SIMMONS & WHITE
CIVIL & TRAFFIC ENGINEERING

SANDPIPER BAY RESORT & RPS ACADEMY

City of Port St. Lucie, FL

TRAFFIC IMPACT STATEMENT

PREPARED FOR:

K2C Academy LLC
4500 SE Pine Valley Street
Port St. Lucie, Florida 34952

JOB NO. 25-103A

DATE: 11/13/2025
REVISED: 11/26/2025
REVISED: 12/16/2025
REVISED: 01/06/2026

Anna Lai, Professional Engineer, State of Florida, License No. 78138 This item has been digitally signed and sealed by Anna Lai, P.E., PTOE, on 01/06/26. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.	Digitally signed by Anna Lai Date: 2026.01.06 13:44:45-05'00'

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1.0 SITE DATA

The subject parcel is located on west of US 1 and south of SE Port St. Lucie Boulevard in the City of Port St. Lucie, Florida. The site is currently developed with 335-room resort hotel, 100-slip marina, and 150-student boarding school. Proposed site development on the parcels will add tennis courts, volleyball courts, pickleball courts, soccer fields, and a golf course as ancillary outdoor uses for the school. The existing resort hotel, marina, and school are vested and there is no proposed increase in the number of students, marina slips, or resort hotel rooms. The ancillary school additions are proposed to better support the existing uses on site.

Site access is not proposed to change and is existing via SE Pine Valley Street and SE Morningside Boulevard. For additional information on site layout, please refer to the site plan prepared by KEITH.

2.0 TRAFFIC GENERATION

Due to the limited ITE Trip Generation Manual, 12th Edition information for boarding schools and marinas, in-field volume counts (included in Appendix A) were collected at the development gate entry points on SE Morningside Boulevard and at SE Pine Valley Street, with construction-related traffic removed. The highest peak hour volume was used instead of trip generation analysis for the boarding school and marina. The traffic to be generated by the proposed resort hotel development has been calculated using the ITE Trip Generation Manual, 12th Edition (included in Appendix B).

Table 1 shows the daily traffic generation and Tables 2 and 3 show the AM and PM peak hour traffic generation. The traffic generated by the existing 335-room resort hotel , 100-slip marina and a 150-student boarding school may be summarized as follows:

Existing/Vested Development

Daily Traffic Generation	=	1,030 tpd
AM Peak Hour Traffic Generation (In/Out)	=	141 pht (99 In/42 Out)
PM Peak Hour Traffic Generation (In/Out)	=	154 pht (65 In/89 Out)

The traffic to be generated by the proposed plan of development consisting of a 335-room resort hotel, 100-slip marina, 150-student boarding school, and ancillary school additions is shown in Tables 4-6 and may be summarized as follows:

Proposed Development

Daily Traffic Generation	=	1,030 tpd
AM Peak Hour Traffic Generation (In/Out)	=	141 pht (99 In/42 Out)
PM Peak Hour Traffic Generation (In/Out)	=	154 pht (65 In/89 Out)

The net new trips associated with the difference between the proposed and existing developments is shown in Table 7 and may be summarized as follows:

Net Trips (Proposed – Existing)

Daily Traffic Generation	=	0 tpd
AM Peak Hour Traffic Generation (In/Out)	=	0 pht (0 In/0 Out)
PM Peak Hour Traffic Generation (In/Out)	=	0 pht (0 In/0 Out)

Proposed site development on the parcels will add tennis courts, volleyball courts, pickleball courts, soccer fields, and a golf course as ancillary outdoor uses for the school. Thus, there are zero net new trips for the existing/vested uses. Therefore, the traffic analysis documented within this report is provided for informational purposes.

3.0 TRAFFIC ANALYSIS

Figure 1 shows the project trip distribution on the surrounding roadway network.

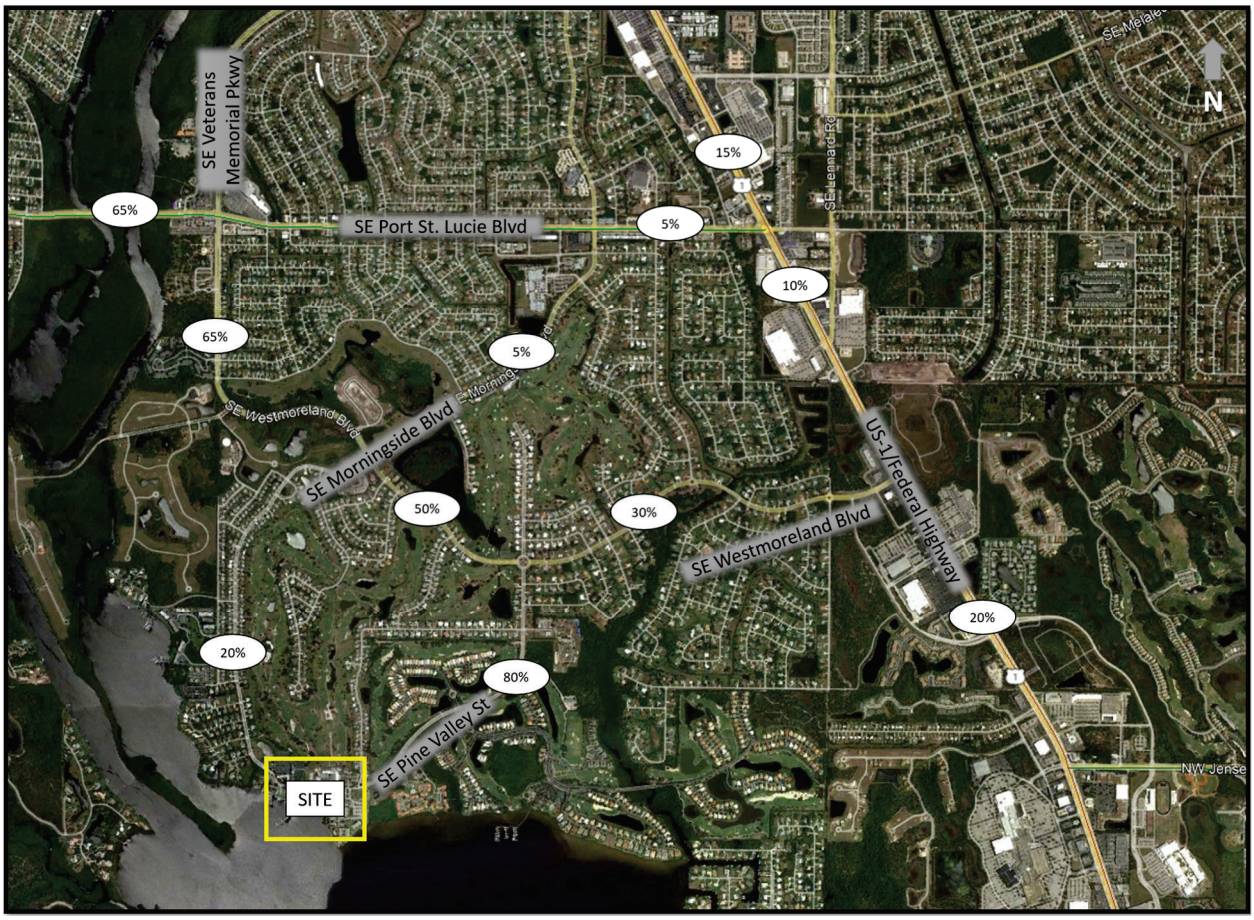

Figure 1 – Trip Assignment

Link Analysis

For a conservative analysis, the study area included all major roadways within three (3) miles of the site. The 3-mile study area is shown below in Figure 2.

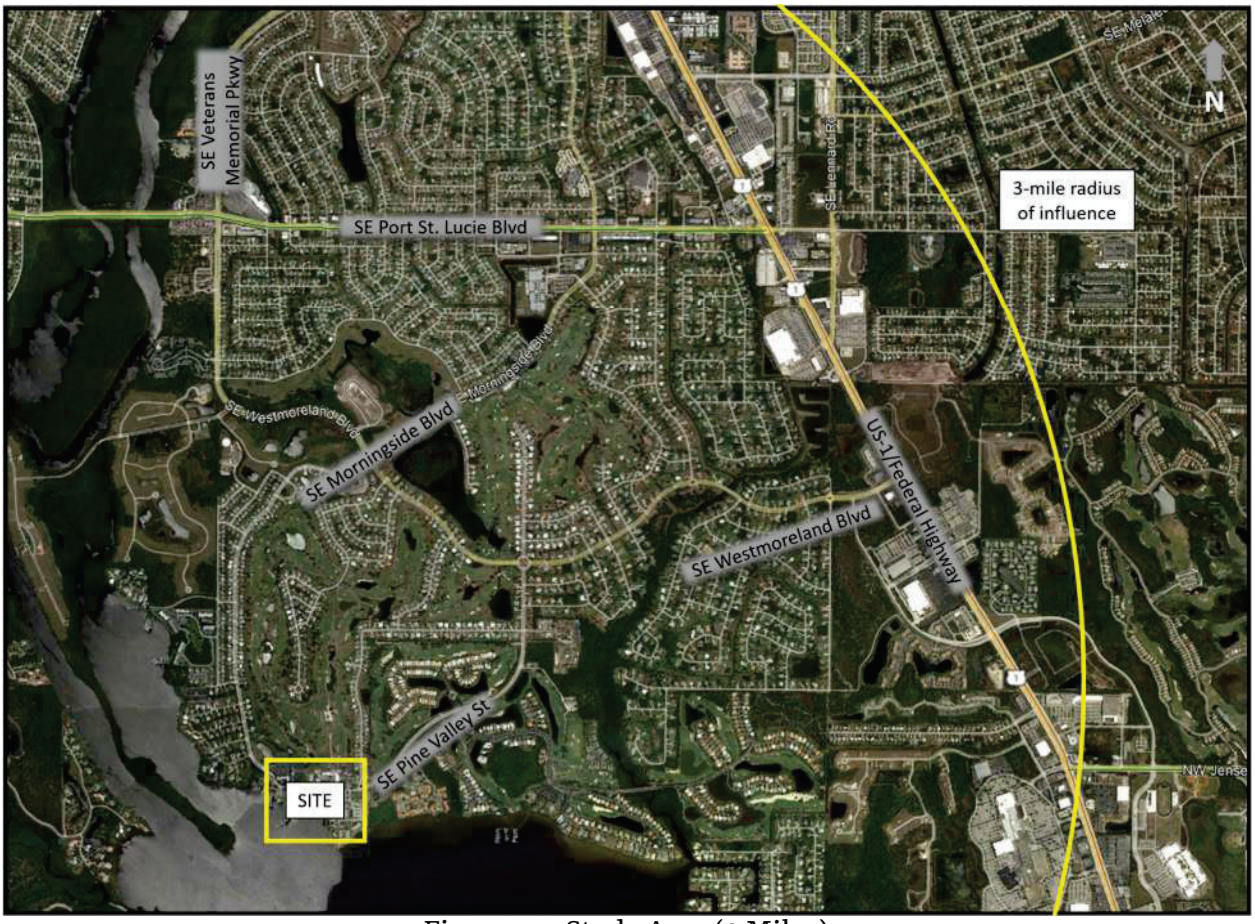

Figure 2 – Study Area (3 Miles)

The project impact to each of the surrounding roadways are shown in Tables 8 and 9 (in Appendix C) which calculate the project trips relative to the Level of Service (LOS) D service volume threshold. The LOS D thresholds were based on the 2024 FDOT Q/LOS tables (in Appendix D) and the roadway classifications were determined from the FDOT Preliminary Context Classification GIS map. As shown in Tables 8 and 9, the surrounding roadways will have less than 5.0% project trip impact and therefore meet the Level of Service requirements.

4.0 TRAFFIC OPERATIONAL MANAGEMENT

The main point of entry for school access will be relocated from its current SE Pine Valley Road location to SE Morningside Boulevard; however, drivers will be able to use the SE Pine Valley Street entrance as needed. Over 50% of the school student population are boarding students and do not own vehicles. An additional number of students live in nearby residences and walk and bike to school. The remaining students are dropped off in the morning and picked up in the afternoon. The school does not have a traditional school queue line due to the low number of students being dropped off and picked up on a daily basis. See the Traffic Operational Management Plan in Appendix E. Parents will briefly park to allow their students to exit/enter the vehicle. Once the student has safely exited/entered the vehicle, parents will depart the parking lot. School faculty also utilizes this same parking lot. School events are to be coordinated with the resort to minimize peak impact and to ensure adequate parking is available for the resort guests and the school events. Buses are not typically used for the school. When buses are used to bus in opposing sport teams, the bus drivers will use parking spaces to be designated for bus staging along the new drive aisle. Resort traffic may not go through campus and will be redirected to go around.

Resort guests will primarily access the resort from the front entrance on SE Pine Valley Street and park in the check-in lot. After checking in, the guests will be directed to the guest lot to the south.

The previous approval included 670 parking spaces, which included 393 paved spaces and a 277 space deficit where in the event of need, additional parking would be provided on-site via valet parking by utilizing undeveloped areas designated as "future event parking".

There are 706 total parking spaces proposed, which includes 438 paved parking spaces and grassy overflow lots for the remaining 268 spaces. The overflow lots will be used for event/valet parking. Additionally, 12 paved golf cart spaces are also proposed.

Resort restaurants are open only to resort guests and are ancillary to the resort use. For special events at the resort, valet service will be utilized to efficiently park the guest/visitor vehicles in overflow lots. For larger resort events such as weddings, conventions, or corporate events, the resort would implement parking control methods with the security team and designate parking areas temporarily as needed as part of event planning.

The largest outdoor space at the resort can hold 350-400 maximum wedding guests, whose vehicles can be accommodated in the proposed parking spaces. The guests/visitors would be accessing the resort from SE Pine Valley Road (on the east side) and would be able to valet their vehicle or be dropped off by a rideshare vehicle. If a school sporting event occurs at the same time, the school access would be via SE Morningside Boulevard (on the west side). The parking is expected to be contained on site and not overflow onto the neighboring streets.

5.0 CONCLUSION

The proposed modifications to RPS Academy are anticipated to result in a negligible traffic impact, as documented in this traffic study. Previous traffic studies for RPS Academy, prepared by Simmons & White and dated June 6, 2025, and October 30, 2024, were completed for traffic concurrency purposes. This traffic study evaluated traffic for the overall existing/vested Planned Unit Development (PUD), which included a 335-room resort hotel, 100-slip marina, and 150-student boarding school. Proposed site development on the parcels will add tennis courts, volleyball courts, pickleball courts, soccer fields, and a golf course as ancillary outdoor uses for the school. The ancillary school additions are proposed to better support the existing uses on site. The existing resort hotel, marina, and school are vested and there is no proposed increase in the number of students, marina slips, or resort hotel rooms. Thus, there are zero net new trips for the existing/vested uses. Therefore, the roadway traffic analysis documented within this report is provided for informational purposes.

Finally, this traffic study addresses parking supply and operational management for the overall site. The property owner will appropriately coordinate events and site operations to ensure adequate internal circulation and on-site parking, thereby minimizing potential impacts to adjacent roadways.

AL: x:/docs/trafficdrainage/tis.25103.rev4

SANDPIPER BAY RESORT AND RPS ACADEMY IMPROVEMENTS

11/06/25
Revised 11/25/25
Revised 01/06/26

EXISTING/VESTED DEVELOPMENT

TABLE 1 - Daily Traffic Generation

Landuse	ITE Code	Intensity		Rate/Equation	Dir Split In	Dir Split Out	Gross Trips	Internalization %	Internalization Total	External Trips (Driveway Trips)	Pass-by %	Pass-by Trips	Net Trips
Resort Hotel[a]	330	335	Rooms	2.67			894		0	894	0%	0	894
Marina[b]		100	Slips	0.60			60		0	60	0%	0	60
Boarding School[c]		150	Students	0.51			76		0	76	0%	0	76
			Grand Totals:				**1,030**	**0.0%**	**0**	**1,030**	**0%**	**0**	**1,030**

TABLE 2 - AM Peak Hour Traffic Generation

Landuse	ITE Code	Intensity		Rate/Equation	Dir Split In	Dir Split Out	Gross Trips In	Gross Trips Out	Gross Trips Total	Internalization %	Internalization In	Internalization Out	Internalization Total	External Trips (Driveway Trips) In	External Trips (Driveway Trips) Out	External Trips (Driveway Trips) Total	Pass-by %	Pass-by Trips	Net Trips In	Net Trips Out	Net Trips Total
Resort Hotel[a]	330	335	Rooms	0.33	0.70	0.30	78	33	111	0.0%	0	0	0	78	33	111	0%	0	78	33	111
Marina[b]		100	Slips	0.09	0.89	0.11	8	1	9	0.0%	0	0	0	8	1	9	0%	0	8	1	9
Boarding School[c]		150	Students	0.14	0.62	0.38	13	8	21	0.0%	0	0	0	13	8	21	0%	0	13	8	21
			Grand Totals:				**99**	**42**	**141**	**0.0%**	**0**	**0**	**0**	**99**	**42**	**141**	**0%**	**0**	**99**	**42**	**141**

TABLE 3 - PM Peak Hour Traffic Generation

Landuse	ITE Code	Intensity		Rate/Equation	Dir Split In	Dir Split Out	Gross Trips In	Gross Trips Out	Gross Trips Total	Internalization %	Internalization In	Internalization Out	Internalization Total	External Trips (Driveway Trips) In	External Trips (Driveway Trips) Out	External Trips (Driveway Trips) Total	Pass-by %	Pass-by Trips	Net Trips In	Net Trips Out	Net Trips Total
Resort Hotel[a]	330	335	Rooms	0.39	0.43	0.57	56	75	131	0.0%	0	0	0	56	75	131	0%	0	56	75	131
Marina[b]		100	Slips	0.06	0.33	0.67	2	4	6	0.0%	0	0	0	2	4	6	0%	0	2	4	6
Boarding School[c]		150	Students	0.11	0.41	0.59	7	10	17	0.0%	0	0	0	7	10	17	0%	0	7	10	17
			Grand Totals:				**65**	**89**	**154**	**0.0%**	**0**	**0**	**0**	**65**	**89**	**154**	**0%**	**0**	**65**	**89**	**154**

Notes:
a) Based on the ITE Trip Generation Manual (12th edition).
b) The marina volumes are based on the in-field counts taken October 4-11, 2025. Daily trip generation based on Daily (28.82) to PM peak (2.89) ratio for Land Use 495 Recreational Community Center.
c) The boarding school volumes are based on the in-field counts taken October 4-11, 2025. Daily trip generation based on Daily (2.17) to AM peak (0.6) ratio for Land Use 534 Private High School.

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11/06/25
Revised 11/25/25

PROPOSED DEVELOPMENT

TABLE 4 - Daily Traffic Generation

Landuse	ITE Code	Intensity		Rate/Equation	Dir Split In	Dir Split Out	Gross Trips	Internalization %	Internalization Total	External Trips (Driveway Trips)	Pass-by %	Pass-by Trips	Net Trips
Resort Hotel[a]	330	335	Rooms	2.67			894		0	894	0%	0	894
Marina[b]		100	Slips	0.60			60		0	60	0%	0	60
Boarding School[c]		150	Students	0.51			76		0	76	0%	0	76
			Grand Totals:				**1,030**	**0.0%**	**0**	**1,030**	**0%**	**0**	**1,030**

TABLE 5 - AM Peak Hour Traffic Generation

Landuse	ITE Code	Intensity		Rate/Equation	Dir Split In	Dir Split Out	Gross Trips In	Gross Trips Out	Gross Trips Total	Internalization %	Internalization In	Internalization Out	Internalization Total	External Trips (Driveway Trips) In	External Trips (Driveway Trips) Out	External Trips (Driveway Trips) Total	Pass-by %	Pass-by Trips	Net Trips In	Net Trips Out	Net Trips Total
Resort Hotel[a]	330	335	Rooms	0.33	0.70	0.30	78	33	111	0.0%	0	0	0	78	33	111	0%	0	78	33	111
Marina[b]		100	Slips	0.09	0.89	0.11	8	1	9	0.0%	0	0	0	8	1	9	0%	0	8	1	9
Boarding School[c]		150	Students	0.14	0.62	0.38	13	8	21	0.0%	0	0	0	13	8	21	0%	0	13	8	21
			Grand Totals:				**99**	**42**	**141**	**0.0%**	**0**	**0**	**0**	**99**	**42**	**141**	**0%**	**0**	**99**	**42**	**141**

TABLE 6 - PM Peak Hour Traffic Generation

Landuse	ITE Code	Intensity		Rate/Equation	Dir Split In	Dir Split Out	Gross Trips In	Gross Trips Out	Gross Trips Total	Internalization %	Internalization In	Internalization Out	Internalization Total	External Trips (Driveway Trips) In	External Trips (Driveway Trips) Out	External Trips (Driveway Trips) Total	Pass-by %	Pass-by Trips	Net Trips In	Net Trips Out	Net Trips Total
Resort Hotel[a]	330	335	Rooms	0.39	0.43	0.57	56	75	131	0.0%	0	0	0	56	75	131	0%	0	56	75	131
Marina[b]		100	Slips	0.06	0.33	0.67	2	4	6	0.0%	0	0	0	2	4	6	0%	0	2	4	6
Boarding School[c]		150	Students	0.11	0.41	0.59	7	10	17	0.0%	0	0	0	7	10	17	0%	0	7	10	17
			Grand Totals:				**65**	**89**	**154**	**0.0%**	**0**	**0**	**0**	**65**	**89**	**154**	**0%**	**0**	**65**	**89**	**154**

Notes:
a) Based on the ITE Trip Generation Manual (12th edition).
b) The marina volumes are based on the in-field counts taken October 4-11, 2025. Daily trip generation based on Daily (28.82) to PM peak (2.89) ratio for Land Use 495 Recreational Community Center.
c) The boarding school volumes are based on the in-field counts taken October 4-11, 2025. Daily trip generation based on Daily (2.17) to AM peak (0.6) ratio for Land Use 534 Private High School.

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SANDPIPER BAY RESORT AND RPS ACADEMY IMPROVEMENTS

11/06/25
Revised 11/25/25
Revised 01/06/26

TABLE 7
TRAFFIC GENERATION INCREASE

	DAILY	AM PEAK HOUR			PM PEAK HOUR		
		TOTAL	IN	OUT	TOTAL	IN	OUT
EXISTING DEVELOPMENT =	1,030	141	99	42	154	65	89
PROPOSED DEVELOPMENT =	1,030	141	99	42	154	65	89
INCREASE =	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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APPENDIX A

FIELD COUNTS

10/04/2025

Time	RPS			Marina		
	In	Out	Total	In	Out	Total
7am-8am			0		1	1
8am-9am			0	3	2	5
9am-10am			0	2	1	3
3pm-4pm			0	2	1	3
4pm-5pm			0	3	1	4
5pm-6pm			0			0

10/05/2025

Time	RPS			Marina		
	In	Out	Total	In	Out	Total
7am-8am	3		3	1		1
8am-9am	1	2	3	3		3
9am-10am	1	1	2			0
3pm-4pm	1	1	2	3	1	4
4pm-5pm	1		1		1	1
5pm-6pm			0			0

10/06/2025

Time	RPS			Marina		
	In	Out	Total	In	Out	Total
7am-8am	12	5	17	1		1
8am-9am	9	2	11	5	1	6
9am-10am	7	1	8	1	2	3
3pm-4pm	4	7	11	1	1	2
4pm-5pm	1	8	9	2	3	5
5pm-6pm	3	4	7	2	3	5

10/07/2025

Time	RPS			Marina		
	In	Out	Total	In	Out	Total
7am-8am	15	1	16	8	1	**9**
8am-9am	10	6	16	4	4	8
9am-10am	10	6	16	3		3
3pm-4pm	7	10	**17**	2	2	4
4pm-5pm	1	5	6	2	2	4
5pm-6pm		1	1	2	4	**6**

10/08/2025

Time	RPS			Marina		
	In	Out	Total	In	Out	Total
7am-8am	10		10	9		9
8am-9am	11		11	2		2
9am-10am	5		5	3		3
3pm-4pm		1	1	1		1
4pm-5pm		4	4	2		2
5pm-6pm		6	6	3		3

10/09/2025

Time	RPS			Marina		
	In	Out	Total	In	Out	Total
7am-8am	13	3	16	5		5
8am-9am	6	3	9	4	2	6
9am-10am	12	4	16	3	3	6
3pm-4pm	2		2	3		3
4pm-5pm	2		2	3		3
5pm-6pm			0	3		3

10/10/2025

Time	RPS			Marina		
	In	Out	Total	In	Out	Total
7am-8am	13	8	**21**	6		6
8am-9am	10	6	16	2	1	3
9am-10am	10	7	17	1		1
3pm-4pm	3		3	2		2
4pm-5pm	3	1	4	1		1
5pm-6pm	8	1	9	3		3

10/11/2025

Time	RPS			Marina		
	In	Out	Total	In	Out	Total
7am-8am	12		12	4		4
8am-9am	4	3	7	2		2
9am-10am	5		5	6	1	7
3pm-4pm	2		2	2		2
4pm-5pm	3	1	4	1		1
5pm-6pm	2		2			0

Calendar 2025-2026

RPS Academies 2025-2026 School Calendar

August 4 - 8 Teacher Pre-Planning
August 11, First Day of School
August 11: Quarter 1 begins

AUGUST 2025						
S	M	T	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

JANUARY 2026						
S	M	T	W	Th	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

January 1-2: Winter break continued
January 5, Teacher Planning Day-No Students
January 6, Students return
January 6: Quarter 3 begins
January 19, MLK Holiday
January 28-29: Testing

September 1 Labor Day Holiday
Sept. 10-11: Testing

SEPTEMBER 2025						
S	M	T	W	Th	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

FEBRUARY 2026						
S	M	T	W	Th	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

February 16, President's Day Holiday
February 25: Teacher planning day-No Students

October 10: Quarter 1 ends
October 13: Quarter 2 begins
October 13: Teacher Planning Day-No Students

OCTOBER 2025						
S	M	T	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

MARCH 2026						
S	M	T	W	Th	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

March 16 - 20, Spring Break
March 13: Quarter 3 ends
March 23: Quarter 4 begins
March 23: Teacher Planning Day- No Students

November 11, Veterans Day Holiday
November 24 - 28 Thanksgiving Break

NOVEMBER 2025						
S	M	T	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

APRIL 2026						
S	M	T	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

April 3, Holiday
April 15-16: Testing
April 10: Prom
April 30: GradBash

December 12 - 18 Midterm Exams
December 22 - January 2 Winter Break
December 19: Quarter 2 Ends

DECEMBER 2025						
S	M	T	W	Th	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

MAY 2026						
S	M	T	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

May 7: 8th Grade Moving Up Ceremony
May 15 - 22 Final Exams
May 25, Memorial Day Holiday
May 29, Graduation- Last Day of School
May 28: Quarter 4 ends

June 1 - 5: Post planning for Teachers.
June 5: Last day for the teachers

Teacher PL/Workday
Holiday
Students return

APPENDIX B

ITE TRIP GENERATION RATES

Land Use: 330
Resort Hotel

Description

A resort hotel is similar to a hotel (Land Use 310) in that it provides overnight accommodation, full-service restaurants, cocktail lounges, retail shops, and guest services, such as concierge and valet service. The primary difference is that a resort hotel caters to the tourist and vacation industry, often providing a wide variety of recreational facilities/programs (e.g., golf courses, tennis courts, beach access, or other amenities) rather than convention and meeting business.

Additional Data

It is recognized that some resort hotels cater to convention business as well as the tourist and vacation industry. A resort hotel with convention facilities is likely to have a different level and pattern of trip generation than is presented in the data plots.

Some properties in this land use provide guest transportation services (e.g., airport shuttle, limousine service, golf course shuttle service) which may have an impact on the overall trip generation rates.

The sites were surveyed in the 1990s and the 2020s in California and Florida.

Source Numbers

436, 1204

Resort Hotel
(330)

Vehicle Trip Ends vs: Rooms
On a: Weekday

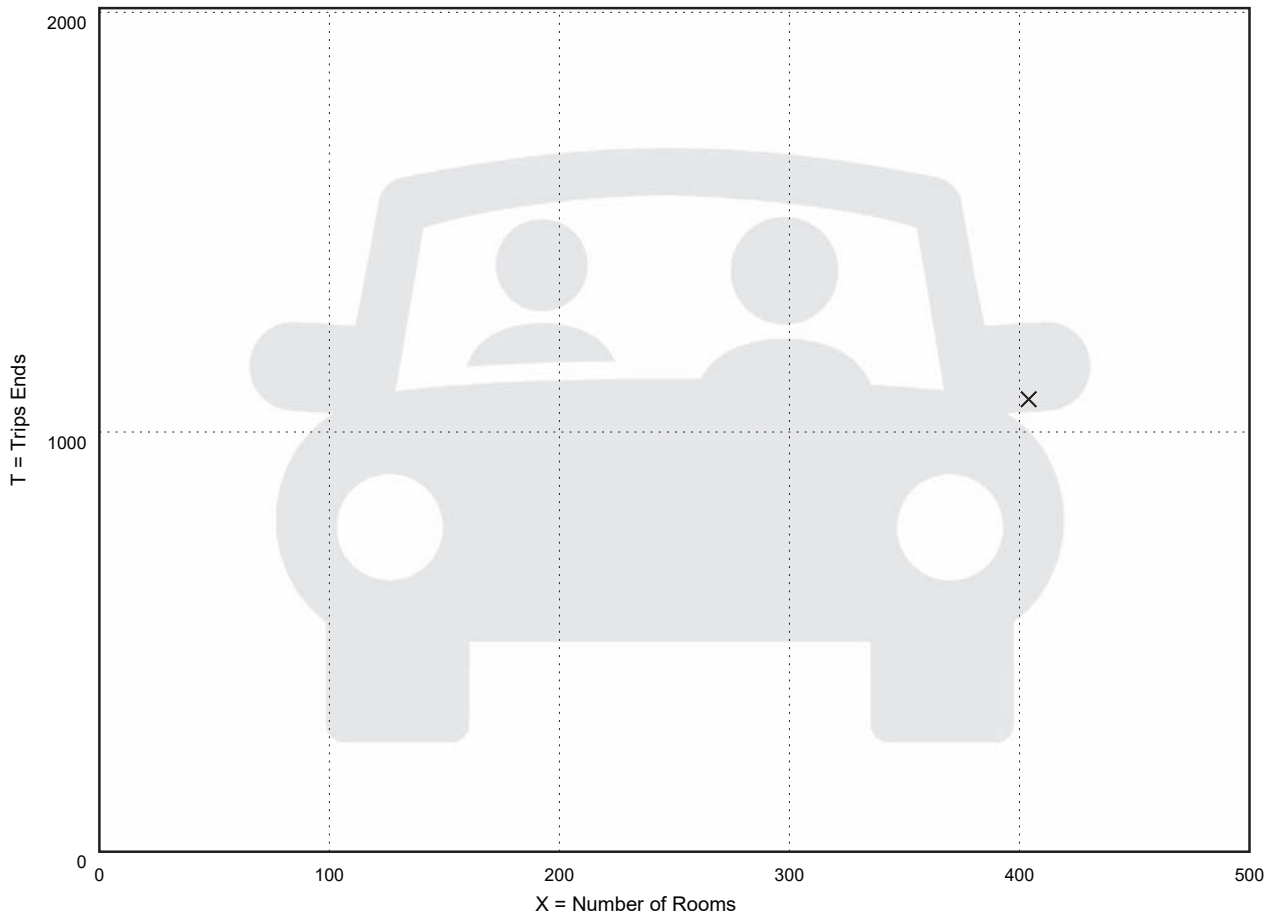
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. Num. of Rooms: 404
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
2.67	2.67 - 2.67	***

Data Plot and Equation

Caution – Small Sample Size



× **Study Site**

– – – – – **Average Rate**

Fitted Curve Equation: Not Given

R^2= *

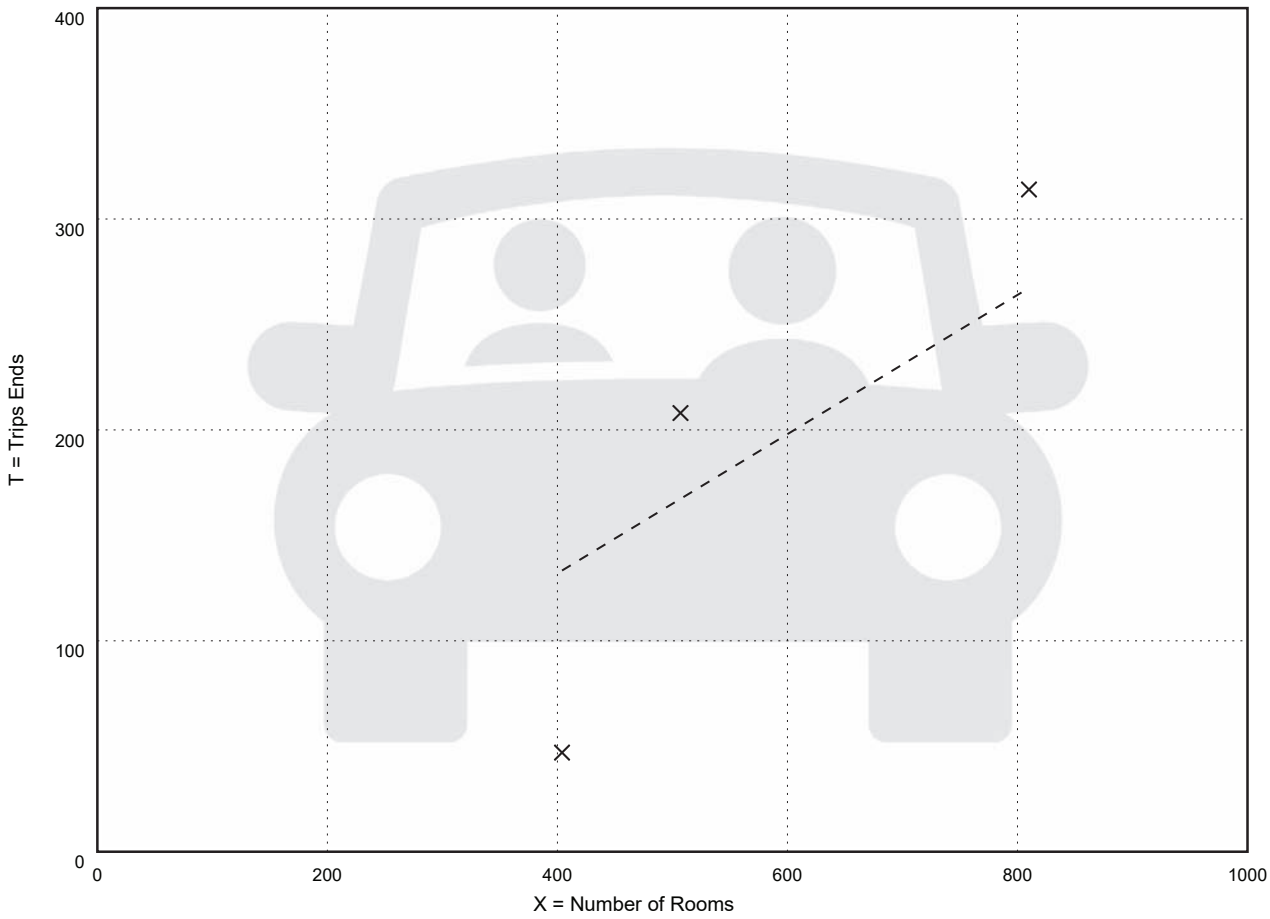
Resort Hotel
(330)

Vehicle Trip Ends vs:	**Rooms**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	3
Avg. Num. of Rooms:	574
Directional Distribution:	70% entering, 30% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.33	0.12 - 0.41	0.15

Data Plot and Equation



× **Study Site** — — — — — **Average Rate**

Fitted Curve Equation: Not Given **R^2= *****

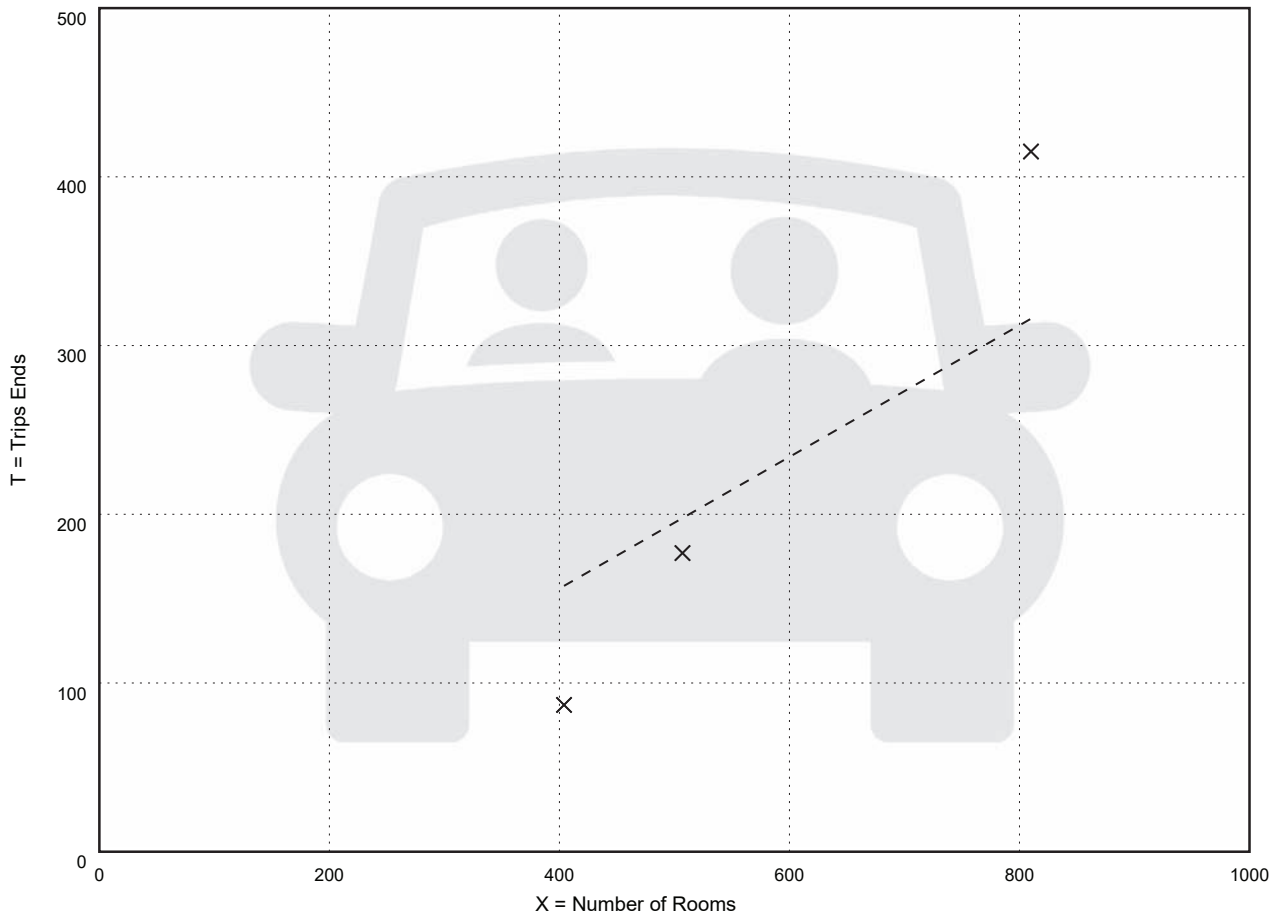
Resort Hotel
(330)

Vehicle Trip Ends vs:	**Rooms**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	3
Avg. Num. of Rooms:	574
Directional Distribution:	43% entering, 57% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.39	0.22 - 0.51	0.15

Data Plot and Equation



× **Study Site** ----- **Average Rate**

Fitted Curve Equation: Not Given **R^2= *****

APPENDIX C

ROADWAY SEGMENT ANALYSIS

11/06/25
Revised 11/25/25
Revised 12/15/25
Revised 01/06/26

TABLE 8
PROJECT SIGNIFICANCE CALCULATION
AM PEAK HOUR

TOTAL AM PEAK HOUR PROJECT TRIPS (IN) = 0
TOTAL AM PEAK HOUR PROJECT TRIPS (OUT) = 0

ROADWAY	FROM	TO	PROJECT DISTRIBUTION	PEAK HOUR PROJECT TRIPS	EXISTING LANES	CLASS	LOS D STANDARD	TOTAL PROJECT IMPACT	PROJECT SIGNIFICANT
SE PORT ST. LUCIE BLVD	FLORESTA DRIVE	VETERANS MEMORIAL PKWY	65%	0	6D	C4	2810	0.00%	NO
SE PORT ST. LUCIE BLVD	VETERANS MEMORIAL PKWY	MORNINGSIDE BLVD	0%	0	6D	C3R	2730	0.00%	NO
SE PORT ST. LUCIE BLVD	MORNINGSIDE BLVD	US 1	5%	0	6D	C3R	2730	0.00%	NO
US 1	JENNINGS ROAD	SE PORT ST. LUCIE BLVD	15%	0	6D	C3C	2680	0.00%	NO
US 1	SE PORT ST. LUCIE BLVD	LENNARD ROAD	10%	0	6D	C3C	2680	0.00%	NO
US 1	LENNARD ROAD	MARTIN COUNTY LINE	20%	0	6D	C3C	2680	0.00%	NO
MORNINGSIDE BOULEVARD	SITE	WESTMORELAND BOULEVARD	20%	0	2	C3R	1110	0.00%	NO
MORNINGSIDE BOULEVARD	WESTMORELAND BOULEVARD	SE PORT ST. LUCIE BLVD	5%	0	2	C3R	1110	0.00%	NO
WESTMORELAND BOULEVARD	PORT ST LUCIE BOULEVARD	MORNINGSIDE BOULEVARD	65%	0	2	C3R	1110	0.00%	NO
WESTMORELAND BOULEVARD	MORNINGSIDE BOULEVARD	SE PINE VALLEY STREET	50%	0	2	C3R	1110	0.00%	NO
WESTMORELAND BOULEVARD	SE PINE VALLEY STREET	US 1	30%	0	2	C3R	1110	0.00%	NO

SIMMONS & WHITE
CIVIL & TRAFFIC ENGINEERING

11/06/25
Revised 11/25/25
Revised 12/15/25
Revised 01/06/26

TABLE 9
PROJECT SIGNIFICANCE CALCULATION
PM PEAK HOUR

TOTAL PM PEAK HOUR PROJECT TRIPS (IN) = 0
TOTAL PM PEAK HOUR PROJECT TRIPS (OUT) = 0

ROADWAY	FROM	TO	PROJECT DISTRIBUTION	PEAK HOUR PROJECT TRIPS	EXISTING LANES	CLASS	LOS D STANDARD	TOTAL PROJECT IMPACT	PROJECT SIGNIFICANT
SE PORT ST. LUCIE BLVD	FLORESTA DRIVE	VETERANS MEMORIAL PKWY	65%	0	6D	C4	2810	0.00%	NO
SE PORT ST. LUCIE BLVD	VETERANS MEMORIAL PKWY	MORNINGSIDE BLVD	0%	0	6D	C3R	2730	0.00%	NO
SE PORT ST. LUCIE BLVD	MORNINGSIDE BLVD	US 1	5%	0	6D	C3R	2730	0.00%	NO
US 1	JENNINGS ROAD	SE PORT ST. LUCIE BLVD	15%	0	6D	C3C	2680	0.00%	NO
US 1	SE PORT ST. LUCIE BLVD	LENNARD ROAD	10%	0	6D	C3C	2680	0.00%	NO
US 1	LENNARD ROAD	MARTIN COUNTY LINE	20%	0	6D	C3C	2680	0.00%	NO
MORNINGSIDE BOULEVARD	SITE	WESTMORELAND BOULEVARD	20%	0	2	C3R	1110	0.00%	NO
MORNINGSIDE BOULEVARD	WESTMORELAND BOULEVARD	SE PORT ST. LUCIE BLVD	5%	0	2	C3R	1110	0.00%	NO
WESTMORELAND BOULEVARD	PORT ST LUCIE BOULEVARD	MORNINGSIDE BOULEVARD	65%	0	2	C3R	1110	0.00%	NO
WESTMORELAND BOULEVARD	MORNINGSIDE BOULEVARD	SE PINE VALLEY STREET	50%	0	2	C3R	1110	0.00%	NO
WESTMORELAND BOULEVARD	SE PINE VALLEY STREET	US 1	30%	0	2	C3R	1110	0.00%	NO

SIMMONS & WHITE
CIVIL & TRAFFIC ENGINEERING

APPENDIX D

2024 FDOT Q/LOS TABLES

C3C & C3R

Motor Vehicle Arterial Generalized Service Volume Tables

(C3C-Suburban Commercial)

Peak Hour Directional

	B	C	D	E
1 Lane	*	760	1,070	**
2 Lane	*	1,520	1,810	**
3 Lane	*	2,360	2,680	**
4 Lane	*	3,170	3,180	**

Peak Hour Two-Way

	B	C	D	E
2 Lane	*	1,380	1,950	**
4 Lane	*	2,760	3,290	**
6 Lane	*	4,290	4,870	**
8 Lane	*	5,760	5,780	**

AADT

	B	C	D	E
2 Lane	*	15,300	21,700	**
4 Lane	*	30,700	36,600	**
6 Lane	*	47,700	54,100	**
8 Lane	*	64,000	64,200	**

(C3R-Suburban Residential)

	B	C	D	E
1 Lane	*	970	1,110	**
2 Lane	*	1,700	1,850	**
3 Lane	*	2,620	2,730	**

	B	C	D	E
2 Lane	*	1,760	2,020	**
4 Lane	*	3,090	3,360	**
6 Lane	*	4,760	4,960	**

	B	C	D	E
2 Lane	*	19,600	22,400	**
4 Lane	*	34,300	37,300	**
6 Lane	*	52,900	55,100	**

Adjustment Factors

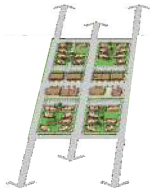
The peak hour directional service volumes should be adjust by multiplying by 1.2 for one-way facilities
The AADT service volumes should be adjusted by multiplying 0.6 for one way facilities 2 Lane Divided Roadway with an Exclusive Left Turn Lane(s): Multiply by 1.05
2 lane Undivided Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.80

Exclusive right turn lane(s): Multiply by 1.05
Multilane Undivided Roadway with an Exclusive Left Turn Lane(s): Multiply by 0.95
Multilane Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.75
Non-State Signalized Roadway: Multiply by 0.90

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.
* 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.

C2T, C4, C5, & C6

Motor Vehicle Arterial Generalized Service Volume Tables



(C2T-Rural Town)

Peak Hour Directional

	B	C	D	E
1 Lane	*	720	940	**
2 Lane	*	1,140	1,640	**
3 Lane	*	2,120	2,510	**

Peak Hour Two-Way

	B	C	D	E
2 Lane	*	1,310	1,710	**
4 Lane	*	2,070	2,980	**
6 Lane	*	3,850	4,560	**

AADT

	B	C	D	E
2 Lane	*	13,800	18,000	**
4 Lane	*	21,800	31,400	**
6 Lane	*	40,500	48,000	**

(C4-Urban General)

	B	C	D	E
1 Lane	*	*	870	1,190
2 Lane	*	1,210	1,790	2,020
3 Lane	*	2,210	2,810	2,990
4 Lane	*	2,590	3,310	3,510

	B	C	D	E
2 Lane	*	*	1,580	2,160
4 Lane	*	2,200	3,250	3,670
6 Lane	*	4,020	5,110	5,440
8 Lane	*	4,710	6,020	6,380

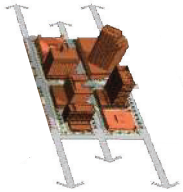
	B	C	D	E
2 Lane	*	*	17,600	24,000
4 Lane	*	24,400	36,100	40,800
6 Lane	*	44,700	56,800	60,400
8 Lane	*	52,300	66,900	70,900

(C5-Urban Center)

	B	C	D	E
1 Lane	*	*	690	1,080
2 Lane	*	1,290	1,900	2,130
3 Lane	*	1,410	2,670	3,110
4 Lane	*	2,910	3,560	3,640

	B	C	D	E
2 Lane	*	*	1,250	1,960
4 Lane	*	2,350	3,450	3,870
6 Lane	*	2,560	4,850	5,650
8 Lane	*	5,290	6,470	6,620

	B	C	D	E
2 Lane	*	*	13,900	21,800
4 Lane	*	26,100	38,300	43,000
6 Lane	*	28,400	53,900	62,800
8 Lane	*	58,800	71,900	73,600



(C6-Urban Core)

	B	C	D	E
1 Lane	*	***	790	1,030
2 Lane	*	***	1,490	1,920
3 Lane	*	***	2,730	2,940
4 Lane	*	***	3,250	3,490

	B	C	D	E
2 Lane	*	***	1,440	1,870
4 Lane	*	***	2,710	3,490
6 Lane	*	***	4,960	5,350
8 Lane	*	***	5,910	6,350

	B	C	D	E
2 Lane	*	***	16,000	20,800
4 Lane	*	***	30,100	38,800
6 Lane	*	***	55,100	59,400
8 Lane	*	***	65,700	70,600

Adjustment Factors

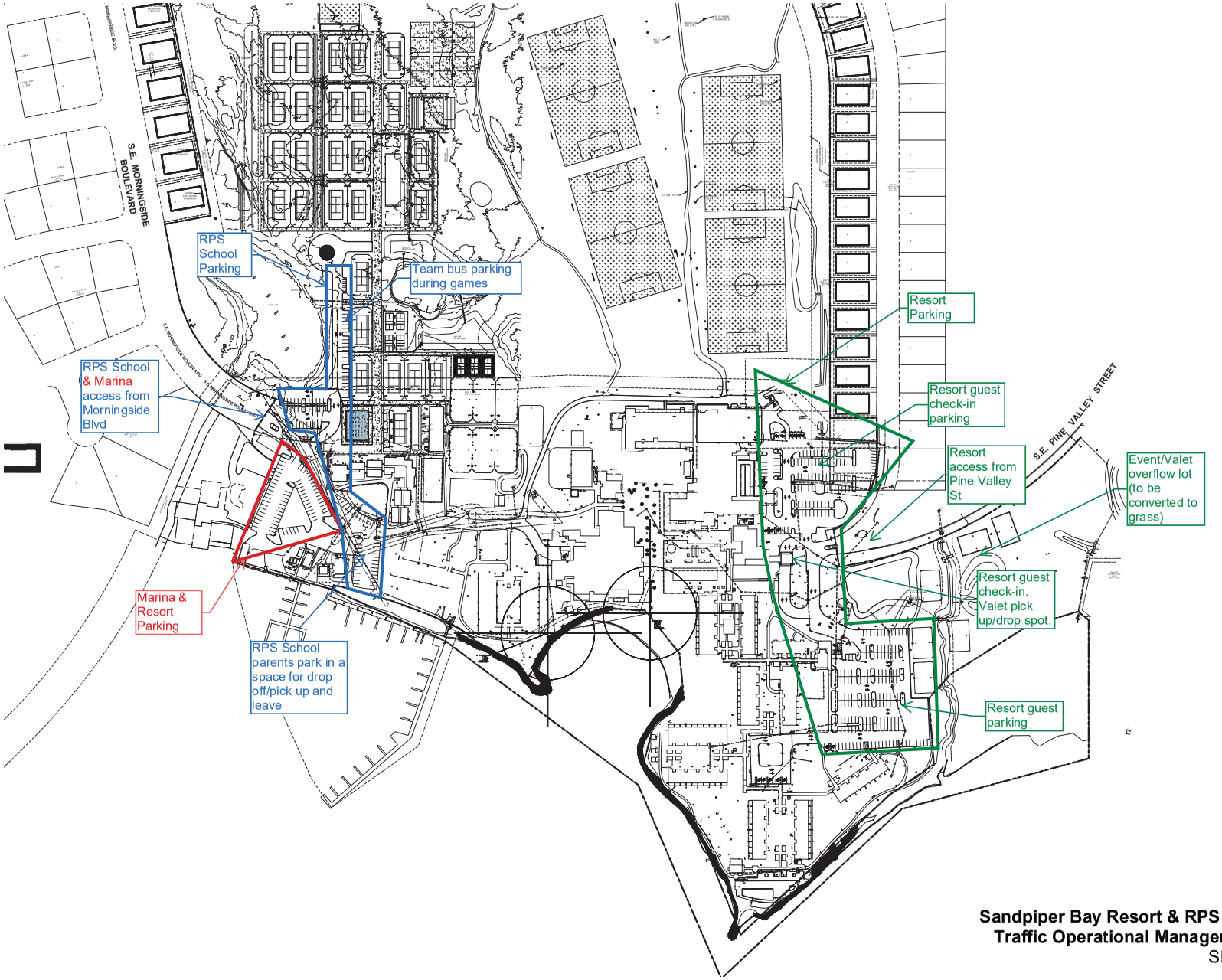
The peak hour directional service volumes should be adjust by multiplying by 1.2 for one-way facilities
The AADT service volumes should be adjusted by multiplying 0.6 for one way facilities 2 Lane Divided Roadway with an Exclusive Left Turn Lane(s): Multiply by 1.05
2 lane Undivided Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.80

Exclusive right turn lane(s): Multiply by 1.05
Multilane Undivided Roadway with an Exclusive Left Turn Lane(s): Multiply by 0.95
Multilane Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.75
Non-State Signalized Roadway: Multiply by 0.90

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.
*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.
***LOS C thresholds are not applicable for C6 as C6 roadway facilities are neither planned nor designed to achieve automobile LOS C.

APPENDIX E

SITE ACCESS



Sandpiper Bay Resort & RPS Academy
Traffic Operational Management Plan
Sheet 1 of 2

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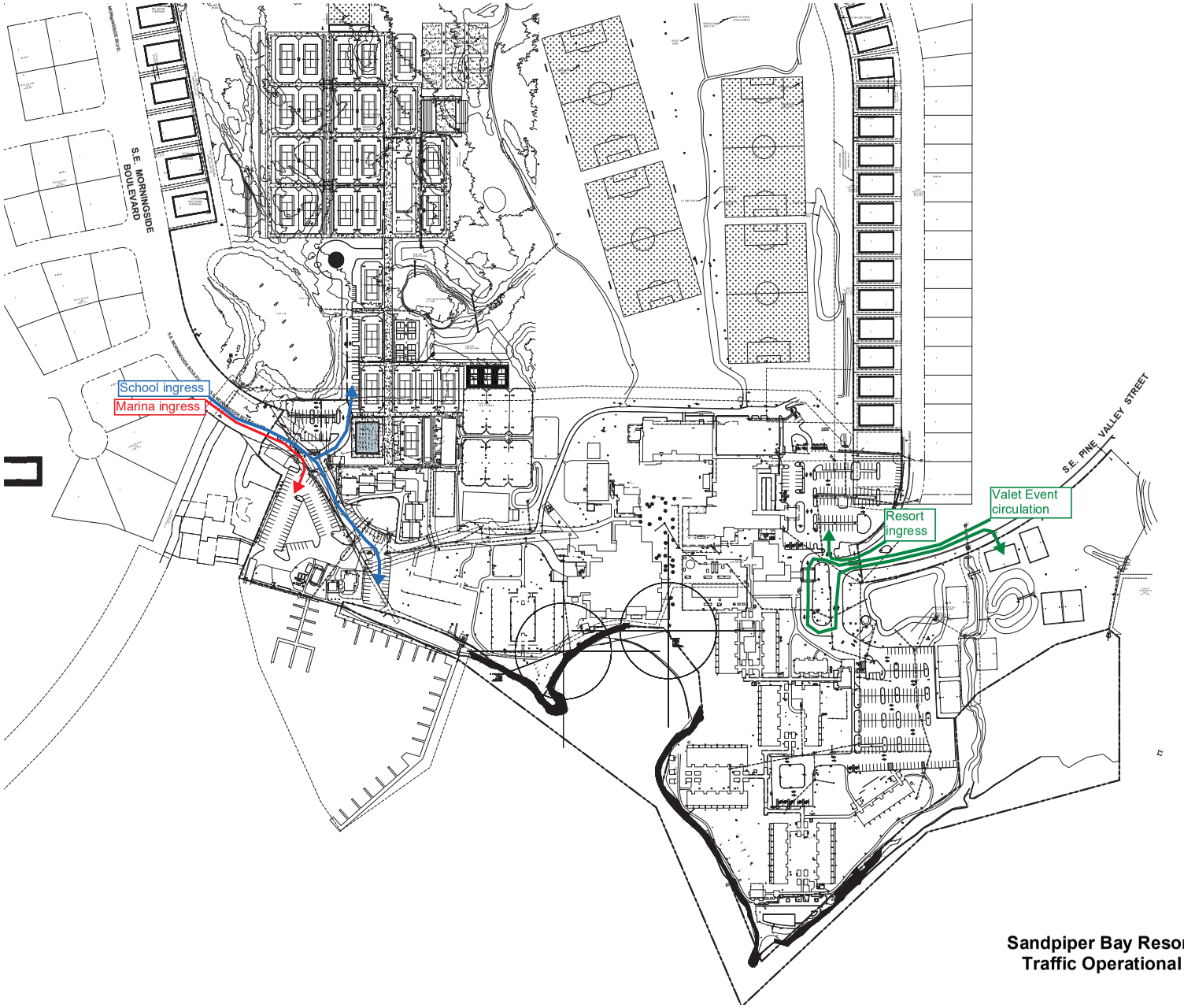

Sandpiper Bay Resort & RPS Academy
Traffic Operational Management Plan
Sheet 2 of 2

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