

SUSAN E. O'ROURKE, P.E., Inc.

Traffic Engineering, Transportation Planning

April 29, 2015

Mr. Joseph Foglia
Foglia Contracting Corp.
DBA Foglia Custom Homes
1555 Indian River Boulevard, Unit B141
Vero Beach, LF 32960

Re: Inlet Palms

Dear Mr. Foglia:

Susan E. O'Rourke, P.E., Inc. has completed the analysis of the proposed plan to develop 7 residential units along Seaway Drive in Fort Pierce. The purpose of this letter report is to demonstrate that the project has a de minimis impact on the roadway network. De minimis is defined as project traffic being less than 1 percent of level of service D capacity and the total traffic of the adjacent roadway being less than 110% of capacity at project buildout.

The steps in the analysis and the ensuing results are presented herein.

Project Description

The project will consist of 7 townhomes; 6 are attached and one detached. The project is located on Seaway Drive to the east of the Coast Guard Museum in Fort Pierce. **Attachment A** shows the project site plan.

Project Traffic

To estimate traffic generated by the 7 units, the ITE Trip Generation, 9th Edition trip rates for Townhome Condo dwelling units, LU Code 230 were applied to the 6 attached units and LU Code 210 applied to the detached unit. Trip generation for the project including daily, AM and PM peak hour is shown in **Attachment B**. As shown there will be 66 daily trips, 6 AM peak hour trips and 7 PM peak hour trips.

Adjacent Street Traffic

Seaway Drive is a two-lane roadway adjacent to the project. It has a two-way capacity of 1200 vehicles per hour. (Non-State Class II)

The project traffic has an assignment of 75% to the west and 25% to the east. That gives its greatest impact as 75% of 6 trips = 5 in the AM and 75% of 10 trips in the PM = 5. Therefore, in the AM and PM peak hour the project has an impact of .42% of capacity.

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The total traffic on Seaway Drive was calculated as existing plus growth at 1% for 2 years plus project traffic. The total AM traffic in 2016= 1,009 existing + 20 growth + 5 project = 1,034 AM trips. The total PM traffic in 2016= 1,055 existing + 21 growth + 5 project = 1,081 PM total)

The total traffic is LOS D capacity for both AM and PM peak hours.

Conclusion

Since the project traffic is less than 1% of LOS D capacity and the total traffic on Seaway Drive is less than 110% of capacity (in fact less than capacity), the project meets the criteria of De Minimis.

Additional analysis is not required and the project satisfies concurrency.

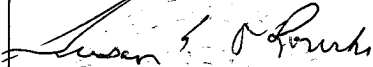
It has been a pleasure working with you. If you have any questions or comments, please give me a call.

Respectfully submitted,
SUSAN E. O'ROURKE, P.E., INC.



Susan E. O'Rourke, P.E.
Registered Civil Engineer – Traffic

Susan E. O'Rourke, P.E., Inc
#42684

Prepared by: Susan E. O'Rourke, P.E., Inc. Certificate of Authorization: #26869 969 SE Federal Highway, Suite 402 Stuart, Florida 34994 772-781-7918	Professional Engineer  Susan E. O'Rourke, P.E. Date signed and sealed: 4/29/15 License #: 42684
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Atachment B

Trip Generation- LU Code 210 Total Single-Family Detached Housing

	Dwelling Units	Equation	% Entering	% Exiting	Trips	Entering	Exiting
Daily	1	$T=9.52(X)$	50	50	10	5	5
AM Peak Hour	1	$T=.78(X)$	25	75	1	0	1
PM Peak Hour	1	$T=1(X)$	63	37	1	1	0

Source: ITE Trip Generation, 9th Edition

*Used rates for only 1 unit

Trip Generation- LU Code 230 Townhome Condos

	Dwelling Units	Equation	% Entering	% Exiting	Trips	Entering	Exiting
Daily	6	$\ln(T)=0.87\ln(X)+2.46$	50	50	56	28	28
AM Peak Hour	6	$\ln(T)=.80(X)+.26$	17	83	5	1	4
PM Peak Hour	6	$\ln(T)=0.82\ln(X)+.32$	67	33	6	4	2

Total	Trips
Daily	66
AM Peak Hour	6
PM Peak Hour	7

ATTACHMENT C

COUNT DATA

Traffic Counts and Level of Service Report Fall 2014

Roadway Name	Location	AADT	PK Hr Service Capacity	AM PK Hr PK DIF		PM PK Hr PK DIF		V/C
				Volume	LOS	Volume	LOS	
SHINN RD	OKEECHOBEE RD to ORANGE AVE	824	1,030	57	B	66	B	0.174
SNEED RD	OKEECHOBEE RD to ORANGE AVE	1,592	500	116	B	111	B	0.694
SOUTHBEND BLVD	BECKER RD to FLORESTA DR	12,000	710	726	E	651	D	0.917
SR A1A NORTH	US 1 to OLD DIXIE HWY	5,607	920	378	C	379	C	0.436
SR A1A NORTH	OLD DIXIE HWY to N HWY A1A	6,400	0	355	C	333	C	0.383
SR A1A NORTH	SHOREWINDS DR to INDIAN RIVER C.L.	6,876	920	370	C	406	C	0.467
SR A1A SOUTH	NETTLES ISLAND to FPL PLANT	7,055	920	432	C	387	C	0.445
SR A1A SOUTH	FPL PLANT to BLUE HERON BLVD	3,413	660	408	C	327	C	0.527
SR A1A SOUTH	BLUE HERON BLVD to SEAWAY DR	6,926	560	374	D	447	D	0.798
SR A1A SOUTH	OCEAN DR to BINNEY DR	11,338	560	564	E	590	E	0.983
SR A1A SOUTH	BINNEY DR to S CAUSEWAY PARK	11,338	790	564	D	590	D	0.747
SR A1A SOUTH	S CAUSEWAY PARK to INDIAN RIVER DR	9,799	1,550	539	C	487	C	0.706
SR A1A SOUTH	INDIAN RIVER DR to US 1	9,799	1,710	539	C	487	C	0.632
ST JAMES DR	AUROS BLVD to ST JAMES BLVD	17,000	1,890	1,254	C	1,216	C	0.676
ST JAMES DR	ST JAMES BLVD to PEACHTREE BLVD	19,000	1,890	1,518	C	1,208	C	0.671
ST JAMES DR	PEACHTREE BLVD to TELFORD AVE	17,000	1,800	1,254	C	1,216	C	0.707
ST JAMES DR	TELFORD AVE to MIDWAY RD	21,000	1,890	1,163	C	1,414	C	0.786
ST JAMES BLVD	SELVITZ RD to ST JAMES DR	4,300	680	318	C	243	C	0.736
ST LUCIE BLVD	KINGS HWY to KEEN RD	4,821	750	384	C	364	C	0.513
ST LUCIE BLVD	KEEN RD to 25TH ST	4,821	750	384	C	364	C	0.513
ST LUCIE BLVD	25TH ST to SENECA AVE	3,784	710	194	C	197	C	0.563
ST LUCIE BLVD	SENECA AVE to US 1	3,784	790	194	C	197	C	0.505
ST LUCIE WEST BLVD	COMMERCE CENTER DR to W OF I-95	10,500	590	492	C	506	C	0.904
ST LUCIE WEST BLVD	I-95 to CALIFORNIA BLVD	35,000	1,890	1,679	C	1,542	C	0.857
ST LUCIE WEST BLVD	CALIFORNIA BLVD to COUNTRY CLUB DR	35,000	1,890	1,679	C	1,542	C	0.857
ST LUCIE WEST BLVD	COUNTRY CLUB DR to CASHMERE BLVD	35,000	1,890	1,679	C	1,542	C	0.857
ST LUCIE WEST BLVD	CASHMERE BLVD to BAYSHORE BLVD	44,000	2,850	2,285	C	2,125	C	0.764
SUNRISE BLVD	MIDWAY RD to BELL AVE	3,709	510	283	D	237	C	0.948
SUNRISE BLVD	BELL AVE to EDWARDS RD	4,016	640	254	C	265	C	0.828

* Volumes shown were adjusted using FDOT Seasonal Factors

* AADT = Annual Average Daily Traffic

$514 \div 0.539 D_{factor} = 1009$
 $590 \div 0.551 D_{factor} = 1055$

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2013 HISTORICAL AADT REPORT

COUNTY: 94 - ST. LUCIE

SITE: 0115 - SR 1A1A/S - E END OF S BRIDGE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2013	11600 C	E 5800	W 5800	9.00	55.98	9.40
2012	12500 C	E 6300	W 6200	9.00	55.80	6.10
2011	10300 C	E 5100	W 5200	9.00	56.20	6.10
2010	13300 C	E 6700	W 6600	11.16	56.34	6.10
2009	12400 C	E 5700	W 6700	11.51	56.49	8.90
2008	12600 C	E 6300	W 6300	11.31	55.19	8.90
2007	14500 C	E 7200	W 7300	11.33	56.77	11.20
2006	14200 C	E 7100	W 7100	11.16	57.49	3.40
2005	15200 C	E 7600	W 7600	11.60	56.20	2.60
2004	14900 C	E 7500	W 7400	11.10	57.00	2.60
2003	14300 C	E 7100	W 7200	10.70	54.30	2.60
2002	15200 C	E 7400	W 7800	10.80	56.30	2.80
2001	13700 C	E 6800	W 6900	10.80	56.00	2.50
2000	14400 C	E 7400	W 7000	10.40	56.50	2.00
1999	14400 C	E 7300	W 7100	10.80	58.70	2.10
1998	14000 C	E 7000	W 7000	10.40	57.30	3.60

Negative growth

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; F = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; G = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2013 HISTORICAL AADT REPORT

COUNTY: 94 - ST. LUCIE

SITE: 5016 - SR A1A/S - S OF SEAWAY DR (COUNTY 5016)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2013	6800 C	N 3500	S 3300	9.00	55.90	3.70
2012	6700 F	N 3300	S 3400	9.00	55.80	3.70
2011	6700 C	N 3300	S 3400	9.00	56.20	3.70
2010	7500 F	N 3700	S 3800	11.16	56.34	4.80
2009	7500 C	N 3700	S 3800	11.51	56.49	8.50
2007	8300 C	N 4000	S 4300	11.33	56.77	8.50
2006	8600 C	N 4300	S 4300	11.16	57.49	8.50
2005	7200 C	N 3600	S 3600	11.60	56.20	5.10
2004	7800 C	N 3800	S 4000	11.10	57.00	5.10
2003	7100 C	N 3500	S 3600	10.70	54.30	7.20
2002	8200 C	N 4200	S 4000	10.80	56.30	7.20
2001	6500 C	N 3300	S 3200	10.80	56.00	3.30
2000	7400 C	N 3700	S 3700	10.40	56.50	2.00
1999	6100 C	N 3100	S 3000	10.80	58.70	2.10
1998	6000 C	N 3100	S 2900	10.40	57.30	2.50

Negative Growth

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES