

TRAFFIC IMPACT ANALYSIS

DELRAY TOWNHOMES DELRAY, FL

PREPARED FOR:

Ocean Ridge Rentals, LLC

Kimley»»Horn

October 1, 2020
Kimley-Horn Project #140726000
CA 00000696
Kimley-Horn and Associates, Inc.
1920 Wekiva Way
West Palm Beach, Florida 33411
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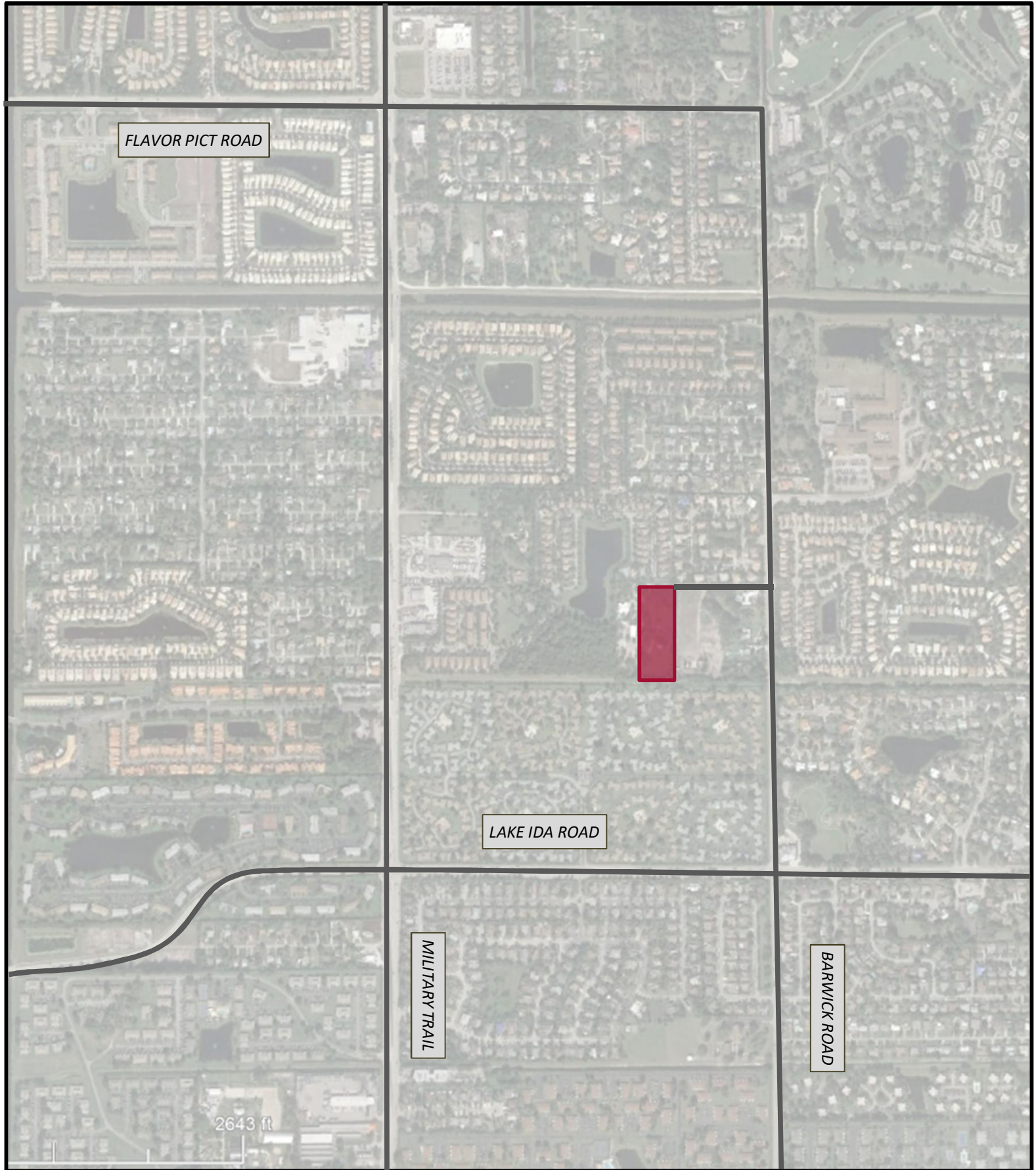
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INTRODUCTION

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 36 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 2025. 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 36 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, 10th 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 254 net external daily trips, 16 net new external AM peak hour trips (+4 in, +12 out) and 19 net new external PM peak hour trips (+12 in, +7 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 Scenario									
Multifamily Low-Rise	36	DU	264	17	4	13	20	13	7
Net New External Trips			264	17	4	13	20	13	7
Proposed Net External Trips-Existing Net External Trips			254	16	4	12	19	12	7
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		0.74 trips/DU (25% in, 75% out)			Ln(T)=0.96 *Ln(X)+0.20 (63% in, 37% out)		0.0%	
Multifamily Low-Rise	7.32 trips/DU		0.46 trips/DU (23% in, 77% out)			0.56 trips/DU (63% in, 37% out)		0.0%	

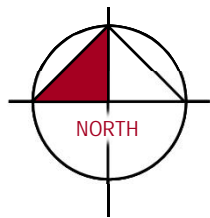
Traffic Distribution

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.



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 *Tables 2 and 3*, the project traffic does not significantly impact the surrounding links. Therefore, no further analysis is required.

Table 2: 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	3	8	0.37%	No	0.99%	No
Barwick Road	133rd Road South	Coconut Lane	2L	810	30%	o	4	1	0.49%	No	0.12%	No

K:\WPB_TPTO\1407\140726000 - Delray Townhomes\[Delray TH Tripgen.xlsx]Test 1 Sig-PM

Table 3: 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	8	5	0.99%	No	0.62%	No
Barwick Road	133rd Road South	Coconut Lane	2L	810	30%	o	2	4	0.25%	No	0.49%	No

K:\WPB_TPTO\1407\140726000 - Delray Townhomes\[Delray TH Tripgen.xlsx]Test 1 Sig-PM

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:

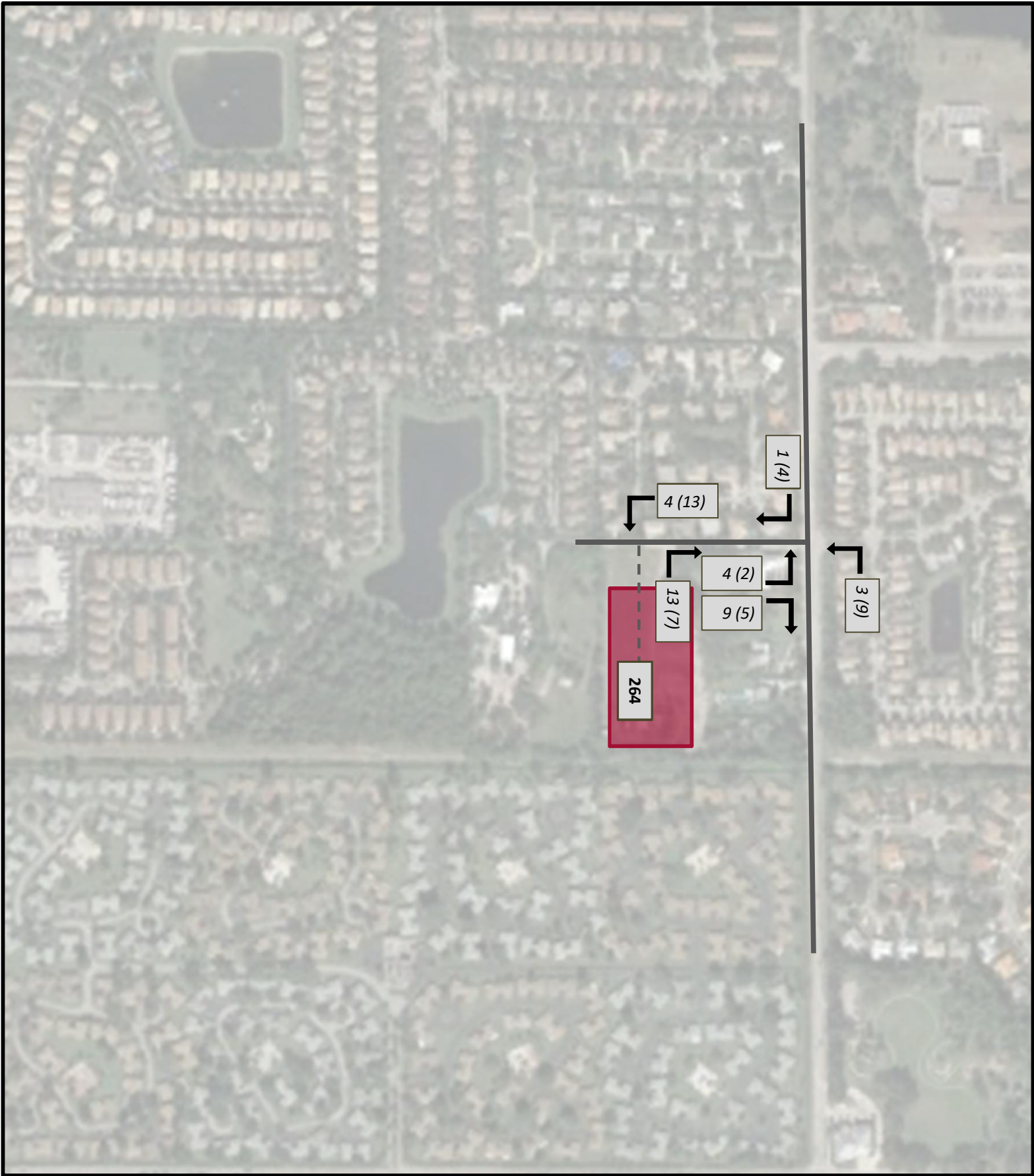
- Right-turn Lane – 75 peak hour right turns, with driveway volumes that exceed 1,000 trips per day, and average daily traffic volumes that exceed 10,000 vehicles per day.
- Left-turn Lane – 30 peak hour left turns.

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	
	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 36 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 - Multiple Family Residential (M (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

2019 Values (Current)

Improvement Value \$23,838
 Land Value \$530,265
 Total Market Value \$554,103
 Assessed Value \$424,846
 Exemption Amount \$0
 Taxable Value \$424,846

All values are as of January 1st each year.

2019 Taxes

Ad Valorem \$9,667
 Non Ad Valorem \$198
 Total Tax \$9,865

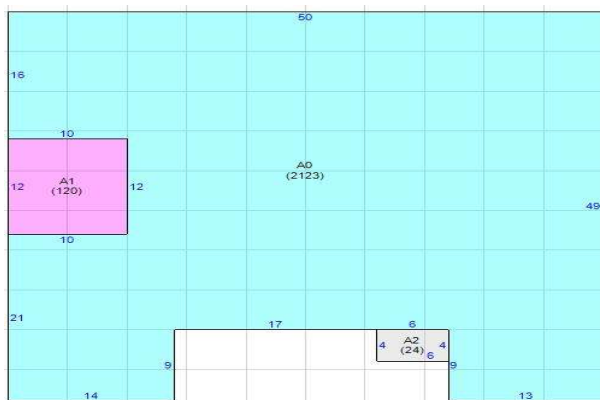
2020 Qualified Exemptions

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

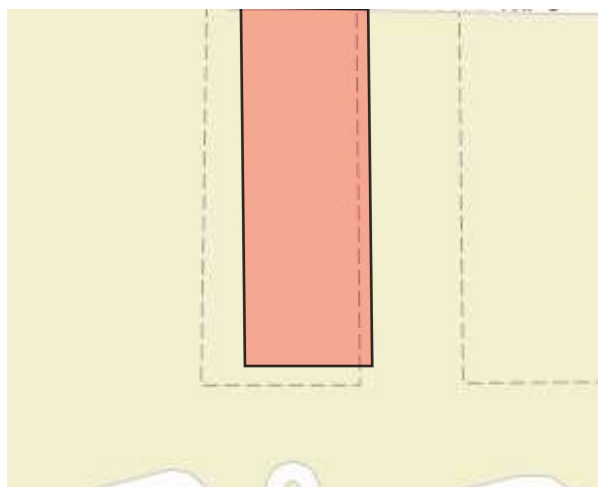
Extra Features

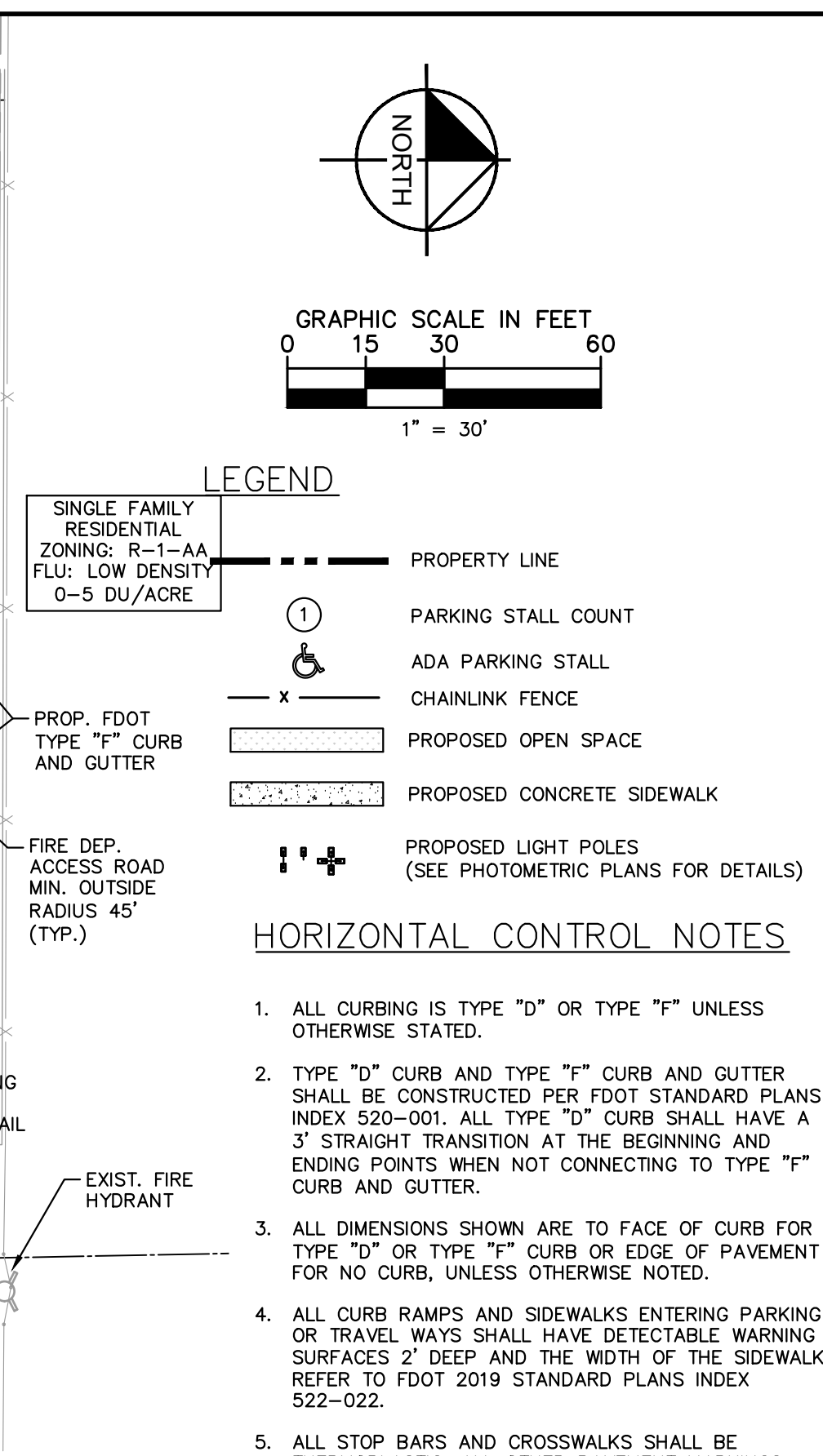
Description	Year Built	Unit
No Extra Feature Available		

Structural Details (Building 1)

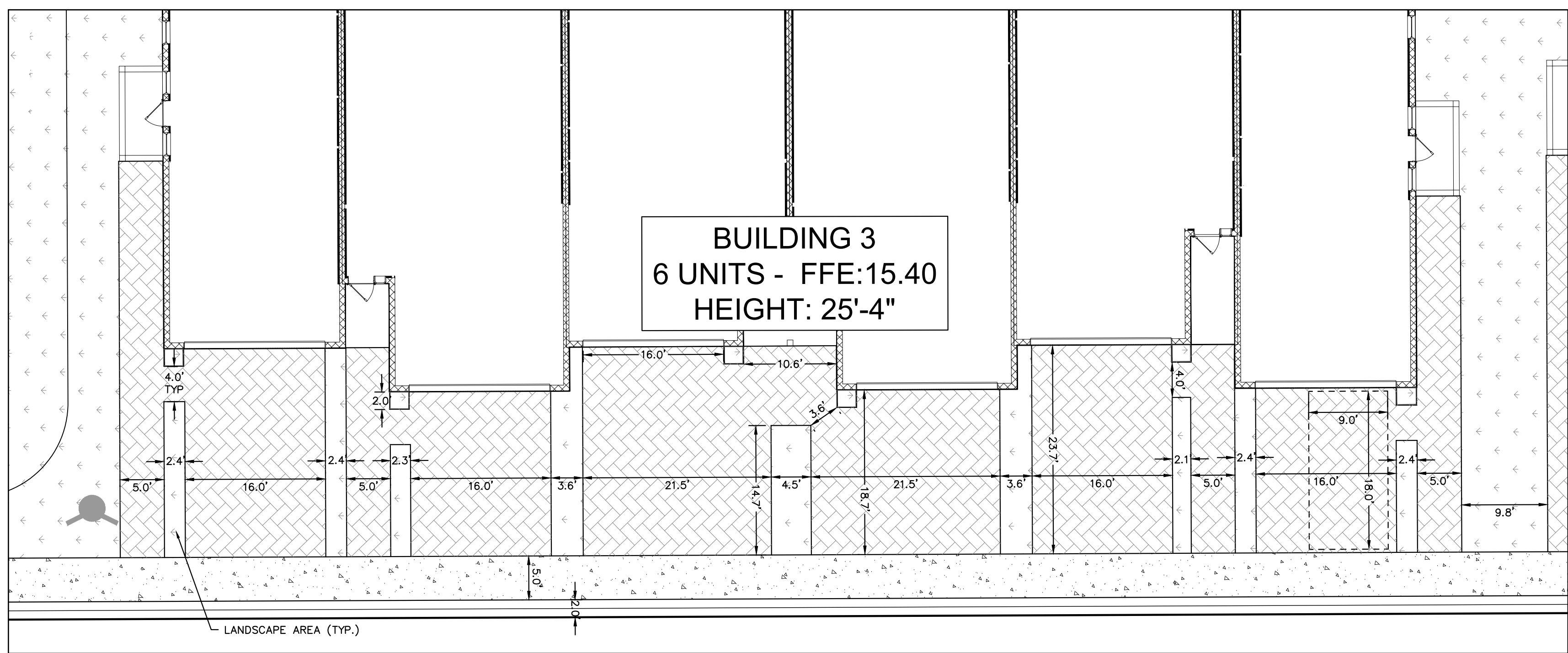
Description	
1. Exterior Wall 1	MSY: CB STUCCO
2. Year Built	1975
3. Air Condition Desc.	HTG & AC
4. Heat Type	FORCED AIR DUCT
5. Heat Fuel	ELECTRIC
6. Bed Rooms	0
7. Full Baths	2
8. Half Baths	0
9. Exterior Wall 2	NONE
10. Roof Structure	FLAT
11. Roof Cover	BUILT-UP TAR/GRAVEL
12. Interior Wall 1	PLYWOOD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

MAP

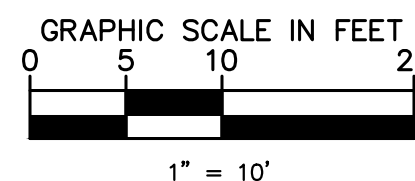




PROJECT NAME		PARCEL INFORMATION	
ADDRESS		DELRAY TOWNHOMES	
PBC FOLIO #		4652 133rd ROAD SOUTH, DELRAY BEACH, FL 33445	
CURRENT ZONING DESIGNATION		12-42-46-12-00-000-3200	
FUTURE LAND USE DESIGNATION		RM-8 (MEDIUM DENSITY RESIDENTIAL)	
PROPOSED ZONING		MD (MULTIPLE FAMILY RESIDENTIAL)	
PROPOSED DENSITY		RM	
LAND AREA GROSS		36 UNITS/3.17 ACRES = 11.36 UNITS/ACRE	
PROP. RIGHT-OF-WAY DEDICATION		138,230 SF (3.173 ACRES)	
LAND AREA NET		5,542 SF (0.127 ACRES)	
FEMA FLOOD CODE		132,689 SF (3.046 ACRES)	
		X	
PROJECT AREAS			
		EXISTING:	PROPOSED:
TOTAL AREA (SF)	132,689	100.0%	132,689 100.0%
IMPERVIOUS TOTAL (SF)	2,217	1.7%	94,015 70.9%
PAVEMENT	0	0.0%	49,234 37.1%
BUILDING	2,217	1.7%	44,781 33.7%
PERVIOUS (SF)	130,472	98.3%	38,674 29.1%
REQUIRED PARKING			
		RATIO:	STALLS
REQUIRED	2 STALLS PER UNIT		72
GUEST PARKING	0.2 STALL PER UNIT (FOR FIRST 20 UNITS)		4
GUEST PARKING	0.3 PER UNIT (FOR UNITS 20 - 50)		5
TOTAL REQUIRED			81
PROVIDED PARKING			
		RATIO:	STALLS
GARAGE PARKING	2 STALLS PER UNIT (2 CAR GARAGE)		72
DRIVEWAY	1 STALL PER UNIT		36
CLUB HOUSE PARKING	N/A		3
ADA PARKING	N/A		1
PARKING PROVIDED			112
UNIT INFORMATION			
TYPE OF UNIT:	NUMBER OF UNITS:	HEIGHT: (MAX 35')	SIZE: (SF)
Clubhouse	1	24'-5"	
2 BEDROOM (MIN. 900 SF)	12	25'-4"	1,291
3 BEDROOM (MIN. 1,250 SF)	24	25'-4"	1,690
LOT SIZE			
CODE REQUIREMENT:		PROVIDED:	
LOT SIZE	8,000 SF MINIMUM	132,689 SF	
LOT WIDTH	60' MINIMUM	221.6'	
LOT DEPTH	100' MINIMUM	599.3'	
LOT COVERAGE	40% MAXIMUM	34%	
USABLE OPEN SPACE	25% MINIMUM	29%	
BUILDING SETBACKS PER 4.4.6(F)			
REQUIRED:		PROVIDED:	
FRONT	25'	25.0'	
SIDE	18.75' (25% addition)	18.8'	
SIDE	18.75' (25% addition)	18.8'	
REAR	30'	44.7'	



TYPICAL BUILDING PARKING DIMENSIONS




THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE AND OBTAINING ALL NECESSARY PERMITS.

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

SHEET NUMBER C4.00	DELRAY TOWNHOMES PREPARED FOR OCEAN RIDGE RENTALS DELRAY BEACH FLORIDA	SITE PLAN	KHA PROJECT 140726000	LICENSED PROFESSIONAL	 Kimley»»Horn © 2020 KIMLEY-HORN AND ASSOCIATES, INC. 1615 S CONGRESS AVE., SUITE 201, DELRAY BEACH, FL 33445 PHONE: 561.366.8600 FAX: 561.366.8175 WWW.KIMLEY-HORN.COM CA 00060966	No.	REVISIONS	DATE	BY
			DATE SEPT. 1, 2020	JASON A. WEBBER, P.E. FLORIDA LICENSE NUMBER 73962					