#### ROUP JF

Traffic Engineering • Transportation Planning

www.jfogroupinc.com

February 13, 2023

Richard Caster | Principal 290 SE 6<sup>th</sup> Avenue Suite #5 Delray Beach, FL 33483

### Re: Cason Court - City of Delray Beach PBC TPS Traffic Analysis & Delray LDR 2.4.3 Analysis PCN: 12-43-46-16-01-041-0010

Dear Rick,

JFO Group Inc. has been retained to evaluate a traffic impact analysis to determine compliance with Palm Beach County (PBC) - Traffic Performance Standards (TPS) - Article 12 of the PBC Unified Land Development Code (ULDC) and with the City of Delray Beach LDR 2.4.3 (E) standards. This traffic statement is associated with a Site Plan amendment application for the Cason United Methodist Church property to add eight (8) single family homes to the subject site.

The site is located on the southwest corner of Swinton Avenue and Lake Ida Road in the City of Delray Beach, Florida within the Coastal Residential Exception Area. Figure 1 shows the project location in relation to the transportation network. Parcel Control Number associated with this project is 12-43-46-16-01-041-0010.

A copy of the property appraiser information for the site is included as Exhibit 1 while Exhibit 2 includes a copy of the project location within the Coastal Residential Exception Area. Exhibit 3 includes a conceptual site plan for the property. Project buildout is expected in the year 2025.

According to provisions in Article 12 of the PBC ULDC – Section 3.B, if a structure or building has not been discontinued or abandoned for five (5) or more years prior to the time of the application, then the project is eligible for an existing use credit against project traffic. Exhibit 4 includes a 2016 aerial of the site.



Figure 1 : Project Location

Project trip generation rates used for this analysis were based on PBC Trip Generation Rates dated July 25, 2022. Table 1 shows the rates used in order to determine the trip generation for Daily, AM, and PM peak hour conditions while Table 2 summarizes the net Daily, AM, and PM peak trips potentially generated by the existing and proposed development. Exhibit 5 includes a copy of PBC trip generation rates. Exhibit 6 includes a copy of the latest TPS approval for the site which included 10 DUs.

According to Table 2, the net Daily and AM peak trips potentially generated due to the proposed development are 31 and 11 trips respectively. There is a reduction in trips during the PM peak hour. Therefore, the proposed changes to the Cason United Methodist Church property will not generate more than 20 gross peak hour trips.

2023-02-13\_Cason Court \_Traffic Statement\_1106.01

Page 1 of 3 6671 W Indiantown Rd • Suite 50-324 Jupiter, Florida 33458 • T: (561) 462-5364 • F: (561) 465-8044 • info@jfo.us



	ITE	Daily	AM Peak Hour			PN	NPeak Ho	our	Weekend Peak Hour		
Land Use	Code	Trip Gen.	In	Out	Total	In	Out	Total	In	Out	Total
Church	560	7.60	62%	38%	0.32	44%	56%	0.49	48%	52%	10.36
Day Care	565	4.09	53%	47%	0.78	47%	53%	0.79	-	-	-
Private School	530	3.17	56%	44%	1.01	46%	54%	0.26	-	-	-
Single Family Detached	210	10.00	26%	74%	0.70	63%	37%	0.94	-	-	-

### Table 1: Trip Generation Rates

### Table 2: Trip Generation

	Into neitra	Daily	AM	Peak H	lour	PM	Peak H	our	Weeke	end Pea	k Hour
Land Use	Intensity	Traffic	In	Out	Total	In	Out	Total	In	Out	Total
		E	XISTIN	g Dev	ELOPM	ENT					
Church	19,580 SF	149	4	2	6	4	6	10	97	106	203
Day Care	80 Students	327	33	29	62	30	33	63	0	0	0
	Σ	476	37	31	68	34	39	73	97	106	203
Pass-By											
Church	5%	7	0	0	0	0	1	1	5	5	10
Day Care	50%	164	17	14	31	15	17	32	0	0	0
	Σ	(171)	(17)	(14)	(31)	(15)	(18)	(33)	(5)	(5)	(10)
Net Existing T	raffic	305	20	17	37	19	21	40	92	101	193
		Ρ	ROPOS	ED DEV	ELOP <i>N</i>	ENT					
Church	19,580 SF	149	4	2	6	4	6	10	97	106	203
Private School	36 Students	114	20	16	36	4	5	9	0	0	0
Single Family	8 DUs	80	2	4	6	5	3	8	-	-	-
	Σ	343	26	22	48	13	14	27	97	106	203
Pass-By											
Church	5%	(7)	(0)	(0)	(0)	(0)	(1)	(1)	(5)	(5)	(10)
Net Proposed Traffic		336	26	22	48	13	13	26	92	101	193
Net Ti	31	6	5	11	(6)	(8)	(14)	0	0	0	

Based on the PBC – TPS and the Land Development Design Standards Manual, a left-turn lane is required at each driveway where inbound peak hour left-turning traffic is equal or greater than 30 vehicles. A right-turn lane is required at each driveway where street Average Daily Traffic (ADT) volumes exceed 10,000 vehicles per day, and driveway daily volume is greater than 1,000 trips, with inbound peak hour right-turning traffic being at least 75 vehicles. Figure 2 provides Daily, AM and PM peak hour driveway volumes for the Cason United Methodist Church property. Based on the information presented in Figure 2, PBC - TPS, and the Land Development Design Standards Manual, turn lanes are not warranted at the project driveways.

2023-02-13_Cason Court _Traffic Statement_1106.01					Page 2 of 3
6671 W Indiantown Rd	٠	Suite 50-324 •	Jupiter,	Florida	33458
T: (561) GO2-JFOG	٠	w w w . jfogroupin	c.com • i	nfo@jfo.u	S

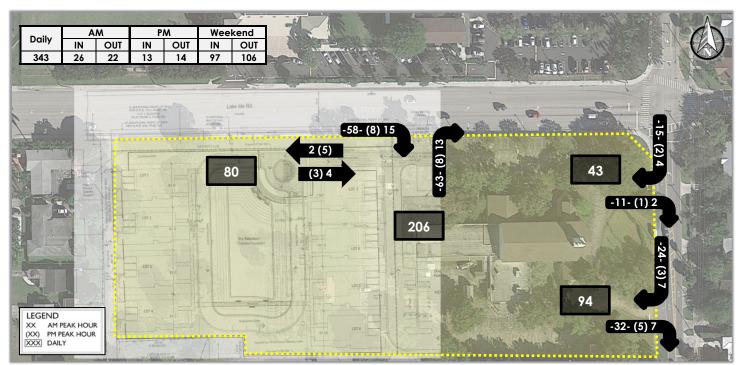


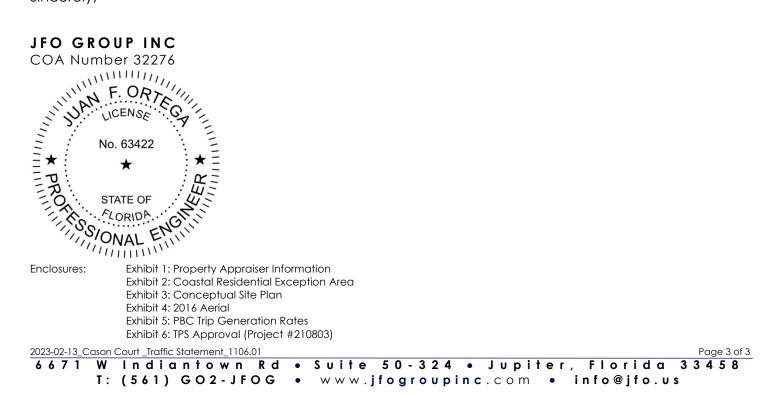
Figure 2: Project Driveway Volumes

The proposed changes to the Cason United Methodist Church property have been evaluated following PBC TPS - Article 12 of the PBC ULDC. This analysis shows that the proposed request to add eight (8) single family homes will generate less than 20 peak hour trips. Furthermore, project is located within the Coastal Residential Exception Area. In addition, the proposed project has been evaluated following City of Delray Beach LDR 2.4.3 (E) standards. This analysis shows that the proposed request will generate less than 201 ADT. This analysis shows that the proposed development will be in compliance with PBC TPS - Article 12 of the PBC ULDC and with City of Delray Beach LDR 2.4.3 (E) standards. Project build-out is expected in 2025.

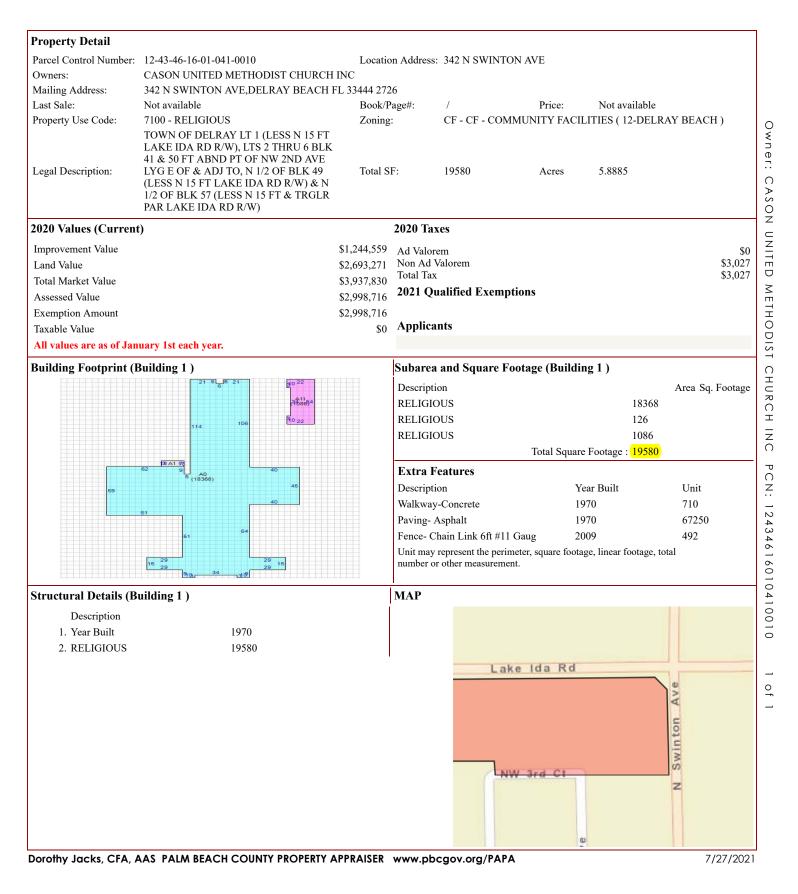
titem has been electronically signed and sealed by Dr. Juan F. Ortega, PE on February 13, 2022 using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

This

Sincerely,



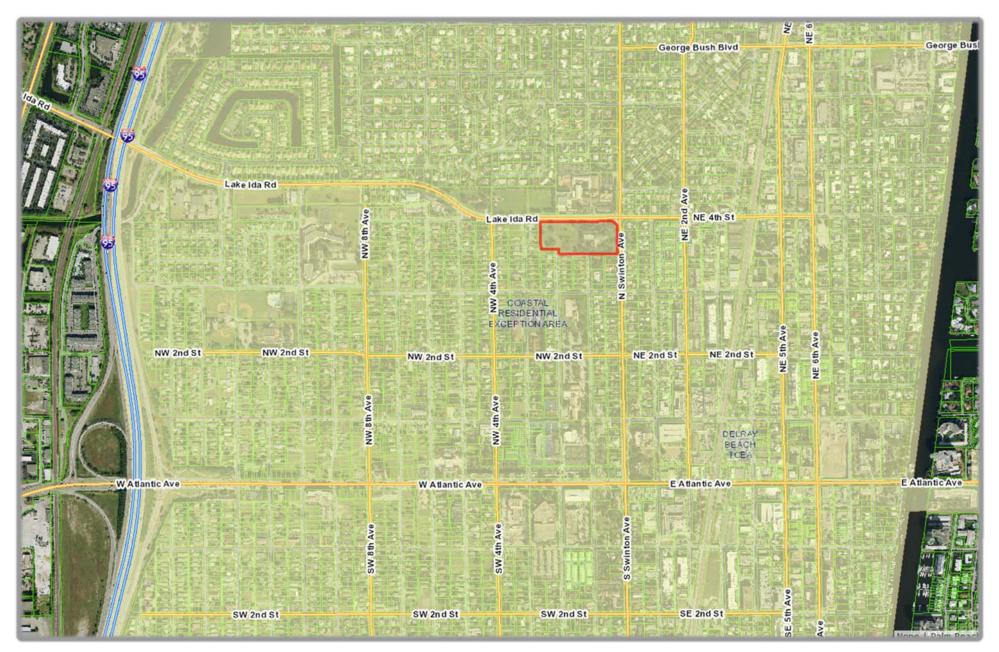
Property Detail							
• •	342 N SWINTON AVE						
Municipality	DELRAY BEACH						
Parcel Control Number	12-43-46-16-01-041-0010						
	DELRAY TOWN OF						
Official Records Book	Official Records Book Page						
Sale Date							
Legal Description	50 FT ABND PT OF NW 2ND	AVE LYG E O	KE IDA RD R/W), LTS 2 THRU 6 BLK F & ADJ TO, N 1/2 OF BLK 49 (LESS (LESS N 15 FT & TRGLR PAR LAKE	5 N 15			
Owner Information							
0		Mailing add	ress				
Owners CASON UNITED METHODIST CHURCH		342 N SWIN	ITON AVE				
CASON UNITED METHODIST CHURCH		DELRAY BE	ACH FL 33444 2726				
Sales Information	No Sala	s Information	Available				
Exemption Information	NO Sale	s information	Available.				
Applicant/Owner	Yea	r	Detail				
Applicant, Owner	202		Detail				
Property Information							
Number of Units 0							
*Total Square Feet 1	9580						
Acres 5							
	100 - RELIGIOUS						
	F - CF - COMMUNITY FACILIT	IES ( 12-DELR	AY BEACH )				
Appraisals							
Tax Year		2020	2019	2018			
Improvement Value	\$1,2	44,559	\$1,185,310	\$1,195,76			
Land Value		93,271	\$2,565,020	\$1,282,51			
Total Market Value	\$3,9	37,830	\$3,750,330	\$2,478,27			
	All values are as of January	1st each yea	r				
Assessed and Taxable Values							
Tax Year		2020	2019	2018			
Assessed Value		98,716	\$2,726,105	\$2,478,27			
Exemption Amount	\$2,9	98,716	\$2,726,105	\$2,478,27			
Taxable Value		\$0	\$0	\$			
Taxes		2022					
Tax Year		2020 ¢0	2019	2018			
Ad Valorem		\$0	\$0	\$			
Non Ad Valorem		\$3,027	\$3,134	\$3,13			
Total tax		\$3,027	\$3,134	\$3,13			

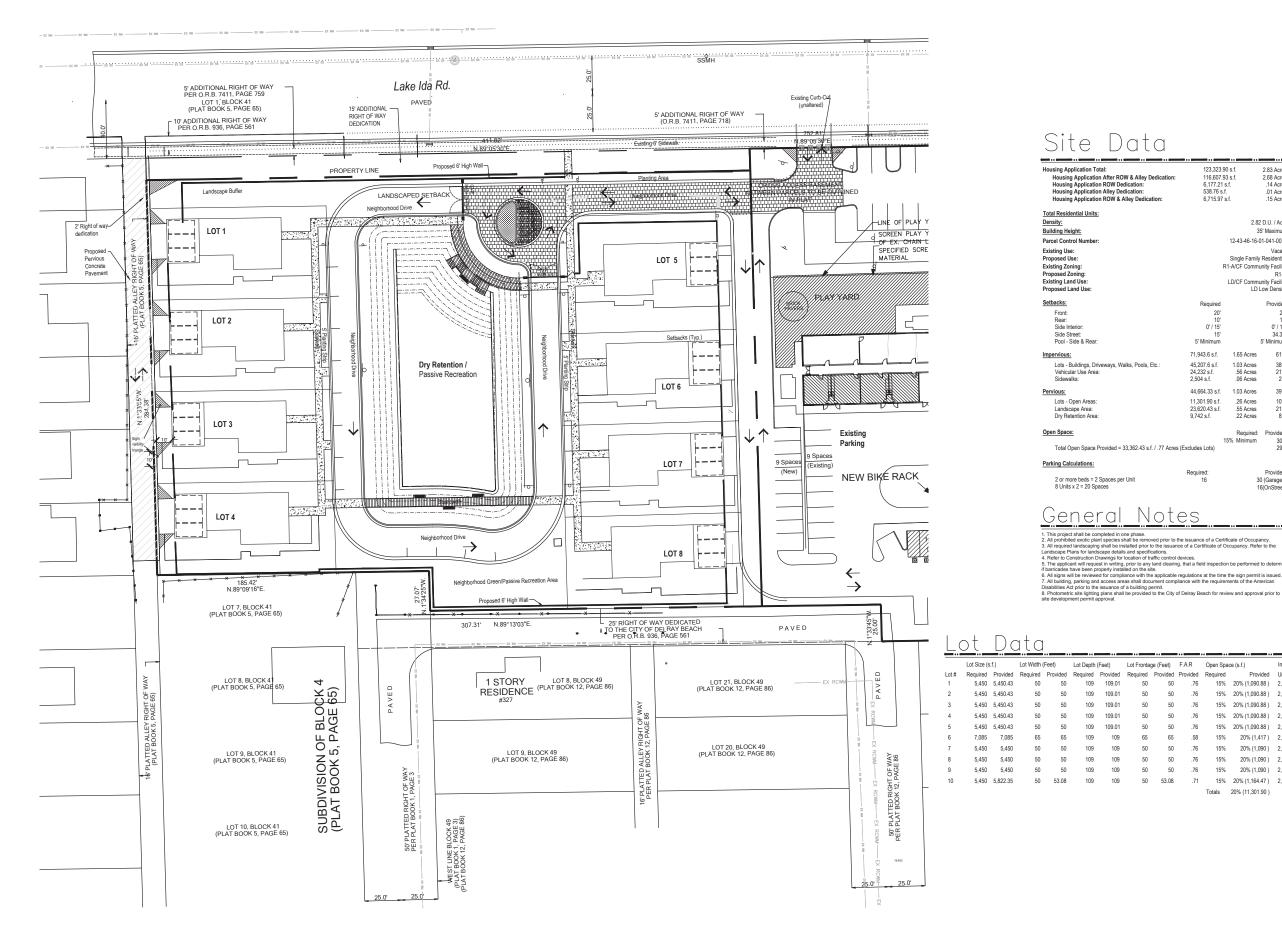


## JFO GROUP INC

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# **Coastal Residential Exception Area**





Site Plan Housing Application

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•••••••••••••••••••••••••••••••••••••••		•••	•••••••••			
	123,323		2.83 Acres			
cation:	116,607		2.68 Acres			
	6,177.21		.14 Acres			
	538.76 s 6.715.97		.01 Acres			
1:	0,715.97	S.T.	.15 Acres			
			8			
		2.	82 D.U. / Acre			
			35' Maximum			
		12-43-46-10	6-01-041-0010			
			Vacant			
			ily Residential			
		R1-A/CF Com				
			R1-A			
			munity Facility			
		L	D Low Density			
	Required		Provided			
	20'		20'			
	10'		10'			
	0' / 15'		0' / 15'			
	15' 5' Minimum		34.36' 5' Minimum			
	5 WIITIIIIIUIII		5 WIIIIIIIIII			
	71,943.6 s.f.	1.65 Acres	s 61%			
	45,207.6 s.f.	1.03 Acres				
	24,232 s.f.	.56 Acres				
	2,504 s.f.	.06 Acres	3 2%			
	44,664.33 s.f.	1.03 Acres	39%			
	11,301.90 s.f.	.26 Acres				
	23,620.43 s.f.	.55 Acres				
	9,742 s.f.	.22 Acres	\$ 8%			
		Require	d: Provided:			
		15% Minimun				
77 Acres (Ex	cludes Lots)		29%			
	,					
	De audies de		Devident			
1	Required: 16		Provided: 30 (Garages)			
	10		16(OnStreet)			

••					•			
(Feet)	F.A.R	Open Space (s.f.)		Imperv	vious			
rovided	Provided	Required	Provided	Unit	Drive	Walks/Patios	Pool (Max.)	Provided (s.f.)
50	.76	15%	20% (1,090.88)	2,388	281.09	1,190.46	500	80% (4,359.55)
50	.76	15%	20% (1,090.88)	2,388	281.09	1,190.46	500	80% (4,359.55 )
50	.76	15%	20% (1,090.88)	2,388	281.09	1,190.46	500	80% (4,359.55 )
50	.76	15%	20% (1,090.88)	2,388	281.09	1,190.46	500	80% (4,359.55 )
50	.76	15%	20% (1,090.88)	2,388	281.09	1,190.46	500	80% (4,359.55 )
65	.58	15%	20% (1,417)	2,388	285.83	2,494.17	500	80% (5,668)
50	.76	15%	20% (1,090)	2,388	285.83	1,186.17	500	80% (4,360)
50	.76	15%	20% (1,090)	2,388	285.83	1,186.17	500	80% (4,360)
50	.76	15%	20% (1,090)	2,388	285.83	1,186.17	500	80% (4,360)
53.08	.71	15%	20% (1,164.47)	2,388	285.83	1,484.05	500	80% (4,657.88 )
		Totals	20% (11,301.90 )					80% (45,207.60 )

Job No Drawn By Submittal D 2–10–2022 6–22–2022 1–27–2023	MCA Dates8-30-2021 2 3-18-2022 2 9-12-2022
Revision Da Comments 	
of the landscap are not to be projects except	t by written n the landscape ort any
landscape arch	
Sheet <b>2</b>	xhibit∘ິ3

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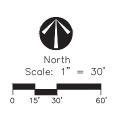
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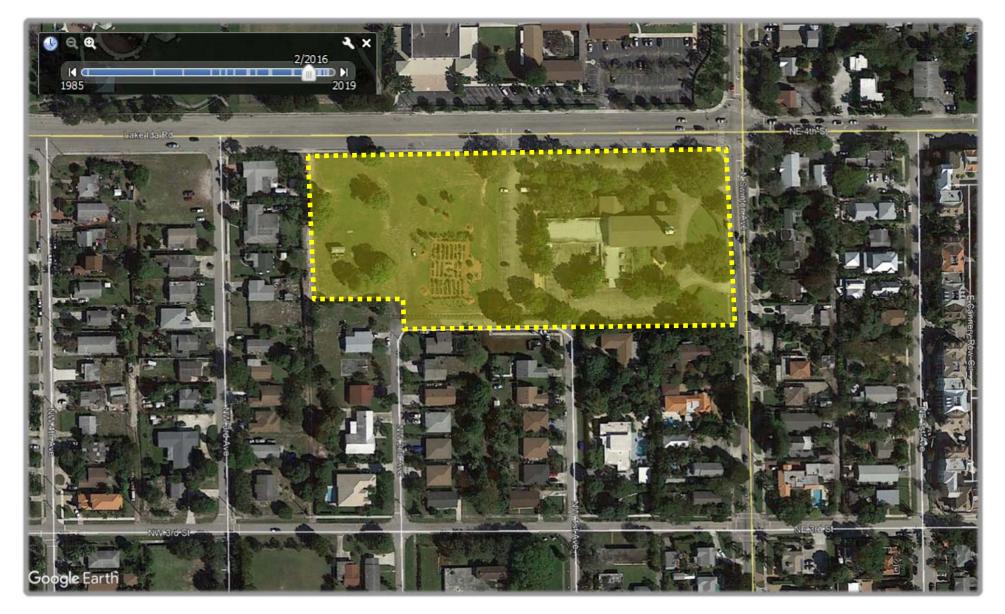
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# JFO GROUP INC

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2016 Aerial



# Palm Beach County Trip Generation Rates

(Must be used with traffic studies submitted to the County on or after 9/1/2022. However, immediate use is highly recommended)

		ITE					AM Peak Hour		PM Peak Hour
Gr	Landuse	Code	Unit	Daily Rate/Equation	Pass-By %	In/Out	Rate/Equation	In/Out	Rate/Equation
	General Light Industrial	110	1000 S.F.	4.87	10%	88/12	0.74	14/86	0.65
ial	Manufacturing	140	1000 S.F.	4.75	10%	76/24	0.68	31/69	0.74
Industrial	Warehouse	150	1000 S.F.	1.71	10%	77/23	0.17	28/72	0.18
Ind	Mini-Warehouse/SS	151	1000 S.F.	1.45	10%	59/41	0.09	47/53	0.15
	HCF Center Warehouse - Non Sort	155	1000 S.F.	1.81	10%	81/19	0.15	39/61	0.16
	Single Family Detached	<mark>210</mark>	<b>Dwelling Unit</b>	10	<mark>0%</mark>	<mark>26/74</mark>	0.7	<mark>63/37</mark>	0.94
_	Multifamily Low-Rise Housing upto 3 story (Apartment/Condo/TH)	220	Dwelling Unit	6.74	0%	24/76	0.4	63/37	0.51
Residential	Multifamily Mid-Rise Housing 4-10 story (Apartment/Condo/TH)	221	Dwelling Unit	4.54	0%	23/77	0.37	61/39	0.39
esi	55+ SF Detached	251	Dwelling Unit	4.31	0%	33/67	0.24	61/39	0.30
~ ~	55+ SF Attached	252	Dwelling Unit	3.24	0%	34/66	0.2	56/44	0.25
	Congregate Care Facility	253	Dwelling Unit	2.21	0%	58/42	0.08	49/51	0.18
	Assisted Living Facility	254	Beds	2.6	0%	60/40	0.18	39/61	0.24
Ldg	Hotel	310	Rooms	7.99	10%	56/44	0.46	51/49	0.59
Rec	Golf Course	430	Holes	30.38	5%	79/21	1.76	53/47	2.91
Ř	Health/Fitness Club	492	1000 S.F.	32.93	5%	51/49	1.31	57/43	3.45
	Elementary School	520	Students	2.27	0%	54/46	0.74	46/54	0.16
	Middle/Junior School	522	Students	2.1	0%	54/46	0.67	48/52	0.15
lal	High School	525	Students	1.94	0%	68/32	0.52	48/52	0.14
Institutional	Private School (K-8)	<mark>530</mark>	Students	<mark>3.17</mark> ª	<mark>0%</mark>	<mark>56/44</mark>	<mark>1.01</mark>	<mark>46/54</mark>	0.26
titu	Private School (K-12)	532	Students	2.48	0%	63/37	0.79	43/57	0.17
lns	Church/Synagogue <sup>b</sup>	<mark>560</mark>	1000 S.F.	<mark>7.6</mark>	<mark>5%</mark>	<mark>62/38</mark>	<mark>0.32</mark>	<mark>44/56</mark>	<mark>0.49</mark>
	Day Care	<mark>565</mark>	Students	4.09	<mark>50%</mark>	<mark>53/47</mark>	<mark>0.78</mark>	<mark>47/53</mark>	<mark>0.79</mark>
	Library	590	1000 S.F.	72.05	10%	71/29	1	48/52	8.16
Med	Hospital	610	1000 S.F.	10.77	10%	67/33	0.82	35/65	0.86
ž	Nursing Home	620	Beds	3.06	10%	72/28	0.14	33/67	0.14
	General Office (10k-250k SF GFA) <sup>h</sup>	710	1000 S.F.	10.84	10%	88/12	1.52	17/83	1.44
	General Office (>250k SF GFA) <sup>h</sup>	710	1000 S.F.	Ln(T) = 0.87 Ln(X) + 3.05	10%	88/12	Ln(T) = 0.86Ln(X) + 1.16	17/83	1.44
Office	Small Office Building (<=10k SF GFA)	712	1000 S.F.	14.39	10%	82/18	1.67	34/66	2.16
Off	Medical Office (Stand-Alone)	720	1000 S.F.	T=42.97(X)-108.01	10%	79/21	3.10	30/70	3.93
[	Medical Office (Near Hospital)	720	1000 S.F.	31.86	10%	81/19	2.68	25/75	2.84
	Government Office	730	1000 S.F.	22.59	10%	75/25	3.34	25/75	1.71

Updated July 25, 2022

		ITE					AM Peak Hour		PM Peak Hour
Gr	Landuse	Code	Unit	Daily Rate/Equation	Pass-By %	In/Out	Rate/Equation	In/Out	Rate/Equation
	Nursery (Garden Center)	817	Acre	108.1	0%	50/50	2.82	50/50	8.06
	Nursery (Wholesale)	818	Acre	19.50	0%	50/50	0.23	50/50	0.36
	Landscape Services	PBC	Acre <sup>c</sup>	121.70	0%	40/60	34.4	58/42	15.1
	Shop Center (>150ksf)	820	1000 S.F.	37.01	24%	62/38	0.84	48/52	3.4
	Shop Plaza (40-150ksf) w/Sup Market	821	1000 S.F.	94.49	39%	62/38	3.53	48/52	9.03
Retail	Shop Plaza (40-150ksf) w/out Sup Market	821	1000 S.F.	67.52	39%	62/38	1.73	49/51	5.19
Ret	Strip Retail Plaza (<40ksf)	822	1000 S.F.	54.45	63%	60/40	2.36	50/50	6.59
	Automobile Sales (New)	840	1000 S.F.	27.84	15%	73/27	1.86	40/60	2.42
	Automobile Parts Sales	843	1000 S.F.	54.57	28%	55/45	2.51	48/52	4.9
	Tire Store	848	1000 S.F.	27.69	28%	64/36	2.61	43/57	3.75
	Supermarket	850	1000 S.F.	93.84	36%	59/41	2.86	50/50	8.95
	Pharmacy + DT	881	1000 S.F.	108.40	50%	52/48	3.74	50/50	10.25
	Drive-In Bank	912	1000 S.F.	100.35	47%	58/42	9.95	50/50	21.01
	Fine Dining Restaurant	931	1000 S.F.	83.84	44%	50/50	0.73	67/33	7.8
	High Turnover Sit-Down Rest.	932	1000 S.F.	107.2	43%	55/45	9.57	61/39	9.05
s	Fast Food Restaurant w/o DT	933	1000 S.F.	450.49	45%	58/42	43.18	50/50	33.21
ice	Fast Food Restaurant + DT	934	1000 S.F.	467.48	49%	51/49	44.61	52/48	33.03
Services	Coffee/Donut Shop w/o DT	936	1000 S.F.	441.88 <sup>d</sup>	45%	51/49	93.08	50/50	32.29
	Coffee/Donut Shop + DT	937	1000 S.F.	533.57	49%	51/49	85.88	50/50	38.99
	Coffee/Donut Shop + DT w/No Seat	938	DT Lanes	179	49%	50/50	39.81	50/50	15.08
	Gas Station w/Convenience Store <sup>e</sup>	FDOT	FP, 1000 S.F.	14.3*PM Trips	61%	50/50	Note f	50/50	12.3*FP+15.5*(X)
	Carwash (Automated) <sup>9</sup>	PBC	Lane	166.00	0%	50/50	11.97	50/50	13.65

# Palm Beach County Trip Generation Rates

(Must be used with traffic studies submitted to the County on or after 9/1/2022. However, immediate use is highly recommended)

a) Based on Daily to AM peak ratio for LUC 532 (Private School (K-12)

b) Weekend peak hour rate = 10.36 per 1,000 s.f. with a 48/52 directional split

c) Landscape Services acreage consists of overnight vehicle and equipment storage as well as areas (covered or uncovered) for chemicals, fertilizers, landscape materials (excluding plants) and other items needed for day-to-day operations. Not included are drive aisles, customer/employee parking,

structures shared by nursery and landscape services, facilities that solely serve the onsite landscape activities or any nursery growing areas.

d) Based on Daily to PM ratio for ITE Code 937 (Coffee Donut Shop + DT)

e) FP=Fueling Position. Use both FP and Convenience Store size in estimating trips using the provided equation. Note that no internalization between the gas pumps and convenience store, as per ULDC Artice 12, should be applied to estimate the net trips.

f) Use PM rates

Footnotes

g) Daily rate taken from PBC trip gen. study. Peak hour rates derived by applying peak to daily ratios for gas station to daily carwash rate from older ITE TGM. New PBC rate study underway. h) Based on PBC analysis of ITE TGM data plots

n) Based on PBC analysis of TTE TGM data plots

Updated July 25, 2022

Modification History

formatting

modification history, edited

Manual 11th ed information

7/25/2022: Updated with ITE TG

3/2/2020: Added Landscape Services,



#### Department of Engineering and Public Works

P.O. Box 21229 West Palm Beach, FL 33416-1229 (561) 684-4000 FAX: (561) 684-4050 www.pbcgov.com

Palm Beach County Board of County Commissioners

Dave Kerner, Mayor

Robert S. Weinroth, Vice Mayor

Maria G. Marino

Gregg K. Weiss

Maria Sachs

Melissa McKinlay

Mack Bernard

#### **County Administrator**

Verdenia C. Baker

"An Equal Opportunity Affirmative Action Employer" August 12, 2021

Dr. Juan F. Ortega, PE JFO Group Inc. 6671 W Indiantown Road, Suite 50-324 Jupiter, FL 33458

### RE: Cason Court Project #: 210803 (Previously 210704) Traffic Performance Standards (TPS) Review

Dear Dr. Ortega:

The Palm Beach County Traffic Division has reviewed the above referenced project Traffic Impact Statement, revised August 10, 2021, pursuant to the Traffic Performance Standards in Article 12 of the Palm Beach County Unified Land Development Code (ULDC). The project is summarized as follows:

Municipality: Location: PCN: Access:	Delray Beach SWC of Lake Ida Road and Swinton Avenue 12-43-46-16-01-041-0010 Three right-in/right-out access driveway connections: one onto Lake Ida Road and two onto Swinton Avenue
	(As used in the study and is NOT necessarily an approval by the County through this TPS letter)
Existing Uses:	Church/Synagogue = 19,580 SF
	Day Care = 80 Students
Approved Uses:	Replace existing day care with:
	Private School = 36 Students
Proposed Uses:	Additional:
•	Single Family Homes = 10 DUs
Project Daily Trips:	318
<b>Project Peak Hour Trip</b>	s: 46 (24/22) AM; 29 (16/13) PM
New Daily Trips:	26
New Peak Hour Trips:	9 (4/5) AM; -11 (-4/-7) PM
Build-out:	December 31, 2024

Based on our review, the Traffic Division has determined the proposed development generates less than 20 peak hour trips; therefore, the project <u>meets</u> the TPS of Palm Beach County.

Please note the receipt of a TPS approval letter does not constitute the review and issuance of a Palm Beach County Right-of-Way (R/W) Construction Permit nor does it eliminate any requirements that may be deemed as site related. For work within Palm Beach County R/W, a detailed review of the project will be provided upon submittal for a R/W permit application. The project is required to comply with all Palm Beach County standards and may include R/W dedication.



Dr. Juan F. Ortega, PE August 12, 2021 Page 2

No building permits are to be issued by the City after the build-out date specified above. The County traffic concurrency approval is subject to the Project Aggregation Rules set forth in the Traffic Performance Standards Ordinance.

The approval letter shall be valid no longer than one year from date of issuance, unless an application for a Site Specific Development Order has been approved, an application for a Site Specific Development Order has been submitted, or the approval letter has been superseded by another approval letter for the same property.

If you have any questions regarding this determination, please contact me at 561-684-4030 or email <u>QBari@pbcgov.org</u>.

Sincerely,

Augi Aunar Bari

Quazi Bari, P.E., PTOE Manager – Growth Management Traffic Division

QB:HA:rb

ec: Addressee

Anthea Gianniotes, AICP, Director of Development Services, City of Delray Beach Hanane Akif, E.I., Project Coordinator II, Traffic Division Steve Bohovsky, Technical Assistant III, Traffic Division

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