



JMD ENGINEERING, INC.

## **TRAFFIC IMPACT ANALYSIS**

**BOCA SURF PARK  
BOCA RATON, FLORIDA**

**Prepared for:  
GREATER BOCA RATON BEACH AND PARK DISTRICT**

**AUGUST 29, 2025**  
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Certificate of Authorization  
Number 00009514

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# INTRODUCTION

Boca Surf Park is a proposed 18.2 acre recreational facility that will replace a portion of the abandoned 27-hole golf course and generally located on the north side of Clint Moore Road, east of I-95. The location of the site is shown in Figure 1. The proposed development will include the following land uses and intensities:

- WaveGarden Lagoon
- Surf Center
- Wellness and Lifestyle Café
- Surf Camp
- Restaurants
- Multifunction Room
- VIP Clubhouse
- Spa & Wellness
- Adventure Zone
- Cabanas

JMD Engineering, Inc. was retained to prepare a traffic impact analysis for the proposed development. This document presents the methodology used and the findings of the traffic impact analysis. It was conducted in accordance with the Traffic Performance Standards Ordinance (TPSO) of Palm Beach County and site-specific requirements from the City of Boca Raton. The analysis used current data available from Palm Beach County and the City of Boca Raton. A horizon of year 2029 was considered in the analysis.



**PROJECT LOCATION MAP**

**FIGURE 1  
BOCA SURF PARK  
BOCA RATON, FL**

# INVENTORY AND PLANNING DATA

The data used in this analysis were obtained from Palm Beach County and collected in the field. The data included:

- 2024 peak hour traffic volumes
- 2025 Intersection count
- Historic traffic count data
- Approved un-built projects from TPS database
- Proposed Conceptual Site Plan
- Traffic Reports from Similar Facilities

# PROJECT TRAFFIC

## Traffic Generation

A trip generation analysis was undertaken for trips associated with the proposed development. ITE Trip Generation rates where applicable were used in the analysis (restaurants, retail, spa, etc.) with the trips for the Lagoon & Academy based on trip data from a similar facility in California. Typical Pass-by capture was not considered applicable as this should for traffic purposes be considered a destination venue. In a similar fashion, the non-Lagoon and Academy trips (restaurants, retail, Spa, Café's, etc.) will primarily be patronized by the 1,000 visitors anticipated weekdays at the facility. As such, we have applied a 90% internal capture for these uses when determining external trips the site generates.

Table 1 presents a trip generation estimation for proposed project. This comparison determines the traffic that is subject to the County's Transportation Performance Standards Ordinance (TPSO) and the City of Boca Raton review. For the proposed redevelopment of the property, the new trips expected to be generated from the proposed development are 1,121 daily trips, 32 AM peak hour trips and 90 PM peak hour trips that must analyzed and are subject to City of Boca Raton and TPSO review and approval.

## Traffic Distribution

Traffic distribution was based on discussions with the applicant on his anticipated customer base and previously approved traffic impact studies in the area. The distribution according to the cardinal directions is:

NORTH	-	25 percent
SOUTH	-	30 percent
EAST	-	15 percent
WEST	-	30 percent

## Traffic Assignment

The net trips for the project were assigned to the surrounding roadway network in terms of a.m. and p.m. peak hour external trips. Figure 2 illustrates the project assignment. Based on the net traffic generation, it was determined that the maximum radius of development influence for Test 1 of the Traffic Performance Standards is one mile. The Test 2 maximum radius of influence is also one mile.



**PROJECT ASSIGNMENT**

**FIGURE 1**  
**BOCA SURF PARK**  
**BOCA RATON, FL**

**TABLE 1  
BOCA SURF PARK  
TRIP GENERATION**

Land Use	Intensity	Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
<b>PROPOSED DEVELOPMENT</b>								
Surf (Lagoon & Academy)	1,000 Persons	1,000	27	26	1	79	40	39
Surf Center	9,500 Square Feet	226	5	4	1	20	9	11
Spa & Wellness	4,000 Square Feet	132	5	3	2	14	8	6
Restaurant & Bar	5,000 Square Feet	419	4	2	2	39	26	13
Wellness Café/Beach Bar	4,000 Square Feet	429	38	21	17	36	22	14
	<b>Subtotal</b>	<b>2,206</b>	<b>79</b>	<b>56</b>	<b>23</b>	<b>188</b>	<b>105</b>	<b>83</b>
<b>Internal Capture</b>								
Surf Center, Spa & Resta	90%	1,085	47	27	20	98	59	39
Net Driveway		<b>1,121</b>	<b>32</b>	<b>29</b>	<b>3</b>	<b>90</b>	<b>46</b>	<b>44</b>
<b>TOTAL NET PROPOSED TRIPS</b>		<b>1,121</b>	<b>32</b>	<b>29</b>	<b>3</b>	<b>90</b>	<b>46</b>	<b>44</b>

**Trip Generation Rates**

Landuse	ITE Code	Unit	Daily Rate/Equation	AM Peak Hour		PM Peak Hour	
				In/Out	Rate/Equation	In/Out	Rate/Equation
Surf Lagoon & Amenities	N/A	Visitor	1	95/5	0.027	51/49	0.079
Sporting Goods	861	1000 S.F.	23.78	78/22	0.48	46/54	2.14
Health/Fitness Club	492	1000 S.F.	32.93	51/49	1.31	57/43	3.45
Fine Dining Restaurant	931	1000 S.F.	83.84	50/50	0.73	67/33	7.8
High Turnover Sit-Down Rest.	932	1000 S.F.	107.2	55/45	9.57	61/39	9.05

SURF LAGOON & AMENITIES TRIP GENERATION FROM NEWPORT BEACH SURF FARM.

Multifunction Room, Day Care, VIP Clubhouse, Adventure Zone, Cabanas Do Not Contribute to External Traffic (Included in Surf Lagoon and Surf Academy)

## ASSURED AND PROGRAMMED CONSTRUCTION

A review of the Five-Year Plans of Palm Beach County and FDOT, no significant roadway construction is planned for the area at the time of build-out. There is an anticipated extension of Jefferey Street from its current terminus at NW 2<sup>nd</sup> Avenue to Dixie Highway across the existing FEC railroad tracks. That improvement sill not significantly alter the anticipated traffic assignment of the project.

# PBC PERFORMANCE STANDARDS TEST

## PART ONE – INTERSECTION EVALUATION

### Intersections on Project Access Links

This Part requires analysis of Major Intersections, within or beyond the Radius of Development Influence, where a Project's traffic is significant on a Link within the Radius of Development of Influence. An analysis is undertaken at the major intersection nearest to each link directly accessed to determine if they are significantly impacted by the project. Based on project intensity and assignment, one intersection meets these criteria. We have analyzed the intersection of Clint Moore Road and Congress Avenue.

Existing counts were converted to peak season and historical growth and approved traffic from the PBC TPS database were added to provide Year 2029 Existing + Background volumes. The net project volumes were added to provide total Year 2029 volumes at the intersection. The Critical Movement Analysis (CMA) worksheets show that the intersection will operate at acceptable volume thresholds of below 1,400.

### Intersections with Ten Percent Project Traffic on Approach

The proposed Palm Beach County Traffic Performance Standards stipulate that an analysis shall be undertaken for intersections where the project traffic comprises 10% or more of the total traffic on at least one of the intersection approaches. None of the intersections in the study area fall within this category.

## PART TWO - LINK EVALUATION

### Test 1

A peak direction, peak hour link performance standard evaluation was undertaken for each significant link considering its total peak hour, peak direction traffic volume and the roadway laneage to be in place in 2029. Project traffic significance for both a.m. and p.m. peak hours for peak hour, peak direction conditions are shown in Table 2 and Table 3 which shows which links are significantly impacted and thus require further analysis. There is one link under TPS jurisdiction expected to be significantly impacted by the project which is Clint Moore Road from NW 2<sup>nd</sup> Avenue to Congress Avenue. The link analysis in Table 4 and Table 5 demonstrated that the link in question operates well within the Level of Service Thresholds. Therefore, no additional analysis is required.

### Test 2 - Five year Analysis

There are no links that are significant. Therefore, no additional analysis is required.

**TABLE 2  
BOCA SURF PARK  
AM PEAK HOUR SIGNIFICANCE ANALYSIS - TEST 1**

ROADWAY TO FROM		LANES	DIRECTION	LOS D VOLUME	PROJECT TRAFFIC					
					% ASSIGN.	INBOUND OUTBOUND	PK HR TRIPS	PROJECT IMPACT	SIGNIFICANT IMPACT?	
CLINT MOORE ROAD										
MILITARY TRAIL	CONGRESS AVE	6LD	EB	2,680	20%	I	6	0.22%	NO	
			WB	2,680	20%	O	1	0.04%	NO	
CONGRESS AVE	SITE		EB	1,960	70%	I	21	1.07%	YES	
			WB	1,960	70%	O	3	0.15%	NO	
SITE	NW 2ND AVE		EB	1,960	30%	O	1	0.05%	NO	
			WB	1,960	30%	I	9	0.46%	NO	
CONGRESS AVENUE										
YAMATO ROAD	CLINT MOORE ROAD	6LD	NB	2,680	30%	I	9	0.34%	NO	
			SB	2,680	30%	O	1	0.04%	NO	
CLINT MOORE ROAD	NW 82ND AVE	6LD	NB	2,680	20%	O	1	0.04%	NO	
			SB	2,680	20%	I	6	0.22%	NO	
YAMATO ROAD										
CONGRESS AVE	I-95	8LD	EB	3,590	20%	I	6	0.17%	NO	
			WB	3,590	20%	O	1	0.03%	NO	
I-95	BOCA RATON BLVD	6LD	EB	2,680	20%	I	6	0.22%	NO	
			WB	2,680	20%	O	1	0.04%	NO	
BOCA RATON BLVD	N. DIXIE HWY	6LD	EB	2,680	10%	I	3	0.11%	NO	
			WB	2,680	10%	O	1	0.04%	NO	
NW 2ND AVE										
SPANISH RIVER	YAMATO ROAD	4LD	NB	1,960	10%	I	3	0.15%	NO	
			SB	1,960	10%	O	1	0.05%	NO	
YAMATO ROAD	CLINT MOORE ROAD	2L	NB	860	15%	I	5	0.58%	NO	
			SB	860	15%	O	1	0.12%	NO	
CLINT MOORE ROAD	HIDDEN VALLEY DR	2L	NB	860	15%	O	1	0.12%	NO	
			SB	860	15%	I	5	0.58%	NO	
HIDDEN VALLEY DR	C-15 CANAL	2L	NB	860	5%	O	1	0.12%	NO	
			SB	860	5%	I	2	0.23%	NO	
N. DIXIE HIGHWAY										
YAMATO ROAD	HIDDEN VALLEY	5L	NB	1,960	5%	O	1	0.05%	NO	
			SB	1,960	5%	I	2	0.10%	NO	
SPANISH RIVER	YAMATO ROAD	5L	NB	1,960	5%	I	2	0.10%	NO	
			SB	1,960	5%	O	1	0.05%	NO	

**TABLE 3  
BOCA SURF PARK  
PM PEAK HOUR SIGNIFICANCE ANALYSIS - TEST 1**

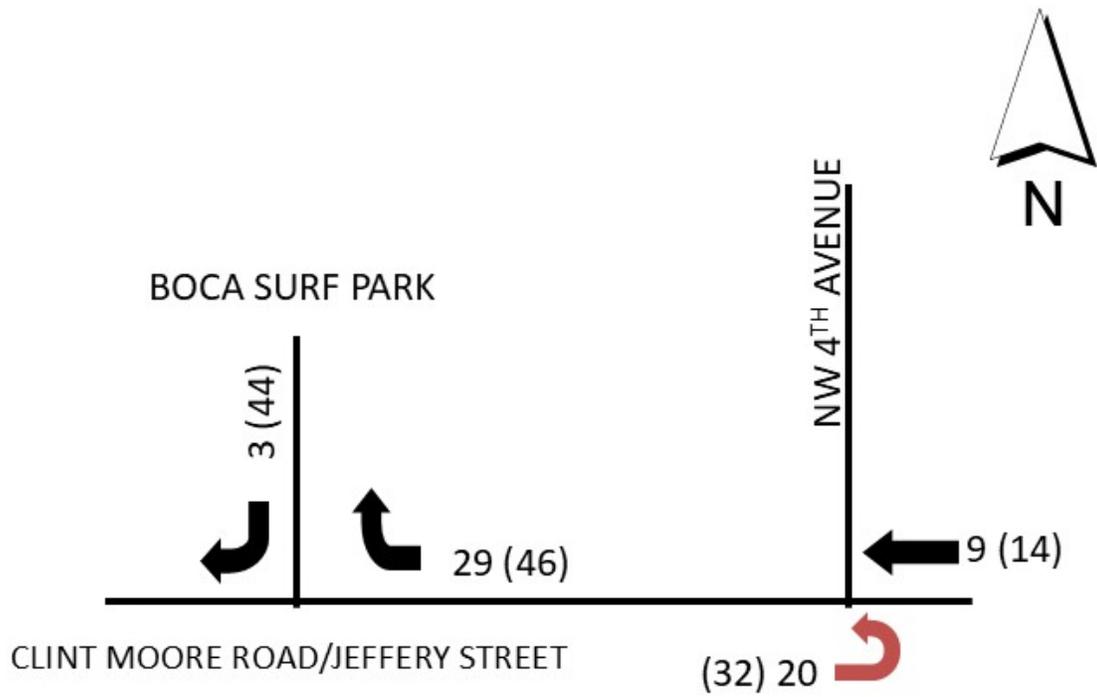
ROADWAY TO	FROM	LANES	DIRECTION	LOS D	PROJECT TRAFFIC					
					% ASSIGN.	INBOUND OUTBOUND	PK HR TRIPS	PROJECT IMPACT	SIGNIFICANT IMPACT?	
CLINT MOORE ROAD										
MILITARY TRAIL	CONGRESS AVE	6LD	EB	2,680	20%	I	10	0.37%	NO	
			WB	2,680	20%	O	9	0.34%	NO	
CONGRESS AVE	SITE		EB	1,960	70%	I	33	1.68%	YES	
			WB	1,960	70%	O	31	1.58%	YES	
SITE	NW 2ND AVE		EB	1,960	30%	O	14	0.71%	NO	
			WB	1,960	30%	I	14	0.71%	NO	
CONGRESS AVENUE										
YAMATO ROAD	CLINT MOORE ROAD	6LD	NB	2,680	30%	I	14	0.52%	NO	
			SB	2,680	30%	O	14	0.52%	NO	
CLINT MOORE ROAD	NW 82ND AVE	6LD	NB	2,680	20%	O	9	0.34%	NO	
			SB	2,680	20%	I	10	0.37%	NO	
YAMATO ROAD										
CONGRESS AVE	I-95	8LD	EB	3,590	20%	I	10	0.28%	NO	
			WB	3,590	20%	O	9	0.25%	NO	
I-95	BOCA RATON BLVD	6LD	EB	2,680	20%	I	10	0.37%	NO	
			WB	2,680	20%	O	9	0.34%	NO	
BOCA RATON BLVD	N. DIXIE HWY	6LD	EB	2,680	10%	I	5	0.19%	NO	
			WB	2,680	10%	O	5	0.19%	NO	
NW 2ND AVE										
SPANISH RIVER	YAMATO ROAD	4LD	NB	1,960	10%	I	5	0.26%	NO	
			SB	1,960	10%	O	5	0.26%	NO	
YAMATO ROAD	CLINT MOORE ROAD	2L	NB	860	15%	I	7	0.81%	NO	
			SB	860	15%	O	7	0.81%	NO	
CLINT MOORE ROAD	HIDDEN VALLEY DR	2L	NB	860	15%	O	7	0.81%	NO	
			SB	860	15%	I	7	0.81%	NO	
HIDDEN VALLEY DR	C-15 CANAL	2L	NB	860	5%	O	3	0.35%	NO	
			SB	860	5%	I	3	0.35%	NO	
N. DIXIE HIGHWAY										
YAMATO ROAD	HIDDEN VALLEY	5L	NB	1,960	5%	O	3	0.15%	NO	
			SB	1,960	5%	I	3	0.15%	NO	
SPANISH RIVER	YAMATO ROAD	5L	NB	1,960	5%	I	3	0.15%	NO	
			SB	1,960	5%	O	3	0.15%	NO	

TABLE 4 BOCA SURF PARK TEST 1 - LEVEL OF SERVICE PEAK HOUR, PEAK DIRECTION ANALYSIS - AM PEAK HOUR (2029)												
ROADWAY TO	FROM	LANES	DIRECTION	LOS CAPACITY	2024 VOLUME	HISTORICAL GROWTH RATE	2029 HISTORICAL GROWTH	(per TPS Database) COMMITTED TRIPS +1%	BKGD USED	PROJECT TRIPS	2029 TOTAL TRIPS	MEETS LOS?
CLINT MOORE ROAD												
	CONGRESS AVE SITE	4LD	EB	1,960	582	1.00%	36	100	100	21	703	YES
			WB	1,960	505	1.00%	31	90	90	3	598	YES
	SITE	NW 2ND AVE	4LD	EB	1,960	582	1.00%	36	106	1	689	YES
			WB	1,960	505	1.00%	31	95	95	12	612	YES

TABLE 5 BOCA SURF PARK TEST 1 - LEVEL OF SERVICE PEAK HOUR, PEAK DIRECTION ANALYSIS - PM PEAK HOUR (2029)												
ROADWAY TO	FROM	LANES	DIRECTION	LOS CAPACITY	2024 VOLUME	HISTORICAL GROWTH RATE	2029 HISTORICAL GROWTH	(per TPS Database) COMMITTED TRIPS +1%	BKGD USED	PROJECT TRIPS	2029 TOTAL TRIPS	MEETS LOS?
CLINT MOORE ROAD												
	CONGRESS AVE SITE	4LD	EB	1,960	763	1.00%	47	101	101	33	897	YES
			WB	1,960	422	1.00%	26	153	153	21	596	YES
	SITE	NW 2ND AVE	4LD	EB	1,960	763	1.00%	47	125	14	902	YES
			WB	1,960	422	1.00%	26	175	175	18	615	YES

## SITE CIRCULATION AND TURN LANE REQUIREMENTS

The access point to the proposed development is on Clint Moore Road. Therefore, the property access and driveway analysis fall under the city's review process. Entrance to the project will be considered an intermediate driveway based on City of Boca Raton code standards and will be required to meet city standards for lanes, width and turning radius. No additional turn lanes along Clint Moore Road are required as a result of this project.



**LEGEND**

AM PEAK – 29

PM PEAK – (46)

 <p>JMD ENGINEERING, INC.</p>	<p><b>PROJECT DRIVEWAY VOLUMES</b></p>	<p>FIGURE 3 BOCA SURF PARK BOCA RATON, FL</p>
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## CONCLUSION

The results of the traffic impact concurrency evaluation indicate that the proposed redevelopment of Boca Surf Park meets the requirements of *Article 12* of Palm Beach County's Traffic Performance standards and the City of Boca Raton's Site-Specific standards without the need for mitigation on the adjacent roadway network.

# APPENDIX

# SITE PLAN



**BOCA**  
SURF PARK

**Boca Raton, FL**  
CONCEPT DESIGN  
2025.07.08



# PROGRAM SUMMARY

## BUILDING 1

2 STORY SURF CENTER AND MULTI USE BUILDING  
25,000 GROSS SF | 7000 OUTDOOR SF

### LEVEL 1

SURF CENTER

WELLNESS AND LIFESTYLE CAFE

DAY CARE/ SURF CAMP

### LEVEL 2

RESTAURANT AND BAR

MULTIFUNCTION ROOM

SIZE (SF)  
GROSS

13,500 SF

9,500 SF

2,500 SF

1,500 SF

11,500 SF

5,000 SF

6,500 SF

## BUILDING 3

VIP CLUB HOUSE AND SPA/ WELLNESS  
6,000 GROSS SF | 2,500 OUTDOOR SF

VIP CLUBHOUSE

SPA AND WELLNESS

SIZE (SF)  
GROSS

2,000 SF

4,000 SF

## BUILDINGS 4 AND 5

AUXILIARY RESTROOMS  
1,000 SF

2 MENS AND WOMENS RESTROOMS

500 SF

## BUILDING 2

BEACH BAR AND CONTROL STATION  
1,700 GROSS SF | 2,700 OUTDOOR

### LEVEL 1

### LEVEL 2

1,500 SF

200 SF

## ADDITIONAL AMENITIES

50 RENTABLE CABANAS

WAVEGARDEN COVE PLUS

EVENT/ ENTERTAINMENT VENUE

ADVENTURE ZONE

PARKING

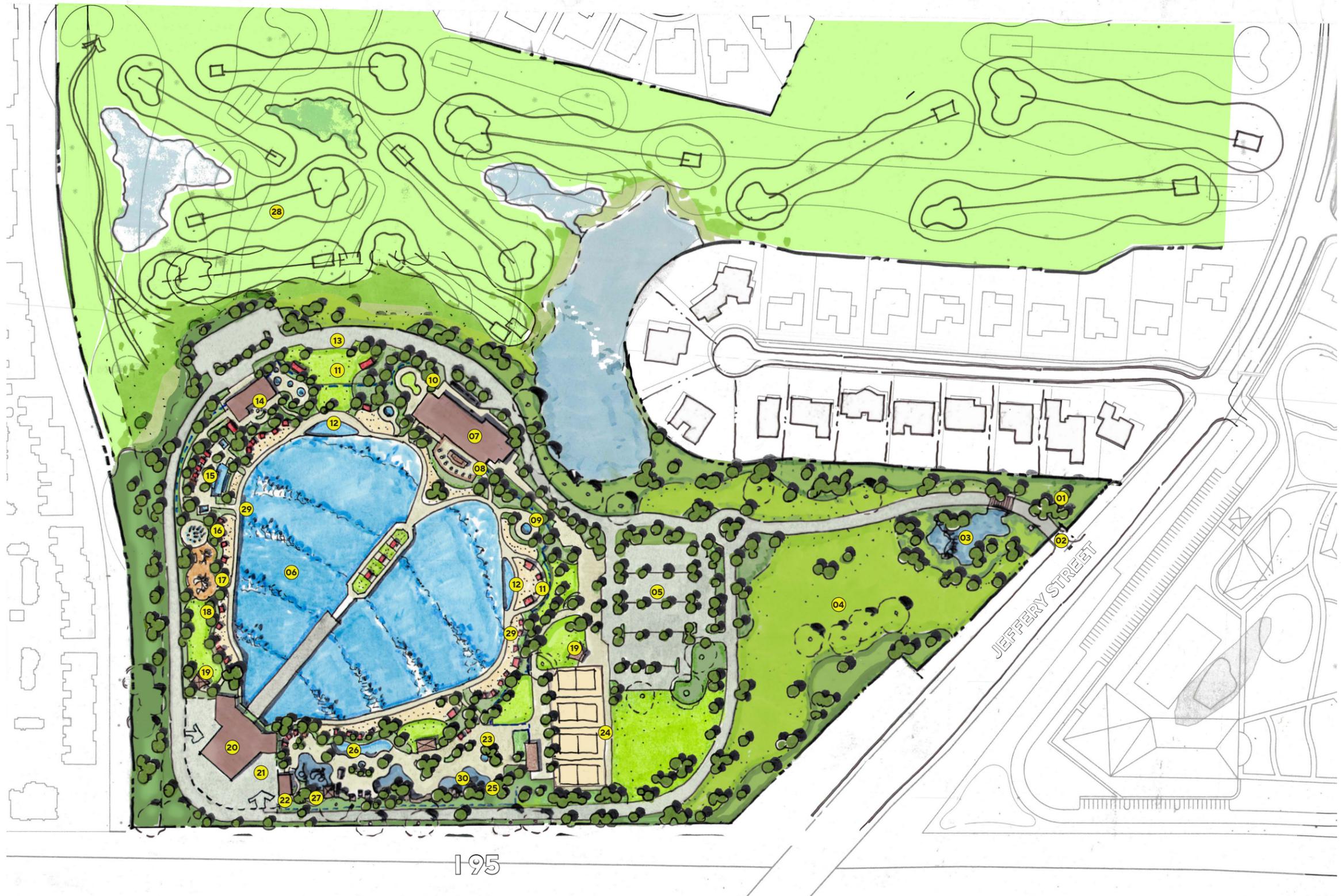
5,000 SF

800 SF

1700 SF

337 STALLS

- 01 ENTRY SIGN
- 02 VEHICULAR ENTRY
- 03 ARRIVAL WATER FEATURE
- 04 OVERFLOW/EVENTS AREA
- 05 PARKING
- 06 WAVEGARDEN LAGOON
- 07 SURF CENTER
- 08 COVERED BAR
- 09 HOT TUB
- 10 DAY CARE PLAY AREA
- 11 EVENT / TRAINING LAWN
- 12 WADING POOLS
- 13 FOOD TRUCK LAY BY LANE
- 14 MEMBERS CLUB & WELLNESS CENTER
- 15 MEMBERS POOL
- 16 MEMBERS KIDS / POOL POP UP
- FOUNTAIN
- 17 KIDS PLAY (DRY)
- 18 FLEX / EVENT AREA
- 19 EVENT LAWN AND SHADE STRUCTURE
- 20 WAVE GARDEN MECHANICAL
- 21 MAINTENANCE AND EMPLOYEE
- PARKING / EMPLOYEE PARKING
- 22 MAINTENANCE BUILDING
- 23 ADVENTURE ZONE
- 24 VOLLEYBALL COURTS
- 25 CLIFF JUMPING POOL
- 26 ROCK CLIMBING POOL
- 27 SLIDE POOL
- 28 DEVELOPMENT BY OTHERS
- 29 SHORELINE/ BEACH/ BOARDWALK
- 30 FAMILY POOL



# TPS DATABASE WORKSHEETS

A B C D E F G H I

Input Data

ROAD NAME: Clint Moore Rd STATION: 6301 Report Created  
 CURRENT YEAR: 2024 FROM: Midpoint 8/24/2025  
 ANALYSIS YEAR: 2029 TO: Boca Raton Blvd  
 GROWTH RATE: 0% COUNT DATE: NA  
 PSF: 0

Link Analysis

Time Period	AM			PM		
	2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB
Existing Volume	0	0	0	0	0	0
Peak Volume	0	0	0	0	0	0
Diversion(%)	0	0	0	0	0	0
Volume after Diversion	0	0	0	0	0	0

Committed Developments							Type	% Complete
FAU Boca	5	1	4	4	3	1	NR	80%
Clint Moore/Military Drug Store	0	0	0	0	0	0	NR	100%
Hidden Valley Royale	19	11	8	20	7	14	Res	0%
North Boca Village	0	0	0	0	0	0	NR	100%
Peninsula DRI - Non Residential	0	0	0	0	0	0	NR	100%
Boca National Golf Club	0	0	0	0	0	0	NR	0%
US Foodservice Facility Expansion	0	0	0	0	0	0	NR	100%
Danburg Mixed-Use	0	0	0	0	0	0	Res	100%
Fairway Commons	0	0	0	0	0	0	NR	100%
SBA Corporate Headquarters	7	1	6	6	5	1	NR	63%
The Lofts at Boca Colonnade	0	0	0	0	0	0	NR	100%
Congress Aenue Storage & Office	0	0	0	0	0	0	NR	100%
1690-2350 South Congress Avenue	74	49	25	124	34	91	Res	15%
5201 Residential	0	0	0	0	0	0	Res	100%
MCM Logistics Center	0	0	0	0	0	0	NR	100%
Public Storage - Boca Raton	3	1	1	5	2	2	NR	50%
Delray Central	10	7	3	12	5	8	NR	0%
AMTEC Residential Complex	9	3	6	9	6	3	Res	56%
900 Broken Sound	13	5	8	13	8	5	Res	0%
Boca Paddle at North Park	29	14	14	29	14	14	NR	0%
6600 N Military Trail	14	4	10	18	11	6	NR	0%
University Village	9	4	5	11	5	5	NR	0%
Boca Village	4	2	2	4	2	3	Res	0%
791 Park of Commerce	14	6	8	19	10	9	NR	0%
Total Committed Developments	210	108	100	274	112	162		
Total Committed Residential	119	70	49	170	57	116		

Total Committed Non-Residential	91	38	51	104	55	46
Double Count Reduction	18	8	10	21	11	9
<b>Total Discounted Committed Developments</b>	<b>192</b>	<b>100</b>	<b>90</b>	<b>253</b>	<b>101</b>	<b>153</b>
Historical Growth	0	0	0	0	0	0
Comm Dev+1% Growth	192	100	90	253	101	153
Growth Volume Used	192	100	90	253	101	153
Total Volume	192	100	90	253	101	153

Lanes	4L					
LOS D Capacity	3060	1860	1860	3060	1860	1860
Link Meets Test 1?	YES	YES	YES	YES	YES	YES
LOS E Capacity	3230	1860	1860	3230	1860	1860
Link Meets Test 2?	YES	YES	YES	YES	YES	YES

Input Data

ROAD NAME: Clint Moore Rd      STATION: 6301  
CURRENT YEAR: 2024      FROM: Congress Ave  
ANALYSIS YEAR: 2029      TO: Midpoint  
GROWTH RATE: 0%      COUNT DATE: NA  
PSF: 0

Report Created  
8/24/2025

Link Analysis

Time Period	AM			PM		
	2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB
Existing Volume	0	0	0	0	0	0
Peak Volume	0	0	0	0	0	0
Diversion(%)	0	0	0	0	0	0
Volume after Diversion	0	0	0	0	0	0

Committed Developments							Type	% Complete
FAU Boca	5	1	4	4	3	1	NR	80%
Clint Moore/Military Drug Store	0	0	0	0	0	0	NR	100%
Hidden Valley Royale	19	11	8	20	7	14	Res	0%
North Boca Village	0	0	0	0	0	0	NR	100%
Peninsula DRI - Non Residential	0	0	0	0	0	0	NR	100%
Congress Plaza at Delray	5	3	2	39	19	20	NR	0%
Boca National Golf Club	0	0	0	0	0	0	NR	0%
US Foodservice Facility Expansion	0	0	0	0	0	0	NR	100%
Danburg Mixed-Use	0	0	0	0	0	0	Res	100%
Fairway Commons	0	0	0	0	0	0	NR	100%
SBA Corporate Headquarters	7	1	6	6	5	1	NR	63%

The Lofts at Boca Colonnade	0	0	0	0	0	0	NR	100%
Congress Aenue Storage & Office	0	0	0	0	0	0	NR	100%
1690-2350 South Congress Avenue	74	49	25	124	34	91	Res	15%
5201 Residential	0	0	0	0	0	0	Res	100%
MCM Logistics Center	0	0	0	0	0	0	NR	100%
Public Storage - Boca Raton	10	5	6	19	10	10	NR	50%
Delray Central	10	7	3	12	5	8	NR	0%
AMTEC Residential Complex	9	3	6	9	6	3	Res	56%
900 Broken Sound	13	5	8	13	8	5	Res	0%
Boca Paddle at North Park	29	14	14	29	14	14	NR	0%
6600 N Military Trail	14	4	10	18	11	6	NR	0%
University Village	9	4	5	11	5	5	NR	0%
Boca Village	4	2	2	4	2	3	Res	0%
791 Park of Commerce	14	6	8	19	10	9	NR	0%
Total Committed Developments	222	115	107	327	139	190		
Total Committed Residential	119	70	49	170	57	116		
Total Committed Non-Residential	103	45	58	157	82	74		
Double Count Reduction	21	9	12	31	14	15		
Total Discounted Committed Developments	201	106	95	296	125	175		
Historical Growth	0	0	0	0	0	0		
Comm Dev+1% Growth	201	106	95	296	125	175		
Growth Volume Used	201	106	95	296	125	175		
Total Volume	201	106	95	296	125	175		

Lanes	4L					
LOS D Capacity	3060	1860	1860	3060	1860	1860
Link Meets Test 1?	YES	YES	YES	YES	YES	YES
LOS E Capacity	3230	1860	1860	3230	1860	1860
Link Meets Test 2?	YES	YES	YES	YES	YES	YES

# TRAFFIC GENERATION DOCUMENTATION



## TECHNICAL MEMORANDUM

**TO:** Brad Sommers, P.E.  
Transportation Manager/City Traffic Engineer  
Public Works Department  
City of Newport Beach

**FROM:** Sean Mohn

**DATE:** March 4, 2025

**RE:** Trip Generation Assessment for Surf Farm  
Newport Beach, California

**Ref:** J2116

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Gibson Transportation Consulting, Inc. (GTC) was asked to prepare a detailed trip generation assessment for Surf Farm (Project) in the City of Newport Beach (City). This memorandum summarizes the assessment, including the development of trip generation rates and estimates for the Project based on detailed programmatic attendance information and operational modeling data provided by industry experts (i.e., Wavegarden<sup>1</sup>), the development of trip generation estimates for the privately owned golf facility (which is open to the public) currently located at the Project site based on *Trip Generation Manual, 11<sup>th</sup> Edition* (Institute of Transportation Engineers [ITE], 2021) rates, and the resulting net new trip generation estimates for the Project.

## PROJECT DESCRIPTION

Based on discussions with the Project team and a detailed review of the associated Project materials, it is our understanding that the Project would redevelop 15 acres at 3100 Irvine Avenue to accommodate a private surfing facility consisting of a five-acre surf lagoon and 59,772 square feet (sf) of associated ancillary amenities for members and guests, including restaurant and lounge areas, as illustrated in Figure 1.

The Project would replace significant portions of the existing privately owned golf facility, including the 38 position driving range, the 233-seat restaurant, and three holes of the golf course. The Project would retain a limited portion of the existing privately owned golf facility (i.e., 15 holes of the golf course). Access to the Project would be provided via the existing driveway located on Irvine Avenue and from a new driveway located on Mesa Drive.

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<sup>1</sup> Wavegarden was founded in 2005 and has grown to become the largest specialist surf park company in the world with over 90 full time employees providing wave innovation design, master planning, civil design, water treatment, operations, and maintenance services. Wavegarden currently has nine surf facilities in operation, 10 surf facilities under construction or pre-construction, and over 40 surf facilities in the feasibility and design phase throughout the Americas, Europe, Asia, and Oceania.

## PROJECT TRIP GENERATION ANALYSIS

The trip generation rates and estimates developed for the Project, the trip generation estimates for the existing privately owned golf facility currently located at the Project site, and the resulting net new trip generation estimates for the Project are detailed below.

### Surf Lagoon and Associated Amenities

For purposes of developing empirical trip generation rates for the five-acre surf lagoon and associated ancillary amenities, GTC conducted a comprehensive review of the detailed programmatic attendance information and operational modeling data prepared by Wavegarden for typical high season weekday activity at the Newport Beach site, which was developed as part of a comprehensive market analysis based on the following key factors:

1. Market Demand Potential – Size, Profile, & Behavior
2. Market Supply – Potential Competition
3. Performance of Comparable Attractions
4. Quality of Concept, Product & Visitor Experience
5. Product Refreshment & Repeat Visit Potential
6. Location, Access & Wider Destination Context
7. Weather, Seasonality & Capacity
8. Price, Opening Hours, Duration of Visit & Value for Money
9. Quality of Management & Marketing
10. Community & Stakeholder Support

It is important to note that (A) the comprehensive market analysis also included an extensive review of comparable case studies for purposes of validating the analysis assumptions and demand envelopes, and (B) that the resulting detailed programmatic attendance information and operational modeling data also reflect the associated physical and operational parameters of the facility, including an identified **maximum capacity of 72 surfers** within the surf lagoon at any given time and the associated demand control afforded by the Project reservation system. The comparable case study sites and relevant details are provided in Attachment A.

Based on subsequent discussions with Wavegarden, it was confirmed that employees would arrive and depart outside the AM and PM peak hours. It was also confirmed that the attendance levels projected for typical high season weekday activity reflect the total demand for the site, inclusive of the surf lagoon demand (approximately 50% of the daily visitors), the independent demand for the ancillary amenities such as the surf academy, restaurant, shops, and fitness/yoga facilities (approximately 50% of the daily visitors), and the non-trip generating demand for the additional ancillary amenities intended to be utilized solely by patrons of the surf lagoon and the surf academy, such as the dorm rooms.

As such, the empirical trip generation rates developed for the surf lagoon and associated amenities are based on the projected attendance levels, corresponding employee estimates and operational parameters, and associated average vehicle ridership (AVR) ratios anticipated during typical high season weekday activity, as summarized below.

- Surf Lagoon and Associated Amenities – Visitors
  - 1,400 Daily Visitors (*2,800 Person Trips*)
    - Surf Lagoon – 700 Daily Visitors (50%)
    - Surf Academy – 140 Daily Visitors (10%)
    - Restaurant – 280 Daily Visitors (20%)
    - Shops – 70 Daily Visitors (5%)
    - Fitness/Yoga Facilities – 210 Daily Visitors (15%)
  - AM Peak Hour
    - 70 Visitors Inbound
    - 4 Visitors Outbound
  - PM Peak Hour
    - 112 Visitors Inbound
    - 110 Visitors Outbound
  - AVR – 2.0 Persons/Vehicle
- Surf Lagoon and Associated Amenities – Employees
  - 70 Daily Employees (*140 Person Trips*)
  - AVR – 1.0 Persons/Vehicle

The tabular summary of the aforementioned detailed programmatic attendance information and operational modeling data prepared by Wavegarden is provided in Attachment B. The resulting trip generation rates for the Project are detailed below.

- Surf Lagoon and Associated Amenities – Visitors
  - Daily Trips – 1.00 Trips/Visitor
  - AM Peak Hour Trips – 0.027 Trips/Visitor
  - PM Peak Hour Trips – 0.079 Trips/Visitor
- Surf Lagoon and Associated Amenities – Employees
  - Daily Trips – 2.00 Trips/Employee
  - AM Peak Hour Trips – N/A
  - PM Peak Hour Trips – N/A

Based on trip generation rates described above for the surf lagoon and associated amenities and the conservative AVR ratios of 2.0 persons/vehicle for visitors and 1.0 persons/vehicle for employees, approximately 1,400 daily trips, 37 morning peak hour trips (including 35 inbound trips and two outbound trips), and 111 afternoon peak hour trips (including 56 inbound trips and 55 outbound trips) would be generated by the visitors and approximately 140 daily trips would be generated by the employees, as summarized in Table 1.

It is important to note that the development of the trip generation rates for the visitors and employees did not consider the utilization of alternative transportation modes (transit, bike, walk, etc.) As such, the resulting trip generation estimates assume that 100% of the visitors and employees would travel to/from the Project site via automobile.

### **Existing Privately Owned Golf Facility to be Retained**

As directed by the City, the trip generation rates for the limited portions of the existing privately owned golf facility to be retained (i.e., 15 holes of the golf course) are based on *Trip Generation Manual, 11<sup>th</sup> Edition* rates for the following ITE land use category, as summarized in Table 1:

- Golf Course (Land Use 430)

Based on trip generation rates described above, approximately 456 daily trips, 26 morning peak hour trips (including 21 inbound trips and five outbound trips), and 44 afternoon peak hour trips (including 23 inbound trips and 21 outbound trips) would be generated by the limited portions of the existing privately owned golf facility to be retained, as summarized in Table 1.

### **Existing Privately Owned Golf Facility to be Replaced**

As directed by the City, the trip generation rates for the significant portions of the existing privately owned golf facility to be replaced, including three holes of the golf course, the 38 position driving range, and the 233-seat restaurant, are based on *Trip Generation Manual, 11<sup>th</sup> Edition* rates for the following ITE land use categories, as summarized in Table 1:

- Golf Course (Land Use 430)
- Driving Range (Land Use 432)
- High-Turnover (Sit-Down) Restaurant (Land Use 932)

To identify the daily trip generation estimates associated with the 233-seat restaurant, the refined methodology utilized the trip generation rates for High-Turnover (Sit-Down) Restaurant (ITE Land Use 932), which seemed the most applicable based on the associated land use definition.

Based on trip generation rates described above, the replacement of the portions of the existing privately owned golf facility described above would result in the reduction of approximately 1,810 daily trips, 136 morning peak hour trips (including 76 inbound trips and 60 outbound trips), and 165 afternoon peak hour trips (including 87 inbound trips and 78 outbound trips), as summarized in Table 1.

For conservative purposes, the resulting trip generation estimates reflect an internal capture adjustment of 25% to account for Golf Course patrons that might also utilize the Driving Range and/or the Restaurant. It is also important to note that the use of *Trip Generation Manual, 11<sup>th</sup> Edition* rates for the three distinct existing privately owned golf facility land uses was validated prior to the completion of this assessment based on a comparative analysis of traffic volume data collected at the Project site on April 3, 2024. The traffic volume data is provided in Attachment C.

## FINAL ASSESSMENT

As previously discussed, the Project trip generation rates and associated trip generation estimates were developed based on the attendance and associated vehicular demand projections for the High Season Weekday Scenario and an associated conservative AVR ratio of 2.0.

Based on the analysis results detailed above, the Project is anticipated to generate 186 **net new** daily trips, a **net reduction** of 73 AM peak hour trips (including 20 inbound trips and 53 outbound trips), and a **net reduction** of 10 PM peak hour trips (including eight inbound trips and two outbound trips), as summarized in Table 1. The net new trip generation estimates reflect both the reduction of trips associated with the significant portions of existing privately owned golf facility to be replaced and the addition of trips associated with the limited portions of the privately owned golf facility to be retained.

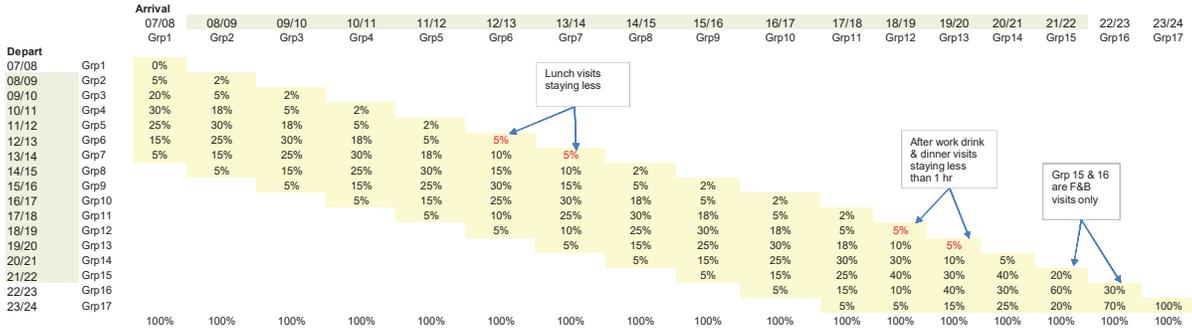
As detailed above, the project is forecast to generate less than 300 net daily trips. Therefore, the Project does not require preparation of a transportation/traffic impact analysis per the City's Traffic Phasing Ordinance. Additionally, the Project is considered to have a less than significant impact on transportation/traffic and a vehicle miles traveled (VMT) study is not required per the City's VMT Analysis Methodology detailed in City Council Policy K-3.

SITE VISITS	Low Season		Mid Season		High Season		TOTAL VISITS
	Week days	Wends/Hols	Week days	Wends/Hols	Week days	Wends/Hols	
Total Days Available	72	46	75	48	39	83	
Total Visits	27,664	22,290	51,908	51,538	54,407	147,618	355,425
Average visits per day	380	480	690	1,070	1,400	1,780	

**AVERAGE HIGH SEASON WEEK DAY PROJECTIONS**

High Season Week day	
Average Visits Per Day	1,400
Arrive by car	100%
Total cars	2.0 people per car
	700

**Forecast Visitor Dwell Time at Surf Park**



Visitors in Park (excluding staff) - Average High Season Week Day						
Hour	Visitor Arrival	Visitor Arrivals	Visitor Cumulative Arrivals	Visitor Departures	Visitor Cumulative Departures	Visitors In Park
07/08	3%	42	42	0	0	42
08/09	5%	70	112	4	4	109
09/10	6%	84	196	14	17	179
10/11	8%	112	308	32	49	259
11/12	9%	126	434	55	103	331
12/13	10%	140	574	82	186	388
13/14	7%	98	672	109	295	377
14/15	6%	84	756	114	409	347
15/16	6%	84	840	115	524	316
16/17	8%	112	952	110	635	317
17/18	9%	126	1,078	93	728	350
18/19	6%	84	1,162	94	822	340
19/20	6%	84	1,246	107	929	317
20/21	5%	70	1,316	120	1,049	267
21/22	4%	56	1,372	151	1,199	173
22/23	2%	28	1,400	130	1,329	71
23/24	0	0	1,400	71	1,400	0
<b>100%</b>	<b>1,400</b>		<b>1,400</b>	<b>Peak In Park</b>		<b>388</b>

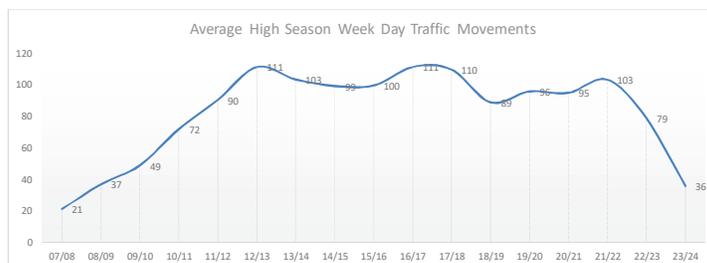
Car Parking Requirements (excluding staff) - Average High Season Week Day					
Hour	Car Arrivals	Car Cumulative Arrivals	Car Departures	Cum. Car Departures	Cars In Park
07/08	21	21	0	0	21
08/09	35	56	2	2	54
09/10	42	98	7	9	89
10/11	56	154	16	24	130
11/12	63	217	27	52	165
12/13	70	287	41	93	194
13/14	49	336	54	147	189
14/15	42	378	57	205	173
15/16	42	420	58	262	158
16/17	56	476	55	317	159
17/18	63	539	47	364	175
18/19	42	581	47	411	170
19/20	42	623	54	464	159
20/21	35	658	60	524	134
21/22	28	686	75	600	86
22/23	14	700	65	664	36
23/24	0	700	36	700	0
<b>700</b>	<b>700</b>		<b>700</b>	<b>Peak in Park</b>	<b>194</b>

Surf Session (14 Hours)

**Traffic Movements - Average High Season Week Day**

Hour	Car Arrivals	Car Departures	Traffic Movements
07/08	21	0	21
08/09	35	2	37
09/10	42	7	49
10/11	56	16	72
11/12	63	27	90
12/13	70	41	111
13/14	49	54	103
14/15	42	57	99
15/16	42	58	100
16/17	56	55	111
17/18	63	47	110
18/19	42	47	89
19/20	42	54	96
20/21	35	60	95
21/22	28	75	103
22/23	14	65	79
23/24	0	36	36
<b>700</b>	<b>700</b>		<b>1,400</b>

Surf Session (14 Hours)



# INTERSECTION DEVELOPMENT

A B C D E F G H I J K L M N O

E-W Street: Clint Moore Rd  
 N-S STREET: Congress Ave  
 TIME PERIOD: AM  
 GROWTH RATE: 1.01  
 SIGNAL ID: 300062

Input Data  
 COUNT DATE: 9/20/2023  
 CURRENT YEAR: 2023  
 ANALYSIS YEAR: 2029  
 PSF: 1.07

Report Created  
 8/24/2025

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound			Type	% Complete
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing Volume	449	383	345	127	689	86	329	251	22	209	910	595		
Existing Volume	449	383	345	127	689	86	329	251	22	209	910	595		
Diversions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Peak Season Volume	486	415	374	138	746	94	357	272	25	227	985	644		
Committed Developments														
Friends of Chabad	2	0	1	0	0	0	1	0	0	0	0	2	NR	80%
Boca National Golf Club	0	0	0	0	0	0	0	0	0	0	0	0	NR	0%
1690-2350 South Congress Avenue	26	0	0	0	0	26	0	17	0	49	33	49	Res	15%
900 Broken Sound	0	0	16	8	0	0	10	20	5	0	32	0	Res	0%
791 Park of Commerce	0	0	16	8	0	0	12	24	6	0	31	0	NR	0%
SBA Corporate Headquarters	12	0	0	0	0	6	0	18	0	1	3	1	NR	63%
FAU Boca	0	0	0	2	2	0	0	0	0	0	0	0	NR	80%
Boca Village	0	0	5	2	0	0	5	7	2	0	7	0	Res	0%
Mutual of America Residential	5	0	0	0	0	0	0	5	0	0	10	10	NR	0%
AMTEC Residential Complex	0	0	18	6	0	0	7	13	3	0	31	0	Res	56%
Delray Central	3	0	0	0	0	3	0	3	0	7	7	7	NR	0%
Alton Delray	2	0	0	0	0	0	0	7	0	0	22	6	NR	0%
6600 N Military Trail	27	4	6	0	10	0	15	0	0	0	0	66	NR	0%
Total Committed Developments	50	0	56	26	2	35	35	114	16	57	176	75		
Total Committed Residential	26	0	39	16	0	26	22	57	10	49	103	49		
Total Committed Non-Residential	24	0	17	10	2	9	13	57	6	8	73	26		
Double Count Reduction	5	0	8	3	0	5	4	11	2	10	21	10		
Total Discounted Committed	45	0	48	23	2	30	31	103	14	47	155	65		
Historical Growth	30	26	23	8	46	6	22	17	2	14	61	40		
Comm Dev+1% Growth	73	24	69	31	44	35	51	118	15	60	211	102		
Growth Volume Used	73	24	69	31	44	35	51	118	15	60	211	102		
Total Volume	559	439	443	169	790	129	408	390	40	287	1196	746		

E-W Street: Clint Moore Rd  
 N-S STREET: Congress Ave  
 TIME PERIOD: PM  
 GROWTH RATE: %  
 SIGNAL ID: 300062

Input Data  
 COUNT DATE: 9/20/2023  
 CURRENT YEAR: 2023  
 ANALYSIS YEAR: 2029  
 PSF: 1.07

Report Created  
 8/24/2025

Intersection Volume Development

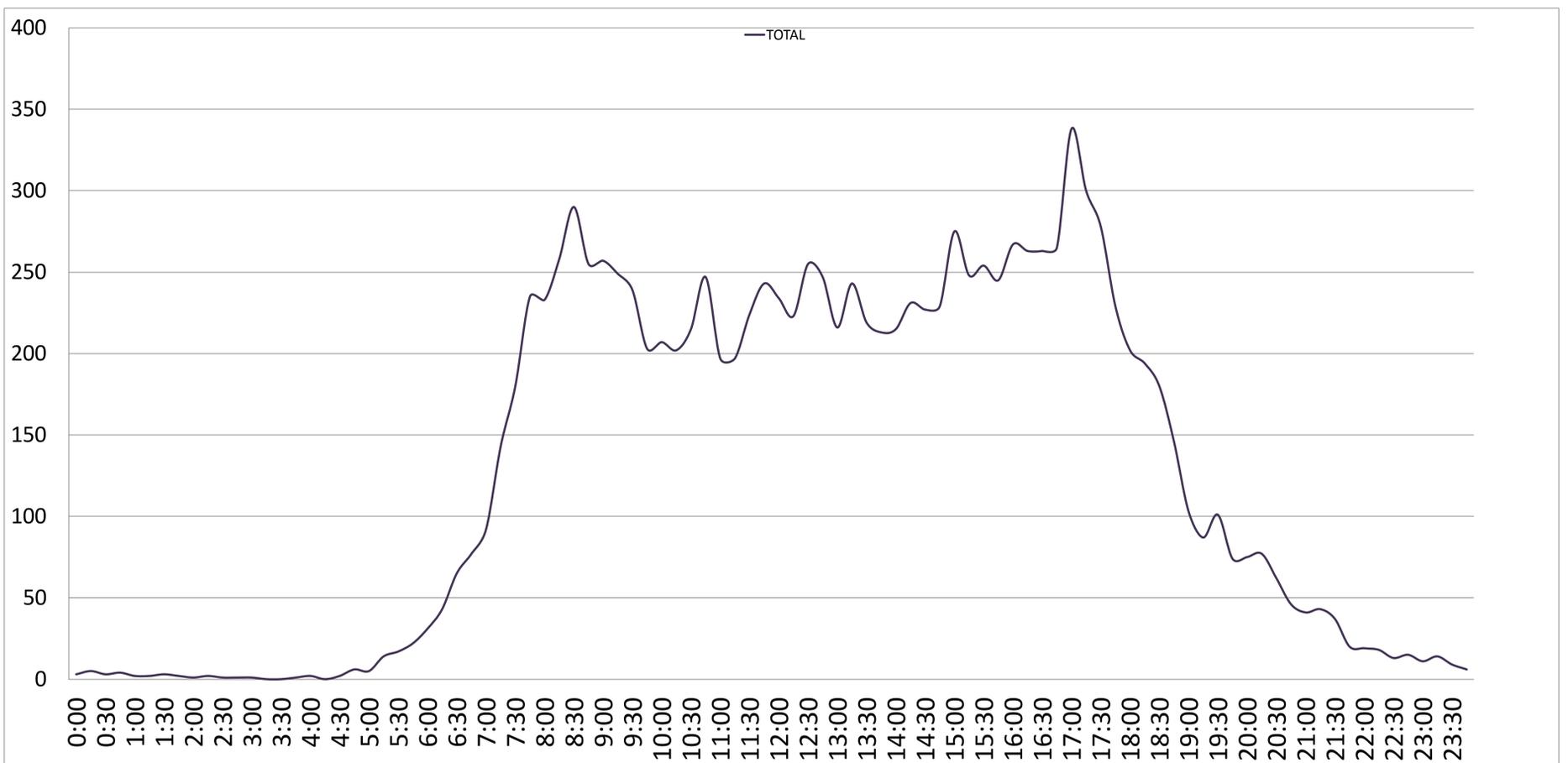
	Eastbound			Westbound			Northbound			Southbound			Type	% Complete
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing Volume	781	409	346	83	776	237	324	837	58	282	995	819		
Existing Volume	781	409	346	83	776	237	324	837	58	282	995	819		
Diversions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Peak Season Volume	845	443	375	91	840	257	351	906	64	306	1076	886		
Committed Developments														
Friends of Chabad	5	0	2	0	0	0	2	0	0	0	0	4	NR	80%
Boca National Golf Club	0	0	0	0	0	0	0	0	0	0	0	0	NR	0%
1690-2350 South Congress Avenue	91	0	0	0	0	91	0	60	0	34	22	34	Res	15%
900 Broken Sound	0	0	9	5	0	0	17	33	8	0	18	0	Res	0%
791 Park of Commerce	0	0	18	9	0	0	20	40	10	0	36	0	NR	0%
SBA Corporate Headquarters	2	0	0	0	0	1	0	3	0	6	16	11	NR	63%
FAU Boca	0	1	0	1	1	0	0	0	1	0	0	0	NR	80%
Boca Village	0	0	7	3	0	0	4	6	2	0	9	0	Res	0%
Mutual of America Residential	10	0	0	0	0	0	0	10	0	0	5	5	NR	0%
AMTEC Residential Complex	0	0	7	3	0	0	18	30	6	0	13	0	Res	56%
Delray Central	8	0	0	0	0	8	0	8	0	5	5	5	NR	0%
Alton Delray	5	0	0	0	0	0	0	18	0	0	12	3	NR	0%
6600 N Military Trail	74	11	17	0	6	0	10	0	0	0	0	41	NR	0%
Total Committed Developments	116	1	43	21	1	100	61	190	27	45	124	59		
Total Committed Residential	91	0	23	11	0	91	39	129	16	34	62	34		
Total Committed Non-Residential	25	1	20	10	1	9	22	61	11	11	62	25		
Double Count Reduction	19	0	4	0	0	0	3	0	0	0	0	10		
Total Discounted Committed	97	1	39	21	1	100	58	190	27	45	124	49		
Historical Growth	52	27	23	6	52	16	22	56	4	19	66	55		
Comm Dev+1% Growth	145	26	60	26	49	115	78	241	31	62	185	99		
Growth Volume Used	145	26	60	26	49	115	78	241	31	62	185	99		
Total Volume	990	469	435	117	889	372	429	1147	95	368	1261	985		

# COUNTS

# Average Daily Traffic Volumes

## Quality Traffic Data, LLC

<b>QTD PROJ/LOC #:</b>	2024107 - 6301	<b>GPS COORDINATES:</b>	0
<b>ON STREET:</b>	CLINT MOORE ROAD (JEFFERY St.)	<b>START DATE:</b>	Wednesday, January 24, 2024
<b>CROSS STREETS:</b>	ON BRIDGE OVER I-95	<b>VICINITY:</b>	Boca Raton



**QUALITY TRAFFIC DATA, LLC**

Phone: 877-852-4355 Fax: 877-877-3698 Info@QualityTrafficData.com

# Average Daily Traffic Volumes

## Quality Traffic Data, LLC

QTD PROJ/LOC #:	2024107 - 6301	GPS COORDINATES:	0
ON STREET:	CLINT MOORE ROAD (JEFFERY St.)	START DATE:	Wednesday, January 24, 2024
CROSS STREETS:	ON BRIDGE OVER I-95	VICINITY:	Boca Raton

AM COUNTS						PM COUNTS													
NB		SB		EB		WB		NB		SB		EB		WB					
00:00				0		3		12:00				126			108				
00:15				3		2		12:15				129			94				
00:30				2		1		12:30				146			109				
00:45				0	5	4	10	15	12:45			151	552	96	407	959			
01:00				2		0		13:00				131			85				
01:15				0		2		13:15				130			113				
01:30				2		1		13:30				113			106				
01:45				0	4	2	5	9	13:45			116	490	97	401	891			
02:00				0		1		14:00				126			89				
02:15				0		2		14:15				148			83				
02:30				0		1		14:30				135			92				
02:45				1	7	0	4	5	14:45			129	538	100	364	902			
03:00				1		0		15:00				166			109				
03:15				0		0		15:15				160			88				
03:30				0		0		15:30				148			106				
03:45				0	7	1	1	2	15:45			145	619	100	403	1022			
04:00				1		1		16:00				171			96				
04:15				0		0		16:15				169			94				
04:30				1		1		16:30				183			80				
04:45				0	2	6	8	10	16:45			162	685	103	373	1058			
05:00				2		3		17:00				233			105				
05:15				8		6		17:15				185			115				
05:30				10		7		17:30				179			99				
05:45				9	29	13	29	58	17:45			139	736	90	409	1145			
06:00				9		22		18:00				117			85				
06:15				21		22		18:15				121			73				
06:30				26		39		18:30				105			75				
06:45				30	86	47	130	216	18:45			88	431	58	291	722			
07:00				29		63		19:00				60			43				
07:15				53		90		19:15				52			35				
07:30				70		110		19:30				49			52				
07:45				94	246	141	404	650	19:45			29	190	45	175	365			
08:00				134		99		20:00				47			28				
08:15				127		131		20:15				34			43				
08:30				156		134		20:30				28			34				
08:45				141	558	114	478	1036	20:45			22	131	24	129	260			
09:00				134		123		21:00				22			19				
09:15				151		98		21:15				20			23				
09:30				156		83		21:30				17			20				
09:45				130	571	73	377	948	21:45			12	71	8	70	141			
10:00				125		82		22:00				10			9				
10:15				123		79		22:15				11			7				
10:30				132		83		22:30				8			5				
10:45				125	505	122	366	871	22:45			10	39	5	26	65			
11:00				128		69		23:00				5			6				
11:15				126		71		23:15				10			4				
11:30				133		91		23:30				7			2				
11:45				133	520	110	341	861	23:45			3	25	3	15	40			
TOTALS:				2528		2153		4681		TOTALS:				4507		3063		7570	

SPLIT	54.0%	46.0%	38.2%	SPLIT	59.5%	40.5%	61.8%
PEAK HOUR	08:30	07:45	08:15	PEAK HOUR	16:30	16:45	16:45
PH VOLUME	582	505	1060	PH VOLUME	763	422	1181
PHF	0.93	0.90	0.91	PHF	0.82	0.92	0.87

DAY'S TOTAL					
NB	SB	EB	WB	TOTAL	
		7035	5216	12251	



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# CMA WORKSHEETS

# INTERSECTION ANALYSIS SHEET

## BOCA SURF PARK

### CLINT MOORE ROAD AND CONGRESS AVENUE

Growth Rate = 1.00%  
 Peak Season = 1.00  
 Buildout Year = 2029  
 Years = 4

<b>AM Peak Hour</b>												
Intersection Volume Development												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
COUNT (2/20/25)	299	275	28	167	606	609	481	438	427	98	393	156
Peak Season Volume	299	275	28	167	606	609	481	438	427	98	393	156
Historical Growth	311	286	29	174	631	634	501	456	444	102	409	162
1% growth	311	286	29	174	631	634	501	456	444	102	409	162
Committed Traffic	31	103	14	47	155	65	45	0	48	23	2	30
Committed +1%	342	389	43	221	786	699	546	456	492	125	411	192
Max	342	389	43	221	786	699	546	456	492	125	411	192
Project Traffic	0%	0%	30%	20%	0%	0%	0%	20%	0%	30%	20%	20%
	0	0	9 <i>in</i>	6 <i>in</i>	0	0	0	6 <i>in</i>	0	1 <i>out</i>	1 <i>out</i>	1 <i>out</i>
<b>Total</b>	<b>342</b>	<b>389</b>	<b>52</b>	<b>227</b>	<b>786</b>	<b>699</b>	<b>546</b>	<b>462</b>	<b>492</b>	<b>126</b>	<b>412</b>	<b>193</b>
Critical Volume Analysis												
No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Approach Volume	783			1,712			1,500			732		
Per Lane Volume	171	130	53	114	262	699	273	155	492	63	207	193.2
RTOR Reduction			0						0			0
Right-turn Overlap			0			-273			-171			-121
Net Per Lane Volume	171	130	53	114	262	426	273	155	321	63	207	72
North-South Critical	NB LT + SB TH = 597						SB LT + NB TH = 244					
East-West Critical	EB LT + WB TH = 480						WB LT + EB TH = 218					
<b>Maximum Critical Sum</b>	<b>597</b>			+	<b>480</b>			=			<b>1,077</b>	
<b>STATUS ?</b>						<b>UNDER</b>						

<b>PM Peak Hour</b>												
Intersection Volume Development												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
COUNT (2/20/25)	349	969	56	213	458	635	772	416	277	27	431	302
Peak Season Volume	349	969	56	213	458	635	772	416	277	27	431	302
Historical Growth	363	1,008	58	222	477	661	803	433	288	28	449	314
1% growth	363	1,008	58	222	477	661	803	433	288	28	449	314
Committed Traffic	61	190	27	45	124	49	97	1	39	21	1	100
Committed +1%	424	1,198	85	267	601	710	900	434	327	49	450	414
Max	424	1,198	85	267	601	710	900	434	327	49	450	414
Project Traffic	0%	0%	30%	20%	0%	0%	0%	20%	0%	30%	20%	20%
	0	0	14 <i>in</i>	10 <i>in</i>	0	0	0	10 <i>in</i>	0	13 <i>out</i>	9 <i>out</i>	9 <i>out</i>
<b>Total</b>	<b>424</b>	<b>1,198</b>	<b>99</b>	<b>277</b>	<b>601</b>	<b>710</b>	<b>900</b>	<b>444</b>	<b>327</b>	<b>62</b>	<b>459</b>	<b>423</b>
Critical Volume Analysis												
No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Approach Volume	1,721			1,588			1,671			945		
Per Lane Volume	212	400	100	139	201	710	450	149	327	31	230	423.2
RTOR Reduction			0			0			0			0
Right-turn Overlap			-9			-450			-212			-139
Net Per Lane Volume	212	400	91	139	201	260	450	149	115	31	230	284
North-South Critical	NB LT + SB TH = 413						SB LT + NB TH = 539					
East-West Critical	EB LT + WB TH = 680						WB LT + EB TH = 180					
<b>Maximum Critical Sum</b>	<b>539</b>			+	<b>680</b>			=			<b>1,219</b>	
<b>STATUS ?</b>						<b>NEAR</b>						