
PLANNED TRANSPORTATION IMPROVEMENTS (2015 - 2035)  
2035 LONG RANGE TRANSPORTATION PLAN**

02/21/2012

<b>L RTP Page No.</b>	<b>Roadway</b>	<b>Limits</b>	<b>Improvement</b>	<b>Timeframe</b>	<b>L RTP Priority</b>	<b>Figure 2B Ref. No.</b>
2	<b>SR 977/Krome Avenue</b>	SW 136 Street to SR 94/Kendall Drive	Widen to 4 lanes (2 to 4)	2015-2020	<b>II</b>	Not Mapped
2	<b>SR 977/Krome Avenue</b>	SR 94/Kendall Drive to SR 90/SW 8 Street	Widen to 4 lanes (2 to 4)	2015-2020	<b>II</b>	Not Mapped
2	<b>SW 137 Avenue</b>	US-1 to SW 184 Street	Widen to 4 lanes (2 to 4)	2015-2020	<b>II</b>	<b>#1</b>
3	<b>SR 821/HEFT</b>	Eureka Drive to Kendall Drive	Widen to 8, 10, 12 lanes plus auxillary lanes	2021-2025	<b>III</b>	<b>#2</b>
3	<b>SW 127 Avenue</b>	SW 120 Street to SW 144 Street	New 4 lanes / Widen to 4 lanes	2021-2025	<b>III</b>	<b>#3</b>
3	<b>SW 152 Street</b>	SW 147 Avenue to SW 157 Avenue	Widen to 4 lanes (2 to 4)	2021-2025	<b>III</b>	<b>#4</b>
4	<b>SR 874 Ramp Connector</b>	SW 136 St or SW 128 St to SR 874	Ramp connection	2026-2035	<b>IV</b>	<b>#5</b>
4	<b>SR 977/Krome Avenue</b>	North of SW 8 St to Mile Post 2.754	Widen to 4 lanes (2 to 4)	2026-2035	<b>IV</b>	Not Mapped
4	<b>SR 977/Krome Avenue</b>	SR-5/US-1 to Lucy St/SW 328 Street	Widen to 4 lanes (2 to 4)	2026-2035	<b>IV</b>	Not Mapped
4	<b>SR 977/Krome Avenue</b>	SW 296 Street to SW 136 Street	Widen to 4 lanes (2 to 4)	2026-2035	<b>IV</b>	Not Mapped
5	<b>SR 977/Krome Avenue</b>	Lucy St/SW 328 Street to SW 296 Street	Widen to 4 lanes (2 to 4)	2026-2035	<b>IV</b>	Not Mapped
5	<b>SR 977/Krome Avenue</b>	Mile Post 2.754 to Mile Post 5.122	Widen to 4 lanes (2 to 4)	2026-2035	<b>IV</b>	Not Mapped
5	<b>SR 977/Krome Avenue</b>	Mile Post 5.122 to Mile Post 8.151	Widen to 4 lanes (2 to 4)	2026-2035	<b>IV</b>	Not Mapped
5	<b>SR 977/Krome Avenue</b>	Mile Post 8.151 to Mile Post 10.626	Widen to 4 lanes (2 to 4)	2026-2035	<b>IV</b>	Not Mapped
5	<b>SR 977/Krome Avenue</b>	Mile Post 10.626 to Mile Post 14.184	Widen to 4 lanes (2 to 4)	2026-2035	<b>IV</b>	Not Mapped
5	<b>SW 72 Street/Sunset Dr</b>	SW 117 Avenue to SW 157 Avenue	Widen to 6 lanes (4 to 6)	2026-2035	<b>IV</b>	Not Mapped
5	<b>SW 104 Street</b>	SW 160 Avenue to SW 167 Avenue	New 4 lanes / Widen to 4 lanes	2026-2035	<b>IV</b>	Not Mapped
5	<b>SW 157 Avenue</b>	SW 184 Street to SW 216 Street	New 2 lanes	2026-2035	<b>IV</b>	<b>#6</b>
5	<b>SW 200 Street</b>	US-1 to Quail Roost Drive	Widen to 4 lanes (2 to 4)	2026-2035	<b>IV</b>	<b>#7</b>

Source: Miami-Dade 2035 Long Range Transportation Plan adopted October 29, 2009





Source: Transit Development Plan - FY 2012 to FY 2021 - Annual Administrative Update - September 2011

- Legend
- Route 34 and 38 - Busway Flyer and Busway Max
  - Route 252 - Coral Reef Max
  - Route 288 - Kendall Cruiser
  - Route 137 - West Dade Connection
  - Site

Figure 2D  
Regional Transit Connectivity  
Coral Reef Commons - UM South Campus Property

## Traffic Concurrency Analysis – Year 2016 Short Term Planning Horizon

A traffic concurrency infrastructure analysis for the Year 2016 short term planning horizon has been prepared to examine the concurrency status of the surrounding roadways consistent with the Miami-Dade County traffic concurrency criteria and guidelines. Pursuant to the analysis performed herein, adequate capacity has been found to exist at the first directly accessed traffic count stations (and at the secondary traffic count stations) located adjacent to and surrounding the project site. Each traffic count station has been found to maintain adequate available capacity for the short term planning horizon to accommodate the traffic impacts for the entire site, inclusive of the residential, school and library uses currently allowed under the existing land use designation, and the proposed retail shopping center uses which are proposed by this CDMP Amendment application. The addition of the **1,660 net external PM peak hour trips for the entire site** does not exceed the available roadway capacity assigned to the surrounding traffic count stations by the Miami-Dade County Public Works Department using their Traffic Count Station database last updated on September 14, 2011. Pursuant to the Miami-Dade County Concurrency Management System, all study area traffic count stations on roadways adjacent to the Amendment Site have been found to operate at acceptable levels of service during the peak hour period, accounting for existing traffic, previously approved committed development traffic, plus the traffic from the proposed Amendment site. Available capacity and acceptable levels of service are maintained for the adjacent count stations and the study area roadway segments, meeting the traffic concurrency standards from the Miami-Dade County Comprehensive Development Master Plan. Based upon these findings, adequate existing and funded transportation infrastructure are maintained for the short term planning horizon to support the development program proposed by this Amendment. The traffic concurrency infrastructure analysis is presented in **Table 4** and reflects the information listed below.

### Traffic Count Data

Updated traffic counts for all roadways under both County and State jurisdiction reflect peak hour period traffic count data from year 2010 using the most recent data available from FDOT, Florida's Turnpike and Miami-Dade County.

### Adopted LOS Standards and the Maximum Service Volumes

The adopted level of service standards used for each count station are provided by Miami-Dade County in their traffic concurrency database. The maximum service volumes for the County count stations have been obtained from the Miami-Dade County ArtPlan calculations from the September 14, 2011 Traffic Concurrency Count Station Database. The maximum service volumes for the State count stations are based upon Table 4 for the Two-Way Peak Hour from the FDOT 2009 Quality/LOS Handbook last updated on 10/4/2010.

### Development Order Trips

The development order trips for each count station has been obtained from the Miami-Dade County and FDOT Traffic Concurrency Count Station database last updated on September 14, 2011.

This analysis also includes the assignment of unbuilt committed development traffic onto the surrounding study area roadway network for the following two projects approved by Miami-Dade County in prior CDMP Amendment cycles:

- Zoo Miami Entertainment Area I approved in 2008 as a Special CDMP Amendment Application for attraction, entertainment, hotel and restaurant uses located in Project Zones 1207 and 1209; and
- Zoo Miami Entertainment Area II approved in 2010 as part of the October 2009 Amendment Cycle for attraction, entertainment, conference hotel and restaurant uses located in Project Zone 1204.

### Project Assignment

The project traffic assignment to the surrounding study area roadways has been established using the Miami-Dade County Cardinal Distribution for Project Zone 1209 as obtained through interpolation for the Year 2016 using the Year 2005 and Year 2035 Cardinal Directions from the updated Directional Trip Distributions Report from the 2035 Long Range Transportation Plan (LRTP) adopted by the MPO in October of 2009. The assignment and distribution of the **1,660 net external PM peak hour trips** for the entire subject property onto the surrounding roadway network and to the cardinal directions from the 2035 LRTP are provided using the figures listed below.

- **Figure 3A** - Location of Project Zone 1209
- **Figure 3B** - Cardinal Distribution for Zone 1209 from Year 2005 and Year 2035 of the 2035 LRTP
- **Figure 3C** – Interpolated Cardinal Distribution for Year 2016 using Years 2005 and 2035 of the 2035 LRTP
- **Figure 3D** - Traffic Concurrency Count Stations
- **Figure 3E** - Traffic Concurrency Distribution for Zone 1209

### Total Traffic Conditions

The concurrency analysis presented in **Table 4** identifies the total traffic at each of the first directly accessed and secondary traffic count stations and the remaining capacity still available after the addition of the total traffic for the existing and proposed land uses within the Amendment site. **Table 4** addresses the Year 2016 Short Term Traffic Conditions for the following study area roadway corridors:

- SW 152 Street – SW 142 Avenue to SW 112 Avenue
- SW 117 Avenue – SW 136 Street to SW 184 Street
- SW 137 Avenue – SW 136 Street to SW 184 Street
- SR 821/HEFT – SW 120 Street to SW 184 Street

The determination of available capacity and level of service for each of the first directly accessed (and secondary) traffic count stations is made after incorporating the total project traffic from the proposed Amendment Site. Pursuant to the Miami-Dade County Concurrency Management System, all study area traffic count stations on roadways adjacent to and surrounding the project site were found to operate at acceptable levels of service during the peak hour period, accounting for existing traffic, previously approved committed development traffic, plus the total project traffic for the proposed Amendment Site. Based upon these findings, adequate existing transportation infrastructure is maintained in the Year 2016 Short Term Planning Horizon to support this proposed CDMP Amendment Application.

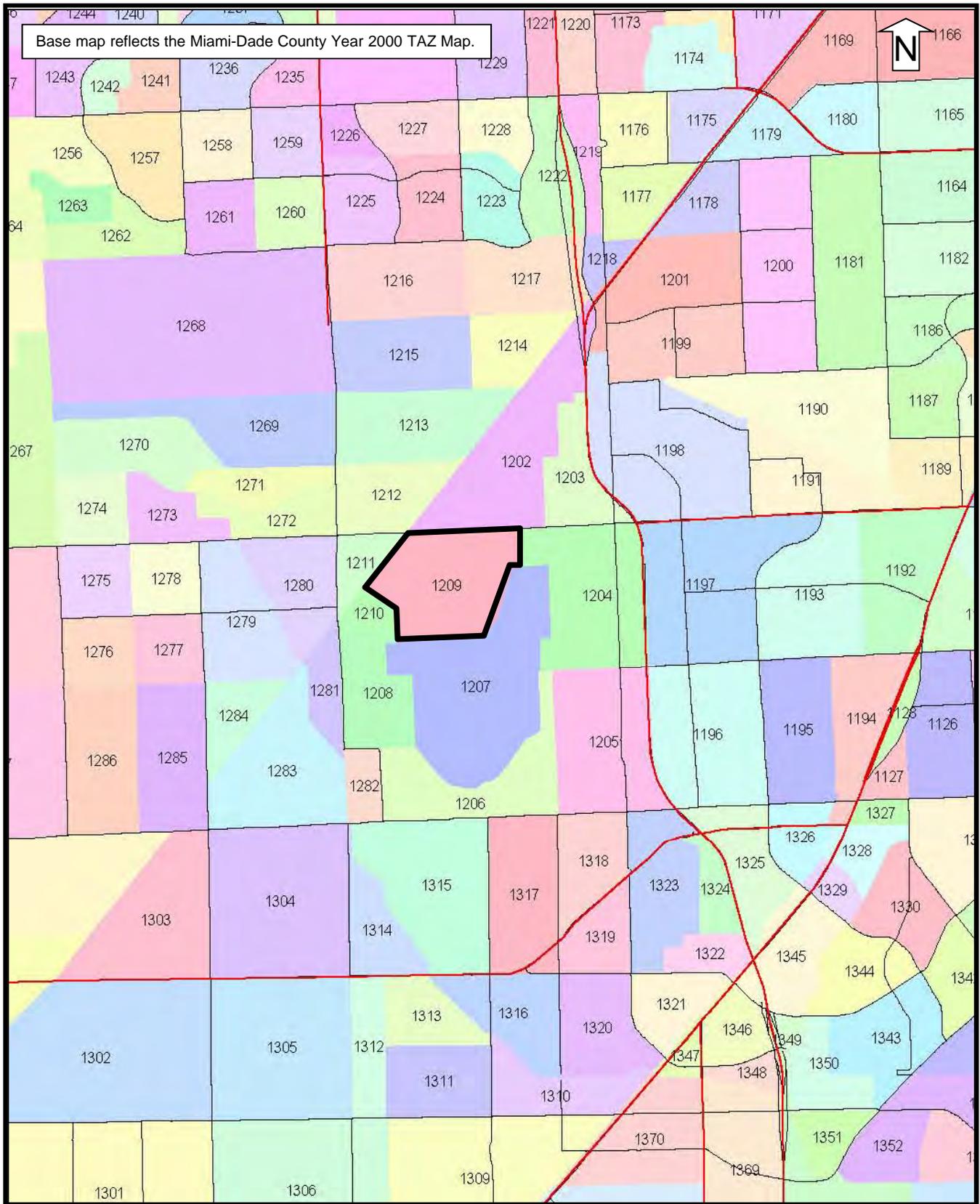
**TABLE 4  
CORAL REEF COMMONS - UM SOUTH CAMPUS PROPERTY  
TRAFFIC CONCURRENCY CAPACITY ANALYSIS FOR THE SHORT TERM PLANNING HORIZON**

10/29/2011

Count Station Number	DESCRIPTION	[1]	[1]	[2] [3]	[4]	Capacity Available after D.O.'s	Zoo I [5]		Zoo II [5]	Total PHP Vol with Zoo I + II	Capacity Available after Zoo I + II	Coral Reef Commons		Total PHP Vol with Project	Capacity Available after Project	[7]		
		Existing Laneage	Two Way Peak Hour Capacity	2010 PHP Vol	D.O.'s as of 9/14/2011		Zoo I PM PK HR Trips	Zoo I PM PK HR Trips	Zoo II PM PK HR Trips			Zone 1209 Cardinal Dist%	[6] PM PK HR Trips			Adopted LOS	Actual LOS	
	<b>First Directly Accessed Count Stations</b>																	
9850	SW 152 St, west of SW 117 Ave to SW 124 Ave	A 6	6,288	4,369	39	1,880	106	155	843	5,512	776	37.03%	615	6,127	161	EE	E+.17	
9852	SW 152 St, west of SW 127 Ave to SW 137 Ave	A 6	6,024	3,839	72	2,113	114	95	521	4,640	1,384	62.97%	1,045	5,685	339	EE	E+.13	
	<b>Secondary Count Stations</b>						220	250	1,364			100.00%	1,660					
9854	SW 152 St, west of SW 137 Ave to SW 142 Ave	A 4	3,924	1,946	128	1,850	31	18	168	2,291	1,633	22.81%	379	2,670	1,254	EE	E	
9816	SW 137 Ave, south of SW 136 St to SW 152 St	A 6	5,780	3,795	407	1,578	35	42	303	4,582	1,198	10.70%	178	4,760	1,020	E	D	
9818	SW 137 Ave, south of SW 152 St to SW 184 St	6	4,560	2,924	129	1,507	49	41	49	3,192	1,368	29.47%	489	3,681	879	D	C	
9752	SW 117 Ave, south of SW 136 St to SW 152 St	A 4	2,910	2,209	16	685	7	20	446	2,698	212	5.20%	86	2,784	126	D	D	
9754	SW 117 Ave, south of SW 152 St to SW 184 St	A 4	3,620	1,489	0	2,131	7	15	723	2,234	1,386	3.50%	58	2,292	1,328	D	C	
0056	SW 152 St, east of SW 112 Ave to HEFT	A 4	4,080	2,560	5	1,515	24	27	212	2,828	1,252	8.70%	144	2,973	1,107	EE	D	
2266	Florida's Turnpike, north of SW 152 St	10L Exp	16,930	14,344	4	2,582	39	52	340	14,779	2,151	12.31%	204	14,984	1,946	D	D	
2254	Florida's Turnpike, south of SW 152 St	8L Exp	13,480	12,012	15	1,453	34	26	106	12,193	1,287	7.32%	122	12,315	1,165	D	D	
												100.01%	1660					

**Notes:**

- [1] Source for the lane geometry and maximum service volumes have been obtained from the Miami-Dade County Public Works Department Concurrency Database, unless otherwise noted.  
Source for the maximum service volumes for State Count Stations 0056, 2254 and 2266 have been obtained from Table 4 of the 2009 FDOT Quality/LOS Handbook last updated 10/4/2010.
- [2] Source for the PHP counts: Miami-Dade County Public Works Concurrency Database dated 9-14-2011 and the 2010 FDOT Traffic Informatio
- [3] The PHP turnpike counts are derived from the 2010 turnpike AADT multplied by 0.088 which converts the AADT to a seasonal volume and then adjusts for the PHP. Factors are derived using the Turnpike Continuous Count Station 0267.  
Count Station 2254 = 136,500 \* 0.088 = 12,012  
Count Station 2266 = 163,000 \* 0.088 = 14,344
- [4] Source for the Approved D.O.'s: Miami-Dade County Public Works Concurrency Database dated 9-14-2011.
- [5] Includes the trip impact and distribution of the Zoo I and Zoo II CDMP Approvals granted by Miami-Dade County in 2008 and 2010.
- [6] Includes the net external PM peak hour trip impact of the full development program proposed for Coral Reef Commons (the UM South Campus Property) as included on Table 2A, inclusive of residential, high school, library and retail uses
- [7] EE = 120% of LOS E, Extraordinary Transit between Urban Infill Area and the UDB.



Base map reflects the Miami-Dade County Year 2000 TAZ Map.



Legend



Project Zone 1209

Figure 3A  
 Location of Project Zone 1209  
 Coral Reef Commons - UM South Campus Property

Miami-Dade County Year 2005 and 2035 Directional Distribution Summaries

MIAMI-DADE 2005 DIRECTIONAL DISTRIBUTION SUMMARY												
ORIGIN ZONE			CARDINAL DIRECTIONS									TOTAL
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW		
1204	3904	PERCENT	14.96	13.4	9.75	15.81	10.48	12.5	10.78	12.32		
		TRIPS	747	536	326	618	465	392	353	813	4,250	
1205	3905	PERCENT	17.58	12.61	7.67	14.54	10.94	9.22	8.31	19.13		
		TRIPS	2572	1189	534	669	527	507	414	824	7,236	
1206	3906	PERCENT	35.54	16.43	7.38	9.25	7.28	7.01	5.72	11.39		
		TRIPS	387	423	250	241	274	275	904	309	3,063	
1207	3907	PERCENT	12.63	13.81	8.16	7.87	8.95	8.98	29.51	10.09		
		TRIPS	280	138	108	112	155	169	197	304	1,463	
1208	3908	PERCENT	19.14	9.43	7.38	7.66	10.59	11.55	13.47	20.78		
		TRIPS	79	43	57	44	58	75	37	145	538	
1209	3909	PERCENT	14.68	7.99	10.59	8.18	10.78	13.94	6.88	26.95		
		TRIPS	17	18	10	12	15	12	26	21	131	
1210	3910	PERCENT	12.98	13.74	7.63	9.16	11.45	9.16	19.85	16.03		
		TRIPS	175	104	91	91	162	60	127	176	986	
1211	3911	PERCENT	17.75	10.55	9.23	9.23	16.43	6.09	12.88	17.85		
		TRIPS	946	838	466	273	363	267	179	493	3,825	
1212	3912	PERCENT	24.73	21.91	12.18	7.14	9.49	6.98	4.68	12.89		
		TRIPS	315	284	70	66	88	72	58	105	1,058	
1213	3913	PERCENT	29.77	26.84	6.62	6.24	8.32	6.81	5.48	9.92		
		TRIPS	28	13	27	22	45	29	17	50	231	
		PERCENT	12.12	5.63	11.69	9.52	19.48	12.55	7.36	21.65		

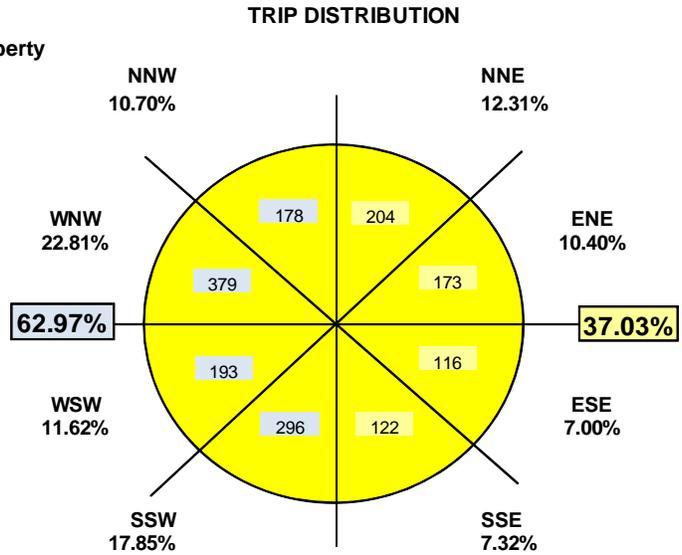
MIAMI-DADE 2035 DIRECTIONAL DISTRIBUTION SUMMARY												
ORIGIN ZONE			CARDINAL DIRECTIONS									TOTAL
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW		
1191	3891	PERCENT	49.08	17.85	1.39	6.09	3.61	1.78	3.59	16.6		
		TRIPS	2547	302	25	380	1427	503	1851	1948	8,983	
1192	3892	PERCENT	28.35	3.36	0.28	4.23	15.89	5.6	20.61	21.69		
		TRIPS	2385	922	419	942	1662	291	580	1018	8,219	
1193	3893	PERCENT	29.02	11.22	5.1	11.46	20.22	3.54	7.06	12.39		
		TRIPS	5450	407	140	242	754	484	519	1726	9,722	
1194	3894	PERCENT	56.06	4.19	1.44	2.49	7.76	4.98	5.34	17.75		
		TRIPS	2142	914	739	1003	1796	725	306	802	8,427	
1195	3895	PERCENT	25.42	10.85	8.77	11.9	21.31	8.6	3.63	9.52		
		TRIPS	2207	1204	282	320	570	173	145	945	5,846	
1196	3896	PERCENT	37.75	20.6	4.82	5.47	9.75	2.96	2.48	16.16		
		TRIPS	2712	1864	965	1329	1125	633	326	1592	10,546	
1197	3897	PERCENT	25.72	17.67	9.15	12.6	10.67	6	3.09	15.1		
		TRIPS	3320	2884	975	1657	1789	426	454	1371	12,876	
1198	3898	PERCENT	25.78	22.4	7.57	12.87	13.89	3.31	3.53	10.65		
		TRIPS	3491	2700	658	2121	1666	656	524	1031	12,847	
1199	3899	PERCENT	27.17	21.02	5.12	16.51	12.97	5.11	4.08	8.03		
		TRIPS	1109	933	565	358	246	521	275	430	4,437	
1200	3900	PERCENT	24.99	21.03	12.73	8.07	5.54	11.74	6.2	9.69		
		TRIPS	1784	1731	510	756	328	191	370	346	6,016	
1201	3901	PERCENT	29.65	28.77	8.48	12.57	5.45	3.17	6.15	5.75		
		TRIPS	1147	1377	299	181	126	99	145	255	3,629	
1202	3902	PERCENT	31.61	37.94	8.24	4.99	3.47	2.73	4	7.03		
		TRIPS	4193	1790	809	1492	730	623	1105	1839	12,581	
1203	3903	PERCENT	33.33	14.23	6.43	11.86	5.8	4.95	8.78	14.62		
		TRIPS	1829	751	728	2999	2469	1149	817	1348	12,090	
1204	3904	PERCENT	15.13	6.21	6.02	24.81	20.42	9.5	6.76	11.15		
		TRIPS	1784	454	515	643	840	346	533	1598	6,713	
1205	3905	PERCENT	26.58	6.76	7.67	9.58	12.51	5.15	7.94	23.8		
		TRIPS	3365	1817	858	513	636	129	245	889	8,452	
1206	3906	PERCENT	39.81	21.5	10.15	6.07	7.52	1.53	2.9	10.52		
		TRIPS	506	382	197	644	734	715	42	74	3,294	
1207	3907	PERCENT	15.36	11.6	3.98	19.55	22.28	21.71	1.28	2.25		
		TRIPS	227	183	231	256	364	431	150	256	2,098	
1208	3908	PERCENT	10.82	8.72	11.01	12.2	17.35	20.54	7.15	12.2		
		TRIPS	23	23	15	100	252	82	56	41	592	
1209	3909	PERCENT	3.89	3.89	2.53	16.89	42.57	13.85	9.46	6.93		
		TRIPS	113	47	60	42	293	161	283	15	1,014	
1210	3910	PERCENT	11.14	4.64	5.92	4.14	28.9	15.88	27.91	1.48		
		TRIPS	113	63	102	292	474	367	77	104	1,592	
		PERCENT	7.1	3.96	6.41	18.34	29.77	23.05	4.84	6.53		

Figure 3B  
Cardinal Distribution for Zone 1209 from Year 2005 and Year 2035 of the 2035 LRTP  
Coral Reef Commons - UM South Campus Property

**CARDINAL DISTRIBUTION FOR YEAR 2016**

PROJECT: Coral Reef Commons - UM South Campus Property

TAZ #	# 1209	
<b>Trips</b>	<b>1,660</b>	<b>PM Trips</b>
NNE	12.31%	204
ENE	10.40%	173
ESE	7.00%	116
SSE	7.32%	122
SSW	17.85%	296
WSW	11.62%	193
WNW	22.81%	379
NNW	10.70%	178
	<b>100.00%</b>	<b>1660</b>



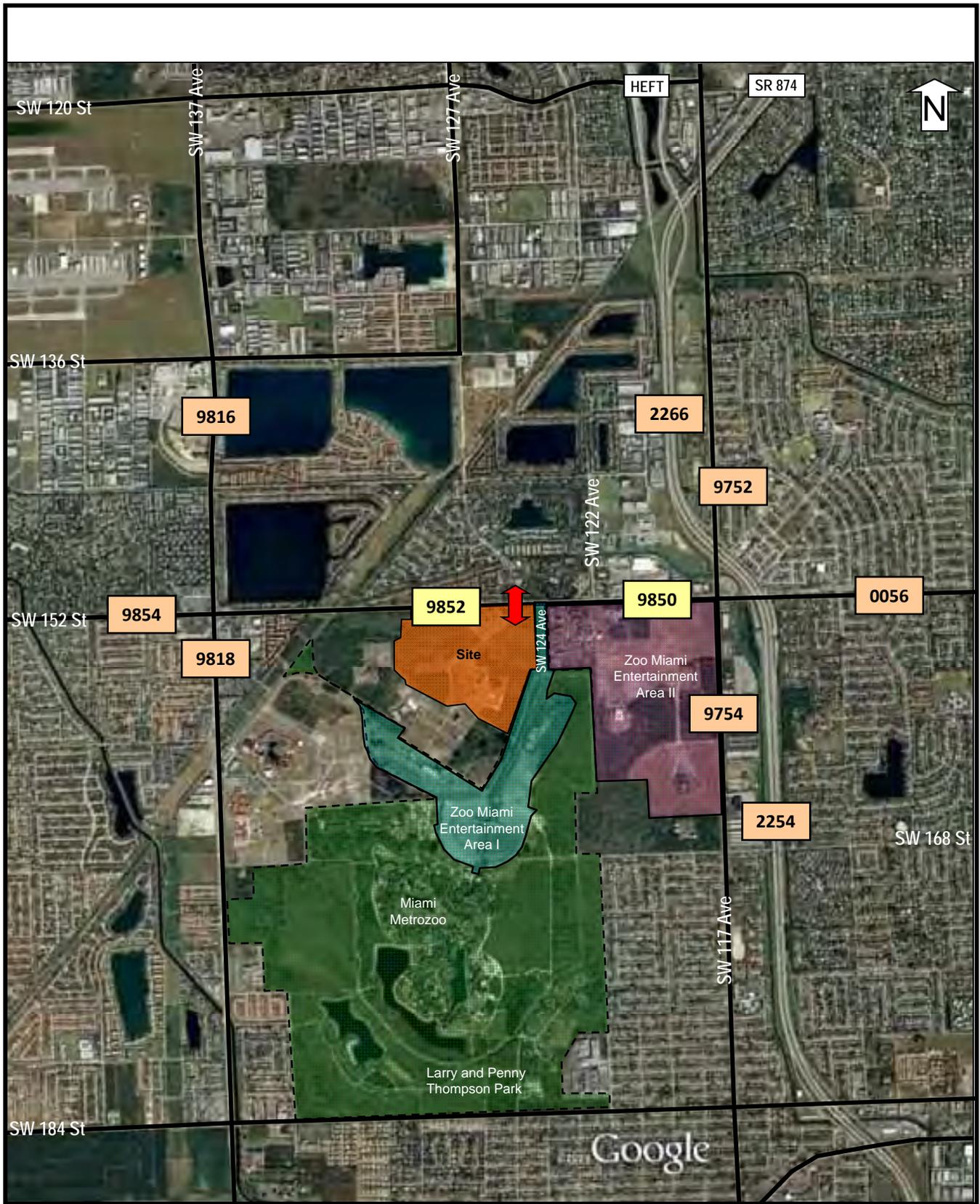
**INTERPOLATED CARDINAL DISTRIBUTION FOR 2016 USING YEARS 2005 AND 2035 OF THE 2035 LRTP**

Cardinal Direction	2005 Zone 1209 Cardinal Distribution	2035 Zone 1209 Cardinal Distribution	2035-2005 Difference	Rate Per Year 30 Years	11 Years	2016 Zone 1209 Cardinal Distribution	Net New PM Peak Hour Project Trips 1660
NNE	12.98%	11.14%	-1.84%	-0.06%	-0.67%	12.31%	204
ENE	13.74%	4.64%	-9.10%	-0.30%	-3.34%	10.40%	173
ESE	7.63%	5.92%	-1.71%	-0.06%	-0.63%	7.00%	116
SSE	9.16%	4.14%	-5.02%	-0.17%	-1.84%	7.32%	122
SSW	11.45%	28.90%	17.45%	0.58%	6.40%	17.85%	296
WSW	9.16%	15.88%	6.72%	0.22%	2.46%	11.62%	193
WNW	19.85%	27.91%	8.06%	0.27%	2.96%	22.81%	379
NNW	16.03%	1.48%	-14.55%	-0.49%	-5.34%	10.70%	178
	100.00%	100.01%				100.00%	1,660

Source: Miami-Dade 2035 Long Range Transportation Plan - Directional Trip Distribution Report, October 2009.

Legend

Figure 3C  
Year 2016 – Traffic Concurrence Distribution and Assignment for Zone 1209  
Coral Reef Commons - UM South Campus Property



Legend

- 9808** First Directly Accessed Count Stations
- 9818** Secondary Count Stations
- Site**
- Project Access

Figure 3D  
Traffic Concurrency Count Stations  
Coral Reef Commons – UM South Campus Property

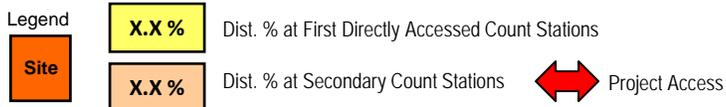


Figure 3E  
Traffic Concurrency Distribution for Zone 1209  
Coral Reef Commons – UM South Campus Property

## Transportation Infrastructure Analysis for the Year 2025 Long Term Planning Horizon

The evaluation of the Year 2025 Long Term Planning Horizon includes a comprehensive network analysis to evaluate the adequacy of the transportation infrastructure in the study area surrounding the Amendment site. The analysis includes an evaluation of existing peak hour period traffic conditions, an evaluation of Year 2025 future background and committed development traffic conditions (without the Amendment), and an evaluation of Year 2025 total traffic conditions with the impact of the Amendment site.

The study area includes the arterial and collector roadway network extending to SW 88 Street on the north, SR 821, SR 874 and US-1 on the east, SW 216 Street on the south and SW 157 Avenue on the west. The Year 2025 network analysis incorporates the future transportation infrastructure which consists of the expanded lane geometry for roadways currently under construction, improvements funded in TIP 2012 and improvements from Priorities II and III of the LRTP 2035. Priority III of the LRTP 2035 includes the four lane expansion to SW 127 Avenue from SW 120 Street to SW 144 Street, including the completion of the roadway connection across the CSX railroad thus creating a new continuous north/south roadway corridor between SW 88 Street and SW 152 Street. This planned improvement from Priority III of the LRTP creates another parallel north-south roadway corridor that can serve as an alternative to SW 137 Avenue.

## Project Traffic Assignment for the Year 2025 Long Term Planning Horizon

The project traffic assignment to the surrounding study area roadways has been established using the Miami-Dade County Cardinal Distribution for Project Zone 1209 as obtained through interpolation for the Year 2025 using the Year 2005 and Year 2035 Cardinal Directions from the updated Directional Trip Distributions Report from the 2035 Long Range Transportation Plan (LRTP) adopted by the MPO in October of 2009. The assignment and distribution of project traffic to the surrounding roadway network and to the cardinal directions from the 2035 LRTP are provided using the figures listed below.

- **Figure 4A** – Interpolated Cardinal Distribution for Year 2025 using Years 2005 and 2035 of the 2035 LRTP
- **Figure 4B** – Project Distribution for the Year 2025 Long Term Planning Horizon for the Study Area
- **Figure 4C** – Project Distribution Adjacent to the Site

Project traffic for the Year 2025 Long Term Planning Horizon reflects the net external PM peak hour trip impact for the shopping center retail use to be located on the portion of the Amendment Site which is seeking a change from Low Medium Density Residential to Business and Office. The net external PM peak hour trips for 370,000 square feet of shopping center retail use is outlined below, taken from **Table 2A** found earlier in this report.

- 456 inbound trips
- 481 outbound trips
- 937 total trips

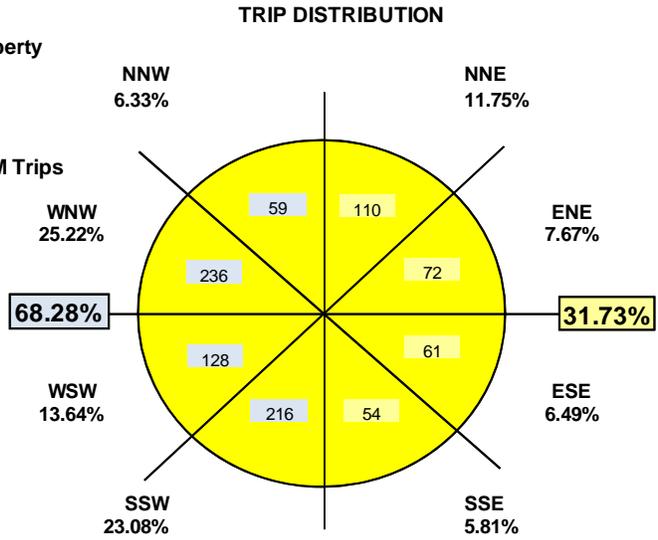
## Significance Determination to Establish Study Area Roadways

**Table 5A** (attached herein) provides the detailed project distribution calculations for the study area and includes a significance determination analysis to identify those existing or future roadway segments where the net new Amendment trips would consume 5.0% or more of the adopted maximum service volume for the regional roadway network. The Amendment trips were found to exceed 5.0% of the adopted maximum service volume for SW 152 Street from SW 127 Avenue to SW 137 Avenue, and for the local roadway segment of SW 127 Avenue providing access to the Amendment Site as illustrated on **Figure 5A**.

**CARDINAL DISTRIBUTION FOR YEAR 2025**

PROJECT: Coral Reef Commons - UM South Campus Property

TAZ #	# 1209	
<b>Trips</b>	<b>937</b>	<b>New Retail PM Trips</b>
NNE	11.75%	110
ENE	7.67%	72
ESE	6.49%	61
SSE	5.81%	54
SSW	23.08%	216
WSW	13.64%	128
WNW	25.22%	236
NNW	6.33%	59
	<b>100.01%</b>	<b>937</b>



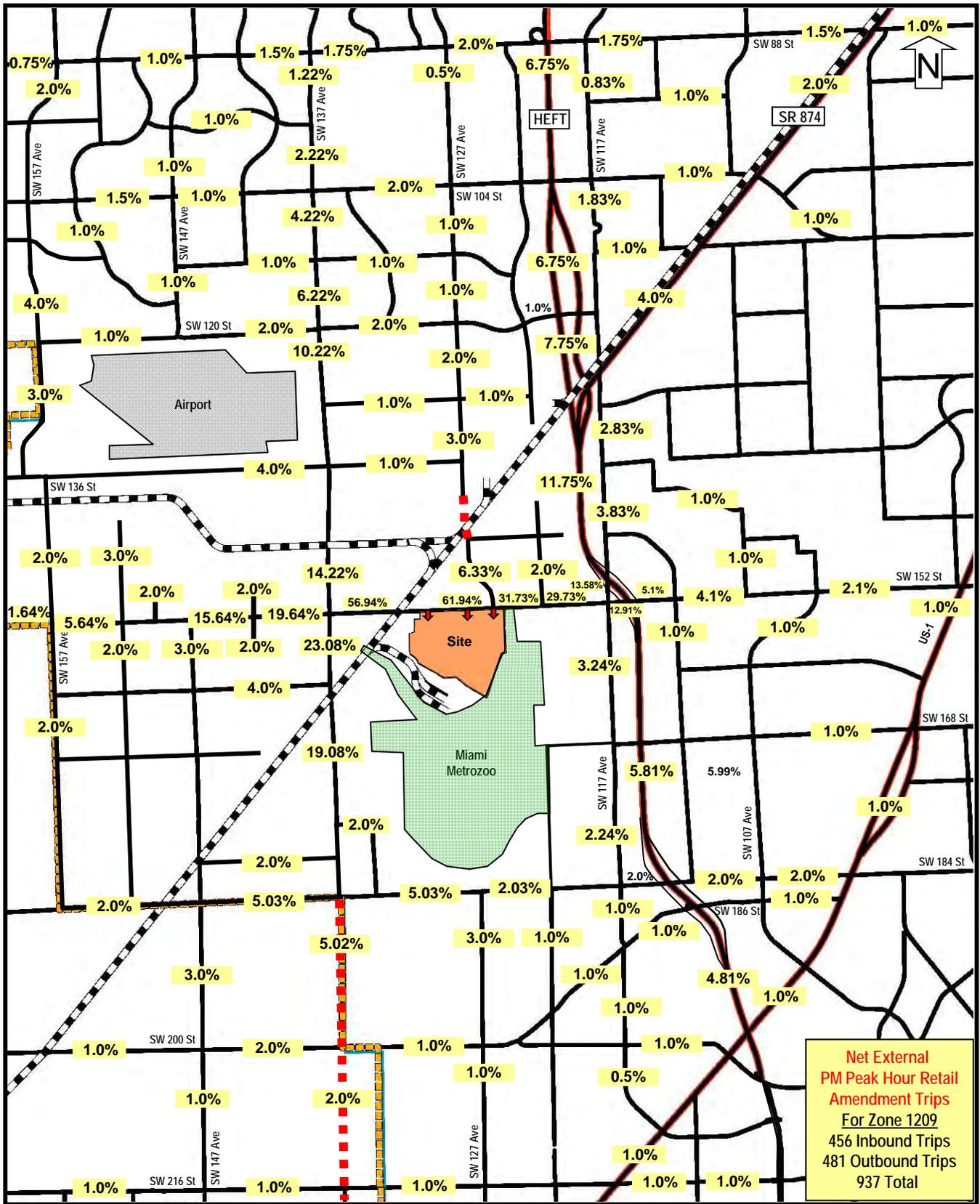
**INTERPOLATED CARDINAL DISTRIBUTION FOR 2025 USING YEARS 2005 AND 2035 OF THE 2035 LRTP**

Cardinal Direction	2005 Zone 1209 Cardinal Distribution	2035 Zone 1209 Cardinal Distribution	2035-2005 Difference	Rate Per Year 30 Years	20 Years	2025 Zone 1209 Cardinal Distribution	Net New PM Peak Hour Trips for the Retail Use 937
NNE	12.98%	11.14%	-1.84%	-0.06%	-1.23%	11.75%	110
ENE	13.74%	4.64%	-9.10%	-0.30%	-6.07%	7.67%	72
ESE	7.63%	5.92%	-1.71%	-0.06%	-1.14%	6.49%	61
SSE	9.16%	4.14%	-5.02%	-0.17%	-3.35%	5.81%	54
SSW	11.45%	28.90%	17.45%	0.58%	11.63%	23.08%	216
WSW	9.16%	15.88%	6.72%	0.22%	4.48%	13.64%	128
WNW	19.85%	27.91%	8.06%	0.27%	5.37%	25.22%	236
NNW	16.03%	1.48%	-14.55%	-0.49%	-9.70%	6.33%	59
	100.00%	100.01%				100.01%	937

Source: Miami-Dade 2035 Long Range Transportation Plan - Directional Trip Distribution Report, October 2009.

Legend

Figure 4A  
Year 2025 – Long Range Distribution and Assignment for Zone 1209  
Coral Reef Commons - UM South Campus Property



Net External  
PM Peak Hour Retail  
Amendment Trips  
For Zone 1209  
456 Inbound Trips  
481 Outbound Trips  
937 Total

Legend

- Site
- Planned Roadway Connections - 2015-2025
- Project Access Locations

Figure 4B  
Project Distribution - 2025 Long Term Planning Horizon  
Coral Reef Commons - UM South Campus Property



- Legend
- 1 Proposed Project Access Locations
  - Conceptual Internal Local Roadway Network
  - Existing Land Use = Low Medium Density Residential – NOT CHANGING
  - Proposed Land Use = Business and Office – SUBJECT OF PROPOSED CDMP CHANGE
  - Environmental Lands (NFC Preserves or Hammocks)

Figure 4C  
Project Distribution Adjacent to the Site  
Coral Reef Commons - UM South Campus Property

Table 5A  
Project Distribution and Significance Determination to establish the Study Area  
Two-Way PM Peak Hour

2/17/2012

ROADWAY SEGMENTS	[1] YEAR 2025 LANES	[2] CDMP ADOPTED LOS STANDARD	Coral Reef Commons		[4] TWO-WAY PEAK HOUR MAX CAPACITY	PROJECT AS A PERCENT OF MSV	[5] PROJECT TRIPS ≥ 5% YES / NO
			TAZ 1209 PROJECT DISTRIBUTION [3]	RETAIL USE NET NEW PM PK HR TRIPS 937			
			<b>SW 157 Avenue</b>				
SW 88 Street to SW 112 Street	4LD	D	2.00%	19	3,204	0.58%	NO
SW 112 Street to SW 120 Street	4LD	D	4.00%	37	3,204	1.17%	NO
SW 120 Street to SW 136 Street	4LD	D	3.00%	28	3,204	0.88%	NO
SW 136 Street to SW 152 Street	4LD	D	2.00%	19	3,204	0.58%	NO
SW 152 Street to SW 184 Street	4LD - TIP 2012	D	2.00%	19	3,204	0.58%	NO
<b>SW 147 Avenue</b>							
SW 88 Street to SW 104 Street	4LD	D	1.00%	9	3,204	0.29%	NO
SW 104 Street to SW 120 Street	4LD	D	1.00%	9	3,204	0.29%	NO
SW 152 Street to SW 184 Street	2LU	D	3.00%	28	1,440	1.95%	NO
SW 184 Street to SW 200 Street	2LU	C	3.00%	28	1,440	1.95%	NO
SW 200 Street to SW 216 Street	2LU	C	1.00%	9	1,440	0.65%	NO
<b>SW 137 AVENUE</b>							
SW 88 Street to SW 104 Street	6LD	E	2.22%	21	5,360	0.39%	NO
SW 104 Street to SW 120 Street	6LD	E	6.22%	58	5,360	1.09%	NO
SW 120 Street to SW 136 Street	6LD	E	10.22%	96	5,150	1.86%	NO
SW 136 Street to SW 152 Street	6LD	E	14.22%	133	5,150	2.59%	NO
SW 152 Street to SW 184 Street	6LD	D	23.08%	216	4,824	4.48%	NO
SW 184 Street to SW 200 Street	4LD - LRTP II	D	5.02%	47	3,204	1.47%	NO
<b>SW 127 AVENUE</b>							Significant?
SW 88 Street to SW 104 Street	4LD	D	0.50%	5	3,204	0.15%	NO
SW 104 Street to SW 120 Street	4LD	D	1.00%	9	3,204	0.29%	NO
SW 120 Street to SW 122 Street	4LD	D	2.00%	19	3,204	0.58%	NO
SW 122 Street to SW 136 Street	4LD - LRTP III	D	3.00%	28	3,204	0.88%	NO
SW 136 Street to SW 144 Street	4LD - LRTP III	D	4.00%	37	3,204	1.17%	NO
SW 144 Street to SW 152 Street	4LD	D	6.33%	59	2,314	2.56%	NO
SW 152 Street to Project	4LD - Access Rd	D	100.00%	937	2,314	40.49%	YES
SW 184 Street to SW 200 Street	2LU	D	3.00%	28	1,440	1.95%	NO
SW 200 Street to SW 216 Street	2LU	D	1.00%	9	1,440	0.65%	NO
<b>SW 124 AVENUE</b>							
SW 152 Street to Metrozoo	4LD	D	0.00%	0	2,314	0.00%	NO
<b>SW 122 AVENUE</b>							
SW 144 Street to SW 152 Street	4LD	D	2.00%	19	2,314	0.81%	NO
<b>SW 117 AVENUE</b>							
SW 88 Street to SW 104 Street	4LD	D	0.83%	8	3,204	0.24%	NO
SW 104 Street to SW 120 Street	4LD	D	1.83%	17	3,204	0.54%	NO
SW 120 Street to SW 136 Street	4LD	D	2.83%	27	3,204	0.83%	NO
SW 136 Street to HEFT Ramps	4LD	D	3.83%	36	3,204	1.12%	NO
HEFT Ramps to SW 152 Street	5LD - TIP 2012	D	13.58%	127	3,623	3.51%	NO
SW 152 Street to SW 116 Street	4LD	D	3.24%	30	3,204	0.95%	NO
SW 116 Street to SW 168 Street	4LD	D	3.24%	30	3,204	0.95%	NO
SW 168 Street to SW 184 Street	4LD	D	2.24%	21	3,204	0.66%	NO
SW 184 Street to SW 186 Street	2LU	D	1.00%	9	1,440	0.65%	NO
SW 186 Street to SW 200 Street	2LU	D	1.00%	9	1,440	0.65%	NO
SW 200 Street to SW US-1	4LD	D	0.50%	5	3,204	0.15%	NO

Table 5A  
Project Distribution and Significance Determination to establish the Study Area  
Two-Way PM Peak Hour

2/17/2012

ROADWAY SEGMENTS	[1] YEAR 2025 LANES	[2] CDMP ADOPTED LOS STANDARD	Coral Reef Commons		[4] TWO-WAY PEAK HOUR MAX CAPACITY	PROJECT AS A PERCENT OF MSV	[5] PROJECT TRIPS ≥ 5% YES / NO
			TAZ 1209 PROJECT DISTRIBUTION [3]	RETAIL USE NET NEW PM PK HR TRIPS 937			
			<b>HEFT</b>				
SW 88 Street to SW 120 Street	12LD - LRTP III	D	6.75%	63	21,950	0.29%	NO
SW 120 Street to SR 874	12LD - LRTP III	D	7.75%	73	21,950	0.33%	NO
SR 874 to SW 152 Street	12LD - LRTP III	D	11.75%	110	21,950	0.50%	NO
SW 152 Street to SW 184 Street	12LD - LRTP III	D	5.81%	54	21,950	0.25%	NO
SW 184 Street to SW 211 Street	6LD	D	4.81%	45	10,150	0.44%	NO
SW 211 Street to SW 112 Avenue	4LD	D	3.81%	36	6,770	0.53%	NO
<b>SR 874</b>							
HEFT to Toll Plaza	6LD	D	4.00%	37	10,150	0.37%	NO
Toll Plaza to SW 104 Street	6LD UNDER CST	D	3.00%	28	10,150	0.28%	NO
SW 104 Street to SR 878	8LD	D	1.00%	9	13,480	0.07%	NO
<b>US-1</b>							
SW 112 Street to SW 136 Street	6LD	EE	1.00%	9	6,180	0.15%	NO
SW 136 Street to SW 152 Street	6LD	EE	1.00%	9	6,180	0.15%	NO
SW 152 Street to SW 168 Street	6LD	EE	1.00%	9	6,180	0.15%	NO
SW 168 Street to SW 184 Street	3LOW SB	EE	1.00%	9	3,708	0.25%	NO
SW 168 Street to SW 184 Street	3LOW NB	EE	1.00%	9	3,708	0.25%	NO
SW 184 Street to SW 200 Street	6LD	EE	1.00%	9	6,180	0.15%	NO
SW 200 Street to SW 216 Street	6LD	EE	1.00%	9	6,180	0.15%	NO
<b>SW 88 Street</b>							
SW 177 Avenue to SW 162 Avenue	4LD	D	0.50%	5	3,560	0.13%	NO
SW 162 Avenue to SW 157 Avenue	6LD	EE	0.75%	7	6,180	0.11%	NO
SW 157 Avenue to SW 147 Avenue	6LD	EE	1.00%	9	6,180	0.15%	NO
SW 147 Avenue to SW 137 Avenue	6LD	EE	1.50%	14	6,180	0.23%	NO
SW 137 Avenue to SW 127 Avenue	6LD	EE	1.75%	16	6,180	0.27%	NO
SW 127 Avenue to SR 821/HEFT	8LD	EE	2.00%	19	8,256	0.23%	NO
SR 821/HEFT to SW 117 Avenue	6LD	EE	2.00%	19	6,180	0.30%	NO
SW 117 Avenue to SW 107 Avenue	6LD	EE	1.75%	16	6,180	0.27%	NO
SW 107 Avenue to SR 874	6LD	EE	1.50%	14	6,180	0.23%	NO
SR 874 to SW 87 Avenue	6LD	EE	1.00%	9	6,180	0.15%	NO
SW 87 Avenue to SR 826	6LD	EE	0.75%	7	6,180	0.11%	NO
<b>SW 104 Street</b>							
SW 157 Avenue to SW 147 Avenue	4LD	EE	1.50%	14	3,845	0.37%	NO
SW 147 Avenue to SW 137 Avenue	4LD	EE	1.00%	9	3,845	0.24%	NO
SW 137 Avenue to SW 127 Avenue	6LD	EE	2.00%	19	5,789	0.32%	NO
SW 127 Avenue to SW 117 Avenue	6LD	EE	1.50%	14	5,789	0.24%	NO
SW 117 Avenue to SR 874	6LD	EE	1.00%	9	5,789	0.16%	NO
<b>SW 120 Street</b>							
SW 157 Avenue to SW 137 Avenue	4LD	D	2.00%	19	3,204	0.58%	NO
SW 137 Avenue to SW 127 Avenue	5LD/4LD	D	2.00%	19	3,204	0.58%	NO
SW 127 Avenue to SW 117 Avenue	4LD	D	2.00%	19	3,204	0.58%	NO
<b>SW 136 Street</b>							
SW 157 Avenue to SW 147 Avenue	4LD	D	4.00%	37	3,204	1.17%	NO
SW 147 Avenue to SW 137 Avenue	4LD	D	4.00%	37	3,204	1.17%	NO
SW 137 Avenue to SW 127 Avenue	4LD	D	1.00%	9	3,204	0.29%	NO

Table 5A  
Project Distribution and Significance Determination to establish the Study Area  
Two-Way PM Peak Hour

2/17/2012

ROADWAY SEGMENTS	[1] YEAR 2025 LANES	[2] CDMP ADOPTED LOS STANDARD	Coral Reef Commons		[4] TWO-WAY PEAK HOUR MAX CAPACITY	PROJECT AS A PERCENT OF MSV	[5] PROJECT TRIPS ≥ 5% YES / NO
			TAZ 1209 PROJECT DISTRIBUTION	RETAIL USE NET NEW PM PK HR TRIPS			
			[3]	937			
<b>SW 152 Street</b>							Significant?
SW 157 Avenue to SW 147 Avenue	4LD - LRTP III	EE	12.64%	118	3,845	3.08%	NO
SW 147 Avenue to SW 137 Avenue	4LD	EE	19.64%	184	3,845	4.79%	NO
SW 137 Avenue to SW 132 Avenue	6LD	EE	56.94%	534	6,180	8.63%	YES
SW 132 Avenue to SW 130 Place	6LD	EE	58.94%	552	6,180	8.94%	YES
SW 130 Place to SW 129 Avenue	6LD	EE	59.94%	562	6,180	9.09%	YES
SW 129 Avenue to SW 127 Avenue	6LD	EE	61.94%	580	6,180	9.39%	YES
SW 127 Avenue to SW 124 Avenue	6LD	EE	31.73%	297	6,180	4.81%	NO
SW 124 Avenue to SW 122 Avenue	Zoo II - 1 EB Lane	EE	31.73%	297	7,210	4.12%	NO
SW 122 Avenue to SW 117 Avenue	Zoo II - 1 EB Lane	EE	29.73%	279	7,210	3.86%	NO
SW 117 Avenue to SR 821/HEFT	5LD - LRTP III	EE	12.91%	121	5,100	2.37%	NO
SR 821/HEFT to SW 112 Avenue	4LD	EE	5.10%	48	4,080	1.17%	NO
SW 112 Avenue to US-1	4LD	EE	4.10%	38	4,080	0.94%	NO
<b>SW 168 Street</b>							
SW 117 Avenue to US-1	2LU	D	1.00%	9	1,440	0.65%	NO
<b>SW 184 Street</b>							
SW 177 Avenue to SW 167 Avenue	2LU	C	1.00%	9	1,350	0.69%	NO
SW 167 Avenue to SW 157 Avenue	2LU	C	1.00%	9	1,350	0.69%	NO
SW 157 Avenue to SW 147 Avenue	2LU	D	2.00%	19	1,440	1.30%	NO
SW 147 Avenue to SW 137 Avenue	4LD UNDER CST	D	5.03%	47	3,204	1.47%	NO
SW 137 Avenue to SW 127 Avenue	4LD	D	5.03%	47	3,204	1.47%	NO
SW 127 Avenue to SW 117 Avenue	4LD	D	2.03%	19	3,204	0.59%	NO
SW 117 Avenue to SR 821/HEFT	4LD	D	2.00%	19	3,204	0.58%	NO
SR 821/HEFT to SW 107 Avenue	4LD	D	2.00%	19	3,204	0.58%	NO
SW 107 Avenue to US-1	4LD	D	2.00%	19	3,204	0.58%	NO
<b>SW 200 Street/Quail Roost Dr</b>							
SW 177 Avenue to SW 157 Avenue	2LU	D	1.00%	9	2,000	0.47%	NO
SW 157 Avenue to SW 147 Avenue	2LU	D	1.00%	9	2,000	0.47%	NO
SW 147 Avenue to SW 137 Avenue	2LU	D	2.00%	19	2,000	0.94%	NO
SW 137 Avenue to SW 127 Avenue	2LU	E	1.00%	9	2,550	0.37%	NO
SW 127 Avenue to SW 117 Avenue	4LD	E	1.00%	9	3,400	0.28%	NO
SW 117 Avenue to SR 821/HEFT	4LD	E	1.00%	9	3,400	0.28%	NO
SR 821/HEFT to US-1	4LD	E	1.00%	9	3,400	0.28%	NO
<b>SW 200 Street/Caribbean Blvd</b>							
Quail Roost Dr to SW 117 Avenue	2LU	D	1.00%	9	1,440	0.65%	NO
SW 117 Avenue to SW 110 Court	2LU	D	1.00%	9	1,440	0.65%	NO
SW 110 Court to US-1	4LD	D	1.00%	9	3,204	0.29%	NO
<b>SW 216 Street</b>							
SW 177 Avenue to SW 167 Avenue	2LU	C	1.00%	9	1,278	0.73%	NO
SW 167 Avenue to SW 157 Avenue	2LU	C	1.00%	9	1,278	0.73%	NO
SW 157 Avenue to SW 147 Avenue	2LU	C	1.00%	9	1,278	0.73%	NO
SW 147 Avenue to SW 137 Avenue	2LU	C	1.00%	9	1,278	0.73%	NO
SW 137 Avenue to SW 127 Avenue	2LU	D	1.00%	9	1,440	0.65%	NO
SW 127 Avenue to US-1	2LU	D	1.00%	9	1,440	0.65%	NO

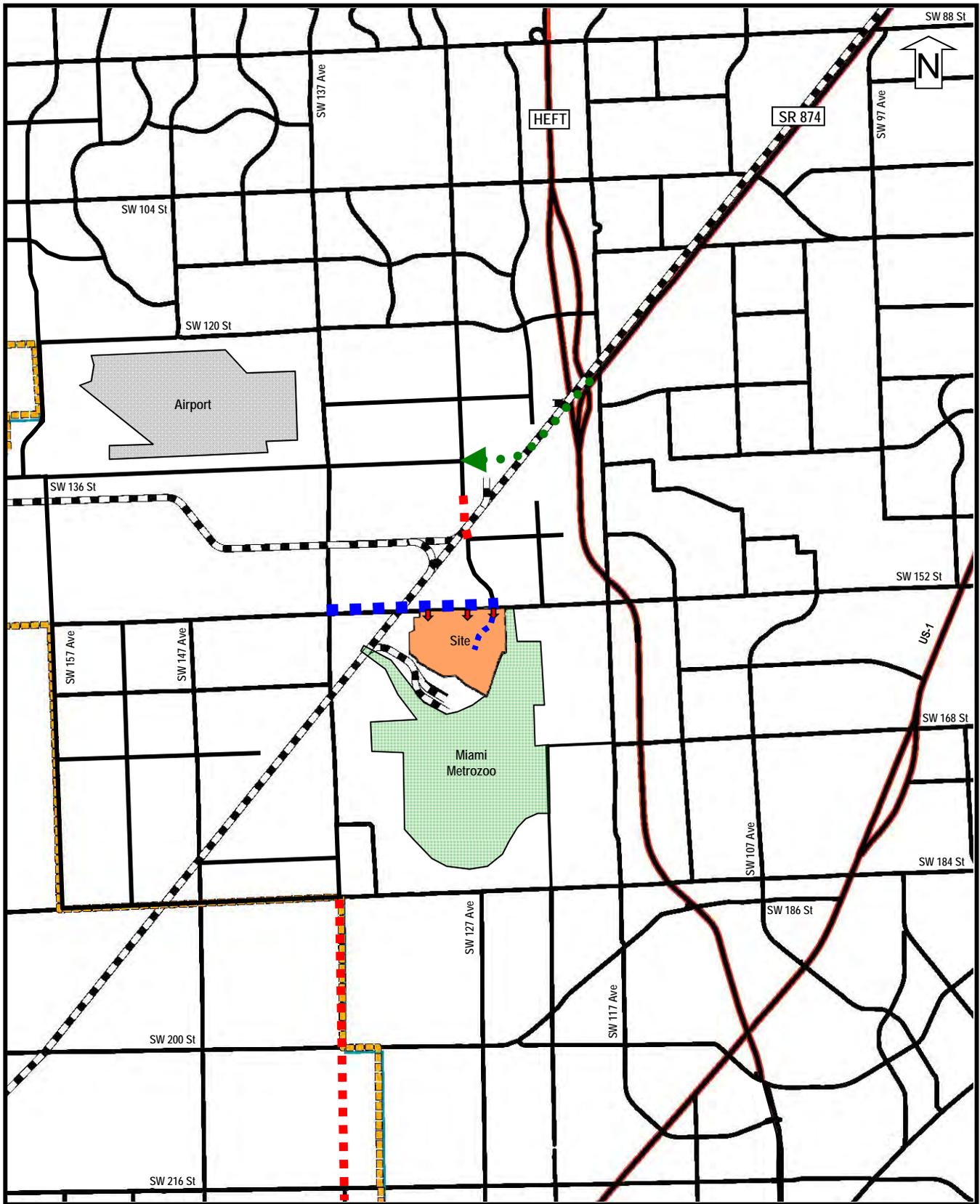
[1] Lane geometry for Year 2025 Long Term Planning Horizon reflects projects under construction, funded projects from TIP 2012 and planned projects from Priorities II and III of the LRTP 2035 which will be built by the Year 2025.

[2] The adopted LOS standards are consistent with the Transportation Element from the Miami-Dade County CDMP.

[3] See Figure 4B for the Project Distribution for the Year 2025 Long Term Planning Horizon.

[4] The two-way peak hour roadway capacities have been obtained from the 2009 FDOT Quality/LOS Handbook updated 10/4/2010.

[5] Study area includes roadway segments where the two-way peak hour project traffic is ≥ 5.0% of the MSV at the adopted LOS.



- Legend
- Planned Roadway Connections - 2015-2025
  - Roadway Connections under Study – TIP 2012
  - ↓ Project Access Locations
  - Roadways with project traffic  $\geq 5\%$  of MSV at Adopted LOS
- Site

Figure 5A  
 Roadway Segments where Project Traffic  $\geq 5.0\%$  of MSV  
 Coral Reef Commons - UM South Campus Property

## Existing Traffic Conditions

An existing conditions network analysis has been prepared for the peak hour period for the study area roadway network. **Table 5B** provides the analysis of existing traffic conditions for the amendment study area and includes the following:

- The existing lane geometry for study area roadways including geometry for roadways under construction;
- The functional classification for each of the roadways in the amendment study area;
- The traffic count stations (where applicable) for each roadway segment analyzed;
- The source of the traffic counts and the dates that traffic counts were collected;
- The adopted level of service standards from the CDMP for each roadway segment analyzed;
- The existing Year 2010 peak hour period traffic from the Miami-Dade County and FDOT Traffic Concurrency Count Station databases dated September 14, 2011 and obtained from Miami-Dade County Public Works;
- Applicant counts or counts from other studies in unique locations where no county or state data was available;
- The two-way peak hour roadway capacity for County Roads based on ArtPlan calculations provided by Miami-Dade County Public Works from the Traffic Concurrency Count Station database dated September 14, 2011;
- The two-way peak hour roadway capacity for State Roads based upon the FDOT 2009 Quality/LOS Handbook;
- The existing two-way peak hour period level of service for each roadway segment analyzed and the volume to capacity ratio.

**Figure 5B** has been provided to identify the existing levels of service on study area roadways where the Amendment traffic is  $\geq 5.0\%$  of the maximum service volume (MSV) at the adopted level of service standard. Also provided are the existing levels of service for those segments adjacent to those road segments where the Amendment traffic consumes  $\geq 5.0\%$  of the MSV.

Table 5B  
Existing Peak Hour Period Traffic Conditions on Study Area Roadways  
Two-Way Peak Hour Period

11/25/2011

ROADWAY SEGMENTS	[1]	[2]	COUNT STATION	COUNT DATE	[3]	9/14/2011	[6] [7]	EXISTING PEAK HOUR PERIOD LOS	VIC
	EXISTING LANES	ROADWAY FUNCTIONAL CLASSIFICATION			CDMP ADOPTED LOS STANDARD	MIAMI-DADE DATABASE EXISTING PHP VOLUME [4]	ART PLAN OR FDOT TWO WAY PK HR MSV		
<b>SW 157 Avenue</b>									
SW 88 Street to SW 112 Street	4LD	County Collector	MD-9857	2010	D	1,376	3,480	C	0.40
SW 112 Street to SW 120 Street	4LD	County Collector	Link Counts	5/3-5/2011	D	1,386	3,480	C	0.40
SW 120 Street to SW 136 Street	4LD	County Collector	Link Counts	5/3-5/2011	D	1,386	3,480	C	0.40
SW 136 Street to SW 152 Street	4LD	County Collector	Average	5/3-5/2011	D	1,386	3,480	C	0.40
SW 152 Street to SW 184 Street	2LU	County Collector	MD-9859	2010	D	1,116	1,590	B	0.70
<b>SW 147 Avenue</b>									
SW 88 Street to SW 104 Street	4LD	County Minor Arterial	MD-9830	2010	D	1,553	1,960	D	0.79
SW 104 Street to SW 120 Street	4LD	County Minor Arterial	MD-9832	2010	D	1,356	1,910	D	0.71
SW 152 Street to SW 184 Street	2LU	County Collector	MD-9834	2010	D	955	1,770	C	0.54
SW 184 Street to SW 200 Street	2LU	County Collector	MD-9836	2010	C	740	1,110	B	0.67
SW 200 Street to SW 216 Street	2LU	County Collector	MD-9836	2010	C	740	1,110	B	0.67
<b>SW 137 AVENUE</b>									
SW 88 Street to SW 104 Street	6LD	State Principal Arterial	FDOT-2520	2010	E	2,830	5,360	B	0.53
SW 104 Street to SW 120 Street	6LD	State Principal Arterial	FDOT-2519	2010	E	3,008	5,360	B	0.56
SW 120 Street to SW 136 Street	6LD	State Principal Arterial	Average **	2010	E	3,402	7,000	C	0.49
SW 136 Street to SW 152 Street	6LD	Urban Principal Arterial	MD-9816	2010	E	3,795	5,780	C	0.66
SW 152 Street to SW 184 Street	6LD	County Minor Arterial	MD-9818	2010	D	2,924	4,560	C	0.64
SW 184 Street to SW 200 Street	2LU	County Minor Arterial	MD-9820	2010	D	786	1,530	C	0.51
** No 2010 data collected for MD-9814.									
<b>SW 127 AVENUE</b>									
SW 88 Street to SW 104 Street	4LD	County Collector	MD-9782	2010	D	1,532	3,270	D	0.47
SW 104 Street to SW 120 Street	4LD	County Collector	MD-9784	2010	D	1,494	2,670	D	0.56
SW 120 Street to SW 122 Street	4LD	County Collector	Average	2010	D	1,058	2,670	D	0.40
SW 122 Street to SW 136 Street	2LU	County Collector	Average	2007	D	622	2,670	C	0.23
SW 136 Street to SW 144 Street	2LU	County Collector	Average	2010	D	556	2,670	C	0.21
SW 144 Street to SW 152 Street	4LD	County Collector	TM Counts	1/21/2010	D	490	2,314	B	0.21
SW 152 Street to Project	2LU	Local Road	TM Counts	1/21/2010	D	40	1,040	B	0.04
SW 184 Street to SW 200 Street	2LU	County Collector	MD-9788	2010	D	585	1,170	B	0.50
SW 200 Street to SW 216 Street	2LU	County Collector	MD-9788	2010	D	585	1,170	B	0.50
<b>SW 124 AVENUE</b>									
SW 152 Street to Metrozoo	4LD	County Collector	TM Counts	1/21/2010	D	145	2,314	B	0.06
<b>SW 122 AVENUE</b>									
SW 144 Street to SW 152 Street	4LD	County Collector	TM Counts	2/2/2010	D	1,292	2,314	B	0.56
<b>SW 117 AVENUE</b>									
SW 88 Street to SW 104 Street	4LD	County Minor Arterial	MD-9748	2010	D	1,657	3,630	C	0.46
SW 104 Street to SW 120 Street	4LD	County Minor Arterial	MD-9750	2010	D	3,207	3,490	D	0.92
SW 120 Street to SW 136 Street	4LD	County Minor Arterial	Average	2010	D	2,708	3,490	C	0.78
SW 136 Street to HEFT Ramps	4LD	County Minor Arterial	MD-9752	2010	D	2,209	2,910	C	0.76
HEFT Ramps to SW 152 Street	4LD	County Minor Arterial	MD-9752	2010	D	2,209	2,910	C	0.76
SW 152 Street to SW 116 Street	4LD	County Minor Arterial	MD-9754	2010	D	1,489	3,620	C	0.41
SW 116 Street to SW 168 Street	4LD	County Minor Arterial	MD-9754	2010	D	1,489	3,620	C	0.41
SW 168 Street to SW 184 Street	4LD	County Minor Arterial	MD-9754	2010	D	1,489	3,620	C	0.41
SW 184 Street to SW 186 Street	2LU	County Minor Arterial	MD-9756	2010	D	1,018	1,260	D	0.81
SW 186 Street to SW 200 Street	2LU	County Minor Arterial	Average	2010	D	892	1,370	D	0.65
SW 200 Street to SW US-1	4LD	County Minor Arterial	MD-9758	2010	D	766	1,370	D	0.56
<b>HEFT</b>									
SW 88 Street to SW 120 Street	6LD	State Principal Arterial	FDOT-2246	2010 [5]	D	8,545	10,150	D	0.84
SW 120 Street to SR 874	6LD	State Principal Arterial	FDOT-2290	2010 [5]	D	7,946	10,150	C	0.78
SR 874 to SW 152 Street	10LD	State Principal Arterial	FDOT-2266	2010 [5]	D	14,344	16,930	D	0.85
SW 152 Street to SW 184 Street	8LD	State Principal Arterial	FDOT-2254	2010 [5]	D	12,012	13,480	D	0.89
SW 184 Street to SW 211 Street	6LD	State Principal Arterial	FDOT-2256	2010 [5]	D	9,944	10,150	D	0.98
SW 211 Street to SW 112 Avenue	4LD	State Principal Arterial	FDOT-2264	2010 [5]	D	6,398	6,770	D	0.94

Table 5B  
Existing Peak Hour Period Traffic Conditions on Study Area Roadways  
Two-Way Peak Hour Period

11/25/2011

ROADWAY SEGMENTS	[1]	[2]	COUNT STATION	COUNT DATE	[3]	9/14/2011	[6] [7]	EXISTING	VIC
	EXISTING LANES	ROADWAY FUNCTIONAL CLASSIFICATION			ADOPTED LOS STANDARD	MIAMI-DADE DATABASE EXISTING PHP VOLUME [4]	ART PLAN OR FDOT TWO WAY PK HR MSV	PEAK HOUR PERIOD LOS	
<b>SR 874</b>									
HEFT to Toll Plaza	6LD	State Principal Arterial	FDOT-2274	2010	D	4,504	10,150	B	0.44
Toll Plaza to SW 104 Street	6LD UNDER CST	State Principal Arterial	FDOT-2274	2010	D	4,504	10,150	B	0.44
SW 104 Street to SR 878	8LD	State Principal Arterial	FDOT-2276	2010	D	8,414	13,480	C	0.62
<b>US-1</b>									
SW 112 Street to SW 136 Street	6LD	State Principal Arterial	FDOT-0014	2010	EE	4,889	6,180	E	0.79
SW 136 Street to SW 152 Street	6LD	State Principal Arterial	MD-9968	2010	EE	4,615	6,348	D	0.73
SW 152 Street to SW 168 Street	6LD	State Principal Arterial	FDOT-0332	2010	EE	4,980	6,180	E	0.81
SW 168 Street to SW 184 Street	3LOW SB	State Principal Arterial	FDOT-2562	2010	EE	2,621	3,708	D	0.71
SW 168 Street to SW 184 Street	3LOW NB	State Principal Arterial	FDOT-2563	2010	EE	3,082	3,708	E	0.83
SW 184 Street to SW 200 Street	6LD	State Principal Arterial	MD-9970	2010	EE	3,324	7,272	C	0.46
SW 200 Street to SW 216 Street	6LD	State Principal Arterial	FDOT-0346	2010	EE	3,333	6,180	C	0.54
<b>SW 88 Street</b>									
SW 177 Avenue to SW 162 Avenue	4LD	State Principal Arterial	FDOT-0010	2010	D	1,224	3,560	B	0.34
SW 162 Avenue to SW 157 Avenue	6LD	State Principal Arterial	FDOT-2529	2010	EE	2,034	6,180	C	0.33
SW 157 Avenue to SW 147 Avenue	6LD	State Principal Arterial	FDOT-1080	2010	EE	3,136	6,180	C	0.51
SW 147 Avenue to SW 137 Avenue	6LD	State Principal Arterial	FDOT-1080	2010	EE	3,136	6,180	C	0.51
SW 137 Avenue to SW 127 Avenue	6LD	State Principal Arterial	FDOT-0060	2010	EE	4,714	6,180	D	0.76
SW 127 Avenue to SR 821/HEFT	8LD	State Principal Arterial	FDOT-0062	2010	EE	5,090	8,256	C	0.62
SR 821/HEFT to SW 117 Avenue	6LD	State Principal Arterial	Average	2010	EE	4,593	6,180	D	0.74
SW 117 Avenue to SW 107 Avenue	6LD	State Principal Arterial	FDOT-0592	2010	EE	4,095	6,180	D	0.66
SW 107 Avenue to SR 874	6LD	State Principal Arterial	FDOT-0064	2010	EE	4,748	6,180	D	0.77
SR 874 to SW 87 Avenue	6LD	State Principal Arterial	FDOT-0066	2010	EE	3,513	6,180	C	0.57
SW 87 Avenue to SR 826	6LD	State Principal Arterial	FDOT-0684	2010	EE	4,664	6,180	D	0.75
<b>SW 104 Street</b>									
SW 157 Avenue to SW 147 Avenue	4LD	County Minor Arterial	MD-9724	2010	EE	2,367	4,248	C	0.56
SW 147 Avenue to SW 137 Avenue	4LD	County Minor Arterial	MD-9722	2010	EE	2,572	4,200	D	0.61
SW 137 Avenue to SW 127 Avenue	6LD	County Minor Arterial	MD-9720	2010	EE	3,388	4,236	E	0.80
SW 127 Avenue to SW 117 Avenue	6LD	County Minor Arterial	MD-9718	2010	EE	4,508	6,348	D	0.71
SW 117 Avenue to SR 874	6LD	County Minor Arterial	MD-9716	2010	EE	4,506	5,076	E+.06	0.89
<b>SW 120 Street</b>									
SW 157 Avenue to SW 137 Avenue	4LD	County Minor Arterial	MD-9762	2010	D	2,116	3,340	C	0.63
SW 137 Avenue to SW 127 Avenue	5LD/4LD	County Minor Arterial	Average	2010	D	2,494	3,870	D	0.64
SW 127 Avenue to SW 117 Avenue	4LD	County Minor Arterial	MD-9760	2010	D	2,871	3,870	D	0.74
<b>SW 136 Street</b>									
SW 157 Avenue to SW 147 Avenue	4LD	County Collector	Link Counts	4/12/2007	D	651	3,204	B	0.20
SW 147 Avenue to SW 137 Avenue	4LD	County Collector	TM Counts	4/12/2007	D	1,733	3,204	B	0.54
SW 137 Avenue to SW 127 Avenue	4LD	County Collector	TM Counts	4/12/2007	D	622	3,204	B	0.19
<b>SW 152 Street</b>									
SW 157 Avenue to SW 147 Avenue	2LU	County Collector	Link Counts	4/12/2007	EE	767	1,440	B	0.53
SW 147 Avenue to SW 137 Avenue	4LD	County Collector	MD-9854	2010	EE	1,946	3,924	E	0.50
SW 137 Avenue to SW 132 Avenue	6LD	Urban Principal Arterial	MD-9852	2010	EE	3,839	6,024	D	0.64
SW 132 Avenue to SW 130 Place	6LD	Urban Principal Arterial	MD-9852	2010	EE	3,839	6,024	D	0.64
SW 130 Place to SW 129 Avenue	6LD	Urban Principal Arterial	MD-9852	2010	EE	3,839	6,024	D	0.64
SW 129 Avenue to SW 127 Avenue	6LD	Urban Principal Arterial	MD-9852	2010	EE	3,839	6,024	D	0.64
SW 127 Avenue to SW 124 Avenue	6LD	Urban Principal Arterial	MD-9852	2010	EE	3,839	6,024	D	0.64
SW 124 Avenue to SW 122 Avenue	6LD	Urban Principal Arterial	MD-9850	2010	EE	4,369	6,288	D	0.69
SW 122 Avenue to SW 117 Avenue	6LD	Urban Principal Arterial	MD-9850	2010	EE	4,369	6,288	D	0.69
SW 117 Avenue to SR 821/HEFT	4LD	Urban Principal Arterial	Average	2010	EE	3,465	4,080	E+.02	0.85
SR 821/HEFT to SW 112 Avenue	4LD	State Principal Arterial	FDOT-0056	2010	EE	2,560	4,080	D	0.63
SW 112 Avenue to US-1	4LD	State Principal Arterial	FDOT-1106	2010	EE	2,786	4,080	D	0.68

Table 5B  
Existing Peak Hour Period Traffic Conditions on Study Area Roadways  
Two-Way Peak Hour Period

11/25/2011

[1] ROADWAY SEGMENTS	[2] EXISTING LANES	[3] ROADWAY FUNCTIONAL CLASSIFICATION	COUNT STATION	COUNT DATE	[3] CDMP ADOPTED LOS STANDARD	9/14/2011 MIAMI-DADE DATABASE EXISTING PHP VOLUME [4]	[6] [7] ART PLAN OR FDOT TWO WAY PK HR MSV	EXISTING PEAK HOUR PERIOD LOS	V/C
<b>SW 168 Street</b> SW 117 Avenue to US-1	2LU	County Collector	MD-9868	2010	D	803	1,150	D	0.70
<b>SW 184 Street</b> SW 177 Avenue to SW 167 Avenue SW 167 Avenue to SW 157 Avenue SW 157 Avenue to SW 147 Avenue SW 147 Avenue to SW 137 Avenue SW 137 Avenue to SW 127 Avenue SW 127 Avenue to SW 117 Avenue SW 117 Avenue to SR 821/HEFT SR 821/HEFT to SW 107 Avenue SW 107 Avenue to US-1	2LU 2LU 2LU 4LD 4LD 4LD 4LD 4LD	Rural County Collector Rural County Collector County Minor Arterial County Minor Arterial County Minor Arterial County Minor Arterial County Minor Arterial County Minor Arterial County Minor Arterial	MD-9880 MD-9880 MD-9879 MD-9878 MD-9876 MD-9876 Average MD-9874 MD-9874	2010 2010 2010 2010 2010 2010 2010 2010 2010	C C D D D D D D D	741 741 911 1,072 1,971 1,971 1,610 1,249 1,249	1,150 1,150 1,420 2,150 3,130 3,130 3,130 1,930 1,930	B B D B C C C D D	0.64 0.64 0.64 0.50 0.63 0.63 0.51 0.65 0.65
<b>SW 200 Street/Quail Roost Dr</b> SW 177 Avenue to SW 157 Avenue SW 157 Avenue to SW 147 Avenue SW 147 Avenue to SW 137 Avenue SW 137 Avenue to SW 127 Avenue SW 127 Avenue to SW 117 Avenue SW 117 Avenue to SR 821/HEFT SR 821/HEFT to US-1	2LU 2LU 2LU 2LU 4LD 4LD 4LD	Rural State Minor Arterial Rural State Minor Arterial Rural State Minor Arterial State Minor Arterial State Minor Arterial State Minor Arterial State Minor Arterial	FDOT-1117 FDOT-1117 MD-9892 FDOT-1116 Average FDOT-0054 FDOT-1114	2010 2010 2010 2010 2010 2010 2010	D D D E E E E	682 682 739 1,284 2,492 3,699 1,506	2,000 2,000 2,000 2,550 3,400 3,400 3,400	B B B C D F C	0.34 0.34 0.37 0.50 0.73 1.09 0.44
<b>SW 200 Street/Caribbean Blvd</b> Quail Roost Dr to SW 117 Avenue SW 117 Avenue to SW 110 Court SW 110 Court to US-1	2LU 2LU 4LD	County Minor Arterial County Minor Arterial County Minor Arterial	MD-9890 MD-9890 MD-9890	2010 2010 2010	D D D	810 810 810	1,040 1,040 3,204	D D D	0.78 0.78 0.25
<b>SW 216 Street</b> SW 177 Avenue to SW 167 Avenue SW 167 Avenue to SW 157 Avenue SW 157 Avenue to SW 147 Avenue SW 147 Avenue to SW 137 Avenue SW 137 Avenue to SW 127 Avenue SW 127 Avenue to US-1	2LU 2LU 2LU 2LU 2LU 2LU	Rural County Collector Rural County Collector Rural County Collector Rural County Collector County Collector County Collector	MD-9902 MD-9902 MD-9902 MD-9902 MD-9898 MD-9898	2010 2010 2010 2010 2010 2010	C C C C D D	309 309 309 309 641 641	570 570 570 570 1,730 1,730	C C C C B B	0.54 0.54 0.54 0.54 0.37 0.37

[1] The expanded lane geometry for roadways under construction are included in this table as existing lane geometry.

[2] The roadway functional classification is based on Figure 3 of the Transportation Element in the CDMP and the 2010 Florida Highway Data CD.

[3] The adopted LOS standards are consistent with the Transportation Element from the Miami-Dade County CDMP.

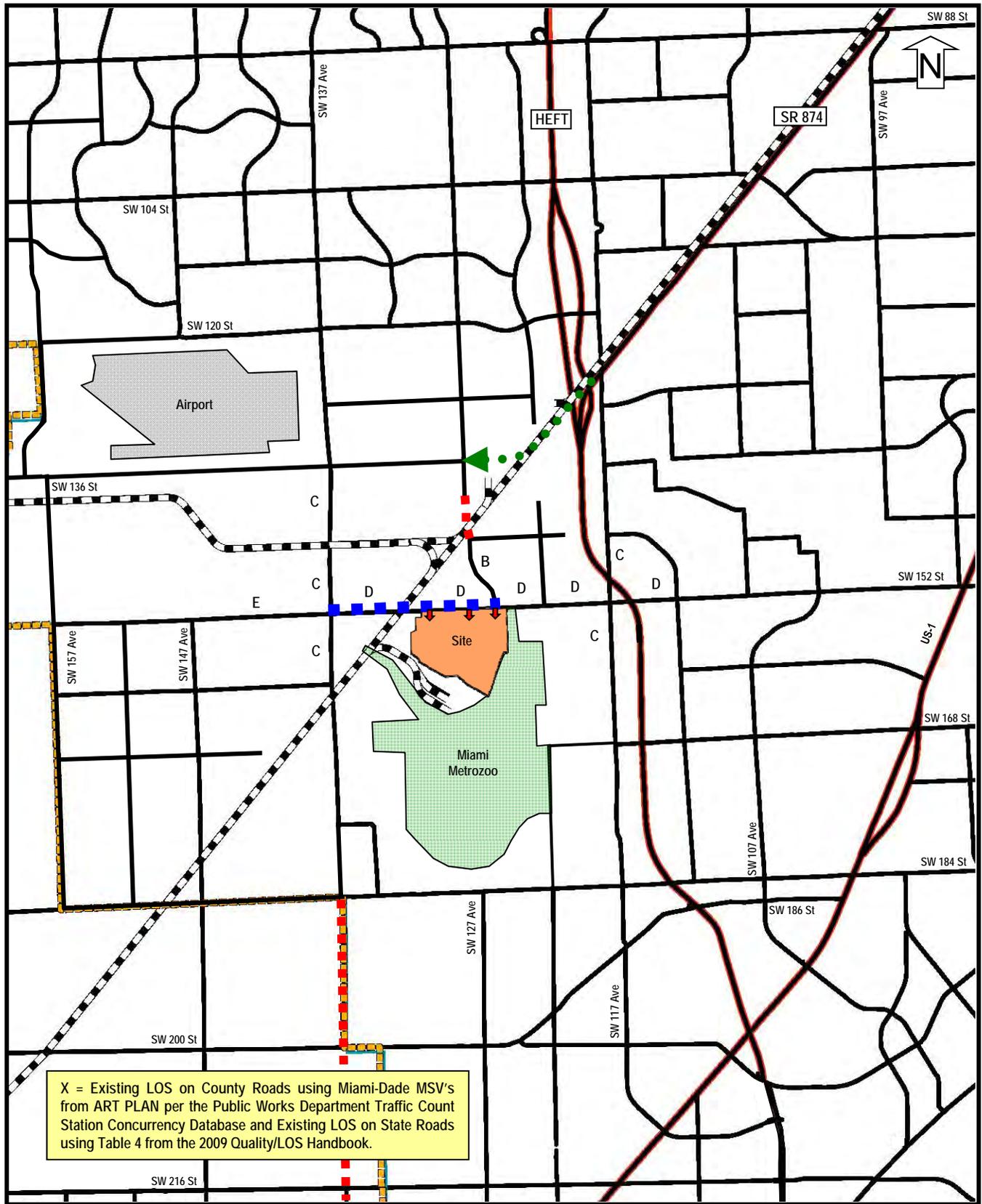
[4] The PHP volumes have been obtained from the Miami-Dade County and FDOT Traffic Count Station Databases dated 9/14/2010.

[5] The PHP volumes for Florida's Turnpike are based upon the 2010 AADT \* 0.088 to establish the PHP volume, based upon data from FDOT Station 0267.

[6] The two-way peak hour MSV for county roads are consistent with ART PLAN as established by MDC Public Works in the Traffic Count Station Database.

For county roads under construction, the MSV is based upon ART PLAN or Table 4 of the 2009 FDOT Quality/LOS Handbook, last updated on 10/4/2010.

[7] The two-way peak hour MSV for state roads are consistent with Table 4 from the 2009 FDOT Quality/LOS Handbook, last updated on 10/4/2010.



- C LOS for adjacent segments are also provided.
- Legend**
- Planned Roadway Connections - 2015-2025
  - Roadway Connection Study - TIP 2012
  - ↓ Project Access Locations
  - Roadways with Project Traffic  $\geq$  5% of MSV at the Adopted LOS Standard

Figure 5B  
Existing LOS on Segments where Project Traffic  $\geq$  5% of MSV  
Coral Reef Commons - UM South Campus Property

## Year 2025 Future Background and Committed Development Traffic Conditions without the Amendment

Table 5C provides the analysis of Year 2025 future background and committed development traffic (before the addition of the Amendment traffic) and includes the growth of the existing peak hour period traffic to the year 2025 and the addition of unbuilt committed development traffic from previously approved projects. The evaluation of future background plus committed development traffic includes the following:

- The future lane geometry for study area roadways inclusive of the improvements under construction, the improvements funded in TIP 2012 and the improvements from Priorities II and III of the LRTP 2035;
- The adopted level of service standard from the CDMP for each roadway segment analyzed;
- The existing two-way peak hour period traffic from **Table 5B**;

### Background Growth

- Model derived linear growth rates calculated using the Model Outputs for the years 2005 and 2035 from the 2035 LRTP (see **Table 5D**), used to grow existing peak hour period traffic to year 2025;
- A linear growth rate of 0.65% per year for the arterial and collector roadways within the study area;
- A linear growth rate of 0.84% per year for Florida's Turnpike;
- A linear growth rate of 1.13% per year for SR 874;
- Growth rates have been adjusted based on the inclusion of committed development traffic in the 2025 analysis.

### Committed Development

- Committed development traffic for each count station quantified in the Traffic Concurrency Count Station database last updated on September 14, 2011 (see **Table 5E**);
- Committed development traffic from prior CDMP amendments in the immediate study area (see **Table 5E**);
- Includes the Residential, School and Library uses approved for the UM South Campus Property during the April 2004 Amendment Cycle located in Project Zone 1209;
- Includes Zoo Miami Entertainment Area I approved in 2008 as a Special CDMP Amendment Application for attraction, entertainment, hotel and restaurant uses located in Project Zones 1207 and 1209;
- Includes Zoo Miami Entertainment Area II approved in 2010 as part of the October 2009 Amendment Cycle for attraction, entertainment, conference hotel and restaurant uses located in Project Zone 1204;
- Committed development trip generation from prior approved studies are presented in **Table 5F**;
- The future background plus committed development traffic for the year 2025;
- The two-way peak hour roadway capacity based upon the FDOT 2009 Quality/LOS Handbook;
- The Year 2025 future background plus committed development level of service (without the Amendment traffic) and the volume to capacity ratio for the Year 2025.

Figure 5C has been provided to identify the Year 2025 background and committed development levels of service on study area roadways where the Amendment traffic is  $\geq 5.0\%$  of the maximum service volume (MSV) at the adopted level of service standard. Also provided are the Year 2025 background and committed development levels of service for those segments adjacent to those road segments where the Amendment traffic consumes  $\geq 5.0\%$  of the MSV.

Figure 5D identifies the location of Zoo Miami Entertainment Area I, Zoo Miami Entertainment Area II and the UM south Campus Property.

Table 5C  
Year 2025 Future Background and Committed Development Traffic Conditions on Study Area Roadways - Long Term Planning Horizon  
Two-Way Peak Hour Period without the Amendment Trips

11/25/2011

ROADWAY SEGMENTS	[1]	[2]	9/14/2011	[3]	2025	[4]	2025	[5]		
	YEAR	CDMP	MIAMI-DADE	MODEL	FUTURE	TOTAL	BACKGROUND	TWO-WAY	2025	2025
	2025 LANES	ADOPTED LOS STANDARD	EXISTING PHP VOLUMES [See Table 5B]	GROWTH RATES [See Table 5D]	BACKGROUND PHP VOLUME	COMMITTED VOLUMES [See Table 5E]	PLUS COMMITTED VOLUMES	PEAK HOUR MAX CAPACITY	PHP LOS	PHP V/C
<b>SW 157 Avenue</b>										
SW 88 Street to SW 112 Street	4LD	D	1,376	0.65%	1,516	36	1,553	3,204	B	0.48
SW 112 Street to SW 120 Street	4LD	D	1,386	0.65%	1,518	67	1,584	3,204	B	0.49
SW 120 Street to SW 136 Street	4LD	D	1,386	0.65%	1,518	67	1,584	3,204	B	0.49
SW 136 Street to SW 152 Street	4LD	D	1,386	0.65%	1,518	62	1,579	3,204	B	0.49
SW 152 Street to SW 184 Street	4LD - TIP 2012	D	1,116	0.65%	1,230	350	1,580	3,204	B	0.49
<b>SW 147 Avenue</b>										
SW 88 Street to SW 104 Street	4LD	D	1,553	0.65%	1,712	28	1,739	3,204	B	0.54
SW 104 Street to SW 120 Street	4LD	D	1,356	0.65%	1,494	229	1,723	3,204	B	0.54
SW 152 Street to SW 184 Street	2LU	D	955	0.65%	1,052	327	1,379	1,440	D	0.96
SW 184 Street to SW 200 Street	2LU	C	740	0.65%	816	84	900	1,440	C	0.62
SW 200 Street to SW 216 Street	2LU	C	740	0.65%	816	62	877	1,440	C	0.61
<b>SW 137 AVENUE</b>										
SW 88 Street to SW 104 Street	6LD	E	2,830	0.65%	3,119	186	3,305	5,360	B	0.62
SW 104 Street to SW 120 Street	6LD	E	3,008	0.65%	3,315	280	3,595	5,360	B	0.67
SW 120 Street to SW 136 Street	6LD	E	3,402	0.65%	3,749	396	4,145	5,150	D	0.80
SW 136 Street to SW 152 Street	6LD	E	3,795	0.65%	4,182	819	5,002	5,150	E	0.97
SW 152 Street to SW 184 Street	6LD	D	2,924	0.65%	3,222	435	3,657	4,824	B	0.76
SW 184 Street to SW 200 Street	4LD - LRTP II	D	786	0.65%	866	152	1,018	3,204	B	0.32
<b>SW 127 AVENUE</b>										
SW 88 Street to SW 104 Street	4LD	D	1,532	0.65%	1,688	24	1,713	3,204	B	0.53
SW 104 Street to SW 120 Street	4LD	D	1,494	0.65%	1,646	67	1,713	3,204	B	0.53
SW 120 Street to SW 122 Street	4LD	D	1,058	0.65%	1,166	51	1,217	3,204	B	0.38
SW 122 Street to SW 136 Street	4LD - LRTP III	D	622	0.65%	699	74	773	3,204	B	0.24
SW 136 Street to SW 144 Street	4LD - LRTP III	D	556	0.65%	613	97	710	3,204	B	0.22
SW 144 Street to SW 152 Street	4LD	D	490	0.65%	540	74	614	2,314	B	0.27
SW 152 Street to Project	4LD - Access Rd	D	40	0.00%	40	723	763	2,314	B	0.33
SW 184 Street to SW 200 Street	2LU	D	585	0.65%	645	80	725	1,440	B	0.50
SW 200 Street to SW 216 Street	2LU	D	585	0.65%	645	66	711	1,440	B	0.49
<b>SW 124 AVENUE</b>										
SW 152 Street to Metrozoo	4LD	D	145	0.65%	160	9	169	2,314	B	0.07
<b>SW 122 AVENUE</b>										
SW 144 Street to SW 152 Street	4LD	D	1,292	0.65%	1,424	67	1,491	2,314	B	0.64
<b>SW 117 AVENUE</b>										
SW 88 Street to SW 104 Street	4LD	D	1,657	0.65%	1,826	251	2,077	3,204	B	0.65
SW 104 Street to SW 120 Street	4LD	D	3,207	0.65%	3,534	231	3,765	3,204	F	1.18
SW 120 Street to SW 136 Street	4LD	D	2,708	0.65%	2,984	120	3,104	3,204	D	0.97
SW 136 Street to HEFT Ramps	4LD	D	2,209	0.65%	2,434	174	2,608	3,204	C	0.81
HEFT Ramps to SW 152 Street	5LD - TIP 2012	D	2,209	0.65%	2,434	569	3,003	3,623	D	0.83
SW 152 Street to SW 116 Street	4LD	D	1,489	0.65%	1,641	766	2,407	3,204	B	0.75
SW 116 Street to SW 168 Street	4LD	D	1,489	0.65%	1,641	351	1,992	3,204	B	0.62
SW 168 Street to SW 184 Street	4LD	D	1,489	0.65%	1,641	351	1,992	3,204	B	0.62
SW 184 Street to SW 186 Street	2LU	D	1,018	0.65%	1,122	121	1,243	1,440	C	0.86
SW 186 Street to SW 200 Street	2LU	D	892	0.65%	983	79	1,062	1,440	C	0.74
SW 200 Street to SW US-1	4LD	D	766	0.65%	844	73	917	3,204	B	0.29
<b>HEFT</b>										
SW 88 Street to SW 120 Street	12LD - LRTP III	D	8,545	0.84%	9,687	313	10,000	21,950	B	0.46
SW 120 Street to SR 874	12LD - LRTP III	D	7,946	0.84%	9,009	329	9,338	21,950	B	0.43
SR 874 to SW 152 Street	12LD - LRTP III	D	14,344	0.84%	16,262	520	16,782	21,950	C	0.76
SW 152 Street to SW 184 Street	12LD - LRTP III	D	12,012	0.84%	13,618	223	13,841	21,950	C	0.63
SW 184 Street to SW 211 Street	6LD	D	9,944	0.84%	11,273	312	11,585	10,150	F	1.14
SW 211 Street to SW 112 Avenue	4LD	D	6,398	0.84%	7,253	566	7,819	6,770	F	1.15

Table 5C  
Year 2025 Future Background and Committed Development Traffic Conditions on Study Area Roadways - Long Term Planning Horizon  
Two-Way Peak Hour Period without the Amendment Trips

11/25/2011

ROADWAY SEGMENTS	[1]	[2]	9/14/2011	[3]	2025	[4]	2025	[5]		
	YEAR	CDMP	MIAMI-DADE	MODEL	FUTURE	TOTAL	BACKGROUND	TWO-WAY	2025	2025
	2025 LANES	ADOPTED LOS STANDARD	EXISTING PHP VOLUMES [See Table 5B]	GROWTH RATES [See Table 5D]	BACKGROUND PHP VOLUME	COMMITTED VOLUMES [See Table 5E]	PLUS COMMITTED VOLUMES	PEAK HOUR MAX CAPACITY	PHP LOS	PHP V/C
<b>SR 874</b>										
HEFT to Toll Plaza	6LD	D	4,504	1.13%	5,331	193	5,524	10,150	B	0.54
Toll Plaza to SW 104 Street	6LD UNDER CST	D	4,504	1.13%	5,331	186	5,517	10,150	B	0.54
SW 104 Street to SR 878	8LD	D	8,414	1.13%	9,959	131	10,090	13,480	C	0.75
<b>US-1</b>										
SW 112 Street to SW 136 Street	6LD	EE	4,889	0.65%	5,388	63	5,451	6,180	E+.06	0.88
SW 136 Street to SW 152 Street	6LD	EE	4,615	0.65%	5,086	48	5,134	6,180	E	0.83
SW 152 Street to SW 168 Street	6LD	EE	4,980	0.65%	5,488	91	5,579	6,180	E+.08	0.90
SW 168 Street to SW 184 Street	3LOW SB	EE	2,621	0.65%	2,889	42	2,930	3,708	C	0.79
SW 168 Street to SW 184 Street	3LOW NB	EE	3,082	0.65%	3,397	42	3,438	3,708	E+.11	0.93
SW 184 Street to SW 200 Street	6LD	EE	3,324	0.65%	3,663	55	3,718	6,180	C	0.60
SW 200 Street to SW 216 Street	6LD	EE	3,333	0.65%	3,673	327	4,000	6,180	D	0.65
<b>SW 88 Street</b>										
SW 177 Avenue to SW 162 Avenue	4LD	D	1,224	0.65%	1,349	118	1,467	3,560	B	0.41
SW 162 Avenue to SW 157 Avenue	6LD	EE	2,034	0.65%	2,242	1,007	3,249	6,180	C	0.53
SW 157 Avenue to SW 147 Avenue	6LD	EE	3,136	0.65%	3,456	536	3,992	6,180	D	0.65
SW 147 Avenue to SW 137 Avenue	6LD	EE	3,136	0.65%	3,456	560	4,016	6,180	D	0.65
SW 137 Avenue to SW 127 Avenue	6LD	EE	4,714	0.65%	5,195	82	5,277	6,180	E+.02	0.85
SW 127 Avenue to SR 821/HEFT	8LD	EE	5,090	0.65%	5,610	84	5,693	8,256	D	0.69
SR 821/HEFT to SW 117 Avenue	6LD	EE	4,593	0.65%	5,061	55	5,116	6,180	E	0.83
SW 117 Avenue to SW 107 Avenue	6LD	EE	4,095	0.65%	4,513	51	4,564	6,180	D	0.74
SW 107 Avenue to SR 874	6LD	EE	4,748	0.65%	5,233	34	5,267	6,180	E+.02	0.85
SR 874 to SW 87 Avenue	6LD	EE	3,513	0.65%	3,872	220	4,092	6,180	D	0.66
SW 87 Avenue to SR 826	6LD	EE	4,664	0.65%	5,140	140	5,280	6,180	E+.02	0.85
<b>SW 104 Street</b>										
SW 157 Avenue to SW 147 Avenue	4LD	EE	2,367	0.65%	2,609	95	2,704	3,845	C	0.70
SW 147 Avenue to SW 137 Avenue	4LD	EE	2,572	0.65%	2,835	28	2,862	3,845	C	0.74
SW 137 Avenue to SW 127 Avenue	6LD	EE	3,388	0.65%	3,734	35	3,769	5,789	B	0.65
SW 127 Avenue to SW 117 Avenue	6LD	EE	4,508	0.65%	4,968	114	5,083	5,789	E	0.88
SW 117 Avenue to SR 874	6LD	EE	4,506	0.65%	4,966	222	5,188	5,789	E	0.90
<b>SW 120 Street</b>										
SW 157 Avenue to SW 137 Avenue	4LD	D	2,116	0.65%	2,332	270	2,602	3,204	C	0.81
SW 137 Avenue to SW 127 Avenue	5LD/4LD	D	2,494	0.65%	2,748	224	2,972	3,204	C	0.93
SW 127 Avenue to SW 117 Avenue	4LD	D	2,871	0.65%	3,164	224	3,388	3,204	F	1.06
<b>SW 136 Street</b>										
SW 157 Avenue to SW 147 Avenue	4LD	D	651	0.65%	732	65	797	3,204	B	0.25
SW 147 Avenue to SW 137 Avenue	4LD	D	1,733	0.65%	1,947	65	2,013	3,204	B	0.63
SW 137 Avenue to SW 127 Avenue	4LD	D	622	0.65%	699	44	743	3,204	B	0.23
<b>SW 152 Street</b>										
SW 157 Avenue to SW 147 Avenue	4LD - LRTP III	EE	767	0.65%	862	194	1,056	3,845	B	0.27
SW 147 Avenue to SW 137 Avenue	4LD	EE	1,946	0.65%	2,145	493	2,638	3,845	C	0.69
SW 137 Avenue to SW 132 Avenue	6LD	EE	3,839	0.65%	4,231	1,155	5,386	6,180	E+.05	0.87
SW 132 Avenue to SW 130 Place	6LD	EE	3,839	0.65%	4,231	1,170	5,401	6,180	E+.05	0.87
SW 130 Place to SW 129 Avenue	6LD	EE	3,839	0.65%	4,231	1,177	5,408	6,180	E+.05	0.88
SW 129 Avenue to SW 127 Avenue	6LD	EE	3,839	0.65%	4,231	1,192	5,422	6,180	E+.05	0.88
SW 127 Avenue to SW 124 Avenue	6LD	EE	3,839	0.65%	4,231	996	5,227	6,180	E+.01	0.85
SW 124 Avenue to SW 122 Avenue	Zoo II - 1 EB Lane	EE	4,369	0.65%	4,815	990	5,805	7,210	E	0.81
SW 122 Avenue to SW 117 Avenue	Zoo II - 1 EB Lane	EE	4,369	0.65%	4,815	1,345	6,160	7,210	E+.02	0.85
SW 117 Avenue to SR 821/HEFT	5LD - LRTP III	EE	3,465	0.65%	3,818	549	4,367	5,100	E+.03	0.86
SR 821/HEFT to SW 112 Avenue	4LD	EE	2,560	0.65%	2,821	201	3,022	4,080	D	0.74
SW 112 Avenue to US-1	4LD	EE	2,786	0.65%	3,070	199	3,269	4,080	E	0.80

Table 5C  
Year 2025 Future Background and Committed Development Traffic Conditions on Study Area Roadways - Long Term Planning Horizon  
Two-Way Peak Hour Period without the Amendment Trips

11/25/2011

ROADWAY SEGMENTS	[1]	[2]	9/14/2011	[3]	2025	[4]	2025	[5]		
	YEAR	CDMP	MIAMI-DADE	MODEL	FUTURE	TOTAL	BACKGROUND	TWO-WAY	2025	2025
	2025 LANES	ADOPTED LOS STANDARD	EXISTING PHP VOLUMES [See Table 5B]	GROWTH RATES [See Table 5D]	BACKGROUND PHP VOLUME	COMMITTED VOLUMES [See Table 5E]	PLUS COMMITTED VOLUMES	PEAK HOUR MAX CAPACITY	PHP LOS	PHP V/C
<b>SW 168 Street</b> SW 117 Avenue to US-1	2LU	D	803	0.65%	885	165	1,050	1,440	C	0.73
<b>SW 184 Street</b> SW 177 Avenue to SW 167 Avenue	2LU	C	741	0.65%	817	48	865	1,350	C	0.64
SW 167 Avenue to SW 157 Avenue	2LU	C	741	0.65%	817	56	873	1,350	C	0.65
SW 157 Avenue to SW 147 Avenue	2LU	D	911	0.65%	1,004	189	1,193	1,440	C	0.83
SW 147 Avenue to SW 137 Avenue	4LD UNDER CST	D	1,072	0.65%	1,181	397	1,579	3,204	B	0.49
SW 137 Avenue to SW 127 Avenue	4LD	D	1,971	0.65%	2,172	179	2,351	3,204	B	0.73
SW 127 Avenue to SW 117 Avenue	4LD	D	1,971	0.65%	2,172	164	2,336	3,204	B	0.73
SW 117 Avenue to SR 821/HEFT	4LD	D	1,610	0.65%	1,774	196	1,971	3,204	B	0.62
SR 821/HEFT to SW 107 Avenue	4LD	D	1,249	0.65%	1,376	157	1,534	3,204	B	0.48
SW 107 Avenue to US-1	4LD	D	1,249	0.65%	1,376	58	1,434	3,204	B	0.45
<b>SW 200 Street/Quail Roost Dr</b> SW 177 Avenue to SW 157 Avenue	2LU	C	682	0.65%	752	26	777	2,000	C	0.39
SW 157 Avenue to SW 147 Avenue	2LU	C	682	0.65%	752	28	780	2,000	C	0.39
SW 147 Avenue to SW 137 Avenue	2LU	C	739	0.65%	814	46	861	2,000	C	0.43
SW 137 Avenue to SW 127 Avenue	2LU	E	1,284	0.65%	1,415	95	1,510	2,550	D	0.59
SW 127 Avenue to SW 117 Avenue	4LD	E	2,492	0.65%	2,746	35	2,781	3,400	D	0.82
SW 117 Avenue to SR 821/HEFT	4LD	E	3,699	0.65%	4,077	35	4,111	3,400	F	1.21
SR 821/HEFT to US-1	4LD	E	1,506	0.65%	1,660	125	1,785	3,400	C	0.52
<b>SW 200 Street/Caribbean Blvd</b> Quail Roost Dr to SW 117 Avenue	2LU	D	810	0.65%	893	28	920	1,440	C	0.64
SW 117 Avenue to SW 110 Court	2LU	D	810	0.65%	893	28	920	1,440	C	0.64
SW 110 Court to US-1	4LD	D	810	0.65%	893	28	920	3,204	B	0.29
<b>SW 216 Street</b> SW 177 Avenue to SW 167 Avenue	2LU	C	309	0.65%	341	30	370	1,278	B	0.29
SW 167 Avenue to SW 157 Avenue	2LU	C	309	0.65%	341	30	370	1,278	B	0.29
SW 157 Avenue to SW 147 Avenue	2LU	C	309	0.65%	341	30	370	1,278	B	0.29
SW 147 Avenue to SW 137 Avenue	2LU	C	309	0.65%	341	32	373	1,278	B	0.29
SW 137 Avenue to SW 127 Avenue	2LU	D	641	0.65%	706	163	869	1,440	C	0.60
SW 127 Avenue to US-1	2LU	D	641	0.65%	706	161	867	1,440	C	0.60

[1] Lane geometry for Year 2025 Long Term Planning Horizon reflects projects under construction, funded projects from TIP 2012 and planned projects from Priorities II and III of the LRTP 2035 which will be built by the Year 2025.

[2] The adopted LOS standards are consistent with the Transportation Element from the Miami-Dade County CDMP.

[3] The growth rate calculations are provided on Table 5D and are based upon linear growth rates established using the 2005 and 2035 model forecasts from the 2035 LRTP.

[4] See Table 5E for the distribution of traffic from unbuilt committed projects.

[5] The two-way peak hour roadway capacities have been obtained from the 2009 FDOT Quality/LOS Handbook updated 10/4/2010.

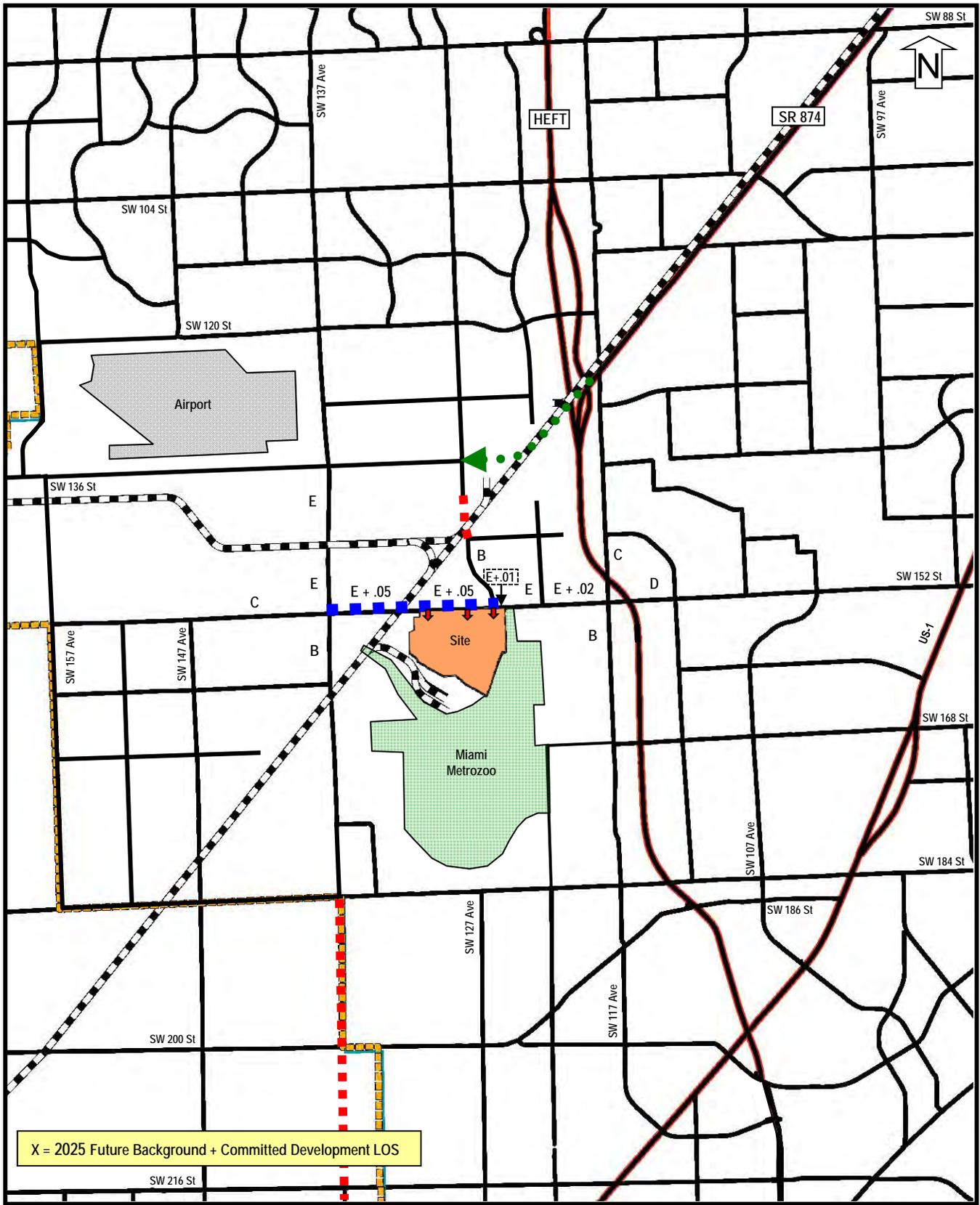


Figure 5C

2025 Background LOS on Segments where Project Traffic  $\geq$  5% of MSV  
Coral Reef Commons - UM South Campus Property

- Legend
- Planned Roadway Connections - 2015-2025
  - Roadway Connection Study - TIP 2012
  - ↓ Project Access Locations
  - Roadways with Project Traffic  $\geq$  5% of MSV at the Adopted LOS
- C LOS for adjacent segments are also provided.

Source: Cathy Sweetapple & Associates

Table 5D  
Traffic Growth Rate Calculations using the 2005 and 2035 LRTP Model Output Files

11/3/2011

ROADWAY	DIR	2005 Model Volumes	2035 Model Volumes	Growth Rate
<b>SW 88 STREET</b>				
WEST OF SW 167 AVENUE	E/W	16,095	23,108	1.21%
WEST OF SW 162 AVENUE	E/W	22,530	22,619	0.01%
WEST OF SW 157 AVENUE	E/W	20,729	24,977	0.62%
WEST OF SW 147 AVENUE	E/W	24,614	30,089	0.67%
WEST OF SW 142 AVENUE	E/W	61,845	58,352	-0.19%
WEST OF SW 137 AVENUE	E/W	54,374	49,912	-0.29%
EAST OF SW 137 AVENUE	E/W	57,884	51,260	-0.40%
WEST OF SW 127 AVENUE	E/W	67,841	74,259	0.30%
EAST OF SW 117 AVENUE	E/W	59,967	71,730	0.60%
EAST OF SW 107 AVENUE	E/W	67,442	74,951	0.35%
EAST OF SW 97 AVENUE	E/W	42,227	55,805	0.93%
EAST OF SW 87 AVENUE	E/W	53,566	64,016	0.60%
<b>AVERAGE:</b>		549,114	601,078	<b>0.30%</b>
<b>SW 104 STREET</b>				
EAST OF SW 157 AVENUE	E/W	15,692	15,352	-0.07%
EAST OF SW 147 AVENUE	E/W	21,966	26,253	0.60%
EAST OF SW 137 AVENUE	E/W	41,135	44,570	0.27%
WEST OF SW 127 AVENUE	E/W	40,054	49,591	0.71%
EAST OF SW 117 AVENUE	E/W	56,804	72,157	0.80%
<b>AVERAGE:</b>		175,651	207,923	<b>0.56%</b>
<b>KILLIAN DRIVE</b>				
EAST OF RAMP TO SR 874	E/W	20,313	42,142	2.46%
WEST OF SW 87 AVENUE	E/W	12,561	16,399	0.89%
WEST OF US-1	E/W	12,790	15,062	0.55%
<b>AVERAGE:</b>		45,664	73,603	<b>1.60%</b>
<b>SW 120 STREET</b>				
WEST OF SW 137 AVENUE	E/W	32,435	40,613	0.75%
WEST OF SW 127 AVENUE	E/W	28,342	52,099	2.05%
WEST OF SW 122 AVENUE	E/W	33,641	58,756	1.88%
WEST OF HEFT	E/W	32,958	72,154	2.65%
<b>AVERAGE:</b>		127,376	223,622	<b>1.89%</b>
<b>SW 136 STREET</b>				
EAST OF SW 157 AVENUE	E/W	10,691	21,454	2.35%
WEST OF SW 137 AVENUE	E/W	26,210	37,453	1.20%
<b>AVERAGE:</b>		36,901	58,907	<b>1.57%</b>
<b>SW 152 STREET</b>				
WEST OF SW 137 AVENUE	E/W	46,327	45,799	-0.04%
EAST OF SW 137 AVENUE	E/W	51,821	54,305	0.16%
WEST OF SW 127 AVENUE	E/W	54,843	58,634	0.22%
WEST OF SW 124 AVENUE	E/W	64,748	59,862	-0.26%
WEST OF SW 122 AVENUE	E/W	65,709	60,295	-0.29%
WEST OF SW 117 AVENUE	E/W	65,709	62,213	-0.18%
WEST OF SW 112 AVENUE	E/W	48,578	51,354	0.19%
EAST OF SW 112 AVENUE	E/W	31,447	40,494	0.85%
WEST OF SW 107 AVENUE	E/W	40,712	36,229	-0.39%
WEST OF US-1	E/W	40,712	48,642	0.59%
<b>AVERAGE:</b>		510,606	517,827	<b>0.05%</b>

Table 5D  
Traffic Growth Rate Calculations using the 2005 and 2035 LRTP Model Output Files

11/3/2011

ROADWAY	DIR	2005 Model Volumes	2035 Model Volumes	Growth Rate
<b>SW 184 STREET</b>				
WEST OF SW 157 AVENUE	E/W	9,646	18,897	2.27%
WEST OF SW 147 AVENUE	E/W	8,180	19,081	2.86%
WEST OF SW 137 AVENUE	E/W	16,645	24,250	1.26%
WEST OF SW 127 AVENUE	E/W	21,069	40,954	2.24%
WEST OF SW 117 AVENUE	E/W	22,306	43,195	2.23%
WEST OF HEFT	E/W	31,182	42,047	1.00%
WEST OF US-1	E/W	31,182	40,463	0.87%
<b>AVERAGE:</b>		140,210	228,887	<b>1.65%</b>
<b>SW 200 STREET/SW 186 STREET</b>				
WEST OF SW 147 AVENUE	E/W	11,504	11,317	-0.05%
WEST OF SW 137 AVENUE	E/W	14,222	8,397	-1.74%
WEST OF SW 127 AVENUE	E/W	14,723	18,682	0.80%
WEST OF SW 117 AVENUE	E/W	24,961	39,888	1.57%
WEST OF SW 107 AVENUE	E/W	22,506	38,751	1.83%
WEST OF US-1	E/W	14,297	21,806	1.42%
<b>AVERAGE:</b>		102,213	138,841	<b>1.03%</b>
<b>SW 216 STREET</b>				
WEST OF SW 147 AVENUE	E/W	8,727	12,585	1.23%
WEST OF SW 134 AVENUE	E/W	11,653	15,212	0.89%
WEST OF SW 127 AVENUE	E/W	15,386	17,595	0.45%
WEST OF US-1	E/W	11,768	18,179	1.46%
<b>AVERAGE:</b>		47,534	63,571	<b>0.97%</b>
<b>SW 157 AVENUE</b>				
SOUTH OF SW 88 STREET	N/S	16,008	36,277	2.76%
SOUTH OF SW 104 STREET	N/S	10,202	32,723	3.96%
NORTH OF SW 120 STREET	N/S	10,202	25,888	3.15%
NORTH OF SW 136 STREET	N/S	10,826	21,879	2.37%
SOUTH OF SW 152 STREET	N/S	10,826	19,178	1.92%
NORTH OF SW 184 STREET	N/S	11,493	21,422	2.10%
<b>AVERAGE:</b>		69,557	157,367	<b>2.76%</b>
<b>SW 147 AVENUE</b>				
SOUTH OF SW 88 STREET	N/S	25,605	31,798	0.72%
SOUTH OF SW 104 STREET	N/S	22,213	32,104	1.24%
SOUTH OF SW 152 STREET	N/S	19,674	24,157	0.69%
NORTH OF SW 184 STREET	N/S	14,221	23,898	1.75%
<b>AVERAGE:</b>		81,713	111,957	<b>1.06%</b>
<b>SW 137 AVENUE</b>				
SOUTH OF KENDALL DRIVE	N/S	47,173	63,588	1.00%
SOUTH OF SW 104 STREET	N/S	42,398	56,737	0.98%
SOUTH OF SW 120 STREET	N/S	63,554	69,288	0.29%
SOUTH OF SW 136 STREET	N/S	57,900	73,509	0.80%
SOUTH OF SW 152 STREET	N/S	41,506	72,011	1.85%
SOUTH OF SW 184 STREET	N/S	13,445	35,132	3.25%
<b>AVERAGE:</b>		265,976	370,265	<b>1.11%</b>

Table 5D  
Traffic Growth Rate Calculations using the 2005 and 2035 LRTP Model Output Files

11/3/2011

ROADWAY	DIR	2005 Model Volumes	2035 Model Volumes	Growth Rate
<b>SW 127 AVENUE</b>				
SOUTH OF KENDALL DRIVE	N/S	9,699	25,937	3.33%
SOUTH OF SW 104 STREET	N/S	11,179	25,053	2.73%
<b>AVERAGE:</b>		20,878	50,990	<b>3.02%</b>
<b>SW 117 AVENUE</b>				
SOUTH OF KENDALL DRIVE	N/S	25,306	28,312	0.37%
SOUTH OF SW 104 STREET	N/S	20,302	32,356	1.57%
NORTH OF SW 120 STREET	N/S	30,413	45,984	1.39%
SOUTH OF SW 136 STREET	N/S	30,413	29,067	-0.15%
SOUTH OF SW 152 STREET	N/S	13,823	32,785	2.92%
NORTH OF SW 168 STREET	N/S	16,076	36,608	2.78%
NORTH OF SW 184 STREET	N/S	12,144	29,301	2.98%
NORTH OF SW 186 STREET	N/S	10,514	17,295	1.67%
NORTH OF SW 200 STREET	N/S	11,613	14,177	0.67%
NORTH OF US-1	N/S	14,530	13,654	-0.21%
<b>AVERAGE:</b>		185,134	279,539	<b>1.38%</b>
<b>US-1</b>				
SOUTH OF SW 88 STREET	N/S	84,701	93,674	0.34%
SOUTH OF SW 112 STREET	N/S	71,685	72,711	0.05%
SOUTH OF SW 136 STREET	N/S	75,031	80,296	0.23%
SOUTH OF SW 152 STREET	N/S	74,224	85,006	0.45%
SOUTH OF SW 186 STREET	N/S	53,786	72,980	1.02%
<b>AVERAGE:</b>		359,427	404,667	<b>0.40%</b>
<b>SR 874</b>				
NORTH OF THE HEFT	N/S	35,191	74,428	2.53%
NORTH OF SW 104 STREET	N/S	53,585	98,817	2.06%
<b>AVERAGE:</b>		88,776	173,245	<b>2.25%</b>
<b>HEFT</b>				
SOUTH OF KENDALL DRIVE	N/S	62,244	95,571	1.44%
NORTH OF SW 152 STREET	N/S	95,979	133,171	1.10%
NORTH OF SW 184 STREET	N/S	75,372	140,859	2.11%
NORTH OF SW 200 STREET	N/S	51,368	98,169	2.18%
<b>TOTAL FOR ALL STATIONS:</b>		<b>284,963</b>	<b>467,770</b>	<b>1.67%</b>
<b>AVERAGE ARTERIAL AND COLLECTOR GROWTH RATE:</b>				Model Rate: <b>1.29%</b>
<b>AVERAGE ARTERIAL AND COLLECTOR GROWTH RATE / 2 TO ADJUST FOR COMMITTEDS:</b>				<b>0.65%</b>
<b>SR 874 GROWTH RATE:</b>				<b>2.25%</b>
<b>SR 874 GROWTH RATE / 2 TO ADJUST FOR COMMITTEDS:</b>				<b>1.13%</b>
<b>HEFT GROWTH RATE:</b>				<b>1.67%</b>
<b>HEFT GROWTH RATE / 2 TO ADJUST FOR COMMITTEDS:</b>				<b>0.84%</b>



- UM South Campus Property – CDMP Approved in 2005
- Zoo I Entertainment Area - CDMP and Zoning Approved in 2008
- Zoo II Entertainment Area – CDMP Approved in 2010
- Miami Metrozoo DRI Boundary

Figure 5D  
Location of Committed Developments  
Coral Reef Commons - UM South Campus Property

Table 5E  
Assignment of Unbuilt Committed Development Traffic  
Two-Way PM Peak Hour

11/25/2011

ROADWAY SEGMENTS	YEAR 2025 LANES	COUNT STATION	9/14/2011 MIAMI-DADE CONCURRENCY DATABASE COMMITTED TRIPS	UM South Campus Approved Amendment Trips		Zoo Miami Entertainment Area I Approved Amendment Trips				Zoo Miami Entertainment Area II Approved Amendment Trips				TOTAL COMMITTED TRAFFIC
				Project Dist.	Net External PM Trips 723	Project Dist.	TAZ 1207 PM Trips 220	Project Dist.	TAZ 1209 PM Trips 250	TAZ 1204 Proj. Dist. Percent	Hotel-Conf PM Trips 938	TAZ 1204 Proj. Dist. Percent	Theme Park PM Trips 650	
				Percent		Percent		Percent		Percent		Percent		
<b>SW 157 Avenue</b>														
SW 88 Street to SW 112 Street	4LD	MD-9857	0	2.00%	14	2.87%	6	3.00%	8	0.50%	5	0.50%	3	36
SW 112 Street to SW 120 Street	4LD	Average	0	4.00%	29	5.87%	13	6.72%	17	0.50%	5	0.50%	3	67
SW 120 Street to SW 136 Street	4LD	Average	0	3.00%	22	7.87%	17	4.72%	12	1.00%	9	1.00%	7	67
SW 136 Street to SW 152 Street	4LD	Average	0	2.00%	14	8.87%	20	4.72%	12	1.00%	9	1.00%	7	62
SW 152 Street to SW 184 Street	4LD - TIP 2012	MD-9859	310	2.00%	14	2.00%	4	2.00%	5	1.00%	9	1.00%	7	350
<b>SW 147 Avenue</b>														
SW 88 Street to SW 104 Street	4LD	MD-9830	0	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	28
SW 104 Street to SW 120 Street	4LD	MD-9832	201	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	229
SW 152 Street to SW 184 Street	2LU	MD-9834	237	3.00%	22	1.00%	2	1.00%	3	4.00%	38	4.00%	26	327
SW 184 Street to SW 200 Street	2LU	MD-9836	42	3.00%	22	1.00%	2	1.00%	3	1.00%	9	1.00%	7	84
SW 200 Street to SW 216 Street	2LU	MD-9836	42	1.00%	7	1.00%	2	1.00%	3	0.50%	5	0.50%	3	62
<b>SW 137 AVENUE</b>														
SW 88 Street to SW 104 Street	6LD	FDOT-2520	0	2.22%	16	9.09%	20	8.76%	22	8.07%	76	8.07%	52	186
SW 104 Street to SW 120 Street	6LD	FDOT-2519	15	5.22%	38	11.09%	24	10.76%	27	11.07%	104	11.07%	72	280
SW 120 Street to SW 136 Street	6LD	MD-9814	54	9.22%	67	14.09%	31	14.76%	37	13.07%	123	13.07%	85	396
SW 136 Street to SW 152 Street	6LD	MD-9816	407	13.22%	96	16.09%	35	16.76%	42	15.07%	141	15.07%	98	819
SW 152 Street to SW 184 Street	6LD	MD-9818	129	23.08%	167	22.07%	49	16.47%	41	3.11%	29	3.11%	20	435
SW 184 Street to SW 200 Street	4LD - LRTP II	MD-9820	25	5.02%	36	12.07%	27	6.47%	16	3.00%	28	3.00%	20	152
<b>SW 127 AVENUE</b>														
SW 88 Street to SW 104 Street	4LD	MD-9782	0	0.50%	4	1.00%	2	1.00%	3	1.00%	9	1.00%	7	24
SW 104 Street to SW 120 Street	4LD	MD-9784	39	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	67
SW 120 Street to SW 122 Street	4LD	Average	0	2.00%	14	1.00%	2	1.00%	3	2.00%	19	2.00%	13	51
SW 122 Street to SW 136 Street	4LD - LRTP III	Average	0	3.00%	22	1.00%	2	1.00%	3	3.00%	28	3.00%	20	74
SW 136 Street to SW 144 Street	4LD - LRTP III	Average	0	4.00%	29	1.00%	2	1.00%	3	4.00%	38	4.00%	26	97
SW 144 Street to SW 152 Street	4LD	TM Counts	0	7.33%	53	1.00%	2	1.00%	3	1.00%	9	1.00%	7	74
SW 152 Street to Project	4LD - Access Rd	TM Counts	0	100.00%	723	0.00%	0	0.00%	0	0.00%	0	0.00%	0	723
SW 184 Street to SW 200 Street	2LU	MD-9788	28	3.00%	22	1.00%	2	5.00%	13	1.00%	9	1.00%	7	80
SW 200 Street to SW 216 Street	2LU	MD-9788	28	1.00%	7	1.00%	2	5.00%	13	1.00%	9	1.00%	7	66
<b>SW 124 AVENUE</b>														
SW 152 Street to Metrozoo	4LD	TM Counts	0	0.00%	0	100.00%	220	100.00%	250	1.00%	9	1.00%	7	486
<b>SW 122 AVENUE</b>														
SW 144 Street to SW 152 Street	4LD	TM Counts	0	2.00%	14	1.00%	2	1.00%	3	3.00%	28	3.00%	20	67

Table 5E  
Assignment of Unbuilt Committed Development Traffic  
Two-Way PM Peak Hour

11/25/2011

ROADWAY SEGMENTS	YEAR 2025 LANES	COUNT STATION	9/14/2011 MIAMI-DADE CONCURRENCY DATABASE COMMITTED TRIPS	UM South Campus		Zoo Miami Entertainment Area I				Zoo Miami Entertainment Area II				TOTAL COMMITTED TRAFFIC
				Approved Amendment Trips		Approved Amendment Trips				Approved Amendment Trips				
				Project Dist. Percent	Net External PM Trips 723	Project Dist. Percent	TAZ 1207 PM Trips 220	Project Dist. Percent	TAZ 1209 PM Trips 250	TAZ 1204 Proj. Dist. Percent	Hotel-Conf PM Trips 938	TAZ 1204 Proj. Dist. Percent	Theme Park PM Trips 650	
<b>SW 117 AVENUE</b>														
SW 88 Street to SW 104 Street	4LD	MD-9748	198	0.83%	6	1.00%	2	1.00%	3	2.67%	25	2.67%	17	251
SW 104 Street to SW 120 Street	4LD	MD-9750	134	1.83%	13	2.00%	4	2.00%	5	4.67%	44	4.67%	30	231
SW 120 Street to SW 136 Street	4LD	Average	0	2.83%	20	2.00%	4	2.00%	5	5.67%	53	5.67%	37	120
SW 136 Street to HEFT Ramps	4LD	MD-9752	16	3.83%	28	2.00%	4	8.00%	20	6.67%	63	6.67%	43	174
HEFT Ramps to SW 152 Street	5LD - TIP 2012	MD-9752	0	13.58%	98	2.00%	4	8.00%	20	28.11%	264	28.11%	183	569
SW 152 Street to SW 116 Street	4LD	MD-9754	0	3.24%	23	2.00%	4	6.00%	15	45.53%	427	45.53%	296	766
SW 116 Street to SW 168 Street	4LD	MD-9754	0	3.24%	23	2.00%	4	6.00%	15	25.76%	242	25.76%	167	452
SW 168 Street to SW 184 Street	4LD	MD-9754	0	2.24%	16	2.00%	4	6.00%	15	19.84%	186	19.84%	129	351
SW 184 Street to SW 186 Street	2LU	MD-9756	0	1.00%	7	2.00%	4	6.00%	15	5.92%	56	5.92%	38	121
SW 186 Street to SW 200 Street	2LU	Average	0	1.00%	7	1.00%	2	3.00%	8	3.92%	37	3.92%	25	79
SW 200 Street to SW US-1	4LD	MD-9758	18	0.50%	4	1.00%	2	1.00%	3	2.92%	27	2.92%	19	73
<b>HEFT</b>														
SW 88 Street to SW 120 Street	12LD - LRTP III	FDOT-2246	27	6.75%	49	6.53%	14	10.88%	27	12.30%	115	12.30%	80	313
SW 120 Street to SR 874	12LD - LRTP III	FDOT-2290	0	7.75%	56	8.53%	19	10.88%	27	14.30%	134	14.30%	93	329
SR 874 to SW 152 Street	12LD - LRTP III	FDOT-2266	4	11.75%	85	17.53%	39	20.88%	52	21.44%	201	21.44%	139	520
SW 152 Street to SW 184 Street	12LD - LRTP III	FDOT-2254	15	5.81%	42	15.66%	34	10.29%	26	6.67%	63	6.67%	43	223
SW 184 Street to SW 211 Street	6LD	FDOT-2256	16	4.81%	35	15.66%	34	10.29%	26	12.66%	119	12.66%	82	312
SW 211 Street to SW 112 Avenue	4LD	FDOT-2264	277	3.81%	28	15.66%	34	10.29%	26	12.66%	119	12.66%	82	566
<b>SR 874</b>														
HEFT to Toll Plaza	6LD	FDOT-2274	6	4.00%	29	9.00%	20	10.00%	25	7.14%	67	7.14%	46	193
Toll Plaza to SW 104 Street	6LD UNDER CST	FDOT-2274	6	3.00%	22	9.00%	20	10.00%	25	7.14%	67	7.14%	46	186
SW 104 Street to SR 878	8LD	FDOT-2276	2	1.00%	7	8.00%	18	9.00%	23	5.14%	48	5.14%	33	131
<b>US-1</b>														
SW 112 Street to SW 136 Street	6LD	FDOT-0014	15	1.00%	7	4.78%	11	5.88%	15	1.00%	9	1.00%	7	63
SW 136 Street to SW 152 Street	6LD	MD-9968	0	1.00%	7	4.78%	11	5.88%	15	1.00%	9	1.00%	7	48
SW 152 Street to SW 168 Street	6LD	FDOT-0332	49	1.00%	7	4.00%	9	4.00%	10	1.00%	9	1.00%	7	91
SW 168 Street to SW 184 Street	3LOW SB	FDOT-2562	0	1.00%	7	4.00%	9	4.00%	10	1.00%	9	1.00%	7	42
SW 168 Street to SW 184 Street	3LOW NB	FDOT-2563	0	1.00%	7	4.00%	9	4.00%	10	1.00%	9	1.00%	7	42
SW 184 Street to SW 200 Street	6LD	MD-9970	15	1.00%	7	3.00%	7	4.00%	10	1.00%	9	1.00%	7	55
SW 200 Street to SW 216 Street	6LD	FDOT-0346	287	1.00%	7	3.00%	7	4.00%	10	1.00%	9	1.00%	7	327
<b>SW 88 Street</b>														
SW 177 Avenue to SW 162 Avenue	4LD	FDOT-0010	94	0.50%	4	1.00%	2	1.00%	3	1.00%	9	1.00%	7	118
SW 162 Avenue to SW 157 Avenue	6LD	FDOT-2529	981	0.75%	5	1.00%	2	1.00%	3	1.00%	9	1.00%	7	1007
SW 157 Avenue to SW 147 Avenue	6LD	FDOT-1080	492	1.00%	7	1.00%	2	1.00%	3	2.00%	19	2.00%	13	536
SW 147 Avenue to SW 137 Avenue	6LD	FDOT-1080	492	1.50%	11	2.00%	4	2.00%	5	3.00%	28	3.00%	20	560
SW 137 Avenue to SW 127 Avenue	6LD	FDOT-0060	28	1.75%	13	2.00%	4	2.00%	5	2.00%	19	2.00%	13	82
SW 127 Avenue to SR 821/HEFT	8LD	FDOT-0062	28	2.00%	14	2.00%	4	2.00%	5	2.00%	19	2.00%	13	84
SR 821/HEFT to SW 117 Avenue	6LD	Average	15	2.00%	14	2.00%	4	2.00%	5	1.00%	9	1.00%	7	55
SW 117 Avenue to SW 107 Avenue	6LD	FDOT-0592	15	1.75%	13	1.00%	2	2.00%	5	1.00%	9	1.00%	7	51
SW 107 Avenue to SR 874	6LD	FDOT-0064	0	1.50%	11	1.00%	2	2.00%	5	1.00%	9	1.00%	7	34
SR 874 to SW 87 Avenue	6LD	FDOT-0066	190	1.00%	7	1.00%	2	2.00%	5	1.00%	9	1.00%	7	220
SW 87 Avenue to SR 826	6LD	FDOT-0684	111	0.75%	5	1.00%	2	2.00%	5	1.00%	9	1.00%	7	140

Table 5E  
Assignment of Unbuilt Committed Development Traffic  
Two-Way PM Peak Hour

11/25/2011

ROADWAY SEGMENTS	YEAR 2025 LANES	COUNT STATION	9/14/2011 MIAMI-DADE CONCURRENCY DATABASE COMMITTED TRIPS	UM South Campus		Zoo Miami Entertainment Area I				Zoo Miami Entertainment Area II				TOTAL COMMITTED TRAFFIC
				Approved Amendment Trips		Approved Amendment Trips				Approved Amendment Trips				
				Project Dist. Percent	Net External PM Trips 723	Project Dist. Percent	TAZ 1207 PM Trips 220	Project Dist. Percent	TAZ 1209 PM Trips 250	TAZ 1204 Proj. Dist. Percent	Hotel-Conf PM Trips 938	TAZ 1204 Proj. Dist. Percent	Theme Park PM Trips 650	
<b>SW 104 Street</b>														
SW 157 Avenue to SW 147 Avenue	4LD	MD-9724	64	1.50%	11	1.00%	2	1.00%	3	1.00%	9	1.00%	7	95
SW 147 Avenue to SW 137 Avenue	4LD	MD-9722	0	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	28
SW 137 Avenue to SW 127 Avenue	6LD	MD-9720	0	2.00%	14	1.00%	2	1.00%	3	1.00%	9	1.00%	7	35
SW 127 Avenue to SW 117 Avenue	6LD	MD-9718	83	1.50%	11	1.00%	2	1.00%	3	1.00%	9	1.00%	7	114
SW 117 Avenue to SR 874	6LD	MD-9716	194	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	222
<b>SW 120 Street</b>														
SW 157 Avenue to SW 137 Avenue	4LD	MD-9762	235	2.00%	14	1.00%	2	1.00%	3	1.00%	9	1.00%	7	270
SW 137 Avenue to SW 127 Avenue	5LD/4LD	Average	189	2.00%	14	1.00%	2	1.00%	3	1.00%	9	1.00%	7	224
SW 127 Avenue to SW 117 Avenue	4LD	MD-9760	189	2.00%	14	1.00%	2	1.00%	3	1.00%	9	1.00%	7	224
<b>SW 136 Street</b>														
SW 157 Avenue to SW 147 Avenue	4LD	Link Counts	0	4.00%	29	1.00%	2	1.00%	3	2.00%	19	2.00%	13	65
SW 147 Avenue to SW 137 Avenue	4LD	TM Counts	0	4.00%	29	1.00%	2	1.00%	3	2.00%	19	2.00%	13	65
SW 137 Avenue to SW 127 Avenue	4LD	TM Counts	0	1.00%	7	1.00%	2	1.00%	3	2.00%	19	2.00%	13	44
<b>SW 152 Street</b>														
SW 157 Avenue to SW 147 Avenue	4LD - LRTP III	Link Counts	0	12.64%	91	11.87%	26	7.72%	19	3.61%	34	3.61%	23	194
SW 147 Avenue to SW 137 Avenue	4LD	MD-9854	128	19.64%	142	13.87%	31	9.72%	24	10.61%	100	10.61%	69	493
SW 137 Avenue to SW 132 Avenue	6LD	MD-9852	72	55.94%	404	52.03%	114	42.95%	107	28.79%	270	28.79%	187	1155
SW 132 Avenue to SW 130 Place	6LD	MD-9852	72	57.94%	419	52.03%	114	42.95%	107	28.79%	270	28.79%	187	1170
SW 130 Place to SW 129 Avenue	6LD	MD-9852	72	58.94%	426	52.03%	114	42.95%	107	28.79%	270	28.79%	187	1177
SW 129 Avenue to SW 127 Avenue	6LD	MD-9852	72	60.94%	441	52.03%	114	42.95%	107	28.79%	270	28.79%	187	1192
SW 127 Avenue to SW 124 Avenue	6LD	MD-9852	72	31.73%	229	52.03%	114	42.95%	107	29.79%	279	29.79%	194	996
SW 124 Avenue to SW 122 Avenue	Zoo II - 1 EB Lane	MD-9850	39	31.73%	229	47.97%	106	57.05%	143	29.79%	279	29.79%	194	990
SW 122 Avenue to SW 117 Avenue	Zoo II - 1 EB Lane	MD-9850	39	29.73%	215	47.97%	106	57.05%	143	53.08%	498	53.08%	345	1345
SW 117 Avenue to SR 821/HEFT	5LD - LRTP III	Average	39	12.91%	93	43.97%	97	43.05%	108	13.34%	125	13.34%	87	549
SR 821/HEFT to SW 112 Avenue	4LD	FDOT-0056	5	5.10%	37	10.78%	24	11.88%	30	6.67%	63	6.67%	43	201
SW 112 Avenue to US-1	4LD	FDOT-1106	12	4.10%	30	9.78%	22	11.88%	30	6.67%	63	6.67%	43	199
<b>SW 168 Street</b>														
SW 117 Avenue to US-1	2LU	MD-9868	59	1.00%	7	1.00%	2	1.00%	3	5.92%	56	5.92%	38	165
<b>SW 184 Street</b>														
SW 177 Avenue to SW 167 Avenue	2LU	MD-9880	11	1.00%	7	3.00%	7	3.00%	8	1.00%	9	1.00%	7	48
SW 167 Avenue to SW 157 Avenue	2LU	MD-9880	11	1.00%	7	3.00%	7	3.00%	8	1.50%	14	1.50%	10	56
SW 157 Avenue to SW 147 Avenue	2LU	MD-9879	129	2.00%	14	3.00%	7	3.00%	8	2.00%	19	2.00%	13	189
SW 147 Avenue to SW 137 Avenue	4LD UNDER CST	MD-9878	288	5.03%	36	5.00%	11	5.00%	13	3.11%	29	3.11%	20	397
SW 137 Avenue to SW 127 Avenue	4LD	MD-9876	41	5.03%	36	5.00%	11	5.00%	13	4.93%	46	4.93%	32	179
SW 127 Avenue to SW 117 Avenue	4LD	MD-9876	41	2.03%	15	3.00%	7	3.00%	8	5.93%	56	5.93%	39	164
SW 117 Avenue to SR 821/HEFT	4LD	MD-9874	41	2.00%	14	3.00%	7	3.00%	8	7.99%	75	7.99%	52	196
SR 821/HEFT to SW 107 Avenue	4LD	MD-9874	2	2.00%	14	3.00%	7	3.00%	8	7.99%	75	7.99%	52	157
SW 107 Avenue to US-1	4LD	MD-9874	2	2.00%	14	2.00%	4	2.00%	5	2.00%	19	2.00%	13	58

Table 5E  
Assignment of Unbuilt Committed Development Traffic  
Two-Way PM Peak Hour

11/25/2011

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				Approved Amendment Trips		Approved Amendment Trips				Approved Amendment Trips				
				Project Dist. Percent	Net External PM Trips 723	Project Dist. Percent	TAZ 1207 PM Trips 220	Project Dist. Percent	TAZ 1209 PM Trips 250	TAZ 1204 Proj. Dist. Percent	Hotel-Conf PM Trips 938	TAZ 1204 Proj. Dist. Percent	Theme Park PM Trips 650	
<b>SW 200 Street/Quail Roost Dr</b>														
SW 177 Avenue to SW 157 Avenue	2LU	FDOT-1117	6	1.00%	7	1.00%	2	1.00%	3	0.50%	5	0.50%	3	26
SW 157 Avenue to SW 147 Avenue	2LU	FDOT-1117	6	1.00%	7	2.00%	4	1.00%	3	0.50%	5	0.50%	3	28
SW 147 Avenue to SW 137 Avenue	2LU	MD-9892	7	2.00%	14	3.00%	7	1.00%	3	1.00%	9	1.00%	7	46
SW 137 Avenue to SW 127 Avenue	2LU	FDOT-1116	63	1.00%	7	3.00%	7	1.00%	3	1.00%	9	1.00%	7	95
SW 127 Avenue to SW 117 Avenue	4LD	FDOT-0054	7	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	35
SW 117 Avenue to SR 821/HEFT	4LD	FDOT-0054	7	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	35
SR 821/HEFT to US-1	4LD	FDOT-1114	97	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	125
<b>SW 200 Street/Caribbean Blvd</b>														
Quail Roost Dr to SW 117 Avenue	2LU	MD-9890	0	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	28
SW 117 Avenue to SW 110 Court	2LU	MD-9890	0	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	28
SW 110 Court to US-1	4LD	MD-9890	0	1.00%	7	1.00%	2	1.00%	3	1.00%	9	1.00%	7	28
<b>SW 216 Street</b>														
SW 177 Avenue to SW 167 Avenue	2LU	MD-9902	10	1.00%	7	1.00%	2	1.00%	3	0.50%	5	0.50%	3	30
SW 167 Avenue to SW 157 Avenue	2LU	MD-9902	10	1.00%	7	1.00%	2	1.00%	3	0.50%	5	0.50%	3	30
SW 157 Avenue to SW 147 Avenue	2LU	MD-9902	10	1.00%	7	1.00%	2	1.00%	3	0.50%	5	0.50%	3	30
SW 147 Avenue to SW 137 Avenue	2LU	MD-9902	10	1.00%	7	2.00%	4	1.00%	3	0.50%	5	0.50%	3	32
SW 137 Avenue to SW 127 Avenue	2LU	MD-9898	141	1.00%	7	2.00%	4	1.00%	3	0.50%	5	0.50%	3	163
SW 127 Avenue to US-1	2LU	MD-9898	141	1.00%	7	1.00%	2	1.00%	3	0.50%	5	0.50%	3	161

[1] This table includes the two-way peak hour committed project traffic from the 9-14-2011 Miami-Dade County Public Works Traffic Concurrency Database.

[2] This table also includes project traffic from the Approved CDMP Amendments for the Zoo Miami Entertainment Areas I and II and the non-commercial portion of the UM South Campus Property.

Table 5F  
Trip Generation for the Unbuilt Committed Developments

11/4/2011

COMMITTED PROJECT	APPROVED USE	PROJECT STATUS	PM TRIPS	% IN	TRIPS IN	% OUT	TRIPS OUT
Zoo Miami Entertainment Area I	Attraction Uses in TAZ 1207	2007 Cycle Approved CDMP Amendment [1]	220	59%	129	41%	91
Zoo Miami Entertainment Area I	Attraction Uses in TAZ 1209	2007 Cycle Approved CDMP Amendment [1]	250	59%	147	41%	103
Zoo Miami Entertainment Area II	Attraction Uses in TAZ 1204	October 2009 Cycle Approved CDMP Amendment [2]	938	39%	362	61%	576
Zoo Miami Entertainment Area II	Hotel Uses in TAZ 1204	October 2009 Cycle Approved CDMP Amendment [2]	650	62%	403	38%	247
UM South Campus Property	Residential, School, Library, TND Retail and Office	2004 Cycle Approved CDMP Amendment [3]	723	59%	425	41%	298

[1] The net external PM Peak Hour trip generation has been obtained from the June 2007 CDMP Amendment Transportation Analysis prepared for the Approved Miami Metrozoo (Zoo Miami) Entertainment Area I CDMP Amendment.

[2] The net external PM Peak Hour trip generation has been obtained from the April 2010 CDMP Amendment Transportation Analysis prepared for the Approved Miami Metrozoo (Zoo Miami) Entertainment Area II CDMP Amendment.

[3] The net external PM Peak Hour trip generation for the uses approved and permitted under Low Medium Density Residential on the UM South Campus Property is based upon the net external trips for the Residential, School and Library Uses already permitted pursuant to the underlying land use for the UM South Campus property, based upon CDMP Amendment Approved in 2005.

[3] The UM South Campus Property was approved for Low Medium Density Residential based upon the CDMP Amendment Approved in 2005. The Amendment anticipated that the property owners would develop a mixed use project using TND principles to combine 1200 residential dwelling units, a 1350 student high school, a 17,400 sf library and retail and office space permissible under the TND zoning ordinance. A new CDMP Amendment is underway to redesignate a portion of the property as Business and Office to enable the development of neighborhood serving retail for future residents on site and for the residents in the surrounding area. Development of 900 apartments, a 1350 student high school and 17,400 sf of library is still contemplated for the site, and is permissible pursuant to the underlying Low Medium Density Residential land use. Thus, the already allowable net external trips for the residential, school and library is incorporated into this analysis as committed development traffic and the trip generation is based upon the calculations provided in Table 2A of this study.

### Total Traffic Conditions for Year 2025 with the Amendment

Table 5G has been prepared to analyze total traffic conditions for the Year 2025 with the Amendment and to provide a significance determination analysis to evaluate whether regional impacts would exist during the 2025 Long Term Planning Horizon for the CDMP after the addition of the Amendment trips.

Table 5H has been prepared to analyze total traffic conditions for the year 2025 after incorporating the Amendment trips along with proposed roadway enhancements by the Applicant to improve the capacity of SW 152 Street from east of the Hammock to SW 124 Avenue. The analyses presented in Tables 5G and 5H include the following:

- The future lane geometry for study area roadways inclusive of the improvements under construction, the improvements funded in TIP 2012 and the improvements from Priorities II and III of the LRTP 2035;
- Off-site roadway capacity improvements proposed by the Amendment (highlighted in blue) in Table 5H;
- The adopted level of service standard from the CDMP for each roadway segment analyzed;
- The two-way peak hour period future background plus committed traffic for the Year 2025 from Table 5C;
- The assignment of the two-way PM peak hour Amendment traffic;
- The Year 2025 two-way peak hour period total traffic, LOS and v/c with the Amendment trips;
- The two-way peak hour roadway capacity based upon the FDOT 2009 Quality/LOS Handbook;
- An analysis to determine if the Amendment trips would consume 5.0% or more of the adopted maximum service volume at the adopted level of service standard.

Figure 5E has been provided to identify the Year 2025 total traffic levels of service on study area roadways where the Amendment traffic is  $\geq 5.0\%$  of the maximum service volume (MSV) at the adopted level of service standard. Also provided are the Year 2025 total traffic levels of service for those segments adjacent to those road segments where the Amendment traffic consumes  $\geq 5.0\%$  of the MSV. Figure 5E indicates that adopted LOS standards continue to be met after incorporating the trips from the Amendment Site.

### Roadway Improvements Proposed by the Amendment

The CDMP Amendment Transportation Analysis has identified proposed roadway and intersection improvements to enhance the roadway network and offset the transportation impacts of the Amendment Site. These proposed improvements will expand both capacity and accessibility while providing improvements that will also benefit the surrounding study area. Access to and from the Amendment will be provided through the expansion of project access intersections along SW 152 Street. Offsite roadway improvements (to complement the improvements already funded or planned by the County and the State) include the expansion of SW 152 Street to add an additional eastbound travel lane from east of the Hammock to SW 124 Avenue as illustrated on Figure 5F and Figure 6. This additional eastbound travel lane will be constructed initially to terminate as right turn lanes at SW 127 Avenue and SW 124 Avenue, but can be retrofitted by others in the future as the fourth EB through lane when the Zoo Miami Entertainment Area II develops and extends the fourth EB through lane to SW 117 Avenue.

Figure 5F identifies the Year 2025 total traffic levels of service incorporating the capacity enhancements proposed to support the Amendment.

Table 5G  
Year 2025 Total Traffic Conditions on Study Area Roadways - Long Term Planning Horizon  
Two-Way Peak Hour Period with the Amendment Trips

2/17/2012

ROADWAY SEGMENTS	[1] YEAR 2025 LANES	[2] CDMP ADOPTED LOS STANDARD	2025 PHP VOLUMES WITHOUT AMENDMENT [See Table 5C]	Coral Reef Commons		2025 VOLUMES WITH AMENDMENT	[3] TWO-WAY PEAK HOUR MAX CAPACITY	2025 PHP LOS	2025 PHP VIC	PROJECT AS A PERCENT OF MSV	PROJECT TRIPS ≥ 5% YES / NO	PROJECT ≥ 5% AND ROADWAY FAILING YES / NO
				Project Dist. Percent	Commercial PM PK HR TRIPS 937							
<b>SW 157 Avenue</b>												
SW 88 Street to SW 112 Street	4LD	D	1,553	2.00%	19	1,571	3,204	B	0.49	0.58%	NO	NO
SW 112 Street to SW 120 Street	4LD	D	1,584	4.00%	37	1,622	3,204	B	0.51	1.17%	NO	NO
SW 120 Street to SW 136 Street	4LD	D	1,584	3.00%	28	1,612	3,204	B	0.50	0.88%	NO	NO
SW 136 Street to SW 152 Street	4LD	D	1,579	2.00%	19	1,598	3,204	B	0.50	0.58%	NO	NO
SW 152 Street to SW 184 Street	4LD - TIP 2012	D	1,580	2.00%	19	1,598	3,204	B	0.50	0.58%	NO	NO
<b>SW 147 Avenue</b>												
SW 88 Street to SW 104 Street	4LD	D	1,739	1.00%	9	1,749	3,204	B	0.55	0.29%	NO	NO
SW 104 Street to SW 120 Street	4LD	D	1,723	1.00%	9	1,733	3,204	B	0.54	0.29%	NO	NO
SW 152 Street to SW 184 Street	2LU	D	1,379	3.00%	28	1,407	1,440	D	0.98	1.95%	NO	NO
SW 184 Street to SW 200 Street	2LU	C	900	3.00%	28	928	1,440	C	0.64	1.95%	NO	NO
SW 200 Street to SW 216 Street	2LU	C	877	1.00%	9	887	1,440	C	0.62	0.65%	NO	NO
<b>SW 137 AVENUE</b>												
SW 88 Street to SW 104 Street	6LD	E	3,305	2.22%	21	3,326	5,360	B	0.62	0.39%	NO	NO
SW 104 Street to SW 120 Street	6LD	E	3,595	6.22%	58	3,653	5,360	B	0.68	1.09%	NO	NO
SW 120 Street to SW 136 Street	6LD	E	4,145	10.22%	96	4,241	5,150	D	0.82	1.86%	NO	NO
SW 136 Street to SW 152 Street	6LD	E	5,002	14.22%	133	5,135	5,150	E	1.00	2.59%	NO	NO
SW 152 Street to SW 184 Street	6LD	D	3,657	23.08%	216	3,874	4,824	B	0.80	4.48%	NO	NO
SW 184 Street to SW 200 Street	4LD - LRTP II	D	1,018	5.02%	47	1,065	3,204	B	0.33	1.47%	NO	NO
<b>SW 127 AVENUE</b>												
SW 88 Street to SW 104 Street	4LD	D	1,713	0.50%	5	1,717	3,204	B	0.54	0.15%	NO	NO
SW 104 Street to SW 120 Street	4LD	D	1,713	1.00%	9	1,723	3,204	B	0.54	0.29%	NO	NO
SW 120 Street to SW 122 Street	4LD	D	1,217	2.00%	19	1,236	3,204	B	0.39	0.58%	NO	NO
SW 122 Street to SW 136 Street	4LD - LRTP III	D	773	3.00%	28	801	3,204	B	0.25	0.88%	NO	NO
SW 136 Street to SW 144 Street	4LD - LRTP III	D	710	4.00%	37	747	3,204	B	0.23	1.17%	NO	NO
SW 144 Street to SW 152 Street	4LD	D	614	6.33%	59	673	2,314	B	0.29	2.56%	NO	NO
SW 152 Street to Project	4LD - Access	D	763	100.00%	937	1,700	2,314	B	0.73	40.49%	YES	NO
SW 184 Street to SW 200 Street	2LU	D	725	3.00%	28	753	1,440	B	0.52	1.95%	NO	NO
SW 200 Street to SW 216 Street	2LU	D	711	1.00%	9	720	1,440	B	0.50	0.65%	NO	NO
<b>SW 124 AVENUE</b>												
SW 152 Street to Metrozoo	4LD	D	169	0.00%	0	169	2,314	B	0.07	0.00%	NO	NO
<b>SW 122 AVENUE</b>												
SW 144 Street to SW 152 Street	4LD	D	1,491	2.00%	19	1,509	2,314	B	0.65	0.81%	NO	NO
<b>SW 117 AVENUE</b>												
SW 88 Street to SW 104 Street	4LD	D	2,077	0.83%	8	2,085	3,204	B	0.65	0.24%	NO	NO
SW 104 Street to SW 120 Street	4LD	D	3,765	1.83%	17	3,782	3,204	F	1.18	0.54%	NO	NO
SW 120 Street to SW 136 Street	4LD	D	3,104	2.83%	27	3,131	3,204	D	0.98	0.83%	NO	NO
SW 136 Street to HEFT Ramps	4LD	D	2,608	3.83%	36	2,644	3,204	C	0.83	1.12%	NO	NO
HEFT Ramps to SW 152 Street	5LD - TIP 2012	D	3,003	13.58%	127	3,131	3,623	D	0.86	3.51%	NO	NO
SW 152 Street to SW 116 Street	4LD	D	2,407	3.24%	30	2,437	3,204	B	0.76	0.95%	NO	NO
SW 116 Street to SW 168 Street	4LD	D	1,992	3.24%	30	2,022	3,204	B	0.63	0.95%	NO	NO
SW 168 Street to SW 184 Street	4LD	D	1,992	2.24%	21	2,013	3,204	B	0.63	0.66%	NO	NO
SW 184 Street to SW 186 Street	2LU	D	1,243	1.00%	9	1,252	1,440	C	0.87	0.65%	NO	NO
SW 186 Street to SW 200 Street	2LU	D	1,062	1.00%	9	1,072	1,440	C	0.74	0.65%	NO	NO
SW 200 Street to SW US-1	4LD	D	917	0.50%	5	922	3,204	B	0.29	0.15%	NO	NO
<b>HEFT</b>												
SW 88 Street to SW 120 Street	12LD - LRTP III	D	10,000	6.75%	63	10,063	21,950	B	0.46	0.29%	NO	NO
SW 120 Street to SR 874	12LD - LRTP III	D	9,338	7.75%	73	9,410	21,950	B	0.43	0.33%	NO	NO
SR 874 to SW 152 Street	12LD - LRTP III	D	16,782	11.75%	110	16,892	21,950	C	0.77	0.50%	NO	NO
SW 152 Street to SW 184 Street	12LD - LRTP III	D	13,841	5.81%	54	13,895	21,950	C	0.63	0.25%	NO	NO
SW 184 Street to SW 211 Street	6LD	D	11,585	4.81%	45	11,630	10,150	F	1.15	0.44%	NO	NO
SW 211 Street to SW 112 Avenue	4LD	D	7,819	3.81%	36	7,854	6,770	F	1.16	0.53%	NO	NO

Table 5G  
Year 2025 Total Traffic Conditions on Study Area Roadways - Long Term Planning Horizon  
Two-Way Peak Hour Period with the Amendment Trips

2/17/2012

ROADWAY SEGMENTS	[1] YEAR 2025 LANES	[2] CDMP ADOPTED LOS STANDARD	2025 PHP VOLUMES WITHOUT AMENDMENT [See Table 5C]	Coral Reef Commons		2025 VOLUMES WITH AMENDMENT	[3] TWO-WAY PEAK HOUR MAX CAPACITY	2025 PHP LOS	2025 PHP VIC	PROJECT AS A PERCENT OF MSV	PROJECT TRIPS ≥ 5% YES / NO	PROJECT ≥ 5% AND ROADWAY FAILING YES / NO
				Project Dist. Percent	Commercial PM PK HR TRIPS 937							
<b>SR 874</b>												
HEFT to Toll Plaza	6LD	D	5,524	4.00%	37	5,561	10,150	B	0.55	0.37%	NO	NO
Toll Plaza to SW 104 Street	6LD UNDER CST	D	5,517	3.00%	28	5,545	10,150	B	0.55	0.28%	NO	NO
SW 104 Street to SR 878	8LD	D	10,090	1.00%	9	10,099	13,480	C	0.75	0.07%	NO	NO
<b>US-1</b>												
SW 112 Street to SW 136 Street	6LD	EE	5,451	1.00%	9	5,461	6,180	E+.06	0.88	0.15%	NO	NO
SW 136 Street to SW 152 Street	6LD	EE	5,134	1.00%	9	5,144	6,180	E	0.83	0.15%	NO	NO
SW 152 Street to SW 168 Street	6LD	EE	5,579	1.00%	9	5,589	6,180	E+.08	0.90	0.15%	NO	NO
SW 168 Street to SW 184 Street	3LOW SB	EE	2,930	1.00%	9	2,940	3,708	C	0.79	0.25%	NO	NO
SW 168 Street to SW 184 Street	3LOW NB	EE	3,438	1.00%	9	3,448	3,708	E+.11	0.93	0.25%	NO	NO
SW 184 Street to SW 200 Street	6LD	EE	3,718	1.00%	9	3,727	6,180	C	0.60	0.15%	NO	NO
SW 200 Street to SW 216 Street	6LD	EE	4,000	1.00%	9	4,009	6,180	D	0.65	0.15%	NO	NO
<b>SW 88 Street</b>												
SW 177 Avenue to SW 162 Avenue	4LD	D	1,467	0.50%	5	1,472	3,560	B	0.41	0.13%	NO	NO
SW 162 Avenue to SW 157 Avenue	6LD	EE	3,249	0.75%	7	3,256	6,180	C	0.53	0.11%	NO	NO
SW 157 Avenue to SW 147 Avenue	6LD	EE	3,992	1.00%	9	4,001	6,180	D	0.65	0.15%	NO	NO
SW 147 Avenue to SW 137 Avenue	6LD	EE	4,016	1.50%	14	4,030	6,180	D	0.65	0.23%	NO	NO
SW 137 Avenue to SW 127 Avenue	6LD	EE	5,277	1.75%	16	5,293	6,180	E+.03	0.86	0.27%	NO	NO
SW 127 Avenue to SR 821/HEFT	8LD	EE	5,693	2.00%	19	5,712	8,256	D	0.69	0.23%	NO	NO
SR 821/HEFT to SW 117 Avenue	6LD	EE	5,116	2.00%	19	5,135	6,180	E	0.83	0.30%	NO	NO
SW 117 Avenue to SW 107 Avenue	6LD	EE	4,564	1.75%	16	4,580	6,180	D	0.74	0.27%	NO	NO
SW 107 Avenue to SR 874	6LD	EE	5,267	1.50%	14	5,281	6,180	E+.02	0.85	0.23%	NO	NO
SR 874 to SW 87 Avenue	6LD	EE	4,092	1.00%	9	4,101	6,180	D	0.66	0.15%	NO	NO
SW 87 Avenue to SR 826	6LD	EE	5,280	0.75%	7	5,287	6,180	E+.03	0.86	0.11%	NO	NO
<b>SW 104 Street</b>												
SW 157 Avenue to SW 147 Avenue	4LD	EE	2,704	1.50%	14	2,718	3,845	C	0.71	0.37%	NO	NO
SW 147 Avenue to SW 137 Avenue	4LD	EE	2,862	1.00%	9	2,872	3,845	C	0.75	0.24%	NO	NO
SW 137 Avenue to SW 127 Avenue	6LD	EE	3,769	2.00%	19	3,788	5,789	B	0.65	0.32%	NO	NO
SW 127 Avenue to SW 117 Avenue	6LD	EE	5,083	1.50%	14	5,097	5,789	E+.06	0.88	0.24%	NO	NO
SW 117 Avenue to SR 874	6LD	EE	5,188	1.00%	9	5,197	5,789	E+.08	0.90	0.16%	NO	NO
<b>SW 120 Street</b>												
SW 157 Avenue to SW 137 Avenue	4LD	D	2,602	2.00%	19	2,621	3,204	C	0.82	0.58%	NO	NO
SW 137 Avenue to SW 127 Avenue	5LD/4LD	D	2,972	2.00%	19	2,991	3,204	C	0.93	0.58%	NO	NO
SW 127 Avenue to SW 117 Avenue	4LD	D	3,388	2.00%	19	3,407	3,204	F	1.06	0.58%	NO	NO
<b>SW 136 Street</b>												
SW 157 Avenue to SW 147 Avenue	4LD	D	797	4.00%	37	834	3,204	B	0.26	1.17%	NO	NO
SW 147 Avenue to SW 137 Avenue	4LD	D	2,013	4.00%	37	2,050	3,204	B	0.64	1.17%	NO	NO
SW 137 Avenue to SW 127 Avenue	4LD	D	743	1.00%	9	752	3,204	B	0.23	0.29%	NO	NO
<b>SW 152 Street</b>												
SW 157 Avenue to SW 147 Avenue	4LD - LRTP III	EE	1,056	12.64%	118	1,174	3,845	B	0.31	3.08%	NO	NO
SW 147 Avenue to SW 137 Avenue	4LD	EE	2,638	19.64%	184	2,822	3,845	C	0.73	4.79%	NO	NO
SW 137 Avenue to SW 132 Avenue	6LD	EE	5,386	56.94%	534	5,920	6,180	E+.15	0.96	8.63%	YES	NO
SW 132 Avenue to SW 130 Place	6LD	EE	5,401	58.94%	552	5,953	6,180	E+.16	0.96	8.94%	YES	NO
SW 130 Place to SW 129 Avenue	6LD	EE	5,408	59.94%	562	5,970	6,180	E+.16	0.97	9.09%	YES	NO
SW 129 Avenue to SW 127 Avenue	6LD	EE	5,422	61.94%	580	6,003	6,180	E+.17	0.97	9.39%	YES	NO
SW 127 Avenue to SW 124 Avenue	6LD	EE	5,227	31.73%	297	5,524	6,180	E+.07	0.89	4.81%	NO	NO
SW 124 Avenue to SW 122 Avenue	Zoo II - 1 EB Lane	EE	5,805	31.73%	297	6,102	7,210	E+.02	0.85	4.12%	NO	NO
SW 122 Avenue to SW 117 Avenue	Zoo II - 1 EB Lane	EE	6,160	29.73%	279	6,439	7,210	E+.07	0.89	3.86%	NO	NO
SW 117 Avenue to SR 821/HEFT	5LD - LRTP III	EE	4,367	12.91%	121	4,488	5,100	E+.06	0.88	2.37%	NO	NO
SR 821/HEFT to SW 112 Avenue	4LD	EE	3,022	5.10%	48	3,070	4,080	D	0.75	1.17%	NO	NO
SW 112 Avenue to US-1	4LD	EE	3,269	4.10%	38	3,308	4,080	E	0.81	0.94%	NO	NO

Table 5G  
Year 2025 Total Traffic Conditions on Study Area Roadways - Long Term Planning Horizon  
Two-Way Peak Hour Period with the Amendment Trips

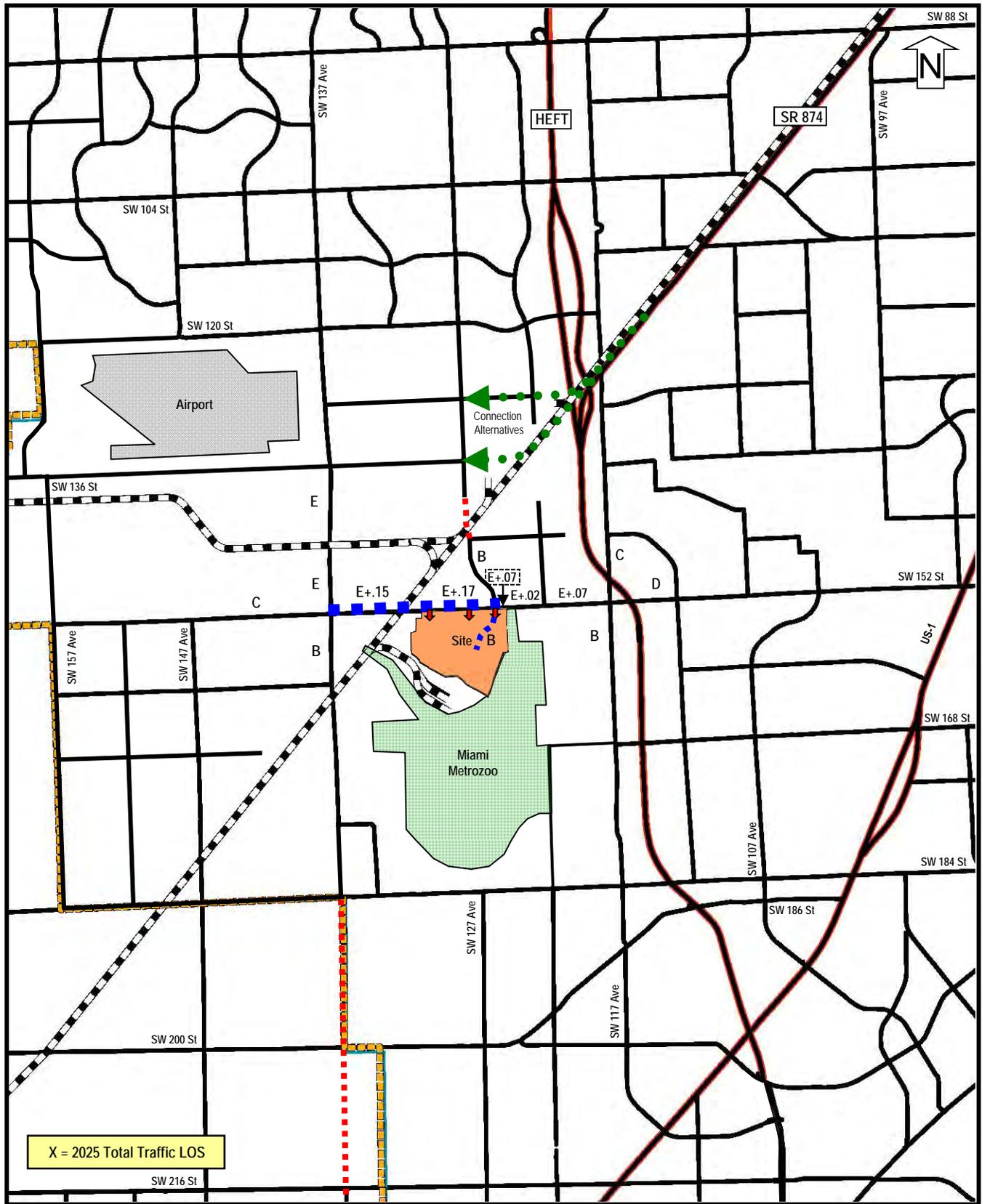
2/17/2012

ROADWAY SEGMENTS	[1] YEAR 2025 LANES	[2] CDMP ADOPTED LOS STANDARD	2025 PHP VOLUMES WITHOUT AMENDMENT [See Table 5C]	Coral Reef Commons		2025 VOLUMES WITH AMENDMENT	[3] TWO-WAY PEAK HOUR MAX CAPACITY	2025 PHP LOS	2025 PHP VIC	PROJECT AS A PERCENT OF MSV	PROJECT TRIPS ≥ 5% YES / NO	PROJECT ≥ 5% AND ROADWAY FAILING YES / NO
				Project	Commercial							
				Dist. Percent	PM PK HR TRIPS 937							
<b>SW 168 Street</b>												
SW 117 Avenue to US-1	2LU	D	1,050	1.00%	9	1,059	1,440	C	0.74	0.65%	NO	NO
<b>SW 184 Street</b>												
SW 177 Avenue to SW 167 Avenue	2LU	C	865	1.00%	9	874	1,350	C	0.65	0.69%	NO	NO
SW 167 Avenue to SW 157 Avenue	2LU	C	873	1.00%	9	882	1,350	C	0.65	0.69%	NO	NO
SW 157 Avenue to SW 147 Avenue	2LU	D	1,193	2.00%	19	1,212	1,440	C	0.84	1.30%	NO	NO
SW 147 Avenue to SW 137 Avenue	4LD UNDER CST	D	1,579	5.03%	47	1,626	3,204	B	0.51	1.47%	NO	NO
SW 137 Avenue to SW 127 Avenue	4LD	D	2,351	5.03%	47	2,398	3,204	B	0.75	1.47%	NO	NO
SW 127 Avenue to SW 117 Avenue	4LD	D	2,336	2.03%	19	2,355	3,204	B	0.74	0.59%	NO	NO
SW 117 Avenue to SR 821/HEFT	4LD	D	1,971	2.00%	19	1,990	3,204	B	0.62	0.58%	NO	NO
SR 821/HEFT to SW 107 Avenue	4LD	D	1,534	2.00%	19	1,553	3,204	B	0.48	0.58%	NO	NO
SW 107 Avenue to US-1	4LD	D	1,434	2.00%	19	1,453	3,204	B	0.45	0.58%	NO	NO
<b>SW 200 Street/Quail Roost Dr</b>												
SW 177 Avenue to SW 157 Avenue	2LU	D	777	1.00%	9	787	2,000	C	0.39	0.47%	NO	NO
SW 157 Avenue to SW 147 Avenue	2LU	D	780	1.00%	9	789	2,000	C	0.39	0.47%	NO	NO
SW 147 Avenue to SW 137 Avenue	2LU	D	861	2.00%	19	880	2,000	C	0.44	0.94%	NO	NO
SW 137 Avenue to SW 127 Avenue	2LU	E	1,510	1.00%	9	1,520	2,550	D	0.60	0.37%	NO	NO
SW 127 Avenue to SW 117 Avenue	4LD	E	2,781	1.00%	9	2,790	3,400	D	0.82	0.28%	NO	NO
SW 117 Avenue to SR 821/HEFT	4LD	E	4,111	1.00%	9	4,121	3,400	F	1.21	0.28%	NO	NO
SR 821/HEFT to US-1	4LD	E	1,785	1.00%	9	1,794	3,400	C	0.53	0.28%	NO	NO
<b>SW 200 Street/Caribbean Blvd</b>												
Quail Roost Dr to SW 117 Avenue	2LU	D	920	1.00%	9	930	1,440	C	0.65	0.65%	NO	NO
SW 117 Avenue to SW 110 Court	2LU	D	920	1.00%	9	930	1,440	C	0.65	0.65%	NO	NO
SW 110 Court to US-1	4LD	D	920	1.00%	9	930	3,204	B	0.29	0.29%	NO	NO
<b>SW 216 Street</b>												
SW 177 Avenue to SW 167 Avenue	2LU	C	370	1.00%	9	380	1,278	B	0.30	0.73%	NO	NO
SW 167 Avenue to SW 157 Avenue	2LU	C	370	1.00%	9	380	1,278	B	0.30	0.73%	NO	NO
SW 157 Avenue to SW 147 Avenue	2LU	C	370	1.00%	9	380	1,278	B	0.30	0.73%	NO	NO
SW 147 Avenue to SW 137 Avenue	2LU	C	373	1.00%	9	382	1,278	B	0.30	0.73%	NO	NO
SW 137 Avenue to SW 127 Avenue	2LU	D	869	1.00%	9	879	1,440	C	0.61	0.65%	NO	NO
SW 127 Avenue to US-1	2LU	D	867	1.00%	9	877	1,440	C	0.61	0.65%	NO	NO

[1] The lane geometry for the Year 2025 Long Term Planning Horizon reflects projects currently under construction, the funded projects from TIP 2012 and the planned projects from Priorities II and III of the LRTP 2035 that will be built by the Year 2025.

[2] The adopted LOS standards are consistent with the Transportation Element from the Miami-Dade County CDMP.

[3] The two-way peak hour roadway capacities are obtained from the 2009 FDOT Quality/LOS Handbook, last updated on 10/4/2010.



- C LOS for adjacent segments are also provided.
- Legend**
- - - Planned Roadway Connections - 2015-2025
  - ● ● Roadway Connection under Study - TIP 2012
  - ↓ Project Access Locations
  - ■ Roadways carrying project traffic  $\geq 5.0\%$  of MSV at the Adopted LOS Standard

Figure 5E  
 2025 Total Traffic LOS on Segments where Project Traffic  $\geq 5\%$  of MSV  
 Coral Reef Commons - UM South Campus Property

Table 5H  
Significantly Impacted Roadways in the 2025 Long Term Planning Horizon  
Two-Way Peak Hour Period with the Amendment Trips

2/17/2012

ROADWAY SEGMENTS	[1] YEAR 2025 LANES	[2] CDMP ADOPTED LOS STANDARD	2025 PHP VOLUMES WITHOUT AMENDMENT	Coral Reef Commons		2025 VOLUMES WITH AMENDMENT	[3] TWO-WAY PEAK HOUR MAX CAPACITY	2025 PHP LOS	2025 PHP V/C	PROJECT AS A PERCENT OF MSV	PROJECT TRIPS ≥ 5% YES / NO	PROJECT ≥ 5% AND ROADWAY FAILING YES / NO
				Project	Commercial							
				Dist. Percent	PM PK HR TRIPS 937							
<b>SW 127 AVENUE</b>												
SW 144 Street to SW 152 Street	4LD	D	614	6.33%	59	673	2,314	B	0.29	2.56%	NO	NO
SW 152 Street to Project	4LD - Access	D	763	100.00%	937	1,700	2,314	B	0.73	40.49%	YES	NO
<b>SW 152 Street</b>												
SW 157 Avenue to SW 147 Avenue	4LD - LRTP III	EE	1,056	12.64%	118	1,174	3,845	B	0.31	3.08%	NO	NO
SW 147 Avenue to SW 137 Avenue	4LD	EE	2,638	19.64%	184	2,822	3,845	C	0.73	4.79%	NO	NO
SW 137 Avenue to SW 132 Avenue	6LD	EE	5,386	56.94%	534	5,920	6,180	E+.15	0.96	8.63%	YES	NO
SW 132 Avenue to SW 130 Place	6LD	EE	5,401	58.94%	552	5,953	6,180	E+.16	0.96	8.94%	YES	NO
SW 130 Place to SW 129 Avenue	6LD	EE	5,408	59.94%	562	5,970	6,180	E+.16	0.97	9.09%	YES	NO
SW 129 Avenue to SW 127 Avenue	6LD	EE	5,422	61.94%	580	6,003	6,180	E+.17	0.97	9.39%	YES	NO
SW 127 Avenue to SW 124 Avenue	6LD	EE	5,227	31.73%	297	5,524	6,180	E+.07	0.89	4.81%	NO	NO
SW 124 Avenue to SW 122 Avenue	Zoo II - 1 EB Lane	EE	5,805	31.73%	297	6,102	7,210	E+.02	0.85	4.12%	NO	NO
SW 122 Avenue to SW 117 Avenue	Zoo II - 1 EB Lane	EE	6,160	29.73%	279	6,439	7,210	E+.07	0.89	3.86%	NO	NO
SW 117 Avenue to SR 821/HEFT	5LD - LRTP III	EE	4,367	12.91%	121	4,488	5,100	E+.06	0.88	2.37%	NO	NO
SR 821/HEFT to SW 112 Avenue	4LD	EE	3,022	5.01%	47	3,069	4,080	D	0.75	1.15%	NO	NO
SW 112 Avenue to US-1	4LD	EE	3,269	4.01%	38	3,307	4,080	E	0.81	0.92%	NO	NO

Proposed Mitigation to Improve Adopted LOS Standards for Significantly Impacted Roads for the 2025 Long Term Planning Horizon

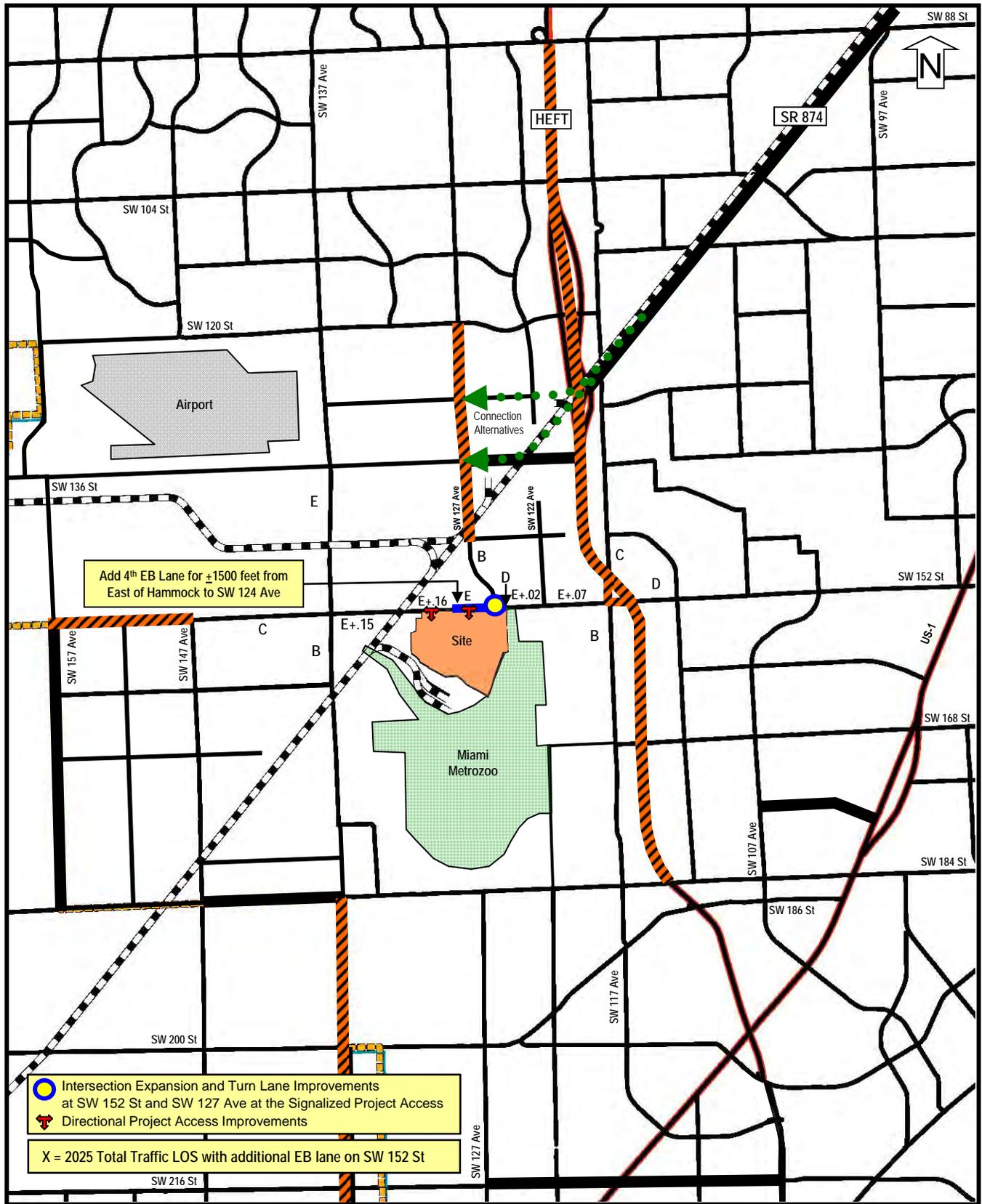
ROADWAY SEGMENTS	[1] YEAR 2025 LANES	[2] CDMP ADOPTED LOS STANDARD	2025 PHP VOLUMES WITHOUT AMENDMENT	Coral Reef Commons		2025 VOLUMES WITH AMENDMENT	[3] TWO-WAY PEAK HOUR MAX CAPACITY	2025 PHP LOS	2025 PHP V/C	PROJECT AS A PERCENT OF MSV	PROJECT TRIPS ≥ 5% YES / NO	PROJECT ≥ 5% AND ROADWAY FAILING YES / NO
				Project	Commercial							
				Dist. Percent	PM PK HR TRIPS 937							
<b>SW 152 Street</b>												
SW 157 Avenue to SW 147 Avenue	4LD - LRTP III	EE	1,056	12.64%	118	1,174	3,845	B	0.31	3.08%	NO	NO
SW 147 Avenue to SW 137 Avenue	4LD	EE	2,638	19.64%	184	2,822	3,845	C	0.73	4.79%	NO	NO
SW 137 Avenue to SW 132 Avenue	6LD	EE	5,386	56.94%	534	5,920	6,180	E+.15	0.96	8.63%	YES	NO
SW 132 Avenue to SW 130 Place	6LD	EE	5,401	58.94%	552	5,953	6,180	E+.16	0.96	8.94%	YES	NO
SW 130 Place to SW 129 Avenue	6LD	EE	5,408	59.94%	562	5,970	6,180	E+.16	0.97	9.09%	YES	NO
SW 129 Avenue to SW 127 Avenue	Add 1 EB Lane [4]	EE	5,422	61.94%	580	6,003	7,210	E	0.83	8.05%	YES	NO
SW 127 Avenue to SW 124 Avenue	Add 1 EB Lane [4]	EE	5,227	31.73%	297	5,524	7,210	D	0.77	4.12%	NO	NO
SW 124 Avenue to SW 122 Avenue	Zoo II - 1 EB Lane	EE	5,805	31.73%	297	6,102	7,210	E+.02	0.85	4.12%	NO	NO
SW 122 Avenue to SW 117 Avenue	Zoo II - 1 EB Lane	EE	6,160	29.73%	279	6,439	7,210	E+.07	0.89	3.86%	NO	NO
SW 117 Avenue to SR 821/HEFT	5LD - LRTP III	EE	4,367	12.91%	121	4,488	5,100	E+.06	0.88	2.37%	NO	NO
SR 821/HEFT to SW 112 Avenue	4LD	EE	3,022	5.01%	47	3,069	4,080	D	0.75	1.15%	NO	NO
SW 112 Avenue to US-1	4LD	EE	3,269	4.01%	38	3,307	4,080	E	0.81	0.92%	NO	NO

[1] The lane geometry for the Year 2025 Long Term Planning Horizon reflects projects currently under construction, the funded projects from TIP 2012 and the planned projects from Priorities II and III of the LRTP 2035 that will be built by the Year 2025.

[2] The adopted LOS standards are consistent with the Transportation Element from the Miami-Dade County CDMP.

[3] The two-way peak hour roadway capacities are obtained from the 2009 FDOT Quality/LOS Handbook, last updated on 10/4/2010.

[4] Add 1 Eastbound Lane for +1500 feet from east of the Hammock to SW 124 Avenue.



- Legend
- TIP 2012 Improvements (See Figure 2A)
  - L RTP 2035 Priority II or III Improvements (See Figure 2B)
  - Site
  - Roadway Connection Study in TIP 2012
  - Proposed Roadway and Intersection Improvements to Support the Amendment

Figure 5F  
Proposed Improvements to Support the Amendment  
Coral Reef Commons - UM South Campus Property

## Roadway and Intersection Improvements to Support the Amendment

The CDMP Amendment Transportation Analysis has identified proposed roadway and intersection improvements to enhance the roadway network and offset the transportation impacts of the Amendment Site. These proposed improvements will expand both capacity and accessibility while providing improvements that will also benefit the surrounding study area. Access to and from the Amendment Site will be provided through the expansion of directional and signalized project access intersections along SW 152 Street. Offsite roadway improvements include the expansion of SW 152 Street to add an additional eastbound travel lane from east of the Hammock to SW 124 Avenue for a distance of approximately 1,500 feet. Each of these proposed improvements are described below and are located conceptually on attached Figure 6.

- **SW 152 Street Eastbound Lane Expansion** - The Applicant has proposed the addition of a fourth eastbound travel lane on SW 152 Street from east of the Hammock to SW 124 Avenue (a distance of approximately 1,500 feet). Right-of-way to accommodate this improvement will be taken from the north edge of the Amendment site along SW 152 Street. This improvement is consistent with the future roadway improvements for eastbound SW 152 Street planned for the Zoo Miami Entertainment Area II. This additional eastbound travel lane will be constructed initially to terminate as right turn lanes at SW 127 Avenue and SW 124 Avenue, but can be retrofitted by others in the future as the fourth EB through lane when the Zoo Entertainment Area II develops and extends the fourth EB through lane to SW 117 Avenue.
- **Project Access 1** - Access to and from the Amendment site will be provided through the expansion of the signalized project access intersection at SW 152 Street and SW 127 Avenue. The geometric expansion at this intersection includes the extension of the storage for the westbound left turn lane (from  $\pm 100$  feet to  $\pm 300$  feet) increasing the vehicular storage from 4 cars to 12. The improvements include the reconstruction of the south leg of the intersection to accommodate (at a minimum), 2 left turn lanes and 1 shared through/right turn lane, and will include the restriping of the north leg as necessary to compliment the geometric improvements on the south side and proposed changes to the signal phasing and signal timing. The improvements also include the fourth eastbound travel lane on SW 152 Street at the eastbound approach to SW 127 Avenue, which will be constructed as an exclusive EB right turn lane.
- **Project Access 2** - Directional Access to and from the south will be provided off of SW 152 Street located  $\pm 850$  feet west of SW 127 Avenue, aligning with theoretical SW 127 Place. This access location will accommodate right in, right out and left in movements. A westbound left turn lane with  $\pm 350$  feet of storage (accommodating 14 cars) will be carved out of the existing median along SW 152 Street. The access roadway that will intersect with SW 152 Street will accommodate (at a minimum) two inbound lanes and one outbound lane, and will be setback to the first cross access by a distance of  $\pm 150$  feet.
- **Project Access 3** - Directional Access to and from the south will be provided off of SW 152 Street located  $\pm 550$  feet west of SW 129 Avenue, aligning with theoretical SW 129 Place. This access location will accommodate right in, right out and left in movements. A westbound left turn lane with  $\pm 150$  feet of storage (accommodating 6 cars) will be carved out of the existing median along SW 152 Street. The access roadway that will intersect with SW 152 Street will accommodate (at a minimum) two inbound lanes and one outbound lane, and will be setback to the first cross access by a distance of  $\pm 150$  feet.
- **Alternative Travel Modes** - The Applicant will incorporate pedestrian connections into the site design to improve internal connections between the uses inclusive of the proposed residential, school, library and retail shopping center. Where legally possible and subject to cooperation, the applicant may incorporate internal pedestrian connections to provide accessibility across environmental lands and accessibility with the neighboring attractions found at Zoo Miami. If necessary, the Applicant will work with Miami-Dade Transit to provide an easement for a bus stop adjacent to the Site for the Coral Reef Max (MDT Route 252).



- SW 152 St – Add 4<sup>th</sup> Eastbound Travel Lane
- 1 SW 152 St at SW 127 Ave Access 1 – Signalized
- 2 SW 152 St at Directional Access 2 – Unsignalized
- 3 SW 152 St at Directional Access 3 - Unsignalized

- Legend
- 1 Proposed Project Access Locations
  - Conceptual Internal Local Roadway Network
  - Existing Land Use = Low Medium Density Residential – NOT CHANGING
  - Proposed Land Use = Business and Office – SUBJECT OF PROPOSED CDMP CHANGE
  - Environmental Lands (NFC Preserves or Hammocks)

Figure 6  
Proposed Transportation Enhancements  
Coral Reef Commons - UM South Campus Property

## Project Access Intersection Analyses for the PM Peak Hour

This study includes an evaluation of the operating conditions for the Year 2016 Short Term Planning Horizon for the three project access intersections serving the Amendment Site as listed below:

- Intersection 1 – SW 152 Street at SW 127 Avenue - signalized
- Intersection 2 – SW 152 Street at Project Access 2 – unsignalized directional median opening
- Intersection 3 – SW 152 Avenue at Project Access 3 – unsignalized directional median opening

Existing peak season, future background, committed development and project turning movements for the PM peak hour are provided in **Tables 6A, 6B and 6C** (found in **Attachment 6** of this study) for each of the project access intersections outlined above. Existing turning movement counts were collected in January of 2010 for the existing signalized intersections on SW 152 Street at SW 127 Avenue and SW 152 Street and SW 129 Avenue (see **Attachment 2**), and these turning movements were used in the analysis of the three project access locations proposed to serve the Amendment Site. The turning movement data was adjusted for peak season for use in this analysis using the most recent peak season conversion factor for Miami-Dade County as obtained from the 2010 Florida Traffic Information CD. Existing peak season turning movement counts were then grown to Year 2016 using the study area growth rate of 0.65% per year to establish future background traffic conditions. Approved trips from Zoo Miami Entertainment Area I was incorporated into the turning movements to reflect previously approved committed development traffic that might be built by the Year 2016. The PM peak hour project turning movements for the entire site (inclusive of the retail use, the retail pass-by trips and the residential, school and library trips) were then added to the future background plus committed development traffic to establish Year 2016 total traffic conditions with project.

The turning movement worksheets, signal timing information and the Existing and Future with Project intersection analyses are provided in **Attachment 6** of this study. A summary of the existing and future intersection levels of service are outlined in **Table 6** below, incorporating the geometric improvements at each access location and the signal phasing and timing enhancements for the intersection of SW 152 Street at SW 127 Avenue. The intersection levels of service are summarized below, and demonstrate that each of the project access intersections will operate at acceptable levels of service after accommodating the traffic impacts of the Amendment Site and the proposed signal phasing, timing and geometric improvements. See attached **Figure 7A** for a summary of the PM peak hour project turning movements at each of the proposed project access locations, followed by **Figure 7B** illustrating the proposed geometric improvements.

No.	Study Intersection	Traffic Control	Adopted LOS	Existing Conditions Year 2010	Existing Conditions 2010 Delay	Future with Project Year 2016 Option 1 [1]	Future with Project 2016 Delay Option 1	Future with Project Year 2016 Option 2 [2]	Future with Project 2016 Delay Option 2
1	SW 152 St at SW 127 Ave	Signalized	EE	EB = LOS B WB = LOS E NB = LOS E SB = LOS E Overall = LOS D	EB = 15.2 WB = 75.1 NB = 66.1 SB = 68.9 Overall = 54.5	EB = LOS B WB = LOS E NB = LOS E SB = LOS D Overall = LOS D	EB = 19.2 WB = 63.2 NB = 69.9 SB = 47.8 Overall = 48.7	EB = LOS B WB = LOS E NB = LOS D SB = LOS D Overall = LOS D	EB = 19.2 WB = 63.2 NB = 49.4 SB = 47.3 Overall = 46.5
2	SW 152 St at Access 2	NB Stop Sign	EE	n/a	n/a	WBL = LOS C [3] NBR = LOS C	WBL = 16.0 NBR = 17.3		
3	SW 152 St at Access 3	NB Stop Sign	EE	n/a	n/a	WBL = LOS C [3] NBR = LOS C	WBL = 22.4 NBR = 21.4		
<p>[1] <b>Option 1</b> includes signal phasing and signal timing improvements and the following arrangement to the approach lane geometry for SW 152 Street at SW 127 Avenue:            EB - 1L, 3T, 1R      NB - 2L, 1TR – see <b>Figure 7B</b>            WB - 1L, 2T, 1TR      SB - 1L, 1T, 1R</p>									
<p>[2] <b>Option 2</b> includes signal phasing and signal timing improvements and the following arrangement to the approach lane geometry for SW 152 Street at SW 127 Avenue:            EB - 1L, 3T, 1R      NB - 2L, 1T, 1R – see <b>Figure 7B</b>            WB - 1L, 2T, 1TR      SB - 1L, 1T, 1R</p>									
<p>[3] Access 2 and Access 3 accommodate Right In, Right Out and Left In only movements and will require the construction of westbound left turn lanes that will be carved out of the existing median along SW 152 Street.</p>									



- ①** Proposed Project Access Locations  
**●** Existing Signal at SW 129 Avenue
- Legend**  
**Site** (dashed box)  
**—** Conceptual Internal Local Roadway Network
- XX** = Inbound Retail Trips  
**[XX]** = Inbound Pass-by Trips  
**(XX)** = Inbound Residential, School and Library Trips
- XX** = Outbound Retail Trips  
**[XX]** = Outbound Pass-by Trips  
**(XX)** = Outbound Residential, School, Library Trips

Figure 7A  
 PM Project Turning Movements at Project Access Locations  
 Coral Reef Commons - UM South Campus Property



① Proposed Project Access Locations      ● Existing Signal at SW 129 Avenue

Legend      — Conceptual Internal Local Roadway Network



→ Existing Lane Geometry  
 → Proposed Geometric Improvements

Figure 7B  
 Proposed Lane Geometry at Project Access Locations  
 Coral Reef Commons - UM South Campus Property

## Conclusions

### Access and Network Improvements to Support the Amendment

Access to and from the Amendment Site will be enhanced by the proposed addition of a fourth eastbound travel lane on SW 152 Street from east of the Hammock to SW 124 Avenue (a distance of approximately 1,500 feet) along with expanded lane geometry at the two proposed directional median openings to access the site and expanded lane geometry at the signalized intersection of SW 152 Street and SW 127 Avenue. Each of these improvements enhance both capacity and mobility for the SW 152 Street corridor, and are consistent with the future roadway improvements for eastbound SW 152 Street planned for the Zoo Miami Entertainment Area II. The proposed roadway and intersection improvements ensure that each of the regionally significant roadways serving the Amendment site will operate within the adopted level of service standards as defined by the CDMP.

### Access to Transit

The Amendment Site is located adjacent to the existing Coral Reef Max Bus Route 252 which currently provides express bus service (and service at 15 and 20 minute headways during the AM and PM peak hours) between the Dadeland South Metrorail Station, the Busway Corridor and the Amendment Site.

### Traffic Concurrency Standards

Pursuant to the Miami-Dade County Concurrency Management System, all study area traffic count stations on roadways adjacent to the Amendment Site have been found to operate at acceptable levels of service during the peak hour period for the Year 2016 Short Term Planning Horizon, accounting for existing traffic, previously approved committed development traffic, plus the traffic from the entire Amendment site. Available capacity and acceptable levels of service are maintained for the adjacent count stations and the study area roadway segments, meeting the traffic concurrency standards from the Miami-Dade County CDMP.

### Year 2025 Traffic Conditions

An evaluation of the Year 2025 traffic conditions has been completed to determine the adequacy of the roadway infrastructure to meet the adopted LOS standards through the Year 2025 Long Term Planning Horizon. Year 2025 traffic conditions incorporate the expanded transportation infrastructure for roads under construction, the funded transportation improvements from TIP 2012, Priority II and III planned transportation improvements from the LRTP 2035, future background traffic conditions reflecting growth in background traffic and traffic from approved committed developments, the traffic impact from the Amendment site and the improvements proposed by the Applicant to enhance the network and offset transportation impacts. A significance determination analysis has been provided to ensure that those roadways carrying significant Amendment traffic will not impact any state or regionally significant roadway found to be operating below the adopted level of service standard in the year 2025.

### Significant Impact and Roadway Enhancements

The Amendment trips were found to exceed 5.0% of the adopted maximum service volume for SW 152 Street from SW 127 Avenue to SW 137 Avenue, and for the local roadway segment of SW 127 Avenue providing access to the Amendment Site. Adopted levels of service were shown to be met with the impact of the Amendment Trips for the Year 2025 Long Term Planning Horizon, however the Applicant has proposed roadway and intersection improvements to enhance the capacity of SW 152 Street to better accommodate the uses proposed by the Amendment site.

### Project Access Intersection Analyses

This study has evaluated the proposed project access intersections under existing and future traffic conditions, incorporating the impacts of existing traffic, background growth, committed development traffic and project traffic for the entire site inclusive of the retail use, the retail pass-by trips and the residential, school and library trips. All project access intersections were found to operate at acceptable levels of service during the PM peak hour through the Year 2016 Short Term Planning Horizon after accommodating the proposed signal phasing, timing and geometric improvements.

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# PROJECT ACCESS OPERATIONAL ANALYSIS AND DESIGN

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## Coral Reef Commons UM South Campus Property

February 2012

Prepared for:  
RAM Development Company

CATHY SWEETAPPLE & ASSOCIATES  
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Coral Reef Commons – UM South Campus Property  
Project Access Operational Analysis and Design

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Attachment 2 ..... Traffic Data  
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# Coral Reef Commons – UM South Campus Property Project Access Operational Analysis and Design

## Introduction

Ram Development Company is currently processing a change (as part of the October 2011 cycle) to the Miami-Dade County Comprehensive Development Master Plan (CDMP) for a portion of the 141.57 gross acre property formerly known as the UM South Campus, located in Sections 25 and 26, Township 55, Range 39, in unincorporated Miami-Dade County, bounded by SW 152 Street on the north, SW 124 Avenue on the east, US Coast Guard lands on the south and US Government lands on the west (see **Figure 1A**). This proposed change seeks to redesignate 68.41 gross acres from Low Medium Density Residential to Business and Office to enable the development of neighborhood serving retail and business uses that will be nestled within a unique site surrounded by Natural Forest Community preserves and hammocks that will share this site with residential style garden apartments, a public school and a public library.

## Land Development Schedule and Project Access Design

The Applicant is pursuing an aggressive development schedule to entitle, design and build this site so that it will be operational by the Year 2014. The CDMP process is underway, after which the Applicant will pursue rezoning, platting and site plan approval. The Applicant is therefore already preparing detailed plans to locate and design project access off of SW 152 Street along with preliminary plans to design the roadway network and circulation that will be utilized to serve the site. This analysis therefore, has been prepared to address the project access design and configuration based on the full impact of the proposed development program, in order to achieve a preliminary design review with Miami-Dade County Public Works that the Applicant can rely upon and utilize to move forward on subsequent project design phases with a level of certainty that the lane geometry for the project access locations, and the roadway network that will connect to the project access locations, will be acceptable to County Staff.

## Proposed Development Program

The southern portion of the subject property will retain the Low Medium Density Residential land use while the northern portion represents the requested land use change to Business and Office (see **Figure 1B**). The Applicant has proposed a new Declaration of Restrictions to govern the development program which accommodates up to 900 residential units, a public school, a public library and 370,000 square feet of shopping center retail and business uses. The proposed development program is outlined in **Table 1A** below while the gross and net external PM peak hour trips are provided in **Table 1B** below.

<b>Table 1A – Proposed Development Program for the Amendment Site</b>								
Proposed Development Program			Development Program Uses Already Allowed			Development Program Uses Newly Proposed		
900 residential units 1350 student public high school 17,400 sf public library 370,000 sf Shopping Center			900 residential units 1350 student public high school 17,400 sf public library Preservation of NFC and Hammock			370,000 sf of Retail and Business Uses Preservation of NFC and Hammock		
<b>Net External AM Trips for Entire Site = 1,068</b>			<b>AM Trips for Uses Allowed = 867</b>			<b>New Retail AM Trips = 201</b>		
<b>Net External PM Trips for Entire Site = 1,660</b>			<b>PM Trips for Uses Allowed = 723</b>			<b>New Retail PM Trips = 937</b>		
<b>Table 1B – Net External PM Peak Hour Trip Generation Summary</b>								
Uses Proposed	ITE LUC	Scale of Development	Gross PM Trips	Internalization at 16%	Pass-by Reduction	Net External PM Trips	PM Trips In	PM Trips Out
Apartments	220	900 DU	558	90	0	468	304	164
Retail Shopping Center	820	370,000 SF	1,529	245	347	937	456	481
High School	530	1350 students	176	28	0	148	70	78
Library	590	17,400 SF	127	20	0	107	51	56
<b>Total</b>			<b>2,390</b>	<b>383</b>	<b>347</b>	<b>1,660</b>	<b>881</b>	<b>779</b>
<small>Note: See Table 2A from the November 2011 CDMP Amendment Transportation Analysis. <span style="float: right;">Source: Cathy Sweetapple &amp; Associates</span></small>								



- UM South Campus Property
- Zoo Miami Entertainment Area I – MDC Parks and Recreation
- Zoo Miami Entertainment Area II – MDC and Coast Guard Properties
- Miami Metrozoo DRI Boundary

Figure 1A  
 Site Location and Adjacent Properties  
 Coral Reef Commons - UM South Campus Property



- Legend
- ① Proposed Project Access Locations
  - Conceptual Internal Local Roadway Network
  - Existing Land Use = Low Medium Density Residential – NOT CHANGING
  - Proposed Land Use = Business and Office – SUBJECT OF PROPOSED CDMP CHANGE
  - Environmental Lands (NFC Preserves or Hammocks)

Figure 1B  
 Proposed Land Use Change and Project Access Locations  
 Coral Reef Commons - UM South Campus Property

### **Project Access to the Regional Roadway Network**

The subject property is located adjacent to SW 152 Street, a 4.6 mile east-west Urban Principal Arterial that connects three north-south Urban Principal Arterials (SW 137 Avenue, Florida's Turnpike and US-1). Primary access to the subject property is provided by the proposed expansion of the existing signalized intersection of SW 152 Street at SW 127 Avenue, with secondary site access provided by the proposed creation of two directional median openings onto SW 152 Street as illustrated in **Figure 2A** and as described in detail below.

**Project Access 1** - Access to and from the subject property will be provided through the expansion of the signalized project access intersection at SW 152 Street and SW 127 Avenue, improving the south leg of the intersection to extend SW 127 Avenue as an improved local access roadway into the heart of the Amendment Site (see **Figure 2B**). The proposed geometric expansion at this intersection includes the following:

- The extension of the storage for the westbound left turn lane (from  $\pm 100$  feet to  $\pm 300$  feet) increasing the westbound vehicular storage from 4 cars to 12 cars;
- The reconstruction of the south leg of the intersection to accommodate 2 northbound left turn lanes, 1 through lane and either 1 exclusive right turn lane or 1 shared through/right turn lane
  - Northbound Geometry = 2L, 1T, 1R or 2L, 1T, 1TR
- The restriping of the north leg of the intersection to compliment the geometric improvements on the south leg and to accommodate proposed changes to the signal phasing and signal timing;
  - Southbound Geometry = 1L, 1T, 1R or 1L, 1T, 1TR
- The expansion of the eastbound approach to accommodate a proposed fourth eastbound travel lane on SW 152 Street which will be constructed initially as an exclusive EB right turn lane;
  - Eastbound Geometry = 1L, 3T, 1R (or 1L, 3T, 1TR in the future if the 4<sup>th</sup> eastbound through lane is extended to SW 117 Avenue by the Zoo Miami Entertainment Area II

**Project Access 2** - Directional Access to and from the south will be provided off of SW 152 Street located  $\pm 800$  feet west of SW 127 Avenue, aligning with theoretical SW 127 Place (see **Figure 2C**). This access location will accommodate the following:

- The provision of right in, right out and left in movements to Project Access 2;
- A westbound left turn lane with  $\pm 350$  feet of storage (accommodating 14 cars) will be carved out of the existing median along SW 152 Street;
- The local access roadway that will intersect with SW 152 Street will accommodate (at a minimum) two inbound lanes and one outbound lane, and will be setback to the first cross access by the minimal acceptable distance per county requirements.

**Project Access 3** - Directional Access to and from the south will be provided off of SW 152 Street located  $\pm 530$  feet west of SW 129 Avenue, aligning with theoretical SW 129 Place (see **Figure 2D**). This access location will accommodate the following:

- The provision of right in, right out and left in movements to Project Access 3;
- A westbound left turn lane with  $\pm 150$  feet of storage (accommodating 6 cars) will be carved out of the existing median along SW 152 Street;
- The local access roadway that will intersect with SW 152 Street will accommodate (at a minimum) two inbound lanes and one outbound lane, and will be setback to the first cross access by the minimal acceptable distance per county requirements.



Legend



Existing Signal



Existing Land Use = Low Medium Density Residential – NOT CHANGING



Proposed Land Use = Business and Office – SUBJECT OF PROPOSED CDMP CHANGE

Figure 2A  
 Proposed Project Access Locations  
 Coral Reef Commons - UM South Campus Property



Expansion of the Existing Signalized Intersection at  
SW 152 Street and SW 127 Avenue

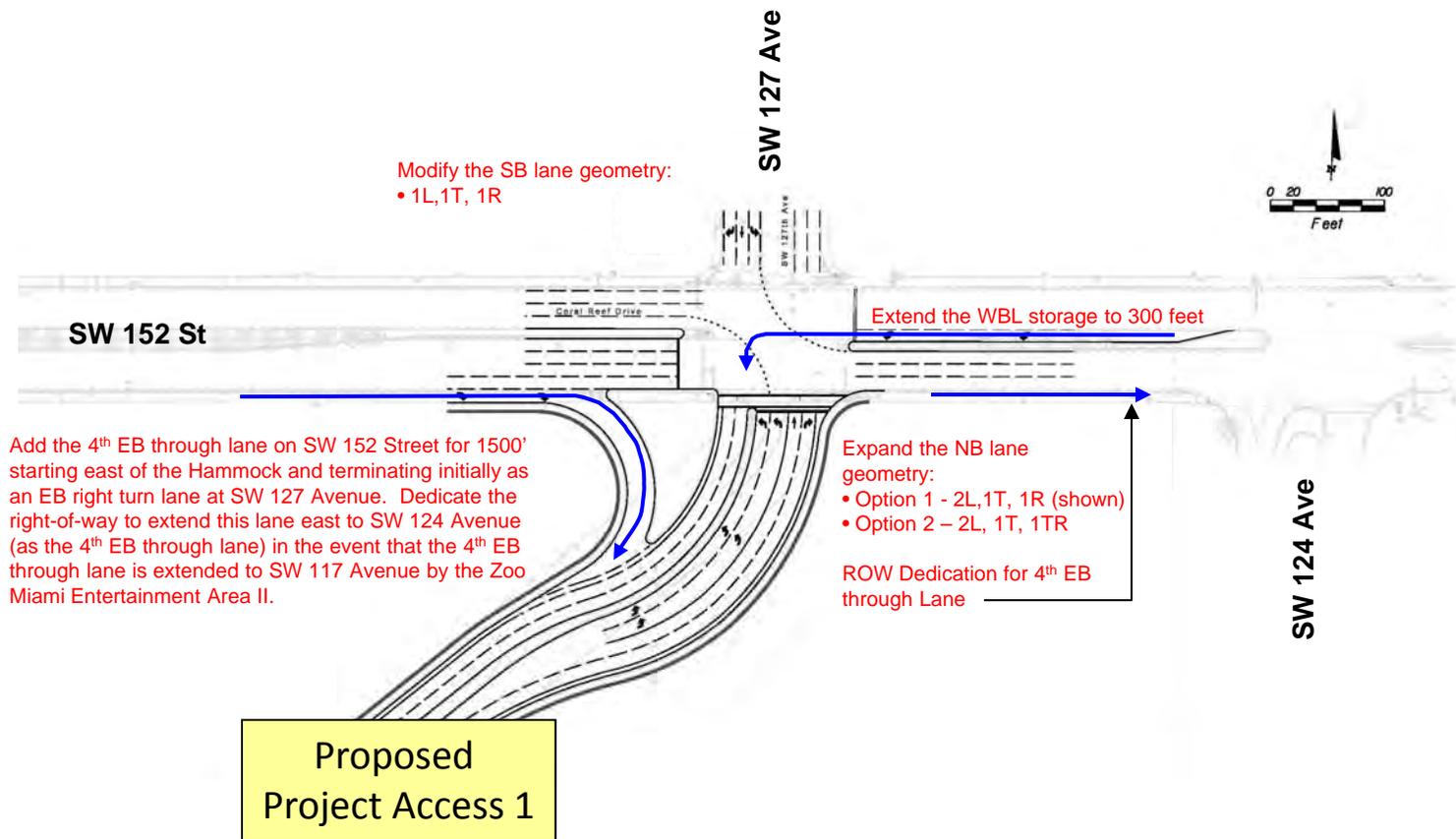


Figure 2B  
Proposed Project Access 1 – Existing Signalized Median Opening  
Coral Reef Commons - UM South Campus Property

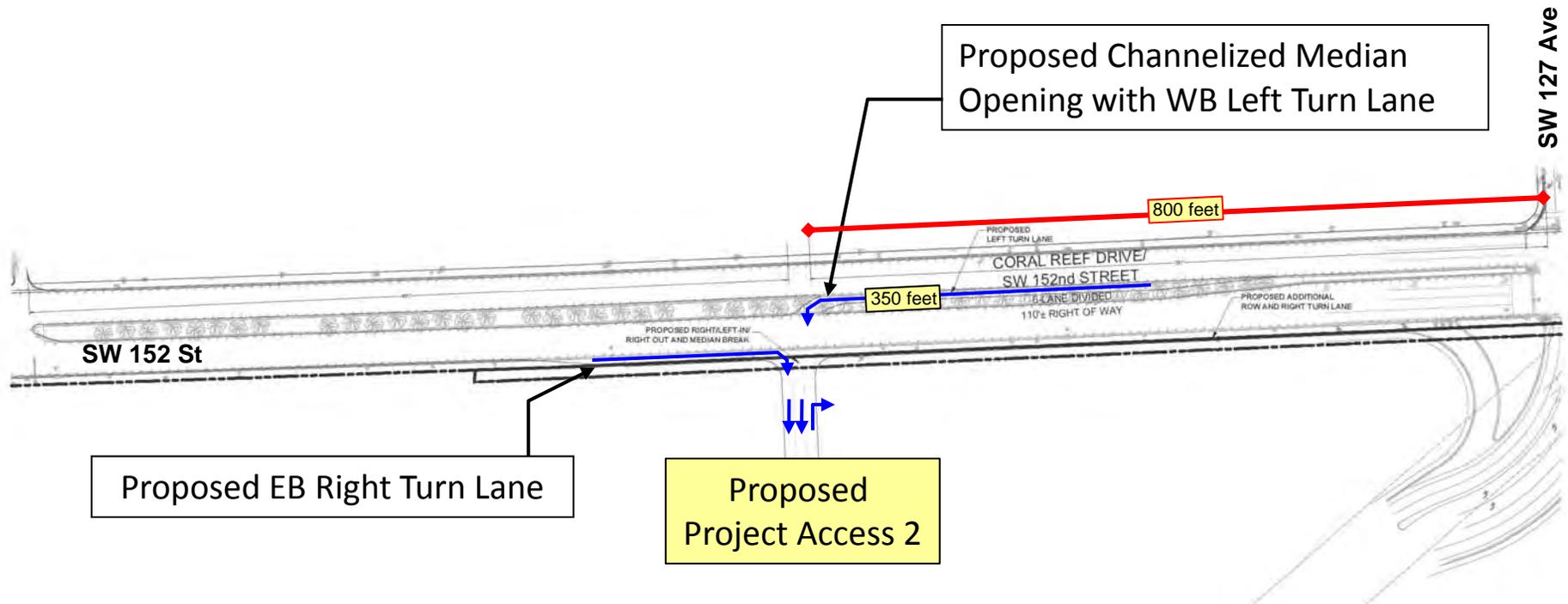


Figure 2C  
Proposed Project Access 2 – Channelized Median Opening  
Coral Reef Commons - UM South Campus Property

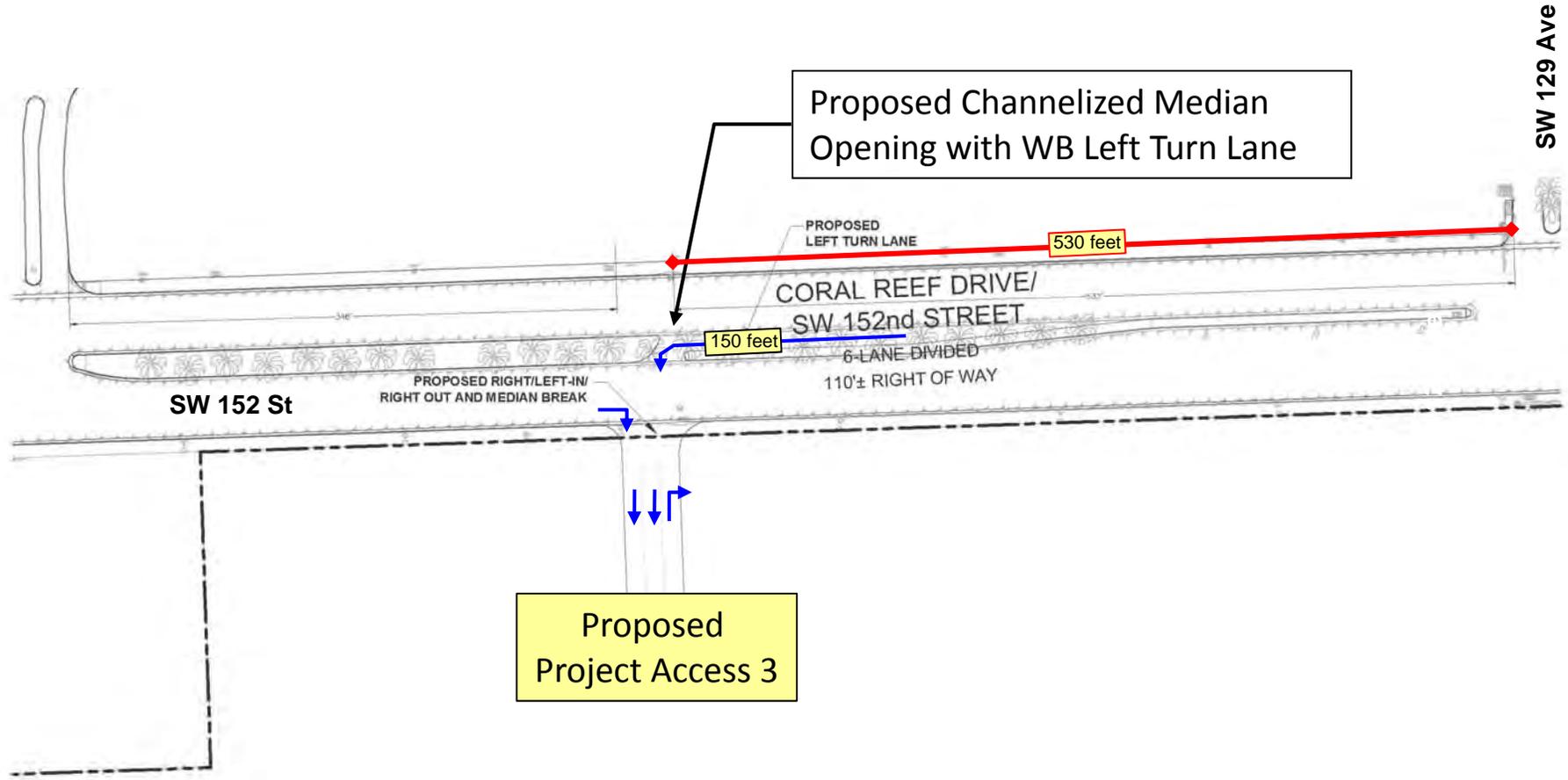


Figure 2D  
Proposed Project Access 3 – Channelized Median Opening  
Coral Reef Commons - UM South Campus Property

### **Local Access Roadways Connecting to the Project Access Locations**

The south leg of each of the three proposed project access intersections extend into the subject property and provide access to and from the proposed land uses to the regional roadway network. The design of each of these three roadways is based upon the adjacent land uses being served, the anticipated user characteristics, the peak hour traffic volume, and the function of these roadway connections to service only the subject site based upon the constraints created by the adjacent land uses to the south which prevent these roadways from carrying through-traffic movements. Pursuant to the *Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Florida Greenbook)*, a roadway which carries relatively low average traffic volumes, which reflects a series of short average trip lengths and minimal through-traffic movements while at the same time reflects high land access for abutting properties, reflects the definition of a local road. The *Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Florida Greenbook)* is granted authority under Sections [20.23\(4\)\(a\)](#), [334.044\(10\)\(a\)](#), [334.048\(3\)](#) and [336.045](#), Florida Statutes, and Rule [14-15.002](#), Florida Administrative Code. This manual is intended for use on all public roads that are not part of the State Highway System.

#### **Access 1 - SW 127 Avenue as a Local Roadway**

SW 127 Avenue (south of SW 152 Street) is proposed for construction as a four lane divided local access roadway at the entry into the Amendment Site. The south leg will feature an expanded intersection to accommodate the peak hour traffic demand for the retail, residential, school and civic uses entering and departing the site, and then will taper back to a two lane divided local access roadway to serve the residential portion of the site.

- SW 127 Avenue (from SW 152 Street to SW 184 Street) is not a designated roadway pursuant to the CDMP map series or the 2035 Long Range Transportation Plan. The roadway pavement which exists today extending south from the existing signal at SW 152 Street is not publically dedicated, and it terminates at a gated access to US Government property located at the southern edge of the Amendment Site.
- Several obstacles exist which prevent this roadway from being extended to the south as a through roadway corridor (to SW 184 Street), since it would bisect several existing and planned Miami-Dade County attractions. These include the Gold Coast Railroad Museum (and the existing railroad tracks and infrastructure) which are part of the Zoo Miami Entertainment Area I, the actual Zoo Miami property and Larry and Penny Thompson Park.
- RAM Development Company has proposed to completely rebuild SW 127 Avenue from SW 152 Street south to the gated access to US Government property, improving and expanding the roadway corridor and dedicating this roadway to the public.
- Through the CDMP Amendment Process for the uses proposed on the Amendment Site, the Applicant has determined the lane geometry needed to address the projected traffic volumes on SW 127 Avenue, and the projected traffic volumes at the intersection of SW 152 Street and SW 127 Avenue.
- Local residents, school related trips, library patrons, shoppers and merchant deliveries will utilize SW 127 Avenue to access abutting properties. The roadway design and operating speed should reflect the practical need to access retail parcels while slowly transitioning from the retail and business portion of the site to the residential portion of the site.

Using the standards and guidelines from the *Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Florida Greenbook)*, **Table 2** outlined below has been prepared to evaluate the factors used to determine the function and classification of the proposed extension of SW 127 Avenue providing access into the Amendment Site.

<b>Table 2 - Factors Utilized to Determine the Function and Classification of a Roadway</b>		
<b>Evaluation Factors</b>	<b>Definition from the Florida Greenbook</b>	<b>Application to SW 127 Avenue</b>
<b>Volume</b>	The design of the roadway is largely determined by the volume of traffic that must be carried by the facility. Variation in volume with respect to direction and time should be evaluated to determine requirements for peak hour capacities.	The Applicant has established the lane geometry needed at the intersection of SW 127 Avenue and SW 152 Street to accommodate existing and projected traffic demand while achieving acceptable operating levels of service at this signalized access point serving the site.
<b>User Types</b>	The types and volumes of roadway users expected to use the roadway influence the trip characteristics and design features.	Local residents, school related trips, library patrons, shoppers and merchant deliveries will utilize SW 127 Avenue to access abutting properties.
<b>Trip Characteristics</b>	The functions of the roadway are determined by the length and purpose of the vehicle trips. Trip characteristics are influenced by land use characteristics and the highway network layout.	The vehicle trips using SW 127 Avenue will reflect a mixture of retail and residential trips which will slowly transition from the public retail and business portion of the site to the private residential portion of the site.
<b>Speed</b>	The operating speed of the roadway should meet the reasonable expectations of the users.	The roadway design should reflect a subdivision roadway to provide access to retail parcels before transitioning to the private residential portion of the site.
<b>Safety</b>	The design of the roadway must reflect safe operating characteristics.	The roadway design should recognize the mixture of retail and residential trips and the need to accommodate high land access with safe operating characteristics.
<b>Level of Service</b>	Level of service reflects a measure of the quality of the overall operating characteristics of a roadway. Factors impacting level of service include speed and safety, travel time, traffic conflicts, freedom to maneuver, driving convenience and comfort and operating costs. Level of service is dependent upon actual traffic volume and composition of traffic.	The Applicant has proposed an expanded intersection at SW 152 Street and SW 127 Avenue to accommodate the projected background traffic and total project demand. SW 127 Avenue will reflect a 4LD roadway as it extends south from SW 152 Street, and will transition to a 2LD roadway as it enters the more private residential portion of the site. This lane geometry will maintain adopted LOS standards and will adequately serve adjacent uses.
<b>Access Requirements</b>	The degree and type of access permitted on a roadway is dependent upon its intended function and should conform to the applicable governing local access management guidelines. Reasonable access control must be exercised to allow a street or highway to fulfill its function.	The Applicant will ensure that the access connections provided off of SW 127 Avenue will meet the local access guidelines provided by Miami-Dade County to serve adjacent uses.
<b>Public Transit</b>	Current and planned transit use on a roadway facility influences its design features. Transit vehicles increase capacity on roadways, and therefore the ability to safely stop along the roadway to accommodate boarding and discharging passengers must be incorporated into the roadway design.	Transit access is currently provided along SW 152 Street via the Coral Reef Max (MDT Route 252). The Applicant will coordinate with Miami-Dade Transit to accommodate a bus stop adjacent to the Site for improved transit access if desired and deemed necessary by the transit agency.
<b>Classification as a Local Road</b>	A roadway which carries relatively low average traffic volume, accommodates short average trip lengths, reflects minimal through traffic movements and high land access for abutting properties is considered a Local Road.	SW 127 Avenue south of SW 152 Street should reflect the characteristics of a local subdivision roadway since it carries low volumes (only site related traffic), reflects no through traffic movements (terminates at US Gov't Property) and reflects high land access for abutting retail, school, library and residential properties.
<p>Note: See pages 1-5 through 1-8 related to Highway Function and Classification from <i>Topic #625-000-015 – Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Florida Greenbook)</i>.</p>		

Source: Cathy Sweetapple & Associates

### **Project Access Intersection Analyses for the PM Peak Hour**

An evaluation was performed to establish the operating conditions and the geometric lane requirements for the Year 2016 for the three project access intersections serving the Amendment Site as listed below:

- Intersection 1 – SW 152 Street at SW 127 Avenue/Project Access 1 – signalized
- Intersection 2 – SW 152 Street at Project Access 2 – unsignalized directional median opening
- Intersection 3 – SW 152 Avenue at Project Access 3 – unsignalized directional median opening

Existing peak season, future background, committed development and project turning movements for the PM peak hour were developed for the Amendment Site and are provided in attached **Tables 3A, 3B and 3C** for each of the project access intersections as outlined below.

- **Table 3A** – SW 152 Street at SW 127 Avenue/Project Access 1 – signalized
- **Table 3B** – SW 152 Street at Project Access 2 – unsignalized directional median opening
- **Table 3C** – SW 152 Avenue at Project Access 3 – unsignalized directional median opening

Existing turning movement counts were collected in January of 2010 for the existing signalized intersections on SW 152 Street at SW 127 Avenue and SW 152 Street and SW 129 Avenue (see **Attachment 2**), and these turning movements were used in the analysis of the three project access locations proposed to serve the Amendment Site. The turning movement data was adjusted for peak season for use in this analysis using the most recent peak season conversion factor for Miami-Dade County as obtained from the 2010 Florida Traffic Information CD. Existing peak season turning movement counts were then grown to Year 2016 using the study area growth rate of 0.65% per year to establish future background traffic conditions. Approved trips from Zoo Miami Entertainment Area I was incorporated into the turning movements to reflect previously approved committed development traffic that might be built by the Year 2016.

The PM peak hour project turning movements for the entire site (inclusive of the retail use, the retail pass-by trips and the residential, school and library trips) were then added to the future background plus committed development traffic to establish Year 2016 total traffic conditions with project. The signal timing information and the Existing and Future with Project intersection analyses are provided in **Attachment 3** of this study.

**TABLE 3A  
CORAL REEF COMMONS - UM SOUTH CAMPUS PROPERTY  
INTERSECTION TURNING MOVEMENTS  
SW 152 STREET AT SW 127 AVENUE**

3/12/2012

PM PEAK HOUR																								
No.	INTERSECTION	MVMT	1-21-10	2010	PEAK	GROWTH	ZOO I	ZOO I	ZOO I	ZOO I	2016	RETAIL	RETAIL	PASS-BY	PASS-BY	RES-SCH-LIB	RES-SCH-LIB	TOTAL	TOTAL	2016	EXISTING	PROPOSED		
			EXISTING	FDOT	SEASON	RATE	2016	2007	TRIPS	TRIPS		TRIPS	TRIPS	DIST.%	TRIPS	DIST.%	TRIPS	DIST.%	TRIPS				DIST.%	TRIPS
			VOLUMES	PSCF	VOLUMES	PER YEAR	FUTURE	148 IN	102 OUT	1209	128 IN	WO	IN	456	IN	173	IN	425	IN	1054	PROJECT			
1	SW 152 St at SW 127 Ave PHF = 0.92	NB																						
		LEFT	9	1.07	10	0.65%	10	0.00%	0	0.00%	0	10	60.94%	293	16.09%	28	44.29%	132	47.54%	453	463		Options	
		THRU	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	7.33%	35	8.00%	14	7.33%	22	7.45%	71	71	1LTR	2L / 2L 1T / 1T	
			RIGHT	25	1.07	27	0.65%	28	0.00%	0	0.00%	0	28	10.50%	51	20.11%	35	31.73%	95	18.89%	180	208		1R / 1TR
	Signalized	SB																						
		LEFT	74	1.07	79	0.65%	82	0.00%	0	0.00%	0	82	0.00%	0	0.00%	0	0.00%	0	0.00%	0	82	1L	1L	
		THRU	1	1.07	1	0.65%	1	0.00%	0	0.00%	0	1	7.33%	33	7.33%	13	7.00%	30	7.20%	76	77	1LT	1T	
			RIGHT	115	1.07	123	0.65%	128	0.00%	0	0.00%	0	128	0.00%	0	0.00%	0	0.00%	0	0.00%	0	128	1R	1R
		EB																						
		LEFT	126	1.07	135	0.65%	140	0.00%	0	0.00%	0	140	0.00%	0	8.04%	14	0.00%	0	1.33%	14	154	1L	1L	
		THRU	1334	1.07	1427	0.65%	1484	52.03%	77	42.95%	55	1616	21.20%	102	40.22%	70	0.00%	0	16.31%	172	1788	2T	3T	
			RIGHT	2	1.07	2	0.65%	2	0.00%	0	0.00%	0	2	20.17%	92	20.23%	35	29.41%	125	23.91%	252	254	1TR	1R
	WB																							
	LEFT	4	1.07	4	0.65%	4	0.00%	0	0.00%	0	4	15.87%	72	16.18%	28	23.76%	101	19.10%	201	205	1L	1L		
	THRU	2457	1.07	2629	0.65%	2733	52.03%	53	42.95%	40	2826	15.86%	72	15.80%	27	8.00%	34	12.68%	134	2959	2T	2T		
		RIGHT	174	1.07	186	0.65%	194	0.00%	0	0.00%	0	194	0.00%	0	0.00%	0	0.00%	0	0.00%	0	194	1TR	1TR	

IN	43.37%	198	43.74%	76	60.17%	256	50.20%	529
OUT	99.97%	379	92.46%	77	83.35%	248	91.53%	704
TOTAL		577		153		504		1233
% of Total		62%		44%		70%		61%

Access 2	IN	EBR+WBL	127	EBR+WBL	50	EBR+WBL	0	177
	OUT	NBR	51	NBR	50	NBR	0	101
	TOTAL		178		100		0	278
	% of Total		19%		29%		0%	14%

Access 3	IN	EBR+WBL	131	EBR+WBL	47	EBR+WBL	169	347
	OUT	NBR	51	NBR	47	NBR	50	148
	TOTAL		182		94		219	495
	% of Total		19%		27%		30%	25%

Total	IN		456		173		425	1054
	OUT		481		174		298	953
	TOTAL		937		347		723	2007
	% of Total		100%		100%		100%	100%

**TABLE 3B  
CORAL REEF COMMONS - UM SOUTH CAMPUS PROPERTY  
INTERSECTION TURNING MOVEMENTS  
SW 152 STREET AND PROPOSED ACCESS 2**

2/4/2012

PM PEAK HOUR																									
No.	INTERSECTION	MVNT	1-21-10	2010	PEAK	GROWTH	2016	ZOO I	ZOO I	ZOO I	ZOO I	2016	RETAIL	RETAIL	PASS-BY	PASS-BY	RES-SCH-LIB	RES-SCH-LIB	TOTAL	TOTAL	[1]	EXISTING LANES	PROPOSED LANES		
			EXISTING VOLUMES	FDOT PSCF	SEASON 2010 VOLUMES	PER YEAR TO 2016	FUTURE VOLUMES	1207 DIST.%	1209 TRIPS 148 IN 102 OUT	1209 TRIPS 128 IN 92 OUT	WITHOUT PROJECT	DIST.% IN	TRIPS 456	DIST.% IN	TRIPS 173	DIST.% IN	TRIPS 425	DIST.% IN	TRIPS 1054	2016 WITH PROJECT					
2	SW 152 St at Access 2 PHF = 0.92	<b>NB</b>																							
		LEFT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	n/a		
		THRU	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0			
		RIGHT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	<b>10.50%</b>	51	<b>28.73%</b>	50	0.00%	0	<b>10.60%</b>	101	101		1R		
Unsignalized		<b>SB</b>																							
		LEFT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	n/a	n/a	
		THRU	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0			
		RIGHT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0				
		<b>EB</b>																							
		LEFT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	3T	3T	
		THRU	1462	1.07	1564	0.65%	1626	52.03%	77	42.95%	55	1758	<b>20.17%</b>	143	<b>20.23%</b>	69	<b>29.41%</b>	125	<b>31.97%</b>	337	2095	127	3T	3T	
		RIGHT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	<b>19.95%</b>	91	<b>20.80%</b>	36	0.00%	0	<b>12.05%</b>	127	127		1R		
		<b>WB</b>																							
		LEFT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	<b>7.89%</b>	36	<b>8.09%</b>	14	0.00%	0	<b>4.74%</b>	50	50	3T	1L		
		THRU	2581	1.07	2762	0.65%	2871	52.03%	53	42.95%	40	2964	<b>7.89%</b>	329	<b>7.51%</b>	41	<b>8.00%</b>	166	<b>50.85%</b>	536	3500	0	3T	3T	
		RIGHT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%	0	0.00%	0	<b>0.00%</b>	0	0				
													IN	<b>27.84%</b>	127	<b>28.89%</b>	50	<b>0.00%</b>	0	<b>16.79%</b>	177				
													OUT	30.67%	51	48.96%	50	29.41%	0	42.57%	101				
													TOTAL		178		100		0	278					
													% of Total		19%		29%		0%	14%					

Note [1]: Due to the limitations of the HCS software which does not allow for the input of 3 approach lanes in each direction for two-way stop controlled intersections, the EB and WB through volumes have been adjusted to utilize 70% of the through volumes since three lanes exist for EB and WB on SW 152 Street.

Note [2]: The westbound through volumes also include outbound project turning movements from SW 127 Avenue - see Figure 7A.

**TABLE 3C  
CORAL REEF COMMONS - UM SOUTH CAMPUS PROPERTY  
INTERSECTION TURNING MOVEMENTS  
SW 152 STREET AND PROPOSED ACCESS 3**

2/6/2012

PM PEAK HOUR																									
No.	INTERSECTION	MVNT	1-21-10	2010	PEAK	GROWTH	2016	ZOO I	ZOO I	ZOO I	ZOO I	2016	RETAIL	RETAIL	PASS-BY	PASS-BY	RES-SCH-LIB	RES-SCH-LIB	TOTAL	TOTAL	[1]	EXISTING LANES	PROPOSED LANES		
			EXISTING VOLUMES	FDOT PSCF	SEASON 2010 VOLUMES	PER YEAR TO 2016	FUTURE VOLUMES	1207 DIST.%	1209 TRIPS 148 IN 102 OUT	1209 TRIPS 128 IN 92 OUT	WITHOUT PROJECT	DIST.% IN	TRIPS 456	DIST.% IN	TRIPS 173	DIST.% IN	TRIPS 425	DIST.% IN	TRIPS 1054	2016 WITH PROJECT					
2	SW 152 St at Access 3 PHF = 0.92	NB																							
		LEFT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	n/a		
		THRU	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0			
		RIGHT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	10.50%	51	27.00%	47	16.78%	50	15.53%	148	148		1R		
Unsignalized		SB																							
		LEFT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	n/a	n/a	
		THRU	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0			
		RIGHT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0			
		EB																							
		LEFT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	3T	2T	
		THRU	1549	1.07	1657	0.65%	1723	52.03%	77	42.95%	55	1855	40.13%	183	39.30%	68	29.41%	125	35.71%	376	2231		2T		
		RIGHT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	19.74%	90	19.65%	34	29.65%	126	23.72%	250	250		1TR		
		WB																							
		LEFT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	8.99%	41	7.51%	13	10.11%	43	9.20%	97	97	3T	1L		
		THRU	2531	1.07	2708	0.65%	2816	52.03%	53	42.95%	40	2909	58.80%	283	22.41%	39	42.28%	126	0.00%	448	3356		3T		
		RIGHT	0	1.07	0	0.65%	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0		3T		
													IN	28.73%	131	27.16%	47	39.76%	169	32.92%	347				
													OUT	50.63%	51	66.30%	47	46.19%	50	51.24%	148				
													TOTAL		182		94		219		495				
													% of Total		19%		27%		30%		25%				

Note [1]: Due to the limitations of the HCS software which does not allow for the input of 3 approach lanes in each direction for two-way stop controlled intersections, the EB and WB through volumes have been adjusted to utilize 70% of the through volumes since three lanes exist for EB and WB on SW 152 Street.

**Intersection Analysis Level of Service Summary**

A summary of the existing and future intersection levels of service are outlined in **Table 4** below incorporating the proposed geometric improvements at each access location and the signal phasing and timing enhancements for the intersection of SW 152 Street at SW 127 Avenue. The intersection levels of service demonstrate that each of the project access intersections will operate at acceptable levels of service after accommodating the traffic impacts of the Amendment Site along with the proposed signal phasing, signal timing and geometric improvements. See attached **Figure 3A** for a summary of the PM peak hour project turning movements at each of the project access locations, and attached **Figure 3B** illustrating the proposed geometric improvements.

<b>Table 4 – Project Access Intersection Analysis Level of Service Summary for the PM Peak Hour</b>									
No.	Study Intersection	Traffic Control	Adopted LOS	Existing Conditions Year 2010	Existing Conditions 2010 Delay	Future with Project Year 2016 Option 1 [1]	Future with Project 2016 Delay Option 1	Future with Project Year 2016 Option 2 [2]	Future with Project 2016 Delay Option 2
1	SW 152 St at SW 127 Ave	Signalized	EE	EB = LOS B WB = LOS E NB = LOS E SB = LOS E Overall = LOS D	EB = 15.2 WB = 75.1 NB = 66.1 SB = 68.9 Overall = 54.5	EB = LOS B WB = LOS E NB = LOS D SB = LOS D Overall = LOS D	EB = 19.2 WB = 63.2 NB = 49.4 SB = 47.3 Overall = 46.5	EB = LOS B WB = LOS E NB = LOS D SB = LOS D Overall = LOS D	EB = 19.2 WB = 63.2 NB = 54.0 SB = 47.4 Overall = 47.0
2	SW 152 St at Access 2	NB Stop Sign	EE	n/a	n/a	WBL = LOS C [3] NBR = LOS C	WBL = 16.0 NBR = 17.3		
3	SW 152 St at Access 3	NB Stop Sign	EE	n/a	n/a	WBL = LOS C [3] NBR = LOS D	WBL = 22.4 NBR = 27.4		
<p><b>[1] Option 1</b> includes signal phasing and signal timing improvements and the following arrangement to the approach lane geometry for SW 152 Street at SW 127 Avenue:            EB - 1L, 3T, 1R                      NB – 2L, 1T, 1R – see Figure 3B            WB – 1L, 2T, 1TR                    SB – 1L, 1T, 1R</p>									
<p><b>[2] Option 2</b> includes signal phasing and signal timing improvements and the following arrangement to the approach lane geometry for SW 152 Street at SW 127 Avenue:            EB - 1L, 3T, 1R                      NB – 2L, 1T, 1TR – see Figure 3B            WB – 1L, 2T, 1TR                    SB – 1L, 1T, 1R</p>									
<p><b>[3]</b> Access 2 and Access 3 accommodate Right In, Right Out and Left In only movements and will require the construction of westbound left turn lanes that will be carved out of the existing median along SW 152 Street.</p>									

Source: Cathy Sweetapple & Associates



① Proposed Project Access Locations

● Existing Signal at SW 129 Avenue

Legend

— Conceptual Internal Local Roadway Network



- XX = Inbound Retail Trips
- [XX] = Inbound Pass-by Trips
- (XX) = Inbound Residential, School and Library Trips

- XX = Outbound Retail Trips
- [XX] = Outbound Pass-by Trips
- (XX) = Outbound Residential, School, Library Trips

Figure 3A  
 PM Project Turning Movements at Project Access Locations  
 Coral Reef Commons - UM South Campus Property



Figure 3B  
 Proposed Lane Geometry at Project Access Locations  
 Coral Reef Commons - UM South Campus Property

## **Conclusions**

### **Project Access Operational Analyses**

This study has evaluated the operational characteristics of the proposed project access intersections under existing and future traffic conditions, incorporating the impacts of existing traffic, background growth, committed development traffic and project traffic for the entire site inclusive of the retail use, the retail pass-by trips and the residential, school and library trips. All project access intersections were found to operate at acceptable levels of service during the PM peak hour through the Year 2016 after accommodating proposed signal phasing, signal timing and geometric improvements.

### **Project Access Design as a Local Road**

Pursuant to the *Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Florida Greenbook)*, a roadway which carries relatively low average traffic volumes, which reflects a series of short average trip lengths and minimal through-traffic movements while at the same time reflects high land access for abutting properties, reflects the definition of a local road. These characteristics reflect the function and operation of SW 127 Avenue south of SW 152 Street which will function as a local, subdivision road, and therefore the design solutions for SW 127 Avenue should reflect the lane geometry that accommodates traffic demand while also providing safe and efficient access to the adjacent land uses south of SW 152 Street in a manner which is consistent with a local road.

# List of Attachments

**Attachment 1      Adopted LOS, Maps and Standards**

**Attachment 2      Traffic Data**

**Attachment 3      Project Access Intersection Analyses**

# **Attachment 1**

## **Adopted LOS, Maps and Standards**

**SUMMARY  
MIAMI-DADE COUNTY  
TRAFFIC CIRCULATION LEVEL OF SERVICE STANDARD**

**Peak Period\* LOS Standard  
Non-FIHS Roadways**

Location	Transit Availability		
	No Transit Service	20 Min. Headway Transit Service Within 1/2 Mile	Extraordinary Transit Service (Commuter Rail or Express Bus)
Outside UDB	LOS D-State Minor Arterials LOS C-County Roads and State Principal Arterials		
Between UIA and UDB	LOS D (90% of Capacity); or LOS E (100% Capacity) on SUMAs	LOS E (100% of Capacity)	120% of Capacity
Inside UIA	LOS E (100% of Capacity)	120% of Capacity	150% of Capacity

**FIHS Roadways**

FIHS Facility	Location				
	Outside UDB	Inside UDB	Roadways Parallel to Exclusive Transit Facilities	Inside Transportation Concurrency Management Areas	Constrained or Backlogged Roadways
Limited Access Facilities	B	D [E]	D [E]	D [E]	Manage
Controlled Access Facilities (Two Lanes)	C	D	E	E	Manage
Controlled Access Facilities (Four or More Lanes)	B	D	E	E	Manage

NOTE: LOS inside of [brackets] applies to general use lanes only when exclusive thru lanes exist.

FIHS= Florida Intrastate Highway System

UIA= Urban Infill Area--Area east of, and including NW/SW 77 Avenue and SR 826 (Palmetto Expressway), excluding the City of Islandia, and excluding the area north of SR 826 and west of I-95.

UDB= Urban Development Boundary

SUMA= State Urban Minor Arterial

\* Peak-period means the average of the two highest consecutive hours of traffic volume during a weekday.

**TABLE 4**

**Generalized Peak Hour Two-Way Volumes for Florida's Urbanized Areas<sup>1</sup>**

10/4/10

<b>STATE SIGNALIZED ARTERIALS</b>						<b>FREEWAYS</b>					
<b>Class I</b> (>0.00 to 1.99 signalized intersections per mile)						Lanes	B	C	D	E	
Lanes	Median	B	C	D	E	4	4,000	5,500	6,770	7,300	
2	Undivided	930	1,500	1,600	***	6	6,000	8,320	10,150	11,290	
4	Divided	2,840	3,440	3,560	***	8	8,000	11,050	13,480	15,270	
6	Divided	4,370	5,200	5,360	***	10	10,000	13,960	16,930	19,250	
8	Divided	5,900	6,970	7,160	***	12	13,730	18,600	21,950	23,230	
<b>Class II</b> (2.00 to 4.50 signalized intersections per mile)						<b>Freeway Adjustments</b>					
Lanes	Median	B	C	D	E	Auxiliary Lanes	Ramp Metering				
2	Undivided	**	1,020	1,480	1,570	+ 1,800	+ 5%				
4	Divided	**	2,420	3,220	3,400						
6	Divided	**	3,790	4,880	5,150						
8	Divided	**	5,150	6,530	6,880						
<b>Class III/IV</b> (more than 4.50 signalized intersections per mile)						<b>UNINTERRUPTED FLOW HIGHWAYS</b>					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
2	Undivided	**	500	1,150	1,440	2	Undivided	730	1,460	2,080	2,620
4	Divided	**	1,220	2,730	3,100	4	Divided	3,220	4,660	6,040	6,840
6	Divided	**	1,910	4,240	4,680	6	Divided	4,840	6,990	9,060	10,280
8	Divided	**	2,620	5,770	6,280	<b>Uninterrupted Flow Highway Adjustments</b>					
						Lanes	Median	Exclusive left lanes	Adjustment factors		
						2	Divided	Yes	+5%		
						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		
<b>Non-State Signalized Roadway Adjustments</b> (Alter corresponding state volumes by the indicated percent.)						<b>BICYCLE MODE<sup>2</sup></b> (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Major City/County Roadways - 10%						Paved Shoulder/ Bicycle Lane					
Other Signalized Roadways - 35%						Coverage	B	C	D	E	
						0-49%	**	310	1,180	>1,180	
						50-84%	240	360	>360	***	
						85-100%	620	>620	***	***	
<b>State &amp; Non-State Signalized Roadway Adjustments</b> (Alter corresponding state volumes by the indicated percent.)						<b>PEDESTRIAN MODE<sup>2</sup></b> (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
<b>Divided/Undivided &amp; Turn Lane Adjustments</b>						Sidewalk Coverage					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		0-49%	**	**	480	1,390	
2	Divided	Yes	No	+5%		50-84%	**	**	1,100	1,820	
2	Undivided	No	No	-20%		85-100%	**	1,100	1,820	>1,820	
Multi	Undivided	Yes	No	-5%		<b>BUS MODE (Scheduled Fixed Route)<sup>3</sup></b> (Buses in peak hour in peak direction)					
Multi	Undivided	No	No	-25%		Sidewalk Coverage	B	C	D	E	
-	-	-	Yes	+ 5%		0-84%	>5	≥4	≥3	≥2	
						85-100%	>4	≥3	≥2	≥1	
<b>One-Way Facility Adjustment</b> Multiply the corresponding two-directional volumes in this table by 0.6.											

<sup>1</sup> Values shown are presented as hourly two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. Although presented as peak hour two-way volumes, they actually represent peak hour peak direction conditions with an applicable D factor applied. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.

<sup>2</sup> Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

<sup>3</sup> Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

\*\* Cannot be achieved using table input value defaults.

\*\*\* Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:

Florida Department of Transportation  
Systems Planning Office  
605 Suwannee Street, MS 19  
Tallahassee, FL 32399-0450

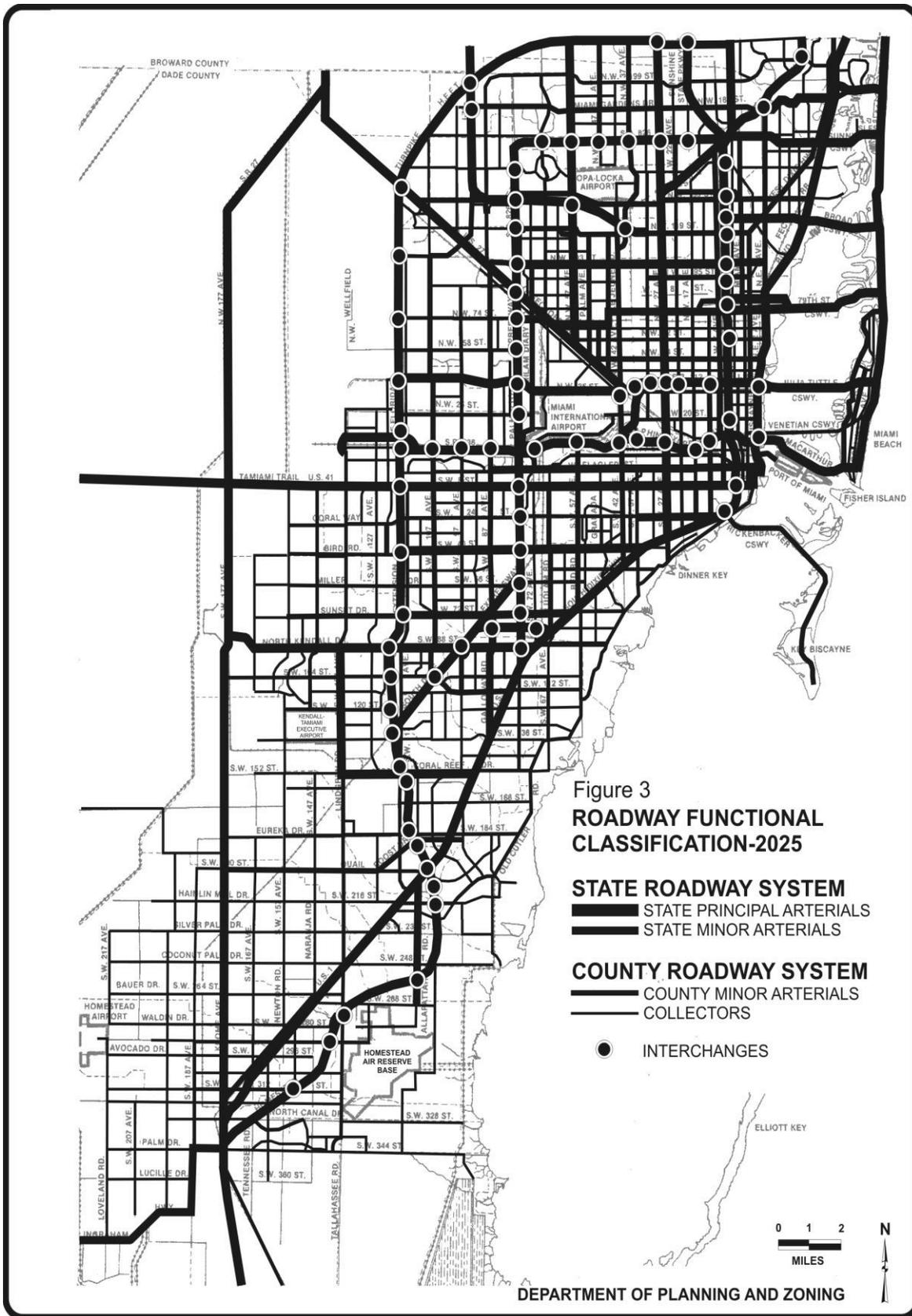
TABLE 4  
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's  
**Urbanized Areas**

9/4/09

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities		Interrupted Flow Facilities									
	Freeways	Highways	State Arterials						Class II			
			Class I	Class II	Class III	Bicycle	Pedestrian	Bus				
<b>ROADWAY CHARACTERISTICS</b>												
Area type (l,o)	1	1	1	1	1	1	1	1	1	1	1	1
Number of through lanes	4-12	2	4-6	2	4-8	2	4-8	2	4-8	4	4	
Posted speed (mph)	65	50	50	45	50	45	45	35	35	45	45	
Free flow speed (mph)	70	55	55	50	55	50	50	40	40	50	50	
Aux, meter, or accel/decel $\geq 1500$ (n,y)	n											
Median (n, nr, r)		n	r	n	r	n	r	n	r	r	r	
Terrain (l,r)	1	1	1									
% no passing zone		80										
Exclusive left turn lanes / [impact](n, y)		[n]	y	y	y	y	y	y	y	y	y	
Exclusive right turn lanes (n, y)				n	n	n	n	n	n	n	n	
Paved shoulder/bicycle lane (n, y)										n, 50%,y	n	
Outside lane width										t	t	
Pavement condition										t		
Sidewalk (n, y)											n, 50%,y	n,y
Sidewalk/roadway separation (a, t, w)											t	
Sidewalk protective barrier (n, y)											n	
Obstacle to bus stop (n, y)												n
Facility length (mi)	4	5	5	2	2	2	2	2	2	2	2	2
Number of segments	4											
<b>TRAFFIC CHARACTERISTICS</b>												
Planning analysis hour factor (K)	0.092	0.094	0.094	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
Peak hour factor (PHF)	0.95	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	
Base saturation flow rate (pcphpl)		1700	2100	1950	1950	1950	1950	1950	1950	1950	1950	
Heavy vehicle percent	4.0	2.0	2.0	2.0	2.0	2.0	2.0	1.5	1.5	2.0	2.0	
Local adjustment factor	0.98	1.0	0.98									
% left turns				12	12	12	12	12	12	12	12	
% right turns				12	12	12	12	12	12	12	12	
Bus span of service												15
<b>CONTROL CHARACTERISTICS</b>												
Number of signals				2	2	6	6	10	10	6	6	
Arrival type (1-6)				3	3	4	4	4	4	4	4	
Signal type (a, s, p)				a	a	s	s	s	s	s	s	
Cycle length (C)				120	120	120	120	120	120	120	120	
Effective green ratio (g/C)				0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	
<b>LEVEL OF SERVICE THRESHOLDS</b>												
Level of Service	Freeways	Highway Segments		State & Non-State Signalized Arterials			Bicycle	Pedestrian	Bus			
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Class III ats	Score	Score	Buses per hr.			
B	$\leq 17$	$\geq 0.833$	$\leq 18$	$> 34$ mph	$> 28$ mph	$> 24$ mph	$\leq 2.5$	$\leq 2.5$	$\geq 4$			
C	$\leq 24$	$> 0.750$	$\leq 26$	$> 27$ mph	$> 22$ mph	$> 18$ mph	$\leq 3.5$	$\leq 3.5$	$\geq 3$			
D	$\leq 31$	$> 0.667$	$\leq 35$	$> 21$ mph	$> 17$ mph	$> 14$ mph	$\leq 4.5$	$\leq 4.5$	$\geq 2$			
E	$\leq 39$	$> 0.583$	$\leq 41$	$> 16$ mph	$> 13$ mph	$> 10$ mph	$\leq 5.5$	$\leq 5.5$	$\geq 1$			

% ffs = Percent free flow speed    ats = Average travel speed



\\S0430003\MetroPlan2\CDMP Amendments\2004 October Cycle\Adopted Maps\Roadway Functional Classification 2025.cdr

## **C HIGHWAY FUNCTION AND CLASSIFICATION**

A determination of the function and operational requirements, and a clear definition of the classification of each new facility are required prior to the actual design.

### **C.1 Function**

Design of each new street or highway is based upon its function in the highway system. Operational requirements that must be satisfied to fulfill this function are dependent upon the following factors:

#### **C.1.a Volume**

Volume of traffic that must be carried by the facility is a primary factor governing the design. Variations in volume with respect to direction and time should also be evaluated to determine the expected requirements for peak capacities.

#### **C.1.b Highway User Types**

Types and relative volumes of highway users expected to use the street or highway influence trip characteristics and design features.

#### **C.1.c Trip Characteristics**

Functions of a new facility are, to a large extent, determined by the length and purpose of vehicle trips. Trip characteristics are influenced by land use characteristics and the highway network layout.

#### **C.1.d Speed**

Operating speed (to be maintained) should meet reasonable expectations of the users.

#### **C.1.e Safety**

Provisions of streets and highways with safe operating characteristics shall be considered a primary requirement.

### **C.1.f Level of Service**

Level of service is essentially a measure of the quality of the overall operating characteristics of a street or highway. Factors involved in determining the level of service include speed and safety, as well as travel time; traffic conflicts and interruptions; freedom to maneuver; driving convenience and comfort; and operating costs. Level of service is also dependent upon actual traffic volume and composition of traffic.

### **C.1.g Access Requirements**

Degree and type of access permitted on a given facility is dependent upon its intended function and should conform to the guidelines in CHAPTER 3 - GEOMETRIC DESIGN. Reasonable access control must be exercised to allow a street or highway to fulfill its function.

### **C.1.h Public Transit Use**

Both current and planned use by public transit influence design features. Transit vehicles increase capacity on a roadway. There must be the ability to safely stop along the roadway to board and discharge passengers.

## **C.2 Classification**

Road classifications are defined in Section 334.03, Florida Statutes. Functional classification is the assignment of roads into systems according to the character of service they provide in relation to the total road network.

### **C.2.a Basic Classification**

Basic functional categories include arterial, collector, and local roads which may be subdivided into principal, major, or minor levels. These levels may be additionally divided into rural and urban categories. This basic classification system is utilized throughout this Manual.

### **C.2.a.1 Local**

A route providing service which is of relatively low average traffic volume, short average trip length or minimal through-traffic movements, and high land access for abutting property.

### **C.2.a.2 Collector**

A route providing service which is of relatively moderate average traffic volume, moderately average trip length, and moderately average operating speed. These routes also collect and distribute traffic between local roads or arterial roads and serve as a linkage between land access and mobility needs.

### **C.2.a.3 Arterial**

A route providing service which is relatively continuous and of relatively high traffic volume, long average trip length, generally higher operating speed, and high mobility importance. In addition, all United States numbered highways shall be arterial roads.

## **C.2.b Classification Modifications**

Design and classification of streets and highways should also be based upon a consideration of highway user expectations. The function of any facility, as perceived by the user, essentially determines the driver's willingness to accept restrictions upon speed, capacity, access, or level of service. Basic classification systems may also be modified by the following variables:

### **C.2.b.1 Urban**

Urban area highway users will generally accept lower speeds and levels of service. Economic constraints in urban areas are also generally more severe. Minor modifications in design criteria are, therefore, appropriate for urban streets.

### **C.2.b.2 Major/Minor**

Streets and highways may be classified as major or minor depending upon traffic volume, trip length, and mobility.

# **Attachment 2**

## **Traffic Data**

2010 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 8701 MIAMI-DADE SOUTH

MOCF: 0.98  
 PSCF

WEEK	DATES	SF	PSCF
1	01/01/2010 - 01/02/2010	1.00	1.02
2	01/03/2010 - 01/09/2010	1.03	1.05
3	01/10/2010 - 01/16/2010	1.05	1.07
4	01/17/2010 - 01/23/2010	1.05	1.07
5	01/24/2010 - 01/30/2010	1.04	1.06
6	01/31/2010 - 02/06/2010	1.03	1.05
7	02/07/2010 - 02/13/2010	1.02	1.04
8	02/14/2010 - 02/20/2010	1.02	1.04
9	02/21/2010 - 02/27/2010	1.01	1.03
10	02/28/2010 - 03/06/2010	1.01	1.03
11	03/07/2010 - 03/13/2010	1.01	1.03
12	03/14/2010 - 03/20/2010	1.00	1.02
13	03/21/2010 - 03/27/2010	1.00	1.02
14	03/28/2010 - 04/03/2010	1.00	1.02
15	04/04/2010 - 04/10/2010	1.00	1.02
16	04/11/2010 - 04/17/2010	1.00	1.02
17	04/18/2010 - 04/24/2010	1.00	1.02
18	04/25/2010 - 05/01/2010	1.00	1.02
19	05/02/2010 - 05/08/2010	1.00	1.02
20	05/09/2010 - 05/15/2010	1.01	1.03
21	05/16/2010 - 05/22/2010	1.01	1.03
22	05/23/2010 - 05/29/2010	1.01	1.03
23	05/30/2010 - 06/05/2010	1.01	1.03
24	06/06/2010 - 06/12/2010	1.02	1.04
25	06/13/2010 - 06/19/2010	1.02	1.04
26	06/20/2010 - 06/26/2010	1.02	1.04
27	06/27/2010 - 07/03/2010	1.02	1.04
28	07/04/2010 - 07/10/2010	1.02	1.04
29	07/11/2010 - 07/17/2010	1.02	1.04
30	07/18/2010 - 07/24/2010	1.01	1.03
31	07/25/2010 - 07/31/2010	1.00	1.02
32	08/01/2010 - 08/07/2010	0.99	1.01
33	08/08/2010 - 08/14/2010	0.99	1.01
34	08/15/2010 - 08/21/2010	0.98	1.00
35	08/22/2010 - 08/28/2010	0.98	1.00
*36	08/29/2010 - 09/04/2010	0.98	1.00
*37	09/05/2010 - 09/11/2010	0.99	1.01
*38	09/12/2010 - 09/18/2010	0.99	1.01
*39	09/19/2010 - 09/25/2010	0.98	1.00
*40	09/26/2010 - 10/02/2010	0.98	1.00
*41	10/03/2010 - 10/09/2010	0.97	0.99
*42	10/10/2010 - 10/16/2010	0.97	0.99
*43	10/17/2010 - 10/23/2010	0.97	0.99
*44	10/24/2010 - 10/30/2010	0.97	0.99
*45	10/31/2010 - 11/06/2010	0.97	0.99
*46	11/07/2010 - 11/13/2010	0.97	0.99
*47	11/14/2010 - 11/20/2010	0.98	1.00
*48	11/21/2010 - 11/27/2010	0.98	1.00
49	11/28/2010 - 12/04/2010	0.99	1.01
50	12/05/2010 - 12/11/2010	1.00	1.02
51	12/12/2010 - 12/18/2010	1.00	1.02
52	12/19/2010 - 12/25/2010	1.03	1.05
53	12/26/2010 - 12/31/2010	1.05	1.07

\* PEAK SEASON

09-FEB-2011 13:45:30

830UPD [1,0,0,1]

6\_8701\_PKSEASON.TXT

SW 152ND STREET & SW 127TH AVENUE  
 MIAMI, FLORIDA  
 COUNTED BY: JOHNNY MOLESTINA  
 SIGNALIZED

TRAFFIC SURVEY SPECIALISTS, INC.  
 624 GARDENIA TERRACE  
 DELRAY BEACH, FLORIDA 33444  
 (561) 272-3255 FAX (561) 272-4381

Site Code : 00100009  
 Start Date: 01/21/10  
 File I.D. : 152S127A  
 Page : 1

ALL VEHICLES

Date	SW 127TH AVENUE From North				SW 152ND STREET From East				SW 127TH AVENUE From South				SW 152ND STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
16:00	0	22	0	22	1	1	535	31	0	1	0	7	1	34	302	0	957
16:15	0	18	0	29	0	0	538	46	0	1	0	4	0	29	326	0	991
16:30	0	25	0	18	0	3	592	32	0	2	0	4	0	32	291	1	1000
16:45	0	24	1	22	1	0	580	33	0	0	0	4	1	37	336	2	1041
Hr Total	0	89	1	91	2	4	2245	142	0	4	0	19	2	132	1255	3	3989
17:00	0	12	0	29	0	0	571	32	0	3	0	9	0	31	341	1	1029
17:15	0	21	0	19	1	0	588	40	0	2	0	5	1	27	355	1	1060
17:30	0	17	1	33	0	0	591	57	0	2	0	4	0	34	322	0	1061
17:45	0	24	0	34	0	3	707	45	0	2	0	7	0	33	316	0	1171
Hr Total	0	74	1	115	1	3	2457	174	0	9	0	25	1	125	1334	2	4321
*TOTAL*	0	163	2	206	3	7	4702	316	0	13	0	44	3	257	2589	5	8310

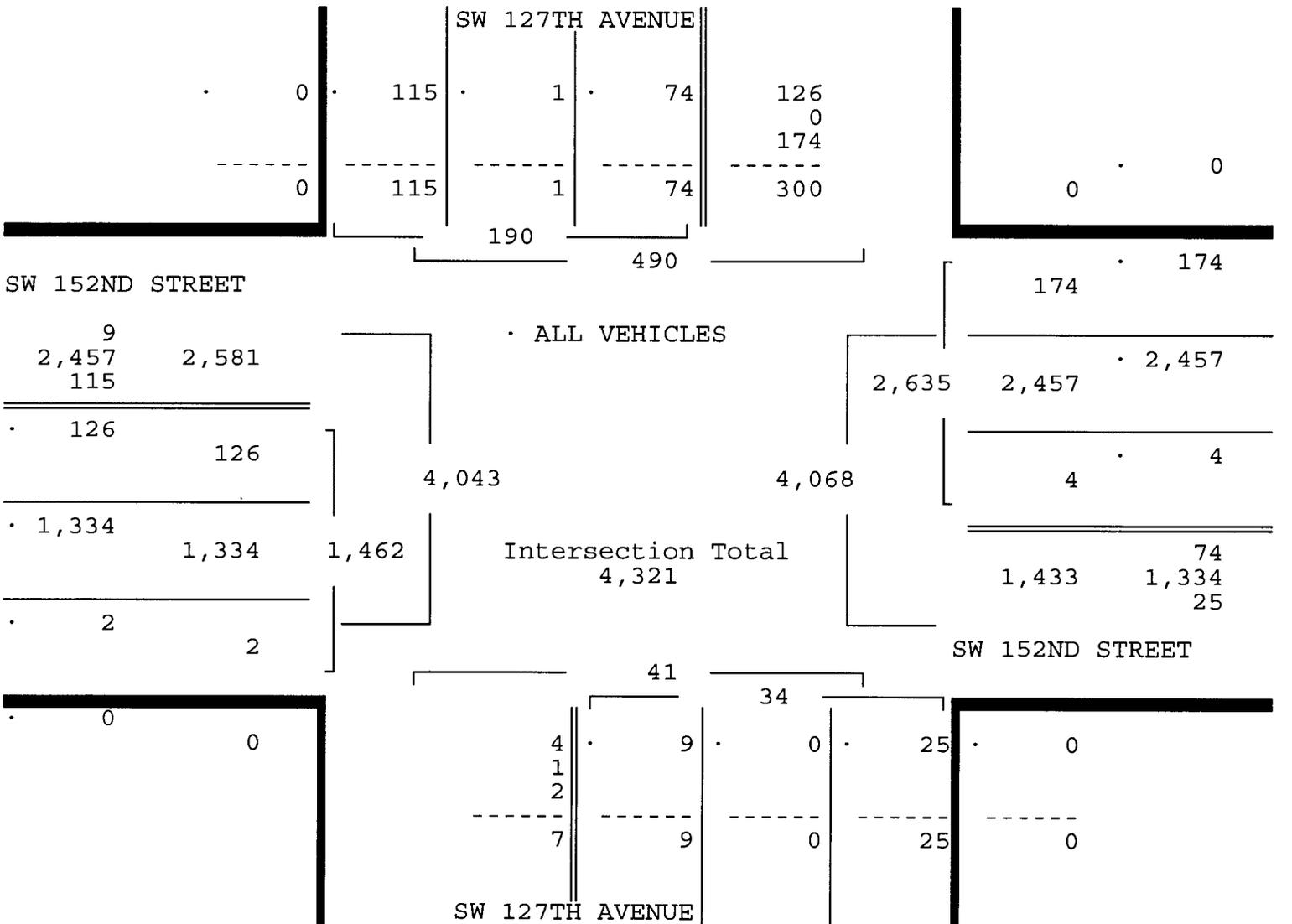
SW 152ND STREET & SW 127TH AVENUE  
 MIAMI, FLORIDA  
 COUNTED BY: JOHNNY MOLESTINA  
 SIGNALIZED

TRAFFIC SURVEY SPECIALISTS, INC.  
 624 GARDENIA TERRACE  
 DELRAY BEACH, FLORIDA 33444  
 (561) 272-3255 FAX (561) 272-4381

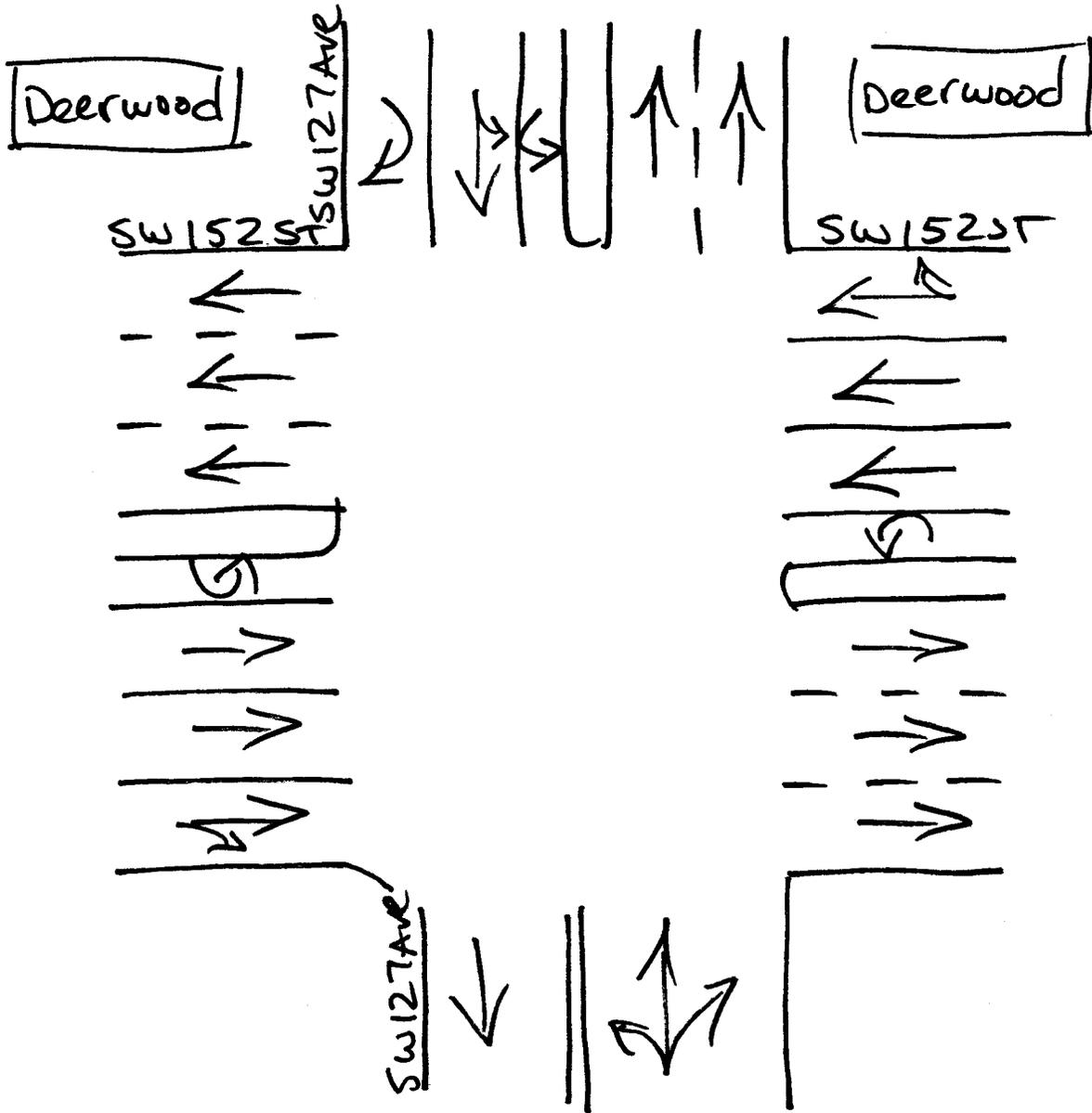
Site Code : 00100009  
 Start Date: 01/21/10  
 File I.D. : 152S127A  
 Page : 2

ALL VEHICLES

SW 127TH AVENUE From North				SW 152ND STREET From East				SW 127TH AVENUE From South				SW 152ND STREET From West				Total							
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right								
Date 01/21/10																							
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 01/21/10																							
Peak start 17:00								17:00								17:00							
Volume	0	74	1	115	1	3	2457	174	0	9	0	25	1	125	1334	2							
Percent	0%	39%	1%	61%	0%	0%	93%	7%	0%	26%	0%	74%	0%	9%	91%	0%							
Pk total	190				2635				34				1462										
Highest	17:45				17:45				17:00				17:15										
Volume	0	24	0	34	0	3	707	45	0	3	0	9	1	27	355	1							
Hi total	58				755				12				384										
PHF	.82				.87				.71				.95										



↑  
North



Miami, Florida

January 21, 2010

drawn by: Luis Palomino  
signalized

# **Attachment 3**

## **Project Access Intersection Analyses**

# Signal Timing

## TOD Schedule Report

for 5174: Coral Reef Dr&SW 127 Av

Print Date:  
9/10/2011

Print Time:  
3:12 AM

<u>Asset</u>	<u>Intersection</u>	<u>TOD Schedule</u>	<u>Op Mode</u>	<u>Plan #</u>	<u>Cycle</u>	<u>Offset</u>	<u>TOD Setting</u>	<u>Active PhaseBank</u>	<u>Active Maximum</u>
5174	Coral Reef Dr&SW 127 Av	DOW-7		N/A	0	0	N/A	0	Max 0

### Splits

<u>PH 1</u>	<u>PH 2</u>	<u>PH 3</u>	<u>PH 4</u>	<u>PH 5</u>	<u>PH 6</u>	<u>PH 7</u>	<u>PH 8</u>
EBL	WBT	SBT	NBT	WBL	EBT	-	-
0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	<u>Walk</u>			<u>Don't Walk</u>			<u>Min Initial</u>			<u>Veh Ext</u>			<u>Max Limit</u>			<u>Max 2</u>			<u>Yellow</u>	<u>Red</u>								
	Phase Bank																											
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3										
1 EBL	0	-	0	0	-	0	5	-	5	-	5	2	-	2	-	2	7	-	5	-	7	15	-	7	-	10	3	0
2 WBT	0	-	0	0	-	0	16	-	16	-	16	1	-	1	-	1	30	-	30	-	56	0	-	30	-	56	4	1.3
3 SBT	0	-	0	0	-	0	7	-	7	-	7	3.5	-	3.5	-	3.5	14	-	15	-	14	25	-	20	-	20	4	1.3
4 NBT	0	-	0	0	-	0	7	-	7	-	7	2.5	-	2.5	-	2.5	7	-	7	-	7	25	-	7	-	12	4	1.3
5 WBL	0	-	0	0	-	0	5	-	5	-	5	2	-	2	-	2	7	-	5	-	7	15	-	7	-	10	3	0
6 EBT	0	-	0	0	-	0	16	-	16	-	16	1	-	1	-	1	30	-	30	-	56	0	-	30	-	56	4	1.3
7 -	0	-	0	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	0
8 -	0	-	0	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	0

Last In Service Date: unknown

Permitted Phases	
<b>12345678</b>	
Default	123456--
External Permit 0	-----
External Permit 1	123456--
External Permit 2	123456--

<u>Current</u> TOD Schedule	<u>Plan</u>	<u>Cycle</u>	<u>Green Time</u>								<u>Ring Offset</u>	<u>Offset</u>
			1 EBL	2 WBT	3 SBT	4 NBT	5 WBL	6 EBT	7 -	8 -		
2		120	11	67	13	11	11	67	0	0	0	27
3		120	11	67	13	11	11	67	0	0	0	75
4		90	11	37	13	11	11	37	0	0	0	29
5		100	11	47	13	11	11	47	0	0	0	0
6		140	12	80	18	12	12	80	0	0	0	2
8		90	11	37	13	11	11	37	0	0	0	29
10		120	11	58	22	11	11	58	0	0	0	54
11		110	13	45	21	13	13	45	0	0	0	22
12		140	12	80	18	12	12	80	0	0	0	2
14		100	12	40	18	12	12	40	0	0	0	18
15		130	12	70	15	15	12	70	0	0	0	67
16		160	12	100	15	15	12	100	0	0	0	133
17		140	12	80	13	17	12	80	0	0	0	122
18		90	12	30	15	15	12	30	0	0	0	21
20		150	15	87	18	12	15	87	0	0	0	38

<u>Local TOD Schedule</u>		
<u>Time</u>	<u>Plan</u>	<u>DOW</u>
0000	Free	Su M T W Th F S
0030	Flash	M T W Th
0100	Flash	Su F S
0500	Free	M T W Th F
0600	Free	Su S
0600	16	M T W Th F
0630	10	S
0800	11	Su
0900	10	M T W Th F
1000	10	Su
1330	15	Su M T W Th F S
1530	17	Su M T W Th F S
1615	20	M T W Th F
1900	3	Su S
2000	4	Su S
2000	3	M T W Th F
2200	Free	Su S
2230	Free	M T W Th F

<u>Current Time of Day Function</u>			
<u>Time</u>	<u>Function</u>	<u>Settings *</u>	<u>Day of Week</u>
0000	TOD OUTPUTS	-----1	Su M T W Th F S
0100	TOD OUTPUTS	-----	Su F S
0600	TOD OUTPUTS	-----1	Su S
0700	TOD OUTPUTS	-----	S
2200	TOD OUTPUTS	-----2-	Su S

<u>Local Time of Day Function</u>			
<u>Time</u>	<u>Function</u>	<u>Settings *</u>	<u>Day of Week</u>
0000	TOD OUTPUTS	-----1	Su M T W Th F S
0030	TOD OUTPUTS	-----	M T W Th
0100	TOD OUTPUTS	-----	Su F S
0500	TOD OUTPUTS	-----1	M T W Th F
0600	TOD OUTPUTS	-----1	Su S
0600	TOD OUTPUTS	-----	M T W Th F
0700	TOD OUTPUTS	-----	S
0800	TOD OUTPUTS	-----	Su
2200	TOD OUTPUTS	-----2-	Su S
2230	TOD OUTPUTS	-----2-	M T W Th F

<u>* Settings</u>
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

***No Calendar Defined/Enabled***

# **Existing Conditions PM Peak Hour**

SW 152 Street at SW 127 Avenue  
Existing Signalized Intersection



## VOLUME ADJUSTMENT AND SATURATION FLOW RATE WORKSHEET

### General Information

Project Description *Coral Reef Commons*

### Volume Adjustment

	EB			WB			NB			SB		
	LT	TH	RT									
Volume	135	1427	2	4	2629	186	10	0	27	79	1	123
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
Adjusted Flow Rate	147	1551	2	4	2858	202	11	0	29	86	1	134
Lane Group	L	TR		L	TR			LTR		L	LT	R
Adjusted Flow Rate	147	1553		4	3060			40		44	43	134
Proportion of LT or RT	1.000	--	0.001	1.000	--	0.066	0.275	--	0.725	0.980	--	1.000

### Saturation Flow Rate

Base Satflow	1900	1900		1900	1900			1900		1900	1900	1900
Number of Lanes	1	3	0	1	3	0	0	1	0	1	1	1
$f_w$	1.000	1.000		1.000	1.000			1.000		1.000	1.000	1.000
$f_{HV}$	0.980	0.980		0.980	0.980			0.980		0.980	0.980	0.980
$f_g$	1.000	1.000		1.000	1.000			1.000		1.000	1.000	1.000
$f_p$	1.000	1.000		1.000	1.000			1.000		1.000	1.000	1.000
$f_{bb}$	1.000	1.000		1.000	1.000			1.000		1.000	1.000	1.000
$f_a$	1.000	1.000		1.000	1.000			1.000		1.000	1.000	1.000
$f_{LU}$	1.000	1.000		1.000	1.000			1.000		1.000	1.000	1.000
$f_{LT}$	0.950	1.000	--	0.950	1.000	--		0.950	--	0.950	1.000	--
Secondary $f_{LT}$	0.046	0.043	--	0.105	0.147	--			--			--
$f_{RT}$	--	1.000		--	0.850		--	0.992		--	1.000	0.850
$f_{Lpb}$	1.000	1.000	--	1.000	1.000	--		1.000	--	1.000	1.000	--
$f_{Rpb}$	--	1.000		--	1.000		--	1.000		--	1.000	1.000
Adjusted Satflow	1770	5587		1770	4750			1755		1770	1863	1583
Secondary Adjusted Satflow	86	243	--	196	699	--			--			--

## CAPACITY AND LOS WORKSHEET

### General Information

Project Description *Coral Reef Commons*

### Capacity Analysis

	EB			WB			NB			SB		
Lane Group	L	TR		L	TR		LTR		L	LT	R	
Adjusted Flow Rate	147	1553		4	3060		40		44	43	134	
Satflow Rate	1770	5587		1770	4750		1755		1770	1863	1583	
Lost Time	2.0	2.0		2.0	2.0		2.0		2.0	2.0	2.0	
Green Ratio	0.71	0.58		0.71	0.58		0.08		0.12	0.12	0.12	
Lane Group Capacity	230	3240		297	2755		140		212	224	190	
v/c Ratio	0.64	0.48		0.01	1.11		0.29		0.21	0.19	0.71	
Flow Ratio	0.08	0.28		0.00	0.64		0.02		0.02	0.02	0.08	
Critical Lane Group	Y	N		N	Y		Y		N	N	Y	
Sum Flow Ratios	0.83											
Lost Time/Cycle	20.00											
Critical v/c Ratio	0.96											

### Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Lane Group	L	TR		L	TR		LTR		L	LT	R	
Adjusted Flow Rate	147	1553		4	3060		40		44	43	134	
Lane Group Capacity	230	3240		297	2755		140		212	224	190	
v/c Ratio	0.64	0.48		0.01	1.11		0.29		0.21	0.19	0.71	
Green Ratio	0.71	0.58		0.71	0.58		0.08		0.12	0.12	0.12	
Uniform Delay $d_1$	44.9	18.3		7.0	31.5		65.0		59.6	59.4	63.4	
Delay Factor k	0.22	0.50		0.11	0.50		0.11		0.11	0.11	0.27	
Incremental Delay $d_2$	5.8	0.5		0.0	55.7		1.1		0.5	0.4	11.3	
PF Factor	1.000	0.621		1.000	0.621		1.000		1.000	1.000	1.000	
Control Delay	50.8	11.9		7.0	75.2		66.1		60.1	59.9	74.7	
Lane Group LOS	D	B		A	E		E		E	E	E	
Approach Delay	15.2			75.1			66.1			68.9		
Approach LOS	B			E			E			E		
Intersection Delay	54.5			Intersection LOS						D		

# Future with Project PM Peak Hour

## Improved Signalized Intersection SW 152 Street at SW 127 Avenue

Option 1 – 2L, 1T, 1R for NB

Option 2 – 2L, 1T, 1TR for NB

## New Unsignalized Intersections

SW 152 Street at Access 2

SW 152 Street at Access 3

Note: Due to the limitations of the HCS Software which does not allow for the input of 3 approach lanes in each direction for the two-way stop controlled intersections, the EB and WB through volumes on SW 152 Street have been adjusted to reflect 70% of the through volumes since three lanes exist for the EB and WB directions, and only two lanes can be utilized in the analyses.



## VOLUME ADJUSTMENT AND SATURATION FLOW RATE WORKSHEET

### General Information

Project Description *Coral Reef Commons*

### Volume Adjustment

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Volume	154	1788	254	205	2959	194	463	71	208	82	77	128
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
Adjusted Flow Rate	162	1882	204	216	3115	183	487	75	156	86	81	72
Lane Group	<i>L</i>	<i>T</i>	<i>R</i>	<i>L</i>	<i>TR</i>		<i>L</i>	<i>T</i>	<i>R</i>	<i>L</i>	<i>T</i>	<i>R</i>
Adjusted Flow Rate	162	1882	204	216	3298		487	75	156	86	81	72
Proportion of LT or RT	1.000	--	1.000	1.000	--	0.055	1.000	--	1.000	1.000	--	1.000

### Saturation Flow Rate

Base Satflow	1900	1900	1900	1900	1900		1900	1900	1900	1900	1900	1900
Number of Lanes	1	3	1	1	3	0	2	1	1	1	1	1
$f_w$	1.000	1.000	1.000	1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000
$f_{HV}$	0.980	0.980	0.980	0.980	0.980		0.980	0.980	0.980	0.980	0.980	0.980
$f_g$	1.000	1.000	1.000	1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000
$f_p$	1.000	1.000	1.000	1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000
$f_{bb}$	1.000	1.000	1.000	1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000
$f_a$	1.000	1.000	1.000	1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000
$f_{LU}$	1.000	1.000	1.000	1.000	1.000		0.971	1.000	1.000	1.000	1.000	1.000
$f_{LT}$	0.950	1.000	--	0.950	1.000	--	0.950	1.000	--	0.950	1.000	--
Secondary $f_{LT}$	0.046	0.046	--	0.091	0.091	--	0.384	0.384	--	0.560	0.560	--
$f_{RT}$	--	1.000	0.850	--	0.992		--	1.000	0.850	--	1.000	0.850
$f_{Lpb}$	1.000	1.000	--	1.000	1.000	--	1.000	1.000	--	1.000	1.000	--
$f_{Rpb}$	--	1.000	1.000	--	1.000		--	1.000	1.000	--	1.000	1.000
Adjusted Satflow	1770	5588	1583	1770	5542		3437	1863	1583	1770	1863	1583
Secondary Adjusted Satflow	85	256	--	170	505	--	1390	716	--	1043	1043	--

## CAPACITY AND LOS WORKSHEET

### General Information

Project Description *Coral Reef Commons*

### Capacity Analysis

	EB			WB			NB			SB		
Lane Group	L	T	R	L	TR		L	T	R	L	T	R
Adjusted Flow Rate	162	1882	204	216	3298		487	75	156	86	81	72
Satflow Rate	1770	5588	1583	1770	5542		3437	1863	1583	1770	1863	1583
Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Green Ratio	0.67	0.55	0.70	0.67	0.55		0.29	0.14	0.26	0.29	0.14	0.26
Lane Group Capacity	205	3088	1110	255	3063		649	265	409	390	265	409
v/c Ratio	0.79	0.61	0.18	0.85	1.08		0.75	0.28	0.38	0.22	0.31	0.18
Flow Ratio	0.09	0.34	0.13	0.09	0.60		0.12	0.04	0.10	0.05	0.04	0.05
Critical Lane Group	N	N	N	Y	Y		Y	N	N	N	N	N
Sum Flow Ratios	0.86											
Lost Time/Cycle	12.90											
Critical v/c Ratio	0.94											

### Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Lane Group	L	T	R	L	TR		L	T	R	L	T	R
Adjusted Flow Rate	162	1882	204	216	3298		487	75	156	86	81	72
Lane Group Capacity	205	3088	1110	255	3063		649	265	409	390	265	409
v/c Ratio	0.79	0.61	0.18	0.85	1.08		0.75	0.28	0.38	0.22	0.31	0.18
Green Ratio	0.67	0.55	0.70	0.67	0.55		0.29	0.14	0.26	0.29	0.14	0.26
Uniform Delay $d_1$	49.4	22.6	7.7	27.8	33.6		44.1	57.5	45.7	39.8	57.7	43.2
Delay Factor k	0.34	0.50	0.50	0.38	0.50		0.31	0.11	0.11	0.11	0.11	0.11
Incremental Delay $d_2$	18.6	0.9	0.4	22.4	41.4		4.9	0.6	0.6	0.3	0.7	0.2
PF Factor	1.000	0.676	1.000	1.000	0.676		1.000	1.000	1.000	1.000	1.000	1.000
Control Delay	68.0	16.2	8.0	50.2	64.1		49.0	58.1	46.3	40.1	58.4	43.4
Lane Group LOS	E	B	A	D	E		D	E	D	D	E	D
Approach Delay	19.2			63.2			49.4			47.3		
Approach LOS	B			E			D			D		
Intersection Delay	46.5			Intersection LOS						D		



## VOLUME ADJUSTMENT AND SATURATION FLOW RATE WORKSHEET

### General Information

Project Description *Coral Reef Commons*

### Volume Adjustment

	EB			WB			NB			SB		
	LT	TH	RT									
Volume	154	1788	254	205	2959	194	463	71	208	82	77	128
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
Adjusted Flow Rate	162	1882	204	216	3115	183	487	75	198	86	81	72
Lane Group	L	T	R	L	TR		L	TR		L	T	R
Adjusted Flow Rate	162	1882	204	216	3298		487	273		86	81	72
Proportion of LT or RT	1.000	--	1.000	1.000	--	0.055	1.000	--	0.725	1.000	--	1.000

### Saturation Flow Rate

Base Satflow	1900	1900	1900	1900	1900		1900	1900		1900	1900	1900
Number of Lanes	1	3	1	1	3	0	2	2	0	1	1	1
$f_w$	1.000	1.000	1.000	1.000	1.000		1.000	1.000		1.000	1.000	1.000
$f_{HV}$	0.980	0.980	0.980	0.980	0.980		0.980	0.980		0.980	0.980	0.980
$f_g$	1.000	1.000	1.000	1.000	1.000		1.000	1.000		1.000	1.000	1.000
$f_p$	1.000	1.000	1.000	1.000	1.000		1.000	1.000		1.000	1.000	1.000
$f_{bb}$	1.000	1.000	1.000	1.000	1.000		1.000	1.000		1.000	1.000	1.000
$f_a$	1.000	1.000	1.000	1.000	1.000		1.000	1.000		1.000	1.000	1.000
$f_{LU}$	1.000	1.000	1.000	1.000	1.000		0.971	0.952		1.000	1.000	1.000
$f_{LT}$	0.950	1.000	--	0.950	1.000	--	0.950	1.000	--	0.950	1.000	--
Secondary $f_{LT}$	0.046	0.046	--	0.091	0.091	--	0.384	0.384	--	0.337	0.337	--
$f_{RT}$	--	1.000	0.850	--	0.992		--	0.891		--	1.000	0.850
$f_{Lpb}$	1.000	1.000	--	1.000	1.000	--	1.000	1.000	--	1.000	1.000	--
$f_{Rpb}$	--	1.000	1.000	--	1.000		--	1.000		--	1.000	1.000
Adjusted Satflow	1770	5588	1583	1770	5542		3437	3161		1770	1863	1583
Secondary Adjusted Satflow	85	256	--	170	505	--	1390	1214	--	627	627	--

## CAPACITY AND LOS WORKSHEET

### General Information

Project Description *Coral Reef Commons*

### Capacity Analysis

	EB			WB			NB			SB		
Lane Group	L	T	R	L	TR		L	TR		L	T	R
Adjusted Flow Rate	162	1882	204	216	3298		487	273		86	81	72
Satflow Rate	1770	5588	1583	1770	5542		3437	3161		1770	1863	1583
Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Green Ratio	0.67	0.55	0.70	0.67	0.55		0.29	0.14		0.29	0.14	0.26
Lane Group Capacity	205	3088	1110	255	3063		649	449		319	265	409
v/c Ratio	0.79	0.61	0.18	0.85	1.08		0.75	0.61		0.27	0.31	0.18
Flow Ratio	0.09	0.34	0.13	0.09	0.60		0.12	0.09		0.05	0.04	0.05
Critical Lane Group	N	N	N	Y	Y		Y	Y		N	N	N
Sum Flow Ratios	0.89											
Lost Time/Cycle	17.20											
Critical v/c Ratio	1.00											

### Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Lane Group	L	T	R	L	TR		L	TR		L	T	R
Adjusted Flow Rate	162	1882	204	216	3298		487	273		86	81	72
Lane Group Capacity	205	3088	1110	255	3063		649	449		319	265	409
v/c Ratio	0.79	0.61	0.18	0.85	1.08		0.75	0.61		0.27	0.31	0.18
Green Ratio	0.67	0.55	0.70	0.67	0.55		0.29	0.14		0.29	0.14	0.26
Uniform Delay $d_1$	49.4	22.6	7.7	27.8	33.6		44.1	60.4		40.1	57.7	43.2
Delay Factor k	0.34	0.50	0.50	0.38	0.50		0.31	0.19		0.11	0.11	0.11
Incremental Delay $d_2$	18.6	0.9	0.4	22.4	41.4		4.9	2.4		0.5	0.7	0.2
PF Factor	1.000	0.676	1.000	1.000	0.676		1.000	1.000		1.000	1.000	1.000
Control Delay	68.0	16.2	8.0	50.2	64.1		49.0	62.8		40.5	58.4	43.4
Lane Group LOS	E	B	A	D	E		D	E		D	E	D
Approach Delay	19.2			63.2			54.0			47.4		
Approach LOS	B			E			D			D		
Intersection Delay	47.0			Intersection LOS						D		

## TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	CAS	Intersection	SW 152 Street at Access 2
Agency/Co.	Cathy Sweetapple & Associates	Jurisdiction	Miami-Dade County
Date Performed	11/27/2011	Analysis Year	Future With Project
Analysis Time Period	PM Peak Hour		
Project Description <i>With 70% EB and WB Approach Volumes</i>			
East/West Street: SW 152 Street		North/South Street: Access 2	
Intersection Orientation: East-West		Study Period (hrs): 0.25	

Vehicle Volumes and Adjustments						
Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		1467	127	50	2450	
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	1544	133	52	2578	0
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type	<i>Raised curb</i>					
RT Channelized			0			0
Lanes	0	2	1	1	2	0
Configuration		T	R	L	T	
Upstream Signal		1			1	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)			101			
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	0	106	0	0	0
Percent Heavy Vehicles	2	2	2	2	2	2
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	1	0	0	0
Configuration			R			

Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L			R			
v (veh/h)		52			106			
C (m) (veh/h)		378			398			
v/c		0.14			0.27			
95% queue length		0.47			1.06			
Control Delay (s/veh)		16.0			17.3			
LOS		C			C			
Approach Delay (s/veh)	--	--	17.3					
Approach LOS	--	--	C					

## TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	CAS	Intersection	SW 152 Street at Access 3
Agency/Co.	Cathy Sweetapple & Associates	Jurisdiction	Miami-Dade County
Date Performed	2/5/2012	Analysis Year	Future With Project
Analysis Time Period	PM Peak Hour		
Project Description <i>With 70% EB and WB Approach Volumes</i>			
East/West Street: SW 152 Street		North/South Street: Access 3	
Intersection Orientation: East-West		Study Period (hrs): 0.25	

Vehicle Volumes and Adjustments						
Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		1562	250	97	2349	
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	1644	263	102	2472	0
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type	<i>Raised curb</i>					
RT Channelized			0			0
Lanes	0	2	0	1	2	0
Configuration		T	TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)			148			
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	0	155	0	0	0
Percent Heavy Vehicles	2	2	2	2	2	2
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	1	0	0	0
Configuration			R			

Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L			R			
v (veh/h)		102			155			
C (m) (veh/h)		308			312			
v/c		0.33			0.50			
95% queue length		1.41			2.61			
Control Delay (s/veh)		22.4			27.4			
LOS		C			D			
Approach Delay (s/veh)	--	--	27.4					
Approach LOS	--	--	D					

CATHY SWEETAPPLE & ASSOCIATES  
TRANSPORTATION AND MOBILITY PLANNING

**Coral Reef Commons – SW 152 Street at SW 127 Avenue  
AM Peak Hour Intersection Analyses to Evaluate Dual Southbound Left Turn Lanes**

**Introduction and Overview**

During the November 2013 review of the signalization design plans for the intersection of SW 152 Street and SW 127 Avenue, the Miami-Dade County PWWM Signs and Signals Division requested that the Applicant incorporate a second SB Left Turn Lane into the intersection design to address existing traffic patterns, directional demand during the AM Peak Hour and dual left turn movements similar to existing conditions. The Applicant had previously studied this intersection as part of the land use process to develop lane geometry that would serve the mixed use Coral Reef Commons project during the PM peak hour. Based on conceptual plans, the Applicant developed improved signal timing that would maximize the benefits of the proposed geometric improvements with protected/permissive timing. During the development of the detailed intersection design plans, the signal phasing was further modified by the Applicant’s design engineer based upon final geometric conditions. The signal phasing for the SB movement was established with a protected only left turn (not protective/permissive). Given the need for protected only left turns, Miami-Dade County then requested a second SB left turn lane that could be carved out of the existing median on the north side of the intersection to accommodate the AM traffic demand.

As the Applicant began the design process to incorporate the second southbound left turn lane on the north leg of the intersection, they also collected AM peak hour turning movements (on 12/5/2013) at the intersection of SW 152 Street and SW 127 Avenue, and began to analyze the AM peak hour for existing and Year 2016 future traffic conditions for the four analysis scenarios outlined in **Table 1** below.

Table 1 – Intersection Analysis Scenarios at SW 152 St and SW 127 Ave	
<b>Scenario 1</b>	Existing AM Peak Hour Traffic Conditions with the Existing Signal Timing and the Existing Split Phasing;
<b>Scenario 2</b>	Future AM Peak Hour with Project with Geometric Improvements proposed by Coral Reef Commons and with the Existing Split Phasing and improved Timing;
<b>Scenario 3</b>	Future AM Peak Hour with Project with Geometric Improvements proposed by Coral Reef Commons and with the Proposed “No-Split” Phasing and improved Timing;
<b>Scenario 4</b>	Future AM Peak Hour with Project with Geometric Improvements, the Proposed “No-Split” Phasing, improved Timing <u>plus</u> the addition of the Second SB Left Turn Lane.

A summary of the intersection improvements (being provided by the Applicant) which are incorporated into the analyses are outlined in **Table 2** below.

Table 2 – Existing and Future Geometry (by Coral Reef Commons ) at SW 152 St and SW 127 Ave			
Movement	Existing Geometry	Future Geometry By Coral Reef Commons	Add’l Geometry requested by MDC
EB	1L, 2T, 1TR	1L, 3T, 1R	
WB	1L, 2T, 1TR	1L, 2T, 1TR – Extended Storage for WBL	
NB	1LTR	2L, 1T, 1R	
SB	1L, 1LT, 1R	1L, 1T, 1R	2 <sup>nd</sup> SBL – 150’ Storage for both SB Lefts

A summary of the intersection analysis results are provided on **Tables 3 and 4** below. The intersection analyses, data collected and support material are provided in **Attachment 1** as outlined below:

- Scenario 1 - AM Peak Hour Existing Conditions - HSC Output File
- Scenario 2 - AM Peak Hour Future with Project – Split Phase – HCS Output File
- Scenario 3 - AM Peak Hour Future with Project – No Split Phase – HCS Output File
- Scenario 4 - AM Peak Hour Future with Project – No Split Phase and the 2<sup>nd</sup> SBL – HCS Output File
- Signal Timing Sheet from Miami-Dade County – Asset Number 5174
- AM Peak Hour Turning Movement Data Collected by Applicant on 12/5/2013
- AM Peak Hour Intersection Turning Movement Worksheet

**Analysis Results**

The summary provided in **Table 3** below demonstrates that both the geometric improvements and the signal phasing and timing improvements (as proposed by the Applicant) result in substantial improvements to the overall intersection LOS, and serve to substantially reduce delay for the NB and SB movements. Even **Scenario 2** – with the **Split Phasing** - shows dramatic improvements for northbound and southbound based upon the geometric improvements and the overlap signal phases provided for the northbound and southbound exclusive right turn lanes. With the additional change to **No Split Phasing** as demonstrated in **Scenario 3** – and with the Protected Left Turn only timing for the NB and SB movements, further improvements to the overall intersection LOS are achieved along with additional **reductions in delay**. Key points for **Scenario 3** are summarized below:

- **Scenario 3** demonstrates that an overall LOS D is achieved for the intersection and an overall LOS E is achieved for the SB left turn movement. This segment of SW 152 Street has an adopted level of service of **EE** which reflects a standard equal to 120% of LOS E based upon extraordinary or enhanced transit service between the Infill Area and the UDB (see adopted LOS Standards in **Attachment 2**). The transit service along SW 152 Street from Route 252 – the Coral Reef Max provides 20 minute transit service during the peak hours and provides direct connections to the Park and Ride at the Turnpike, the Park and Ride at US-1, the Busway Corridor and the Dadeland South Metrorail Station. **Scenario 3** improves the intersection operations to a point which meets and exceeds the applicable adopted LOS standards.

**Table 3 – Summary of the AM Peak Hour Intersection Analysis Results**

No	SW 152 Street at SW 127 Avenue	Overall Int		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	AM Existing – Split Phase	77.2	E	36.0	D	9.2	A	66.3	E	408.3	F
2	AM Future (w/ Project) – Split Phase	52.0	D	55.7	E	42.3	D	55.8	E	61.6	E
3	AM Future – No Split Phase	48.6	D	51.5	D	40.9	D	51.5	D	56.7	E
4	AM Future – No Split Phase – 2 <sup>nd</sup> SBL	48.3	D	51.5	D	40.9	D	51.5	D	53.4	D

**Table 4 – Summary of the AM Peak Hour Intersection Analysis Results for the Southbound Movement**

No	SW 152 Street at SW 127 Avenue	Int Overall		SB Overall		SB Left		SB Through		SB Right	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	AM Existing – Split Phase	77.2	E	408.3	F	93.4	F	84.3	F	653.6	F
2	AM Future (w/ Project) – Split Phase	52.0	D	61.6	E	79.9	E	55.5	E	44.3	D
3	AM Future – No Split Phase	48.6	D	56.7	E	58.2	E	68.5	E	53.3	D
4	AM Future – No Split Phase – 2 <sup>nd</sup> SBL	48.3	D	53.4	D	51.1	D	68.5	E	53.3	D

- **Scenario 4** reflects all the benefits achieved in **Scenario 3** – and further improves the overall intersection LOS and brings the SB left turn movement to an **LOS D** with the addition of the second SB left turn lane carved out of the existing median on the north side of the intersection. The Applicant has incorporated this second SB left turn lane into their improvement plans, and has submitted the first draft of this plan to Miami-Dade County for review (see **Attachment 3**). Each of the SB left turn lanes provide 150 feet of storage based upon the information provided by the intersection analyses (see the **Back of Queue Worksheet** provided in **Attachment 1** for **Scenario 4**).

**Conclusions**

The analyses provided herein for both **Scenario 3** (No Split Phase and 1 SB Left) and **Scenario 4** (No Split Phase and 2 SB Lefts) demonstrate that acceptable levels of service can be achieved during the AM Peak Hour at the intersection of SW 152 Street and SW 127 Avenue for both the intersection as a whole and for the SB left turn movement. The Applicant has incorporated the second SB left turn lane into their improvement plans and will continue to coordinate with Miami-Dade County during the review process.

# **Attachment 1**

- 1. Intersection Analysis HCS Output Files**
- 2. Signal Timing Sheet**
- 3. AM Pk Hr Turning Movement Count**
- 4. Turning Movement Worksheet**

**SHORT REPORT**

General Information				Site Information			
Analyst	LSB			Intersection	SW 152 St at SW 127 Ave		
Agency or Co.	Cathy Sweetapple & Associates			Area Type	All other areas		
Date Performed	1/28/2014			Jurisdiction	Miami-Dade County		
Time Period	AM Peak Hour			Analysis Year	Existing		

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT									
Number of Lanes	1	3	0	1	3	0	0	1	0	1	1	1
Lane Group	L	TR		L	TR			LTR		L	LT	R
Volume (vph)	244	1928	7	18	1292	83	2	0	1	241	1	315
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
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
Pretimed/Actuated (P/A)	A	P	P	A	P	P	A	A	A	A	A	A
Startup Lost Time	2.0	2.0		2.0	2.0			2.0		2.0	2.0	2.0
Extension of Effective Green	2.0	2.0		2.0	2.0			2.0		2.0	2.0	2.0
Arrival Type	3	4		3	4			4		3	4	3
Unit Extension	3.0	3.0		3.0	3.0			3.0		3.0	3.0	3.0
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0			12.0		12.0	12.0	12.0
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0		0	0			0		0	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	Excl. Left	EW Perm	03	04	SB Only	NB Only	07	08
Timing	G = 12.0	G = 100.0	G = 0.0	G = 0.0	G = 15.0	G = 15.0	G = 0.0	G = 0.0
	Y = 3	Y = 5.3	Y = 0	Y = 0	Y = 5.3	Y = 5.3	Y = 0	Y = 0
Duration of Analysis (hrs) = 0.25						Cycle Length C = 160.9		

Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	257	2036		19	1447			3		130	125	332
Lane Group Capacity	188	3471		260	2952			164		165	174	148
v/c Ratio	1.37	0.59		0.07	0.49			0.02		0.79	0.72	2.24
Green Ratio	0.73	0.62		0.73	0.62			0.09		0.09	0.09	0.09
Uniform Delay d <sub>1</sub>	45.6	18.1		7.4	16.6			66.3		71.4	70.9	73.0
Delay Factor k	0.50	0.50		0.11	0.50			0.11		0.33	0.28	0.50
Incremental Delay d <sub>2</sub>	195.3	0.7		0.1	0.6			0.0		22.0	13.4	580.6
PF Factor	1.000	0.521		1.000	0.521			1.000		1.000	1.000	1.000
Control Delay	240.9	10.2		7.6	9.2			66.3		93.4	84.3	653.6
Lane Group LOS	F	B		A	A			E		F	F	F
Approach Delay	36.0			9.2			66.3			408.3		
Approach LOS	D			A			E			F		
Intersection Delay	77.2			Intersection LOS						E		

## SHORT REPORT

General Information				Site Information			
Analyst	LSB			Intersection	SW 152 St at SW 127 Ave		
Agency or Co.	Cathy Sweetapple & Associates			Area Type	All other areas		
Date Performed	1/28/2014			Jurisdiction	Miami-Dade County		
Time Period	AM Peak Hour			Analysis Year	Future - Split Phase		

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	3	1	1	3	0	2	1	1	1	1	1
Lane Group	L	T	R	L	TR		L	T	R	L	T	R
Volume (vph)	257	2035	161	142	1403	86	254	42	162	251	42	328
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
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
Pretimed/Actuated (P/A)	A	P	P	A	P	P	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Arrival Type	3	4	3	3	4		3	4	3	3	4	3
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	50	0	0	75
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	
Phasing	Excl. Left	EW Perm	03	04	SB Only	NB Only	07	08				
Timing	G = 24.0	G = 64.0	G = 0.0	G = 0.0	G = 29.0	G = 25.0	G = 0.0	G = 0.0				
	Y = 3	Y = 5.3	Y = 0	Y = 0	Y = 5.3	Y = 5.3	Y = 0	Y = 0				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 160.9						

Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	Adjusted Flow Rate	271	2142	169	149	1568		267	44	118	264	44
Lane Group Capacity	309	2223	630	348	1889		534	273	534	319	336	521
v/c Ratio	0.88	0.96	0.27	0.43	0.83		0.50	0.16	0.22	0.83	0.13	0.51
Green Ratio	0.58	0.40	0.40	0.58	0.40		0.16	0.16	0.34	0.18	0.18	0.33
Uniform Delay d <sub>1</sub>	54.1	47.3	32.7	28.9	43.6		62.2	58.9	38.2	63.5	55.4	43.5
Delay Factor k	0.40	0.50	0.50	0.11	0.50		0.11	0.11	0.11	0.37	0.11	0.12
Incremental Delay d <sub>2</sub>	23.6	12.3	1.0	0.8	4.4		0.7	0.3	0.2	16.4	0.2	0.8
PF Factor	1.000	0.897	1.000	1.000	0.897		1.000	1.000	1.000	1.000	1.000	1.000
Control Delay	77.7	54.7	33.7	29.8	43.5		63.0	59.1	38.4	79.9	55.5	44.3
Lane Group LOS	E	D	C	C	D		E	E	D	E	E	D
Approach Delay	55.7			42.3			55.8			61.6		
Approach LOS	E			D			E			E		
Intersection Delay	52.0			Intersection LOS						D		

**SHORT REPORT**

General Information				Site Information			
Analyst	LSB			Intersection	SW 152 St at SW 127 Ave		
Agency or Co.	Cathy Sweetapple & Associates			Area Type	All other areas		
Date Performed	1/28/2014			Jurisdiction	Miami-Dade County		
Time Period	AM Peak Hour			Analysis Year	Future - No Split Phase		

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	3	1	1	3	0	2	1	1	1	1	1
Lane Group	L	T	R	L	TR		L	T	R	L	T	R
Volume (vph)	257	2035	161	142	1403	86	254	42	162	251	42	328
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
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
Pretimed/Actuated (P/A)	A	P	P	A	P	P	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Arrival Type	3	4	3	3	4		3	4	3	3	4	3
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	50	0	0	75
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	
Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08				
Timing	G = 24.0	G = 65.0	G = 0.0	G = 0.0	G = 38.0	G = 15.0	G = 0.0	G = 0.0				
	Y = 3	Y = 5.3	Y = 0	Y = 0	Y = 5.3	Y = 5.3	Y = 0	Y = 0				
Duration of Analysis (hrs) = 0.25							Cycle Length C = 160.9					

Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	271	2142	169	149	1568		267	44	118	264	44	266
Lane Group Capacity	309	2257	1065	350	1919		812	164	436	418	174	436
v/c Ratio	0.88	0.95	0.16	0.43	0.82		0.33	0.27	0.27	0.63	0.25	0.61
Green Ratio	0.59	0.40	0.67	0.59	0.40		0.24	0.09	0.28	0.24	0.09	0.28
Uniform Delay d <sub>1</sub>	53.9	46.3	9.6	28.3	42.7		50.9	67.8	45.7	55.2	67.7	50.8
Delay Factor k	0.40	0.50	0.50	0.11	0.50		0.11	0.11	0.11	0.21	0.11	0.20
Incremental Delay d <sub>2</sub>	23.6	10.3	0.3	0.8	4.0		0.2	0.9	0.3	3.1	0.8	2.5
PF Factor	1.000	0.890	1.000	1.000	0.890		1.000	1.000	1.000	1.000	1.000	1.000
Control Delay	77.5	51.5	9.9	29.1	42.0		51.1	68.7	46.0	58.2	68.5	53.3
Lane Group LOS	E	D	A	C	D		D	E	D	E	E	D
Approach Delay	51.5			40.9			51.5			56.7		
Approach LOS	D			D			D			E		
Intersection Delay	48.6			Intersection LOS						D		

## SHORT REPORT

General Information				Site Information			
Analyst	LSB			Intersection	SW 152 St at SW 127 Ave		
Agency or Co.	Cathy Sweetapple & Associates			Area Type	All other areas		
Date Performed	1/28/2014			Jurisdiction	Miami-Dade County		
Time Period	AM Peak Hour			Analysis Year	Future - 2 SBL		

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	3	1	1	3	0	2	1	1	2	1	1
Lane Group	L	T	R	L	TR		L	T	R	L	T	R
Volume (vph)	257	2035	161	142	1403	86	254	42	162	251	42	328
% Heavy Vehicles	2	2	2	2	2	2	2	2	2	2	2	2
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
Pretimed/Actuated (P/A)	A	P	P	A	P	P	A	A	A	A	A	A
Startup Lost Time	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Arrival Type	3	4	3	3	4		3	4	3	3	4	3
Unit Extension	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	50	0	0	75
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0	0	0	0		0	0	0	0	0	0
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	
Phasing	Excl. Left	EW Perm	03	04	Excl. Left	Thru & RT	07	08				
Timing	G = 24.0	G = 65.0	G = 0.0	G = 0.0	G = 38.0	G = 15.0	G = 0.0	G = 0.0				
	Y = 3	Y = 5.3	Y = 0	Y = 0	Y = 5.3	Y = 5.3	Y = 0	Y = 0				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 160.9						

Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	271	2142	169	149	1568		267	44	118	264	44	266
Lane Group Capacity	309	2257	1065	350	1919		812	164	436	812	174	436
v/c Ratio	0.88	0.95	0.16	0.43	0.82		0.33	0.27	0.27	0.33	0.25	0.61
Green Ratio	0.59	0.40	0.67	0.59	0.40		0.24	0.09	0.28	0.24	0.09	0.28
Uniform Delay d <sub>1</sub>	53.9	46.3	9.6	28.3	42.7		50.9	67.8	45.7	50.8	67.7	50.8
Delay Factor k	0.40	0.50	0.50	0.11	0.50		0.11	0.11	0.11	0.11	0.11	0.20
Incremental Delay d <sub>2</sub>	23.6	10.3	0.3	0.8	4.0		0.2	0.9	0.3	0.2	0.8	2.5
PF Factor	1.000	0.890	1.000	1.000	0.890		1.000	1.000	1.000	1.000	1.000	1.000
Control Delay	77.5	51.5	9.9	29.1	42.0		51.1	68.7	46.0	51.1	68.5	53.3
Lane Group LOS	E	D	A	C	D		D	E	D	D	E	D
Approach Delay	51.5			40.9			51.5			53.4		
Approach LOS	D			D			D			D		
Intersection Delay	48.3			Intersection LOS						D		

**BACK-OF-QUEUE WORKSHEET****General Information**Project Description *Coral Reef Commons***Average Back of Queue**

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Lane Group	<i>L</i>	<i>T</i>	<i>R</i>	<i>L</i>	<i>TR</i>		<i>L</i>	<i>T</i>	<i>R</i>	<i>L</i>	<i>T</i>	<i>R</i>
Initial Queue/Lane	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Flow Rate/Lane Group	271	2142	169	149	1568		267	44	118	264	44	266
Satflow/Lane	515	1862	1583	597	1583		1770	1755	1583	1770	1863	1583
Capacity/Lane Group	309	2257	1065	350	1919		812	164	436	812	174	436
Flow Ratio	0.5	0.4	0.1	0.2	0.3		0.1	0.0	0.1	0.1	0.0	0.2
v/c Ratio	0.88	0.95	0.16	0.43	0.82		0.33	0.27	0.27	0.33	0.25	0.61
I Factor	1.000	1.000	1.000	1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000
Arrival Type	3	4	3	3	4		3	4	3	3	4	3
Platoon Ratio	1.00	1.33	1.00	1.00	1.33		1.00	1.33	1.00	1.00	1.33	1.00
PF Factor	1.00	0.98	1.00	1.00	0.93		1.00	0.97	1.00	1.00	0.97	1.00
Q <sub>1</sub>	5.8	30.1	2.8	2.9	19.2		5.1	1.8	4.1	5.0	1.8	10.4
k <sub>B</sub>	0.5	1.4	1.8	0.5	1.3		0.6	0.3	0.6	0.6	0.3	0.6
Q <sub>2</sub>	2.3	9.1	0.3	0.4	4.3		0.3	0.1	0.2	0.3	0.1	0.9
Q Average	8.0	39.2	3.1	3.3	23.5		5.3	1.9	4.3	5.3	1.9	11.2

**Percentile Back of Queue (95th percentile)**

f <sub>B</sub> %	1.9	1.6	2.1	2.0	1.6		1.9	2.0	2.0	1.9	2.0	1.8
Back of Queue	15.1	62.7	6.6	6.6	37.9		10.4	3.9	8.6	10.3	3.9	20.5

**Queue Storage Ratio**

Queue Spacing	25.0	25.0	25.0	25.0	25.0		25.0	25.0	25.0	25.0	25.0	25.0
Queue Storage	225	2100	600	300	1125		450	225	225	300	300	300
Average Queue Storage Ratio	0.9	0.5	0.1	0.3	0.5		0.3	0.2	0.5	0.4	0.2	0.9
95% Queue Storage Ratio	1.7	0.7	0.3	0.6	0.8		0.6	0.4	1.0	0.9	0.3	1.7

## TOD Schedule Report

for 5174: Coral Reef Dr&SW 127 Av

Print Date:  
9/10/2011

Print Time:  
3:12 AM

<u>Asset</u>	<u>Intersection</u>	<u>TOD Schedule</u>	<u>Op Mode</u>	<u>Plan #</u>	<u>Cycle</u>	<u>Offset</u>	<u>TOD Setting</u>	<u>Active PhaseBank</u>	<u>Active Maximum</u>
5174	Coral Reef Dr&SW 127 Av	DOW-7		N/A	0	0	N/A	0	Max 0

### Splits

<u>PH 1</u>	<u>PH 2</u>	<u>PH 3</u>	<u>PH 4</u>	<u>PH 5</u>	<u>PH 6</u>	<u>PH 7</u>	<u>PH 8</u>
EBL	WBT	SBT	NBT	WBL	EBT	-	-
0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	<u>Walk</u>			<u>Don't Walk</u>			<u>Min Initial</u>			<u>Veh Ext</u>			<u>Max Limit</u>			<u>Max 2</u>			<u>Yellow</u>	<u>Red</u>			
	Phase Bank																						
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3					
1 EBL	0	-	0	0	-	0	5	-	5	5	2	-	2	7	-	5	7	15	-	7	10	3	0
2 WBT	0	-	0	0	-	0	16	-	16	16	1	-	1	30	-	30	56	0	-	30	56	4	1.3
3 SBT	0	-	0	0	-	0	7	-	7	7	3.5	-	3.5	14	-	15	14	25	-	20	20	4	1.3
4 NBT	0	-	0	0	-	0	7	-	7	7	2.5	-	2.5	7	-	7	7	25	-	7	12	4	1.3
5 WBL	0	-	0	0	-	0	5	-	5	5	2	-	2	7	-	5	7	15	-	7	10	3	0
6 EBT	0	-	0	0	-	0	16	-	16	16	1	-	1	30	-	30	56	0	-	30	56	4	1.3
7 -	0	-	0	0	-	0	0	-	0	0	0	-	0	0	-	0	0	0	-	0	0	0	0
8 -	0	-	0	0	-	0	0	-	0	0	0	-	0	0	-	0	0	0	-	0	0	0	0

Last In Service Date: unknown

<u>Permitted Phases</u>	
<b>12345678</b>	
Default	123456--
External Permit 0	-----
External Permit 1	123456--
External Permit 2	123456--

<u>Current</u> TOD Schedule	<u>Plan</u>	<u>Cycle</u>	<u>Green Time</u>								<u>Ring Offset</u>	<u>Offset</u>
			1 EBL	2 WBT	3 SBT	4 NBT	5 WBL	6 EBT	7 -	8 -		
2		120	11	67	13	11	11	67	0	0	0	27
3		120	11	67	13	11	11	67	0	0	0	75
4		90	11	37	13	11	11	37	0	0	0	29
5		100	11	47	13	11	11	47	0	0	0	0
6		140	12	80	18	12	12	80	0	0	0	2
8		90	11	37	13	11	11	37	0	0	0	29
10		120	11	58	22	11	11	58	0	0	0	54
11		110	13	45	21	13	13	45	0	0	0	22
12		140	12	80	18	12	12	80	0	0	0	2
14		100	12	40	18	12	12	40	0	0	0	18
15		130	12	70	15	15	12	70	0	0	0	67
16		160	12	100	15	15	12	100	0	0	0	133
17		140	12	80	13	17	12	80	0	0	0	122
18		90	12	30	15	15	12	30	0	0	0	21
20		150	15	87	18	12	15	87	0	0	0	38

<u>Local TOD Schedule</u>		
<u>Time</u>	<u>Plan</u>	<u>DOW</u>
0000	Free	Su M T W Th F S
0030	Flash	M T W Th
0100	Flash	Su F S
0500	Free	M T W Th F
0600	Free	Su S
0600	16	M T W Th F
0630	10	S
0800	11	Su
0900	10	M T W Th F
1000	10	Su
1330	15	Su M T W Th F S
1530	17	Su M T W Th F S
1615	20	M T W Th F
1900	3	Su S
2000	4	Su S
2000	3	M T W Th F
2200	Free	Su S
2230	Free	M T W Th F

<u>Current Time of Day Function</u>			
<u>Time</u>	<u>Function</u>	<u>Settings *</u>	<u>Day of Week</u>
0000	TOD OUTPUTS	-----1	Su M T W Th F S
0100	TOD OUTPUTS	-----	Su F S
0600	TOD OUTPUTS	-----1	Su S
0700	TOD OUTPUTS	-----	S
2200	TOD OUTPUTS	-----2-	Su S

<u>Local Time of Day Function</u>			
<u>Time</u>	<u>Function</u>	<u>Settings *</u>	<u>Day of Week</u>
0000	TOD OUTPUTS	-----1	Su M T W Th F S
0030	TOD OUTPUTS	-----	M T W Th
0100	TOD OUTPUTS	-----	Su F S
0500	TOD OUTPUTS	-----1	M T W Th F
0600	TOD OUTPUTS	-----1	Su S
0600	TOD OUTPUTS	-----	M T W Th F
0700	TOD OUTPUTS	-----	S
0800	TOD OUTPUTS	-----	Su
2200	TOD OUTPUTS	-----2-	Su S
2230	TOD OUTPUTS	-----2-	M T W Th F

<u>* Settings</u>
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

***No Calendar Defined/Enabled***

SW 152ND STREET & SW 127TH AVENUE  
 MIAMI, FLORIDA  
 COUNTED BY: DAWN KINGSBURY  
 SIGNALIZED

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

Site Code : 00130214  
 Start Date: 12/05/13  
 File I.D. : 152S127A  
 Page : 1

ALL VEHICLES

Date	SW 127TH AVENUE From North				SW 152ND STREET From East				SW 127TH AVENUE From South				SW 152ND STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
07:00	0	52	0	30	0	3	249	13	0	0	0	0	2	27	512	0	888
07:15	0	50	1	50	0	6	296	23	0	0	0	0	0	29	431	3	889
07:30	0	74	1	73	0	2	304	25	0	0	0	0	0	46	466	1	992
07:45	0	62	0	81	0	4	319	15	0	1	0	1	0	57	460	2	1002
Hr Total	0	238	2	234	0	15	1168	76	0	1	0	1	2	159	1869	6	3771
08:00	0	56	0	83	0	4	339	22	0	1	0	0	0	75	500	1	1081
08:15	0	49	0	78	0	8	330	21	0	0	0	0	1	65	502	3	1057
08:30	0	34	0	46	0	5	351	16	0	0	0	1	0	44	489	2	988
08:45	0	30	0	37	0	2	342	14	0	0	0	0	0	36	481	0	942
Hr Total	0	169	0	244	0	19	1362	73	0	1	0	1	1	220	1972	6	4068
*TOTAL*	0	407	2	478	0	34	2530	149	0	2	0	2	3	379	3841	12	7839

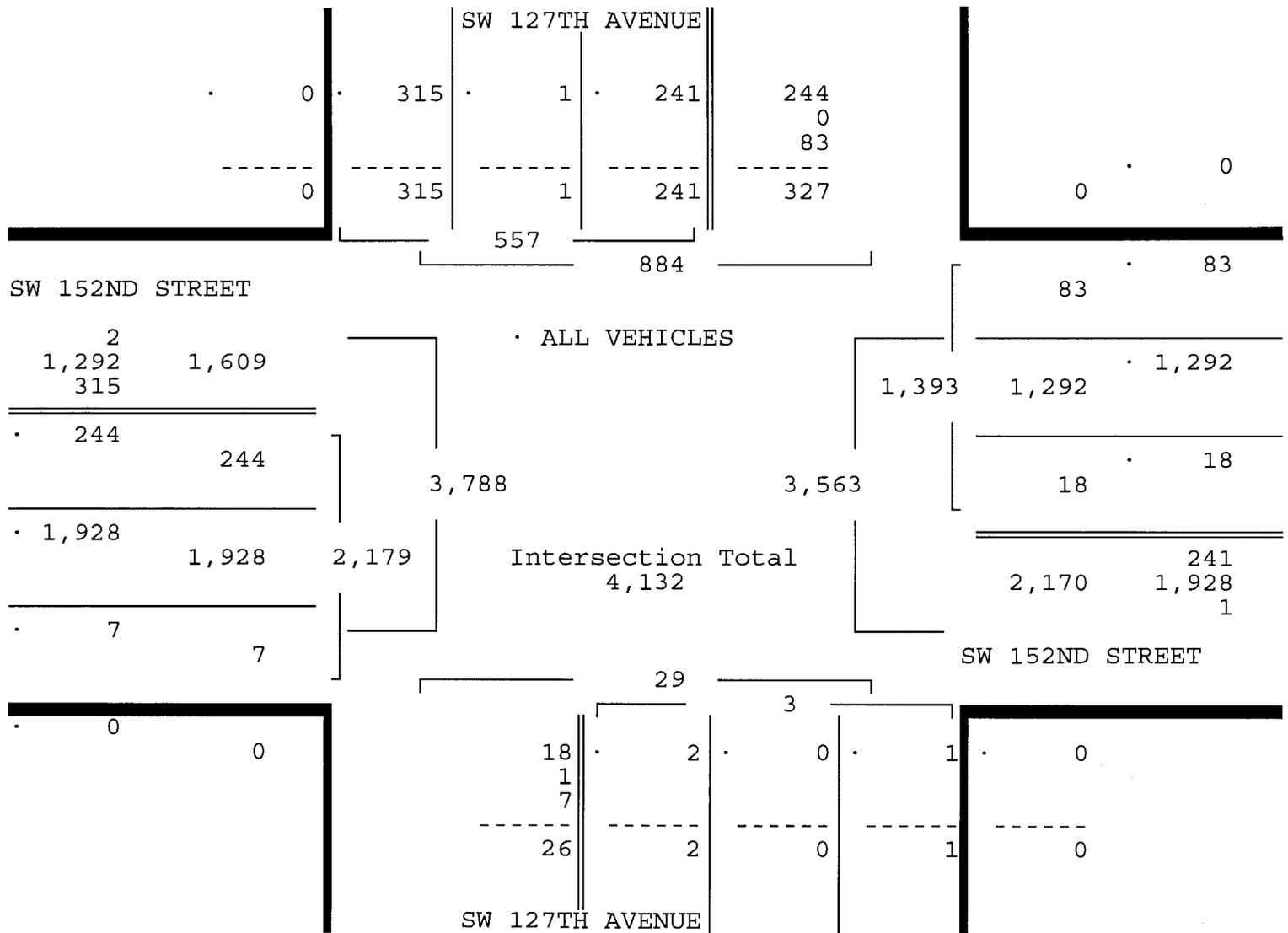
SW 152ND STREET & SW 127TH AVENUE  
 MIAMI, FLORIDA  
 COUNTED BY: DAWN KINGSBURY  
 SIGNALIZED

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

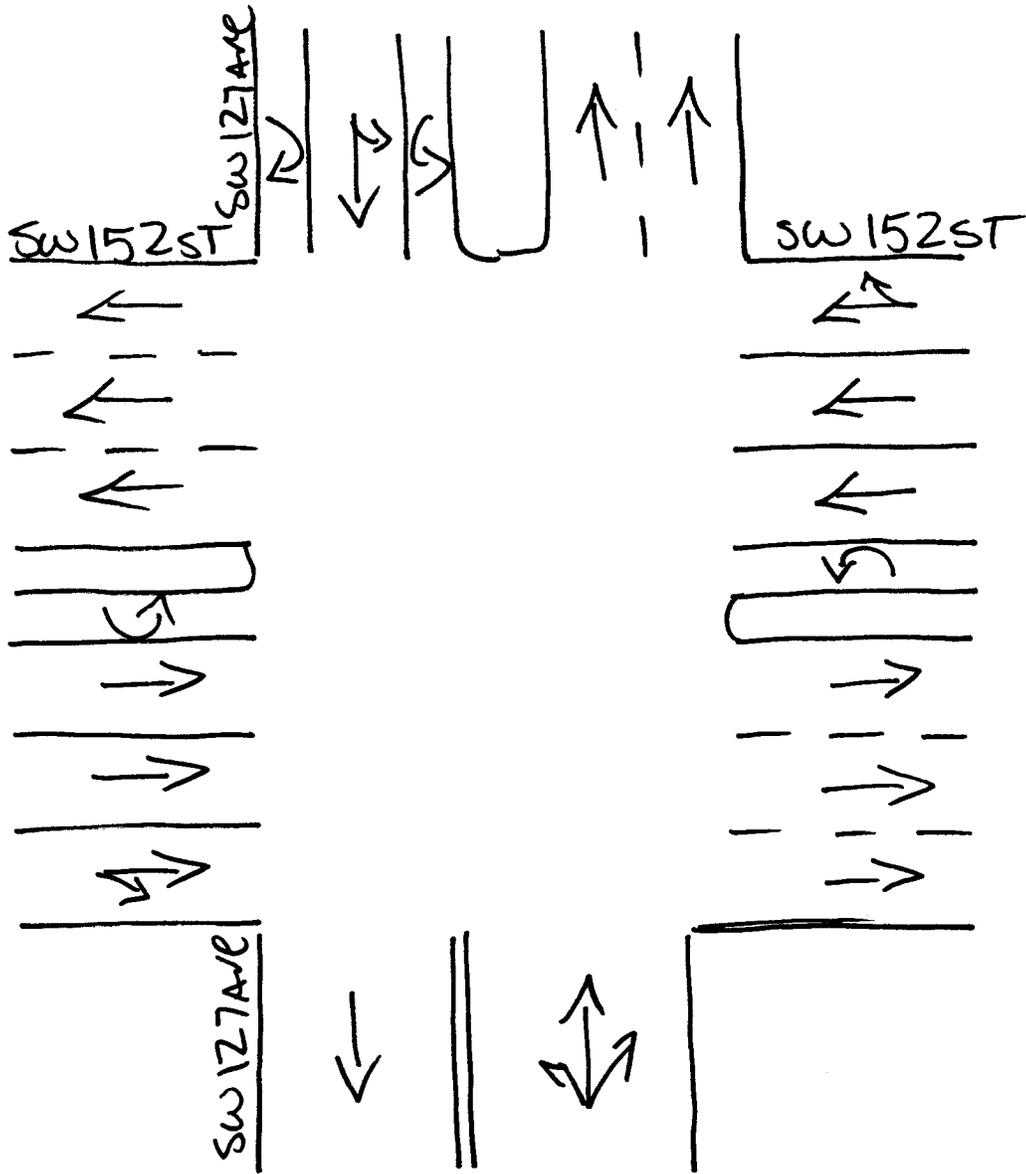
Site Code : 00130214  
 Start Date: 12/05/13  
 File I.D. : 152S127A  
 Page : 2

ALL VEHICLES

SW 127TH AVENUE From North				SW 152ND STREET From East				SW 127TH AVENUE From South				SW 152ND STREET From West				Total	
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right		
Date 12/05/13																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 12/05/13																	
Peak start 07:30				07:30				07:30				07:30					
Volume	0	241	1	315	0	18	1292	83	0	2	0	1	1	243	1928	7	
Percent	0%	43%	0%	57%	0%	1%	93%	6%	0%	67%	0%	33%	0%	11%	88%	0%	
Pk total	557				1393				3				2179				
Highest 07:30				08:00				07:45				08:00					
Volume	0	74	1	73	0	4	339	22	0	1	0	1	0	75	500	1	
Hi total	148				365				2				576				
PHF	.94				.95				.38				.95				



↑  
North



Miami, Florida

December 05, 2013

drawn by: Luis Palomino

Signalized

**TABLE 5 - AM PEAK HOUR  
CORAL REEF COMMONS - UM SOUTH CAMPUS PROPERTY  
INTERSECTION TURNING MOVEMENTS  
SW 152 STREET AT SW 127 AVENUE**

1/29/2014

AM PEAK HOUR																			
No.	INTERSECTION	MVNT	12-5-13	2012	PEAK	GROWTH	2016	RETAIL	RETAIL	PASS-BY	PASS-BY	RES-SCH-LIB	RES-SCH-LIB	TOTAL	TOTAL	2016	EXISTING	PROPOSED	
			EXISTING	FDOT	SEASON	RATE	WO	DIST.%	TRIPS	DIST.%	TRIPS	DIST.%	TRIPS	DIST.%	TRIPS	WITH			LANES
			VOLUMES	PSCF	VOLUMES	PER YEAR	PROJECT	IN	70	IN	37	IN	407	IN	575	PROJECT			
			OUT			TO 2016		OUT	70	OUT	38	OUT	459	OUT	567				
1	SW 152 St at SW 127 Ave  PHF = 0.95	<b>NB</b>																	
		LEFT	2	1.02	2	0.65%	2	60.94%	43	16.09%	6	44.29%	203	44.46%	252	254		2l	
		THRU	0	1.02	0	0.65%	0	7.33%	5	8.00%	3	7.33%	34	7.37%	42	42	1LTR	1t	
		RIGHT	1	1.02	1	0.65%	1	10.50%	7	20.11%	8	31.73%	146	28.33%	161	162		1R	
Signalized		<b>SB</b>																OPTIONS	
		LEFT	241	1.02	246	0.65%	251	0.00%	0	0.00%	0	0.00%	0	0.00%	0	251	1L	1L / 2L	
		THRU	1	1.02	1	0.65%	1	7.33%	10	7.33%	3	7.00%	28	7.10%	41	42	1LT	1T	
		RIGHT	315	1.02	321	0.65%	328	0.00%	0	0.00%	0	0.00%	0	0.00%	0	328	1R	1R	
		<b>EB</b>																	
		LEFT	244	1.02	249	0.65%	254	0.00%	0	8.04%	3	0.00%	0	0.53%	3	257	1L	1L	
		THRU	1928	1.02	1967	0.65%	2005	21.20%	15	40.22%	15	0.00%	0	5.24%	30	2035	2T	3T	
		RIGHT	7	1.02	7	0.65%	7	20.17%	26	20.23%	7	29.41%	120	26.71%	154	161	1TR	1R	
		<b>WB</b>																	
		LEFT	18	1.02	18	0.65%	19	15.87%	21	16.18%	6	23.76%	97	21.47%	123	142	1L	1L	
		THRU	1292	1.02	1318	0.65%	1344	15.86%	21	15.80%	6	8.00%	33	10.29%	59	1403	2T	2T	
		RIGHT	83	1.02	85	0.65%	86	0.00%	0	0.00%	0	0.00%	0	0.00%	0	86	1TR	1TR	

# **Attachment 2**

## **Adopted LOS Standards**

**SUMMARY  
MIAMI-DADE COUNTY  
TRAFFIC CIRCULATION LEVEL OF SERVICE STANDARD**

**Peak Period\* LOS Standard  
Non-FIHS Roadways**

Location	Transit Availability		
	No Transit Service	20 Min. Headway Transit Service Within 1/2 Mile	Extraordinary Transit Service (Commuter Rail or Express Bus)
Outside UDB	LOS D-State Minor Arterials LOS C-County Roads and State Principal Arterials		
Between UIA and UDB	LOS D (90% of Capacity); or LOS E (100% Capacity) on SUMAs	LOS E (100% of Capacity)	120% of Capacity
Inside UIA	LOS E (100% of Capacity)	120% of Capacity	150% of Capacity

**FIHS Roadways**

FIHS Facility	Location				
	Outside UDB	Inside UDB	Roadways Parallel to Exclusive Transit Facilities	Inside Transportation Concurrency Management Areas	Constrained or Backlogged Roadways
Limited Access Facilities	B	D [E]	D [E]	D [E]	Manage
Controlled Access Facilities (Two Lanes)	C	D	E	E	Manage
Controlled Access Facilities (Four or More Lanes)	B	D	E	E	Manage

NOTE: LOS inside of [brackets] applies to general use lanes only when exclusive thru lanes exist.

FIHS= Florida Intrastate Highway System

UIA= Urban Infill Area--Area east of, and including NW/SW 77 Avenue and SR 826 (Palmetto Expressway), excluding the City of Islandia, and excluding the area north of SR 826 and west of I-95.

UDB= Urban Development Boundary

SUMA= State Urban Minor Arterial

\* Peak-period means the average of the two highest consecutive hours of traffic volume during a weekday.

Paragraph  
Reference  
Number

17.

**SUMMARY  
MIAMI-DADE COUNTY  
TRAFFIC CIRCULATION LEVEL OF SERVICE STANDARDS**

**Peak Period\* LOS Standards  
Non-FIHS SIS Roadways**

Location	Transit Availability		
	No Transit Service	20 Min. Headway Transit Service Within 1/2 Mile	Extraordinary Transit Service (Commuter Rail, <u>Metro</u> rail, <u>People Mover</u> , <u>Bus Rapid Transit</u> , or <u>Express Bus</u> , or <u>Enhanced Bus Service</u> )
Outside UDB	LOS <del>D</del> <u>C</u> -State Minor Arterials LOS C-County Roads and State Principal Arterials		
Between UIA and UDB	LOS D (90% of Capacity); or LOS E (100% Capacity) on SUMAs	LOS E (100% of Capacity)	120% of Capacity
Inside UIA	LOS E (100% of Capacity)	120% of Capacity	150% of Capacity

18.

**FIHS SIS Roadways**

FIHS <u>SIS</u> Facility	Location				
	Outside UDB	Inside UDB	Roadways Parallel to Exclusive Transit Facilities	Inside Transportation Concurrency Management Areas	Constrained or Backlogged Roadways
Limited Access Facilities	<del>B</del> <u>C</u>	D [E]	D [E]	D [E]	Manage
Controlled Access Facilities ( <u>Two Lanes</u> )	C	D	E	E	Manage
Controlled Access Facilities ( <u>Four or More Lanes</u> )	<del>B</del>	<del>D</del>	<del>E</del>	<del>E</del>	<del>Manage</del>

19. NOTES: LOS inside of [brackets] applies to general use lanes only when exclusive thru lanes exist.  
 FIHS = Florida Intrastate Highway System  
 SIS = Strategic Intermodal System  
 UIA = Urban Infill Area--Area east of, and including NW/SW 77 Avenue and SR 826  
 (Palmetto Expressway), ~~excluding the City of Islandia~~, and excluding the area north of  
 SR 826 and west of I-95.  
 UDB=Urban Development Boundary  
 SUMA=State Urban Minor Arterial  
 \*Peak-period means the average of the two highest consecutive hours of traffic volume during a  
 weekday.

# **Attachment 3**

**Draft Improvement Plan  
2<sup>nd</sup> SB Left Turn Lane  
SW 127 Ave at SW 152 St**

CURVE DATA 127TH-NORTH-1  
PI STA. = 302+01.96  
Δ = 91° 35' 46" (LT)  
D = 51° 00' 00"  
L = 99.74  
R = 198.59  
= 1.145:92  
PC STA. = 301+82.42  
PT STA. = 303+81.01

PI STA. 302+01.96

303

302

301

CPP

CPP

CPP

140

141

142

143

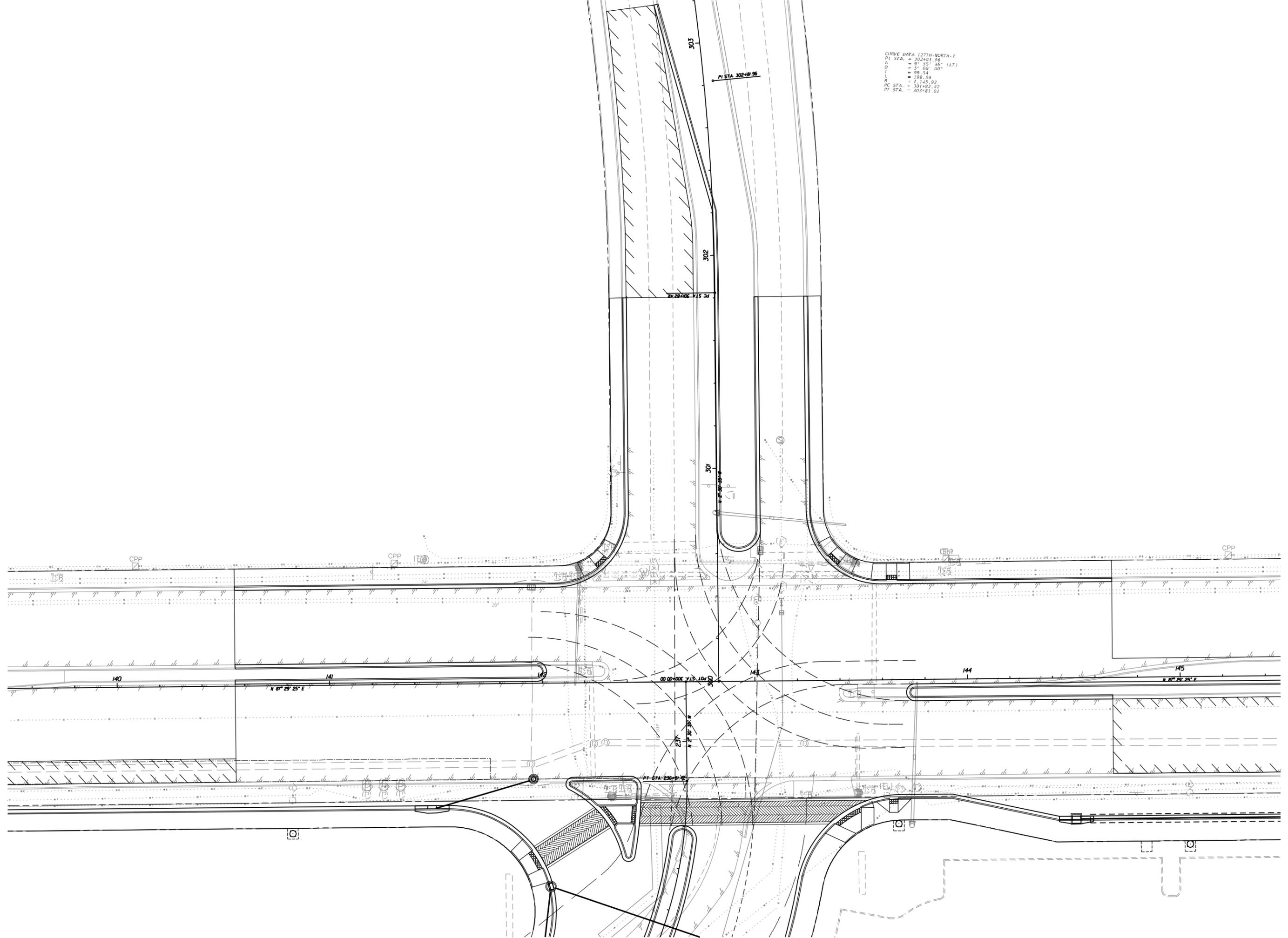
144

145

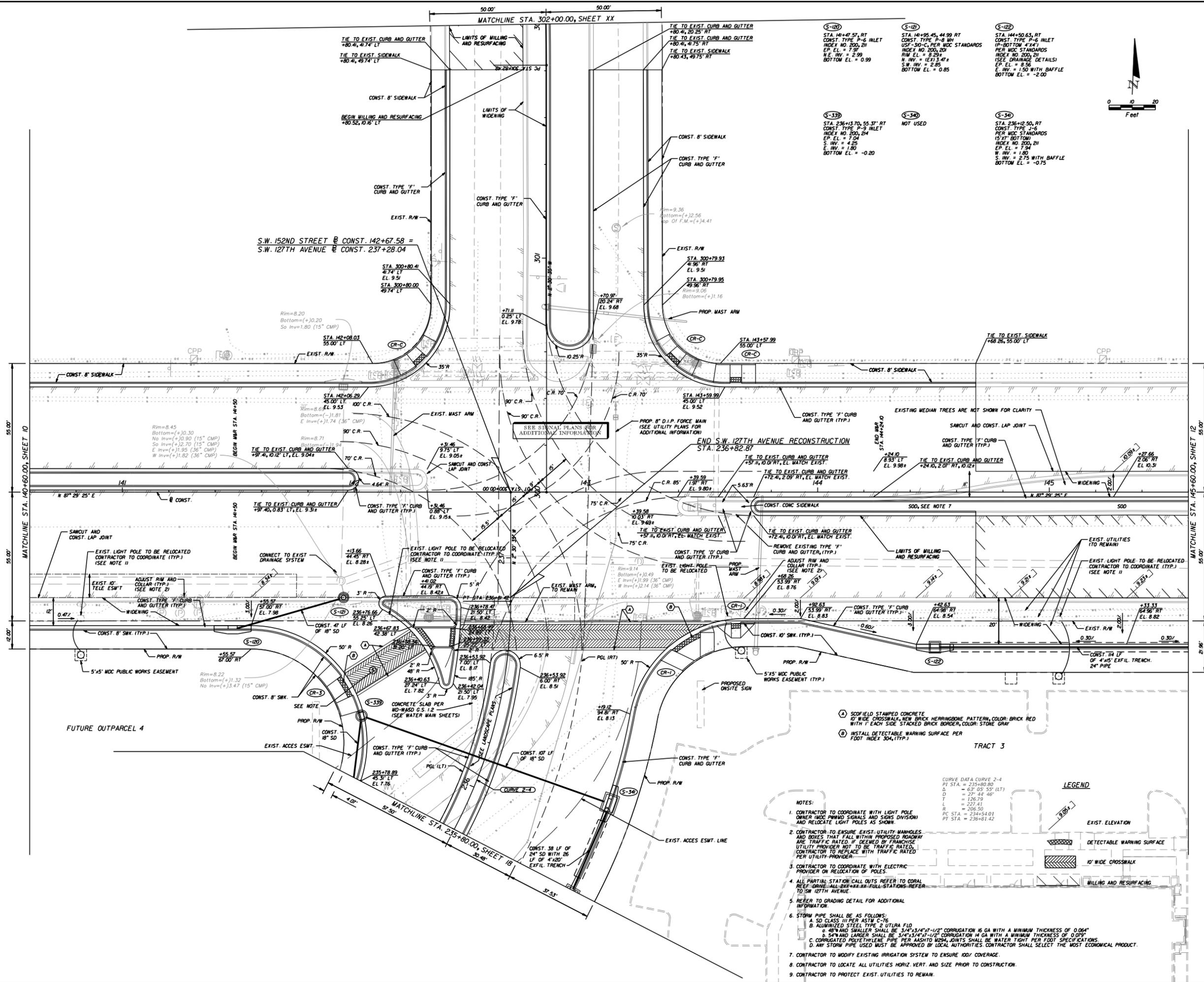
N 87° 29' 25" E

N 87° 29' 25" E

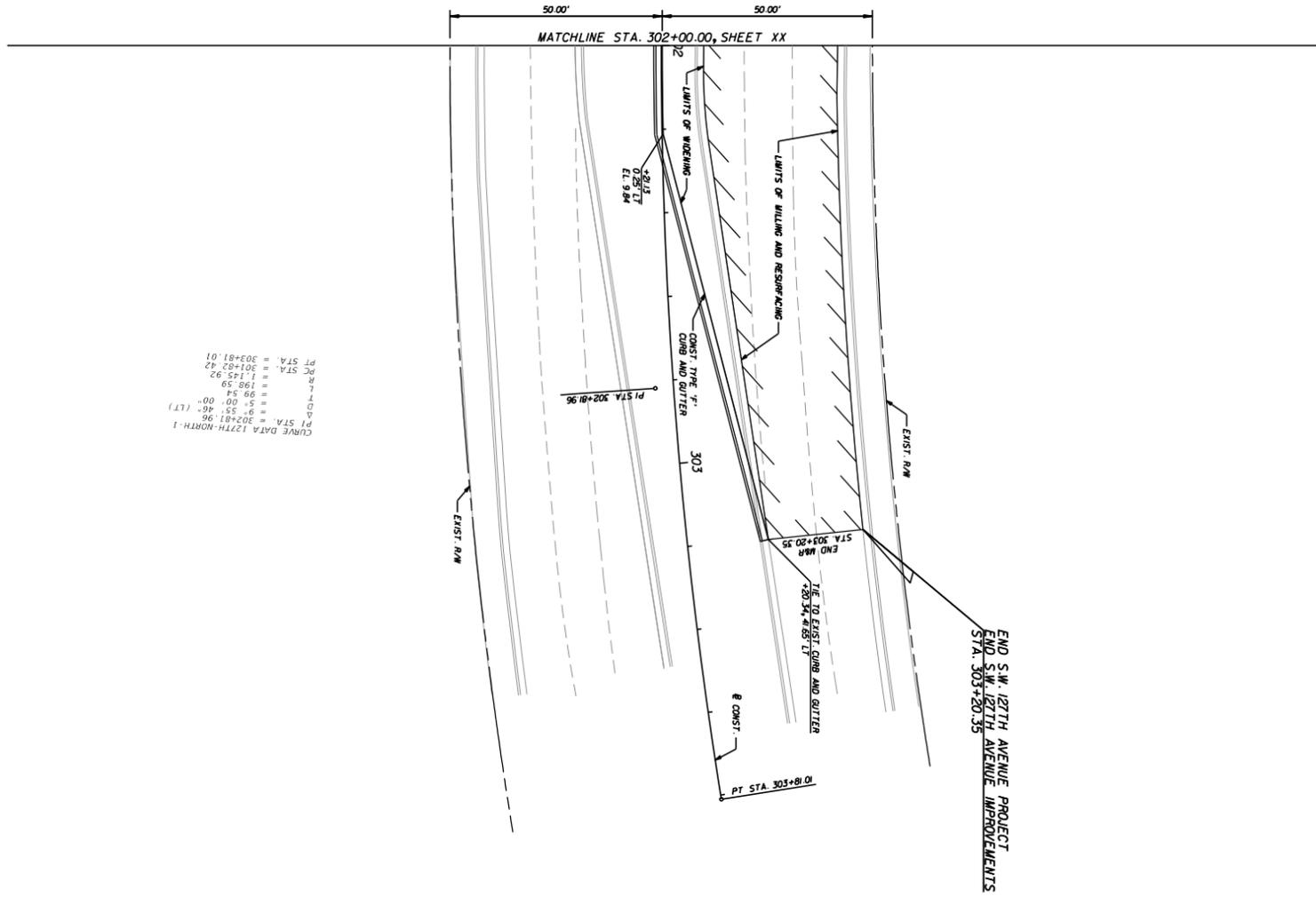
PT STA. 236+01.96



K:\NWB\DEV\1544009\_Coral Reef Commons\SCADD\Drawings\PLANS\ROADWAY\PLAN\ROAD05.dwg  
 1/28/2014 10:03:35 AM  
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

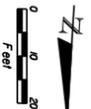


<b>Kimley-Horn and Associates, Inc.</b> 2013 KIMLEY-HORN AND ASSOCIATES, INC. 445 24TH STREET, SUITE 200, VERO BEACH, FL 32960 PHONE: 772-794-4100 FAX: 772-794-4130 WWW.KIMLEY-HORN.COM CA 00000696		REVISIONS No. BY DATE 2 REVS PER MDC P.W. 01-KX-14 MCF 1 REVS PER MDC P.W. 09-20-13 WJL
KHA PROJECT 047544004	LICENSED PROFESSIONAL ERIC J. KLEIER FLORIDA LICENSE NUMBER 64076	DATE 09/16/2013
SCALE AS SHOWN	DESIGNED BY EJK	DRAWN BY BL
CHECKED BY MT	DATE:	BY:
<b>CORAL REEF COMMONS DRIVE</b> <b>PLAN SHEET</b>		PREPARED FOR <b>RAM REALTY SERVICES</b> MIAMI-DADE COUNTY FLORIDA



CURVE DATA 127TH-NORTH-1  
 PT STA. = 302+81.96  
 Q STA. = 302+81.96  
 L = 5.51  
 T = 9.00  
 E = 5.00  
 R = 99.99  
 PC STA. = 301+82.42  
 PT STA. = 303+81.01

END S.W. 127TH AVENUE PROJECT  
 END S.W. 127TH AVENUE IMPROVEMENTS  
 STA. 303+20.35



**CORAL REEF  
COMMONS**  
 PREPARED FOR  
**RAM REALTY SERVICES**  
 MIAMI-DADE COUNTY FLORIDA

**SW 127TH  
PLAN SHEET**

KHA PROJECT  
047544004  
 DATE  
09/16/2013  
 SCALE AS SHOWN  
 DESIGNED BY EJK  
 DRAWN BY BL  
 CHECKED BY MT  
 LICENSED PROFESSIONAL  
 ERIC J. KLEIER  
 FLORIDA LICENSE NUMBER  
64076  
 DATE:

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No.	REVISIONS	DATE	BY
2	REVS PER MDC P.W.	01-XX-14	MCF
1	REVS PER MDC P.W.	09-20-13	WJL