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

September 15, 2022

Rebecca J. Mulcahy, P.E.
Pinder Troutman Consulting, Inc.
2005 Vista Parkway, Suite 111
West Palm Beach, FL 33411

RE: Lantana & Fearnley Properties - Revised FLUA Amendment Policy 3.5-d Review Round 2022-23-A

Dear Ms. Mulcahy:

Palm Beach County Traffic Division has reviewed the Land Use Plan Amendment Application Transportation Analysis for the proposed Future Land Use Amendment for the above-referenced project, revised September 12, 2022, pursuant to Policy 3.5-d of the Land Use Element of the Palm Beach County Comprehensive Plan. The project is summarized as follows:

Location:	Northeast quadrant of the Lantana Road & Hagen Ranch Road/Fearnley Road	
PCN:	00-42-43-27-05-032-1876 ***(others on file)***	
Acres:	18.02 acres	
	Current FLU	**Proposed FLU**
FLU:	Low Residential, 1 unit per acre (LR-1)	Low Residential, 2 units per acre (LR-2)
Zoning:	Agriculture Residential (AR)	Planned Unit Development (PUD)
Density/ Intensity:	1 unit per acre	2 units per acre
Maximum Potential:	Residential-Single Family = 18 DUs	Residential-Single Family = 36 DUs, OR Residential Multi-Family LR = 104 DUs (with Density Bonus)
Proposed Potential:	None	None
Net Daily Trips:	521 (maximum – current)	
Net PH Trips:	42 (10/32) AM, 53 (33/20) PM (maximum)	
** **Maximum** indicates typical FAR and maximum trip generator. **Proposed** indicates the specific uses and intensities/densities anticipated in the zoning application.*		

Based on the review, the Traffic Division has determined that the traffic impacts of the proposed amendment **meet** Policy 3.5-d of the Future Land Use Element of the Palm Beach County Comprehensive Plan at the **maximum potential** density shown above.

Please note the proposed amendment will have an insignificant impact on the long-range and Test 2 analyses.

Please contact me at 561-684-4030 or email me at DSimeus@pbcgov.org with any questions.

Sincerely,

Dominique Simeus, P.E.
Professional Engineer
Traffic Division

DS
ec:
Quazi Bari, P.E., PTOE – Manager – Growth Management, Traffic Division
Lisa Amara – Director, Zoning Division
Bryan Davis – Principal Planner, Planning Division
Stephanie Gregory – Principal Planner, Planning Division
Khurshid Mohyuddin – Principal Planner, Planning Division
Kathleen Chang – Senior Planner, Planning Division
David Wiloch – Senior Planner, Planning Division
Alberto Lopez Tagle - Technical Assistant III, Traffic Division

File: General - TPS – Unincorporated - Traffic Study Review
N:\TRAFFIC\Development Review\Comp Plan\23-A\Lantana & Fearnley Properties - Revised.docx

LANTANA & FEARNLEY PROPERTIES
FUTURE LAND USE AMENDMENT
TRANSPORTATION ANALYSIS

Prepared for

LANTANA LAND TRUST

PINDER TROUTMAN CONSULTING, INC.
Certificate of Authorization Number: 7989
2005 Vista Parkway, Suite 111
West Palm Beach, FL 33411
(561) 296-9698

#PTC22-027
March 28, 2022
Revised April 22, 2022
Revised May 3, 2022
Revised June 1, 2022
Revised September 12, 2022

Rebecca J. Mulcahy, State of Florida, Professional Engineer, License No. 42570

This item has been electronically signed and sealed by Rebecca J. Mulcahy, P.E. on 9/12/22 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.

LANTANA & FEARNLEY PROPERTIES
FUTURE LAND USE AMENDMENT
TRANSPORTATION ANALYSIS

INTRODUCTION

It is proposed to change the Future Land Use designation for an 18.02-acre property from Low Residential 1 (LR-1) to Low Residential 2 (LR-2). The site is located at the northeast quadrant of the Lantana Road and Hagen Ranch Road/Fearnley Road intersection., as shown on **Exhibit 1**. The purpose of this analysis is to determine if the proposed land use designation is consistent with the Transportation Element of the Comprehensive Plan. This study addresses a five-year traffic analysis and a long-range (Year 2045) traffic analysis.

SITE DATA

The PCNs for the site are 00-42-43-27-05-032-1876/1883/3050. The existing Future Land Use (FLU) designation of LR-1 is proposed to be changed to LR-2. The Comprehensive Plan assigns a maximum intensity to the FLU designation. The maximum intensity scenarios for the existing and proposed FLU are shown below:

Existing FLU Designation LR-1 (Maximum)	**Proposed FLU Designation** LR-2 (Maximum)
18 Single Family Units	36 Single Family Units OR 104 Townhouse Units (With Density Bonuses)

TRANSPORTATION ELEMENT

Level of Service (LOS) Analysis

In order to assess the transportation impacts of the proposed change in land use designation, the methodology established by Policy 3.5-d of the Land Use Element of the Palm Beach County Comprehensive Plan was followed.

Trip Generation

Palm Beach County and the Institute of Transportation Engineers (ITE), Trip Generation, *11th Edition*, were the sources of trip generation data utilized in this study. Daily and peak hour trips generated by the existing FLU designation at the maximum/existing intensity are shown on **Exhibit 2A**. The daily and peak hour trips generated by the proposed FLU designation at the maximum intensity are shown on **Exhibit 2B**. The highest use (highest trips) is shown for each time-of-day category. The comparison of existing and proposed FLU designations, based on the highest trips are shown on **Exhibit 2C**. The net daily trip generation is used for the Long Range (Year 2045) analysis. Based on the net daily trip generation of 521, the directly accessed link is required to be analyzed for the Long-Range analysis. The peak hour trips are used for the Five-Year Analysis. Based on the new PM peak hour trip generation of 53 trips, the radius of development influence is one mile for the Five-Year analysis.

Trip Distribution and Assignment

In order to determine the impact of the development's traffic on the surrounding roadway network, a directional distribution of project trips was developed, based on the area's land uses and roadway network. **Exhibit 3** provides the distribution for the site's net new trips.

Roadway Improvements

A review was undertaken of the FDOT Transportation Improvement Program and the Palm Beach County Five Year Road Program to determine if any roadways within the study area are scheduled to be improved. No roadway improvements are scheduled for construction in the study area.

Five Year Analysis

The Five-Year Analysis examines traffic conditions at the end of the fifth year of the FDOT Five Year Transportation Improvement Program. This analysis is required for any roadway link within the radius of development influence where the project impact is greater than 3% of LOS E and outside the radius where the project impact is greater than 5% of LOS E. The highest AM and PM peak hour trips were assigned to the roadway network based on **Exhibit 3**. As shown on **Exhibits 4A and 4B**, no roadway links are significantly impacted by the proposed FLU designation. Therefore, the proposed FLU meets the Five-Year requirements.

Long Range (Year 2045) Analysis

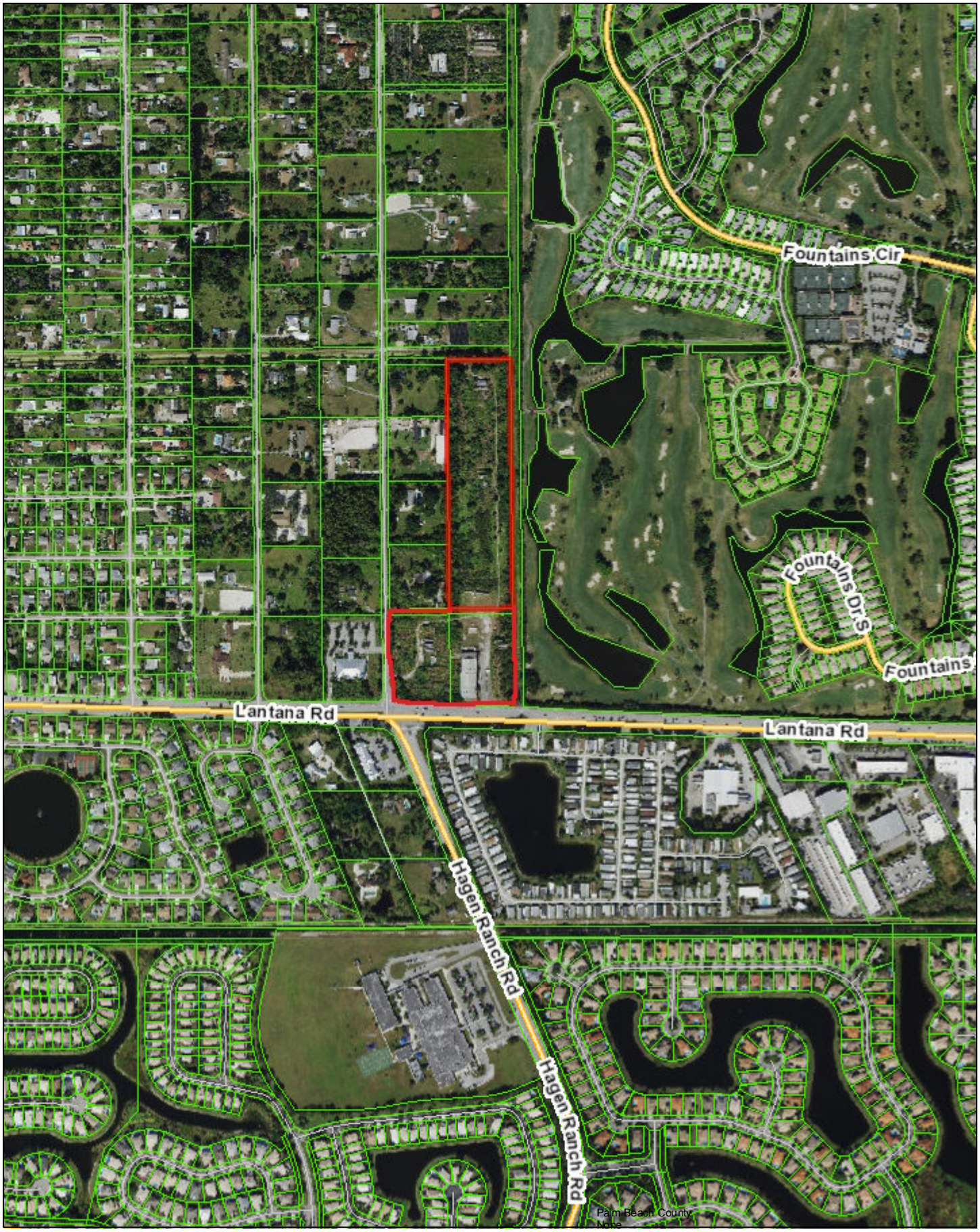
Exhibit 5 provides the net daily trip assignment of the proposed FLU at maximum intensity for the required links. It also provides volume to capacity (v/c) ratios and project impact percentages. A roadway is considered significantly impacted for the long-range analysis if project impacts are greater than 1% to 3% of LOS D, depending on the v/c ratio. Year 2045 net project traffic is total external traffic generated by the proposed FLU designation at maximum intensity, less traffic generated by the existing FLU designation at maximum intensity. For the Year 2045 analysis, roadway lanes and traffic volumes were obtained from the Palm Beach Transportation Planning Agency (TPA). This information is provided in the **Appendix.** Recent and concurrent Land Use Atlas amendment traffic studies were reviewed. Excerpts from the Encompass Health traffic report are provided in the **Appendix.** Traffic volumes from this report is included in the long-range analysis. There are no significantly impacted roadway links. Therefore, this project meets the Long Range (Year 2045) Analysis requirements for the proposed land use designation at the maximum intensity.

CONCLUSIONS

This analysis shows that the proposed future land use designation of LR-2 (with Density Bonuses) for the 18.02-acre site meets the transportation standards and is consistent with the Comprehensive Plan.

EXHIBITS

Exhibit 1 Project Location



March 22, 2022

1:9,028

0 0.075 0.15 0.3 mi

0 0.1 0.2 0.4 km

Lantana & Fearnley Properties

Exhibit 2A
Lantana & Fearnley Properties
Trip Generation - Existing FLU Designation (LR-1)

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate [1]	% In	Total Trips	Pass-by Trips [1]		Total Trips
Resid. Single Family	210	18 DUs	10 / DU	50%	180	-	0%	180
TOTAL					180	-		180

AM PEAK HOUR

Land Use	ITE Code	Intensity	Trip Generation Rate [1]	% In	Total Trips			Pass-by Trips [1]		New Trips		
					In	Out	Trips			In	Out	Trips
Resid. Single Family	210	18 DUs	0.70 / DU	26%	3	10	13	-	0%	3	10	13
TOTAL					3	10	13	-		3	10	13

PM PEAK HOUR

Land Use	ITE Code	Intensity	Trip Generation Rate [1]	% In	Total Trips			Pass-by Trips [1]		New Trips		
					In	Out	Trips			In	Out	Trips
Resid. Single Family	210	18 DUs	0.94 / DU	63%	11	6	17	-	0%	11	6	17
TOTAL					11	6	17	-		11	6	17

[1] Source: Palm Beach County Traffic Division and ITE Trip Generation, *11th Edition*.

Exhibit 2B
Lantana & Fearnley Properties
Trip Generation - Proposed FLU Designation (LR-2)*

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate [1]	% In	Total Trips	Pass-by Trips [1]		Total Trips
Resid. Single Family	210	36 DUs	10 / DU	50%	360	-	0%	360
Resid. Multi Family LR	220	104 DUs	6.74 / DU	50%	701	-	0%	701
HIGHEST USE					701	-		701

AM PEAK HOUR

Land Use	ITE Code	Intensity	Trip Generation Rate [1]	% In	Total Trips			Pass-by Trips [1]		New Trips		
					In	Out	Trips			In	Out	Trips
Resid. Single Family	210	36 DUs	0.70 / DU	26%	7	18	25	-	0%	7	18	25
Resid. Multi Family LR	220	104 DUs	0.40 / DU	24%	10	32	42	-	0%	10	32	42
HIGHEST USE					10	32	42	-		10	32	42

PM PEAK HOUR

Land Use	ITE Code	Intensity	Trip Generation Rate [1]	% In	Total Trips			Pass-by Trips [1]		New Trips		
					In	Out	Trips			In	Out	Trips
Resid. Single Family	210	36 DUs	0.94 / DU	63%	21	13	34	-	0%	21	13	34
Resid. Multi Family LR	220	104 DUs	0.51 / DU	63%	33	20	53	-	0%	33	20	53
HIGHEST USE					33	20	53	-		33	20	53

* 2 DU / Acre or 104 Townhomes with Density Bonus.

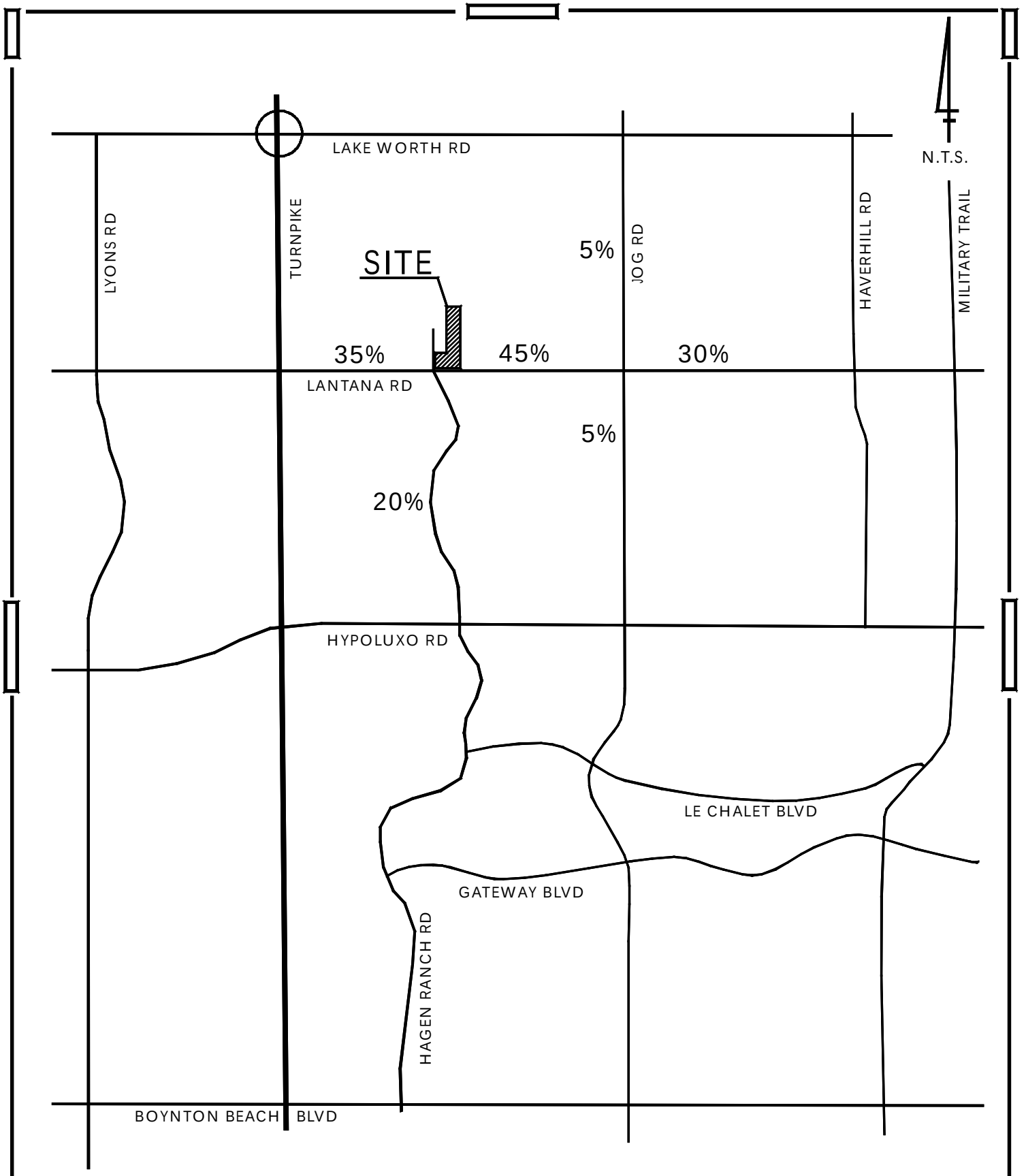
[1] Source: Palm Beach County Traffic Division and ITE Trip Generation, *11th Edition*.

Exhibit 2C
Lantana & Fearnley Properties
Trip Generation Comparison

	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Existing FLU (LR-1) [1]	180	3	10	13	11	6	17
Proposed FLU (LR-2) [2]	701	10	32	42	33	20	53
Net New Trips:	521	7	22	29	22	14	36

[1] See Exhibit 2A.

[2] See Exhibit 2B for highest use.



3/23/22
22-027

LANTANA & FEARNLEY PROPERTIES	EXHIBIT 3 PROJECT TRAFFIC DISTRIBUTION	PTC

Exhibit 4A
Lantana & Fearnley Properties
Project Traffic Assignment - Test 2

AM Peak Hour

Roadway	Link	Lanes	Class	Dir	10 In / 32 Out % Dist.	Pk Hour Direct. Trips	Total Project Impact	LOS E Service Vol. (1)	Signif-icant Impact?
Hagen Ranch Rd	Lantana Rd to Hypoluxo Rd	2L	I	NB	20%	2	0.23%	860	No
				SB	20%	6	0.70%	860	No
Jog Rd	Lake Worth Rd to Lantana Rd	6LD	II	NB	5%	2	0.07%	2830	No
				SB	5%	1	0.04%	2830	No
	Lantana Rd to Hypoluxo Rd	6LD	II	NB	5%	1	0.04%	2830	No
				SB	5%	2	0.07%	2830	No
Lantana Rd	Lyons Rd to Hagen Ranch Rd	4LD	I	EB	35%	4	0.20%	1960	No
				WB	35%	11	0.56%	1960	No
	Hagen Ranch Rd to Jog Rd	6LD	I	EB	45%	14	0.48%	2940	No
				WB	45%	5	0.17%	2940	No
	Jog Rd to Haverhill Rd	6LD	II	EB	30%	10	0.35%	2830	No
				WB	30%	3	0.11%	2830	No

(1) Source: 2009 FDOT Quality / LOS Handbook.

Exhibit 4B
Lantana & Fearnley Properties
Project Traffic Assignment - Test 2

PM Peak Hour

Roadway	Link	Lanes	Class	Dir	33 In / 20 Out % Dist.	Pk Hour Direct. Trips	Total Project Impact	LOS E Service Vol. (1)	Signif-icant Impact?
Hagen Ranch Rd	Lantana Rd to Hypoluxo Rd	2L	I	NB	20%	7	0.81%	860	No
				SB	20%	4	0.47%	860	No
Jog Rd	Lake Worth Rd to Lantana Rd	6LD	II	NB	5%	1	0.04%	2830	No
				SB	5%	2	0.07%	2830	No
	Lantana Rd to Hypoluxo Rd	6LD	II	NB	5%	2	0.07%	2830	No
				SB	5%	1	0.04%	2830	No
Lantana Rd	Lyons Rd to Hagen Ranch Rd	4LD	I	EB	35%	12	0.61%	1960	No
				WB	35%	7	0.36%	1960	No
	Hagen Ranch Rd to Jog Rd	6LD	I	EB	45%	9	0.31%	2940	No
				WB	45%	15	0.51%	2940	No
	Jog Rd to Haverhill Rd	6LD	II	EB	30%	6	0.21%	2830	No
				WB	30%	10	0.35%	2830	No

(1) Source: 2009 FDOT Quality / LOS Handbook.

Exhibit 5
Lantana & Fearnley Properties
Project Traffic Assignment - 2045 Analysis

Proposed FLU (Maximum Intensity) - Current FLU (Maximum Intensity)

Roadway	Link	2045 Conditions			Encompass Health	Net Project Traffic		2045 Total Traffic	V/C w/ Proj.	Total Project Impact	Signif-icant Impact?
		Lanes	Volume [1]	LOS D Capacity [2]		521 % Dist	Project Trips				
Lantana Road	Lyons Road to Hagen Ranch Road	4LD	42,100	33,200	621	35%	182	42,903	1.29	0.55%	No
	Hagen Ranch Road to Jog Road	6LD	45,700	50,300	-	45%	234	45,934	0.91	0.47%	No
Hagen Ranch Road	Hypoluxo Road to Lantana Road	3L	11,200	15,200	-	20%	104	11,304	0.74	0.68%	No

[1] Source: Palm Beach TPA for Year 2045 base volumes. See Appendix.
[2] Source: Table TE 1a, Palm Beach County Comprehensive Plan.

APPENDIX

SERPM 8 2045 Cost Feasible Adjusted Two-Way Traffic Volumes - Palm Beach County

PBC Station	FDOT Station	Roadway	From	To	Existing Lanes	Cost Feasible Lanes	2005 Counts	2010 Count	2015 Count	2018 Count	2015 Model	2045 Model	2045 Adjusted
6831	937169	GLADES RD	FAU Entrance/10th Ave NW	Boca Raton Blvd	6	6T	40,979	40,520	43,129	-	29,355	37,760	51,500
6833	930045	GLADES RD	Boca Raton Blvd	Old Dixie Hwy	6	6T	31,340	30,826	31,207	25,500	18,494	25,330	38,000
6837	930045	GLADES RD	Old Dixie Hwy	US-1 (Federal Hwy)	6	6T	21,142	18,587	25,998	19,633	18,494	25,330	32,800
	937528	GREENBRIAR BLVD	Greenview Shores Blv	Wellington Trace	4	4			-	-	132	487	500
3432	937319	GREENVIEW SHORES	Wellington Trc	South Shore Blvd	4	4	21,269	16,060	18,685	18,100	12,017	18,751	25,400
	937487	GULFSTREAM BLVD	Seacrest Blvd	US-1	2	2			-	-	604	968	1,000
3649	937092	GUN CLUB RD	Jog Rd	Haverhill Rd	2	3	6,740	4,227	3,918	4,917	2,033	3,038	4,900
3651	937093	GUN CLUB RD	Haverhill Rd	Military Tr	5	5	16,087	11,857	9,719	10,896	4,015	6,806	12,500
3653	937094	GUN CLUB RD	Military Tr	Kirk Rd	5	5	17,196	10,704	11,130	12,272	4,940	9,728	15,900
3655	937095	GUN CLUB RD	Kirk Rd	Congress Ave	5	5	16,544	11,374	11,215	12,119	11,136	17,741	17,900
5604	937076	HAGEN RANCH RD	W Atlantic Ave	Lake Ida Rd	4	4	16,979	18,059	16,220	17,392	13,900	20,748	24,200
5646	937077	HAGEN RANCH RD	Lake Ida Rd	Pipers Glen Blvd	4	4	15,607	13,249	12,896	14,914	12,072	18,610	19,900
5600	937075	HAGEN RANCH RD	Pipers Glen Blvd	Boynton Beach Blvd	4	4	17,772	18,471	17,559	19,853	21,295	27,498	23,800
5214	937138	HAGEN RANCH RD	Boynton Beach Blvd	Gateway Blvd	3	3	11,636	9,078	9,600	12,300	14,595	15,740	10,700
4666	937136	HAGEN RANCH RD	Gateway Blvd	Hypoluxo Rd	3	3	10,877	10,728	10,990	12,494	15,903	17,740	12,800
4668	937137	HAGEN RANCH RD	Hypoluxo Rd	Lantana Rd	3	3	13,573	9,993	9,576	9,869	14,250	15,867	11,200
	937579	HALL BLVD	Orange Blvd	Northlake Blvd	2	2			-	-	3,364	4,381	4,400
	937470	HATTON HWY	Gator Blvd	SR-700	2	2			-	-	310	360	400
4674	PBC041	HAVERHILL RD	Le Chalet Blvd	Hypoluxo Rd	2	3		10,669	11,353	11,763	1,227	47,915	58,000
4674	937149	HAVERHILL RD	Hypoluxo Rd	Lantana Rd	2	2	10,625	10,669	11,353	11,763	1,530	2,199	12,000
4672	937148	HAVERHILL RD	Lantana Rd	Melaleuca Ln	4	4	13,960	13,530	13,527	13,400	7,057	10,958	17,400
4646	937147	HAVERHILL RD	Melaleuca Ln	Lake Worth Rd	5	5	15,646	12,027	12,276	21,000	30,700	30,818	12,400
4638	937147	HAVERHILL RD	Lake Worth Rd	10th Ave N	5	5	18,150	18,363	18,786	21,000	30,700	30,818	18,900
4656	937147	HAVERHILL RD	10th Ave N	Cresthaven Blvd	5	5	22,083	19,560	22,017	23,879	30,700	30,818	22,100
4642	937146	HAVERHILL RD	Cresthaven Blvd	Purdy Ln	5	5	21,452	20,299	22,184	24,361	28,942	29,779	23,000
4224	937145	HAVERHILL RD	Purdy Ln	Forest Hill Blvd	5	5	23,092	21,919	22,762	25,534	29,018	29,313	23,100
3640	937038	HAVERHILL RD	Forest Hill Blvd	Summit Blvd	5	5	28,896	24,605	26,230	29,531	31,002	32,755	27,700
3634	937037	HAVERHILL RD	Summit Blvd	Southern Blvd	5	5	22,876	21,199	23,214	23,881	28,660	32,754	27,300
3608	937036	HAVERHILL RD	Southern Blvd	Belvedere Rd	5	5	22,051	20,031	22,190	22,809	16,965	23,923	29,100
3604	937035	HAVERHILL RD	Belvedere Rd	Okeechobee Blvd	5	5	24,162	20,120	21,666	22,502	17,017	24,783	29,400
3600	937008	HAVERHILL RD	Okeechobee Blvd	Community Dr	5	6	33,155	26,156	25,998	26,588	26,279	39,605	39,200
3672	937010	HAVERHILL RD	Community Dr	Roebuck Rd	5	5	30,533	22,464	22,121	23,238	19,921	28,880	32,100
3622	937009	HAVERHILL RD	Roebuck Rd	45th St	5	5	35,118	26,525	27,771	36,048	15,301	27,248	39,700
3202	937007	HAVERHILL RD	45th St	Beeline Hwy	5	5	20,202	14,297	14,643	16,087	8,331	12,876	19,200
	937723	HEIGHTS BLVD	Donald Ross Road	Central Blvd	2	2			-	-	2,144	2,478	2,500
6861	938529	HIDDEN VALLEY BLVD	Boca Raton Blvd	Old Dixie Hwy	4	4	8,517	6,526	7,588	7,914	1,934	4,524	10,200
	933501	HIGH RIDGE RD	Gateway Blvd	Miner Rd	2	5			-	-	11,351	20,407	20,400
4648	937304	HIGH RIDGE RD	Miner Rd	Hypoluxo Rd	2	2	7,646	5,322	6,527	7,139	5,322	6,924	8,500
	937483	HIGH RIDGE RD	Hypoluxo Road	Lk. Osborne Drive	2	2			-	-	8,089	9,746	9,700
2307	937055	HOLLY DR	Military Tr	SR 811	2	2	7,971	-	6,539	7,200	3,763	4,451	7,200

SERPM 8 2045 Cost Feasible Adjusted Two-Way Traffic Volumes - Palm Beach County

PBC Station	FDOT Station	Roadway	From	To	Existing Lanes	Cost Feasible Lanes	2005 Counts	2010 Count	2015 Count	2018 Count	2015 Model	2045 Model	2045 Adjusted
	935071	LAKE AVE	Dixie Hwy	S. M St	2	2			-	-	7,932	8,479	8,500
5649	937072	LAKE IDA RD	Hagen Ranch Rd	Jog Rd	2	2	12,238	7,591	7,536	8,812	3,015	3,482	8,000
5653	937074	LAKE IDA RD	Jog Rd	El Clair Ranch Rd	2	2	12,383	10,168	10,969	11,274	3,474	4,792	12,300
5651	937073	LAKE IDA RD	El Clair Ranch Rd	Military Tr	2	2	13,228	11,590	11,682	12,608	5,795	6,444	12,300
5623	937017	LAKE IDA RD	Military Tr	Barwick Rd	4	4	20,410	15,701	19,827	20,420	10,394	13,568	23,000
5605	937016	LAKE IDA RD	Barwick Rd	Congress Ave	4	4	29,688	27,179	28,271	30,891	13,799	17,154	31,600
5307	937061	LAKE IDA RD	Congress Ave	Swinton Ave	4	4	19,839	21,306	21,542	24,685	13,516	22,317	30,300
	937424	LAKE OSBORNE DR	12th Av S	Lake Worth Rd	2	2			-	-	91	492	500
3445	937163	LAKE WORTH RD	South Shore Blvd	120th Av	2	2	15,873	23,445	12,221	13,300	9,509	13,097	15,800
4409	937120	LAKE WORTH RD	120th Av	Isles Bl	4	4	20,557	15,106	14,871	17,500	10,481	16,195	20,600
4407	937119	LAKE WORTH RD	Isles Bl	SR-7	4	4	31,272	24,753	26,672	28,030	23,647	30,859	34,800
4401	930053	LAKE WORTH RD	SR-7	Lyons Rd	6	6T	36,432	33,787	38,065	39,252	29,845	37,416	45,600
4101	930054	LAKE WORTH RD	Lyons Rd	Florida Turnpike	6	6T			-	-	37,500	47,734	47,700
4201	930055	LAKE WORTH RD	Florida Turnpike	Pinehurst Dr	6	6T	42,905	34,043	39,166	42,106	37,301	45,035	47,300
4645	937233	LAKE WORTH RD	Pinehurst Dr	Jog Rd	6	6T	53,067	44,593	46,028	51,629	45,864	52,388	52,600
4609	937232	LAKE WORTH RD	Jog Rd	Sherwood Forest Blvd	6	6T	45,006	44,260	45,661	48,041	24,773	33,520	54,400
4673	937232	LAKE WORTH RD	Sherwood Forest Blvd	Haverhill Rd	6	6T	51,532	41,648	41,210	44,850	24,773	33,520	50,000
4627	930404	LAKE WORTH RD	Haverhill Rd	Military Tr	6	6T	50,676	43,493	44,371	44,984	22,275	29,002	51,100
4611	930024	LAKE WORTH RD	Military Tr	Kirk Rd	6	6T	47,121	43,790	42,951	44,802	26,081	34,974	51,800
4647	937234	LAKE WORTH RD	Kirk Rd	Congress Ave	6	6T	43,331	37,971	38,415	40,684	21,652	26,913	43,700
4651	930025	LAKE WORTH RD	Congress Ave	Boutwell Rd	4	4T	29,118	28,562	23,415	26,619	12,045	17,150	28,500
4305	930751	LAKE WORTH RD	Boutwell Rd	Lake/Lucerne Split	4	4T	24,924	-	25,497	25,500	14,494	19,765	30,800
4817	935069	LAKE WORTH RD	Dixie Hwy (SR-805)	'A' St	3	3	9,126	-	8,385	8,900	3,936	5,959	10,400
4813	935068	LAKE WORTH RD	Dixie Hwy (SR-805)	'A' St	2	2	10,601	-	8,078	8,200	4,936	6,196	9,300
4815	935076	LAKE WORTH RD	Federal Hwy (US-1)	Dixie Hwy (SR-805)	2	2	10,042	8,559	8,410	-	3,428	3,878	8,900
4811	935070	LAKE WORTH RD	Federal Hwy	Dixie Hwy (SR-805)	2	2	10,669	8,322	9,526	9,600	7,859	8,516	10,300
4801	930118	LAKE WORTH RD	A1A	Lucerne Ave	4	4	15,674	12,934	16,111	12,100	8,069	8,737	16,800
4403	937291	LANTANA RD	SR-7	Lyons Rd	4	4	19,621	14,775	15,574	17,057	18,458	16,412	13,800
4207	937290	LANTANA RD	Lyons Rd	Hagen Ranch Rd	4	4	38,436	24,298	25,977	28,535	27,248	44,140	42,100
4669	937293	LANTANA RD	Hagen Ranch Rd	Jog Rd	6	6	38,587	32,050	32,219	36,116	35,241	50,031	45,700
4619	937292	LANTANA RD	Jog Rd	Haverhill Rd	6	6	40,005	35,130	35,845	42,984	29,837	41,862	50,300
4605	930693	LANTANA RD	Military Tr	Lawrence Rd	6	6	42,958	33,827	41,854	49,357	35,147	46,266	55,100
4665	937289	LANTANA RD	Lawrence Rd	Congress Ave	6	6	47,796	47,863	47,054	50,923	56,534	66,732	57,300
4623	937288	LANTANA RD	Congress Ave	High Ridge Rd	6	6	42,455	43,695	41,390	46,300	32,001	40,113	49,500
4209	930076	LANTANA RD	High Ridge Rd	I-95	5	6	42,461	45,356	43,805	45,500	35,422	43,085	53,300
4311	930077	LANTANA RD	I-95	Redding Dr	5	6	41,769	38,457	37,424	36,000	28,787	39,254	47,900
4807	935214	LANTANA RD	Redding Dr	Federal Hwy	5	5	21,493	-	19,392	18,253	12,402	12,848	19,800
	937618	LARRIMORE RD	SR-15	SR-729	2	2			-	-	586	827	800
5638	937303	LAWRENCE RD	Woolbright Rd	Boynton Beach Blvd	3	3	7,854	7,167	7,651	8,714	7,479	10,007	10,200
5204	937302	LAWRENCE RD	Boynton Beach Blvd	Gateway Blvd	5	5	16,110	13,804	14,777	17,539	9,617	13,795	19,000

Kimley»Horn

September 30, 2021

Elizabeth Mann, Director of Design & Construction
Encompass Health
9001 Liberty Parkway
Birmingham, Alabama 35242

RE: ***Encompass Health Lake Worth – Land Use Plan Amendment Traffic Evaluation***
9719 & 9645 Lantana Road
Palm Beach County, Florida
KH #140900000

Dear Elizabeth:

Kimley-Horn and Associates, Inc. has prepared a Land Use Plan Amendment study to determine the potential impact of the proposed future land use change for the 9719 & 9645 Lantana Road (Encompass Health) site located on the north side of Lantana Road, at the intersection of Lantana Road & Bellagio Lakes Blvd. in Lake Worth, Florida. The existing land use designation for the site is Low Residential, 2 unit per acre (LR-2). It is proposed to change the future land use designation to Institutional & Public Facilities (INST). The Encompass Health parcel is 8.21 acres in size. Figure 1 illustrates the site location.

The following evaluation considers the maximum trip generation potential for the site resulting from the proposed future land use designation change. Following is a summary of the analyses undertaken.

MAXIMUM DEVELOPMENT POTENTIAL

To determine the net change in the trip generation potential due to the proposed future land use change, the maximum development intensities for the existing and proposed designations were determined using information provided in Palm Beach County's Comprehensive Plan. The maximum development intensities under the existing and proposed land use designations are summarized in Table 1. The methodology for the determination of maximum intensities is summarized in the following sections.

Table 1: Future Land Use Intensities
Theoretical Maximum Development (for Traffic Analysis)

Scenario	Designation	Acreage	Max Development Intensity	Total Maximum Intensity
Existing Land Use	Low Residential-2 (LR-2)	8.21	2 DU/acre	16 DU
Proposed Land Use	Insititutional & Public Facilities (INST)	8.21	.45 FAR	160,932 sf

Existing Land Use Designation: Low Residential, 2 unit per acre (LR-2)

Under the existing land use designation, low density single family residential use is permitted. Using information provided by the Palm Beach County Comprehensive Plan, up to two dwelling units per acre are permitted. Based on the total acreage of the site, a maximum of 16 dwelling units are permitted under the existing land use designation.

SIGNIFICANCE ANALYSIS (LONG RANGE: YEAR 2045)

For the long-range analysis, the net new daily trips associated with the proposed future land use change were distributed to the links on the surrounding road network within the project RDI based on the distribution illustrated in Figure 2. For the LUPA analysis, any links which project traffic impacts more than the significance thresholds outlined in the Future Land Use Element, Table 3.5-1 are considered significantly impacted. Table 6 summarizes the preliminary results for the AM and PM peak hours, respectively. It should be noted that the proposed development scenario traffic was used in this part of the analysis.

Table 6: Long Range Significance Summary

			COMMITTED	LOS D	PROJECT TRIPS						
ROADWAY	FROM	TO	NUMBER LANES	GEN. SVC. DAILY VOL.	PROJECT % ASSIGNMENT	PROJECT TRAFFIC	2045 ADJ. VOLUMES	V/C	SIG THRESHOLD	% IMPACT	Sig?
SR7	Lake Worth Road	Lantana Road	6LD	50,300	25%	388	57,200	1.14	3%	0.77%	No
SR7	Lantana Road	Hypoluxo Road	6LD	50,300	15%	233	54,000	1.08	3%	0.46%	No
Lantana Road	SR7	Project Driveway	4LD	33,200	40%	621	13,800	0.43	3%	1.87%	No
Lantana Road	Project Driveway	Lyons Road	4LD	33,200	60%	931	13,800	0.44	3%	2.80%	No
Lantana Road	Lyons Road	Hagen Ranch Road	4LD	33,200	40%	621	42,100	1.29	2%	1.87%	No
Hypoluxo Road	SR7	Lyons Road	4LD	33,200	5%	78	17,300	0.52	3%	0.23%	No
Hypoluxo Road	Lyons Road	Hagen Ranch Road	4LD	33,200	3%	47	24,200	0.73	3%	0.14%	No
Lyons Road	Lake Worth Road	Lantana Road	2LD	15,200	8%	124	36,200	2.39	1%	0.82%	No
Lyons Road	Lantana Road	Hypoluxo Road	4LD	33,200	12%	186	36,700	1.11	3%	0.56%	No

As seen in the table above, none of the links are expected to be significantly impacted by the addition of project traffic.

CAPACITY ANALYSIS (LONG RANGE: YEAR 2045)

Since none of the links within the project RDI are significantly impacted, it is not necessary to conduct a capacity analysis. Therefore, no further link analysis is necessary as part of the long-range future land use plan amendment analysis.