

**Appendix 21-15 (R)
Sensitivity Analysis**

**Contents of Appendix Revised April 2008
/ Appendix number Revised October 2008**

APPENDIX 21-15 (R) SENSITIVITY ANALYSIS

In order to establish how much Project development can be supported before an interchange is needed at the HEFT/NW 170 Street, a sensitivity analysis (included in this appendix) was prepared consistent with previous discussions with review agencies. The following methodology was used.

1. **Table 21-7 (R), Project Traffic Assignment** in the main report shows that at full Project buildout with the proposed interchange, 2,048 two-way pm peak hour project trips will use NW 107 Avenue and NW 97 Avenue south of NW 154 Street to access the surface streets. Therefore, the project will be limited to 2,048 two-way pm peak hour trips before the interchange at HEFT/NW 170 Street is required.
2. A combination of land uses was developed whose total trip generation do not exceed 2,048 two-way pm peak hour project trips (see attached internalization matrix). Note that, internalization is consistent with the analysis in the main report. Furthermore, no *pass-by* or *diverted linked trip* deductions were taken for this scenario.
3. The transportation model was run including the reduced development program. The network was adjusted to reflect conditions without the interchange. In addition, the Applicant has agreed not to fund the construction of the extension of NW 170 Street east of NW 97 Avenue until the interchange is completed. This section of roadway was also not included in the model run. Model runs for this scenario are included in this appendix. Based on this modeling effort, a Project distribution was obtained without the interchange at NW 170 Street.
4. Committed developments traffic needed to be re-distributed to reflect the roadway network described above.
5. Diversions taken from other roadways to the new interchange in the main study were not used for this scenario.
6. Roadway analysis of future traffic conditions with and without the project (the reduced development program) was performed and is included in this appendix. Project volumes for this scenario accessing NW 107 Avenue and NW 97 Avenue south of NW 154 Street are highlighted and do not exceed 2,048 two-way pm peak hour trips. The analysis shows similar or lower impacts on all the regionally significant roadways. Project traffic is not significant and adverse in any roadway link in the study area.

**Trip Generation and Internalization Sample for Land Uses that can be supported by the transportation system
without an Interchange at HEFT/NW 170 Street
Beacon County Line DRI**

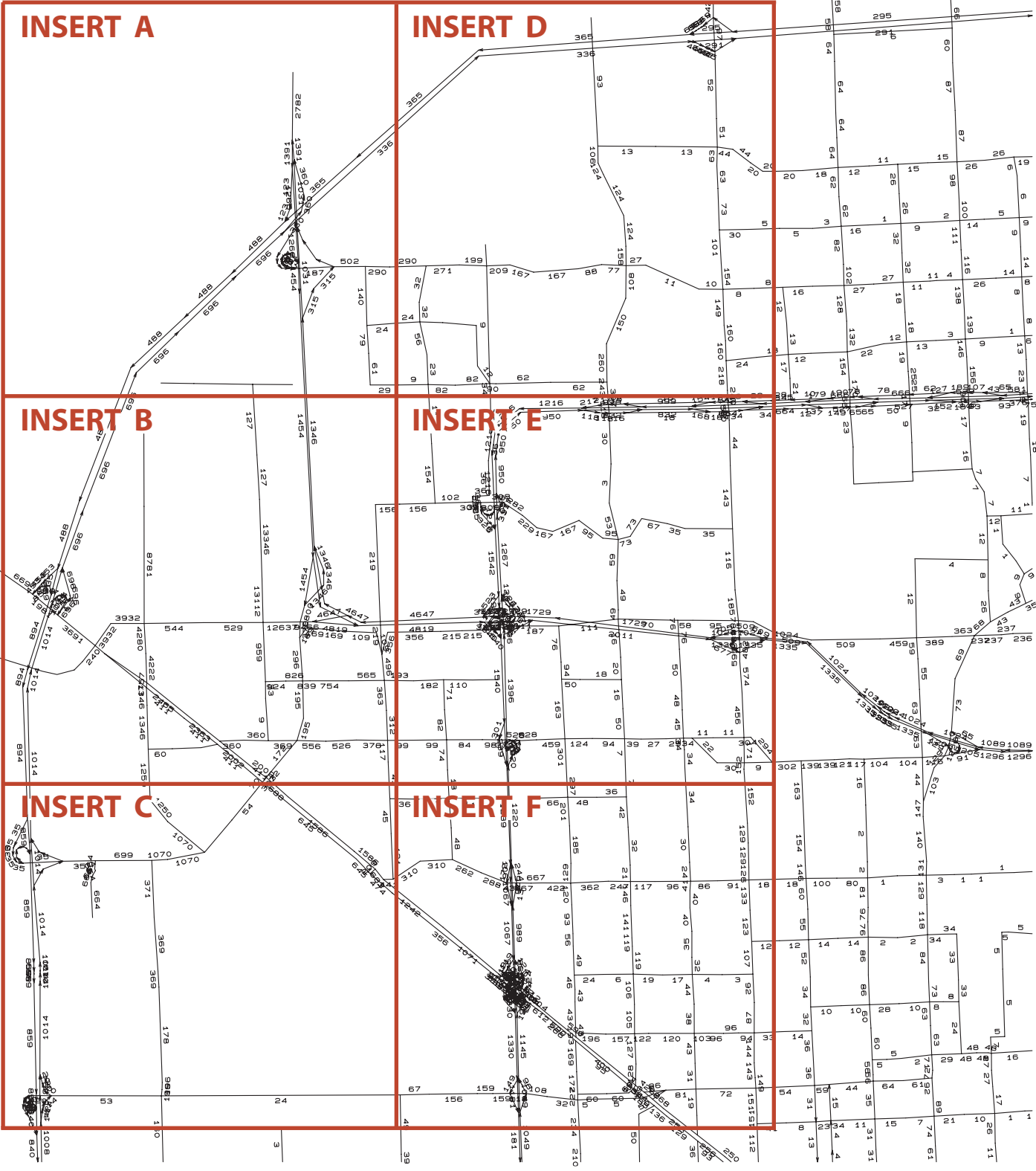
Unconstrained Internalization Demand - PM Peak Hour

Retail Land Use 820 100,000 SF GLA n (Trips) = 0.66 Ln (1,000 SF) + 3.4		Office Land Use 710 225,000 SF GFA n (Trips) = 0.37 (1,000 SF) + 60.08		Warehouse Land Use 150 3,000,000 SF GFA n (Trips) = 0.79 Ln (1,000 SF) + 0.54		Hotel Land Use 310 0 Rooms 0.59 Trips / Room		1,916	TOTAL ITE
In	Out	In	Out	In	Out	In	Out		
300	326	56	275	240	719	0	0		
	3% 10	15% 8			2% 14	2% 0			
2% 6		8	23% 63	0% 0	0	0	0%		
	3% 10		10	15% 36					
2% 6			6		23% 165				
	12% 39		0			31% 0			
9% 27			0				53% 0		
			1% 3	6% 14					
	6% 3			3	1% 7				
			2% 6		2% 0				
	0% 0				0		0%		

Balanced Internalization Demand - PM Peak Hour

Retail Land Use 820 100,000 SF GLA n (Trips) = 0.66 Ln (1,000 SF) + 3.4		Office Land Use 710 225,000 SF GFA n (Trips) = 0.37 (1,000 SF) + 60.08		Warehouse Land Use 150 3,000,000 SF GFA n (Trips) = 0.79 Ln (1,000 SF) + 0.54		Hotel Land Use 310 0 Rooms 0.59 Trips / Room		1,916	TOTAL ITE
In	Out	In	Out	In	Out	In	Out		
300	326	56	275	240	719	0	0		
	-8	-8			0	0			Adjustment Factors
-6			-6	0			0		0%
0	0			0					-100%
0	0						0		-55%
0			-3	-3					0%
		-3			-3		0		0%
	0		0				0		
294	318	45	266	237	716	0	0	1,876	External Trips
	2.24%		6.04%		0.63%		0.00%	2.09%	
-4	-5	-1	-4	-4	-11	0	0	1.5%	Transit/Pedestrians
0	0							0%	Pass-By
0	0							0%	Diverted Linked Trips
290	313	44	262	233	705	0	0	1,848	Net New External Trips
				41	124			0.85	Truck Adjustment Factor (f HV)
290	313	44	262	275	830	0	0	2,014	Net New External Trips adjusted for Heavy

Note: Adjustment Factor for Heavy Vehicles: $f_{HV} = 1 / (1 + 0.35 (1.5 - 1))$ as calculated from equation 21-4 in page 21-7 of the HCM 2000
Revised April 2008



INSERT A

INSERT D

INSERT B

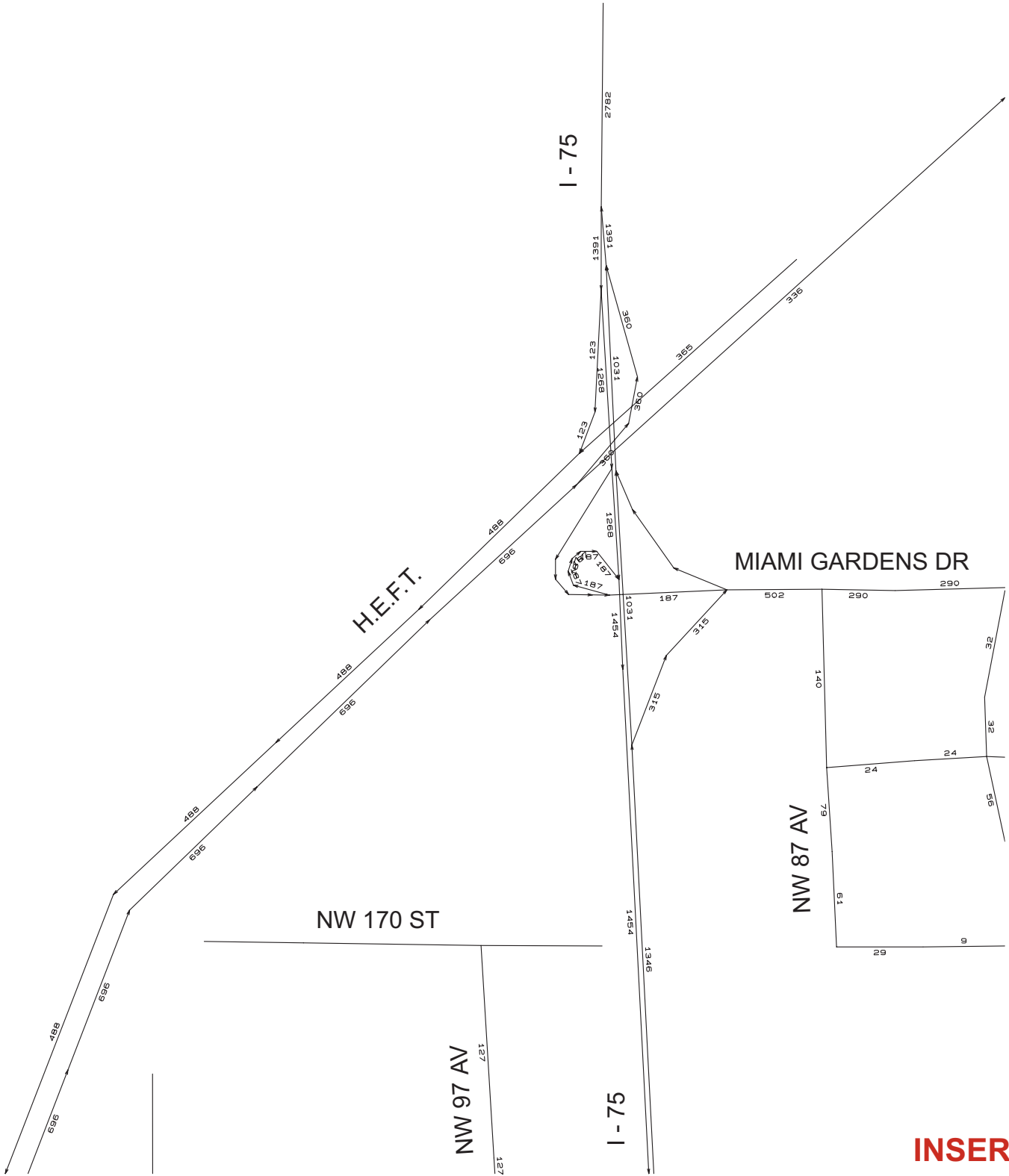
INSERT E

INSERT C

INSERT F

Miami
Beacon County DRI (wo 170 Int wo conn) (Sensitivity) - #06257
PLOT HIGHWAY LOAD -- SELZONE TWO-WAY LINK VOLUMES

26MAR08 14:50:07



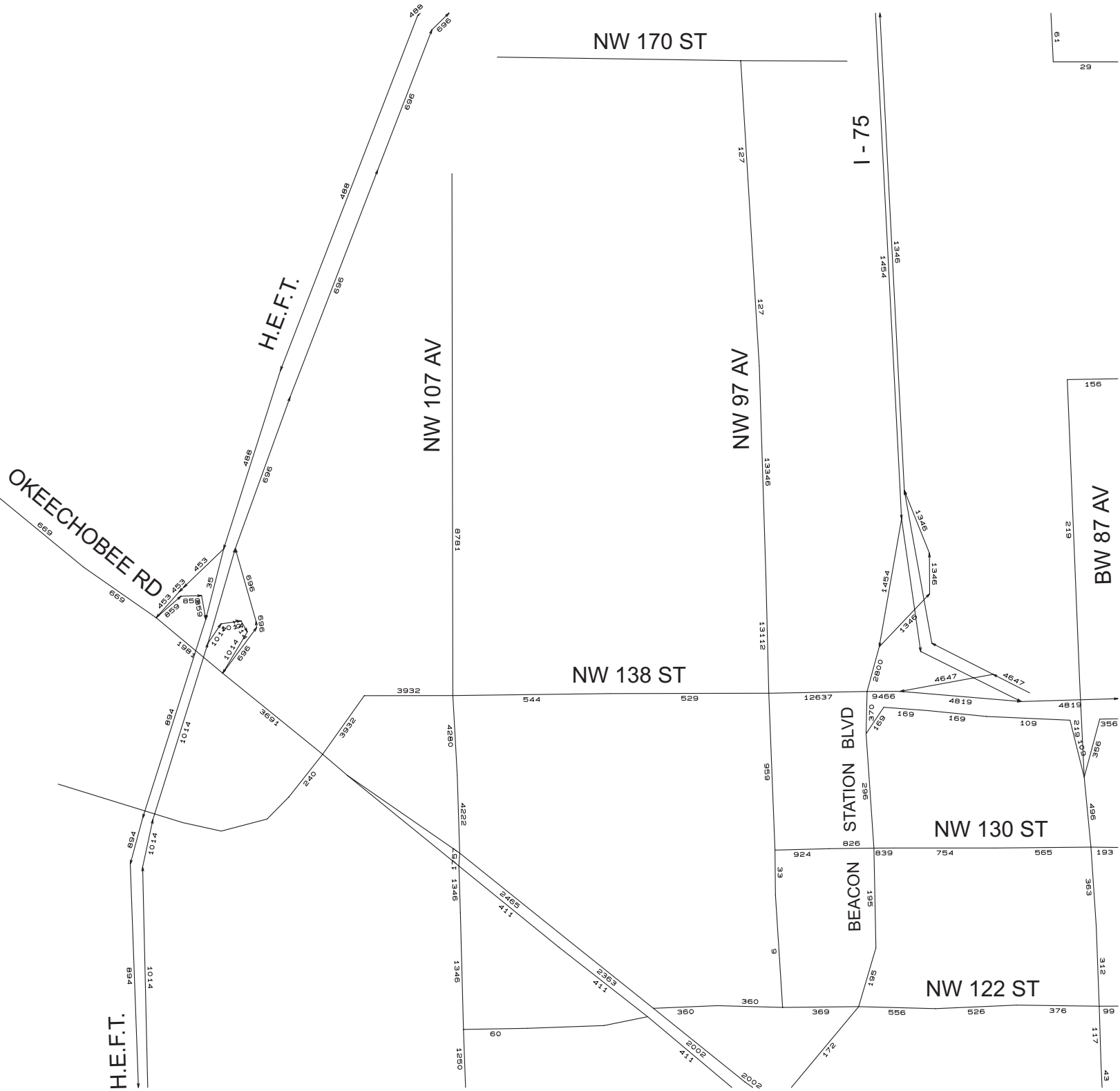
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Miami
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 PLOT HIGHWAY LOAD --- SELZONE TWO-WAY LINK VOLUMES

25MAR08 09:14:37



61
29



INSERT B

Miami

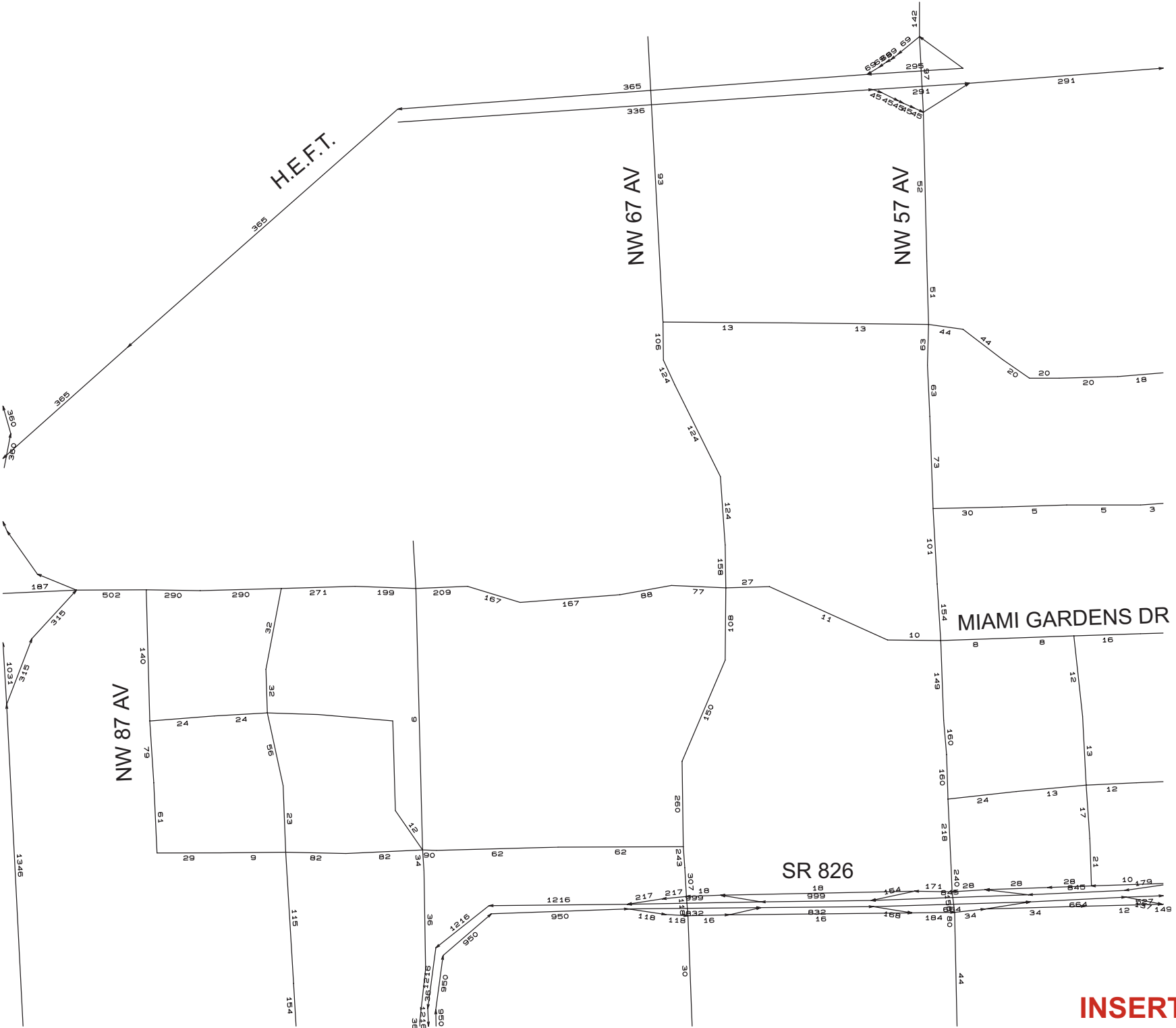
Beacon County DRI (w/o 170 Int w/o conn) (Sensitivity) - #06257
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INSERT C

Miami

Beacon County DRI (w/ 170 Int w/ conn) (Sensitivity) - #06257
PLOT HIGHWAY LOAD -- SELZONE TWO-WAY LINK VOLUMES
25MAR08 09: 29: 40



INSERT D

Miami

Beacon County DRI (wo 170 Int wo conn) (Sensitivity) - #06257
PLOT HIGHWAY LOAD -- SELZONE TWO-WAY LINK VOLUMES

26MAR08 15:19:32



INSERT E

Miami

Beacon County DRI (wo 170 Int wo conn) (Sensitivity) - #06257

PLOT HIGHWAY LOAD -- SELZONE TWO-WAY LINK VOLUMES

25MAR08 09:30:27



INSERT F

Miami

Beacon County DRI (wo 170 Int wo conn) (Sensitivity) - #06257
PLOT HIGHWAY LOAD -- SELZONE TWO-WAY LINK VOLUMES

25MAR08 09: 11: 23

SENSITIVITY ANALYSIS - FUTURE CONDITIONS WITHOUT INTERCHAGE (REDUCED DEVELOPMENT)

Future Traffic Conditions without Project - (weekday, one-way, PM peak)

Beacon Countyline DRI

Roadway	Limits		Directi on	Directional # of Lanes	Roadway Type	Municipality	LOS STD	Volume (2018)	Service Volume	V/SV	Meets LOS STD?
	From	To									
Palmetto Expressway (SR 826)	Red Road/NW 57 Av	NW 67 Av/Ludlam Rd	EB	3 LD	FIHS	Miami Lakes	D	8,172	5,410	1.51	No
			WB	3 LD				6,695	5,410	1.24	No
	NW 67 Av/Ludlam Rd	Miami Lakes Drive	NEB	3 LD	FIHS	Miami Lakes	D	8,891	5,410	1.64	No
			SWB	3 LD				7,187	5,410	1.33	No
	Miami Lakes Drive	I-75	NB	3 LD	FIHS	Miami Lakes	D	9,113	5,410	1.68	No
			SB	3 LD				7,133	5,410	1.32	No
	I-75	W 68 St/NW 122 Street	NB	4 LD	FIHS	Hialeah	D	10,570	7,380	1.43	No
			SB	4 LD				8,410	7,380	1.14	No
	W 68 St/NW 122 Street	W 49 Street/NW 103 St	NB	4 LD	FIHS	Hialeah	D	10,956	7,380	1.48	No
			SB	4 LD				8,717	7,380	1.18	No
NW 87 Avenue / West	W 49 Street/NW 103 St	Okeechobee Rd/US 27	NB	5 LD	FIHS	Hialeah/Hialeah	D	11,314	9,340	1.21	No
			SB	5 LD				9,001	9,340	0.96	Yes
	Okeechobee Rd/US 27	NW 74 Street	NB	5 LD	FIHS	Medley	D	11,821	9,340	1.27	No
			SB	5 LD				9,488	9,340	1.02	No
	Miami Gardens Drive	NW 170 Street	NB	2LD (1)	Collector	Miami-Dade	D	471	1,620	0.29	Yes
			SB	2LD (1)				760	1,620	0.47	Yes
	NW 170 Street	Miami Lakes Drive	NB	2LD (1)	Collector	Miami Lakes	D	53	1,620	0.03	Yes
			SB	2LD (1)				108	1,620	0.07	Yes
	Miami Lakes Drive	I-75	NB	2 LD	Collector	Miami Lakes	D	1,203	1,620	0.74	Yes
			SB	2 LD				905	1,620	0.56	Yes
I-75	Miramar Parkway	HEFT	NB	4 LD	FIHS	Miramar	D	10,177	7,480	1.36	No
			SB	4 LD				9,386	7,480	1.25	No
	HEFT	NW 186 Street	NB	4 LD	FIHS	Miami-Dade	D	9,098	7,380	1.23	No
			SB	4 LD				8,439	7,380	1.14	No
	NW 186 Street	NW 138 Street	NB	4 LD	FIHS	Miami	D	8,909	7,380	1.21	No
			SB	4 LD				7,876	7,380	1.07	No
NW 97 Avenue	NW 138 Street	SR 826	EB	4 LD	FIHS	Miami	D	6,894	NA (3)	NA (3)	Yes (3)
			WB	4 LD				7,391	NA (3)	NA (3)	Yes (3)
	NW 170 Street	NW 154 Street	NB	2LD (2)	NA	Hialeah	D	0	1,620	0.00	Yes
			SB	2LD (2)				0	1,620	0.00	Yes
	NW 154 Street	NW 138 Street	NB	2LD (1)	NA	Hialeah	D	0	1,620	0.00	Yes
			SB	2LD (1)				0	1,620	0.00	Yes
NW 107 Avenue	NW 138 Street	W 68 Street	NB	1 L	Collector	Hialeah/Hialeah	D	240	760	0.32	Yes
			SB	1 L				141	760	0.18	Yes
	NW 166 Street	NW 162 Street	NB	1 L (2)	Collector	Hialeah/Hialeah	D	0	760	0.00	Yes
			SB	1 L (2)				0	760	0.00	Yes
	NW 162 Street	NW 154 Street	NB	1 L (2)	Collector	Hialeah/Hialeah	D	0	760	0.00	Yes
			SB	1 L (2)				0	760	0.00	Yes
HEFT	NW 154 Street	NW 138 Street	NB	1 L (2)	Collector	Hialeah/Hialeah Gardens	D	124	760	0.16	Yes
			SB	1 L (2)				121	760	0.16	Yes
	NW 138 Street	Okeechobee Rd/US 27	NB	2 LD (1)	Collector	Hialeah Gardens	D	471	1,620	0.29	Yes
			SB	2 LD (1)				348	1,620	0.21	Yes
	NW 57 Av (Red Road)	I-75	NB	2 LD	FIHS	Miramar	D	4,755	3,580	1.33	No
			SB	2 LD				3,504	3,580	0.98	Yes
NW 170 Street	I-75	NW 170 Street	NB	3 LD	FIHS	Miami-Dade	D	8,431	5,530	1.52	No
			SB	3 LD				6,102	5,530	1.10	No
	NW 170 Street	Okeechobee Rd/US 27	NB	3 LD	FIHS	Miami- Dade/Hialeah	D	8,401	5,530	1.52	No
			SB	3 LD				6,041	5,530	1.09	No
	Okeechobee Rd/US 27	NW 106 Street	NB	3 LD	FIHS	Miami- Dade/Medley	D	8,979	5,530	1.62	No
			SB	3 LD				6,406	5,530	1.16	No
	NW 106 Street	NW 74 Street	NB	3 LD	FIHS	Miami-Dade	D	9,626	5,530	1.74	No
			SB	3 LD				7,070	5,530	1.28	No

Notes:

(1) Committed Roadway Improvement.

(2) Project related Improvement.

(3) See HCS+ analysis provided in Appendix 21-3.

Revised April 2008

Source: David Plummer and Associates, Inc.

SENSITIVITY ANALYSIS - FUTURE CONDITIONS WITHOUT INTERCHARGE (REDUCED DEVELOPMENT)

Future Traffic Conditions without Project - (weekday, one-way, PM peak)

Beacon Countyline DRI

Roadway	Limits		Direction	Directional # of Lanes	Roadway Type	Municipality	LOS STD	Volume (2018)	Service Volume	V/SV	Meets LOS STD?
	From	To									
Miami Gardens Drive (NW 186 Street)	I-75	NW 87 Avenue	EB	2 LD	State Minor Arterial	Miami-Dade	SUMA	2,615	1,800	1.45	No
			WB	2 LD				1,138	1,800	0.63	Yes
	NW 87 Avenue	NW 77 Avenue	EB	2 LD	State Minor Arterial	Miami-Dade	SUMA	1,550	1,800	0.86	Yes
			WB	2 LD				945	1,800	0.53	Yes
	NW 77 Avenue	NW 67 Avenue	EB	2 LD	State Minor Arterial	Miami-Dade	SUMA	2,167	1,800	1.20	No
		WB	2 LD				1,724	1,800	0.96	Yes	
NW 170 Street	NW 67 Avenue	NW 57 Avenue (Red Rd)	EB	2 LD	State Minor Arterial	Miami-Dade	HE	1,982	1,800	1.10	No
			WB	2 LD				1,631	1,800	0.91	Yes
	HEFT	NW 97 Avenue	EB	2LD (2)	Collector	Miami-Dade/Hialeah	D	0	1,620	0.00	Yes
			WB	2LD (2)				0	1,620	0.00	Yes
	NW 97 Avenue	I-75	EB	1 L (2)	Collector	Miami-	D	0	798	0.00	Yes
		WB	1 L (2)				0	798	0.00	Yes	
NW 138 Street	I-75	NW 87 Avenue	EB	1 L	Collector	Miami-	D	62	760	0.08	Yes
			WB	1 L				93	760	0.12	Yes
	NW 87 Avenue	NW 77 Avenue	EB	1 L	Collector	Miami-	D	444	760	0.58	Yes
			WB	1 L				447	760	0.59	Yes
	NW 77 Avenue	NW 67 Avenue	EB	1 L	Collector	Miami-	D	369	760	0.48	Yes
		WB	1 L				458	760	0.60	Yes	
NW 130 Street (W 76 Street)	Okeechobee Rd/US 27	NW 107 Avenue	EB	2LD	Collector	Hialeah/Hialeah	D	723	1,620	0.45	Yes
			WB	2LD				522	1,620	0.32	Yes
	NW 107 Avenue	NW 97 Avenue	EB	2LD (1)	Collector	Hialeah/Hialeah	D	687	1,620	0.42	Yes
			WB	2LD (1)				492	1,620	0.30	Yes
	NW 97 Avenue	Beacon Station Blvd	EB	2LD (1)	Collector	Hialeah	D	815	1,620	0.50	Yes
		WB	2LD (1)				760	1,620	0.47	Yes	
Okeechobee Rd/US 27	NW 97 Av	Beacon Station Blvd	EB	2LD (1)	County Minor Arterial	Hialeah	D	378	1,620	0.23	Yes
			WB	2LD (1)				548	1,620	0.34	Yes
	Beacon Station Blvd	NW 87 Av	EB	1 L	County Minor Arterial	Hialeah	D	584	760	0.77	Yes
			WB	1 L				645	760	0.85	Yes
	NW 87 Av	W of SR 826	EB	1 L	County Minor	Hialeah	C	425	760	0.56	Yes
		WB	1 L				503	760	0.66	Yes	
West Okeechobee Rd / Frontage Road	West	HEFT	NWB	2 LD	FIHS	Hialeah Gardens	C	1,393	2,500	0.56	Yes
			SEB	2 LD				1,169	2,500	0.47	Yes
	HEFT	NW 138 Street	NWB	3 LD	FIHS	Hialeah/Hialeah Gardens	D	1,382	2,790	0.50	Yes
			SEB	3 LD				1,222	2,790	0.44	Yes
	NW 138 Street	Beacon Station Blvd	NWB	3 LD	FIHS	Hialeah Gardens	D	1,332	2,790	0.48	Yes
			SEB	3 LD				1,123	2,790	0.40	Yes
	Beacon Station Blvd	NW 87 Avenue	NWB	3 LD	FIHS	Hialeah Gardens	D	2,241	2,790	0.80	Yes
			SEB	3 LD				1,996	2,790	0.72	Yes
	NW 87 Avenue	SR 826	NWB	3 LD	FIHS	Hialeah Gardens	D	2,449	2,790	0.88	Yes
			SEB	3 LD				2,184	2,790	0.78	Yes
Gratigny Expressway	SR 826	NW 74 St	NWB	3 LD	State Principal Arterial	Hialeah	E + 20%	3,133	3,348	0.94	Yes
			SEB	3 LD				2,239	3,348	0.67	Yes
	US 27/NW 138 Street	NW 107 Avenue	NWB	1 L	Collector	Hialeah Gardens	D	396	760	0.52	Yes
			SEB	1 L				531	760	0.70	Yes
	NW 107 Avenue	Hialeah Gardens Blvd	NWB	1 L	Collector	Hialeah Gardens	D	492	760	0.65	Yes
			SEB	1 L				248	760	0.33	Yes
	Hialeah Gardens Blvd	NW 87 Avenue	NWB	1 L	Collector	Hialeah Gardens	D	272	760	0.36	Yes
			SEB	1 L				291	760	0.38	Yes
	NW 87 Avenue	NW 77 Avenue	NWB	1 L	Collector	Hialeah Gardens	D	766	760	1.01	No
			SEB	1 L				349	760	0.46	Yes
W 68 Street/NW 122 Street	SR 826	Red Road/W 4 Av	EB	3 LD	FIHS	Hialeah/Miami Lakes	D	3,287	5,410	0.61	Yes
			WB	3 LD				2,970	5,410	0.55	Yes
	Okeechobee Road	NW 97 Avenue	EB	1 L	Collector	Hialeah Gardens	D	327	608	0.54	Yes
			WB	1 L				237	608	0.39	Yes
	NW 97 Avenue	NW 87 Av / W 28 Av	EB	1 L	County Minor Arterial	Hialeah	D	566	608	0.93	Yes
		WB	1 L				611	608	1.01	No	
W 68 Street/NW 122 Street	NW 87 Av / W 28 Av	SR 826	EB	2 LD	County Minor Arterial	Hialeah	D	1,385	1,620	0.86	Yes
			WB	2 LD				1,666	1,620	1.03	No

Notes:
 (1) Committed Roadway Improvement. (2) Project related Improvement. (3) See HCS+ analysis provided in Appendix 21-3.
 (2) Project related Improvement.
 (3) See HCS+ analysis provided in Appendix 21-3.

Revised April 2008

Source: David Plummer and Associates, Inc.

SENSITIVITY ANALYSIS - FUTURE CONDITIONS WITHOUT INTERCHANGE (REDUCED DEVELOPMENT)

Project Traffic Assignment (weekday, one-way, PM peak)

Beacon Countyline DRI

Roadway	Limits		Direction	Directional # of Lanes	Roadway Type	LOS STD	Service Volume	Net New External Project Traffic				
	From	To						Project Traffic	% Project	% Consumption One-Way	% Consumption Two-Way	
Palmetto Expressway (SR 826)	Red Road/NW 57 Av	NW 67 Av/Ludlam Rd	EB	3 LD	FIHS	D	5,410	116	8.24%	2.1%	1.5%	
			WB	3 LD			5,410	50		0.9%		
		NW 67 Av/Ludlam Rd	Miami Lakes Drive	NEB	3 LD	FIHS	D	5,410	138	9.83%	2.6%	1.8%
				SWB	3 LD			5,410	60		1.1%	
		Miami Lakes Drive	I-75	NB	3 LD	FIHS	D	5,410	123	12.71%	2.3%	2.4%
				SB	3 LD			5,410	133		2.5%	
		I-75	W 68 St/NW 122 Street	NB	4 LD	FIHS	D	7,380	81	13.26%	1.1%	1.8%
				SB	4 LD			7,380	186		2.5%	
		W 68 St/NW 122 Street	W 49 Street/NW 103 St	NB	4 LD	FIHS	D	7,380	68	11.12%	0.9%	1.5%
				SB	4 LD			7,380	156		2.1%	
		W 49 Street/NW 103 St	Okeechobee Rd/US 27	NB	5 LD	FIHS	D	9,340	57	9.33%	0.6%	1.0%
				SB	5 LD			9,340	131		1.4%	
		Okeechobee Rd/US 27	NW 74 Street	NB	5 LD	FIHS	D	9,340	68	11.17%	0.7%	1.2%
				SB	5 LD			9,340	157		1.7%	
NW 87 Avenue / West 28 Avenue	Miami Gardens Drive	NW 170 Street	NB	2LD	Collector	D	1,620	6	0.45%	0.4%	0.3%	
			SB	2LD			1,620	3		0.2%		
		NW 170 Street	Miami Lakes Drive	NB	2LD	Collector	D	1,620	0	0.00%	0.0%	0.0%
				SB	2LD			1,620	0		0.0%	
		Miami Lakes Drive	I-75	NB	2 LD	Collector	D	1,620	6	0.99%	0.4%	0.6%
				SB	2 LD			1,620	14		0.9%	
		I-75	Miramar Parkway	NB	4 LD	FIHS	D	7,480	177	12.61%	2.4%	1.7%
				SB	4 LD			7,480	77		1.0%	
		HEFT	NW 186 Street	NB	4 LD	FIHS	D	7,380	0	0.00%	0.0%	0.0%
				SB	4 LD			7,380	0		0.0%	
	NW 186 Street	NW 138 Street	NB	4 LD	FIHS	D	7,380	40	6.55%	0.5%	0.9%	
			SB	4 LD			7,380	92		1.2%		
	NW 138 Street	SR 826	EB	4 LD	FIHS	D	NA (1)	550	39.13%	(1)	(1)	
			WB	4 LD			NA (1)	238		(1)		
NW 97 Avenue	NW 170 Street	NW 154 Street	NB	2LD	NA	D	1,620	91	14.15%	5.6%	8.8%	
			SB	2LD			1,620	194		12.0%		
	NW 154 Street	NW 138 Street	NB	2LD	NA	D	1,620	367	60.28%	22.7%	37.5%	
			SB	2LD			1,620	847		52.3%		
	NW 138 Street	W 68 Street	NB	1 L	Collector	D	760	9	1.49%	1.2%	2.0%	
			SB	1 L			760	21		2.8%		
NW 107 Avenue	NW 166 Street	NW 162 Street	NB	1 L	Collector	D	760	81	13.26%	10.7%	17.6%	
			SB	1 L			760	186		24.5%		
	NW 162 Street	NW 154 Street	NB	1 L	Collector	D	760	242	39.72%	31.8%	52.6%	
				SB	1 L		760	558		73.4%		
	NW 154 Street	NW 138 Street	NB	1 L	Collector	D	760	242	39.72%	31.8%	52.6%	
			SB	1 L			760	558		73.4%		
	NW 138 Street	Okeechobee Rd/US 27	NB	2 LD	Collector	D	1,620	117	19.22%	7.2%	11.9%	
			SB	2 LD			1,620	270		16.7%		
HEFT	NW 57 Av (Red Road)	I-75	NB	2 LD	FIHS	D	3,580	45	3.18%	1.3%	0.9%	
			SB	2 LD			3,580	19		0.5%		
		I-75	NW 170 Street	NB	3 LD	FIHS	D	5,530	75	5.36%	1.4%	1.0%
				SB	3 LD		5,530	33		0.6%		
		NW 170 Street	Okeechobee Rd/US 27	NB	3 LD	FIHS	D	5,530	33	5.36%	0.6%	1.0%
				SB	3 LD		5,530	75		1.4%		
		Okeechobee Rd/US 27	NW 106 Street	NB	3 LD	FIHS	D	5,530	53	8.64%	1.0%	1.6%
				SB	3 LD		5,530	121		2.2%		
		NW 106 Street	NW 74 Street	NB	3 LD	FIHS	D	5,530	53	8.64%	1.0%	1.6%
				SB	3 LD		5,530	121		2.2%		

Notes: (1) See HCS+ analysis provided in Appendix 21-3.

Revised April 2008

Source: David Plummer and Associates, Inc.

SENSITIVITY ANALYSIS - FUTURE CONDITIONS WITHOUT INTERCHANGE (REDUCED DEVELOPMENT)

Project Traffic Assignment (weekday, one-way, PM peak)

Beacon Countyline DRI

Roadway	Limits		Direction	Directional # of Lanes	Roadway Type	LOS STD	Service Volume (1)	Net New External Project Traffic			
	From	To						Project Traffic	% Project	% Consumption One-Way	% Consumption Two-Way
Miami Gardens Drive (NW 186 Street)	I-75	NW 87 Avenue	EB	2 LD	State Minor Arterial	SUMA	1,800	0	0.00%	0.0%	0.0%
			WB	2 LD	0		1,800	0	0.0%	0.0%	0.0%
	NW 87 Avenue	NW 77 Avenue	EB	2 LD	State Minor Arterial	SUMA	1,800	17	1.19%	0.9%	0.7%
			WB	2 LD	0		1,800	7		0.4%	
NW 170 Street	NW 77 Avenue	NW 67 Avenue	EB	2 LD	State Minor Arterial	SUMA	1,800	9	0.65%	0.5%	0.4%
			WB	2 LD	0		1,800	4		0.2%	
	NW 67 Avenue	NW 57 Avenue (Red Rd)	EB	2 LD	State Minor Arterial	HE	1,800	1	0.05%	0.1%	0.0%
			WB	2 LD	0		1,800	0		0.0%	0.0%
NW 154 Street	HEFT	NW 97 Avenue	EB	2LD	Collector	D	1,620	33	3.28%	2.0%	2.0%
			WB	2LD			1,620	33		2.0%	
	NW 97 Avenue	I-75	EB	1 L	Collector	D	798	0	0.00%	0.0%	0.0%
			WB	1 L			798	0		0.0%	
	I-75	NW 87 Avenue	EB	1 L	Collector	D	760	0	0.00%	0.0%	0.0%
			WB	1 L			760	0		0.0%	
NW 138 Street	NW 87 Avenue	NW 77 Avenue	EB	1 L	Collector	D	760	3	0.20%	0.4%	0.3%
			WB	1 L			760	1		0.1%	
	NW 77 Avenue	NW 67 Avenue	EB	1 L	Collector	D	760	5	0.35%	0.7%	0.5%
			WB	1 L			760	2		0.3%	
	I-75	NW 87 Avenue	EB	1 L	Collector	D	760	0	0.00%	0.0%	0.0%
			WB	1 L			760	0		0.0%	
NW 130 Street (W 76 Street)	NW 87 Avenue	SR 826	EB	2 LD	Collector	D	1,620	6	0.99%	0.4%	0.6%
			WB	2 LD			1,620	14		0.9%	
	SR 826	NW 67 Avenue	EB	2 LD	Collector	E	1,720	11	0.79%	0.6%	0.5%
			WB	2 LD			1,720	5		0.3%	
	NW 67 Avenue	NW 57 Avenue (Red Rd)	EB	2 LD	Collector	E + 20%	2,064	4	0.30%	0.2%	0.1%
			WB	2 LD			2,064	2		0.1%	
Okeechobee Rd/US 27	Okeechobee Rd/US 27	NW 107 Avenue	EB	2LD	Collector	D	1,620	108	17.78%	6.7%	11.0%
			WB	2LD			1,620	250		15.4%	
	NW 107 Avenue	NW 97 Avenue	EB	2LD	Collector	D	1,620	33	2.43%	2.0%	1.5%
			WB	2LD			1,620	16		1.0%	
	NW 97 Avenue	Beacon Station Blvd	EB	2LD	Collector	D	1,620	802	57.10%	49.5%	35.5%
			WB	2LD			1,620	348		21.5%	
Okeechobee Rd/US 27	NW 97 Av	Beacon Station Blvd	EB	2LD	County Minor Arterial	D	1,620	56	3.97%	3.5%	2.5%
			WB	2LD			1,620	24		1.5%	
	Beacon Station Blvd	NW 87 Av	EB	1 L	County Minor	D	760	46	3.28%	6.1%	4.3%
			WB	1 L	0		760	20		2.6%	
	NW 87 Av	W of SR 826	EB	1 L	County Minor Arterial	C	760	10	0.70%	1.3%	0.9%
			WB	1 L			760	4		0.5%	
West Okeechobee Rd / Frontage Road	West	HEFT	NWB	2 LD	FIHS	C	2,500	18	2.98%	0.7%	1.2%
			SEB	2 LD			2,500	42		1.7%	
	HEFT	NW 138 Street	NWB	3 LD	FIHS	D	2,790	102	16.68%	3.7%	6.0%
			SEB	3 LD			2,790	234		8.4%	
	NW 138 Street	Beacon Station Blvd	NWB	3 LD	FIHS	D	2,790	140	9.98%	5.0%	3.6%
			SEB	3 LD			2,790	61		2.2%	
	Beacon Station Blvd	NW 87 Avenue	NWB	3 LD	FIHS	D	2,790	104	7.40%	3.7%	2.7%
			SEB	3 LD			2,790	45		1.6%	
	NW 87 Avenue	SR 826	NWB	3 LD	FIHS	D	2,790	72	5.11%	2.6%	1.8%
			SEB	3 LD			2,790	31		1.1%	
Gratigny Expressway	SR 826	NW 74 St	NWB	3 LD	State Principal Arterial	E + 20%	3,348	36	2.53%	1.1%	0.8%
			SEB	3 LD			3,348	15		0.4%	
	US 27/NW 138 Street	NW 107 Avenue	NWB	1 L	Collector	D	760	0	0.00%	0.0%	0.0%
			SEB	1 L			760	0		0.0%	
	NW 107 Avenue	Hialeah Gardens Blvd	NWB	1 L	Collector	D	760	26	1.84%	3.4%	2.4%
			SEB	1 L			760	11		1.4%	
	Hialeah Gardens Blvd	NW 87 Avenue	NWB	1 L	Collector	D	760	41	2.93%	5.4%	3.9%
			SEB	1 L			760	18		2.4%	
	NW 87 Avenue	NW 77 Avenue	NWB	1 L	Collector	D	760	22	1.59%	2.9%	2.1%
			SEB	1 L			760	10		1.3%	
W 68 Street/NW 122 Street	SR 826	Red Road/W 4 Av	EB	3 LD	FIHS	D	5,410	237	16.88%	4.4%	3.1%
			WB	3 LD			5,410	103		1.9%	
	Okeechobee Road	NW 97 Avenue	EB	1 L	Collector	D	608	23	1.64%	3.8%	2.7%
			WB	1 L			608	10		1.6%	
W 68 Street/NW 122 Street	NW 97 Avenue	NW 87 Av / W 28 Av	EB	1 L	County Minor Arterial	D	608	29	2.09%	4.8%	3.5%
			WB	1 L			608	13		2.1%	
	NW 87 Av / W 28 Av	SR 826	EB	2 LD	County Minor Arterial	D	1,620	6	0.45%	0.4%	0.3%
			WB	2 LD			1,620	3		0.2%	

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SENSITIVITY ANALYSIS - FUTURE CONDITIONS WITHOUT INTERCHAGE (REDUCED DEVELOPMENT)

Future Traffic Conditions with Project - (weekday, one-way, PM peak)

Beacon Countyline DRI

Roadway	Limits		Directi on	Directional # of Lanes	Roadway Type	Municipality	Volume (2018)	LOS STD	Service Volume	V/SV	Meets LOS STD?
	From	To									
Palmetto Expressway (SR 826)	Red Road/NW 57 Av	NW 67 Av/Ludlam Rd	EB	3 LD	FIHS	Miami Lakes	8,288	D	5,410	1.53	No
			WB	3 LD			6,745		5,410	1.25	No
	NW 67 Av/Ludlam Rd	Miami Lakes Drive	NEB	3 LD	FIHS	Miami Lakes	9,029	D	5,410	1.67	No
			SWB	3 LD			7,247		5,410	1.34	No
	Miami Lakes Drive	I-75	NB	3 LD	FIHS	Miami Lakes	9,236	D	5,410	1.71	No
			SB	3 LD			7,266		5,410	1.34	No
	I-75	W 68 St/NW 122 Street	NB	4 LD	FIHS	Hialeah	10,651	D	7,380	1.44	No
			SB	4 LD			8,596		7,380	1.16	No
	W 68 St/NW 122 Street	W 49 Street/NW 103 St	NB	4 LD	FIHS	Hialeah	11,024	D	7,380	1.49	No
			SB	4 LD			8,873		7,380	1.20	No
W 49 Street/NW 103 St	Okeechobee Rd/US 27	NB	5 LD	FIHS	Hialeah/Hialeah	11,371	D	9,340	1.22	No	
		SB	5 LD			9,132		9,340	0.98	Yes	
Okeechobee Rd/US 27	NW 74 Street	NB	5 LD	FIHS	Medley	11,889	D	9,340	1.27	No	
		SB	5 LD			9,645		9,340	1.03	No	
NW 87 Avenue / West 28 Avenue	Miami Gardens Drive	NW 170 Street	NB	2LD	Collector	Miami-Dade	477	D	1,620	0.29	Yes
			SB	2LD			763		1,620	0.47	Yes
	NW 170 Street	Miami Lakes Drive	NB	2LD	Collector	Miami Lakes	53	D	1,620	0.03	Yes
		SB	2LD			108		1,620	0.07	Yes	
I-75	Miami Lakes Drive	I-75	NB	2 LD	Collector	Miami Lakes	1,209	D	1,620	0.75	Yes
			SB	2 LD			919		1,620	0.57	Yes
	Miramar Parkway	HEFT	NB	4 LD	FIHS	Miramar	10,354	D	7,480	1.38	No
			SB	4 LD			9,463		7,480	1.27	No
	HEFT	NW 186 Street	NB	4 LD	FIHS	Miami-Dade	9,098	D	7,380	1.23	No
		SB	4 LD			8,439		7,380	1.14	No	
NW 186 Street	NW 138 Street	NB	4 LD	FIHS	Miami	8,949	D	7,380	1.21	No	
		SB	4 LD			7,968		7,380	1.08	No	
NW 138 Street	SR 826	EB	4 LD	FIHS	Miami	7,444	D	NA (1)	NA (1)	Yes (1)	
		WB	4 LD			7,629		NA (1)	NA (1)	Yes (1)	
NW 97 Avenue	NW 170 Street	NW 154 Street	NB	2LD	Collector	Hialeah	91	D	1,620	0.06	Yes
			SB	2LD			194		1,620	0.12	Yes
	NW 154 Street	NW 138 Street	NB	2LD	Collector	Hialeah	367	D	1,620	0.23	Yes
		SB	2LD			847		1,620	0.52	Yes	
NW 107 Avenue	NW 138 Street	W 68 Street	NB	1 L	Collector	Hialeah/Hialeah	249	D	760	0.33	Yes
			SB	1 L			162		760	0.21	Yes
	NW 166 Street	NW 162 Street	NB	1 L	Collector	Hialeah/Hialeah	81	D	760	0.11	Yes
			SB	1 L			186		760	0.24	Yes
	NW 162 Street	NW 154 Street	NB	1 L	Collector	Hialeah/Hialeah	242	D	760	0.32	Yes
		SB	1 L			558		760	0.73	Yes	
HEFT	NW 154 Street	NW 138 Street	NB	1 L	Collector	Hialeah/Hialeah	366	D	760	0.48	Yes
			SB	1 L		Gardens	679		760	0.89	Yes
	NW 138 Street	Okeechobee Rd/US 27	NB	2 LD	Collector	Hialeah Gardens	588	D	1,620	0.36	Yes
			SB	2 LD			618		1,620	0.38	Yes
	NW 57 Av (Red Road)	I-75	NB	2 LD	FIHS	Miramar	4,800	D	3,580	1.34	No
		SB	2 LD			3,523		3,580	0.98	Yes	
I-75	NW 170 Street	NW 170 Street	NB	3 LD	FIHS	Miami-Dade	8,506	D	5,530	1.54	No
			SB	3 LD			6,135		5,530	1.11	No
	NW 170 Street	Okeechobee Rd/US 27	NB	3 LD	FIHS	Miami-Dade/Hialeah	8,434	D	5,530	1.53	No
			SB	3 LD			6,116		5,530	1.11	No
	Okeechobee Rd/US 27	NW 106 Street	NB	3 LD	FIHS	Miami-Dade/Medley	9,032	D	5,530	1.63	No
		SB	3 LD			6,527		5,530	1.18	No	
NW 106 Street	NW 74 Street	NB	3 LD	FIHS	Miami-Dade	9,679	D	5,530	1.75	No	
			SB	3 LD			7,191		5,530	1.30	No

(1) See HCS+ analysis provided in Appendix 21-

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SENSITIVITY ANALYSIS - FUTURE CONDITIONS WITHOUT INTERCHAGE (REDUCED DEVELOPMENT)

Future Traffic Conditions with Project - (weekday, one-way, PM peak)

Beacon Countyline DRI

Roadway	Limits		Directi on	Directional # of Lanes	Roadway Type	Municipality	Volume (2018)	LOS STD	Service Volume	V/SV	Meets LOS STD?	
	From	To										
Miami Gardens Drive (NW 186 Street)	I-75	NW 87 Avenue	EB	2 LD	State Minor	Miami-Dade	2,615	SUMA	1,800	1.45	No	
			WB	2 LD	Arterial		1,138		1,800	0.63	Yes	
	NW 87 Avenue	NW 77 Avenue	EB	2 LD	State Minor	Miami-Dade	1,567	SUMA	1,800	0.87	Yes	
			WB	2 LD	Arterial		952		1,800	0.53	Yes	
	NW 77 Avenue	NW 67 Avenue	EB	2 LD	State Minor	Miami-Dade	2,176	SUMA	1,800	1.21	No	
			WB	2 LD	Arterial		1,728		1,800	0.96	Yes	
	NW 67 Avenue	NW 57 Avenue (Red Rd)	EB	2 LD	State Minor	Miami-Dade	1,983	HE	1,800	1.10	No	
			WB	2 LD	Arterial		1,631		1,800	0.91	Yes	
NW 170 Street	HEFT	NW 97 Avenue	EB	2LD	Collector	Miami- Dade/Hialeah	33	D	1,620	0.02	Yes	
			WB	2LD			33		1,620	0.02	Yes	
	NW 97 Avenue	I-75	EB	1 L	Collector	Miami-	0	D	798	0.00	Yes	
			WB	1 L			0		798	0.00	Yes	
	I-75	NW 87 Avenue	EB	1 L	Collector	Miami-	62	D	760	0.08	Yes	
			WB	1 L			93		760	0.12	Yes	
	NW 87 Avenue	NW 77 Avenue	EB	1 L	Collector	Miami-	447	D	760	0.59	Yes	
			WB	1 L			448		760	0.59	Yes	
	NW 77 Avenue	NW 67 Avenue	EB	1 L	Collector	Miami-	374	D	760	0.49	Yes	
			WB	1 L			460		760	0.61	Yes	
	NW 138 Street	Okeechobee Rd/US 27	NW 107 Avenue	EB	2LD	Collector	Hialeah/Hialeah	831	D	1,620	0.51	Yes
			WB	2LD			772		1,620	0.48	Yes	
	NW 107 Avenue	NW 97 Avenue	EB	2LD	Collector	Hialeah/Hialeah	720	D	1,620	0.44	Yes	
			WB	2LD			508		1,620	0.31	Yes	
	NW 97 Avenue	Beacon Station Blvd	EB	2LD	Collector	Hialeah	1,617	D	1,620	1.00	Yes	
			WB	2LD			1,108		1,620	0.68	Yes	
NW 130 Street (W 76 Street)	NW 97 Av	Beacon Station Blvd	EB	2LD	County Minor	Hialeah	434	D	1,620	0.27	Yes	
			WB	2LD	Arterial		572		1,620	0.35	Yes	
	Beacon Station Blvd	NW 87 Av	EB	1 L	County Minor	Hialeah	630	D	760	0.83	Yes	
			WB	1 L	Arterial		665		760	0.88	Yes	
	NW 87 Av	W of SR 826	EB	1 L	County Minor	Hialeah	435	C	760	0.57	Yes	
			WB	1 L	Arterial		507		760	0.67	Yes	
	Okeechobee Rd/US 27	West	HEFT	NWB	2 LD	FIHS	Hialeah Gardens	1,411	C	2,500	0.56	Yes
			SEB	2 LD			1,211		2,500	0.48	Yes	
	HEFT	NW 138 Street	NWB	3 LD	FIHS	Hialeah/Hialeah Gardens	1,484	D	2,790	0.53	Yes	
			SEB	3 LD			1,456		2,790	0.52	Yes	
	NW 138 Street	Beacon Station Blvd	NWB	3 LD	FIHS	Hialeah Gardens	1,472	D	2,790	0.53	Yes	
			SEB	3 LD			1,184		2,790	0.42	Yes	
	Beacon Station Blvd	NW 87 Avenue	NWB	3 LD	FIHS	Hialeah Gardens	2,345	D	2,790	0.84	Yes	
			SEB	3 LD			2,041		2,790	0.73	Yes	
	NW 87 Avenue	SR 826	NWB	3 LD	FIHS	Hialeah Gardens	2,521	D	2,790	0.90	Yes	
			SEB	3 LD			2,215		2,790	0.79	Yes	
	SR 826	NW 74 St	NWB	3 LD	State Principal	Hialeah	3,169	E + 20%	3,348	0.95	Yes	
			SEB	3 LD	Arterial		2,254		3,348	0.67	Yes	
	West Okeechobee Rd/ Frontage Road	US 27/NW 138 Street	NW 107 Avenue	NWB	1 L	Collector	Hialeah Gardens	396	D	760	0.52	Yes
			SEB	1 L			531		760	0.70	Yes	
	NW 107 Avenue	Hialeah Gardens Blvd	NWB	1 L	Collector	Hialeah Gardens	518	D	760	0.68	Yes	
			SEB	1 L			259		760	0.34	Yes	
	Hialeah Gardens Blvd	NW 87 Avenue	NWB	1 L	Collector	Hialeah Gardens	313	D	760	0.41	Yes	
			SEB	1 L			309		760	0.41	Yes	
	NW 87 Avenue	NW 77 Avenue	NWB	1 L	Collector	Hialeah Gardens	788	D	760	1.04	No	
			SEB	1 L			359		760	0.47	Yes	
	Gratigny Expressway	SR 826	Red Road/W 4 Av	EB	3 LD	FIHS	Hialeah/Miami Lakes	3,524	D	5,410	0.65	Yes
			WB	3 LD			3,073		5,410	0.57	Yes	
W 68 Street/NW 122 Street	Okeechobee Road	NW 97 Avenue	EB	1 L	Collector	Hialeah Gardens	350	D	608	0.58	Yes	
			WB	1 L			247		608	0.41	Yes	
	NW 97 Avenue	NW 87 Av / W 28 Av	EB	1 L	County Minor	Hialeah	595	D	608	0.98	Yes	
			WB	1 L	Arterial		624		608	1.03	No	
	NW 87 Av / W 28 Av	SR 826	EB	2 LD	County Minor	Hialeah	1,391	D	1,620	0.86	Yes	
			WB	2 LD	Arterial		1,669		1,620	1.03	No	

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