

TRAFFIC IMPACT ANALYSIS

DELRAY TOWNHOMES DELRAY, FL

PREPARED FOR:

Ocean Ridge Rentals, LLC

Kimley»Horn

October 3, 2023
Kimley-Horn Project #140726000
CA 00000696
477 S Rosemary Avenue, Suite 215
West Palm Beach, Florida 33401
561/845-0665 TEL

TRAFFIC IMPACT ANALYSIS

DELRAY TOWNHOMES

DELRAY, FL

Prepared by:

Kimley-Horn and Associates, Inc.

West Palm Beach, Florida



October 03, 2023

Kimley-Horn Project #140726000

CA 00000696

Kimley-Horn and Associates, Inc.

477 S Rosemary Avenue, Suite 215

West Palm Beach, Florida 33401

561/845-0665 TEL

Adam Kerr, P.E.

Florida Registration Number 64773

TABLE OF CONTENTS

INTRODUCTION 1

PROJECT TRAFFIC 3

 Existing and Proposed Land Uses 3

 Trip Generation 3

 Traffic Distribution..... 4

 Traffic Assignment..... 4

 Time of Day-Distribution 4

TEST 1 SIGNIFICANCE ANALYSIS 6

DRIVEWAY ANALYSIS 8

 Palm Beach County Thresholds..... 8

CONCLUSION10

APPENDIX A: PROJECT INFORMATION11

LIST OF TABLES

Table 1: Trip Generation 3

Table 2: Time-of-day Vehicular Trips 4

Table 3: Test 1 Part 1 AM Significance Analysis 7

Table 4: Test 1 Part 1 PM Significance Analysis 7

LIST OF FIGURES

Figure 1: Site Location 2

Figure 2: Trip Distribution 5

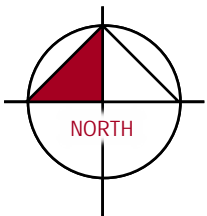
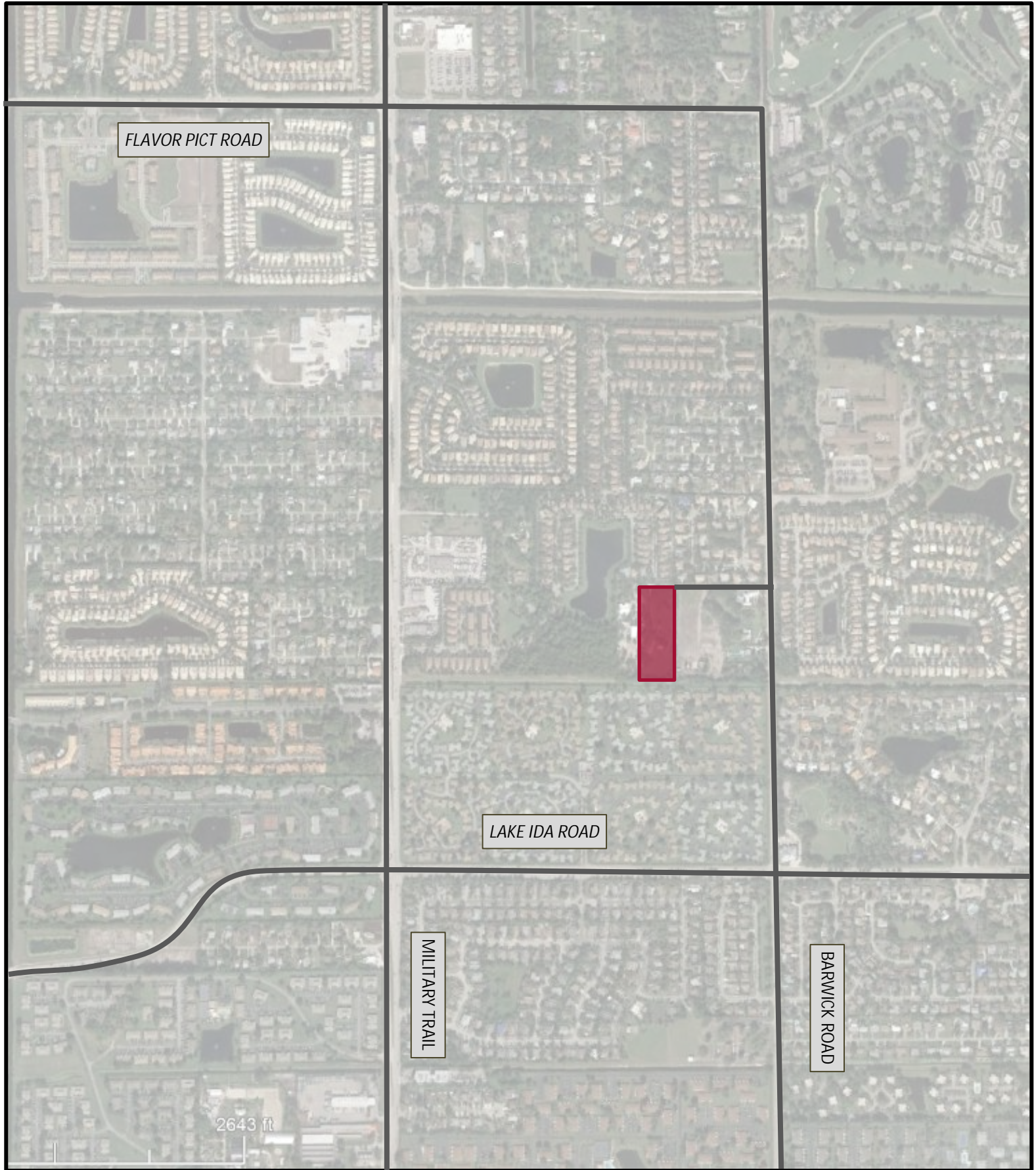
Figure 3: Driveway Volumes 9

INTRODUCTION

The Delray Townhomes project site is located just west of Barwick Road, on the south side of 133rd Road South, in Delray Beach, Florida. *Figure 1* illustrates the location of the project site. The existing site consists of a one single family residential dwelling unit. The proposed plan of development includes demolition of the existing structures, and the construction of 25 multifamily dwelling units. The Parcel Control Number (PCN) for the project site is 12-42-46-12-00-000-3200.

Kimley-Horn and Associates, Inc. was retained to prepare a traffic impact analysis to evaluate the impacts resulting from buildout of above-mentioned site by 2028. This document presents the methodology used and the findings of the traffic impact analysis. The analysis was conducted in accordance with the requirements set forth by Palm Beach County, Florida.

The site plan, Parcel Control Number, and study methodology information can be found in *Appendix A*.



LEGEND

-  SITE LOCATION
-  TRAFFICWAYS EVALUATED

FIGURE 1
DELRAY TOWNHOMES
140726000
SITE LOCATION

PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the project, and the distribution and assignment of that traffic over the study roadway network.

Existing and Proposed Land Uses

The existing site currently contains one single family detached residence. The proposed site will include 25 multifamily dwelling units.

Trip Generation

The trip generation potential of the development was calculated based upon the trip generation rates and equations provided Palm Beach County Trip Generation Rates. These rates are based on the rates for similar land uses within the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The trip generation potential for the existing and future land uses were calculated using rates and equations published for Single-Family Detached Housing (Land Use 210) and Multifamily Housing Low-Rise (Land Use 220). Internal capture was not used because it does not correlate with the respective land uses.

Since the existing site is currently operating, credit was taken for trips currently being generated by the site. As indicated in Table 1, the net new trip generation potential of the proposed site is 159 net external daily trips, 9 net new external AM peak hour trips (+2 inbound, +7 outbound) and 12 net new external PM peak hour trips (+7 inbound, +5 out). Based on the net new trip generation of the proposed site, the radius of the development influence for the site is the directly accessed links.

Table 1: Trip Generation

Land Use		Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Existing Scenario									
Single Family Detached	1	DU	10	1	0	1	1	1	0
Net New External Trips			10	1	0	1	1	1	0
Proposed Development									
Multifamily Low-Rise	25	DU	169	10	2	8	13	8	5
Net New External Trips			169	10	2	8	13	8	5
Proposed Net External Trips-Existing Net External Trips			159	9	2	7	12	7	5
Radius of Development Influence:			Directly Accessed Links						
<u>Land Use</u>	<u>Daily</u>	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>	<u>Pass By</u>					
Single Family Detached	10 trips/DU	0.7 trips/DU (26% in, 74% out)		0.94 trips/DU (63% in, 37% out)				0.0%	
Multifamily Low-Rise	6.74 trips/DU	0.4 trips/DU (24% in, 76% out)		0.51 trips/DU (63% in, 37% out)				0.0%	

Traffic Distribution

Traffic distribution is the pairing of trip ends from the subject site with other land uses in the area. These trips were assigned to the surrounding roadways based upon a review of the roadway network proposed to be in place at the time of buildout and its travel time characteristics. The distribution according to cardinal directions from the site to the surrounding links is:

NORTH	-	30 percent
SOUTH	-	70 percent

Traffic Assignment

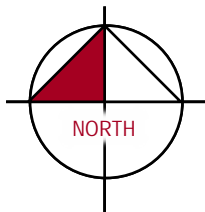
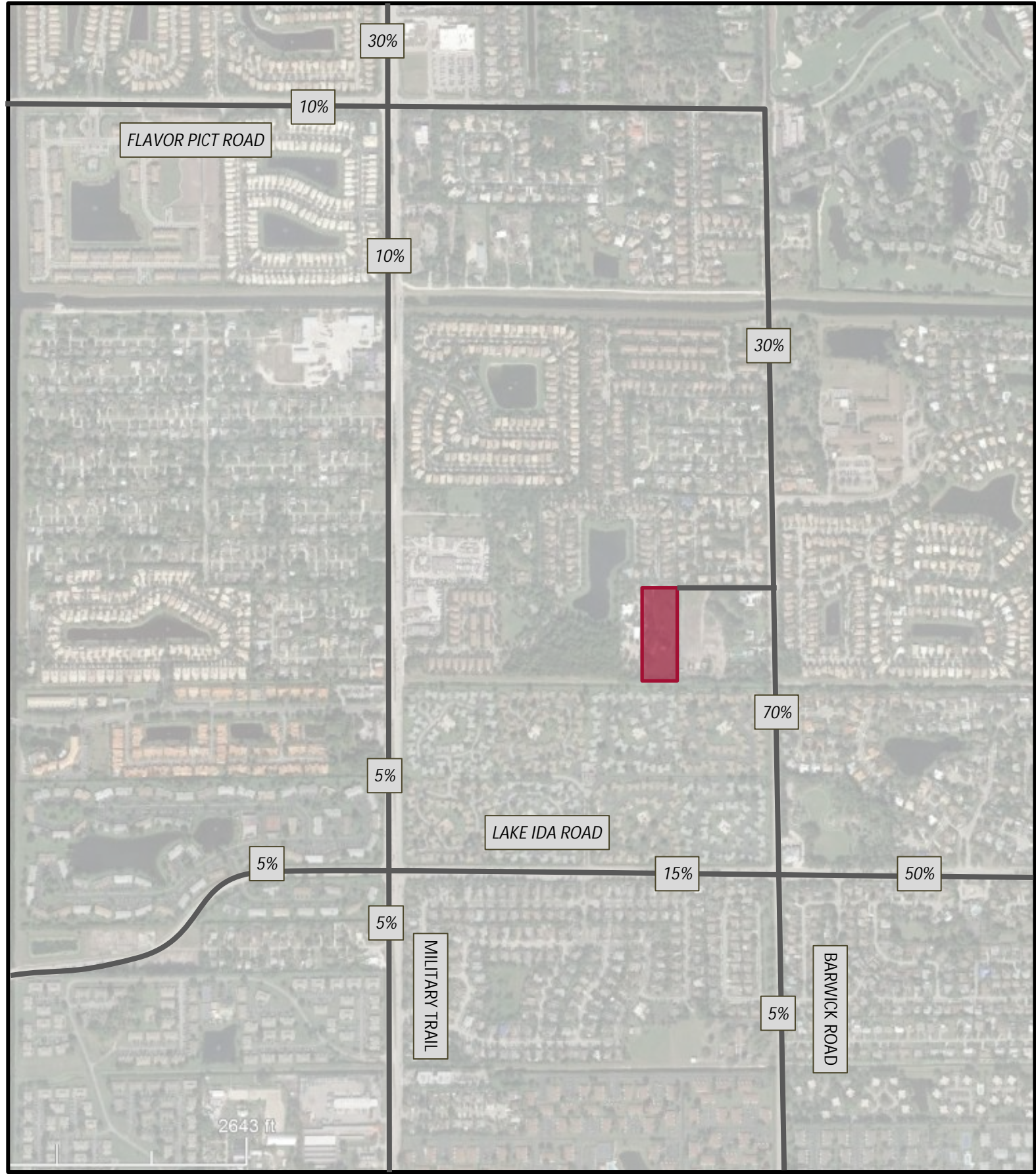
The site traffic was assigned to the surrounding roadway network based upon existing travel patterns. Figure 2 shows the project distribution of the surrounding roadways; this distribution is based on the Palm Beach County TPS database distribution for the project.

Time of Day-Distribution

As the site is near a school, an analysis of the potential traffic caused by the proposed development during the school's dismissal time was done. Table 2 shows the anticipated trips during the school's dismissal period.

Table 2: Time-of-day Vehicular Trips

Land Use	Time of Day Distribution (1pm-3pm)			
	Time of Day	Distribution	Daily Trips	Vehicle Trips
Multifamily Low-Rise	1:00pm-2:00pm	4.20%	169	7
	2:00pm-3:00pm	5.20%		9



LEGEND



-  SITE LOCATION
-  TRAFFICWAYS EVALUATED

FIGURE 2
DELRAY TOWNHOMES
140726000
TRIP DISTRIBUTION

TEST 1 SIGNIFICANCE ANALYSIS

A peak-hour peak-directional (PHPD) analysis was undertaken on all of the links included in the Palm Beach County Thoroughfare Map within the directly accessed to determine significantly impacted links. Net new external project traffic was assigned to all the thoroughfare roadway links within the radius of development influence. Per Palm Beach County standards, any links on which the project traffic impact is greater than 1% of the level of service (LOS) D generalized service volume are significantly impacted.

As shown in Table 3 and Table 4 the project traffic does not significantly impact the surrounding links. Therefore, no further analysis is required.

Table 3: Test 1 Part 1 AM Significance Analysis

ROADWAY	FROM	TO	COMMITTED NUMBER OF LANES	LOS D GEN. SVC. VOLUME	PROJECT % ASSIGNMENT	NB/EB IN/OUT?	PROJECT TRIPS					
							AM PEAK HOUR					
							TRIPS		% IMPACT			
							NB/EB	SB/WB	NB/EB	Sig?	SB/WB	Sig?
Barwick Road	Lake Ida Road	133rd Road South	2L	810	70%	i	1	5	0.12%	No	0.62%	No
Barwick Road	133rd Road South	Coconut Lane	2L	810	30%	o	2	1	0.25%	No	0.12%	No

Table 4: Test 1 Part 1 PM Significance Analysis

ROADWAY	FROM	TO	COMMITTED NUMBER OF LANES	LOS D GEN. SVC. VOLUME	PROJECT % ASSIGNMENT	NB/EB IN/OUT?	PROJECT TRIPS					
							PM PEAK HOUR					
							TRIPS		% IMPACT			
							NB/EB	SB/WB	NB/EB	Sig?	SB/WB	Sig?
Barwick Road	Lake Ida Road	133rd Road South	2L	810	70%	i	5	4	0.62%	No	0.49%	No
Barwick Road	133rd Road South	Coconut Lane	2L	810	30%	o	2	2	0.25%	No	0.25%	No

DRIVEWAY ANALYSIS

Access to the site is proposed via one full-access driveway on 133rd Road South. *Figure 3* illustrates the future total driveway volumes for the site.

Palm Beach County Thresholds

Section 300 of the Palm Beach County “Design Standards Manual” provides the vehicle thresholds for exclusive turn lanes at site driveways. According to the standards noted in this document, the volume thresholds for providing exclusive turn lanes are as follows:

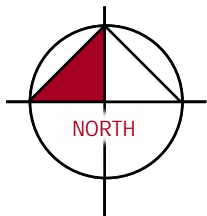
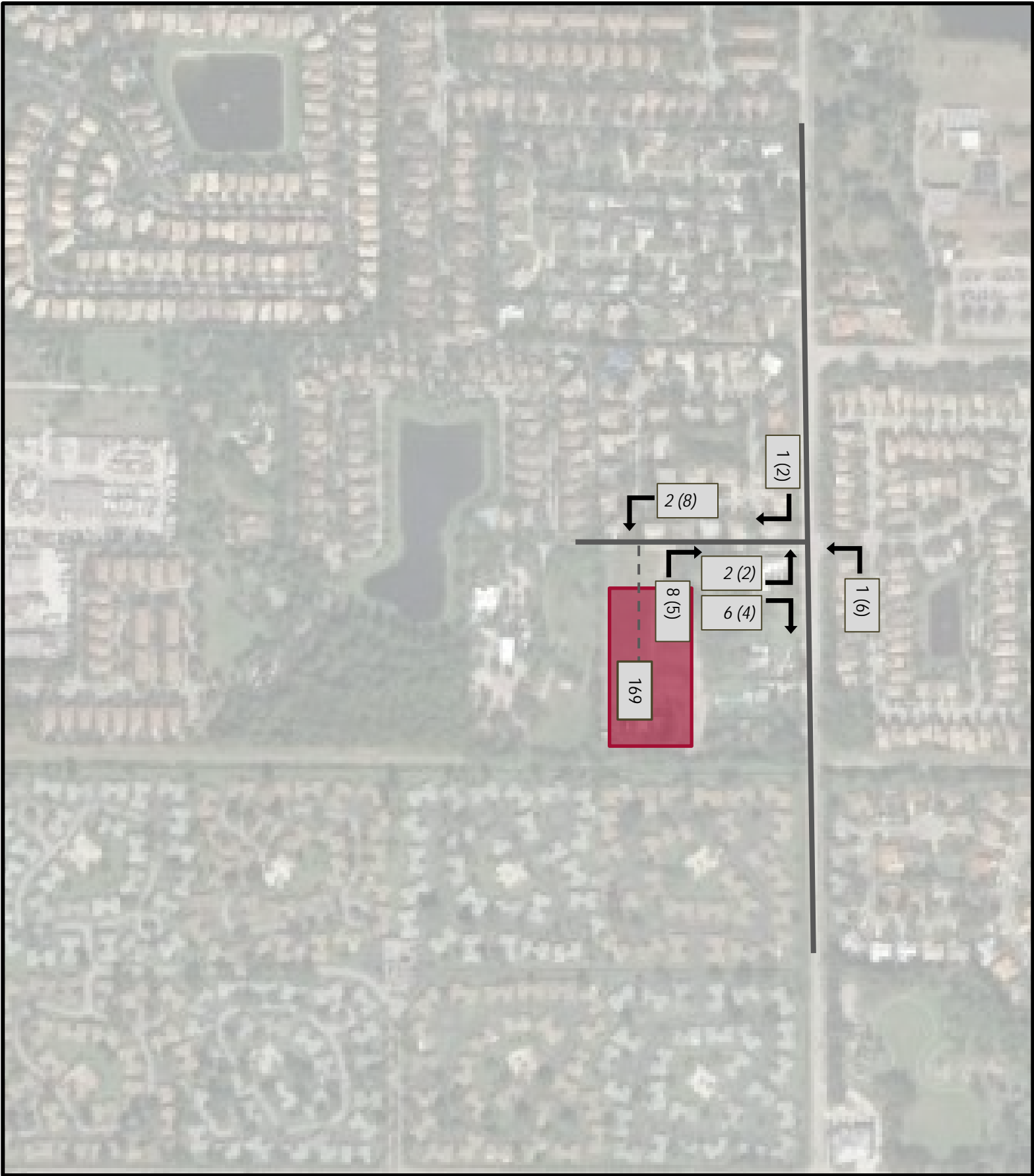
- Right-turn Lane – 75 peak hour right turns, with driveway volumes that exceed 1,000 trips per day, and average daily traffic volumes that exceed 10,000 vehicles per day.
- Left-turn Lane – 30 peak hour left turns.

As shown in *Figure 3*, none of the inbound movements exceed these turn lane thresholds.

The Palm Beach County Code provides for classification of driveways as minor, intermediate, or major and the determination of ingress turn lane requirements. The following criteria are used to classify driveways located within Palm Beach County:

1. Minor - Provides service for a maximum daily volume of 500 vehicles.
2. Intermediate - Provides service for a maximum daily volume from 500 to 2,000 vehicles.
3. Major - Provides service for a daily volume over 2,000 vehicles.

Based on the Palm Beach County thresholds, the site driveway is classified as minor.



LEGEND	
XX	SITE LOCATION
XX	AM VOLUMES
(XX)	PM VOLUMES
(XX)	DAILY VOLUMES

FIGURE 3
DELRAY TOWNHOMES
140726000
DRIVEWAY VOLUMES

CONCLUSION

It is proposed to redevelop the site located just west of Barwick Road, on the south side of 133rd Road South, in Delray Beach, Florida. The existing site consists of a one single family residential dwelling unit. The proposed plan of development includes demolition of the existing structures, and the construction of 25 multifamily dwelling units. As shown in the foregoing analysis, the site meets the requirements of the Palm Beach County TPSO, without significantly impacting any of the surrounding links.

APPENDIX A: PROJECT INFORMATION

Property Detail

Parcel Control Number: 12-42-46-12-00-000-3200 Location Address: 4652 133RD RD S
 Owners: OCEAN RIDGE RENTALS LLC
 Mailing Address: 1535 N OCEAN BLVD, DELRAY BEACH FL 33483 7322
 Last Sale: MAR-2020 Book/Page#: 31308 / 1097 Price: \$1,470,000
 Property Use Code: 0100 - SINGLE FAMILY Zoning: RM-8 - RM-8-MULTIPLE FAMILY (MEDIUM) (12-DELRAY BEACH)
 Legal Description: 12-46-42 E 221.59 FT OF SW 1/4 OF SE 1/4 OF NW 1/4 (LESS S 40 FT CANAL R/W) Total SF: 2267 Acres 3.18

2023 Values (Preliminary)

Improvement Value \$39,486
 Land Value \$1,499,497
 Total Market Value \$1,538,983
 Assessed Value \$1,400,768
 Exemption Amount \$0
 Taxable Value \$1,400,768

All values are as of January 1st each year.

2023 Taxes (Preliminary)

Ad Valorem \$27,390
 Non Ad Valorem \$537
 Total Tax \$27,927

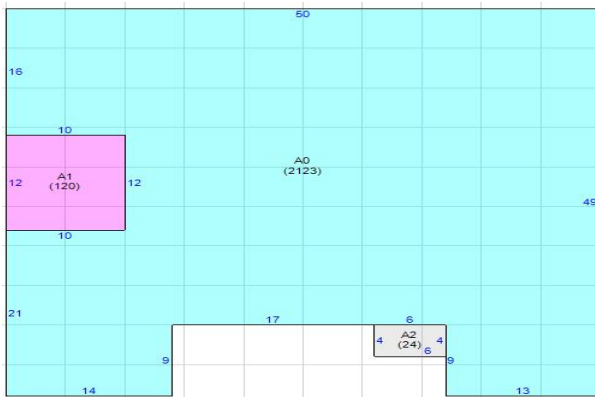
2023 Qualified Exemptions

No Details Found

Applicants

No Details Found

Building Footprint (Building 1)



Subarea and Square Footage (Building 1)

Description	Area Sq. Footage
FST Finished Storage	120
FOP Finished Open Porch	24
BAS Base Area	2123
Total Square Footage :	2267
Total Area Under Air :	2123

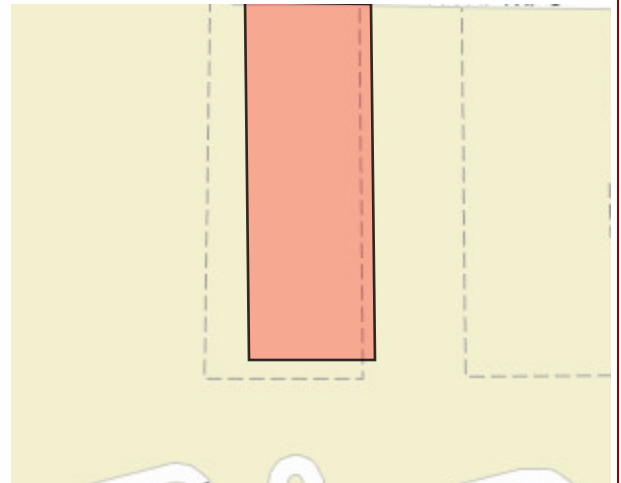
Extra Features

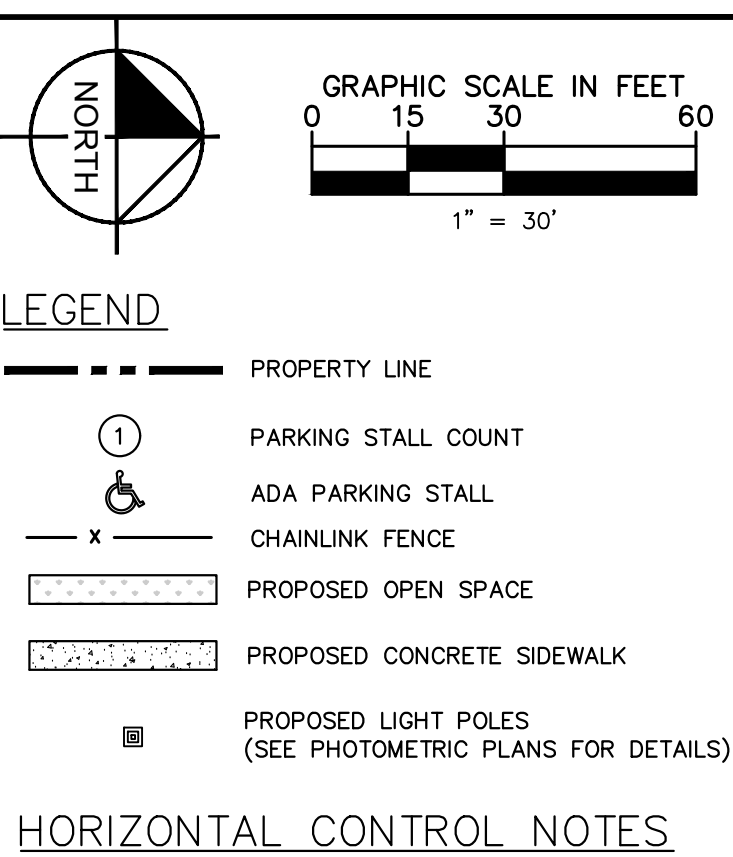
Description	Year Built	Unit
No Extra Feature Available		

Structural Details (Building 1)

Description	
1. Exterior Wall 1	MSY: CB STUCCO
2. Year Built	1975
3. Air Condition Desc.	HTG & AC
4. Heat Type	FORCED AIR DUCT
5. Heat Fuel	ELECTRIC
6. Bed Rooms	0
7. Full Baths	2
8. Half Baths	0
9. Exterior Wall 2	NONE
10. Roof Structure	FLAT
11. Roof Cover	BUILT-UP TAR/GRAVEL
12. Interior Wall 1	PLYWOOD PNL.
13. Interior Wall 2	N/A
14. Floor Type 1	CARPETING
15. Floor Type 2	N/A
16. Stories	1

MAP





GRAPHIC SCALE IN FEET
0 5 10 20
1" = 10'

BUILDING 2
5 UNITS –
FFE: 15.40
HEIGHT: 25.33'

2.27'

5.0' (TYP.)

PROP. LIGHT POLE

6.3'

18.0'

5.6'

18.0'

13.0'

18.0'

18.0'

18.2'

2.0'

10.7'

23.7'

18.1'

6.4'

18.0'

9.0'

18.0'

2.2'

6.4'

LANDSCAPE AREA (TYP.)

GUEST PARKING STALL (SHOWN FOR PREFERENCE)

PLANS ARE IN NAVD 1988 DATUM
CONVERSION EQUATION IS BELOW:
(NAVD 1988) + 1.5' = (NGVD 1929)

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

[illegible]