



**CITY OF LIGHTHOUSE POINT
2200 N.E. 38th STREET
LIGHTHOUSE POINT, FLORIDA 33064**

NOTICE OF DEVELOPMENT REVIEW COMMITTEE MEETING

Notice is hereby given that the Development Review Committee will meet to review a Site Plan submitted by the Lighthouse Point Yacht Club.

The meeting details are as follows:

Date: Wednesday, January 6, 2021
Time: 10:00 am EST
Location: Virtual

Please click the link below to join the webinar:

<https://us02web.zoom.us/j/85198549985?pwd=VGVSqRW9mU25LVHVudmNPL00wL3RhQT09>

Passcode: 114952

OR

Join the meeting via telephone by calling one of the following phone numbers: US: +1 312 626 6799 or +1 929 205 6099 or +1 301 715 8592 or +1 346 248 7799 or +1 669 900 6833 or +1 253 215 8782

Webinar ID: 851 9854 9985

Passcode: 114952

Please note this meeting will be conducted virtually utilizing communications media technology ("CMT"). To protect the public health, safety and welfare of the community, the City of Lighthouse Point municipal offices are closed to the public and Committee Members will attend the meeting utilizing CMT.

Prior to the meeting date, if any member of the public requires additional information on how this meeting will be conducted, how to participate in the meeting, or if any person with a disability requires assistance to participate in said meeting, please contact:

Jennifer M. Oh, City Clerk
2200 NE 38th Street
Lighthouse Point, FL 33064
954-943-6500
joh@lighthouseponit.com

Posted on: January 4, 2021 by 8:30 a.m.



City of Lighthouse Point
Building Department
3701 NE 22 Avenue Lighthouse Point, FL 33064
Office 954-943-6509 / Fax 954-784-3447

DATE: December 17, 2020

TO: Development Review Committee

FROM: Sherry Burgan, Building & Permitting Specialist & Supervisor
John Lavisky, City Administrator
Planning, Zoning, and Building Department

SUBJECT: DRC Meeting
Wednesday, January 6th, 2021 at 10:00 A.M.
Zoom Meeting

Attached you will find the plans for a site plan for the Lighthouse Point Yacht Club, located at 2701 NE 42 Street.

Please review the plans for the site plan amendment and prepare your comments in writing to be presented at January 6th meeting.

Please have the comments forwarded to me by January 5, 2021.

If you are unable to attend, kindly return your plans and comments to the Building Department by January 5th.

If you have any questions, please call Sherry at 954-943-6509.

C: John Lavisky
Tony Long
Charles Schramm
Ross Licata
John Hickey
Cary Winningham
City Clerk



CITY OF LIGHTHOUSE POINT

APPLICATION FOR SITE PLAN APPROVAL

Date: 12/4/20
Case No.: _____
Receipt No.: _____

Date Received _____
Check No. _____
Amount \$ _____

Filing Fees: \$1,700.00 The fee includes an initial cost recovery deposit of \$1,500.00 plus the \$200.00 application fee.

☒ Conceptual ☐ Preliminary ☐ Final Site Plan Approval

In addition to the application for Site Plan approval, the applicant shall supply the documentation required by Section 42-112 and Section 42-113 of the City's Code as well as the City's Site Plan Submission Checklist. The Site Plan Submission Checklist is available at the City's Building Department.

Petitioner: Lighthouse Point Yacht Club Investments LLC
Address: 2701 NE 42nd Street
City: LHP

Phone: 954-410-0297 Fax: _____ E-mail: Terry@patersondevelopment.com
If Petitioner is not the Owner, Name of Owner: _____

Signature of Petitioner: _____

Description of Project: See Attached

Present Zoning District: MU-YG Present Future Land Use Map (FLUM) Designation: Irregular Residential

Address of Property: 2701 NE 42nd Street

Legal Description of Property (Plat Book/Page or Metes and Bounds): Venetian Isles
replat 48-41 B Bk 43, 43A

OWNER / AGENT CERTIFICATE:

This is to certify that I am the owner/agent of the subject lands described above in the application for Site Plan Approval, and that all information supplied herein is true and correct to the best of my knowledge. By signing this application, owner/agent specifically agrees to allow access to described property at reasonable times by City personnel, for the purpose of verification of information provided by owner/agent.

Signature of owner/agent: _____
December 20, 20 by Terence Paterson

Sworn to and subscribed before me this 1 day of



He/She is personally known to me or

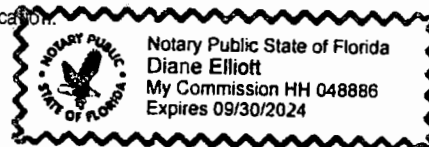


He/She has presented _____

as identification.

Signature of Notary Public: Diane Elliott

Type or Print Name: Diane Elliott



LHPYC Phasing Narrative

- Permitting of the Civil, Parking and Internal Roadways would start first. This would be in the City and then the County.
- Permitting for the Perimeter Dock and raised Seawall cap to begin as soon as possible.
- Permitting for the new Tennis/Bistro which would serve as the temporary Yacht Club Clubhouse to start as soon as MEP and Engineering is ready.
- Permitting of the Existing Building Kids Activity Center and Club Accessory Bathrooms and Laundry to start as soon as possible due to a recent fire that destroyed our existing Laundry.
- Construction/Renovation of the Laundry and Kids Center Bathrooms in the existing building to start as soon as permits are ready.

It is understood that only the plan review process will take place for the above, but no permits to be issued until the site plan is approved and second reading on Land Use and Zoning has occurred. However, all the above items do fall within the existing codes of the property.

- After all the Entitlements and Site Plan approvals are complete, we would submit for Permits on the following structures at the same time:
 - Yacht Club Pools
 - Yacht Club Clubhouse
 - Townhome Building 2
 - Townhome Building 3
 - Townhome Building 4
 - Townhome Building 5
- Permitting of the Demolition of the Yacht Club Clubhouse should take 3 months due to the need to shut down all FPL power, gas, sewer and water, perform asbestos, rodent and other testing needed to get a demolition permit.
- As soon as this shut down occurs, we would like to start constructing any retaining walls needed around the property. Before the 1st phase of demolition part of these walls can be constructed, while some will only be built immediately after demolition.

- As soon as Dock and Seawall Cap replacement permits are issues, we would start the new docks from East side, moving to the North Side, then lastly the West Side. Building this in 300' or less sections to keep the Marina main figure available for use at all times. Vessels in each section under construction will be moved to areas either not being worked on or complete already. This process will draw out the time of Dock and Seawall Cap replacement but is needed to stay safe and operational. Seawall itself will not be replaced. Seawall Cap and Dock is a far simpler process.
- Before existing Yacht Club Clubhouse is demolished, we would like to start construction of the new Tennis/Bistro temporary Clubhouse. This should take us 8 months to construct and is designed to be a stand alone building not requiring utilities to come from the internal new systems being built. This is in an abundance of caution if there are any delays in connecting these new underground utilities.
- If we have received the County Civil and Underground Permits by the time we shut down all existing Yacht Club Clubhouse utilities, we will start our Underground Civil work moving from West to East as not to have the entire property dug up at one time. The underground total depth doesn't go past 6' deep. Following OSHA standards on angle of trench depths, plus distance between utilities, we shouldn't need trenches wider than 20' at the surface at any time. So this allows for easy access around the property.
- While the Tennis/Bistro is under construction still, therefore no clientele, we intend to demolish the existing Yacht Club Clubhouse and Marina Bathrooms. At that same time we will scrape down to the road rock on the west tennis courts and most of the existing parking and drive isles. See Dem Phase 1 on the demo plan. This would leave a compacted road rock surface on most of the property. The small area left that is not under the new Yacht Club Clubhouse footprint will receive a road rock treatment for ease of access around the property.

This will leave the site clear and stable.

- After Phase 1 demolition and is complete, we will be ready to construct the staging area in the middle of the property. The staging area is extra large to allow us to move dumpsters and containers for storage and offices around if we need to. However, they will be strategically placed over completed underground locations and away from where the new curbs will be installed.
- Since the Phase 1 demolition leave the existing entry and 41 vehicle SW parking lot untouched and available for use by the Marina, gym occupants and tennis players at all times. Marina requirements are maximum 39 vehicles at its peak. We ask for temporary relief from the city to let us not meet the parking requirements for these item for a short period of time. This parking lot already opens to D dock on the west side of the property. D dock links to all other docks, existing gym (future Kids Center), and pool area. The existing Tennis Center has a pedestrian crossing leading to the SW parking area. Temporary Stop Signs will also be installed on the crosswalk to allow safe passage for Tennis Players.

- By the time the Tennis Center/Bistro is open as the Temporary Clubhouse, we will have Phase 2 Demolished of the existing Tennis Center Building, installed compacted road rock in its place, constructed all Parking Curbs and Sub-Base in main parking areas, and have construction fencing and signage blocking off member access to all construction areas. This will allow for an additional 51 parking spaces in the main parking lot, and 40 additional parking spaces in the NE marina parking lot, and 16 spaces west of the Tennis/Bistro. We ask for temporary relief to allow us to use gravel lot parking, or un-marked first lift asphalt, and shift parking from one lot to the other while asphaltting the parking area. Since our parking will be available in 4 different location and by far surpass all requirements to service the Tennis/Bistro, Marina and we will easily be able to meet the parking requirements while temporarily shutting down one or two sections at a time. Parking and traffic flow signs will be provided.
- First lift of all parking and roadways. Staging area large enough to move containers around within.
- Guard House Construction to take place after all curbs, subbase and commercial sidewalks installed. No residential sidewalks until Townhome Buildings 2, 3, 4, and 5 are substantially complete.
- Six to Eight months before the Yacht Club Clubhouse is complete, we will start the pool area Phase 3 Demolition and new pools construction. This area will then be fenced off and a walkway to the gym, bathrooms and laundry from D Dock will remain.
- Four months before Yacht Club Clubhouse completion we will complete 2nd lift of parking asphalt and vehicular circulation.
- Once above complete, the Grass Overflow Parking area will be finished.
- All staging area offices and containers, and fencing will be removed.
- Only once all of the North Section of the property is complete, will we start the final Phase 4 Demolition consisting of scraping the asphalt and remaining 3 clay tennis courts down to their road rock.
- The last 3 properties consisting of Building 1, 6 which are total of 5 townhomes and the Single Family Residence will be started once the North section is complete and operational. This is because we need to maintain 5 working tennis courts at all times.
- These 3 locations will be fenced and construction will continue within these fences away from any and all club activities and following all existing city ordinances for construction.
- The Emergency Access roadway will be clear of any construction vehicles and parking will follow city ordinances only allowing one side of the street parking for work vehicles.

MEMORANDUM

To: Terry Paterson
Jessica Easterling

From: Karl Peterson, P.E.

Date: March 3, 2020

Subject: Lighthouse Point Yacht Club – Lighthouse Point, Florida
Marina Parking Memorandum

The Lighthouse Point Yacht Club on NE 27th Terrace in Lighthouse Point, Broward County, Florida has a marina with 78 berths. According to the City's Code of Ordinances (Sec. 42-410.) marinas and yacht basins are required to provide one (1) parking space for each boat slip (or, berth) and one (1) parking space for each employee.

In order to assess and evaluate the appropriateness of these parking requirements for the marina at the Lighthouse Point Yacht Club, a parking study (including on-site data collection) has been performed at the Lighthouse Point Yacht Club. The purpose of this data collection effort was to quantify the number of marina-related vehicles parked on-site in 30-minute intervals between the hours of 8:00 AM and 10:00 PM. These counts were performed for a two-week period beginning on Tuesday, November 20, 2018 and concluding on Monday, December 3, 2018. The raw traffic data is presented in Attachment A.

In summary, the peak parking demand for vehicles associated with the marina during the two-week period was reported to be 38 parked vehicles which occurred during five (5) separate 30-minute intervals generally between 8:00 AM and 1:00 PM.

With a peak parking demand of 38 parked vehicles associated with 78 berths within the marina, the resulting peak parking ratio for the Lighthouse Point Yacht Club marina is approximately one (1) parking space per two (2) marina berths.

Attachment A

Lighthouse Point Yacht Club – Marina Parking Counts

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: November 20, 2018 - December 3, 2018
Time Period: 8:00 AM to 10:00 PM

Date	Time Intervals (Number of Parked Vehicles - Directly Associated with the Marina)													
	8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
	8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM
11/20/2018	14	14	13	28	30	25	26	25	25	19	19	21	19	22
11/21/2018	18	17	21	23	27	24	23	23	22	20	19	19	18	15
11/22/2018	22	21	22	22	23	20	19	19	17	16	16	17	15	13
11/23/2018	25	24	28	27	31	30	29	29	30	28	28	27	27	25
11/24/2018	22	24	24	17	17	18	22	20	20	22	20	19	21	21
11/25/2018	18	19	18	20	20	18	17	17	19	19	16	17	15	15
11/26/2018	25	26	27	28	26	25	29	29	31	31	30	30	31	31
11/27/2018	27	28	28	28	30	29	29	27	26	26	25	25	21	22
11/28/2018	25	32	32	33	34	34	35	35	32	32	31	31	29	29
11/29/2018	28	29	29	28	32	34	35	36	38	38	37	37	37	37
11/30/2018	25	26	26	36	34	35	32	30	28	28	28	29	29	28
12/1/2018	29	29	30	31	30	32	33	33	32	31	32	30	32	31
12/2/2018	20	21	21	22	20	22	22	22	21	22	26	25	26	27
12/3/2018	38	38	36	36	38	34	33	32	29	28	30	28	26	24

30-Minute Maximum	38	38	36	36	38	35	35	36	38	38	37	37	37	37
30-Minute Average	24	25	26	28	28	28	28	27	27	26	26	26	25	25

Parking Zone	Time Intervals (Number of Parked Vehicles - Directly Associated with the Marina)													
	3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
	3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM
11/20/2018	18	20	17	10	14	20	13	13	16	12	12	14	12	16
11/21/2018	15	19	18	22	21	21	24	23	22	24	24	23	20	18
11/22/2018	12	11	11	9	10	10	8	8	7	10	10	19	16	16
11/23/2018	23	25	25	27	24	24	22	19	20	23	19	19	15	13
11/24/2018	20	19	18	20	20	20	20	18	18	19	20	22	21	20
11/25/2018	15	8	10	10	8	8	12	12	11	11	16	18	18	20
11/26/2018	28	27	26	28	-	-	-	-	-	-	-	-	-	-
11/27/2018	13	15	14	13	13	10	10	11	10	13	13	14	14	14
11/28/2018	30	32	33	34	30	29	28	28	25	25	23	24	21	19
11/29/2018	25	28	30	28	30	29	25	26	24	25	22	23	24	22
11/30/2018	29	32	37	35	36	37	36	35	34	31	31	30	30	26
12/1/2018	29	28	28	30	27	27	27	28	28	27	28	24	28	22
12/2/2018	24	24	22	20	21	19	18	20	20	22	22	24	20	22
12/3/2018	21	20	19	20	20	-	-	-	-	-	-	-	-	-

30-Minute Maximum	30	32	37	35	36	37	36	35	34	31	31	30	30	26
30-Minute Average	22	22	22	22	22	22	21	21	20	21	20	22	20	19

Source: KBP Consulting, Inc. (November / December 2018)

MEMORANDUM

To: Terry Paterson
Jessica Easterling

From: Karl Peterson, P.E.

Date: March 4, 2020

Subject: Lighthouse Point Yacht Club – Lighthouse Point, Florida
Parking Memorandum

The Lighthouse Point Yacht Club on NE 27th Terrace in Lighthouse Point, Broward County, Florida is a private club with various facilities including a dining area, a bar, a fitness center, a pool, tennis courts, meeting rooms, offices, a kid's area and a marina. A plan has been prepared and is currently under review to redevelop the site with a new clubhouse, a new tennis facility, and a residential component that will consist of 20 townhomes and two (2) single family dwelling units. The existing marina will remain as is.

The City's Code of Ordinances do not specify a parking requirement for this specific use (i.e. private yacht club). As such, the parking requirements for the club would be determined based upon the parking requirements for each individual use within the property. Because the uses within a club such as this are utilized during different times of the day and many are utilized simultaneously, this approach to determining the parking requirements results in a significant overestimation of the parking supply necessary to meet the actual parking demands.

In order to identify a realistic and reasonable parking supply for the Lighthouse Point Yacht Club, a parking study (including on-site data collection) has been performed at the Lighthouse Point Yacht Club. The purpose of this data collection effort was to identify the peak parking demand associated with the existing club facilities. This objective was achieved by quantifying the number of club-related vehicles parked on-site in 30-minute intervals between the hours of 8:00 AM and 10:00 PM. These counts were performed for a two-week period beginning on Tuesday, November 20, 2018 and concluding on Monday, December 3, 2018. The parking zones established for data collection purposes are presented in Attachment A to this memorandum and the raw parking data is presented in Attachment B.¹

¹ It should be noted that this parking count was performed while simultaneously documenting the parking demand associated with the marina facilities at the Lighthouse Point Yacht Club. In order to establish a parking demand for the club facilities, the marina-related vehicles on site at the time of this count are not included in the parking demand totals or calculations for the club facilities. The results of the marina parking analysis are summarized in a technical memorandum dated March 3, 2020.

KBP CONSULTING, INC.

A summary of the peak parking demand recorded on a daily basis at the Lighthouse Point Yacht Club between November 20, 2018 and December 3, 2018 is presented below:

<u>Date</u>	<u>Peak Parking Demand</u>
• November 20, 2018 (Tuesday):	55
• November 21, 2018 (Wednesday):	58
• November 22, 2018 (Thursday):	111 (Thanksgiving Day)
• November 23, 2018 (Friday):	85
• November 24, 2018 (Saturday):	54
• November 25, 2018 (Sunday):	44
• November 26, 2018 (Monday):	35
• November 27, 2018 (Tuesday):	42
• November 28, 2018 (Wednesday):	97
• November 29, 2018 (Thursday):	51
• November 30, 2018 (Friday):	59
• December 1, 2018 (Saturday):	98
• December 2, 2018 (Sunday):	90
• December 3, 2018 (Monday):	35

As indicated in the summary above, the peak parking demand for the Lighthouse Point Yacht Club occurred on Thursday, November 22, 2018 (Thanksgiving Day) with 111 parked vehicles which occurred between 4:30 PM and 5:00 PM.

The primary traffic and parking generator for the club is, and will likely continue to be, the dining / banquet facilities. With the proposed redevelopment plan, the capacity of these dining / banquet facilities will be increasing by approximately 25%. Similarly, the overall building area for the club will be increasing from approximately 39,500 square feet to approximately 49,500 square feet – or an increase of slightly more than 25%. And, overall activity at the club is expected to increase with the new and more modern facilities and an anticipated growth in the club's membership numbers. According to the project team, the projected growth in club membership as a result of the redevelopment program is approximately 30%.

There is no specific or industry standard strategy for estimating traffic and parking demand as it relates to private clubs; however, based upon the foregoing growth projections attributed to the expanded dining / banquet facilities, the additional building area, and the projected increase in club membership, it appears that a projected increase of 30% in the parking demand is reasonable and justifiable. *(It is noted that, there will be occasional events such as wedding receptions, parties and fundraisers held at the club that may cause unusually high parking demands. The scheduling of these events will be done well in advance and will allow ample time to develop alternate parking plans, if necessary, to accommodate the anticipated parking demand.)*

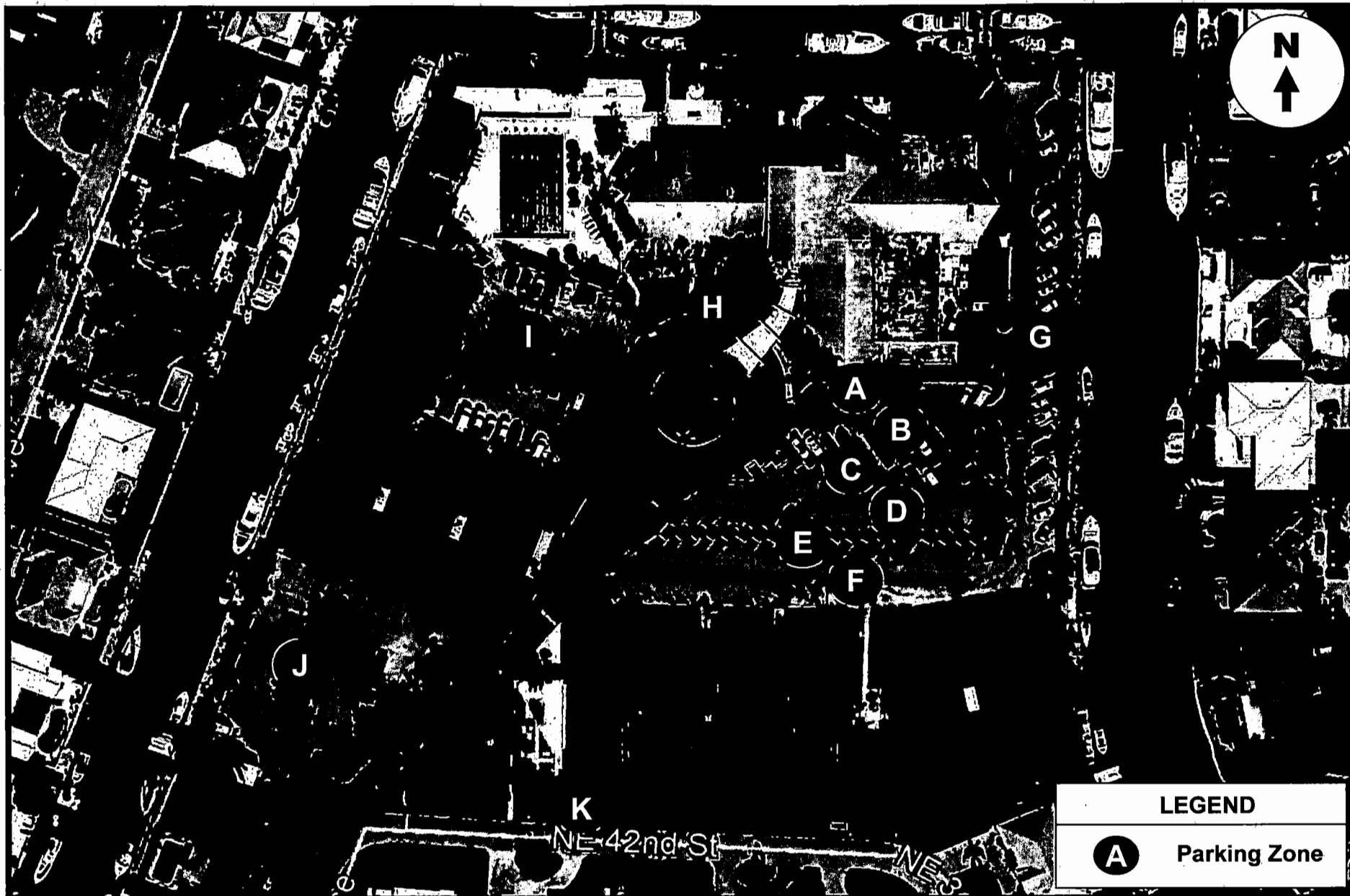
KBP CONSULTING, INC.

With an observed peak parking demand of 111 parked vehicles associated with the existing club facilities, the application of a 30% growth factor yields a peak parking demand of 145 parked vehicles. Combined with the parking demand / requirements for the marina (i.e. approximately 40 parking spaces), the total parking supply required to satisfy the peak parking demand at the Lighthouse Point Yacht Club is 185 parking spaces.

According to the latest site plan, the proposed parking supply consists of 162 general use parking spaces, 43 valet parking spaces and 30 overflow valet parking spaces for a total of 235 parking spaces on site. As such, it appears that the proposed parking supply will be adequate to satisfy the typical peak period demand at the club.

Attachment A

Lighthouse Point Yacht Club – Parking Study Zones



LEGEND

A Parking Zone

KBP
CONSULTING, INC.

Parking Study
Parking Zones

Attachment A
Lighthouse Point Yacht Club
Lighthouse Point, Florida

Attachment B

Lighthouse Point Yacht Club – Parking Data

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: Tuesday, November 20, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM
A	11	0	0	0	0	0	0	0	0	0	0	1	1	2	1
B	12	2	2	2	2	3	5	4	4	5	5	6	4	5	5
C	16	0	0	0	1	3	3	1	0	1	2	3	4	5	5
D	21	0	1	0	0	0	0	0	0	0	0	0	0	1	1
E	20	2	3	3	6	4	6	6	5	2	2	2	2	2	3
F	18	0	0	5	5	5	5	2	1	0	0	0	0	0	0
G	26	16	15	18	24	26	22	22	21	18	12	12	13	13	16
H	0	0	0	0	0	2	2	2	0	0	1	1	2	3	4
I	36	20	22	29	32	33	29	31	29	25	24	24	29	30	29
J	41	6	8	10	10	9	7	7	5	4	4	4	4	6	7
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-14	-14	-13	-28	-30	-25	-26	-25	-25	-19	-19	-21	-19	-22
Total	201	32	37	54	52	65	54	49	40	30	31	34	38	48	49

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM
A	11	1	1	1	0	0	0	0	0	0	0	0	0	0	0
B	12	5	3	3	4	4	3	3	3	2	2	2	1	2	1
C	16	5	4	4	3	2	2	3	3	1	1	1	1	1	1
D	21	1	1	1	2	2	2	1	1	1	1	1	1	0	0
E	20	3	4	5	5	3	4	5	4	5	5	4	3	2	1
F	18	1	0	0	1	1	2	2	1	0	0	0	0	0	0
G	26	14	15	16	13	16	18	13	12	12	13	12	11	12	11
H	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0
I	36	27	23	19	22	26	23	22	21	18	19	17	17	16	16
J	41	6	8	7	5	5	3	3	3	2	2	2	1	1	1
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-18	-20	-17	-10	-14	-20	-13	-13	-16	-12	-12	-14	-12	-16
Total	201	48	40	40	45	45	37	39	35	25	31	27	21	22	15

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club

Analyst: KBP

Project No.: P16.519

Date: Wednesday, November 21, 2018

Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM
A	11	0	0	1	1	1	1	2	2	2	2	2	2	2	1
B	12	1	1	2	2	2	2	3	3	3	6	4	6	6	6
C	16	0	0	0	0	2	2	3	3	6	9	1	2	2	3
D	21	0	0	0	1	1	1	1	1	3	3	2	0	0	0
E	20	1	2	3	3	4	2	5	4	4	5	3	2	2	2
F	18	0	0	0	1	2	4	1	2	2	3	3	2	2	3
G	26	18	17	18	17	19	18	20	21	20	21	21	20	19	19
H	0	0	0	0	0	0	0	1	0	4	2	3	4	4	3
I	36	16	18	23	25	21	22	24	23	23	21	21	19	19	16
J	41	4	4	4	6	7	10	7	7	6	6	7	11	11	14
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-18	-17	-21	-23	-27	-24	-23	-23	-22	-20	-19	-19	-18	-15
Total	201	22	25	30	33	32	38	44	43	51	50	48	49	49	52

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM
A	11	1	1	1	2	0	1	0	0	1	1	1	1	0	0
B	12	6	4	4	4	4	3	4	5	5	6	4	4	3	1
C	16	3	2	1	1	1	1	5	6	8	9	5	5	4	1
D	21	0	4	3	6	2	2	0	1	2	2	0	1	0	0
E	20	2	2	2	3	5	5	4	4	7	6	5	5	4	1
F	18	3	3	2	3	3	2	2	2	2	2	1	1	1	0
G	26	18	14	12	12	12	13	13	13	10	11	15	14	13	13
H	0	2	2	3	2	3	2	4	5	7	8	5	4	3	2
I	36	16	16	15	17	15	16	14	14	15	16	17	16	16	15
J	41	14	16	17	20	19	18	22	21	20	20	20	20	15	12
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-15	-19	-18	-22	-21	-21	-24	-23	-22	-24	-24	-23	-20	-18
Total	201	50	45	42	48	43	42	44	48	55	57	49	48	39	27

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
 8400 N. University Drive
 Suite 309
 Tamarac, Florida 33321
 (954) 560-7103

Project: Lighthouse Point Yacht Club

Analyst: KBP

Project No.: P16.519

Date: Thursday, November 22, 2018

Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM
A	11	0	0	1	1	0	0	0	0	0	0	0	0	0	0
B	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1
C	16	0	0	0	0	0	0	0	1	1	1	1	1	1	1
D	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E	20	1	3	4	4	5	4	2	3	2	2	3	2	3	3
F	18	0	1	3	3	5	2	0	0	0	0	0	0	0	0
G	26	17	17	18	18	18	16	14	14	15	15	14	14	13	14
H	0	0	1	1	1	1	1	1	0	0	0	0	1	1	1
I	36	15	15	16	16	18	20	22	22	15	16	15	16	17	18
J	41	4	5	8	7	7	6	8	11	12	13	14	14	17	20
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-22	-21	-22	-22	-23	-20	-19	-19	-17	-16	-16	-17	-15	-13
Total	201	16	22	30	29	32	30	29	33	29	32	32	32	38	45

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM
A	11	2	4	5	6	6	5	7	5	5	5	0	0	0	0
B	12	2	5	6	6	6	6	5	7	7	7	1	1	1	1
C	16	6	7	11	13	14	11	8	8	9	8	4	2	2	0
D	21	3	13	14	16	15	6	5	5	4	3	1	0	0	0
E	20	3	5	8	8	8	8	9	6	5	3	2	2	0	0
F	18	1	2	2	2	2	4	2	2	1	1	0	0	0	0
G	26	13	12	10	10	11	11	11	12	9	8	8	7	7	6
H	0	3	6	8	7	9	11	12	9	8	6	4	0	0	0
I	36	20	22	23	24	22	21	21	19	16	18	15	15	14	14
J	41	25	27	27	28	25	25	26	22	22	24	22	20	7	3
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-12	-11	-11	-9	-10	-10	-8	-8	-7	-10	-10	-19	-16	-16
Total	201	66	92	103	111	108	98	98	87	79	73	47	28	15	8

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: Friday, November 23, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM
A	11	0	0	0	0	0	0	0	0	3	3	4	4	4	1
B	12	1	1	3	4	2	2	1	3	5	5	3	2	2	3
C	16	0	0	1	1	2	2	1	2	3	3	4	4	4	3
D	21	0	1	3	3	1	1	2	1	1	1	1	1	1	2
E	20	0	0	1	1	2	2	2	2	3	4	5	5	5	5
F	18	0	0	0	1	5	5	4	4	6	4	2	2	2	2
G	26	14	15	18	19	20	21	17	18	19	19	20	20	19	20
H	0	0	0	0	0	0	0	1	1	2	1	3	3	3	3
I	36	17	18	28	27	26	24	28	27	30	29	28	22	22	21
J	41	5	6	5	5	7	8	6	7	6	6	8	8	11	8
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-25	-24	-28	-27	-31	-30	-29	-29	-30	-28	-28	-27	-27	-25
Total	201	12	17	31	34	34	35	33	36	48	47	50	44	46	43

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM
A	11	1	1	1	2	1	1	2	2	2	4	6	6	6	4
B	12	3	3	3	2	2	2	1	2	2	3	5	4	4	4
C	16	3	3	3	3	4	4	4	3	3	3	9	10	9	10
D	21	2	2	2	2	1	1	0	2	1	2	7	8	7	6
E	20	5	5	5	4	3	3	4	6	6	8	4	5	4	4
F	18	1	3	3	2	3	3	3	4	4	4	4	6	4	4
G	26	21	20	20	17	18	17	17	15	14	14	13	13	14	14
H	0	3	2	2	0	2	1	1	2	3	5	13	10	11	12
I	36	22	22	21	24	26	27	27	24	23	22	23	23	23	21
J	41	7	9	10	14	19	19	18	19	19	18	19	19	18	17
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-23	-25	-25	-27	-24	-24	-22	-19	-20	-23	-19	-19	-15	-13
Total	201	45	45	45	43	55	54	55	60	57	60	84	85	85	83

Source: KBP Consulting, Inc. (December / November 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: Saturday, November 24, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
A	11	0	1	1	1	1	1	1	1	1	1	1	1	1	1
B	12	2	2	2	2	2	2	2	2	2	2	3	3	3	3
C	16	0	0	0	2	2	2	2	2	2	2	2	2	2	2
D	21	0	2	2	1	1	1	1	1	1	1	1	1	2	2
E	20	0	2	4	4	4	4	4	3	3	3	3	3	2	2
F	18	0	1	4	4	4	4	3	3	2	0	0	0	0	0
G	26	14	14	15	18	17	17	18	18	18	18	19	19	18	17
H	0	0	1	2	1	1	0	0	0	0	1	0	0	0	0
I	36	15	16	18	23	22	20	23	18	19	18	18	19	15	14
J	41	2	5	8	15	15	13	13	13	13	13	13	13	13	13
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-22	-24	-24	-17	-17	-18	-22	-20	-20	-22	-20	-19	-21	-21
Total	201	11	20	32	54	52	46	45	41	41	37	40	42	35	33

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
A	11	0	1	0	0	0	0	2	2	2	1	1	1	0	0
B	12	4	1	1	1	1	1	1	1	1	1	1	1	1	1
C	16	3	2	3	3	3	3	4	4	4	4	1	1	1	0
D	21	0	2	3	3	3	3	2	2	2	2	1	1	0	0
E	20	1	1	1	1	1	1	5	4	4	3	2	2	1	1
F	18	0	1	1	1	1	2	1	1	1	1	1	1	1	1
G	26	11	11	8	7	7	10	9	10	11	10	10	12	12	11
H	0	0	1	0	0	0	0	1	5	6	6	3	3	3	1
I	36	17	14	12	11	12	16	18	24	26	27	18	17	13	12
J	41	12	18	16	17	17	16	16	16	14	13	9	8	5	3
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-20	-19	-18	-20	-20	-20	-20	-18	-18	-19	-20	-22	-21	-20
Total	201	28	33	27	24	25	32	39	51	53	49	27	25	16	10

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: Sunday, November 25, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
A	11	0	0	1	1	1	1	0	0	0	0	0	0	0	0
B	12	1	1	1	1	1	1	1	2	2	2	2	1	1	2
C	16	0	0	0	0	0	0	0	0	0	0	1	0	0	0
D	21	1	2	1	1	1	1	2	4	4	4	2	1	2	1
E	20	2	2	2	2	2	2	3	3	4	4	4	4	4	3
F	18	0	0	0	1	2	2	2	1	2	2	2	1	0	0
G	26	16	13	15	17	17	18	12	14	15	14	13	14	11	10
H	0	0	0	0	2	3	3	2	1	2	2	0	0	0	0
I	36	15	14	17	20	20	19	18	18	19	21	17	18	18	17
J	41	8	9	8	10	10	9	12	14	14	14	16	16	16	14
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-18	-19	-18	-20	-20	-18	-17	-17	-19	-19	-16	-17	-15	-15
Total	201	25	22	27	35	37	38	35	40	43	43	41	38	37	32

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
A	11	1	1	1	1	1	1	1	1	0	0	0	0	0	0
B	12	2	2	3	2	3	3	2	3	2	1	0	0	0	0
C	16	0	0	1	0	0	0	0	0	0	0	0	0	0	0
D	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E	20	2	2	2	1	0	0	0	0	1	1	1	1	0	0
F	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G	26	10	8	8	6	7	6	8	12	12	12	13	14	14	14
H	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I	36	12	12	13	8	7	6	10	11	10	10	14	16	17	18
J	41	10	8	6	5	4	4	4	3	3	3	2	1	1	1
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-15	-8	-10	-10	-8	-8	-12	-12	-11	-11	-16	-18	-18	-20
Total	201	22	25	24	13	14	12	13	18	17	16	14	14	14	13

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: Monday, November 26, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
A	11	0	0	0	0	0	0	0	0	0	0	1	1	1	1
B	12	1	1	3	3	3	3	3	3	3	3	3	3	3	3
C	16	0	0	0	0	1	1	0	0	0	0	1	1	1	1
D	21	0	0	0	0	0	1	2	2	2	0	0	0	0	0
E	20	1	1	2	2	3	3	2	3	2	2	1	1	1	1
F	18	0	0	1	1	3	3	0	0	0	0	0	0	0	0
G	26	14	15	14	15	11	14	16	16	15	14	14	14	17	17
H	0	0	1	0	0	1	1	1	1	0	0	0	0	0	0
I	36	19	19	25	26	28	24	21	20	20	20	20	20	19	19
J	41	7	7	10	9	11	9	7	7	7	7	6	6	6	6
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-25	-26	-27	-28	-26	-25	-29	-29	-31	-31	-30	-30	-31	-31
Total	201	17	18	28	28	35	34	23	23	18	15	16	16	17	17

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
A	11	0	0	0	0										
B	12	5	5	4	1										
C	16	1	1	1	0										
D	21	1	1	0	0										
E	20	1	1	1	1										
F	18	1	1	0	0										
G	26	14	14	16	11										
H	0	2	2	0	0										
I	36	19	20	21	14										
J	41	8	6	6	1										
K	0	0	0	0	0										
Marina	-	-28	-27	-26	-28										
Total	201	24	24	23	0	0	0	0	0	0	0	0	0	0	0

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: Tuesday, November 27, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
A	11	0	0	0	0	0	0	2	2	1	1	1	1	1	1
B	12	1	1	1	1	2	2	3	3	2	2	6	6	4	4
C	16	0	0	2	2	0	0	1	1	0	0	2	2	2	2
D	21	0	2	2	0	3	3	3	3	3	2	1	1	1	2
E	20	2	2	4	6	8	6	6	6	6	5	5	6	4	4
F	18	0	2	2	3	1	2	2	2	1	1	1	0	0	0
G	26	12	13	14	16	19	21	23	23	19	20	20	20	20	20
H	0	0	0	0	0	2	0	0	0	0	0	1	1	0	0
I	36	17	26	25	26	25	25	19	19	22	23	22	21	20	20
J	41	2	5	5	6	6	6	5	4	5	5	5	5	5	5
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-27	-28	-28	-28	-30	-29	-29	-27	-26	-26	-25	-25	-21	-22
Total	201	7	23	27	32	36	36	35	36	33	33	39	38	36	36

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
A	11	1	1	0	0	0	0	0	1	0	0	0	0	0	0
B	12	4	5	3	2	2	2	2	3	2	2	2	2	2	2
C	16	3	3	1	2	2	0	1	0	1	0	0	0	0	0
D	21	2	2	3	2	1	0	1	1	0	0	0	0	0	0
E	20	2	3	3	2	1	2	2	2	0	0	0	1	1	1
F	18	0	1	1	1	2	0	1	1	0	0	0	0	0	0
G	26	14	14	15	15	15	10	11	14	14	15	14	15	15	15
H	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
I	36	20	22	23	22	21	18	19	15	12	14	14	14	14	14
J	41	4	5	4	5	6	3	3	4	3	2	2	2	1	1
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-13	-15	-14	-13	-13	-10	-10	-11	-10	-13	-13	-14	-14	-14
Total	201	37	42	39	38	37	25	30	31	22	20	19	20	19	19

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: Wednesday, November 28, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
A	11	0	0	0	0	0	0	0	0	1	1	0	0	0	0
B	12	1	1	1	2	2	2	2	2	5	6	5	5	4	4
C	16	0	0	0	1	1	2	2	2	10	10	4	4	2	3
D	21	0	0	0	1	1	1	1	1	4	4	0	0	0	2
E	20	1	1	1	3	3	3	3	3	5	5	4	2	0	1
F	18	0	0	0	3	4	4	4	4	2	2	1	1	1	1
G	26	13	16	16	18	19	20	23	22	22	23	22	22	20	20
H	0	0	1	1	0	0	0	0	0	3	3	3	3	3	2
I	36	15	24	25	21	22	22	23	23	18	19	19	19	20	21
J	41	4	8	8	13	13	12	12	12	10	10	10	10	10	10
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-25	-32	-32	-33	-34	-34	-35	-35	-32	-32	-31	-31	-29	-29
Total	201	9	19	20	29	31	32	35	34	48	51	37	35	31	35

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
A	11	0	0	1	2	2	5	6	7	8	7	7	6	3	1
B	12	5	3	3	2	3	2	2	5	6	4	5	4	4	0
C	16	3	3	4	5	7	8	12	12	11	13	11	9	7	1
D	21	2	2	2	4	6	9	13	14	13	13	12	9	4	0
E	20	1	6	4	6	12	13	15	15	15	12	11	8	3	0
F	18	1	1	1	2	4	4	5	5	4	4	3	3	2	0
G	26	19	16	15	14	12	13	14	14	15	15	14	13	13	14
H	0	2	3	3	4	4	8	10	9	8	9	8	8	7	2
I	36	20	21	23	20	20	21	20	20	19	20	18	16	15	15
J	41	10	13	20	21	22	22	23	23	23	21	22	20	16	6
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-30	-32	-33	-34	-30	-29	-28	-28	-25	-25	-23	-24	-21	-19
Total	201	33	36	43	46	62	76	92	98	97	93	88	72	53	20

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.619
Date: Thursday, November 29, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM
A	11	0	0	0	0	0	0	0	0	0	1	3	3	3	3
B	12	1	1	1	1	1	1	3	3	2	2	5	5	4	4
C	16	1	1	1	2	1	1	3	3	0	0	0	0	0	1
D	21	0	0	0	1	2	2	1	2	1	1	0	0	0	0
E	20	0	2	2	3	3	4	4	3	3	2	2	2	2	2
F	18	0	2	2	3	4	4	3	3	2	2	3	3	3	3
G	26	17	18	18	17	19	20	18	19	21	20	21	21	22	22
H	0	0	0	0	0	0	0	0	0	1	2	2	2	0	2
I	36	19	21	26	26	26	27	26	27	29	29	25	26	29	28
J	41	4	8	8	8	11	12	10	10	10	9	10	10	10	11
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-26	-29	-29	-28	-32	-34	-35	-36	-38	-38	-37	-37	-37	-37
Total	201	14	24	29	33	35	37	33	34	31	30	34	35	36	39

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM
A	11	2	3	3	0	0	1	2	2	2	2	2	2	1	1
B	12	2	2	5	3	3	3	2	2	2	1	1	1	1	0
C	16	1	1	3	2	6	7	7	6	7	8	5	4	3	4
D	21	1	1	1	1	1	0	0	0	1	1	1	1	0	0
E	20	2	3	5	5	6	7	7	7	6	5	5	4	4	3
F	18	2	3	3	3	3	3	3	3	3	2	2	2	2	1
G	26	16	17	17	16	21	20	14	15	16	17	15	16	15	15
H	0	0	0	0	0	1	3	4	5	5	4	3	4	3	1
I	36	23	24	22	21	18	17	14	20	19	19	19	20	20	19
J	41	8	7	17	16	19	18	16	15	14	13	10	11	11	5
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-25	-28	-30	-28	-30	-29	-25	-26	-24	-25	-22	-23	-24	-22
Total	201	32	33	46	39	48	50	44	49	51	47	41	42	36	27

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P18.519
Date: Friday, November 30, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
A	11	0	0	0	0	0	0	0	2	4	4	4	3	2	0
B	12	0	0	0	1	0	0	0	2	3	2	2	2	1	1
C	16	1	1	1	2	2	2	3	4	6	3	4	4	3	2
D	21	0	1	2	3	3	3	4	3	3	4	4	3	4	3
E	20	0	2	2	3	4	5	4	3	3	3	3	2	3	3
F	18	0	0	0	1	1	1	1	0	0	0	0	1	1	0
G	25	18	20	24	25	24	24	22	21	20	20	21	20	22	21
H	0	0	1	1	1	1	1	1	2	2	3	2	1	0	1
I	36	16	21	23	24	21	22	23	27	26	22	21	22	20	21
J	41	3	4	5	7	9	9	9	8	6	8	8	10	9	10
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-25	-26	-26	-36	-34	-35	-32	-30	-28	-28	-28	-29	-29	-28
Total	201	13	24	32	31	31	32	35	42	45	41	41	39	36	34

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
A	11	2	3	1	1	1	1	3	4	4	4	4	4	4	1
B	12	0	1	0	0	0	0	1	2	2	2	2	2	2	0
C	16	3	4	1	1	1	1	1	4	4	4	4	4	3	0
D	21	2	2	4	3	3	3	1	1	1	1	1	1	1	0
E	20	4	5	3	3	3	3	5	5	4	4	4	4	4	0
F	18	0	1	0	0	0	0	0	0	0	0	0	0	0	0
G	26	18	19	18	16	17	17	17	18	18	17	17	18	18	18
H	0	2	2	1	0	1	2	3	8	9	8	7	8	6	2
I	36	27	29	30	28	25	26	24	25	24	20	22	21	20	19
J	41	10	13	19	23	25	25	25	27	26	24	24	21	20	10
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-29	-32	-37	-35	-36	-37	-36	-35	-34	-31	-31	-30	-30	-26
Total	201	39	47	40	40	40	41	44	59	58	53	54	53	48	24

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: Saturday, December 1, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
A	11	0	0	2	2	2	2	5	6	6	10	10	8	7	5
B	12	0	0	2	3	3	3	9	10	10	11	11	10	9	9
C	16	3	3	11	12	11	11	10	9	10	13	13	14	13	12
D	21	1	1	2	2	3	3	5	6	9	17	15	15	14	12
E	20	7	8	9	9	6	5	10	9	9	16	16	14	14	15
F	18	2	3	4	4	1	1	2	1	2	6	6	5	4	4
G	26	19	20	21	21	20	19	22	23	22	22	23	22	21	20
H	0	1	1	1	2	3	2	3	4	3	0	0	1	2	1
I	36	16	16	17	18	19	18	16	15	15	20	21	20	22	21
J	41	7	7	9	10	13	14	14	14	15	13	15	14	16	16
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-29	-29	-30	-31	-30	-32	-33	-33	-32	-31	-32	-30	-32	-31
Total	201	27	30	48	52	51	46	63	64	69	97	93	93	90	84

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
A	11	7	7	7	7	6	6	6	6	6	6	4	4	2	1
B	12	6	7	7	7	7	7	7	7	7	7	6	3	2	1
C	16	10	11	11	12	13	13	13	13	13	13	12	9	8	8
D	21	9	9	9	9	10	10	10	10	10	10	9	8	4	4
E	20	15	9	9	9	9	9	8	8	8	7	7	6	2	2
F	18	12	9	9	9	9	9	8	8	8	8	8	6	6	6
G	26	22	20	20	22	22	21	21	21	21	20	20	19	18	18
H	0	1	2	2	4	4	4	4	4	4	3	2	2	2	0
I	36	16	18	19	22	24	18	14	12	12	11	10	12	12	12
J	41	14	14	14	13	13	23	23	23	23	22	20	15	14	14
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-29	-28	-28	-30	-27	-27	-27	-28	-28	-27	-28	-24	-28	-22
Total	201	83	78	79	84	90	93	87	84	84	80	70	60	42	44

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: Sunday, December 2, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
A	11	0	0	0	1	1	1	1	1	1	1	1	1	1	2
B	12	0	0	0	0	0	3	4	4	6	4	4	7	9	10
C	16	1	1	1	1	2	2	4	5	6	5	5	6	8	9
D	21	1	1	1	2	1	2	1	1	1	1	1	1	2	4
E	20	1	1	1	1	2	3	3	2	2	1	1	5	5	4
F	18	0	0	0	0	0	1	1	1	1	1	1	1	1	0
G	26	21	20	20	20	21	24	25	27	27	25	26	27	25	23
H	0	0	0	0	0	0	0	1	1	1	2	2	1	1	1
I	36	17	16	16	17	16	20	20	21	23	25	25	25	21	25
J	41	10	11	11	12	15	17	15	15	15	15	14	13	13	13
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-20	-21	-21	-22	-20	-22	-22	-22	-21	-22	-26	-25	-26	-27
Total	201	31	29	29	32	38	51	53	56	62	58	54	62	60	64

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
A	11	1	1	7	7	6	6	6	6	6	6	4	4	3	0
B	12	10	10	7	6	6	6	6	6	6	6	6	4	2	1
C	16	8	8	10	10	11	12	12	11	10	10	10	8	6	4
D	21	4	6	9	9	10	10	10	10	9	10	8	6	2	2
E	20	6	7	9	9	10	9	9	8	8	7	7	6	4	2
F	18	0	0	10	9	9	9	9	9	8	7	7	6	4	4
G	26	27	21	20	20	20	18	18	19	18	20	20	20	20	20
H	0	0	0	2	4	4	4	4	4	3	2	2	2	1	0
I	36	26	25	19	19	20	18	16	15	12	12	12	12	12	13
J	41	14	14	13	13	13	16	18	18	20	18	17	15	14	14
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-24	-24	-22	-20	-21	-19	-18	-20	-20	-22	-22	-24	-20	-22
Total	201	72	68	84	86	88	89	90	86	80	76	71	59	48	38

Source: KBP Consulting, Inc. (November / December 2018)

KBP Consulting, Inc.
8400 N. University Drive
Suite 309
Tamarac, Florida 33321
(954) 560-7103

Project: Lighthouse Point Yacht Club
Analyst: KBP
Project No.: P16.519
Date: Monday, December 3, 2018
Time Period: 8:00 AM to 10:00 PM

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		8:00 AM to 8:30 AM	8:30 AM to 9:00 AM	9:00 AM to 9:30 AM	9:30 AM to 10:00 AM	10:00 AM to 10:30 AM	10:30 AM to 11:00 AM	11:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 12:30 PM	12:30 PM to 1:00 PM	1:00 PM to 1:30 PM	1:30 PM to 2:00 PM	2:00 PM to 2:30 PM	2:30 PM to 3:00 PM
A	11	0	0	0	0	0	0	0	0	0	0	0	0	1	1
B	12	1	2	3	3	2	3	3	3	5	5	5	4	4	4
C	16	1	1	3	3	4	4	4	3	3	3	2	0	0	0
D	21	0	0	1	1	0	0	0	0	0	0	0	0	0	0
E	20	0	0	4	4	3	3	3	3	3	2	0	0	0	0
F	18	0	0	3	4	6	6	5	5	3	3	0	0	0	0
G	26	19	20	16	16	13	13	14	15	15	13	12	12	12	12
H	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0
I	36	23	24	27	27	23	22	21	22	20	19	25	24	22	19
J	41	7	8	11	12	13	11	10	10	8	7	7	7	9	10
K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marina	-	-38	-38	-36	-36	-38	-34	-33	-32	-29	-28	-30	-28	-26	-24
Total	201	13	18	33	33	27	29	28	30	28	24	21	19	22	22

Parking Zone	Number of Available Spaces	Time Intervals (Number of Parked Vehicles)													
		3:00 PM to 3:30 PM	3:30 PM to 4:00 PM	4:00 PM to 4:30 PM	4:30 PM to 5:00 PM	5:00 PM to 5:30 PM	5:30 PM to 6:00 PM	6:00 PM to 6:30 PM	6:30 PM to 7:00 PM	7:00 PM to 7:30 PM	7:30 PM to 8:00 PM	8:00 PM to 8:30 PM	8:30 PM to 9:00 PM	9:00 PM to 9:30 PM	9:30 PM to 10:00 PM
A	11	0	1	0	0	0									
B	12	4	4	4	4	2									
C	16	0	1	0	0	0									
D	21	0	0	1	1	0									
E	20	1	2	2	2	0									
F	18	0	0	0	0	0									
G	26	14	13	11	12	14									
H	0	2	3	4	3	0									
I	36	17	18	16	16	18									
J	41	7	7	5	4	2									
K	0	0	0	0	0	0									
Marina	-	-21	-20	-19	-20	-20									
Total	201	24	29	24	22	16	0	0	0	0	0	0	0	0	0

Source: KBP Consulting, Inc. (November / December 2018)

Lighthouse Point Yacht Club

2701 NE 42nd Street
Lighthouse Point, Florida

DRIVEWAY QUEUING EVALUATION



prepared for:
Paterson Project Management, Inc.

KBP CONSULTING, INC.

March 2020

Lighthouse Point Yacht Club

2701 NE 42nd Street

Lighthouse Point, Florida

Driveway Queuing Evaluation

March 2020

Prepared for:
Paterson Project Management, Inc.

Prepared by:
KBP Consulting, Inc.
8400 N. University Drive, Suite 309
Tamarac, Florida 33321
Phone: (954) 560-7103

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INTRODUCTION

The Lighthouse Point Yacht Club is an existing private clubhouse and marina located on the north side of NE 42nd Street between NE 27th Terrace and NE 30th Avenue in the City of Lighthouse Point, Broward County, Florida. More specifically, the site is located at 2701 NE 42nd Street. The location of the project site is illustrated in Figure 1 on the following page.

In response to an inquiry from the City of Lighthouse Point, KBP Consulting, Inc. has been retained by Paterson Project Management, Inc. to conduct a driveway queuing evaluation that addresses the likelihood that outbound vehicles (i.e. exiting the yacht club property) will obstruct the residential driveways in the immediate proximity of a proposed barrier gate to be located at the yacht club's driveway connection to NE 42nd Street and NE 27th Terrace. This study addresses the vehicular trip generation characteristics of both the yacht club and the proposed residential units and the anticipated queuing characteristics at the gated egress point.

This queuing study is divided into four (4) sections, as listed below:

1. Inventory
2. Trip Generation
3. Driveway Queuing Evaluation
4. Summary & Conclusions



KBP
CONSULTING, INC.

Project Location Map

FIGURE 1
Lighthouse Point Yacht Club
Lighthouse Point, Florida

INVENTORY

Existing Land Use and Access

The subject +/- 9.5-acre site for the Lighthouse Point Yacht Club consists of a clubhouse, marina, fitness facility, pool, and tennis courts. The total building area for the existing facilities is approximately 39,500 square feet. Vehicular access to the site is provided via one (1) driveway connection at the intersection of NE 42nd Street and NE 27th Terrace.

Proposed Land Uses and Access

The proposed project will involve the redevelopment of the clubhouse and associated amenities (i.e. fitness facilities, pool, tennis courts, etc.) and the construction of 22 residential dwelling units (20 townhomes and 2 single-family dwelling units). The overall building area for the club will be increasing to approximately 49,500 square feet – or an increase of slightly more than 25%. It should be noted that the marina portion of the yacht club will remain as is.

Vehicular access to the site will be provided via the existing driveway connection at NE 42nd Street and NE 27th Terrace. Barrier gates are proposed for both the ingress and egress lanes serving the property. The gate for the ingress lane will be located 80 to 100 feet north of NE 42nd Street. And, the gate for the egress lane will be located just north of the property line along NE 42nd Street. Both gates will be activated immediately upon the presence of an approaching vehicle. In other words, no other means of gate activation (i.e. transponder, bar code, keypad entry, etc.) will be required to enter or exit the yacht club property. The preliminary site plan for the Lighthouse Point Yacht Club property is presented in Appendix A of this report.

TRIP GENERATION

The trip generation analysis for the Lighthouse Point Yacht Club project was based upon actual traffic counts for the existing yacht club and information contained in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual (10th Edition)* for the proposed residential components of the development. According to the subject ITE manual, the most appropriate land use categories for the proposed residential development are Land Use #210 – Single-Family Detached Housing and Land Use #220 – Multifamily Housing (Low-Rise). The trip generation rates / equations used to determine the residential vehicle trips associated with this analysis are presented below and excerpts from the ITE report are presented in Appendix B.

ITE Land Use #210 – Single-Family Detached Housing

- Weekday: $T = 9.44 (X)$
where T = number of trips and X = number of dwelling units
- AM Peak Hour: $T = 0.71 (X) + 4.80$ (25% in / 75% out)
- PM Peak Hour: $\text{Ln}(T) = 0.96 \text{Ln}(X) + 0.20$ (63% in / 37% out)

ITE Land Use #220 – Multifamily Housing (Low-Rise)

- Weekday: $T = 7.32 (X)$
where T = number of trips and X = number of dwelling units
- AM Peak Hour: $\text{Ln}(T) = 0.95 \text{Ln}(X) - 0.51$ (23% in / 77% out)
- PM Peak Hour: $\text{Ln}(T) = 0.89 \text{Ln}(X) - 0.02$ (63% in / 37% out)

Traffic counts for the existing Lighthouse Point Yacht Club were performed at the entry / exit point (i.e. the club's driveway connection to NE 42nd Street) during a typical week (i.e. seven consecutive days) in April 2018. The purpose of these counts was to quantify the weekday and peak hour trip generation characteristics of the club. The results of this effort are also presented in Appendix B. In order to reflect the additional traffic associated with the redevelopment of the club facilities, an increase of 30% has been applied to the recorded traffic volumes. This growth rate has been developed based upon the increase in the dining / banquet facilities (i.e. 25%), an increase of 25% in the overall building area for the club, and a projected increase of 30% in the club membership numbers.

Table 1 below summarizes the vehicle trips associated with the existing yacht club and the proposed redevelopment of the Lighthouse Point Yacht Club in the City of Lighthouse Point, Florida.

Table 1 Trip Generation Summary Lighthouse Point Yacht Club - Lighthouse Point, Florida								
Land Use	Size	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
<i>Existing</i> Yacht Club	9.50 Acres	668	24	9	33	29	31	60
Sub Total		668	24	9	33	29	31	60
<i>Proposed</i> Yacht Club (+30% Growth Factor)	9.50 Acres	868	32	11	43	38	40	78
Single-Family Detached Housing	2 DU	19	2	4	6	1	1	2
Multifamily Housing (Low-Rise)	20 DU	146	2	8	10	9	5	14
Sub Total		1,033	36	23	59	48	46	94
Difference (Proposed - Existing)		365	12	14	26	19	15	34

Compiled by: KBP Consulting, Inc. (March 2020).

Sources: Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition) for the residential component and traffic counts performed by Traffic Survey Specialists, Inc. for the existing yacht club.

As indicated in Table 1 above, the net new external trips anticipated to be generated by the proposed redevelopment of the Lighthouse Point Yacht Club consists of 365 daily vehicle trips, 26 vehicle trips during the weekday AM peak hour (12 inbound and 14 outbound) and 34 vehicle trips during the weekday PM peak hour (19 inbound and 15 outbound). For the purposes of this queuing analysis, the total number of exiting vehicles during the AM peak hour is projected to be 23 and the number of exiting vehicles during the PM peak hour is projected to be 46.¹

¹ It is acknowledged that the Lighthouse Point Yacht Club will host various events including wedding receptions, parties, and fundraisers to name a few, that may have a higher exiting peak hour volume than considered in this analysis. These events are considered to be atypical and infrequent for the purposes of this queuing analysis. As such, this analysis is based upon typical operational characteristics that will occur for a majority of the time.

DRIVEWAY QUEUING EVALUATION

The trip generation analysis for this site indicates that the peak outbound traffic volume will typically occur during the PM peak hours with 46 vehicles. (It is important to note that there will be occasional events at the yacht club that may generate more than 46 exiting vehicles within a one-hour period. However, these events are considered to be infrequent and the impacts will have a short duration.)

Based upon our review of the technical specifications for the proposed barrier gate system, the amount of time required for the gate to raise from a closed position to a fully open position will be between 3.0 seconds and 5.5 seconds (depending upon the final length and weight of the gate). For the purposes of this analysis, an opening time of 5.5 seconds has been assumed. As noted previously, this gate will open automatically based upon the presence of an approaching vehicle. Therefore, no additional processing or activation time is required for a vehicle to exit the site. It is also very important to note that conflicting vehicles at this intersection (i.e. vehicles approaching from the east on NE 42nd Street) are infrequent. Therefore, delays for exiting vehicles will be minimal. As a result of this condition, the presence of the proposed barrier gate will essentially act as a traffic calming device to slow vehicles as they approach the intersection at NE 42nd Street and NE 27th Terrace and exit the site. In its entirety, the operational characteristics of the exit lane and the proposed barrier gate indicate that it is unlikely that vehicle queues will materialize at this location.

In spite of these conditions, a statistical queuing analysis has been conducted for the proposed barrier gate system that will control the egress lane for the Lighthouse Point Yacht Club. This analysis has been conducted in accordance with the procedures presented in the Institute of Transportation Engineers (ITE) *Transportation and Land Development* publication. Please see applicable excerpts in Appendix C.

Assuming a total processing time of 11.0 seconds per exiting vehicle (i.e. 5.5 seconds for the gate to open and 5.5 seconds for the gate to close after each vehicle) and a 99% confidence level, it is projected that the egress lane will experience queues of no more than one (1) vehicle. (Please see calculations presented in Appendix D.) Additionally, it should be noted that the term “queue” suggests that vehicles are stopped for an extended period of time. In this case, processing times are low and it is unlikely that exiting vehicles will actually come to a complete stop as the gate opens. Therefore, the exposure time (or, the time that a driveway is obstructed) is further reduced.

A review of the proposed site plan reveals that the typical maximum “queue” of one (1) vehicle will only obstruct the driveway for the southernmost townhome and the duration of this condition will be minimal. As such, the delays encountered by motorists attempting to exit this driveway will be negligible and a relatively rare inconvenience.

SUMMARY & CONCLUSIONS

The Lighthouse Point Yacht Club is an existing private clubhouse and marina located on the north side of NE 42nd Street between NE 27th Terrace and NE 30th Avenue in the City of Lighthouse Point, Broward County, Florida. More specifically, the site is located at 2701 NE 42nd Street.

The subject +/- 9.5-acre site for the Lighthouse Point Yacht Club currently consists of a clubhouse, marina, fitness facility, pool, and tennis courts. The proposed project will involve the redevelopment of the clubhouse and associated amenities (i.e. fitness facilities, pool, tennis courts, etc.) and the construction of 22 residential dwelling units (20 townhomes and 2 single-family dwelling units). Vehicular access to the site will be provided via the existing driveway connection at NE 42nd Street and NE 27th Terrace. Barrier gates will be provided on both the ingress and egress lanes serving the property.

The trip generation analysis for this site indicates that the peak outbound traffic volume will typically occur during the PM peak hours with 46 vehicles. Based upon the queuing analysis conducted in accordance with ITE procedures, it is projected that the egress lane will experience queues of no more than one (1) vehicle. Additionally, it should be noted that the term “queue” suggests that vehicles are stopped for an extended period of time. In this case, processing times are low and it is unlikely that exiting vehicles will actually come to a complete stop as the gate opens. Therefore, the exposure time (or, the time that a driveway is obstructed) is further reduced.

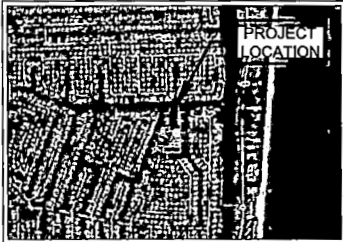
A review of the proposed site plan reveals that the typical maximum “queue” of one (1) vehicle will only obstruct the driveway for the southernmost townhome and the duration of this condition will be minimal. As such, the delays encountered by motorists attempting to exit this driveway will be negligible and a relatively rare inconvenience.

Appendix A

Lighthouse Point Yacht Club

Preliminary Site Plan

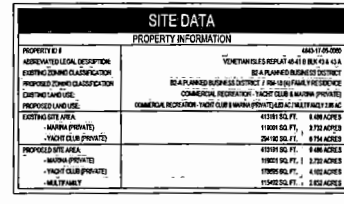
SITE NOTES	
• SEE ATTACHED SURVEY FOR LEGAL DESCRIPTION • VERIFY PROPERTY LINE DIMENSIONS WITH SURVEY • SEE CIVIL AND LANDSCAPE PLANS FOR ANY ADDITIONAL INFORMATION REGARDING HARDSCAPE, DRAINAGE, POOL, CONSTRUCTION AND DESIGN AND ANY OTHER SITE SPECIFIC INFORMATION • SITE DRAINAGE BY CIVIL ENGINEER	



LOCATION MAP
NOT TO SCALE

IMPORTANT NOTE

SITE CALCULATIONS HAVE NOT BEEN TOTALLY PROVIDED BASED ON CURRENT LIGHTHOUSE POINT LAND DEVELOPMENT REGULATIONS. PROPERTY OWNER ALONG WITH ATTORNEY HAVE BEEN WORKING WITH LIGHTHOUSE POINT ZONING DEPARTMENT IN AN EFFORT TO UPDATE THE LAND DEVELOPMENT REGULATIONS WHICH THESE CALCULATIONS HAVE BEEN BASED OFF OF FOR WHEN THE REGULATIONS GET AMENDED TO BE RECORD ORDINANCES FOR USE.



PROPOSED DEVELOPMENT

[illegible]

MULTIFAMILY (TOWNHOUSE UNITS)

[illegible]

PROPOSED SITE PLAN
SCALE: 1" = 30'-0"

5

SP-1

Appendix B

Trip Generation Information

ITE Trip Generation Manual (10th Edition) Excerpts

Land Use: 210

Single-Family Detached Housing

Description

Single-family detached housing includes all single-family detached homes on individual lots. A typical site surveyed is a suburban subdivision.

Additional Data

The number of vehicles and residents had a high correlation with average weekday vehicle trip ends. The use of these variables was limited, however, because the number of vehicles and residents was often difficult to obtain or predict. The number of dwelling units was generally used as the independent variable of choice because it was usually readily available, easy to project, and had a high correlation with average weekday vehicle trip ends.

This land use included data from a wide variety of units with different sizes, price ranges, locations, and ages. Consequently, there was a wide variation in trips generated within this category. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

Single-family detached units had the highest trip generation rate per dwelling unit of all residential uses because they were the largest units in size and had more residents and more vehicles per unit than other residential land uses; they were generally located farther away from shopping centers, employment areas, and other trip attractors than other residential land uses; and they generally had fewer alternative modes of transportation available because they were typically not as concentrated as other residential land uses.

Time-of-day distribution data for this land use are presented in Appendix A. For the six general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:00 and 5:00 p.m., respectively. For the two sites with Saturday data, the overall highest vehicle volume was counted between 3:00 and 4:00 p.m. For the one site with Sunday data, the overall highest vehicle volume was counted between 10:15 and 11:15 a.m.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Connecticut, Delaware, Illinois, Indiana, Maryland, Minnesota, Montana, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Vermont, and Virginia.

Source Numbers

100, 105, 114, 126, 157, 167, 177, 197, 207, 211, 217, 267, 275, 293, 300, 319, 320, 356, 357, 367, 384, 387, 407, 435, 522, 550, 552, 579, 598, 601, 603, 614, 637, 711, 716, 720, 728, 735, 868, 903, 925, 936

Single-Family Detached Housing (210)

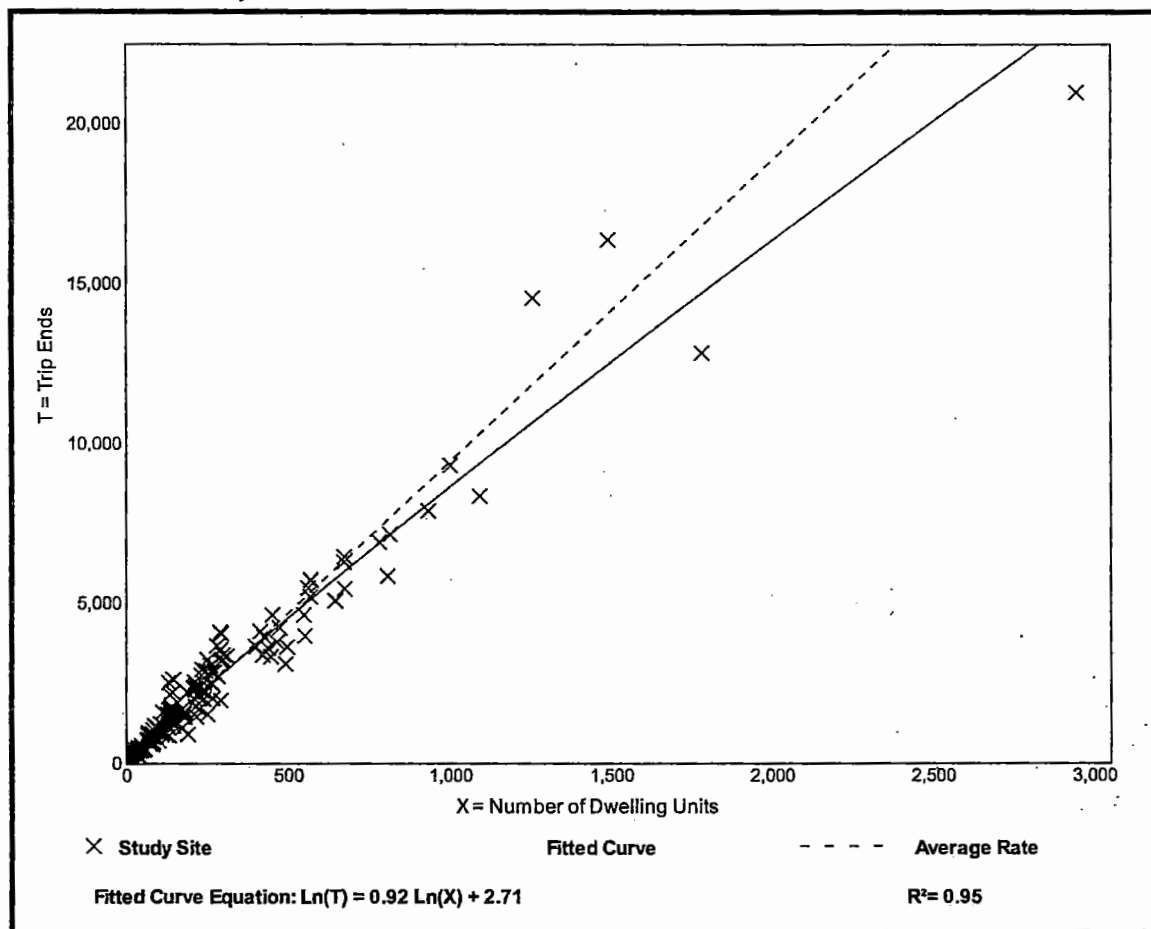
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 159
Avg. Num. of Dwelling Units: 264
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.44	4.81 - 19.39	2.10

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 173

Avg. Num. of Dwelling Units: 219

Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate

Range of Rates

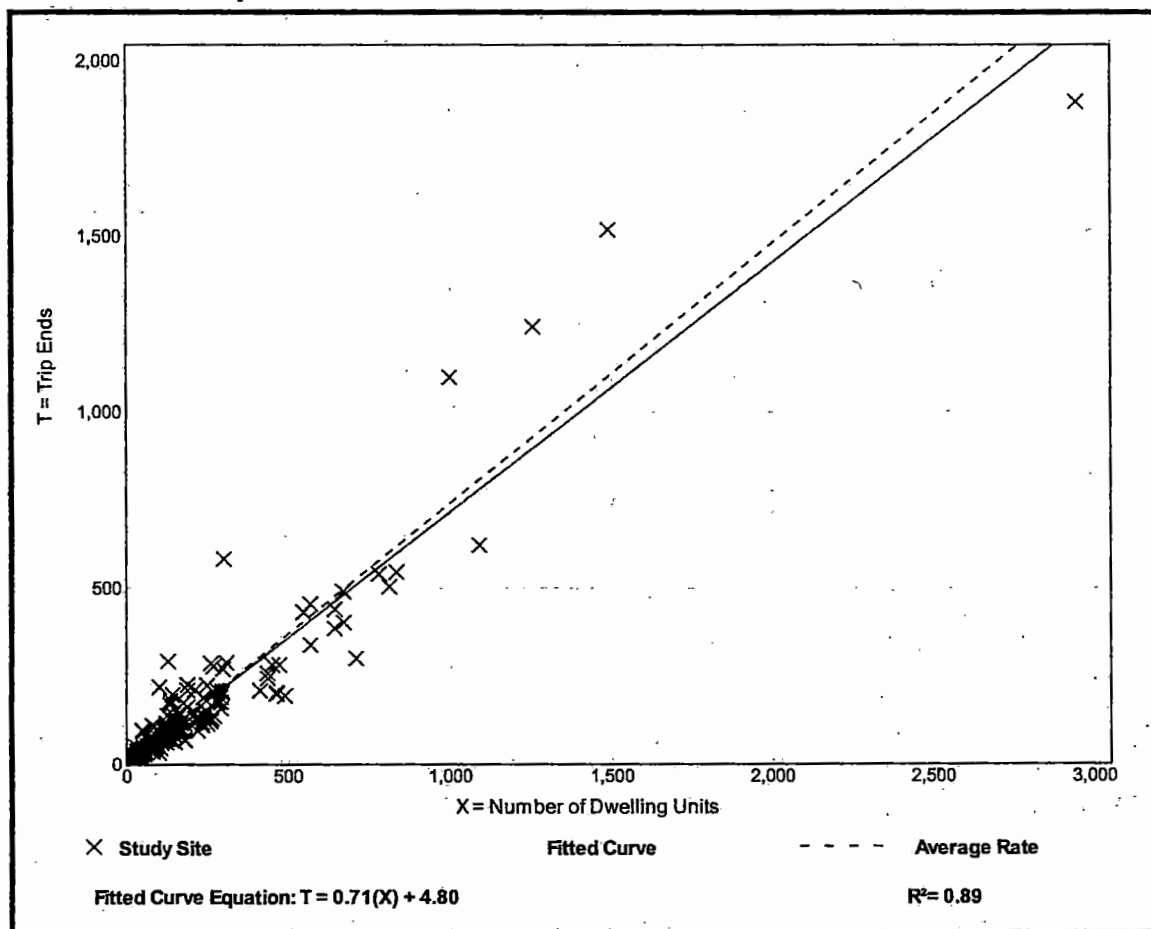
Standard Deviation

0.74

0.33 - 2.27

0.27

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 190

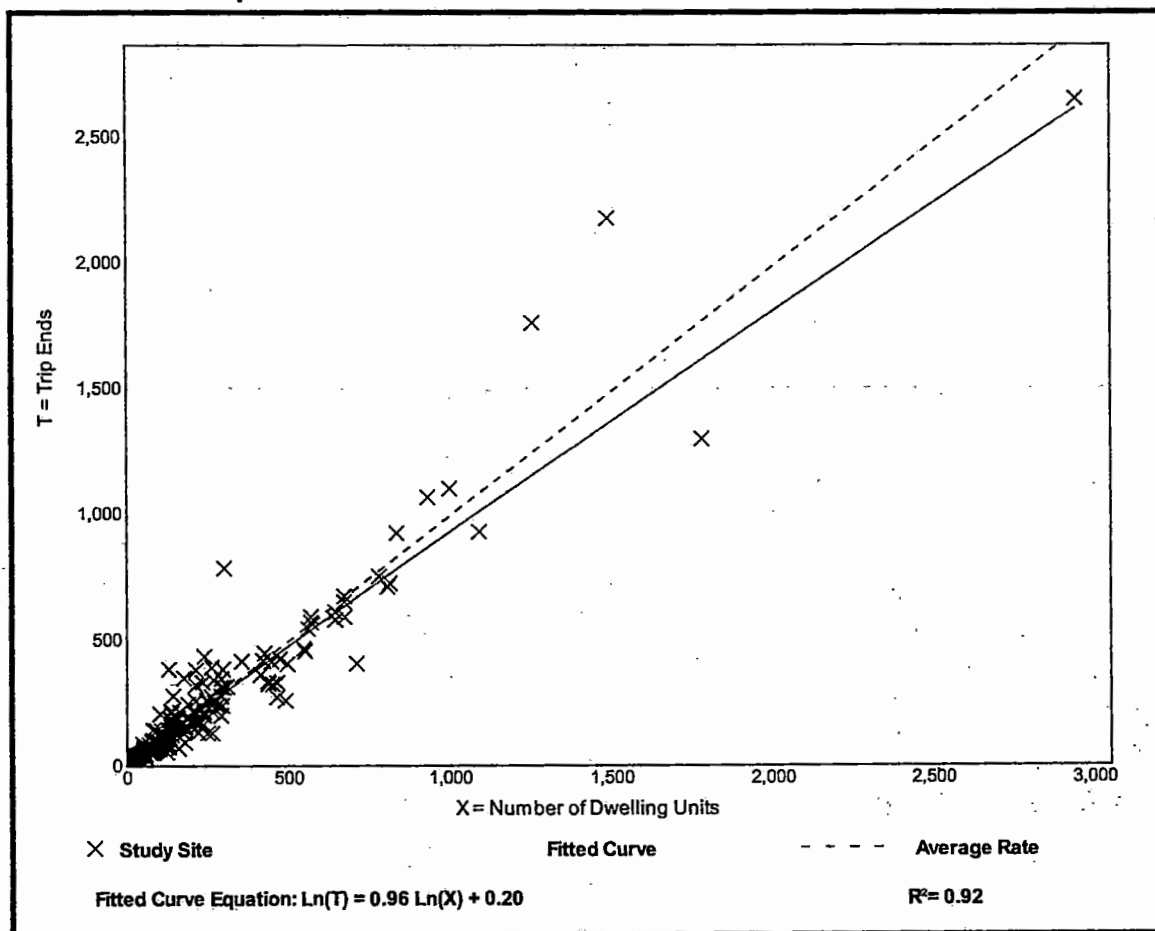
Avg. Num. of Dwelling Units: 242

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.99	0.44 - 2.98	0.31

Data Plot and Equation



Land Use: 220

Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have one or two levels (floors). Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), and off-campus student apartment (Land Use 225) are related land uses.

Additional Data

In prior editions of *Trip Generation Manual*, the low-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of vehicle trip data found no clear differences in trip making patterns between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

This land use included data from a wide variety of units with different sizes, price ranges, locations, and ages. Consequently, there was a wide variation in trips generated within this category. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

Time-of-day distribution data for this land use are presented in Appendix A. For the 10 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:45 and 5:45 p.m., respectively. For the one site with Saturday data, the overall highest vehicle volume was counted between 9:45 and 10:45 a.m. For the one site with Sunday data, the overall highest vehicle volume was counted between 11:45 a.m. and 12:45 p.m.

For the one dense multi-use urban site with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:00 and 8:00 a.m. and 6:15 and 7:15 p.m., respectively.

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

The average numbers of person trips per vehicle trip at the five general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.13 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.21 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, District of Columbia, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Minnesota, New Jersey, New York, Ontario, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Virginia, and Washington.

It is expected that the number of bedrooms and number of residents are likely correlated to the number of trips generated by a residential site. Many of the studies included in this land use did not indicate the total number of bedrooms. To assist in the future analysis of this land use, it is important that this information be collected and included in trip generation data submissions.

Source Numbers

168, 187, 188, 204, 211, 300, 305, 306, 319, 320, 321, 357, 390, 412, 418, 525, 530, 571, 579, 583, 864, 868, 869, 870, 896, 903, 918, 946, 947, 948, 951

Multifamily Housing (Low-Rise) (220)

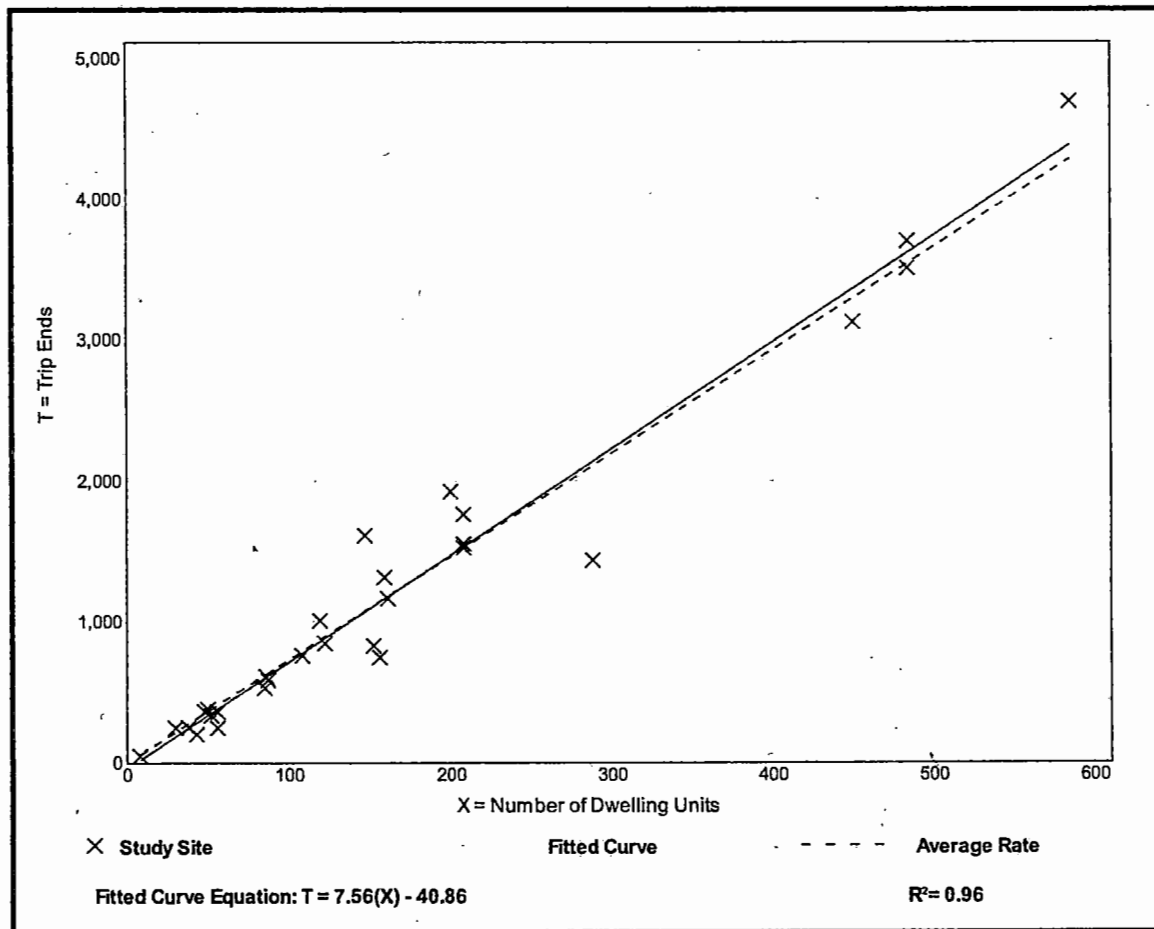
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 29
Avg. Num. of Dwelling Units: 168
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.32	4.45 - 10.97	1.31

Data Plot and Equation



Multifamily Housing (Low-Rise) (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 42

Avg. Num. of Dwelling Units: 199

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate

Range of Rates

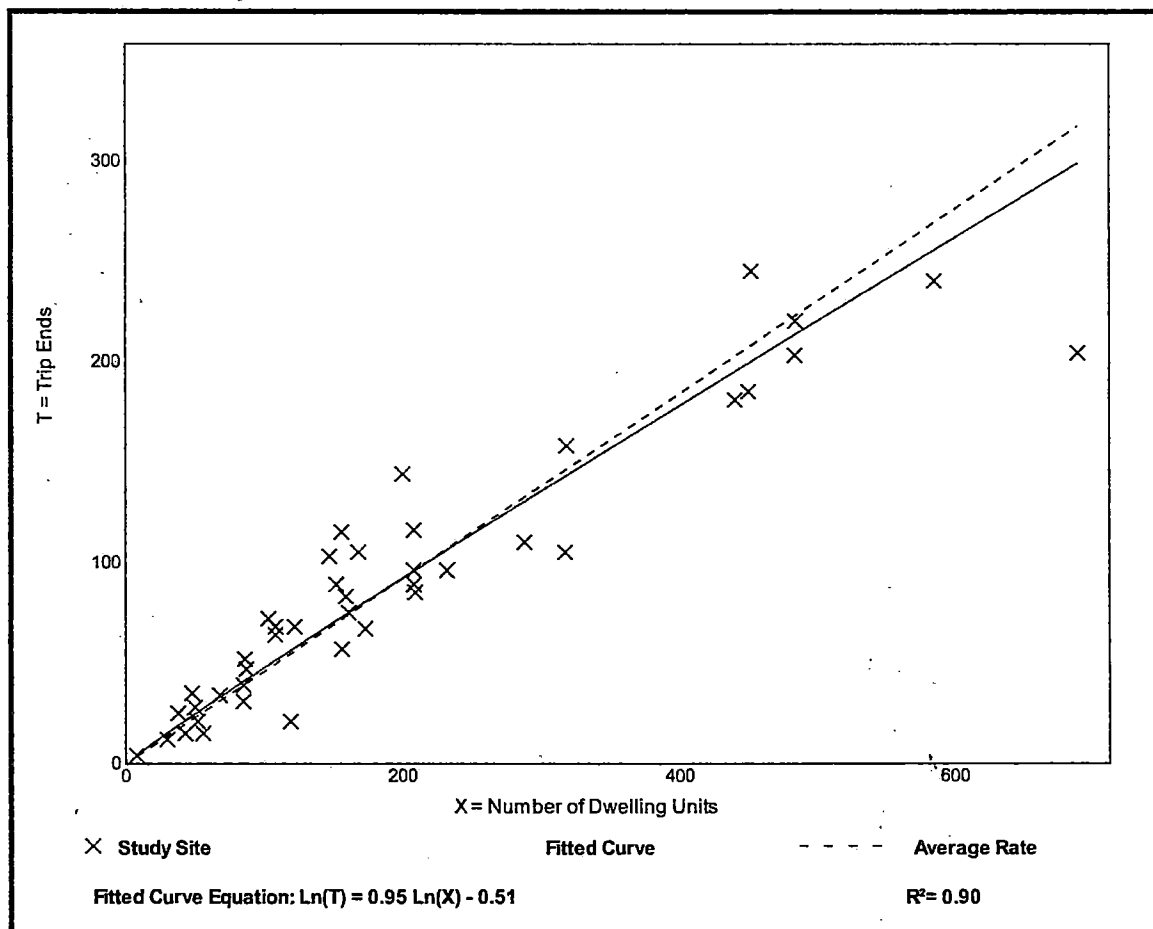
Standard Deviation

0.46

0.18 - 0.74

0.12

Data Plot and Equation



Multifamily Housing (Low-Rise) (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 50

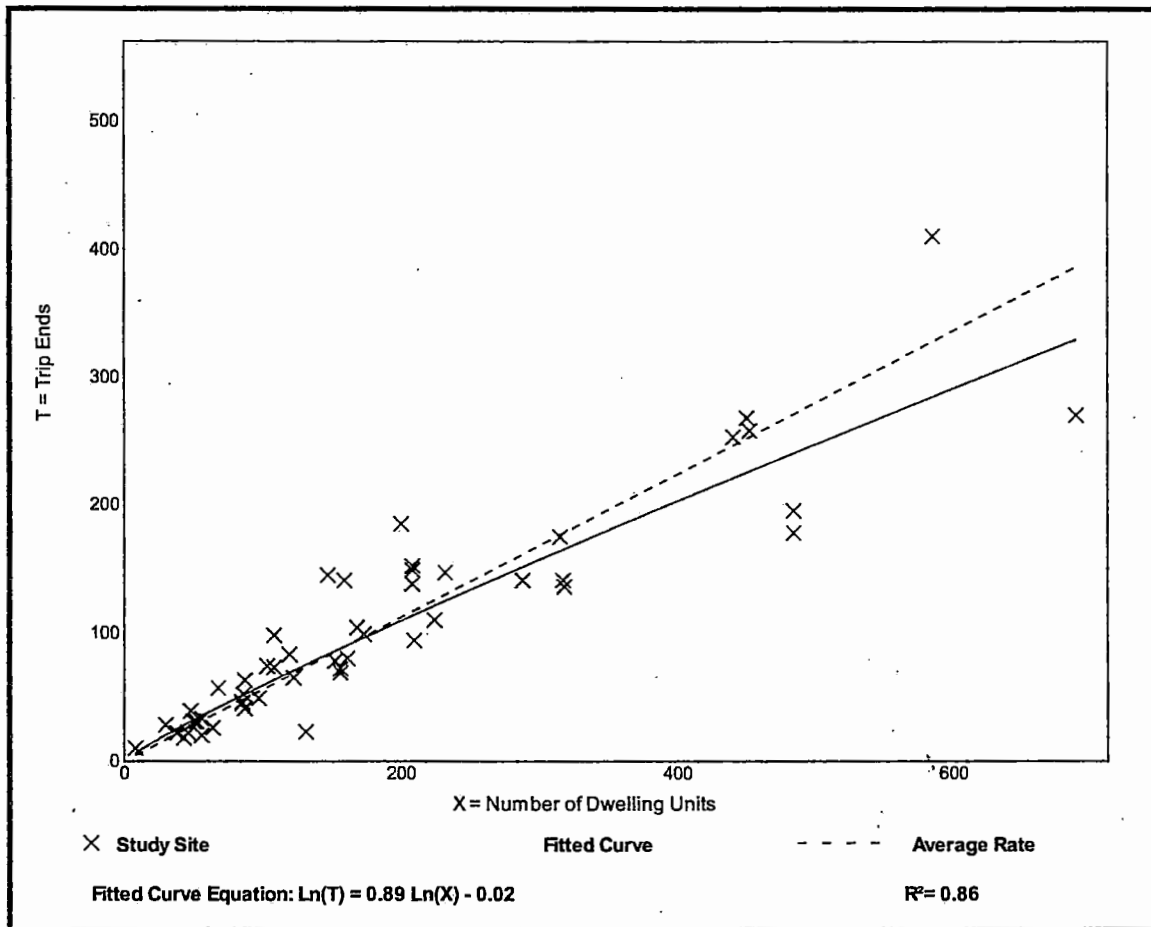
Avg. Num. of Dwelling Units: 187

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.56	0.18 - 1.25	0.16

Data Plot and Equation



Lighthouse Point Yacht Club

Existing Trip Generation Data

KBP CONSULTING, INC.

MEMORANDUM

To: Jessica Easterling

From: Karl Peterson, P.E.

Date: May 5, 2018

Subject: Lighthouse Point Yacht Club – Lighthouse Point, Florida
Traffic Count Memorandum

In preparation for upcoming meetings and analyses, a traffic count has been performed at the entrance to the Lighthouse Point Yacht Club on NE 27th Terrace in Lighthouse Point, Broward County, Florida. The purpose of this data collection effort was to quantify the number of vehicles entering and exiting the property on a weekly, daily, and hourly basis. This count was performed for a 7-day period beginning on Monday, April 16, 2018 and concluding on Sunday, April 22, 2018. The raw traffic data is presented in Attachment A to this memorandum and a summary is presented below.

Daily Traffic Volumes:

- Monday (4/16): Total Volume = 487 (248 in / 239 out)
- Tuesday (4/17): Total Volume = 507 (255 in / 252 out)
- Wednesday (4/18): Total Volume = 819 (410 in / 409 out)
- Thursday (4/19): Total Volume = 674 (340 in / 334 out)
- Friday (4/20): Total Volume = 851 (428 in / 423 out)
- Saturday (4/21): Total Volume = 830 (418 in / 412 out)
- Sunday (4/22): Total Volume = 309 (148 in / 161 out)
- **Week (4/16 – 4/22): Total Volume = 4,477 (2,247 in / 2,230 out)**
- **Weekday Average: 668 vehicle trips**

Weekday AM Peak Hour (7:00 – 9:00):

- Peak Volume: 39 Vehicle Trips (32 in / 7 out) on Tuesday (4/17)
- Weekly Average: 33 vehicle trips (74% in / 26% out)

Weekday PM Peak Hour (4:00 – 6:00):

- Peak Volume: 86 Vehicle Trips (42 in / 44 out) on Friday (4/20)
- Weekly Average: 60 vehicle trips (49% in / 51% out)

Attachment A

Lighthouse Point Yacht Club – Traffic Counts

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Monday, 04/16/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
00:00 - 00:14	0	1	1
00:15 - 00:29	0	0	0
00:30 - 00:44	0	0	0
00:45 - 00:59	0	0	0
01:00 - 01:14	1	1	2
01:15 - 01:29	0	0	0
01:30 - 01:44	0	0	0
01:45 - 01:59	0	0	0
02:00 - 02:14	0	0	0
02:15 - 02:29	0	0	0
02:30 - 02:44	0	0	0
02:45 - 02:59	0	0	0
03:00 - 03:14	0	0	0
03:15 - 03:29	0	0	0
03:30 - 03:44	0	0	0
03:45 - 03:59	0	0	0
04:00 - 04:14	0	0	0
04:15 - 04:29	0	0	0
04:30 - 04:44	0	0	0
04:45 - 04:59	0	0	0
05:00 - 05:14	0	0	0
05:15 - 05:29	0	0	0
05:30 - 05:44	0	0	0
05:45 - 05:59	2	0	2
06:00 - 06:14	2	0	2
06:15 - 06:29	0	0	0
06:30 - 06:44	3	1	4
06:45 - 06:59	2	0	2
07:00 - 07:14	4	0	4
07:15 - 07:29	1	2	3
07:30 - 07:44	3	1	4
07:45 - 07:59	4	2	6
08:00 - 08:14	4	4	8
08:15 - 08:29	6	1	7
08:30 - 08:44	2	3	5
08:45 - 08:59	8	2	10
09:00 - 09:14	8	5	13
09:15 - 09:29	6	4	10
09:30 - 09:44	7	1	8
09:45 - 09:59	3	1	4
10:00 - 10:14	6	4	10
10:15 - 10:29	5	8	13
10:30 - 10:44	3	4	7
10:45 - 10:59	8	3	11
11:00 - 11:14	3	9	12
11:15 - 11:29	4	5	9
11:30 - 11:44	2	4	6
11:45 - 11:59	3	8	11
12:00 - 12:14	1	6	7
12:15 - 12:29	5	3	8
12:30 - 12:44	1	3	4
12:45 - 12:59	8	2	10

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Monday, 04/16/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
13:00 - 13:14	5	3	8
13:15 - 13:29	5	5	10
13:30 - 13:44	7	2	9
13:45 - 13:59	5	3	8
14:00 - 14:14	5	9	14
14:15 - 14:29	4	6	10
14:30 - 14:44	11	6	17
14:45 - 14:59	11	5	16
15:00 - 15:14	5	6	11
15:15 - 15:29	4	7	11
15:30 - 15:44	2	12	14
15:45 - 15:59	4	3	7
16:00 - 16:14	1	1	2
16:15 - 16:29	5	2	7
16:30 - 16:44	9	7	16
16:45 - 16:59	4	7	11
17:00 - 17:14	3	3	6
17:15 - 17:29	3	3	6
17:30 - 17:44	0	10	10
17:45 - 17:59	6	7	13
18:00 - 18:14	7	8	15
18:15 - 18:29	2	7	9
18:30 - 18:44	3	0	3
18:45 - 18:59	2	2	4
19:00 - 19:14	3	7	10
19:15 - 19:29	1	0	1
19:30 - 19:44	2	3	5
19:45 - 19:59	0	5	5
20:00 - 20:14	1	4	5
20:15 - 20:29	0	1	1
20:30 - 20:44	4	0	4
20:45 - 20:59	0	1	1
21:00 - 21:14	1	1	2
21:15 - 21:29	0	1	1
21:30 - 21:44	0	1	1
21:45 - 21:59	0	2	2
22:00 - 22:14	1	0	1
22:15 - 22:29	3	0	3
22:30 - 22:44	1	0	1
22:45 - 22:59	0	1	1
23:00 - 23:14	0	0	0
23:15 - 23:29	1	0	1
23:30 - 23:44	1	0	1
23:45 - 23:59	1	0	1
Totals	248	239	487
AM Peak Time	08:45 - 09:44	10:58 - 11:57	10:17 - 11:16
AM Peak Volume	29	26	46
PM Peak Time	14:11 - 15:10	17:26 - 18:25	13:59 - 14:58
PM Peak Volume	32	33	57

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Tuesday, 04/17/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
00:00 - 00:14	0	0	0
00:15 - 00:29	0	0	0
00:30 - 00:44	0	0	0
00:45 - 00:59	0	0	0
01:00 - 01:14	0	0	0
01:15 - 01:29	0	2	2
01:30 - 01:44	1	1	2
01:45 - 01:59	0	0	0
02:00 - 02:14	0	0	0
02:15 - 02:29	0	0	0
02:30 - 02:44	0	1	1
02:45 - 02:59	0	0	0
03:00 - 03:14	0	0	0
03:15 - 03:29	0	0	0
03:30 - 03:44	0	0	0
03:45 - 03:59	0	0	0
04:00 - 04:14	0	0	0
04:15 - 04:29	0	0	0
04:30 - 04:44	0	0	0
04:45 - 04:59	0	0	0
05:00 - 05:14	0	0	0
05:15 - 05:29	0	0	0
05:30 - 05:44	0	0	0
05:45 - 05:59	1	0	1
06:00 - 06:14	1	0	1
06:15 - 06:29	0	1	1
06:30 - 06:44	5	1	6
06:45 - 06:59	4	2	6
07:00 - 07:14	2	2	4
07:15 - 07:29	3	3	6
07:30 - 07:44	0	3	3
07:45 - 07:59	3	3	6
08:00 - 08:14	5	3	8
08:15 - 08:29	8	0	8
08:30 - 08:44	8	3	11
08:45 - 08:59	11	1	12
09:00 - 09:14	4	3	7
09:15 - 09:29	6	1	7
09:30 - 09:44	12	8	20
09:45 - 09:59	8	3	11
10:00 - 10:14	7	5	12
10:15 - 10:29	10	2	12
10:30 - 10:44	0	4	4
10:45 - 10:59	2	3	5
11:00 - 11:14	1	7	8
11:15 - 11:29	4	7	11
11:30 - 11:44	2	6	8
11:45 - 11:59	7	4	11
12:00 - 12:14	3	7	10
12:15 - 12:29	8	3	11
12:30 - 12:44	4	2	6
12:45 - 12:59	9	5	14

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Tuesday, 04/17/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
13:00 - 13:14	7	5	12
13:15 - 13:29	10	3	13
13:30 - 13:44	4	9	13
13:45 - 13:59	3	7	10
14:00 - 14:14	4	1	5
14:15 - 14:29	6	4	10
14:30 - 14:44	6	5	11
14:45 - 14:59	3	4	7
15:00 - 15:14	5	12	17
15:15 - 15:29	6	7	13
15:30 - 15:44	5	11	16
15:45 - 15:59	2	1	3
16:00 - 16:14	3	3	6
16:15 - 16:29	5	3	8
16:30 - 16:44	4	3	7
16:45 - 16:59	2	4	6
17:00 - 17:14	1	4	5
17:15 - 17:29	2	6	8
17:30 - 17:44	3	6	9
17:45 - 17:59	6	4	10
18:00 - 18:14	4	3	7
18:15 - 18:29	1	3	4
18:30 - 18:44	2	4	6
18:45 - 18:59	1	6	7
19:00 - 19:14	0	6	6
19:15 - 19:29	0	3	3
19:30 - 19:44	6	4	10
19:45 - 19:59	1	0	1
20:00 - 20:14	3	1	4
20:15 - 20:29	2	6	8
20:30 - 20:44	2	2	4
20:45 - 20:59	3	2	5
21:00 - 21:14	1	3	4
21:15 - 21:29	0	1	1
21:30 - 21:44	0	1	1
21:45 - 21:59	0	2	2
22:00 - 22:14	0	0	0
22:15 - 22:29	0	4	4
22:30 - 22:44	1	0	1
22:45 - 22:59	1	0	1
23:00 - 23:14	0	0	0
23:15 - 23:29	1	3	4
23:30 - 23:44	0	0	0
23:45 - 23:59	0	0	0
Totals	255	252	507
AM Peak Time	09:24 - 10:23	10:40 - 11:39	09:24 - 10:23
AM Peak Volume	38	26	56
PM Peak Time	12:41 - 13:40	14:35 - 15:34	14:41 - 15:40
PM Peak Volume	32	35	56

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Wednesday, 04/18/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
00:00 - 00:14	0	0	0
00:15 - 00:29	1	0	1
00:30 - 00:44	1	0	1
00:45 - 00:59	0	0	0
01:00 - 01:14	0	0	0
01:15 - 01:29	0	0	0
01:30 - 01:44	0	2	2
01:45 - 01:59	0	0	0
02:00 - 02:14	0	1	1
02:15 - 02:29	0	0	0
02:30 - 02:44	0	0	0
02:45 - 02:59	0	0	0
03:00 - 03:14	0	0	0
03:15 - 03:29	0	0	0
03:30 - 03:44	0	0	0
03:45 - 03:59	0	0	0
04:00 - 04:14	0	0	0
04:15 - 04:29	0	0	0
04:30 - 04:44	0	0	0
04:45 - 04:59	0	0	0
05:00 - 05:14	0	0	0
05:15 - 05:29	3	0	3
05:30 - 05:44	0	0	0
05:45 - 05:59	1	0	1
06:00 - 06:14	0	1	1
06:15 - 06:29	0	0	0
06:30 - 06:44	3	2	5
06:45 - 06:59	5	0	5
07:00 - 07:14	2	0	2
07:15 - 07:29	2	1	3
07:30 - 07:44	1	3	4
07:45 - 07:59	3	2	5
08:00 - 08:14	3	1	4
08:15 - 08:29	4	3	7
08:30 - 08:44	5	5	10
08:45 - 08:59	8	2	10
09:00 - 09:14	6	4	10
09:15 - 09:29	3	1	4
09:30 - 09:44	9	1	10
09:45 - 09:59	14	2	16
10:00 - 10:14	15	6	21
10:15 - 10:29	4	3	7
10:30 - 10:44	5	7	12
10:45 - 10:59	7	10	17
11:00 - 11:14	9	6	15
11:15 - 11:29	7	2	9
11:30 - 11:44	20	2	22
11:45 - 11:59	20	2	22
12:00 - 12:14	11	8	19
12:15 - 12:29	6	5	11
12:30 - 12:44	11	9	20
12:45 - 12:59	5	9	14

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Wednesday, 04/18/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
13:00 - 13:14	3	6	9
13:15 - 13:29	7	22	29
13:30 - 13:44	7	5	12
13:45 - 13:59	8	7	15
14:00 - 14:14	7	8	15
14:15 - 14:29	3	16	19
14:30 - 14:44	2	7	9
14:45 - 14:59	11	8	19
15:00 - 15:14	11	17	28
15:15 - 15:29	6	8	14
15:30 - 15:44	8	7	15
15:45 - 15:59	2	7	9
16:00 - 16:14	6	6	12
16:15 - 16:29	12	3	15
16:30 - 16:44	8	15	23
16:45 - 16:59	5	7	12
17:00 - 17:14	10	12	22
17:15 - 17:29	5	7	12
17:30 - 17:44	9	2	11
17:45 - 17:59	13	7	20
18:00 - 18:14	15	4	19
18:15 - 18:29	6	5	11
18:30 - 18:44	3	6	9
18:45 - 18:59	13	7	20
19:00 - 19:14	5	7	12
19:15 - 19:29	6	8	14
19:30 - 19:44	6	3	9
19:45 - 19:59	5	10	15
20:00 - 20:14	2	2	4
20:15 - 20:29	2	7	9
20:30 - 20:44	2	2	4
20:45 - 20:59	0	10	10
21:00 - 21:14	1	6	7
21:15 - 21:29	3	19	22
21:30 - 21:44	0	12	12
21:45 - 21:59	0	3	3
22:00 - 22:14	1	5	6
22:15 - 22:29	0	1	1
22:30 - 22:44	0	3	3
22:45 - 22:59	0	2	2
23:00 - 23:14	2	3	5
23:15 - 23:29	0	5	5
23:30 - 23:44	1	1	2
23:45 - 23:59	0	1	1
Totals	410	409	819
AM Peak Time	10:58 - 11:57	10:03 - 11:02	10:51 - 11:50
AM Peak Volume	57	28	69
PM Peak Time	17:26 - 18:25	14:13 - 15:12	14:13 - 15:12
PM Peak Volume	43	51	77

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Thursday, 04/19/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
00:00 - 00:14	0	1	1
00:15 - 00:29	0	1	1
00:30 - 00:44	0	0	0
00:45 - 00:59	0	0	0
01:00 - 01:14	0	0	0
01:15 - 01:29	0	0	0
01:30 - 01:44	0	0	0
01:45 - 01:59	1	1	2
02:00 - 02:14	0	0	0
02:15 - 02:29	0	0	0
02:30 - 02:44	0	0	0
02:45 - 02:59	0	0	0
03:00 - 03:14	0	0	0
03:15 - 03:29	0	0	0
03:30 - 03:44	0	0	0
03:45 - 03:59	1	1	2
04:00 - 04:14	0	0	0
04:15 - 04:29	0	0	0
04:30 - 04:44	0	0	0
04:45 - 04:59	0	0	0
05:00 - 05:14	0	0	0
05:15 - 05:29	0	0	0
05:30 - 05:44	1	0	1
05:45 - 05:59	0	0	0
06:00 - 06:14	3	0	3
06:15 - 06:29	3	1	4
06:30 - 06:44	4	1	5
06:45 - 06:59	6	0	6
07:00 - 07:14	3	2	5
07:15 - 07:29	3	1	4
07:30 - 07:44	9	1	10
07:45 - 07:59	4	5	9
08:00 - 08:14	3	3	6
08:15 - 08:29	3	1	4
08:30 - 08:44	3	1	4
08:45 - 08:59	0	0	0
09:00 - 09:14	5	1	6
09:15 - 09:29	4	2	6
09:30 - 09:44	10	7	17
09:45 - 09:59	9	5	14
10:00 - 10:14	6	1	7
10:15 - 10:29	3	4	7
10:30 - 10:44	5	1	6
10:45 - 10:59	1	4	5
11:00 - 11:14	8	8	16
11:15 - 11:29	7	5	12
11:30 - 11:44	1	7	8
11:45 - 11:59	3	4	7
12:00 - 12:14	3	7	10
12:15 - 12:29	6	1	7
12:30 - 12:44	7	5	12
12:45 - 12:59	13	3	16

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Thursday, 04/19/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
13:00 - 13:14	5	7	12
13:15 - 13:29	5	1	6
13:30 - 13:44	8	4	12
13:45 - 13:59	7	5	12
14:00 - 14:14	4	6	10
14:15 - 14:29	3	10	13
14:30 - 14:44	1	4	5
14:45 - 14:59	4	5	9
15:00 - 15:14	3	13	16
15:15 - 15:29	7	2	9
15:30 - 15:44	11	2	13
15:45 - 15:59	5	5	10
16:00 - 16:14	7	7	14
16:15 - 16:29	9	5	14
16:30 - 16:44	6	8	14
16:45 - 16:59	8	6	14
17:00 - 17:14	8	6	14
17:15 - 17:29	3	7	10
17:30 - 17:44	6	7	13
17:45 - 17:59	22	10	32
18:00 - 18:14	11	8	19
18:15 - 18:29	9	6	15
18:30 - 18:44	6	4	10
18:45 - 18:59	1	3	4
19:00 - 19:14	2	6	8
19:15 - 19:29	11	7	18
19:30 - 19:44	3	5	8
19:45 - 19:59	2	4	6
20:00 - 20:14	3	4	7
20:15 - 20:29	3	3	6
20:30 - 20:44	3	10	13
20:45 - 20:59	3	3	6
21:00 - 21:14	3	15	18
21:15 - 21:29	4	10	14
21:30 - 21:44	0	2	2
21:45 - 21:59	0	4	4
22:00 - 22:14	0	5	5
22:15 - 22:29	0	5	5
22:30 - 22:44	2	8	10
22:45 - 22:59	0	3	3
23:00 - 23:14	2	6	8
23:15 - 23:29	0	5	5
23:30 - 23:44	2	3	5
23:45 - 23:59	0	0	0
Totals	340	334	674
AM Peak Time	09:13 - 10:12	10:47 - 11:46	09:28 - 10:27
AM Peak Volume	29	25	45
PM Peak Time	17:42 - 18:41	20:29 - 21:28	17:24 - 18:23
PM Peak Volume	51	40	82

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Friday, 04/20/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
00:00 - 00:14	0	1	1
00:15 - 00:29	0	0	0
00:30 - 00:44	0	0	0
00:45 - 00:59	1	0	1
01:00 - 01:14	0	0	0
01:15 - 01:29	0	0	0
01:30 - 01:44	0	0	0
01:45 - 01:59	0	0	0
02:00 - 02:14	0	0	0
02:15 - 02:29	1	0	1
02:30 - 02:44	1	1	2
02:45 - 02:59	0	0	0
03:00 - 03:14	0	0	0
03:15 - 03:29	0	1	1
03:30 - 03:44	1	1	2
03:45 - 03:59	0	0	0
04:00 - 04:14	0	0	0
04:15 - 04:29	0	0	0
04:30 - 04:44	0	0	0
04:45 - 04:59	0	0	0
05:00 - 05:14	1	0	1
05:15 - 05:29	0	0	0
05:30 - 05:44	2	0	2
05:45 - 05:59	2	0	2
06:00 - 06:14	2	0	2
06:15 - 06:29	0	2	2
06:30 - 06:44	1	1	2
06:45 - 06:59	4	0	4
07:00 - 07:14	4	1	5
07:15 - 07:29	1	1	2
07:30 - 07:44	1	1	2
07:45 - 07:59	1	2	3
08:00 - 08:14	6	1	7
08:15 - 08:29	4	0	4
08:30 - 08:44	6	2	8
08:45 - 08:59	16	3	19
09:00 - 09:14	8	3	11
09:15 - 09:29	2	7	9
09:30 - 09:44	10	6	16
09:45 - 09:59	13	7	20
10:00 - 10:14	8	7	13
10:15 - 10:29	6	3	9
10:30 - 10:44	5	5	10
10:45 - 10:59	9	6	15
11:00 - 11:14	5	11	16
11:15 - 11:29	8	3	11
11:30 - 11:44	8	11	19
11:45 - 11:59	19	7	26
12:00 - 12:14	11	8	19
12:15 - 12:29	5	9	14
12:30 - 12:44	4	2	6
12:45 - 12:59	10	5	15

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Friday, 04/20/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
13:00 - 13:14	9	9	18
13:15 - 13:29	5	7	12
13:30 - 13:44	7	2	9
13:45 - 13:59	9	4	13
14:00 - 14:14	8	5	13
14:15 - 14:29	8	5	13
14:30 - 14:44	4	13	17
14:45 - 14:59	9	6	15
15:00 - 15:14	5	12	17
15:15 - 15:29	9	5	14
15:30 - 15:44	5	10	15
15:45 - 15:59	6	3	9
16:00 - 16:14	15	13	28
16:15 - 16:29	6	13	19
16:30 - 16:44	14	7	21
16:45 - 16:59	7	11	18
17:00 - 17:14	10	9	19
17:15 - 17:29	16	6	22
17:30 - 17:44	6	7	13
17:45 - 17:59	13	3	16
18:00 - 18:14	11	7	18
18:15 - 18:29	9	3	12
18:30 - 18:44	9	5	14
18:45 - 18:59	7	4	11
19:00 - 19:14	4	1	5
19:15 - 19:29	4	6	10
19:30 - 19:44	2	5	7
19:45 - 19:59	0	4	4
20:00 - 20:14	7	8	15
20:15 - 20:29	1	2	3
20:30 - 20:44	1	5	6
20:45 - 20:59	2	9	11
21:00 - 21:14	4	5	9
21:15 - 21:29	1	8	9
21:30 - 21:44	2	2	4
21:45 - 21:59	1	12	13
22:00 - 22:14	2	13	15
22:15 - 22:29	1	21	22
22:30 - 22:44	2	4	6
22:45 - 22:59	0	9	9
23:00 - 23:14	2	11	13
23:15 - 23:29	1	8	9
23:30 - 23:44	0	3	3
23:45 - 23:59	0	0	0
Totals	428	423	851
AM Peak Time	08:47 - 09:46	10:59 - 11:58	10:59 - 11:58
AM Peak Volume	40	32	72
PM Peak Time	17:08 - 18:07	21:52 - 22:51	15:56 - 16:55
PM Peak Volume	50	54	88

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Saturday, 04/21/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
00:00 - 00:14	0	2	2
00:15 - 00:29	0	0	0
00:30 - 00:44	0	0	0
00:45 - 00:59	1	0	1
01:00 - 01:14	0	0	0
01:15 - 01:29	0	0	0
01:30 - 01:44	0	0	0
01:45 - 01:59	0	0	0
02:00 - 02:14	1	1	2
02:15 - 02:29	0	1	1
02:30 - 02:44	0	0	0
02:45 - 02:59	0	0	0
03:00 - 03:14	0	0	0
03:15 - 03:29	0	0	0
03:30 - 03:44	0	0	0
03:45 - 03:59	0	0	0
04:00 - 04:14	0	0	0
04:15 - 04:29	0	0	0
04:30 - 04:44	0	0	0
04:45 - 04:59	0	0	0
05:00 - 05:14	0	0	0
05:15 - 05:29	0	0	0
05:30 - 05:44	0	0	0
05:45 - 05:59	0	0	0
06:00 - 06:14	0	0	0
06:15 - 06:29	0	0	0
06:30 - 06:44	4	0	4
06:45 - 06:59	5	1	6
07:00 - 07:14	3	0	3
07:15 - 07:29	0	0	0
07:30 - 07:44	1	0	1
07:45 - 07:59	8	2	10
08:00 - 08:14	5	1	6
08:15 - 08:29	3	1	4
08:30 - 08:44	8	2	10
08:45 - 08:59	10	2	12
09:00 - 09:14	8	4	12
09:15 - 09:29	12	4	16
09:30 - 09:44	9	6	15
09:45 - 09:59	9	2	11
10:00 - 10:14	7	9	16
10:15 - 10:29	3	6	9
10:30 - 10:44	9	11	20
10:45 - 10:59	8	2	10
11:00 - 11:14	15	6	21
11:15 - 11:29	56	9	65
11:30 - 11:44	28	13	41
11:45 - 11:59	8	10	18
12:00 - 12:14	12	6	18
12:15 - 12:29	13	3	16
12:30 - 12:44	11	6	17
12:45 - 12:59	13	4	17

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Saturday, 04/21/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
13:00 - 13:14	8	3	11
13:15 - 13:29	14	8	22
13:30 - 13:44	4	18	22
13:45 - 13:59	3	17	20
14:00 - 14:14	3	13	16
14:15 - 14:29	1	19	20
14:30 - 14:44	2	27	29
14:45 - 14:59	4	18	22
15:00 - 15:14	7	20	27
15:15 - 15:29	6	5	11
15:30 - 15:44	7	6	13
15:45 - 15:59	4	6	10
16:00 - 16:14	2	10	12
16:15 - 16:29	6	16	22
16:30 - 16:44	3	7	10
16:45 - 16:59	7	3	10
17:00 - 17:14	4	5	9
17:15 - 17:29	4	4	8
17:30 - 17:44	12	6	18
17:45 - 17:59	10	3	13
18:00 - 18:14	3	3	6
18:15 - 18:29	2	2	4
18:30 - 18:44	3	2	5
18:45 - 18:59	2	3	5
19:00 - 19:14	2	1	3
19:15 - 19:29	3	2	5
19:30 - 19:44	4	3	7
19:45 - 19:59	0	2	2
20:00 - 20:14	1	3	4
20:15 - 20:29	2	4	6
20:30 - 20:44	2	5	7
20:45 - 20:59	0	7	7
21:00 - 21:14	1	8	9
21:15 - 21:29	0	4	4
21:30 - 21:44	1	5	6
21:45 - 21:59	0	5	5
22:00 - 22:14	1	2	3
22:15 - 22:29	2	2	4
22:30 - 22:44	2	3	5
22:45 - 22:59	0	1	1
23:00 - 23:14	1	4	5
23:15 - 23:29	1	1	2
23:30 - 23:44	2	4	6
23:45 - 23:59	2	8	10
Totals	418	412	830
AM Peak Time	10:56 - 11:55	11:00 - 11:59	11:00 - 11:59
AM Peak Volume	109	38	145
PM Peak Time	12:19 - 13:18	14:10 - 15:09	14:08 - 15:07
PM Peak Volume	53	88	101

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Sunday, 04/22/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
00:00 - 00:14	2	8	10
00:15 - 00:29	0	0	0
00:30 - 00:44	0	5	5
00:45 - 00:59	1	1	2
01:00 - 01:14	0	0	0
01:15 - 01:29	0	1	1
01:30 - 01:44	0	0	0
01:45 - 01:59	0	0	0
02:00 - 02:14	0	0	0
02:15 - 02:29	0	0	0
02:30 - 02:44	0	0	0
02:45 - 02:59	0	0	0
03:00 - 03:14	0	0	0
03:15 - 03:29	0	0	0
03:30 - 03:44	0	0	0
03:45 - 03:59	2	0	2
04:00 - 04:14	0	0	0
04:15 - 04:29	0	0	0
04:30 - 04:44	0	0	0
04:45 - 04:59	0	2	2
05:00 - 05:14	0	0	0
05:15 - 05:29	1	0	1
05:30 - 05:44	1	0	1
05:45 - 05:59	0	0	0
06:00 - 06:14	0	0	0
06:15 - 06:29	0	0	0
06:30 - 06:44	0	0	0
06:45 - 06:59	2	0	2
07:00 - 07:14	1	0	1
07:15 - 07:29	1	0	1
07:30 - 07:44	3	1	4
07:45 - 07:59	1	1	2
08:00 - 08:14	4	3	7
08:15 - 08:29	0	0	0
08:30 - 08:44	1	0	1
08:45 - 08:59	1	1	2
09:00 - 09:14	7	2	9
09:15 - 09:29	4	2	6
09:30 - 09:44	7	4	11
09:45 - 09:59	2	3	5
10:00 - 10:14	8	2	10
10:15 - 10:29	7	2	9
10:30 - 10:44	6	4	10
10:45 - 10:59	5	3	8
11:00 - 11:14	3	4	7
11:15 - 11:29	5	6	11
11:30 - 11:44	3	5	8
11:45 - 11:59	4	2	6
12:00 - 12:14	3	4	7
12:15 - 12:29	0	2	2
12:30 - 12:44	2	2	4
12:45 - 12:59	2	0	2

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Sunday, 04/22/2018

Unit ID:

Location: NE 27th Terrace (Lighthouse Yacht Club Entrance) North of 42nd Street

Comments: Lighthouse Point, Florida

	Northbound (Ins) Volume	Southbound (Outs) Volume	Total Volume
13:00 - 13:14	3	4	7
13:15 - 13:29	2	3	5
13:30 - 13:44	3	3	6
13:45 - 13:59	1	7	8
14:00 - 14:14	1	9	10
14:15 - 14:29	3	6	9
14:30 - 14:44	3	3	6
14:45 - 14:59	2	2	4
15:00 - 15:14	6	6	12
15:15 - 15:29	2	5	7
15:30 - 15:44	2	1	3
15:45 - 15:59	1	3	4
16:00 - 16:14	2	2	4
16:15 - 16:29	4	2	6
16:30 - 16:44	1	7	8
16:45 - 16:59	2	0	2
17:00 - 17:14	3	3	6
17:15 - 17:29	2	1	3
17:30 - 17:44	1	1	2
17:45 - 17:59	0	3	3
18:00 - 18:14	0	2	2
18:15 - 18:29	0	0	0
18:30 - 18:44	0	0	0
18:45 - 18:59	4	1	5
19:00 - 19:14	1	2	3
19:15 - 19:29	1	1	2
19:30 - 19:44	0	1	1
19:45 - 19:59	1	1	2
20:00 - 20:14	0	0	0
20:15 - 20:29	3	2	5
20:30 - 20:44	5	4	9
20:45 - 20:59	0	0	0
21:00 - 21:14	0	2	2
21:15 - 21:29	0	3	3
21:30 - 21:44	0	1	1
21:45 - 21:59	0	0	0
22:00 - 22:14	0	0	0
22:15 - 22:29	0	0	0
22:30 - 22:44	0	0	0
22:45 - 22:59	0	0	0
23:00 - 23:14	0	0	0
23:15 - 23:29	0	0	0
23:30 - 23:44	0	0	0
23:45 - 23:59	0	0	0
Totals	148	161	309
AM Peak Time	10:05 - 11:04	10:41 - 11:40	10:05 - 11:04
AM Peak Volume	28	19	41
PM Peak Time	14:15 - 15:14	13:30 - 14:29	14:23 - 15:22
PM Peak Volume	14	25	35

Appendix C

ITE Transportation and Land Development **Queuing Procedures**

Transportation and Land Development

2nd Edition

by Vergil G. Stover
and Frank J. Koepke



Institute of Transportation Engineers

location, a 5% probability of back-up onto the adjacent street is judged to be acceptable. Demand on the system for design is expected to be 110 vehicles in a 45-minute period. Average service time was expected to be 2.2 minutes. Is the queue storage adequate?

Such problems can be quickly solved using Equation (8-9b) given in Table 8-10 and repeated below for convenience.

$$M = \left\lceil \frac{\ln P(x > M) - \ln Q_M}{\ln \rho} \right\rceil - 1$$

where:

M = queue length which is exceeded ρ percent of the time

N = number of service channels (drive-in positions)

Q = service rate per channel (vehicles per hour)

$\rho = \frac{\text{demand rate}}{\text{service rate}} = \frac{q}{NQ}$ utilization factor

q = demand rate on the system (vehicles per hour)

Q_M = tabulated values of the relationship between queue length, number of channels, and utilization factor (see Table 8-11)

TABLE 8-11

Table of Q_M Values

	$N = 1$	2	3	4	6	8	10
0.0	0.0000	0.0000	0.0000	0.0000			
0.1	.1000	.0182	.0037	.0008	.0000	0.0000	0.0000
.2	.2000	.0666	.0247	.0096	.0015	.0002	.0000
.3	.3000	.1385	.0700	.0370	.0111	.0036	.0011
.4	.4000	.2286	.1411	.0907	.0400	.0185	.0088
.5	.5000	.3333	.2368	.1739	.0991	.0591	.0360
.6	.6000	.4501	.3548	.2870	.1965	.1395	.1013
.7	.7000	.5766	.4923	.4286	.3359	.2706	.2218
.8	.8000	.7111	.6472	.5964	.5178	.4576	.4093
.9	.9000	.8526	.8172	.7878	.7401	.7014	.6697
1.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

$\rho = \frac{q}{NQ}$ = arrival rate, total
 number of channels (service rate per channel)
 N = number of channels (service positions)

Solution

Step 1: $Q = \frac{60 \text{ min/hr}}{2.2 \text{ min/service}} = 27.3$ services per hour

Step 2: $q = (110 \text{ veh/45 min}) \times (60 \text{ min/hr}) = 146.7$ vehicles per hour

Step 3: $\rho = \frac{q}{NQ} = \frac{146.7}{(6)(27.3)} = 0.8956$

Step 4: $Q_M = 0.7303$ by interpolation between 0.8 and 0.9 for $N = 6$ from the table of Q_M values (see Table 8-11)

Step 5: The acceptable probability of the queue, M , being longer than the storage, 18 spaces in this example, was stated to be 5% $P(x > M) = 0.05$, and:

$$M = \left\lceil \frac{\ln 0.05 - \ln 0.7303}{\ln 0.8956} \right\rceil - 1 = \left\lceil \frac{-2.996 - (-0.314)}{-0.110} \right\rceil - 1$$

$$= 24.38 - 1 = 23.38, \text{ say } 23 \text{ vehicles.}$$

Appendix D

Lighthouse Point Yacht Club

Queuing Analysis

Lighthouse Point Yacht Club – Egress Lane
Queuing Analysis based on ITE Procedures

$q = 46 \text{ veh/hr (demand rate)}$

$Q = 327 \text{ veh/hr (service rate @ 11.0 sec/veh)}$

$$p = \frac{q}{NQ} = 0.1407 \text{ (N = one)}$$

$$Q_M = 0.1407 \text{ (for N = 1)}$$

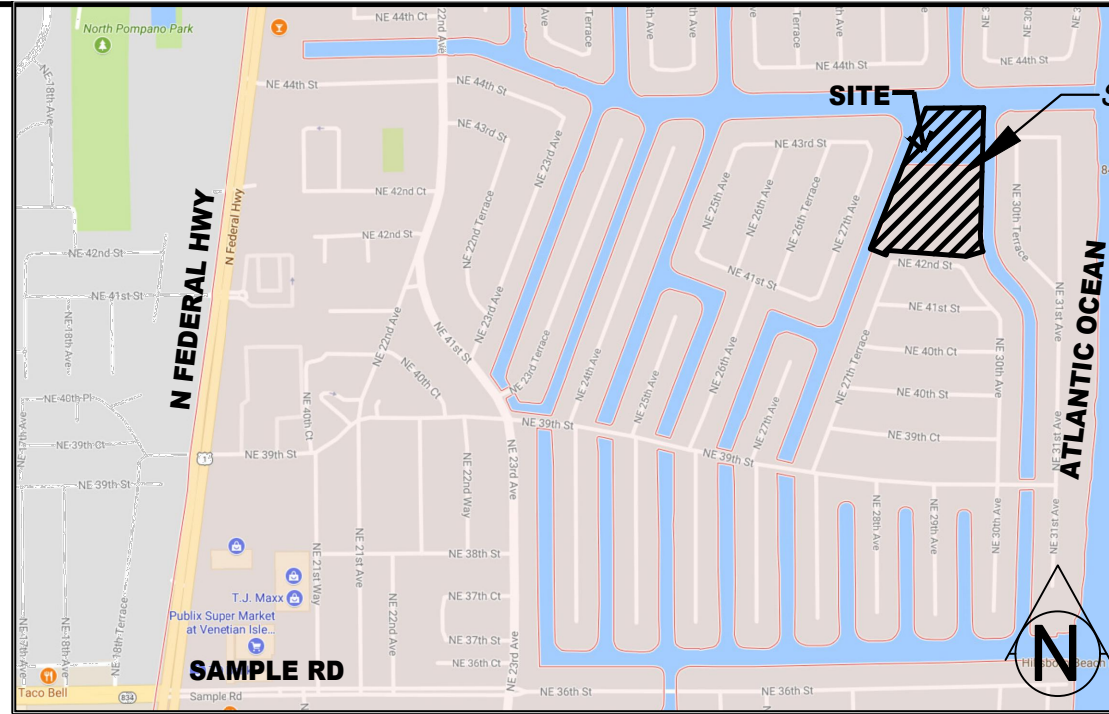
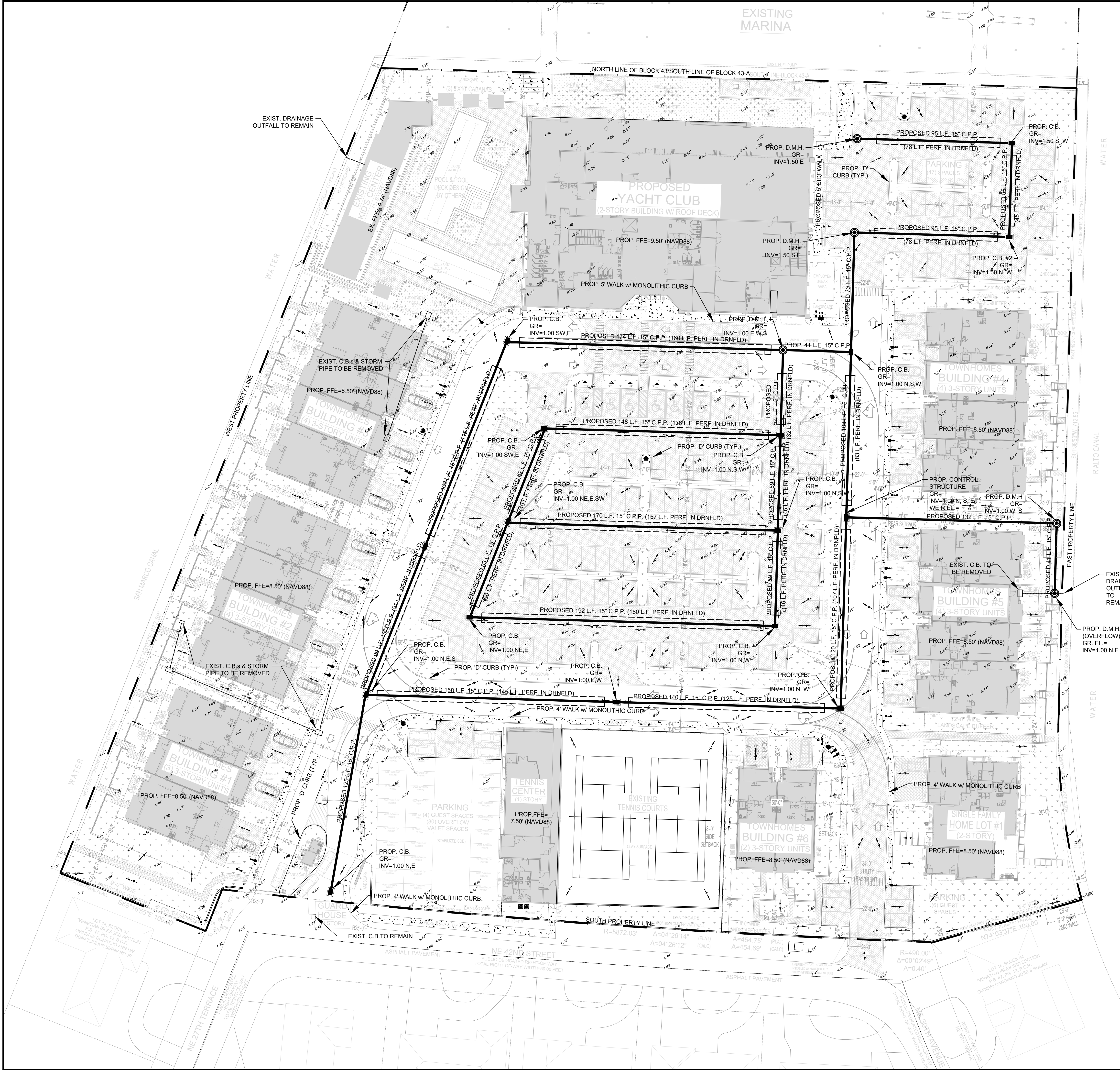
Using Acceptable Probability of 1% (99% Confidence Level)

$$M = \left[\frac{\ln(x > M) - \ln(Q_M)}{\ln(p)} \right] - 1$$

$$M = \left[\frac{\ln(0.01) - \ln(0.1407)}{\ln(0.1407)} \right] - 1$$

$$M = \left[\frac{-4.605 - (-1.961)}{-1.961} \right] - 1$$

$M = 1.348 - 1 = 0.348 \text{ vehicle}$
or, by default, 1 vehicle



LAND DESCRIPTION:
BLOCKS 43 AND 43-A, OF VENETIAN ISLES REPLAT, A REPLAT OF A PORTION OF VENETIAN ISLES 3RD SECTION, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 48, PAGE 41, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

LEGEND

- EXISTING GRADE
- DIRECTION OF FLOW
- F.H. FIRE HYDRANT
- C.O. CLEANOUT
- S.M.H. SANITARY SEWER MANHOLE
- D.M.H. DRAINAGE (STORM) MANHOLE
- C.B. CATCH BASIN
- U.E. UTILITY EASEMENT
- D.I.P. DUCTILE IRON PIPE
- P.V.C. POLYVINYL CHLORIDE
- C.P.P. CORRUGATED POLYETHYLENE PIPE
- D.D.C.V. DOUBLE DETECTOR CHECK VALVE

NOTES TO CONTRACTOR

- SURVEY NOTES:**
- EXISTING ELEVATIONS AND CONDITIONS SHOWN HEREON WERE TAKEN FROM A ALTA/NSPS SURVEY PREPARED BY COUSINS SURVEYORS & ASSOCIATES, INC. PROJECT NO. 8252-17 ON 1/31/17; LAST UPDATED 8/18/17.
 - ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988).
 - BENCHMARK DESCRIPTION: BROWARD COUNTY ENGINEERING DEPARTMENT BENCHMARK #2973, ELEVATION = 8.50' (NAVD 1988).
- UTILITY NOTES:**
- EXISTING UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN.
 - THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY LOCATION, DEPTH AND SIZE OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALL INSTALLATIONS SHALL BE MADE IN SUCH A MANNER AS NOT TO INTERFERE WITH EXISTING OR NEW UTILITIES, DRAINAGE OR ROADWAY CONSTRUCTION. IF AN EXISTING FACILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE CONFLICT.
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DESIGN NOTES:

- THIS DESIGN IS CONCEPTUAL AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.
- LOCATIONS OF EXISTING AND PROPOSED UTILITIES TO BE COORDINATED WITH LANDSCAPE DESIGN DURING PREPARATION OF FINAL CIVIL ENGINEERING PLANS.
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NEAL B. JANOV #21998

DIVERSIFIED CONSTRUCTION

DCES

& ENGINEERING SERVICES

2295 N.W. CORPORATE BLVD. #125 BOCA RATON, FL 33431

561-750-3717 FAX 561-750-3686

EB #6459

REVISIONS	DATE:	DWN.:	CHK.:
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

LIGHTHOUSE POINT

YACHT CLUB

2701 NE 42ND STREET

LIGHTHOUSE POINT, FLORIDA

CONCEPTUAL

PAVING, GRADING & DRAINAGE PLAN

DCES

SCALE: 1"=30'

DATE: 2-18-20

DWN. BY: S.T.

CHK. BY: N.B.J.

F.B. PG.

JOB NO.: 2247-17

SHEET: C-1 OF 2

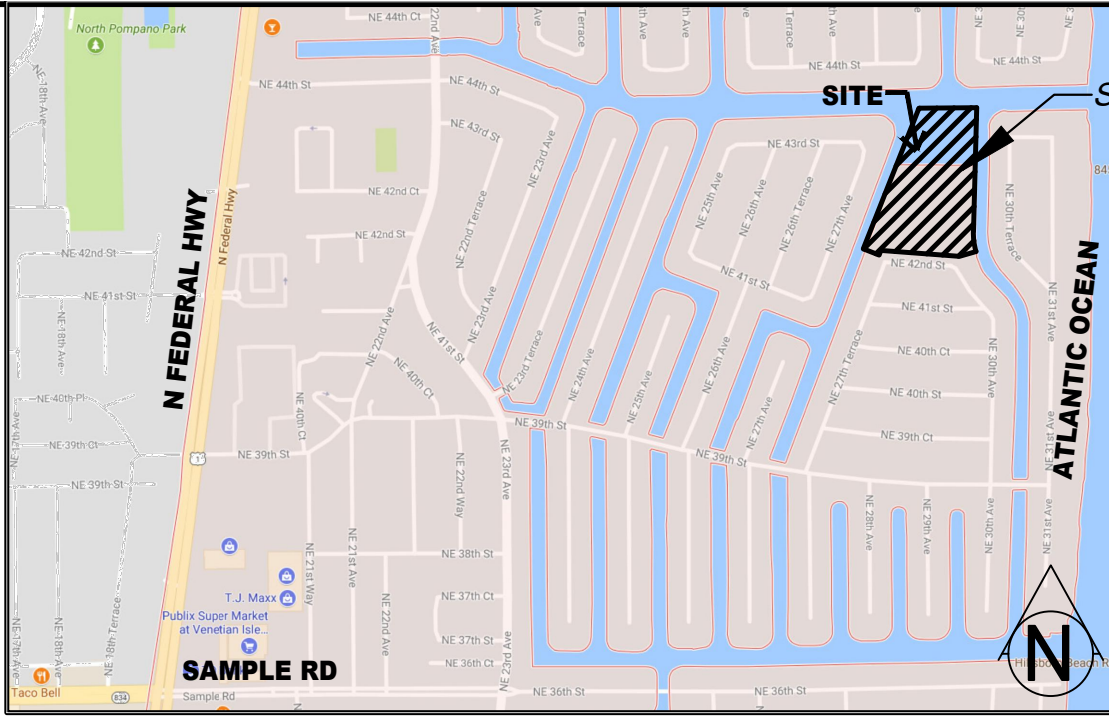
FIRE DEPARTMENT NOTES:

1. ALL GATES REQUIRING FIRE DEPARTMENT ACCESS SHALL PROVIDE KNOX PADLOCK.
2. BUILDINGS WITH AN ELEVATOR REQUIRE A KNOX BOX 4400 SERIES. A KNOX BOX SHALL BE PROVIDED AND PURCHASED THROUGH THE CITY OF LIGHTHOUSE POINT FIRE DEPARTMENT.
3. THE FIRE TRUCK ACCESS ROUTE SHALL PROVIDE A MINIMUM VERTICAL CLEARANCE OF 14' ALONG WITH PERMANENT WEATHERPROOF SIGNAGE WHERE APPLICABLE.
4. FIRE HYDRANTS SHALL FACE THE NEAREST ROAD.
5. FIRE DEPARTMENT CONNECTIONS (FDC) SHALL BE WITHIN 100' OF A FIRE HYDRANT.
6. NO TREE, BUSH, HEDGE, OR SHRUB, SHALL BE PLANTED WITHIN 7'6" IN FRONT OF AND TO THE SIDES OF A FIRE HYDRANT AND 4' TO THE REAR.
7. FIRE HYDRANTS SHALL BE PROTECTED WITH BOLLARDS IF SUBJECT TO MECHANICAL DAMAGE.
8. ALL BUILDINGS WITHIN THE CITY SHALL BE NUMBERED WITH THE STREET ADDRESS, FRONT & REAR AND/OR SIDE DOORS, WITH THE NUMBERS BEING NOT LESS THAN SIX, NOR MORE THAN NINE INCHES IN HEIGHT. THE NUMERALS SHALL CONTRAST WITH THEIR BACKGROUND AND BE KEPT FREE OF OBSTRUCTIONS. NUMBERS SHOULD BE MAINTAINED IN A CONSPICUOUS PLACE WHERE THEY CAN BE SEEN AND READ FROM THE STREET.
9. FIRE DEPARTMENT CONNECTIONS (FDC) SHALL BE PROVIDED WITH METAL CAPS FACING ROADWAY.
10. FIRE DEPARTMENT CONNECTIONS (FDC) SHALL BE 2.5" IN DIAMETER AND SHALL BE PROTECTED BY A UL LISTED CHECK VALVE AND SHALL BE INSTALLED NOT LESS THAN 18" NOR MORE THAN 4' ABOVE GRADE.
11. A PERMANENT SIGN CONSTRUCTED OF WEATHER RESISTANT METAL OR RIGID PLASTIC MATERIALS WITH RED AND WHITE LETTERS AT LEAST 1" HIGH SHALL BE ATTACHED TO THE EXTERIOR OF THE BUILDING ADJACENT TO THE CONNECTION OR ON THE CONNECTION, SECURED WITH SUBSTANTIAL AND CORROSION RESISTANT FASTENERS, AND SHALL READ "STANDPIPE" AND/OR "SPRINKLER" AS APPLICABLE.
12. A FLORIDA CERTIFIED SPRINKLER CONTRACTOR SHALL PULL PERMITS AND BEGIN WORK FROM THE POINT OF SERVICE PER STATE STATUTES 4A-46.040.

UTILITY NOTES:

1. KIDS CENTER & MARINA SERVICES TO REMAIN OPERATIONAL DURING CONSTRUCTION
2. FPL COMCAST, AT&T & GAS RELOCATION & SERVICE COORDINATION BY OTHERS

EXISTING MARINA



LOCATION SKETCH
N.T.S.

LAND DESCRIPTION:

BLOCKS 43 AND 43-A, OF VENETIAN ISLES REPLAT, A REPLAT OF A PORTION OF VENETIAN ISLES 3RD SECTION, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 48, PAGE 41, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

LEGEND

- EXISTING GRADE
- DIRECTION OF FLOW
- F.H. FIRE HYDRANT
- C.O. CLEANOUT
- S.M.H. SANITARY SEWER MANHOLE
- D.M.H. DRAINAGE (STORM) MANHOLE
- C.B. CATCH BASIN
- U.E. UTILITY EASEMENT
- D.I.P. DUCTILE IRON PIPE
- P.V.C. POLYVINYL CHLORIDE
- C.P.P. CORRUGATED POLYETHYLENE PIPE
- D.D.C.V. DOUBLE DETECTOR CHECK VALVE

NOTES TO CONTRACTOR

SURVEY NOTES:

1. EXISTING ELEVATIONS AND CONDITIONS SHOWN HEREON WERE TAKEN FROM A ALTA/NSPS SURVEY PREPARED BY COUSINS SURVEYORS & ASSOCIATES, INC. PROJECT NO. 8252-17 ON 1/31/17; LAST UPDATED 8/18/17.
2. ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988).
3. BENCHMARK DESCRIPTION: BROWARD COUNTY ENGINEERING DEPARTMENT BENCHMARK #2973, ELEVATION = 8.50' (NAVD 1988).

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REVISIONS

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2701 NE 42ND STREET
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CONCEPTUAL
WATER & SEWER PLAN

DCES

SCALE: 1"=30'

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JOB NO.:

2247-17

SHEET: C-2 OF 2

January 6, 2021 Development Review Committee

Some documents were unable to be posted online due to their size.

Please contact the City Clerk's Office at 954-943-6500 for further instructions on how to review these additional materials.