# CITY OF FORT PIERCE
# TECHNICAL REVIEW COMMITTEE

## AGENDA

Regular Meeting of the Fort Pierce Technical Review Committee to be held Thursday, September 15, 2022 at 10:00 a.m. in the William D. Dannahower, 2nd Floor Conference Room, 100 North U.S. Highway 1.

1. **New Business:**

   a. (7) Annexations – Woods Family Annexations - 3403-312-0000-000-4, 3403-312-0001-010-4, 3403-311-0005-050-1, 3403-502-0075-000-3, 3403-502-0069-000-8, 3403-502-0070-000-8, 3403-804-0043-000-7

   b. Site Plan and Conditional Use- Bev Smith Kia- 5560 S. US Highway 1

   c. Site Plan – Kings Highway Commerce Center - 2313-331-0000-000-4, 2313-332-0000-000-7, 2313-332-0000-010-0, 2313-333-0001-000-7

   d. Site Plan- K & K Properties - 2427-601-0031-000-8

   e. Preliminary Plat - Fort Pierce Commercial- 2419-321-0001-000-5, 2419-322-0003-000-2, 2419-322-0002-000-5

**Technical Review Committee** **1. a.**

Meeting Date: 09/15/2022

REQUESTED ACTION

(7) Annexations – Woods Family Annexations - 3403-312-0000-000-4, 3403-312-0001-010-4, 3403-311-0005-050-1, 3403-502-0075-000-3, 3403-502-0069-000-8, 3403-502-0070-000-8, 3403-804-0043-000-7

LOCATION

South of E Midway Road, East and West of S US Highway 1

RESPONSIBLE STAFF

Vennis Gilmore, Senior Planner

RECOMMENDATION

N/A

Attachments

TRC Packet

**Form Review**

Form Started By: Vennis Gilmore Started On: 08/29/2022 05:36 PM

Final Approval Date: 08/31/2022

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

| | | |
|---|---|---|
| TO | : | Technical Review Committee |
| FROM | : | Vennis Gilmore, Senior Planner |
| RE | : | Technical Review Project: #22-02000005 |
| BOARD DATE | : | September 15, 2022 |

## (7) Annexations – Woods Family Annexations

Attached are Applications for Annexation for six (7) subject properties.

Parcel ID(s): 3403-312-0000-000-4, 3403-312-0001-010-4, 3403-311-0005-050-1, 3403-502-0075-000-3, 3403-502-0069-000-8, 3403-502-0070-000-8, 3403-804-0043-000-7

The above subject parcel total approximately 33.44 acres more or less.

Please review and provide comments on this application. Please send all comments to the following emails vgilmore@cityoffortpierce.com, planning@cityoffortpierce.com, and/or through interoffice mail to the Planning Department. If you have comments, please respond as soon as possible.

Please do not hesitate to contact me should you require any additional information or clarification at 772-467-3741.

Thank You,

Vennis Gilmore
Senior Planner

Donald J. Cuozzo Inc.
Cuozzo Planning Solutions
p.o. box 1939 - stuart, fl 34995
cell: 772.485.1600 - office: 772.221.2128

8-15-2022
Hand Delivery

Kev Freeman
Planning Director
Planning Department
City of Fort Pierce
100 North US 1
Fort Pierce,
Florida 34950

**Re: Annexation of Woods Family Limited Partnership II Properties into City of Fort Pierce**

Dear Mr. Freeman,

On behalf of our client, the Woods Family Limited Partnership II, please find attached the application as one original set and two copies, requesting annexation of seven parcels into the City of Fort Pierce jurisdiction. The property is currently within the jurisdiction of St. Lucie County. The following table depicts parcel control numbers, acreage, land use, zoning and property valuations extracted from the Property Appraiser information data.

| PCN | Acreage | Property FLU | Property Zoning | Property Value |
|---|---|---|---|---|
| 3403-312-0000-000-4 | 0.98 acres | Commercial | CN | $287,500.00 |
| 3403-312-0001-010-4 | 3.48 acres | Residential Urban | RS-3 | $287,500.00 |
| 3403-311-0005-050-1 | 2.0 acres | Commercial | CN | $287,500.00 |
| 3403-502-0075-000-3 | 8.96 acres | Commercial | CN | $612,500.00 |
| 3403-502-0069-000-8 | 8.29 acres | Commercial | CG | $370,000.00 |
| 3403-502-0070-000-8 | 9.73 acres | Residential Urban | R-S4 | $370,000.00 |
| 3403-804-0043-000-7 | 0.35 acres | Commercial | CG | $15,200.00 |

In support of the request to annex the six parcels into the City of Fort Pierce please find attached the following:

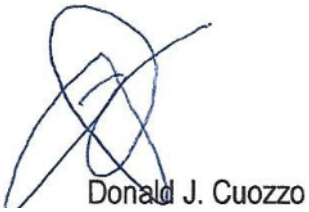
1. Cover letter
2. $1,000.000 application fee has been held by staff to be credited towards the $1890.00 advertising fee. The $890.00 outstanding advertising fee amount has been paid online.
3. Application form

4. Property Maps & Information
5. Warranty Deeds
6. Surveys

The properties are all currently vacant and within St. Lucie County jurisdiction. The request to annex the properties into the City of Fort Pierce would address what may be considered an existing enclave. Existing properties adjacent to the subject of this request are already within Fort Pierce jurisdiction. The property owner requests the properties be annexed with a view to assigning a High Density (RH) designation to the properties, with the exception of the PCN: 3403-502-0069-000-8 and PCN: 3403-804-0043-000-7, whereby a General Commercial land use and zoning designation is requested. Such requests are considered consistent with the existing development patterns and address the existing enclave issues.

Thank you in advance for reviewing the project. The necessary number of copies will be provided ahead of the TRC, Planning Board, and City Commission meeting once staff has completed the initial review of the annexation application request. If you have any questions or need any additional information, please do not hesitate to contact me.

Sincerely,



THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

# APPLICATION FOR ANNEXATION

Annexation applications will require the adoption of an ordinance which will require a public meeting before the Planning Board and two public hearings before the City Commission.

**Application submission shall include the following:**

- **TRC** (*Initial Submission): One (1) original and (8) paper copies of the application and support documents and provide one (1) electronic copy of the application packet as described below.
- **Planning Board**: One (1) original and (16) paper copies of the application and support documents and provide one (1) electronic copy of the application packet as described below.
- **City Commission**: One (1) original and (11) paper copies of the application and support documents and provide one (1) electronic copy of the application packet as described below.

**In addition to a complete application, packets shall include:**

- Warranty Deed
- Current Survey (completed within the last 12 months)

**1.** Address: W Midway Rd, Melville Rd, 5150 S US Highway 1 & Vacant Unaddressed, Fort Pierce, Florida

**2.** Legal description of real property for which annexation is being requested:
See attached

Property Tax ID: See attached

**3.** Size of described property: 33.44 acres total

**4.** Project description: Vacant multiple properties located within St. Lucie County

**5.** Current St. Lucie County Future Land Use Designation: Residential Urban (RU) Commercial (COM)

**6.** Current St. Lucie County Zoning: R-5, High Density Residential & C-3

**7.** Is this a Historic property? No

**8.** Appraised value: Multiple values - see attached property appraiser information sheets

**9.** Name of Owner(s): Woods Family Limited Partnership II

Signature of Owner(s): Sayfid L. Woods

Mailing Address: 5121 SS US Highway 1

City Fort Pierce State FL Zip 34982

Phone _____ Fax _____

**10.** Name of Representative: Donald Cuozzo, Cuozzo Design Group, Inc.

Signature of representative: _____

Mailing Address: P.O. Box 1939

City) Stuart State FL Zip 34995

Phone 772 485 1600 Fax _____

E-mail: dcuozzo@cdgplan.com

***INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772)467-3729***

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**OFFICE USE**:

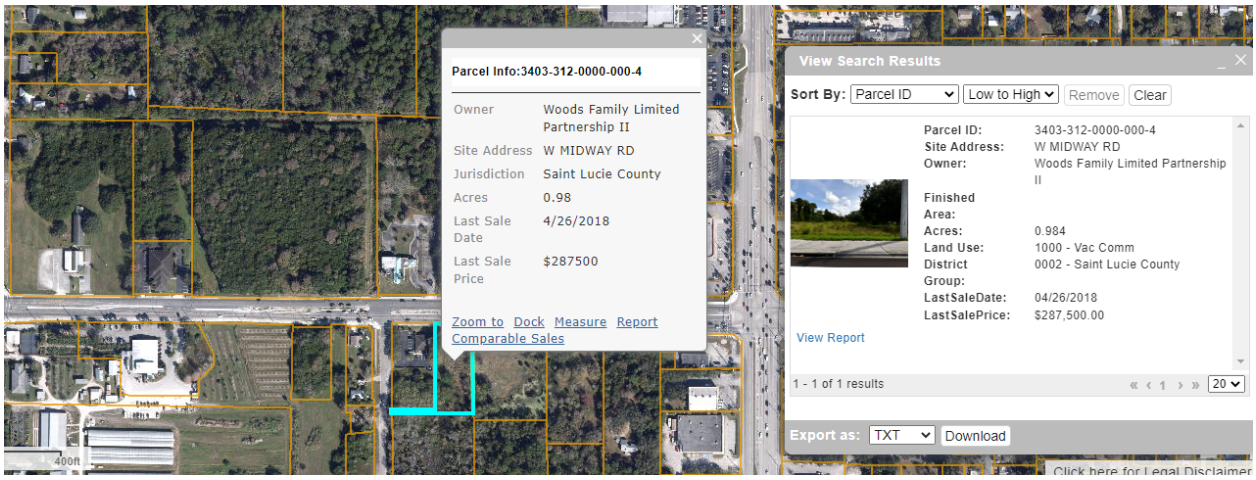
**DATE RECEIVED**: _____ Signed: _____

File Number: _____ Check No: _____ Receipt No: _____

TRC Review: _____ Planning Board Review: _____ City Commission: _____

Ordinance No: _____ Date Approved: _____

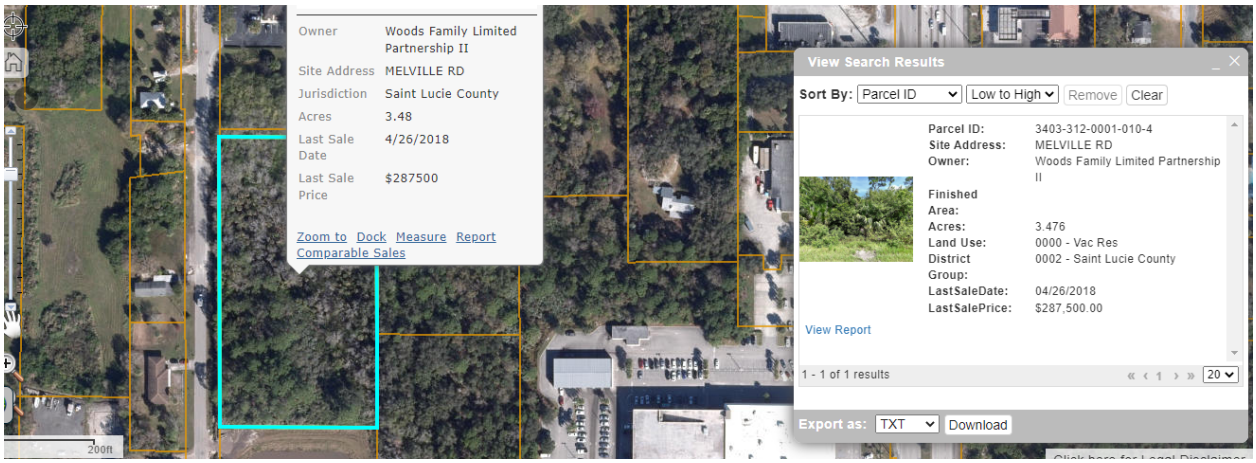
**Parcel 1:** 3403-312-0000-000-4 **0.98-acres**
COMM FLU & CN ZONING




Legal Description: 3 36 40 E 134 FT OF N 316 FT AND S 16 FT OF N E 316 FT OF W 1/2 OF W1/2 OF NE 1/4 OF SW 1/4-LESS W 45 FT AND LESS THAT PORTION FORMIDWAY RD- AND LESS THAT PORTION AS IN OR 3608-2308 FOR RDR/W (0.99 AC-42,859 SF) (MAP 34/03S)

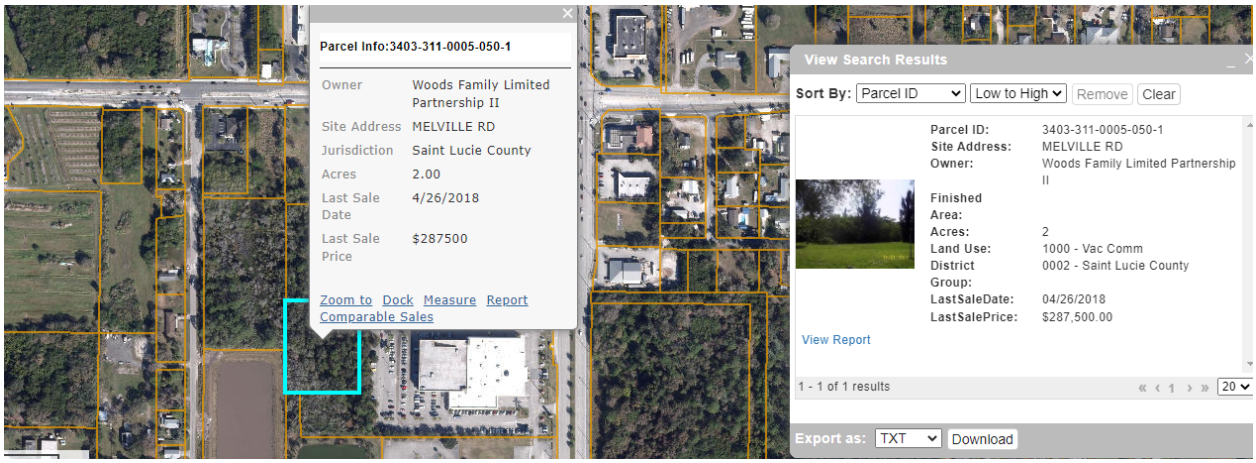
**Parcel 2:** 3403-312-0001-010-4 **3.48-acres**

RU FLU & RS-3 ZONING




Legal Description: 3 36 40 W 1/2 OF W 1/2 OF NE 1/4 OF SW 1/4-LESS W 45 FT AND LESS S407 FT AND LESS N 356 FT-(3.48 AC-151,414.56SF)

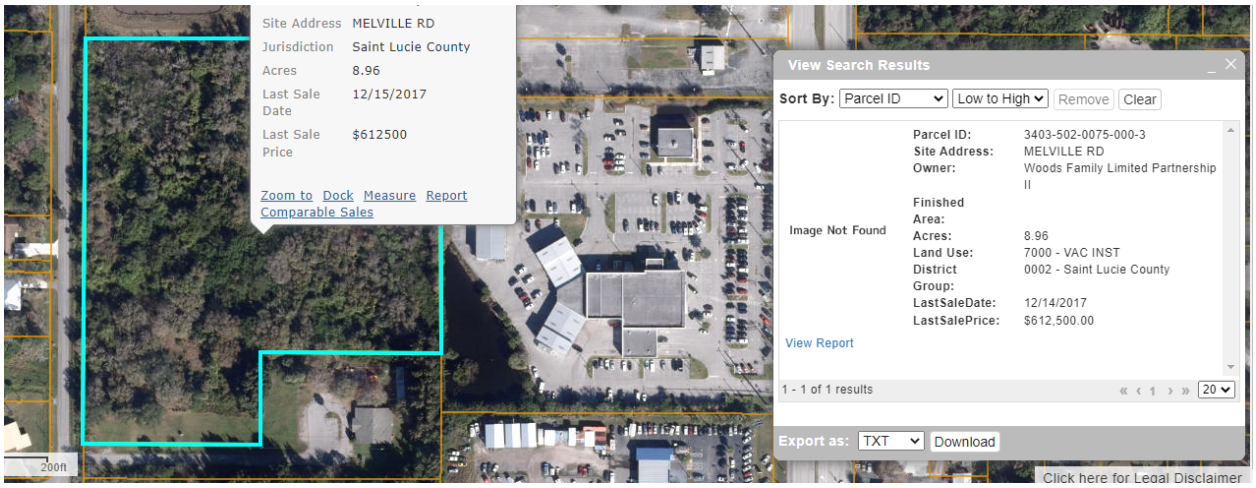
**Parcel 3:** 3403-311-0005-050-1 **2-acres**
COMM FLU & CN ZONING




Legal Description: 3 36 40 FROM INT 1/4 COR RUN WLY ALG E-W 1/4 SEC LI 993 FT, TH S672.48 FT TO POB, TH CONT S 332.52 FT, TH E 262 FT, TH N 332.52 FT,TH W 262 FT TO POB (2.00 AC)

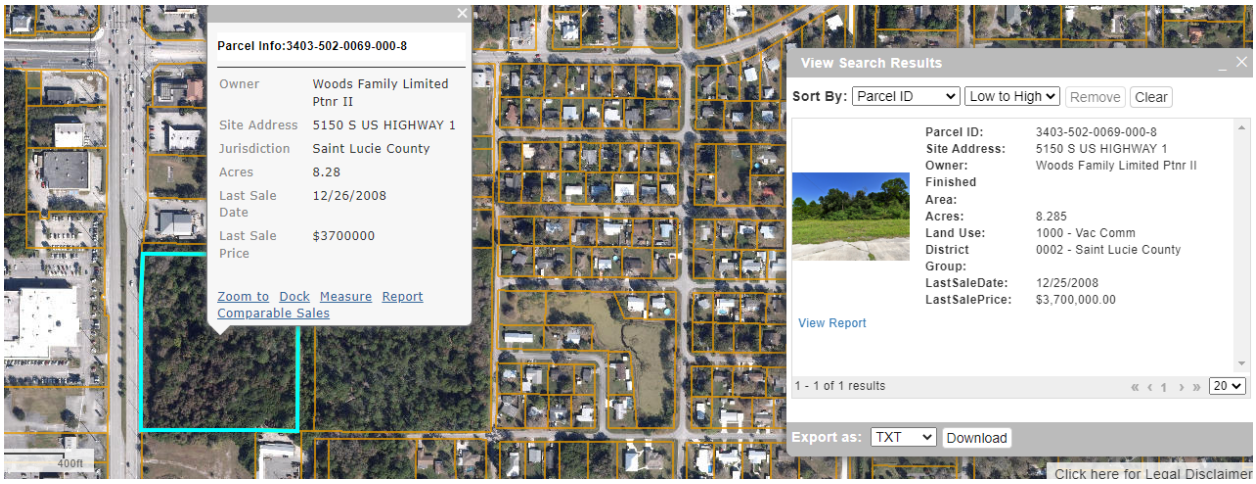
**Parcel 4:** 3403-502-0075-000-3 **8.96-acres**
RU FLU & RS-3 ZONING

COMM FLU & CN ZONING



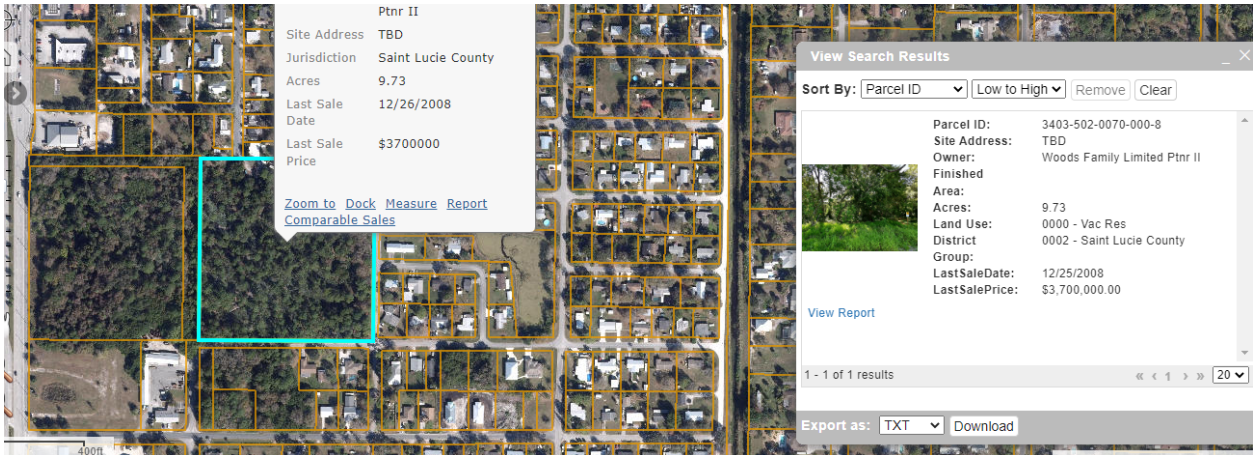

Legal Description: WHITE CITY S/D 03 36 40 PART OF LOTS 48 AND 50 MPDAF: N 713.81FT OF W 1/2 OF SE 1/4 OF SW 1/4-LESS W 45 FT AND LESS S 163 FT OFE 308 FT- (8.96 AC) (OR 4079-2282)

**Parcel 5:** 3403-502-0069-000-8 **8.29-acres**
COMM FLU & CG ZONING

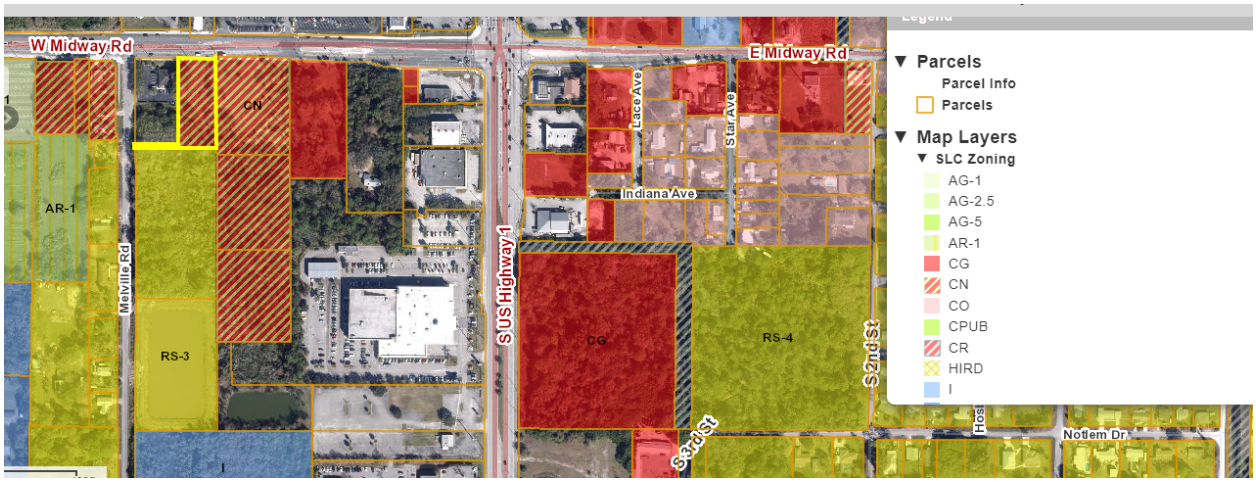


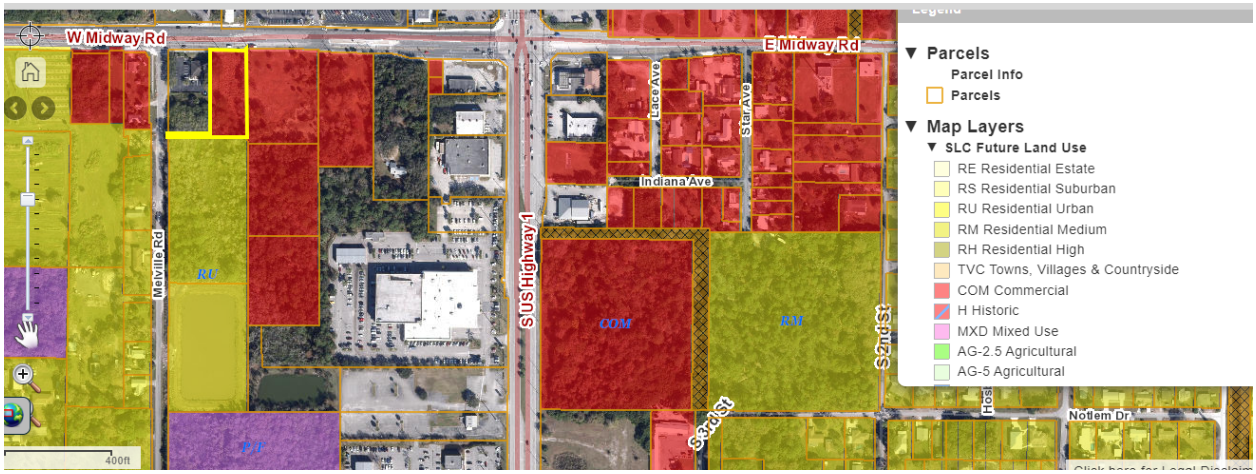

Legal Description: WHITE CITY S/D 03 36 40 LOT 40-LESS N 20 FT AND LESS E 30 FT ANDLESS RD R/W- (MAP 34/03S) (8.29 AC) (OR 3049-1422)

**Parcel 6:** 3403-502-0070-000-8 **9.73-ACRES**
RU FLU & R-S4 ZONING




Legal Description: WHITE CITY S/D 03 36 40 LOT 41-LESS W 30 FT CANAL R/W- (9.73AC)(MAP 34/03S) (OR 3049-1422)


W Midway Rd
E Midway Rd
CN
AR-1
RS-3
CG
RS-4
Melville Rd
S US Highway 1
Lace Ave
Star Ave
Indiana Ave
S 2nd St
S 3rd St
Notlem Dr
Parcels
Parcel Info
Parcels
Map Layers
SLC Zoning
AG-1
AG-2.5
AG-5
AR-1
CG
CN
CO
CPUB
CR
HIRD
I


W Midway Rd
E Midway Rd
RLC
COM
RM
PUB
Melville Rd
S US Highway 1
Lace Ave
Star Ave
Indiana Ave
S 2nd St
S 3rd St
Notlem Dr
400ft
Parcels
Parcel Info
Parcels
Map Layers
SLC Future Land Use
RE Residential Estate
RS Residential Suburban
RU Residential Urban
RM Residential Medium
RH Residential High
TVC Towns, Villages & Countryside
COM Commercial
H Historic
MXD Mixed Use
AG-2.5 Agricultural
AG-5 Agricultural

**Parcel 7:** 3403-804-0043-000-7 **0.35-acres**
COMMERCIAL FLU & CG ZONING

Michelle Franklin
Certified Florida Appraiser
✖ Close Property Card

Basic Info | Buildings | Features/Yard Items | Values | Sales | Permits | Tax Estimate/Tools | Property Card | S

## Property Identification

Site Address: INDIANA AVE
Sec/Town/Range: 03/36S/40E
Parcel ID: 3403-804-0043-000-7
Jurisdiction: Saint Lucie County

Use Type: 1000
Account #: 39524
Map ID: 34/03S
Zoning: Comm Offic

## Ownership

Woods Family Limited Ptnr II
PO Box 15340
Fort Pierce, FL 34979



## Legal Description

CENTRAL WHITE CITY S/D BLK 4 LOTS 3 AND 4-LESS S 20 FT FOR CANAL R/W- (0.35 AC) (OR 3049-1422)

## Current Values

| | |
|---|---|
| Just/Market Value: | $15,200 |
| Assessed Value: | $15,200 |
| Exemptions: | $0 |
| Taxable Value: | $15,200 |

**Property taxes are subject to change upon change of ownership.**

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

## Total Areas

| | |
|---|---|
| Finished/Under Air (SF): | 0 |
| Gross Sketched Area (SF): | 0 |
| Land Size (acres): | 0.35 |
| Land Size (SF): | 15,246 |

## Building Design Wind Speed

| Occupancy Category | I | II | III |
|---|---|---|---|
| Speed | 140 | 160 | 170 |

Sources/links:

Taxes for this parcel: SLC Tax Collector's Office
Download TRIM for this parcel: Download PDF

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
© Copyright 2022 Saint Lucie County Property Appraiser. All rights reserved.

Legal Description: CENTRAL WHITE CITY S/D BLK 4 LOTS 3 AND 4-LESS S 20 FT FOR CANAL R/W- (0.35 AC) (OR 3049-1422)

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 3297797 OR BOOK 3049 PAGE 1422, Recorded 01/07/2009 at 10:37 AM
Doc Tax: $25900.00

Prepared by and record & return to:
Sarah S. Vogel
International Land & Title Corporation
2385 NW Executive Center Drive, Suite 100
Boca Raton, FL 33431

Parcel ID Number:

# Warranty Deed

**This Indenture,** Made this day of December 26, 2008 A.D., **Between** Fordham Holdings, LLC, a Florida limited liability company,

of the County of Palm Beach, State of Florida, **grantor,** and Woods Family Limited Partnership II, a Florida limited partnership,

whose address is: 15303 Burlsey Court, Tampa, FL 33647

of the County of Hillsborough, State of Florida, **grantee.**

**Witnesseth** that the GRANTOR, for and in consideration of the sum of ----------TEN DOLLARS ($10)---------- DOLLARS, and other good and valuable consideration to GRANTOR in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate, lying and being in the County of St. Lucie State of Florida to wit:

Parcel One:

Lots 40 and 41, Sheen's Map of WHITE CITY, according to the plat thereof as recorded in Plat Book 1, Page 23, of the Public Records of St. Lucie County, Florida, and being in Section 3, Township 36 South, Range 40 East, Excepting therefrom rights-of-way for drainage canals and public road and Less and Excepting those lands described in Amended Final Judgment recorded in O.R. Book 1919, Page 2621, Public Records of St. Lucie County, Florida; and

Parcel Two:

Lots 3 and 4, Block 4, LESS the South 20 Feet thereof, CENTRAL WHITE CITY SUBDIVISION, according to the Plat thereof, as recorded in Plat Book 5, Page 63, of the Public Records of St. Lucie County, Florida.

Subject to restrictions, reservations and easements of record, if any, and taxes subsequent to 2008.

and the grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

**In Witness Whereof,** the grantor has hereunto set its hand and seal the day and year first above written.

**Signed, sealed and delivered in our presence:**

Witness
Printed Name: Marlyn J. Wiener

Witness
Printed Name: Ronny Lewis

Fordham Holdings, LLC, a Florida limited liability company

By: _____ (Seal)
Donald J. Thomas, Manager
P.O. Address: 445 E. Palmetto Park Road, Boca Raton, FL 33432

STATE OF Florida
COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me this 26 day of December, 2008 by Donald J. Thomas, as Manager of Fordham Holdings, LLC, a Florida limited liability company, on behalf of the company,
he is personally known to me or he has produced his Florida driver's license as identification.

RONALD LEWIS
MY COMMISSION # DD687570
EXPIRES: July 09, 2011
1-800-3-NOTARY Fl. Notary Discount Assoc. Co.

Printed Name: _____
Notary Public
My Commission Expires:


Laser Generated by O'Display Systems, Inc., 2008 (863) 763-5555 Form FLWD-1

# State of Florida

## Department of State

I certify from the records of this office that FORDHAM HOLDINGS, LLC is a limited liability company organized under the laws of the State of Florida, filed on May 4, 2004.

The document number of this limited liability company is L04000033928.

I further certify that said limited liability company has paid all fees due this office through December 31, 2008, that its most recent annual report was filed on November 19, 2008, and its status is active.

I further certify that said limited liability company has not filed Articles of Dissolution.

*Given under my hand and the Great Seal of Florida, at Tallahassee, the Capital, this the Sixth day of January, 2009*

**Secretary of State**

Authentication ID: **200139690412-010609-L04000033928**

To authenticate this certificate,visit the following site, enter this ID, and then follow the instructions displayed.
**https://efile.sunbiz.org/certauthver.html**

# LIMITED LIABILITY COMPANY CERTIFICATE
## FORDHAM HOLDINGS, LLC

In connection with the sale by FORDHAM HOLDINGS, LLC, a Florida limited liability company ("Company" or "Seller"), to WOODS FAMILY LIMITED PARTNERSHIP II, a Florida limited partnership ("Partnership or Buyer") of the property described as: Legal description attached ("Property"), the undersigned hereby certifies as follows:

1. The Company is a Florida limited liability company consisting of the following Manager and no others: DONALD J. THOMAS ("Manager").

2. The Company is existing and in good standing under the laws of the State of Florida under that certain Operating Agreement of Fordham Holdings, LLC ("Agreement"), and the Agreement is in full force and effect and has not been modified, amended or revoked, and the Company has not been dissolved.

3. The Company is the owner of the Property and DONALD J. THOMAS, as the sole Manager of the Company, has the full power and authority on behalf of the Company to consummate the sale of the Property to the Buyer in accordance with the Agreement for Purchase and Sale between Seller and Buyer dated November 17, 2008, and on behalf of Seller to execute any and all documents deemed necessary in connection with said sale.

4. There are no bankruptcy or insolvency proceedings, voluntary or involuntary, threatened or pending against the Company or the Manager in any court, and that, to the best of the undersigned's knowledge, there are no grounds upon which any such proceeding could be filed against the Company or the Manager.

5. The signature below by which this Certificate is executed is the authorized signature of DONALD J. THOMAS, as such signature will appear on instruments executed by DONALD J. THOMAS as Manager of the Company.

Executed as of the 26 day of December, 2008, by the undersigned.

FORDHAM HOLDINGS, LLC
a Florida limited liability company

By: _____
Donald J. Thomas, Manager

Parcel One:

Lots 40 and 41, Sheen's Map of WHITE CITY, according to the plat thereof as recorded in Plat Book 1, Page 23, of the Public Records of St. Lucie County, Florida, and being in Section 3, Township 36 South, Range 40 East, Excepting therefrom rights-of-way for drainage canals and public road and Less and Excepting those lands described in Amended Final Judgment recorded in O.R. Book 1919, Page 2621, Public Records of St. Lucie County, Florida; and

Parcel Two:

Lots 3 and 4, Block 4, LESS the South 20 Feet thereof, CENTRAL WHITE CITY SUBDIVISION, according to the Plat thereof, as recorded in Plat Book 5, Page 63, of the Public Records of St. Lucie County, Florida.

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4384346 OR BOOK 4079 PAGE 2282, Recorded 12/27/2017 08:40:47 AM Doc Tax: $4287.50

Prepared by:
Ryan Grazi, Esq.
Grazi & Gianino, LLP,
217 E. Ocean Blvd.
Stuart, Florida 34994

File Number: GG-70-17

# Corporate Warranty Deed

**This Indenture,** made, December 15, 2017 A.D. **Between** **Covenant Tabernacle World Outreach Center, Incorporated** whose post office address is: 7186 S. Federal Highway, Port Saint Lucie, Florida 34952 a corporation existing under the laws of the State of Florida, Grantor and **Woods Family Limited Partnership II** whose post office address is: 15303 Burlsey Court, Tampa, Florida 33647, Grantee,

**Witnesseth,** that the said Grantor, for and in consideration of the sum of Ten and No/100 Dollars ($10.00 ), to it in hand paid by the said Grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said Grantee forever, the following described land, situate, lying and being in the County of Saint Lucie, State of Florida, to wit:

The North 773.81 feet of the West 1/2 of the Southeast 1/4 of the Southwest 1/4 of Section 3, Township 36 South, Range 40 East, less the West 45 feet thereof, St. Lucie County, Florida. The above being a portion of Lots 48 and 50, Sheens Plat of White City recorded in Plat Book 1, Page 23, of the Public Records of St. Lucie County, Florida.

Less and except the following: Commencing at the Northwest corner of the Southeast quarter of the Southwest quarter of Section 3, Township 36 South, Range 40 East, St. Lucie County, Florida and running thence South 00°12'56" East for 773.81 feet; thence North 89°59'15" East, for 45.00 feet to the Point of Beginning; thence from the Point of Beginning North 00°12'56" West, for 60.00 feet; thence North 89°59'15" East for 309.38 feet; thence North 00°16'15" West, for 163.00 feet; thence North 89°51'15" East, for 308.00 feet; thence South 00°16'15" East, for 223.00 feet; thence South 89°59'15" West for 617.44 feet to the Place and Point of Beginning.

Subject to taxes for the current year, covenants, restrictions and easements of record, if any.

Parcel Identification Number: 3403-502-0075-000/3

**And** the said Grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

**In Witness Whereof,** the said Grantor has caused this instrument to be executed in its name by its duly authorized officer and caused its corporate seal to be affixed the day and year first above written.

Covenant Tabernacle World Outreach Center, Incorporated

***Signed and Sealed in Our Presence:***

By: _____
**Bryan H. Longworth**
**Its: Vice President**

Witness Print Name: Bryan Grazi

Witness Print Name: Kelly A. DeMaria

State of Florida
County of Martin

The foregoing instrument was acknowledged before me this 15th day of December, 2017, by Bryan H. Longworth, as the Vice President of Covenant Tabernacle World Outreach Center, Incorporated A corporation existing under the laws of the State of Florida, on behalf of the corporation. ____He is personally known to me or ___has produced FL DL as identification.

KELLY A DEMARIA
MY COMMISSION # FF942994
EXPIRES December 13, 2019
(407) 398-0153 FloridaNotaryService.com

_____(Seal)
Notary Public
Notary Printed Name: Kelly A. DeMaria
My Commission Expires:

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4430030 OR BOOK 4126 PAGE 1095, Recorded 05/01/2018 11:53:34 AM Doc Tax: $2012.50

Prepared by and return to:
**Michael J McDermott**
**McDermott & Thacker, P.A.**
**791 West Lumsden Road**
**Brandon, FL 33511**
**813-684-3131**
File Number: **18-0016 Woods**

[Space Above This Line For Recording Data]

# WARRANTY DEED

**This Warranty Deed** made this 26 day of April, **2018** between **KEYS FAMILY, LLC, a Florida Limited Liability Company, as to Parcel 1; NEAL S. KEYS, as to Parcel 2 and Parcel 3; NEAL S. KEYS, Individually and as Trustee, as to Parcel 4** whose post office address is **1911 NE 172 Street, North Miami Beach, FL 33162**, grantor, and **WOODS FAMILY LIMITED PARTNERSHIP II, a Florida limited partnership** whose post office address is **34 East High Point Rd., Stuart, FL 34996**, grantee:

*(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)*

**Witnesseth**, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Saint Lucie County, Florida** to-wit:

PARCEL 1: **(PARCEL ID 3403-311-0005-050-1)**
**THE SOUTH 332.52 FEET OF THE WEST 262 FEET AND THE SOUTH 3 FEET OF THE NORTH 335.52 FEET OF THE SOUTH 665.04 FEET OF THE WEST 262.0 FEET OF THE FOLLOWING DESCRIBED PROPERTY, WHICH THE FOLLOWING DESCRIBED PROPERTY IS HEREAFTER REFERRED TO AS THE "ANDREW CHRISTIANSEN TRACT", TO WIT:**

**THE WEST 262.0 FEET OF A PARCEL OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, RECORDED AS THE "ANDREW CHRISTIANSEN TRACT" AS SHOWN ON THE PLAT OF WHITE CITY, AS RECORDED IN PLAT BOOK 1, PAGE 23, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:**
**FROM THE CENTER OF THE AFORESAID SECTION 3 LYING ON THE CENTER LINE OF THE SOUTHBOUND LANE OF U.S. HIGHWAY #1 AS NOW IN USE, RUN WEST ALONG THE QUARTER SECTION LINE (ASSUMED BEARING WEST) A DISTANCE OF 993.0 FEET TO AN EXISTING 1 1/2" IRON PIPE; SAID POINT IS THE NORTHWEST CORNER OF THE AFOREMENTIONED "ANDREW CHRISTIANSEN TRACT" AND LIES 35.5 FEET SOUTH OF THE CENTERLINE OF PAVEMENT OF MIDWAY ROAD AND IS THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING, RUN SOUTH 0°11' EAST, A DISTANCE OF 1005 FEET TO AN EXISTING IRON PIPE; THENCE RUN EAST A DISTANCE OF 262.0 FEET TO A 3/4" IRON PIPE; THENCE RUN NORTH 0°11' WEST, A DISTANCE OF 1005.0 FEET TO AN EXISTING CONCRETE MONUMENT ON SAID QUARTER SECTION LINE; THENCE RUN WEST, ALONG SAID QUARTER SECTION LINE, A DISTANCE OF 262.0 FEET TO THE POINT OF BEGINNING.**

**TOGETHER WITH A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AS CONTAINED IN GRANT OF EASEMENT AS CONTAINED IN TERMINATION OF EASEMENT AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 817, PAGE 2843.**

DoubleTime®

*TOGETHER WITH:*

PARCEL 2: (PARCEL ID 3403-311-0005-010-9)

**THE NORTH 332.52 FEET OF THE SOUTH 665.04 FEET OF THE WEST 262 FEET OF THE FOLLOWING DESCRIBED PROPERTY, WHICH THE FOLLOWING DESCRIBED PROPERTY IS HEREAFTER REFERRED TO AS THE "ANDREW CHRISTIANSEN TRACT", TO WIT: THE WEST 262.0 FEET OF A PARCEL OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, RECORDED AS THE "ANDREW CHRISTIANSEN TRACT" AS SHOWN ON THE PLAT OF WHITE CITY, AS RECORDED IN PLAT BOOK 1, PAGE 23, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: FROM THE CENTER OF THE AFORESAID SECTION 3 LYING ON THE CENTER LINE OF THE SOUTHBOUND LANE OF U.S. HIGHWAY #1 AS NOW IN USE, RUN WEST ALONG THE QUARTER SECTION LINE (ASSUMED BEARING WEST) A DISTANCE OF 993.0 FEET TO AN EXISTING 1 1/2" IRON PIPE; SAID POINT IS THE NORTHWEST CORNER OF THE AFOREMENTIONED "ANDREW CHRISTIANSEN TRACT" AND LIES 35.5 FEET SOUTH OF THE CENTERLINE OF PAVEMENT OF MIDWAY ROAD AND IS THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING, RUN SOUTH 0°11' EAST, A DISTANCE OF 1005 FEET TO AN EXISTING IRON PIPE; THENCE RUN EAST A DISTANCE OF 262.0 FEET TO A 3/4" IRON PIPE; THENCE RUN NORTH 0°11' WEST, A DISTANCE OF 1005.0 FEET TO AN EXISTING CONCRETE MONUMENT ON SAID QUARTER SECTION LINE; THENCE RUN WEST, ALONG SAID QUARTER SECTION LINE, A DISTANCE OF 262.0 FEET TO THE POINT OF BEGINNING.**

**TOGETHER WITH A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AS CONTAINED IN GRANT OF EASEMENT AS CONTAINED IN TERMINATION OF EASEMENT AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 817, PAGE 2843.**

*TOGETHER WITH:*

PARCEL 3: (PARCEL ID 3403-312-0001-010-4)

**THE WEST 1/2 OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, LESS THE WEST 45 FEET, LESS THE SOUTH 470 FEET AND LESS THE NORTH 316 FEET THEREOF IN SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.**

*TOGETHER WITH:*

PARCEL 4: (PARCEL ID 3403-312-0000-000-4)

**THE NORTH 316 FEET OF THE WEST 1/2 OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, LESS THE NORTH 300 FEET OF THE WEST 151.54 FEET THEREOF AND LESS THAT PORTION IN MIDWAY ROAD RIGHT OF WAY IN SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.**

**CONTAINING IN ALL 370,012 SQUARE FEET OR 8.494 ACRES, MORE OR LESS.**

SUBJECT TO:

(1) **Easement as set forth in instrument recorded in recorded in O.R. Book 817, Page 2843, as affected by subordination recorded in O. R. Book 3831, Page 2773, and O. R. Book 3831, Page 2769, Public Records of Saint Lucie County, Florida.**
(2) **Unity of Title recorded in O.R. Book 1285, Page 660, Public Records of Saint Lucie County, Florida**

**Together** with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

**To Have and to Hold**, the same in fee simple forever.

**And** the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to **December 31, 2017**.

**In Witness Whereof**, grantor has hereunto set grantor's hand and seal the day and year first above written.

*Signed, sealed and delivered in our presence:*

KEYS FAMILY, LLC,
a Florida limited liability company

Witness Name: GLENDA PETERS

Witness Name: Donald Dorf

By: _____
NEAL S KEYS, Manager

Witness Name: GLENDA PETERS

Witness Name: Donald Dorf

_____ (*Seal*)
NEAL S KEYS, individually

Witness Name: GLENDA PETERS

Witness Name: Donald Dorf

_____
NEAL S KEYS, individually and as Trustee

State of Florida
County of Miami-Dade

The foregoing instrument was acknowledged before me this 26th day of APRIL, 2018 by NEAL S KEYS, Manager of KEYS FAMILY LLC, a Florida limited liability company, on behalf of the limited liability company. He/she [☑] is personally known to me or [_] has produced a driver's license as identification.

*[Notary Seal]*

NOTARY PUBLIC, STATE OF FLORIDA
Printed Name: _____
My Commission Expires: _____

GLENDA E PETERS
MY COMMISSION #FF183084
EXPIRES December 11, 2018
(407) 398-0153 FloridaNotaryService.com



DoubleTime®

State of Florida
County of Miami-Dade

The foregoing instrument was acknowledged before me this 26th day of APRIL, 2018 by NEAL S KEYS, Individually, who [✓] is personally known or [_] has produced a driver's license as identification.

*[Notary Seal]*

Glenda E Peters
NOTARY PUBLIC, STATE OF FLORIDA
Printed Name:
My Commission Expires:

GLENDA E PETERS
MY COMMISSION #FF183064
EXPIRES December 11, 2018
(407) 398-0153 FloridaNotaryService.com

State of Florida
County of Miami-Dade

The foregoing instrument was acknowledged before me this 26th day of APRIL, 2018 by NEAL S KEYS, Individually and as Trustee. He [✓] is personally known or [_] has produced a driver's license as identification.

[Notary Seal]

Glenda E Peters
NOTARY PUBLIC, STATE OF FLORIDA
Printed Name:
My Commission Expires:

GLENDA E PETERS
MY COMMISSION #FF183064
EXPIRES December 11, 2018
(407) 398-0153 FloridaNotaryService.com

18-0016

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4430030 OR BOOK 4126 PAGE 1095, Recorded 05/01/2018 11:53:34 AM Doc Tax: $2012.50

Prepared by and return to:
**Michael J McDermott**
**McDermott & Thacker, P.A.**
**791 West Lumsden Road**
**Brandon, FL 33511**
**813-684-3131**
File Number: **18-0016 Woods**

[Space Above This Line For Recording Data]

# WARRANTY DEED

**This Warranty Deed** made this 26 day of April, **2018** between **KEYS FAMILY, LLC, a Florida Limited Liability Company, as to Parcel 1; NEAL S. KEYS, as to Parcel 2 and Parcel 3; NEAL S. KEYS, Individually and as Trustee, as to Parcel 4** whose post office address is **1911 NE 172 Street, North Miami Beach, FL 33162**, grantor, and **WOODS FAMILY LIMITED PARTNERSHIP II, a Florida limited partnership** whose post office address is **34 East High Point Rd., Stuart, FL 34996**, grantee:

*(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)*

**Witnesseth**, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Saint Lucie County, Florida** to-wit:

PARCEL 1: **(PARCEL ID 3403-311-0005-050-1)**
**THE SOUTH 332.52 FEET OF THE WEST 262 FEET AND THE SOUTH 3 FEET OF THE NORTH 335.52 FEET OF THE SOUTH 665.04 FEET OF THE WEST 262.0 FEET OF THE FOLLOWING DESCRIBED PROPERTY, WHICH THE FOLLOWING DESCRIBED PROPERTY IS HEREAFTER REFERRED TO AS THE "ANDREW CHRISTIANSEN TRACT", TO WIT:**

**THE WEST 262.0 FEET OF A PARCEL OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, RECORDED AS THE "ANDREW CHRISTIANSEN TRACT" AS SHOWN ON THE PLAT OF WHITE CITY, AS RECORDED IN PLAT BOOK 1, PAGE 23, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:**
**FROM THE CENTER OF THE AFORESAID SECTION 3 LYING ON THE CENTER LINE OF THE SOUTHBOUND LANE OF U.S. HIGHWAY #1 AS NOW IN USE, RUN WEST ALONG THE QUARTER SECTION LINE (ASSUMED BEARING WEST) A DISTANCE OF 993.0 FEET TO AN EXISTING 1 1/2" IRON PIPE; SAID POINT IS THE NORTHWEST CORNER OF THE AFOREMENTIONED "ANDREW CHRISTIANSEN TRACT" AND LIES 35.5 FEET SOUTH OF THE CENTERLINE OF PAVEMENT OF MIDWAY ROAD AND IS THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING, RUN SOUTH 0°11' EAST, A DISTANCE OF 1005 FEET TO AN EXISTING IRON PIPE; THENCE RUN EAST A DISTANCE OF 262.0 FEET TO A 3/4" IRON PIPE; THENCE RUN NORTH 0°11' WEST, A DISTANCE OF 1005.0 FEET TO AN EXISTING CONCRETE MONUMENT ON SAID QUARTER SECTION LINE; THENCE RUN WEST, ALONG SAID QUARTER SECTION LINE, A DISTANCE OF 262.0 FEET TO THE POINT OF BEGINNING.**

**TOGETHER WITH A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AS CONTAINED IN GRANT OF EASEMENT AS CONTAINED IN TERMINATION OF EASEMENT AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 817, PAGE 2843.**

DoubleTime®

*TOGETHER WITH:*

PARCEL 2: (PARCEL ID 3403-311-0005-010-9)

**THE NORTH 332.52 FEET OF THE SOUTH 665.04 FEET OF THE WEST 262 FEET OF THE FOLLOWING DESCRIBED PROPERTY, WHICH THE FOLLOWING DESCRIBED PROPERTY IS HEREAFTER REFERRED TO AS THE "ANDREW CHRISTIANSEN TRACT", TO WIT: THE WEST 262.0 FEET OF A PARCEL OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, RECORDED AS THE "ANDREW CHRISTIANSEN TRACT" AS SHOWN ON THE PLAT OF WHITE CITY, AS RECORDED IN PLAT BOOK 1, PAGE 23, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: FROM THE CENTER OF THE AFORESAID SECTION 3 LYING ON THE CENTER LINE OF THE SOUTHBOUND LANE OF U.S. HIGHWAY #1 AS NOW IN USE, RUN WEST ALONG THE QUARTER SECTION LINE (ASSUMED BEARING WEST) A DISTANCE OF 993.0 FEET TO AN EXISTING 1 1/2" IRON PIPE; SAID POINT IS THE NORTHWEST CORNER OF THE AFOREMENTIONED "ANDREW CHRISTIANSEN TRACT" AND LIES 35.5 FEET SOUTH OF THE CENTERLINE OF PAVEMENT OF MIDWAY ROAD AND IS THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING, RUN SOUTH 0°11' EAST, A DISTANCE OF 1005 FEET TO AN EXISTING IRON PIPE; THENCE RUN EAST A DISTANCE OF 262.0 FEET TO A 3/4" IRON PIPE; THENCE RUN NORTH 0°11' WEST, A DISTANCE OF 1005.0 FEET TO AN EXISTING CONCRETE MONUMENT ON SAID QUARTER SECTION LINE; THENCE RUN WEST, ALONG SAID QUARTER SECTION LINE, A DISTANCE OF 262.0 FEET TO THE POINT OF BEGINNING.**

**TOGETHER WITH A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AS CONTAINED IN GRANT OF EASEMENT AS CONTAINED IN TERMINATION OF EASEMENT AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 817, PAGE 2843.**

*TOGETHER WITH:*

PARCEL 3: (PARCEL ID 3403-312-0001-010-4)

**THE WEST 1/2 OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, LESS THE WEST 45 FEET, LESS THE SOUTH 470 FEET AND LESS THE NORTH 316 FEET THEREOF IN SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.**

*TOGETHER WITH:*

PARCEL 4: (PARCEL ID 3403-312-0000-000-4)

**THE NORTH 316 FEET OF THE WEST 1/2 OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, LESS THE NORTH 300 FEET OF THE WEST 151.54 FEET THEREOF AND LESS THAT PORTION IN MIDWAY ROAD RIGHT OF WAY IN SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.**

**CONTAINING IN ALL 370,012 SQUARE FEET OR 8.494 ACRES, MORE OR LESS.**

SUBJECT TO:

(1) **Easement as set forth in instrument recorded in recorded in O.R. Book 817, Page 2843, as affected by subordination recorded in O. R. Book 3831, Page 2773, and O. R. Book 3831, Page 2769, Public Records of Saint Lucie County, Florida.**
(2) **Unity of Title recorded in O.R. Book 1285, Page 660, Public Records of Saint Lucie County, Florida**

**Together** with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

**To Have and to Hold**, the same in fee simple forever.

**And** the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to **December 31, 2017**.

**In Witness Whereof**, grantor has hereunto set grantor's hand and seal the day and year first above written.

*Signed, sealed and delivered in our presence:*

KEYS FAMILY, LLC,
a Florida limited liability company

Witness Name: GLENDA PETERS

Witness Name: Donald Dorf

By: _____
NEAL S KEYS, Manager

Witness Name: GLENDA PETERS

Witness Name: Donald Dorf

_____ (*Seal*)
NEAL S KEYS, individually

Witness Name: GLENDA PETERS

Witness Name: Donald Dorf

_____
NEAL S KEYS, individually and as Trustee

State of Florida
County of Miami-Dade

The foregoing instrument was acknowledged before me this 26th day of APRIL, 2018 by NEAL S KEYS, Manager of KEYS FAMILY LLC, a Florida limited liability company, on behalf of the limited liability company. He/she [☑] is personally known to me or [_] has produced a driver's license as identification.

*[Notary Seal]*

NOTARY PUBLIC, STATE OF FLORIDA
Printed Name: _____
My Commission Expires: _____

GLENDA E PETERS
MY COMMISSION #FF183084
EXPIRES December 11, 2018
(407) 398-0153 FloridaNotaryService.com



DoubleTime®

State of Florida
County of Miami-Dade

The foregoing instrument was acknowledged before me this 26th day of APRIL, 2018 by NEAL S KEYS, Individually, who [✓] is personally known or [_] has produced a driver's license as identification.

*[Notary Seal]*

Glenda E Peters
NOTARY PUBLIC, STATE OF FLORIDA
Printed Name:
My Commission Expires:

GLENDA E PETERS
MY COMMISSION #FF183064
EXPIRES December 11, 2018
(407) 398-0153 FloridaNotaryService.com

State of Florida
County of Miami-Dade

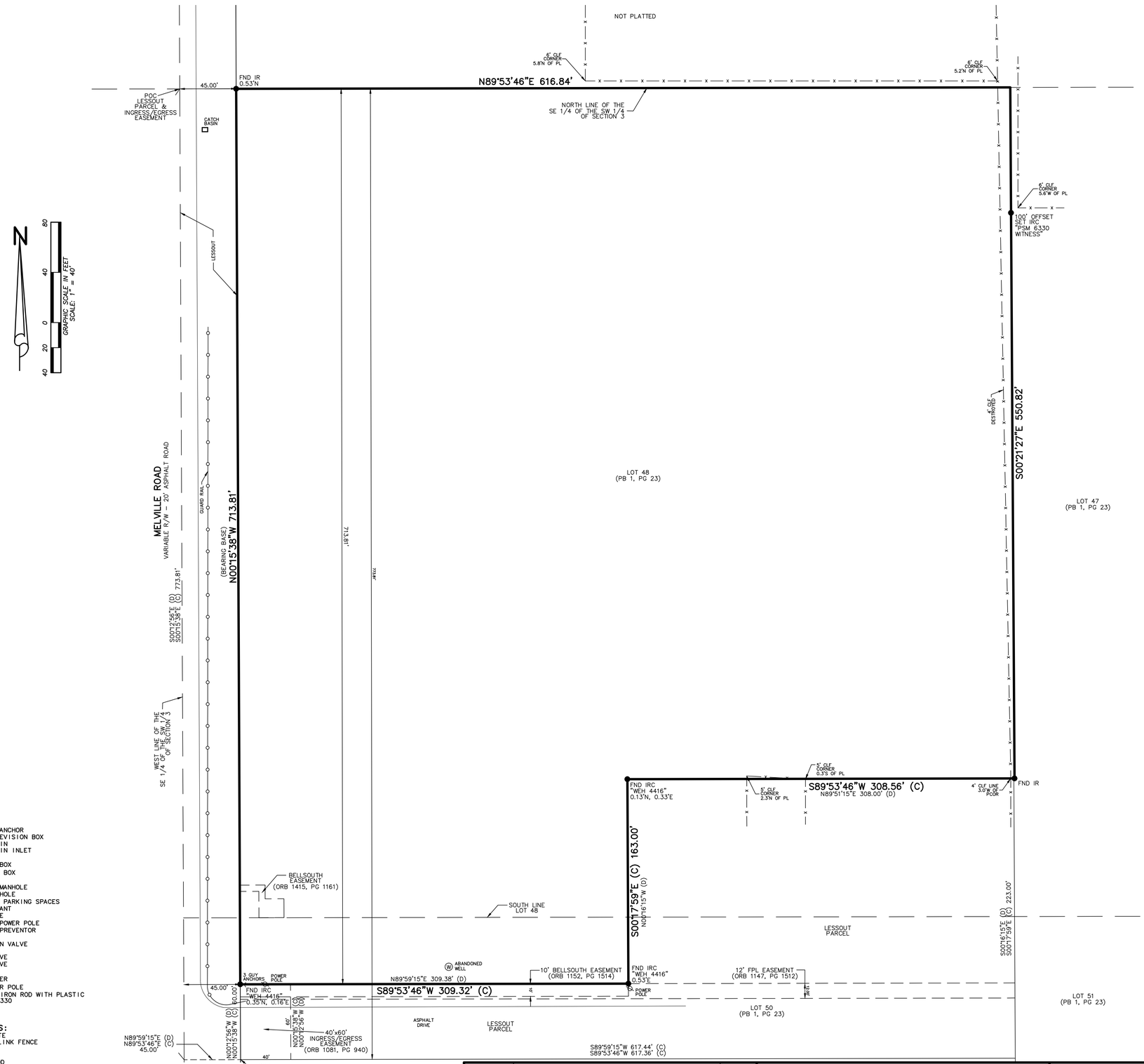
The foregoing instrument was acknowledged before me this 26th day of APRIL, 2018 by NEAL S KEYS, Individually and as Trustee. He [✓] is personally known or [_] has produced a driver's license as identification.

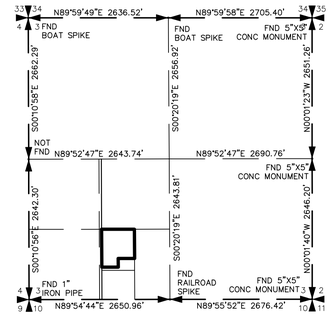
[Notary Seal]

Glenda E Peters
NOTARY PUBLIC, STATE OF FLORIDA
Printed Name:
My Commission Expires:

GLENDA E PETERS
MY COMMISSION #FF183064
EXPIRES December 11, 2018
(407) 398-0153 FloridaNotaryService.com

18-0016




## LEGAL DESCRIPTION:

THE NORTH 773.81 FEET OF THE WEST 1/2 OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, LESS THE WEST 45 FEET THEREOF, ST. LUCIE COUNTY FLORIDA. THE ABOVE BEING A PORTION OF LOTS 48 AND 50, SHEENS PLAT OF WHITE CITY RECORDED IN PLAT BOOK 1, PAGE 23, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LESS AND EXCEPT THE FOLLOWING:

COMMENCING AT THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA AND RUNNING THENCE SOUTH 00°12'56" EAST FOR 773.81 FEET; THENCE NORTH 89°59'15" EAST, FOR 45.00 FEET TO THE POINT OF BEGINNING; THENCE FROM THE POINT OF BEGINNING NORTH 00°12'56" WEST, FOR 60.00 FEET; THENCE NORTH 89°59'15" EAST FOR 309.38 FEET' THENCE NORTH 00°16'15" WEST, FOR 163.00 FEET; THENCE NORTH 89°51'15" EAST, FOR 308.00 FEET; THENCE SOUTH 00°16'15" EAST, FOR 223.00 FEET; THENCE SOUTH 89°59'15" WEST FOR 617.44 FEET TO THE PLACE AND POINT OF BEGINNING.

AND

EASEMENT PARCEL:

COMMENCING AT THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, RUN THENCE SOUTH 00°12'56" EAST FOR 773.81 FEET; THENCE NORTH 89°59'15" EAST, FOR 45.00 FEET TO THE POINT OF BEGINNING OF AN EASEMENT FOR INGRESS AND EGRESS; THENCE FROM THE POINT OF BEGINNING NORTH 00°12'56" WEST, FOR 60.00 FEET; THENCE NORTH 89°59'15" EAST FOR 40.00 FEET; THENCE SOUTH 00°12'56" EAST, FOR 60.00 FEET; THENCE SOUTH 89°59'15" WEST FOR 40.00 FEET TO THE POINT OF BEGINNING.

CONTAINING: 390,427 SQUARE FEET OR 8.963 ACRES, MORE OR LESS.

## SURVEY REPORT:

1. THIS IS A BOUNDARY SURVEY AS DEFINED IN CHAPTER 5J-17.050(10)(a-k), FLORIDA ADMINISTRATIVE CODE.
2. SURVEY BASED ON ST. LUCIE COUNTY SECTIONAL DATA AND SHEENS PLAT OF WHITE CITY RECORDED IN PLAT BOOK 1, PAGE 23, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. ALL MATTERS IDENTIIFED ON SAID PLAT ARE SHOWN ON THE SURVEY.
3. LEGAL DESCRIPTION WAS FURNISHED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NUMBER: 503005 A1, COMMITMENT DATE: NOVEMBER 6, 2017 AT 11:00 PM.
4. BEARING BASIS: N00°15'38"W ALONG THE WEST PROPERTY LINE.
5. NO UNDERGROUND UTILITIES OR IMPROVEMENTS WERE LOCATED UNLESS OTHERWISE SHOWN.
6. THIS SITE LIES WITHIN FLOOD ZONE "X", ACCORDING TO THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 12111C0277 J, EFFECTIVE DATE 2-16-12.
7. FLOOD ZONE SHOWN HEREON IS AN INTERPRETATION BY THE SURVEYOR AND IS PROVIDED AS A COURTESY. THE FLOOD ZONE SHOULD BE VERIFIED BY A DETERMINATION AGENCY.
8. THERE MAY BE ADDITIONAL EASEMENTS AND/OR RESTRICTIONS NOT SHOWN ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN PERFORMED BY ALEXANDER J. PIAZZA PSM, INC.
9. THE EXPECTED USE OF THE SUBJECT PROPERTY IS FOR THE PURCHASE OF PROPERTY AND FALLS WITHIN THE COMMERCIAL HIGH RISK CATEGORY AS CLASSIFIED IN CHAPTER 5J-17.051(15)(b)(ii), FLORIDA ADMINISTRATIVE CODE. ALL FIELD-MEASURED CONTROL MEASUREMENTS EXCEEDED 1:10,000 FEET ACCURACY REQUIREMENTS FOR THIS CLASSIFICATION. ALL SURVEY MEASUREMENTS ARE IN FEET.
10. ALL MAPPED FEATURES SHOWN HEREON ARE UNDER THE DIRECT SUPERVISION AND RESPONSIBILITY OF ALEXANDER J. PIAZZA PSM, INC.
11. SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
12. ADDITIONS OR DELETIONS TO THE SURVEY MAP OR REPORT BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
13. THE BEARINGS SHOWN HEREON ARE RELATIVE TO THE STATE PLANE COORDINATE SYSTEM OF THE NORTH AMERICAN DATUM OF 1983 (2007 ADJUSTMENT) AND ARE REFERENCED TO THE LENGEMANN OF FLORIDA'S L-NET GPS NETWORK DEVELOPED WHICH MEETS OR EXCEEDS THE FEDERAL GEODETIC CONTROL COMMITTEE (FGCC) GUIDELINES FOR "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES" AS WELL AS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17.051 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472.027 FLORIDA STATUTES. BENCHMARKS SET OR FOUND FOR THIS SURVEY ARE NOTED ON THE SKETCH.
14. THIS SURVEY IS PREPARED ONLY FOR THE PARTIES LISTED BELOW AND IS NOT ASSIGNABLE.
    CERTIFIED TO: WOODS FAMILY LIMITED PARTNERSHIP II
    GRAZI & GIANINO, LLP
    OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
15. © COPYRIGHT 2017 BY ALEXANDER J. PIAZZA PSM, INC.
    THE SKETCH OF SURVEY AND SURVEY REPORT COMPRISE THE COMPLETE SURVEY.
    THIS SURVEY IS NOT VALID UNLESS THE SKETCH AND REPORT ACCOMPANY EACH OTHER.
    REPRODUCTIONS OF THIS SURVEY ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER EMPLOYED BY ALEXANDER J. PIAZZA PSM, INC.

ALEXANDER J. PIAZZA PSM, INC.

DATE OF FIELD SURVEY: 10-13-17

DATE OF SURVEY: 10-16-17

ALEXANDER J. PIAZZA
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE No. 6330

## SYMBOLS:

- = GUY WIRE ANCHOR
- = CABLE TELEVISION BOX
- = CATCH BASIN
- = CATCH BASIN INLET
- = CLEANOUT
- = ELECTRIC BOX
- = TELEPHONE BOX
- = SIGN
- = SANITARY MANHOLE
- = STORM MANHOLE
- = NUMBER OF PARKING SPACES
- = FIRE HYDRANT
- = LIGHT POLE
- = CONCRETE POWER POLE
- = BACKFLOW PREVENTOR
- = MAIL BOX
- = IRRIGATION VALVE
- = GAS VALVE
- = SEWER VALVE
- = WATER VALVE
- = WELL
- = WATER METER
- = WOOD POWER POLE
- = SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

## ABBREVIATIONS:

| | |
|---|---|
| CONC | = CONCRETE |
| CLF | = CHAIN LINK FENCE |
| FND | = FOUND |
| INV | = INVERT |
| IR | = IRON ROD |
| IRC | = IRON ROD WITH PLASTIC CAP |
| LB | = LICENSE BUSINESS |
| LS | = LICENSE SURVEY |
| PL | = PROPERTY LINE |
| R/W | = RIGHT-OF-WAY |
| RCP | = REINFORCED CONCRETE PIPE |
| RGE | = RANGE |
| SEC | = SECTION |
| TWP | = TOWNSHIP |
| UE | = UTILITY EASEMENT |

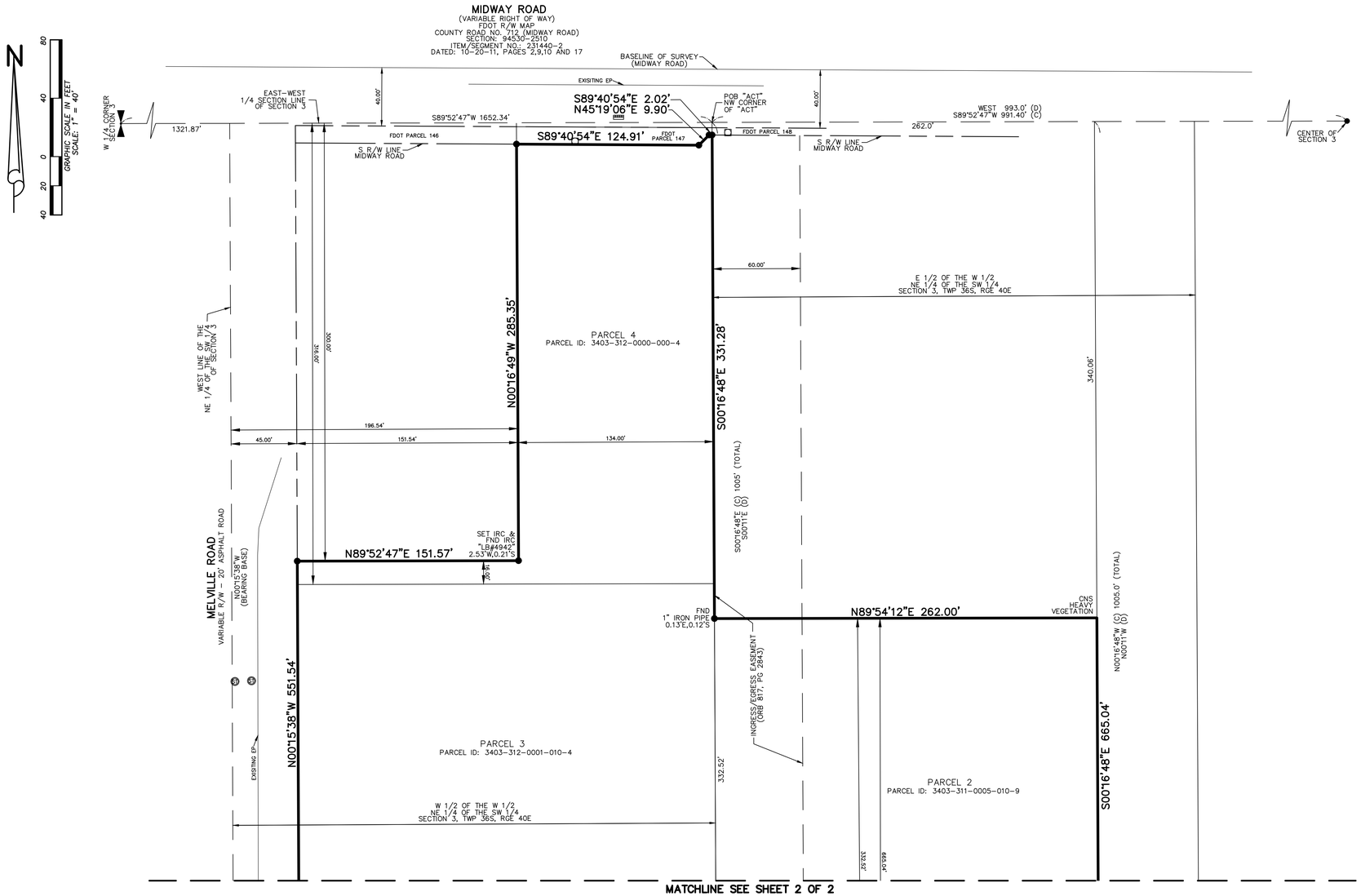
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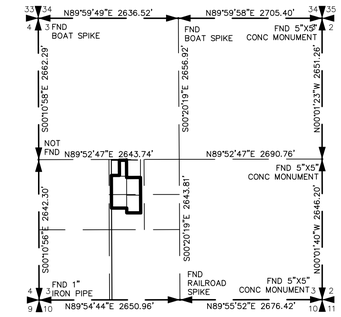

**ALEXANDER J. PIAZZA PSM, INC.**
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280


# BOUNDARY SURVEY
## MELVILLE ROAD
SEC 3, TWP 36S, RGE 40E
AS PREPARED FOR
## WOODS FAMILY LIMITED PARTNERSHIP II

| | | | |
|---|---|---|---|
| CAD | K:\BUILDERS\DWG2017\17-3407.DWG | | |
| REF | K:\ | | |
| FLD | CJM / RP | FB. PG. | JOB 17-3407 |
| OFF | CJM | | DATE 10-16-17 |
| CKD | AJP | SHEET 1 OF 1 | DWG D-784 |

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**SURVEY REPORT:**

1. THIS IS A BOUNDARY SURVEY AS DEFINED IN CHAPTER 5J-17.050(10)(a-k), FLORIDA ADMINISTRATIVE CODE.
2. SURVEY BASED ON ST. LUCIE COUNTY SECTIONAL DATA AND SHEENS PLAT OF WHITE CITY RECORDED IN PLAT BOOK 1, PAGE 23, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. ALL MATTERS IDENTIIFED ON SAID PLAT ARE SHOWN ON THE SURVEY.
3. LEGAL DESCRIPTION WAS FURNISHED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NUMBER: 554100 A1, COMMITMENT DATE: MARCH 28, 2018 AT 11:00 PM.
4. BEARING BASIS: N00°15'38"W ALONG THE WEST LINE OF THE NE 1/4 OF THE SW 1/4 OF SECTION 3.
5. NO UNDERGROUND UTILITIES OR IMPROVEMENTS WERE LOCATED UNLESS OTHERWISE SHOWN.
6. THIS SITE LIES WITHIN FLOOD ZONE "X", ACCORDING TO THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 12111C0277 J, EFFECTIVE DATE 2-16-12.
7. FLOOD ZONE SHOWN HEREON IS AN INTERPRETATION BY THE SURVEYOR AND IS PROVIDED AS A COURTESY. THE FLOOD ZONE SHOULD BE VERIFIED BY A DETERMINATION AGENCY.
8. THERE MAY BE ADDITIONAL EASEMENTS AND/OR RESTRICTIONS NOT SHOWN ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN PERFORMED BY ALEXANDER J. PIAZZA PSM, INC.
9. THE EXPECTED USE OF THE SUBJECT PROPERTY IS FOR THE PURCHASE OF PROPERTY AND FALLS WITHIN THE COMMERCIAL HIGH RISK CATEGORY AS CLASSIFIED IN CHAPTER 5J-17.051(15)(b)(ii), FLORIDA ADMINISTRATIVE CODE. ALL FIELD-MEASURED CONTROL MEASUREMENTS EXCEEDED 1:10,000 FEET ACCURACY REQUIREMENTS FOR THIS CLASSIFICATION. ALL SURVEY MEASUREMENTS ARE IN FEET.
10. ALL MAPPED FEATURES SHOWN HEREON ARE UNDER THE DIRECT SUPERVISION AND RESPONSIBILITY OF ALEXANDER J. PIAZZA PSM, INC.
11. SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
12. ADDITIONS OR DELETIONS TO THE SURVEY MAP OR REPORT BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
13. THE BEARINGS SHOWN HEREON ARE RELATIVE TO THE STATE PLANE COORDINATE SYSTEM OF THE NORTH AMERICAN DATUM OF 1983 (2007 ADJUSTMENT) AND ARE REFERENCED TO THE LENGEMANN OF FLORIDA'S L-NET GPS NETWORK DEVELOPED WHICH MEETS OR EXCEEDS THE FEDERAL GEODETIC CONTROL COMMITTEE (FGCC) GUIDELINES FOR "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES" AS WELL AS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17.051 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472.027 FLORIDA STATUTES. BENCHMARKS SET OR FOUND FOR THIS SURVEY ARE NOTED ON THE SKETCH.
14. THIS SURVEY IS PREPARED ONLY FOR THE PARTIES LISTED BELOW AND IS NOT ASSIGNABLE.
    CERTIFIED TO: WOODS FAMILY LIMITED PARTNERSHIP II
    McDERMOTT & THACKER, P.A.
    OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
15. © COPYRIGHT 2018 BY ALEXANDER J. PIAZZA PSM, INC.
    THE SKETCH OF SURVEY AND SURVEY REPORT COMPRISE THE COMPLETE SURVEY.
    THIS SURVEY IS NOT VALID UNLESS THE SKETCH AND REPORT ACCOMPANY EACH OTHER.
    REPRODUCTIONS OF THIS SURVEY ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER EMPLOYED BY ALEXANDER J. PIAZZA PSM, INC.

DATE OF FIELD SURVEY: 4-18-18

DATE OF SURVEY: 4-19-18

ALEXANDER J. PIAZZA PSM, INC.

ALEXANDER J. PIAZZA
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE No. 6330

**SYMBOLS:**

- = GUY WIRE ANCHOR
- = CABLE TELEVISION BOX
- = CATCH BASIN
- = CATCH BASIN INLET
- = CLEANOUT
- = ELECTRIC BOX
- = TELEPHONE BOX
- = SIGN
- = SANITARY MANHOLE
- = STORM MANHOLE
- = NUMBER OF PARKING SPACES
- = FIRE HYDRANT
- = LIGHT POLE
- = CONCRETE POWER POLE
- = BACKFLOW PREVENTOR
- = MAIL BOX
- = IRRIGATION VALVE
- = GAS VALVE
- = SEWER VALVE
- = WATER VALVE
- = WELL
- = WATER METER
- = WOOD POWER POLE
- = SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

**ABBREVIATIONS:**

"ACT" = ANDREW CHRISTIANSEN TRACT
CONC = CONCRETE
CLF = CHAIN LINK FENCE
EP = EDGE OF PAVEMENT
FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
FND = FOUND
INV = INVERT
IR = IRON ROD
IRC = IRON ROD WITH PLASTIC CAP
LB = LICENSE BUSINESS
LS = LICENSE SURVEY
PL = PROPERTY LINE
R/W = RIGHT-OF-WAY
RCP = REINFORCED CONCRETE PIPE
RGE = RANGE
SEC = SECTION
TWP = TOWNSHIP
UE = UTILITY EASEMENT

**LEGAL DESCRIPTION:**

PARCEL 1: PARCEL ID 3403-311-0005-050-1

THE SOUTH 332.52 FEET OF THE WEST 262 FEET AND THE SOUTH 3 FEET OF THE NORTH 335.52 FEET OF THE SOUTH 665.04 FEET OF THE WEST 262.0 FEET OF THE FOLLOWING DESCRIBED PROPERTY, WHICH THE FOLLOWING DESCRIBED PROPERTY IS HEREAFTER REFERRED TO AS THE "ANDREW CHRISTIANSEN TRACT", TO WIT:

THE WEST 262.0 FEET OF A PARCEL OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, RECORDED AS THE "ANDREW CHRISTIANSEN TRACT" AS SHOWN ON THE PLAT OF WHITE CITY, AS RECORDED IN PLAT BOOK 1, PAGE 23, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: FROM THE CENTER OF THE AFORESAID SECTION 3 LYING ON THE CENTER LINE OF THE SOUTHBOUND LANE OF U.S. HIGHWAY #1 AS NOW IN USE, RUN WEST ALONG THE QUARTER SECTION LINE (ASSUMED BEARING WEST) A DISTANCE OF 993.0 FEET TO AN EXISTING 1 1/2" IRON PIPE; SAID POINT IS THE NORTHWEST CORNER OF THE AFOREMENTIONED "ANDREW CHRISTIANSEN TRACT" AND LIES 35.5 FEET SOUTH OF THE CENTERLINE OF PAVEMENT OF MIDWAY ROAD AND IS THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING, RUN SOUTH 0°11' EAST, A DISTANCE OF 1005 FEET TO AN EXISTING IRON PIPE; THENCE RUN EAST A DISTANCE OF 262.0 FEET TO A 3/4" IRON PIPE; THENCE RUN NORTH 0°11' WEST, A DISTANCE OF 1005.0 FEET TO AN EXISTING CONCRETE MONUMENT ON SAID QUARTER SECTION LINE; THENCE RUN WEST, ALONG SAID QUARTER SECTION LINE, A DISTANCE OF 262.0 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AS CONTAINED IN GRANT OF EASEMENT AS CONTAINED IN TERMINATION OF EASEMENT AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 817, PAGE 2843.

TOGETHER WITH:

PARCEL 2: PARCEL ID 3403-311-0005-010-9

THE NORTH 332.52 FEET OF THE SOUTH 665.04 FEET OF THE WEST 262 FEET OF THE FOLLOWING DESCRIBED PROPERTY, WHICH THE FOLLOWING DESCRIBED PROPERTY IS HEREAFTER REFERRED TO AS THE "ANDREW CHRISTIANSEN TRACT", TO WIT:

THE WEST 262.0 FEET OF A PARCEL OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, RECORDED AS THE "ANDREW CHRISTIANSEN TRACT" AS SHOWN ON THE PLAT OF WHITE CITY, AS RECORDED IN PLAT BOOK 1, PAGE 23, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: FROM THE CENTER OF THE AFORESAID SECTION 3 LYING ON THE CENTER LINE OF THE SOUTHBOUND LANE OF U.S. HIGHWAY #1 AS NOW IN USE, RUN WEST ALONG THE QUARTER SECTION LINE (ASSUMED BEARING WEST) A DISTANCE OF 993.0 FEET TO AN EXISTING 1 1/2" IRON PIPE; SAID POINT IS THE NORTHWEST CORNER OF THE AFOREMENTIONED "ANDREW CHRISTIANSEN TRACT" AND LIES 35.5 FEET SOUTH OF THE CENTERLINE OF PAVEMENT OF MIDWAY ROAD AND IS THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING, RUN SOUTH 0°11' EAST, A DISTANCE OF 1005 FEET TO AN EXISTING IRON PIPE; THENCE RUN EAST A DISTANCE OF 262.0 FEET TO A 3/4" IRON PIPE; THENCE RUN NORTH 0°11' WEST, A DISTANCE OF 1005.0 FEET TO AN EXISTING CONCRETE MONUMENT ON SAID QUARTER SECTION LINE; THENCE RUN WEST, ALONG SAID QUARTER SECTION LINE, A DISTANCE OF 262.0 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AS CONTAINED IN GRANT OF EASEMENT AS CONTAINED IN TERMINATION OF EASEMENT AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 817, PAGE 2843.

TOGETHER WITH:

PARCEL 3: PARCEL ID 3403-312-0001-010-4

THE WEST 1/2 OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, LESS THE WEST 45 FEET, LESS THE SOUTH 470 FEET AND LESS THE NORTH 316 FEET THEREOF IN SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

TOGETHER WITH:

PARCEL 4: PARCEL ID 3403-312-0000-000-4

THE NORTH 316 FEET OF THE WEST 1/2 OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, LESS THE NORTH 300 FEET OF THE WEST 151.54 FEET THEREOF AND LESS THAT PORTION IN MIDWAY ROAD RIGHT OF WAY IN SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

CONTAINING IN ALL 370,012 SQUARE FEET OR 8.494 ACRES, MORE OR LESS.

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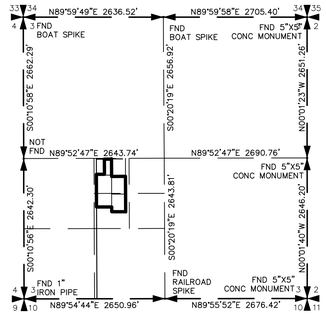
**ALEXANDER J. PIAZZA PSM, INC.**
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619 SW Biltmore Street
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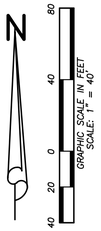
# BOUNDARY SURVEY
## MELVILLE ROAD
SEC 3, TWP 36S, RGE 40E
AS PREPARED FOR
## WOODS FAMILY LIMITED PARTNERSHIP II

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|---|---|---|---|---|---|
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| REF | K:\ | | | | |
| FLD | CJM / RP | FB. | PG. | JOB | 18-3822 |
| OFF | CJM | | | DATE | 4-18-18 |
| CKD | AJP | SHEET | 1 OF 2 | DWG | D-809 |

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MATCHLINE SEE SHEET 1 OF 2




MELVILLE ROAD
VARIABLE R/W – 20' ASPHALT ROAD
N00°15'38"W (BEARING BASE)
EXISTING EP

WEST LINE OF THE NE 1/4 OF THE SW 1/4 OF SECTION 3

N00°15'38"W 551.54'

PARCEL 3
PARCEL ID: 3403-312-0001-010-4

W 1/2 OF THE W 1/2 NE 1/4 OF THE SW 1/4 SECTION 3, TWP 36S, RGE 40E

45.00'

S89°53'46"W 285.76'

N00°16'48"W 153.38'

330.00'

INGRESS/EGRESS EASEMENT (ORB 817, PG 2845)

332.52'

60.00'

PARCEL 2
PARCEL ID: 3403-311-0005-010-9

330.00'

S00°16'48"E (C) 1005' (TOTAL)
S00°11'E (D)

179.14'

660.99'

N00°16'48"W (C) 1005.0' (TOTAL)
N00°11'W (D)

S00°16'48"E 665.04'

E 1/2 OF THE W 1/2 NE 1/4 OF THE SW 1/4 SECTION 3, TWP 36S, RGE 40E

PARCEL 1
PARCEL ID: 3403-311-0005-050-1

330.00'

S89°54'12"W (C) 262.00'
EAST (D)

CNS
HEAVY VEGETATION

S LINE NE 1/4 OF SW 1/4 OF SECTION 3

**SYMBOLS:**

- = GUY WIRE ANCHOR
- = CABLE TELEVISION BOX
- = CATCH BASIN
- = CATCH BASIN INLET
- = CLEANOUT
- = ELECTRIC BOX
- = TELEPHONE BOX
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**ABBREVIATIONS:**

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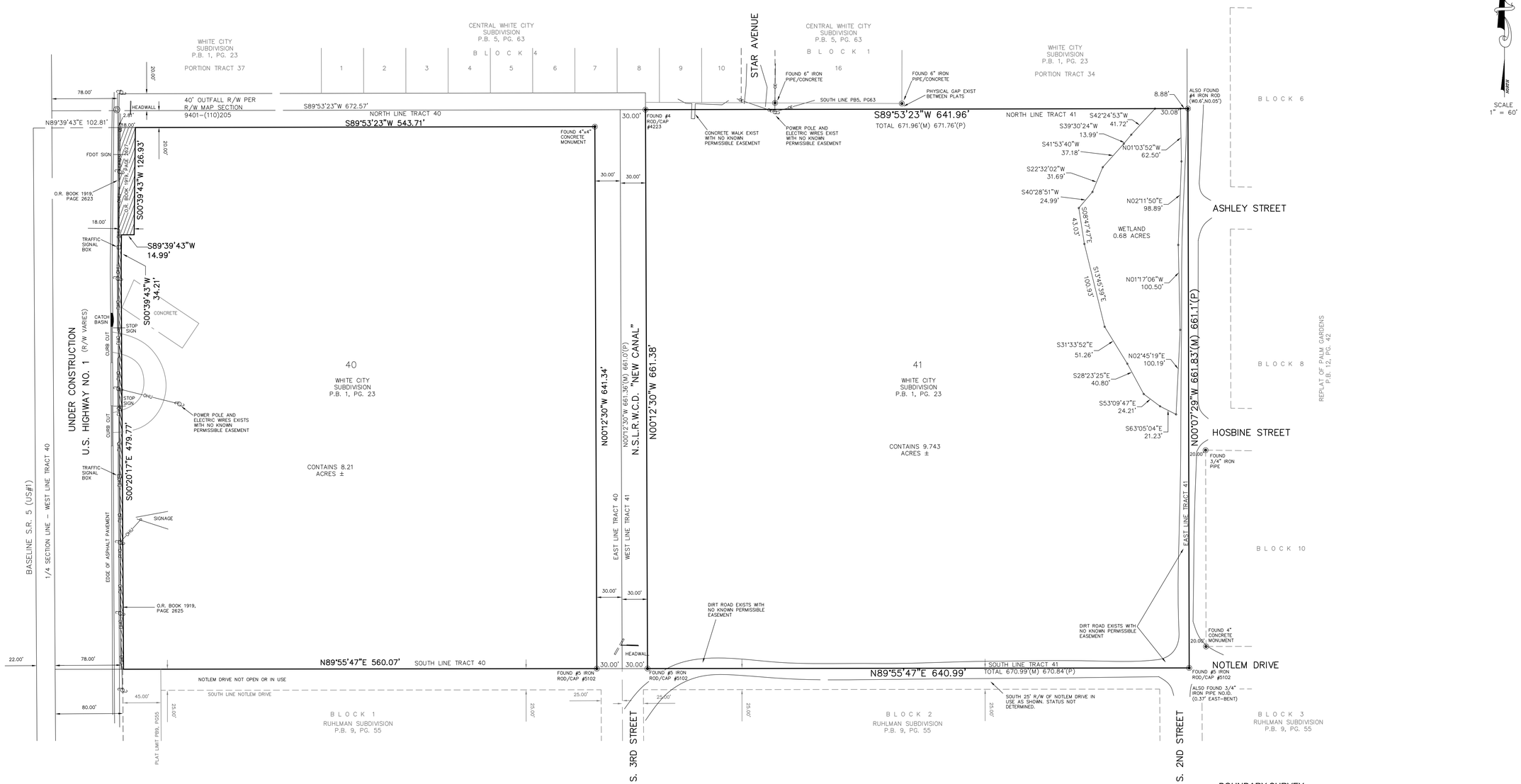
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LB#7280


# BOUNDARY SURVEY
# MELVILLE ROAD
SEC 3, TWP 36S, RGE 40E
AS PREPARED FOR:
WOODS FAMILY LIMITED PARTNERSHIP II

| | | | | | |
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| CAD | K:\BUILDERS\DWG2017\18-3822.DWG | | | | |
| REF | K:\ | | | | |
| FLD | CJM / RP | FB. | PG. | JOB | 18-3822 |
| OFF | CJM | | | DATE | 4-18-18 |
| CKD | AJP | SHEET | 2 OF 2 | DWG | D-809 |

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## SURVEYOR'S NOTES:

1. BEARINGS REFER TO STATE PLANE NORTH AMERICAN DATUM 1983, FLORIDA EAST ZONE. BEARING BASE CAN BE DETERMINED ALONG THE SOUTH LINE OF SUBJECT PARCEL. CONTROL MONUMENTS USED ARE SAV2, Y403, STL4, SAV1.
2. (P)=PLAT MEASUREMENT; (M)=FIELD MEASUREMENT; (C)=CALCULATED MEASUREMENT
3. PROPERTY LIES IN FLOOD ZONE "X", FEMA MAP #12111C0280F, 8-19-91.
4. THE LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAYS, EASEMENTS, OR OTHER ENCUMBRANCES BY THIS FIRM.
5. UNDERGROUND UTILITIES NOT LOCATED PER THIS SURVEY.
6. P.C.P. = PERMANENT CONTROL POINT; P.R.M. = PERMANENT REFERENCE MONUMENT.
7. FDOT = FLORIDA DEPTARTMENT OF TRANSPORTATION.
8. EL = ELEVATION; MIN. = MINIMUM; PB = PLAT BOOK; PG = PAGE
9. COV'D = COVERED; TYP. = TYPICAL; CONC. = CONCRETE
10. ℄ = CENTERLINE OF ROAD; R/W = RIGHT-OF-WAY.
11. ▣ = STORM WATER CATCH BASIN; Ⓓ = STORM MANHOLE
12. ⌐□ = POWER POLE; ◑ = GUY WIRE; ⊸ = SIGN; OHU = OVERHEAD UTILITIES.

## RIGHT OF WAY NOTES:

1. RIGHT OF WAY FOR US#1 DETERMINED BY REFERENCE TO RIGHT OF WAY MAP SECTION #94010-2500 SHEET 15 OF 31.
2. NOTLEM DRIVE SOUTH OF TRACT 40 IS NOT OPEN OR IN USE.
3. NOTLEM DRIVE SOUTH OF TRACT 41 IS A DIRT ROAD AND EXIST ONTO SUBJECT PROPERTY AS SHOWN WITH NO KNOWN R/W.
4. WEST OF TRACT 41 EXIST A 20' R/W KNOWN AS S. 2ND ST. A DIRT ROAD EXIST ON SUBJECT PROPERTY AS SHOWN WITH NO KNOWN R/W.
5. US#1 IS CURRENTLY UNDER CONSTRUCTION AT TIME OF THIS SURVEY.

## AREA NOTES:

TRACT 40: 357419.89 SQ.FT. (8.205 ACRES)
TRACT 41: 424405.57 SQ.FT. (9.743 ACRES)

TOTAL AREA: 781825.46 SQ.FT. (17.948 ACRES)

## WETLAND NOTES:

1.) WETLANDS WERE FLAGGED BY LINDA PETZ ENVIRONMENTAL AND FIELD LOCATED BY THIS OFFICE JANUARY 2007.

2.) WETLANDS ARE SUBJECT TO GOVERNMENTAL JURISDICTION.

DRAWING DATE: 12/08/2008
FIELD DATE: 12/5/2008
F.B. FOLDER
SKETCH NO. 204036_18AC_12-2008.dwg

# BOUNDARY SURVEY

**LEGAL DESCRIPTION:**
LOTS 40 AND 41 OF SHEEN'S MAP OF WHITE CITY, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, PAGE(S) 23, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA AND BEING IN SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, EXCEPTING THEREFROM RIGHTS-OF-WAY FOR DRAINAGE CANALS AND PUBLIC ROAD AND LESS AND EXCEPTING THOSE LANDS DESCRIBED IN AMENDED FINAL JUDGMENT RECORDED IN O.R. BOOK 1919, PAGE 2621, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

## CERTIFICATIONS VALID TO:

1. WOODS FT. PIERCE PROPERTY, LLC
2. MCDERMOTT & THACKER, P.A.
3. INTERNATIONAL LAND & TITLE CORPORATION
4. OLD REPUBLIC NATIONAL TITLE INS. CO.
5. WOODS FAMILY LIMITED PARTNERSHIP II, A FLORIDA LIMITED PARTNERSHIP

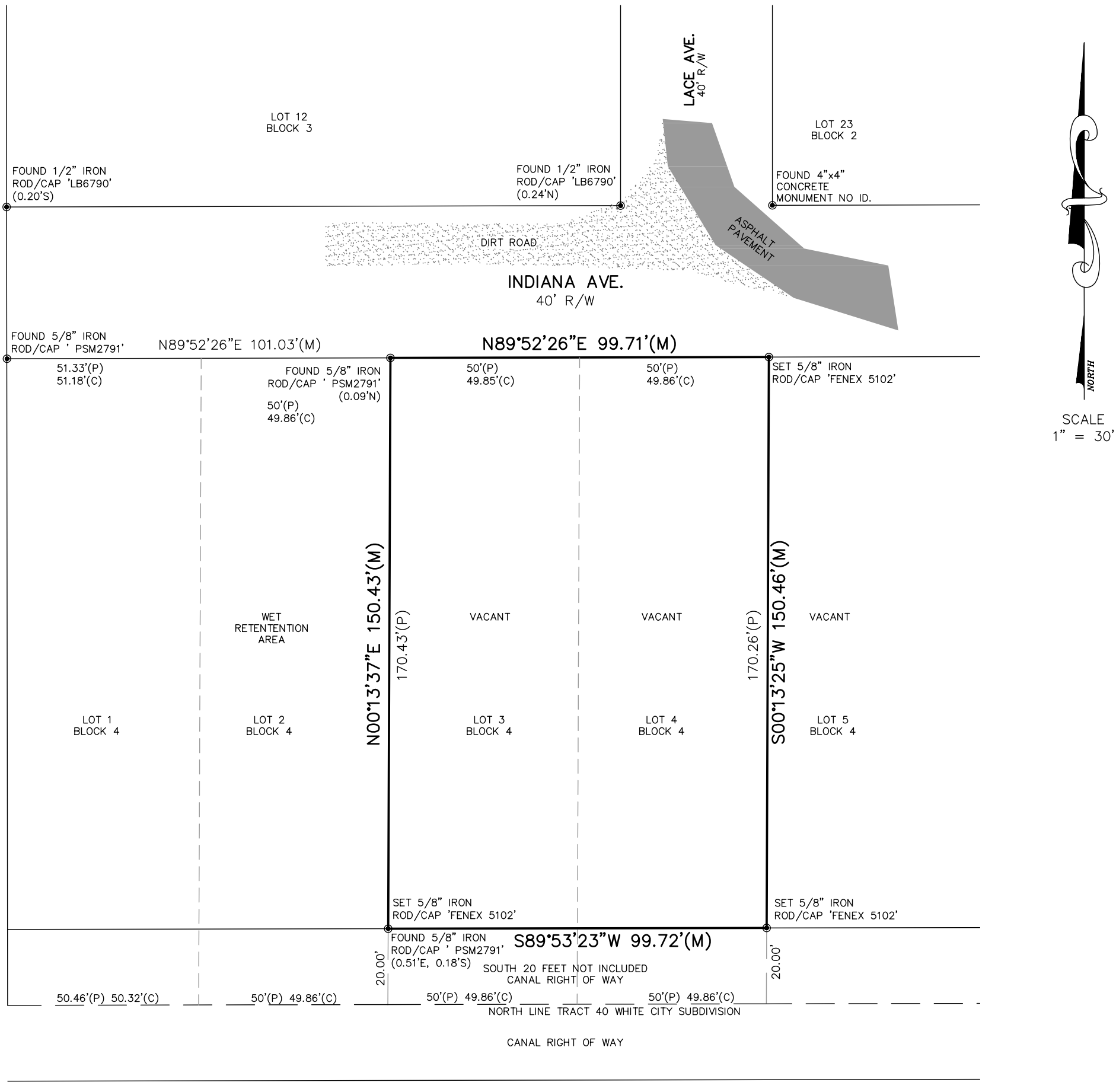
## CERTIFICATION:

I HEREBY CERTIFY THAT THE SKETCH SHOWN HEREON IS A CORRECT REPRESENTATION OF A SURVEY DONE UNDER MY DIRECTION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. NO SEARCH OF THE PUBLIC RECORDS MADE FOR ERRORS OR OMISSIONS OF SAID DESCRIPTION. EASEMENTS OF RECORD NOT SHOWN UNLESS FURNISHED. I FURTHER CERTIFY THAT THIS SURVEY MEETS THE MINIMUM TECHNICAL STANDARDS SET FORTH UNDER RULE 61G17-6 F.A.C. BY THE FLORIDA BOARD OF SURVEYORS AND MAPPERS.

CHRISTIAN FENEX AND ASSOCIATES, LLC
PROFESSIONAL SURVEYING AND MAPPING
ENVIRONMENTAL CONSULTING
1657 S. DIXIE HIGHWAY, STUART, FLORIDA
P.O. BOX 2533, PALM CITY, FL 34991
PH.(772)283-2977 FAX.(772)283-2979
LICENSED BUSINESS # 6858

FLORIDA REGISTRATION #5102
CHRISTIAN FENEX

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.




## BOUNDARY SURVEY

**LEGAL DESCRIPTION**: (PER ORB/PG 3031/2379 & 3031/2381) LOT 3 AND LOT 4, BLOCK 4, LESS THE SOUTH 20 FEET THEREOF, CENTRAL WHITE CITY SUBDIVISION, ACCORDING TO THE PLAT THEREOF, RECORDED IN PLAT BOOK 5, PAGE 63, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

## CERTIFICATION VALID TO:

1. WOODS FT. PIERCE PROPERTY, LLC
2. MCDERMOTT & THACKER, P.A.
3. INTERNATIONAL LAND & TITLE CORPORATION
4. OLD REPUBLIC NATIONAL TITLE INS. CO.
5. WOODS FAMILY LIMITED PARTNERSHIP II, A FLORIDA LIMITED PARTNERSHIP

## SURVEYOR'S NOTES:

1. BEARINGS REFER TO STATE PLANE NORTH AMERICAN DATUM 1983, FLORIDA EAST ZONE. BEARING BASE CAN BE DETERMINED ALONG THE NORTH LINE OF SUBJECT PARCEL. CONTROL MONUMENTS USED ARE SAV2, Y403, STL4, SAV1.
2. (P)=PLAT MEASUREMENT; (M)=FIELD MEASUREMENT; (C)=CALCULATED MEASUREMENT
3. PROPERTY LIES IN FLOOD ZONE "X", FEMA MAP #12111C0280F, 8-19-91.
4. THE LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAYS, EASEMENTS, OR OTHER ENCUMBRANCES BY THIS FIRM.
5. UNDERGROUND UTILITIES NOT LOCATED PER THIS SURVEY.
6. PB = PLAT BOOK; PG = PAGE; R/W = RIGHT-OF-WAY.
7. THIS SURVEY PREPARED WITHOUT BENEFIT OF TITLE. EASEMENTS OR OTHER INSTRUMENTS OF RECORD MAY EXIST OTHER THAN SHOWN HEREON.
8. PORTION OF LOT IS LOW AND CLIENT IS ADVISED TO SEEK ENVIRONMENTAL CONSULTANT FOR SITE EVALUATION.
9. ORB/PG = OFFICIAL RECORDS BOOK AND PAGE (ST. LUCIE COUNTY PUBLIC RECORDS)

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

## CERTIFICATION:

I HEREBY CERTIFY THAT THE SKETCH SHOWN HEREON IS A CORRECT REPRESENTATION OF A SURVEY DONE UNDER MY DIRECTION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. NO SEARCH OF THE PUBLIC RECORDS MADE FOR ERRORS OR OMISSIONS OF SAID DESCRIPTION. EASEMENTS OF RECORD NOT SHOWN UNLESS FURNISHED. I FURTHER CERTIFY THAT THIS SURVEY MEETS THE MINIMUM TECHNICAL STANDARDS SET FORTH UNDER RULE 61G17-6 F.A.C. BY THE FLORIDA BOARD OF SURVEYORS AND MAPPERS.

CHRISTIAN FENEX AND ASSOCIATES, LLC
PROFESSIONAL SURVEYING AND MAPPING
ENVIRONMENTAL CONSULTING
1657 S. DIXIE HIGHWAY, STUART, FLORIDA
P.O. BOX 2533, PALM CITY, FL 34991
PH.(772)283-2977 FAX.(772)283-2979
LICENSED BUSINESS # 6858

FLORIDA REGISTRATION #5102
CHRISTIAN FENEX

| PLAT BOOK | PAGE | DATE OF SKETCH | FIELD SURVEY DATE | F.B. | PG. | SCALE | W.O.# |
|---|---|---|---|---|---|---|---|
| 5 | 63 | 12/11/08 | 12/10/08 | P3 | 36 | 1" = 30' | 208051 |

SKETCH NO. 208051_KUNE_LOTS3-4.DWG

**Technical Review Committee** **1. b.**

Meeting Date: 09/15/2022

REQUESTED ACTION

Site Plan and Conditional Use- Bev Smith Kia- 5560 S. US Highway 1

LOCATION

5560 S US Hwy 1

RESPONSIBLE STAFF

Ryan Altizer, Planner

RECOMMENDATION

N/A

Attachments

TRC Packet

**Form Review**

Form Started By: Ryan Altizer Started On: 08/31/2022 12:53 PM

Final Approval Date: 08/31/2022

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

| | |
|---|---|
| **TO:** | Technical Review Committee |
| **THROUGH**: | Kevin Freeman, Planning Director |
| **FROM:** | Ryan Altizer, Planner |
| **RE:** | **Bev Smith Kia – Site Plan and Conditional Use - 22-07000015**<br>**5560 S US Highway 1** |
| **BOARD DATE:** | September 15, 2022 |

**Site Plan and Conditional Use at 5560 S US Highway 1**

The above referenced project is being submitted for your review and comments. The applicant is requesting a Site Plan and Conditional Use for 5560 S US Highway 1 for the construction of asphalt pavement parking to provide vehicle storage for automotive dealership.

Please send all comments to planning@cityoffortpierce.com and/or through interoffice mail to the Planning Department

If you have comments, please respond prior to Tuesday, September 13, 2022. If you have any questions, please contact the Planning Department at 772-467-3737.

Thank you

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

# Design Review

Property address or Location 5560 South U.S. Hwy 1

Parcel ID #(s) 3403-502-0302-000-4

Project Description The project consists of construction of asphalt pavement parking to provide vehicle storage for automotive dealership, and two dry stormwater ponds.

| | |
|---|---|
| Nicholas Smith | Michael Smith |
| Property Owner(s) | Applicant/Representative, Title, Company |
| 7845 SW Ellipse Way | 7845 SW Ellipse Way |
| Street Address | Street Address |
| Stuart FL 34997 | Stuart FL 34997 |
| City State Zip | City State Zip |
| 561-818-2847 | 561-818-2847 |
| Phone Number | Phone Number |
| Mike Smith <msmith@bevsmithtoyota.com> | Mike Smith <msmith@bevsmithtoyota.com> |
| Email Address | Email Address |

***Property Owner(s) Acknowledgements:*** *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Application (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

Michael Smith

*Property Owner(s) Signature(s)*

STATE OF FLORIDA -- COUNTY

The foregoing instrument was acknowledged before me this 21st day of July, 2022, by Michael Smith who is personally known to me or has produced _____ as identification.

K Marie McKisset

Signature of Notary

Notary Public State of Florida
K Marie McKisset
My Commission
HH 199374
Exp.11/26/2026 (seal)

**TO BE COMPLETED BY STAFF**

| Zoning | Future Land Use | Total Acres | Historic Districts | Historic Designation |
|---|---|---|---|---|
| | | | | |

Pre-Application Meeting Date _____ Fees _____ Control # _____ B. Permit _____

Intake Planner _____

Planner Assigned _____

Approved _____ Date _____

Comments _____

Intake Date Stamp

# Design Review Application Checklist
## (City Code of Ordinances 22-59)

Submittal for Administrative Approval

a. A survey (1" = 30' minimum scale) of property lines, existing topography and the location of trees meeting the tree protection regulations of section 22-194, location of bordering streets and, if applicable, wetlands and beaches.
b. A site analysis study to include a discussion of specimen trees and other natural vegetation, access, significant topography, wetlands, buffers, setbacks, views, orientation, the surrounding built environment and other site features that may influence design elements.
c. A draft written narrative describing the design intent of the project, its goals and objectives and how it reflects the site analysis study results.
d. Context photographs of neighboring uses and architectural styles.
e. Photographs and/or drawings of architectural buildings or objects that serve as a precedent for the proposed building design. Models should be taken from local exemplary buildings, either existing or demolished. Documentation of such buildings is available in the city's planning department.
f. Photographs of all existing structures located on the property. If existing structures on the property are more than fifty (50) years of age, documentation of these structures with data from the Florida Master Site File form is also required.
g. Conceptual site plan (to scale) showing proposed location of all buildings, structures, parking areas, signs and landscaping.
h. Landscape plan, at the same scale as the site plan. The planning director or designee may request enlarged plans of detailed planting areas. Planting schedule with sizes of proposed plantings must be included.
i. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.
j. Exterior elevations showing architectural character, external architectural features and streetscape of the proposed development, including materials, colors, shadow lines and landscaping. The street elevation shall encompass the entire proposed project and generally identify the major elements of the adjacent two (2) properties on either side of the site. If the adjacent properties are vacant or underutilized, a diagram shall be provided that identifies the mass and form that is allowable under current zoning. If the street elevation must be drawn at such a scale as to render architectural details of the building unreadable, drawings of individual buildings at a larger scale should be provided as well.
k. Design review concurrent with conceptual development plan procedure according to subsection 22-58(e) is also available.

Submittal for Board Approval

a. A written narrative describing how the project conforms to administrative approval and design review guidelines of this section.
b. A final site plan meeting the requirements of section 22-58
c. A final site lighting plan that meets the requirements of subsection 22-58(d)(8).
d. A final landscape plan that meets the requirements of Article XII, Landscaping and Trees.
e. Final floor plans and elevation drawings (1/8" = 1'-0" minimum scale), as detailed under administrative approval, showing exterior building materials and colors with architectural sections and details to adequately describe the project.
f. A color board (11"x17" maximum) containing actual color samples of all exterior finishes, keyed to the elevations, and indicating the manufacturer's name and color designation.

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PLANNING DEPARTMENT Florida

# DEVELOPMENT REVIEW

**Property Information**

Property address or Location 5560 South U.S. Hwy 1

Parcel ID #(s) 3403-502-0302-000-4

Project description The project consists of construction of asphalt pavement parking to provide vehicle storage for automotive dealership, and two dry stormwater ponds.

**Application Type**

☐Site Plan ■Conditional Use w/New Construction ☐Conceptual Development Plan

☐Minor Amendment ☐Major Amendment

**Site Information**

*Non-Residential:* Proposed Sq. Ft.: 419,485 sf Site Acreage: 9.63 ac

*Residential:* Proposed Units: _____ Proposed Sq. Ft.: _____ Site Acreage: _____

Nicholas Smith
**Property Owner(s)**
7845 SW Ellipse Way
Street Address
Stuart FL 34997
City State Zip
561-818-2847
Phone Number
msmith@bevsmithtoyota.com
Email Address

Michael Smith
**Applicant/Representative, Title, Company**
7845 SW Ellipse Way
Street Address
Stuart FL 34997
City State Zip
561-818-2847
Phone Number
msmith@bevsmithtoyota.com
Email Address

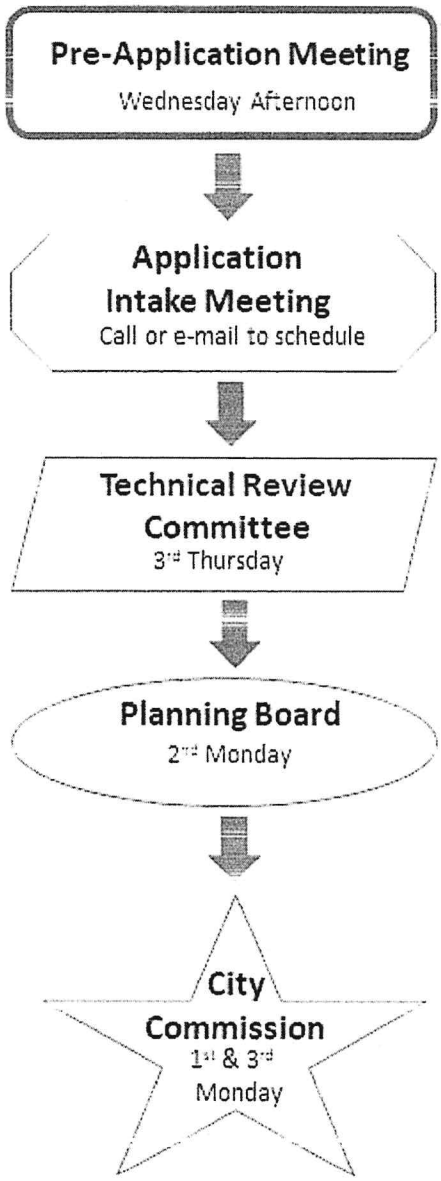
***Property Owner(s) Acknowledgements:*** *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.*

Michael Smith
*Property Owner(s) Signature(s)*

**APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS**
**CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM**
**For more information, please refer to the website:**
https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Revi

*General Information*

- **Incomplete application packets will not be accepted.**
- In-take meetings are required for application submittals.
- Site plan approval is valid for one (1) year following City Commission approval. To maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date.
- Fee Schedule - https://www.cityoffortpierce.com/DocumentCenter/View/2620/Fee-Schedule-
- Public Notice Fees - https://www.cityoffortpierce.com/DocumentCenter/View/8818/Public-Notice-Fees-




***Site Plan submittal requirements:***

***Submit one (1) original & three (3) hard copies and one (1) CD or Flash Drive of the following. Additional copies will be required of subsequent submittals.***

- [x] Complete application
- [x] Warranty Deed
- [x] SLC Property Record Card
- [x] Detailed project description
- [x] General location map (see Section 125-313)
- [x] Survey (see Section 125-313)
- [x] Site Plan (see Section 125-313)
- [x] Landscaping Plan (see Section 123-37)
- [x] Conceptual Drainage Plan (see Section 125-313)
- [x] Environmental Impact Report
- [ ] Beach/Dune System protection plan, if applicable (see Section 125-313)
- [x] Lighting Plan (see Section 125-313)
- [x] Design Review submittals (see Design Review application)
- [x] Traffic Impact Report
- [x] Concurrency Review submittals (see Concurrency Review application)

**Bev Smith Automotive Group**
**7845 S.E. Ellipse Way**
**Stuart, Florida 34997**
**Office: 561-718-2933**
**Fax: 772-781-8573**

November 14, 2018

Re: Letter of Authorization for Michael Smith

I have authorized Michael Smith to act and sign on behalf of the company for all agency permitting and processing of applications for the Bev Smith Kia development projects located at 5560 S. US Hwy1, Ft. Pierce, Florida, 34982.

Sincerely,

Nicholas S. Smith
President

NSS/cc

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
# CAPACITY ANALYSIS

## I. Site Data:

| | Existing Use | Future Land Use | Zoning |
|---|---|---|---|
| **North** | Medical | GC | C-3 |
| **South** | Residential Home | CG (SLC) | CG (SLC) |
| **East** | Single-family | PUD (SLC) | PUD/ RM-5 (SLC) |
| **West** | Automotive retail | CG | C-3 |

| | Future Land Use | Zoning Classification | Maximum Intensity<br>Residential: Dwelling Units per Acre<br>Other: Square Footage | Total Acreage | Flood Zone |
|---|---|---|---|---|---|
| **Current** | GC | C-3 | 5,274 | 9.63 | X |
| ****Proposed** | GC | C-3 | 0 | 9.63 | N/A |

## II. Public Facilities Information:

| **A. Potable Water:** | |
|---|---|
| Average Use | Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand)<br>Other: 0.125 gallons per day per square foot 659 gpd |
| Demand Analysis | Maximum 659 gpd x 4 = 2,636 gpd |
| Current Zoning/FLU | Total gallons per day 659 gpd |
| **Proposed Zoning/FLU | Total gallons per day 659 gpd |
| **Change in Demand | Total gallons per day 0.0 |

| **B. Wastewater:** | |
|---|---|
| Average Use | Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand)<br>Other: 0.1 gallons per day per square foot 659 gpd |
| Demand Analysis | Maximum 2,636 gpd |
| Current Zoning/FLU | Total gallons per day 659 gpd |
| **Proposed Zoning/FLU | Total gallons per day 659 gpd |
| **Change in Demand | Total gallons per day 0.0 |

**C. Parks and Recreation (Residential Classifications Only):** N/A
(Du x 2.6 = persons + 44,227 = population /LOS)

| Park Type | LOS | Existing Population Park Demand | Proposed Population Park Demand | Change in Demand |
|---|---|---|---|---|
| **Regional** | 20 acres per 1,000 people | | | |
| **Urban District** | 5 acres per 1,000 people | | | |
| **Community** | 2.5 acres per 1,000 people | | | |
| **Neighborhood** | 1.36 acres per 1,000 people | | | |

**D. Public Schools (Residential Classifications Only):** N/A
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

| | K-8 | High |
|---|---|---|
| **School Name** | | |
| **City** | | |
| **Distance** | | |
| **Current Zoning/FLU Enrollment Demand** | | |
| ****Proposed Zoning/FLU Enrollment Demand** | | |
| ****Change in Demand** | | |

**E. Solid Waste: Residential (**2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units)

| | |
|---|---|
| **Demand Analysis** | Maximum |
| **Current Zoning/FLU** | N/A |
| ****Proposed Zoning/FLU** | |
| ***Change in Demand** | |

**F. Stormwater:**
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

| | |
|---|---|
| **Impact** | Impervious area increases with the proposed development. The site/ stormwater design complies with SFWMD requirements to provide less discharge in 25-yr post-development conditions versus pre-development. |

## III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

| **G. Transportation Analysis: Complete ITE Trip Generation Data Form**<br>Most recent ITE Code for use; HCM Roadway Capacity | | |
|---|---|---|
| | **AADT** | **AM/PM Peak Hour Trips** |
| **Demand Analysis** | Maximum | Maximum |
| **Current Zoning/FLU** | | |
| ****Proposed Zoning/FLU** | | |
| ***Change in Demand** | Trips | Trips |
| **Impact to Capacity** | N/A - SITE IS NOT OPEN TO PUBLIC AND IS AN ACCESSORY TO DEALERSHIP ACROSS THE STREET. | |

## IV. Project Description

| **PHASING** |
|---|
| Is this project (phase) part of a larger project? ☐ Yes ☑ No |
| |
| If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date. |
| Total Project: Residential Units: Single Family: Multifamily: |
| Non-residential (square footage): |
| Mixed-use (describe use): |
| (If this is a single phase project, name it Phase I – Total) |

| **RESIDENTIAL DATA** | | | | | |
|---|---|---|---|---|---|
| **Type** | **Phase** | **Number of Units** | **Acres** | **Expected beginning date** | **Expected completion date** |
| Single-family, detached | | | | | |
| Single-family, attached | | | | | |
| Multi-family | | | | | |
| Other (specify) | | | | | |

| NON-RESIDENTIAL DATA | | | | | |
|---|---|---|---|---|---|
| **Type(s) specify** | **Phase** | **Square footage** | **Acres** | **Expecting beginning date** | **Expected completion date** |
| No NEW building proposed. | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. ☐ Yes ☑ No

B. 1. Does this application involve demolition or re-use of any structure(s)? ☑ Yes ☐ No
If yes, what is the size of the structure(s) to be demolished or re-used? 5,274 SF RE-USE

2. What is the current use of the structure to be demolished or re-used? AUTOMOTIVE DETAILING

3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? ☐ Yes ☑ No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested:

** Complete section if requesting a change in zoning, future land use, or expanding

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

# GENERAL ADDRESS REQUEST

Residential $25.00 per address
Commercial - $50.00 per address
E-mail Address request form to planning_dl@cityoffortpierce.com

[x] Assigned [ ] Corrected [ ] Changed

**Residential subdivisions** or **apartment complexes** of three or more units require a site plan showing each unit's address and a spreadsheet with the address and corresponding parcel ID #.

**Property Owner(s):** Nicholas Smith

**Parcel Identification(s):** 3403-502-0302-000-4

**Legal Description:** THE SOUTH ONE-HALF (1/2) OF LOT 234, IN SECTION 10, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ACCORDING TO THE PLAT OF WHITE CITY SUBDIVISION, RECORDED IN PLAT BOOK 1, PAGE 23, OF THE F

**Current Address:** 5560 South U.S. Hwy 1

**Use of Property:** Auto Service

**Applicants Signature:** Michael Smith **Date:** 7/21/22

**Printed Name:** Mike Smith

[X] I am not the owner of the described property; however, the owner(s) authorizes me to act as agent for the owner(s) of record. (Provide copy of authorization).

**Contact Information:** Phone: 561-818-2847 Email: Mike Smith msmith@bevsmithtoyota.com

Office Use Only

**PROPOSED NEW ADDRESS:** _____

**Signature of City Representative:** _____

EDWIN M. FRY, Jr., CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 2787119 OR BOOK 2471 PAGE 2370, Recorded 01/26/2006 at 02:42 PM
Doc Tax: $21000.00

This instrument prepared by:

Name: Burt Bruton, Esq.
Address: Greenberg Traurig, P.A.
1221 Brickell Avenue
Miami, FL 33131

Property Appraiser's Parcel ID#:
3403-502-0302-000/4

(Space reserved for Clerk of Court)

# WARRANTY DEED

THIS INDENTURE, made this 9th day of January, A.D. 2006 between **BEAN FAMILY INVESTMENTS, LTD.**, a Florida limited partnership (the "**Grantor**"), and **NICHOLAS S. SMITH** (the "**Grantee**"), whose mailing address is 1210 Northlake Boulevard, Lake Park, FL 33403;

WITNESSETH, that the Grantor, for and in consideration of the sum of TEN DOLLARS ($10.00), to the Grantor in hand paid by the Grantee and other good and valuable consideration, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the Grantee and the Grantee's heirs and assigns forever, the following described land situate, lying and being in St. Lucie County, Florida, to-wit:

SEE EXHIBIT "A" ATTACHED HERETO AND INCORPORATED HEREIN

SUBJECT TO zoning and other governmental regulations; any recorded easements, covenants, restrictions and limitations; and real property taxes for the year 2006 and subsequent years.

AND THE GRANTOR DOES HEREBY FULLY WARRANT the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the Grantor has caused this instrument to be signed by its duly authorized sole general partner the day and year first above written.

Michelle Franklin, CFA -- Saint Lucie County Property Appraiser -- All rights reserved.

## Property Identification

Site Address: 5560 S US HIGHWAY 1
Sec/Town/Range: 10/36S/40E
Parcel ID: 3403-502-0302-000-4
Jurisdiction: Fort Pierce

Use Type: 2700
Account #: 39301
Map ID: 34/10N
Zoning: General Co

## Ownership

Nicholas S Smith

7845 SW Ellipse Way
Stuart, FL 34997

## Legal Description

WHITE CITY S/D 10 36 40 S 1/2 OF LOT 234 AND N 300 FT OF LOT 241 LYG E OF US #1 AND S 175 FT OF N 475 FT OF W 425 FT OF LOT 241 LYG E OF US #1-LESS RD AND CANAL RS/W- (9.63 AC) (MAP 34/10N) (REFERENCE DB 223-268)



## Current Values

| | |
|---|---|
| Just/Market Value: | $1,548,400 |
| Assessed Value: | $1,548,400 |
| Exemptions: | $0 |
| Taxable Value: | $1,548,400 |

**Property taxes are subject to change upon change of ownership.**

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

Taxes for this parcel: SLC Tax Collector's Office
Download TRIM for this parcel: Download PDF

## Total Areas

| | |
|---|---|
| Finished/Under Air (SF): | 5,200 |
| Gross Sketched Area (SF): | 6,000 |
| Land Size (acres): | 9.63 |
| Land Size (SF): | 419,482.8 |

## Building Design Wind Speed

| Occupancy Category | I | II | III & IV |
|---|---|---|---|
| Speed | 140 | 160 | 170 |

Sources/links:

## Sale History

| Date | Book/Page | Sale Code | Deed | Grantor | Price |
|---|---|---|---|---|---|
| Jan 9, 2006 | 2471 / 2370 | XX00 | WD | Bean Family Investments Ltd | $3,000,000 |
| Feb 25, 1997 | 1063 / 0778 | XX01 | WD | R AND B HOLDING CO INC | $900,000 |
| Sep 1, 1984 | 0480 / 1512 | XX01 | CV | | $0 |
| Nov 1, 1977 | 0277 / 1685 | XX00 | CV | | $203,500 |
| Oct 1, 1977 | 0276 / 0908 | XX00 | CV | | $203,500 |
| Jan 1, 1973 | 0210 / 0449 | XX01 | CV | | $70,000 |

## Building Information (1 of 1)

Finished Area: 5,200 SF

Gross Sketched Area: 6,000 SF

## Special Features and Yard Items

| | | | |
|---|---|---|---|
| DOUBLE LIGHT | 1 | 6 | 1973 |

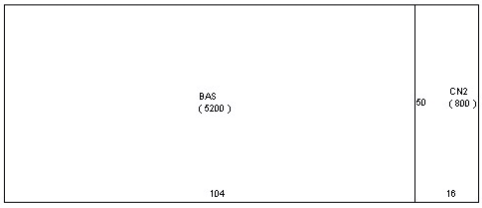
## Exterior Data

| | | |
|---|---|---|
| View: | Roof Cover: Metal | Roof Structure: Steel Truss |
| Building Type: SRCT | Year Built: 1989 | Frame: |
| Grade: Y_D- | Effective Year: 1989 | Primary Wall: Corr Metal |
| Story Height: 1 Story | No. Units: 1 | Secondary Wall: Conc Block |

## Interior Data

| | | |
|---|---|---|
| Bedrooms: 0 | Electric: MAXIMUM | Primary Int Wall: |
| Full Baths: 0 | Heat Type: FrcdHotAir | Avg Hgt/Floor: 0 |
| Half Baths: 0 | Heat Fuel: ELEC | Primary Floors: CONC GRD |
| A/C %: 26% | Heated %: 26% | Sprinkled %: 0% |






## Sketch Area Legend

| Sub Area | Description | Area | Fin. Area | Perimeter |
|---|---|---|---|---|
| BAS | BASE AREA | 5200 | 5200 | 308 |
| CN2 | CANOPY | 800 | 0 | 132 |

| Type | Qty | Units | Year Blt |
|---|---|---|---|
| ASP1 HIGH | 1 | 42000 | 1977 |
| CHAINLINK 4' | 1 | 620 | 1977 |

## Current Year Values

### Current Values Breakdown

| | |
|---|---|
| Building: | $206,100 |
| Land: | $1,342,300 |
| Just/Market: | $1,548,400 |
| Ag Credit: | $0 |
| Save Our Homes or 10% Cap: | $0 |
| Assessed: | $1,548,400 |
| Exemption(s): | $0 |
| Taxable: | $1,548,400 |

### Current Year Exemption Value Breakdown

### Current Year Special Assessment Breakdown

| Start Year | AssessCode | Units | Description | Amount |
|---|---|---|---|---|
| 2013 | 0054 | 9.63 | North St. Lucie Water Management District | $207.05 |
| Start Year | AssessCode | Units | Description | Amount |
| 2022 | 0041 | 51.4 | Fort Pierce Stormwater Charge | $3,546.60 |

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office.

## Historical Values

| Year | Just/Market | Assessed | Exemptions | Taxable |
|---|---|---|---|---|
| 2021 | $1,548,400 | $1,548,400 | $0 | $1,548,400 |
| 2020 | $1,460,200 | $1,460,200 | $0 | $1,460,200 |
| 2019 | $1,457,000 | $1,457,000 | $0 | $1,457,000 |
| 2018 | $1,459,000 | $1,459,000 | $0 | $1,459,000 |

## Permits

| Number | Issue Date | Description | Amount | Fee |
|---|---|---|---|---|
| C47038 | Aug 1, 1988 | Commercial New Construction | $66,000 | $66,000 |
| C24090228 | Sep 17, 2004 | Unknown | $14,000 | $252 |
| C24113125 | Nov 24, 2004 | Demolition | $2,450 | $77 |
| C11110065 | Nov 7, 2011 | Electric | $0 | $0 |
| C1802-0055 | Feb 2, 2018 | Electric | $0 | $0 |
| C2007-0625 | Jul 29, 2020 | Garage Door | $2,317 | $0 |

Notice: This does not necessarily represent all the permits for this property.
Click the following link to check for additional permit data in Fort Pierce

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
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MBV
ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
www.mbveng.com CA #3728

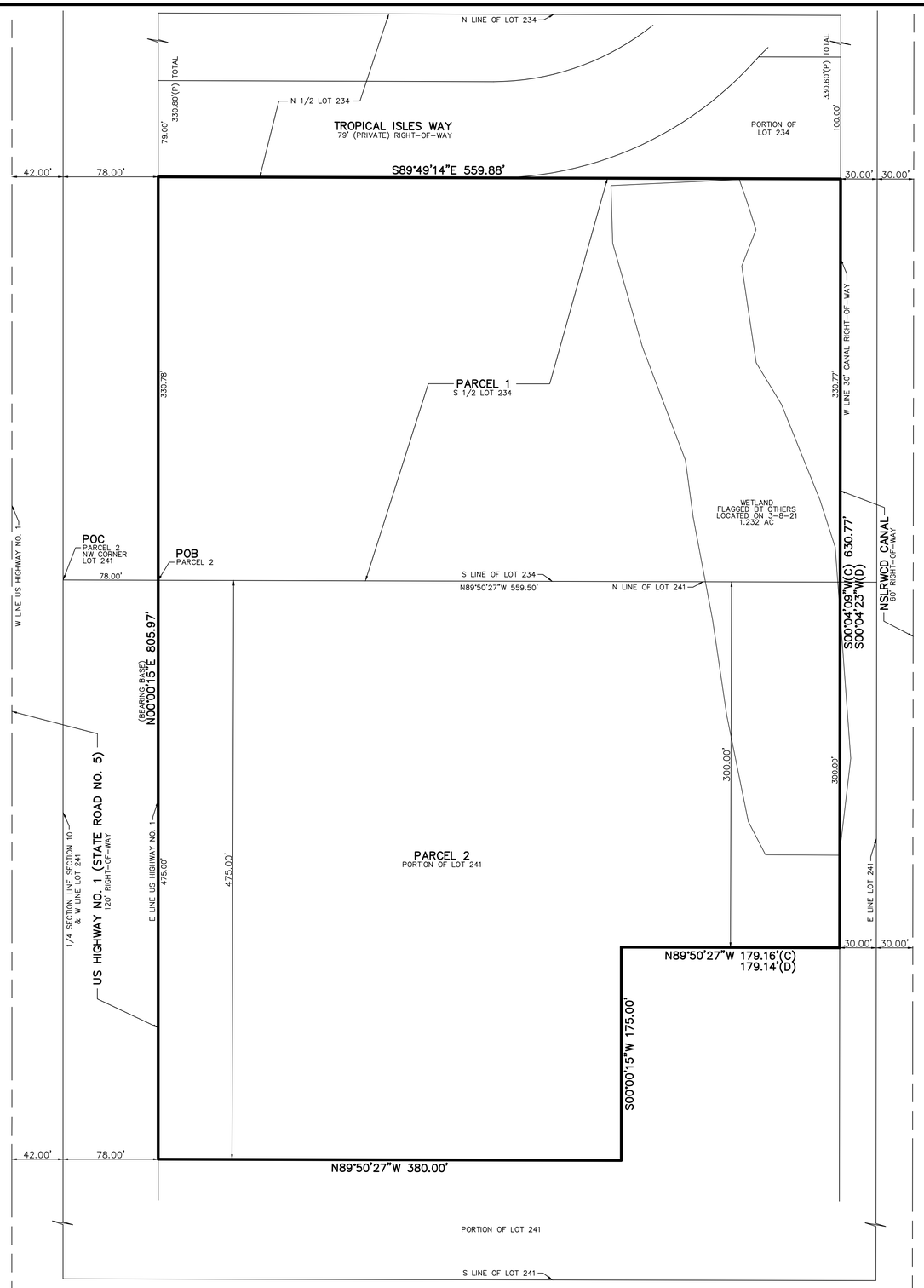
# Project Narrative

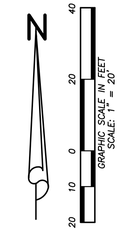
This project has current permit approvals under St. Lucie County, PDC Order 2019-031. The project received approval to construct asphalt pavement parking and an associated pond with outfall to NSLRWCD canal to the East. The current approvals have not been constructed to date, as the owner was seeking to modify and expand the site parking and relocate the approved pond. There is an existing building on-site and is operating as a vehicle reconditioning facility. Public customers are currently not entering the premises. All customer service and sales are located at the main KIA store located across the highway.

Proposed site modifications with this plan include two separate asphalt-paved parking areas and two separate stormwater ponds. All existing paved area and adjacent proposed paved area to the East of site, shall discharge stormwater flows via sheet flow to the proposed dry stormwater pond in the NE corner. The proposed new paved parking area to the South of existing development, along the US-1 corridor, shall discharge stormwater flows via sheet flow to a proposed swale for stormwater storage and treatment. An outfall was not required per stormwater calculations.

When this project was started in 2018 and approved in 2019, there were no wetlands present on the site. While the project was placed on hold, wetlands have developed over a couple years and have been flagged and identified by SFWMD. The wetlands coincidentally developed in the location of the proposed pond. The site has also received a full Environmental Impact Report and no concerns have been identified.

There are no new access points proposed with this project.
There are no utilities proposed with this project.
There is no building or building modifications proposed with this project.
The site has a current FPUA/ FDOT utilities permit to construct a sanitary sewer lift station.




**LEGAL DESCRIPTION:**

PARCEL 1:

THE SOUTH ONE-HALF (1/2) OF LOT 234, IN SECTION 10, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ACCORDING TO THE PLAT OF WHITE CITY SUBDIVISION, RECORDED IN PLAT BOOK 1, PAGE 23, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS AND EXCEPTING THEREFROM THE EAST 30 FEET DEEDED TO THE STATE OF FLORIDA.

TOGETHER WITH:

PARCEL 2:

A PARCEL OF LAND LYING AND BEING IN THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 10, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF LOT 241 OF WHITE CITY, ACCORDING TO SHEEN'S SURVEY THEREOF RECORDED IN PLAT BOOK 1, PAGE 23 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, RUN SOUTH 89°50'27" EAST ALONG THE NORTH LINE OF SAID LOT 241 A DISTANCE OF 78 FEET TO THE POINT OF INTERSECTION OF SAID NORTH LINE WITH THE EAST RIGHT-OF-WAY LINE OF U.S. HIGHWAY NO. 1 (STATE ROAD NO. 5)(A 120-FOOT RIGHT-OF-WAY, THE EAST LINE OF WHICH LIES 78 FEET EAST OF THE QUARTER-SECTION LINE OF SAID SECTION 10), SAID POINT OF INTERSECTION BEING THE POINT OF BEGINNING; THENCE RUN SOUTH 00°00'15" WEST ALONG THE EAST RIGHT-OF-WAY LINE OF SAID HIGHWAY A DISTANCE OF 475 FEET; THENCE RUN SOUTH 89°50'27" EAST ALONG A LINE PARALLEL WITH AND 475 FEET SOUTH OF THE NORTH LINE OF SAID LOT 241, A DISTANCE OF 380 FEET; THENCE RUN NORTH 00°00'15" EAST A DISTANCE OF 175 FEET TO A POINT 300 FEET SOUTH OF THE NORTH LINE OF SAID LOT 241; THENCE RUN SOUTH 89°50'27" EAST ALONG A LINE PARALLEL WITH AND 300 FEET SOUTH OF SAID NORTH LINE OF LOT 241 A DISTANCE OF 179.14 FEET MORE OR LESS TO A POINT ON THE WEST LINE OF A 60-FOOT CANAL RIGHT-OF-WAY (SAID WEST LINE LIES 30 FEET WEST OF THE EAST LINE OF LOT 241); THENCE RUN NORTH 00°04'23" EAST ALONG SAID WEST CANAL RIGHT-OF-WAY LINE A DISTANCE OF 300 FEET TO THE NORTH LINE OF SAID LOT 241; THENCE RUN NORTH 89°50'27" WEST ALONG THE NORTH LINE OF SAID LOT 241 A DISTANCE OF 559.50 FEET TO THE POINT OF BEGINNING.

CONTAINING 419,485 SQUARE FEET OR 9.630 ACRES, MORE OR LESS.

**SURVEY REPORT:**

1. THIS IS A BOUNDARY & TOPOGRAPHIC SURVEY AS DEFINED IN CHAPTER 5J-17.050(11), FLORIDA ADMINISTRATIVE CODE.
2. SURVEY BASED ON A BOUNDARY SURVEY PERFORMED BY DONALD D. DANIELS, INC., JOB NUMBER: 05-087, DATED 9-28-05.
3. BEARING BASIS: A DEED BEARING OF N00°00'15"E ALONG THE MONUMENTED WEST PROPERTY LINE.
4. NO UNDERGROUND UTILITIES OR IMPROVEMENTS WERE LOCATED UNLESS OTHERWISE SHOWN.
5. THIS SITE LIES WITHIN FLOOD ZONE "X", ACCORDING TO THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 12111C0277 J, EFFECTIVE DATE 2-16-12.
6. FLOOD ZONE SHOWN HEREON IS AN INTERPRETATION BY THE SURVEYOR AND IS PROVIDED AS A COURTESY. THE FLOOD ZONE SHOULD BE VERIFIED BY A DETERMINATION AGENCY.
7. THERE MAY BE ADDITIONAL EASEMENTS AND/OR RESTRICTIONS NOT SHOWN ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN PERFORMED BY ALEXANDER J. PIAZZA PSM, INC.
8. THE EXPECTED USE OF THE SUBJECT PROPERTY IS FOR FUTURE CONSTRUCTION AND ENGINEERING DESIGN OF A PARKING LOT AND LIFT STATION AND FALLS WITHIN THE COMMERCIAL HIGH RISK CATEGORY AS CLASSIFIED IN CHAPTER 5J-17.051(2), FLORIDA ADMINISTRATIVE CODE. ALL FIELD-MEASURED CONTROL MEASUREMENTS EXCEEDED 1:10,000 FEET ACCURACY REQUIREMENTS FOR THIS CLASSIFICATION. ALL SURVEY MEASUREMENTS ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD IN FEET.
9. ALL MAPPED FEATURES SHOWN HEREON ARE UNDER THE DIRECT SUPERVISION AND RESPONSIBILITY OF ALEXANDER J. PIAZZA PSM, INC.
10. SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
11. ADDITIONS OR DELETIONS TO THE SURVEY MAP OR REPORT BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
12. THE BEARINGS SHOWN HEREON ARE RELATIVE TO THE STATE PLANE COORDINATE SYSTEM OF THE NORTH AMERICAN DATUM OF 1983 (2007 ADJUSTMENT) AND THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 AND ARE REFERENCED TO THE LENGEMANN OF FLORIDA'S L-NET GPS NETWORK DEVELOPED WHICH MEETS OR EXCEEDS THE FEDERAL GEODETIC CONTROL COMMITTEE (FGCC) GUIDELINES FOR "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES" AS WELL AS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17.051 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472.027 FLORIDA STATUTES. PRIMARY BENCHMARK: NGS "W 403" NAVD88 ELEVATION = 13.40, LOCATED AT THE NW CORNER OF THE INTERSECTION OF US HIGHWAY NO. 1 AND ULRICH ROAD, 1.5' EAST OF UTILTIY POLE #6 6370 7124 05. BENCHMARKS SET OR FOUND FOR THIS SURVEY ARE NOTED ON THE SKETCH.
13. THIS SURVEY IS PREPARED ONLY FOR THE PARTIES LISTED BELOW AND IS NOT ASSIGNABLE. CERTIFIED TO: BEV SMITH OF FORT PIERCE II, INC.
14. © COPYRIGHT 2018 BY ALEXANDER J. PIAZZA PSM, INC. THE SKETCH OF SURVEY AND SURVEY REPORT COMPRISE THE COMPLETE SURVEY. THIS SURVEY IS NOT VALID UNLESS THE SKETCH AND REPORT ACCOMPANY EACH OTHER. REPRODUCTIONS OF THIS SURVEY ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER EMPLOYED BY ALEXANDER J. PIAZZA PSM, INC.

DATE OF FIELD SURVEY: 1-27-22, 3-08-21, 10-31-18, 9-19-18

DATE OF SURVEY: 9-25-18

ALEXANDER J. PIAZZA PSM, INC.

ALEXANDER J. PIAZZA
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE No. 6330

**ABBREVIATIONS:**

| | |
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| CONC | = CONCRETE |
| CLF | = CHAIN LINK FENCE |
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| FFE | = FINISHED FLOOR ELEVATION |
| FND | = FOUND |
| IP | = IRON PIPE |
| INV | = INVERT |
| IR | = IRON ROD |
| IRC | = IRON ROD WITH PLASTIC CAP |
| LB | = LICENSE BUSINESS |
| LS | = LICENSE SURVEY |
| (M) | = MEASURED |
| MON | = MONUMENT |
| NSLRWCD | = NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT |
| ORB | = OFFICIAL RECORD BOOK |
| (P) | = PLAT |
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| PG | = PAGE |
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| PL | = PROPERTY LINE |
| POB | = POINT OF BEGINNING |
| POC | = POINT OF COMMENCEMENT |
| R/W | = RIGHT-OF-WAY |
| RCP | = REINFORCED CONCRETE PIPE |
| RGE | = RANGE |
| SEC | = SECTION |
| TWP | = TOWNSHIP |
| UE | = UTILITY EASEMENT |
| PUDE | = PUBLIC UTITLITY & DRAINAGE EASEMENT |

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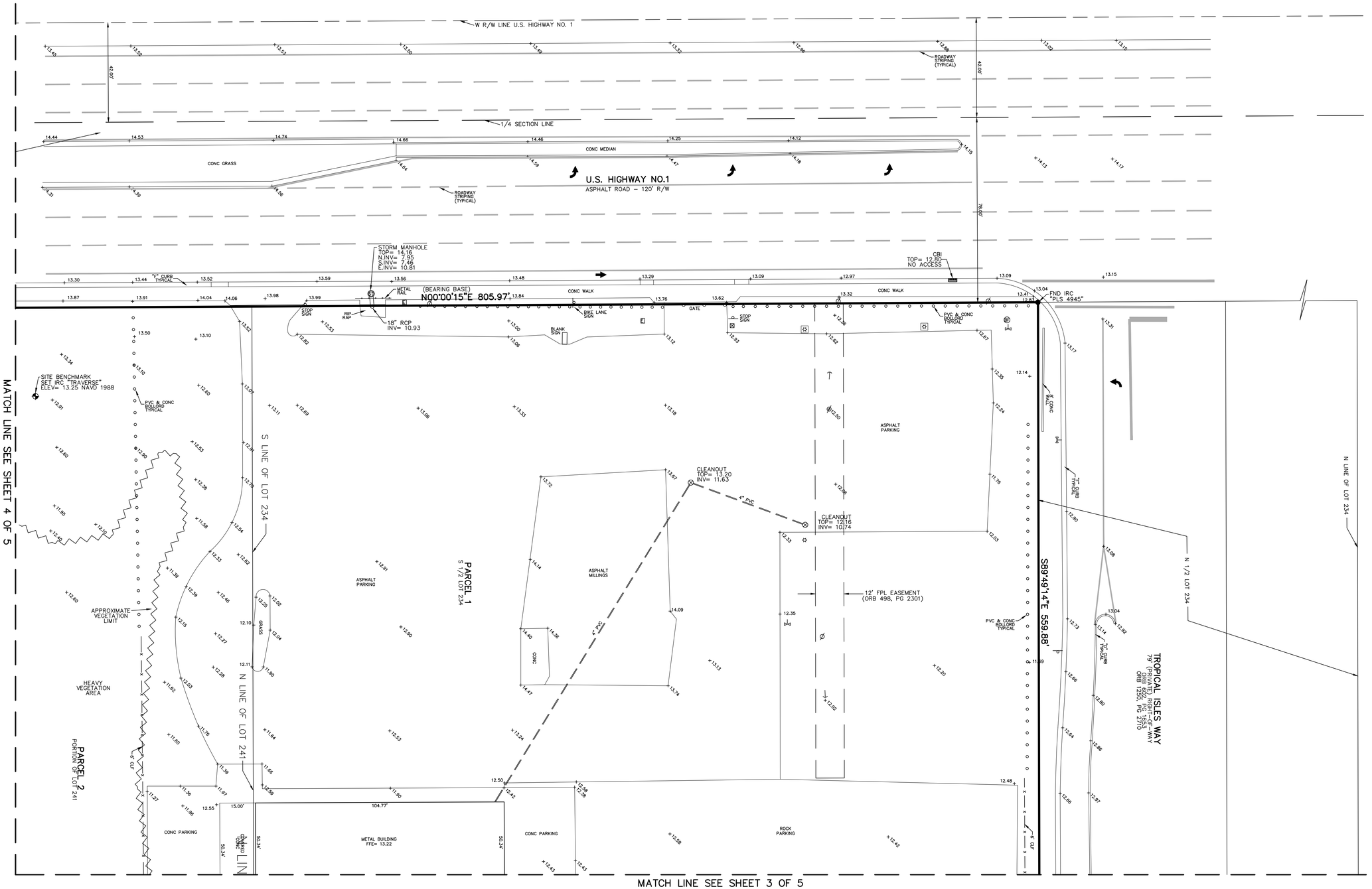
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- = WELL
- = WATER METER
- = WOOD POWER POLE
- = SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

| DATE: | REVISIONS: | BY: |
|---|---|---|
| | | |
| | | |
| | | |
| 2-04-22 | ADD ADDITIONAL TOPO | AJP |
| 3-17-21 | ADD WETLAND | AJP |
| 6-27-19 | REVISE PER COUNTY COMMENTS | AJP |
| 5-23-19 | REVISE PER COUNTY COMMENTS | AJP |
| 3-29-19 | ADD TREES WITHIN PROPOSED DRAINAGE EASEMENT | AJP |

**ALEXANDER J. PIAZZA PSM, INC.**
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

# BOUNDARY & TOPOGRAPHIC SURVEY
## 5560 S. US HIGHWAY NO.1
AS PREPARED FOR
## BEV SMITH OF FORT PIERCE II, INC.

| | | | |
|---|---|---|---|
| CAD | K:\BUILDERS, DWG2018\18-4187.DWG | | |
| REF | K:\ | | |
| FLD | CJM / RP | FB. PG. | JOB 18-4187 |
| OFF | CJM | | DATE 9-25-18 |
| CKD | AJP | SHEET 1 OF 5 | DWG D-832 |




MATCH LINE SEE SHEET 4 OF 5

MATCH LINE SEE SHEET 3 OF 5

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= GAS VALVE
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

20 10 0 20 40
GRAPHIC SCALE IN FEET
SCALE: 1" = 20'

| DATE: | REVISIONS: | BY: |
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| CKD | AJP | SHEET 2 OF 5 | DWG D-832 |

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MATCH LINE SEE SHEET 2 OF 5

MATCH LINE SEE SHEET 5 OF 5

E 60' DEDICATED ROAD

LOT 242

METAL BUILDING
FFE= 13.22

CONC PARKING

CLEANOUT
TOP= 12.76
INV E.= 11.70

CLEANOUT
INV= 9.23

CLEANOUT
INV= 9.27

CLEANOUT
INV= 9.41

CLEANOUT
INV= 8.96

4" PVC

4" PVC PIPE
45° BEND
INV N.= 11.15
INV W.= 11.15

6' CLF

APPROXIMATE VEGETATION LIMIT

HEAVY VEGETATION AREA

ROCK PARKING

SEPTIC TANK
(FLAGGED BY OTHERS)

PARCEL 2
PORTION OF LOT 241

N LINE OF LOT 241

S LINE OF LOT 234

PARCEL 1
S 1/2 LOT 234

PROPOSED
15' DRAINAGE
EASEMENT

PORTION OF
LOT 234

TROPICAL ISLES WAY
79' (PRIVATE) R/W
ORB 1202
PG. 1953
ORB 1250
PG. 2710

N LINE OF LOT 234

S89°49'14"E 559.88'

S00°04'09"W(C) 630.77'
S00°04'23"W(D)

30.00'

TOP OF BANK

EDGE OF WATER

TOE OF SLOPE

E LINE LOT 241

48" RCP
N.INV= 6.36
S. INV= 5.75

N.S.L.R.W.C.D. CANAL
60' RIGHT-OF-WAY

50" RCP
N.INV= 5.38
S. INV= 5.20

GRAPHIC SCALE IN FEET
SCALE: 1" = 20'

20 10 0 20 40

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N.S.L.C.W.C.D.= NORTH ST. LUCIE COUNTY WATER CONTROL DISTRIC

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= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330
2" = DENOTES TREE SIZE
= DENOTES PALM TREE
= DENOTES SIMPSON STOPPER TREE
= DENOTES PINE TREE
= DENOTES OAK TREE

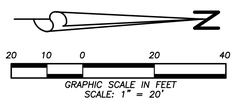
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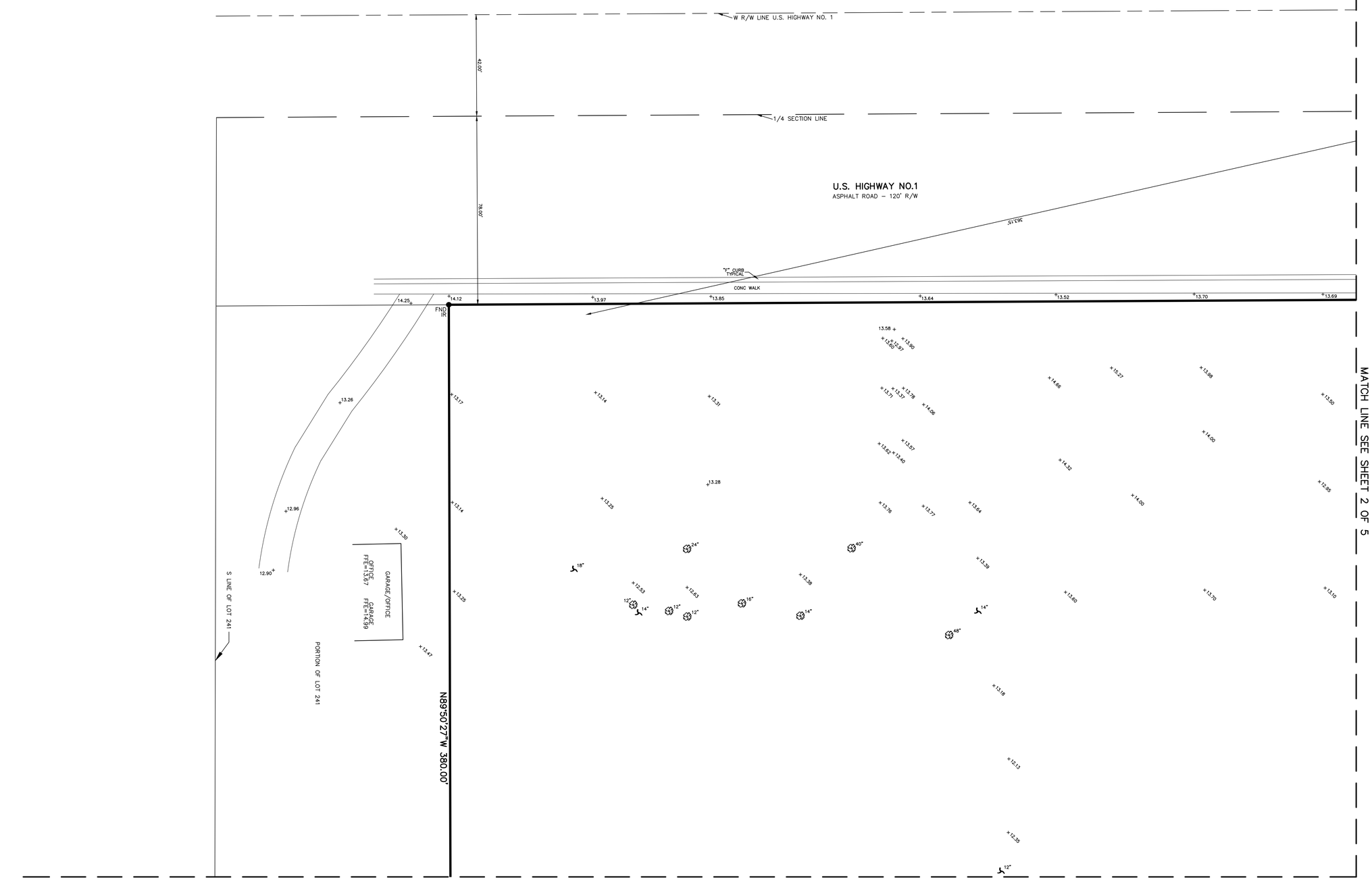

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| CKD | AJP | SHEET 4 OF 5 | DWG D-832 |

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MATCH LINE SEE SHEET 4 OF 5

MATCH LINE SEE SHEET 3 OF 5

S LINE OF LOT 241

PORTION OF LOT 241

S00°00'15"W 175.00'

N89°50'27"W 179.16'(C)
179.14'(D)

FND IRC
"LB 4286"

30.00'

30.00'

N.S.L.R.W.C.D. CANAL
60' RIGHT-OF-WAY

×11.80
×12.60
×12.83
12" ×12.29
15" ×12.04
12" 11.76
×10.34
×9.85
×10.12
×10.04
×9.71

N
20 10 0 20 40
GRAPHIC SCALE IN FEET
SCALE: 1" = 20'

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PCOR = PROPERTY CORNER
PL = PROPERTY LINE
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
R/W = RIGHT-OF-WAY
RCP = REINFORCED CONCRETE PIPE
RGE = RANGE
SEC = SECTION
TWP = TOWNSHIP
UE = UTILITY EASEMENT
PUDE = PUBLIC UTITLITY & DRAINAGE EASEMENT
N.S.L.C.W.C.D.= NORTH ST. LUCIE COUNTY WATER CONTROL DISTRIC

**SYMBOLS:**

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CATCH BASIN
= CATCH BASIN INLET
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= NUMBER OF PARKING SPACES
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= BACKFLOW PREVENTOR
= MAIL BOX
= IRRIGATION VALVE
= GAS VALVE
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330
2" = DENOTES TREE SIZE
= DENOTES PALM TREE
= DENOTES SIMPSON STOPPER TREE
= DENOTES PINE TREE
= DENOTES OAK TREE

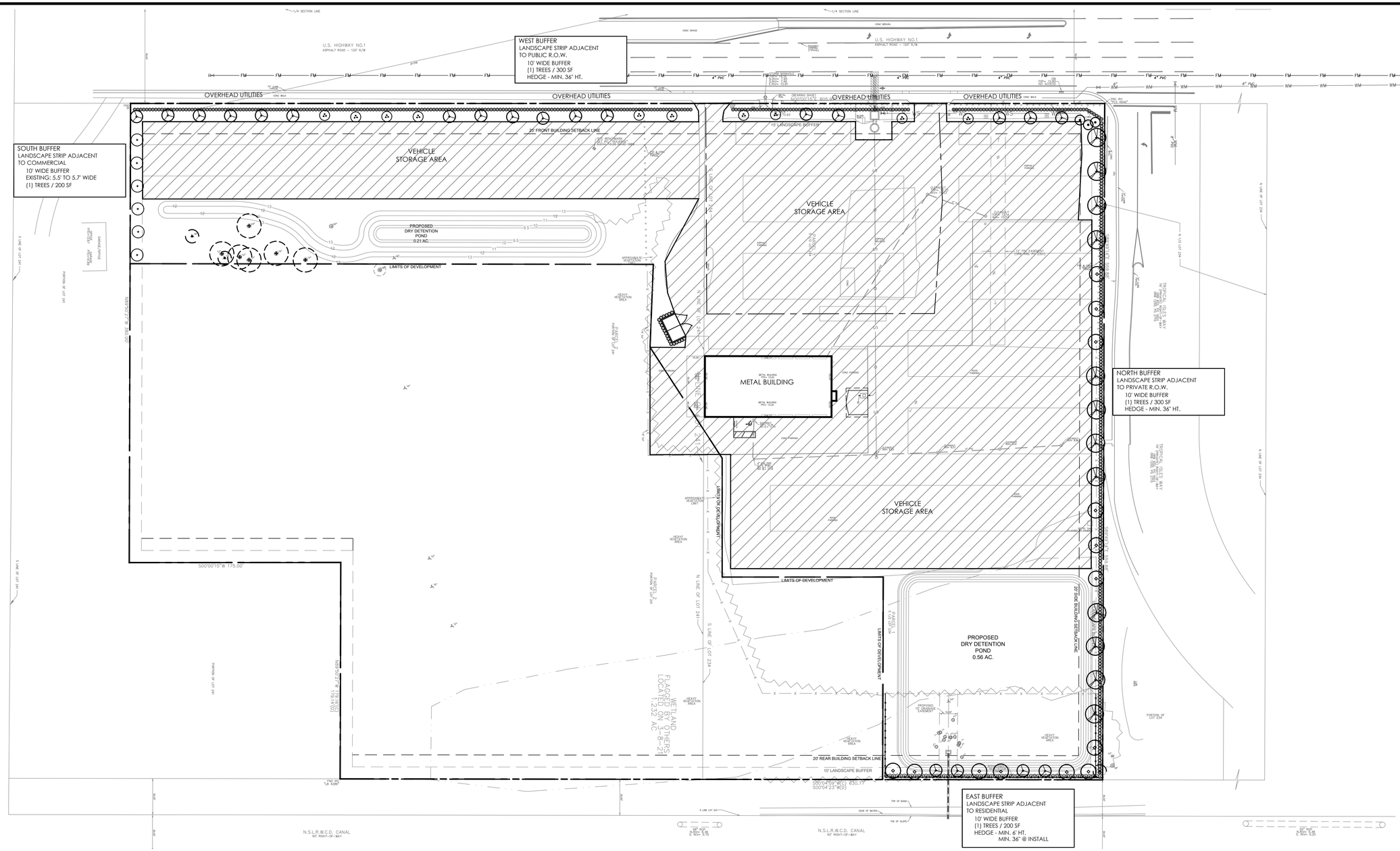
| DATE: | REVISIONS: | BY: |
|---|---|---|
| 2-04-22 | ADD ADDITIONAL TOPO | AJP |
| 6-27-19 | REVISE PER COUNTY COMMENTS | AJP |
| 5-23-19 | REVISE PER COUNTY COMMENTS | AJP |
| 3-29-19 | ADD TREES WITHIN PROPOSED DRAINAGE EASEMENT | AJP |


**ALEXANDER J. PIAZZA PSM, INC.**
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280


# BOUNDARY & TOPOGRAPHIC SURVEY
## 5560 S. US HIGHWAY NO.1
AS PREPARED FOR
## BEV SMITH OF FORT PIERCE II, INC.

| | | | |
|---|---|---|---|
| CAD | K:\BUILDERS, DWG2018\18-4187.DWG | | |
| REF | K:\ | | |
| FLD | CJM / RP | FB. PG. | JOB 18-4187 |
| OFF | CJM | | DATE 9-25-18 |
| CKD | AJP | SHEET 5 OF 5 | DWG D-832 |

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## Landscape Calculations

| | REQUIRED/ PERMITTED | PROVIDED |
|---|---|---|
| LANDSCAPE STRIPS ADJACENT TO PUBLIC R.O.W. - WEST - U.S. HWY. ONE - 760 LF [806' LESS 46' DRIVEWAY] | | |
| 10' WIDE LANDSCAPE STRIP (760 X 10 = 7,600 SF.) | | |
| PROPOSED: 15' WIDE | | |
| OVERHEAD POWERLINES | | |
| TREES: 1 / 300 SF | 26 TREES | 26 TREES |
| *INCLUDES: (16) HOLLY TREES = 16 TREES* | | |
| *(10) CRAPE MYRTLES = 10 TREES* | | |
| PLUS 36" HT. HEDGE | | |
| NORTH: TROPICAL ISLES WAY - 560 LF | | |
| 10' WIDE LANDSCAPE STRIP (560 X 10 = 5,600 SF.) | | |
| TREES: 1 / 300 SF | 19 TREES | 19 TREES |
| *INCLUDES: (12) OAKS = 12 TREES* | | |
| *(7) MAGNOLIAS = 7 TREES* | | |
| PLUS 36" HT. HEDGE | | |
| LANDSCAPE STRIPS ADJACENT TO RESIDENTIAL | | |
| EAST SIDE - 182 LF | | |
| 10' WIDE LANDSCAPE STRIP (182 X 10 = 1,820 SF.) | | |
| TREES: 1 / 200 SF | 10 TREES | 10 TREES |
| *INCLUDES: (6) MAGNOLIAS = 6 TREES* | | |
| *(4) HOLLY TREES = 4 TREES* | | |
| PLUS 6' HT. HEDGE INSTALLED AT 24" | | |
| LANDSCAPE STRIPS ADJACENT TO COMMERCIAL | | |
| SOUTHSIDE - 133 LF. | | |
| 10' WIDE LANDSCAPE STRIP (133 X 10 = 1,330 SF.) | | |
| (1) TREE / 200 SF | 7 TREES | 7 TREES |
| *INCLUDES: (6) GREEN BUTTONWOOD = 6 TREES* | | |
| *(1) HOLLY TREE = 1 TREE* | | |

## Plant List

| | SYM. | KEY | BOTANICAL NAME/ COMMON NAME | HEIGHT/ SPREAD | SPECIFICATION | NATIVE | DROUGHT TOLERANT | TOTAL |
|---|---|---|---|---|---|---|---|---|
| TREES | | CE | CONOCARPUS ERECTUS<br>GREEN BUTTONWOOD | 12' HT.<br>5' SPR. | FIELD GROWN B&B<br>2.5" CAL. 5' CT. MIN. | Y | H | 6 |
| | | I A | ILEX X 'ATTENUATA'<br>EAST PALATKA HOLLY | 12' HT.<br>5' SPR. | 45 GAL. MIN. 2.5 CAL.<br>TREE FORM, 5' CT. MIN. | Y | M | 21 |
| | | MG | MAGNOLIA GRANDIFLORA<br>'LITTLE GEM'<br>LITTLE GEM MAGNOLIA | 12' HT.<br>5' SPR. | FIELD GROWN B&B<br>2.5" CAL., 5' C.T. MIN. | Y | H | 13 |
| | | LI | LAGERSTROEMIA INDICA<br>CRAPE MYRTLE | 12' HT.<br>5' SPR. | FIELD GROWN B&B<br>2.5" CAL., 5' C.T. MIN. | N | M | 10 |
| | | QV | QUERCUS VIRGINIANA<br>LIVE OAK | 12' HT.<br>5' SPR. | FIELD GROWN, B&B<br>2.5" CAL. 5' CT. MIN. | Y | H | 12 |
| | | SP | SABAL PALMETTO<br>SABAL PALMETTO | 10 CT. | | Y | H | 3 |
| SHRUBS | | CLU | CLUSIA GUTTIFERA<br>CLUSIA | 36" HT.<br>24" SPR. | 36" O.C.<br>FULL TO BASE | Y | H | 60 |
| | | CHR | CHRYSOBALANUS ICACO<br>COCOPLUM | 24" X 16" | 3 GAL., 30" O.C. | Y | H | 295 |
| | | VIB | VIBURNUM ODORATISSIMUM<br>SWEET VIBURNUM | 24" X 16" | 3 GAL., 30" O.C. | N | H | 236 |
| | | SOD | STENOTAPHRUM SECUNDATUM<br>ST. AUGUSTINE SOD | | DISEASE FREE, LAID TIGHTLY, EVEN UNIFORM | N | M | T.B.D. |

## Existing Landscaping

| SYM | KEY | BOTANICAL NAME/ COMMON NAME | HEIGHT/ SPREAD | SPECIFICATION | NATIVE | DROUGHT TOLERANT | TOTAL |
|---|---|---|---|---|---|---|---|
| | QV | QUERCUS VIRGINIANA | LIVE OAK | | Y | H | 6 |
| | SP | SABAL PALMETTO | SABAL PALM | | Y | H | 3 |

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plot date:
file name:


Patrick D. Cunningham, LLC
land planning
landscape architecture
519 Sapphire Drive
Sarasota, FL 34234
o: 941.351.8915
pcunningham.LLC@gmail.com


# Conceptual Landscape Plan

Bev Smith Kia
5560 US Highway One
Ft. Pierce, Florida

DATE: 07.28.2022
REV:
SCALE: 1"=40'-0"

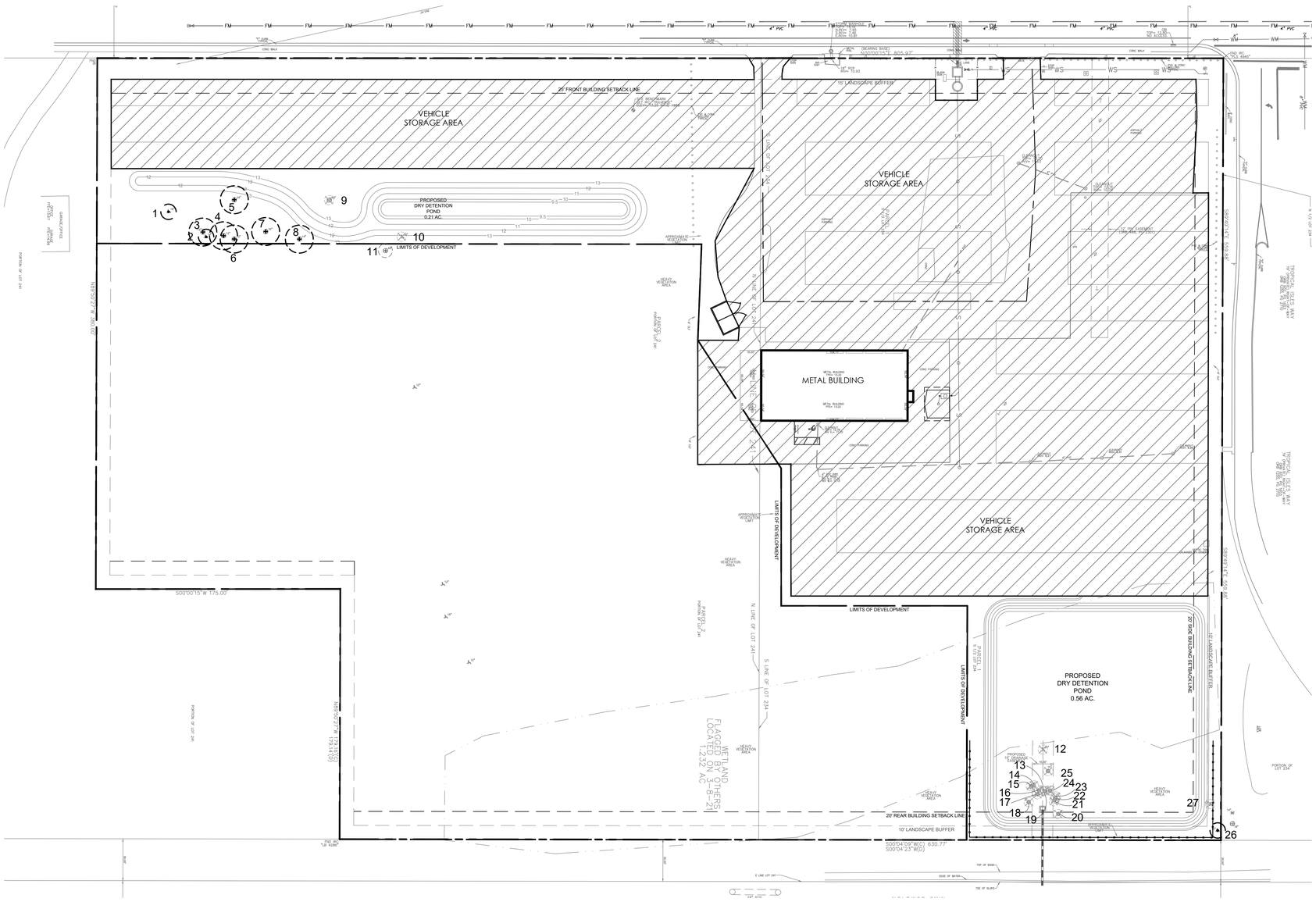
PATRICK D. CUNNINGHAM
FL REG. # LA: 0001669
SEAL

0 40 80
NORTH

SHEET
L-1



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## General Notes:

1. CALCULATIONS ABOVE ARE PER TREE REPLACEMENT CHART IN THE JURISDICTION'S LAND DEVELOPMENT REGULATIONS.
2. A TREE REMOVAL PERMIT WILL BE REQUIRED PRIOR COMMENCEMENT OF DEVELOPMENT ACTIVITY.
3. THE CONDITION OF THE TREES LISTED ARE BASED ON A VARIETY OF MATERIALS, AS WELL AS FIELD OBSERVATIONS, AND ARE TO BE USED AS REFERENCE ONLY AND IS NOT TO BE USE FOR TREE PERMITTING. A CERTIFIED ARBORIST, NOT THE LANDSCAPE ARCHITECT IS RESPONSIBLE FOR ANY TREE EVALUATION REQUIRED BY THE CITY.
4. A CERTIFIED ARBORIST IS TO PROVIDE THE FINAL TREE DISPOSITION PLAN AT TIME OF TREE PERMITTING. THE VALUATION OF TREES SHALL BE APPRAISED USING THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS GUIDE FOR PLANT APPRAISAL, LATEST EDITION.

## Additional Notes:

1. TREE BARRICADES FOR TREES TO BE PRESERVED DURING CONSTRUCTION SHALL BE LOCATED AT THE DRIP LINE, UNLESS OTHERWISE APPROVED BY THE ENVIRONMENTAL REVIEW STAFF, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. THE AREA WITHIN THE DRIP LINE SHALL REMAIN UNDISTURBED.
3. THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN TECH DRIP LINE OF PRESERVED TREES:
   - A. IMPROVEMENTS, FILL, MACHINERY AND VEHICLE TRAVEL OR PARKING
   - B. UNDERGROUND UTILITIES
   - C. GRADE CHANGES, COMPACTION OF SOIL, OR EXCAVATION
   - D. STORAGE OR CONSTRUCTION MATERIALS.
4. THE TREE PROTECTION BARRICADES SHALL CONSIST OF CHAIN LINK FENCE (NEW OR USED) OR ORANGE SAFETY FENCE WITH A MINIMUM 5-FOOT HEIGHT, UNLESS OTHERWISE APPROVED BY THE BUILDING AND DEVELOPMENT SERVICES.
5. A TREE PERMIT WILL BE REQUIRED PRIOR TO ANY CONSTRUCTION, NATIVE VEGETATION REMOVAL WITHIN THE DRIP LINE OF A TREE, AND/OR TREE REMOVAL.
6. NO CLEARING WITH HEAVY EQUIPMENT, FILLING, OR PLACEMENT OF IMPROVEMENTS OR UTILITY LINES SHALL OCCUR WITHIN THE PROTECTED ROOT ZONE OF ANY CANOPY TREE TO BE SAVED.
7. THE PROTECTED ROOT ZONE IS DEFINED AS THE DRIPLINE OF THE TREE. ONLY HAND CLEARING OR MOWING IS PERMITTED WITHIN THE PROTECTED ROOT ZONE OF A CANOPY TREES TO BE SAVED IF AUTHORIZED BY THE ADMINISTRATOR.

ALL EXISTING TREES TO BE PROTECTED DURING ANY LAND CLEARING AND/OR CONSTRUCTION AS FOLLOWS:

(A) PRIOR TO ANY LAND CLEARING OPERATIONS, TEMPORARY BARRIERS SHALL BE INSTALLED AROUND ALL TREES TO REMAIN WITHIN THE LIMITS OF LAND CLEARING OR CONSTRUCTION AND SHALL REMAIN UNTIL THE COMPLETION OF THE WORK.

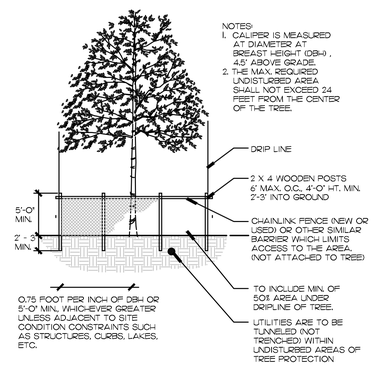
TREE PROTECTION SHALL COMPLY WITH THE JURISDICTION'S REGULATIONS.

(B) NO MATERIALS, TRAILERS, EQUIPMENT OR CHEMICALS SHALL BE STORED, OPERATED DUMPED, BURIED OR BURNED WITHIN THE PROTECTED AREAS.

NO ATTACHMENT, WIRES (OTHER THAN PROTECTIVE GUY WIRES), SIGNS OR PERMITS SHALL BE ATTACHED TO A PROTECTED TREE.

(C) PROTECTED TREES SHALL BE PRUNED TO RESTORE THIS NATURAL SHAPE AND FERTILIZED AS NECESSARY TO COMPENSATE FOR ANY LOSS OF ROOTS AND TO STIMULATE ROOT GROWTH.

ANY DAMAGE TO TREE CROWNS OR ROOT SYSTEMS SHALL BE REPAIRED IMMEDIATELY AFTER DAMAGE OCCURS.




**TYPICAL TREE PROTECTION DETAIL**
NOT TO SCALE

## Existing Tree Inventory List

| NO. | TREE SPECIES | DBH | ACTION | MITIGATION | NO. | TREE SPECIES | DBH | ACTION | MITIGATION |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SABAL PALM | | TO REMAIN | - - | 14 | TREE | 1" | TO BE REMOVED | -- |
| 2 | SABAL PALM | | TO REMAIN | -- | 15 | TREE | 1" | TO BE REMOVED | -- |
| 3 | OAK | 12" | TO REMAIN | -- | 16 | TREE | 1" | TO BE REMOVED | -- |
| 4 | OAK | 12" | TO REMAIN | -- | 17 | TREE | 1" | TO BE REMOVED | -- |
| 5 | OAK | 24" | TO REMAIN | -- | 18 | TREE | 2" | TO BE REMOVED | -- |
| 6 | OAK | 12" | TO REMAIN | -- | 19 | TREE | 1" | TO BE REMOVED | -- |
| 7 | OAK | 16" | TO REMAIN | -- | 20 | TREE | 1" | TO BE REMOVED | -- |
| 8 | OAK | 14" | TO REMAIN | -- | 21 | TREE | 1" | TO BE REMOVED | -- |
| 9 | OAK | 40" | TO BE REMOVED | 40" | 22 | TREE | 2" | TO BE REMOVED | -- |
| 10 | SABAL | | TO BE REMOVED | 1 PALM | 23 | TREE | 1" | TO BE REMOVED | -- |
| 11 | OAK | 48" | TO REMAIN | -- | 24 | TREE | 1" | TO BE REMOVED | -- |
| 12 | SABAL PALM | | TO BE REMOVED | 1 PALM | 25 | TREE | 1" | TO BE REMOVED | -- |
| 13 | TREE | 1" | TO BE REMOVED | -- | 26 | SABAL | | TO REMAIN | -- |
| | | | | | 27 | SABAL | | TO BE REMOVED | 1 PALM |

## Tree Mitigation Calculations

| | QUANTITY | DBH (INCHES) | MITIGATION REQU. |
|---|---|---|---|
| TO BE REMOVED | | | |
| TREES UNDER 14" | 13 TREES | 15" | 0" |
| LIVE OAKS 14" AND ABOVE | 1 TREE | 40" | 40" |
| SABAL PALMS | 3 PALMS | N/A | 3 PALMS |

| MITIGATION (REPLACEMENT) | REQUIRED | PROVIDED |
|---|---|---|
| TOTAL TREE MITIGATION REQUIRED | 40" | 46.5" |
| *Includes:* | | |
| *(6) GREEN BUTTONWOOD @ 3" cal. (Half Credit -1.5")* | | *9.0"* |
| *(12) LIVE OAKS @ 3" cal. (Half Credit -1.5")* | | *18.0"* |
| *(13) MAGNOLIAS @ 3" cal. (Half Credit -1.5")* | | *19.5"* |
| TOTAL PALM MITIGATION REQUIRED | 3 PALMS | 3 PALMS |
| *Includes:* | | |
| *(3) SABAL PALMS @ 10' ct min.* | | *3 PALMS* |

48 HOURS BEFORE DIGGING CALL TOLL FREE 8-1-1 SUNSHINE811.COM NOTIFICATION CENTER

plot date:
file name:


Patrick D. Cunningham, LLC
land planning
landscape architecture
519 Sapphire Drive
Sarasota, FL 34234
o: 941.351.8915
pcunningham.LLC@gmail.com


Existing Vegetation Plan

Bev Smith Kia
5560 US Highway One
Ft. Pierce, Florida

DATE: 07.28.2022
REV:
SCALE: 1"=40'-0"

PATRICK D. CUNNINGHAM FL REG. # LA: 0001669
SEAL

0 40 80
NORTH

L-2
SHEET



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## Additional Notes

1. QUALITY
PLANT MATERIALS USED SHALL CONFORM TO THE STANDARDS FOR FLORIDA NO. 1 OR BETTER, AS GIVEN IN THE MOST CURRENT EDITION OF "GRADES AND STANDARDS FOR NURSERY PLANTS" PART I AND PART II, STATE OF FLORIDA.

2. DROUGHT TOLERANCE REQUIREMENTS
A MINIMUM OF 75% TO 100% OF TOTAL CUMULATIVE LANDSCAPE PLANT MATERIAL USED TO MEET THE PROVISIONS OF THE I.R.C. LDR, CHAPTER 926, SHALL BE "HIGH DROUGHT TOLERANT," AS CLASSIFIED AND LISTED IN THE MOST RECENT EDITION OF THE "WATERWISE - FLORIDA LANDSCAPES - LANDSCAPING TO PROMOTE WATER CONSERVATION USING PRINCIPLES OF XERISCAPE" - FROM FLORIDA'S WATER MANAGEMENT DISTRICTS.

3. TREES:
A. CANOPY TREES SHALL BE SPECIES HAVING AN AVERAGE MATURE SPREAD OF CROWN GREATER THAN FIFTEEN (15) FEET IN DIAMETER, AND HAVING A TRUNK WITH OVER FIVE (5) FEET OF CLEAR WOOD.
B. CANOPY TREES SHALL HAVE A 2" DIAMETER AT 0.5' ABOVE GRADE AND BE A MIN. 12' IN HEIGHT WITH A MINIMUM CROWN SPREAD OF 4.5' AT TIME OF PLANTING.
C. PALMS SHALL BE CONSIDERED 1/3 OF A TREE AND, IF USED, THEY SHALL CONSIST OF NO MORE THAN ONE-THIRD OF THE TOTAL NEW TREE REQUIREMENT. ADDITIONALLY, 3 PALMS = 1 CANOPY TREE. SINGLE DATE PALMS (NOT PYGMY DATE PALMS) MAY BE SUBSTITUTED FOR A CANOPY TREE.
D. AT LEAST 50% OF ALL NEW REQUIRED TREES SHALL BE OF A NATIVE SPECIES, AND AT LEAST 75% - 100% OF ALL TREES SHALL BE RATED "DROUGHT TOLERANT."
E. REQUIRED UNDERSTORY TREES SHALL BE A MINIMUM OF SIX (6) FEET OVERALL IN HEIGHT AND ONE- AND ONE-HALF (1.5) INCHES DIAMETER AT ONE-HALF (0.5) FEET ABOVE GRADE AT THE TIME OF PLANTING. MULTI-TRUNK TREES SHALL HAVE A COMBINED ONE- AND ONE-HALF-INCH CALIPER FOR ALL TRUNKS AT SIX (6) INCHES ABOVE GRADE. PALM TREES USED AS UNDERSTORY TREES SHALL HAVE A MINIMUM OVERALL HEIGHT OF SIX (6) FEET AND SHALL NOT COMPRISE MORE THAN ONE-THIRD (1/3) OF THE TOTAL UNDERSTORY TREE REQUIREMENT.
F. A ROOT BARRIER IS REQUIRED FOR CANOPY TREES WITHIN 6-FT. OF A SIDEWALK, PAVED AREA, BUILDING, OR UNDERGROUND UTILITY .

4. SHRUBS/ HEDGES:
A. SHRUBS SHALL BE A MINIMUM OF EIGHTEEN (18) INCHES IN HEIGHT WHEN MEASURED IMMEDIATELY AFTER PLANTING, EXCEPT THAT SHRUBS OF NON-NATIVE VIBURNUM AND LIGUSTRUM SPECIES SHALL BE A MINIMUM OF TWENTY-FOUR (24) INCHES IN HEIGHT IMMEDIATELY AFTER PLANTING.
B. SHRUBS, WHERE REQUIRED, SHALL BE PLANTED IN AN OFFSET DOUBLE ROW AND MAINTAINED SO AS TO FORM A CONTINUOUS, UNBROKEN, SOLID SCREEN, WHERE REQUIRED TO FORM A CONTINUOUS SCREEN, TO SATISFY A BUFFER OR OPAQUE FEATURE REQUIREMENT, SHRUBS SHALL BE PLANTED ON TWENTY-FOUR (24)-TO-THIRTY (30) INCH CENTERS, UNLESS A GREATER SPACING IS NECESSARY TO ACCOMMODATE LARGER SHRUBS AND IS APPROVED BY PLANNING DIVISION STAFF.
C. EXCLUDING SHRUBS USED IN OPAQUE FEATURES, AT LEAST 50% OF THE REQUIRED NUMBER OF SHRUBS SHALL BE OF NATIVE SPECIES.

5. MULCH AND GROUND COVERS
THE USE OF CYPRESS MULCH IS PROHIBITED. MULCH THAT IS NOT CYPRESS MAY BE USED. GROUND COVERS (NOT INCLUDING SOD GRASS) SHALL BE PLANTED IN SUCH A MANNER AS TO PRESENT A FINISHED APPEARANCE AND REASONABLY COMPLETE COVERAGE WITHIN ONE YEAR AFTER PLANTING. AT LEAST 50% OF THE AREA COVERED BY LIVING MATERIAL SHALL BE OF NATIVE SPECIES. REFER TO IRC LDC FOR A LIST OF NATIVE GROUND COVERS AND FLOWERS. THE COMPLETE COVERAGE OF AN AREA BY GROUND COVERS PRECLUDES THE USE OF MULCH THEREAFTER.

6. TURF GRASS
TURF GRASS AREAS SHALL BE IDENTIFIED ON THE LANDSCAPE PLAN AND SHALL BE LIMITED TO A MAXIMUM OF 50% OF THE TOTAL IRRIGATED, LANDSCAPED AND VEGETATED PROJECT AREA, EXCLUDING RIGHTS-OF-WAY, ACTIVE RECREATION AREAS (E.G. PLAYFIELDS), AND SLOPES WITHIN DRY RETENTION AREAS. TURF GRASS SHALL BE PLACED SO THAT IT CAN BE IRRIGATED IN A SEPARATE ZONE. PREFERRED TURF GRASSES ARE THOSE QUALIFYING AS NATIVE.

7. IRRIGATION USAGE ZONES SHALL BE AS FOLLOWS:
A. GRASS AREA SHALL BE IN HIGH USAGE ZONES.
B. TREES & SHRUBS SHALL BE IN LOW USAGE ZONES.

8. THERE SHALL BE (6) DIFFERENT SPECIES OF TREES USED, AND (9) DIFFERENT SPECIES OF SHRUBS WITH (4) BEING NATIVE PER I.R.C. ORDINANCE, CHAPTER 926.

9. THE CONTRACTOR SHALL ATTEMPT TO PRESERVE AS MANY EXISTING TREES AS POSSIBLE AND FEASIBLE. TREES THAT ARE PRESERVED MAY BE CREDITED TOWARDS THE SITE TREE REQUIREMENT IF THEY MEET THE SPECIFICATIONS.

10. THE CONTRACTOR SHALL COORDINATE THE PLACEMENT OF TREES, SIGNS AND LIGHTS SUCH THAT ALL SIGNAGE IS EASILY SEEN AND LIGHTING WORKS FOR ITS INTENDED PURPOSE. TREE PLACEMENT MAY VARY FROM THIS PLAN TO ACHIEVE THIS REQUIREMENT.

11. LANDSCAPE ISLANDS SHALL BE BACKFILLED AT LEAST TO TOP OF CURB, AND MAY BE BERMED TO A MAXIMUM HEIGHT OF 24" ABOVE ADJACENT PARKING LOT GRADE.

12. ALL LANDSCAPE MATERIAL IN SHOCK WILL BE REPLACED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.

LAND CLEARING NOTES
A. ALL NATIVE UPLAND VEGETATION CONTRIBUTING TO THE STABILIZATION OF BANKS OR EXISTING CANALS, DITCHES OR NATURAL WATERCOURSES SHALL BE RETAINED.

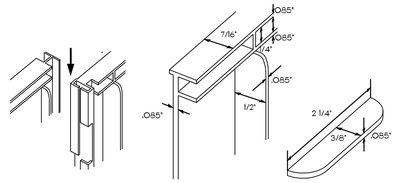
B. ALL NUISANCE EXOTIC VEGETATION EXISTING ON SITE SHALL BE REMOVED IN CONJUNCTION WITH ANY SITE DEVELOPMENT.

C. ANY ABANDONED FLOW WELLS EXISTING ON SITE SHALL BE PLUGGED IN CONJUNCTION WITH SITE DEVELOPMENT.

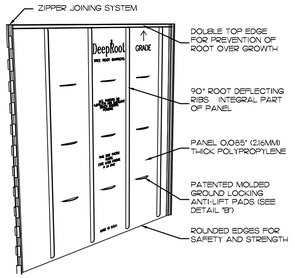
NOTES:
SPECIFIED TREE ROOT BARRIERS ARE A MECHANICAL BARRIER AND ROOT DEFLECTOR TO PREVENT TREE ROOTS FROM DAMAGING HARDSCAPES AND LANDSCAPES. ASSEMBLED IN 2' LONG MODULES TO CREATE VARYING SIZES OF CYLINDERS FOR SURROUNDING ROOT BALLS (SURROUND PLANTING STYLE) OR FOR LINEAR APPLICATIONS DIRECTLY BESIDE A HARDSCAPE ADJACENT TO ONE SIDE OF THE TREES (LINEAR PLANTING STYLE).

A. MATERIALS
1. THE CONTRACTOR SHALL FURNISH AND INSTALL TREE ROOT BARRIERS AS SPECIFIED. THE TREE ROOT BARRIERS SHALL BE PRODUCT # UB 24-2, # UB 36-2 AND # UB 48-2 AS MANUFACTURED BY DEEP ROOT PARTNERS, LP, 345 LORTON AVE. #103, BURLINGAME, CA (800-458-7668), OR APPROVED EQUAL. THE BARRIER SHALL BE BLACK, INJECTION MOLDED PANELS, OF 0.065" WALL THICKNESS IN MODULES 24" LONG BY 24" & 48" DEEP, MANUFACTURED WITH A MINIMUM 50% POST CONSUMER RECYCLED POLYPROPYLENE PLASTIC WITH ADDED ULTRAVIOLET INHIBITORS, RECYCLABLE. EACH PANEL SHALL HAVE:

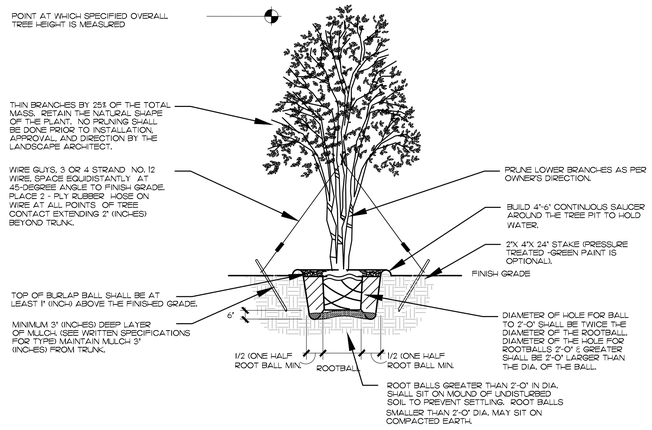
B. CONSTRUCTION AND INSTALLATION
1. THE CONTRACTOR SHALL INSTALL THE TREE ROOT BARRIERS WITH THE NUMBER OF PANELS AND IN THE MANNER SHOWN ON THE DRAWINGS. THE VERTICAL ROOT DEFLECTING RIBS SHALL BE FACING INWARDS TO THE ROOT BALL AND THE TOP OF THE DOUBLE EDGE SHALL BE 1/2" ABOVE GRADE. EACH OF THE REQUIRED NUMBER OF PANELS SHALL BE CONNECTED TO FORM A CONTINUOUS BARRIER AROUND THE ROOT BALL OR WHERE SPECIFIED, JOINED IN A LINEAR FASHION AND PLACED ALONG THE ADJACENT HARDSCAPE. ALL STREET TREES WITH TRUNKS CLOSER THAN 4 FT. TO PAVED SURFACES SHALL BE PLANTED WITH ROOT BARRIER BETWEEN THE ROOT BALL AND PAVING. PLANTINGS WITHIN TREE WELLS REQUIRE ROOT BARRIERS ALONG ALL SIDES OF THE TREE WELL.
2. EXCAVATION AND SOIL PREPARATION SHALL CONFORM TO THE DRAWINGS.
3. THE TREE ROOT BARRIERS SHALL BE BACKFILLED ON THE OUTSIDE WITH 3/4" TO 1 1/2" GRAVEL OR CRUSHED ROCK AS SHOWN ON THE DRAWINGS. NO GRAVEL BACKFILL IS REQUIRED FOR A LINEAR PLANTING



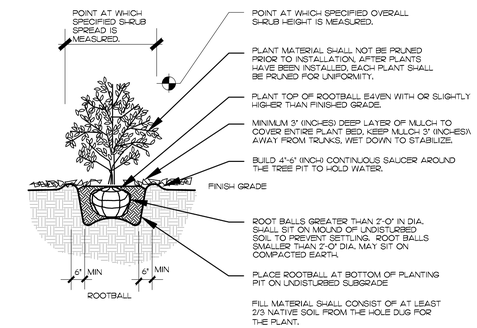
ZIPPER JOINING SYSTEM | DOUBLE TOP EDGE | ANTI-LIFT GROUND LOCK



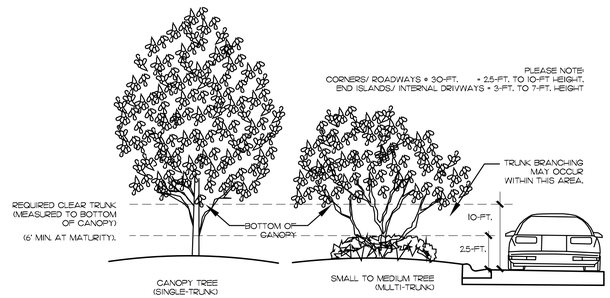

**24" DEEPROOT TREE ROOT BARRIERS**
NOT TO SCALE



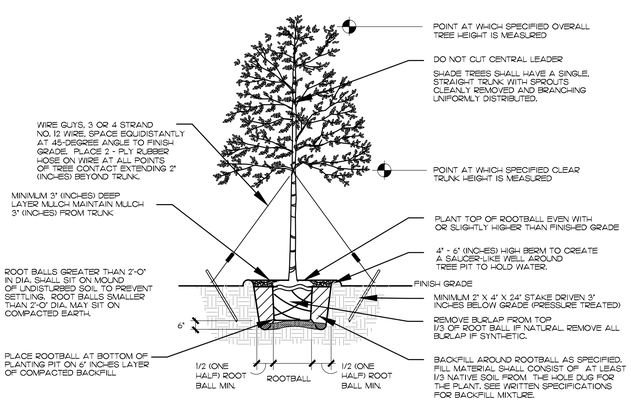

**TYPICAL IRRIGULAR/MULTI-TRUNK TREE PLANTING DETAIL**
NOT TO SCALE



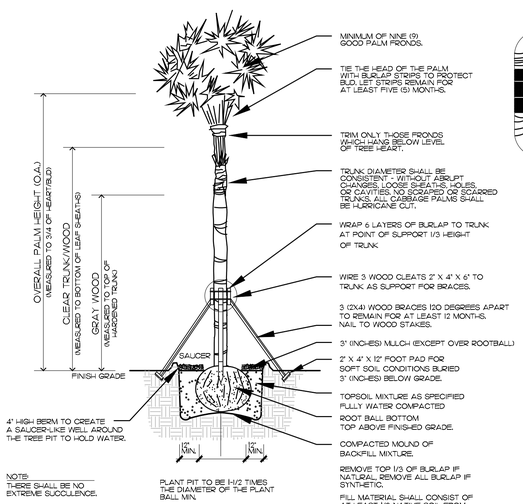

**TYPICAL SHRUB/ GROUNDCOVER PLANTING DETAIL**
NOT TO SCALE




**CLEAR TRUNK WITHIN SIGHT TRIANGLE DETAIL**
NOT TO SCALE



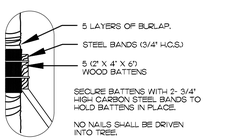

**TYPICAL TREE PLANTING DETAIL**
NOT TO SCALE

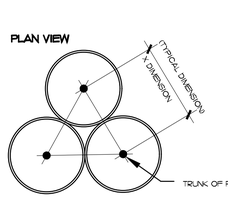



NOTE:
THERE SHALL BE NO EXTREME SUCCULENCE.

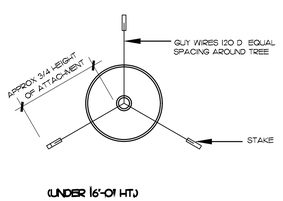
PLANT PIT TO BE 1-1/2 TIMES THE DIAMETER OF THE PLANT BALL MIN.

**TYPICAL PALM PLANTING DETAIL**
NOT TO SCALE




**TYPICAL PLANT SPACING DETAIL**
NOT TO SCALE




(UNDER 16'-0" HT.)
**TYPICAL TREE GUYING DETAIL**
NOT TO SCALE

48 HOURS BEFORE DIGGING
CALL TOLL FREE
8-1-1
SUNSHINE811.COM
NOTIFICATION CENTER

plot date:
file name:


Patrick D. Cunningham, LLC
land planning
landscape architecture
519 Sapphire Drive
Sarasota, FL 34234
o: 941.351.8915
pcunningham.LLC@gmail.com


Landscape Details

Bev Smith Kia
5560 US Highway One
Ft. Pierce, Florida

DATE: 07.28.2022
REV:
SCALE: N.T.S.
SEAL
PATRICK D. CUNNINGHAM FL REG. # LA. 0001469
SHEET NORTH
L-3



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Advanced Restoration Ecology

# 5560 S US HWY 1

St Lucie County, FL

## Environmental Assessment

Prepared For:
Bev Smith Kia

Prepared By:

Drew Gatewood, MS, PWS
2593 NE Roberta St
Jensen Beach, FL 34957
772-242-7200
813-784-8891

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The environmental assessment report below has been compiled in accordance with the St Lucie County Development Review Division and previsions set forth by the state of Florida. The parcel is listed by the St Lucie County Property Appraiser as Parcel ID number 3403-502-0302-000-4 and is a total of 9.63 acres. The property is located at 5560 S US Hwy 1 in Ft Pierce, Florida. The following report describes the findings of our recent on site review and database research as it pertains to St Lucie County and the State of Florida.

## LAND USE RECORDS

The St Lucie County Property Appraiser's Report lists this property as 2700 Auto Sales.

## SOIL COMPOSITION:

Based on a review of the United State Department of Agriculture's Web Soil Survey database the site's soils are comprised of the following:

***Riviera Fine Sand*** - This poorly drained, nearly level soil is found in hammocks and along drainageways. The surface layer is dark gray brown fine sand about 5 inches thick. The soil has a water table at a depth of less than 10 inches for 2 to 4 months in most years and at a depth of 10 to 30 inches for most of the rest of the year. Permeability is rapid in the surface and subsurface layers, slow to very slow in the subsoil, and rapid in the substratum. Natural vegetation includes cabbage palms. and scattered longleaf pine and slash pine and an understory of wax myrtle and saw palmetto. The most common native grasses are pineland threeawn and blue maidencane. Broomsedges, creeping bluestem, paspalum, sand cordgrass and panicums are typical grasses for this soil.

***Pineda Sand*** – *This is a nearly level poorly drained soil found in grassy flats. The natural vegetation associated with this soil type includes slash pine, cabbage palm, wax myrtle, gallberry, fetterbush, and brooms sedge. The surface layer typically is dark gray and dark grayish brown sand. The subsurface layer is brown fine sand with yellow and brownish mottles.*

***Susanna and Wauchula*** - This poorly drained soil is found typically in broad areas in the flatwoods. Typically the surface layer is black fine sand about 5 inches thick. The water table is at a depth of less than 10 inches for 2 to 4 months during the wet season and within a depth of 40 inches for more than 6 months. Natural vegetation consists of slash pine, saw palmetto, inkberry, rusty lyonia, black root, penny royal, pineland threeawn, chalky bluestem, panicum and various grasses. The soil is well suited for pasture and hay crops.

***Wabasso Sand*** - This soil is a nearly level, poorly drained soil in broad open areas of the flatwoods. The surface layer is sand about 8 inches thick. The upper 4 inches is black and the lower 4 inches is dark grey. The water table is typically at a depth of less than 10 inches for 1 to 4 months during the wet season, and at a depth of 10 to 40 inches for 6 to 9 months in most years. Natural vegetation is slash pine, cabbage palm, saw palmetto, running oak, inkberry and fetterbush. Common grasses are threeawn and bluestem. The soil has severe limitations for cultivated crops and citrus due to wetness. The soil has high potential for dwellings without basements, small commercial buildings, local roads and streets.

*Nettles Sand* is a poorly drained, nearly level soil found in areas of broad flatwoods. Typically the surface layer is 11 inches thick. Black sand comprises the upper 5 inches, very dark gray sand in the next three inches and dark gray sand in the lower 3 inches. Subsurface layer is light gray sand 22 inches thick. The water table is typically at a depth of 10 inches for 2 to 4 months during wet seasons, and at a depth of 10 to 40 inches for 6 months of longer in most years. Natural vegetation includes slash pine, cabbage palm, saw palmetto, wax myrtle, inkberry, fetterbush, creeping bluestem, chalky bluestem, Florida threeawn, and pineland threeawn. This soil has severe limitations for cultivated crops unless water control and other food management practices are provided. This soil has potential for improved pasture grasses and high potential for dwellings without basements, small commercial buildings, and roads.

## WILDLIFE EVALUATION:

On September 25, 2020, ARE conducted pedestrian transects across 100% of property looking for local, state and federally listed or endangered species present on the site. This survey primarily focused on the presence of gopher tortoise burrows or recent activity. During the pedestrian transects of the property, no gopher tortoise activity was observed on site. No other listed plant or animal species were observed on site during the site visit.

## NATIVE HABITAT

The site investigation conducted by ARE, Inc. did not find native upland habitat on the site. The site has been previously cleared and has dense exotic content throughout the understory. Species observed during the site reconnaissance included the following,

| | |
|---|---|
| Muscadine Grape (*Vitis rotundifolia*) | Brazilian pepper (*Schinus terbinthifolius*) |
| Cabbage palm (*Sabal palmetto*) | Mahoe (*Hibiscus tiliaceus*) |
| Guava (*Psidium guajava*) | Old World Climbing Fern (*Lygodium* sp) |
| Slash Pine (*Pinus densa*) | Laurel Oak (*Quercus laurifolia*) |

## WETLAND DELINEATION:

Based on the State definition of a wetland in 62-340 FAC, there are three components: hydric soils, wetland plants, and hydrologic indicators. These factors listed were present during the site investigation. ARE concludes this property does include state and possibly federally jurisdictional wetlands on site in its current configuration. A wetland delineation and verification by the State and possibly the USCAOE will be needed prior to any site clearing.

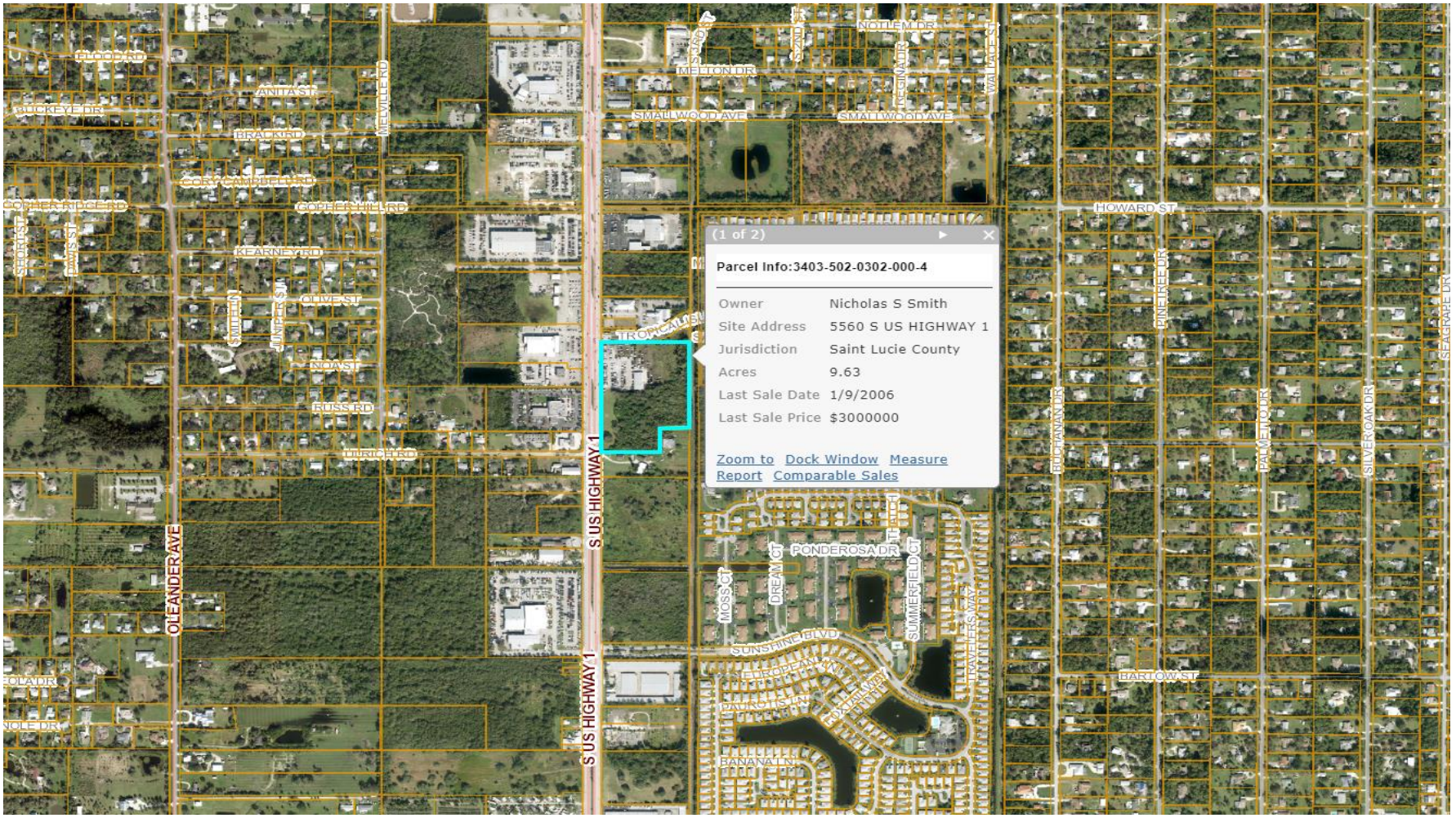
## COUNTY REQUIREMENTS

The County will require proof of a completed gopher tortoise survey by a licensed agent. Please submit this document with any applications to use as the needed verification of a 100% gopher tortoise survey has been completed on the site. Per FWC regulations a gopher tortoise survey is good for 90 days, and any clearing must have a valid survey prior to commencement. The County will not authorize/issue any permitting without a current gopher tortoise survey. There are trees meeting the County's protection standards (Please see tree data table and map). A site plan will be needed to determine possible needs for mitigation to offset any impacts to these trees.

## CONCLUSION:

Based on County requirements, ARE, Inc. conducted a site investigation throughout the property to survey for the presence of any listed plant or animal species. No Gopher Tortoise burrows were observed on site, nor were any other State or Federally listed species observed on the property during the site visit. A 100% gopher tortoise survey of

the property was conducted and completed by an FWC licensed gopher tortoise agent during the site investigation. Native habitat was not determined to be on site due to the dense exotic content in the understory of the site. It is the professional opinion of ARE, Inc. that there are State and possibly Federally jurisdictional wetlands on the site as the site's characteristics did meet the minimum thresholds required for wetland classification. These wetland limits need to be delineated and verified by the State and possibly the USACOE prior to clearing. There are trees meeting the protection standards for St Lucie County. A site plan/ clearing plan will be needed to determine if mitigation is needed to offset impacts to these trees.




9/26/2020

Location Map

Map Source: St Lucie County

N

**5560 S US HWY 1**
**Ft. Pierce, FL**

Advanced Restoration Ecology




9/26/2020

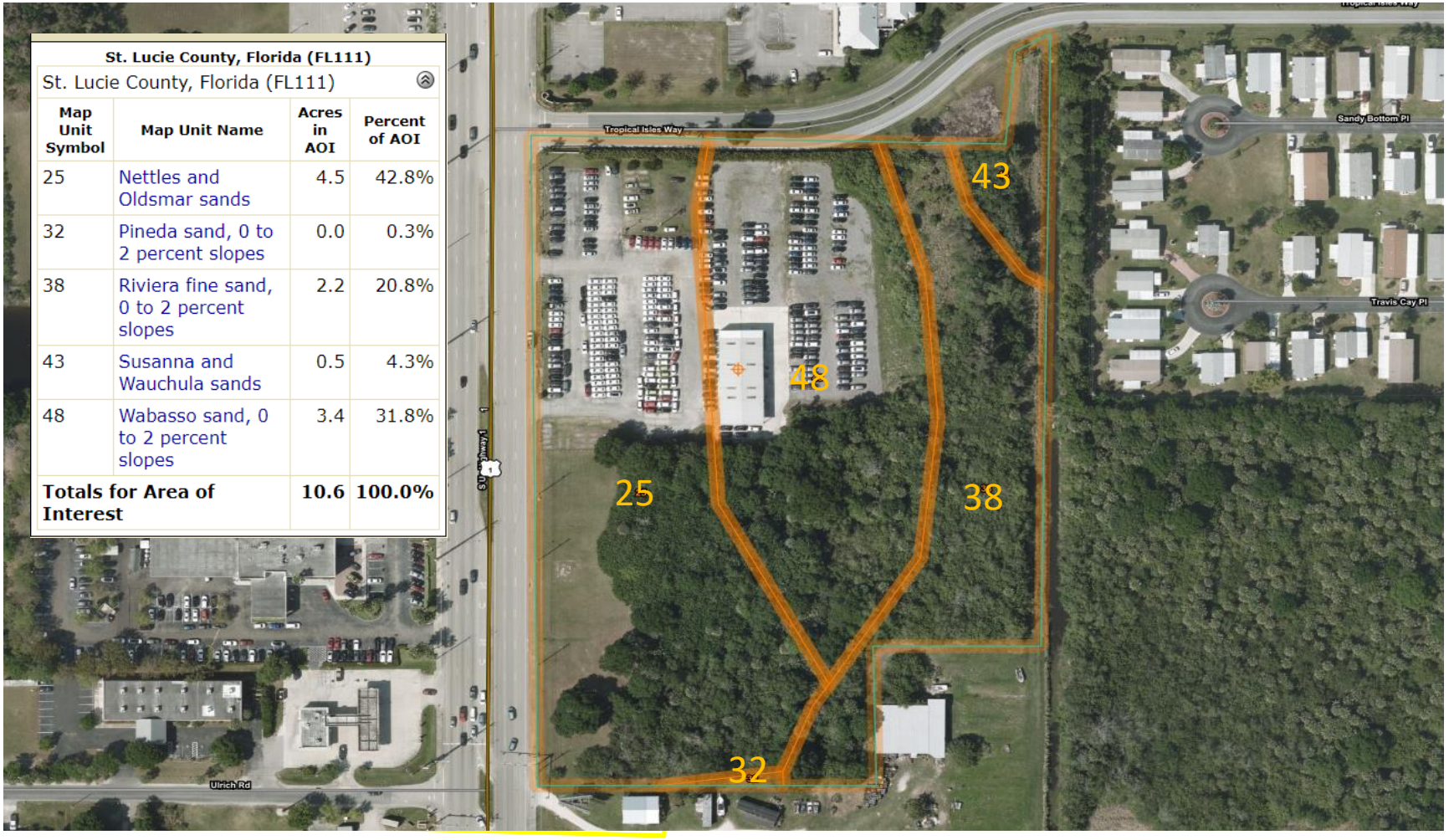
FLUCCS Map

Map Source: Google Earth

N

**5560 S US HWY 1**
**Ft. Pierce, FL**

Advanced Restoration Ecology




**St. Lucie County, Florida (FL111)**

St. Lucie County, Florida (FL111)

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 25 | Nettles and Oldsmar sands | 4.5 | 42.8% |
| 32 | Pineda sand, 0 to 2 percent slopes | 0.0 | 0.3% |
| 38 | Riviera fine sand, 0 to 2 percent slopes | 2.2 | 20.8% |
| 43 | Susanna and Wauchula sands | 0.5 | 4.3% |
| 48 | Wabasso sand, 0 to 2 percent slopes | 3.4 | 31.8% |
| **Totals for Area of Interest** | | **10.6** | **100.0%** |

9/26/2020

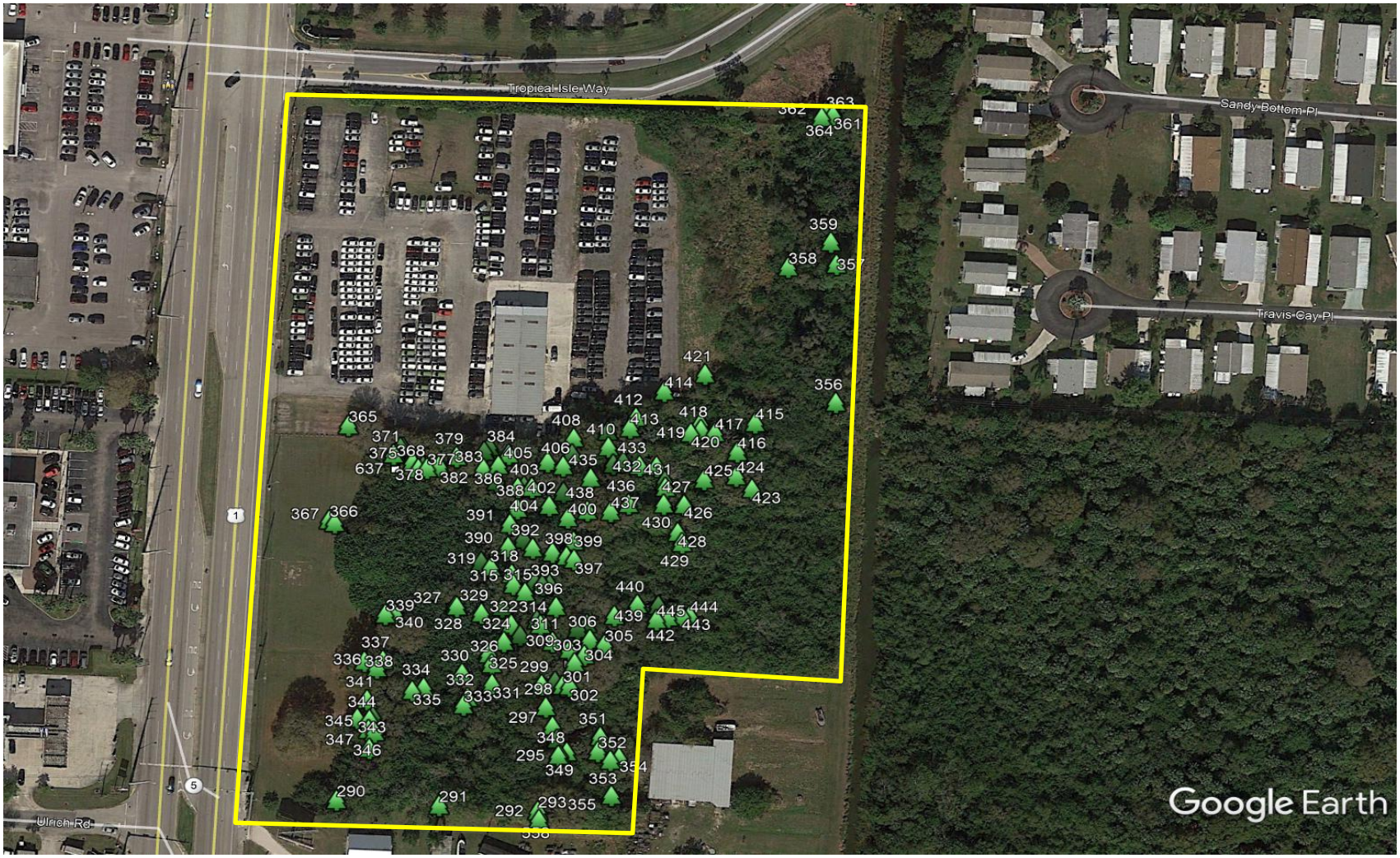
Soil Map

Map Source: Google Earth

N

**5560 S US HWY 1**
**Ft. Pierce, FL**

Advanced Restoration Ecology




9/26/2020

Tree Survey Map

Map Source: Google Earth

N

**5560 S US HWY 1**
**Ft. Pierce, FL**

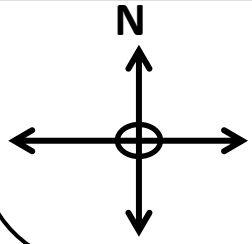
Advanced Restoration Ecology

| Tag No | Species | Size |
|---|---|---|
| 290 | Cabbage Palm | 12' |
| 291 | Laurel Oak | 28" |
| 292 | Cabbage Palm | 10' |
| 293 | Laurel Oak | 60" |
| 294 | Cabbage Palm | 22' |
| 295 | Laurel Oak | 16" |
| 296 | Cabbage Palm | 13' |
| 297 | Laurel Oak | 30" |
| 298 | Cabbage Palm | 14' |
| 299 | Cabbage Palm | 15' |
| 300 | Cabbage Palm | 13' |
| 301 | Cabbage Palm | 12' |
| 302 | Laurel Oak | 28" |
| 303 | Laurel Oak | 13" |
| 304 | Cabbage Palm | 15' |
| 305 | Cabbage Palm | 14' |
| 306 | Cabbage Palm | 10' |
| 307 | Cabbage Palm | 15' |
| 308 | Laurel Oak | 14" |
| 309 | Laurel Oak | 12" |
| 310 | Cabbage Palm | 15' |
| 311 | Cabbage Palm | 16' |
| 312 | Cabbage Palm | 18' |
| 313 | Laurel Oak | 24" |
| 314 | Cabbage Palm | 18' |
| 315 | Cabbage Palm | 18' |
| 316 | Cabbage Palm | 16' |
| 317 | Laurel Oak | 13" |
| 318 | Laurel Oak | 18" |
| 319 | Cabbage Palm | 20' |
| 320 | Cabbage Palm | 22' |
| 321 | Cabbage Palm | 11' |
| 322 | Laurel Oak | 15" |
| 323 | Laurel Oak | 12" |
| 324 | Laurel Oak | 20" |
| 325 | Cabbage Palm | 22' |
| 326 | Cabbage Palm | 24' |
| 327 | Cabbage Palm | 20' |
| 328 | Cabbage Palm | 16' |
| 329 | Cabbage Palm | 20' |
| 330 | Cabbage Palm | 12' |
| 331 | Laurel Oak | 12" |
| 332 | Cabbage Palm | 21' |
| 333 | Cabbage Palm | 23' |
| 334 | Cabbage Palm | 23' |
| 335 | Laurel Oak | 14" |
| 336 | Cabbage Palm | 15' |
| 337 | Laurel Oak | 40" |
| 338 | Cabbage Palm | 14' |
| 339 | Laurel Oak | 40" |
| 340 | Laurel Oak | 20" |
| 341 | Laurel Oak | 13" |
| 342 | Laurel Oak | 30" |
| 343 | Laurel Oak | 12" |
| 344 | Cabbage Palm | 16' |
| 345 | Laurel Oak | 12" |
| 346 | Cabbage Palm | 18' |
| 347 | Cabbage Palm | 22' |
| 348 | Cabbage Palm | 17' |
| 349 | Cabbage Palm | 16' |
| 350 | Cabbage Palm | 16' |
| 351 | Laurel Oak | 12" |
| 352 | Cabbage Palm | 12' |
| 353 | Laurel Oak | 14" |
| 354 | Laurel Oak | 24" |
| 355 | Cabbage Palm | 16' |
| 356 | Slash Pine | 28" |
| 357 | Laurel Oak | 12" |
| 358 | Cabbage Palm | 14' |
| 359 | Cabbage Palm | 17' |
| 360 | Cabbage Palm | 18' |
| 361 | Slash Pine | 18" |
| 362 | Slash Pine | 15" |
| 363 | Laurel Oak | 24" |
| 364 | Laurel Oak | 30" |
| 365 | Cabbage Palm | 18' |
| 366 | Cabbage Palm | 20' |
| 367 | Cabbage Palm | 17' |
| 368 | Laurel Oak | 14" |
| 369 | Laurel Oak | 32" |
| 370 | Cabbage Palm | 14' |
| 371 | Cabbage Palm | 14' |
| 372 | Laurel Oak | 14" |
| 373 | Laurel Oak | 16" |
| 374 | Laurel Oak | 14" |
| 375 | Cabbage Palm | 15' |
| 376 | Laurel Oak | 14" |
| 377 | Cabbage Palm | 16' |
| 378 | Laurel Oak | 18" |
| 379 | Laurel Oak | 12" |
| 380 | Laurel Oak | 15" |
| 381 | Laurel Oak | 14" |
| 382 | Laurel Oak | 21" |
| 383 | Laurel Oak | 44" |
| 384 | Laurel Oak | 14" |
| 385 | Laurel Oak | 14" |
| 386 | Cabbage Palm | 18' |
| 387 | Cabbage Palm | 16' |
| 388 | Laurel Oak | 18" |
| 389 | Laurel Oak | 16" |
| 390 | Laurel Oak | 32" |
| 391 | Cabbage Palm | 22' |
| 392 | Cabbage Palm | 20' |
| 393 | Cabbage Palm | 16' |
| 394 | Cabbage Palm | 18' |
| 395 | Laurel Oak | 14" |
| 396 | Laurel Oak | 25" |
| 397 | Laurel Oak | 16" |
| 398 | Cabbage Palm | 23' |
| 399 | Cabbage Palm | 21' |
| 400 | Cabbage Palm | 18' |
| 401 | Cabbage Palm | 18' |
| 402 | Cabbage Palm | 20' |
| 403 | Cabbage Palm | 17' |
| 404 | Laurel Oak | 14" |
| 405 | Laurel Oak | 22" |
| 406 | Laurel Oak | 17" |
| 407 | Laurel Oak | 48" |
| 408 | Laurel Oak | 30" |
| 409 | Cabbage Palm | 22' |
| 410 | Cabbage Palm | 17' |
| 411 | Laurel Oak | 24" |
| 412 | Cabbage Palm | 17' |
| 413 | Laurel Oak | 12" |
| 414 | Cabbage Palm | 20' |
| 415 | Cabbage Palm | 18' |
| 416 | Laurel Oak | 34" |
| 417 | Cabbage Palm | 23' |
| 418 | Cabbage Palm | 21' |
| 419 | Cabbage Palm | 20' |
| 420 | Cabbage Palm | 16' |
| 421 | Cabbage Palm | 22' |
| 422 | Cabbage Palm | 16' |
| 423 | Laurel Oak | 40" |
| 424 | Cabbage Palm | 14' |
| 425 | Laurel Oak | 13' |
| 426 | Cabbage Palm | 16' |
| 427 | Cabbage Palm | 17' |
| 428 | Cabbage Palm | 17' |
| 429 | Cabbage Palm | 15' |
| 430 | Cabbage Palm | 15' |
| 431 | Cabbage Palm | 1' |
| 432 | Cabbage Palm | 15' |
| 433 | Cabbage Palm | 10' |
| 434 | Laurel Oak | 82" |
| 435 | Laurel Oak | 14" |
| 436 | Laurel Oak | 16" |
| 437 | Cabbage Palm | 13' |
| 438 | Laurel Oak | 36" |
| 439 | Cabbage Palm | 17' |
| 440 | Cabbage Palm | 17' |
| 441 | Cabbage Palm | 18' |
| 442 | Cabbage Palm | 18' |
| 443 | Cabbage Palm | 15; |
| 444 | Cabbage Palm | 18' |
| 445 | Live Oak Cluster | 103" |

9/26/2020

Tree Survey Data Table

Map Source: Google Earth




**5560 S US HWY 1**
**Ft. Pierce, FL**

Advanced Restoration Ecology

| Tag No | Species | Size |
|---|---|---|
| 290 | Cabbage Palm | 12' |
| 291 | Laurel Oak | 28" |
| 292 | Cabbage Palm | 10' |
| 293 | Laurel Oak | 60" |
| 294 | Cabbage Palm | 22' |
| 295 | Laurel Oak | 16" |
| 296 | Cabbage Palm | 13' |
| 297 | Laurel Oak | 30" |
| 298 | Cabbage Palm | 14' |
| 299 | Cabbage Palm | 15' |
| 300 | Cabbage Palm | 13' |
| 301 | Cabbage Palm | 12' |
| 302 | Laurel Oak | 28" |
| 303 | Laurel Oak | 13" |
| 304 | Cabbage Palm | 15' |
| 305 | Cabbage Palm | 14' |
| 306 | Cabbage Palm | 10' |
| 307 | Cabbage Palm | 15' |
| 308 | Laurel Oak | 14" |
| 309 | Laurel Oak | 12" |
| 310 | Cabbage Palm | 15' |
| 311 | Cabbage Palm | 16' |
| 312 | Cabbage Palm | 18' |
| 313 | Laurel Oak | 24" |
| 314 | Cabbage Palm | 18' |
| 315 | Cabbage Palm | 18' |
| 316 | Cabbage Palm | 16' |
| 317 | Laurel Oak | 13" |
| 318 | Laurel Oak | 18" |
| 319 | Cabbage Palm | 20' |
| 320 | Cabbage Palm | 22' |
| 321 | Cabbage Palm | 11' |
| 322 | Laurel Oak | 15" |
| 323 | Laurel Oak | 12" |
| 324 | Laurel Oak | 20" |
| 325 | Cabbage Palm | 22' |
| 326 | Cabbage Palm | 24' |
| 327 | Cabbage Palm | 20' |
| 328 | Cabbage Palm | 16' |
| 329 | Cabbage Palm | 20' |
| 330 | Cabbage Palm | 12' |
| 331 | Laurel Oak | 12" |
| 332 | Cabbage Palm | 21' |
| 333 | Cabbage Palm | 23' |
| 334 | Cabbage Palm | 23' |
| 335 | Laurel Oak | 14" |

| | | |
|---|---|---|
| 336 | Cabbage Palm | 15' |
| 337 | Laurel Oak | 40" |
| 338 | Cabbage Palm | 14' |
| 339 | Laurel Oak | 40" |
| 340 | Laurel Oak | 20" |
| 341 | Laurel Oak | 13" |
| 342 | Laurel Oak | 30" |
| 343 | Laurel Oak | 12" |
| 344 | Cabbage Palm | 16' |
| 345 | Laurel Oak | 12" |
| 346 | Cabbage Palm | 18' |
| 347 | Cabbage Palm | 22' |
| 348 | Cabbage Palm | 17' |
| 349 | Cabbage Palm | 16' |
| 350 | Cabbage Palm | 16' |
| 351 | Laurel Oak | 12" |
| 352 | Cabbage Palm | 12' |
| 353 | Laurel Oak | 14" |
| 354 | Laurel Oak | 24" |
| 355 | Cabbage Palm | 16' |
| 356 | Slash Pine | 28" |
| 357 | Laurel Oak | 12" |
| 358 | Cabbage Palm | 14' |
| 359 | Cabbage Palm | 17' |
| 360 | Cabbage Palm | 18' |
| 361 | Slash Pine | 18" |
| 362 | Slash Pine | 15" |
| 363 | Laurel Oak | 24" |
| 364 | Laurel Oak | 30" |
| 365 | Cabbage Palm | 18' |
| 366 | Cabbage Palm | 20' |
| 367 | Cabbage Palm | 17' |
| 368 | Laurel Oak | 14" |
| 369 | Laurel Oak | 32'' |
| 370 | Cabbage Palm | 14' |
| 371 | Cabbage Palm | 14' |
| 372 | Laurel Oak | 14" |
| 373 | Laurel Oak | 16" |
| 374 | Laurel Oak | 14" |
| 375 | Cabbage Palm | 15' |
| 376 | Laurel Oak | 14" |
| 377 | Cabbage Palm | 16' |
| 378 | Laurel Oak | 18" |
| 379 | Laurel Oak | 12" |
| 380 | Laurel Oak | 15" |
| 381 | Laurel Oak | 14" |
| 382 | Laurel Oak | 21" |

| | | |
|---|---|---|
| 383 | Laurel Oak | 44" |
| 384 | Laurel Oak | 14" |
| 385 | Laurel Oak | 14" |
| 386 | Cabbage Palm | 18' |
| 387 | Cabbage Palm | 16' |
| 388 | Laurel Oak | 18" |
| 389 | Laurel Oak | 16" |
| 390 | Laurel Oak | 32" |
| 391 | Cabbage Palm | 22' |
| 392 | Cabbage Palm | 20' |
| 393 | Cabbage Palm | 16' |
| 394 | Cabbage Palm | 18' |
| 395 | Laurel Oak | 14" |
| 396 | Laurel Oak | 25" |
| 397 | Laurel Oak | 16" |
| 398 | Cabbage Palm | 23' |
| 399 | Cabbage Palm | 21' |
| 400 | Cabbage Palm | 18' |
| 401 | Cabbage Palm | 18' |
| 402 | Cabbage Palm | 20' |
| 403 | Cabbage Palm | 17' |
| 404 | Laurel Oak | 14" |
| 405 | Laurel Oak | 22" |
| 406 | Laurel Oak | 17" |
| 407 | Laurel Oak | 48" |
| 408 | Laurel Oak | 30" |
| 409 | Cabbage Palm | 22' |
| 410 | Cabbage Palm | 17' |
| 411 | Laurel Oak | 24" |
| 412 | Cabbage Palm | 17' |
| 413 | Laurel Oak | 12" |
| 414 | Cabbage Palm | 20' |
| 415 | Cabbage Palm | 18' |
| 416 | Laurel Oak | 34" |
| 417 | Cabbage Palm | 23' |
| 418 | Cabbage Palm | 21' |
| 419 | Cabbage Palm | 20' |
| 420 | Cabbage Palm | 16' |
| 421 | Cabbage Palm | 22' |
| 422 | Cabbage Palm | 16' |
| 423 | Laurel Oak | 40" |
| 424 | Cabbage Palm | 14' |
| 425 | Laurel Oak | 13' |
| 426 | Cabbage Palm | 16' |
| 427 | Cabbage Palm | 17' |
| 428 | Cabbage Palm | 17' |
| 429 | Cabbage Palm | 15' |

| | | |
|---|---|---|
| 430 | Cabbage Palm | 15' |
| 431 | Cabbage Palm | 1' |
| 432 | Cabbage Palm | 15' |
| 433 | Cabbage Palm | 10' |
| 434 | Laurel Oak | 82" |
| 435 | Laurel Oak | 14" |
| 436 | Laurel Oak | 16" |
| 437 | Cabbage Palm | 13' |
| 438 | Laurel Oak | 36" |
| 439 | Cabbage Palm | 17' |
| 440 | Cabbage Palm | 17' |
| 441 | Cabbage Palm | 18' |
| 442 | Cabbage Palm | 18' |
| 443 | Cabbage Palm | 15; |
| 444 | Cabbage Palm | 18' |
| 445 | Live Oak Cluster | 103" |

Advanced Restoration Ecology

# MEMORANDUM

TO: Bev Smith Kia

FROM: Drew Gatewood

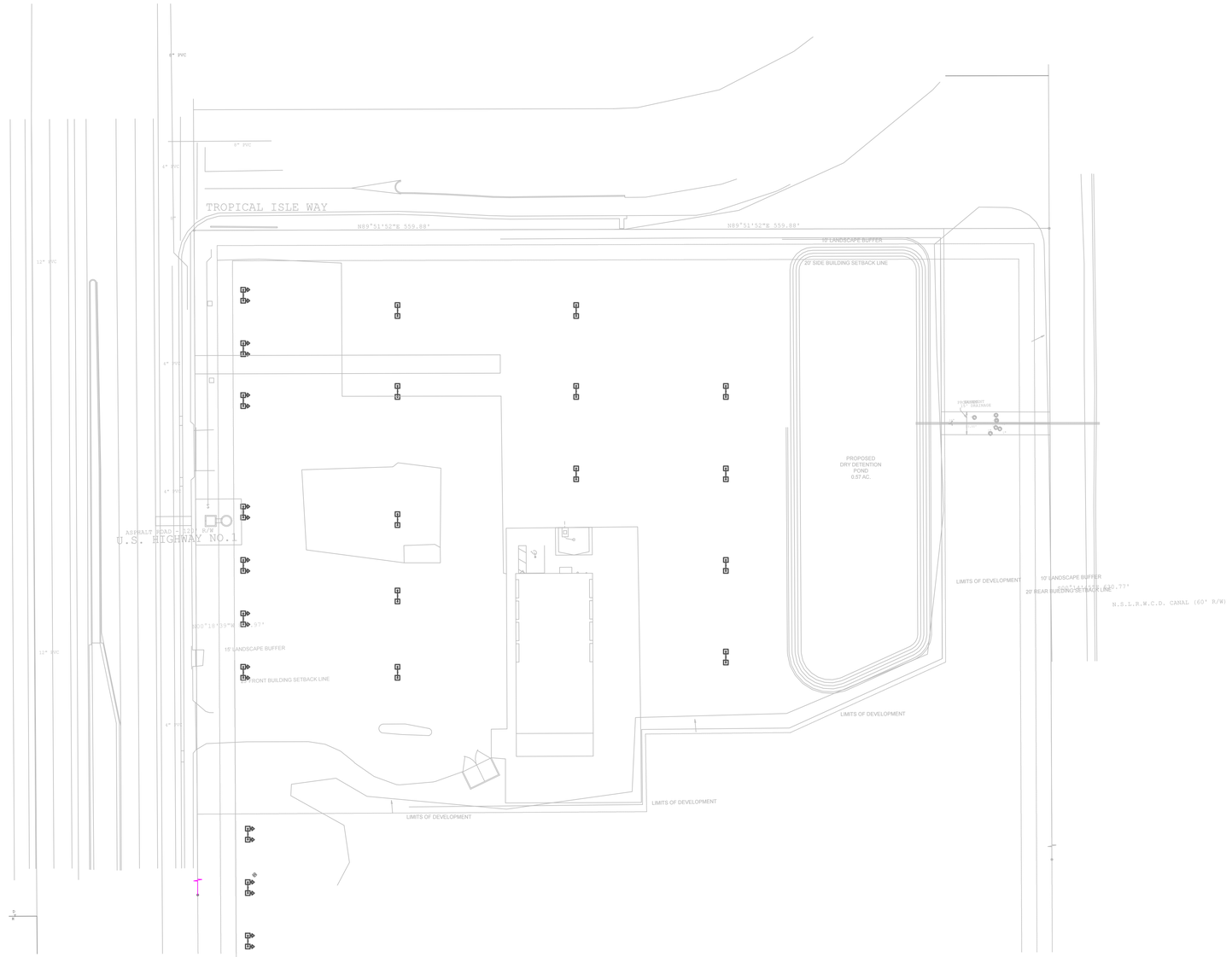
CC: File

DATE: 12/16/2021

RE: 5560 S US Hwy 1

On December 16, 2021, Drew Gatewood, a Florida Fish and Wildlife Conservation Commission (FFWCC) Authorized Gopher Tortoise Agent with ARE performed a 100% gopher tortoise survey on the above referenced parcel. Pedestrian transects were completed in compliance with FFWCC requirements. The site is currently vacant land with proposed commercial construction planned. ARE did not find any evidence gopher tortoise burrows during the 100% survey on the parcel. The site has dense exotic content throughout it, preventing viable forage and habitat to support gopher tortoise populations. This survey is good for 90 days and should be submitted with your building and clearing application. Please be aware that any activity within 25' of a gopher tortoise burrow will require FFWCC authorization, and ARE should be notified if during the clearing or the property a gopher tortoise is observed. No other state or federally listed species were observed during the site visit.

Drew Gatewood, MS, PWS




| Luminaire Schedule | | | | | | |
|---|---|---|---|---|---|---|
| Symbol | Qty | Label | Arrangement | Lumens | LLF | Description |
| | 12 | D | BACK-BACK | 40566.1 | 1.000 | GL3-40H-3RM-750 |
| | 14 | A | D180 | 40566.1 | 1.000 | GL3-40H-3RM-750 |

| Calculation Summary | | | | | | | |
|---|---|---|---|---|---|---|---|
| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
| ADDED LOT | Illuminance | Fc | 36.71 | 65.1 | 9.9 | 3.71 | 6.58 |
| MAIN LOT | Illuminance | Fc | 13.13 | 61.0 | 0.2 | 65.65 | 305.00 |

- DUE TO CHANGING LIGHTING ORDINANCES IT IS THE CONTRACTORS RESPONSIBILITY TO SUBMIT THE SITE PHOTOMETRICS AND LUMINAIRE SPECS TO THE LOCAL INSPECTOR BEFORE ORDERING TO ENSURE THIS PLAN COMPLIES WITH LOCAL LIGHTING ORDINACES.
- THIS LIGHTING DESIGN IS BASED ON INFORMATION SUPPLIED BY OTHERS. CHANGES IN ELECTRICAL SUPPLY, AREA GEOMETRY AND OBJECTS WITHIN THE LIGHTED AREA MAY PRODUCE ILLUMINATION VALUES DIFFERENT FROM THE PREDICTED RESULTS SHOWN ON THIS LAYOUT.
- THIS LAYOUT IS BASED ON .IES FILES THAT WERE LAB TESTED OR COMPUTER GENERATED. ACTUAL RESULTS MAY VARY.

Project: Bev Smith KIA - Added Lot
Scale: 1" = 30'
Drawing Date: January 16, 2022

Wampler Lighting Group
83 High Avenue
Valley Head, AL 35989
256.996.2560

MBV
ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
www.mbveng.com CA #3728

# STORMWATER MANAGEMENT CALCULATIONS

for

## BEV SMITH KIA - SITE IMPROVEMENTS

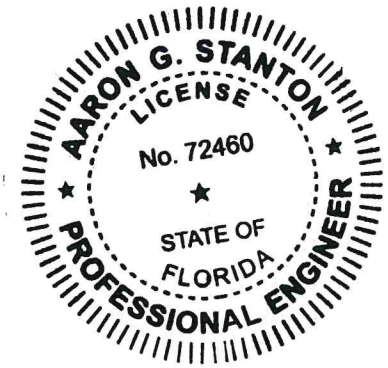
### ST. LUCIE COUNTY, FLORIDA

December 2018
Revised January 2019
Revised July 2022

This item has been digitally signed & sealed by Aaron Stanton, P.E. on the date adjacent to the seal.

Printed copies of this document are not considered signed & sealed and the signature must be verified on any electronic copies.

Prepared by: MBV Engineering, Inc.
1835 20th Street
Vero Beach, Florida 32960
772-569-0035
Certificate of Authorization #: 3728




Engineers Project #: 18-0251
Designed By: AGS

Mr. Aaron G. Stanton, P.E. #72460

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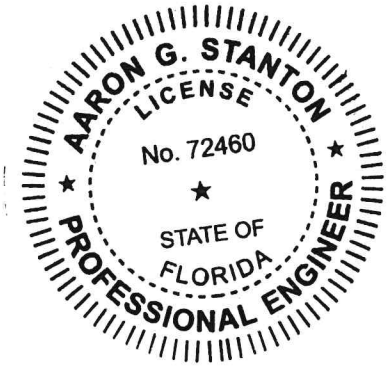

**I Purpose**
**II Proposed System**
**III Site Data**
**IV Pre-Development Conditions**
**V Post Development Conditions**
**VI Required Treatment Volume**
**VII Nutrient Calculations**
**VIII Proposed Treatment Volume**
**IX Allowable Volume to Drawdown**
**X Summary**

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| A.1 | Node Max Repot |
| A.2 | Node Diagram |
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| A.4 | Volumetric Drawdown from 10YR-72HR Storm Event |
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| **Attachment C** | **Pre-Development Basin Map** |
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| **Attachment F** | **FEMA Flood Zone Map** |
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| **Attachment H** | **Historical SFWMD ERP (The Groves of Fort Pierce, ERP # 56-00410-S)** |
| **Attachment I** | **Geotechnical Report by GFA** |



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1835 20th Street
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Mr. Aaron G. Stanton, P.E. #72460

## I. PURPOSE

The site has been used as an existing car storage lot for Bev Smith Kia. This project will proposed to add drainage improvements to bring the site into complaince with stormwater regulations. The purpose of this report is to provide St. Lucie County, SFWMD and the North St. Lucie River Water Control District (NSLRWCD) with calculations and documentation which demonstrates the proposed surface water management system complies with state and local criteria.

## II. PROPOSED SYSTEM

The proposed surface water management system will consist of a dry detention basin with a retention component as required for nutrient and discharge control requirements. The site will be graded to flow to the detention basin via overland flow. The detention basin is designed to retain the required treatment volume and to provide attenuation for the 25 year - 24 hour storm and provide the required treatment volume drawdown per NSLRWCD criteria.

## III. SITE DATA

Site Area: 419,485 s.f. 9.630 acres

Site Location: 5560 U.S. Highway 1
Fort Pierce, FL

Site Soils:

| Soil | Map Unit Sym | Class | Percentage |
|---|---|---|---|
| Nettles & Oldsmar | 25 | B/D | 50% |
| Wabasso | 48 | B/D | 50% |

Flood Zone: The subject property is located in Flood Zone 'X' per Flood Insurance Rate Map No. 12111C0277 J dated February 16, 2012. See Attachment F.

Wet Season Water Table: Based on a previously approved water table, under a SFWMD ERP for The Grove of Ft. Pierce, the water table is taken as 8.0 NGVD, which would convert to 6.5 NAVD. An excerpt of the permit can be found under Attachment H. The geotechnical report by GFA International, dated October 26, 2018 and included as Attachment I, estimated the wet season water table to be approximately 2 - 2.5 ft above the existing groundwater elevations taken. This would put the WSWT at approximately 8.7 NAVD on average for the site. Based on this information and using sound engineering practice, the WSWT for this design was taken as **8.0 NAVD**. This was also the WSWT approved for Jeep-Alfa Romeo-Maserati dealership, directly to the south, that was approved by SFWMD on 4/10/18.

Hydraulic Conductivity: Two (2) exfiltration tests were taken and are listed in the geotechnical report dated October 26, 2018 done by GFA. The average of these two tests resulted ina a **K value of 1.66 x $10^{-4}$ cfs/$ft^2$ - ft head**.

## IV. PRE-DEVELOPMENT CONDITIONS

| | | | |
|---|---|---|---|
| Site Area | 419,485 s.f. | 9.630 acres | |
| Drainage Area | 236,931 s.f. | 5.439 acres | 100.0% |
| Building Area | 5,274 s.f. | .121 acres | 2.2% |
| Parking, Asphalt | 47,468 s.f. | 1.090 acres | 20.0% |
| Parking, Concrete | 10,167 s.f. | .233 acres | 4.3% |
| Covered Concrete Area | 755 s.f. | .017 acres | 0.3% |
| Parking, Millings | 5,031 s.f. | .115 acres | 2.1% |
| Parking, Stab. (rock & millings) | 44,669 s.f. | 1.025 acres | 18.9% |
| Green Areas | 123,567 s.f. | 2.837 acres | 52.2% |
| | | | |
| Total, Impervious | 68,695 s.f. | 1.577 acres | 29.0% |
| Total Semi.-Impervious | 44,669 s.f. | 1.025 acres | 18.9% |
| Total Pervious | 123,567 s.f. | 2.837 acres | 52.2% |
| | | | 100.0% |

*Weighted Curve Number*

| | | | |
|---|---|---|---|
| % Impervious | 29.0% | CN1 = 98 | |
| % Semi-Pervious | 18.9% | CN2 = 88 | |
| % Pervious | 52.2% | CN3 = 56 | Type B Brush-Fair |

CN = [(% Impervious)(CN1) + (% Pervious)(CN2) ]

TOTAL CN = 74.2

*Time of Concentration*

Tc = [ 0.007 (N x L)^0.8 ] / [ P2^0.5 x S^0.4 ] Sheet Flow

| | |
|---|---|
| N = Mannings Roughness Coeff. = | 0.400 |
| L = Length of Flow (ft) = | 300 |
| Change in elevation = | 1 |
| P = Rainfall Intensity (in/hr)= | 5 |
| S = slope (ft/ft) = | 0.0033 |

t1= 84.7 min.

Tc = [L] / [3600*V ] Shallow Concentrated Flow

| | |
|---|---|
| Slope (ft/ft) = | 0.004 |
| L = Length of Flow (ft) = | 325 |
| V = Velocity (ft/s) (Fig 3-1) = | 1.0 |

t2= 5.3 min.

Total Time of Concentration (Tc) 90.0 min.

## V. POST-DEVELOPMENT CONDITIONS

### A. NORTH BASIN

| | | | |
|---|---|---|---|
| Site Area | 419,485 s.f. | 9.630 acres | |
| Drainage Area | 174,855 s.f. | 4.014 acres | 100.0% |
| Building Area | 5,274 s.f. | .121 acres | 3.0% |
| Parking, Asphalt | 102,684 s.f. | 2.357 acres | 58.7% |
| Parking, Concrete | 10,167 s.f. | .233 acres | 5.8% |
| Covered Concrete Area | 755 s.f. | .017 acres | 0.4% |
| Parking, Millings | 5,031 s.f. | .115 acres | 2.9% |
| Parking, Stab. (rock & millings) | s.f. | .000 acres | 0.0% |
| Green Areas | 50,944 s.f. | 1.170 acres | 29.1% |
| | | | |
| Total Impervious | 123,911 s.f. | 2.845 acres | 70.9% |
| Total Semi.-Impervious | s.f. | .000 acres | 0.0% |
| Total Pervious | 50,944 s.f. | 1.170 acres | 29.1% |
| | | | 100.0% |

*Weighted Curve Number*

| | | | |
|---|---|---|---|
| % Impervious | 70.9% | CN1 = 98 | |
| % Semi-Pervious | 0.0% | CN2 = 88 | |
| % Pervious | 29.1% | CN3 = 56 | Type B Brush-Fair |

CN = [(% Impervious)(CN1) + (% Pervious)(CN2) ]

TOTAL CN = 85.8

*Time of Concentration*

Tc = [ 0.007 (N x L)^0.8 ] / [ P2^0.5 x S^0.4 ] Sheet Flow

| | |
|---|---|
| N = Mannings Roughness Coeff. = | 0.400 |
| L = Length of Flow (ft) = | 300 |
| Change in elevation = | 1 |
| P = Rainfall Intensity (in/hr)= | 5 |
| S = slope (ft/ft) = | 0.0033 |
| t1= | 84.7 min. |

Tc = [L] / [3600*V ] Shallow Concentrated Flow

| | |
|---|---|
| Slope (ft/ft) = | 0.004 |
| L = Length of Flow (ft) = | 325 |
| V = Velocity (ft/s) (Fig 3-1) = | 1.0 |
| t2= | 5.3 min. |

Total Time of Concentration (Tc) 90.0 min.

**B. SOUTH BASIN**

| | | | |
|---|---|---|---|
| Site Area | 419,485 s.f. | 9.630 acres | |
| Drainage Area | 62,076 s.f. | 1.425 acres | 100.0% |
| Parking, Asphalt | 29,484 s.f. | .677 acres | 47.5% |
| Green Areas | 32,592 s.f. | .748 acres | 52.5% |
| | | | |
| Total Impervious | 29,484 s.f. | .677 acres | 47.5% |
| Total Semi.-Impervious | s.f. | .000 acres | 0.0% |
| Total Pervious | 32,592 s.f. | .748 acres | 52.5% |
| | | | 100.0% |

*Weighted Curve Number*

| | | | |
|---|---|---|---|
| % Impervious | 47.5% | CN1 = 98 | |
| % Semi-Pervious | 0.0% | CN2 = 88 | |
| % Pervious | 52.5% | CN3 = 56 | Type B Brush-Fair |

CN = [(% Impervious)(CN1) + (% Pervious)(CN2) ]

TOTAL CN = 75.9

*Time of Concentration*

Tc = [ 0.007 (N x L)^0.8 ] / [ P2^0.5 x S^0.4 ] Sheet Flow

| | |
|---|---|
| N = Mannings Roughness Coeff. = | 0.013 |
| L = Length of Flow (ft) = | 120 |
| Change in elevation = | 0.8 |
| P = Rainfall Intensity (in/hr)= | 5 |
| S = slope (ft/ft) = | 0.0067 |

t1= 2.0 min.

Total Time of Concentration (Tc) 2.0 min. <-- (If <10min., use 10 min.)

## VI. REQUIRED TREATMENT VOLUME

### A. NORTH DRY POND BASIN

| | | | | |
|---|---|---|---|---|
| Total Contributing Area (ac) = | | 4.014 | ac | |
| Total Impervious Area (ac) = | | 2.845 | ac | |
| (impervious + 70% of semi-pervious) | | | | |
| | | Vol. | | |
| Required Treatment over site (in) = | 1.0 | 0.335 | ac-ft | |
| Required Treatment over impervious area (in) = | 2.50 | 0.593 | ac-ft | |
| Required Treatment Volume (Greater of 2 above) = | | 0.593 | ac-ft | |
| On-line Retention: Additional 0.5" over drainage area = | | 0.000 | ac-ft | |
| Additional 0.5" pretreatment for commercial/industrial sites = | | 0.167 | ac-ft | |
| Additional 50% for Discharge to OFW (***St. Lucie River***) = | | 0.296 | ac-ft | |
| Treatment Volume | | 1.056 | ac-ft | = 46,008 cf |
| If dry retention used, apply 50% reduction | | 0.528 | ac-ft | |
| **Required Treatment Volume** | | **0.528** | **ac-ft** | |
| **Provided Treatment Volume** | | **0.785** | **ac-ft** | |

### B. SOUTH DRY POND BASIN

| | | | | |
|---|---|---|---|---|
| Total Contributing Area (ac) = | | 1.425 | ac | |
| Total Impervious Area (ac) = | | 0.677 | ac | |
| (impervious + 70% of semi-pervious) | | | | |
| | | Vol. | | |
| Required Treatment over site (in) = | 1.0 | 0.119 | ac-ft | |
| Required Treatment over impervious area (in) = | 2.50 | 0.141 | ac-ft | |
| Required Treatment Volume (Greater of 2 above) = | | 0.141 | ac-ft | |
| On-line Retention: Additional 0.5" over drainage area = | | 0.000 | ac-ft | |
| Additional 0.5" pretreatment for commercial/industrial sites = | | 0.059 | ac-ft | |
| Additional 50% for Discharge to OFW (***St. Lucie River***) = | | 0.071 | ac-ft | |
| Treatment Volume | | 0.271 | ac-ft | = 11,800 cf |
| If dry retention used, apply 50% reduction | | 0.135 | ac-ft | |
| **Required Treatment Volume** | | **0.135** | **ac-ft** | |
| **Provided Treatment Volume** | | **0.224** | **ac-ft** | |

## VII. NUTRIENT CALCULATIONS

***Pre-Development Mean Annual Loading of Total Phosphorus***

| Land Use Category | Mean Annual Total Phosphorus Load (kg/ac-yr) HSG B |
|---|---|
| Commercial (max. 80% imp.) | 0.916 |
| Open Land | 0.017 |

Basin Impervious Area = 2.295 ac (semi-pervious counts as 70% of area towards impervious)
Basin Pervious Area = 3.144 ac

Pre-Development Total Phosphorus Load = 2.156 kg/yr

***Post-Development Mean Annual Loading of Total Phosphorus***

| Land Use Category | Mean Annual Total Phosphorus Load (kg/ac-yr) HSG B |
|---|---|
| Commercial (max. 80% imp.) | 0.916 |
| Open Land | 0.017 |

**A. NORTH DRY POND BASIN**

Basin Impervious Area = 2.845 ac
Basin Pervious Area = 1.170 ac

Post-Development Total Phosphorus Load = 2.626 kg/yr

**B. SOUTH BASIN**

Basin Impervious Area = 0.677 ac
Basin Pervious Area = 0.748 ac

Post-Development Total Phosphorus Load = 0.633 kg/yr

***Required Removal Efficiency for Total Phosphorus***

$$\frac{\text{Post Phosphorus - Pre Phosphorus}}{\text{Post Phosphorus}} = 34\%$$

***Proposed Removal Efficiency for Total Phosphorus***

Total Site Development Area = 5.439 ac
Total Pond Volume = 1.009 ac-ft
Inches of Retention for Site = 2.23 inches

Proposed Dry Detention Pond w/ 2.25" retention Depth (Table 11.7-23) = 94%

## VIII. PROPOSED TREATMENT VOLUME

**A. NORTH DRY POND BASIN**

| Stage (ft) | Area (s.f.) | Area (ac) | Incremental Volume (c.f.) | Incremental Volume (ac-ft) | Cumulative Volume (c.f.) | Cumulative Volume (ac-ft) |
|---|---|---|---|---|---|---|
| bot. of pond = 9.00 | 21,063 | 0.484 | 0 | 0.000 | 0 | 0.000 |
| 9.50 | 22,207 | 0.510 | 10,817 | 0.248 | 10,817 | 0.248 |
| 10.00 | 23,377 | 0.537 | 11,396 | 0.262 | 22,214 | 0.510 |
| top of bank = 10.50 | 24,572 | 0.564 | 11,987 | 0.275 | 34,201 | 0.785 |
| perimeter berm = 11.00 | 26,370 | 0.605 | 12,736 | 0.292 | 46,936 | 1.078 |

| | | |
|---|---|---|
| TV Vol = 10.03 | | 0.528 |

**B. SOUTH BASIN**

| Stage (ft) | Area (s.f.) | Area (ac) | Incremental Volume (c.f.) | Incremental Volume (ac-ft) | Cumulative Volume (c.f.) | Cumulative Volume (ac-ft) |
|---|---|---|---|---|---|---|
| bot. of pond = 9.50 | 1,742 | 0.040 | 0 | 0.000 | 0 | 0.000 |
| 10.00 | 2,483 | 0.057 | 1,056 | 0.024 | 1,056 | 0.024 |
| 11.00 | 4,040 | 0.093 | 3,262 | 0.075 | 4,318 | 0.099 |
| top of bank = 12.00 | 6,827 | 0.157 | 5,434 | 0.125 | 9,751 | 0.224 |
| perimeter berm = 13.00 | 17,500 | 0.402 | 12,164 | 0.279 | 21,915 | 0.503 |

| | | |
|---|---|---|
| TV Vol = 11.01 | | 0.135 |

## IX. ALLOWABLE VOLUME TO DRAW DOWN

North St. Lucie River Water Control District (NSLRWCD) allows 2" over 24 hours to be discharged into its canals from a site.

| | | |
|---|---|---|
| Allowable Discharge Rate (2"/day) = | 0.91 | ac-ft |
| Actual Discharge Volume = | **0.99** | **cf (over greatest 24 hr period)** |

The ICPR model for NSLRWCD drainage system indicates Basin SE-260 is 18.31 acres. According to the ICPR model provided by the District, the existing peak discharge for a 10-year 72-hour storm is 66.36 cfs. Therefore, the pre-development pro-rated discharge for the 4.014 acres is 14.55 cfs. See Attachment H for basin map for NSLRWCD drainage system.

## X. SUMMARY

The controlling discharge event is NSLRWCD's rule of 2" of discharge over a 24 period for the 10yr-72hr storm event, which yields a maximum allowable discharge volume of 29, 143 cf into their canal over any given 24 hour period. Therfore, the mean annual and 25yr-24hr pre-development discharges were not summarized here.

The post-development stages and discharges summarized below are in compliance with SFWMD and St. Lucie County regulations for stormwater systems.

### STORM EVENTS

MEAN ANNUAL (5.0")

| Basin-Site | Peak Discharge (CFS) | Peak Stage (NAVD) |
|---|---|---|
| PRE | -- | -- |
| POST-N. Pond | 0.09 | 10.19 |
| POST-S. Pond | 0 | 11.27 |

10YR-24HR (6.0")

| Basin-Site | Peak Discharge (CFS) | Peak Stage (NAVD) |
|---|---|---|
| PRE | -- | -- |
| POST-N. Pond | 0.24 | 10.49 |
| POST-S. Pond | 0 | 11.57 |

10YR-72HR (9.0")

| Basin-Site | Peak Discharge (CFS) | Peak Stage (NAVD) |
|---|---|---|
| PRE | 14.55** | -- |
| POST-N. Pond | 1.76 | 11.02 |
| POST-S. Pond | 0 | 12.09 |

25YR-72HR (10.0")

| Basin-Site | Peak Discharge (CFS) | Peak Stage (NAVD) |
|---|---|---|
| PRE | -- | -- |
| POST-N. Pond | 2.65 | 11.07 |
| POST-S. Pond | 0 | 12.29 |

100YR-72HR (12.0")

| Basin-Site | Peak Discharge (CFS) | Peak Stage (NAVD) |
|---|---|---|
| PRE | -- | -- |
| POST-N. Pond | 4.5 | 11.15 |
| POST-S. Pond | 0 | 12.65 |

** pro-rated discharge from NSLRWCD model

# Attachment A

A.1 Node Max Report

A.2 Node Diagram

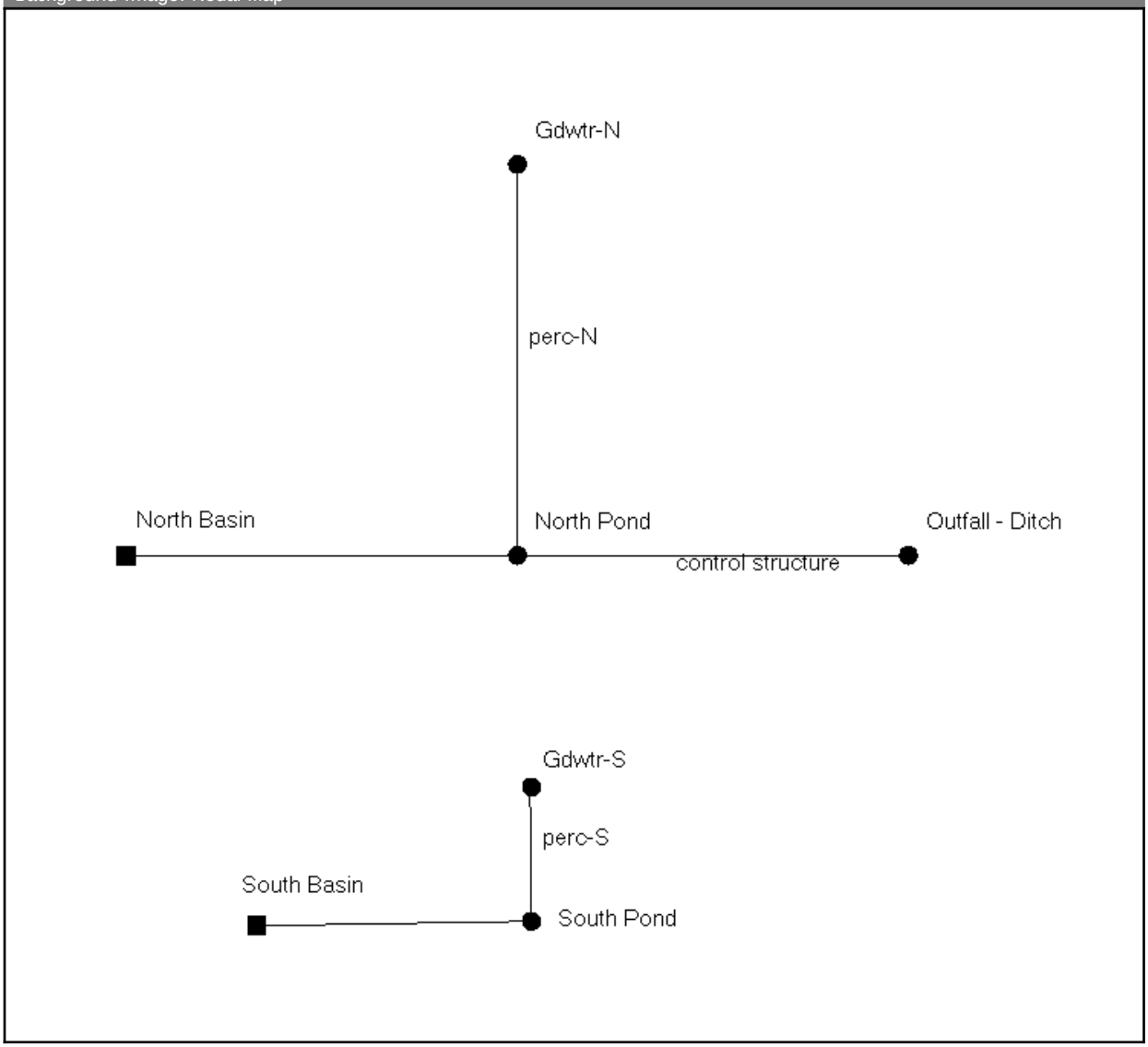
A.3 Input Report

A.4 Volumetric Drawdown from 10YR-72HR Storm Event

Node Max Conditions [Scenario1]

| Node Name | Sim Name | Warning Stage [ft] | Max Stage [ft] | Min/Max Delta Stage [ft] | Max Total Inflow [cfs] | Max Total Outflow [cfs] | Max Surface Area [ft2] |
|---|---|---|---|---|---|---|---|
| Gdwtr-N | 100yr-72hr | 8.10 | 8.00 | 0.0000 | 0.48 | 0.00 | 0 |
| Gdwtr-S | 100yr-72hr | 8.10 | 8.00 | 0.0000 | 1.38 | 0.00 | 0 |
| North Pond | 100yr-72hr | 11.00 | 11.15 | 0.0010 | 6.35 | 4.88 | 26310 |
| Outfall - Ditch | 100yr-72hr | 10.00 | 8.00 | 0.0000 | 4.50 | 0.00 | 0 |
| South Pond | 100yr-72hr | 13.00 | 12.65 | 0.0010 | 7.28 | 1.38 | 13172 |
| Gdwtr-N | 10yr-24hr | 8.10 | 8.00 | 0.0000 | 2.82 | 0.00 | 0 |
| Gdwtr-S | 10yr-24hr | 8.10 | 8.00 | 0.0000 | 1.14 | 0.00 | 0 |
| North Pond | 10yr-24hr | 11.00 | 10.49 | 0.0010 | 3.58 | 2.82 | 24533 |
| Outfall - Ditch | 10yr-24hr | 10.00 | 8.00 | 0.0000 | 0.24 | 0.00 | 0 |
| South Pond | 10yr-24hr | 13.00 | 11.57 | 0.0010 | 4.26 | 1.14 | 6896 |
| Gdwtr-N | 10yr-72hr | 8.10 | 8.00 | 0.0000 | 0.42 | 0.00 | 0 |
| Gdwtr-S | 10yr-72hr | 8.10 | 8.00 | 0.0000 | 1.30 | 0.00 | 0 |
| North Pond | 10yr-72hr | 11.00 | 11.02 | 0.0010 | 4.63 | 2.09 | 26310 |
| Outfall - Ditch | 10yr-72hr | 10.00 | 8.00 | 0.0000 | 1.76 | 0.00 | 0 |
| South Pond | 10yr-72hr | 13.00 | 12.09 | 0.0010 | 5.33 | 1.30 | 9375 |
| Gdwtr-N | 25yr-72hr | 8.10 | 8.00 | 0.0000 | 0.46 | 0.00 | 0 |
| Gdwtr-S | 25yr-72hr | 8.10 | 8.00 | 0.0000 | 1.30 | 0.00 | 0 |
| North Pond | 25yr-72hr | 11.00 | 11.07 | 0.0010 | 5.20 | 3.01 | 26310 |
| Outfall - Ditch | 25yr-72hr | 10.00 | 8.00 | 0.0000 | 2.65 | 0.00 | 0 |
| South Pond | 25yr-72hr | 13.00 | 12.29 | 0.0010 | 5.98 | 1.30 | 10739 |
| Gdwtr-N | mean annual | 8.10 | 8.00 | 0.0000 | 2.70 | 0.00 | 0 |
| Gdwtr-S | mean annual | 8.10 | 8.00 | 0.0000 | 0.92 | 0.00 | 0 |
| North Pond | mean annual | 11.00 | 10.19 | 0.0010 | 2.80 | 2.70 | 23813 |
| Outfall - Ditch | mean annual | 10.00 | 8.00 | 0.0000 | 0.09 | 0.00 | 0 |
| South Pond | mean annual | 13.00 | 11.27 | 0.0010 | 3.36 | 0.92 | 5535 |

Background Image: Nodal Map



## Manual Basin: North Basin

Scenario: Scenario1
Node: North Pond
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 90.0000 min
Max Allowable Q: 999999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: Uh256
Peaking Factor: 256.0
Area: 4.0140 ac

| Area [ac] | Land Cover Zone | Soil Zone | Rainfall Name |
|---|---|---|---|
| 4.0140 | Site | B | |

Comment:

## Manual Basin: South Basin

Scenario: Scenario1
Node: South Pond
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 1.4250 ac

| Area [ac] | Land Cover Zone | Soil Zone | Rainfall Name |
|---|---|---|---|
| 1.4250 | Site | B | |

Comment:

## Node: Gdwtr-N

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 8.00 ft
Warning Stage: 8.10 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 8.00 |
| 0 | 0 | 0 | 24.0000 | 8.00 |
| 0 | 0 | 0 | 360.0000 | 8.00 |

Comment:

## Node: Gdwtr-S

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 8.00 ft
Warning Stage: 8.10 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 8.00 |
| 0 | 0 | 0 | 24.0000 | 8.00 |
| 0 | 0 | 0 | 360.0000 | 8.00 |

Comment:

## Node: North Pond

Scenario: Scenario1
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 9.00 ft
Warning Stage: 11.00 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 9.00 | 0.00 | 0 |
| 9.50 | 0.25 | 10890 |
| 10.00 | 0.51 | 22390 |
| 10.50 | 0.79 | 34238 |
| 11.00 | 1.08 | 46958 |

Comment:

## Node: Outfall - Ditch

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 8.00 ft
Warning Stage: 10.00 ft
Boundary Stage:

| Year | Month | Day | Hour | Stage [ft] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 8.00 |
| 0 | 0 | 0 | 24.0000 | 8.00 |
| 0 | 0 | 0 | 360.0000 | 8.00 |

Comment:

## Node: South Pond

Scenario: Scenario1
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 9.50 ft
Warning Stage: 13.00 ft

| Stage [ft] | Volume [ac-ft] | Volume [ft3] |
|---|---|---|
| 9.50 | 0.00 | 0 |
| 10.00 | 0.02 | 1045 |
| 11.00 | 0.10 | 4312 |
| 12.00 | 0.22 | 9757 |
| 13.00 | 0.50 | 21911 |

Comment:

## Drop Structure Link: control structure

Scenario: Scenario1
From Node: North Pond
To Node: Outfall - Ditch
Link Count: 1
Flow Direction: Both
Solution: Combine
Increments: 10
Pipe Count: 1
Damping: 0.0000 ft
Length: 120.00 ft
FHWA Code: 29
Entr Loss Coef: 0.70
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Bend Location: 0.00 dec
Energy Switch: Energy

### Upstream Pipe

Invert: 7.40 ft
Manning's N: 0.0120

#### Geometry: Circular

Max Depth: 1.25 ft

#### Bottom Clip

Default: 0.00 ft
Op Table:
Ref Node:
Manning's N: 0.0000

#### Top Clip

Default: 0.00 ft
Op Table:
Ref Node:
Manning's N: 0.0000

### Downstream Pipe

Invert: 7.00 ft
Manning's N: 0.0120

#### Geometry: Circular

Max Depth: 1.25 ft

#### Bottom Clip

Default: 0.00 ft
Op Table:
Ref Node:
Manning's N: 0.0000

#### Top Clip

Default: 0.00 ft
Op Table:
Ref Node:
Manning's N: 0.0000

Pipe Comment:

### Weir Component

Weir: 1
Weir Count: 1

#### Bottom Clip

Default: 0.00 ft

| | |
|---|---|
| Weir Flow Direction: | Both |
| Damping: | 0.0000 ft |
| Weir Type: | Sharp Crested Vertical |
| Geometry Type: | Rectangular |
| Invert: | 10.00 ft |
| Control Elevation: | 10.00 ft |
| Max Depth: | 0.25 ft |
| Max Width: | 0.33 ft |
| Fillet: | 0.00 ft |

| | |
|---|---|
| Op Table: | |
| Ref Node: | |

**Top Clip**

| | |
|---|---|
| Default: | 0.00 ft |
| Op Table: | |
| Ref Node: | |

**Discharge Coefficients**

| | |
|---|---|
| Weir Default: | 3.200 |
| Weir Table: | |
| Orifice Default: | 0.600 |
| Orifice Table: | |

Weir Comment:

**Weir Component**

| | |
|---|---|
| Weir: | 2 |
| Weir Count: | 1 |
| Weir Flow Direction: | Both |
| Damping: | 0.0000 ft |
| Weir Type: | Horizontal |
| Geometry Type: | Rectangular |
| Invert: | 10.90 ft |
| Control Elevation: | 10.90 ft |
| Max Depth: | 3.08 ft |
| Max Width: | 2.00 ft |
| Fillet: | 0.00 ft |

**Bottom Clip**

| | |
|---|---|
| Default: | 0.00 ft |
| Op Table: | |
| Ref Node: | |

**Top Clip**

| | |
|---|---|
| Default: | 0.00 ft |
| Op Table: | |
| Ref Node: | |

**Discharge Coefficients**

| | |
|---|---|
| Weir Default: | 3.200 |
| Weir Table: | |
| Orifice Default: | 0.600 |
| Orifice Table: | |

Weir Comment:

Drop Structure Comment:

**Percolation Link: perc-N**

| | | | |
|---|---|---|---|
| Scenario: | Scenario1 | Surface Area Option: | User Specified |
| From Node: | North Pond | Bottom Elevation: | 9.00 ft |
| To Node: | Gdwtr-N | Surface Area: | 0.4850 ac |
| Link Count: | 1 | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Flow Direction: | Both | Perimeter 1: | 604.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 2: | 836.00 ft |
| Water Table Elevation: | 8.00 ft | Perimeter 3: | 1814.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P1 to P2: | 50.00 ft |
| Horizontal Conductivity: | 28.680 fpd | Distance P2 to P3: | 250.00 ft |
| Vertical Conductivity: | 14.340 fpd | # of Cells P1 to P2: | 10 |
| Fillable Porosity: | 0.400 | # of Cells P2 to P3: | 25 |
| Layer Thickness: | 1.00 ft | | |

Comment:

## Percolation Link: perc-S

| | | | |
|---|---|---|---|
| Scenario: | Scenario1 | Surface Area Option: | Vary Based on Stage/Area Table |
| From Node: | South Pond | | |
| To Node: | Gdwtr-S | Vertical Flow Termination: | Horizontal Flow Algorithm |
| Link Count: | 1 | Perimeter 1: | 807.00 ft |
| Flow Direction: | Both | Perimeter 2: | 1083.00 ft |
| Aquifer Base Elevation: | 0.00 ft | Perimeter 3: | 1791.00 ft |
| Water Table Elevation: | 8.00 ft | Distance P1 to P2: | 50.00 ft |
| Annual Recharge Rate: | 0 ipy | Distance P2 to P3: | 250.00 ft |
| Horizontal Conductivity: | 28.680 fpd | # of Cells P1 to P2: | 10 |
| Vertical Conductivity: | 14.340 fpd | # of Cells P2 to P3: | 250 |
| Fillable Porosity: | 0.400 | | |
| Layer Thickness: | 1.50 ft | | |

Comment:

## Simulation: 100yr-72hr

Scenario: Scenario1
Run Date/Time: 7/28/2022 9:41:53 PM
Program Version: ICPR4 4.07.00

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 72.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

#### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

| | |
|---|---|
| Rainfall Folder: | |
| Unit Hydrograph Folder: | |

### Lookup Tables

| | |
|---|---|
| Boundary Stage Set: | |
| Extern Hydrograph Set: | |
| Curve Number Set: | Site |
| Green-Ampt Set: | |
| Vertical Layers Set: | |
| Impervious Set: | Site |

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 24.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~SFWMD-72 |
| | | Rainfall Amount: | 12.00 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 10yr-24hr

| | |
|---|---|
| Scenario: | Scenario1 |
| Run Date/Time: | 7/28/2022 9:42:35 PM |
| Program Version: | ICPR4 4.07.00 |

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 24.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder:

Unit Hydrograph Folder:

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: Site
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Site

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 6.00 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

## Simulation: 10yr-72hr

Scenario: Scenario1
Run Date/Time: 7/28/2022 9:42:48 PM
Program Version: ICPR4 4.07.00

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 100.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 60.0000 |

### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 60.0000 |

### Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder:
Unit Hydrograph Folder:

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: Site
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Site

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain: Global

| | | | |
|---|---|---|---|
| | | Opt: | |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~SFWMD-72 |
| | | Rainfall Amount: | 9.00 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: 25yr-72hr

Scenario: Scenario1
Run Date/Time: 7/28/2022 9:43:03 PM
Program Version: ICPR4 4.07.00

### General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 72.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

### Output Time Increments

#### Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

#### Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

#### Restart File

Save Restart: False

### Resources & Lookup Tables

| Resources | | Lookup Tables | |
|---|---|---|---|
| Rainfall Folder: | | Boundary Stage Set: | |
| | | Extern Hydrograph Set: | |
| Unit Hydrograph Folder: | | Curve Number Set: | Site |
| | | Green-Ampt Set: | |
| | | Vertical Layers Set: | |
| | | Impervious Set: | Site |

## Tolerances & Options

| | | | |
|---|---|---|---|
| Time Marching: | SAOR | IA Recovery Time: | 24.0000 hr |
| Max Iterations: | 6 | | |
| Over-Relax Weight Fact: | 0.5 dec | | |
| dZ Tolerance: | 0.0010 ft | Smp/Man Basin Rain Opt: | Global |
| Max dZ: | 1.0000 ft | | |
| Link Optimizer Tol: | 0.0001 ft | Rainfall Name: | ~SFWMD-72 |
| | | Rainfall Amount: | 10.00 in |
| Edge Length Option: | Automatic | Storm Duration: | 72.0000 hr |
| | | Dflt Damping (1D): | 0.0050 ft |
| | | Min Node Srf Area (1D): | 100 ft2 |
| | | Energy Switch (1D): | Energy |

Comment:

## Simulation: mean annual

| | |
|---|---|
| Scenario: | Scenario1 |
| Run Date/Time: | 7/28/2022 9:43:45 PM |
| Program Version: | ICPR4 4.07.00 |

## General

Run Mode: Normal

| | Year | Month | Day | Hour [hr] |
|---|---|---|---|---|
| Start Time: | 0 | 0 | 0 | 0.0000 |
| End Time: | 0 | 0 | 0 | 24.0000 |

| | Hydrology [sec] | Surface Hydraulics [sec] |
|---|---|---|
| Min Calculation Time: | 60.0000 | 0.1000 |
| Max Calculation Time: | | 30.0000 |

## Output Time Increments

## Hydrology

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

## Surface Hydraulics

| Year | Month | Day | Hour [hr] | Time Increment [min] |
|---|---|---|---|---|
| 0 | 0 | 0 | 0.0000 | 15.0000 |

## Restart File

Save Restart: False

## Resources & Lookup Tables

### Resources

Rainfall Folder:

Unit Hydrograph Folder:

### Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: Site
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Site

## Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 5.00 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

2"/ac/24hrs

| Scenario | Sim | Node Name | Relative Time [hrs] | Stage [ft] | Total Inflow Volume [ft3] |
|---|---|---|---|---|---|
| Scenario1 | 10yr-72hr | Outfall - Ditch | 0.0000 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 1.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 2.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 3.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 4.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 5.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 6.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 7.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 8.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 9.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 10.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 11.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 12.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 13.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 14.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 15.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 16.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 17.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 18.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 19.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 20.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 21.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 22.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 23.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 24.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 25.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 26.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 27.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 28.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 29.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 30.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 31.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 32.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 33.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 34.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 35.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 36.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 37.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 38.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 39.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 40.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 41.0027 | 8.00 | 0 |

2"/ac/24hrs

| Scenario | Sim | Node Name | Relative Time [hrs] | Stage [ft] | Total Inflow Volume [ft3] |
|---|---|---|---|---|---|
| Scenario1 | 10yr-72hr | Outfall - Ditch | 42.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 43.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 44.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 45.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 46.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 47.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 48.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 49.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 50.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 51.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 52.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 53.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 54.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 55.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 56.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 57.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 58.0015 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 59.0027 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 60.0001 | 8.00 | 0 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 61.0012 | 8.00 | 88 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 62.0006 | 8.00 | 985 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 63.0067 | 8.00 | 3517 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 64.0067 | 8.00 | 9638 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 65.0067 | 8.00 | 15065 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 66.0067 | 8.00 | 19378 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 67.0067 | 8.00 | 22627 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 68.0067 | 8.00 | 25038 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 69.0067 | 8.00 | 26872 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 70.0067 | 8.00 | 28279 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 71.0067 | 8.00 | 29533 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 72.0067 | 8.00 | 30770 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 73.0067 | 8.00 | 31988 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 74.0067 | 8.00 | 33182 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 75.0067 | 8.00 | 34340 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 76.0067 | 8.00 | 35454 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 77.0067 | 8.00 | 36522 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 78.0067 | 8.00 | 37541 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 79.0067 | 8.00 | 38508 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 80.0067 | 8.00 | 39422 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 81.0067 | 8.00 | 40282 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 82.0067 | 8.00 | 41088 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 83.0067 | 8.00 | 41840 |

2"/ac/24hrs

| Scenario | Sim | Node Name | Relative Time [hrs] | Stage [ft] | Total Inflow Volume [ft3] |
|---|---|---|---|---|---|
| Scenario1 | 10yr-72hr | Outfall - Ditch | 84.0067 | 8.00 | 42536 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 85.0067 | 8.00 | 43177 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 86.0067 | 8.00 | 43756 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 87.0067 | 8.00 | 44260 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 88.0067 | 8.00 | 44691 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 89.0067 | 8.00 | 45057 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 90.0067 | 8.00 | 45367 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 91.0067 | 8.00 | 45630 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 92.0067 | 8.00 | 45852 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 93.0067 | 8.00 | 46040 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 94.0067 | 8.00 | 46198 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 95.0067 | 8.00 | 46329 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 96.0067 | 8.00 | 46439 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 97.0067 | 8.00 | 46528 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 98.0067 | 8.00 | 46601 |
| Scenario1 | 10yr-72hr | Outfall - Ditch | 99.0067 | 8.00 | 46659 |

# Allowable Discharge - 2"/ac/24-hr for NSLRWCD

| Post | | | |
|---|---|---|---|
| Time | Cumulative CF | Cumulative Acre-Feet | 24 Hour Volume Discharge Acre-Feet |
| 0 | 0 | 0.00 | |
| 1 | 0 | 0.00 | |
| 2 | 0 | 0.00 | |
| 3 | 0 | 0.00 | |
| 4 | 0 | 0.00 | |
| 5 | 0 | 0.00 | |
| 6 | 0 | 0.00 | |
| 7 | 0 | 0.00 | |
| 8 | 0 | 0.00 | |
| 9 | 0 | 0.00 | |
| 10 | 0 | 0.00 | |
| 11 | 0 | 0.00 | |
| 12 | 0 | 0.00 | |
| 13 | 0 | 0.00 | |
| 14 | 0 | 0.00 | |
| 15 | 0 | 0.00 | |
| 16 | 0 | 0.00 | |
| 17 | 0 | 0.00 | |
| 18 | 0 | 0.00 | |
| 19 | 0 | 0.00 | |
| 20 | 0 | 0.00 | |
| 21 | 0 | 0.00 | |
| 22 | 0 | 0.00 | |
| 23 | 0 | 0.00 | |
| 24 | 0 | 0.00 | 0.00 |
| 25 | 0 | 0.00 | 0.00 |
| 26 | 0 | 0.00 | 0.00 |
| 27 | 0 | 0.00 | 0.00 |
| 28 | 0 | 0.00 | 0.00 |
| 29 | 0 | 0.00 | 0.00 |
| 30 | 0 | 0.00 | 0.00 |
| 31 | 0 | 0.00 | 0.00 |
| 32 | 0 | 0.00 | 0.00 |
| 33 | 0 | 0.00 | 0.00 |
| 34 | 0 | 0.00 | 0.00 |
| 35 | 0 | 0.00 | 0.00 |
| 36 | 0 | 0.00 | 0.00 |
| 37 | 0 | 0.00 | 0.00 |

5.44 (ac) development area

0.91 (ac-ft) max allow. discharge

0.99 (ac-ft) max discharge

# Allowable Discharge - 2"/ac/24-hr for NSLRWCD

| | | | |
|---|---|---|---|
| 38 | 0 | 0.00 | 0.00 |
| 39 | 0 | 0.00 | 0.00 |
| 40 | 0 | 0.00 | 0.00 |
| 41 | 0 | 0.00 | 0.00 |
| 42 | 0 | 0.00 | 0.00 |
| 43 | 0 | 0.00 | 0.00 |
| 44 | 0 | 0.00 | 0.00 |
| 45 | 0 | 0.00 | 0.00 |
| 46 | 0 | 0.00 | 0.00 |
| 47 | 0 | 0.00 | 0.00 |
| 48 | 0 | 0.00 | 0.00 |
| 49 | 0 | 0.00 | 0.00 |
| 50 | 0 | 0.00 | 0.00 |
| 51 | 0 | 0.00 | 0.00 |
| 52 | 0 | 0.00 | 0.00 |
| 53 | 0 | 0.00 | 0.00 |
| 54 | 0 | 0.00 | 0.00 |
| 55 | 0 | 0.00 | 0.00 |
| 56 | 0 | 0.00 | 0.00 |
| 57 | 0 | 0.00 | 0.00 |
| 58 | 0 | 0.00 | 0.00 |
| 59 | 0 | 0.00 | 0.00 |
| 60 | 0 | 0.00 | 0.00 |
| 61 | 88 | 0.00 | 0.00 |
| 62 | 985 | 0.02 | 0.02 |
| 63 | 3517 | 0.08 | 0.08 |
| 64 | 9638 | 0.22 | 0.22 |
| 65 | 15065 | 0.35 | 0.35 |
| 66 | 19378 | 0.44 | 0.44 |
| 67 | 22627 | 0.52 | 0.52 |
| 68 | 25038 | 0.57 | 0.57 |
| 69 | 26872 | 0.62 | 0.62 |
| 70 | 28279 | 0.65 | 0.65 |
| 71 | 29533 | 0.68 | 0.68 |
| 72 | 30770 | 0.71 | 0.71 |
| 73 | 31988 | 0.73 | 0.73 |
| 74 | 33182 | 0.76 | 0.76 |
| 75 | 34340 | 0.79 | 0.79 |
| 76 | 35454 | 0.81 | 0.81 |
| 77 | 36522 | 0.84 | 0.84 |
| 78 | 37541 | 0.86 | 0.86 |
| 79 | 38508 | 0.88 | 0.88 |
| 80 | 39422 | 0.91 | 0.91 |
| 81 | 40282 | 0.92 | 0.92 |

# Allowable Discharge - 2"/ac/24-hr for NSLRWCD

| | | | |
|---|---|---|---|
| 82 | 41088 | 0.94 | 0.94 |
| 83 | 41840 | 0.96 | 0.96 |
| 84 | 42536 | 0.98 | 0.98 |
| 85 | 43177 | 0.99 | 0.99 |
| 86 | 43756 | 1.00 | 0.98 |
| 87 | 44260 | 1.02 | 0.94 |
| 88 | 44691 | 1.03 | 0.80 |
| 89 | 45057 | 1.03 | 0.69 |
| 90 | 45367 | 1.04 | 0.60 |
| 91 | 45630 | 1.05 | 0.53 |
| 92 | 45852 | 1.05 | 0.48 |
| 93 | 46040 | 1.06 | 0.44 |
| 94 | 46198 | 1.06 | 0.41 |
| 95 | 46329 | 1.06 | 0.39 |
| 96 | 46439 | 1.07 | 0.36 |
| 97 | 46528 | 1.07 | 0.33 |
| 98 | 46601 | 1.07 | 0.31 |
| 99 | 46659 | 1.07 | 0.28 |
| | | | **0.99** |

# Appendix B

Nutrient Tables

B.1 Table 11.7-3

B.2 Table 11.7-23

TABLE 11.7-3

MEAN ANNUAL LOADINGS OF TOTAL PHOSPHORUS FOR LAND USE TYPES IN THE LAKE APOPKA HYDROLOGIC BASIN

| LAND USE CATEGORY | MEAN ANNUAL TOTAL PHOSPHORUS LOAD (kg/ac-yr) | | | |
|---|---|---|---|---|
| | HSG A | HSG B | HSG C | HSG D |
| Low-Density Residential (max. 15% impervious) | 0.069 | 0.135 | 0.215 | 0.284 |
| Single-Family Residential (max. 25% impervious) | 0.227 | 0.286 | 0.383 | 0.465 |
| Single-Family Residential (max. 40% impervious) | 0.250 | 0.333 | 0.446 | 0.536 |
| Multi-Family Residential (max. 65% impervious) | 1.082 | 1.156 | 1.257 | 1.336 |
| Commercial (max. 80% impervious) | 0.899 | 0.916 | 0.943 | 0.964 |
| Highway – max. 50% impervious | 0.710 | 0.756 | 0.817 | 0.871 |
| Highway – max. 75% impervious | 1.053 | 1.076 | 1.106 | 1.133 |
| Agriculture – Pasture | 0.026 | 0.118 | 0.239 | 0.347 |
| Agriculture – Crops, Ornamentals, Nurseries | 0.040 | 0.180 | 0.366 | 0.531 |
| Agriculture – Groves | 0.007 | 0.036 | 0.079 | 0.123 |
| Open Land/Recreational/Fallow Groves and Cropland | 0.004 | 0.017 | 0.035 | 0.051 |
| Forests/Abandoned Tree Crops | 0.004 | 0.021 | 0.045 | 0.070 |

HSG = Hydrologic Soil Group

**Table 11.7-23**

**Removal Efficiencies for Total Phosphorus Using Various Treatment Options in Commercial (max. 80% impervious) for Hydrologic Soil Group B**

| Retention Depth (inches) | Annual Total P Removal (%) | | | |
|---|---|---|---|---|
| | Dry Retention[1] | Retention / Wet Detention[2] | | |
| | | $t_d$=7 days | $t_d$=14 days | $t_d$=21 days |
| 0.25 | 41 | 73 | 77 | 79 |
| 0.50 | 63 | 83 | 86 | 87 |
| 0.75 | 74 | 88 | 90 | 91 |
| 1.00 | 81 | 92 | 93 | 93 |
| 1.25 | 87 | 94 | 95 | 95 |
| 1.50 | 89 | 95 | 96 | 96 |
| 1.75 | 92 | 96 | 97 | 97 |
| 2.00 | 93 | 97 | 97 | 98 |
| 2.25 | 94 | 97 | 98 | 98 |
| 2.50 | 95 | 98 | 98 | 98 |
| 2.75 | 96 | 98 | 98 | 99 |
| 3.00 | 97 | 98 | 99 | 99 |
| 3.25 | 97 | 99 | 99 | 99 |
| 3.50 | 97 | 99 | 99 | 99 |
| 3.75 | 98 | 99 | 99 | 99 |
| 4.00 | 98 | 99 | 99 | 99 |

1. Dry retention alone.
2. Dry retention followed by wet detention with various residence times.

# Attachment C

Pre-Development Basin Map




# PRE-DEVELOPMENT BASIN MAP

SCALE: 1" = 60'

GRAPHIC SCALE

0 60 120

( IN FEET )

1 inch = 60 ft.

## LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- EXISTING ASPHALT MILLINGS
- PROPOSED ASPHALT

## SITE DATA

### SITE ADDRESS

5560 SOUTH U.S. HIGHWAY #1
FORT PIERCE, FLORIDA 34982

### TAX PARCEL I.D. NUMBER(S)

3403-502-0302-000-4

### ZONING

CG

### LAND USE

COM

| REVISIONS | DATE |
|---|---|
| --- | --- |
| --- | --- |
| --- | --- |
| --- | --- |
| --- | --- |
| --- | --- |
| --- | --- |

| | |
|---|---|
| JOB NO. | 18-0251 |
| DESIGNED | AS |
| DRAWN | GWR |
| DATE | 12/4/2018 |
| CHECKED | AS |
| DATE ISSUED | 12-4-2018 |

MBV ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728
1835 20TH STREET
VERO BEACH, FL 32960
PH. (772) 569-0035
FX. (772) 778-3617
MELBOURNE, FL - PH (321) 253-1510
FT. PIERCE, FL - PH (772) 468-9055

BEV SMITH KIA

ST. LUCIE COUNTY FLORIDA

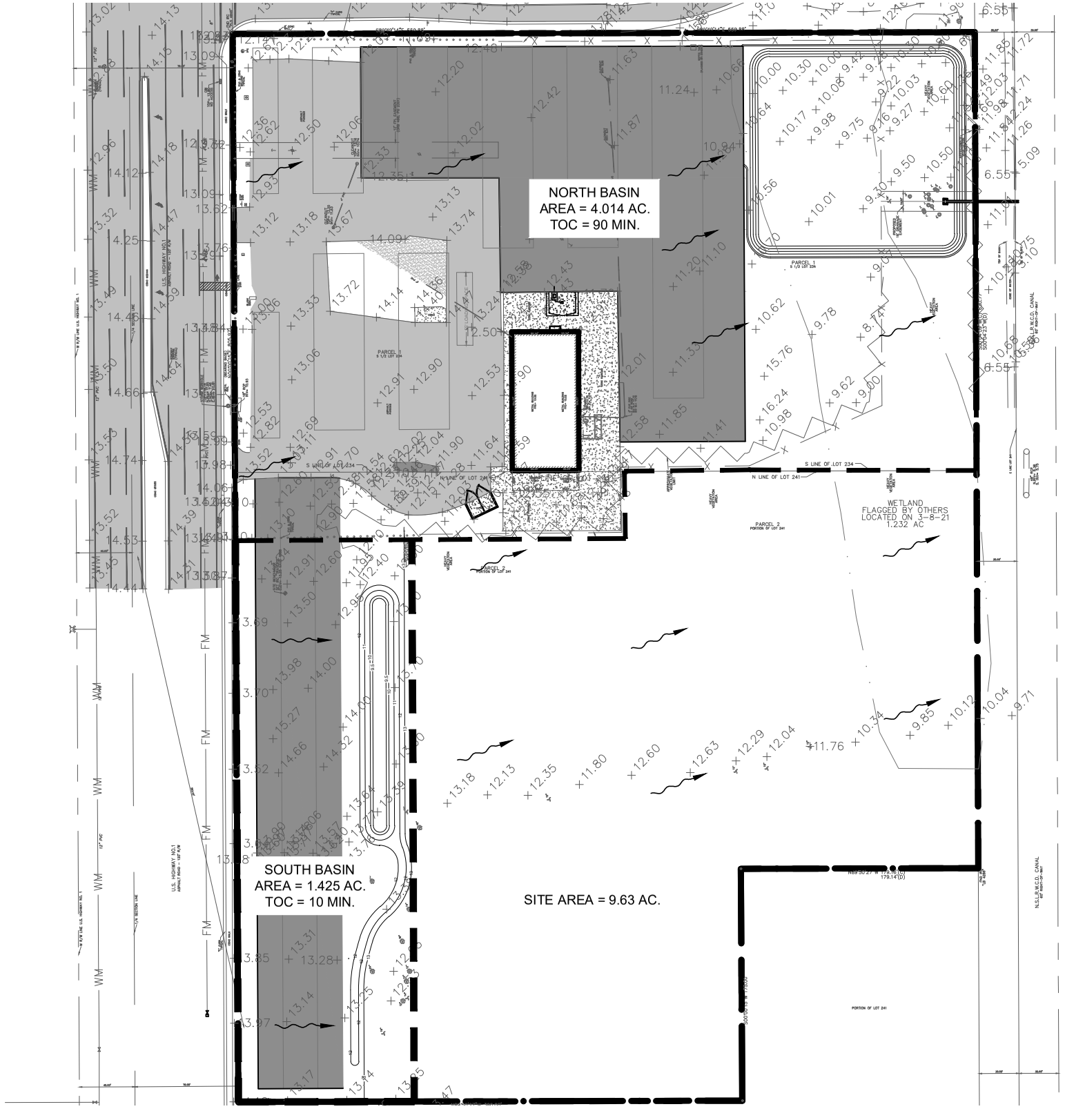
PRE-DEVELOPMENT
BASIN MAP

SHEET
C

DATE: 18-0251

# Attachment D

Post-Development Basin Map




# LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- EXISTING ASPHALT MILLINGS
- PROPOSED ASPHALT
- PROPERTY BOUNDARY
- BASIN BOUNDARY
- STORMWATER FLOW DIRECTION

# POST-DEVELOPMENT BASIN MAP

SCALE: 1" = 100'

GRAPHIC SCALE

0 100 200

( IN FEET )

1 inch = 100 ft.

| REVISIONS | DATE |
|---|---|
| ---- | ---- |
| ---- | ---- |
| ---- | ---- |
| ---- | ---- |
| ---- | ---- |
| ---- | ---- |
| ---- | ---- |

| | |
|---|---|
| JOB NO. | 18-0251 |
| DESIGNED | AS |
| DRAWN | GWR |
| DATE | 7/29/2022 |
| CHECKED | AS |
| DATE ISSUED | 12-4-2018 |

MBV ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728

1835 20TH STREET
VERO BEACH, FL 32960
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FT. PIERCE, FL - PH (772) 468-9055

BEV SMITH KIA

ST. LUCIE COUNTY FLORIDA

POST-DEVELOPMENT
BASIN MAP

SHEET
D

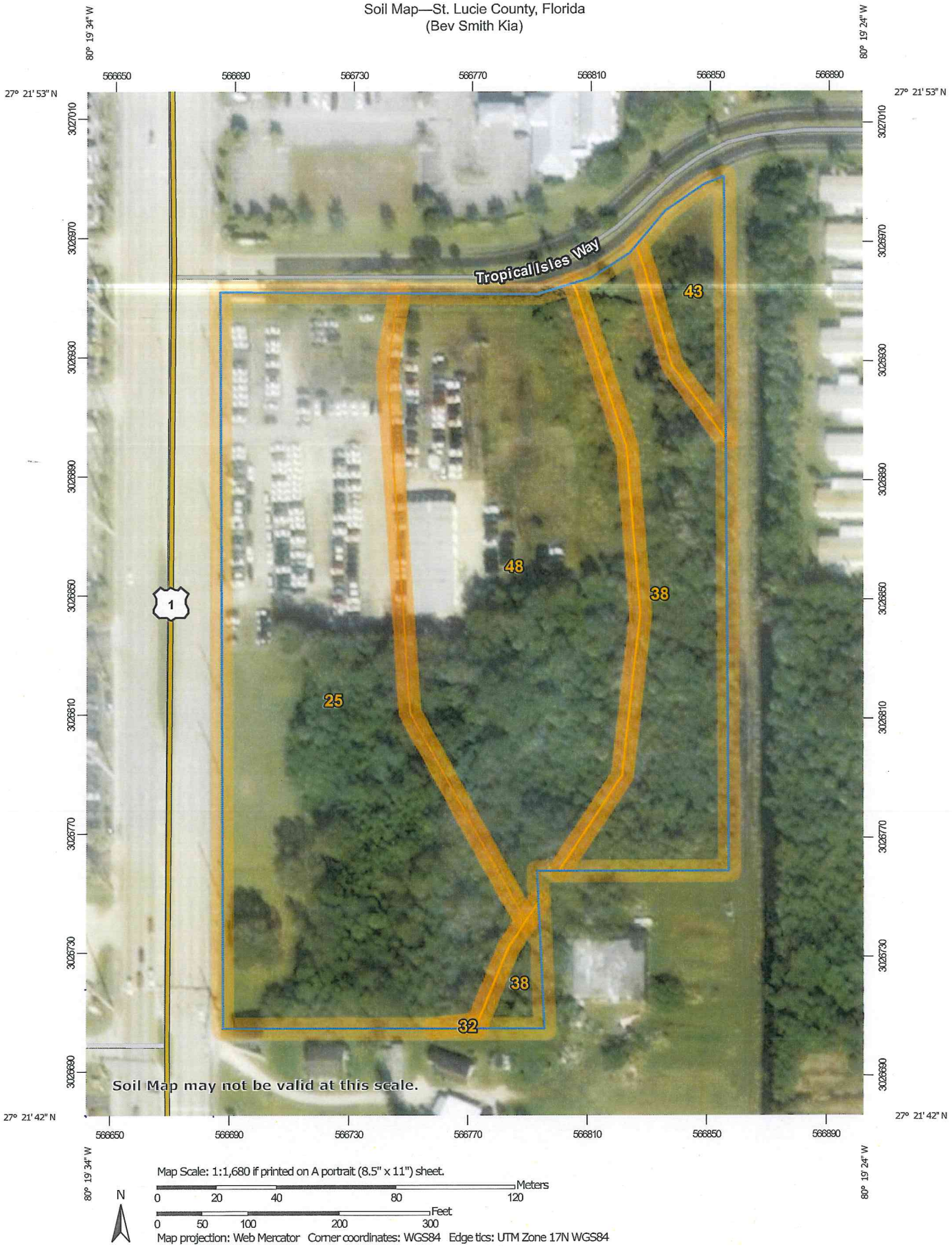
DATE: 18-0251

# Attachment E

Soils Map

# Attachment E

Soil Map—St. Lucie County, Florida
(Bev Smith Kia)




Map Scale: 1:1,680 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

## MAP LEGEND

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**
- Streams and Canals

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**
- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: St. Lucie County, Florida
Survey Area Data: Version 11, Sep 17, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Dec 15, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

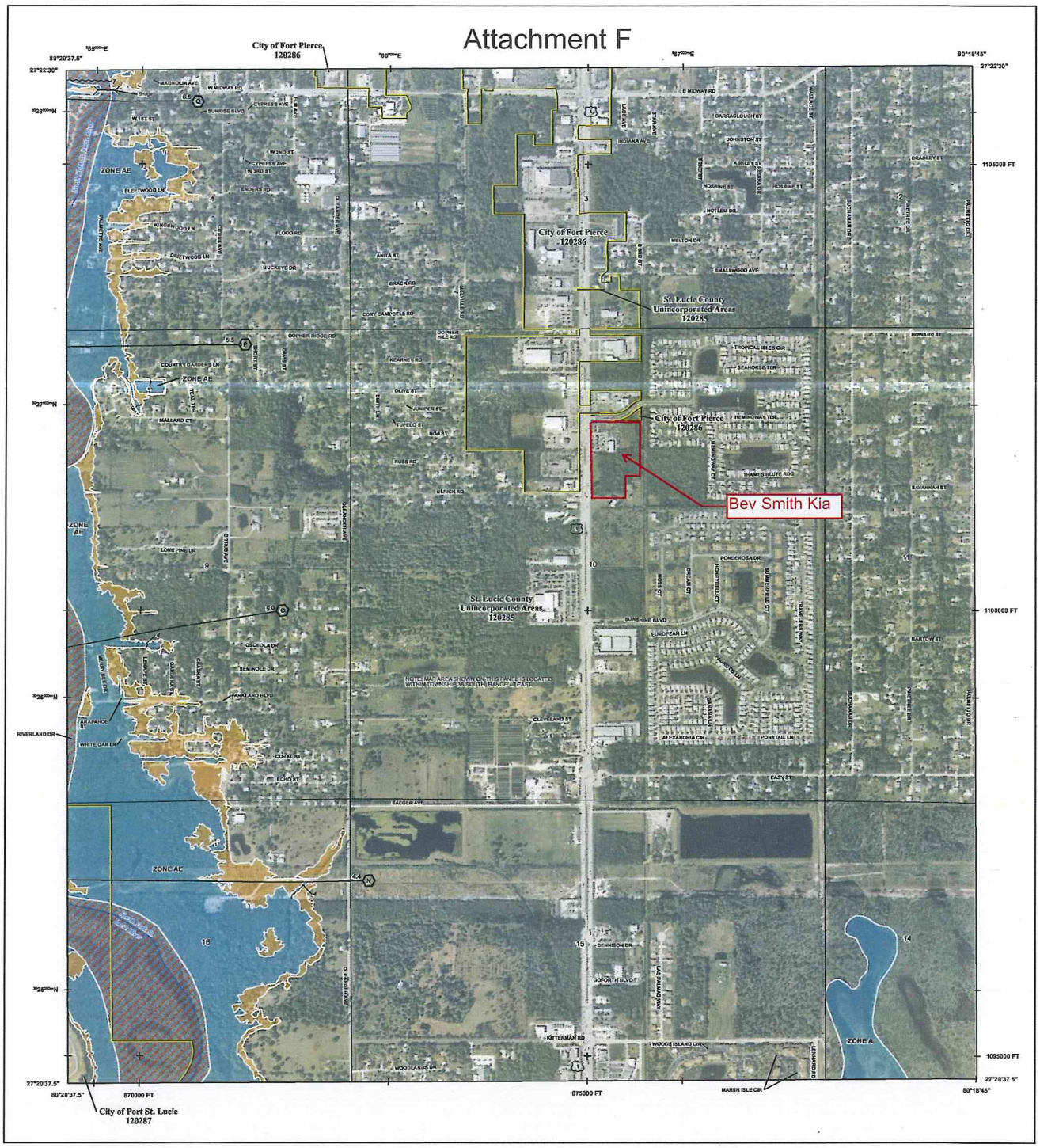
# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 25 | Nettles and Oldsmar sands | 4.3 | 43.9% |
| 32 | Pineda sand, 0 to 2 percent slopes | 0.0 | 0.0% |
| 38 | Riviera fine sand, 0 to 2 percent slopes | 1.8 | 18.1% |
| 43 | Susanna and Wauchula sands | 0.4 | 4.0% |
| 48 | Wabasso sand, 0 to 2 percent slopes | 3.3 | 33.9% |
| **Totals for Area of Interest** | | **9.8** | **100.0%** |

# Attachment F

FEMA Flood Zone Map

# Attachment F




## FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTP://MSC.FEMA.GOV

**SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

**OTHER AREAS**
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Area of Undetermined Flood Hazard Zone D

**GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**
- 18.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

## NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map data for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the St. Lucie County Planning and Development Services Department, dated 2016; the Florida Department of Transportation, dated 2016; the Bureau of Land Management, dated 2004; the U.S. Fish and Wildlife Service, dated 2015; and the U.S. Department of Agriculture Farm Service Agency, dated 2015.

## SCALE

N

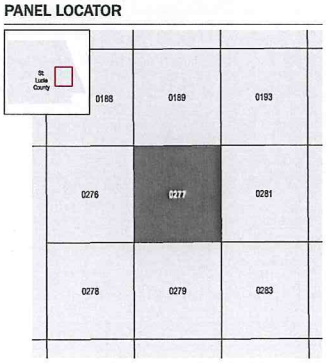
Map Projection: HARN State Plane Transverse Mercator, Florida East Zone; North American Datum 1983 HARN; Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 250 500 750 1,000 2,000 feet

0 125 250 500 meters

## PANEL LOCATOR




FEMA National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

ST. LUCIE COUNTY, FLORIDA and Incorporated Areas

PANEL 277 OF 420

Panel Contains:

| COMMUNITY | NUMBER | PANEL | SUFFIX |
|---|---|---|---|
| FORT PIERCE, CITY OF | 120286 | 0277 | K |
| PORT ST. LUCIE, CITY OF | 120287 | 0277 | K |
| ST. LUCIE COUNTY | 120285 | 0277 | K |

PRELIMINARY
6/22/2017

VERSION NUMBER
2.3.3.2

MAP NUMBER
12111C0277K

MAP REVISED

# Attachment G

Rainfall Maps

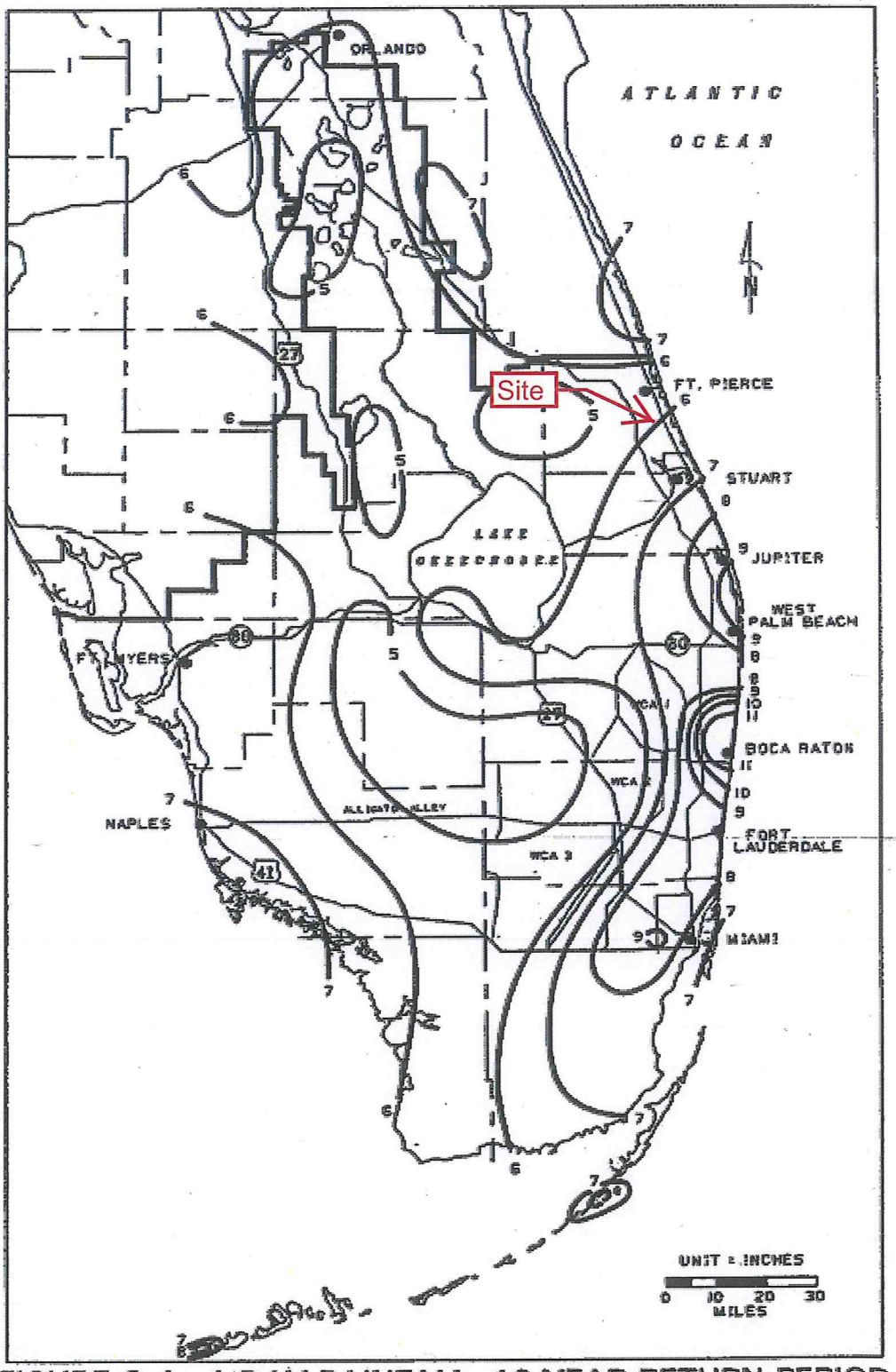



FIGURE C-4. 1-DAY RAINFALL: 10-YEAR RETURN PERIOD

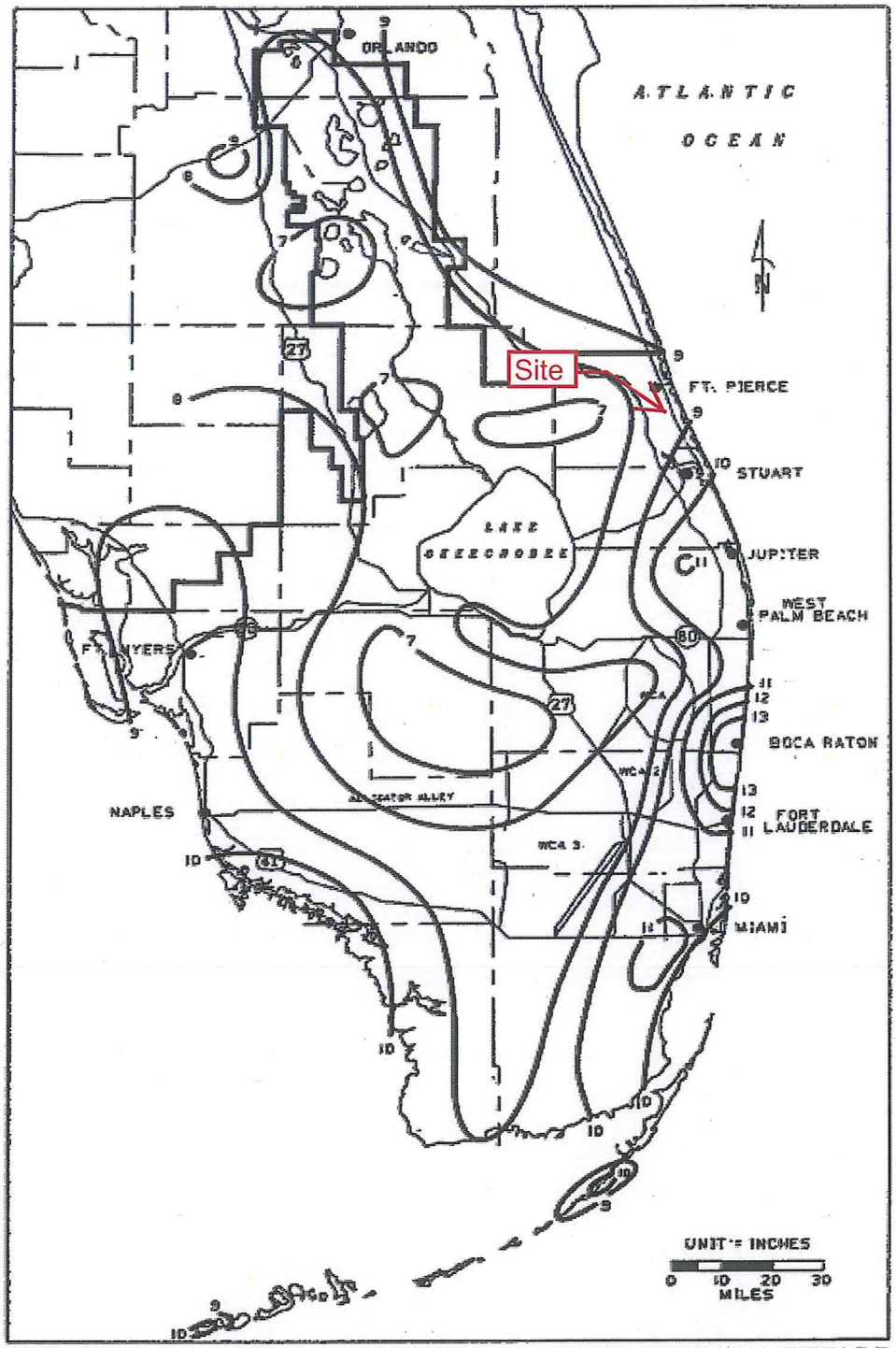



FIGURE C-7. 3-DAY RAINFALL: 10-YEAR RETURN PERIOD

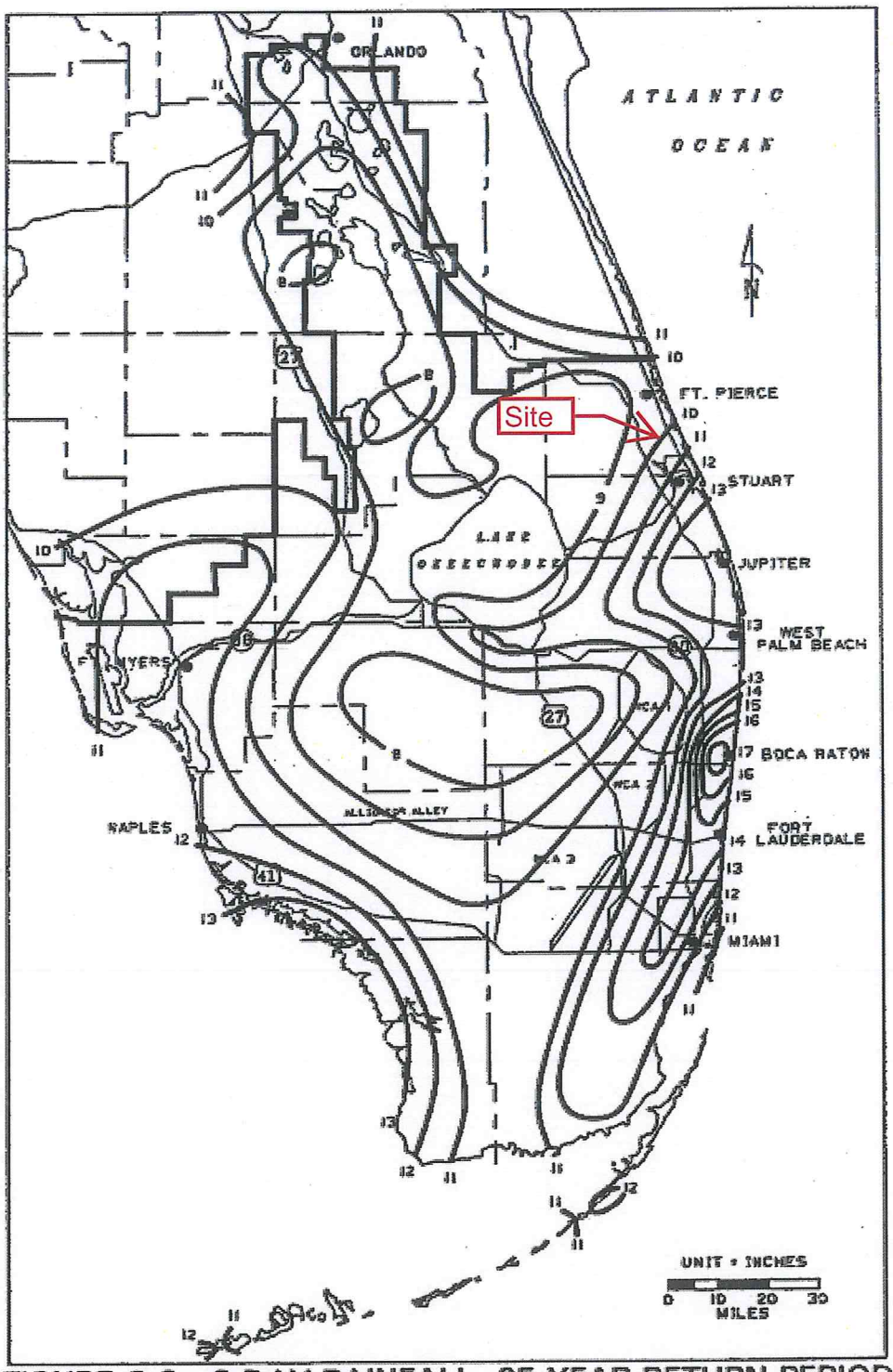



FIGURE C-8. 3-DAY RAINFALL: 25-YEAR RETURN PERIOD

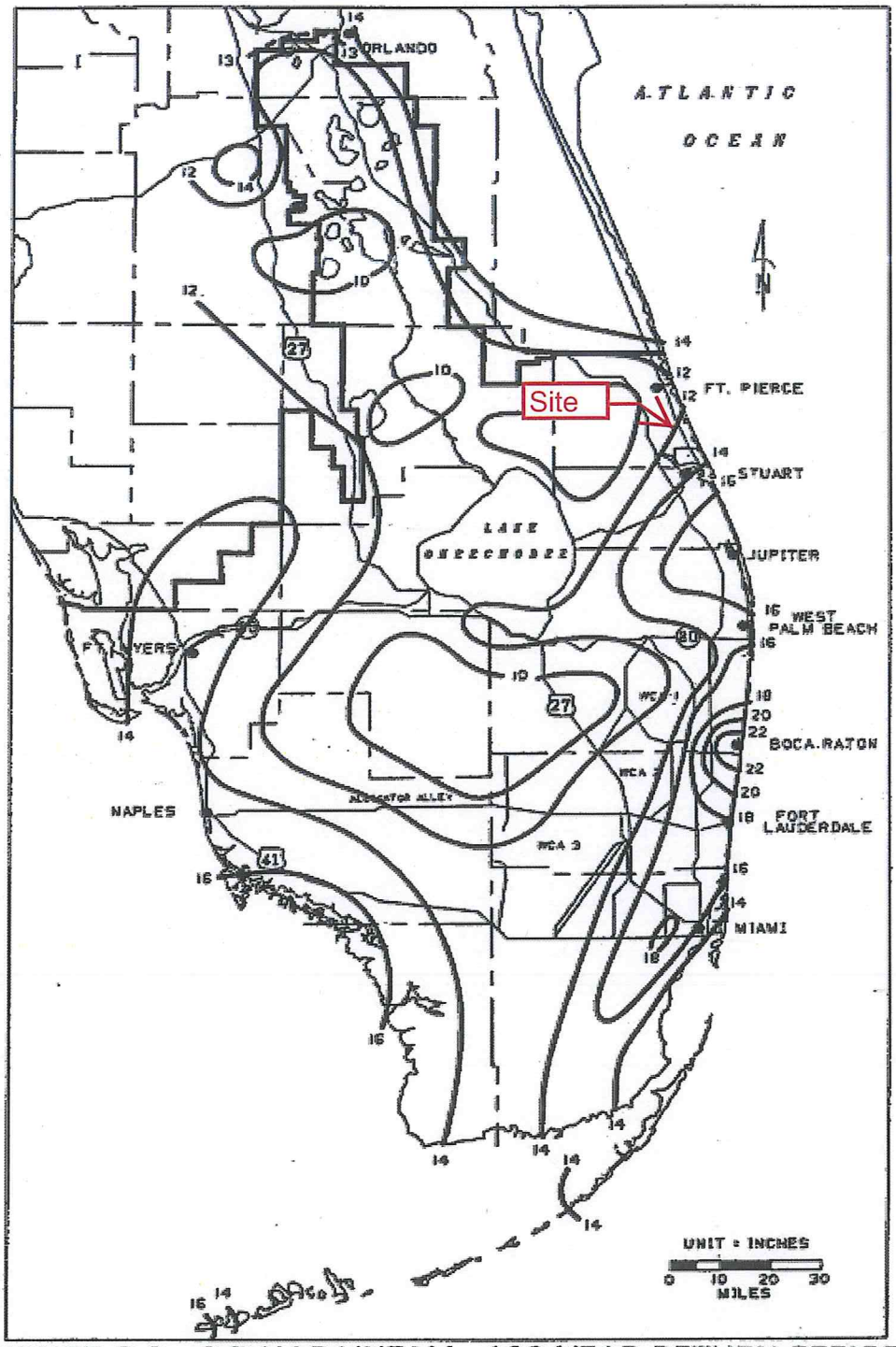
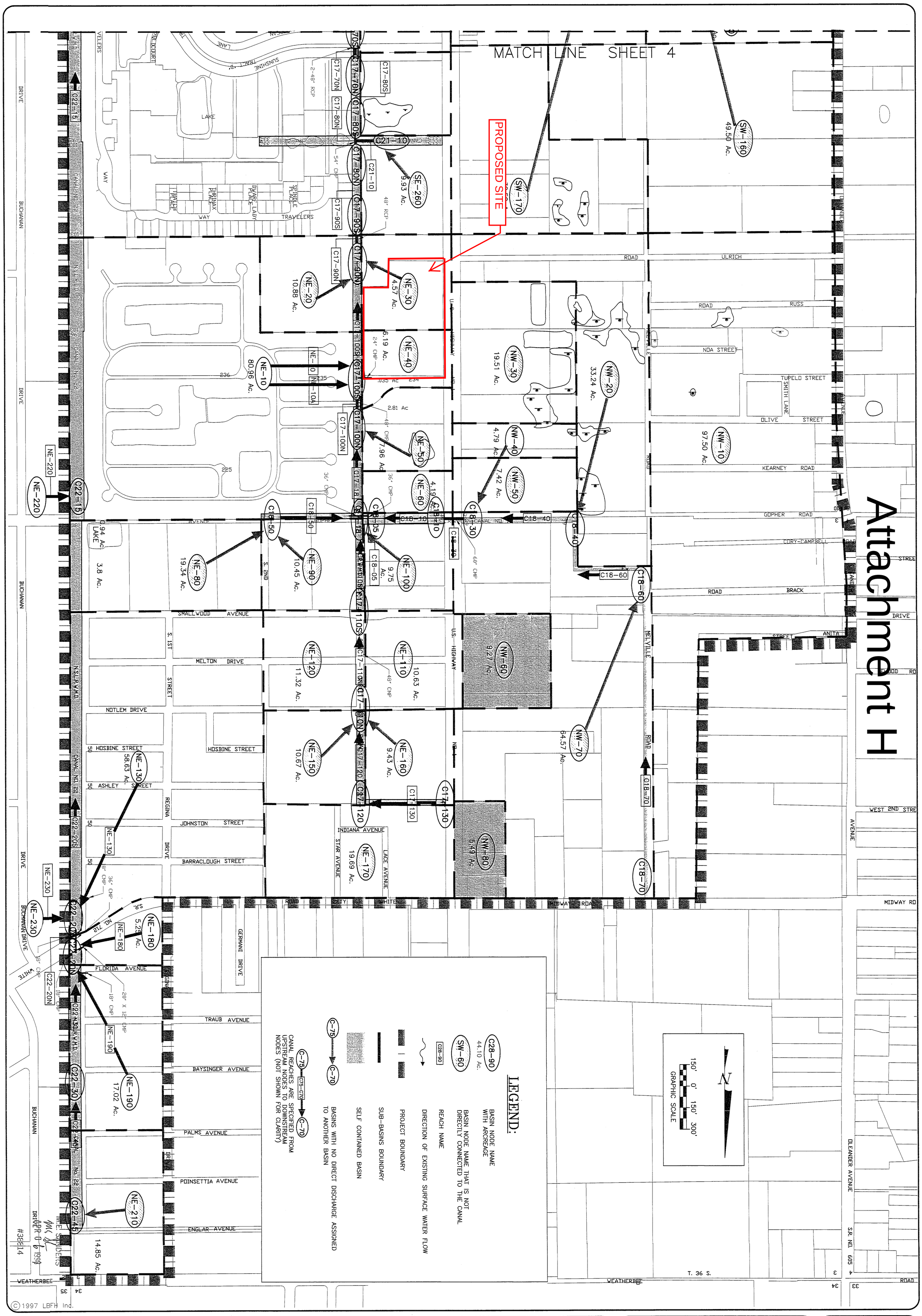



FIGURE C-9. 3-DAY RAINFALL: 100-YEAR RETURN PERIOD

# Attachment H

Historical SFWMD ERP (The Groves of Fort Pierce, ERP # 56-00410-S)

P:\98-0036\EN6\98036C05.dwg Wed Mar 31 15:26:58 1999 LBFH Inc.




Attachment H

©1997 LBFH Inc.

DATE: JANUARY 1999
HORZ. SCALE: 1" = 300'
VERT. SCALE: NTS

SHEET 5 OF 7

# RETROFIT FOR
NSLRWCD CANALS 23 & 28

## NODAL DIAGRAM FOR HYDRAULIC MODEL

VERIFY SCALE
BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING
0 1
ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

Lindahl, Browning, Ferrari & Hellstrom, Inc.
CONSULTING ENGINEERS, SURVEYORS & MAPPERS
FORT PIERCE • OKEECHOBEE • WEST PALM BEACH • PALM CITY

| DATE | REVISIONS |
|---|---|
| | |

LBFH PROJECT NUMBER: 98-0036
DESIGNED BY: K.A.G.
DRAWN/CALC BY: R.A.H.
CHECKED BY: M.E.S.
FB & PG:

| BASIN | QMX (cfs) | TMX (hrs) | VOL (in) | NOTES |
|---|---|---|---|---|
| SE-160 | 9.96 | 60.03 | 5.83 | |
| SE-170 | 19.47 | 60.48 | 4.47 | |
| SE-180 | 31.66 | 60.02 | 6.81 | US1 FRONTAGE |
| SE-190 | 8.94 | 60.57 | 5.57 | |
| SE-200 | 11.36 | 60.24 | 4.59 | |

| BASIN NAME | SE-210 | SE-220 | SE-230 | SE-240 | SE-250 |
|---|---|---|---|---|---|
| NODE NAME | SE-210 | SE-220 | SE-230 | C17-60 | C17-70S |
| UNIT HYDROGRAPH | UH256 | UH256 | UH256 | UH256 | UH256 |
| PEAKING FACTOR | 256. | 256. | 256. | 256. | 256. |
| RAINFALL FILE | SFWMD72 | SFWMD72 | SFWMD72 | SFWMD72 | SFWMD72 |
| RAIN AMOUNT (in) | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 |
| STORM DURATION (hrs) | 72.00 | 72.00 | 72.00 | 72.00 | 72.00 |
| AREA (ac) | 123.87 | 4.81 | 5.41 | 9.30 | 6.22 |
| CURVE NUMBER | 65.00 | 76.00 | 77.00 | 77.00 | 70.00 |
| DCIA (%) | .00 | .00 | .00 | .00 | .00 |
| TC (mins) | 60.00 | 10.00 | 23.30 | 13.40 | 15.20 |
| LAG TIME (hrs) | .00 | .00 | .00 | .00 | .00 |
| BASIN STATUS | ONS | ONS | ONS | ONS | ONS |

| BASIN | QMX (cfs) | TMX (hrs) | VOL (in) | NOTES |
|---|---|---|---|---|
| SE-210 | 138.99 | 60.53 | 4.72 | THE GROVE COMMUNITY 56-00410-S |
| SE-220 | 16.46 | 60.02 | 6.07 | |
| SE-230 | 13.22 | 60.11 | 6.19 | |
| SE-240 | 29.19 | 60.03 | 6.19 | |
| SE-250 | 16.76 | 60.06 | 5.33 | |

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C23 ADDITIONAL WEIR
5/19/09 P:\74-0901\US1 POND\VER-07B

| BASIN NAME | SE-255 | SE-260 | SE-270 | SE-280 | SW-10 |
|---|---|---|---|---|---|
| NODE NAME | SE-255 | C21-10 | SE-270 | SE-280 | SW-10 |
| UNIT HYDROGRAPH | UH256 | UH256 | UH256 | UH256 | UH256 |
| PEAKING FACTOR | 256. | 256. | 256. | 256. | 256. |
| RAINFALL FILE | SFWMD72 | SFWMD72 | SFWMD72 | SFWMD72 | SFWMD72 |
| RAIN AMOUNT (in) | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 |
| STORM DURATION (hrs) | 72.00 | 72.00 | 72.00 | 72.00 | 72.00 |
| AREA (ac) | 4.25 | 18.31 | 8.90 | 8.33 | 55.42 |
| CURVE NUMBER | 90.00 | 81.00 | 77.00 | 77.00 | 65.00 |
| DCIA (%) | .00 | .00 | .00 | .00 | .00 |
| TC (mins) | 10.00 | 10.00 | 54.20 | 28.30 | 13.80 |
| LAG TIME (hrs) | .00 | .00 | .00 | .00 | .00 |
| BASIN STATUS | ONSITE | ONS | ONS | ONS | ONSITE |

| BASIN | QMX (cfs) | TMX (hrs) | VOL (in) | NOTES |
|---|---|---|---|---|
| SE-255 | 16.52 | 60.02 | 7.79 | CUTTING EDGE SELF STORAGE,56-01815 |
| SE-260 | 66.36 | 60.02 | 6.69 | |
| SE-270 | 13.14 | 60.46 | 6.19 | |
| SE-280 | 18.33 | 60.18 | 6.19 | |
| SW-10 | 141.55 | 60.04 | 4.71 | |

Form #0157
Rev 10-89

# Attachment H

**********

## SOUTH FLORIDA WATER MANAGEMENT DISTRICT
## MODIFICATION OF SURFACE WATER MANAGEMENT PERMIT NO. 56-00410-S
CERTIFICATION FOR STORMWATER DISCHARGE

**********

DATE ISSUED: MARCH 12, 1992

ISSUED TO: WYNNE BUILDING CORP.
(PALM GROVE)
8000 SOUTH U.S. 1
PORT ST. LUCIE, FL 34952

LOCATION: ST. LUCIE COUNTY, SECTION 10 TWP. 36S RGE. 40E

ORIGINAL PERMIT AUTHORIZATION: CONSTRUCTION AND OPERATION OF A WATER MANAGEMENT SYSTEM SERVING 113.8 ACRES OF RESIDENTIAL LANDS BY A SYSTEM OF INLETS AND CULVERTS, ON-SITE LAKES, 1-1.08' WIDE WEIR AND 1-1960 LF EXFILTRATION TRENCH DISCHARGING INTO NORTH ST. LUCIE RIVER WATER MANAGEMENT DISTRICT'S C-21 AND THE NEW CANAL.

APPROVED MODIFICATION: CONSTRUCTION AND OPERATION OF A SURFACE WATER MANAGEMENT SYSTEM TO SERVE A 77.2 ACRE RESIDENTIAL PROJECT DISCHARGING VIA THE N.S.L.R.W.C.D. NEW CANAL TO N. FORK OF THE ST. LUCIE RIVER.

(911125-2)

This Permit Modification is approved pursuant to a request dated Nov.25, 1991. Permittee agrees to hold and save the South Florida Water Management District and its successors harmless from any and all damages, claims or liabilities which may arise by reason of the construction, operation, maintenance or use of any work or structure involved in the Permit. The original Permit, including all plans and specifications attached thereto, as addressed by the staff report and those addressed by the Modification Staff Report are by reference made a part hereof.

All specifications and special and Limiting Conditions attendant to the original Permit, unless specifically recinded by this or previous Modifications, remain in effect.

SPECIAL CONDITIONS: SEE SHEETS 2, 3 & 4 OF 6 - 18 SPECIAL CONDITIONS.
SEE SHEETS 5 & 6 OF 6 - 12 LIMITING CONDITIONS.

ORIGINAL PERMIT ISSUED: November 12, 1981

PERMIT MODIFICATION APPROVED BY THE GOVERNING BOARD OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

FILED WITH THE CLERK OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Original signed by: Vern Kaiser
ON _____
BY _____ DEPUTY CLERK

POSTED
QUADRANGLES 1
ITEM NUMBER 34
DATE 3-12-92
SIGNED JK

Original Signed by
ANTHONY M. WATERHOUSE, P.E.,
DEPUTY DIRECTOR
WATER MANAGEMENT DIVISION
RESOURCE CONTROL DEPARTMENT

## SPECIAL CONDITIONS

1 . MINIMUM BUILDING FLOOR ELEVATION: 17.0 FEET NGVD FOR FINISHED FLOORS LOCATED ON THE NORTH AND EAST PROPERTY LINE AND 14.5 FEET NGVD FOR THE REMAINDER.

2 . MINIMUM ROAD CROWN ELEVATION: 12.5 FEET NGVD.

3 . DISCHARGE FACILITIES:

BASIN: (EXISTING SITE)

1-1.1' WIDE SHARP CRESTED WEIR WITH CREST AT ELEV. 10.44' NGVD,
1-.2' W X 2.28' H RECTANGULAR NOTCH WITH INVERT AT ELEV. 8.16' NGVD,
AND 28 LF OF 3' DIA. CMP CULVERT.

RECEIVING BODY : THE N.S.L.R.W.C.D. NEW CANAL

CONTROL ELEV : 8' NGVD. 6.5' NAVD

BASIN: (PROPOSED SITE)

1-1.17' WIDE SHARP CRESTED WEIR WITH CREST AT ELEV. 9.3' NGVD,
1-.87' W X 1.3' H X 37 DEG. V-NOTCH WITH INVERT AT ELEV. 8' NGVD, AND
30 LF OF 3.5' WIDE X 2.42' HIGH ARCH CAP CULVERT.

RECEIVING BODY : THE N.S.L.R.W.C.D. NEW CANAL

CONTROL ELEV : 8' NGVD. 6.5' NAVD

4 . THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION, SHOALING OR WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.

5 . MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS ARE NOT CREATED IN THE RECEIVING WATER.

6 . THE DISTRICT RESERVES THE RIGHT TO REQUIRE THAT ADDITIONAL WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.

7 . LAKE SIDE SLOPES SHALL BE 4:1 (HORIZONTAL:VERTICAL) TO A DEPTH OF TWO FEET BELOW THE CONTROL ELEVATION. SIDE SLOPES SHALL BE NURTURED OR PLANTED FROM 2 FEET BELOW TO 1 FOOT ABOVE CONTROL ELEVATION TO INSURE VEGETATIVE GROWTH.

8 . PRIOR TO THE INITIATION OF ANY WITHDRAWAL OF WATER (IRRIGATION, DEWATERING, PUBLIC WATER SUPPLY, ETC.), IT WILL BE NECESSARY TO APPLY FOR A WATER USE PERMIT. THE PERMITTEE IS CAUTIONED THAT A MINIMUM OF 90 DAYS IS REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION. THE

# Attachment I

Geotechnical Report by GFA

UNIVERSAL
ENGINEERING SCIENCES

# GEOTECHNICAL EXPLORATION

BEV SMITH KIA EXPANSION
5660 US HIGHWAY 1
FORT PIERCE, FLORIDA

UES PROJECT NO. 3330.2100346.0000

**PREPARED FOR:**

Bev Smith Toyota
3350 US Highway 1
Fort Peirce, Florida

Attn: Mr. Michael Smith

**PREPARED BY:**

Universal Engineering Sciences
607 NW Commodity Cove
Port St. Lucie, Florida 34986
(772) 924-3575

January 26, 2022

UNIVERSAL
ENGINEERING SCIENCES
Consultants In: Geotechnical Engineering • Environmental Sciences
Geophysical Services • Construction Materials Testing • Threshold Inspection
Building Inspection • Plan Review • Building Code Administration

January 26, 2022

Mr. Michael Smith
**Bev Smith Toyota**
3350 US Highway 1
Fort Peirce, Florida
Phone: (772) 464-8440
Email: msmith@bevsmithtoyota.com

**Subject: Report of Geotechnical Exploration**
**Bev Smith Kia Expansion**
**5660 US Highway 1, Fort Pierce, Florida**
**UES Project No. 3330.2100346.0000**

Dear Mr. Smith:

Universal Engineering Sciences (UES) has completed the subsurface exploration and geotechnical engineering evaluation for the above referenced project in accordance with the geotechnical and engineering service agreement for this project. The scope of services was completed in general accordance with our Geotechnical Engineering Proposal No. 18-9647.02 Rev #1 dated January 4, 2022, planned in conjunction with and authorized by you.

## EXECUTIVE SUMMARY

The purpose of our subsurface exploration was to classify the nature of the subsurface soils and general geomorphic conditions at the site and evaluate their impact upon the proposed construction. This report contains the results of our subsurface exploration and our engineering interpretations of these with respect to the project characteristics described to us, including providing recommendations for foundation design, pavement design, site preparation, and earthwork construction.

Per our recent telephone discussions and email correspondence with you, UES understands that you plan to expand the parking area at Bev Smith Kia located at 5660 US Highway 1 in Fort Pierce, Florida. Testing was completed previously by GFA International, although the design of the proposed expansion has changed, and additional testing is needed. UES has been provided a picture of a concept plan showing the layout of the proposed swale, paved parking area, and the dry retention pond on the property.

The recommendations provided herein are based upon the above considerations. If the stated conditions are incorrect or if the project description is revised, please inform UES so that we may review our recommendations with respect to any modifications.

Three (3) hand auger borings with hand cone penetrometer (HCP) testing (AB-1, AB-2, and AB-5), advanced to a depth of approximately 10 feet below the existing ground surface, were performed within the planned paved parking and the dry retention pond areas. Additionally, two (2) hand auger borings with hand cone penetrometer (HCP) testing (AB-3 and AB-4) advanced to an approximate depth of 10 feet below ground surface and two (2) Shelby tube samples (SH-1 and SH-2) were tested for their horizontal and vertical permeability were performed within the proposed swale. Furthermore, an exfiltration test was also performed in a 6-feet deep auger boring for the proposed dry retention pond. The locations of the borings, Shelby tubes, and exfiltration test are illustrated on the Test Location Plan in Appendix B.

The subsurface soil conditions encountered at the boring locations generally consisted of loose to medium dense fine sand (SP), fine sand with silt (SP-SM), silty fine sand (SM), and clayey fine sand (SC) to termination depths.

The results of the soil borings and exfiltration and falling head permeability tests were considered to develop pavement design for the project.

We appreciate the opportunity to be of service during this phase of the project and look forward to a continued association. Please do not hesitate to contact us if you have any questions or comments, or if we may further assist you as your plans proceed.

Respectfully Submitted,
**Universal Engineering Sciences**
Florida Registry No. 4930




Digitally signed by Allan Abubakar
Date: 2022.01.26 15:31:53 -05'00'

This item has been digitally signed and sealed by Allan G. Abubakar, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Allan G. Abubakar, P.E.
Sr. Project Engineer
Florida Registration No. 69952

Khaled Abdelli
Project Manager

Distribution: Mr. Michael Smith - Bev Smith Toyota 1 pdf

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# 1.0 INTRODUCTION

## 1.1 Scope of Services

The objective of our geotechnical services was to collect subsurface data for the subject project, summarize the test results, and discuss any apparent site conditions that may have geotechnical significance for the proposed construction. The following scope of services is provided within this report:

1. Prepare boring logs depicting the subsurface soil conditions encountered during our field exploration.

2. Review the soil samples obtained during our field exploration for classification and additional testing if necessary.

3. Evaluate the existing soil conditions found during our exploration with respect to the proposed expansion.

4. Provide recommendations for pavement design and subgrade preparation.

5. Provide site preparation criteria for the proposed construction.

6. Provide results and design parameters for stormwater management testing conducted.

## 1.2 Project Description

Per our recent telephone discussions and email correspondence with you, UES understands that you plan to expand the parking area at Bev Smith Kia located at 5660 US Highway 1 in Fort Pierce, Florida. Testing was completed previously by GFA International, although the design of the proposed expansion has changed, and additional testing is needed. UES has been provided a picture of a concept plan showing the layout of the proposed swale, paved parking area, and the dry retention pond on the property.

The recommendations provided herein are based upon the above considerations. If the stated conditions are incorrect or if the project description is revised, please inform UES so that we may review our recommendations with respect to any modifications.

# 2.0 OBSERVATIONS

## 2.1 Site Description

The project site is located at 5660 US Highway 1 in Fort Pierce, Florida as illustrated on the Site Vicinity Map in Appendix A. At the time of our field exploration, the site was developed with existing structure and associated parking area.

## 2.2 Field Exploration

Three (3) hand auger borings with hand cone penetrometer (HCP) testing (AB-1, AB-2, and AB-5), advanced to a depth of approximately 10 feet below the existing ground surface, were performed within the planned paved parking and the dry retention pond areas. Additionally, two (2) hand auger borings with hand cone penetrometer (HCP) testing (AB-3 and AB-4) advanced to an approximate depth of 10 feet below ground surface and two (2) Shelby tube samples (SH-1 and SH-2) were tested for their horizontal and vertical permeability were performed within the proposed swale. Furthermore, an exfiltration test was also performed in a 6-feet deep auger boring for the proposed dry retention pond. The locations of the borings, Shelby tubes, and exfiltration test are illustrated on the Test Location Plan in Appendix B.

The auger borings were performed in substantial accordance with ASTM D 1452, "Standard Practice for Soil Exploration and Sampling by Auger Borings." Hand Cone Penetrometer (HCP) tests were conducted at one-foot depth intervals in the auger borings. The HCP test, in conjunction with information about the soil type, is empirically correlated to the relative density of subsurface soils.

Site specific survey staking of the borings, Shelby tubes, and exfiltration test were not provided for our field exploration. The indicated depth and location of each boring were approximated based upon existing grade, the provided Conceptual Site Plan, and estimated distances and relationships to existing landmarks at the site.

## 2.3 Laboratory Testing

Soil samples recovered from our field exploration were returned to our laboratory where they were visually classified by a geotechnical engineer in general accordance with the Unified Soil Classification System (ASTM D 2488). Selected sample was tested for organic content (AASHTO T-267). The laboratory test results are summarized in Table 3.3.1 below and are also contained on the boring logs.

**Table 2.3.1 - Laboratory Test Results**

| Boring No. | Strata Depth (feet) | Sample Description | Organic Content (%) |
|---|---|---|---|
| AB-4 | 2 - 3 | Dark brown organically stained fine sand, trace roots (SP) | 3.0 |

The recovered samples were not evaluated, either visually or analytically, for chemical composition or environmental hazards. UES will be pleased to perform these services for an additional fee, if required

## 2.4 Geomorphic Conditions

The geology of the site as mapped on the USDA Soil Survey website consists of Nettles and Oldsmar sands (25) Riviera fine sand, 0 to 2 percent slopes (38) and, Susanna and Wauchula sands (43). **These are sand and loamy sand soils and organic soils are not indicated.**

Note that the Soil Survey generally extends to a maximum depth of 80 inches below ground surface and is not indicative of deeper soil conditions.

Boring logs resulting from our field exploration are presented in Appendix D - Log of Boring Records. The logs contain the soil descriptions, the hand cone penetrometer (HCP) values logged during the drilling and sampling activities. Note that the soil boring data reflect information from the specific test locations only and the soil conditions may vary between the strata interfaces indicated on the logs. The soil classifications and descriptions shown on the logs are generally based upon visual characterizations of the recovered samples using the Unified Soil Classification System. See Appendix F - Discussion of Soil Groups, for a detailed description of various soil groups.

The subsurface soil conditions encountered at the boring locations generally consisted of loose to medium dense fine sand (SP), fine sand with silt (SP-SM), silty fine sand (SM), and clayey fine sand (SC) to termination depths.

### 2.5 Hydrogeological Conditions

On the dates of our field exploration (January 15, 2022), groundwater was encountered in the auger borings ranging from depths of 5.8 to 9.2 feet below ground surface. The groundwater table typically fluctuates seasonally depending upon local rainfall and other site specific and/or local influences. Brief ponding of stormwater may occur across the site after heavy or extended rainfall events.

Falling head permeability tests were performed on the shelby tube samples to obtain horizontal ($k_h$) and vertical ($k_v$) permeability values of the soils. The permeability test results are summarized in the following Table 2.5.1.

**Table 2.5.1 – Permeability Test Results**

| Test Location | Sample Depth (feet) | Sample Description | Coefficient of Permeability, k (ft/day) | |
|---|---|---|---|---|
| | | | $k_V$ | $k_H$ |
| SH-1 (AB-3) | 1.5 - 2.0 | Gray fine sand (SP) | 9.135 | 2.436 |
| SH-2 (AB-4) | 1.5 - 2.0 | Dark gray fine sand (SP | 10.747 | 1.729 |

During our field exploration, we performed one (1) auger boring and exfiltration test (EX-1) in accordance with the South Florida Water Management District method for open hole constant head field testing. The test was conducted at the approximate location indicated on the Test Location Plan in Appendix B. The hydraulic conductivity (K-value) determined at EX-1 was **1.84 X $10^{-07}$ (cfs/$ft^2$-ft).** The test results are also presented in Appendix E - Hydraulic Conductivity Results.

### 2.6 Seasonal High Groundwater Table

The normal seasonal high groundwater level each year is the level that typically occurs in the August to September period at the end of the rainy season during a year of normal or average rainfall. During periods of above normal rainfall and in extreme cases of flooding, the water table elevations typically exceed the normal seasonal high groundwater level. Under this scenario, normal high groundwater levels approach the normal seasonal high groundwater levels.

The normal seasonal high groundwater level is affected by several factors. The drainage characteristics of the soils, the land surface elevation, relief points such as drainage ditches, lakes, rivers, canals, swamp areas, etc., and distance to relief points are some of the more important factors influencing the seasonal high groundwater level.

In order to better interpret the groundwater data, we reviewed available monthly precipitation data from several stations in the Fort Pierce area from June 2021 through December 2021 utilizing the Community Collaborative Rain, Hail & Snow Network website, which corresponds to the six (6) months prior to the time of our field exploration. The data indicated that the recorded rainfall during this period was relatively normal compared to the 30-year recorded average rainfall.

Based on our interpretations of the site conditions, the groundwater levels recorded in our soil borings at the time of drilling, and the data obtained from the various sources referenced herein, we estimate the normal seasonal high groundwater level to be approximately 1 to 1.5 feet above the water levels recorded in the borings. As previously noted, it is possible that higher groundwater levels may exceed the estimated normal seasonal high groundwater level as a result of significant or prolonged rainfall events. However, design for normal seasonal high groundwater conditions, instead of the extreme conditions, generally is more appropriate.

## 3.0 PAVEMENT AREA DESIGN AND CONSTRUCTION CONSIDERATIONS

### 3.1 Pavement Design Sections

The pavement sections were designed considering assumed traffic loading and previous experience with similar projects. Flexible pavement sections in the geographic area typically consist of an asphaltic wearing course, a base course, and a stabilized subgrade layer. Rigid pavements are constructed either directly upon prepared soil subgrades or upon a base course and stabilized subgrade for heavier loads.

Based on our prior experience and the assumed traffic loading criteria, recommended pavement section thicknesses are provided in Table 3.1.1 below.

**Table 3.1.1 - Design Pavement Sections**

| Pavement Type | Layer | Material Description | Layer Thickness | |
|---|---|---|---|---|
| | | | Light Duty | Heavy Duty |
| **Flexible** | (A) | Asphalt Wearing Surface FDOT SP-9.5 or SP-12.5 | 1.5 | 2.5 |
| | (B) | Base rock (minimum LBR of 100), compacted to 98 percent of modified Proctor maximum dry density | 6 | 8 |
| | (SSG) | Stabilized subgrade (minimum LBR of 40), compacted to 98 percent of modified Proctor maximum dry density | 12 | 12 |
| | **STRUCTURAL NUMBER (SN)** | | **2.7** | **3.5** |
| **Rigid** | (C) | FDOT Portland Cement Concrete | NA | 8 |
| | (B) | Base rock (minimum LBR of 100), compacted to 98 percent of modified Proctor maximum dry density | NA | - |
| | (CSG) | Soil subgrade compacted to 98 percent of modified Proctor maximum dry density | NA | 12 |

### 3.2 Compacted Subgrade or Embankment Fill

The subgrade or embankment fill is the layer that supports the structural pavement section. Subgrade and embankment fill should be constructed following the criteria and procedures presented in Section 3.9 of this report.

### 3.3 Stabilized Subgrade

The stabilized subgrade is the portion of the pavement section between the compacted subgrade or embankment fill and the base course. We recommend that subgrade material be compacted to at least 98 percent of modified Proctor maximum dry density (AASHTO T-180). The stabilized subgrade material should have a minimum Limerock Bearing Ratio (LBR) value of 40. Compliance tests should be performed upon the stabilized subgrade for full depth at a frequency of one test per 5,000 square feet, or at a minimum of two test locations, whichever is greater.

### 3.4 Base Course

The base course is the portion of the pavement section between the surface course and stabilized subgrade. In areas where separation of at least 1.5 feet between the estimated wet seasonal high groundwater table and the bottom of the base material occurs, we recommend the base course be limerock or cemented coquina having a minimum Limerock Bearing Ratio (LBR) value of 100. The base material should be obtained from an approved source. The base material should be placed in maximum 6-inch-thick lifts and compacted to at least 98 percent of modified Proctor maximum dry density (AASHTO T-180).

If the separation between the estimated wet seasonal high groundwater table and the bottom of the base material is less than 1.5 feet, we recommend that asphaltic concrete base (FDOT SP-12.5) be used in lieu of limerock or cemented coquina. The subgrade should be mechanically stabilized (compacted) to a minimum of 98 percent of modified Proctor maximum dry density (AASHTO T-180). Compliance tests should be performed on the base course at a frequency of one test per 5,000 square feet, or a minimum of two test locations, whichever is greater.

### 3.5 Flexible (Asphalt) Pavement

Asphalt pavement should consist of either FDOT SP-9.5 or SP-12.5 asphaltic concrete. The mixes should be a current FDOT approved design for the materials used for the project. Samples of the materials delivered to the project should be tested to verify that the aggregate gradation and asphalt content satisfies the mix design specifications.

The asphalt should be compacted to meet the requirements of the latest edition of the FDOT *Standard Specifications for Road and Bridge Construction*. Compliance tests should be performed by obtaining cores to evaluate material thickness and density at a frequency of one test per 10,000 square feet, or a minimum of two test locations, whichever is greater.

### 3.6 Rigid (Concrete) Pavement

Rigid pavements should be constructed using concrete having a minimum 28-day compressive strength of 4,000 psi. Fill required to raise grades in pavement areas should be compacted to at least 98 percent of modified Proctor maximum dry density (AASHTO T-180).

The pavement slabs should be reinforced to make them as rigid as practical. Proper joints should be provided at the junctions of slabs so that a small amount of independent movement can without causing structural damage. Construction and control joints should be accordance with current American Concrete Institute (ACI) and industry practices.

The pavement sections presented in this report are minimum pavement section thicknesses typically used for similar type projects. The pavement materials and construction procedures should conform to FDOT, ACI, or appropriate city/county requirements.

### 3.7 Effects of Water

Premature pavement section deterioration can occur due to intrusion of the wet season high groundwater table and/or improper surface water runoff management. We recommend the pavement areas be constructed to have a minimum separation of 1.5 feet between the wet season high groundwater table and the bottom of base course, regardless of the type of base material. In addition, we recommend that full-depth curb sections be designed and constructed. Using either extruded curb sections, which lie directly on top of the final surface course, or eliminating the curbing entirely, may allow runoff and/or irrigation water to migrate between the base and surface course. This condition can result in the separation of the surface course from the base course, causing a rippling effect, which results in premature deterioration of the pavement.

### 3.8 Construction Traffic

Incomplete pavement sections or pavement areas designed for light duty traffic will not perform satisfactorily under typical construction traffic loading. We recommend that all construction traffic (i.e., construction equipment, vehicles, etc.) either be re-routed away from these areas or the pavement sections be designed to support construction phase loading conditions.

### 3.9 Pavement Site Preparation

Our recommendations for preparation of the site for pavement construction are noted below. This approach to improving and maintaining site soils has been found to be successful with similar soil conditions.

1. The proposed construction limits should be cleared, stripped, and grubbed of all surface vegetation, topsoil, and associated root systems to depths of their vertical reaches. This should be performed within and to a distance of 5 feet beyond the limits of the pavement areas.
2. Prior to initiating fill operations, the existing ground surface should be compacted (proof rolled) using a steel drum vibratory roller having sufficient static weight and vibratory impact energy to achieve the required compaction. After completing the proof rolling, density tests should be performed at a frequency of one test per 5,000 square feet, or at a minimum of two test locations, whichever is greater, to confirm a minimum compaction compliance of 98 percent of modified Proctor maximum dry density (AASHTO T-180).

3. Fill material should be inorganic (classified as SP/GW) containing not more than 5 percent (by weight) fibrous organic materials. **Fill material having silt/clay-size fines contents greater than 5 percent should not be used, including cyclone sand material.** The fill should be placed in maximum 12-inch-thick lifts. Each lift should be compacted to a minimum density of 98 percent of modified Proctor maximum dry density (AASHTO T-180).

4. Compliance density tests should be performed within the fill at a frequency of not less than one test per 5,000 square feet per lift, or at a minimum of two test locations, whichever is greater.

5. Representative samples of both on-site and import materials proposed for use as fill should be obtained and tested to determine compliance with the project specifications. The testing should include moisture-density relations (AASHTO T-180) and particle size analysis.

6. The contractor should consider the contours contained on the final grading, paving, and drainage plans when executing backfilling and compaction operations.

## 4.0 REPORT LIMITATIONS

This consulting report has been prepared for the exclusive use of Bev Smith Toyota and other members of the design team for the proposed Bev Smith Kia Expansion project located at 5660 US Highway 1 in Fort Pierce, Florida. This report has been prepared in accordance with generally accepted local geotechnical engineering practices; no other warranty, either express or implied, is made.

The evaluation submitted in this report is based in part upon the data collected during a field exploration. However, the nature and extent of variations throughout the subsurface profile may not become evident until construction. If variations then appear evident, it may be necessary to reevaluate information and professional opinions provided in this report. In the event changes are made in the nature, design, or location of the proposed swale, pavement and pond areas, the evaluation and opinions contained in this report should not be considered valid unless the changes are reviewed, and our conclusions modified or verified in writing by UES.

UES should be provided the opportunity to review the final civil plans, structural plans, and project specifications to determine if UES's recommendations have been properly interpreted, communicated, and implemented. If UES is not afforded the opportunity to participate in construction related aspects of foundation installation and pavement construction as recommended in this report or any report addendum, UES cannot accept responsibility for the interpretation of our recommendations made in this report or in a report addendum for foundation or pavement performance.

## 5.0 BASIS FOR RECOMMENDATIONS

The recommendations presented in this report are based on the data obtained from the borings and exfiltration and falling head permeability tests performed at the locations indicated on the Test Location Plan in Appendix B. This report does not reflect variations which may occur between borings. While the borings are representative of the subsurface conditions at their respective locations and for their vertical reaches, local variations characteristic of the subsurface soils of the region are anticipated and may be encountered. The delineation between soil types shown on the boring logs is approximate and the descriptions represent our interpretation of the subsurface conditions at the designated boring locations on the specific dates drilled.

Any third-party reliance of our geotechnical report or parts thereof is strictly prohibited without the express written consent of Universal Engineering Sciences. The applicable auger boring methodology (ASTM D 1452) used in performing our borings, and for determining penetration resistance and soil relative density, is specific to the sampling tools utilized and does not reflect the ease or difficulty to advance other tools or materials.

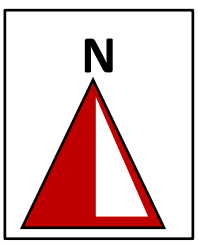
# Appendix A - Vicinity Map

# Site Vicinity Map

**Bev Smith Kia Expansion**
**5660 US Highway 1, Fort Pierce, Florida**

| Project No. 3330.2100346.0000 | Drafted by: JR | Reviewed By: AA | Date: 1/25/2022 |
|---|---|---|---|



# Appendix B - Test Location Plan

# Test Location Plan

**Bev Smith Kia Expansion**
**5660 US Highway 1, Fort Pierce, Florida**

| Project No. 3330.2100346.0000 | Drafted by: JR | Reviewed By: AA | Date: 1/26/2022 |
|---|---|---|---|




N

## Legend

- Approximate 10’ Auger Boring Test Locations
- Approximate Exfiltration Test Location
- Approximate Shelby Tube Locations

# Appendix C - Notes Related to Borings

## NOTES RELATED TO BORING RECORDS AND GENERALIZED SUBSURFACE PROFILES

1. Groundwater levels (if encountered) were recorded either during or following the boring completion on the date indicated. Fluctuations in groundwater levels are common - see the report text for a discussion.
2. The boring locations were identified in the field by estimated distances and offsets from existing reference marks and/or other site landmarks.
3. The completed boreholes were backfilled to adjacent site grade using drilling spoils and patched with asphalt cold mix in pavement areas.
4. The Log of Boring records represent our interpretation of soil conditions based on visual classification of the soil samples recovered from the borings.
5. The Log of Boring records are subject to the limitations, conclusions, and recommendations presented in the report text.
6. The Standard Penetration Test (SPT) N-values contained on the Log of Boring records refer to the total blow counts of a 140-pound drop hammer falling 30 inches required to drive a split-barrel sampler a total distance of 12 inches into soil strata at specific depth intervals.
7. The Hand Cone Penetrometer (HCP) values contained on Log of Boring records and the Cone Penetration Test (CPT) values contained on the Cone Penetration Sounding logs refer to the cone tip resistance recorded when pushing the cone tip into the soil strata at specific depth intervals.
8. The soil and/or rock strata interfaces shown on the Log of Boring records are approximate and may vary from those shown on the logs. The soil and/or rock descriptions shown on the Log of Boring records refer to conditions at the specific location tested. Soil/rock conditions may vary between test locations.
9. Relative density for coarse-grained soils (sands/gravels) and consistency for fine-grained soils (silts/clays) are described as follows:

| **Coarse Grained Soils (Sands and Gravels)** | | | | **Fine Grained Soils (Silts and Clays)** | | | |
|---|---|---|---|---|---|---|---|
| SPT N-Value | HCP Value ($kg/cm^2$) | CPT Value (tsf) | Relative Density | SPT N-Value | HCP Value ($kg/cm^2$) | CPT Value (tsf) | Consistency |
| 0-4 | 0-16 | 0-20 | Very Loose | 0-2 | 0-20 | 0-3 | Very Soft |
| 5-10 | 17-36 | 21-40 | Loose | 3-4 | 21-35 | 4-6 | Soft |
| 11-30 | 37-116 | 41-120 | Med. Dense | 5-8 | >35 | 7-12 | Firm |
| 31-50 | 117-196 | 121-200 | Dense | 9-15 | | 13-25 | Stiff |
| >50 | > 196 | >200 | Very Dense | 16-30 | | 26-50 | Very Stiff |
| | | | | >30 | | >50 | Hard |

10. Grain size descriptions are as follows:

| **Description** | **Particle Size Limits** |
|---|---|
| Boulder | Greater than 12 inches |
| Cobble | 3 to 12 inches |
| Coarse Gravel | 3/4 to 3 inches |
| Fine Gravel | No. 4 sieve to 3/4 inch |
| Coarse Sand | No. 10 to No. 4 sieve |
| Medium Sand | No. 40 to No. 10 sieve |
| Fine Sand | No. 200 to No. 40 sieve |
| Fines (Silt/Clay) | Smaller than No. 200 sieve |

11. Definitions for modifiers used in soil/rock descriptions:

| **Proportion** | **Modifier** | **Approximate Root Diameter** | **Modifier** |
|---|---|---|---|
| <5% | Trace | Less than 1/32" | Fine roots |
| 5% to 12% | Little | 1/32" to 1/4" | Small roots |
| 12% to 30% | Some | 1/4" to 1" | Medium roots |
| 30% to 50% | And | Greater than 1" | Large roots |

Organic Soils: Soils containing vegetative tissue in various stages of decomposition having a fibrous to amorphous texture. Usually having a dark brown to black color and an organic odor.
Organic Content Modifiers: <25%: Slightly to Highly Organic; 25% to 75%: Muck; >75%: Peat

# Appendix D - Log of Boring Records

Universal Engineering Sciences
607 NW Commodity Cove
Port Saint Lucie, Florida 34986
(772) 924-3575

# LOG OF BORING AB-1



**CLIENT** Bev Smith Toyota
**PROJECT NAME** Bev Smith Kia Expansion
**PROJECT NUMBER** 3330.2100346.0000
**PROJECT LOCATION** 5660 US Highway 1, Fort Pierce, Florida
**DATE STARTED** 1/15/22 **COMPLETED** 1/15/22
**LATITUDE** **LONGITUDE**
**DRILLING CONTRACTOR** Universal Engineering Sciences
**GROUND WATER LEVELS:**
**DRILLING METHOD** Auger Boring
▽ **AT TIME OF DRILLING** 5.80 ft
**DRILLER** Lo
**AT END OF** ---
**NOTES**
**ESHGT**

| DEPTH (ft) | HAND CONE PENETROMETER (HCP) (tsf) | GRAPHIC LOG | MATERIAL DESCRIPTION | MOISTURE CONTENT (%) | FINES CONTENT (%) | ORGANIC CONTENT (%) |
|---|---|---|---|---|---|---|
| 0.0 | 80 | | Dark gray fine sand (SP) | | | |
| | 80 | | | | | |
| | | | 2.0 | | | |
| | | | Dark brown organically stained fine sand, trace roots (SP) | | | |
| 2.5 | 80 | | | | | |
| | | | 3.0 | | | |
| | | | Brown fine sand (SP) | | | |
| | 80 | | | | | |
| | | | 4.0 | | | |
| | | | Gray silty fine sand (SM) | | | |
| | 80 | | | | | |
| 5.0 | | | | | | |
| | 70 | | ▽ | | | |
| | 70 | | | | | |
| 7.5 | | | | | | |
| | 80 | | | | | |
| | 80 | | | | | |
| | 80 | | | | | |
| 10.0 | | | 10.0 | | | |

Bottom of borehole at 10.0 feet.

HAND AUGER WITH HCP - GFA DATA TEMPLATE.GDT - 1/25/22 11:38 - Y:\PROJECTS_UES PROJECT SETUP\2021 UES PROJECTS\3330.2100346.0000 - BEV SMITH KIA EXPANSION - FORT PIERCE - GEO\18-9647.02 - BEV SMITH KIA EXPANSION - FT. PIERCE - GE

Universal Engineering Sciences
607 NW Commodity Cove
Port Saint Lucie, Florida 34986
(772) 924-3575

# LOG OF BORING AB-2



**CLIENT** Bev Smith Toyota
**PROJECT NAME** Bev Smith Kia Expansion
**PROJECT NUMBER** 3330.2100346.0000
**PROJECT LOCATION** 5660 US Highway 1, Fort Pierce, Florida
**DATE STARTED** 1/15/22 **COMPLETED** 1/15/22
**LATITUDE** **LONGITUDE**
**DRILLING CONTRACTOR** Universal Engineering Sciences
**GROUND WATER LEVELS:**
**DRILLING METHOD** Auger Boring
▽ **AT TIME OF DRILLING** 7.00 ft
**DRILLER** Lo
**AT END OF** ---
**NOTES**
**ESHGT**

| DEPTH (ft) | HAND CONE PENETROMETER (HCP) (tsf) | GRAPHIC LOG | MATERIAL DESCRIPTION | MOISTURE CONTENT (%) | FINES CONTENT (%) | ORGANIC CONTENT (%) |
|---|---|---|---|---|---|---|
| 0.0 | 80 | | Gray fine sand (SP) | | | |
| | 80 | | | | | |
| 2.0 | | | Dark brown organically stained fine sand (SP) | | | |
| 2.5 | 80 | | | | | |
| 3.0 | | | Brown fine sand (SP) | | | |
| | 80 | | | | | |
| 4.0 | | | Light gray fine sand with silt (SP-SM) | | | |
| | 80 | | | | | |
| 5.0 | 80 | | | | | |
| | 80 | | | | | |
| 7.0 ▽ | | | Gray clayey fine sand (SC) | | | |
| 7.5 | 80 | | | | | |
| | 80 | | | | | |
| | 80 | | | | | |
| 10.0 | | | 10.0 | | | |

Bottom of borehole at 10.0 feet.

HAND AUGER WITH HCP - GFA DATA TEMPLATE.GDT - 1/25/22 11:38 - Y:\PROJECTS_UES PROJECT SETUP\2021 UES PROJECTS\3330.2100346.0000 - BEV SMITH KIA EXPANSION - FORT PIERCE - GEO\18-9647.02 - BEV SMITH KIA EXPANSION - FT. PIERCE - GE

Universal Engineering Sciences
607 NW Commodity Cove
Port Saint Lucie, Florida 34986
(772) 924-3575

# LOG OF BORING AB-3



**CLIENT** Bev Smith Toyota
**PROJECT NAME** Bev Smith Kia Expansion
**PROJECT NUMBER** 3330.2100346.0000
**PROJECT LOCATION** 5660 US Highway 1, Fort Pierce, Florida
**DATE STARTED** 1/15/22 **COMPLETED** 1/15/22
**LATITUDE** **LONGITUDE**
**DRILLING CONTRACTOR** Universal Engineering Sciences
**GROUND WATER LEVELS:**
**DRILLING METHOD** Auger Boring
▽ **AT TIME OF DRILLING** 8.00 ft
**DRILLER** Lo
**AT END OF** ---
**NOTES**
**ESHGT**

| DEPTH (ft) | HAND CONE PENETROMETER (HCP) (tsf) | GRAPHIC LOG | MATERIAL DESCRIPTION | MOISTURE CONTENT (%) | FINES CONTENT (%) | ORGANIC CONTENT (%) |
|---|---|---|---|---|---|---|
| 0.0 | 80 | | Gray fine sand (SP) | | | |
| | 80 | | | | | |
| 2.0 | | | Dark brown organically stained fine sand, trace roots (SP) | | | |
| 2.5 | 80 | | | | | |
| 3.0 | | | Brown fine sand (SP) | | | |
| | 80 | | | | | |
| 4.0 | | | Dark gray fine sand (SP) | | | |
| | 80 | | | | | |
| 5.0 | | | | | | |
| | 80 | | | | | |
| 6.0 | | | Light gray clayey fine sand, trace roots (SC) | | | |
| | 80 | | | | | |
| 7.5 | 70 | | | | | |
| 8.0 ▽ | | | Gray silty fine sand (SM) | | | |
| | 70 | | | | | |
| | 70 | | | | | |
| 10.0 | | | 10.0 | | | |

Bottom of borehole at 10.0 feet.

HAND AUGER WITH HCP - GFA DATA TEMPLATE.GDT - 1/25/22 11:38 - Y:\PROJECTS_UES PROJECT SETUP\2021 UES PROJECTS\3330.2100346.0000 - BEV SMITH KIA EXPANSION - FORT PIERCE - GEO\18-9647.02 - BEV SMITH KIA EXPANSION - FT. PIERCE - GE

Universal Engineering Sciences
607 NW Commodity Cove
Port Saint Lucie, Florida 34986
(772) 924-3575

# LOG OF BORING AB-4



**CLIENT** Bev Smith Toyota
**PROJECT NAME** Bev Smith Kia Expansion
**PROJECT NUMBER** 3330.2100346.0000
**PROJECT LOCATION** 5660 US Highway 1, Fort Pierce, Florida
**DATE STARTED** 1/15/22 **COMPLETED** 1/15/22
**LATITUDE** **LONGITUDE**
**DRILLING CONTRACTOR** Universal Engineering Sciences
**GROUND WATER LEVELS:**
**DRILLING METHOD** Auger Boring
▽ **AT TIME OF DRILLING** 6.00 ft
**DRILLER** Lo
**AT END OF** ---
**NOTES**
**ESHGT**

| DEPTH (ft) | HAND CONE PENETROMETER (HCP) (tsf) | GRAPHIC LOG | MATERIAL DESCRIPTION | MOISTURE CONTENT (%) | FINES CONTENT (%) | ORGANIC CONTENT (%) |
|---|---|---|---|---|---|---|
| 0.0 | 80 | | Dark gray fine sand (SP) | | | |
| | 80 | | | | | |
| | | | 2.0 | | | |
| | | | Dark brown organically stained fine sand, trace roots (SP) | | | 3.0 |
| 2.5 | 80 | | | | | |
| | | | 3.0 | | | |
| | | | Brown fine sand (SP) | | | |
| | 80 | | | | | |
| | | | 4.0 | | | |
| | | | Light brown silty fine sand (SM) | | | |
| | 80 | | | | | |
| 5.0 | | | | | | |
| | 70 | | | | | |
| | | | 6.0 ▽ | | | |
| | | | Gray silty fine sand (SM) | | | |
| | 70 | | | | | |
| 7.5 | | | | | | |
| | 80 | | | | | |
| | 80 | | | | | |
| | 80 | | | | | |
| 10.0 | | | 10.0 | | | |

Bottom of borehole at 10.0 feet.

HAND AUGER WITH HCP - GFA DATA TEMPLATE.GDT - 1/25/22 11:38 - Y:\PROJECTS_UES PROJECT SETUP\2021 UES PROJECTS\3330.2100346.0000 - BEV SMITH KIA EXPANSION - FORT PIERCE - GEO\18-9647.02 - BEV SMITH KIA EXPANSION - FT. PIERCE - GE

Universal Engineering Sciences
607 NW Commodity Cove
Port Saint Lucie, Florida 34986
(772) 924-3575

# LOG OF BORING AB-5



**CLIENT** Bev Smith Toyota
**PROJECT NAME** Bev Smith Kia Expansion
**PROJECT NUMBER** 3330.2100346.0000
**PROJECT LOCATION** 5660 US Highway 1, Fort Pierce, Florida
**DATE STARTED** 1/15/22 **COMPLETED** 1/15/22
**LATITUDE** **LONGITUDE**
**DRILLING CONTRACTOR** Universal Engineering Sciences
**GROUND WATER LEVELS:**
**DRILLING METHOD** Auger Boring
▽ **AT TIME OF DRILLING** 9.20 ft
**DRILLER** Lo
**AT END OF** ---
**NOTES**
**ESHGT**

| DEPTH (ft) | HAND CONE PENETROMETER (HCP) (tsf) | GRAPHIC LOG | MATERIAL DESCRIPTION | MOISTURE CONTENT (%) | FINES CONTENT (%) | ORGANIC CONTENT (%) |
|---|---|---|---|---|---|---|
| 0.0 | 80 | | Gray fine sand (SP) | | | |
| | 80 | | | | | |
| | | | 2.0 | | | |
| | | | Light gray fine sand (SP) | | | |
| 2.5 | 80 | | | | | |
| | | | 3.0 | | | |
| | 80 | | Gray silty fine sand, trace roots (SM) | | | |
| | 80 | | | | | |
| 5.0 | | | | | | |
| | 80 | | | | | |
| | 80 | | | | | |
| 7.5 | 80 | | | | | |
| | | | 8.0 | | | |
| | 80 | | Gray fine sand (SP) | | | |
| | | | ▽ | | | |
| | 70 | | | | | |
| 10.0 | | | 10.0 | | | |

Bottom of borehole at 10.0 feet.

HAND AUGER WITH HCP - GFA DATA TEMPLATE.GDT - 1/25/22 11:38 - Y:\PROJECTS_UES PROJECT SETUP\2021 UES PROJECTS\3330.2100346.0000 - BEV SMITH KIA EXPANSION - FORT PIERCE - GEO\18-9647.02 - BEV SMITH KIA EXPANSION - FT. PIERCE - GE

# Appendix E - Hydraulic Conductivity Results

UNIVERSAL
ENGINEERING SCIENCES
Consultants In: Geotechnical Engineering • Environmental Sciences
Geophysical Services • Construction Materials Testing • Threshold Inspection
Building Inspection • Plan Review • Building Code Administration

# EXFILTRATION TEST REPORT
## South Florida Water Management District - Usual Open Hole Test

**Client:** Bev Smith Toyota

**Project No:** 3330.2100346.0000

**Project:** Bev Smith Kia Expansion
5660 US Highway 1, Fort Pierce, Florida

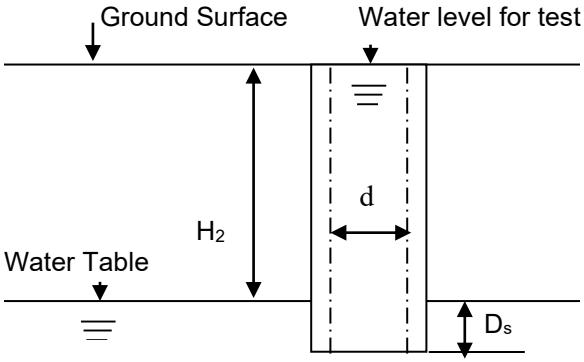
**Test Date:** 1/15/2022
**Technician:** LO

## SOIL PROFILE

| Test Location: EX-1 | Depth (feet) | Soil Description | HCP |
|---|---|---|---|
| | 0 – 1 | Dark gray fine sand (SP) | 80+ |
| | 1 – 3 | Light gray fine sand (SP) | 80+ |
| | 3 – 6 | Gray silty fine sand, trace roots (SM) | 80+ |
| | | | 80+ |
| | | | 80+ |
| | | | 80+ |
| | | | |
| | **Depth to Water Table from Ground Surface (feet)** | | NE* |

* Not Encountered

## CALCULATION OF HYDRAULIC CONDUCTIVITY




$$K = \frac{4Q}{\pi d(2H_2^2 + 4H_2D_S + H_2d)}$$

| | | |
|---|---|---|
| **K** | Hydraulic Conductivity (cfs/ $ft^2$ – ft head) | **$1.84 \times 10^{-07}$** |
| **Q** | Stabilized Flow Rate (cubic ft per second) | **$3.57 \times 10^{-06}$** |
| **d** | Diameter of Test Hole (feet) | **0.33** |
| **$H_2$** | Depth to Water Table (feet) | **6.0** |
| **$D_S$** | Saturated Hole Depth (feet) | **0** |
| Notes: | | |

# Appendix F - Discussion of Soil Groups

# DISCUSSION OF SOIL GROUPS

## COARSE GRAINED SOILS

**General.** A soil is classified as coarse-grained if more than 50 percent of a representative sample of the material is retained on the No. 200 sieve.

**GW and SW Groups.** These groups comprise well-graded gravelly and sandy soils containing little or no plastic fines (less than 5 percent passing the No. 200 sieve). The low fines content does not noticeably change the shear strength characteristics of these soils and does not interfere with their free-draining characteristics.

**GP and SP Groups.** Poorly graded gravels and sands containing little or no plastic fines (less than 5 percent passing the No. 200 sieve) are in the GP and SP groups. The materials can be called uniform gravels, uniform sands, or non-uniform mixtures of very coarse materials and very fine sand, with intermediate sizes lacking (sometimes called skip-graded, gap-graded, or step-graded). This last group often results from borrow pit excavation in which gravel and sand layers are mixed.

**GM and SM Groups.** In general, the GM and SM groups comprise gravels or sands with fines (more than 12 percent passing the No. 200 sieve) having little or no plasticity. The plasticity index and liquid limit of soils in these groups plot below the “A” line on the plasticity chart. The gradation of the material is not considered significant and both well and poorly graded materials are included.

**GC and SC Groups.** In general, the GC and SC groups comprise gravelly or sandy soils containing fines (more than 12 percent passing the No, 200 sieve) having plasticity characteristics. The plasticity index and liquid limit of soils in these groups plot above the “A” line on the plasticity chart.

## FINE GRAINED SOILS

**General.** A soil is classified as fine-grained if more than 50 percent of a representative sample of the material passes the No. 200 sieve.

**ML and MH Groups.** These groups comprise inorganic silts (ML) and elastic silts (MH) having either low (L) or high (H) liquid limits, respectively. ML soils have a liquid limit of less than 50 while MH soils have a liquid limit of 50 and greater. Silts and elastic silts can also contain varying amounts of sand and gravel. Also included in this group are loess sediments and rock flours.

**CL and CH Groups.** These groups comprise low plasticity (lean) clays (CL) and medium to high plasticity (fat) clays (CH) having either low (L) or high (H) liquid limits, respectively. CL soils have a liquid limit of less than 50 while CH soils have a liquid limit of 50 and greater. The low plasticity clays can also be sandy clays or silty clays. The moderate to high plasticity clays can also be sandy clays and include some volcanic clays.

**OL and OH Groups.** These groups comprise organic silts and clays. The soils are characterized by the presence of organic odor and/or dark color. The OL and OH soils are differentiated by determining and comparing their liquid limit values before and after oven drying representative soil samples.

## HIGHLY ORGANIC SOILS

The highly organic soils are usually very soft and compressible and have undesirable construction characteristics. Particles of leaves, grasses, branches, or other fibrous vegetative matter are common components of these soils. They are not subdivided and are classified into one group with the symbol PT. Peat humus and swamp soils with a highly organic texture are typical soils of the group.

**Technical Review Committee** **1. c.**

Meeting Date: 09/15/2022

REQUESTED ACTION

Site Plan – Kings Highway Commerce Center - 2313-331-0000-000-4, 2313-332-0000-000-7, 2313-332-0000-010-0, 2313-333-0001-000-7

LOCATION

NE Corner of S Kings HWY and White Road

RESPONSIBLE STAFF

Vennis Gilmore, Senior Planner

RECOMMENDATION

N/A

Attachments

TRC Packet

**Form Review**

Form Started By: Vennis Gilmore Started On: 08/29/2022 05:40 PM

Final Approval Date: 08/31/2022

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

| | | |
|---|---|---|
| TO | : | Technical Review Committee |
| FROM | : | Vennis Gilmore, Senior Planner |
| RE | : | Technical Review Project: #22-07000016 |
| BOARD DATE | : | September 15, 2022 |

## Site Plan (Development & Design Review) – Kings Highway Commerce Center

Attached is an Application for a Site Plan (Development & Design Review) for the subject property located at the NE Corner of S Kings HWY and White Road.

Parcel ID(s): 2313-331-0000-000-4, 2313-332-0000-000-7, 2313-332-0000-010-0, 2313-333-0001-000-7

Kings Hwy Commerce Center is a proposed 34.33 ac Distribution Center with 442 KSF of warehouse and office uses. The project will be developed in 2 phases. The access is provided from Kings Hwy with a right turn in & out only, and full access driveways on Graham & White Roads.

Please review and provide comments on this application. Please send all comments to the following emails vgilmore@cityoffortpierce.com, planning@cityoffortpierce.com, and/or through interoffice mail to the Planning Department. If you have comments, please respond as soon as possible.

Please do not hesitate to contact me should you require any additional information or clarification at 772-467-3741.

Thank You,

Vennis Gilmore
Senior Planner

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

# DEVELOPMENT REVIEW

Property address or Location see attached

Parcel ID #(s) See attachment

Project description 34.81 AC distribution center w/ 2-22 ksf buildings & supporting infrastructure

| | |
|---|---|
| J A Development Partners, LLC | Jeff H. Iravani, Inc |
| **Property Owner(s)** | **Applicant/Representative, Title, Company** |
| 4923 W. Cypress Street | 1934 Commerce Lane Suite 5 |
| Street Address | Street Address |
| Tampa FL 33607 | Jupiter FL 33458 |
| City State Zip | City State Zip |
| 813-505-4036 | 5615756030 |
| Phone Number | Phone Number |
| ken@tampaglobal.com | jhi@jhiinc.com |
| Email Address | Email Address |

***Property Owner(s) Acknowledgements:*** *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.*

*Property Owner(s) Signature(s)*

STATE OF FLORIDA -- COUNTY Palm Beach

The foregoing instrument was acknowledged before me this 29 day of July, 2022, by Jeff Iravani who is personally known to me or has produced _____ as identification.

Signature of Notary

Jenna L. Jenkins
COMMISSION # GG270322
EXPIRES: October 23, 2022
Bonded Thru Aaron Notary

***INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729***

## TO BE COMPLETED BY STAFF

| Zoning | Future Land Use | Total Acres | Historic District | Historic Designation |
|---|---|---|---|---|
| | | | | Contributing Individual<br>Non-Contributing None |

Pre-Application Meeting Date_____

Intake Planner_____

Planner Assigned_____

Approved By_____ Date _____

Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

# ❑ DEVELOPMENT REVIEW

***General Information***

- ❑ Incomplete application packets cannot be accepted.
- ❑ Site Plan approval is valid for one (1) year following City Commission approval. In order to maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date, and building permits must be maintained until site plan is completed, per plans, or approval shall lapse.

*Choose Application Type:*

| Application Type | | |
|---|---|---|
| ■ Site Plan | ❑ Conditional Use with New Const. | ❑ Major Amendment |
| ❑ Conceptual Development Plan | | ❑ Minor Amendment |

*Site Information:*

Non-Residential: Proposed Sq. Ft.: 442,000 sf  Residential: Proposed Units:_____

Surrounding Uses: *(i.e. single family home, retail, industrial, etc.)*

| North | South | East | West |
|---|---|---|---|
| vacant | Commercial | Agricultural | Institutional |




## *Site Plan submittal requirements:*

***Submit one (1) original & thirteen (13) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals.***

- ☒ Complete notarized application
- ☒ Warranty Deed
- ☒ SLC Property Record Card
- ☒ Statements of ownership & control of proposed development. Statement describing in detail: character & intended use.
- ☒ General location map (see Section 22-58.d.2)
- ☒ Survey (see Section 22-58.d.3)
- ☒ Site Plan (see Section 22-58.d.4)
- ☒ Landscaping Plan (see Section 22-187)
- ☒ Storm Drainage Plan (see Section 22-58.d.6)
- ☒ Environmental Impact Report
- ☒ Beach/Dune System protection plan, if applicable (see Section 22-58.d.7)
- ☒ Lighting Plan (see Section 22-58.d.8)
- ☒ Design Review submittals (see Design Review application)
- ☒ Traffic Impact Report
- ☒ Concurrency Review submittals (see Concurrency Review application)

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

# Design Review

Property address or Location: See attached

Parcel ID #(s): See attached

Project Description: Proposed 109 acre distribution including warehouse and office

| | |
|---|---|
| J A Development Partners, LLC | Jeff H. Iravani, Inc - Authorized Agent |
| Property Owner(s) | Applicant/Representative, Title, Company |
| 4923 W Cypress Street | 1934 Commerce Lane Suite 5 |
| Street Address | Street Address |
| Tampa FL 33607 | Jupiter FL 33458 |
| City State Zip | City State Zip |
| 813-505-4036 | 5615756030 |
| Phone Number | Phone Number |
| Ken@tampaglobal.com | jhi@bellsouth.net |
| Email Address | Email Address |

***Property Owner(s) Acknowledgements:*** *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Application (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

*Property Owner(s) Signature(s)*

STATE OF FLORIDA -- COUNTY Palm Beach

The foregoing instrument was acknowledged before me this 29 day of July, 2022, by Jeff Iravani who is personally known to me or has produced _____ as identification.

Signature of Notary

Jenna L. Jenkins
COMMISSION # GG270322
EXPIRES: October 23, 2022
Bonded Thru Aaron Notary

**TO BE COMPLETED BY STAFF**

| Zoning | Future Land Use | Total Acres | Historic Districts | Historic Designation |
|---|---|---|---|---|
| | | | | |

Pre-Application Meeting Date _____ Fees _____ Control # _____ B. Permit _____

Intake Planner _____

Planner Assigned _____

Approved _____ Date _____

Comments _____

Intake Date Stamp

# Design Review Application Checklist
**(City Code of Ordinances 22-59)**

Submittal for Administrative Approval

a. A survey (1" = 30' minimum scale) of property lines, existing topography and the location of trees meeting the tree protection regulations of section 22-194, location of bordering streets and, if applicable, wetlands and beaches.
b. A site analysis study to include a discussion of specimen trees and other natural vegetation, access, significant topography, wetlands, buffers, setbacks, views, orientation, the surrounding built environment and other site features that may influence design elements.
c. A draft written narrative describing the design intent of the project, its goals and objectives and how it reflects the site analysis study results.
d. Context photographs of neighboring uses and architectural styles.
e. Photographs and/or drawings of architectural buildings or objects that serve as a precedent for the proposed building design. Models should be taken from local exemplary buildings, either existing or demolished. Documentation of such buildings is available in the city's planning department.
f. Photographs of all existing structures located on the property. If existing structures on the property are more than fifty (50) years of age, documentation of these structures with data from the Florida Master Site File form is also required.
g. Conceptual site plan (to scale) showing proposed location of all buildings, structures, parking areas, signs and landscaping.
h. Landscape plan, at the same scale as the site plan. The planning director or designee may request enlarged plans of detailed planting areas. Planting schedule with sizes of proposed plantings must be included.
i. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.
j. Exterior elevations showing architectural character, external architectural features and streetscape of the proposed development, including materials, colors, shadow lines and landscaping. The street elevation shall encompass the entire proposed project and generally identify the major elements of the adjacent two (2) properties on either side of the site. If the adjacent properties are vacant or underutilized, a diagram shall be provided that identifies the mass and form that is allowable under current zoning. If the street elevation must be drawn at such a scale as to render architectural details of the building unreadable, drawings of individual buildings at a larger scale should be provided as well.
k. Design review concurrent with conceptual development plan procedure according to subsection 22-58(e) is also available.

Submittal for Board Approval

a. A written narrative describing how the project conforms to administrative approval and design review guidelines of this section.
b. A final site plan meeting the requirements of section 22-58
c. A final site lighting plan that meets the requirements of subsection 22-58(d)(8).
d. A final landscape plan that meets the requirements of Article XII, Landscaping and Trees.
e. Final floor plans and elevation drawings (1/8" = 1'-0" minimum scale), as detailed under administrative approval, showing exterior building materials and colors with architectural sections and details to adequately describe the project.
f. A color board (11"x17" maximum) containing actual color samples of all exterior finishes, keyed to the elevations, and indicating the manufacturer's name and color designation.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
# CAPACITY ANALYSIS

## I. Site Data:

| | Existing Use | Future Land Use | Zoning |
|---|---|---|---|
| **North** | vacant | Commercial, County | CG, County |
| **South** | Distribution | GC | CP-1 |
| **East** | Agriculture | RU, County | AR-1, County |
| **West** | Institutional | SD | PNRD |

| | Future Land Use | Zoning Classification | Maximum Intensity<br>Residential: Dwelling Units per Acre<br>Other: Square Footage | Total Acreage | Flood Zone |
|---|---|---|---|---|---|
| **Current** | CG | CP-1 | 909 ksf | 34.81 | N/A |
| ****Proposed** | CG | CP-1 | 442 ksf | 34.81 | N/A |

## II. Public Facilities Information:

| **A. Potable Water:** | |
|---|---|
| Average Use | Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand)<br>Other: 0.125 gallons per day per square foot |
| Demand Analysis | Maximum |
| Current Zoning/FLU | Total gallons per day 113,625 |
| **Proposed Zoning/FLU | Total gallons per day 55,250 |
| **Change in Demand | Total gallons per day -58,375 |

| **B. Wastewater:** | |
|---|---|
| Average Use | Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand)<br>Other: 0.1 gallons per day per square foot |
| Demand Analysis | Maximum |
| Current Zoning/FLU | Total gallons per day 90,900 |
| **Proposed Zoning/FLU | Total gallons per day 44,200 |
| **Change in Demand | Total gallons per day -46,700 |

**C. Parks and Recreation (Residential Classifications Only):** N/A
(Du x 2.6 = persons + 44,227 = population /LOS)

| Park Type | LOS | Existing Population Park Demand | Proposed Population Park Demand | Change in Demand |
|---|---|---|---|---|
| **Regional** | 20 acres per 1,000 people | | | |
| **Urban District** | 5 acres per 1,000 people | | | |
| **Community** | 2.5 acres per 1,000 people | | | |
| **Neighborhood** | 1.36 acres per 1,000 people | | | |

**D. Public Schools (Residential Classifications Only):** N/A
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

| | K-8 | High |
|---|---|---|
| **School Name** | | |
| **City** | | |
| **Distance** | | |
| **Current Zoning/FLU Enrollment Demand** | | |
| ****Proposed Zoning/FLU Enrollment Demand** | | |
| ****Change in Demand** | | |

| **E. Solid Waste: Residential (**2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units) | |
|---|---|
| **Demand Analysis** | Maximum |
| **Current Zoning/FLU** | 22.8 yd |
| ****Proposed Zoning/FLU** | 11.1 yd |
| ***Change in Demand** | - 11.7 yd |

**F. Stormwater:**
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

| | |
|---|---|
| **Impact** | Post development discharge will be less than pre-development due to drainage improvements. Per NSLRWCD, discharge is limited per lot size so there will be no negative impact. |

## III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

| **G. Transportation Analysis: Complete ITE Trip Generation Data Form**<br>Most recent ITE Code for use; HCM Roadway Capacity | | |
|---|---|---|
| | **AADT** | **AM/PM Peak Hour Trips** |
| **Demand Analysis** | Maximum | Maximum |
| **Current Zoning/FLU** | 2,112 | 257/234 |
| ****Proposed Zoning/FLU** | 1,027 | 125/114 |
| ***Change in Demand** | Trips -1,085 | Trips -132/-120 |
| **Impact to Capacity** | Project meets concurrency per TIR by O'Rourke Enginnering | |

## IV. Project Description

| **PHASING** |
|---|
| Is this project (phase) part of a larger project? ☐ Yes ☑ No |
| |
| If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date. |
| Total Project: Residential Units: Single Family: Multifamily: |
| Non-residential (square footage): 442 ksf |
| Mixed-use (describe use): |
| (If this is a single phase project, name it Phase I – Total) |

| **RESIDENTIAL DATA** | | | | | |
|---|---|---|---|---|---|
| **Type** | **Phase** | **Number of Units** | **Acres** | **Expected beginning date** | **Expected completion date** |
| Single-family, detached | | | | | |
| Single-family, attached | | | | | |
| Multi-family | | | | | |
| Other (specify) | | | | | |

| NON-RESIDENTIAL DATA | | | | | |
|---|---|---|---|---|---|
| **Type(s) specify** | **Phase** | **Square footage** | **Acres** | **Expecting beginning date** | **Expected completion date** |
| Distribution, warehouse, office | | 442 ksf | 34.81 | 04/01/2023 | 04/01/2024 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. ☐ Yes ☑ No

B. 1. Does this application involve demolition or re-use of any structure(s)? ☐ Yes ☑ No
If yes, what is the size of the structure(s) to be demolished or re-used? _____
2. What is the current use of the structure to be demolished or re-used? _____
3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? ☐ Yes ☐ No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested: None

** Complete section if requesting a change in zoning, future land use, or expanding

Jeff H. Iravani, Inc.
Consulting Engineers
**1934 Commerce Lane, Suite 5**
**Jupiter, Florida 33458**
**Tel: (561) 575-6030 Fax: (561) 575-6088**
**Email: JHI@JHIinc.com Website: www.JHIinc.com**

July 14, 2022

City of Ft. Pierce
Planning Department
P.O. Box 1480
Fort Pierce, FL 34950

Attn: Vennis Gilmore
Planning Supervisor

Re: **Kings Highway Commerce Park**
JHI Project No. 2205-1402
Parcel ID#'s 2313-331-0000-000-4 J A Enterprises, Inc 19.29 ac
2313-332-0000-000-7 Matthew Lyle Wynne, LLC 7.45 ac
2313-332-0000-010-0 Matthew Lyle Wynne II, LLC 0.83 ac
2313-333-0001-000-7 Shad Properties Group, LLC 6.75 ac

Dear Vennis,

Kings Hwy Commerce Center is a proposed 34.33 ac Distribution Center with 442 KSF of warehouse and office uses. The project will be developed in 2 phases.
The access is provided from Kings Hwy with a right turn in & out only fuu access driveways onto Graham & white Roads.

Please see attached site plan & aerial for the project snd me know if there are any questions.

Thank you.

*J H Iravani*

Jeff H. Iravani, P.E.
President
Authorized Agent

Jeff H. Iravani, Inc.
Consulting Engineers
**1934 Commerce Lane, Suite 5**
**Jupiter, Florida 33458**
**Tel: (561) 575-6030 Fax: (561) 575-6088**
**Email: JHI@JHIinc.com Website: www.JHIinc.com**

July 28, 2022

City of Ft. Pierce
Planning Department
P.O. Box 1480
Fort Pierce, FL 34950

Attn: Vennis Gilmore
Planning Supervisor

Re: **Kings Highway Commerce Park Property Owners List**
JHI Project No. 2205-1402

| | |
|---|---|
| Parcel ID#'s | 2313-331-0000-000-4 J A Enterprises, Inc 19.29 ac |
| | 2313-332-0000-000-7 Matthew Lyle Wynne, LLC 7.45 ac |
| | 2313-332-0000-010-0 Matthew Lyle Wynne II, LLC 0.83 ac |
| | 2313-333-0001-000-7 Shad Properties Group, LLC 6.75 ac |

Thank you.

*J H Iravani*

Jeff H. Iravani, P.E.
President
Authorized Agent

# Shad Properties Group, LLC
# 6301 W. Broward Blvd
# Plantation, FL 33317

June 17, 2022

**RE:** Parcel ID # 2313-333-0001-000-7
Kings Highway Commerce Center
Southeast corner of Kings Highway and Graham Road
Fort Pierce, Florida

To Whom It May Concern:

**Shad Properties Group, LLC,** the owner of the above referenced parcel, hereby authorizes Jeff H. Iravani, Inc to be our authorized agent to obtain all the required annexation, re-zoning, site plan approvals & civil related permits and to sign on our behalf on all applicable applications for the above referenced project.

Sincerely,

Signature: Nabeela Islam Shad

Name: NABEELA ISLAM SHAD

Title: MANAGER

STATE OF FLORIDA BROWARD
COUNTY OF ~~PALM BEACH~~

The foregoing instrument was acknowledged before me this 20 day of June, 2022, by Nabeela Shad who is personally known to me (or) produced a drivers' license as identification and who did (did not) take an oath.

Syed Hussain
Notary Public Syed Hussain

Seal

SYED HUSSAIN
Notary Public - State of Florida
Commission # HH 163972
My Comm. Expires Sep 19, 2025
Bonded through National Notary Assn.

# J A Development Partners, LLC

June 17, 2022

**RE:** Kings Highway Commerce Center
Southeast corner of Kings Highway and Graham Road
Fort Pierce, Florida

To Whom It May Concern:

**J A Development Partners, LLC** , the owner of the above referenced parcel, hereby authorizes Jeff H. Iravani, Inc to be our authorized agent to obtain all the required annexation, re-zoning, site plan approvals & civil related permits and to sign on our behalf on all applicable applications for the above referenced project.

Sincerely,

Signature: _____

Name: KENNETH J. MORIN

Title: MANAGER

STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this 21st day of June, 2022, by Kenneth J. Morin who is personally known to me (or) produced a drivers' license as identification and who did (did not) take an oath.

_____
Notary Public

Seal

KRISTINA ILLING
MY COMMISSION # HH 199265
EXPIRES: July 8, 2024
Bonded Thru Notary Public Underwriters

# Matthew Lyle Wynne II, LLC
# 8000 S US One Suite 402
# Port St Lucie, FL 34952

June 17, 2022

**RE:** Parcel ID # 2313-332-0000-010-0
Kings Highway Commerce Center
Southeast corner of Kings Highway and Graham Road
Fort Pierce, Florida

To Whom It May Concern:

**Matthew Lyle Wynne II, LLC**, the owner of the above referenced parcel, hereby authorizes Jeff H. Iravani, Inc to be our authorized agent to obtain all the required annexation, re-zoning, site plan approvals & civil related permits and to sign on our behalf on all applicable applications for the above referenced project.

Sincerely,

Signature: _____

Name: Matthew L. Wynne

Title: Manager

STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this 20th day of June, 2022, by Matthew Lyle Wynne who is personally known to me (or) produced a drivers' license as identification and who did (did not) take an oath.

Susan LaFleur
Notary Public

SUSAN LAFLEUR
MY COMMISSION # GG 356204
EXPIRES: February 23, 2023
Bonded Thru Notary Public Underwriters

Seal

# Matthew Lyle Wynne, LLC
# 8000 S US One Suite 402
# Port St Lucie, FL 34952

June 17, 2022

**RE:** Parcel ID # 2313-332-0000-000-7
Kings Highway Commerce Center
Southeast corner of Kings Highway and Graham Road
Fort Pierce, Florida

To Whom It May Concern:

**Matthew Lyle Wynne, LLC**, the owner of the above referenced parcel, hereby authorizes Jeff H. Iravani, Inc to be our authorized agent to obtain all the required annexation, re-zoning, site plan approvals & civil related permits and to sign on our behalf on all applicable applications for the above referenced project.

Sincerely,

Signature: _____

Name: Matthew L. Wynne

Title: Manager

STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this 20th day of June, 2022, by Matthew L. Wynne who is personally known to me (or) produced a drivers' license as identification and who did (did not) take an oath.

_____
Notary Public

Seal

SUSAN LAFLEUR
MY COMMISSION # GG 356204
EXPIRES: February 23, 2023
Bonded Thru Notary Public Underwriters

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 3926462 OR BOOK 3605 PAGE 859, Recorded 02/19/2014 at 10:14 AM
Doc Tax: $490.70

St. Lucie County File Date: 02/19/2014 08:38 AM

J.A. ENTERPRISES, INC.,
Plaintiff,

VS.

GRAHAM GROVES DEVELOPMENT, LLC,
an administratively dissolved Florida limited
liability company; and
UNKNOWN TENANT #1,
Defendants.

IN THE CIRCUIT COURT, NINETEENTH JUDICIAL CIRCUIT, IN AND FOR THE COUNTY OF ST LUCIE, STATE OF FLORIDA - CIVIL DIVISION
**CASE NO. 562012CA003461**

## CERTIFICATE OF TITLE

The undersigned Clerk of the Court certifies that (s)he executed and filed a Certificate of Sale in this action on Feb, 4,2014 for the property described herein and that no objections to the sale have been filed within the time allowed for filing objections.

The following property in St Lucie County, Florida:

***The East 1/2 of the Southwest 1/4 of the Southwest 1/4 of Section 13, Township 35 South, Range 39 East, lying and being in St. Lucie County, Florida, less and except the North forty feet (40') for the right of way for Graham Road.***

Property Address: 0 White Road, Fort Pierce, Florida.
WAS SOLD TO:

**J.A. ENTERPRISES, INC.**
**100 Davit Drive**
**North Palm Beach, FL 33408**

WITNESS my hand and the seal of this Court On 19 February, 2014

JOSEPH E. SMITH
CLERK OF CIRCUIT COURT

BY: _____
Deputy Clerk

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 3390885 OR BOOK 3128 PAGE 1592, Recorded 09/17/2009 at 03:20 PM
Doc Tax: $3850.00

This Document Prepared By and Return to:
FRANK H. FEE, III, ESQUIRE
FEE, DeROSS & FEE
500 Virginia Avenue, Suite 200
Fort Pierce, FL 34982

Parcel ID Number: 2313-332-0000-000/7
Recording $ 27.00
Doc. Stamps $ 3,850.00

# Warranty Deed

**This Indenture,** Made this 11th day of September, 2009 A.D., **Between**

Ben Agler and Karol Agler, husband and wife

of the County of St. Lucie, State of Florida, **grantors,** and

Matthew Lyle Wynne II, LLC, a Florida limited liability company

whose address is: 8000 So. U.S. Hwy. 1, Suite 402, Port St. Lucie, FL 34952

of the County of St. Lucie, State of Florida, **grantee.**

**Witnesseth** that the GRANTORS, for and in consideration of the sum of

----------TEN DOLLARS ($10)---------- DOLLARS,

and other good and valuable consideration to GRANTORS in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, have granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate, lying and being in the County of St. Lucie State of Florida to wit:

The South One (1) Acre of the Real Property more fully described on Exhibit "A" attached hereto and made a part hereof.

SUBJECT TO restrictions, reservations, limitations and easements of record, if any; this reference to said restrictions shall not operate to reimpose the same.

SUBJECT TO the lien, operation and affect of that certain Mortgage and Note Bifurcation/Modification Agreement ("Agreement") dated October 31, 2007, securing Bifurcation Note #2 (as defined in the Agreement) in the reduced principal sum of $549,247.74 which is intended to remain in full force and effect, and not be merged with the fee title to the above described property.

and the grantors do hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

WYNNEAGLERMOD

**In Witness Whereof,** the grantors have hereunto set their hands and seals the day and year first above written.
**Signed, sealed and delivered in our presence:**

Printed Name: FRANK HIFEE, III
Witness

Printed Name: Connie Sue Moore
Witness

Ben Agler (Seal)
**Ben Agler**
P.O. Address: **1140 SW Greenbriar Cove, Fort Pierce, FL 34986**

Karol Agler (Seal)
**Karol Agler**
P.O. Address: **1140 SW Greenbriar Cove, Fort Pierce, FL 34986**

**STATE OF** Florida
**COUNTY OF** St. Lucie

The foregoing instrument was acknowledged before me this 11th day of September, 2009, by
**Ben Agler and Karol Agler, husband and wife**
who are personally known to me or who have produced their **Florida driver's license** as identification.

Printed Name: Connie Sue Moore
**Notary Public**
My Commission Expires: / /

CONNIE SUE MOORE
Commission # DD 869716
Expires April 4, 2013
Bonded Thru Troy Fain Insurance 800-385-7019

WYNNEAGLERMOD

## EXHIBIT "A"

PARCEL A:
A portion of the Southwest 1/4 of Section 13, Township 35 South, Range 39 East, St. Lucie County, Florida, more particularly described as follows:

Commencing at the Southwest corner of said Section 13, run East on the South Section Line 25 feet to the East right-of-way line of King's Highway; thence run N. 00°05'22" E., 614.19 feet, along aforesaid right-of-way, to the Point of Beginning. From the Point of Beginning continue N. 00°05'22" E., along said right-of-way, 683.20 feet, to the South right-of-way of Graham Road; thence N. 89°57'26" E., along the South right-of-way of Graham Road, 637.83 feet; thence S. 00°56'56" W., 683.68 feet; thence West, 638.29 feet to the Point of Beginning,

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 3390883 OR BOOK 3128 PAGE 1586, Recorded 09/17/2009 at 03:20 PM
Doc Tax: $0.70

This Document Prepared By and Return to:
**FRANK H. FEE, III, ESQUIRE**
**FEE, DeROSS & FEE**
**500 Virginia Avenue, Suite 200**
**Fort Pierce, FL 34982**

**Parcel ID Number:** 2313-332-0000-000/7

Recording $27.00
Doc. Stamps $ .70

# Corrective Warranty Deed

**This Indenture,** Made this 11th day of September, 2009 A.D., **Between**
**Ben Agler and Karol Agler, husband and wife**
of the County of **St. Lucie**, State of **Florida, grantors,** and
**Matthew Lyle Wynne, LLC, a Florida limited liability company**
whose address is: **8000 So. U.S. Hwy. 1, Suite 402, Port St. Lucie, FL 34952**
of the County of **St. Lucie**, State of **Florida, grantee.**

**Witnesseth** that the GRANTORS, for and in consideration of the sum of
----------**TEN DOLLARS ($10)**---------- DOLLARS,
and other good and valuable consideration to GRANTORS in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, have granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate, lying and being in the County of **St. Lucie** State of **Florida** to wit:

See Exhibit "A" attached hereto and made a part hereof.

Subject to restrictions, reservations, limitations and easements of record, if any; this reference to said restrictions shall not operate to reimpose the same.

This is a CORRECTIVE WARRANTY DEED intended to cure the legal description exception appearing in that certain Warranty Deed from Grantors to Grantee dated January 9, 2008, recorded in O.R. Book 2926, Page 55 of the Public Records of St. Lucie County, Florida, which deed intended to except from the described parcel the South One (1) Acre thereof, rather than the South Five (5) Acres.

and the grantors do hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

**In Witness Whereof,** the grantors have hereunto set their hands and seals the day and year first above written.
**Signed, sealed and delivered in our presence:**

Printed Name: FRANK HITEF
Witness

Printed Name: Connie Sue Moore
Witness

(Seal)
**Ben Agler**
P.O. Address: **1140 SW Greenbriar Cove, Fort Pierce, FL 34986**

(Seal)
**Karol Agler**
P.O. Address: **1140 SW Greenbriar Cove, Fort Pierce, FL 34986**

**STATE OF Florida**
**COUNTY OF St. Lucie**

The foregoing instrument was acknowledged before me this **11th** day of **September, 2009** by **Ben Agler and Karol Agler, husband and wife** who are personally known to me or who have produced their **Florida driver's license** as identification.

Printed Name: Connie Sue Moore
Notary Public
My Commission Expires: / /

CONNIE SUE MOORE
Commission # DD 869716
Expires April 4, 2013
Bonded Thru Troy Fain Insurance 800-385-7019

WYNNEAGLER

## EXHIBIT "A"

PARCEL A:
A portion of the Southwest 1/4 of Section 13, Township 35 South, Range 39 East, St. Lucie County, Florida, more particularly described as follows:

Commencing at the Southwest corner of said Section 13, run East on the South Section Line 25 feet to the East right-of-way line of King's Highway; thence run N. 00°05'22" E., 614.19 feet, along aforesaid right-of-way, to the Point of Beginning. From the Point of Beginning continue N. 00°05'22" E., along said right-of-way, 683.20 feet, to the South right-of-way of Graham Road; thence N. 89°57'26" E., along the South right-of-way of Graham Road, 637.83 feet; thence S. 00°56'56" W., 683.68 feet; thence West, 638.29 feet to the Point of Beginning,

**LESS THE SOUTH ONE (1) ACRE THEREOF.**

JOANNE HOLMAN, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 2501878 OR BOOK 2095 PAGE 1237, Recorded 11/17/2004 at 12:03 PM
Doc Tax: $3780.00

**This Instrument Prepared by:**
**Treasure Coast Abstract & Title Insurance Co.**
**401 South Indian River Drive**
**Fort Pierce, Fl 34950**

Return to CH BX: 76

# WARRANTY DEED

**THIS WARRANTY DEED,** executed this 12th day of November, 2004 by:

**MATTHEW LYLE WYNNE, a single adult, individually and as Trustee**

8000 South U.S.1, Suite 402
Port St. Lucie, Florida 34982

hereinafter called the Grantor, to:

**SHAD PROPERTIES GROUP, LLC, a Florida limited liability company**
6301 W. Broward Boulevard
Plantation, Florida 33317

hereinafter called the Grantee:

"Wherever used herein, the terms "Grantor" and "Grantee" shall include singular and plural, heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, wherever the context so admits or requires."

**WITNESSETH,** That the Grantor, for and in consideration of the sum of $10.00 in hand paid by the said second party, the receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the Grantee forever, all that certain land situate, lying and being in the County of St. Lucie, State of Florida, to-wit:

See Exhibit "A" attached hereto

**TOGETHER** with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

**TO HAVE AND TO HOLD** the same in fee simple forever.

**AND** the Grantor hereby covenants with the Grantee that the Grantor is lawfully seized of said land in fee simple; that the Grantor has good right and lawful authority to sell and convey said land; that the Grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2004

**IN WITNESS WHEREOF,** the Grantor has caused these presents to be executed the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

Amanda Stopkowitz
AMANDA STOPKOWITZ, Witness
(Print or Type Name)

Jacquelyn Brewer
JACQUELYN BREWER, Witness
(Print or Type Name)

By: _____
Matthew Lyle Wynne, as Trustee

STATE OF FLORIDA
COUNTY OF ST. LUCIE

12th I HEREBY CERTIFY that the foregoing instrument was acknowledged before me this 12th day of NOVEMBER, 2004, by MATTHEW LYLE WYNNE, a single adult, individually and as Trustee who is personally known to me and who did not take an oath.

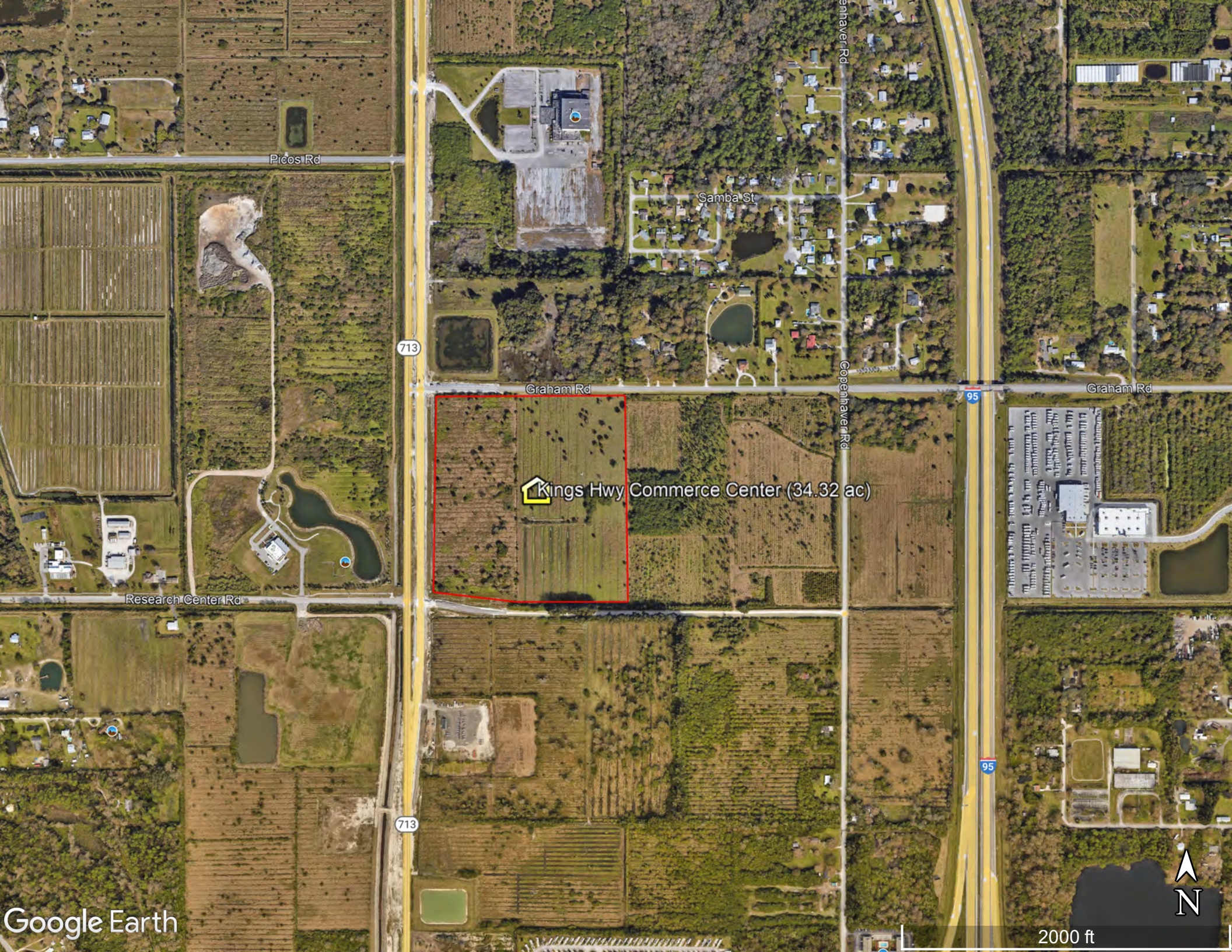
JACQUELYN B. BREWER
MY COMMISSION # DD 164638
EXPIRES: March 9, 2007
Bonded Thru Notary Public Underwriters

Jacquelyn Brewer
JACQUELYN BREWER NOTARY PUBLIC
State of Florida at Large
My Commission Expires: _____
My Commission No.: _____

**EXHIBIT "A"**

PARCEL B:
A portion of the Southwest ¼ of Section 13, Township 35 South, Range 39 East, St. Lucie County, Florida, more particularly described as follows:
Commencing at the Southwest corner of said Section 13, run East on the South Section Line 25 feet to the East right-of-way line of King's Highway, and the Point of Beginning. From the Point of Beginning run N.00°05'22" E., along aforesaid East right-of-way, 614.19 feet; thence East, 638.29 feet; thence S. 00°56'56" W., 614.19 feet to the South Section Line; thence West, along said Section Line, 638.70 feet to the Point of Beginning.
All the above containing 9.00 acres, more or less.

**The above described property is not now nor ever has been the homestead of the Grantor.**


Picos Rd
Samba St
713
Graham Rd
Graham Rd
Copenhaver Rd
95
Kings Hwy Commerce Center (34.32 ac)
Research Center Rd
713
95
N
Google Earth
2000 ft

# Kings Highway Commerce Center

## Aerial

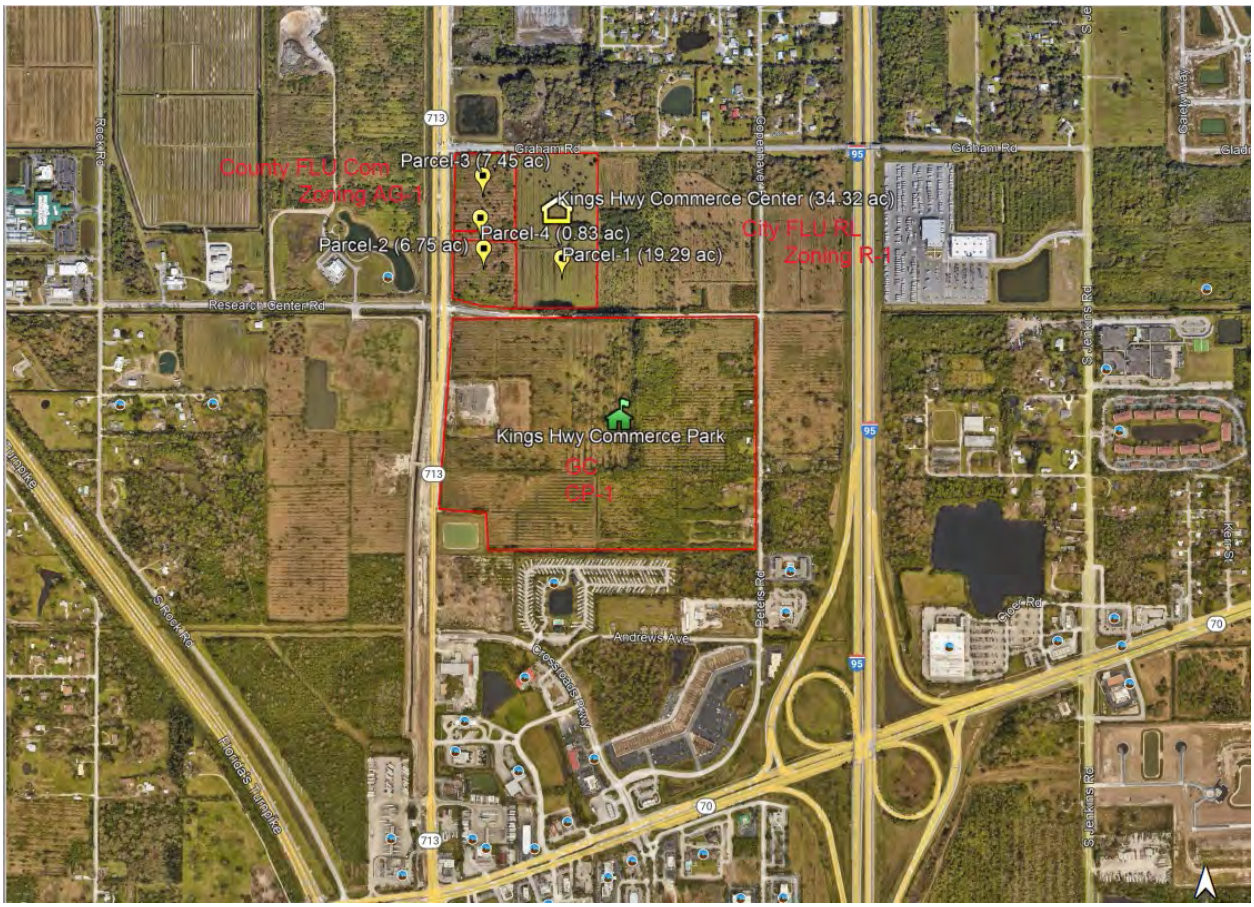



EXHIBIT - A

# King Highway Commerce Center

# City of Fort Pierce Zoning Map

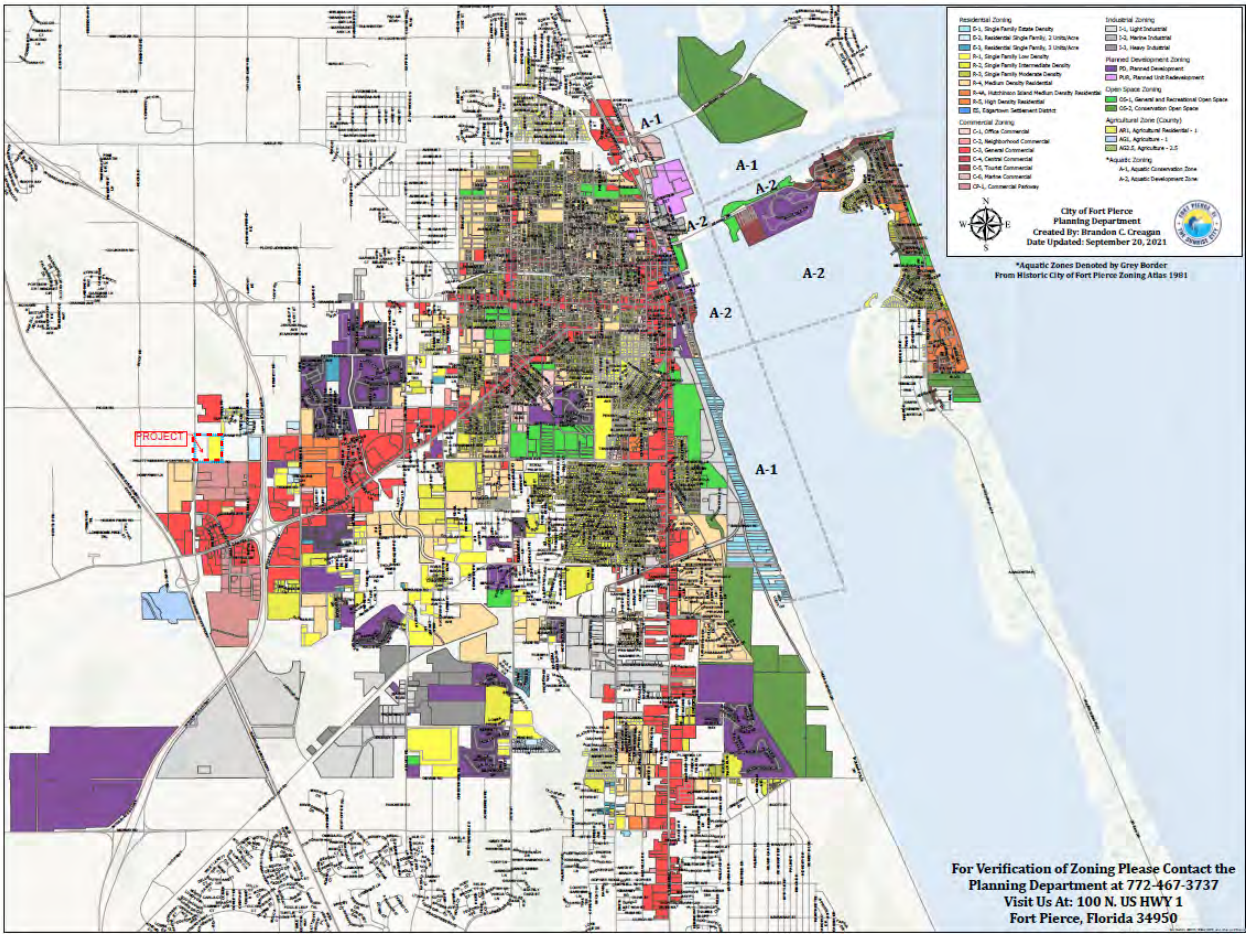



EXHIBIT - C

# King Highway Commerce Center

# City of Fort Pierce Zoning Map

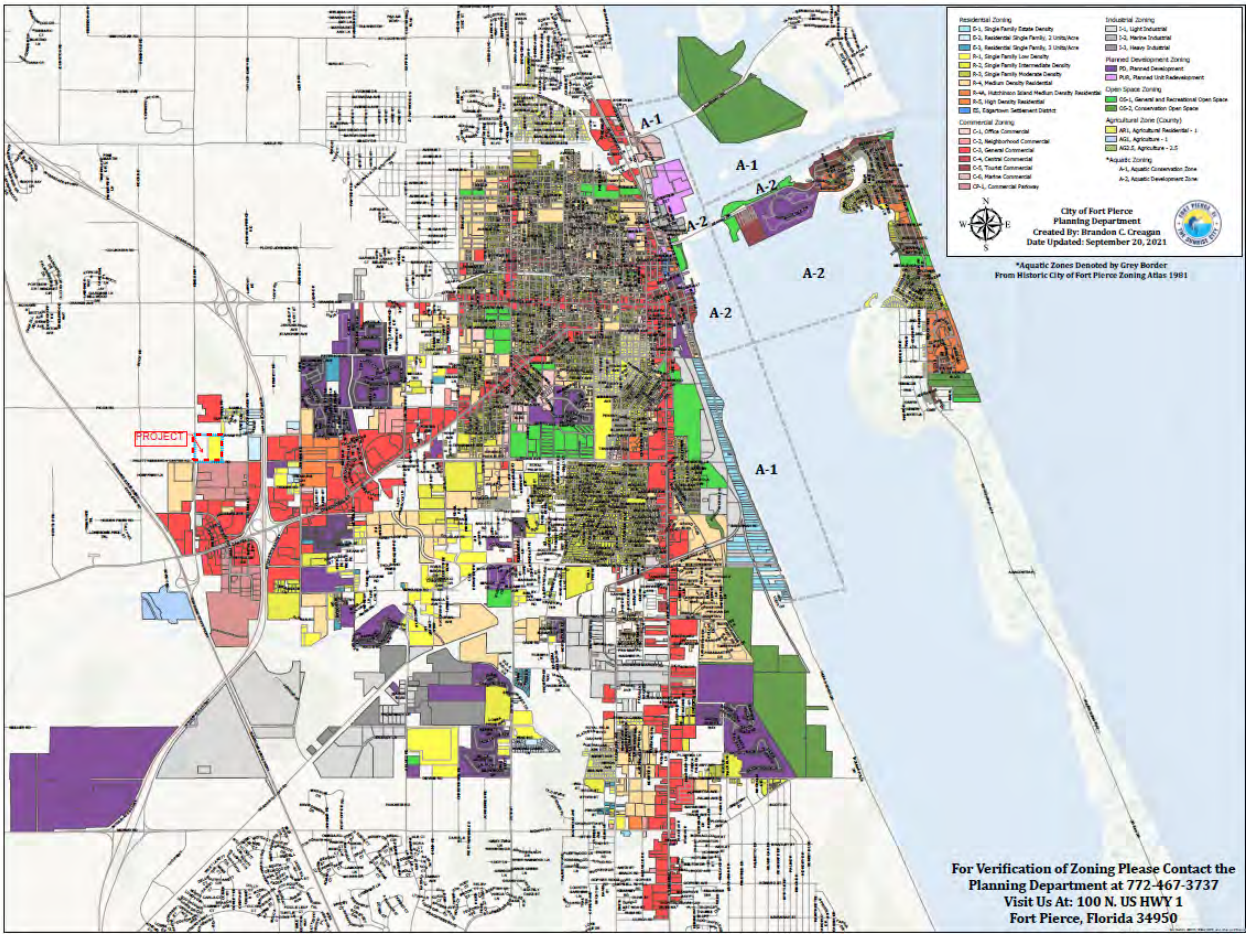



EXHIBIT - C

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## Property Identification

Site Address: TBD
Sec/Town/Range: 13/35S/39E
Parcel ID: 2313-333-0001-000-7
Jurisdiction: Saint Lucie County

Use Type: 6000
Account #: 156018
Map ID: 23/13S
Zoning: AG-1 Count

## Ownership

Shad Properties Group LLC

6301 W Broward Blvd
Plantation, FL 33317



## Legal Description

13 35 39 THAT PART OF SEC MPDAF: FROM SW COR OF SW 1/4, TH N 89 44 39 E 25 FT, TH N 00 11 05 W 614.19 FT, TH N 89 44 38 E 110 FT TO POB; TH CONT N 89 44 38 E 528.29 FT, TH S 00 56 56 W 614.19 FT TO S LI OF SEC, THE S 89 44 39 W 62.45 FT, TH N 00 15 21 W 44.07 FT, TH S 89 44 39 W 83.73 FT TO CURVE CONC NE, R OF 776 FT, TH NWLY ALG ARC 201.78 FT TO TO CURVE CONC SW, R OF 886 FT, TH NWLY ALG ARC 162.30 FT TO CURVE CONC NE, R OF 25 FT, TH NWLY ALG ARC 37.38 FT, TH N 00 11 05 W 491.91 FT TO POB (6.752 AC - 294,117 SF) (OR 2095-1237)

## Current Values

| | |
|---|---|
| Just/Market Value: | $472,640 |
| Assessed Value: | $1,857 |
| Exemptions: | $0 |
| Taxable Value: | $1,857 |

**Property taxes are subject to change upon change of ownership.**

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

Taxes for this parcel: SLC Tax Collector's Office
Download TRIM for this parcel: Download PDF

## Total Areas

| | |
|---|---|
| Finished/Under Air (SF): | 0 |
| Gross Sketched Area (SF): | 0 |
| Land Size (acres): | 6.75 |
| Land Size (SF): | 294,117 |

## Building Design Wind Speed

| Occupancy Category | I | II | III & IV |
|---|---|---|---|
| Speed | 140 | 150 | 160 |

Sources/links:

## Sale History

| Date | Book/Page | Sale Code | Deed | Grantor | Price |
|---|---|---|---|---|---|
| Nov 12, 2004 | 2095 / 1237 | XX00 | WD | Wynne (TR) Matthew L | $540,000 |
| Nov 6, 2003 | 1846 / 1516 | XX00 | WD | A P Hoeffner Sons Inc | $525,000 |

## Building Information (1 of 1)

Finished Area: 0 SF

Gross Sketched Area: 0 SF

Exterior Data

| | | |
|---|---|---|
| View: | Roof Cover: | Roof Structure: |
| Building Type: | Year Built: N/A | Frame: |
| Grade: | Effective Year: N/A | Primary Wall: |
| Story Height: | No. Units: 0 | Secondary Wall: |

Interior Data

| | | |
|---|---|---|
| Bedrooms: 0 | Electric: | Primary Int Wall: |
| Full Baths: 0 | Heat Type: | Avg Hgt/Floor: 0 |
| Half Baths: 0 | Heat Fuel: | Primary Floors: |
| A/C %: 0% | Heated %: N/A% | Sprinkled %: 0% |



Image or Sketch unavailable for display

## Sketch Area Legend

| Sub Area | Description | Area | Fin. Area | Perimeter |
|---|---|---|---|---|

## Special Features and Yard Items

| Type | Qty | Units | Year Blt |
|---|---|---|---|

## Current Year Values

Current Values Breakdown

| | |
|---|---|
| Building: | $0 |
| Land: | $472,640 |
| Just/Market: | $472,640 |
| Ag Credit: | $470,783 |
| Save Our Homes or 10% Cap: | $0 |
| Assessed: | $1,857 |
| Exemption(s): | $0 |
| Taxable: | $1,857 |

Current Year Exemption Value Breakdown

Current Year Special Assessment Breakdown

| Start Year | AssessCode | Units | Description | Amount |
|---|---|---|---|---|
| 2017 | 0054 | 6.752 | North St. Lucie Water Management District | $145.17 |

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office.

## Historical Values

| Year | Just/Market | Assessed | Exemptions | Taxable |
|---|---|---|---|---|
| 2021 | $472,640 | $1,857 | $0 | $1,857 |
| 2020 | $472,640 | $1,857 | $0 | $1,857 |
| 2019 | $472,640 | $1,857 | $0 | $1,857 |
| 2018 | $472,640 | $1,857 | $0 | $1,857 |

## Permits

| Number | Issue Date | Description | Amount | Fee |
|---|---|---|---|---|

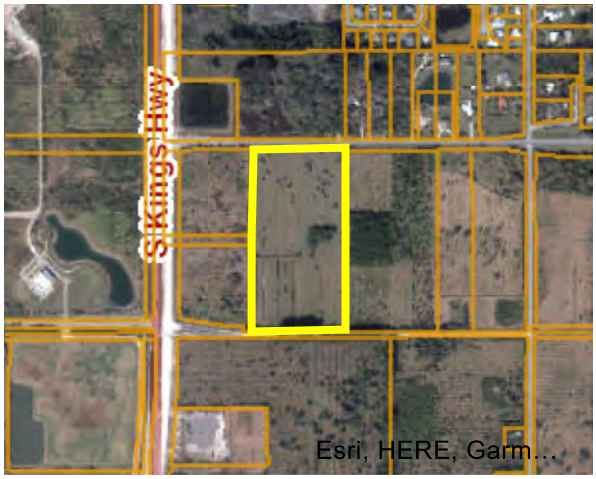
Notice: This does not necessarily represent all the permits for this property.
Click the following link to check for additional permit data in Saint Lucie County

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
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# Saint Lucie County Property Appraiser
Michelle Franklin CFA

Report generated: Monday, May 9, 2022

## Parcel Report







## Parcel

| | |
|---|---|
| **PARCELNO:** | 2313-331-0000-000-4 |
| **Property ID:** | 13744 |
| **Owner1:** | J A Enterprises Inc |
| **SiteAddress:** | White RD |

## Owner

| | |
|---|---|
| **Owner1:** | J A Enterprises Inc |
| **Owner2:** | |
| **Owner3:** | |
| **MailingAddress:** | 100 Davit DR North Palm Beach, FL 33408-5021 |

## Overview

| | |
|---|---|
| **PrimaryLandUse:** | 6000 - GRZNG SLD CP |
| **DistrictGroup:** | 0022 - Fort Pierce |
| **Subdivision:** | Metes and Bounds |
| **Just/Market Value:** | $434,025 |
| **FinishedArea:** | |
| **Acres:** | 19.29 |
| **TotalArea:** | 840,272.4 |

## Legal Description

**LegalDescription:** 13 35 39 E 1/2 OF SW 1/4 OF SW 1/4-LESS N 40 FT AND LESS S 35 FT FOR RD RS/W- (19.29 AC) (OR 3605-859)

## Value History

| Year | Just/Market Value | Building Value | Land Value | SFYI Value | Assessed Value | Exemption Amount | County Taxable | Save Our Home OR 10% Cap Differential | Ag Credit |
|---|---|---|---|---|---|---|---|---|---|
| 2021 | $434,025 | $0 | $434,025 | $0 | $5,305 | $0 | $5,305 | $0 | $428,720 |
| 2020 | $434,025 | $0 | $434,025 | $0 | $5,305 | $0 | $5,305 | $0 | $428,720 |
| 2019 | $370,368 | $0 | $370,368 | $0 | $5,305 | $0 | $5,305 | $0 | $365,063 |
| 2018 | $370,368 | $0 | $370,368 | $0 | $5,305 | $0 | $5,305 | $0 | $365,063 |

## Tax Links

SLC Tax Collector's Office taxes for this parcel

Download TRIM notice for this parcel

## Special Assessments

| Description | Start Year | Units | Amount |
|---|---|---|---|
| North St. Lucie Water Management District | 2013 | 19.29 | 395.45 |
| Fort Pierce Stormwater Charge | 2006 | 53 | 3,657 |

## Improvements

| | |
|---|---|
| **Building Sequence:** | 1 |
| **Bedrooms:** | 0 |
| **Bathrooms:** | 0 |
| **Building Type:** | - |
| **Story Height:** | |
| **No of Living Units:** | |
| **Total Finished Area:** | 0 |
| **Gross Sketched Area:** | 0 |
| **Year Built:** | |
| **Effective Year:** | |
| **Primary Roof Cover:** | |
| **Primary Roof Structure:** | |
| **Primary Wall:** | |
| **A/C %:** | 0 |

## Land Lines

| Line Number | Units | Unit Type |
|---|---|---|
| 1 | 19.29 | MACR |
| 2 | 19.29 | CACR |

## Sales History

| Sale Date | Sale Price | Sale Code | Deed Type | Grantor | Book Page | View Document |
|---|---|---|---|---|---|---|
| 02/18/2014 | $70,100 | 0111 | CT | Graham Groves Development LLC | 3605-859 | Clerk of Courts |
| 06/10/2005 | $1,400,000 | XX01 | SP | Graham Groves | 2276-2278 | Clerk of Courts |
| 04/07/1995 | $221,900 | XX00 | WD | Kenneth H Lelly | 951-771 | Clerk of Courts |
| 12/19/1994 | $100 | XX01 | WD | Kenneth H Lelly | 934-1835 | Clerk of Courts |
| 08/01/1980 | $124,900 | XX00 | CV | | 338-2795 | Clerk of Courts |

## Photos



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## Property Identification

Site Address: KINGS HWY
Sec/Town/Range: 13/35S/39E
Parcel ID: 2313-332-0000-000-7
Jurisdiction: Saint Lucie County

Use Type: 6000
Account #: 13745
Map ID: 23/13S
Zoning: AG-1 Count

## Ownership

Matthew Lyle Wynne LLC

8000 S US Highway 1 Ste 402
Port St Lucie, FL 34952




## Legal Description

13 35 39 FROM SW COR OF SEC RUN N 89 44 39 E ALG S LI OF SEC 25 FT, TH N 00 11 05 W 682.41 FT, TH N 89 44 38 E 110 FT TO POB; TH N 00 11 05 W 590.70 FT TO CURVE CONC SE, R OF 25 FT, TH NELY ALG ARC 39.25 FT TO SLY RD R/W LI OF GRAHAM RD, TH N 89 57 26 E ALG S R/W LI 502.85 FT,TH S 00 56 56 W 615.68 FT, TH S 89 44 38 W 528.29 FT TO POB (7.452 AC - 324,609 SF) (OR 2095-1248: 2926-55: 3128-1586)

## Current Values

| | |
|---|---|
| Just/Market Value: | $391,230 |
| Assessed Value: | $2,049 |
| Exemptions: | $0 |
| Taxable Value: | $2,049 |

**Property taxes are subject to change upon change of ownership.**

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

Taxes for this parcel: SLC Tax Collector's Office
Download TRIM for this parcel: Download PDF

## Total Areas

| | |
|---|---|
| Finished/Under Air (SF): | 0 |
| Gross Sketched Area (SF): | 0 |
| Land Size (acres): | 7.45 |
| Land Size (SF): | 324,609 |

## Building Design Wind Speed

| Occupancy Category | I | II | III & IV |
|---|---|---|---|
| Speed | 140 | 150 | 160 |

Sources/links:

## Sale History

| Date | Book/Page | Sale Code | Deed | Grantor | Price |
|---|---|---|---|---|---|
| Sep 11, 2009 | 3128 / 1586 | 0111 | WD | Matthew Lyle Wynne LLC | $100 |
| Jan 9, 2008 | 2926 / 0055 | XX02 | WD | Agler Ben | $250,000 |
| Nov 12, 2004 | 2095 / 1248 | XX00 | WD | Wynne (TR) Matthew L | $800,000 |
| Nov 6, 2003 | 1846 / 1516 | XX00 | WD | A P Hoeffner Sons Inc | $525,000 |
| Jan 1, 1979 | 0322 / 2838 | XX01 | CV | | $0 |

## Building Information (1 of 1)

Finished Area: 0 SF

Gross Sketched Area: 0 SF

Exterior Data

| | | |
|---|---|---|
| View: | Roof Cover: | Roof Structure: |
| Building Type: | Year Built: N/A | Frame: |
| Grade: | Effective Year: N/A | Primary Wall: |

| | | |
|---|---|---|
| Story Height: | No. Units: 0 | Secondary Wall: |

Interior Data

| | | |
|---|---|---|
| Bedrooms: 0 | Electric: | Primary Int Wall: |
| Full Baths: 0 | Heat Type: | Avg Hgt/Floor: 0 |
| Half Baths: 0 | Heat Fuel: | Primary Floors: |
| A/C %: 0% | Heated %: N/A% | Sprinkled %: 0% |




Image or Sketch unavailable for display

## Sketch Area Legend

| Sub Area | Description | Area | Fin. Area | Perimeter |
|---|---|---|---|---|

## Special Features and Yard Items

| Type | Qty | Units | Year Blt |
|---|---|---|---|

## Current Year Values

Current Values Breakdown

| | |
|---|---|
| Building: | $0 |
| Land: | $391,230 |
| Just/Market: | $391,230 |
| Ag Credit: | $389,181 |
| Save Our Homes or 10% Cap: | $0 |
| Assessed: | $2,049 |
| Exemption(s): | $0 |
| Taxable: | $2,049 |

Current Year Exemption Value Breakdown

Current Year Special Assessment Breakdown

| Start Year | AssessCode | Units | Description | Amount |
|---|---|---|---|---|
| 2016 | 0054 | 7.452 | North St. Lucie Water Management District | $152.77 |

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office.

## Historical Values

| Year | Just/Market | Assessed | Exemptions | Taxable |
|---|---|---|---|---|
| 2021 | $391,230 | $2,049 | $0 | $2,049 |
| 2020 | $391,230 | $2,049 | $0 | $2,049 |
| 2019 | $391,230 | $2,049 | $0 | $2,049 |
| 2018 | $391,230 | $2,049 | $0 | $2,049 |

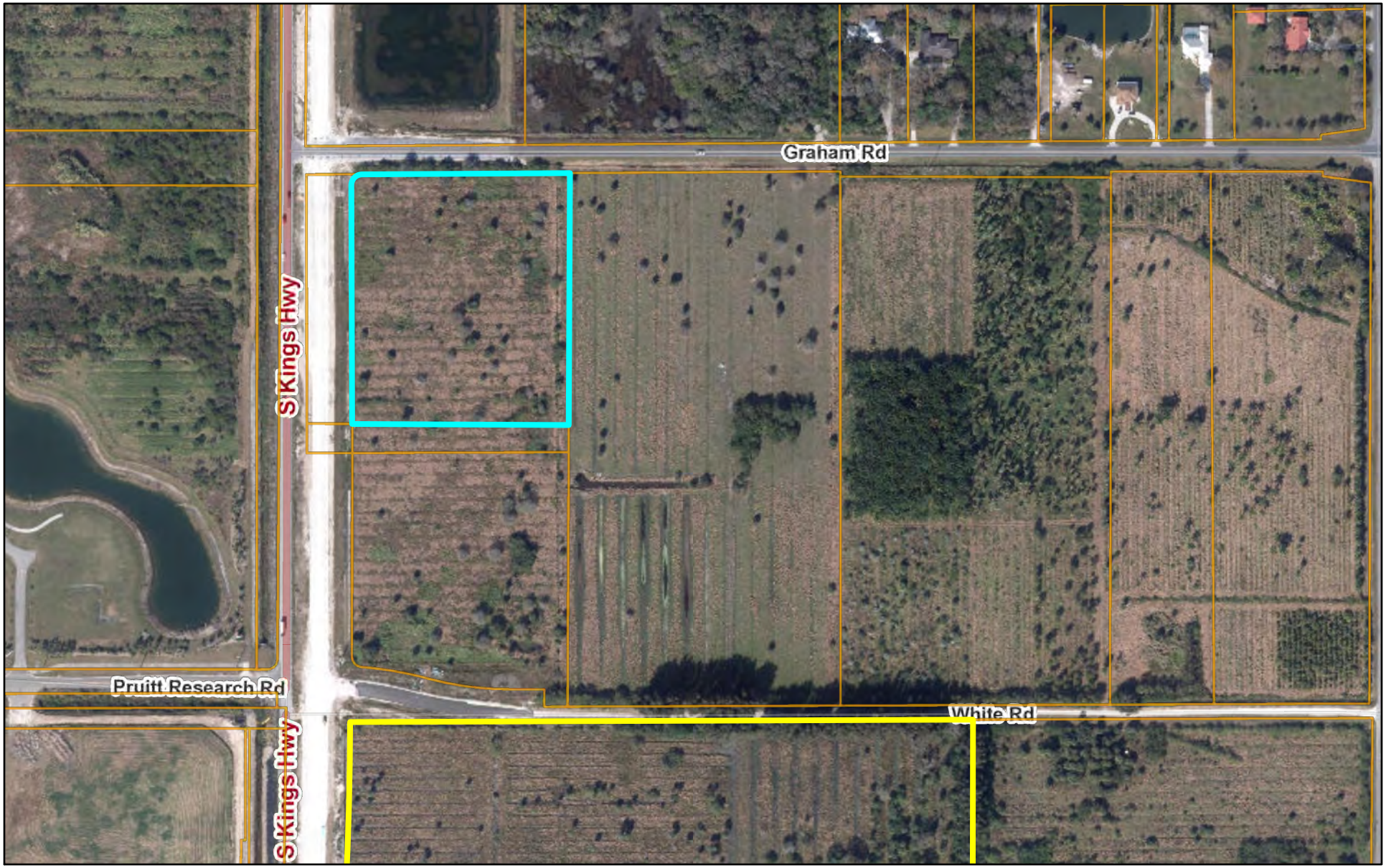
## Permits

| Number | Issue Date | Description | Amount | Fee |
|---|---|---|---|---|

Notice: This does not necessarily represent all the permits for this property.
Click the following link to check for additional permit data in Saint Lucie County

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# Saint Lucie County Property Appraiser




June 15, 2022

1:4,514

0 187.5 375 750 ft

0 55 110 220 m

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

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## Property Identification

Site Address: KINGS HWY
Sec/Town/Range: 13/35S/39E
Parcel ID: 2313-332-0000-010-0
Jurisdiction: Saint Lucie County

Use Type: 6000
Account #: 174934
Map ID: 23/13S
Zoning: AG-1 Count



## Ownership

Matthew Lyle Wynne II LLC

8000 S US Highway 1 Ste 402
Port St Lucie, FL 34952

## Legal Description

13 35 39 FROM SW COR OF SEC TH N 89 44 39 E ALG S LI OF SEC 25 FT, TH N 00 11 05 W 614.19 FT, TH N 89 44 38 E 110 FT TO POB; TH N 00 11 05 W 68.22 FT, TH N 89 57 26 E 528.29 FT, TH S 00 56 56 E 68 FT, TH S 89 44 38 W 528.29 FT TO POB (0.83AC - 36,155 SF) (OR 3128-1592)

## Current Values

| | |
|---|---|
| Just/Market Value: | $43,575 |
| Assessed Value: | $228 |
| Exemptions: | $0 |
| Taxable Value: | $228 |

**Property taxes are subject to change upon change of ownership.**

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

Taxes for this parcel: SLC Tax Collector's Office
Download TRIM for this parcel: Download PDF

## Total Areas

| | |
|---|---|
| Finished/Under Air (SF): | 0 |
| Gross Sketched Area (SF): | 0 |
| Land Size (acres): | 0.83 |
| Land Size (SF): | 36,155 |

## Building Design Wind Speed

| Occupancy Category | I | II | III & IV |
|---|---|---|---|
| Speed | 140 | 150 | 160 |

Sources/links:

## Sale History

| Date | Book/Page | Sale Code | Deed | Grantor | Price |
|---|---|---|---|---|---|
| Sep 11, 2009 | 3128 / 1592 | 0001 | WD | Agler Ben | $550,000 |
| Sep 11, 2009 | 3128 / 1586 | 0130 | WD | Matthew Lyle Wynne LLC | $100 |
| Jan 9, 2008 | 2926 / 0055 | XX02 | WD | Agler Ben | $250,000 |

## Building Information (1 of 1)

Finished Area: 0 SF

Gross Sketched Area: 0 SF

Exterior Data

| | | |
|---|---|---|
| View: | Roof Cover: | Roof Structure: |
| Building Type: | Year Built: N/A | Frame: |
| Grade: | Effective Year: N/A | Primary Wall: |
| Story Height: | No. Units: 0 | Secondary Wall: |

Interior Data

| | | |
|---|---|---|
| Bedrooms: 0 | Electric: | Primary Int Wall: |
| Full Baths: 0 | Heat Type: | Avg Hgt/Floor: 0 |

| | | |
|---|---|---|
| Half Baths: 0 | Heat Fuel: | Primary Floors: |
| A/C %: 0% | Heated %: N/A% | Sprinkled %: 0% |





## Sketch Area Legend

| Sub Area | Description | Area | Fin. Area | Perimeter |
|---|---|---|---|---|

## Special Features and Yard Items

| Type | Qty | Units | Year Blt |
|---|---|---|---|

## Current Year Values

Current Values Breakdown

| | |
|---|---|
| Building: | $0 |
| Land: | $43,575 |
| Just/Market: | $43,575 |
| Ag Credit: | $43,347 |
| Save Our Homes or 10% Cap: | $0 |
| Assessed: | $228 |
| Exemption(s): | $0 |
| Taxable: | $228 |

Current Year Exemption Value Breakdown

Current Year Special Assessment Breakdown

| Start Year | AssessCode | Units | Description | Amount |
|---|---|---|---|---|
| 2016 | 0054 | 0.83 | North St. Lucie Water Management District | $25.00 |

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office.

## Historical Values

| Year | Just/Market | Assessed | Exemptions | Taxable |
|---|---|---|---|---|
| 2021 | $43,575 | $228 | $0 | $228 |
| 2020 | $43,575 | $228 | $0 | $228 |
| 2019 | $43,575 | $228 | $0 | $228 |
| 2018 | $43,575 | $228 | $0 | $228 |

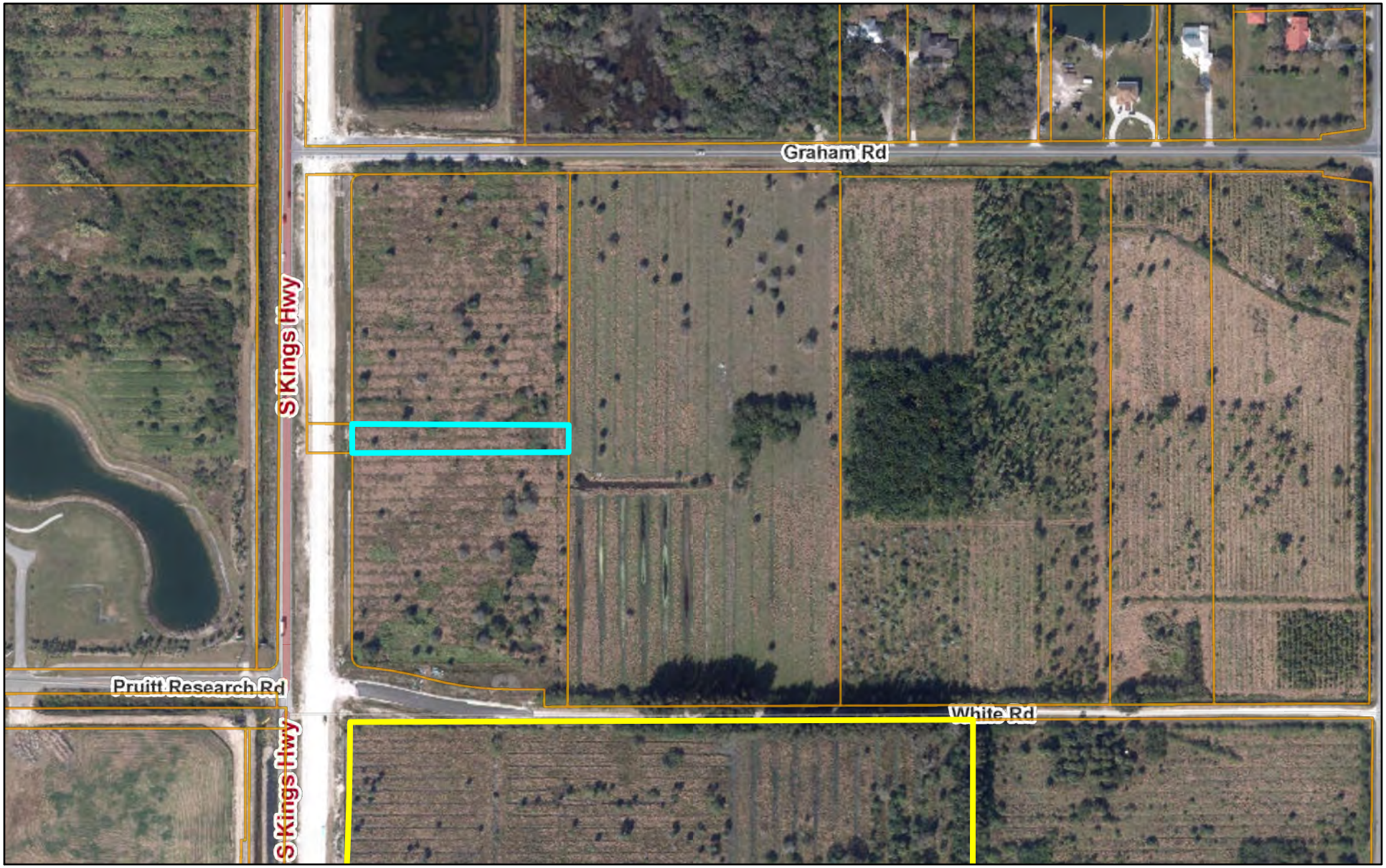
## Permits

| Number | Issue Date | Description | Amount | Fee |
|---|---|---|---|---|

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Click the following link to check for additional permit data in Saint Lucie County

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# Saint Lucie County Property Appraiser



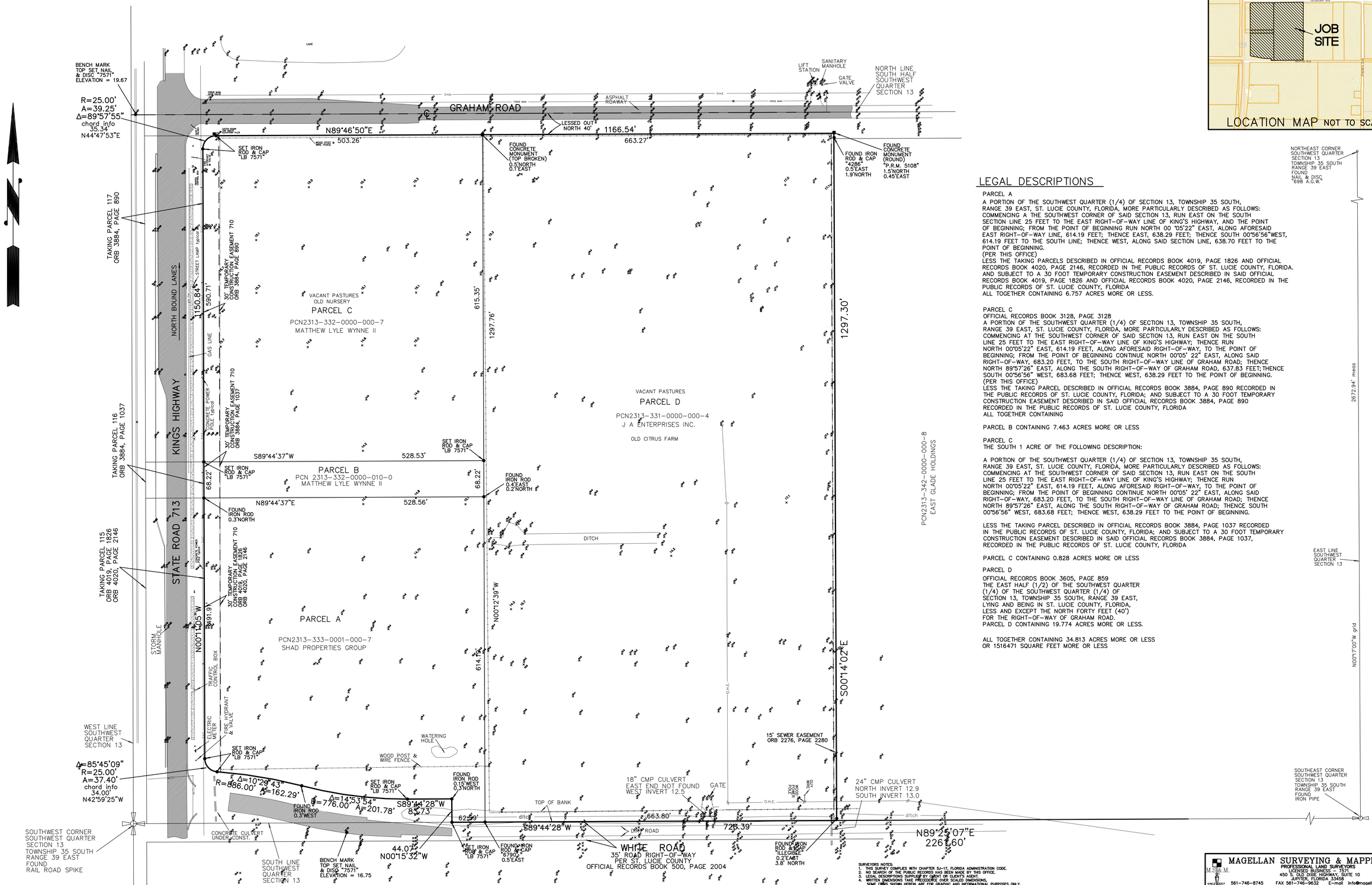

June 15, 2022

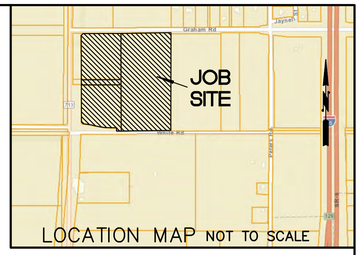
1:4,514

0 187.5 375 750 ft

0 55 110 220 m

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),




## LEGAL DESCRIPTIONS

PARCEL A
A PORTION OF THE SOUTHWEST QUARTER (1/4) OF SECTION 13, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING A THE SOUTHWEST CORNER OF SAID SECTION 13, RUN EAST ON THE SOUTH SECTION LINE 25 FEET TO THE EAST RIGHT-OF-WAY LINE OF KING'S HIGHWAY, AND THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING RUN NORTH 00 '05'22" EAST, ALONG AFORESAID EAST RIGHT-OF-WAY LINE, 614.19 FEET; THENCE EAST, 638.29 FEET; THENCE SOUTH 00'56'56"WEST, 614.19 FEET TO THE SOUTH LINE; THENCE WEST, ALONG SAID SECTION LINE, 638.70 FEET TO THE POINT OF BEGINNING.
(PER THIS OFFICE)
LESS THE TAKING PARCELS DESCRIBED IN OFFICIAL RECORDS BOOK 4019, PAGE 1826 AND OFFICIAL RECORDS BOOK 4020, PAGE 2146, RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
AND SUBJECT TO A 30 FOOT TEMPORARY CONSTRUCTION EASEMENT DESCRIBED IN SAID OFFICIAL RECORDS BOOK 4019, PAGE 1826 AND OFFICIAL RECORDS BOOK 4020, PAGE 2146, RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA
ALL TOGETHER CONTAINING 6.757 ACRES MORE OR LESS.

PARCEL C
OFFICIAL RECORDS BOOK 3128, PAGE 3128
A PORTION OF THE SOUTHWEST QUARTER (1/4) OF SECTION 13, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 13, RUN EAST ON THE SOUTH LINE 25 FEET TO THE EAST RIGHT-OF-WAY LINE OF KING'S HIGHWAY; THENCE RUN NORTH 00°05'22" EAST, 614.19 FEET, ALONG AFORESAID RIGHT-OF-WAY, TO THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING CONTINUE NORTH 00°05' 22" EAST, ALONG SAID RIGHT-OF-WAY, 683.20 FEET, TO THE SOUTH RIGHT-OF-WAY LINE OF GRAHAM ROAD; THENCE NORTH 89°57'26" EAST, ALONG THE SOUTH RIGHT-OF-WAY OF GRAHAM ROAD, 637.83 FEET; THENCE SOUTH 00°56'56" WEST, 683.68 FEET; THENCE WEST, 638.29 FEET TO THE POINT OF BEGINNING.
(PER THIS OFFICE)
LESS THE TAKING PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 3884, PAGE 890 RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; AND SUBJECT TO A 30 FOOT TEMPORARY CONSTRUCTION EASEMENT DESCRIBED IN SAID OFFICIAL RECORDS BOOK 3884, PAGE 890 RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA
ALL TOGETHER CONTAINING

PARCEL B CONTAINING 7.463 ACRES MORE OR LESS

PARCEL C
THE SOUTH 1 ACRE OF THE FOLLOWING DESCRIPTION:

A PORTION OF THE SOUTHWEST QUARTER (1/4) OF SECTION 13, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 13, RUN EAST ON THE SOUTH LINE 25 FEET TO THE EAST RIGHT-OF-WAY LINE OF KING'S HIGHWAY; THENCE RUN NORTH 00°05'22" EAST, 614.19 FEET, ALONG AFORESAID RIGHT-OF-WAY, TO THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING CONTINUE NORTH 00°05' 22" EAST, ALONG SAID RIGHT-OF-WAY, 683.20 FEET, TO THE SOUTH RIGHT-OF-WAY LINE OF GRAHAM ROAD; THENCE NORTH 89°57'26" EAST, ALONG THE SOUTH RIGHT-OF-WAY OF GRAHAM ROAD; THENCE SOUTH 00°56'56" WEST, 683.68 FEET; THENCE WEST, 638.29 FEET TO THE POINT OF BEGINNING.

LESS THE TAKING PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 3884, PAGE 1037 RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; AND SUBJECT TO A 30 FOOT TEMPORARY CONSTRUCTION EASEMENT DESCRIBED IN SAID OFFICIAL RECORDS BOOK 3884, PAGE 1037, RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA

PARCEL C CONTAINING 0.828 ACRES MORE OR LESS

PARCEL D
OFFICIAL RECORDS BOOK 3605, PAGE 859
THE EAST HALF (1/2) OF THE SOUTHWEST QUARTER (1/4) OF THE SOUTHWEST QUARTER (1/4) OF SECTION 13, TOWNSHIP 35 SOUTH, RANGE 39 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA, LESS AND EXCEPT THE NORTH FORTY FEET (40') FOR THE RIGHT-OF-WAY OF GRAHAM ROAD.
PARCEL D CONTAINING 19.774 ACRES MORE OR LESS.

ALL TOGETHER CONTAINING 34.813 ACRES MORE OR LESS
OR 1516471 SQUARE FEET MORE OR LESS

NOTE:
THIS SURVEY PERFORMED WITHOUT BENEFIT OF TITLE

SURVEYORS NOTES:
1. THIS SURVEY COMPLIES WITH CHAPTER 5J-17, FLORIDA ADMINISTRATION CODE.
2. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN MADE BY THIS OFFICE.
3. LEGAL DESCRIPTIONS SUPPLIED BY CLIENT OR CLIENT'S AGENT.
4. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. SOME ITEMS SHOWN HEREIN ARE FOR GRAPHIC AND INFORMATIONAL PURPOSES ONLY.
5. VISIBLE ENCROACHMENTS, IF ANY ARE SHOWN HEREON.
6. THIS SURVEY FOR CONVEYANCE PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION PURPOSES WITHOUT PERMISSION OF THIS SURVEYOR.
7. ELEVATIONS HEREON BASED ON NORTH AMERICAN VERTICAL DATUM (N.A.V.D. 1988)
8. NO UNDERGROUND UTILITIES LOCATED EXCEPT WHERE SHOWN HEREON.
9. THIS IS NOT AN ENVIRONMENTAL SURVEY.
10. THIS SURVEY DOES NOT GUARANTY OWNERSHIP OR RIPARIAN RIGHTS BEYOND MEAN HIGH WATER LINE.
11. BEARINGS HEREON BASED ON THE MEASURED GRID BEARING OF S89°44'28"W ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 13 AND ALL OTHER BEARINGS ARE RELATIVE THERETO.
12. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
13. FORM BOARD TIE-IN & UNDER CONSTRUCTION TIE-IN SURVEYS INTENT IS TO SHOW SETBACK COMPLIANCE; OWNER AND/OR CONTRACTOR ACCEPTS RESPONSIBILITY FOR PLACEMENT OF FORMBOARDS UPON RECEIPT OF THIS SURVEY. PLUMBING AND OTHER UTILITIES INSTALLED AT CONTRACTORS RISK.
14. THIS SURVEY IS NOT VALID WITHOUT SURVEYORS SIGNATURE & EMBOSSED SEAL, OR A VERIFIABLE ELECTRONIC SIGNATURE IN ACCORDANCE WITH STATE STATUTE 668.001-668.006.

RONALD E. STOTLER
PROFESSIONAL SURVEYOR AND MAPPER
CERTIFICATE NO. 5026
STATE OF FLORIDA

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# Boundary Survey & Topo

Prepared For: J A LEGACY DEVELOPMENT PARTNERS, LLC

| Drawn by RES | Date Of Survey JULY 20, 2022 | Scale 1"= 80' |
|---|---|---|
| Field: TF F.B. 187 Pg32 | | Drawing Number 22-116 |

BOUNDARY, 07-09-2022
REVISIONS:
ADD TOPO, 07-20-2022

# Stormwater Management Report

# For

# Kings Highway Commerce Center

**Ft. Pierce, Florida**

**07/27/2022**


**Prepared By:**

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_____
**Jeff H. Iravani, P.E.**
**Florida Registration # 33155**

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## I. Introduction

The site is located on the north side of White Road 0.1 mile east of Kings Hwy and approximately 1 mile north of Okeechobee Rd (SR-70) and consist of 34.32 ac of land.
See Exhibit-A,

An industrial development including warehouse, distribution and related offices with ultimate buildout of 442 ksf of buildings and supporting infrastructure is proposed.

The site historical discharge is to North St. Lucie River Water Control District (NSLRWCD) Canal-40 along the west side of Kings Hwy via 1-24" RCP and then into the Ten Mile Creek and ultimately into the St. Lucie River North Fork which is considered impaired.

The proposed master drainage system consists of 2 lakes, with wet retention/detention, totaling 3.6 ac and 5 dry detentions totaling 2.96 ac.

The dry detention area shall provide the pre-treatment requirements.

Dischsrge to C-40 is thru a control structure CS-1 located on the NWC of the Lake-1.

The construction of this project shall be phased.
Phase-I includes the master drainage system, the main drive & access to Kings Hwy along w/ 2 dwy onto White Rd.

Phse-II includes Building-II along w/ 2 dwy's onto Graham Rioad.

Off-site improvements include a right turn lanes on Kings Hwy for the main access.

Section 24, Township 35S, Range 39E, City of Fort Pierce, St. Lucie County, Florida

## II. Site Data

| Item | Total (ac) | Phase-I (ac) | Phase-II (ac) |
|---|---|---|---|
| Lot Area | 34.81 | | |
| Phase Area | | 21.04 | 13.76 |
| Bldg | 10.15 | 5.73 | 5.73 |
| Pavt/SW | 13.16 | 7.46 | 5.7 |
| Lake | 3.60 | 3.6 | 0 |
| Impervious Total | 26.91 | 16.79 | 10.12 |
| % Impervious | 77.3% | | |
| Pervious* | 7.90 | 4.25 | 3.65 |
| Dry Detentions | 2.96 | 2.96 | 0 |
| Pervious w/o dry det | 4.94 | 1.29 | 3.65 |
| Impervious w/o lakes | 23.31 | 13.19 | 10.12 |

*Includes Dry Detentions

S = 6.8" (Depressional) x (1-0.773 x 0.75 = 1.16 in
**CN = 89.3**

## III. Off-site Discharge

This project has Kings Hwy to the west, Graham Road to the north and Peter's road to the east. There is agiriculotural parcel to the east that discahrges to a ditch along White Road and to C-37 on the east siode of Peters Rd.

## IV. Wetlands

There are no wetlands on this property**.** As per aerial photograph of the site, the majority of the site is utilized for agrilciultural use.

## V. Water Table

The control elevation in the NSLRWCD canal is 11.5 FT, NAVD.
HWT of 12.0 FT, NAVD is assumed for this project.
Control Structure CS-1 bleeder invert elevation (el) is set at 12.65 to provide 0.65' of wet retntion which will be utilized for nutrient traertement.
The lakes start elevations at ICPR is also set at 12.65 to exclude the retention volume from flood routing storage calculations. See Sect XIII.

## VI. Design Criteria

Water Quality
Bleeder el is set @ 12.65 to provide 0.65' of wet retention in the lakes.
Weir el is set @ el 14.3 to provide1.65' of wet detention.
Impaired outfall waters requires add'l 50% water quality.

Required water quality is the greater of below in wet detention x 1.5:

a. 2.5" wet detention over impervious area.
b. 1.25" wet retention over impervious area.
c. 1" wet detention over the entire project area.

**V req wet det** =2.5"A/12(A-lake-Bldg-pervious area)/(A-lake-Bldg)
(2.5"x34.81)(34.81-3.60-10.15-7.9)/(34.81-3.6-10.15))/12 = 4.53 A-F
1"(34.81-3.60-2.96) /12 = 2.35 A-F
4.53 x 1.5 = **6.80 A-F**

**V prop wet det** =1.65' (lake area (@ 12.65 + @ 14.3)/2 = 1.65'(3.77+4.01)/2= **6.42 A-F**

**V prop wet ret** = 0.65' (lake area (@ 12.0 + @ 12.65)/2 =0.65'(3.60+3.77)/2= **2.40 A-F**

**V req pre-treat** = (34.81-3.60-2.96) x 0.5"/12 = **1.18 A-F**

Dry detention will be utilized.
0.9' of dry detention is proposed at all dry detention areas.
**V dry det**= 0.9'(A@ 13.0 bottom+ A@ 13.9 weir)/2=0.9(1.11+1.67)/2= **1.25 A-F>1.18**

Dry detention volume would be 75% of wet detention.
Retention volume would be 50% of wet detention.

**Prop water quality/Req'd** = 6.42/6.8 + 1.25/(0.75 x 6.8) + 2.4/(0.5 x 6.8) = **190%**

Nutrient treatment
Wet retention shall be utilized.
**Prop retention** = 2.4 a-f x12/ (34.81-3.6 lake-2,96 dry det) = **1.02"**

## VI. Design Criteria, cont'd

Design Elevations
Min Pavt EL
10yr-24hr storm peak stage 14.53 FT, NAVD
Min Pavt EL 15.40 FT

Perimeter Berm EL
10yr-72hr storm peak stage 15.92 FT, NAVD (NSLRWCD req't)
Min perim berm EL 16.23 FT

Min Fin Floor EL
100yr-72hr storm peak stage 16.28 FT, NAVD
Min F.F. EL 17.50 FT

## VII. Allowable Discharge

NSLRWCD allowable discharge is 2" per day for a 10yr-72hr storm. This is a volume-based limitation. There is no limitation on the peak discharge rate.
V allowable (10yr-72hr) = 34.81 ac x 2"/12 = 5.8 A-F /day
V max prop (10yr-72hr) = 1.6 A-F from 60.0-hr to 84.0 hr (see 10yr-72hr storm routing).

## VIII. Bleeder Design

(SFWMD) Bleeder is to discharge 1/2" in 24 hr.
Q SFWMD = 34.81 ac x 1/2" x 43,560/(12 x 3600 x 24) = 73 cfs

$Q = 4.8 \times A \times (H)^{0.5}$
H avg = 0.825'
$0.73 = 4.8 \times A \times 0.825^{0.5}$
A = 0.165 sf = 23.75 sq in
Use 5.5 in dia bleeder

## IX. Utilities

Fort Pierce Utility Authority would be providing water & wastewater services to the proposed development.

## X. Maintenance Entity

The applicant shall be the maintenance entity.

## XI. Irrigation

The lake surface water shall be utilized for irrigation purposes. A water use permit shall be obtained from SFWMD.

## XII. ICPR Flood Routing

The retention volumes are not included in flood routing calculations to be conservative and due to low soil hydraulic conductivity.

Grading assumption for ICPR Input:
1. Surface el's except sidewalk 15.5-17.0
2. F.F. el 17.5

## XIII. Nutrient Removal

St. Lucie River is considered impaired so post development nutrient loading rates, nitrogen (TN) & phosphorus (TP), need to match pre-development.

"Evaluation of Current **S**tormwater **D**esign **C**riteria within **S**tate of **F**lorida "final report (**FSDC**) dated June 2007 is utilized in this section. The referenced portions of FSDC are attached under Appendix. The 2012 South Florida Environmental Report Appendix 10-1 (**SFER**) for land use categories in the St. Lucie River Watershed will be used for the nutrient concentrations. SFWMD Vol IV Manual 2012 reference is shown as **SFWMD.**

The project is in Zone-2 per FSDC Fig 4-3

Per FSDC Fig 6.1, BOD removal in excess of 95% shall be achieved if removal efficiency is provided for both nitrogen & phosphorus.

The proposed development is considered industrial. FSDC 4.1.5.
The site was previously developed as citrus groves from before 1968 to mid-1990's & now is used as a pasture. Therefore, unimproved pasture, as defined in Florida Fish & Wildlife "Florida Land Use Classification…, December 2012, is assumed for the pre-development land use. Existing soil is assumed to be depressional.

**Pre Dev-Nutrient Loading Basin 34.81 ac**
**Post Dev Nutrient Loading Basin** = 34.81-3.6 lake-2.96 dry det = **28.25 ac**

Pre-Development
Type D soil
Pasture in good condition,
**NDCIA CN = 80** SCS TR 55 (SCS) Table 2-2c

## XIII. Nutrient Removal cont'd

Post Development
Open Space in good condition
Pervious area CN = 80 SCS Table 2-2a
NDCIA Imp = 0
NDCIA Total = 4.94 ac Perv w/o dry det Sec II

**NDCIA CN = 80**
DCIA = 23.31 ac Imp w/o lake Sec II
**DCIA %** = (23.31/(28.25) = **82.5%**

Pre Dev Mean Annual C = 0.111 FSDC Appendix C Zone-2
Post Dev Mean Annual C = 0.688

Post-dev vs Pre dev loading
TN 1.27 mg/l vs 1.19 mg/l SFER
Req % removal = ((1.27 x0.688x28.25) -(1.19 x0.111 x34.81))/ (1.27x0.688x28.25) = 81.4%
TP 0.37 mg/l vs 0.25 mg/l SFER
Req % removal = ((0.37x0.688x28.25) -(0.25 x0.111 x34.81))/ (0.37x0.688x28.25) = 86.6%

Annual rainfall = 53.5" FSDC Appendix A-3
Mean annual runoff = 0.688 x 53.5 = 36.8"
$V_{runoff}$ = 36.8"(28.25ac)/(12x365) = 0.237 A-F /day
$V_{perm\ pool}$ = 33.7 a-f
$T_{wet\ det\ residence}$ = 33.7/0.237 = 142 days

Removal Efficiency (RE)
1" of retention shall be provided
It is proposed to provide 1.25" of retention & wet detention w/ 142 days residency

1" retention has 73.15% RE FSDC Appendix-D Wet detention w/ 142 days residency has 76.9% RE TP FSDC Fig 5-9
42.4% RE TN FSDC Fig 5-10

Overall Removal Efficiency (ORE)
**ORE TN** = 0.7315 + (1-0.7315) (0.424) = **84.5% > 81.4%** FSDC 6.1.2 Eq-1
**ORE TP** = 0.7315 + (1-0.7315) (0.769) = **93.8% > 86.6%**

==========
==== Basins ====
==========

Name: A-DET 1 Node: F-lake 2 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 6.500 Time Shift(hrs): 0.00
Curve Number: 89.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

---

Name: B-DET 2 Node: F-lake 2 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 7.700 Time Shift(hrs): 0.00
Curve Number: 89.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

---

Name: C-DET 3 Node: F-lake 2 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 7.110 Time Shift(hrs): 0.00
Curve Number: 89.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

---

Name: D-DET 45 Node: F-lake 2 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 6.500 Time Shift(hrs): 0.00
Curve Number: 89.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

---

Name: E-lake 1 Node: F-lake 2 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 3.100 Time Shift(hrs): 0.00
Curve Number: 89.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

---

Name: F-lake 2 Node: F-lake 2 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0

Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 2.900 Time Shift(hrs): 0.00
Curve Number: 89.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

---

Name: H-PreDev Node: H-PreDev Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 15.00
Area(ac): 34.810 Time Shift(hrs): 0.00
Curve Number: 80.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: A-DET 1 Base Flow(cfs): 0.000 Init Stage(ft): 12.650
Group: BASE Warn Stage(ft): 17.500
Type: Stage/Area

| Stage(ft) | Area(ac) |
|---|---|
| 12.900 | 0.0000 |
| 13.000 | 0.2200 |
| 15.500 | 0.7400 |
| 17.000 | 3.7000 |

---

Name: B-DET 2 Base Flow(cfs): 0.000 Init Stage(ft): 12.650
Group: BASE Warn Stage(ft): 17.500
Type: Stage/Area

| Stage(ft) | Area(ac) |
|---|---|
| 12.900 | 0.0000 |
| 13.000 | 0.2200 |
| 15.500 | 0.7700 |
| 17.000 | 4.9000 |

---

Name: C-DET 3 Base Flow(cfs): 0.000 Init Stage(ft): 12.650
Group: BASE Warn Stage(ft): 17.500
Type: Stage/Area

| Stage(ft) | Area(ac) |
|---|---|
| 12.900 | 0.0000 |
| 13.000 | 0.2300 |
| 15.500 | 0.6600 |
| 17.000 | 4.5700 |

---

Name: D-DET 45 Base Flow(cfs): 0.000 Init Stage(ft): 12.650
Group: BASE Warn Stage(ft): 17.500
Type: Stage/Area

| Stage(ft) | Area(ac) |
|---|---|

| | |
|---|---|
| 12.900 | 0.0000 |
| 13.000 | 0.2300 |
| 15.500 | 0.6600 |
| 17.000 | 4.5700 |

Name: E-lake 1 Base Flow(cfs): 0.000 Init Stage(ft): 12.650
Group: BASE Warn Stage(ft): 17.500
Type: Stage/Area

| Stage(ft) | Area(ac) |
|---|---|
| 12.640 | 0.0000 |
| 12.650 | 1.7600 |
| 16.000 | 2.1600 |
| 16.500 | 3.1000 |

Name: F-lake 2 Base Flow(cfs): 0.000 Init Stage(ft): 12.650
Group: BASE Warn Stage(ft): 17.500
Type: Stage/Area

| Stage(ft) | Area(ac) |
|---|---|
| 12.640 | 0.0000 |
| 12.650 | 2.0100 |
| 16.000 | 2.3900 |
| 16.500 | 2.9000 |

Name: G-CANAL Base Flow(cfs): 0.000 Init Stage(ft): 11.500
Group: BASE Warn Stage(ft): 14.500
Type: Time/Stage

| Time(hrs) | Stage(ft) |
|---|---|
| 0.00 | 11.500 |
| 60.00 | 15.500 |
| 120.00 | 11.500 |

Name: H-PreDev Base Flow(cfs): 0.000 Init Stage(ft): 14.500
Group: BASE Warn Stage(ft): 18.000
Type: Stage/Area

| Stage(ft) | Area(ac) |
|---|---|
| 14.500 | 0.0000 |
| 16.000 | 34.8100 |

## Pipes

Name: LAKE-21 From Node: F-lake 2 Length(ft): 172.00
Group: BASE To Node: E-lake 1 Count: 1
Friction Equation: Automatic
Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.00
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dc
Stabilizer Option: None

| | UPSTREAM | DOWNSTREAM |
|---|---|---|
| Geometry: | Circular | Circular |
| Span(in): | 36.00 | 36.00 |
| Rise(in): | 36.00 | 36.00 |
| Invert(ft): | 7.000 | 7.000 |
| Manning's N: | 0.013000 | 0.013000 |
| Top Clip(in): | 0.000 | 0.000 |
| Bot Clip(in): | 0.000 | 0.000 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

==========
==== Drop Structures ==========
==========

| | | | | | |
|---|---|---|---|---|---|
| Name: | CS-1 | From Node: | E-lake 1 | Length(ft): | 230.00 |
| Group: | BASE | To Node: | G-CANAL | Count: | 1 |

| | UPSTREAM | DOWNSTREAM | | |
|---|---|---|---|---|
| Geometry: | Circular | Circular | Friction Equation: | Average Conveyance |
| Span(in): | 24.00 | 24.00 | Solution Algorithm: | Most Restrictive |
| Rise(in): | 24.00 | 24.00 | Flow: | None |
| Invert(ft): | 8.500 | 8.000 | Entrance Loss Coef: | 0.000 |
| Manning's N: | 0.013000 | 0.013000 | Exit Loss Coef: | 0.000 |
| Top Clip(in): | 0.000 | 0.000 | Outlet Ctrl Spec: | Use dc or tw |
| Bot Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: | Use dn |
| | | | Solution Incs: | 0 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 2 for Drop Structure CS-1 ***

TABLE

| | | | |
|---|---|---|---|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.130 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 12.00 | Invert(ft): | 14.300 |
| Rise(in): | 18.00 | Control Elev(ft): | 14.300 |

*** Weir 2 of 2 for Drop Structure CS-1 ***

TABLE

| | | | |
|---|---|---|---|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.130 |
| Geometry: | Circular | Orifice Disc Coef: | 0.600 |
| Span(in): | 8.75 | Invert(ft): | 12.350 |
| Rise(in): | 8.75 | Control Elev(ft): | 12.350 |

---

| | | | | | |
|---|---|---|---|---|---|
| Name: | CS-12 | From Node: | A-DET 1 | Length(ft): | 130.00 |
| Group: | BASE | To Node: | F-lake 2 | Count: | 1 |

| | UPSTREAM | DOWNSTREAM | | |
|---|---|---|---|---|
| Geometry: | Circular | Circular | Friction Equation: | Average Conveyance |
| Span(in): | 30.00 | 30.00 | Solution Algorithm: | Most Restrictive |
| Rise(in): | 30.00 | 30.00 | Flow: | Both |
| Invert(ft): | 7.000 | 6.500 | Entrance Loss Coef: | 0.000 |
| Manning's N: | 0.013000 | 0.013000 | Exit Loss Coef: | 1.000 |
| Top Clip(in): | 0.000 | 0.000 | Outlet Ctrl Spec: | Use dc or tw |
| Bot Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: | Use dc |
| | | | Solution Incs: | 10 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 2 for Drop Structure CS-12 ***

TABLE

| | | | |
|---|---|---|---|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Horizontal | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 70.00 | Invert(ft): | 13.750 |
| Rise(in): | 35.00 | Control Elev(ft): | 13.750 |

*** Weir 2 of 2 for Drop Structure CS-12 ***

TABLE

| | | | |
|---|---|---|---|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Circular | Orifice Disc Coef: | 0.600 |
| Span(in): | 4.50 | Invert(ft): | 11.500 |
| Rise(in): | 4.50 | Control Elev(ft): | 11.500 |

---

| | | | | | |
|---|---|---|---|---|---|
| Name: | CS-22 | From Node: | B-DET 2 | Length(ft): | 130.00 |
| Group: | BASE | To Node: | F-lake 2 | Count: | 1 |

| | UPSTREAM | DOWNSTREAM | | |
|---|---|---|---|---|
| Geometry: | Circular | Circular | Friction Equation: | Average Conveyance |
| Span(in): | 30.00 | 30.00 | Solution Algorithm: | Most Restrictive |
| Rise(in): | 30.00 | 30.00 | Flow: | Both |
| Invert(ft): | 7.000 | 6.500 | Entrance Loss Coef: | 0.000 |
| Manning's N: | 0.013000 | 0.013000 | Exit Loss Coef: | 1.000 |
| Top Clip(in): | 0.000 | 0.000 | Outlet Ctrl Spec: | Use dc or tw |
| Bot Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: | Use dc |
| | | | Solution Incs: | 10 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 2 for Drop Structure CS-22 ***

TABLE

| | | | |
|---|---|---|---|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Horizontal | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 70.00 | Invert(ft): | 13.750 |
| Rise(in): | 35.00 | Control Elev(ft): | 13.750 |

*** Weir 2 of 2 for Drop Structure CS-22 ***

TABLE

| | | | |
|---|---|---|---|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Circular | Orifice Disc Coef: | 0.600 |
| Span(in): | 4.50 | Invert(ft): | 11.500 |
| Rise(in): | 4.50 | Control Elev(ft): | 11.500 |

---

| | | | | | |
|---|---|---|---|---|---|
| Name: | CS-31 | From Node: | C-DET 3 | Length(ft): | 130.00 |
| Group: | BASE | To Node: | E-lake 1 | Count: | 1 |

| | UPSTREAM | DOWNSTREAM | | |
|---|---|---|---|---|
| Geometry: | Circular | Circular | Friction Equation: | Average Conveyance |
| Span(in): | 30.00 | 30.00 | Solution Algorithm: | Most Restrictive |
| Rise(in): | 30.00 | 30.00 | Flow: | Both |
| | | | Entrance Loss Coef: | 0.000 |

| | | | |
|---|---|---|---|
| Invert(ft): | 7.000 | 6.500 | Exit Loss Coef: 1.000 |
| Manning's N: | 0.013000 | 0.013000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): | 0.000 | 0.000 | Solution Incs: 10 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 2 for Drop Structure CS-31 ***

TABLE

| | | | |
|---|---|---|---|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Horizontal | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 70.00 | Invert(ft): | 13.750 |
| Rise(in): | 35.00 | Control Elev(ft): | 13.750 |

*** Weir 2 of 2 for Drop Structure CS-31 ***

TABLE

| | | | |
|---|---|---|---|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Circular | Orifice Disc Coef: | 0.600 |
| Span(in): | 4.50 | Invert(ft): | 11.500 |
| Rise(in): | 4.50 | Control Elev(ft): | 11.500 |

---

| | | | |
|---|---|---|---|
| Name: | CS-451 | From Node: D-DET 45 | Length(ft): 130.00 |
| Group: | BASE | To Node: E-lake 1 | Count: 1 |

| | UPSTREAM | DOWNSTREAM | | |
|---|---|---|---|---|
| Geometry: | Circular | Circular | Friction Equation: | Average Conveyance |
| Span(in): | 30.00 | 30.00 | Solution Algorithm: | Most Restrictive |
| Rise(in): | 30.00 | 30.00 | Flow: | Both |
| Invert(ft): | 7.000 | 6.500 | Entrance Loss Coef: | 0.000 |
| Manning's N: | 0.013000 | 0.013000 | Exit Loss Coef: | 1.000 |
| Top Clip(in): | 0.000 | 0.000 | Outlet Ctrl Spec: | Use dc or tw |
| Bot Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: | Use dc |
| | | | Solution Incs: | 10 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 2 for Drop Structure CS-451 ***

TABLE

| | | | |
|---|---|---|---|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Horizontal | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 70.00 | Invert(ft): | 13.750 |
| Rise(in): | 35.00 | Control Elev(ft): | 13.750 |

*** Weir 2 of 2 for Drop Structure CS-451 ***

TABLE

| | | | |
|---|---|---|---|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Circular | Orifice Disc Coef: | 0.600 |
| Span(in): | 4.50 | Invert(ft): | 11.500 |
| Rise(in): | 4.50 | Control Elev(ft): | 11.500 |

==========
==== Hydrology Simulations ==========
==========

Name: 100YR-24HR
Filename: C:\ICPRUSER1\10YR-24HR.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 8.00

| Time(hrs) | Print Inc(min) |
|---|---|
| 8.000 | 60.00 |
| 16.000 | 30.00 |
| 24.000 | 60.00 |

---

Name: 100YR-72HR
Filename: C:\ICPRUSER1\100YR-72HR.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: SFWMD72
Rainfall Amount(in): 10.00

| Time(hrs) | Print Inc(min) |
|---|---|
| 48.000 | 60.00 |
| 72.000 | 15.00 |

---

Name: 10YR-24HR
Filename: C:\ICPRUSER1\10YR-24HR.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 5.50

| Time(hrs) | Print Inc(min) |
|---|---|
| 8.000 | 60.00 |
| 16.000 | 30.00 |
| 24.000 | 60.00 |

---

Name: 10YR-72HR
Filename: C:\ICPRUSER1\10 yr 72 hr.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: SFWMD72
Rainfall Amount(in): 8.10

| Time(hrs) | Print Inc(min) |
|---|---|
| 48.000 | 60.00 |
| 72.000 | 15.00 |

---

Name: 25yr-72hr
Filename: C:\ICPRUSER1\25 year 72 hr.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: SFWMD72
Rainfall Amount(in): 9.10

| Time(hrs) | Print Inc(min) |
|---|---|

48.000 60.00
72.000 15.00

---

Name: 5YR-24HR
Filename: C:\ICPRUSER1\5YR-24HR.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 4.60

| Time(hrs) | Print Inc(min) |
|---|---|
| 8.000 | 60.00 |
| 16.000 | 30.00 |
| 24.000 | 60.00 |

==========
==== Routing Simulations ==========
==========

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\ICPRUSER1\100YR-24HR.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 24.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

| Time(hrs) | Print Inc(min) |
|---|---|
| 4.000 | 240.000 |
| 10.000 | 60.000 |
| 12.000 | 15.000 |
| 24.000 | 120.000 |

| Group | Run |
|---|---|
| BASE | Yes |

---

Name: 100YR-72HR Hydrology Sim: 100YR-72HR
Filename: C:\ICPRUSER1\100YR-72HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 72.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

IBP

| Time(hrs) | Print Inc(min) |
|---|---|
| 36.000 | 720.000 |
| 48.000 | 240.000 |
| 60.000 | 60.000 |
| 72.000 | 60.000 |

| Group | Run |
|---|---|

BASE Yes

---

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\ICPRUSER1\10YR-24HR.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 24.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

| Time(hrs) | Print Inc(min) |
|---|---|
| 4.000 | 240.000 |
| 10.000 | 60.000 |
| 12.000 | 15.000 |
| 24.000 | 120.000 |

| Group | Run |
|---|---|
| BASE | Yes |

---

Name: 10YR-72HR Hydrology Sim: 10YR-72HR
Filename: C:\ICPRUSER1\10YR72HR.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 360.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

IBP

| Time(hrs) | Print Inc(min) |
|---|---|
| 36.000 | 120.000 |
| 48.000 | 120.000 |
| 60.000 | 60.000 |
| 96.000 | 60.000 |
| 360.000 | 120.000 |

| Group | Run |
|---|---|
| BASE | Yes |

---

Name: 25yr-72hr Hydrology Sim: 25yr-72hr
Filename: C:\ICPRUSER1\25YR72HR.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 72.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

IBP

| Time(hrs) | Print Inc(min) |
|---|---|
| 36.000 | 120.000 |
| 48.000 | 120.000 |
| 60.000 | 60.000 |
| 72.000 | 60.000 |
| 360.000 | 360.000 |

| Group | Run |
|---|---|
| BASE | Yes |

---

Name: 5YR-24HR Hydrology Sim: 5YR-24HR
Filename: C:\ICPRUSER1\5YR-24HR.I32

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 24.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

| Time(hrs) | Print Inc(min) |
|---|---|
| 4.000 | 240.000 |
| 10.000 | 60.000 |
| 12.000 | 15.000 |
| 24.000 | 120.000 |

| Group | Run |
|---|---|
| BASE | Yes |

Kings Hwy Commerce Center
07/27/22
Max Node
Max Node

| Name | Group | Simulation | Max Time Stage hrs | Max Stage ft | Warning Stage ft | Max Delta Stage ft | Max Surf Area ft2 | Max Time Inflow hrs | Max Inflow cfs | Max Time Outflow hrs | Max Outflow cfs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A-DET 1 | BASE | 100YR-72HR | 71.99 | 16.281 | 17.500 | -0.2500 | 99381 | 0.00 | 0.000 | 61.03 | 1.174 |
| B-DET 2 | BASE | 100YR-72HR | 71.99 | 16.281 | 17.500 | -0.2500 | 127185 | 0.00 | 0.000 | 61.30 | 0.661 |
| C-DET 3 | BASE | 100YR-72HR | 71.99 | 16.279 | 17.500 | -0.2500 | 117241 | 0.00 | 0.000 | 0.00 | 0.265 |
| D-DET 45 | BASE | 100YR-72HR | 71.99 | 16.279 | 17.500 | -0.2500 | 117241 | 0.00 | 0.000 | 0.00 | 0.265 |
| E-lake 1 | BASE | 100YR-72HR | 71.99 | 16.281 | 17.500 | 0.0037 | 117078 | 60.13 | 24.029 | 0.00 | 0.000 |
| F-lake 2 | BASE | 100YR-72HR | 71.99 | 16.282 | 17.500 | 0.0050 | 116657 | 60.00 | 113.635 | 60.19 | 36.616 |
| G-CANAL | BASE | 100YR-72HR | 60.00 | 15.500 | 14.500 | 0.0011 | 0 | 0.00 | 0.000 | 0.00 | 0.000 |
| H-PreDev | BASE | 100YR-72HR | 71.99 | 15.868 | 18.000 | 0.0012 | 1382857 | 60.00 | 119.935 | 0.00 | 0.000 |
| A-DET 1 | BASE | 10YR-24HR | 20.10 | 14.532 | 17.500 | -0.2500 | 23460 | 0.00 | 0.000 | 13.04 | 0.848 |
| B-DET 2 | BASE | 10YR-24HR | 20.10 | 14.532 | 17.500 | -0.2500 | 24260 | 0.00 | 0.000 | 13.04 | 0.872 |
| C-DET 3 | BASE | 10YR-24HR | 20.27 | 14.526 | 17.500 | -0.2500 | 21450 | 0.00 | 0.000 | 0.00 | 0.265 |
| D-DET 45 | BASE | 10YR-24HR | 20.27 | 14.526 | 17.500 | -0.2500 | 21450 | 0.00 | 0.000 | 0.00 | 0.265 |
| E-lake 1 | BASE | 10YR-24HR | 20.27 | 14.526 | 17.500 | 0.0040 | 86435 | 12.16 | 27.902 | 17.64 | 2.959 |
| F-lake 2 | BASE | 10YR-24HR | 20.10 | 14.532 | 17.500 | 0.0050 | 96865 | 12.00 | 88.347 | 12.16 | 28.699 |
| G-CANAL | BASE | 10YR-24HR | 24.00 | 13.100 | 14.500 | 0.0011 | 0 | 17.64 | 2.959 | 0.00 | 0.000 |
| H-PreDev | BASE | 10YR-24HR | 24.00 | 15.415 | 18.000 | 0.0019 | 924640 | 12.00 | 61.867 | 0.00 | 0.000 |
| A-DET 1 | BASE | 10YR-72HR | 60.85 | 16.136 | 17.500 | -0.2500 | 86900 | 0.00 | 0.000 | 61.01 | 1.428 |
| B-DET 2 | BASE | 10YR-72HR | 61.09 | 16.120 | 17.500 | -0.2500 | 107847 | 0.00 | 0.000 | 72.11 | 1.259 |
| C-DET 3 | BASE | 10YR-72HR | 63.55 | 16.034 | 17.500 | -0.2500 | 89345 | 0.00 | 0.000 | 72.71 | 0.920 |
| D-DET 45 | BASE | 10YR-72HR | 63.55 | 16.034 | 17.500 | -0.2500 | 89345 | 0.00 | 0.000 | 72.71 | 0.920 |
| E-lake 1 | BASE | 10YR-72HR | 63.50 | 16.034 | 17.500 | 0.0040 | 96860 | 60.17 | 19.021 | 68.81 | 7.121 |
| F-lake 2 | BASE | 10YR-72HR | 60.38 | 16.233 | 17.500 | 0.0050 | 114469 | 60.00 | 88.235 | 60.17 | 30.112 |
| G-CANAL | BASE | 10YR-72HR | 60.00 | 15.500 | 14.500 | 0.0011 | 0 | 68.81 | 7.121 | 0.00 | 0.000 |
| H-PreDev | BASE | 10YR-72HR | 72.01 | 15.693 | 18.000 | 0.0013 | 1205867 | 60.00 | 93.498 | 0.00 | 0.000 |

Kings Hwy Commerce Center
07/27/22
10yr-72 hr
Max Node

| Simulation | Node | Group | Time hrs | Stage ft | Warning Stage ft | Surface Area ft2 | Total Inflow cfs | Total Outflow cfs | Total Vol In af | Total Vol Out af |
|---|---|---|---|---|---|---|---|---|---|---|
| 10YR-72HR | A-DET 1 | BASE | 0.00 | 12.650 | 17.500 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | B-DET 2 | BASE | 0.00 | 12.650 | 17.500 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | C-DET 3 | BASE | 0.00 | 12.650 | 17.500 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | D-DET 45 | BASE | 0.00 | 12.650 | 17.500 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | E-lake 1 | BASE | 0.00 | 12.650 | 17.500 | 76679 | 0.000 | 0.246 | 0.0 | 0.0 |
| 10YR-72HR | F-lake 2 | BASE | 0.00 | 12.650 | 17.500 | 87568 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | G-CANAL | BASE | 0.00 | 11.500 | 14.500 | 0 | 0.246 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 0.00 | 14.500 | 18.000 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 2.00 | 12.900 | 17.500 | 113 | 0.000 | 0.247 | 0.0 | 0.0 |
| 10YR-72HR | B-DET 2 | BASE | 2.00 | 12.900 | 17.500 | 113 | 0.000 | 0.247 | 0.0 | 0.0 |
| 10YR-72HR | C-DET 3 | BASE | 2.00 | 12.900 | 17.500 | 113 | 0.000 | 0.247 | 0.0 | 0.0 |
| 10YR-72HR | D-DET 45 | BASE | 2.00 | 12.900 | 17.500 | 113 | 0.000 | 0.247 | 0.0 | 0.0 |
| 10YR-72HR | E-lake 1 | BASE | 2.00 | 12.683 | 17.500 | 76849 | 0.621 | 0.299 | 0.1 | 0.0 |
| 10YR-72HR | F-lake 2 | BASE | 2.00 | 12.683 | 17.500 | 87731 | 0.494 | 0.127 | 0.0 | 0.0 |
| 10YR-72HR | G-CANAL | BASE | 2.00 | 11.633 | 14.500 | 0 | 0.299 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 2.00 | 14.500 | 18.000 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 4.00 | 12.900 | 17.500 | 113 | 0.000 | 0.231 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 4.00 | 12.900 | 17.500 | 113 | 0.000 | 0.231 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 4.00 | 12.900 | 17.500 | 113 | 0.000 | 0.231 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 4.00 | 12.900 | 17.500 | 113 | 0.000 | 0.231 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 4.00 | 12.710 | 17.500 | 76993 | 0.616 | 0.347 | 0.2 | 0.1 |
| 10YR-72HR | F-lake 2 | BASE | 4.00 | 12.710 | 17.500 | 87867 | 0.461 | 0.154 | 0.1 | 0.0 |
| 10YR-72HR | G-CANAL | BASE | 4.00 | 11.767 | 14.500 | 0 | 0.347 | 0.000 | 0.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 4.00 | 14.500 | 18.000 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 6.00 | 12.900 | 17.500 | 113 | 0.000 | 0.216 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 6.00 | 12.900 | 17.500 | 113 | 0.000 | 0.216 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 6.00 | 12.900 | 17.500 | 113 | 0.000 | 0.216 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 6.00 | 12.900 | 17.500 | 113 | 0.000 | 0.216 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 6.00 | 12.733 | 17.500 | 77112 | 0.611 | 0.389 | 0.3 | 0.2 |
| 10YR-72HR | F-lake 2 | BASE | 6.00 | 12.733 | 17.500 | 87980 | 0.433 | 0.179 | 0.2 | 0.1 |
| 10YR-72HR | G-CANAL | BASE | 6.00 | 11.900 | 14.500 | 0 | 0.389 | 0.000 | 0.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 6.00 | 14.500 | 18.000 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 8.00 | 12.900 | 17.500 | 113 | 0.000 | 0.203 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 8.00 | 12.900 | 17.500 | 113 | 0.000 | 0.203 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 8.00 | 12.900 | 17.500 | 113 | 0.000 | 0.203 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 8.00 | 12.900 | 17.500 | 113 | 0.000 | 0.203 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 8.00 | 12.754 | 17.500 | 77218 | 0.651 | 0.427 | 0.4 | 0.2 |
| 10YR-72HR | F-lake 2 | BASE | 8.00 | 12.754 | 17.500 | 88081 | 0.502 | 0.246 | 0.3 | 0.1 |
| 10YR-72HR | G-CANAL | BASE | 8.00 | 12.033 | 14.500 | 0 | 0.427 | 0.000 | 0.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 8.00 | 14.500 | 18.000 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 10.00 | 12.900 | 17.500 | 113 | 0.000 | 0.187 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 10.00 | 12.900 | 17.500 | 113 | 0.000 | 0.187 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 10.00 | 12.900 | 17.500 | 113 | 0.000 | 0.187 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 10.00 | 12.900 | 17.500 | 113 | 0.000 | 0.187 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 10.00 | 12.775 | 17.500 | 77329 | 0.703 | 0.469 | 0.5 | 0.3 |
| 10YR-72HR | F-lake 2 | BASE | 10.00 | 12.775 | 17.500 | 88187 | 0.596 | 0.329 | 0.4 | 0.1 |
| 10YR-72HR | G-CANAL | BASE | 10.00 | 12.167 | 14.500 | 0 | 0.469 | 0.000 | 0.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 10.00 | 14.500 | 18.000 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 12.00 | 12.900 | 17.500 | 113 | 0.000 | 0.170 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 12.00 | 12.900 | 17.500 | 113 | 0.000 | 0.170 | 0.0 | 0.2 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | C-DET 3 | BASE | 12.00 | 12.900 | 17.500 | 113 | 0.000 | 0.170 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 12.00 | 12.900 | 17.500 | 113 | 0.000 | 0.170 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 12.00 | 12.797 | 17.500 | 77442 | 0.744 | 0.513 | 0.6 | 0.4 |
| 10YR-72HR | F-lake 2 | BASE | 12.00 | 12.797 | 17.500 | 88295 | 0.668 | 0.404 | 0.5 | 0.2 |
| 10YR-72HR | G-CANAL | BASE | 12.00 | 12.300 | 14.500 | 0 | 0.513 | 0.000 | 0.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 12.00 | 14.500 | 18.000 | 113 | 0.000 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 14.00 | 12.900 | 17.500 | 113 | 0.000 | 0.152 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 14.00 | 12.900 | 17.500 | 113 | 0.000 | 0.152 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 14.00 | 12.900 | 17.500 | 113 | 0.000 | 0.152 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 14.00 | 12.900 | 17.500 | 113 | 0.000 | 0.152 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 14.00 | 12.818 | 17.500 | 77552 | 0.769 | 0.545 | 0.7 | 0.5 |
| 10YR-72HR | F-lake 2 | BASE | 14.00 | 12.818 | 17.500 | 88399 | 0.721 | 0.465 | 0.6 | 0.3 |
| 10YR-72HR | G-CANAL | BASE | 14.00 | 12.433 | 14.500 | 0 | 0.545 | 0.000 | 0.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 14.00 | 14.502 | 18.000 | 1839 | 0.001 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 16.00 | 12.900 | 17.500 | 113 | 0.000 | 0.131 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 16.00 | 12.900 | 17.500 | 113 | 0.000 | 0.131 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 16.00 | 12.900 | 17.500 | 113 | 0.000 | 0.131 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 16.00 | 12.900 | 17.500 | 113 | 0.000 | 0.131 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 16.00 | 12.839 | 17.500 | 77660 | 0.761 | 0.534 | 0.8 | 0.6 |
| 10YR-72HR | F-lake 2 | BASE | 16.00 | 12.839 | 17.500 | 88502 | 0.757 | 0.499 | 0.7 | 0.4 |
| 10YR-72HR | G-CANAL | BASE | 16.00 | 12.567 | 14.500 | 0 | 0.534 | 0.000 | 0.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 16.00 | 14.521 | 18.000 | 21345 | 0.064 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 18.00 | 12.900 | 17.500 | 113 | 0.000 | 0.106 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 18.00 | 12.900 | 17.500 | 113 | 0.000 | 0.106 | 0.0 | 0.3 |
| 10YR-72HR | C-DET 3 | BASE | 18.00 | 12.900 | 17.500 | 113 | 0.000 | 0.106 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 18.00 | 12.900 | 17.500 | 113 | 0.000 | 0.106 | 0.0 | 0.3 |
| 10YR-72HR | E-lake 1 | BASE | 18.00 | 12.860 | 17.500 | 77771 | 0.715 | 0.478 | 1.0 | 0.6 |
| 10YR-72HR | F-lake 2 | BASE | 18.00 | 12.860 | 17.500 | 88607 | 0.773 | 0.503 | 0.8 | 0.4 |
| 10YR-72HR | G-CANAL | BASE | 18.00 | 12.700 | 14.500 | 0 | 0.478 | 0.000 | 0.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 18.00 | 14.543 | 18.000 | 43281 | 0.130 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 20.00 | 12.900 | 17.500 | 113 | 0.000 | 0.068 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 20.00 | 12.900 | 17.500 | 113 | 0.000 | 0.068 | 0.0 | 0.3 |
| 10YR-72HR | C-DET 3 | BASE | 20.00 | 12.900 | 17.500 | 113 | 0.000 | 0.068 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 20.00 | 12.900 | 17.500 | 113 | 0.000 | 0.068 | 0.0 | 0.3 |
| 10YR-72HR | E-lake 1 | BASE | 20.00 | 12.883 | 17.500 | 77893 | 0.571 | 0.288 | 1.1 | 0.7 |
| 10YR-72HR | F-lake 2 | BASE | 20.00 | 12.884 | 17.500 | 88723 | 0.755 | 0.435 | 1.0 | 0.5 |
| 10YR-72HR | G-CANAL | BASE | 20.00 | 12.833 | 14.500 | 0 | 0.288 | 0.000 | 0.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 20.00 | 14.564 | 18.000 | 64854 | 0.190 | 0.000 | 0.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 22.01 | 12.916 | 17.500 | 1533 | 0.000 | -0.007 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 22.01 | 12.916 | 17.500 | 1533 | 0.000 | -0.007 | 0.0 | 0.3 |
| 10YR-72HR | C-DET 3 | BASE | 22.01 | 12.916 | 17.500 | 1587 | 0.000 | -0.010 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 22.01 | 12.916 | 17.500 | 1587 | 0.000 | -0.010 | 0.0 | 0.3 |
| 10YR-72HR | E-lake 1 | BASE | 22.01 | 12.916 | 17.500 | 78063 | -0.335 | -0.301 | 1.1 | 0.7 |
| 10YR-72HR | F-lake 2 | BASE | 22.01 | 12.916 | 17.500 | 88884 | 0.657 | -0.314 | 1.1 | 0.5 |
| 10YR-72HR | G-CANAL | BASE | 22.01 | 12.967 | 14.500 | 0 | -0.301 | 0.000 | 0.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 22.01 | 14.585 | 18.000 | 86023 | 0.246 | 0.000 | 0.1 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 24.01 | 12.957 | 17.500 | 5506 | 0.000 | -0.032 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 24.01 | 12.957 | 17.500 | 5506 | 0.000 | -0.032 | 0.0 | 0.3 |
| 10YR-72HR | C-DET 3 | BASE | 24.01 | 12.957 | 17.500 | 5726 | 0.000 | -0.034 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 24.01 | 12.957 | 17.500 | 5726 | 0.000 | -0.034 | 0.0 | 0.3 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | E-lake 1 | BASE | 24.01 | 12.961 | 17.500 | 78297 | -0.517 | -0.531 | 1.0 | 0.6 |
| 10YR-72HR | F-lake 2 | BASE | 24.01 | 12.961 | 17.500 | 89105 | 0.656 | -0.450 | 1.2 | 0.5 |
| 10YR-72HR | G-CANAL | BASE | 24.01 | 13.101 | 14.500 | 0 | -0.531 | 0.000 | 0.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 24.01 | 14.605 | 18.000 | 106586 | 0.299 | 0.000 | 0.1 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 26.01 | 13.006 | 17.500 | 9637 | 0.000 | -0.073 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 26.01 | 13.006 | 17.500 | 9640 | 0.000 | -0.073 | 0.0 | 0.3 |
| 10YR-72HR | C-DET 3 | BASE | 26.01 | 13.005 | 17.500 | 10056 | 0.000 | -0.075 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 26.01 | 13.005 | 17.500 | 10056 | 0.000 | -0.075 | 0.0 | 0.3 |
| 10YR-72HR | E-lake 1 | BASE | 26.01 | 13.025 | 17.500 | 78630 | -0.591 | -0.882 | 0.9 | 0.5 |
| 10YR-72HR | F-lake 2 | BASE | 26.01 | 13.025 | 17.500 | 89421 | 0.971 | -0.440 | 1.3 | 0.4 |
| 10YR-72HR | G-CANAL | BASE | 26.01 | 13.234 | 14.500 | 0 | -0.882 | 0.000 | 0.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 26.01 | 14.632 | 18.000 | 133362 | 0.525 | 0.000 | 0.2 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 28.01 | 13.068 | 17.500 | 10201 | 0.000 | -0.095 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 28.01 | 13.068 | 17.500 | 10235 | 0.000 | -0.095 | 0.0 | 0.3 |
| 10YR-72HR | C-DET 3 | BASE | 28.01 | 13.066 | 17.500 | 10517 | 0.000 | -0.098 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 28.01 | 13.066 | 17.500 | 10517 | 0.000 | -0.098 | 0.0 | 0.3 |
| 10YR-72HR | E-lake 1 | BASE | 28.01 | 13.100 | 17.500 | 79021 | -0.673 | -1.012 | 0.8 | 0.4 |
| 10YR-72HR | F-lake 2 | BASE | 28.01 | 13.100 | 17.500 | 89793 | 0.997 | -0.478 | 1.5 | 0.3 |
| 10YR-72HR | G-CANAL | BASE | 28.01 | 13.367 | 14.500 | 0 | -1.012 | 0.000 | 0.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 28.01 | 14.660 | 18.000 | 161527 | 0.614 | 0.000 | 0.3 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 30.01 | 13.138 | 17.500 | 10833 | 0.000 | -0.108 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 30.01 | 13.138 | 17.500 | 10903 | 0.000 | -0.109 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 30.01 | 13.136 | 17.500 | 11039 | 0.000 | -0.111 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 30.01 | 13.136 | 17.500 | 11039 | 0.000 | -0.111 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 30.01 | 13.180 | 17.500 | 79435 | -0.721 | -1.110 | 0.7 | 0.2 |
| 10YR-72HR | F-lake 2 | BASE | 30.01 | 13.180 | 17.500 | 90186 | 1.030 | -0.499 | 1.6 | 0.2 |
| 10YR-72HR | G-CANAL | BASE | 30.01 | 13.501 | 14.500 | 0 | -1.110 | 0.000 | 0.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 30.01 | 14.687 | 18.000 | 188766 | 0.695 | 0.000 | 0.4 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 32.01 | 13.212 | 17.500 | 11501 | 0.000 | -0.120 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 32.01 | 13.211 | 17.500 | 11606 | 0.000 | -0.121 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 32.01 | 13.210 | 17.500 | 11593 | 0.000 | -0.122 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 32.01 | 13.210 | 17.500 | 11593 | 0.000 | -0.122 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 32.01 | 13.263 | 17.500 | 79867 | -0.760 | -1.194 | 0.6 | -0.0 |
| 10YR-72HR | F-lake 2 | BASE | 32.01 | 13.263 | 17.500 | 90597 | 1.057 | -0.516 | 1.8 | 0.1 |
| 10YR-72HR | G-CANAL | BASE | 32.01 | 13.634 | 14.500 | 0 | -1.194 | 0.000 | -0.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 32.01 | 14.713 | 18.000 | 215153 | 0.768 | 0.000 | 0.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 34.01 | 13.288 | 17.500 | 12192 | 0.000 | -0.131 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 34.01 | 13.287 | 17.500 | 12334 | 0.000 | -0.132 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 34.01 | 13.287 | 17.500 | 12169 | 0.000 | -0.132 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 34.01 | 13.287 | 17.500 | 12169 | 0.000 | -0.132 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 34.01 | 13.349 | 17.500 | 80315 | -0.794 | -1.267 | 0.5 | -0.2 |
| 10YR-72HR | F-lake 2 | BASE | 34.01 | 13.349 | 17.500 | 91022 | 1.079 | -0.530 | 2.0 | 0.1 |
| 10YR-72HR | G-CANAL | BASE | 34.01 | 13.767 | 14.500 | 0 | -1.267 | 0.000 | -0.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 34.01 | 14.738 | 18.000 | 240752 | 0.834 | 0.000 | 0.7 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 36.01 | 13.366 | 17.500 | 12901 | 0.000 | -0.142 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 36.01 | 13.365 | 17.500 | 13081 | 0.000 | -0.143 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 36.01 | 13.366 | 17.500 | 12762 | 0.000 | -0.142 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 36.01 | 13.366 | 17.500 | 12762 | 0.000 | -0.142 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 36.01 | 13.438 | 17.500 | 80776 | -0.825 | -1.333 | 0.3 | -0.4 |
| 10YR-72HR | F-lake 2 | BASE | 36.01 | 13.438 | 17.500 | 91460 | 1.096 | -0.541 | 2.2 | -0.0 |

| Simulation | Node | Group | Time hrs | Stage ft | Warning Stage ft | Surface Area ft2 | Total Inflow cfs | Total Outflow cfs | Total Vol In af | Total Vol Out af |
|---|---|---|---|---|---|---|---|---|---|---|
| 10YR-72HR | G-CANAL | BASE | 36.01 | 13.901 | 14.500 | 0 | -1.333 | 0.000 | -0.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 36.01 | 14.763 | 18.000 | 265618 | 0.895 | 0.000 | 0.8 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 38.01 | 13.446 | 17.500 | 13624 | 0.000 | -0.152 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 38.01 | 13.444 | 17.500 | 13841 | 0.000 | -0.154 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 38.01 | 13.447 | 17.500 | 13367 | 0.000 | -0.152 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 38.01 | 13.447 | 17.500 | 13367 | 0.000 | -0.152 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 38.01 | 13.529 | 17.500 | 81250 | -0.848 | -1.393 | 0.2 | -0.6 |
| 10YR-72HR | F-lake 2 | BASE | 38.01 | 13.529 | 17.500 | 91910 | 1.123 | -0.545 | 2.4 | -0.1 |
| 10YR-72HR | G-CANAL | BASE | 38.01 | 14.034 | 14.500 | 0 | -1.393 | 0.000 | -0.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 38.01 | 14.787 | 18.000 | 289979 | 0.960 | 0.000 | 0.9 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 40.01 | 13.527 | 17.500 | 14359 | 0.000 | -0.163 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 40.01 | 13.525 | 17.500 | 14614 | 0.000 | -0.165 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 40.01 | 13.529 | 17.500 | 13984 | 0.000 | -0.161 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 40.01 | 13.529 | 17.500 | 13984 | 0.000 | -0.161 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 40.01 | 13.622 | 17.500 | 81732 | -0.875 | -1.448 | 0.0 | -0.9 |
| 10YR-72HR | F-lake 2 | BASE | 40.01 | 13.621 | 17.500 | 92368 | 1.132 | -0.553 | 2.5 | -0.2 |
| 10YR-72HR | G-CANAL | BASE | 40.01 | 14.167 | 14.500 | 0 | -1.448 | 0.000 | -0.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 40.01 | 14.810 | 18.000 | 313754 | 1.011 | 0.000 | 1.1 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 42.01 | 13.609 | 17.500 | 15102 | 0.000 | -0.173 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 42.01 | 13.606 | 17.500 | 15394 | 0.000 | -0.175 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 42.01 | 13.613 | 17.500 | 14608 | 0.000 | -0.170 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 42.01 | 13.613 | 17.500 | 14608 | 0.000 | -0.170 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 42.01 | 13.716 | 17.500 | 82221 | -0.900 | -1.499 | -0.1 | -1.1 |
| 10YR-72HR | F-lake 2 | BASE | 42.01 | 13.715 | 17.500 | 92832 | 1.139 | -0.560 | 2.7 | -0.3 |
| 10YR-72HR | G-CANAL | BASE | 42.01 | 14.301 | 14.500 | 0 | -1.499 | 0.000 | -1.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 42.01 | 14.833 | 18.000 | 336915 | 1.058 | 0.000 | 1.3 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 44.01 | 13.747 | 17.500 | 16351 | 0.000 | -0.564 | 0.0 | 0.0 |
| 10YR-72HR | B-DET 2 | BASE | 44.01 | 13.743 | 17.500 | 16700 | 0.000 | -0.568 | 0.0 | 0.0 |
| 10YR-72HR | C-DET 3 | BASE | 44.01 | 13.754 | 17.500 | 15670 | 0.000 | -0.554 | 0.0 | 0.0 |
| 10YR-72HR | D-DET 45 | BASE | 44.01 | 13.754 | 17.500 | 15670 | 0.000 | -0.554 | 0.0 | 0.0 |
| 10YR-72HR | E-lake 1 | BASE | 44.01 | 13.792 | 17.500 | 82618 | -1.692 | -1.672 | -0.3 | -1.4 |
| 10YR-72HR | F-lake 2 | BASE | 44.01 | 13.792 | 17.500 | 93210 | 0.378 | -0.584 | 2.9 | -0.4 |
| 10YR-72HR | G-CANAL | BASE | 44.01 | 14.434 | 14.500 | 0 | -1.672 | 0.000 | -1.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 44.01 | 14.856 | 18.000 | 359501 | 1.102 | 0.000 | 1.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 46.01 | 13.878 | 17.500 | 17534 | 0.000 | -0.250 | 0.0 | -0.0 |
| 10YR-72HR | B-DET 2 | BASE | 46.01 | 13.877 | 17.500 | 17992 | 0.000 | -0.257 | 0.0 | -0.0 |
| 10YR-72HR | C-DET 3 | BASE | 46.01 | 13.878 | 17.500 | 16595 | 0.000 | -0.237 | 0.0 | -0.0 |
| 10YR-72HR | D-DET 45 | BASE | 46.01 | 13.878 | 17.500 | 16595 | 0.000 | -0.237 | 0.0 | -0.0 |
| 10YR-72HR | E-lake 1 | BASE | 46.01 | 13.880 | 17.500 | 83074 | -0.779 | -1.959 | -0.5 | -1.7 |
| 10YR-72HR | F-lake 2 | BASE | 46.01 | 13.880 | 17.500 | 93644 | 1.024 | -0.305 | 3.0 | -0.5 |
| 10YR-72HR | G-CANAL | BASE | 46.01 | 14.567 | 14.500 | 0 | -1.959 | 0.000 | -1.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 46.01 | 14.877 | 18.000 | 381544 | 1.142 | 0.000 | 1.6 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 48.01 | 13.984 | 17.500 | 18501 | 0.000 | -0.285 | 0.0 | -0.1 |
| 10YR-72HR | B-DET 2 | BASE | 48.01 | 13.984 | 17.500 | 19015 | 0.000 | -0.293 | 0.0 | -0.1 |
| 10YR-72HR | C-DET 3 | BASE | 48.01 | 13.984 | 17.500 | 17395 | 0.000 | -0.268 | 0.0 | -0.1 |
| 10YR-72HR | D-DET 45 | BASE | 48.01 | 13.984 | 17.500 | 17395 | 0.000 | -0.268 | 0.0 | -0.1 |
| 10YR-72HR | E-lake 1 | BASE | 48.01 | 13.986 | 17.500 | 83628 | -1.009 | -2.298 | -0.7 | -2.0 |
| 10YR-72HR | F-lake 2 | BASE | 48.01 | 13.986 | 17.500 | 94169 | 0.977 | -0.473 | 3.1 | -0.5 |
| 10YR-72HR | G-CANAL | BASE | 48.01 | 14.701 | 14.500 | 0 | -2.298 | 0.000 | -2.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 48.01 | 14.899 | 18.000 | 403077 | 1.181 | 0.000 | 1.8 | 0.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | A-DET 1 | BASE | 50.01 | 14.104 | 17.500 | 19587 | 0.000 | -0.343 | 0.0 | -0.1 |
| 10YR-72HR | B-DET 2 | BASE | 50.01 | 14.104 | 17.500 | 20164 | 0.000 | -0.353 | 0.0 | -0.1 |
| 10YR-72HR | C-DET 3 | BASE | 50.01 | 14.104 | 17.500 | 18294 | 0.000 | -0.320 | 0.0 | -0.1 |
| 10YR-72HR | D-DET 45 | BASE | 50.01 | 14.104 | 17.500 | 18294 | 0.000 | -0.320 | 0.0 | -0.1 |
| 10YR-72HR | E-lake 1 | BASE | 50.01 | 14.106 | 17.500 | 84252 | -1.205 | -2.681 | -0.9 | -2.5 |
| 10YR-72HR | F-lake 2 | BASE | 50.01 | 14.106 | 17.500 | 94762 | 1.094 | -0.565 | 3.3 | -0.6 |
| 10YR-72HR | G-CANAL | BASE | 50.01 | 14.834 | 14.500 | 0 | -2.681 | 0.000 | -2.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 50.01 | 14.922 | 18.000 | 426145 | 1.383 | 0.000 | 2.1 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 51.01 | 14.171 | 17.500 | 20197 | 0.000 | -0.391 | 0.0 | -0.2 |
| 10YR-72HR | B-DET 2 | BASE | 51.01 | 14.171 | 17.500 | 20809 | 0.000 | -0.403 | 0.0 | -0.2 |
| 10YR-72HR | C-DET 3 | BASE | 51.01 | 14.172 | 17.500 | 18798 | 0.000 | -0.364 | 0.0 | -0.1 |
| 10YR-72HR | D-DET 45 | BASE | 51.01 | 14.172 | 17.500 | 18798 | 0.000 | -0.364 | 0.0 | -0.1 |
| 10YR-72HR | E-lake 1 | BASE | 51.01 | 14.173 | 17.500 | 84603 | -1.243 | -2.884 | -1.0 | -2.7 |
| 10YR-72HR | F-lake 2 | BASE | 51.01 | 14.173 | 17.500 | 95095 | 1.327 | -0.515 | 3.4 | -0.7 |
| 10YR-72HR | G-CANAL | BASE | 51.01 | 14.901 | 14.500 | 0 | -2.884 | 0.000 | -2.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 51.01 | 14.934 | 18.000 | 439178 | 1.646 | 0.000 | 2.2 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 52.01 | 14.244 | 17.500 | 20856 | 0.000 | -0.433 | 0.0 | -0.2 |
| 10YR-72HR | B-DET 2 | BASE | 52.01 | 14.244 | 17.500 | 21506 | 0.000 | -0.446 | 0.0 | -0.2 |
| 10YR-72HR | C-DET 3 | BASE | 52.01 | 14.245 | 17.500 | 19343 | 0.000 | -0.401 | 0.0 | -0.2 |
| 10YR-72HR | D-DET 45 | BASE | 52.01 | 14.245 | 17.500 | 19343 | 0.000 | -0.401 | 0.0 | -0.2 |
| 10YR-72HR | E-lake 1 | BASE | 52.01 | 14.246 | 17.500 | 84981 | -1.325 | -3.093 | -1.1 | -2.9 |
| 10YR-72HR | F-lake 2 | BASE | 52.01 | 14.246 | 17.500 | 95455 | 1.462 | -0.523 | 3.5 | -0.7 |
| 10YR-72HR | G-CANAL | BASE | 52.01 | 14.967 | 14.500 | 0 | -3.093 | 0.000 | -2.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 52.01 | 14.949 | 18.000 | 453559 | 1.839 | 0.000 | 2.3 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 53.01 | 14.327 | 17.500 | 21605 | 0.000 | -0.518 | 0.0 | -0.2 |
| 10YR-72HR | B-DET 2 | BASE | 53.01 | 14.327 | 17.500 | 22298 | 0.000 | -0.534 | 0.0 | -0.2 |
| 10YR-72HR | C-DET 3 | BASE | 53.01 | 14.327 | 17.500 | 19962 | 0.000 | -0.478 | 0.0 | -0.2 |
| 10YR-72HR | D-DET 45 | BASE | 53.01 | 14.327 | 17.500 | 19962 | 0.000 | -0.478 | 0.0 | -0.2 |
| 10YR-72HR | E-lake 1 | BASE | 53.01 | 14.329 | 17.500 | 85412 | -1.240 | -3.296 | -1.2 | -3.2 |
| 10YR-72HR | F-lake 2 | BASE | 53.01 | 14.329 | 17.500 | 95865 | 2.014 | -0.284 | 3.7 | -0.7 |
| 10YR-72HR | G-CANAL | BASE | 53.01 | 15.034 | 14.500 | 0 | -3.296 | 0.000 | -3.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 53.01 | 14.966 | 18.000 | 470942 | 2.421 | 0.000 | 2.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 54.01 | 14.421 | 17.500 | 22454 | 0.000 | -0.623 | 0.0 | -0.3 |
| 10YR-72HR | B-DET 2 | BASE | 54.01 | 14.420 | 17.500 | 23195 | 0.000 | -0.643 | 0.0 | -0.3 |
| 10YR-72HR | C-DET 3 | BASE | 54.01 | 14.421 | 17.500 | 20664 | 0.000 | -0.532 | 0.0 | -0.3 |
| 10YR-72HR | D-DET 45 | BASE | 54.01 | 14.421 | 17.500 | 20664 | 0.000 | -0.532 | 0.0 | -0.3 |
| 10YR-72HR | E-lake 1 | BASE | 54.01 | 14.423 | 17.500 | 85900 | -0.571 | -3.444 | -1.2 | -3.5 |
| 10YR-72HR | F-lake 2 | BASE | 54.01 | 14.423 | 17.500 | 96330 | 2.542 | 0.494 | 3.9 | -0.7 |
| 10YR-72HR | G-CANAL | BASE | 54.01 | 15.101 | 14.500 | 0 | -3.444 | 0.000 | -3.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 54.01 | 14.987 | 18.000 | 492279 | 3.055 | 0.000 | 2.7 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 55.01 | 14.525 | 17.500 | 23396 | 0.000 | -0.694 | 0.0 | -0.3 |
| 10YR-72HR | B-DET 2 | BASE | 55.01 | 14.524 | 17.500 | 24192 | 0.000 | -0.718 | 0.0 | -0.3 |
| 10YR-72HR | C-DET 3 | BASE | 55.01 | 14.525 | 17.500 | 21443 | 0.000 | -0.636 | 0.0 | -0.3 |
| 10YR-72HR | D-DET 45 | BASE | 55.01 | 14.525 | 17.500 | 21443 | 0.000 | -0.636 | 0.0 | -0.3 |
| 10YR-72HR | E-lake 1 | BASE | 55.01 | 14.527 | 17.500 | 86443 | -0.971 | -3.545 | -1.3 | -3.8 |
| 10YR-72HR | F-lake 2 | BASE | 55.01 | 14.527 | 17.500 | 96845 | 3.175 | 0.300 | 4.1 | -0.7 |
| 10YR-72HR | G-CANAL | BASE | 55.01 | 15.167 | 14.500 | 0 | -3.545 | 0.000 | -3.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 55.01 | 15.012 | 18.000 | 517430 | 3.743 | 0.000 | 3.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 56.01 | 14.638 | 17.500 | 24425 | 0.000 | -0.788 | 0.0 | -0.4 |
| 10YR-72HR | B-DET 2 | BASE | 56.01 | 14.638 | 17.500 | 25280 | 0.000 | -0.815 | 0.0 | -0.4 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | C-DET 3 | BASE | 56.01 | 14.638 | 17.500 | 22293 | 0.000 | -0.718 | 0.0 | -0.4 |
| 10YR-72HR | D-DET 45 | BASE | 56.01 | 14.638 | 17.500 | 22293 | 0.000 | -0.718 | 0.0 | -0.4 |
| 10YR-72HR | E-lake 1 | BASE | 56.01 | 14.641 | 17.500 | 87034 | -0.803 | -3.613 | -1.4 | -4.1 |
| 10YR-72HR | F-lake 2 | BASE | 56.01 | 14.641 | 17.500 | 97408 | 3.783 | 0.633 | 4.4 | -0.7 |
| 10YR-72HR | G-CANAL | BASE | 56.01 | 15.234 | 14.500 | 0 | -3.613 | 0.000 | -4.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 56.01 | 15.040 | 18.000 | 546157 | 4.470 | 0.000 | 3.3 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 57.01 | 14.762 | 17.500 | 25549 | 0.000 | -0.898 | 0.0 | -0.5 |
| 10YR-72HR | B-DET 2 | BASE | 57.01 | 14.762 | 17.500 | 26468 | 0.000 | -0.930 | 0.0 | -0.5 |
| 10YR-72HR | C-DET 3 | BASE | 57.01 | 14.762 | 17.500 | 23218 | 0.000 | -0.814 | 0.0 | -0.4 |
| 10YR-72HR | D-DET 45 | BASE | 57.01 | 14.762 | 17.500 | 23218 | 0.000 | -0.814 | 0.0 | -0.4 |
| 10YR-72HR | E-lake 1 | BASE | 57.01 | 14.765 | 17.500 | 87678 | -0.561 | -3.641 | -1.4 | -4.4 |
| 10YR-72HR | F-lake 2 | BASE | 57.01 | 14.766 | 17.500 | 98022 | 4.526 | 1.068 | 4.7 | -0.6 |
| 10YR-72HR | G-CANAL | BASE | 57.01 | 15.301 | 14.500 | 0 | -3.641 | 0.000 | -4.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 57.01 | 15.072 | 18.000 | 578666 | 5.358 | 0.000 | 3.7 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 58.01 | 14.901 | 17.500 | 26804 | 0.000 | -1.088 | 0.0 | -0.5 |
| 10YR-72HR | B-DET 2 | BASE | 58.01 | 14.900 | 17.500 | 27795 | 0.000 | -1.128 | 0.0 | -0.6 |
| 10YR-72HR | C-DET 3 | BASE | 58.01 | 14.899 | 17.500 | 24245 | 0.000 | -0.976 | 0.0 | -0.5 |
| 10YR-72HR | D-DET 45 | BASE | 58.01 | 14.899 | 17.500 | 24245 | 0.000 | -0.976 | 0.0 | -0.5 |
| 10YR-72HR | E-lake 1 | BASE | 58.01 | 14.903 | 17.500 | 88395 | -0.041 | -3.609 | -1.5 | -4.7 |
| 10YR-72HR | F-lake 2 | BASE | 58.01 | 14.905 | 17.500 | 98711 | 5.936 | 1.911 | 5.2 | -0.5 |
| 10YR-72HR | G-CANAL | BASE | 58.01 | 15.367 | 14.500 | 0 | -3.609 | 0.000 | -4.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 58.01 | 15.110 | 18.000 | 616388 | 6.918 | 0.000 | 4.3 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 59.01 | 15.065 | 17.500 | 28291 | 0.000 | -1.486 | 0.0 | -0.6 |
| 10YR-72HR | B-DET 2 | BASE | 59.01 | 15.064 | 17.500 | 29366 | 0.000 | -1.541 | 0.0 | -0.7 |
| 10YR-72HR | C-DET 3 | BASE | 59.01 | 15.057 | 17.500 | 25431 | 0.000 | -1.271 | 0.0 | -0.6 |
| 10YR-72HR | D-DET 45 | BASE | 59.01 | 15.057 | 17.500 | 25431 | 0.000 | -1.271 | 0.0 | -0.6 |
| 10YR-72HR | E-lake 1 | BASE | 59.01 | 15.062 | 17.500 | 89226 | 1.051 | -3.457 | -1.4 | -4.9 |
| 10YR-72HR | F-lake 2 | BASE | 59.01 | 15.071 | 17.500 | 99533 | 8.963 | 3.593 | 5.8 | -0.2 |
| 10YR-72HR | G-CANAL | BASE | 59.01 | 15.434 | 14.500 | 0 | -3.457 | 0.000 | -4.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 59.01 | 15.156 | 18.000 | 662955 | 10.114 | 0.000 | 5.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 60.00 | 15.640 | 17.500 | 44300 | 0.000 | -14.224 | 0.0 | -1.3 |
| 10YR-72HR | B-DET 2 | BASE | 60.00 | 15.627 | 17.500 | 48776 | 0.000 | -14.521 | 0.0 | -1.3 |
| 10YR-72HR | C-DET 3 | BASE | 60.00 | 15.378 | 17.500 | 27839 | 0.000 | -5.073 | 0.0 | -0.9 |
| 10YR-72HR | D-DET 45 | BASE | 60.00 | 15.378 | 17.500 | 27839 | 0.000 | -5.073 | 0.0 | -0.9 |
| 10YR-72HR | E-lake 1 | BASE | 60.00 | 15.426 | 17.500 | 91119 | 17.458 | -1.519 | -0.7 | -5.1 |
| 10YR-72HR | F-lake 2 | BASE | 60.00 | 15.958 | 17.500 | 103914 | 87.810 | 27.605 | 9.7 | 1.0 |
| 10YR-72HR | G-CANAL | BASE | 60.00 | 15.500 | 14.500 | 0 | -1.519 | 0.000 | -5.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 60.00 | 15.323 | 18.000 | 832355 | 93.368 | 0.000 | 9.2 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 61.00 | 16.129 | 17.500 | 86281 | 0.000 | 1.427 | 0.0 | -1.8 |
| 10YR-72HR | B-DET 2 | BASE | 61.00 | 16.117 | 17.500 | 107592 | 0.000 | -1.502 | 0.0 | -2.0 |
| 10YR-72HR | C-DET 3 | BASE | 61.00 | 15.841 | 17.500 | 67417 | 0.000 | -4.494 | 0.0 | -1.2 |
| 10YR-72HR | D-DET 45 | BASE | 61.00 | 15.841 | 17.500 | 67417 | 0.000 | -4.494 | 0.0 | -1.2 |
| 10YR-72HR | E-lake 1 | BASE | 61.00 | 15.878 | 17.500 | 93468 | 9.764 | 4.740 | 0.5 | -5.0 |
| 10YR-72HR | F-lake 2 | BASE | 61.00 | 16.123 | 17.500 | 109600 | 16.925 | 18.752 | 14.1 | 3.0 |
| 10YR-72HR | G-CANAL | BASE | 61.00 | 15.433 | 14.500 | 0 | 4.740 | 0.000 | -5.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 61.00 | 15.526 | 18.000 | 1036991 | 23.328 | 0.000 | 14.0 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 62.01 | 16.089 | 17.500 | 82870 | 0.000 | 0.543 | 0.0 | -1.7 |
| 10YR-72HR | B-DET 2 | BASE | 62.01 | 16.090 | 17.500 | 104271 | 0.000 | 0.725 | 0.0 | -2.0 |
| 10YR-72HR | C-DET 3 | BASE | 62.01 | 15.991 | 17.500 | 84449 | 0.000 | -1.881 | 0.0 | -1.5 |
| 10YR-72HR | D-DET 45 | BASE | 62.01 | 15.991 | 17.500 | 84449 | 0.000 | -1.881 | 0.0 | -1.5 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | E-lake 1 | BASE | 62.01 | 15.999 | 17.500 | 94097 | 7.511 | 5.811 | 1.2 | -4.6 |
| 10YR-72HR | F-lake 2 | BASE | 62.01 | 16.088 | 17.500 | 108017 | 10.625 | 11.272 | 15.2 | 4.2 |
| 10YR-72HR | G-CANAL | BASE | 62.01 | 15.366 | 14.500 | 0 | 5.811 | 0.000 | -4.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 62.01 | 15.573 | 18.000 | 1084837 | 9.551 | 0.000 | 15.4 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 63.01 | 16.068 | 17.500 | 81039 | 0.000 | 0.297 | 0.0 | -1.7 |
| 10YR-72HR | B-DET 2 | BASE | 63.01 | 16.068 | 17.500 | 101667 | 0.000 | 0.386 | 0.0 | -2.0 |
| 10YR-72HR | C-DET 3 | BASE | 63.01 | 16.031 | 17.500 | 89054 | 0.000 | -0.285 | 0.0 | -1.6 |
| 10YR-72HR | D-DET 45 | BASE | 63.01 | 16.031 | 17.500 | 89054 | 0.000 | -0.285 | 0.0 | -1.6 |
| 10YR-72HR | E-lake 1 | BASE | 63.01 | 16.032 | 17.500 | 96700 | 6.553 | 6.303 | 1.8 | -4.1 |
| 10YR-72HR | F-lake 2 | BASE | 63.01 | 16.067 | 17.500 | 107104 | 6.766 | 7.123 | 15.9 | 5.0 |
| 10YR-72HR | G-CANAL | BASE | 63.01 | 15.299 | 14.500 | 0 | 6.303 | 0.000 | -4.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 63.01 | 15.598 | 18.000 | 1109537 | 6.137 | 0.000 | 16.1 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 64.01 | 16.061 | 17.500 | 80427 | 0.000 | 0.106 | 0.0 | -1.7 |
| 10YR-72HR | B-DET 2 | BASE | 64.01 | 16.061 | 17.500 | 100789 | 0.000 | 0.131 | 0.0 | -2.0 |
| 10YR-72HR | C-DET 3 | BASE | 64.01 | 16.033 | 17.500 | 89241 | 0.000 | 0.085 | 0.0 | -1.6 |
| 10YR-72HR | D-DET 45 | BASE | 64.01 | 16.033 | 17.500 | 89241 | 0.000 | 0.085 | 0.0 | -1.6 |
| 10YR-72HR | E-lake 1 | BASE | 64.01 | 16.033 | 17.500 | 96771 | 6.489 | 6.589 | 2.3 | -3.5 |
| 10YR-72HR | F-lake 2 | BASE | 64.01 | 16.060 | 17.500 | 106807 | 6.139 | 6.319 | 16.5 | 5.5 |
| 10YR-72HR | G-CANAL | BASE | 64.01 | 15.232 | 14.500 | 0 | 6.589 | 0.000 | -3.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 64.01 | 15.617 | 18.000 | 1128726 | 5.775 | 0.000 | 16.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 65.01 | 16.041 | 17.500 | 78728 | 0.000 | 0.492 | 0.0 | -1.7 |
| 10YR-72HR | B-DET 2 | BASE | 65.01 | 16.041 | 17.500 | 98464 | 0.000 | 0.618 | 0.0 | -1.9 |
| 10YR-72HR | C-DET 3 | BASE | 65.01 | 16.021 | 17.500 | 87900 | 0.000 | 0.463 | 0.0 | -1.6 |
| 10YR-72HR | D-DET 45 | BASE | 65.01 | 16.021 | 17.500 | 87900 | 0.000 | 0.463 | 0.0 | -1.6 |
| 10YR-72HR | E-lake 1 | BASE | 65.01 | 16.020 | 17.500 | 95724 | 6.263 | 6.782 | 2.8 | -3.0 |
| 10YR-72HR | F-lake 2 | BASE | 65.01 | 16.040 | 17.500 | 105884 | 4.682 | 5.336 | 16.9 | 6.0 |
| 10YR-72HR | G-CANAL | BASE | 65.01 | 15.166 | 14.500 | 0 | 6.782 | 0.000 | -3.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 65.01 | 15.630 | 18.000 | 1142679 | 3.607 | 0.000 | 16.9 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 66.01 | 16.019 | 17.500 | 76865 | 0.000 | 0.465 | 0.0 | -1.6 |
| 10YR-72HR | B-DET 2 | BASE | 66.01 | 16.020 | 17.500 | 95858 | 0.000 | 0.580 | 0.0 | -1.9 |
| 10YR-72HR | C-DET 3 | BASE | 66.01 | 16.000 | 17.500 | 85517 | 0.000 | 0.526 | 0.0 | -1.5 |
| 10YR-72HR | D-DET 45 | BASE | 66.01 | 16.000 | 17.500 | 85517 | 0.000 | 0.526 | 0.0 | -1.5 |
| 10YR-72HR | E-lake 1 | BASE | 66.01 | 15.999 | 17.500 | 94095 | 6.333 | 6.912 | 3.4 | -2.4 |
| 10YR-72HR | F-lake 2 | BASE | 66.01 | 16.018 | 17.500 | 104924 | 4.645 | 5.281 | 17.3 | 6.4 |
| 10YR-72HR | G-CANAL | BASE | 66.01 | 15.099 | 14.500 | 0 | 6.912 | 0.000 | -2.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 66.01 | 15.641 | 18.000 | 1153858 | 3.517 | 0.000 | 17.2 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 67.01 | 15.997 | 17.500 | 74945 | 0.000 | 0.477 | 0.0 | -1.6 |
| 10YR-72HR | B-DET 2 | BASE | 67.01 | 15.997 | 17.500 | 93180 | 0.000 | 0.593 | 0.0 | -1.8 |
| 10YR-72HR | C-DET 3 | BASE | 67.01 | 15.977 | 17.500 | 82936 | 0.000 | 0.537 | 0.0 | -1.5 |
| 10YR-72HR | D-DET 45 | BASE | 67.01 | 15.977 | 17.500 | 82936 | 0.000 | 0.537 | 0.0 | -1.5 |
| 10YR-72HR | E-lake 1 | BASE | 67.01 | 15.976 | 17.500 | 93977 | 6.408 | 7.017 | 3.9 | -1.8 |
| 10YR-72HR | F-lake 2 | BASE | 67.01 | 15.996 | 17.500 | 104100 | 4.671 | 5.334 | 17.7 | 6.9 |
| 10YR-72HR | G-CANAL | BASE | 67.01 | 15.032 | 14.500 | 0 | 7.017 | 0.000 | -1.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 67.01 | 15.652 | 18.000 | 1164910 | 3.524 | 0.000 | 17.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 68.01 | 15.973 | 17.500 | 72931 | 0.000 | 0.489 | 0.0 | -1.5 |
| 10YR-72HR | B-DET 2 | BASE | 68.01 | 15.974 | 17.500 | 90371 | 0.000 | 0.604 | 0.0 | -1.8 |
| 10YR-72HR | C-DET 3 | BASE | 68.01 | 15.953 | 17.500 | 80234 | 0.000 | 0.541 | 0.0 | -1.5 |
| 10YR-72HR | D-DET 45 | BASE | 68.01 | 15.953 | 17.500 | 80234 | 0.000 | 0.541 | 0.0 | -1.5 |
| 10YR-72HR | E-lake 1 | BASE | 68.01 | 15.952 | 17.500 | 93853 | 6.462 | 7.096 | 4.4 | -1.3 |
| 10YR-72HR | F-lake 2 | BASE | 68.01 | 15.972 | 17.500 | 103984 | 4.657 | 5.380 | 18.1 | 7.3 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | G-CANAL | BASE | 68.01 | 14.966 | 14.500 | 0 | 7.096 | 0.000 | -1.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 68.01 | 15.663 | 18.000 | 1175875 | 3.503 | 0.000 | 17.8 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 69.01 | 15.941 | 17.500 | 70137 | 0.000 | 0.669 | 0.0 | -1.5 |
| 10YR-72HR | B-DET 2 | BASE | 69.01 | 15.942 | 17.500 | 86501 | 0.000 | 0.826 | 0.0 | -1.7 |
| 10YR-72HR | C-DET 3 | BASE | 69.01 | 15.925 | 17.500 | 76956 | 0.000 | 0.699 | 0.0 | -1.4 |
| 10YR-72HR | D-DET 45 | BASE | 69.01 | 15.925 | 17.500 | 76956 | 0.000 | 0.699 | 0.0 | -1.4 |
| 10YR-72HR | E-lake 1 | BASE | 69.01 | 15.923 | 17.500 | 93700 | 6.264 | 7.120 | 4.9 | -0.7 |
| 10YR-72HR | F-lake 2 | BASE | 69.01 | 15.939 | 17.500 | 103820 | 3.880 | 4.865 | 18.4 | 7.8 |
| 10YR-72HR | G-CANAL | BASE | 69.01 | 14.899 | 14.500 | 0 | 7.120 | 0.000 | -0.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 69.01 | 15.672 | 18.000 | 1184437 | 2.399 | 0.000 | 18.1 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 70.01 | 15.907 | 17.500 | 67198 | 0.000 | 0.642 | 0.0 | -1.4 |
| 10YR-72HR | B-DET 2 | BASE | 70.01 | 15.907 | 17.500 | 82394 | 0.000 | 0.788 | 0.0 | -1.7 |
| 10YR-72HR | C-DET 3 | BASE | 70.01 | 15.891 | 17.500 | 73130 | 0.000 | 0.696 | 0.0 | -1.3 |
| 10YR-72HR | D-DET 45 | BASE | 70.01 | 15.891 | 17.500 | 73130 | 0.000 | 0.696 | 0.0 | -1.3 |
| 10YR-72HR | E-lake 1 | BASE | 70.01 | 15.889 | 17.500 | 93525 | 6.196 | 7.083 | 5.5 | -0.1 |
| 10YR-72HR | F-lake 2 | BASE | 70.01 | 15.905 | 17.500 | 103652 | 3.816 | 4.804 | 18.7 | 8.2 |
| 10YR-72HR | G-CANAL | BASE | 70.01 | 14.832 | 14.500 | 0 | 7.083 | 0.000 | -0.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 70.01 | 15.679 | 18.000 | 1191636 | 2.341 | 0.000 | 18.2 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 71.01 | 15.872 | 17.500 | 64225 | 0.000 | 0.622 | 0.0 | -1.4 |
| 10YR-72HR | B-DET 2 | BASE | 71.01 | 15.873 | 17.500 | 78241 | 0.000 | 0.758 | 0.0 | -1.6 |
| 10YR-72HR | C-DET 3 | BASE | 71.01 | 15.856 | 17.500 | 69218 | 0.000 | 0.666 | 0.0 | -1.3 |
| 10YR-72HR | D-DET 45 | BASE | 71.01 | 15.856 | 17.500 | 69218 | 0.000 | 0.666 | 0.0 | -1.3 |
| 10YR-72HR | E-lake 1 | BASE | 71.01 | 15.855 | 17.500 | 93346 | 6.111 | 7.006 | 6.0 | 0.5 |
| 10YR-72HR | F-lake 2 | BASE | 71.01 | 15.870 | 17.500 | 103481 | 3.780 | 4.779 | 19.1 | 8.5 |
| 10YR-72HR | G-CANAL | BASE | 71.01 | 14.766 | 14.500 | 0 | 7.006 | 0.000 | 0.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 71.01 | 15.686 | 18.000 | 1198792 | 2.356 | 0.000 | 18.4 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 72.01 | 15.837 | 17.500 | 61208 | 0.000 | 0.752 | 0.0 | -1.3 |
| 10YR-72HR | B-DET 2 | BASE | 72.01 | 15.838 | 17.500 | 74026 | 0.000 | 0.869 | 0.0 | -1.5 |
| 10YR-72HR | C-DET 3 | BASE | 72.01 | 15.822 | 17.500 | 65266 | 0.000 | 0.638 | 0.0 | -1.2 |
| 10YR-72HR | D-DET 45 | BASE | 72.01 | 15.822 | 17.500 | 65266 | 0.000 | 0.638 | 0.0 | -1.2 |
| 10YR-72HR | E-lake 1 | BASE | 72.01 | 15.820 | 17.500 | 93165 | 5.917 | 6.903 | 6.5 | 1.1 |
| 10YR-72HR | F-lake 2 | BASE | 72.01 | 15.835 | 17.500 | 103305 | 1.621 | 4.641 | 19.3 | 8.9 |
| 10YR-72HR | G-CANAL | BASE | 72.01 | 14.699 | 14.500 | 0 | 6.903 | 0.000 | 1.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 72.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 73.01 | 15.779 | 17.500 | 56257 | 0.000 | 0.869 | 0.0 | -1.3 |
| 10YR-72HR | B-DET 2 | BASE | 73.01 | 15.780 | 17.500 | 67156 | 0.000 | 1.041 | 0.0 | -1.4 |
| 10YR-72HR | C-DET 3 | BASE | 73.01 | 15.771 | 17.500 | 59536 | 0.000 | 0.911 | 0.0 | -1.2 |
| 10YR-72HR | D-DET 45 | BASE | 73.01 | 15.771 | 17.500 | 59536 | 0.000 | 0.911 | 0.0 | -1.2 |
| 10YR-72HR | E-lake 1 | BASE | 73.01 | 15.768 | 17.500 | 92897 | 5.318 | 6.734 | 6.9 | 1.6 |
| 10YR-72HR | F-lake 2 | BASE | 73.01 | 15.777 | 17.500 | 103018 | 1.910 | 3.495 | 19.4 | 9.3 |
| 10YR-72HR | G-CANAL | BASE | 73.01 | 14.632 | 14.500 | 0 | 6.734 | 0.000 | 1.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 73.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 74.01 | 15.723 | 17.500 | 51403 | 0.000 | 0.821 | 0.0 | -1.2 |
| 10YR-72HR | B-DET 2 | BASE | 74.01 | 15.724 | 17.500 | 60365 | 0.000 | 0.966 | 0.0 | -1.4 |
| 10YR-72HR | C-DET 3 | BASE | 74.01 | 15.715 | 17.500 | 53155 | 0.000 | 0.845 | 0.0 | -1.1 |
| 10YR-72HR | D-DET 45 | BASE | 74.01 | 15.715 | 17.500 | 53155 | 0.000 | 0.845 | 0.0 | -1.1 |
| 10YR-72HR | E-lake 1 | BASE | 74.01 | 15.712 | 17.500 | 92606 | 5.112 | 6.577 | 7.4 | 2.2 |
| 10YR-72HR | F-lake 2 | BASE | 74.01 | 15.720 | 17.500 | 102740 | 1.787 | 3.422 | 19.6 | 9.6 |
| 10YR-72HR | G-CANAL | BASE | 74.01 | 14.566 | 14.500 | 0 | 6.577 | 0.000 | 2.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 74.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | A-DET 1 | BASE | 75.01 | 15.664 | 17.500 | 46368 | 0.000 | 0.769 | 0.0 | -1.1 |
| 10YR-72HR | B-DET 2 | BASE | 75.01 | 15.665 | 17.500 | 53323 | 0.000 | 0.887 | 0.0 | -1.3 |
| 10YR-72HR | C-DET 3 | BASE | 75.01 | 15.657 | 17.500 | 46531 | 0.000 | 0.769 | 0.0 | -1.0 |
| 10YR-72HR | D-DET 45 | BASE | 75.01 | 15.657 | 17.500 | 46531 | 0.000 | 0.769 | 0.0 | -1.0 |
| 10YR-72HR | E-lake 1 | BASE | 75.01 | 15.654 | 17.500 | 92304 | 4.889 | 6.406 | 7.8 | 2.7 |
| 10YR-72HR | F-lake 2 | BASE | 75.01 | 15.662 | 17.500 | 102452 | 1.656 | 3.351 | 19.7 | 9.8 |
| 10YR-72HR | G-CANAL | BASE | 75.01 | 14.499 | 14.500 | 0 | 6.406 | 0.000 | 2.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 75.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 76.01 | 15.603 | 17.500 | 41125 | 0.000 | 0.712 | 0.0 | -1.1 |
| 10YR-72HR | B-DET 2 | BASE | 76.01 | 15.604 | 17.500 | 45990 | 0.000 | 0.798 | 0.0 | -1.2 |
| 10YR-72HR | C-DET 3 | BASE | 76.01 | 15.596 | 17.500 | 39632 | 0.000 | 0.684 | 0.0 | -1.0 |
| 10YR-72HR | D-DET 45 | BASE | 76.01 | 15.596 | 17.500 | 39632 | 0.000 | 0.684 | 0.0 | -1.0 |
| 10YR-72HR | E-lake 1 | BASE | 76.01 | 15.594 | 17.500 | 91990 | 4.641 | 6.219 | 8.2 | 3.2 |
| 10YR-72HR | F-lake 2 | BASE | 76.01 | 15.601 | 17.500 | 102151 | 1.511 | 3.274 | 19.9 | 10.1 |
| 10YR-72HR | G-CANAL | BASE | 76.01 | 14.432 | 14.500 | 0 | 6.219 | 0.000 | 3.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 76.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 77.01 | 15.540 | 17.500 | 35641 | 0.000 | 0.647 | 0.0 | -1.0 |
| 10YR-72HR | B-DET 2 | BASE | 77.01 | 15.540 | 17.500 | 38319 | 0.000 | 0.697 | 0.0 | -1.2 |
| 10YR-72HR | C-DET 3 | BASE | 77.01 | 15.532 | 17.500 | 32420 | 0.000 | 0.586 | 0.0 | -0.9 |
| 10YR-72HR | D-DET 45 | BASE | 77.01 | 15.532 | 17.500 | 32420 | 0.000 | 0.586 | 0.0 | -0.9 |
| 10YR-72HR | E-lake 1 | BASE | 77.01 | 15.531 | 17.500 | 91661 | 4.356 | 6.003 | 8.5 | 3.7 |
| 10YR-72HR | F-lake 2 | BASE | 77.01 | 15.538 | 17.500 | 101837 | 1.344 | 3.185 | 20.0 | 10.4 |
| 10YR-72HR | G-CANAL | BASE | 77.01 | 14.366 | 14.500 | 0 | 6.003 | 0.000 | 3.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 77.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 78.01 | 15.473 | 17.500 | 31991 | 0.000 | 0.588 | 0.0 | -1.0 |
| 10YR-72HR | B-DET 2 | BASE | 78.01 | 15.473 | 17.500 | 33285 | 0.000 | 0.612 | 0.0 | -1.1 |
| 10YR-72HR | C-DET 3 | BASE | 78.01 | 15.466 | 17.500 | 28498 | 0.000 | 0.520 | 0.0 | -0.9 |
| 10YR-72HR | D-DET 45 | BASE | 78.01 | 15.466 | 17.500 | 28498 | 0.000 | 0.520 | 0.0 | -0.9 |
| 10YR-72HR | E-lake 1 | BASE | 78.01 | 15.465 | 17.500 | 91319 | 4.104 | 5.767 | 8.9 | 4.2 |
| 10YR-72HR | F-lake 2 | BASE | 78.01 | 15.471 | 17.500 | 101510 | 1.200 | 3.065 | 20.1 | 10.6 |
| 10YR-72HR | G-CANAL | BASE | 78.01 | 14.299 | 14.500 | 0 | 5.767 | 0.000 | 4.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 78.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 79.01 | 15.408 | 17.500 | 31401 | 0.000 | 0.559 | 0.0 | -0.9 |
| 10YR-72HR | B-DET 2 | BASE | 79.01 | 15.408 | 17.500 | 32661 | 0.000 | 0.581 | 0.0 | -1.1 |
| 10YR-72HR | C-DET 3 | BASE | 79.01 | 15.402 | 17.500 | 28014 | 0.000 | 0.494 | 0.0 | -0.8 |
| 10YR-72HR | D-DET 45 | BASE | 79.01 | 15.402 | 17.500 | 28014 | 0.000 | 0.494 | 0.0 | -0.8 |
| 10YR-72HR | E-lake 1 | BASE | 79.01 | 15.400 | 17.500 | 90984 | 3.927 | 5.531 | 9.2 | 4.7 |
| 10YR-72HR | F-lake 2 | BASE | 79.01 | 15.406 | 17.500 | 101188 | 1.140 | 2.938 | 20.2 | 10.9 |
| 10YR-72HR | G-CANAL | BASE | 79.01 | 14.232 | 14.500 | 0 | 5.531 | 0.000 | 4.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 79.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 80.01 | 15.345 | 17.500 | 30830 | 0.000 | 0.530 | 0.0 | -0.9 |
| 10YR-72HR | B-DET 2 | BASE | 80.01 | 15.345 | 17.500 | 32057 | 0.000 | 0.551 | 0.0 | -1.0 |
| 10YR-72HR | C-DET 3 | BASE | 80.01 | 15.339 | 17.500 | 27546 | 0.000 | 0.469 | 0.0 | -0.8 |
| 10YR-72HR | D-DET 45 | BASE | 80.01 | 15.339 | 17.500 | 27546 | 0.000 | 0.469 | 0.0 | -0.8 |
| 10YR-72HR | E-lake 1 | BASE | 80.01 | 15.338 | 17.500 | 90659 | 3.750 | 5.293 | 9.5 | 5.1 |
| 10YR-72HR | F-lake 2 | BASE | 80.01 | 15.344 | 17.500 | 100878 | 1.081 | 2.811 | 20.3 | 11.1 |
| 10YR-72HR | G-CANAL | BASE | 80.01 | 14.166 | 14.500 | 0 | 5.293 | 0.000 | 5.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 80.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 81.01 | 15.284 | 17.500 | 30280 | 0.000 | 0.501 | 0.0 | -0.8 |
| 10YR-72HR | B-DET 2 | BASE | 81.01 | 15.284 | 17.500 | 31475 | 0.000 | 0.521 | 0.0 | -1.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | C-DET 3 | BASE | 81.01 | 15.279 | 17.500 | 27095 | 0.000 | 0.444 | 0.0 | -0.8 |
| 10YR-72HR | D-DET 45 | BASE | 81.01 | 15.279 | 17.500 | 27095 | 0.000 | 0.444 | 0.0 | -0.8 |
| 10YR-72HR | E-lake 1 | BASE | 81.01 | 15.278 | 17.500 | 90347 | 3.571 | 5.051 | 9.8 | 5.6 |
| 10YR-72HR | F-lake 2 | BASE | 81.01 | 15.283 | 17.500 | 100578 | 1.021 | 2.682 | 20.4 | 11.4 |
| 10YR-72HR | G-CANAL | BASE | 81.01 | 14.099 | 14.500 | 0 | 5.051 | 0.000 | 5.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 81.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 82.01 | 15.226 | 17.500 | 29752 | 0.000 | 0.473 | 0.0 | -0.8 |
| 10YR-72HR | B-DET 2 | BASE | 82.01 | 15.226 | 17.500 | 30916 | 0.000 | 0.491 | 0.0 | -0.9 |
| 10YR-72HR | C-DET 3 | BASE | 82.01 | 15.221 | 17.500 | 26661 | 0.000 | 0.420 | 0.0 | -0.7 |
| 10YR-72HR | D-DET 45 | BASE | 82.01 | 15.221 | 17.500 | 26661 | 0.000 | 0.420 | 0.0 | -0.7 |
| 10YR-72HR | E-lake 1 | BASE | 82.01 | 15.220 | 17.500 | 90046 | 3.396 | 4.814 | 10.1 | 6.0 |
| 10YR-72HR | F-lake 2 | BASE | 82.01 | 15.225 | 17.500 | 100290 | 0.964 | 2.556 | 20.4 | 11.6 |
| 10YR-72HR | G-CANAL | BASE | 82.01 | 14.032 | 14.500 | 0 | 4.814 | 0.000 | 6.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 82.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 83.01 | 15.170 | 17.500 | 29243 | 0.000 | 0.447 | 0.0 | -0.8 |
| 10YR-72HR | B-DET 2 | BASE | 83.01 | 15.170 | 17.500 | 30378 | 0.000 | 0.464 | 0.0 | -0.9 |
| 10YR-72HR | C-DET 3 | BASE | 83.01 | 15.166 | 17.500 | 26244 | 0.000 | 0.398 | 0.0 | -0.7 |
| 10YR-72HR | D-DET 45 | BASE | 83.01 | 15.166 | 17.500 | 26244 | 0.000 | 0.398 | 0.0 | -0.7 |
| 10YR-72HR | E-lake 1 | BASE | 83.01 | 15.164 | 17.500 | 89757 | 3.233 | 4.593 | 10.4 | 6.4 |
| 10YR-72HR | F-lake 2 | BASE | 83.01 | 15.169 | 17.500 | 100013 | 0.911 | 2.437 | 20.5 | 11.8 |
| 10YR-72HR | G-CANAL | BASE | 83.01 | 13.966 | 14.500 | 0 | 4.593 | 0.000 | 6.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 83.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 84.01 | 15.116 | 17.500 | 28754 | 0.000 | 0.423 | 0.0 | -0.7 |
| 10YR-72HR | B-DET 2 | BASE | 84.01 | 15.116 | 17.500 | 29861 | 0.000 | 0.439 | 0.0 | -0.8 |
| 10YR-72HR | C-DET 3 | BASE | 84.01 | 15.112 | 17.500 | 25842 | 0.000 | 0.377 | 0.0 | -0.7 |
| 10YR-72HR | D-DET 45 | BASE | 84.01 | 15.112 | 17.500 | 25842 | 0.000 | 0.377 | 0.0 | -0.7 |
| 10YR-72HR | E-lake 1 | BASE | 84.01 | 15.111 | 17.500 | 89478 | 3.081 | 4.386 | 10.7 | 6.7 |
| 10YR-72HR | F-lake 2 | BASE | 84.01 | 15.115 | 17.500 | 99747 | 0.862 | 2.326 | 20.6 | 12.0 |
| 10YR-72HR | G-CANAL | BASE | 84.01 | 13.899 | 14.500 | 0 | 4.386 | 0.000 | 6.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 84.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 85.01 | 15.064 | 17.500 | 28284 | 0.000 | 0.400 | 0.0 | -0.7 |
| 10YR-72HR | B-DET 2 | BASE | 85.01 | 15.064 | 17.500 | 29363 | 0.000 | 0.415 | 0.0 | -0.8 |
| 10YR-72HR | C-DET 3 | BASE | 85.01 | 15.060 | 17.500 | 25456 | 0.000 | 0.358 | 0.0 | -0.6 |
| 10YR-72HR | D-DET 45 | BASE | 85.01 | 15.060 | 17.500 | 25456 | 0.000 | 0.358 | 0.0 | -0.6 |
| 10YR-72HR | E-lake 1 | BASE | 85.01 | 15.059 | 17.500 | 89210 | 2.937 | 4.190 | 10.9 | 7.1 |
| 10YR-72HR | F-lake 2 | BASE | 85.01 | 15.063 | 17.500 | 99490 | 0.816 | 2.222 | 20.7 | 12.2 |
| 10YR-72HR | G-CANAL | BASE | 85.01 | 13.832 | 14.500 | 0 | 4.190 | 0.000 | 7.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 85.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 86.01 | 15.014 | 17.500 | 27831 | 0.000 | 0.380 | 0.0 | -0.6 |
| 10YR-72HR | B-DET 2 | BASE | 86.01 | 15.014 | 17.500 | 28884 | 0.000 | 0.394 | 0.0 | -0.8 |
| 10YR-72HR | C-DET 3 | BASE | 86.01 | 15.011 | 17.500 | 25083 | 0.000 | 0.340 | 0.0 | -0.6 |
| 10YR-72HR | D-DET 45 | BASE | 86.01 | 15.011 | 17.500 | 25083 | 0.000 | 0.340 | 0.0 | -0.6 |
| 10YR-72HR | E-lake 1 | BASE | 86.01 | 15.010 | 17.500 | 88952 | 2.806 | 4.011 | 11.1 | 7.4 |
| 10YR-72HR | F-lake 2 | BASE | 86.01 | 15.013 | 17.500 | 99244 | 0.773 | 2.125 | 20.7 | 12.3 |
| 10YR-72HR | G-CANAL | BASE | 86.01 | 13.766 | 14.500 | 0 | 4.011 | 0.000 | 7.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 86.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 87.01 | 14.966 | 17.500 | 27394 | 0.000 | 0.361 | 0.0 | -0.6 |
| 10YR-72HR | B-DET 2 | BASE | 87.01 | 14.966 | 17.500 | 28422 | 0.000 | 0.374 | 0.0 | -0.7 |
| 10YR-72HR | C-DET 3 | BASE | 87.01 | 14.963 | 17.500 | 24724 | 0.000 | 0.324 | 0.0 | -0.6 |
| 10YR-72HR | D-DET 45 | BASE | 87.01 | 14.963 | 17.500 | 24724 | 0.000 | 0.324 | 0.0 | -0.6 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | E-lake 1 | BASE | 87.01 | 14.962 | 17.500 | 88702 | 2.685 | 3.845 | 11.4 | 7.8 |
| 10YR-72HR | F-lake 2 | BASE | 87.01 | 14.965 | 17.500 | 99006 | 0.735 | 2.037 | 20.8 | 12.5 |
| 10YR-72HR | G-CANAL | BASE | 87.01 | 13.699 | 14.500 | 0 | 3.845 | 0.000 | 7.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 87.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 88.01 | 14.919 | 17.500 | 26971 | 0.000 | 0.343 | 0.0 | -0.6 |
| 10YR-72HR | B-DET 2 | BASE | 88.01 | 14.919 | 17.500 | 27975 | 0.000 | 0.356 | 0.0 | -0.7 |
| 10YR-72HR | C-DET 3 | BASE | 88.01 | 14.916 | 17.500 | 24377 | 0.000 | 0.309 | 0.0 | -0.5 |
| 10YR-72HR | D-DET 45 | BASE | 88.01 | 14.916 | 17.500 | 24377 | 0.000 | 0.309 | 0.0 | -0.5 |
| 10YR-72HR | E-lake 1 | BASE | 88.01 | 14.915 | 17.500 | 88461 | 2.573 | 3.693 | 11.6 | 8.1 |
| 10YR-72HR | F-lake 2 | BASE | 88.01 | 14.918 | 17.500 | 98775 | 0.699 | 1.956 | 20.8 | 12.7 |
| 10YR-72HR | G-CANAL | BASE | 88.01 | 13.632 | 14.500 | 0 | 3.693 | 0.000 | 8.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 88.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 89.01 | 14.874 | 17.500 | 26563 | 0.000 | 0.328 | 0.0 | -0.6 |
| 10YR-72HR | B-DET 2 | BASE | 89.01 | 14.874 | 17.500 | 27543 | 0.000 | 0.340 | 0.0 | -0.7 |
| 10YR-72HR | C-DET 3 | BASE | 89.01 | 14.871 | 17.500 | 24040 | 0.000 | 0.295 | 0.0 | -0.5 |
| 10YR-72HR | D-DET 45 | BASE | 89.01 | 14.871 | 17.500 | 24040 | 0.000 | 0.295 | 0.0 | -0.5 |
| 10YR-72HR | E-lake 1 | BASE | 89.01 | 14.871 | 17.500 | 88228 | 2.472 | 3.554 | 11.8 | 8.4 |
| 10YR-72HR | F-lake 2 | BASE | 89.01 | 14.873 | 17.500 | 98553 | 0.667 | 1.881 | 20.9 | 12.8 |
| 10YR-72HR | G-CANAL | BASE | 89.01 | 13.566 | 14.500 | 0 | 3.554 | 0.000 | 8.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 89.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 90.01 | 14.830 | 17.500 | 26167 | 0.000 | 0.313 | 0.0 | -0.5 |
| 10YR-72HR | B-DET 2 | BASE | 90.01 | 14.830 | 17.500 | 27124 | 0.000 | 0.324 | 0.0 | -0.7 |
| 10YR-72HR | C-DET 3 | BASE | 90.01 | 14.828 | 17.500 | 23714 | 0.000 | 0.283 | 0.0 | -0.5 |
| 10YR-72HR | D-DET 45 | BASE | 90.01 | 14.828 | 17.500 | 23714 | 0.000 | 0.283 | 0.0 | -0.5 |
| 10YR-72HR | E-lake 1 | BASE | 90.01 | 14.827 | 17.500 | 88002 | 2.378 | 3.426 | 12.0 | 8.7 |
| 10YR-72HR | F-lake 2 | BASE | 90.01 | 14.829 | 17.500 | 98337 | 0.638 | 1.813 | 21.0 | 13.0 |
| 10YR-72HR | G-CANAL | BASE | 90.01 | 13.499 | 14.500 | 0 | 3.426 | 0.000 | 8.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 90.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 91.01 | 14.788 | 17.500 | 25782 | 0.000 | 0.300 | 0.0 | -0.5 |
| 10YR-72HR | B-DET 2 | BASE | 91.01 | 14.788 | 17.500 | 26717 | 0.000 | 0.311 | 0.0 | -0.6 |
| 10YR-72HR | C-DET 3 | BASE | 91.01 | 14.786 | 17.500 | 23397 | 0.000 | 0.271 | 0.0 | -0.5 |
| 10YR-72HR | D-DET 45 | BASE | 91.01 | 14.786 | 17.500 | 23397 | 0.000 | 0.271 | 0.0 | -0.5 |
| 10YR-72HR | E-lake 1 | BASE | 91.01 | 14.785 | 17.500 | 87782 | 2.293 | 3.309 | 12.2 | 8.9 |
| 10YR-72HR | F-lake 2 | BASE | 91.01 | 14.787 | 17.500 | 98127 | 0.610 | 1.751 | 21.0 | 13.1 |
| 10YR-72HR | G-CANAL | BASE | 91.01 | 13.432 | 14.500 | 0 | 3.309 | 0.000 | 8.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 91.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 92.01 | 14.747 | 17.500 | 25408 | 0.000 | 0.288 | 0.0 | -0.5 |
| 10YR-72HR | B-DET 2 | BASE | 92.01 | 14.747 | 17.500 | 26321 | 0.000 | 0.298 | 0.0 | -0.6 |
| 10YR-72HR | C-DET 3 | BASE | 92.01 | 14.744 | 17.500 | 23089 | 0.000 | 0.261 | 0.0 | -0.4 |
| 10YR-72HR | D-DET 45 | BASE | 92.01 | 14.744 | 17.500 | 23089 | 0.000 | 0.261 | 0.0 | -0.4 |
| 10YR-72HR | E-lake 1 | BASE | 92.01 | 14.744 | 17.500 | 87568 | 2.215 | 3.202 | 12.4 | 9.2 |
| 10YR-72HR | F-lake 2 | BASE | 92.01 | 14.746 | 17.500 | 97923 | 0.586 | 1.694 | 21.1 | 13.3 |
| 10YR-72HR | G-CANAL | BASE | 92.01 | 13.366 | 14.500 | 0 | 3.202 | 0.000 | 9.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 92.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 93.01 | 14.706 | 17.500 | 25043 | 0.000 | 0.277 | 0.0 | -0.5 |
| 10YR-72HR | B-DET 2 | BASE | 93.01 | 14.706 | 17.500 | 25935 | 0.000 | 0.286 | 0.0 | -0.6 |
| 10YR-72HR | C-DET 3 | BASE | 93.01 | 14.704 | 17.500 | 22788 | 0.000 | 0.251 | 0.0 | -0.4 |
| 10YR-72HR | D-DET 45 | BASE | 93.01 | 14.704 | 17.500 | 22788 | 0.000 | 0.251 | 0.0 | -0.4 |
| 10YR-72HR | E-lake 1 | BASE | 93.01 | 14.704 | 17.500 | 87359 | 2.143 | 3.105 | 12.6 | 9.5 |
| 10YR-72HR | F-lake 2 | BASE | 93.01 | 14.705 | 17.500 | 97725 | 0.563 | 1.642 | 21.1 | 13.4 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | G-CANAL | BASE | 93.01 | 13.299 | 14.500 | 0 | 3.105 | 0.000 | 9.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 93.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 94.01 | 14.667 | 17.500 | 24687 | 0.000 | 0.266 | 0.0 | -0.4 |
| 10YR-72HR | B-DET 2 | BASE | 94.01 | 14.667 | 17.500 | 25559 | 0.000 | 0.276 | 0.0 | -0.6 |
| 10YR-72HR | C-DET 3 | BASE | 94.01 | 14.665 | 17.500 | 22494 | 0.000 | 0.242 | 0.0 | -0.4 |
| 10YR-72HR | D-DET 45 | BASE | 94.01 | 14.665 | 17.500 | 22494 | 0.000 | 0.242 | 0.0 | -0.4 |
| 10YR-72HR | E-lake 1 | BASE | 94.01 | 14.664 | 17.500 | 87156 | 2.079 | 3.016 | 12.7 | 9.7 |
| 10YR-72HR | F-lake 2 | BASE | 94.01 | 14.666 | 17.500 | 97531 | 0.542 | 1.594 | 21.2 | 13.5 |
| 10YR-72HR | G-CANAL | BASE | 94.01 | 13.232 | 14.500 | 0 | 3.016 | 0.000 | 9.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 94.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 95.01 | 14.629 | 17.500 | 24338 | 0.000 | 0.257 | 0.0 | -0.4 |
| 10YR-72HR | B-DET 2 | BASE | 95.01 | 14.629 | 17.500 | 25190 | 0.000 | 0.266 | 0.0 | -0.5 |
| 10YR-72HR | C-DET 3 | BASE | 95.01 | 14.627 | 17.500 | 22207 | 0.000 | 0.234 | 0.0 | -0.4 |
| 10YR-72HR | D-DET 45 | BASE | 95.01 | 14.627 | 17.500 | 22207 | 0.000 | 0.234 | 0.0 | -0.4 |
| 10YR-72HR | E-lake 1 | BASE | 95.01 | 14.626 | 17.500 | 86956 | 2.020 | 2.936 | 12.9 | 10.0 |
| 10YR-72HR | F-lake 2 | BASE | 95.01 | 14.628 | 17.500 | 97341 | 0.523 | 1.552 | 21.2 | 13.7 |
| 10YR-72HR | G-CANAL | BASE | 95.01 | 13.166 | 14.500 | 0 | 2.936 | 0.000 | 10.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 95.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 96.01 | 14.591 | 17.500 | 23997 | 0.000 | 0.249 | 0.0 | -0.4 |
| 10YR-72HR | B-DET 2 | BASE | 96.01 | 14.591 | 17.500 | 24829 | 0.000 | 0.257 | 0.0 | -0.5 |
| 10YR-72HR | C-DET 3 | BASE | 96.01 | 14.589 | 17.500 | 21925 | 0.000 | 0.227 | 0.0 | -0.4 |
| 10YR-72HR | D-DET 45 | BASE | 96.01 | 14.589 | 17.500 | 21925 | 0.000 | 0.227 | 0.0 | -0.4 |
| 10YR-72HR | E-lake 1 | BASE | 96.01 | 14.588 | 17.500 | 86761 | 1.967 | 2.864 | 13.1 | 10.2 |
| 10YR-72HR | F-lake 2 | BASE | 96.01 | 14.590 | 17.500 | 97155 | 0.506 | 1.513 | 21.2 | 13.8 |
| 10YR-72HR | G-CANAL | BASE | 96.01 | 13.099 | 14.500 | 0 | 2.864 | 0.000 | 10.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 96.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 97.01 | 14.554 | 17.500 | 23662 | 0.000 | 0.241 | 0.0 | -0.4 |
| 10YR-72HR | B-DET 2 | BASE | 97.01 | 14.554 | 17.500 | 24474 | 0.000 | 0.250 | 0.0 | -0.5 |
| 10YR-72HR | C-DET 3 | BASE | 97.01 | 14.552 | 17.500 | 21649 | 0.000 | 0.220 | 0.0 | -0.4 |
| 10YR-72HR | D-DET 45 | BASE | 97.01 | 14.552 | 17.500 | 21649 | 0.000 | 0.220 | 0.0 | -0.4 |
| 10YR-72HR | E-lake 1 | BASE | 97.01 | 14.552 | 17.500 | 86569 | 1.920 | 2.800 | 13.2 | 10.4 |
| 10YR-72HR | F-lake 2 | BASE | 97.01 | 14.553 | 17.500 | 96972 | 0.491 | 1.479 | 21.3 | 13.9 |
| 10YR-72HR | G-CANAL | BASE | 97.01 | 13.032 | 14.500 | 0 | 2.800 | 0.000 | 10.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 97.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 99.01 | 14.481 | 17.500 | 23006 | 0.000 | 0.228 | 0.0 | -0.3 |
| 10YR-72HR | B-DET 2 | BASE | 99.01 | 14.482 | 17.500 | 23781 | 0.000 | 0.236 | 0.0 | -0.5 |
| 10YR-72HR | C-DET 3 | BASE | 99.01 | 14.480 | 17.500 | 21107 | 0.000 | 0.209 | 0.0 | -0.3 |
| 10YR-72HR | D-DET 45 | BASE | 99.01 | 14.480 | 17.500 | 21107 | 0.000 | 0.209 | 0.0 | -0.3 |
| 10YR-72HR | E-lake 1 | BASE | 99.01 | 14.479 | 17.500 | 86193 | 1.841 | 2.695 | 13.5 | 10.9 |
| 10YR-72HR | F-lake 2 | BASE | 99.01 | 14.481 | 17.500 | 96614 | 0.464 | 1.423 | 21.4 | 14.2 |
| 10YR-72HR | G-CANAL | BASE | 99.01 | 12.899 | 14.500 | 0 | 2.695 | 0.000 | 10.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 99.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 101.01 | 14.411 | 17.500 | 22365 | 0.000 | 0.218 | 0.0 | -0.3 |
| 10YR-72HR | B-DET 2 | BASE | 101.01 | 14.411 | 17.500 | 23102 | 0.000 | 0.225 | 0.0 | -0.4 |
| 10YR-72HR | C-DET 3 | BASE | 101.01 | 14.409 | 17.500 | 20578 | 0.000 | 0.201 | 0.0 | -0.3 |
| 10YR-72HR | D-DET 45 | BASE | 101.01 | 14.409 | 17.500 | 20578 | 0.000 | 0.201 | 0.0 | -0.3 |
| 10YR-72HR | E-lake 1 | BASE | 101.01 | 14.409 | 17.500 | 85825 | 1.784 | 2.621 | 13.8 | 11.3 |
| 10YR-72HR | F-lake 2 | BASE | 101.01 | 14.410 | 17.500 | 96265 | 0.444 | 1.383 | 21.4 | 14.4 |
| 10YR-72HR | G-CANAL | BASE | 101.01 | 12.766 | 14.500 | 0 | 2.621 | 0.000 | 11.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 101.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | A-DET 1 | BASE | 103.01 | 14.341 | 17.500 | 21732 | 0.000 | 0.209 | 0.0 | -0.3 |
| 10YR-72HR | B-DET 2 | BASE | 103.01 | 14.341 | 17.500 | 22434 | 0.000 | 0.216 | 0.0 | -0.4 |
| 10YR-72HR | C-DET 3 | BASE | 103.01 | 14.340 | 17.500 | 20055 | 0.000 | 0.192 | 0.0 | -0.2 |
| 10YR-72HR | D-DET 45 | BASE | 103.01 | 14.340 | 17.500 | 20055 | 0.000 | 0.192 | 0.0 | -0.2 |
| 10YR-72HR | E-lake 1 | BASE | 103.01 | 14.339 | 17.500 | 85463 | 1.731 | 2.551 | 14.1 | 11.8 |
| 10YR-72HR | F-lake 2 | BASE | 103.01 | 14.340 | 17.500 | 95920 | 0.424 | 1.346 | 21.5 | 14.6 |
| 10YR-72HR | G-CANAL | BASE | 103.01 | 12.632 | 14.500 | 0 | 2.551 | 0.000 | 11.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 103.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 105.01 | 14.272 | 17.500 | 21108 | 0.000 | 0.201 | 0.0 | -0.2 |
| 10YR-72HR | B-DET 2 | BASE | 105.01 | 14.272 | 17.500 | 21773 | 0.000 | 0.208 | 0.0 | -0.3 |
| 10YR-72HR | C-DET 3 | BASE | 105.01 | 14.271 | 17.500 | 19540 | 0.000 | 0.186 | 0.0 | -0.2 |
| 10YR-72HR | D-DET 45 | BASE | 105.01 | 14.271 | 17.500 | 19540 | 0.000 | 0.186 | 0.0 | -0.2 |
| 10YR-72HR | E-lake 1 | BASE | 105.01 | 14.270 | 17.500 | 85104 | 1.694 | 2.506 | 14.4 | 12.2 |
| 10YR-72HR | F-lake 2 | BASE | 105.01 | 14.271 | 17.500 | 95579 | 0.409 | 1.322 | 21.6 | 14.8 |
| 10YR-72HR | G-CANAL | BASE | 105.01 | 12.499 | 14.500 | 0 | 2.506 | 0.000 | 12.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 105.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 107.01 | 14.204 | 17.500 | 20489 | 0.000 | 0.193 | 0.0 | -0.2 |
| 10YR-72HR | B-DET 2 | BASE | 107.01 | 14.204 | 17.500 | 21118 | 0.000 | 0.199 | 0.0 | -0.3 |
| 10YR-72HR | C-DET 3 | BASE | 107.01 | 14.202 | 17.500 | 19028 | 0.000 | 0.179 | 0.0 | -0.2 |
| 10YR-72HR | D-DET 45 | BASE | 107.01 | 14.202 | 17.500 | 19028 | 0.000 | 0.179 | 0.0 | -0.2 |
| 10YR-72HR | E-lake 1 | BASE | 107.01 | 14.202 | 17.500 | 84749 | 1.651 | 2.450 | 14.7 | 12.6 |
| 10YR-72HR | F-lake 2 | BASE | 107.01 | 14.203 | 17.500 | 95241 | 0.393 | 1.292 | 21.6 | 15.1 |
| 10YR-72HR | G-CANAL | BASE | 107.01 | 12.366 | 14.500 | 0 | 2.450 | 0.000 | 12.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 107.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 109.01 | 14.136 | 17.500 | 19877 | 0.000 | 0.185 | 0.0 | -0.2 |
| 10YR-72HR | B-DET 2 | BASE | 109.01 | 14.136 | 17.500 | 20471 | 0.000 | 0.191 | 0.0 | -0.3 |
| 10YR-72HR | C-DET 3 | BASE | 109.01 | 14.135 | 17.500 | 18522 | 0.000 | 0.173 | 0.0 | -0.2 |
| 10YR-72HR | D-DET 45 | BASE | 109.01 | 14.135 | 17.500 | 18522 | 0.000 | 0.173 | 0.0 | -0.2 |
| 10YR-72HR | E-lake 1 | BASE | 109.01 | 14.134 | 17.500 | 84398 | 1.607 | 2.394 | 15.0 | 13.0 |
| 10YR-72HR | F-lake 2 | BASE | 109.01 | 14.135 | 17.500 | 94907 | 0.376 | 1.262 | 21.7 | 15.3 |
| 10YR-72HR | G-CANAL | BASE | 109.01 | 12.232 | 14.500 | 0 | 2.394 | 0.000 | 13.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 109.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 111.01 | 14.069 | 17.500 | 19272 | 0.000 | 0.177 | 0.0 | -0.1 |
| 10YR-72HR | B-DET 2 | BASE | 111.01 | 14.069 | 17.500 | 19831 | 0.000 | 0.183 | 0.0 | -0.2 |
| 10YR-72HR | C-DET 3 | BASE | 111.01 | 14.068 | 17.500 | 18022 | 0.000 | 0.166 | 0.0 | -0.1 |
| 10YR-72HR | D-DET 45 | BASE | 111.01 | 14.068 | 17.500 | 18022 | 0.000 | 0.166 | 0.0 | -0.1 |
| 10YR-72HR | E-lake 1 | BASE | 111.01 | 14.067 | 17.500 | 84051 | 1.563 | 2.337 | 15.2 | 13.4 |
| 10YR-72HR | F-lake 2 | BASE | 111.01 | 14.068 | 17.500 | 94577 | 0.360 | 1.232 | 21.8 | 15.5 |
| 10YR-72HR | G-CANAL | BASE | 111.01 | 12.099 | 14.500 | 0 | 2.337 | 0.000 | 13.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 111.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 113.01 | 14.004 | 17.500 | 18676 | 0.000 | 0.170 | 0.0 | -0.1 |
| 10YR-72HR | B-DET 2 | BASE | 113.01 | 14.004 | 17.500 | 19200 | 0.000 | 0.174 | 0.0 | -0.2 |
| 10YR-72HR | C-DET 3 | BASE | 113.01 | 14.002 | 17.500 | 17529 | 0.000 | 0.159 | 0.0 | -0.1 |
| 10YR-72HR | D-DET 45 | BASE | 113.01 | 14.002 | 17.500 | 17529 | 0.000 | 0.159 | 0.0 | -0.1 |
| 10YR-72HR | E-lake 1 | BASE | 113.01 | 14.002 | 17.500 | 83708 | 1.519 | 2.280 | 15.5 | 13.8 |
| 10YR-72HR | F-lake 2 | BASE | 113.01 | 14.003 | 17.500 | 94252 | 0.344 | 1.201 | 21.8 | 15.7 |
| 10YR-72HR | G-CANAL | BASE | 113.01 | 11.966 | 14.500 | 0 | 2.280 | 0.000 | 13.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 113.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 115.01 | 13.939 | 17.500 | 18087 | 0.000 | 0.162 | 0.0 | -0.1 |
| 10YR-72HR | B-DET 2 | BASE | 115.01 | 13.939 | 17.500 | 18578 | 0.000 | 0.166 | 0.0 | -0.2 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | C-DET 3 | BASE | 115.01 | 13.938 | 17.500 | 17043 | 0.000 | 0.152 | 0.0 | -0.1 |
| 10YR-72HR | D-DET 45 | BASE | 115.01 | 13.938 | 17.500 | 17043 | 0.000 | 0.152 | 0.0 | -0.1 |
| 10YR-72HR | E-lake 1 | BASE | 115.01 | 13.937 | 17.500 | 83370 | 1.475 | 2.221 | 15.7 | 14.1 |
| 10YR-72HR | F-lake 2 | BASE | 115.01 | 13.938 | 17.500 | 93931 | 0.328 | 1.170 | 21.9 | 15.9 |
| 10YR-72HR | G-CANAL | BASE | 115.01 | 11.832 | 14.500 | 0 | 2.221 | 0.000 | 14.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 115.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 117.01 | 13.875 | 17.500 | 17509 | 0.000 | 0.154 | 0.0 | -0.1 |
| 10YR-72HR | B-DET 2 | BASE | 117.01 | 13.875 | 17.500 | 17966 | 0.000 | 0.158 | 0.0 | -0.2 |
| 10YR-72HR | C-DET 3 | BASE | 117.01 | 13.874 | 17.500 | 16565 | 0.000 | 0.146 | 0.0 | -0.1 |
| 10YR-72HR | D-DET 45 | BASE | 117.01 | 13.874 | 17.500 | 16565 | 0.000 | 0.146 | 0.0 | -0.1 |
| 10YR-72HR | E-lake 1 | BASE | 117.01 | 13.873 | 17.500 | 83038 | 1.430 | 2.162 | 16.0 | 14.5 |
| 10YR-72HR | F-lake 2 | BASE | 117.01 | 13.874 | 17.500 | 93614 | 0.312 | 1.139 | 21.9 | 16.1 |
| 10YR-72HR | G-CANAL | BASE | 117.01 | 11.699 | 14.500 | 0 | 2.162 | 0.000 | 14.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 117.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 119.01 | 13.812 | 17.500 | 16941 | 0.000 | 0.145 | 0.0 | -0.0 |
| 10YR-72HR | B-DET 2 | BASE | 119.01 | 13.812 | 17.500 | 17366 | 0.000 | 0.149 | 0.0 | -0.1 |
| 10YR-72HR | C-DET 3 | BASE | 119.01 | 13.811 | 17.500 | 16096 | 0.000 | 0.138 | 0.0 | -0.0 |
| 10YR-72HR | D-DET 45 | BASE | 119.01 | 13.811 | 17.500 | 16096 | 0.000 | 0.138 | 0.0 | -0.0 |
| 10YR-72HR | E-lake 1 | BASE | 119.01 | 13.810 | 17.500 | 82710 | 1.383 | 2.103 | 16.2 | 14.8 |
| 10YR-72HR | F-lake 2 | BASE | 119.01 | 13.810 | 17.500 | 93302 | 0.294 | 1.107 | 22.0 | 16.3 |
| 10YR-72HR | G-CANAL | BASE | 119.01 | 11.566 | 14.500 | 0 | 2.103 | 0.000 | 14.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 119.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 121.01 | 13.756 | 17.500 | 16436 | 0.000 | 0.082 | 0.0 | -0.0 |
| 10YR-72HR | B-DET 2 | BASE | 121.01 | 13.757 | 17.500 | 16833 | 0.000 | 0.083 | 0.0 | -0.1 |
| 10YR-72HR | C-DET 3 | BASE | 121.01 | 13.756 | 17.500 | 15680 | 0.000 | 0.077 | 0.0 | -0.0 |
| 10YR-72HR | D-DET 45 | BASE | 121.01 | 13.756 | 17.500 | 15680 | 0.000 | 0.077 | 0.0 | -0.0 |
| 10YR-72HR | E-lake 1 | BASE | 121.01 | 13.745 | 17.500 | 82376 | 1.232 | 2.040 | 16.4 | 15.2 |
| 10YR-72HR | F-lake 2 | BASE | 121.01 | 13.746 | 17.500 | 92985 | 0.165 | 1.079 | 22.0 | 16.4 |
| 10YR-72HR | G-CANAL | BASE | 121.01 | 11.500 | 14.500 | 0 | 2.040 | 0.000 | 15.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 121.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 123.01 | 13.717 | 17.500 | 16084 | 0.000 | 0.105 | 0.0 | 0.0 |
| 10YR-72HR | B-DET 2 | BASE | 123.01 | 13.718 | 17.500 | 16466 | 0.000 | 0.106 | 0.0 | -0.1 |
| 10YR-72HR | C-DET 3 | BASE | 123.01 | 13.715 | 17.500 | 15379 | 0.000 | 0.103 | 0.0 | 0.0 |
| 10YR-72HR | D-DET 45 | BASE | 123.01 | 13.715 | 17.500 | 15379 | 0.000 | 0.103 | 0.0 | 0.0 |
| 10YR-72HR | E-lake 1 | BASE | 123.01 | 13.677 | 17.500 | 82022 | 1.242 | 1.972 | 16.6 | 15.5 |
| 10YR-72HR | F-lake 2 | BASE | 123.01 | 13.678 | 17.500 | 92648 | 0.211 | 1.036 | 22.0 | 16.6 |
| 10YR-72HR | G-CANAL | BASE | 123.01 | 11.500 | 14.500 | 0 | 1.972 | 0.000 | 15.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 123.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 125.01 | 13.666 | 17.500 | 15619 | 0.000 | 0.118 | 0.0 | 0.0 |
| 10YR-72HR | B-DET 2 | BASE | 125.01 | 13.668 | 17.500 | 15980 | 0.000 | 0.120 | 0.0 | -0.1 |
| 10YR-72HR | C-DET 3 | BASE | 125.01 | 13.663 | 17.500 | 14986 | 0.000 | 0.115 | 0.0 | 0.0 |
| 10YR-72HR | D-DET 45 | BASE | 125.01 | 13.663 | 17.500 | 14986 | 0.000 | 0.115 | 0.0 | 0.0 |
| 10YR-72HR | E-lake 1 | BASE | 125.01 | 13.616 | 17.500 | 81702 | 1.232 | 1.908 | 16.8 | 15.8 |
| 10YR-72HR | F-lake 2 | BASE | 125.01 | 13.616 | 17.500 | 92344 | 0.238 | 1.002 | 22.1 | 16.8 |
| 10YR-72HR | G-CANAL | BASE | 125.01 | 11.500 | 14.500 | 0 | 1.908 | 0.000 | 15.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 125.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 127.01 | 13.610 | 17.500 | 15110 | 0.000 | 0.120 | 0.0 | 0.0 |
| 10YR-72HR | B-DET 2 | BASE | 127.01 | 13.612 | 17.500 | 15446 | 0.000 | 0.122 | 0.0 | -0.1 |
| 10YR-72HR | C-DET 3 | BASE | 127.01 | 13.606 | 17.500 | 14561 | 0.000 | 0.117 | 0.0 | 0.0 |
| 10YR-72HR | D-DET 45 | BASE | 127.01 | 13.606 | 17.500 | 14561 | 0.000 | 0.117 | 0.0 | 0.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | E-lake 1 | BASE | 127.01 | 13.558 | 17.500 | 81400 | 1.203 | 1.845 | 17.0 | 16.1 |
| 10YR-72HR | F-lake 2 | BASE | 127.01 | 13.558 | 17.500 | 92057 | 0.243 | 0.970 | 22.1 | 16.9 |
| 10YR-72HR | G-CANAL | BASE | 127.01 | 11.500 | 14.500 | 0 | 1.845 | 0.000 | 16.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 127.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 129.01 | 13.552 | 17.500 | 14585 | 0.000 | 0.118 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 129.01 | 13.554 | 17.500 | 14893 | 0.000 | 0.120 | 0.0 | -0.0 |
| 10YR-72HR | C-DET 3 | BASE | 129.01 | 13.548 | 17.500 | 14126 | 0.000 | 0.114 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 129.01 | 13.548 | 17.500 | 14126 | 0.000 | 0.114 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 129.01 | 13.502 | 17.500 | 81110 | 1.165 | 1.783 | 17.2 | 16.4 |
| 10YR-72HR | F-lake 2 | BASE | 129.01 | 13.503 | 17.500 | 91781 | 0.238 | 0.937 | 22.2 | 17.1 |
| 10YR-72HR | G-CANAL | BASE | 129.01 | 11.500 | 14.500 | 0 | 1.783 | 0.000 | 16.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 129.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 131.01 | 13.494 | 17.500 | 14059 | 0.000 | 0.113 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 131.01 | 13.496 | 17.500 | 14336 | 0.000 | 0.115 | 0.0 | -0.0 |
| 10YR-72HR | C-DET 3 | BASE | 131.01 | 13.490 | 17.500 | 13693 | 0.000 | 0.109 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 131.01 | 13.490 | 17.500 | 13693 | 0.000 | 0.109 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 131.01 | 13.448 | 17.500 | 80829 | 1.123 | 1.721 | 17.4 | 16.7 |
| 10YR-72HR | F-lake 2 | BASE | 131.01 | 13.449 | 17.500 | 91514 | 0.228 | 0.905 | 22.2 | 17.2 |
| 10YR-72HR | G-CANAL | BASE | 131.01 | 11.500 | 14.500 | 0 | 1.721 | 0.000 | 16.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 131.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 133.01 | 13.437 | 17.500 | 13539 | 0.000 | 0.107 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 133.01 | 13.438 | 17.500 | 13785 | 0.000 | 0.109 | 0.0 | -0.0 |
| 10YR-72HR | C-DET 3 | BASE | 133.01 | 13.434 | 17.500 | 13267 | 0.000 | 0.103 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 133.01 | 13.434 | 17.500 | 13267 | 0.000 | 0.103 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 133.01 | 13.395 | 17.500 | 80556 | 1.079 | 1.658 | 17.6 | 17.0 |
| 10YR-72HR | F-lake 2 | BASE | 133.01 | 13.396 | 17.500 | 91255 | 0.216 | 0.872 | 22.2 | 17.4 |
| 10YR-72HR | G-CANAL | BASE | 133.01 | 11.500 | 14.500 | 0 | 1.658 | 0.000 | 17.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 133.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 135.01 | 13.381 | 17.500 | 13031 | 0.000 | 0.100 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 135.01 | 13.382 | 17.500 | 13245 | 0.000 | 0.102 | 0.0 | 0.0 |
| 10YR-72HR | C-DET 3 | BASE | 135.01 | 13.378 | 17.500 | 12853 | 0.000 | 0.097 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 135.01 | 13.378 | 17.500 | 12853 | 0.000 | 0.097 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 135.01 | 13.344 | 17.500 | 80290 | 1.034 | 1.595 | 17.8 | 17.3 |
| 10YR-72HR | F-lake 2 | BASE | 135.01 | 13.345 | 17.500 | 91002 | 0.202 | 0.839 | 22.3 | 17.5 |
| 10YR-72HR | G-CANAL | BASE | 135.01 | 11.500 | 14.500 | 0 | 1.595 | 0.000 | 17.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 135.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 137.01 | 13.326 | 17.500 | 12538 | 0.000 | 0.093 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 137.01 | 13.327 | 17.500 | 12721 | 0.000 | 0.095 | 0.0 | 0.0 |
| 10YR-72HR | C-DET 3 | BASE | 137.01 | 13.325 | 17.500 | 12450 | 0.000 | 0.091 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 137.01 | 13.325 | 17.500 | 12450 | 0.000 | 0.091 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 137.01 | 13.295 | 17.500 | 80032 | 0.987 | 1.531 | 17.9 | 17.5 |
| 10YR-72HR | F-lake 2 | BASE | 137.01 | 13.295 | 17.500 | 90757 | 0.188 | 0.805 | 22.3 | 17.7 |
| 10YR-72HR | G-CANAL | BASE | 137.01 | 11.500 | 14.500 | 0 | 1.531 | 0.000 | 17.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 137.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 139.01 | 13.274 | 17.500 | 12063 | 0.000 | 0.086 | 0.0 | 0.1 |
| 10YR-72HR | B-DET 2 | BASE | 139.01 | 13.275 | 17.500 | 12215 | 0.000 | 0.088 | 0.0 | 0.0 |
| 10YR-72HR | C-DET 3 | BASE | 139.01 | 13.273 | 17.500 | 12062 | 0.000 | 0.085 | 0.0 | 0.1 |
| 10YR-72HR | D-DET 45 | BASE | 139.01 | 13.273 | 17.500 | 12062 | 0.000 | 0.085 | 0.0 | 0.1 |
| 10YR-72HR | E-lake 1 | BASE | 139.01 | 13.247 | 17.500 | 79782 | 0.941 | 1.466 | 18.1 | 17.8 |
| 10YR-72HR | F-lake 2 | BASE | 139.01 | 13.247 | 17.500 | 90519 | 0.174 | 0.770 | 22.3 | 17.8 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | G-CANAL | BASE | 139.01 | 11.500 | 14.500 | 0 | 1.466 | 0.000 | 17.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 139.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 141.01 | 13.223 | 17.500 | 11605 | 0.000 | 0.079 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 141.01 | 13.224 | 17.500 | 11729 | 0.000 | 0.081 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 141.01 | 13.223 | 17.500 | 11687 | 0.000 | 0.079 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 141.01 | 13.223 | 17.500 | 11687 | 0.000 | 0.079 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 141.01 | 13.200 | 17.500 | 79541 | 0.878 | 1.372 | 18.2 | 18.0 |
| 10YR-72HR | F-lake 2 | BASE | 141.01 | 13.201 | 17.500 | 90290 | 0.160 | 0.720 | 22.4 | 17.9 |
| 10YR-72HR | G-CANAL | BASE | 141.01 | 11.500 | 14.500 | 0 | 1.372 | 0.000 | 18.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 141.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 143.01 | 13.176 | 17.500 | 11175 | 0.000 | 0.071 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 143.01 | 13.176 | 17.500 | 11271 | 0.000 | 0.072 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 143.01 | 13.176 | 17.500 | 11335 | 0.000 | 0.071 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 143.01 | 13.176 | 17.500 | 11335 | 0.000 | 0.071 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 143.01 | 13.157 | 17.500 | 79318 | 0.804 | 1.260 | 18.4 | 18.2 |
| 10YR-72HR | F-lake 2 | BASE | 143.01 | 13.158 | 17.500 | 90077 | 0.143 | 0.661 | 22.4 | 18.0 |
| 10YR-72HR | G-CANAL | BASE | 143.01 | 11.500 | 14.500 | 0 | 1.260 | 0.000 | 18.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 143.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 145.01 | 13.132 | 17.500 | 10778 | 0.000 | 0.063 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 145.01 | 13.132 | 17.500 | 10850 | 0.000 | 0.063 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 145.01 | 13.132 | 17.500 | 11008 | 0.000 | 0.064 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 145.01 | 13.132 | 17.500 | 11008 | 0.000 | 0.064 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 145.01 | 13.118 | 17.500 | 79110 | 0.734 | 1.156 | 18.5 | 18.4 |
| 10YR-72HR | F-lake 2 | BASE | 145.01 | 13.118 | 17.500 | 89880 | 0.126 | 0.606 | 22.4 | 18.1 |
| 10YR-72HR | G-CANAL | BASE | 145.01 | 11.500 | 14.500 | 0 | 1.156 | 0.000 | 18.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 145.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 147.01 | 13.092 | 17.500 | 10414 | 0.000 | 0.055 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 147.01 | 13.092 | 17.500 | 10464 | 0.000 | 0.056 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 147.01 | 13.092 | 17.500 | 10709 | 0.000 | 0.057 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 147.01 | 13.092 | 17.500 | 10709 | 0.000 | 0.057 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 147.01 | 13.081 | 17.500 | 78918 | 0.669 | 1.059 | 18.6 | 18.6 |
| 10YR-72HR | F-lake 2 | BASE | 147.01 | 13.081 | 17.500 | 89697 | 0.111 | 0.555 | 22.4 | 18.2 |
| 10YR-72HR | G-CANAL | BASE | 147.01 | 11.500 | 14.500 | 0 | 1.059 | 0.000 | 18.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 147.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 149.01 | 13.055 | 17.500 | 10078 | 0.000 | 0.051 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 149.01 | 13.055 | 17.500 | 10108 | 0.000 | 0.051 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 149.01 | 13.055 | 17.500 | 10431 | 0.000 | 0.052 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 149.01 | 13.055 | 17.500 | 10431 | 0.000 | 0.052 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 149.01 | 13.045 | 17.500 | 78735 | 0.637 | 1.016 | 18.7 | 18.8 |
| 10YR-72HR | F-lake 2 | BASE | 149.01 | 13.046 | 17.500 | 89523 | 0.101 | 0.532 | 22.4 | 18.3 |
| 10YR-72HR | G-CANAL | BASE | 149.01 | 11.500 | 14.500 | 0 | 1.016 | 0.000 | 18.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 149.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 151.01 | 13.019 | 17.500 | 9759 | 0.000 | 0.047 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 151.01 | 13.019 | 17.500 | 9769 | 0.000 | 0.047 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 151.01 | 13.020 | 17.500 | 10167 | 0.000 | 0.048 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 151.01 | 13.020 | 17.500 | 10167 | 0.000 | 0.048 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 151.01 | 13.011 | 17.500 | 78559 | 0.598 | 0.957 | 18.8 | 19.0 |
| 10YR-72HR | F-lake 2 | BASE | 151.01 | 13.012 | 17.500 | 89356 | 0.093 | 0.502 | 22.5 | 18.4 |
| 10YR-72HR | G-CANAL | BASE | 151.01 | 11.500 | 14.500 | 0 | 0.957 | 0.000 | 19.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 151.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | A-DET 1 | BASE | 153.01 | 12.985 | 17.500 | 8180 | 0.000 | 0.040 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 153.01 | 12.985 | 17.500 | 8181 | 0.000 | 0.040 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 153.01 | 12.986 | 17.500 | 8602 | 0.000 | 0.042 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 153.01 | 12.986 | 17.500 | 8602 | 0.000 | 0.042 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 153.01 | 12.979 | 17.500 | 78392 | 0.554 | 0.896 | 18.9 | 19.1 |
| 10YR-72HR | F-lake 2 | BASE | 153.01 | 12.980 | 17.500 | 89197 | 0.080 | 0.469 | 22.5 | 18.5 |
| 10YR-72HR | G-CANAL | BASE | 153.01 | 11.500 | 14.500 | 0 | 0.896 | 0.000 | 19.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 153.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 155.01 | 12.950 | 17.500 | 4792 | 0.000 | 0.023 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 155.01 | 12.950 | 17.500 | 4792 | 0.000 | 0.023 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 155.01 | 12.950 | 17.500 | 5020 | 0.000 | 0.024 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 155.01 | 12.950 | 17.500 | 5020 | 0.000 | 0.024 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 155.01 | 12.948 | 17.500 | 78228 | 0.487 | 0.831 | 19.0 | 19.3 |
| 10YR-72HR | F-lake 2 | BASE | 155.01 | 12.948 | 17.500 | 89042 | 0.046 | 0.438 | 22.5 | 18.6 |
| 10YR-72HR | G-CANAL | BASE | 155.01 | 11.500 | 14.500 | 0 | 0.831 | 0.000 | 19.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 155.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 157.01 | 12.917 | 17.500 | 1585 | 0.000 | 0.007 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 157.01 | 12.917 | 17.500 | 1585 | 0.000 | 0.007 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 157.01 | 12.916 | 17.500 | 1647 | 0.000 | 0.007 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 157.01 | 12.916 | 17.500 | 1647 | 0.000 | 0.007 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 157.01 | 12.916 | 17.500 | 78063 | 0.421 | 0.764 | 19.1 | 19.4 |
| 10YR-72HR | F-lake 2 | BASE | 157.01 | 12.916 | 17.500 | 88885 | 0.014 | 0.406 | 22.5 | 18.6 |
| 10YR-72HR | G-CANAL | BASE | 157.01 | 11.500 | 14.500 | 0 | 0.764 | 0.000 | 19.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 157.01 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 159.00 | 12.900 | 17.500 | 113 | 0.000 | 0.057 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 159.00 | 12.900 | 17.500 | 113 | 0.000 | 0.057 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 159.00 | 12.900 | 17.500 | 113 | 0.000 | 0.057 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 159.00 | 12.900 | 17.500 | 113 | 0.000 | 0.057 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 159.00 | 12.888 | 17.500 | 77919 | 0.482 | 0.705 | 19.2 | 19.5 |
| 10YR-72HR | F-lake 2 | BASE | 159.00 | 12.889 | 17.500 | 88747 | 0.114 | 0.368 | 22.5 | 18.7 |
| 10YR-72HR | G-CANAL | BASE | 159.00 | 11.500 | 14.500 | 0 | 0.705 | 0.000 | 19.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 159.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 161.00 | 12.900 | 17.500 | 113 | 0.000 | 0.089 | 0.0 | 0.2 |
| 10YR-72HR | B-DET 2 | BASE | 161.00 | 12.900 | 17.500 | 113 | 0.000 | 0.089 | 0.0 | 0.1 |
| 10YR-72HR | C-DET 3 | BASE | 161.00 | 12.900 | 17.500 | 113 | 0.000 | 0.089 | 0.0 | 0.2 |
| 10YR-72HR | D-DET 45 | BASE | 161.00 | 12.900 | 17.500 | 113 | 0.000 | 0.089 | 0.0 | 0.2 |
| 10YR-72HR | E-lake 1 | BASE | 161.00 | 12.872 | 17.500 | 77832 | 0.523 | 0.669 | 19.2 | 19.6 |
| 10YR-72HR | F-lake 2 | BASE | 161.00 | 12.872 | 17.500 | 88665 | 0.178 | 0.345 | 22.5 | 18.8 |
| 10YR-72HR | G-CANAL | BASE | 161.00 | 11.500 | 14.500 | 0 | 0.669 | 0.000 | 19.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 161.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 163.00 | 12.900 | 17.500 | 113 | 0.000 | 0.105 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 163.00 | 12.900 | 17.500 | 113 | 0.000 | 0.105 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 163.00 | 12.900 | 17.500 | 113 | 0.000 | 0.106 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 163.00 | 12.900 | 17.500 | 113 | 0.000 | 0.106 | 0.0 | 0.3 |
| 10YR-72HR | E-lake 1 | BASE | 163.00 | 12.860 | 17.500 | 77772 | 0.541 | 0.645 | 19.3 | 19.7 |
| 10YR-72HR | F-lake 2 | BASE | 163.00 | 12.860 | 17.500 | 88608 | 0.211 | 0.330 | 22.6 | 18.8 |
| 10YR-72HR | G-CANAL | BASE | 163.00 | 11.500 | 14.500 | 0 | 0.645 | 0.000 | 19.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 163.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 165.00 | 12.900 | 17.500 | 113 | 0.000 | 0.116 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 165.00 | 12.900 | 17.500 | 113 | 0.000 | 0.116 | 0.0 | 0.2 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | C-DET 3 | BASE | 165.00 | 12.900 | 17.500 | 113 | 0.000 | 0.116 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 165.00 | 12.900 | 17.500 | 113 | 0.000 | 0.116 | 0.0 | 0.3 |
| 10YR-72HR | E-lake 1 | BASE | 165.00 | 12.852 | 17.500 | 77729 | 0.551 | 0.627 | 19.4 | 19.8 |
| 10YR-72HR | F-lake 2 | BASE | 165.00 | 12.852 | 17.500 | 88567 | 0.232 | 0.319 | 22.6 | 18.9 |
| 10YR-72HR | G-CANAL | BASE | 165.00 | 11.500 | 14.500 | 0 | 0.627 | 0.000 | 19.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 165.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 167.00 | 12.900 | 17.500 | 113 | 0.000 | 0.123 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 167.00 | 12.900 | 17.500 | 113 | 0.000 | 0.123 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 167.00 | 12.900 | 17.500 | 113 | 0.000 | 0.123 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 167.00 | 12.900 | 17.500 | 113 | 0.000 | 0.123 | 0.0 | 0.3 |
| 10YR-72HR | E-lake 1 | BASE | 167.00 | 12.846 | 17.500 | 77698 | 0.557 | 0.614 | 19.5 | 19.9 |
| 10YR-72HR | F-lake 2 | BASE | 167.00 | 12.846 | 17.500 | 88537 | 0.246 | 0.311 | 22.6 | 18.9 |
| 10YR-72HR | G-CANAL | BASE | 167.00 | 11.500 | 14.500 | 0 | 0.614 | 0.000 | 19.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 167.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 169.00 | 12.900 | 17.500 | 113 | 0.000 | 0.128 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 169.00 | 12.900 | 17.500 | 113 | 0.000 | 0.128 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 169.00 | 12.900 | 17.500 | 113 | 0.000 | 0.128 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 169.00 | 12.900 | 17.500 | 113 | 0.000 | 0.128 | 0.0 | 0.3 |
| 10YR-72HR | E-lake 1 | BASE | 169.00 | 12.841 | 17.500 | 77674 | 0.562 | 0.605 | 19.6 | 20.0 |
| 10YR-72HR | F-lake 2 | BASE | 169.00 | 12.841 | 17.500 | 88514 | 0.256 | 0.305 | 22.7 | 19.0 |
| 10YR-72HR | G-CANAL | BASE | 169.00 | 11.500 | 14.500 | 0 | 0.605 | 0.000 | 20.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 169.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 171.00 | 12.900 | 17.500 | 113 | 0.000 | 0.132 | 0.0 | 0.3 |
| 10YR-72HR | B-DET 2 | BASE | 171.00 | 12.900 | 17.500 | 113 | 0.000 | 0.132 | 0.0 | 0.2 |
| 10YR-72HR | C-DET 3 | BASE | 171.00 | 12.900 | 17.500 | 113 | 0.000 | 0.132 | 0.0 | 0.3 |
| 10YR-72HR | D-DET 45 | BASE | 171.00 | 12.900 | 17.500 | 113 | 0.000 | 0.132 | 0.0 | 0.3 |
| 10YR-72HR | E-lake 1 | BASE | 171.00 | 12.838 | 17.500 | 77656 | 0.565 | 0.597 | 19.7 | 20.1 |
| 10YR-72HR | F-lake 2 | BASE | 171.00 | 12.838 | 17.500 | 88497 | 0.264 | 0.301 | 22.7 | 19.0 |
| 10YR-72HR | G-CANAL | BASE | 171.00 | 11.500 | 14.500 | 0 | 0.597 | 0.000 | 20.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 171.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 173.00 | 12.900 | 17.500 | 113 | 0.000 | 0.135 | 0.0 | 0.4 |
| 10YR-72HR | B-DET 2 | BASE | 173.00 | 12.900 | 17.500 | 113 | 0.000 | 0.135 | 0.0 | 0.3 |
| 10YR-72HR | C-DET 3 | BASE | 173.00 | 12.900 | 17.500 | 113 | 0.000 | 0.135 | 0.0 | 0.4 |
| 10YR-72HR | D-DET 45 | BASE | 173.00 | 12.900 | 17.500 | 113 | 0.000 | 0.135 | 0.0 | 0.4 |
| 10YR-72HR | E-lake 1 | BASE | 173.00 | 12.835 | 17.500 | 77642 | 0.567 | 0.592 | 19.8 | 20.2 |
| 10YR-72HR | F-lake 2 | BASE | 173.00 | 12.835 | 17.500 | 88484 | 0.269 | 0.298 | 22.8 | 19.1 |
| 10YR-72HR | G-CANAL | BASE | 173.00 | 11.500 | 14.500 | 0 | 0.592 | 0.000 | 20.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 173.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 175.00 | 12.900 | 17.500 | 113 | 0.000 | 0.137 | 0.0 | 0.4 |
| 10YR-72HR | B-DET 2 | BASE | 175.00 | 12.900 | 17.500 | 113 | 0.000 | 0.137 | 0.0 | 0.3 |
| 10YR-72HR | C-DET 3 | BASE | 175.00 | 12.900 | 17.500 | 113 | 0.000 | 0.137 | 0.0 | 0.4 |
| 10YR-72HR | D-DET 45 | BASE | 175.00 | 12.900 | 17.500 | 113 | 0.000 | 0.137 | 0.0 | 0.4 |
| 10YR-72HR | E-lake 1 | BASE | 175.00 | 12.833 | 17.500 | 77632 | 0.569 | 0.588 | 19.9 | 20.3 |
| 10YR-72HR | F-lake 2 | BASE | 175.00 | 12.833 | 17.500 | 88474 | 0.274 | 0.295 | 22.8 | 19.1 |
| 10YR-72HR | G-CANAL | BASE | 175.00 | 11.500 | 14.500 | 0 | 0.588 | 0.000 | 20.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 175.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 177.00 | 12.900 | 17.500 | 113 | 0.000 | 0.138 | 0.0 | 0.4 |
| 10YR-72HR | B-DET 2 | BASE | 177.00 | 12.900 | 17.500 | 113 | 0.000 | 0.138 | 0.0 | 0.3 |
| 10YR-72HR | C-DET 3 | BASE | 177.00 | 12.900 | 17.500 | 113 | 0.000 | 0.138 | 0.0 | 0.4 |
| 10YR-72HR | D-DET 45 | BASE | 177.00 | 12.900 | 17.500 | 113 | 0.000 | 0.138 | 0.0 | 0.4 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | E-lake 1 | BASE | 177.00 | 12.832 | 17.500 | 77624 | 0.570 | 0.584 | 20.0 | 20.4 |
| 10YR-72HR | F-lake 2 | BASE | 177.00 | 12.832 | 17.500 | 88467 | 0.277 | 0.293 | 22.9 | 19.2 |
| 10YR-72HR | G-CANAL | BASE | 177.00 | 11.500 | 14.500 | 0 | 0.584 | 0.000 | 20.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 177.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 179.00 | 12.900 | 17.500 | 113 | 0.000 | 0.140 | 0.0 | 0.4 |
| 10YR-72HR | B-DET 2 | BASE | 179.00 | 12.900 | 17.500 | 113 | 0.000 | 0.140 | 0.0 | 0.3 |
| 10YR-72HR | C-DET 3 | BASE | 179.00 | 12.900 | 17.500 | 113 | 0.000 | 0.140 | 0.0 | 0.4 |
| 10YR-72HR | D-DET 45 | BASE | 179.00 | 12.900 | 17.500 | 113 | 0.000 | 0.140 | 0.0 | 0.4 |
| 10YR-72HR | E-lake 1 | BASE | 179.00 | 12.831 | 17.500 | 77618 | 0.571 | 0.582 | 20.1 | 20.5 |
| 10YR-72HR | F-lake 2 | BASE | 179.00 | 12.831 | 17.500 | 88461 | 0.279 | 0.292 | 22.9 | 19.2 |
| 10YR-72HR | G-CANAL | BASE | 179.00 | 11.500 | 14.500 | 0 | 0.582 | 0.000 | 20.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 179.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 181.00 | 12.900 | 17.500 | 113 | 0.000 | 0.140 | 0.0 | 0.5 |
| 10YR-72HR | B-DET 2 | BASE | 181.00 | 12.900 | 17.500 | 113 | 0.000 | 0.140 | 0.0 | 0.4 |
| 10YR-72HR | C-DET 3 | BASE | 181.00 | 12.900 | 17.500 | 113 | 0.000 | 0.141 | 0.0 | 0.4 |
| 10YR-72HR | D-DET 45 | BASE | 181.00 | 12.900 | 17.500 | 113 | 0.000 | 0.141 | 0.0 | 0.4 |
| 10YR-72HR | E-lake 1 | BASE | 181.00 | 12.830 | 17.500 | 77613 | 0.572 | 0.580 | 20.2 | 20.6 |
| 10YR-72HR | F-lake 2 | BASE | 181.00 | 12.830 | 17.500 | 88456 | 0.281 | 0.291 | 22.9 | 19.3 |
| 10YR-72HR | G-CANAL | BASE | 181.00 | 11.500 | 14.500 | 0 | 0.580 | 0.000 | 20.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 181.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 183.00 | 12.900 | 17.500 | 113 | 0.000 | 0.141 | 0.0 | 0.5 |
| 10YR-72HR | B-DET 2 | BASE | 183.00 | 12.900 | 17.500 | 113 | 0.000 | 0.141 | 0.0 | 0.4 |
| 10YR-72HR | C-DET 3 | BASE | 183.00 | 12.900 | 17.500 | 113 | 0.000 | 0.141 | 0.0 | 0.5 |
| 10YR-72HR | D-DET 45 | BASE | 183.00 | 12.900 | 17.500 | 113 | 0.000 | 0.141 | 0.0 | 0.5 |
| 10YR-72HR | E-lake 1 | BASE | 183.00 | 12.829 | 17.500 | 77609 | 0.572 | 0.579 | 20.3 | 20.7 |
| 10YR-72HR | F-lake 2 | BASE | 183.00 | 12.829 | 17.500 | 88453 | 0.282 | 0.290 | 23.0 | 19.3 |
| 10YR-72HR | G-CANAL | BASE | 183.00 | 11.500 | 14.500 | 0 | 0.579 | 0.000 | 20.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 183.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 185.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.5 |
| 10YR-72HR | B-DET 2 | BASE | 185.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.4 |
| 10YR-72HR | C-DET 3 | BASE | 185.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.5 |
| 10YR-72HR | D-DET 45 | BASE | 185.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.5 |
| 10YR-72HR | E-lake 1 | BASE | 185.00 | 12.828 | 17.500 | 77606 | 0.573 | 0.578 | 20.4 | 20.8 |
| 10YR-72HR | F-lake 2 | BASE | 185.00 | 12.828 | 17.500 | 88450 | 0.283 | 0.289 | 23.0 | 19.4 |
| 10YR-72HR | G-CANAL | BASE | 185.00 | 11.500 | 14.500 | 0 | 0.578 | 0.000 | 20.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 185.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 187.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.5 |
| 10YR-72HR | B-DET 2 | BASE | 187.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.4 |
| 10YR-72HR | C-DET 3 | BASE | 187.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.5 |
| 10YR-72HR | D-DET 45 | BASE | 187.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.5 |
| 10YR-72HR | E-lake 1 | BASE | 187.00 | 12.828 | 17.500 | 77604 | 0.573 | 0.577 | 20.5 | 20.9 |
| 10YR-72HR | F-lake 2 | BASE | 187.00 | 12.828 | 17.500 | 88448 | 0.284 | 0.289 | 23.1 | 19.4 |
| 10YR-72HR | G-CANAL | BASE | 187.00 | 11.500 | 14.500 | 0 | 0.577 | 0.000 | 20.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 187.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 189.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.5 |
| 10YR-72HR | B-DET 2 | BASE | 189.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.4 |
| 10YR-72HR | C-DET 3 | BASE | 189.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.5 |
| 10YR-72HR | D-DET 45 | BASE | 189.00 | 12.900 | 17.500 | 113 | 0.000 | 0.142 | 0.0 | 0.5 |
| 10YR-72HR | E-lake 1 | BASE | 189.00 | 12.828 | 17.500 | 77603 | 0.573 | 0.576 | 20.5 | 21.0 |
| 10YR-72HR | F-lake 2 | BASE | 189.00 | 12.828 | 17.500 | 88447 | 0.285 | 0.288 | 23.1 | 19.5 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | G-CANAL | BASE | 189.00 | 11.500 | 14.500 | 0 | 0.576 | 0.000 | 21.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 189.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 191.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | B-DET 2 | BASE | 191.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.5 |
| 10YR-72HR | C-DET 3 | BASE | 191.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | D-DET 45 | BASE | 191.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | E-lake 1 | BASE | 191.00 | 12.827 | 17.500 | 77601 | 0.573 | 0.576 | 20.6 | 21.1 |
| 10YR-72HR | F-lake 2 | BASE | 191.00 | 12.828 | 17.500 | 88446 | 0.285 | 0.288 | 23.2 | 19.5 |
| 10YR-72HR | G-CANAL | BASE | 191.00 | 11.500 | 14.500 | 0 | 0.576 | 0.000 | 21.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 191.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 193.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | B-DET 2 | BASE | 193.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.5 |
| 10YR-72HR | C-DET 3 | BASE | 193.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | D-DET 45 | BASE | 193.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | E-lake 1 | BASE | 193.00 | 12.827 | 17.500 | 77600 | 0.573 | 0.575 | 20.7 | 21.2 |
| 10YR-72HR | F-lake 2 | BASE | 193.00 | 12.827 | 17.500 | 88445 | 0.286 | 0.288 | 23.2 | 19.6 |
| 10YR-72HR | G-CANAL | BASE | 193.00 | 11.500 | 14.500 | 0 | 0.575 | 0.000 | 21.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 193.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 195.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | B-DET 2 | BASE | 195.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.5 |
| 10YR-72HR | C-DET 3 | BASE | 195.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | D-DET 45 | BASE | 195.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | E-lake 1 | BASE | 195.00 | 12.827 | 17.500 | 77600 | 0.573 | 0.575 | 20.8 | 21.3 |
| 10YR-72HR | F-lake 2 | BASE | 195.00 | 12.827 | 17.500 | 88444 | 0.286 | 0.287 | 23.3 | 19.6 |
| 10YR-72HR | G-CANAL | BASE | 195.00 | 11.500 | 14.500 | 0 | 0.575 | 0.000 | 21.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 195.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 197.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | B-DET 2 | BASE | 197.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.5 |
| 10YR-72HR | C-DET 3 | BASE | 197.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | D-DET 45 | BASE | 197.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | E-lake 1 | BASE | 197.00 | 12.827 | 17.500 | 77599 | 0.574 | 0.575 | 20.9 | 21.4 |
| 10YR-72HR | F-lake 2 | BASE | 197.00 | 12.827 | 17.500 | 88443 | 0.286 | 0.287 | 23.3 | 19.7 |
| 10YR-72HR | G-CANAL | BASE | 197.00 | 11.500 | 14.500 | 0 | 0.575 | 0.000 | 21.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 197.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 199.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | B-DET 2 | BASE | 199.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | C-DET 3 | BASE | 199.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | D-DET 45 | BASE | 199.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | E-lake 1 | BASE | 199.00 | 12.827 | 17.500 | 77599 | 0.574 | 0.574 | 21.0 | 21.5 |
| 10YR-72HR | F-lake 2 | BASE | 199.00 | 12.827 | 17.500 | 88443 | 0.286 | 0.287 | 23.4 | 19.7 |
| 10YR-72HR | G-CANAL | BASE | 199.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 21.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 199.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 201.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | B-DET 2 | BASE | 201.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | C-DET 3 | BASE | 201.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | D-DET 45 | BASE | 201.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | E-lake 1 | BASE | 201.00 | 12.827 | 17.500 | 77598 | 0.574 | 0.574 | 21.1 | 21.6 |
| 10YR-72HR | F-lake 2 | BASE | 201.00 | 12.827 | 17.500 | 88443 | 0.286 | 0.287 | 23.4 | 19.7 |
| 10YR-72HR | G-CANAL | BASE | 201.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 21.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 201.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | A-DET 1 | BASE | 203.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | B-DET 2 | BASE | 203.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | C-DET 3 | BASE | 203.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | D-DET 45 | BASE | 203.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | E-lake 1 | BASE | 203.00 | 12.827 | 17.500 | 77598 | 0.574 | 0.574 | 21.2 | 21.7 |
| 10YR-72HR | F-lake 2 | BASE | 203.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.5 | 19.8 |
| 10YR-72HR | G-CANAL | BASE | 203.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 21.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 203.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 205.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | B-DET 2 | BASE | 205.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.6 |
| 10YR-72HR | C-DET 3 | BASE | 205.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | D-DET 45 | BASE | 205.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | E-lake 1 | BASE | 205.00 | 12.827 | 17.500 | 77598 | 0.574 | 0.574 | 21.3 | 21.8 |
| 10YR-72HR | F-lake 2 | BASE | 205.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.5 | 19.8 |
| 10YR-72HR | G-CANAL | BASE | 205.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 21.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 205.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 207.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | B-DET 2 | BASE | 207.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | C-DET 3 | BASE | 207.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | D-DET 45 | BASE | 207.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | E-lake 1 | BASE | 207.00 | 12.827 | 17.500 | 77598 | 0.574 | 0.574 | 21.4 | 21.9 |
| 10YR-72HR | F-lake 2 | BASE | 207.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.6 | 19.9 |
| 10YR-72HR | G-CANAL | BASE | 207.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 21.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 207.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 209.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | B-DET 2 | BASE | 209.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | C-DET 3 | BASE | 209.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | D-DET 45 | BASE | 209.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | E-lake 1 | BASE | 209.00 | 12.827 | 17.500 | 77598 | 0.574 | 0.574 | 21.5 | 22.0 |
| 10YR-72HR | F-lake 2 | BASE | 209.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.6 | 19.9 |
| 10YR-72HR | G-CANAL | BASE | 209.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 209.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 211.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | B-DET 2 | BASE | 211.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | C-DET 3 | BASE | 211.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | D-DET 45 | BASE | 211.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | E-lake 1 | BASE | 211.00 | 12.827 | 17.500 | 77598 | 0.574 | 0.574 | 21.6 | 22.1 |
| 10YR-72HR | F-lake 2 | BASE | 211.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.7 | 20.0 |
| 10YR-72HR | G-CANAL | BASE | 211.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 211.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 213.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | B-DET 2 | BASE | 213.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.7 |
| 10YR-72HR | C-DET 3 | BASE | 213.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | D-DET 45 | BASE | 213.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | E-lake 1 | BASE | 213.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 21.7 | 22.1 |
| 10YR-72HR | F-lake 2 | BASE | 213.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.7 | 20.0 |
| 10YR-72HR | G-CANAL | BASE | 213.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 213.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 215.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | B-DET 2 | BASE | 215.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | C-DET 3 | BASE | 215.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | D-DET 45 | BASE | 215.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | E-lake 1 | BASE | 215.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 21.8 | 22.2 |
| 10YR-72HR | F-lake 2 | BASE | 215.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.8 | 20.1 |
| 10YR-72HR | G-CANAL | BASE | 215.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 215.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 217.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | B-DET 2 | BASE | 217.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | C-DET 3 | BASE | 217.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | D-DET 45 | BASE | 217.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | E-lake 1 | BASE | 217.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 21.9 | 22.3 |
| 10YR-72HR | F-lake 2 | BASE | 217.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.8 | 20.1 |
| 10YR-72HR | G-CANAL | BASE | 217.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 217.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 219.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | B-DET 2 | BASE | 219.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | C-DET 3 | BASE | 219.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | D-DET 45 | BASE | 219.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | E-lake 1 | BASE | 219.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.0 | 22.4 |
| 10YR-72HR | F-lake 2 | BASE | 219.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.8 | 20.2 |
| 10YR-72HR | G-CANAL | BASE | 219.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 219.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 221.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | B-DET 2 | BASE | 221.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | C-DET 3 | BASE | 221.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | D-DET 45 | BASE | 221.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | E-lake 1 | BASE | 221.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.1 | 22.5 |
| 10YR-72HR | F-lake 2 | BASE | 221.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.9 | 20.2 |
| 10YR-72HR | G-CANAL | BASE | 221.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 221.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 223.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | B-DET 2 | BASE | 223.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.8 |
| 10YR-72HR | C-DET 3 | BASE | 223.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | D-DET 45 | BASE | 223.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | E-lake 1 | BASE | 223.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.2 | 22.6 |
| 10YR-72HR | F-lake 2 | BASE | 223.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 23.9 | 20.3 |
| 10YR-72HR | G-CANAL | BASE | 223.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 223.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 225.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | B-DET 2 | BASE | 225.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | C-DET 3 | BASE | 225.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | D-DET 45 | BASE | 225.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | E-lake 1 | BASE | 225.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.3 | 22.7 |
| 10YR-72HR | F-lake 2 | BASE | 225.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.0 | 20.3 |
| 10YR-72HR | G-CANAL | BASE | 225.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 225.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 227.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | B-DET 2 | BASE | 227.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | C-DET 3 | BASE | 227.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | D-DET 45 | BASE | 227.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | E-lake 1 | BASE | 227.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.3 | 22.8 |
| 10YR-72HR | F-lake 2 | BASE | 227.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.0 | 20.4 |
| 10YR-72HR | G-CANAL | BASE | 227.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 227.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 229.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | B-DET 2 | BASE | 229.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | C-DET 3 | BASE | 229.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | D-DET 45 | BASE | 229.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | E-lake 1 | BASE | 229.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.4 | 22.9 |
| 10YR-72HR | F-lake 2 | BASE | 229.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.1 | 20.4 |
| 10YR-72HR | G-CANAL | BASE | 229.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 22.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 229.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 231.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | B-DET 2 | BASE | 231.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 0.9 |
| 10YR-72HR | C-DET 3 | BASE | 231.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | D-DET 45 | BASE | 231.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | E-lake 1 | BASE | 231.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.5 | 23.0 |
| 10YR-72HR | F-lake 2 | BASE | 231.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.1 | 20.5 |
| 10YR-72HR | G-CANAL | BASE | 231.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 231.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 233.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | B-DET 2 | BASE | 233.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | C-DET 3 | BASE | 233.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | D-DET 45 | BASE | 233.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | E-lake 1 | BASE | 233.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.6 | 23.1 |
| 10YR-72HR | F-lake 2 | BASE | 233.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.2 | 20.5 |
| 10YR-72HR | G-CANAL | BASE | 233.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 233.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 235.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | B-DET 2 | BASE | 235.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | C-DET 3 | BASE | 235.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | D-DET 45 | BASE | 235.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | E-lake 1 | BASE | 235.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.7 | 23.2 |
| 10YR-72HR | F-lake 2 | BASE | 235.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.2 | 20.6 |
| 10YR-72HR | G-CANAL | BASE | 235.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 235.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 237.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | B-DET 2 | BASE | 237.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | C-DET 3 | BASE | 237.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | D-DET 45 | BASE | 237.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | E-lake 1 | BASE | 237.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.8 | 23.3 |
| 10YR-72HR | F-lake 2 | BASE | 237.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.3 | 20.6 |
| 10YR-72HR | G-CANAL | BASE | 237.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 237.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 239.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | B-DET 2 | BASE | 239.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.0 |
| 10YR-72HR | C-DET 3 | BASE | 239.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | D-DET 45 | BASE | 239.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | E-lake 1 | BASE | 239.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 22.9 | 23.4 |
| 10YR-72HR | F-lake 2 | BASE | 239.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.3 | 20.6 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | G-CANAL | BASE | 239.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 239.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 241.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | B-DET 2 | BASE | 241.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | C-DET 3 | BASE | 241.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | D-DET 45 | BASE | 241.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | E-lake 1 | BASE | 241.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 23.0 | 23.5 |
| 10YR-72HR | F-lake 2 | BASE | 241.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.4 | 20.7 |
| 10YR-72HR | G-CANAL | BASE | 241.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 241.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 243.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | B-DET 2 | BASE | 243.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | C-DET 3 | BASE | 243.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | D-DET 45 | BASE | 243.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | E-lake 1 | BASE | 243.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 23.1 | 23.6 |
| 10YR-72HR | F-lake 2 | BASE | 243.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.4 | 20.7 |
| 10YR-72HR | G-CANAL | BASE | 243.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 243.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 245.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | B-DET 2 | BASE | 245.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | C-DET 3 | BASE | 245.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | D-DET 45 | BASE | 245.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | E-lake 1 | BASE | 245.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 23.2 | 23.7 |
| 10YR-72HR | F-lake 2 | BASE | 245.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.5 | 20.8 |
| 10YR-72HR | G-CANAL | BASE | 245.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 245.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 247.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | B-DET 2 | BASE | 247.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.1 |
| 10YR-72HR | C-DET 3 | BASE | 247.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | D-DET 45 | BASE | 247.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | E-lake 1 | BASE | 247.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 23.3 | 23.8 |
| 10YR-72HR | F-lake 2 | BASE | 247.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.5 | 20.8 |
| 10YR-72HR | G-CANAL | BASE | 247.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 247.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 249.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | B-DET 2 | BASE | 249.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | C-DET 3 | BASE | 249.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | D-DET 45 | BASE | 249.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | E-lake 1 | BASE | 249.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 23.4 | 23.9 |
| 10YR-72HR | F-lake 2 | BASE | 249.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.6 | 20.9 |
| 10YR-72HR | G-CANAL | BASE | 249.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 249.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 251.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | B-DET 2 | BASE | 251.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | C-DET 3 | BASE | 251.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | D-DET 45 | BASE | 251.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | E-lake 1 | BASE | 251.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 23.5 | 23.9 |
| 10YR-72HR | F-lake 2 | BASE | 251.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.6 | 20.9 |
| 10YR-72HR | G-CANAL | BASE | 251.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 23.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 251.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | A-DET 1 | BASE | 253.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | B-DET 2 | BASE | 253.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | C-DET 3 | BASE | 253.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | D-DET 45 | BASE | 253.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | E-lake 1 | BASE | 253.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 23.6 | 24.0 |
| 10YR-72HR | F-lake 2 | BASE | 253.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.7 | 21.0 |
| 10YR-72HR | G-CANAL | BASE | 253.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 24.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 253.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 255.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | B-DET 2 | BASE | 255.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.2 |
| 10YR-72HR | C-DET 3 | BASE | 255.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | D-DET 45 | BASE | 255.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | E-lake 1 | BASE | 255.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 23.7 | 24.1 |
| 10YR-72HR | F-lake 2 | BASE | 255.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.7 | 21.0 |
| 10YR-72HR | G-CANAL | BASE | 255.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 24.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 255.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 257.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | B-DET 2 | BASE | 257.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | C-DET 3 | BASE | 257.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | D-DET 45 | BASE | 257.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | E-lake 1 | BASE | 257.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 23.8 | 24.2 |
| 10YR-72HR | F-lake 2 | BASE | 257.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.7 | 21.1 |
| 10YR-72HR | G-CANAL | BASE | 257.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 24.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 257.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 259.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | B-DET 2 | BASE | 259.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | C-DET 3 | BASE | 259.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | D-DET 45 | BASE | 259.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | E-lake 1 | BASE | 259.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 23.9 | 24.3 |
| 10YR-72HR | F-lake 2 | BASE | 259.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.8 | 21.1 |
| 10YR-72HR | G-CANAL | BASE | 259.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 24.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 259.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 261.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | B-DET 2 | BASE | 261.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | C-DET 3 | BASE | 261.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | D-DET 45 | BASE | 261.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | E-lake 1 | BASE | 261.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.0 | 24.4 |
| 10YR-72HR | F-lake 2 | BASE | 261.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.8 | 21.2 |
| 10YR-72HR | G-CANAL | BASE | 261.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 24.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 261.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 263.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | B-DET 2 | BASE | 263.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |
| 10YR-72HR | C-DET 3 | BASE | 263.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | D-DET 45 | BASE | 263.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | E-lake 1 | BASE | 263.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.1 | 24.5 |
| 10YR-72HR | F-lake 2 | BASE | 263.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.9 | 21.2 |
| 10YR-72HR | G-CANAL | BASE | 263.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 24.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 263.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 265.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | B-DET 2 | BASE | 265.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.3 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | C-DET 3 | BASE | 265.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | D-DET 45 | BASE | 265.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | E-lake 1 | BASE | 265.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.1 | 24.6 |
| 10YR-72HR | F-lake 2 | BASE | 265.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 24.9 | 21.3 |
| 10YR-72HR | G-CANAL | BASE | 265.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 24.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 265.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 267.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | B-DET 2 | BASE | 267.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | C-DET 3 | BASE | 267.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | D-DET 45 | BASE | 267.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | E-lake 1 | BASE | 267.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.2 | 24.7 |
| 10YR-72HR | F-lake 2 | BASE | 267.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.0 | 21.3 |
| 10YR-72HR | G-CANAL | BASE | 267.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 24.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 267.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 269.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | B-DET 2 | BASE | 269.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | C-DET 3 | BASE | 269.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | D-DET 45 | BASE | 269.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | E-lake 1 | BASE | 269.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.3 | 24.8 |
| 10YR-72HR | F-lake 2 | BASE | 269.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.0 | 21.4 |
| 10YR-72HR | G-CANAL | BASE | 269.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 24.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 269.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 271.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | B-DET 2 | BASE | 271.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | C-DET 3 | BASE | 271.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | D-DET 45 | BASE | 271.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | E-lake 1 | BASE | 271.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.4 | 24.9 |
| 10YR-72HR | F-lake 2 | BASE | 271.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.1 | 21.4 |
| 10YR-72HR | G-CANAL | BASE | 271.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 24.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 271.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 273.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | B-DET 2 | BASE | 273.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.4 |
| 10YR-72HR | C-DET 3 | BASE | 273.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | D-DET 45 | BASE | 273.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | E-lake 1 | BASE | 273.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.5 | 25.0 |
| 10YR-72HR | F-lake 2 | BASE | 273.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.1 | 21.5 |
| 10YR-72HR | G-CANAL | BASE | 273.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 273.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 275.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | B-DET 2 | BASE | 275.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | C-DET 3 | BASE | 275.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | D-DET 45 | BASE | 275.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | E-lake 1 | BASE | 275.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.6 | 25.1 |
| 10YR-72HR | F-lake 2 | BASE | 275.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.2 | 21.5 |
| 10YR-72HR | G-CANAL | BASE | 275.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 275.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 277.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | B-DET 2 | BASE | 277.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | C-DET 3 | BASE | 277.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | D-DET 45 | BASE | 277.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | E-lake 1 | BASE | 277.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.7 | 25.2 |
| 10YR-72HR | F-lake 2 | BASE | 277.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.2 | 21.5 |
| 10YR-72HR | G-CANAL | BASE | 277.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 277.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 279.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | B-DET 2 | BASE | 279.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | C-DET 3 | BASE | 279.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | D-DET 45 | BASE | 279.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | E-lake 1 | BASE | 279.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.8 | 25.3 |
| 10YR-72HR | F-lake 2 | BASE | 279.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.3 | 21.6 |
| 10YR-72HR | G-CANAL | BASE | 279.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 279.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 281.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | B-DET 2 | BASE | 281.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.5 |
| 10YR-72HR | C-DET 3 | BASE | 281.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | D-DET 45 | BASE | 281.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | E-lake 1 | BASE | 281.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 24.9 | 25.4 |
| 10YR-72HR | F-lake 2 | BASE | 281.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.3 | 21.6 |
| 10YR-72HR | G-CANAL | BASE | 281.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 281.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 283.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | B-DET 2 | BASE | 283.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | C-DET 3 | BASE | 283.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | D-DET 45 | BASE | 283.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | E-lake 1 | BASE | 283.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 25.0 | 25.5 |
| 10YR-72HR | F-lake 2 | BASE | 283.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.4 | 21.7 |
| 10YR-72HR | G-CANAL | BASE | 283.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 283.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 285.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | B-DET 2 | BASE | 285.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | C-DET 3 | BASE | 285.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | D-DET 45 | BASE | 285.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | E-lake 1 | BASE | 285.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 25.1 | 25.6 |
| 10YR-72HR | F-lake 2 | BASE | 285.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.4 | 21.7 |
| 10YR-72HR | G-CANAL | BASE | 285.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 285.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 287.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | B-DET 2 | BASE | 287.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | C-DET 3 | BASE | 287.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | D-DET 45 | BASE | 287.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | E-lake 1 | BASE | 287.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 25.2 | 25.7 |
| 10YR-72HR | F-lake 2 | BASE | 287.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.5 | 21.8 |
| 10YR-72HR | G-CANAL | BASE | 287.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 287.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 289.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | B-DET 2 | BASE | 289.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.6 |
| 10YR-72HR | C-DET 3 | BASE | 289.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | D-DET 45 | BASE | 289.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | E-lake 1 | BASE | 289.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 25.3 | 25.7 |
| 10YR-72HR | F-lake 2 | BASE | 289.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.5 | 21.8 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | G-CANAL | BASE | 289.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 289.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 291.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | B-DET 2 | BASE | 291.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | C-DET 3 | BASE | 291.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | D-DET 45 | BASE | 291.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | E-lake 1 | BASE | 291.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 25.4 | 25.8 |
| 10YR-72HR | F-lake 2 | BASE | 291.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.6 | 21.9 |
| 10YR-72HR | G-CANAL | BASE | 291.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 291.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 293.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | B-DET 2 | BASE | 293.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | C-DET 3 | BASE | 293.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | D-DET 45 | BASE | 293.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | E-lake 1 | BASE | 293.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 25.5 | 25.9 |
| 10YR-72HR | F-lake 2 | BASE | 293.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.6 | 21.9 |
| 10YR-72HR | G-CANAL | BASE | 293.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 25.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 293.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 295.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | B-DET 2 | BASE | 295.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | C-DET 3 | BASE | 295.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | D-DET 45 | BASE | 295.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | E-lake 1 | BASE | 295.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 25.6 | 26.0 |
| 10YR-72HR | F-lake 2 | BASE | 295.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.6 | 22.0 |
| 10YR-72HR | G-CANAL | BASE | 295.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 26.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 295.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 297.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | B-DET 2 | BASE | 297.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | C-DET 3 | BASE | 297.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | D-DET 45 | BASE | 297.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | E-lake 1 | BASE | 297.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 25.7 | 26.1 |
| 10YR-72HR | F-lake 2 | BASE | 297.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.7 | 22.0 |
| 10YR-72HR | G-CANAL | BASE | 297.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 26.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 297.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 299.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | B-DET 2 | BASE | 299.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.7 |
| 10YR-72HR | C-DET 3 | BASE | 299.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | D-DET 45 | BASE | 299.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | E-lake 1 | BASE | 299.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 25.8 | 26.2 |
| 10YR-72HR | F-lake 2 | BASE | 299.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.7 | 22.1 |
| 10YR-72HR | G-CANAL | BASE | 299.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 26.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 299.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 301.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | B-DET 2 | BASE | 301.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | C-DET 3 | BASE | 301.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | D-DET 45 | BASE | 301.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | E-lake 1 | BASE | 301.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 25.9 | 26.3 |
| 10YR-72HR | F-lake 2 | BASE | 301.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.8 | 22.1 |
| 10YR-72HR | G-CANAL | BASE | 301.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 26.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 301.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | A-DET 1 | BASE | 303.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | B-DET 2 | BASE | 303.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | C-DET 3 | BASE | 303.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | D-DET 45 | BASE | 303.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | E-lake 1 | BASE | 303.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.0 | 26.4 |
| 10YR-72HR | F-lake 2 | BASE | 303.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.8 | 22.2 |
| 10YR-72HR | G-CANAL | BASE | 303.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 26.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 303.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 305.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | B-DET 2 | BASE | 305.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | C-DET 3 | BASE | 305.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | D-DET 45 | BASE | 305.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | E-lake 1 | BASE | 305.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.0 | 26.5 |
| 10YR-72HR | F-lake 2 | BASE | 305.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.9 | 22.2 |
| 10YR-72HR | G-CANAL | BASE | 305.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 26.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 305.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 307.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | B-DET 2 | BASE | 307.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.8 |
| 10YR-72HR | C-DET 3 | BASE | 307.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | D-DET 45 | BASE | 307.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | E-lake 1 | BASE | 307.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.1 | 26.6 |
| 10YR-72HR | F-lake 2 | BASE | 307.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 25.9 | 22.3 |
| 10YR-72HR | G-CANAL | BASE | 307.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 26.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 307.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 309.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | B-DET 2 | BASE | 309.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | C-DET 3 | BASE | 309.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | D-DET 45 | BASE | 309.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | E-lake 1 | BASE | 309.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.2 | 26.7 |
| 10YR-72HR | F-lake 2 | BASE | 309.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.0 | 22.3 |
| 10YR-72HR | G-CANAL | BASE | 309.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 26.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 309.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 311.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | B-DET 2 | BASE | 311.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | C-DET 3 | BASE | 311.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | D-DET 45 | BASE | 311.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | E-lake 1 | BASE | 311.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.3 | 26.8 |
| 10YR-72HR | F-lake 2 | BASE | 311.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.0 | 22.4 |
| 10YR-72HR | G-CANAL | BASE | 311.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 26.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 311.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 313.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | B-DET 2 | BASE | 313.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |
| 10YR-72HR | C-DET 3 | BASE | 313.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | D-DET 45 | BASE | 313.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | E-lake 1 | BASE | 313.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.4 | 26.9 |
| 10YR-72HR | F-lake 2 | BASE | 313.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.1 | 22.4 |
| 10YR-72HR | G-CANAL | BASE | 313.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 26.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 313.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 315.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | B-DET 2 | BASE | 315.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 1.9 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | C-DET 3 | BASE | 315.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | D-DET 45 | BASE | 315.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | E-lake 1 | BASE | 315.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.5 | 27.0 |
| 10YR-72HR | F-lake 2 | BASE | 315.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.1 | 22.4 |
| 10YR-72HR | G-CANAL | BASE | 315.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 315.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 317.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | B-DET 2 | BASE | 317.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | C-DET 3 | BASE | 317.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | D-DET 45 | BASE | 317.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | E-lake 1 | BASE | 317.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.6 | 27.1 |
| 10YR-72HR | F-lake 2 | BASE | 317.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.2 | 22.5 |
| 10YR-72HR | G-CANAL | BASE | 317.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 317.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 319.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | B-DET 2 | BASE | 319.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | C-DET 3 | BASE | 319.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | D-DET 45 | BASE | 319.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | E-lake 1 | BASE | 319.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.7 | 27.2 |
| 10YR-72HR | F-lake 2 | BASE | 319.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.2 | 22.5 |
| 10YR-72HR | G-CANAL | BASE | 319.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 319.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 321.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | B-DET 2 | BASE | 321.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | C-DET 3 | BASE | 321.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | D-DET 45 | BASE | 321.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | E-lake 1 | BASE | 321.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.8 | 27.3 |
| 10YR-72HR | F-lake 2 | BASE | 321.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.3 | 22.6 |
| 10YR-72HR | G-CANAL | BASE | 321.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 321.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 323.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | B-DET 2 | BASE | 323.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.0 |
| 10YR-72HR | C-DET 3 | BASE | 323.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | D-DET 45 | BASE | 323.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | E-lake 1 | BASE | 323.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 26.9 | 27.4 |
| 10YR-72HR | F-lake 2 | BASE | 323.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.3 | 22.6 |
| 10YR-72HR | G-CANAL | BASE | 323.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 323.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 325.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | B-DET 2 | BASE | 325.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | C-DET 3 | BASE | 325.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | D-DET 45 | BASE | 325.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | E-lake 1 | BASE | 325.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.0 | 27.5 |
| 10YR-72HR | F-lake 2 | BASE | 325.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.4 | 22.7 |
| 10YR-72HR | G-CANAL | BASE | 325.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 325.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 327.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | B-DET 2 | BASE | 327.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | C-DET 3 | BASE | 327.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | D-DET 45 | BASE | 327.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | E-lake 1 | BASE | 327.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.1 | 27.6 |
| 10YR-72HR | F-lake 2 | BASE | 327.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.4 | 22.7 |
| 10YR-72HR | G-CANAL | BASE | 327.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 327.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 329.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | B-DET 2 | BASE | 329.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | C-DET 3 | BASE | 329.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | D-DET 45 | BASE | 329.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | E-lake 1 | BASE | 329.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.2 | 27.6 |
| 10YR-72HR | F-lake 2 | BASE | 329.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.5 | 22.8 |
| 10YR-72HR | G-CANAL | BASE | 329.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 329.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 331.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | B-DET 2 | BASE | 331.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.1 |
| 10YR-72HR | C-DET 3 | BASE | 331.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | D-DET 45 | BASE | 331.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | E-lake 1 | BASE | 331.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.3 | 27.7 |
| 10YR-72HR | F-lake 2 | BASE | 331.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.5 | 22.8 |
| 10YR-72HR | G-CANAL | BASE | 331.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 331.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 333.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | B-DET 2 | BASE | 333.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | C-DET 3 | BASE | 333.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | D-DET 45 | BASE | 333.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | E-lake 1 | BASE | 333.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.4 | 27.8 |
| 10YR-72HR | F-lake 2 | BASE | 333.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.5 | 22.9 |
| 10YR-72HR | G-CANAL | BASE | 333.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 333.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 335.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | B-DET 2 | BASE | 335.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | C-DET 3 | BASE | 335.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | D-DET 45 | BASE | 335.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | E-lake 1 | BASE | 335.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.5 | 27.9 |
| 10YR-72HR | F-lake 2 | BASE | 335.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.6 | 22.9 |
| 10YR-72HR | G-CANAL | BASE | 335.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 27.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 335.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 337.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | B-DET 2 | BASE | 337.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | C-DET 3 | BASE | 337.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | D-DET 45 | BASE | 337.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | E-lake 1 | BASE | 337.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.6 | 28.0 |
| 10YR-72HR | F-lake 2 | BASE | 337.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.6 | 23.0 |
| 10YR-72HR | G-CANAL | BASE | 337.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 28.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 337.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 339.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | B-DET 2 | BASE | 339.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | C-DET 3 | BASE | 339.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | D-DET 45 | BASE | 339.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | E-lake 1 | BASE | 339.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.7 | 28.1 |
| 10YR-72HR | F-lake 2 | BASE | 339.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.7 | 23.0 |

| Simulation | Node | Group | Time | Stage | Warning Stage | Surface Area | Total Inflow | Total Outflow | Total Vol In | Total Vol Out |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs | ft | ft | ft2 | cfs | cfs | af | af |
| 10YR-72HR | G-CANAL | BASE | 339.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 28.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 339.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 341.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | B-DET 2 | BASE | 341.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.2 |
| 10YR-72HR | C-DET 3 | BASE | 341.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | D-DET 45 | BASE | 341.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | E-lake 1 | BASE | 341.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.8 | 28.2 |
| 10YR-72HR | F-lake 2 | BASE | 341.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.7 | 23.1 |
| 10YR-72HR | G-CANAL | BASE | 341.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 28.2 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 341.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 343.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | B-DET 2 | BASE | 343.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | C-DET 3 | BASE | 343.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | D-DET 45 | BASE | 343.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | E-lake 1 | BASE | 343.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.8 | 28.3 |
| 10YR-72HR | F-lake 2 | BASE | 343.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.8 | 23.1 |
| 10YR-72HR | G-CANAL | BASE | 343.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 28.3 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 343.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 345.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | B-DET 2 | BASE | 345.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | C-DET 3 | BASE | 345.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | D-DET 45 | BASE | 345.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | E-lake 1 | BASE | 345.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 27.9 | 28.4 |
| 10YR-72HR | F-lake 2 | BASE | 345.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.8 | 23.2 |
| 10YR-72HR | G-CANAL | BASE | 345.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 28.4 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 345.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 347.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | B-DET 2 | BASE | 347.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | C-DET 3 | BASE | 347.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | D-DET 45 | BASE | 347.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | E-lake 1 | BASE | 347.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 28.0 | 28.5 |
| 10YR-72HR | F-lake 2 | BASE | 347.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.9 | 23.2 |
| 10YR-72HR | G-CANAL | BASE | 347.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 28.5 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 347.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 349.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | B-DET 2 | BASE | 349.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.3 |
| 10YR-72HR | C-DET 3 | BASE | 349.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | D-DET 45 | BASE | 349.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | E-lake 1 | BASE | 349.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 28.1 | 28.6 |
| 10YR-72HR | F-lake 2 | BASE | 349.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 26.9 | 23.3 |
| 10YR-72HR | G-CANAL | BASE | 349.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 28.6 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 349.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 351.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | B-DET 2 | BASE | 351.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | C-DET 3 | BASE | 351.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | D-DET 45 | BASE | 351.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | E-lake 1 | BASE | 351.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 28.2 | 28.7 |
| 10YR-72HR | F-lake 2 | BASE | 351.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 27.0 | 23.3 |
| 10YR-72HR | G-CANAL | BASE | 351.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 28.7 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 351.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |

| Simulation | Node | Group | Time hrs | Stage ft | Warning Stage ft | Surface Area ft2 | Total Inflow cfs | Total Outflow cfs | Total Vol In af | Total Vol Out af |
|---|---|---|---|---|---|---|---|---|---|---|
| 10YR-72HR | A-DET 1 | BASE | 353.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | B-DET 2 | BASE | 353.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | C-DET 3 | BASE | 353.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | D-DET 45 | BASE | 353.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | E-lake 1 | BASE | 353.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 28.3 | 28.8 |
| 10YR-72HR | F-lake 2 | BASE | 353.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 27.0 | 23.3 |
| 10YR-72HR | G-CANAL | BASE | 353.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 28.8 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 353.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 355.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | B-DET 2 | BASE | 355.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | C-DET 3 | BASE | 355.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | D-DET 45 | BASE | 355.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | E-lake 1 | BASE | 355.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 28.4 | 28.9 |
| 10YR-72HR | F-lake 2 | BASE | 355.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 27.1 | 23.4 |
| 10YR-72HR | G-CANAL | BASE | 355.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 28.9 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 355.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 357.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | B-DET 2 | BASE | 357.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.4 |
| 10YR-72HR | C-DET 3 | BASE | 357.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | D-DET 45 | BASE | 357.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | E-lake 1 | BASE | 357.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 28.5 | 29.0 |
| 10YR-72HR | F-lake 2 | BASE | 357.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 27.1 | 23.4 |
| 10YR-72HR | G-CANAL | BASE | 357.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 29.0 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 357.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 359.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.6 |
| 10YR-72HR | B-DET 2 | BASE | 359.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | C-DET 3 | BASE | 359.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.6 |
| 10YR-72HR | D-DET 45 | BASE | 359.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.6 |
| 10YR-72HR | E-lake 1 | BASE | 359.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 28.6 | 29.1 |
| 10YR-72HR | F-lake 2 | BASE | 359.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 27.2 | 23.5 |
| 10YR-72HR | G-CANAL | BASE | 359.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 29.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 359.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |
| 10YR-72HR | A-DET 1 | BASE | 360.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.6 |
| 10YR-72HR | B-DET 2 | BASE | 360.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.5 |
| 10YR-72HR | C-DET 3 | BASE | 360.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.6 |
| 10YR-72HR | D-DET 45 | BASE | 360.00 | 12.900 | 17.500 | 113 | 0.000 | 0.143 | 0.0 | 2.6 |
| 10YR-72HR | E-lake 1 | BASE | 360.00 | 12.827 | 17.500 | 77597 | 0.574 | 0.574 | 28.7 | 29.1 |
| 10YR-72HR | F-lake 2 | BASE | 360.00 | 12.827 | 17.500 | 88442 | 0.287 | 0.287 | 27.2 | 23.5 |
| 10YR-72HR | G-CANAL | BASE | 360.00 | 11.500 | 14.500 | 0 | 0.574 | 0.000 | 29.1 | 0.0 |
| 10YR-72HR | H-PreDev | BASE | 360.00 | 15.693 | 18.000 | 1205867 | 0.000 | 0.000 | 18.5 | 0.0 |

# Appendix

The next step is to compute the project-specific S-value to use for determining the runoff volume which will be discharged from the site. The depth to the water table will be 3 feet (17.0 - 14.0 = 3.0), consequently the total amount of water which can be stored under pervious surfaces will be 4.95 inches. If 15% of the project will be in lakes and 35% will be covered by impervious surfaces, then the remainder, or 50% will be pervious areas and the appropriate weighted S-value will be:

$$4.95" \times (1 - (.15+.35)) = 2.48" = S$$

Figure E-1 is a graphical representation of the cumulative water storage capabilities of the soil profile for the developed and undisturbed conditions versus the depth to the average wet season water table for the typical sandy soils found within the South Florida Water Management District boundaries.

In about April, 1993, the US SCS furnished the District test data for Immokalee and Riviera soils which show less soil storage than the typical soils described above. The following table shows the average values as compared to the typical values (Coastal). Although the lesser storage values result in higher SCS runoff curve numbers, the depressional and flatwoods soils typically are in flat and depressed areas with standing water, thus the areas have low runoff potential.

**SOIL STORAGE**

| Depth to W.T. | Coastal (1) Stor. (In.) | CN | Flatwoods (2) Stor. (In.) | CN | Depressional (3) Stor. (In.) | CN |
|---|---|---|---|---|---|---|
| 1' | 0.6 | 94 | 0.6 | 94 | 0.6 | 94 |
| 2' | 2.5 | 80 | 2.5 | 80 | 2.1 | 83 |
| 3' | 6.6 | 60 | 5.4 | 65 | 4.4 | 69 |
| 4' | 10.9 | 48 | 9.0 | 53 | 6.8 | 60 |

(1) Sandy soils 0 - 40" thick with water tables dropping below 40" - St. Lucie series is representative

(2) Water tables 15" - 40" - Immokalee series is representative

(3) Water tables above ground - 15" - Riviera and Pompano series are representative

Figure E-1 is also a graphical comparison of the cumulative water storage capabilities of the soil profile for flatwoods and depressional storage.

**Table 2-2a** Runoff curve numbers for urban areas [1/]

| Cover description: Cover type and hydrologic condition | Average percent impervious area [2/] | Curve numbers for hydrologic soil group: A | B | C | D |
|---|---|---|---|---|---|
| *Fully developed urban areas (vegetation established)* | | | | | |
| Open space (lawns, parks, golf courses, cemeteries, etc.) [3/]: | | | | | |
| Poor condition (grass cover < 50%) | | 68 | 79 | 86 | 89 |
| Fair condition (grass cover 50% to 75%) | | 49 | 69 | 79 | 84 |
| Good condition (grass cover > 75%) | | 39 | 61 | 74 | 80 |
| Impervious areas: | | | | | |
| Paved parking lots, roofs, driveways, etc. (excluding right-of-way) | | 98 | 98 | 98 | 98 |
| Streets and roads: | | | | | |
| Paved; curbs and storm sewers (excluding right-of-way) | | 98 | 98 | 98 | 98 |
| Paved; open ditches (including right-of-way) | | 83 | 89 | 92 | 93 |
| Gravel (including right-of-way) | | 76 | 85 | 89 | 91 |
| Dirt (including right-of-way) | | 72 | 82 | 87 | 89 |
| Western desert urban areas: | | | | | |
| Natural desert landscaping (pervious areas only) [4/] | | 63 | 77 | 85 | 88 |
| Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders) | | 96 | 96 | 96 | 96 |
| Urban districts: | | | | | |
| Commercial and business | 85 | 89 | 92 | 94 | 95 |
| Industrial | 72 | 81 | 88 | 91 | 93 |
| Residential districts by average lot size: | | | | | |
| 1/8 acre or less (town houses) | 65 | 77 | 85 | 90 | 92 |
| 1/4 acre | 38 | 61 | 75 | 83 | 87 |
| 1/3 acre | 30 | 57 | 72 | 81 | 86 |
| 1/2 acre | 25 | 54 | 70 | 80 | 85 |
| 1 acre | 20 | 51 | 68 | 79 | 84 |
| 2 acres | 12 | 46 | 65 | 77 | 82 |
| *Developing urban areas* | | | | | |
| Newly graded areas (pervious areas only, no vegetation) [5/] | | 77 | 86 | 91 | 94 |
| Idle lands (CN's are determined using cover types similar to those in table 2-2c). | | | | | |

[1] Average runoff condition, and $I_a = 0.2S$.

[2] The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.

[3] CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.

[4] Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.

[5] Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

**Table 2-2b** Runoff curve numbers for cultivated agricultural lands [1/]

| Cover description | | | Curve numbers for hydrologic soil group | | | |
|---|---|---|---|---|---|---|
| Cover type | Treatment [2/] | Hydrologic condition [3/] | A | B | C | D |
| Fallow | Bare soil | — | 77 | 86 | 91 | 94 |
| | Crop residue cover (CR) | Poor | 76 | 85 | 90 | 93 |
| | | Good | 74 | 83 | 88 | 90 |
| Row crops | Straight row (SR) | Poor | 72 | 81 | 88 | 91 |
| | | Good | 67 | 78 | 85 | 89 |
| | SR + CR | Poor | 71 | 80 | 87 | 90 |
| | | Good | 64 | 75 | 82 | 85 |
| | Contoured (C) | Poor | 70 | 79 | 84 | 88 |
| | | Good | 65 | 75 | 82 | 86 |
| | C + CR | Poor | 69 | 78 | 83 | 87 |
| | | Good | 64 | 74 | 81 | 85 |
| | Contoured & terraced (C&T) | Poor | 66 | 74 | 80 | 82 |
| | | Good | 62 | 71 | 78 | 81 |
| | C&T+ CR | Poor | 65 | 73 | 79 | 81 |
| | | Good | 61 | 70 | 77 | 80 |
| Small grain | SR | Poor | 65 | 76 | 84 | 88 |
| | | Good | 63 | 75 | 83 | 87 |
| | SR + CR | Poor | 64 | 75 | 83 | 86 |
| | | Good | 60 | 72 | 80 | 84 |
| | C | Poor | 63 | 74 | 82 | 85 |
| | | Good | 61 | 73 | 81 | 84 |
| | C + CR | Poor | 62 | 73 | 81 | 84 |
| | | Good | 60 | 72 | 80 | 83 |
| | C&T | Poor | 61 | 72 | 79 | 82 |
| | | Good | 59 | 70 | 78 | 81 |
| | C&T+ CR | Poor | 60 | 71 | 78 | 81 |
| | | Good | 58 | 69 | 77 | 80 |
| Close-seeded or broadcast legumes or rotation meadow | SR | Poor | 66 | 77 | 85 | 89 |
| | | Good | 58 | 72 | 81 | 85 |
| | C | Poor | 64 | 75 | 83 | 85 |
| | | Good | 55 | 69 | 78 | 83 |
| | C&T | Poor | 63 | 73 | 80 | 83 |
| | | Good | 51 | 67 | 76 | 80 |

[1] Average runoff condition, and $I_a$=0.2S

[2] Crop residue cover applies only if residue is on at least 5% of the surface throughout the year.

[3] Hydraulic condition is based on combination factors that affect infiltration and runoff, including (a) density and canopy of vegetative areas, (b) amount of year-round cover, (c) amount of grass or close-seeded legumes, (d) percent of residue cover on the land surface (good ≥ 20%), and (e) degree of surface roughness.

Poor: Factors impair infiltration and tend to increase runoff.

Good: Factors encourage average and better than average infiltration and tend to decrease runoff.

**Table 2-2c** Runoff curve numbers for other agricultural lands [1/]

| Cover description | | Curve numbers for hydrologic soil group | | | |
|---|---|---|---|---|---|
| Cover type | Hydrologic condition | A | B | C | D |
| Pasture, grassland, or range—continuous forage for grazing. [2/] | Poor | 68 | 79 | 86 | 89 |
| | Fair | 49 | 69 | 79 | 84 |
| | Good | 39 | 61 | 74 | 80 |
| Meadow—continuous grass, protected from grazing and generally mowed for hay. | — | 30 | 58 | 71 | 78 |
| Brush—brush-weed-grass mixture with brush the major element. [3/] | Poor | 48 | 67 | 77 | 83 |
| | Fair | 35 | 56 | 70 | 77 |
| | Good | 30 [4/] | 48 | 65 | 73 |
| Woods—grass combination (orchard or tree farm). [5/] | Poor | 57 | 73 | 82 | 86 |
| | Fair | 43 | 65 | 76 | 82 |
| | Good | 32 | 58 | 72 | 79 |
| Woods. [6/] | Poor | 45 | 66 | 77 | 83 |
| | Fair | 36 | 60 | 73 | 79 |
| | Good | 30 [4/] | 55 | 70 | 77 |
| Farmsteads—buildings, lanes, driveways, and surrounding lots. | — | 59 | 74 | 82 | 86 |

1 Average runoff condition, and $I_a = 0.2S$.

2 *Poor:* <50%) ground cover or heavily grazed with no mulch.
*Fair:* 50 to 75% ground cover and not heavily grazed.
*Good:* > 75% ground cover and lightly or only occasionally grazed.

3 *Poor:* <50% ground cover.
*Fair:* 50 to 75% ground cover.
*Good:* >75% ground cover.

4 Actual curve number is less than 30; use CN = 30 for runoff computations.

5 CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

6 *Poor:* Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.
*Fair:* Woods are grazed but not burned, and some forest litter covers the soil.
*Good:* Woods are protected from grazing, and litter and brush adequately cover the soil.

# Evaluation of Current Stormwater Design Criteria within the State of Florida

## Final Report

Prepared for:




**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**FDEP Contract No. SO108**

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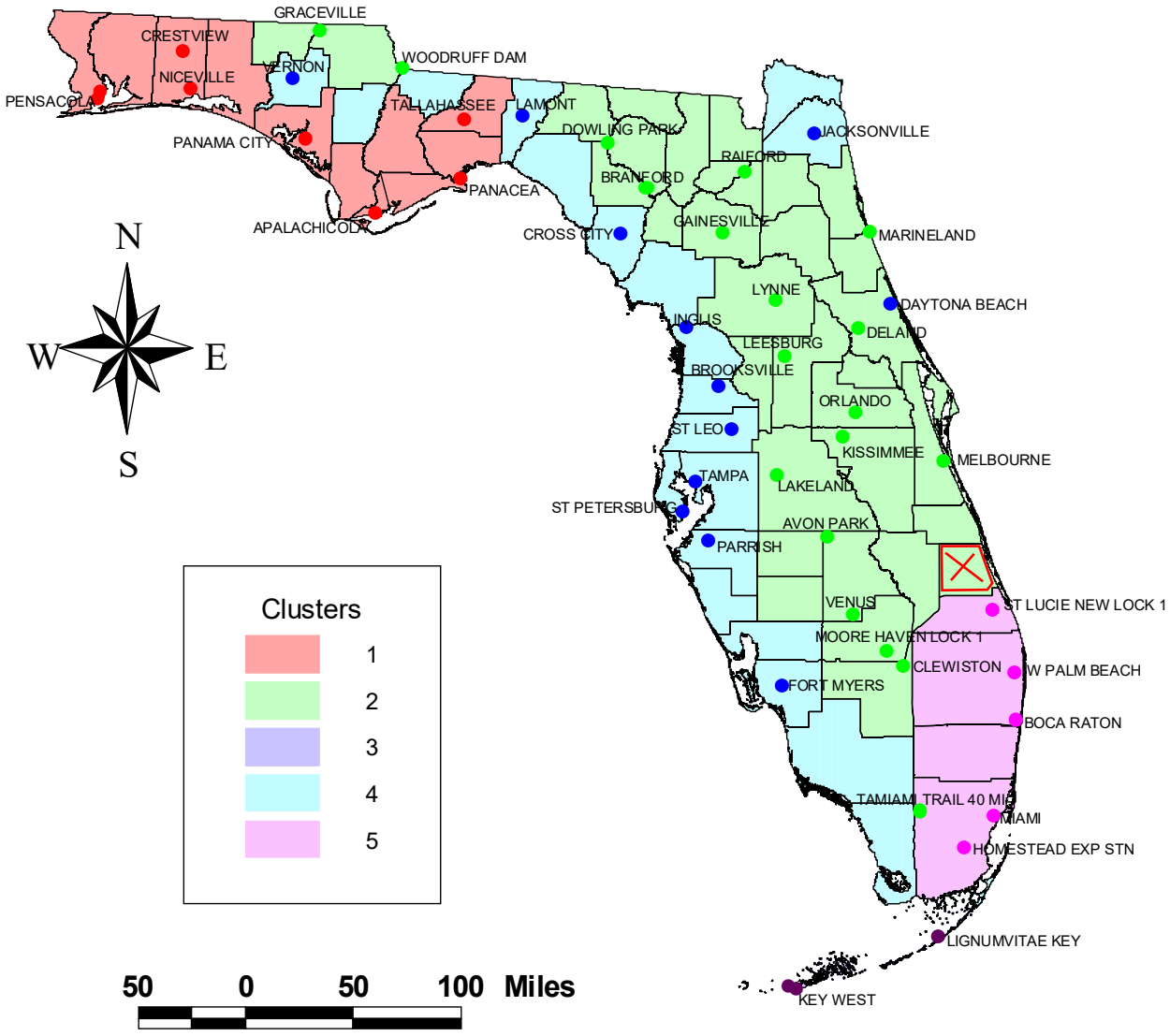



Figure 4-3. Meteorological Zones Identified Using Cluster Analysis.

Unfortunately, not all counties in Florida have long-term meteorological monitoring sites with hourly data. For purposes of designating meteorological zones, counties without a monitoring site were grouped according to the meteorological characteristics of adjacent counties with monitoring sites. The resulting zones appear to be relatively intuitive with respect to meteorological processes. The cluster groupings only have two apparent outliers, Daytona Beach and Tamiami Trail, which appear out of place. However, in a data set containing 45 points, an analysis conducted at a 95% probability level would be expected to have approximately 2-3 outlier values. A listing of counties included in each meteorological zone is given in Table 4-23.

## TABLE 4-23

## COUNTIES INCLUDED IN THE DESIGNATED METEORLOGICAL ZONES

| ZONE | | | | |
|---|---|---|---|---|
| **1** | **2** | **3** | **4** | **5** |
| Okaloosa | St. Lucie | Monroe | Washington | Martin |
| Liberty | Columbia | | Manatee | Broward |
| Bay | DeSoto | | Levy | Miami-Dade |
| Wakulla | St. Johns | | Pasco | Palm Beach |
| Leon | Seminole | | Pinellas | |
| Santarosa | Sumter | | Lee | |
| Gulf | Flagler | | Hillsborough | |
| Franklin | Suwannee | | Hernando | |
| Escambia | Gadsden | | Sarasota | |
| Walton | Gilchrist | | Duval | |
| | Glades | | Dixie | |
| | Calhoun | | Collier | |
| | Hamilton | | Citrus | |
| | Hardee | | Charlotte | |
| | Hendry | | Taylor | |
| | Union | | Nassau | |
| | Highlands | | Jefferson | |
| | Putnam | | Monroe | |
| | Holmes | | | |
| | Indian River | | | |
| | Jackson | | | |
| | Volusia | | | |
| | Lafayette | | | |
| | Lake | | | |
| | Polk | | | |
| | Brevard | | | |
| | Bradford | | | |
| | Baker | | | |
| | Madison | | | |
| | Osceola | | | |
| | Marion | | | |
| | Orange | | | |
| | Clay | | | |
| | Okeechobee | | | |
| | Alachua | | | |

A summary of mean runoff coefficients for each cluster as a function of land use and hydrologic soil group is given in Table 4-24. The values summarized in this table reflect the mean runoff coefficients for each land use and hydrologic soil group and each meteorological monitoring site included in each of the five clusters. The values summarized in Table 4-24 reflect differences in runoff coefficients as a result of frequency distributions of common rain events only. This analysis does not include variability in rainfall depth throughout the State which must be multiplied times the mean runoff coefficients to obtain an estimate of annual runoff volume.

$$BOD_i = BOD_o \times exp(-K \times t)$$

where:

$BOD_t$ = BOD at time, t (mg/l)

$BOD_o$ = initial BOD (mg/l)

t = time (days)

K = decomposition constant ($time^{-1}$)

BOD decomposition constants (K) in surface waters are temperature-dependent but are typically on the order of 0.1/day. A graphical representation of the theoretical removal of BOD as a function of time, based upon a decomposition constant of 0.1/day, is given in Figure 6-1. This relationship can be used to estimate the time required to achieve a certain BOD removal efficiency within a wet detention pond. A removal efficiency of approximately 80% is achieved for BOD after a residence time of approximately 15 days, with removal efficiencies in excess of 95% after approximately 30-35 days. As a result, the removal of BOD in aquatic systems occurs at a much more rapid rate than removal of total nitrogen or total phosphorus, as indicated in Figures 5-10 and 5-11. Therefore, if a stormwater management system provides the required removal efficiency for both total nitrogen and total phosphorus, the system will also easily provide the same pollutant removal efficiency for BOD.

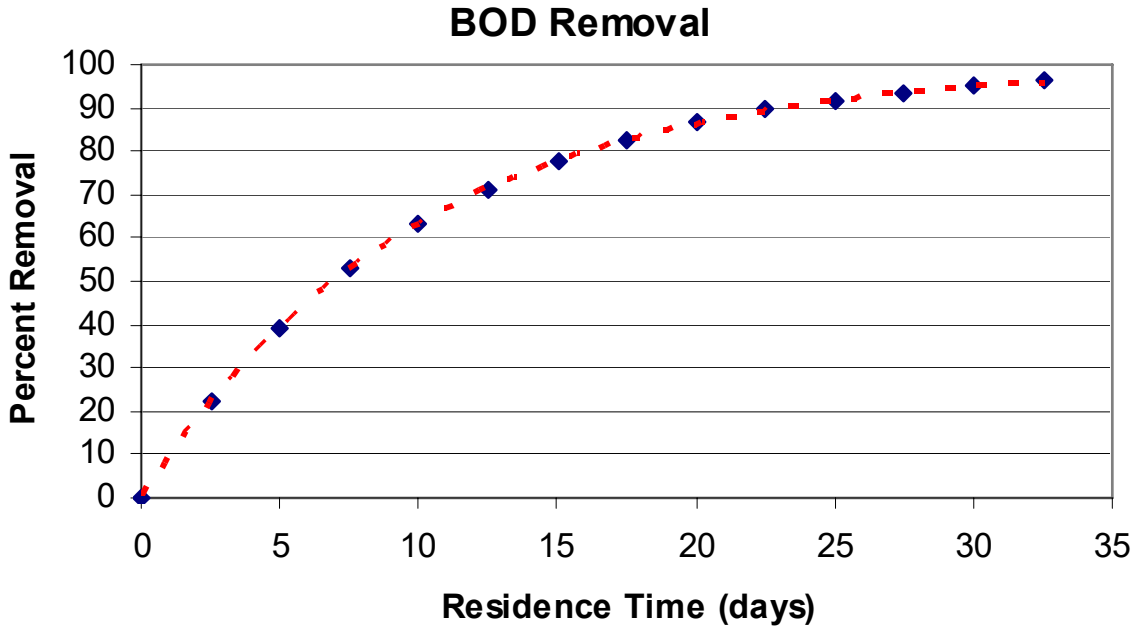



Figure 6-1. Theoretical Removal of BOD as a Function of Residence Time in a Wet Detention Pond.

## 4.1.5 Low-Intensity Commercial Areas

For the purposes of this evaluation, the term intensity refers to the level of use of the commercial area rather than an indication of the type of business or density of development. Low-intensity commercial areas are defined as areas which receive only a moderate amount of traffic volume and where cars may be parked during the day for extended periods of time. Since most commercial activities themselves generate relatively little pollutant loading, the majority of pollutant deposition occurs as a result of automobiles and trucks operating within the commercial area. Low-intensity commercial areas include schools, churches, professional office sites, and small shopping centers. High-intensity commercial areas include downtown business districts and large regional shopping areas.

A summary of hydrologic characteristics from low-intensity commercial stormwater characterization studies is given in Table B.3. Nine separate studies were identified in the available literature, with watershed areas ranging from 2.17-50.70 acres. Percentage imperviousness for the commercial sites range from 60% to approximately 100%. Eight of the nine studies utilize curb and gutter stormsewer systems, with swales utilized for drainage conveyance at the Florida Aquarium site.

A summary of mean stormwater emc values from low-intensity commercial stormwater studies is given in Table 4-7. Characterization data for total nitrogen, total phosphorus, and TSS are provided for each of the nine studies, with eight of the nine studies providing characterization data for BOD. As observed in previous land use categories, characterization data for heavy metals is somewhat limited. In general, low-intensity commercial areas are characterized by relatively low levels of total nitrogen, total phosphorus, and BOD, although TSS concentrations are somewhat elevated. Runoff characteristics reported by Harper and Herr (1993) are not included in calculation of the mean value since the runoff in this study received pre-treatment in a vegetated swale prior to collection.

**TABLE 4-7**

**SUMMARY OF MEAN STORMWATER CHARACTERISTICS FROM LOW-INTENSITY COMMERCIAL STORMWATER STUDIES**

| LOCATION | REFERENCE | MEAN emc VALUE (mg/l) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TN | TP | BOD | TSS | Cd | Cr | Cu | Fe | Ni | Pb | Zn |
| Orlando Areawide Study[1] | ECFRPC (1978) | 0.89 | 0.16 | 3.6 | 146 | -- | -- | -- | -- | -- | 0.068[2] | -- |
| Ft. Lauderdale - Coral Ridge Mall | Miller (1979) | 1.10 | 0.10 | 5.4 | 45.0 | -- | -- | 0.015 | -- | -- | 0.387[2] | 0.128 |
| Tampa - Norma Park | U.S. EPA (1983) | 1.19 | 0.15 | 12.0 | 22.0 | -- | -- | -- | -- | -- | 0.046[2] | 0.037 |
| Orlando - International Market Place | Harper (1988) | 1.53 | 0.19 | 11.6 | 111 | 0.008 | 0.013 | 0.031 | 1.10 | 0.028 | 0.136[2] | 0.168 |
| DeBary[3] | Harper and Herr (1993) | 0.761 | 0.260 | 6.9 | 79.1 | 0.0005 | 0.003 | 0.010 | 0.582 | -- | 0.009 | 0.028 |
| Bradfordville | ERD (2000) | 2.14 | 0.160 | 9.0 | 38.3 | -- | -- | -- | -- | -- | -- | -- |
| Tallahassee - Cross Creek Shopping Center | COT and ERD (2002) | 0.925 | 0.15 | 8.0 | 15.0 | -- | -- | 0.008 | -- | -- | 0.002 | 0.045 |
| Sarasota County | ERD (2004) | 0.88 | 0.31 | 4.3 | 39.9 | -- | -- | -- | -- | -- | -- | -- |
| Florida Aquarium - Tampa | Teague, et al. (2005) | 0.761 | 0.215 | -- | 42.4 | 0.003 | -- | 0.019 | 1.17 | -- | 0.008 | 0.090 |
| **Overall Mean Value** | | **1.18** | **0.179** | **7.7** | **57.5** | **0.006** | **0.013** | **0.018** | **1.14** | **0.028** | **0.005** | **0.094** |

1. Average of studies performed on a parking lot, motel complex, and commercial strip development
2. Data not included in calculation of mean value
3. Values excluded from means due to swale pre-treatment

## Zone 2
## Mean Annual Runoff Coefficients (C Values) as a Function of DCIA Percentage and Non-DCIA Curve Number (CN)

| NDCIA CN | Percent DCIA | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 |
| 30 | 0.002 | 0.043 | 0.083 | 0.123 | 0.164 | 0.204 | 0.244 | 0.285 | 0.325 | 0.366 | 0.406 | 0.446 | 0.487 | 0.527 | 0.567 | 0.608 | 0.648 | 0.688 | 0.729 | 0.769 | 0.809 |
| 35 | 0.004 | 0.044 | 0.085 | 0.125 | 0.165 | 0.205 | 0.246 | 0.286 | 0.326 | 0.366 | 0.407 | 0.447 | 0.487 | 0.528 | 0.568 | 0.608 | 0.648 | 0.689 | 0.729 | 0.769 | 0.809 |
| 40 | 0.007 | 0.047 | 0.087 | 0.127 | 0.167 | 0.207 | 0.248 | 0.288 | 0.328 | 0.368 | 0.408 | 0.448 | 0.488 | 0.528 | 0.569 | 0.609 | 0.649 | 0.689 | 0.729 | 0.769 | 0.809 |
| 45 | 0.010 | 0.050 | 0.090 | 0.130 | 0.170 | 0.210 | 0.250 | 0.290 | 0.330 | 0.370 | 0.410 | 0.450 | 0.490 | 0.530 | 0.570 | 0.610 | 0.650 | 0.690 | 0.729 | 0.769 | 0.809 |
| 50 | 0.015 | 0.055 | 0.095 | 0.134 | 0.174 | 0.214 | 0.254 | 0.293 | 0.333 | 0.373 | 0.412 | 0.452 | 0.492 | 0.531 | 0.571 | 0.611 | 0.651 | 0.690 | 0.730 | 0.770 | 0.809 |
| 55 | 0.022 | 0.061 | 0.101 | 0.140 | 0.179 | 0.219 | 0.258 | 0.298 | 0.337 | 0.376 | 0.416 | 0.455 | 0.494 | 0.534 | 0.573 | 0.613 | 0.652 | 0.691 | 0.731 | 0.770 | 0.809 |
| 60 | 0.030 | 0.069 | 0.108 | 0.147 | 0.186 | 0.225 | 0.264 | 0.303 | 0.342 | 0.381 | 0.420 | 0.459 | 0.498 | 0.537 | 0.576 | 0.615 | 0.654 | 0.693 | 0.731 | 0.770 | 0.809 |
| 65 | 0.042 | 0.080 | 0.119 | 0.157 | 0.195 | 0.234 | 0.272 | 0.311 | 0.349 | 0.387 | 0.426 | 0.464 | 0.502 | 0.541 | 0.579 | 0.618 | 0.656 | 0.694 | 0.733 | 0.771 | 0.809 |
| 70 | 0.057 | 0.095 | 0.133 | 0.170 | 0.208 | 0.245 | 0.283 | 0.321 | 0.358 | 0.396 | 0.433 | 0.471 | 0.509 | 0.546 | 0.584 | 0.621 | 0.659 | 0.697 | 0.734 | 0.772 | 0.809 |
| 75 | 0.079 | 0.116 | 0.152 | 0.189 | 0.225 | 0.262 | 0.298 | 0.335 | 0.371 | 0.408 | 0.444 | 0.481 | 0.517 | 0.554 | 0.590 | 0.627 | 0.663 | 0.700 | 0.736 | 0.773 | 0.809 |
| 80 | 0.111 | 0.146 | 0.181 | 0.216 | 0.251 | 0.285 | 0.320 | 0.355 | 0.390 | 0.425 | 0.460 | 0.495 | 0.530 | 0.565 | 0.600 | 0.635 | 0.670 | 0.705 | 0.740 | 0.774 | 0.809 |
| 85 | 0.160 | 0.192 | 0.225 | 0.257 | 0.290 | 0.322 | 0.355 | 0.387 | 0.420 | 0.452 | 0.485 | 0.517 | 0.550 | 0.582 | 0.614 | 0.647 | 0.679 | 0.712 | 0.744 | 0.777 | 0.809 |
| 90 | 0.242 | 0.270 | 0.299 | 0.327 | 0.355 | 0.384 | 0.412 | 0.440 | 0.469 | 0.497 | 0.526 | 0.554 | 0.582 | 0.611 | 0.639 | 0.667 | 0.696 | 0.724 | 0.753 | 0.781 | 0.809 |
| 95 | 0.404 | 0.424 | 0.444 | 0.464 | 0.485 | 0.505 | 0.525 | 0.546 | 0.566 | 0.586 | 0.606 | 0.627 | 0.647 | 0.667 | 0.688 | 0.708 | 0.728 | 0.749 | 0.769 | 0.789 | 0.809 |
| 98 | 0.595 | 0.605 | 0.616 | 0.627 | 0.638 | 0.648 | 0.659 | 0.670 | 0.680 | 0.691 | 0.702 | 0.713 | 0.723 | 0.734 | 0.745 | 0.756 | 0.766 | 0.777 | 0.788 | 0.799 | 0.809 |

82.5%

0.688

**Table B-4.** Estimated runoff and TN and TP loads [in pounds per acre per year (lbs/ac/yr)] and concentrations [in milligrams per liter (mg/L)] for 2004 land use categories in the St. Lucie River Watershed.

| Land Use Category | Land Use Description | FLUCCS | Runoff (in/yr) | Unit TN Load (lbs/ ac/yr) | TN Concen- tration (mg/L) | Unit TP Load (lbs/ ac/yr) | TP Concen- tration (mg/L) |
|---|---|---|---|---|---|---|---|
| Residential Low Density | Residential Low Density[1] | 1100 | 17.5676 | 4.29 | 1.08 | 0.49 | 0.12 |
| Residential Medium Density | Residential Medium Density[2] | 1200 | 20.7617 | 6.24 | 1.33 | 1.40 | 0.30 |
| Residential High Density | Residential High Density[2] | 1300 | 23.9558 | 9.36 | 1.73 | 3.00 | 0.55 |
| Other Urban | Commercial and Services[2] | 1400 | 25.5528 | 8.58 | 1.48 | 1.40 | 0.24 |
| | Industrial[2] | 1500 | 27.1499 | 7.80 | 1.27 | 2.40 | 0.39 |
| | Extractive[2] | 1600 | 23.9558 | 5.46 | 1.01 | 0.66 | 0.12 |
| | Institutional[2] | 1700 | 23.9558 | 5.46 | 1.01 | 2.40 | 0.44 |
| | Recreational[2] | 1800 | 17.5676 | 5.46 | 1.37 | 0.96 | 0.24 |
| Improved Pastures | Improved Pastures | 2110 | 19.1646 | 8.66 | 2.00 | 1.90 | 0.44 |
| Unimproved Pastures | Unimproved Pastures | 2120 | 15.9705 | 4.29 | 1.19 | 0.92 | 0.25 |
| Woodland Pastures/Rangeland | Woodland Pastures | 2130 | 15.9705 | 3.20 | 0.89 | 0.88 | 0.24 |
| | Rangeland | 3000 | 15.9705 | 3.20 | 0.89 | 0.28 | 0.08 |
| Row Crops | Row Crops | 2140 | 22.3587 | 11.70 | 2.31 | 4.50 | 0.89 |
| Sugar Cane | Sugar Cane | 2156 | 19.1646 | 6.24 | 1.44 | 0.63 | 0.15 |
| Citrus | Citrus | 2210 | 19.1646 | 6.63 | 1.53 | 1.80 | 0.42 |
| Sod Farms | Sod Farms | 2420 | 19.1646 | 7.02 | 1.62 | 2.52 | 0.58 |
| Ornamentals | Ornamentals | 2430 | 19.1646 | 9.36 | 2.16 | 2.90 | 0.67 |
| Horse Farms | Horse Farms | 2510 | 15.9705 | 12.48 | 3.45 | 1.82 | 0.50 |
| Dairies | Dairies | 2520 | 15.9705 | 15.60 | 4.32 | 9.38 | 2.60 |
| Other Areas | Field Crops | 2150 | 15.9705 | 5.17 | 1.43 | 2.96 | 0.82 |
| | Mixed Crops | 2160 | 19.1646 | 8.58 | 1.98 | 3.50 | 0.81 |
| | Fruit Orchards | 2220 | 19.1646 | 7.02 | 1.62 | 2.30 | 0.53 |
| | Other Groves | 2230 | 19.1646 | 7.02 | 1.62 | 2.30 | 0.53 |
| | Cattle Feeding Operations | 2310 | 19.1646 | 42.16 | 9.72 | 8.96 | 2.07 |
| | Poultry Feeding Operations | 2320 | 19.1646 | 7.80 | 1.80 | 1.50 | 0.35 |
| | Tree Nurseries | 2410 | 15.9705 | 9.36 | 2.59 | 2.90 | 0.80 |
| | Specialty Farms | 2500 | 15.9705 | 6.24 | 1.73 | 1.82 | 0.50 |
| | Aquaculture | 2540 | 7.98525 | 7.80 | 4.32 | 0.70 | 0.39 |
| | Fallow Crop Land | 2610 | 19.1646 | 5.46 | 1.26 | 0.70 | 0.16 |
| Tree Plantations | Tree Plantations | 4400 | 15.9705 | 2.42 | 0.67 | 0.18 | 0.05 |
| Water | Water | 5000 | 3.1941 | 0.70 | 0.97 | 0.05 | 0.07 |
| Natural Areas | Upland Forests (not including 4400s) | 4000 | 14.3735 | 1.95 | 0.60 | 0.28 | 0.09 |
| | Wetlands | 6000 | 1.59705 | 1.17 | 3.24 | 0.01 | 0.03 |
| | Barren Land | 7000 | 23.9558 | 5.46 | 1.01 | 0.75 | 0.14 |
| | Open Land | 1900 | 15.9705 | 3.12 | 0.86 | 0.28 | 0.08 |
| Transportation | Transportation | 8100 | 27.1499 | 7.18 | 1.17 | 1.65 | 0.27 |
| Communication/Utilities | Communications | 8200 | 15.9705 | 4.68 | 1.30 | 0.48 | 0.13 |
| | Utilities | 8300 | 15.9705 | 4.68 | 1.30 | 0.48 | 0.13 |

[1]Assumed to be on septic systems.

[2]Assumed discharge from wastewater treatment outside of the watershed.

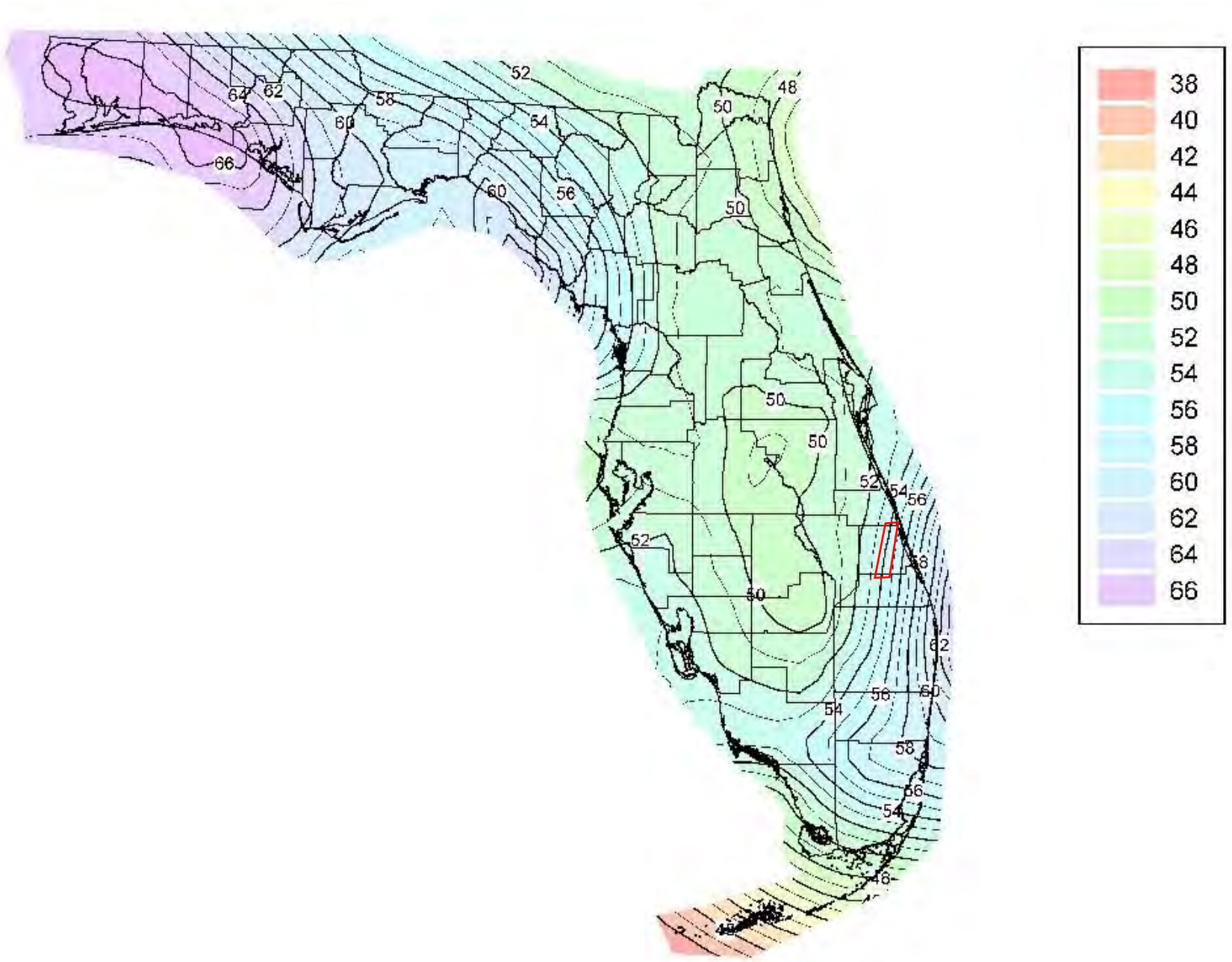
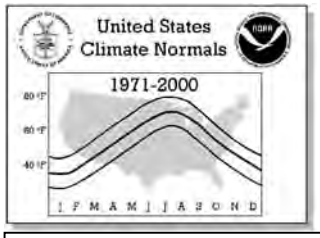



Figure 3-2. Isopleths of Mean Annual Precipitation in Florida from 1971-2000.






# FLORIDA



**PRECIPITATION NORMALS** (Total in Inches)

| No. | Station Name | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | ANNUAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | APALACHICOLA AP | 4.87 | 3.76 | 4.95 | 3.00 | 2.62 | 4.30 | 7.31 | 7.29 | 7.10 | 4.18 | 3.62 | 3.51 | 56.51 |
| 002 | ARCADIA | 2.13 | 2.43 | 3.10 | 1.86 | 3.87 | 7.81 | 7.64 | 7.02 | 6.77 | 2.87 | 2.08 | 1.76 | 49.34 |
| 003 | ARCHBOLD BIO STATION | 2.32 | 2.38 | 3.25 | 2.33 | 3.98 | 7.74 | 7.66 | 7.42 | 6.50 | 3.00 | 2.07 | 1.95 | 50.60 |
| 004 | AVON PARK 2 W | 2.48 | 2.41 | 3.02 | 2.17 | 3.63 | 8.25 | 6.81 | 7.18 | 5.98 | 3.02 | 2.27 | 1.87 | 49.09 |
| 005 | BABSON PARK 1 ENE | 2.06 | 2.56 | 3.13 | 1.95 | 4.10 | 6.86 | 8.23 | 7.29 | 5.65 | 2.29 | 2.48 | 1.75 | 48.35 |
| 006 | BARTOW | 2.51 | 2.82 | 3.11 | 2.53 | 3.81 | 6.78 | 8.56 | 6.52 | 6.68 | 2.71 | 2.18 | 2.37 | 50.58 |
| 007 | BELLE GLADE EXP STN | 2.51 | 1.88 | 2.65 | 2.41 | 5.04 | 7.33 | 7.34 | 7.16 | 7.09 | 3.54 | 2.79 | 1.82 | 51.56 |
| 008 | BITHLO | 2.35 | 2.69 | 2.81 | 1.88 | 3.47 | 7.26 | 6.86 | 8.06 | 6.14 | 3.75 | 2.14 | 1.87 | 49.28 |
| 009 | BRADENTON 5 ESE | 2.94 | 2.66 | 3.36 | 1.83 | 2.85 | 7.41 | 8.71 | 9.43 | 7.25 | 2.88 | 2.35 | 2.45 | 54.12 |
| 010 | BROOKSVILLE CHIN HILL | 3.27 | 3.24 | 4.22 | 2.62 | 3.40 | 7.24 | 7.16 | 8.24 | 5.96 | 2.38 | 2.39 | 2.45 | 52.57 |
| 011 | BUSHNELL 2 E | 3.43 | 3.02 | 3.93 | 2.34 | 3.79 | 6.18 | 6.43 | 7.24 | 6.00 | 2.14 | 2.18 | 2.52 | 49.20 |
| 012 | CANAL POINT USDA | 2.60 | 2.27 | 3.44 | 2.42 | 4.61 | 7.64 | 6.22 | 6.69 | 7.28 | 3.91 | 2.95 | 2.07 | 52.10 |
| 013 | CHIPLEY 3 E | 6.09 | 4.81 | 6.11 | 3.84 | 4.21 | 5.24 | 6.92 | 5.38 | 4.76 | 2.90 | 4.12 | 3.86 | 58.24 |
| 014 | CLERMONT 7 S | 3.11 | 2.58 | 3.81 | 2.18 | 3.67 | 7.86 | 6.78 | 6.96 | 5.59 | 2.40 | 2.40 | 2.40 | 49.74 |
| 015 | CLEWISTON US ENGINEERS | 2.38 | 2.01 | 2.68 | 2.16 | 4.50 | 7.15 | 6.58 | 6.28 | 4.99 | 2.87 | 2.28 | 1.52 | 45.40 |
| 016 | CRESCENT CITY | 3.34 | 2.83 | 4.06 | 2.56 | 3.52 | 6.53 | 6.34 | 6.28 | 6.11 | 3.12 | 2.55 | 2.55 | 49.79 |
| 017 | CRESTVIEW BOB SIKES AP | 6.49 | 4.91 | 7.06 | 4.26 | 4.94 | 7.41 | 6.83 | 6.34 | 4.88 | 3.02 | 4.20 | 3.60 | 63.94 |
| 018 | CROSS CITY 2 WNW | 4.41 | 3.54 | 4.42 | 3.48 | 3.06 | 6.34 | 8.92 | 9.67 | 6.10 | 2.93 | 2.35 | 3.27 | 58.49 |
| 019 | DAYTONA BEACH INTL AP | 3.13 | 2.74 | 3.84 | 2.54 | 3.26 | 5.69 | 5.17 | 6.09 | 6.61 | 4.48 | 3.03 | 2.71 | 49.29 |
| 020 | DE FUNIAK SPRINGS | 5.61 | 5.39 | 6.23 | 3.93 | 4.95 | 6.60 | 7.67 | 6.77 | 6.03 | 3.23 | 4.76 | 4.35 | 65.52 |
| 021 | DELAND 1 SSE | 3.35 | 2.96 | 3.84 | 2.80 | 4.27 | 7.60 | 7.88 | 7.70 | 7.17 | 4.09 | 2.72 | 2.65 | 57.03 |
| 022 | DESOTO CITY 8 SW | 2.31 | 2.57 | 3.10 | 2.20 | 3.61 | 8.21 | 7.00 | 6.97 | 6.48 | 2.64 | 2.30 | 1.62 | 49.01 |
| 023 | DEVILS GARDEN | 2.37 | 2.09 | 2.78 | 2.63 | 4.33 | 8.58 | 7.52 | 8.10 | 6.53 | 3.52 | 2.58 | 1.64 | 52.67 |
| 024 | EVERGLADES | 1.71 | 1.49 | 1.92 | 1.93 | 3.56 | 9.89 | 7.34 | 8.62 | 8.23 | 3.80 | 1.89 | 1.72 | 52.10 |
| 025 | FEDERAL POINT | 3.09 | 2.89 | 3.68 | 2.34 | 3.55 | 6.67 | 6.16 | 6.57 | 6.83 | 3.34 | 2.70 | 2.72 | 50.54 |
| 026 | FERNANDINA BEACH | 3.82 | 3.17 | 4.01 | 2.91 | 2.87 | 5.30 | 5.80 | 5.34 | 7.73 | 4.22 | 2.49 | 2.73 | 50.39 |
| 027 | FLAMINGO RANGER STN | 1.94 | 1.63 | 1.87 | 2.06 | 5.06 | 7.25 | 4.73 | 7.43 | 7.20 | 4.26 | 2.46 | 1.57 | 47.46 |
| 028 | FORT DRUM 5 NW | 2.27 | 2.47 | 3.78 | 2.43 | 4.47 | 8.05 | 7.60 | 7.27 | 6.60 | 3.73 | 2.30 | 1.86 | 52.83 |
| 029 | FORT GREEN 12 WSW | 2.43 | 2.62 | 3.31 | 2.09 | 3.42 | 8.18 | 8.29 | 7.78 | 6.86 | 2.62 | 2.13 | 2.23 | 51.96 |
| 030 | FORT LAUDERDALE | 2.94 | 2.70 | 2.80 | 3.91 | 6.33 | 10.01 | 6.70 | 6.88 | 8.26 | 6.44 | 4.57 | 2.65 | 64.19 |
| 031 | FORT MYERS (PAGE AP) | 2.23 | 2.10 | 2.74 | 1.67 | 3.42 | 9.77 | 8.98 | 9.54 | 7.86 | 2.59 | 1.71 | 1.58 | 54.19 |
| 032 | FORT PIERCE | 2.70 | 2.99 | 3.27 | 2.77 | 4.38 | 5.84 | 5.79 | 6.35 | 7.81 | 5.82 | 3.50 | 2.28 | 53.50 |
| 033 | FOUNTAIN 3 SSE | 5.83 | 4.69 | 6.38 | 3.05 | 4.39 | 7.20 | 8.00 | 6.50 | 6.61 | 2.95 | 4.01 | 4.41 | 64.02 |
| 034 | GAINESVILLE 3 WSW | 4.13 | 3.90 | 3.94 | 3.03 | 3.70 | 5.87 | 5.34 | 6.69 | 5.33 | 1.89 | 2.58 | 3.05 | 49.45 |
| 035 | GAINESVILLE 11 WNW | 3.95 | 2.34 | 4.31 | 2.92 | 3.34 | 6.20 | 7.50 | 7.89 | 4.05 | 2.99 | 1.87 | 2.20 | 49.56 |
| 036 | GAINESVILLE RGNL AP | 3.51 | 3.39 | 4.26 | 2.86 | 3.23 | 6.78 | 6.10 | 6.63 | 4.37 | 2.50 | 2.17 | 2.56 | 48.36 |
| 037 | GLEN ST MARY 1 W | 4.34 | 3.41 | 4.52 | 3.29 | 3.58 | 6.53 | 6.33 | 7.33 | 5.36 | 3.10 | 2.23 | 2.92 | 52.94 |
| 038 | HASTINGS ARC | 3.39 | 2.69 | 3.94 | 2.72 | 3.47 | 6.98 | 5.56 | 6.37 | 7.40 | 3.94 | 2.88 | 2.65 | 51.99 |
| 039 | HIALEAH | 2.34 | 2.22 | 3.20 | 3.90 | 6.08 | 10.24 | 7.00 | 9.20 | 8.88 | 6.56 | 3.83 | 2.59 | 66.04 |
| 040 | HIGH SPRINGS | 4.35 | 3.69 | 4.33 | 3.28 | 3.63 | 6.88 | 7.53 | 7.92 | 4.56 | 2.96 | 2.28 | 2.74 | 54.15 |
| 041 | HILLSBOROUGH RVR ST PK | 3.35 | 3.12 | 3.41 | 2.23 | 3.21 | 7.87 | 7.27 | 8.16 | 7.23 | 2.71 | 2.72 | 3.28 | 54.56 |
| 042 | HOMESTEAD EXP STN | 1.94 | 1.78 | 1.88 | 2.74 | 5.77 | 9.51 | 6.82 | 9.16 | 8.90 | 5.49 | 2.59 | 1.61 | 58.19 |
| 043 | IMMOKALEE 3 NNW | 2.33 | 2.26 | 2.97 | 2.36 | 4.08 | 7.78 | 7.27 | 7.49 | 6.61 | 2.88 | 2.27 | 1.77 | 50.07 |
| 044 | INVERNESS 3 SE | 3.55 | 2.96 | 4.17 | 2.40 | 3.33 | 7.40 | 7.05 | 7.52 | 5.93 | 2.63 | 2.27 | 2.56 | 51.77 |
| 045 | JACKSONVILLE CECIL NAS | 3.50 | 3.20 | 4.16 | 2.91 | 3.25 | 6.54 | 6.39 | 7.07 | 6.69 | 3.24 | 2.28 | 2.65 | 51.88 |
| 046 | JACKSONVILLE INTL AP | 3.69 | 3.15 | 3.93 | 3.14 | 3.48 | 5.37 | 5.97 | 6.87 | 7.90 | 3.86 | 2.34 | 2.64 | 52.34 |
| 047 | JACKSONVILLE NAS | 3.39 | 2.59 | 3.97 | 2.77 | 3.22 | 5.78 | 5.99 | 5.87 | 7.28 | 3.30 | 2.35 | 2.45 | 48.96 |
| 048 | JACKSONVILLE BEACH | 3.56 | 2.84 | 3.92 | 2.87 | 3.03 | 5.70 | 5.21 | 6.11 | 7.53 | 5.04 | 2.36 | 2.75 | 50.92 |
| 049 | JASPER | 4.96 | 4.13 | 5.16 | 3.45 | 3.33 | 6.03 | 5.62 | 6.27 | 4.20 | 2.87 | 2.79 | 3.43 | 52.24 |
| 050 | KEY WEST INTL AP | 2.22 | 1.51 | 1.86 | 2.06 | 3.48 | 4.57 | 3.27 | 5.40 | 5.45 | 4.34 | 2.64 | 2.14 | 38.94 |
| 051 | KEY WEST NAS | 2.50 | 1.65 | 1.80 | 2.12 | 3.88 | 5.42 | 4.11 | 5.48 | 6.33 | 4.58 | 2.62 | 2.24 | 42.73 |
| 052 | KISSIMMEE 2 | 2.39 | 2.72 | 3.32 | 2.02 | 3.83 | 6.02 | 6.55 | 7.32 | 6.01 | 3.17 | 2.42 | 2.24 | 48.01 |
| 053 | LA BELLE | 2.31 | 2.16 | 2.89 | 2.29 | 3.91 | 8.88 | 7.69 | 7.78 | 6.57 | 3.35 | 2.34 | 1.71 | 51.88 |
| 054 | LAKE ALFRED EXP STN | 2.52 | 2.75 | 3.43 | 1.99 | 4.12 | 6.88 | 7.11 | 7.43 | 6.53 | 2.96 | 2.29 | 2.28 | 50.29 |
| 055 | LAKE CITY 2 E | 4.52 | 3.61 | 4.90 | 3.15 | 3.71 | 6.91 | 6.74 | 7.19 | 4.67 | 2.82 | 2.42 | 2.96 | 53.60 |
| 056 | LAKELAND | 2.45 | 2.73 | 3.38 | 2.04 | 3.81 | 7.00 | 7.51 | 7.33 | 6.33 | 2.29 | 2.12 | 2.14 | 49.13 |
| 057 | LISBON | 3.32 | 2.87 | 4.03 | 2.80 | 4.13 | 6.13 | 5.67 | 6.20 | 5.76 | 2.54 | 2.53 | 2.65 | 48.63 |
| 058 | LIVE OAK | 4.99 | 4.01 | 5.33 | 3.29 | 3.23 | 6.06 | 6.35 | 6.13 | 4.64 | 3.26 | 2.43 | 3.11 | 52.83 |
| 059 | LOXAHATCHEE | 2.99 | 2.23 | 2.97 | 2.27 | 5.33 | 8.84 | 7.30 | 5.58 | 9.25 | 5.18 | 4.44 | 2.06 | 58.44 |
| 060 | MADISON | 5.50 | 4.11 | 5.59 | 3.22 | 3.10 | 5.82 | 6.18 | 5.38 | 3.94 | 2.96 | 3.31 | 4.07 | 53.18 |
| 061 | MAYPORT PILOT STN | 2.70 | 2.58 | 3.23 | 2.41 | 2.13 | 4.06 | 4.21 | 4.45 | 7.15 | 4.16 | 1.74 | 2.20 | 41.02 |
| 062 | MAYO | 4.88 | 3.66 | 4.85 | 3.07 | 3.19 | 5.82 | 7.60 | 7.97 | 5.07 | 3.01 | 2.52 | 3.23 | 54.87 |
| 063 | MELBOURNE WFO | 2.48 | 2.49 | 2.92 | 2.08 | 3.94 | 5.83 | 5.38 | 5.78 | 7.20 | 4.76 | 3.12 | 2.31 | 48.29 |
| 064 | MIAMI BEACH | 2.44 | 2.14 | 2.20 | 2.81 | 4.90 | 6.90 | 3.63 | 5.44 | 6.31 | 4.53 | 3.32 | 1.98 | 46.60 |
| 065 | MIAMI INTL AP | 1.88 | 2.07 | 2.56 | 3.36 | 5.52 | 8.54 | 5.79 | 8.63 | 8.38 | 6.19 | 3.43 | 2.18 | 58.53 |
| 066 | MILTON EXPERIMENT STN | 6.39 | 5.04 | 7.32 | 4.35 | 4.83 | 7.11 | 8.17 | 6.62 | 6.12 | 3.66 | 5.47 | 4.40 | 69.48 |
| 067 | MONTICELLO 3 W | 5.63 | 4.64 | 6.00 | 3.63 | 4.03 | 5.60 | 6.50 | 6.73 | 4.70 | 3.32 | 3.63 | 3.90 | 58.31 |
| 068 | MOORE HAVEN LOCK 1 | 2.04 | 2.05 | 2.93 | 2.35 | 3.70 | 6.98 | 6.67 | 6.80 | 6.42 | 2.95 | 1.91 | 1.64 | 46.44 |
| 069 | MOUNTAIN LAKE | 2.38 | 2.43 | 3.12 | 2.02 | 3.88 | 7.12 | 7.45 | 6.64 | 5.83 | 2.50 | 2.23 | 2.10 | 47.70 |

### 5.2.2.1 SJRWMD Design Criteria

Wet detention ponds designed according to St. Johns River Water Management District (SJRWMD) criteria are characterized by relatively short residence times, ranging from approximately 14-21 days under wet season conditions. Virtually all existing research studies on wet detention systems, as summarized in Table 5-2, have been performed on shallow ponds with relatively short residence times. Six of the eight studies summarized in Table 5-2 are located in the St. Johns River Water Management District, although designs for some of the earlier studies may be different from current design criteria.

A summary of estimated performance efficiencies of wet detention ponds designed according to SJRWMD criteria is given in Table 5-8. The values summarized in this table reflect the overall mean treatment efficiencies for wet detention systems summarized in Table 5-2. The values summarized in Table 5-8 correspond closely to performance efficiencies measured by Harper and Herr (1993) for a wet detention pond constructed according to SJRWMD criteria. Based upon the estimated performance efficiency summarized in Table 5-8, with the possible exception of TSS, wet detention ponds designed according to SJRWMD criteria fail to meet the 80% removal criteria outlined in Chapter 62-40.

**TABLE 5-8**

**ESTIMATED PERFORMANCE EFFICIENCY OF WET DETENTION PONDS DESIGNED ACCORDING TO SJRWMD CRITERIA**

| PARAMETER | ANNUAL MASS REMOVAL (%) |
|---|---|
| Total N | 25 |
| Total P | 65 |
| TSS | 75-85 |
| BOD | 65-70 |

### 5.2.2.2 SFWMD Design Criteria

As discussed in a previous section, wet detention systems designed within the South Florida Water Management District (SFWMD) are often excavated to water depths of 20 ft or more. The SFWMD does not have any specific limitation on pond depth, and developers often dig deep wet detention ponds to provide additional fill for low areas within a development. This technique can result in ponds with substantially extended detention times, often in excess of 200 days.

## Mean Annual Mass Removal Efficiencies for 0.75-inches of Retention in Zone 2

| NDCIA | Percent DCIA | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CN | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 |
| 30 | 97.9 | 98.2 | 97.5 | 96.2 | 94.4 | 92.1 | 89.6 | 86.9 | 84.1 | 81.3 | 78.5 | 75.9 | 73.3 | 70.9 | 68.5 | 66.3 | 64.2 | 62.2 | 60.4 | 58.6 |
| 35 | 96.7 | 97.3 | 96.8 | 95.6 | 93.8 | 91.7 | 89.2 | 86.6 | 83.8 | 81.1 | 78.4 | 75.7 | 73.2 | 70.8 | 68.5 | 66.3 | 64.2 | 62.2 | 60.4 | 58.6 |
| 40 | 95.0 | 96.1 | 95.9 | 94.8 | 93.1 | 91.1 | 88.7 | 86.2 | 83.5 | 80.8 | 78.2 | 75.6 | 73.1 | 70.7 | 68.4 | 66.2 | 64.2 | 62.2 | 60.4 | 58.6 |
| 45 | 93.0 | 94.7 | 94.6 | 93.7 | 92.2 | 90.3 | 88.1 | 85.6 | 83.1 | 80.5 | 77.9 | 75.4 | 72.9 | 70.6 | 68.3 | 66.2 | 64.1 | 62.2 | 60.4 | 58.6 |
| 50 | 90.7 | 92.8 | 93.1 | 92.4 | 91.1 | 89.3 | 87.3 | 85.0 | 82.5 | 80.0 | 77.5 | 75.1 | 72.7 | 70.4 | 68.2 | 66.1 | 64.0 | 62.1 | 60.3 | 58.6 |
| 55 | 88.0 | 90.6 | 91.1 | 90.7 | 89.7 | 88.1 | 86.3 | 84.1 | 81.8 | 79.4 | 77.0 | 74.7 | 72.4 | 70.1 | 68.0 | 65.9 | 64.0 | 62.1 | 60.3 | 58.6 |
| 60 | 84.8 | 87.9 | 88.8 | 88.7 | 88.0 | 86.7 | 85.0 | 83.0 | 80.9 | 78.7 | 76.5 | 74.2 | 72.0 | 69.8 | 67.8 | 65.8 | 63.8 | 62.0 | 60.3 | 58.6 |
| 65 | 81.5 | 84.9 | 86.2 | 86.3 | 85.8 | 84.8 | 83.4 | 81.7 | 79.8 | 77.8 | 75.7 | 73.6 | 71.5 | 69.5 | 67.5 | 65.5 | 63.7 | 61.9 | 60.2 | 58.6 |
| 70 | 78.1 | 81.7 | 83.1 | 83.5 | 83.2 | 82.5 | 81.4 | 80.0 | 78.4 | 76.6 | 74.7 | 72.8 | 70.9 | 68.9 | 67.1 | 65.2 | 63.5 | 61.8 | 60.2 | 58.6 |
| 75 | 74.9 | 78.1 | 79.6 | 80.2 | 80.2 | 79.8 | 79.0 | 77.9 | 76.5 | 75.0 | 73.4 | 71.7 | 70.0 | 68.3 | 66.5 | 64.8 | 63.2 | 61.6 | 60.1 | 58.6 |
| 80 | 71.6 | 74.3 | 75.8 | 76.5 | 76.7 | 76.5 | 76.0 | 75.2 | 74.1 | 73.0 | 71.7 | 70.3 | 68.8 | 67.3 | 65.8 | 64.3 | 62.8 | 61.4 | 60.0 | 58.6 |
| 85 | 68.6 | 70.6 | 71.8 | 72.5 | 72.8 | 72.7 | 72.4 | 71.9 | 71.2 | 70.3 | 69.3 | 68.3 | 67.1 | 65.9 | 64.7 | 63.5 | 62.2 | 61.0 | 59.8 | 58.6 |
| 90 | 65.7 | 66.9 | 67.7 | 68.1 | 68.3 | 68.3 | 68.2 | 67.9 | 67.5 | 66.9 | 66.3 | 65.6 | 64.9 | 64.0 | 63.2 | 62.3 | 61.4 | 60.5 | 59.5 | 58.6 |
| 95 | 62.7 | 63.0 | 63.2 | 63.3 | 63.4 | 63.4 | 63.3 | 63.2 | 63.0 | 62.8 | 62.5 | 62.2 | 61.8 | 61.4 | 61.0 | 60.5 | 60.1 | 59.6 | 59.1 | 58.6 |
| 98 | 60.8 | 60.8 | 60.8 | 60.7 | 60.7 | 60.6 | 60.5 | 60.4 | 60.3 | 60.2 | 60.1 | 59.9 | 59.8 | 59.6 | 59.5 | 59.3 | 59.2 | 59.0 | 58.8 | 58.6 |

## Mean Annual Mass Removal Efficiencies for 1.00-inches of Retention in Zone 2

82.5%

| NDCIA | Percent DCIA | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CN | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 |
| 30 | 98.5 | 98.8 | 98.5 | 97.9 | 96.9 | 95.6 | 94.1 | 92.3 | 90.4 | 88.4 | 86.3 | 84.2 | 82.1 | 80.0 | 77.9 | 75.9 | 74.0 | 72.2 | 70.3 | 68.6 |
| 35 | 97.5 | 98.2 | 98.0 | 97.4 | 96.5 | 95.3 | 93.7 | 92.0 | 90.2 | 88.2 | 86.2 | 84.1 | 82.0 | 79.9 | 77.9 | 75.9 | 74.0 | 72.1 | 70.3 | 68.6 |
| 40 | 96.4 | 97.3 | 97.2 | 96.8 | 95.9 | 94.8 | 93.3 | 91.7 | 89.9 | 87.9 | 85.9 | 83.9 | 81.8 | 79.8 | 77.8 | 75.8 | 73.9 | 72.1 | 70.3 | 68.6 |
| 45 | 94.8 | 96.1 | 96.3 | 96.0 | 95.2 | 94.1 | 92.7 | 91.2 | 89.4 | 87.6 | 85.6 | 83.6 | 81.6 | 79.6 | 77.7 | 75.8 | 73.9 | 72.1 | 70.3 | 68.6 |
| 50 | 93.0 | 94.8 | 95.2 | 94.9 | 94.3 | 93.3 | 92.0 | 90.5 | 88.9 | 87.1 | 85.3 | 83.3 | 81.4 | 79.5 | 77.5 | 75.6 | 73.8 | 72.0 | 70.3 | 68.6 |
| 55 | 91.0 | 93.2 | 93.7 | 93.6 | 93.1 | 92.3 | 91.1 | 89.8 | 88.2 | 86.6 | 84.8 | 82.9 | 81.1 | 79.2 | 77.3 | 75.5 | 73.7 | 72.0 | 70.2 | 68.6 |
| 60 | 88.8 | 91.2 | 92.0 | 92.0 | 91.7 | 91.0 | 90.0 | 88.8 | 87.4 | 85.9 | 84.2 | 82.4 | 80.7 | 78.9 | 77.1 | 75.3 | 73.6 | 71.9 | 70.2 | 68.6 |
| 65 | 86.2 | 88.9 | 89.9 | 90.2 | 90.0 | 89.5 | 88.7 | 87.6 | 86.4 | 85.0 | 83.4 | 81.8 | 80.2 | 78.5 | 76.8 | 75.1 | 73.4 | 71.8 | 70.2 | 68.6 |
| 70 | 83.6 | 86.4 | 87.5 | 88.0 | 88.0 | 87.6 | 86.9 | 86.1 | 85.1 | 83.8 | 82.5 | 81.0 | 79.5 | 77.9 | 76.4 | 74.8 | 73.2 | 71.6 | 70.1 | 68.6 |
| 75 | 81.0 | 83.6 | 84.9 | 85.5 | 85.6 | 85.3 | 84.9 | 84.2 | 83.4 | 82.4 | 81.2 | 80.0 | 78.6 | 77.2 | 75.8 | 74.3 | 72.9 | 71.5 | 70.0 | 68.6 |
| 80 | 78.6 | 80.8 | 82.0 | 82.5 | 82.8 | 82.7 | 82.4 | 81.9 | 81.3 | 80.5 | 79.6 | 78.5 | 77.4 | 76.3 | 75.0 | 73.8 | 72.5 | 71.2 | 69.9 | 68.6 |
| 85 | 76.1 | 77.7 | 78.7 | 79.3 | 79.6 | 79.7 | 79.5 | 79.2 | 78.8 | 78.2 | 77.5 | 76.7 | 75.9 | 74.9 | 74.0 | 72.9 | 71.9 | 70.8 | 69.7 | 68.6 |
| 90 | 73.9 | 74.8 | 75.5 | 75.9 | 76.1 | 76.2 | 76.2 | 76.0 | 75.7 | 75.3 | 74.9 | 74.4 | 73.8 | 73.2 | 72.5 | 71.8 | 71.0 | 70.3 | 69.4 | 68.6 |
| 95 | 71.5 | 71.8 | 72.0 | 72.1 | 72.2 | 72.2 | 72.2 | 72.1 | 72.0 | 71.9 | 71.7 | 71.4 | 71.2 | 70.9 | 70.6 | 70.2 | 69.9 | 69.5 | 69.0 | 68.6 |
| 98 | 70.2 | 70.2 | 70.2 | 70.2 | 70.1 | 70.1 | 70.1 | 70.0 | 69.9 | 69.8 | 69.7 | 69.7 | 69.6 | 69.4 | 69.3 | 69.2 | 69.0 | 68.9 | 68.8 | 68.6 |

73.15%

Each of the four water management districts mentioned previously provides calculations for a treatment volume associated with the wet detention system. This treatment volume is often referred to as the "water quality volume" since the criteria are similar to the water quality treatment criteria for dry retention or dry detention. However, research on wet detention ponds clearly indicates that the most significant factor impacting the performance efficiency of a wet detention pond is the residence time within the system - specifically, the volume of the permanent pool with respect to the volume of runoff entering the pond (Toet, et al., 1990; Harper and Herr, 1993; Rushton, et al., 1995; and DB Environmental, 2005). Since the specified treatment volumes are negligible in comparison to the permanent pool volume contained within the wet detention pond, the treatment volume criteria primarily regulates the drawdown characteristics of the wet detention pond and has little impact on the overall water quality performance efficiency of the system.

Residence time within a wet detention pond is determined by the relationship between the permanent pool volume and the annual runoff inputs, as follows:

$$Detention\ \ Time,\ t_d\ (days) = \frac{PPV}{RO} \times \frac{365\ days}{year}$$

where:

PPV = permanent pool volume (ac-ft)

RO = annual runoff inputs (ac-ft/yr)

For purposes of this calculation, the permanent pool volume is considered to include the total volume of water within the pond below the control elevation.

Criteria related to residence time and pond depth are not included in specific design criteria outlined by the Suwannee River or Southwest Florida Water Management Districts. Wet detention ponds designed in these districts could conceivably have a wide range of detention times and associated performance efficiencies, with some ponds approaching design criteria similar to that used in the St. Johns River Water Management District and other ponds approaching design criteria utilized in the South Florida Water Management District. As a result, estimates of the anticipated performance efficiency of wet detention systems designed in the St. Johns River and South Florida Water Management Districts will be presented in this section, with the anticipated efficiency of wet detention systems designed in the Suwannee River and Southwest Florida Water Management Districts likely to fall somewhere in between.

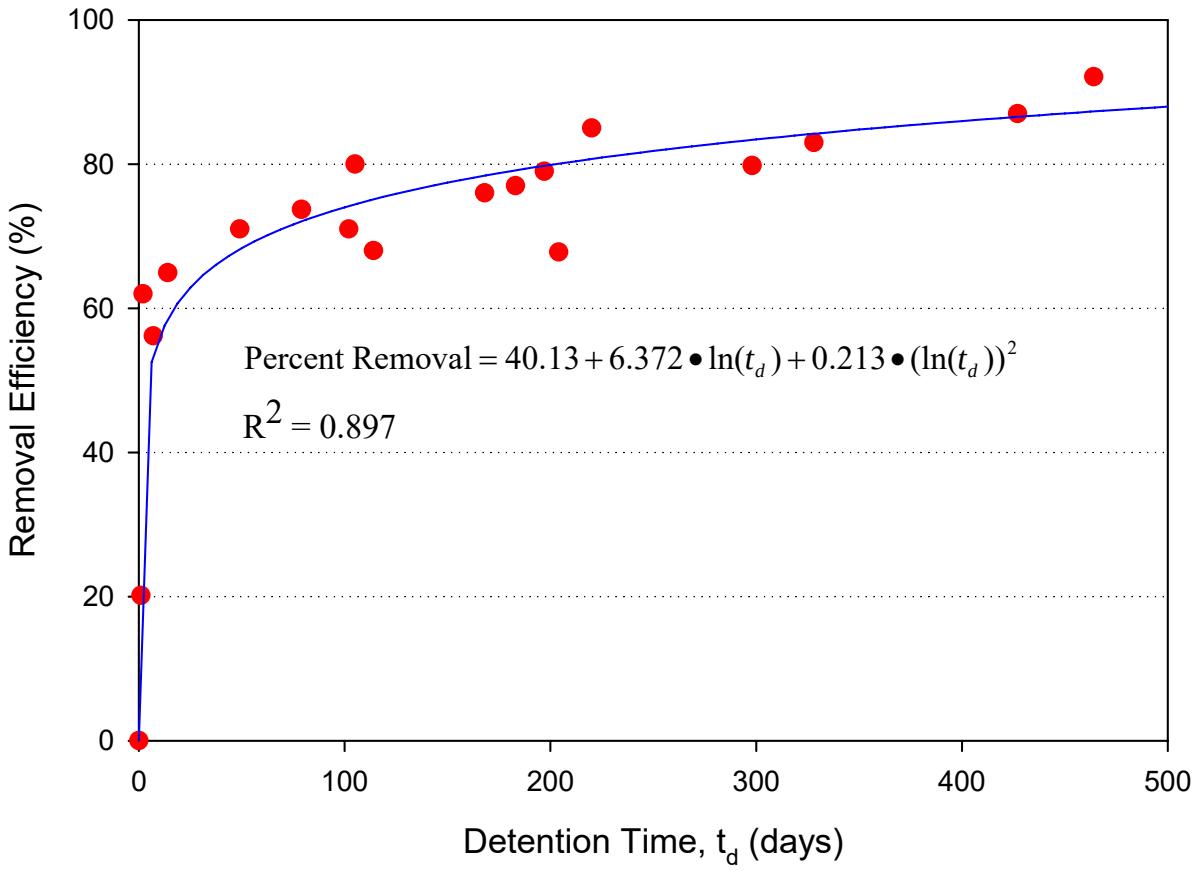



Figure 5-9. Removal Efficiency of Total Phosphorus in Wet Detention Ponds as a Function of Residence Time.

The relationship indicated on Figure 5-9 suggests that removal of phosphorus in wet detention ponds continues to occur, although at a progressively slower rate, with increases in residence time within the system. A removal efficiency of 80% can be achieved at a detention time of about 200 days. The upper limit for removal efficiencies in wet detention ponds appears to be approximately 90%, although removal efficiencies in excess of 90% were achieved at extended detention times in three of the 20 studies. At this point, total phosphorus concentrations within wet detention ponds appear to approach irreducible concentrations which reflect natural background phosphorus levels in surface waterbodies.

Relationships between detention time and removal efficiencies for total nitrogen in wet detention ponds are illustrated on Figure 5-10. The data points presented on this figure are based upon the referenced studies summarized in Table 5-9. The annual mass removal efficiency of 63% reported by Rushton, et al. (1995) for a wet pond with a detention time of 14 days and the removal efficiency of 33% for a 2-day detention time were eliminated from the data set as outliers due to elevated values for the Student T and Cook's D parameters.

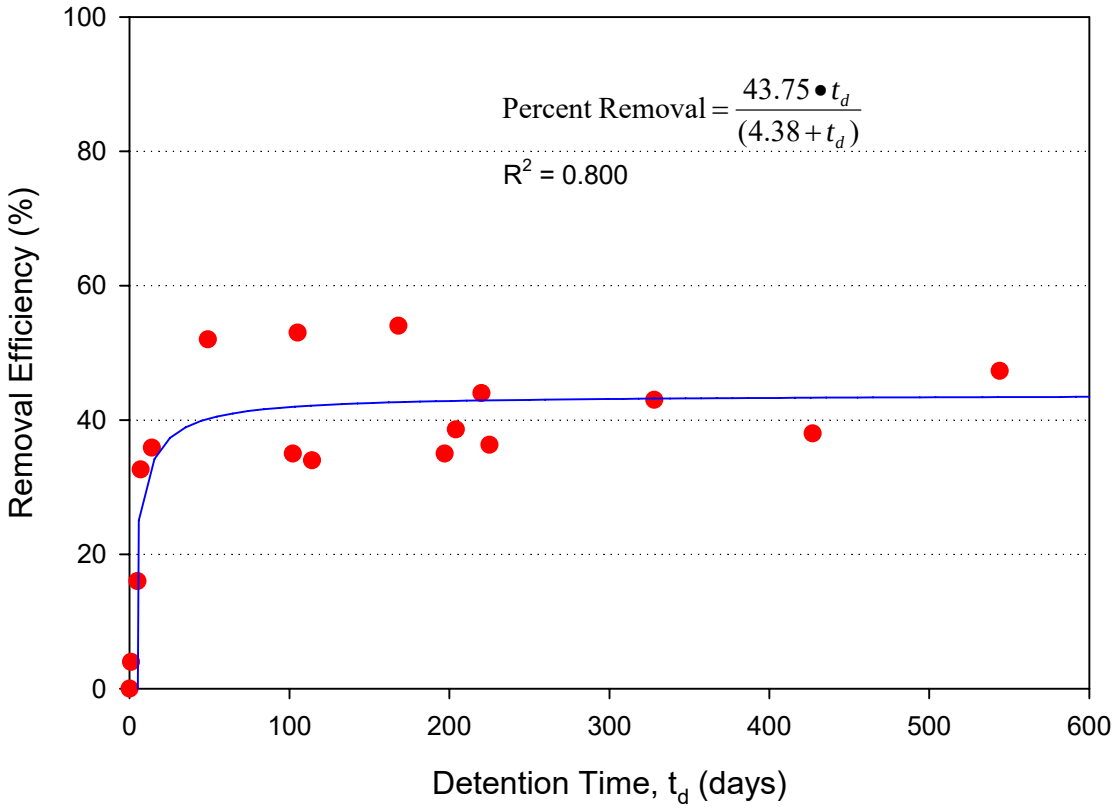



Figure 5-10. Removal Efficiency of Total Nitrogen in Wet Detention Ponds as a Function of Residence Time.

The best-fit for the relationship between removal efficiency and detention time for total nitrogen was obtained using a hyperbolic equation. The final version of this equation is summarized on Figure 5-10. The $R^2$ value of 0.800 suggests that detention time explains approximately 80% of the observed variability in removal efficiencies for total nitrogen in wet detention ponds. The remaining variability in removal efficiencies for total nitrogen is likely due to variability in methods of analysis between the listed studies as well as variability in the dominant nitrogen form present in the stormwater inflows. In general, inorganic forms of nitrogen (ammonia and $NO_x$) and particulate nitrogen are removed relatively rapidly in wet detention ponds. The initial rapid removal of nitrogen within the first 10-20 days, indicated on Figure 5-10, is probably a result of the rapid uptake of inorganic nitrogen and the settling of particulate species. Other forms of nitrogen, such as organic nitrogen, are removed at a substantially slower rate and are likely responsible for the dramatic slowdown in removal efficiency observed for total nitrogen after approximately 20-30 days.

The hyperbolic relationship summarized on Figure 5-10 indicates that a removal efficiency of approximately 40% can be achieved for total nitrogen in 50 days, with a maximum efficiency of approximately 45% at extended detention periods. The lack of additional removal efficiencies for total nitrogen observed at extended detention times is probably a reflection of either phosphorus limitation or that irreducible concentrations of total nitrogen have been achieved within the pond.

As indicated previously, wet detention systems must be utilized as part of a treatment train to achieve the required 80% removal efficiency specified under the Water Resource Implementation Rule (Chapter 62-40). When treatment systems are used in series as part of a treatment train, the efficiency of the overall treatment train can be calculated using the following equation:

$$\textit{Overall Treatment Train Efficiency (decimal)} = Eff_1 + (1 - Eff_1) \times Eff_2 \qquad \textit{(Eq. 1)}$$

where:

$Eff_1$ = efficiency of initial treatment system (decimal)

$Eff_2$ = efficiency of second treatment system (decimal)

After treatment in the initial system, a load reduction has occurred which is a function of the type of treatment provided. After migrating through the initial treatment system, the remaining load consists of mass which was not removed in the initial system. This mass is then acted upon by the second treatment system with an efficiency associated with the particular type of system used. The overall efficiency can then be calculated according to the above equation.

To achieve an overall annual mass load reduction of 80% using wet detention, a pre-treatment system must first be used to provide a significant portion of the desired pollutant removal effectiveness. For example, assume that a wet detention pond is designed with a detention period of approximately 50 days which is sufficient to achieve a removal efficiency of approximately 40% for total nitrogen. Utilizing the relationship summarized as Eq. 1, and assuming that the efficiency of the wet detention system for total nitrogen (40%) is represented by $Eff_2$, the efficiency of the initial treatment system ($Eff_1$) would need to be 67% to achieve an overall treatment efficiency of 80%.

Depending upon the characteristics of the development and the meteorological region, achieving an initial 67% annual mass load reduction using retention will require between 0.25-0.75 inch of dry retention as pre-treatment. When pre-treatment is provided and the remaining stormwater is discharged into the wet detention pond, the overall treatment system will achieve a mass removal efficiency of 80% for total nitrogen. The mass removal efficiency for total phosphorus and other significant pollutants will be substantially in excess of 80%.

# Site Plan
# For
# Kings Highway Commerce Center

Section 24 Township 35S Range 39E

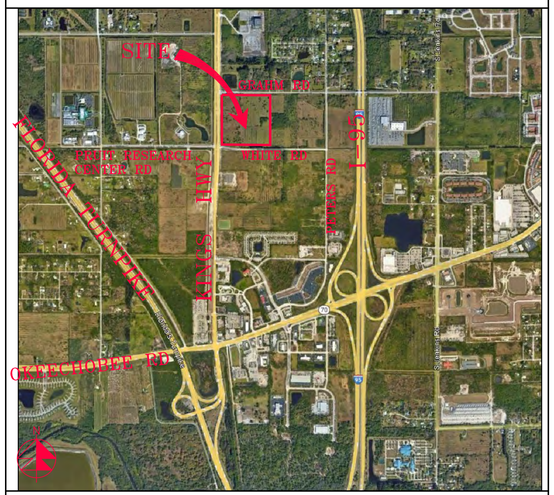
Fort Pierce, Florida

## Developer

JA Development Partners, LLC

4923 W Cypress Street,
Tampa, Florida 33607

## Aerial




Vicinity Map

## Drawing Index


| | |
|---|---|
| C-1 | Cover Sheet |
| MSP-1 | Master Site Plan |
| SP1-SP4 | Site Plan |
| TCP-1 | Truck Circulation Plan |
| TCP-2 | Truck Circulation Plan |
| TCP-3 | Truck Circulation Plan |
| | |


REVISIONS


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WEBSITE: www.JHIinc.com

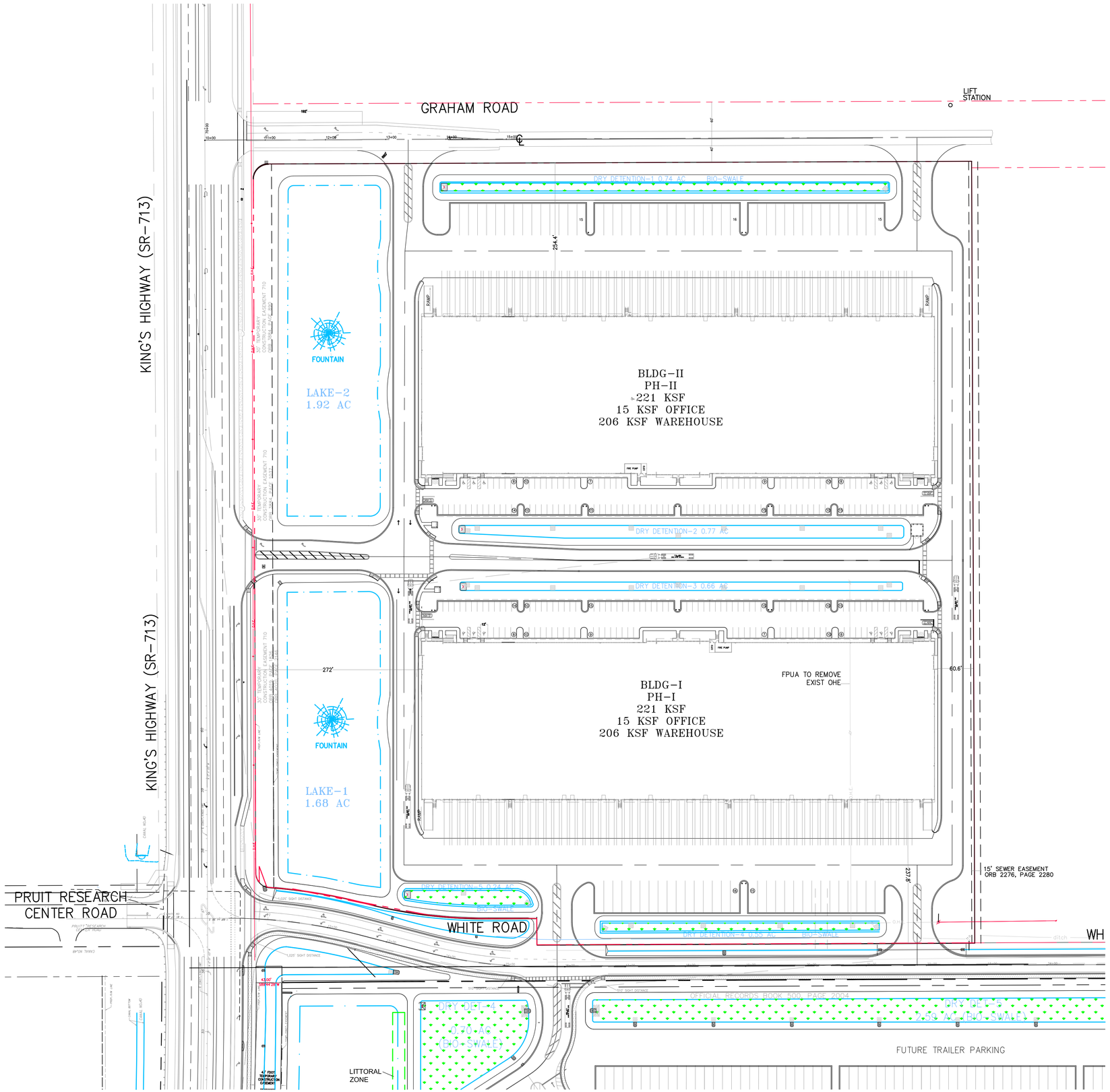

Kings Highway Commerce Center
Fort Pierce, Florida

Cover Sheet

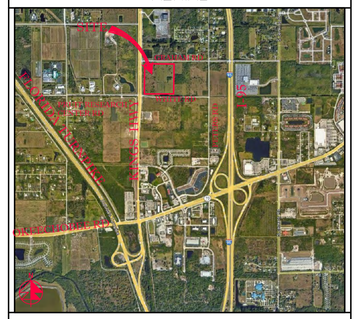
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|---|---|---|---|---|
| 07-07-22 | NA | JHI | CLJ | 2205-1402 |

SEAL

SHEET NO.
C-1




## AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

80' 0 40' 80' 160'

SCALE: 1" = 80'

## SITE DATA

| | | | |
|---|---|---|---|
| PROPOSED USE | OFFICE/WAREHOUSE/DISTRIBUTION | | |
| FUTURE LAND USE | GC | | |
| ZONING | CP-1 | | |
| PARCEL AREA | 1,516,417 SF | 34.81 AC | 100% |
| **BUILDOUT** | | | |
| BUILDING AREA | 442,000 SF | | 29.2% |
| OFFICE | 30,000 SF | | |
| WAREHOUSE | 412,000 SF | | |
| **PHASE-I** | | | |
| BUILDING AREA | 221,000 SF | | |
| OFFICE | 15,000 SF | | |
| WAREHOUSE | 206,000 SF | | |
| **PHASE-II** | | | |
| BUILDING AREA | 221,000 SF | | |
| OFFICE | 15,000 SF | | |
| WAREHOUSE | 206,000 SF | | |
| **PARKING REQ PH-I** | | | 116 SP |
| OFFICE ITE RATE | 15,000 SF @ 2.39/KSF | | 36 SP |
| WAREHOUSE ITE RATE | 206,000 SF @ 0.39/KSF | | 80 SP |
| HANDICAP | | | 5 SP |
| PARKING PROP | | | 131 SP |
| HANDICAP | | | 6 SP |
| LOADING REQ | | | 8 SP |
| LOADING PROP | | | 60 SP |
| **PARKING REQ PH-II** | | | 116 SP |
| OFFICE ITE RATE | 15,000 SF @ 2.39/KSF | | 36 SP |
| WAREHOUSE ITE RATE | 206,000 SF @ 0.39/KSF | | 80 SP |
| HANDICAP | | | 5 SP |
| PARKING PROP | | | 131 SP |
| HANDICAP | | | 6 SP |
| LOADING REQ | | | 8 SP |
| LOADING PROP | | | 60 SP |
| PAVT/SW | 573,400 SF | | |
| TOTAL IMPERVIOUS | 1,015,400 SF | | 67.0% |
| LAKES | 156,816 SF | | 10.3% |
| PERVIOUS | 344,201 SF | | 22.7% |
| BLDG HEIGHT | 65 FT MAX | | |

| SETBACKS | REQ'D | PROP |
|---|---|---|
| FRONT | 15' | 272' |
| REAR | 10' | 60' |
| SIDE STREET | 10' | 237' |
| SIDE | 20' | |

PCN 2313-333-0001-000-7
2313-332-0000-010-0
2313-332-0000-000-7
2313-331-0001-000-4

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Kings Highway Commerce Center

Fort Pierce, Florida

Master Site Plan

| JOB NO. | DRAWN BY | DESIGNED BY | SCALE | DATE |
|---|---|---|---|---|
| 2205-1402 | DDI | JHI | 1"=80' | 05/22/2022 |

LEGACY
DEVELOPMENT PARTNERS

SEAL

SHEET NO.
MSP-1

SEE SHT SP-7

KING'S HIGHWAY (SR-713)

SEE SHT SP-8

BLDG-I
PH-I
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

DRY DETENTION-2 0.77 AC

DRY DETENTION-3 0.66 AC

DRY DETENTION-4 0.55 AC

DRY DETENTION-5 0.24 AC

BIO-SWALE

LAKE-1
1.68 AC

FOUNTAIN

WHITE ROAD

RAMP

STOP SIGN & BAR TYP

FIRE PUMP

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 4019, PAGE 1826 ORB 4020, PAGE 2146

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 4019, PAGE 1834, PAGE 1837

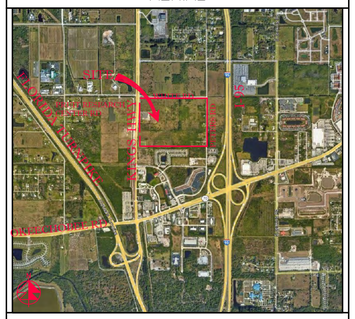
1,025' SIGHT DISTANCE

43.00'
S89°44'28"W

O.H.E.

CANAL NO.40

## AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

REVISIONS


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Kings Highway Commerce Center

Fort Pierce, Florida

SITE PLAN

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

SEAL

SHEET NO.
SP-1

SEE SHT SP-7

DRY DETENTION-2 0.77 AC

DRY DETENTION-3 0.66 AC

STOP SIGN & BAR TYP

FIRE PUMP

BLDG-I
PH-I
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

DRY DETENTION-5 0.24 AC

BIO-SWALE

WHITE ROAD

DRY DETENTION-4 0.55 AC

BIO-SWALE

RAMP

15' SEWER EASEMENT
ORB 2276, PAGE 2280

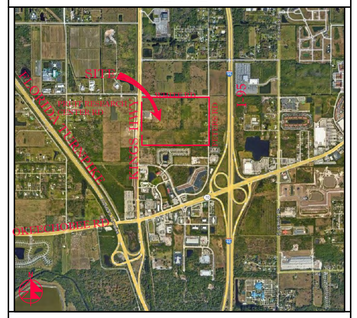
15' SEWER EA
ORB 2276, PA

510' SIGHT DISTANCE

OFFICIAL RECORDS BOOK 500, PAGE 2004

SEE SHT SP-8

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

REVISIONS


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Kings Highway Commerce Center

Fort Pierce, Florida

SITE PLAN

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1" = 40' | JHI | DDI | 2205-1402 |

SEAL

COA 6986

SHEET NO.

SP-2

SEE SHT SP-7

KING'S HIGHWAY (SR-713)

GRAHAM ROAD

GRAHAM ROAD

233.4'

192'

70+00

10+00

11+00

12+00

13+00

14+00

15+00

R60'

48'

17'

DRY DETENTION-1 0.74 AC

BIO-SWALE

15' TYP

15

16

55'

R25'

R15'

R7.5'

75'

R61.3'

RAMP

60'

OHE

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 3884, PAGE 890

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 3884, PAGE 1037

FOUNTAIN

LAKE-2
1.92 AC

34'

5'

BLDG-II
PH-II
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

FIRE PUMP

12' TYP

5' TYP

18' TYP

9.5' TYP

R5' TYP

R6.3'

10'

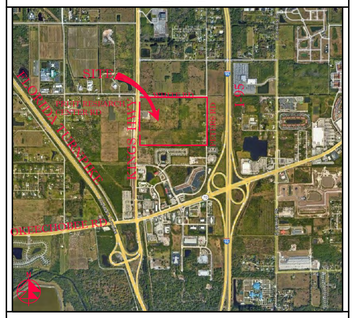
STOP SIGN & BAR TYP

DRY DETENTION-2 0.77 AC

DRY DETENTION-3 0.66 AC

SEE SHT SP-8

## AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

REVISIONS


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WEBSITE: www.JHIinc.com


Kings Highway Commerce Center

Fort Pierce, Florida

SITE PLAN

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

SEAL

COA 6986

SHEET NO.

SP-3

GRAHAM ROAD

GRAHAM ROAD

12+00 13+00 14+00 15+00

LIFT STA

3.4'

R60' R60' R60' R60'

17' 48' 17' 17' 48' 17'

DRY DETENTION-1 0.74 AC BIO-SWALE

STOP SIGN & BAR TYP

15' TYP 15' TYP 15' TYP

15 16 15

55' 55' 55'

R25' R15' R7.5' R7.5' R10' R40' R50' R25.1'

75' 75'

R61.3'

RAMP RAMP

60' 60'

34' 5' 5' 34'

BLDG-II
PH-II
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

FIRE PUMP ELEC

12' TYP 5' TYP 18' TYP 9.5' TYP R5' TYP 18' TYP 9.5' TYP 5' TYP 12' TYP

R14.9' R14.9'

R15' R6.3' R5' TYP R5' TYP

18' TYP 9.5' TYP 18' TYP 9.5' TYP 18' TYP

10' 10' 10' 10' 10' 10' 10' 10' 10' 10' 10' 10' 10' 10' 10'

14 10 15 15 10 15 10

DRY DETENTION-2 0.77 AC

STOP SIGN & BAR TYP

17' 17'

DRY DETENTION-3 0.66 AC

STOP SIGN & BAR TYP

R60' R60' R60' R60' R60' R60'

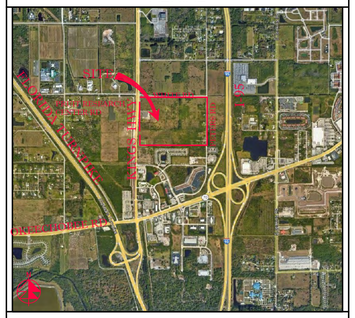
SEE SHT SP-7

UNTAIN

KE-2
02 AC

SEE SHT SP-8

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

REVISIONS


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Kings Highway Commerce Center

Fort Pierce, Florida

SITE PLAN

| JOB NO. | DRAWN BY | DESIGNED BY | SCALE | DATE |
|---|---|---|---|---|
| 2205-1402 | DDI | JHI | 1" = 40' | 07-07-22 |

SEAL

COA 6986

SHEET NO.

SP-4

GRAHAM ROAD

LIFT STATION

KING'S HIGHWAY (SR-713)

DRY DETENTION-1 0.74 AC

FOUNTAIN

LAKE-2
1.94 AC

BLDG-II
PH-II
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

DRY DETENTION-2 0.77 AC

DRY DETENTION-3 0.66 AC

FOUNTAIN

LAKE-1
1.69 AC

BLDG-I
PH-I
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

15' SEWER EASEMENT
ORB 2276, PAGE 2281

PRUIT RESEARCH
CENTER ROAD

DRY DETENTION-5 0.24 AC

WHITE ROAD

DRY DETENTION-4 0.55 AC

OFFICIAL RECORDS BOOK 500, PAGE 2094

DRY DET-4
0.55 AC
LEGEND
SWALE

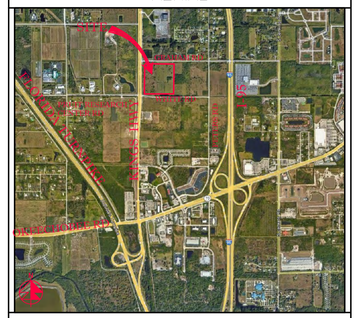
DRY DET-5
0.24 AC
LEGEND
SWALE

FUTURE TRAILER PARKING

LITTORAL
ZONE

SEE SHT SP-8

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

80' 0 40' 80' 160'

SCALE: 1" = 80'

REVISIONS

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Kings Highway Commerce Center
Fort Pierce, Florida

Truck Circulation Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 05/22/2022 | 1"=80' | JHI | DDI | 2205-1402 |

LEGACY
DEVELOPMENT PARTNERS

SEAL

SHEET NO.
TC-1

SEE SHT SP-7

KING'S HIGHWAY (SR-713)

CANAL NO.40

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 4019, PAGE 1826 ORB 4020, PAGE 2146

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 4019, PAGE 1826 ORB 4020, PAGE 2146

O.H.E.

PROP. R/W LINE

TEMP. CONST. EASEMENT

FOUNTAIN

LAKE-1
1.69 AC

DRY DETENTION-2 0.77 AC

DRY DETENTION-3 0.66 AC

DRY DETENTION-5 0.24 AC

DRY DETENTION-4 0.55 AC

BLDG-I
PH-I
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

FIRE PUMP

RAMP

WHITE ROAD

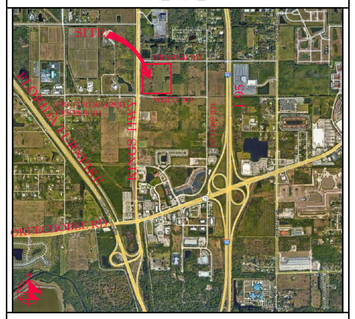
1,025' SIGHT DISTANCE

1,025' SIGHT DISTANCE

43.00'
S89°44'28"W

SEE SHT SP-8

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 40' 80'

SCALE: 1" = 40'

REVISIONS


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FAX: (561) 575-6088
WEBSITE: www.JHIinc.com


Kings Highway Commerce Center

Fort Pierce, Florida

Truck Circulation

| JOB NO. | DRAWN BY | DESIGNED BY | SCALE | DATE |
|---|---|---|---|---|
| 2205-1402 | DDI | JHI | 1"=40' | 05/22/2022 |

SEAL

COA 6986

SHEET NO.

TC-2

SEE SHT SP-7

KINGS HIGHWAY (SR-713)

GRAHAM ROAD

192'

60'

40'

70+00 10+00 11+00 12+00 13+00 14+00 15+00

RAMP

O.H.E.

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 3884 PAGE 890

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 3884 PAGE 1037

FOUNTAIN

LAKE-2
1.94 AC

DRY DETENTION-1 0.74 AC

15

16

BLDG-II
PH-II
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

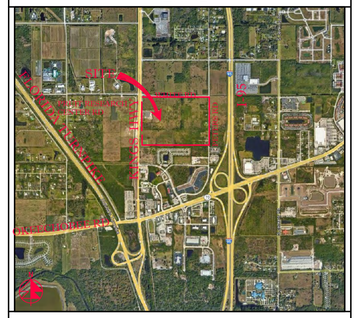
FIRE PUMP 2373

DRY DETENTION-2 0.77 AC

DRY DETENTION-3 0.66 AC

SEE SHT SP-8

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

50' 0 25' 50' 100'

SCALE: 1" = 50'

REVISIONS


Jeff H. Iravani, Inc.
Consulting Engineers
1934 COMMERCE LANE, SUITE 5
JUPITER, FLORIDA 33458
EMAIL: JHI@bellsouth.net
TEL: (561) 575-6030
FAX: (561) 575-6088
WEBSITE: www.JHIinc.com


Kings Highway Commerce Center

Fort Pierce, Florida

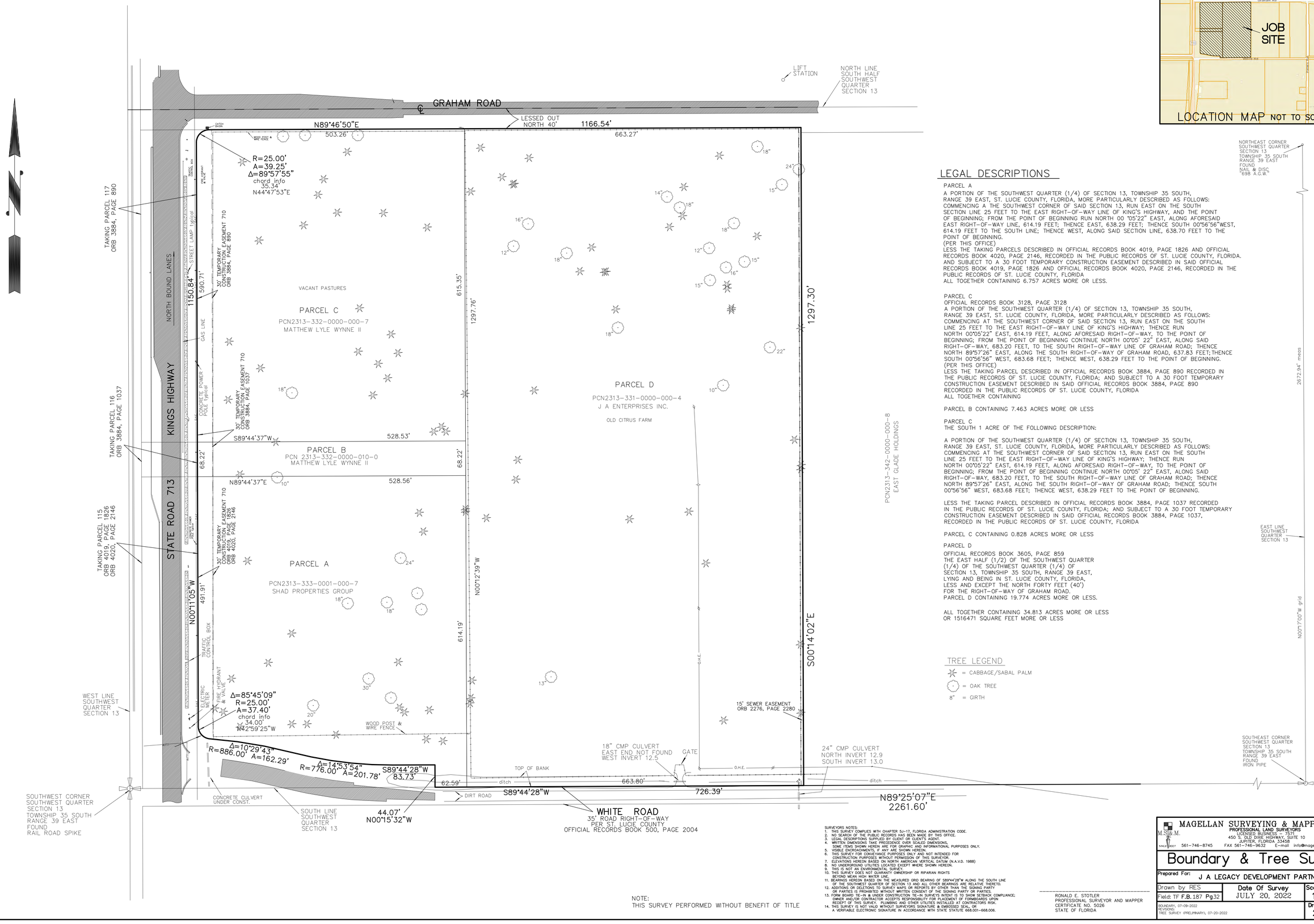
Truck Circulation

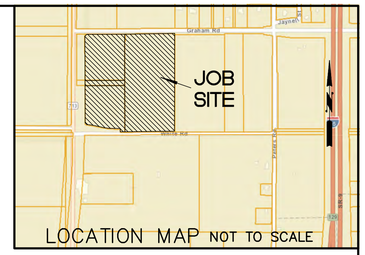
| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 01-22-21 | 1"=50' | JHI | DDI | 2101-1355 |

SEAL

SHEET NO.

TC-3




## LEGAL DESCRIPTIONS

PARCEL A
A PORTION OF THE SOUTHWEST QUARTER (1/4) OF SECTION 13, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING A THE SOUTHWEST CORNER OF SAID SECTION 13, RUN EAST ON THE SOUTH SECTION LINE 25 FEET TO THE EAST RIGHT-OF-WAY LINE OF KING'S HIGHWAY, AND THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING RUN NORTH 00 °05'22" EAST, ALONG AFORESAID EAST RIGHT-OF-WAY LINE, 614.19 FEET; THENCE EAST, 638.29 FEET; THENCE SOUTH 00°56'56"WEST, 614.19 FEET TO THE SOUTH LINE; THENCE WEST, ALONG SAID SECTION LINE, 638.70 FEET TO THE POINT OF BEGINNING.
(PER THIS OFFICE)
LESS THE TAKING PARCELS DESCRIBED IN OFFICIAL RECORDS BOOK 4019, PAGE 1826 AND OFFICIAL RECORDS BOOK 4020, PAGE 2146, RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. AND SUBJECT TO A 30 FOOT TEMPORARY CONSTRUCTION EASEMENT DESCRIBED IN SAID OFFICIAL RECORDS BOOK 4019, PAGE 1826 AND OFFICIAL RECORDS BOOK 4020, PAGE 2146, RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA
ALL TOGETHER CONTAINING 6.757 ACRES MORE OR LESS.

PARCEL C
OFFICIAL RECORDS BOOK 3128, PAGE 3128
A PORTION OF THE SOUTHWEST QUARTER (1/4) OF SECTION 13, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 13, RUN EAST ON THE SOUTH LINE 25 FEET TO THE EAST RIGHT-OF-WAY LINE OF KING'S HIGHWAY; THENCE RUN NORTH 00°05'22" EAST, 614.19 FEET, ALONG AFORESAID RIGHT-OF-WAY, TO THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING CONTINUE NORTH 00°05' 22" EAST, ALONG SAID RIGHT-OF-WAY, 683.20 FEET, TO THE SOUTH RIGHT-OF-WAY LINE OF GRAHAM ROAD; THENCE NORTH 89°57'26" EAST, ALONG THE SOUTH RIGHT-OF-WAY OF GRAHAM ROAD, 637.83 FEET; THENCE SOUTH 00°56'56" WEST, 683.68 FEET; THENCE WEST, 638.29 FEET TO THE POINT OF BEGINNING.
(PER THIS OFFICE)
LESS THE TAKING PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 3884, PAGE 890 RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; AND SUBJECT TO A 30 FOOT TEMPORARY CONSTRUCTION EASEMENT DESCRIBED IN SAID OFFICIAL RECORDS BOOK 3884, PAGE 890 RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA
ALL TOGETHER CONTAINING

PARCEL B CONTAINING 7.463 ACRES MORE OR LESS

PARCEL C
THE SOUTH 1 ACRE OF THE FOLLOWING DESCRIPTION:

A PORTION OF THE SOUTHWEST QUARTER (1/4) OF SECTION 13, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 13, RUN EAST ON THE SOUTH LINE 25 FEET TO THE EAST RIGHT-OF-WAY LINE OF KING'S HIGHWAY; THENCE RUN NORTH 00°05'22" EAST, 614.19 FEET, ALONG AFORESAID RIGHT-OF-WAY, TO THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING CONTINUE NORTH 00°05' 22" EAST, ALONG SAID RIGHT-OF-WAY, 683.20 FEET, TO THE SOUTH RIGHT-OF-WAY LINE OF GRAHAM ROAD; THENCE NORTH 89°57'26" EAST, ALONG THE SOUTH RIGHT-OF-WAY OF GRAHAM ROAD; THENCE SOUTH 00°56'56" WEST, 683.68 FEET; THENCE WEST, 638.29 FEET TO THE POINT OF BEGINNING.

LESS THE TAKING PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 3884, PAGE 1037 RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; AND SUBJECT TO A 30 FOOT TEMPORARY CONSTRUCTION EASEMENT DESCRIBED IN SAID OFFICIAL RECORDS BOOK 3884, PAGE 1037, RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA

PARCEL C CONTAINING 0.828 ACRES MORE OR LESS

PARCEL D
OFFICIAL RECORDS BOOK 3605, PAGE 859
THE EAST HALF (1/2) OF THE SOUTHWEST QUARTER (1/4) OF THE SOUTHWEST QUARTER (1/4) OF SECTION 13, TOWNSHIP 35 SOUTH, RANGE 39 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA, LESS AND EXCEPT THE NORTH FORTY FEET (40') FOR THE RIGHT-OF-WAY OF GRAHAM ROAD.
PARCEL D CONTAINING 19.774 ACRES MORE OR LESS.

ALL TOGETHER CONTAINING 34.813 ACRES MORE OR LESS
OR 1516471 SQUARE FEET MORE OR LESS

NOTE:
THIS SURVEY PERFORMED WITHOUT BENEFIT OF TITLE

SURVEYORS NOTES:
1. THIS SURVEY COMPLIES WITH CHAPTER 5J-17, FLORIDA ADMINISTRATION CODE.
2. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN MADE BY THIS OFFICE.
3. LEGAL DESCRIPTIONS SUPPLIED BY CLIENT OR CLIENTS AGENT.
4. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS, SOME ITEMS SHOWN HEREIN ARE FOR GRAPHIC AND INFORMATIONAL PURPOSES ONLY.
5. VISIBLE ENCROACHMENTS, IF ANY ARE SHOWN HEREON.
6. THIS SURVEY FOR CONVEYANCE PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION PURPOSES WITHOUT PERMISSION OF THIS SURVEYOR.
7. ELEVATIONS HEREON BASED ON NORTH AMERICAN VERTICAL DATUM (N.A.V.D. 1988)
8. NO UNDERGROUND UTILITIES LOCATED EXCEPT WHERE SHOWN HEREON.
9. THIS IS NOT AN ENVIRONMENTAL SURVEY.
10. THIS SURVEY DOES NOT GUARANTY OWNERSHIP OR RIPARIAN RIGHTS BEYOND MEAN HIGH WATER LINE.
11. BEARINGS HEREON BASED ON THE MEASURED GRID BEARING OF S89°44'28"W ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 13 AND ALL OTHER BEARINGS ARE RELATIVE THERETO.
12. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
13. FORM BOARD TIE-IN & UNDER CONSTRUCTION TIE-IN SURVEYS INTENT IS TO SHOW SETBACK COMPLIANCE; OWNER AND/OR CONTRACTOR ACCEPTS RESPONSIBILITY FOR PLACEMENT OF FORMBOARDS UPON RECEIPT OF THIS SURVEY. PLUMBING AND OTHER UTILITIES INSTALLED AT CONTRACTORS RISK.
14. THIS SURVEY IS NOT VALID WITHOUT SURVEYORS SIGNATURE & EMBOSSED SEAL, OR A VERIFIABLE ELECTRONIC SIGNATURE IN ACCORDANCE WITH STATE STATUTE 668.001-668.006.

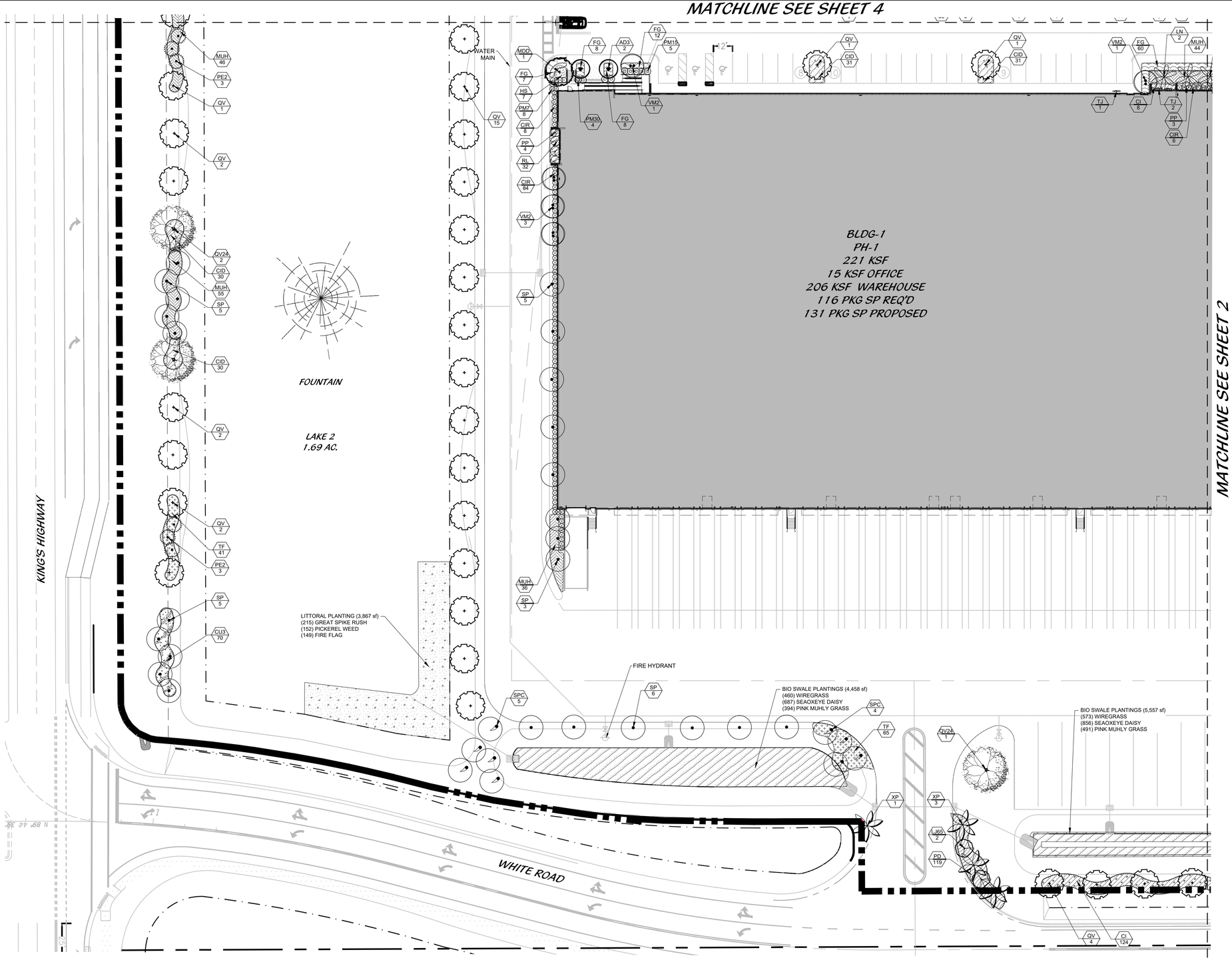
RONALD E. STOTLER
PROFESSIONAL SURVEYOR AND MAPPER
CERTIFICATE NO. 5026
STATE OF FLORIDA

MAGELLAN SURVEYING & MAPPING, INC.
PROFESSIONAL LAND SURVEYORS
LICENSED BUSINESS 7577
450 S. OLD DIXIE HIGHWAY, SUITE 10
JUPITER, FLORIDA 33458
561-746-8745 FAX 561-746-9632 E-mail info@magellansurveying.com

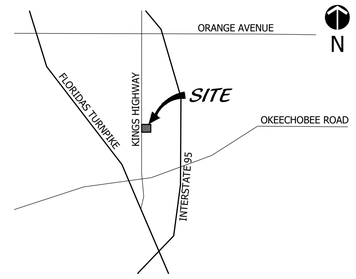
# Boundary & Tree Survey

Prepared For: J A LEGACY DEVELOPMENT PARTNERS, LLC

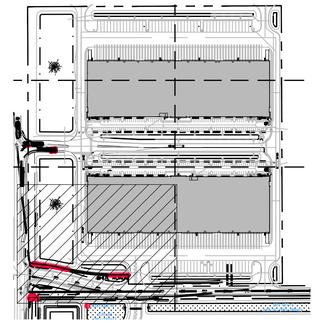
| Drawn by RES | Date Of Survey JULY 20, 2022 | Scale 1"= 80' |
|---|---|---|
| Field: TF F.B.187 Pg32 | | |
| BOUNDARY, 07-09-2022<br>REVISIONS:<br>TREE SURVEY (PRELIMINARY), 07-20-2022 | | Drawing Number 22-116 |




## LOCATION MAP




## SHEET LAYOUT MAP



# Landscape Plan

0' 15' 30' 60' 90' 120'

Scale: 1" = 30'-0"

North

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Land Planners
Environmental Consultants
1934 Commerce Lane
Suite 1
Jupiter, Florida 33458
561.747.6336 · Fax 747.1377
Lic# LC-26000535


# King's Highway Commerce Center

## Landscape Plan

City of Fort Pierce, Florida

REGISTERED LANDSCAPE ARCHITECT
DONALDSON E. HEARING
LA 0000943
STATE OF FLORIDA

| | |
|---|---|
| DESIGNED | DEH |
| DRAWN | AGB |
| APPROVED | DEH |
| JOB NUMBER | 21-0130 |
| DATE | 07-28-22 |
| REVISIONS | |

July 28, 2022 2:28:20 p.m.
Drawing: 21-1001 LP.DWG

SHEET 1 OF 7


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MATCHLINE SEE SHEET 3

MATCHLINE SEE SHEET 1

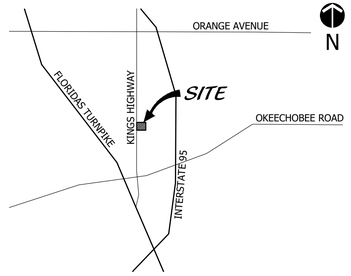
BLDG-1
PH-1
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE
116 PKG SP REQ'D
131 PKG SP PROPOSED

BIO SWALE PLANTINGS (1,467 sf)
(152) WIREGRASS
(226) SEAOXEYE DAISY
(130) PINK MUHLY GRASS

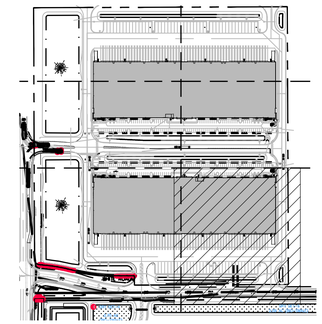
TYPE F CURB

WHITE ROAD

## LOCATION MAP




## SHEET LAYOUT MAP



# Landscape Plan

0' 15' 30' 60' 90' 120'

Scale: 1" = 30'-0"

North

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1934 Commerce Lane
Suite 1
Jupiter, Florida 33458
561.747.6336 · Fax 747.1377
Lic# LC-26000535


King's Highway Commerce Center
Landscape Plan
City of Fort Pierce, Florida

REGISTERED LANDSCAPE ARCHITECT
CHALMERS E. HEARING
LA 0000943
STATE OF FLORIDA

| | |
|---|---|
| DESIGNED | DEH |
| DRAWN | AGB |
| APPROVED | DEH |
| JOB NUMBER | 21-0130 |
| DATE | 07-28-22 |
| REVISIONS | |

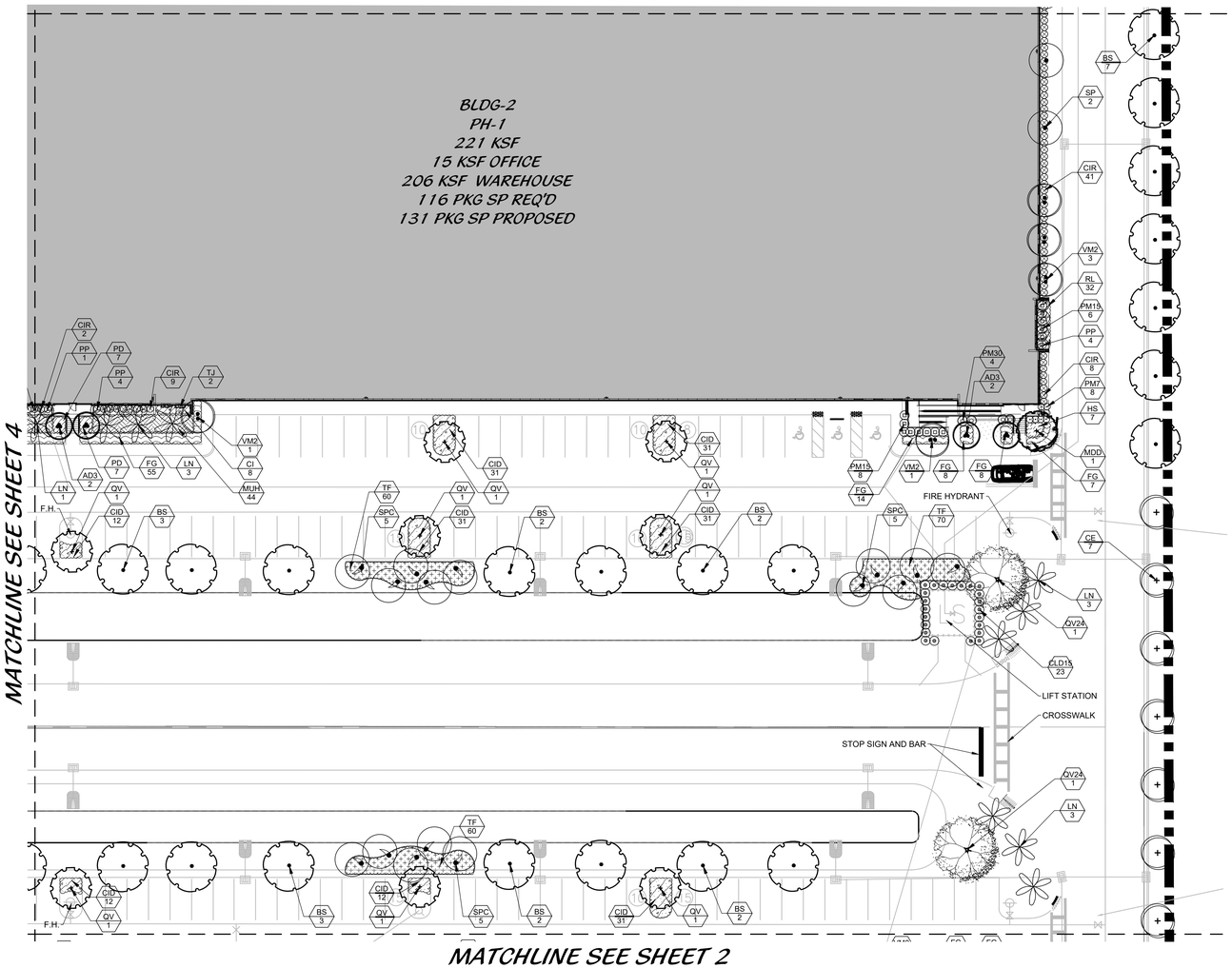
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Drawing: 21-1001 LP.DWG

SHEET 2 OF 7

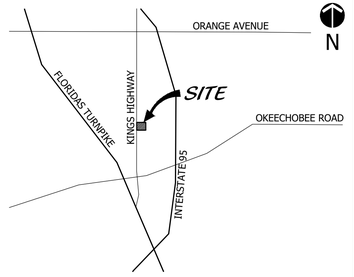

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MATCHLINE SEE SHEET 5

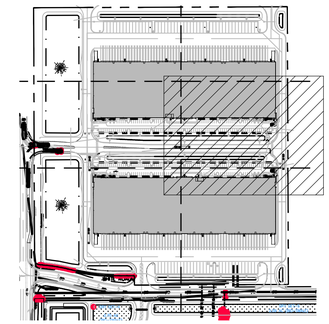
BLDG-2
PH-1
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE
116 PKG SP REQ'D
131 PKG SP PROPOSED




## LOCATION MAP




## SHEET LAYOUT MAP



# Landscape Plan




Scale: 1" = 30'-0"

North

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www.cotleurhearing.com
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King's Highway Commerce Center
Landscape Plan
City of Fort Pierce, Florida

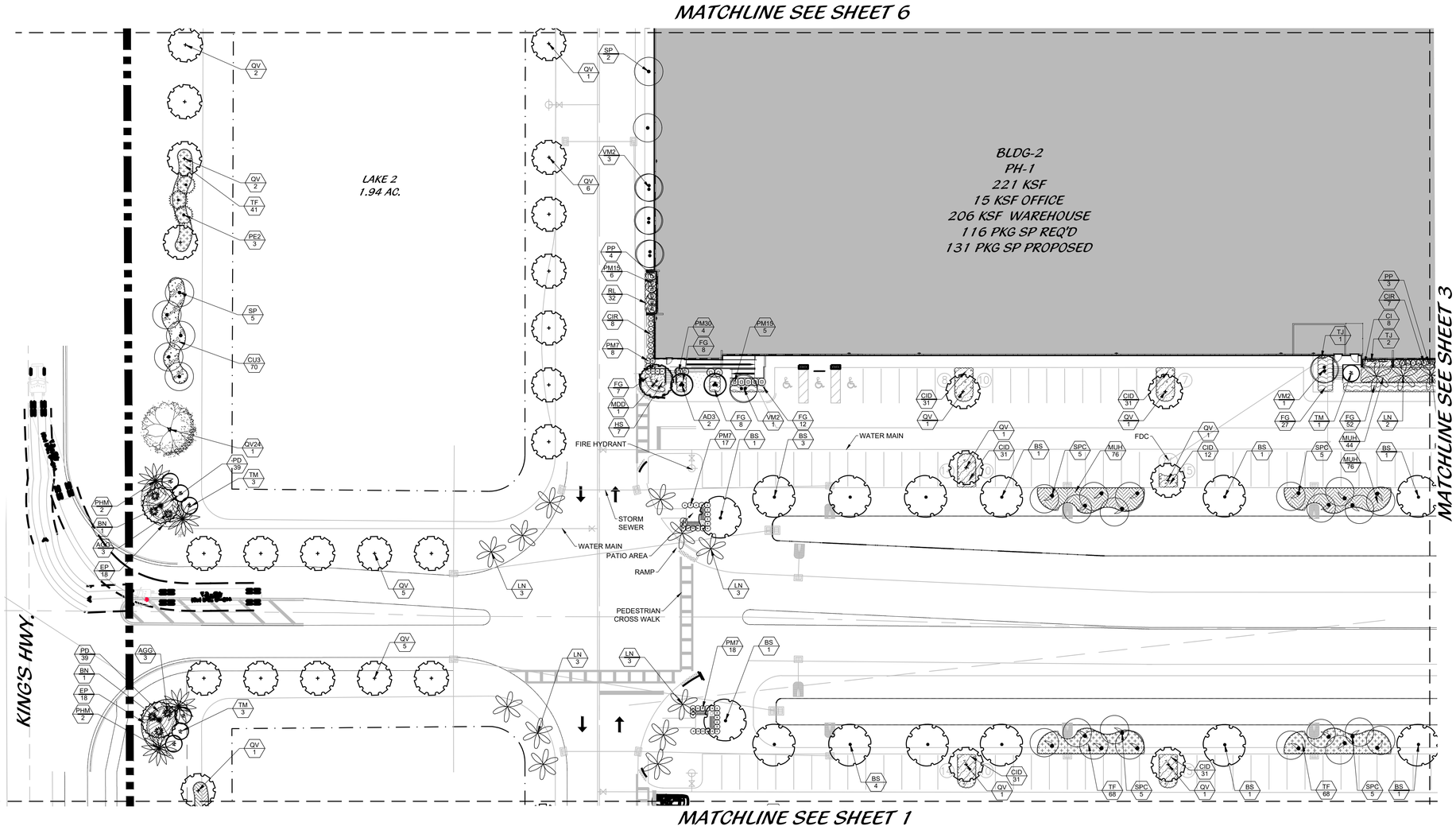
REGISTERED LANDSCAPE ARCHITECT
DOUGLAS E. HEARING
LA 0000943
STATE OF FLORIDA

| | |
|---|---|
| DESIGNED | DEH |
| DRAWN | AGB |
| APPROVED | DEH |
| JOB NUMBER | 21-0130 |
| DATE | 07-28-22 |
| REVISIONS | |

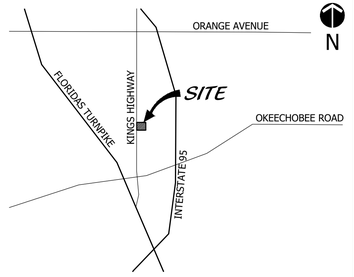
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Drawing: 21-1001 LP.DWG

SHEET 3 OF 7

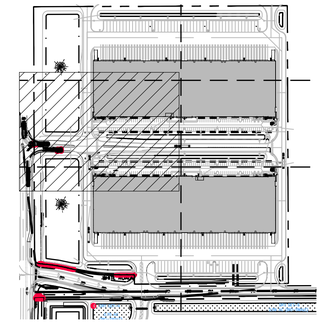

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## LOCATION MAP




## SHEET LAYOUT MAP



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# Landscape Plan

0' 15' 30' 60' 90' 120'

Scale: 1" = 30'-0"

North

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Suite 1
Jupiter, Florida 33458
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Lic# LC-26000535

King's Highway Commerce Center
Landscape Plan
City of Fort Pierce, Florida

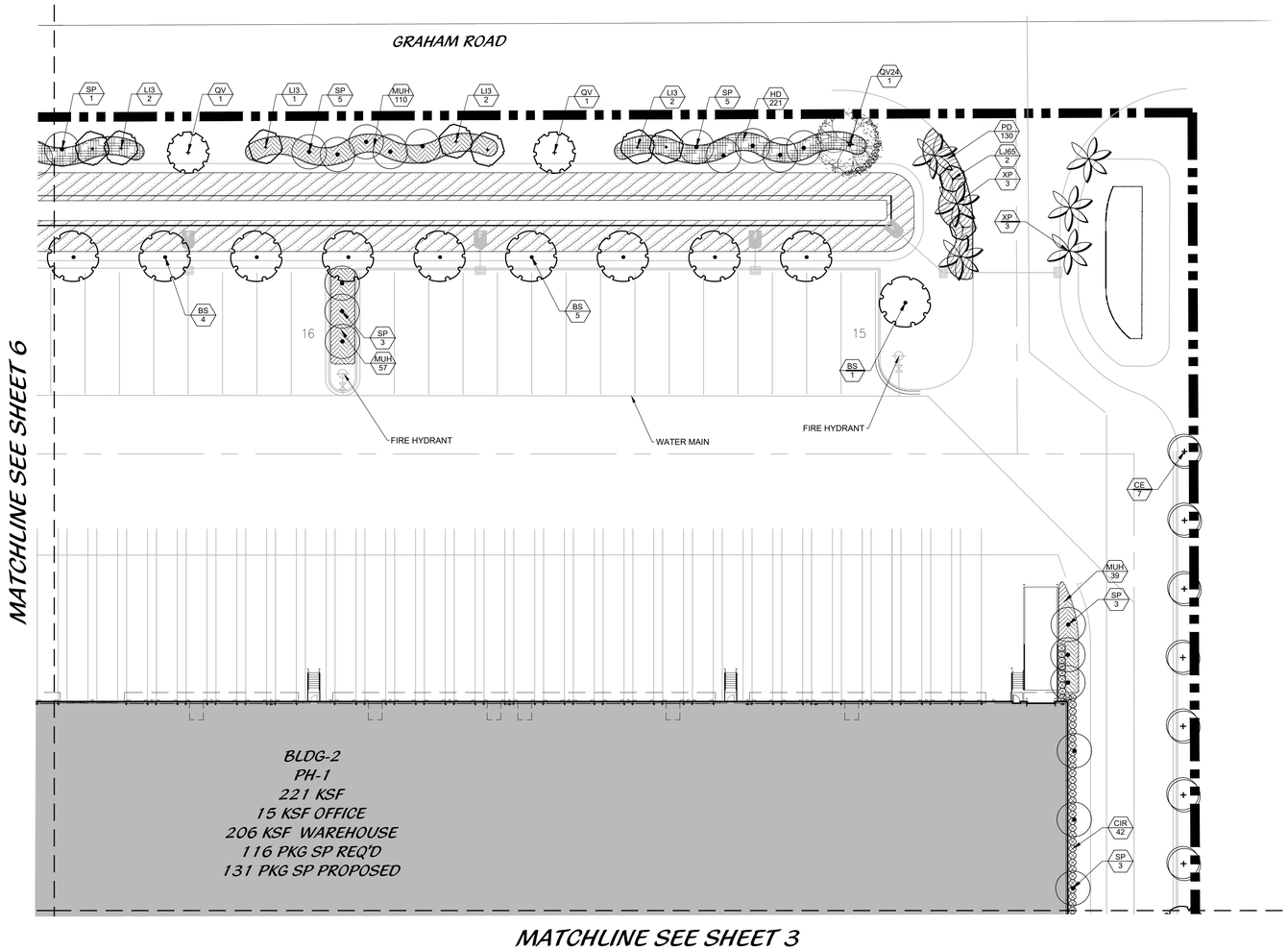
REGISTERED LANDSCAPE ARCHITECT
DONALDSON E. HEARING
LA 0000943
STATE OF FLORIDA

| | |
|---|---|
| DESIGNED | DEH |
| DRAWN | AGB |
| APPROVED | DEH |
| JOB NUMBER | 21-0130 |
| DATE | 07-28-22 |
| REVISIONS | |

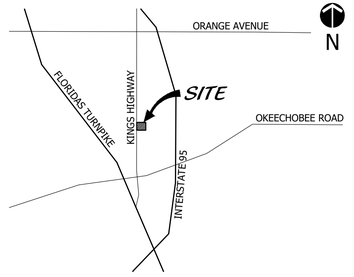
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SHEET 4 OF 7

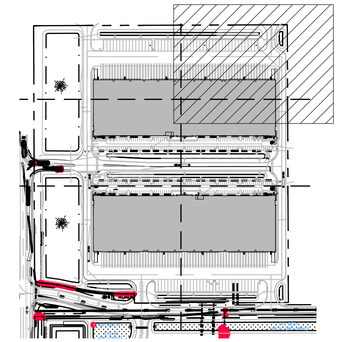
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## LOCATION MAP




## SHEET LAYOUT MAP



# Landscape Plan

0' 15' 30' 60' 90' 120'

Scale: 1" = 30'-0"

North

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www.cotleurhearing.com
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King's Highway Commerce Center
Landscape Plan
City of Fort Pierce, Florida

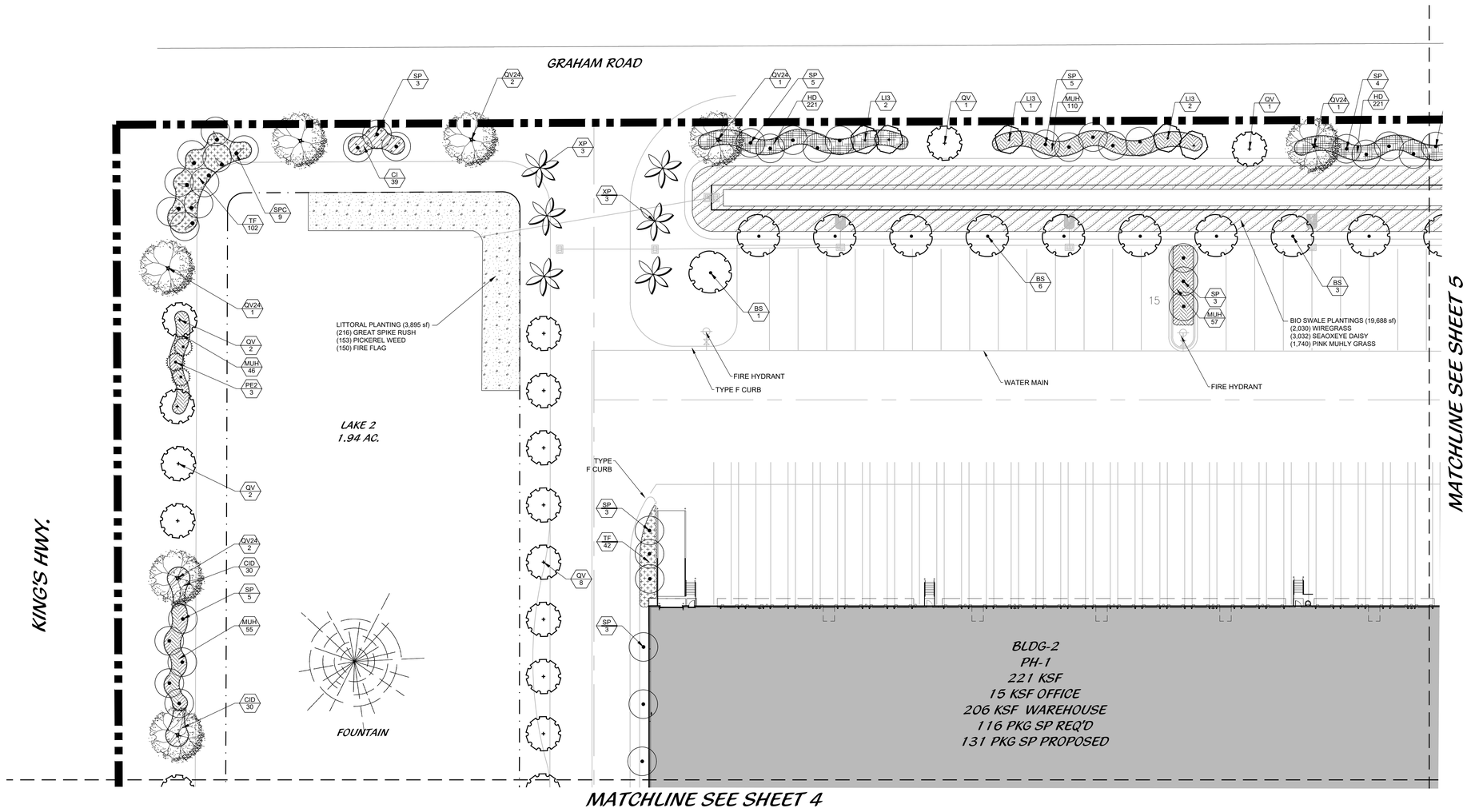
REGISTERED LANDSCAPE ARCHITECT
DONALD IRON E. HEARING
LA 0000943
STATE OF FLORIDA

| | |
|---|---|
| DESIGNED | DEH |
| DRAWN | AGB |
| APPROVED | DEH |
| JOB NUMBER | 21-0130 |
| DATE | 07-28-22 |
| REVISIONS | |

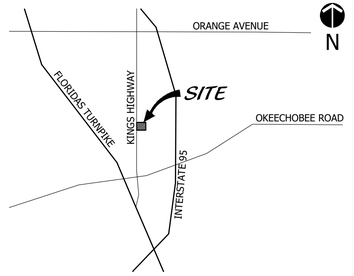
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Drawing: 21-1001 LP.DWG

SHEET 5 OF 7

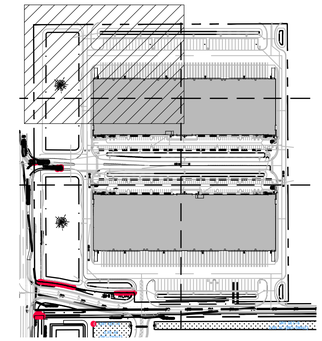
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## LOCATION MAP




## SHEET LAYOUT MAP



# Landscape Plan

0' 15' 30' 60' 90' 120'

Scale: 1" = 30'-0"

North

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561.747.6336 · Fax 747.1377
Lic# LC-26000535

*King's Highway Commerce Center*
Landscape Plan
City of Fort Pierce, Florida

REGISTERED LANDSCAPE ARCHITECT
CHALMERS E. HEARING
LA 0000943
STATE OF FLORIDA

| | |
|---|---|
| DESIGNED | DEH |
| DRAWN | AGB |
| APPROVED | DEH |
| JOB NUMBER | 21-0130 |
| DATE | 07-28-22 |
| REVISIONS | |

July 28, 2022 2:28:20 p.m.
Drawing: 21-1001 LP.DWG

SHEET 6 OF 7

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# LANDSCAPE NOTES

ALL PLANT MATERIAL SHALL BE FLORIDA NUMBER 1 OR BETTER AS DEFINED BY THE DIVISION OF PLANT INDUSTRY 'FLORIDA GRADES AND STANDARDS' LATEST EDITION.

ALL LANDSCAPE SHALL CONFORM TO THE REQUIREMENTS OF THE TOWN OF JUPITER LAND DEVELOPMENT REGULATIONS. THE TOWN OF JUPITER LANDSCAPE CODE (LDRs) SHALL GOVERN IN THE EVENT OF A CONFLICT.

VEGETATION REMOVAL PERMITS ARE REQUIRED PRIOR TO REMOVING, CLEARING OR STRIPPING ANY VEGETATION FROM THE PROPERTY.

AT THE TIME OF BUILDING PERMIT, THE APPLICANT SHALL EXECUTE HOLD HARMLESS AGREEMENTS WITH ALL APPLICABLE UTILITIES FOR LANDSCAPING WITHIN UTILITY EASEMENTS.

THE LANDSCAPE CONTRACTOR SHALL NOT MAKE ANY SUBSTITUTIONS AND/ OR CHANGES WITHOUT THE AUTHORIZATION OF TOWN OF JUPITER, THE OWNER AND THE LANDSCAPE ARCHITECT.

THE LANDSCAPE CONTRACTOR SHALL REVIEW THE PROJECT DRAINAGE AND UTILITY PLANS PRIOR TO CONSTRUCTION AND AVOID ALL CONFLICTS. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK.

THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS.

THE CONTRACTOR SHALL COORDINATE THE PLANTING AND TRIMMING OF STREET TREES TO ENSURE FULL VISIBILITY TO TRAFFIC CONTROL AND SAFETY SIGNAGE

TREES SHALL BE POSITIONED TO AVOID CONFLICTS WITH SIGNAGE AND SITE LIGHTING. LARGER TREES WILL BE PROVIDED AT INTERSECTIONS WHERE DEEMED NECESSARY.

ALL VEGETATION SHALL BE SELECTED AND POSITIONED SO THAT IT DOES NOT PRESENT OBSTRUCTIONS TO THE LINE OF SIGHT AT INTERSECTIONS PURSUANT TO SECTION 27-1262(a)(9)(c) OF THE TOWN OF JUPITER CODE.

ALL ABOVE GROUND UTILITIES I.E. TRANSFORMERS, SWITCH BOXES, AC CONDENSERS AND ALIKE SHALL BE FULLY SCREENED FROM VIEW ON THREE SIDES WITH LANDSCAPING. THE LANDSCAPING SHALL TO THE TALLEST POINT OF SAID EQUIPMENT AT TIME OF PLANTING.

ALL TREES SHALL BE LOCATED WITHIN A MULCH PLANTING BED WITH A MINIMUM OF TWO (2) FEET OF CLEARANCE TO THE EDGE OF THE BED.

SOD AND IRRIGATION SHALL BE INSTALLED IN ANY ADJACENT RIGHT OF WAY BETWEEN THE SIDEWALK AND THE CURB.

ALL SOD SHALL BE STENOTAPHRUM SECONDATUS FLORITAM-PALMETTO (ST. AUGUSTINE SOD).

TREES WITHIN PLANTING ISLANDS LESS THAN FIVE (5) FEET IN WIDTH SHALL BE LOCATED TO AVOID CONFLICTS WITH THE OVERHANG OF VEHICLES.

TYPE D RAISED CONCRETE CURBING SHALL BE PROVIDED AROUND ALL PLANTING ISLANDS WITHIN VEHICULAR USE AREAS.

TREES AT ENTRANCE WAYS AND WITHIN SIGHT TRIANGLES SHALL BE TRIMMED IN SUCH A FASHION TO MINIMIZE SITE VISIBILITY CONFLICTS, CLEAR VISIBILITY SHALL BE MAINTAINED BETWEEN 30 INCHES AND 7 FEET. TEN FOOT BY THIRTY FOOT SIGHT VISIBILITY TRIANGLES SHALL BE PROVIDED AT THE INTERSECTIONS WITH THE PUBLIC RIGHT OF WAY. IN ADDITION ALL LANDSCAPING SHALL CONFORM TO THE REQUIREMENTS OF FDOT INDEX 546.

EARTH BERMS SHALL NOT EXCEED A 3:1 SLOPE 4:1 SLOPES OR GREATER ARE PREFERABLE.

ALL TREES PLANTED UNDER OR ADJACENT TO FPL POWER LINES WILL COMPLY WITH THE FPL RIGHT TREE IN THE RIGHT PLACE GUIDELINES (REV 5/95)

PERIMETER TREES AT THE TIME OF PLANTING SHALL BE SPACED IN A WAY THAT COMPLEMENTS THE SPACING OF ANY EXISTING TREES ON ADJACENT DEVELOPED AREAS.

ALL LANDSCAPE ISLANDS AND BEDS SHALL BE FREE FROM SHELL ROCK AND CONSTRUCTION DEBRIS, EXCAVATED TO A DEPTH OF 30 INCHES OR TO CLEAN NATIVE SOILS AND FILLED WITH THE SPECIFIED BACKFILL MIXTURE.

ALL LANDSCAPE ISLANDS SHALL INCORPORATE THE INSTALLATION OF MOUNDING OF NATIVE SOILS A MINIMUM OF SIX INCHES (6") ABOVE THE TOP OF CURB.

19.5" 'BIO BARRIER' ROOT BARRIER SHALL BE PROVIDED FOR SHADE TREES PLANTED WITHIN SIX (6') FEET OF PUBLIC CURBS, SIDEWALKS OR PUBLIC RIGHT OF WAYS. ALL ROOT BARRIER SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURES RECOMMENDATIONS. THE TOTAL LENGTH OF THE ROOT BARRIERS SHALL BE 20' ADJACENT TO THE SIDEWALK AND 20' ADJACENT TO THE CURB.

ALL AREAS SHALL BE FULLY IRRIGATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF JUPITER. THE IRRIGATION WATER SOURCE SHALL BE WELL WATER FOR COMMON AREAS AND POTABLE WATER AROUND THE BUILDING FOUNDATION.

CATCH BASINS AND DRAINAGE SHALL NOT BE LOCATED WITH IN REQUIRED PERIMETER BUFFERS OR PRESERVE AREAS.

THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE 100% OVERLAP COVERAGE TO ALL LANDSCAPE AND SOD AREAS.

THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN SENSOR/CUT OFF SWITCH IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.

EXISTING TREES AND VEGETATION TO REMAIN SHALL BE STAKED AND BARRICADED PRIOR TO ANY LAND CLEARING. TREES TO BE RELOCATED SHALL BE ROOT PRUNED AND PROTECTED DURING CONSTRUCTION.

ALL TREES PROPOSED TO BE PRESERVED ON SITE SHALL BE PROTECTED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN DIVISION IV., VEGETATION REMOVAL REQUIREMENTS IN THE TOWN OF JUPITER CODE PRIOR TO THE ISSUANCE OF A C.O.

ANY AREA DESIGNATED WITH EXISTING VEGETATION TO REMAIN THAT IS DISTURBED DURING CONSTRUCTION WILL BE RESTORED WITH NATIVE PLANTINGS.

EXISTING TREES PRESERVED OR RELOCATED ON SITE SHALL BE PRUNED ACCORDING TO ANSI A300 STANDARDS OR BY AN ISA CERTIFIED ARBORIST.

ALL EXISTING LANDSCAPING AND TREES TO REMAIN SHALL BE BARRICADED WITH ORANGE CONSTRUCTION BARRICADE. THE BARRICADE SHALL BE INSTALLED AT THE DRIP LINE OF THE TREE/PALM OR AT THE EDGE OF THE SHRUB MASS. BARRICADES SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION.

EXISTING, SUITABLE NATIVE VEGETATION LOCATED WITHIN THE PROPOSED DEVELOPMENT AREAS SHALL BE RELOCATED TO SUPPLEMENT THE LANDSCAPING. NATIVE VEGETATION SHALL BE RELOCATED BY TREE SPADE OR CRANE. PRIOR TO THE CLEARING OF THE SITE THE APPLICANT SHALL IDENTIFY ALL NATIVE VEGETATION TO BE RELOCATED.

RELOCATION METHODOLOGY: EXISTING NATIVE VEGETATION DETERMINED TO BE SUITABLE FOR RELOCATION SHALL BE RELOCATED TO TARGET AREAS USING HYDROLOGIC TREE SPADES. THE SIZE OF SPADE SHALL VARY FROM 90" TO 45" DEPENDING ON THE SIZE AND TYPE OF VEGETATION TO BE MOVED. THE APPLICANT SHALL IDENTIFY PRIOR TO THE CLEARING OF THE SITE ALL EXISTING NATIVE VEGETATION TO BE RELOCATED. FOLLOWING RELOCATION, VEGETATION SHALL BE WATERED DAILY FOR A PERIOD NOT LESS THAN 90 DAYS AFTER WHICH IT SHALL BE WATERED ON AN AS NEED BASIS TO INSURE SURVIVAL. AT A MINIMUM THE APPLICANT SHALL INSURE 60% SURVIVAL FOR ALL RELOCATED PLANT MATERIAL.

# LANDSCAPE SPECIFICATIONS

**1. GENERAL LANDSCAPE REQUIREMENTS**

LANDSCAPE CONTRACT WORK INCLUDES, BUT IS NOT LIMITED TO, SOIL PREPARATION, FINE OR FINISH GRADING, FURNISHING AND INSTALLING PLANT MATERIAL, WATERING, STAKING, GUYING AND MULCHING.

PLANT SIZE AND QUALITY

TREES, PALMS, SHRUBS, GROUNDCOVERS:
PLANT SPECIES AND SIZES SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS, NOMENCLATURE SHALL CONFORM TO STANDARD PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS PARTS I & II, LATEST EDITION PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE FLORIDA GRADE NUMBER 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY.

ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS OF GOOD QUALITY AND BE IN A HEALTHY GROWING CONDITION.

AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER.

STANDARD PLANTING MIXTURE SHALL BE ONE (1) PART RECYCLED ORGANIC MATERIAL ADDED TO THREE (3) PARTS EXISTING NATIVE SOIL.

REPLACEMENT SOIL SHALL BE USED AS SPECIFIED TO REPLACE EXISTING SOILS THAT ARE DETERMINED BY THE LANDSCAPE ARCHITEC TO BE UNSUITABLE FOR PLANTING, IE. ROAD BASE, PAVEMENT, ETC. REPLACEMENT SOIL MIX SHALL CONTAIN 60% SAND AND 40% MUCK. SAND SHALL BE 100% CLEAN NATIVE SAND SCREENED TO 1/4" AND MUCK SHALL BE 100% CLEAN ORGANIC NATIVE MUCK SCREENED TO 1/2". ALL SOIL SHALL BE MIXED PRIOR TO DELIVERY ON SITE.

MULCH SHALL BE SHREDDED MELALEUCA, EUCALYPTUS OR GRADE "A" RECYCLED. ALL MULCH IS TO BE APPLIED TO A DEPTH OF 3", EXCEPT AS OTHERWISE NOTED.

FERTILIZER IN BACKFILL MIXTURE FOR ALL PLANTS SHALL CONSIST OF MILORGANITE ACTIVATED SLUDGE MIXED WITH THE BACKFILL AT A RATE OF NOT LESS THAN 50 LBS. PER CUBIC YARD.

FERTILIZER FOR TREES AND SHRUBS MAY BE TABLET FORM OR GRANULAR. GRANULAR FERTILIZER SHALL BE UNIFORM IN COMPOSITION, DRY AND FREE-FLOWING. THIS FERTILIZER SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED BAGS, EACH BEARING THE MANUFACTURER'S STATEMENT OF ANALYSIS, AND SHALL MEET THE FOLLOWING REQUIREMENTS: 16% NITROGEN, 7% PHOSPHORUS, 12% POTASSIUM, PLUS IRON. TABLET FERTILIZER (AGRIFORM OR EQUAL) IN 21 GRAM SIZE SHALL MEET THE FOLLOWING REQUIREMENTS: 20% NITROGEN, 10% PHOSPHORUS AND 5% POTASSIUM.

FERTILIZER WILL BE APPLIED AT THE FOLLOWING RATES:

| PLANT SIZE | 16-7-12 | AGRIFORM TABLETS (21 GRAM) |
|---|---|---|
| 1 GAL. | 1/4 LB. | 1 |
| 3 GAL. | 1/3 LB. | 3 |
| 7-15 GAL. | 1/2 LB. | 6 |
| 1"-6" CALIPER | 2 LBS./1" CALIPER | 2 PER 1" CALIPER |
| 8" AND LARGER | 3 LBS./1" CALIPER | 2 PER 1" CALIPER |

"FLORIDA EAST COAST PALM SPECIAL" SHALL BE APPLIED TO ALL PALMS AT INSTALLATION AT A RATE OF ½ LB. PER INCH OF TRUNK UNLESS OTHERWISE SPECIFIED.

FIELD GROWN TREES AND PALMS PREVIOUSLY ROOT PRUNED SHALL OBTAIN A ROOT BALL WITH SUFFICIENT ROOTS FOR CONTINUED GROWTH WITHOUT RESULTING SHOCK.

CONTRACTOR SHALL NOT MARK OR SCAR TRUNK IN ANY FASHION.

PLANTS SHALL BE WATERED AS NECESSARY OR WITHIN 24 HOURS AFTER NOTIFICATION BY THE LANDSCAPE ARCHITECT.

THE LOCATIONS OF PLANTS, AS SHOWN IN THESE PLANS, ARE APPROXIMATE. THE FINAL LOCATIONS MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS. MAJOR ADJUSTMENTS TO THE LAYOUT ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT.

ALL PLASTIC FABRIC SHALL BE REMOVED FROM PLANT MATERIAL AT TIME OF INSTALLATION.

ALL TREES MUST BE STAKED AS SHOWN ON THE PLANTING DETAILS WITHIN 24 HOURS OF PLANTING. STAKES TO REMAIN FOR A MINIMUM OF 9 MONTHS, BUT NO LONGER THAN 18 MONTHS. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF THE STAKES.

ALL TREES MUST BE PRUNED AS PER LANDSCAPE ARCHITECT'S DIRECTION. SABAL PALMS MAY BE HURRICANE CUT.

ALL SHRUBS, TREES AND GROUND COVER WILL HAVE IMPROVED SOIL AS PER PLANTING SOIL NOTES. THE SOILS SHALL BE PLACED IN THE HOLE DURING PLANTING. TOP DRESSING ONLY IS NOT ACCEPTABLE.

DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING. ALL TREES SHALL BE SPIKED IN UTILIZING WATER AND A TREE BAR.

THE LANDSCAPE CONTRACTOR SHALL WATER, MULCH, WEED, PRUNE, AND OTHERWISE MAINTAIN ALL PLANTS, INCLUDING SOD, UNTIL COMPLETION OF CONTRACT OR ACCEPTANCE BY LANDSCAPE ARCHITECT. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE, PLANTING SAUCERS RESTORED, AND DEFECTIVE WORK CORRECTED.

THE LANDSCAPE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR DEBRIS CAUSED BY HIS CREWS DURING THE PERFORMANCE OF THE WORK. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROMPTLY REMOVE ALL WASTE MATERIALS, DEBRIS, UNUSED PLANT MATERIAL, EMPTY PLANT CONTAINERS AND ALL EQUIPMENT FROM THE PROJECT SITE.

UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AND REQUEST A FINAL INSPECTION. ANY ITEMS THAT ARE JUDGED INCOMPLETE OR UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHALL BE CORRECTED BY THE LANDSCAPE CONTRACTOR WITHIN 14 DAYS.

ALL LABOR AND MATERIAL FOR SOIL AMENDMENTS AND FERTILIZER THAT IS REQUIRED TO INSURE THE SUCCESSFUL ESTABLISHMENT AND SURVIVAL OF THE PROPOSED VEGETATION, AS WELL AS ALL THE COST FOR THE REMOVAL OF UNSUITABLE OR EXCESS BACKFILL MATERIAL, SHALL BE INCLUDED IN THE CONTRACTOR'S BID TO PERFORM THE WORK REPRESENTED IN THIS PLAN SET.

**2. PLANTING TREES**

EXCAVATE PIT AS PER PLANTING DETAILS.

BACKFILL AROUND BALL WITH STANDARD PLANTING MIXTURE AND SLIGHTLY COMPACT, WATER THOROUGHLY AS LAYERS ARE PLACED TO ELIMINATE VOIDS AND AIR POCKETS. BUILD A 6" HIGH BERM OF STANDARD PLANTING MIXTURE BEYOND EDGE OF EXCAVATION. APPLY 3" (AFTER SETTLEMENT) OF MULCH EXCEPT WITHIN 6" OF TRUNK.

PRUNE TREE TO REMOVE DAMAGED BRANCHES, IMPROVE NATURAL SHAPE AND THIN OUT STRUCTURE. DO NOT REMOVE MORE THAN 15% OF BRANCHES. DO NOT PRUNE BACK TERMINAL LEADER.

GUY AND STAKE TREE IN ACCORDANCE WIT THE STAKING DETAILS IMMEDIATELY AFTER PLANTING.

**3. PLANTING SHRUBS**

LAYOUT SHRUBS TO CREATE A CONTINUOUS SMOOTH FRONT LINE AND FILL IN BEHIND.

EXCAVATE PIT OR TRENCH TO 1-1/2 TIMES THE DIAMETER OF THE BALLS OR CONTAINERS OR 1'-0" WIDER THAN THE SPREAD OF ROOTS FOR POSITIONING AT PROPER HEIGHT. BACKFILL AROUND PLANTS WITH STANDARD PLANTING MIXTURE. COMPACTED TO ELIMINATE VOIDS AND AIR POCKETS. FORM GRADE SLIGHTLY DISHED AND BERMED AT EDGES OF EXCAVATION. APPLY 3" OF MULCH EXCEPT WITHIN 3" OF STEMS.

PRUNE SHRUBS TO REMOVE DAMAGED BRANCHES, IMPROVE NATURAL SHAPE AND THIN OUT STRUCTURE. DO NOT REMOVE MORE THAN 15% OF BRANCHES.

**4. PLANTING GROUND COVER**

LOOSEN SUBGRADE TO DEPTH OF 4" IN AREAS WHERE TOPSOIL HAS BEEN STRIPPED AND SPREAD SMOOTH.

SPACE PLANTS AS OTHERWISE INDICATED. DIG HOLES LARGE ENOUGH TO ALLOW SPREADING OF ROOTS. COMPACT BACKFILLTO ELIMINATE VOIDS AND LEAVE GRADE SLIGHTLY DISHED AT EACH PLANT. WATER THOROUGHLY. APPLY 3" OF MULCH OVER ENTIRE PLANTING BED, LIFTING PLANT FOLIAGE ABOVE MULCH.

DURING PERIODS OF HOT SUN AND/OR WIND AT TIME OF PLANTING, PROVIDE PROTECTIVE COVER FOR SEVERAL DAYS OR AS NEEDED.

**5. PLANTING LAWNS**

SODDING: SOD TYPE SPECIFIED ON PLANT LIST SHALL BE MACHINE STRIPPED NOT MORE THAN 24 HOURS PRIOR TO LAYING.

LOOSEN SUBGRADE TO DEPTH OF 4" AND GRADE WITH TOPSOIL EITHER PROVIDED ON SITE OR IMPORTED STANDARD PLANTING MIX TO FINISH DESIGN ELEVATIONS. ROLL PREPARED LAWN SURFACE. WATER THOROUGHLY, BUT DO NOT CREATE MUDDY SOIL CONDITION.

FERTILIZE SOIL AT THE RATE OF APPROXIMATELY 10 LBS. PER 1,000 S.F. SPREAD FERTILIZER OVER THE AREA TO RECEIVE GRASS BY USING AN APPROVED DISTRIBUTION DEVICE CALIBRATED TO DISTRIBUTE THE APPROPRIATE QUANTITY. DO NOT FERTILIZE WHEN WIND VELOCITY EXCEEDS 15 M.P.H. THOROUGHLY MIX FERTILIZER INTO THE TOP 2" OF TOPSOIL.

LAY SOD STRIPS WITH TIGHT JOINTS, DO NOT OVERLAP, STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. WORK SIFTED STANDARD PLANTING MIXTURE INTO MINOR CRACKS BETWEEN PIECES OF SOD AND REMOVE EXCESS SOIL DEPOSITS FROM SODDED AREAS. SOD ON SLOPES GREATER THAN 3:1 SHALL BE STAKED IN PLACE. ROLL OR STAMP LIGHTLY AND WATER THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING.

**6. MISCELLANEOUS LANDSCAPE WORK**

LANDSCAPE MAINTENANCE

MAINTAIN LANDSCAPE WORK UNTIL FINAL ACCEPTANCE IS ISSUED BY THE OWNER'S REPRESENTATIVE. INCLUDE WATERING, WEEDING, CULTIVATING, RESTORATION OF GRADE, MOWING AND TRIMMING GRASS, PRUNING TREES AND SHRUBS, PROTECTION FROM INSECTS AND DISEASES, FERTILIZING AND SIMILAR OPERATIONS AS NEEDED TO INSURE NORMAL GROWTH AND GOOD HEALTH FOR LIVE PLANT MATERIAL.

PLANT MATERIAL SUBSTITUTION

NO SUBSTITUTION OF PLANT MATERIAL, TYPE OR SIZES WILL BE PERMITTED WITHOUT AUTHORIZATION FROM THE LANDSCAPE ARCHITECT.

PLANTING BED PREPARATION

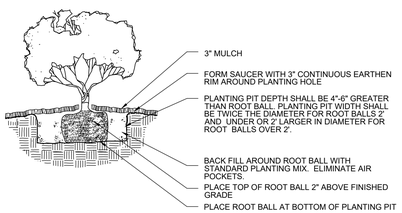
ALL PLANTING BEDS SHALL BE PROPERLY PREPARED PRIOR TO THE COMMENCEMENT OF ANY PLANTING. PLANTING AREAS, INCLUDING LAWNS SHALL BE FREE OF ALL WEEDS AND NUISANCE VEGETATION. IF TORPEDO GRASS (PANICUM REPENS) IS PRESENT OR ENCOUNTERED DURING PLANTING, THE LANDSCAPE CONTRACTOR SHALL STOP ALL PLANTING UNTIL IT CAN BE DEMONSTRATED THAT IT HAS BEEN COMPLETELY REMOVED OR ERADICATED. THERE SHALL BE NO EXCEPTIONS TO THIS PROVISION.

ALL LANDSCAPE ISLANDS AND BEDS WILL BE FREE OF SHELL ROCK AND CONSTRUCTION DEBRIS AND WILL BE EXCAVATED TO A DEPTH OF 30 INCHES OR TO CLEAN, NATIVE SOIL AND FILLED WITH THE SPECIFIED REPLACEMENT SOIL.

LANDSCAPE WARRANTY

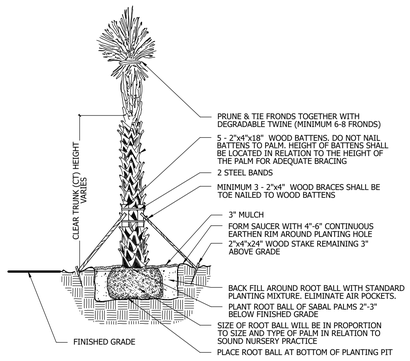
THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF SIX (6) MONTHS FROM THE DATE OF CONDITIONAL ACCEPTANCE IN WRITING FROM THE LANDSCAPE ARCHITECT. AT THE TIME OF CONDITIONAL ACCEPTANCE, THE SIX (6) MONTH PERIOD SHALL COMMENCE. ANY MATERIALS WHICH HAVE DIED OR DECLINED TO THE POINT WHERE THEY NO LONGER MEET FLORIDA #1 CONDITION DURING THIS PERIOD SHALL BE PROMPTLY REPLACED WITH SPECIMENS THAT MEET THE MINIMUM REQUIREMENTS CALLED FOR ON THE DRAWINGS. THE LANDSCAPE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR THE DEATH OR DAMAGE RESULTING FROM ACTS OF GOD SUCH AS LIGHTNING, VANDALISM, AND AUTOMOBILES OR FROM NEGLIGENCE BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND OTHERWISE MAINTAINING PLANTS UP TO THE CONDITIONAL ACCEPTANCE PERIOD, UNLESS A WRITTEN AGREEMENT WITH THE LANDSCAPE ARCHITECT PROVIDES FOR A DIFFERENT ARRANGEMENT.

# PLANTING DETAILS



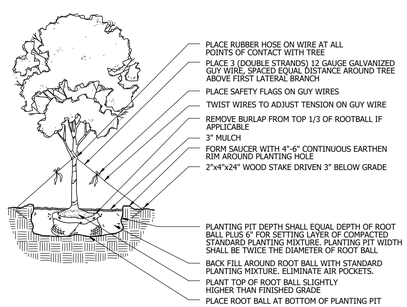

SHRUB/GROUNDCOVER PLANTING DETAIL

*NTS*




PALM PLANTING DETAIL

*NTS*




LARGE TREE PLANTING DETAIL

*NTS*

# PLANT SCHEDULE

| TREES | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT | CAL | SIZE | NATIVE | LOW MAINT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| | BS | 62 | BURSERA SIMARUBA | GUMBO LIMBO | FIELD GROWN | 3"Cal | 14` HT, 6` - 8` SPRD | Y | | FULL CANOPY |
| | CE | 21 | CONOCARPUS ERECTUS | GREEN BUTTONWOOD | 30 GAL. OR F.G. | 2.5" CAL | 12` O.A. | Y | | FULL CANOPY |
| | LI3 | 12 | LAGERSTROEMIA INDICA `MUSKOGEE` | CRAPE MYRTLE | 65 GAL. MIN. | 2.5" CAL. | 12` O.A.X 5` SPRD | N | N | FULL & THICK CANOPY, FLORIDA FANCY, 5` C.T. |
| | LJ65 | 6 | LIGUSTRUM JAPONICUM | JAPANESE PRIVET | 65 GAL | 3 TRK MIN., 1"-2" CAL. EA. | 8` HT, 8` SPRD. | N | | FULL CANOPY, 4` CT., MULTI-TRUNK, FF |
| | MDD | 4 | MAGNOLIA GRANDIFLORA `D.D. BLANCHARD` | SOUTHERN MAGNOLIA | 100 GAL | 5" CAL | 18`-20` O.A. | Y | | FULL CANOPY, SOUTH GROWN, MATCHING,FF |
| | PE2 | 12 | PINUS ELLIOTTII `DENSA` | SLASH PINE | N.A. | | 10-12` OA | Y | | FULL CANOPY; PLANTED IN PRESERVE |
| | PP | 32 | POLYALTHIA LONGIFOLIA PENDULA | INDIAN MAST TREE | 45 GAL | 2" CAL. MIN | 12`-14` HT. | N | | FULL & THICK, MATCHED |
| | QV | 94 | QUERCUS VIRGINIANA | LIVE OAK | 30 GAL. OR F.G. | 2" CAL. MIN | 12` HT. X 5` SPRD. | Y | | FULL CANOPY, 4` CT MIN. |
| | QV24 | 18 | QUERCUS VIRGINIANA `CATHEDRAL` ~ | CATHEDRAL LIVE OAK | FIELD GROWN | 8-10" CAL. | 25` x 25` | Y | Y | SINGLE, STRAIGHT TRUNK, FULL CANOPY, SYMMETRICAL. 6` CT MIN. |
| PALM TREES | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT | CAL | SIZE | NATIVE | LOW MAINT | REMARKS |
| | LN | 30 | LIVISTONA NITIDA ^ | NITTIDA PALM | FIELD GROWN | N.A. | 14`-16` OA | | | FULL CANOPY, DIAMOND CUT, FLORIDA FANCY. |
| | PHM | 4 | PHOENIX DACTYLIFERA `MEDJOOL` | MEDJOOL DATE PALM | FIELD GROWN | N.A. | 10`-12` WD. | N | | STRAIGHT TRUNK, FULL CANOPY, DIAMOND CUT. HT. |
| | SPC | 58 | SABAL PALMETTO | CABBAGE PALM | FIELD GROWN | N.A. | 14`, 18`, 22` CT., STGG. | | | SLICK, CURVED TRUNK, STAGGER HEIGHTS IN CLUSTERS |
| | SP | 95 | SABAL PALMETTO | CABBAGE PALM | N.A. | N.A. | 14`, 18`, 22` STGG. | Y | | RELOCATED FROM ON SITE |
| | TM | 8 | THRINAX MORRISII | KEY THATCH PALM | 45 GAL OR F.G | N.A. | 6` OA, MULTI TRUNK | Y | | FULL & THICK, MULTI TRUNK, FF |
| | AD3 | 12 | VEITCHIA MERRILLII-ADONIDIA | TRIPLE CHRISTMAS PALM | FIELD GROWN | N.A. | 12`-14` HT. | N | N | FULL CANOPY, TRIPLE TRUNK |
| | VM2 | 20 | VEITCHIA MONTGOMERYANA | DOUBLE MONTGOMERY PALM | FIELD GROWN | N.A. | 14`-16` OA | | | FULL CANOPY, DOUBLE TRUNK |
| SIGNATURE PALM | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT | CAL | SIZE | NATIVE | LOW MAINT | REMARKS |
| | BN | 2 | BISMARCKIA NOBILIS | BISMARCK PALM | FG | HEAVY CALIPER | 6` WD | N | | FULL CANOPY, ROOT PRUNED, FLORIDA FANCY |
| | XP | 20 | X BUTIAGRUS NABONNANDII | MULE PALM | FG | | 8` CT. | | | MATCHING |
| SHRUBS | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT | SIZE | SPACE | NATIVE | LOW MAINT | REMARKS |
| | AGG | 6 | AGAVE AMERICANA `GAINESVILLE BLUE` | GAINESVILLE BLUE AGAVE | 30 GAL | 4`-5` O.A. X 3`-4` SPRD. | A.S. | N | | FULL & THICK |
| | CIR | 318 | CHRYSOBALANUS ICACO `RED TIP` | RED TIP COCOPLUM | 7 GAL | 3` X 3` | 3` O.C. | Y | | FULL |
| | CLD15 | 23 | CLUSIA GUTTIFERA | CLUSIA | 15 GAL | 6` HT. X 3` SPRD. | 3` O.C. | N | | FULL & THICK |
| | PM7 | 67 | PODOCARPUS MAKII | PODOCARPUS | 7 GAL | 3` X 2` | 2` O.C. | N | | FULL & THICK |
| | PM15 | 44 | PODOCARPUS MAKII~ | PODOCARPUS | 15 GAL | 5` O.A., 2` SPRD | 2` O.C. | N | | FULL & THICK |
| | PM30 | 16 | PODOCARPUS MAKII~ | PODOCARPUS | 30 gal | 6` X 3` | 3` O.C. | N | N | FULL & THICK. SHRUB FORM |
| | TJ | 11 | TRACHELOSPERMUM JASMINOIDES | JASMINE VINE | 25 GAL | 10-12` O.A. | A.S. | | | CLIMBING |
| GROUND COVERS | CODE | QTY | BOTANICAL NAME | COMMON NAME | CONT | SIZE | SPACE | NATIVE | LOW MAINT | REMARKS |
| | CI | 443 | CHRYSOBALANUS ICACO | COCOPLUM | 3 GAL | 18" X18" | 30" O.C. | Y | | FULL & THICK |
| | CID | 602 | CHRYSOBALANUS ICACO `HORIZONTAL` | DWARF COCOPLUM | 3 GAL | 12" x 12" | 24" O.C. | Y | | FULL & THICK, NOT STRETCHED, FF |
| | CU3 | 140 | COCCOLOBA UVIFERA | SEA GRAPE | 3 GAL | 24" X 24" | 24" O.C. | Y | | FULL & THICK |
| | EP | 36 | ELEOCHARIS PALUSTRIS | GREAT SPIKE RUSH | 1 GAL | 6" X 6" | 3` OC | N | | FULL & THICK |
| | FG | 417 | FICUS MACROPHYLLA `GREEN ISLAND` | GREEN ISLAND FICUS | 3 GAL | 15" X 15" | 24" O.C. | N | | FULL & THICK |
| | HD | 663 | HAMELIA PATENS `COMPACTA` | DWARF FIREBUSH | 3 GAL | 18" X 18" | 24" O.C. | Y | | FULL & THICK, FLORIDA NATIVE VARIETY |
| | HS | 28 | HIBISCUS `S

# Construction Plans & Specifications
# For
# Kings Highway Commerce Center

Section 24 Township 35S Range 39E

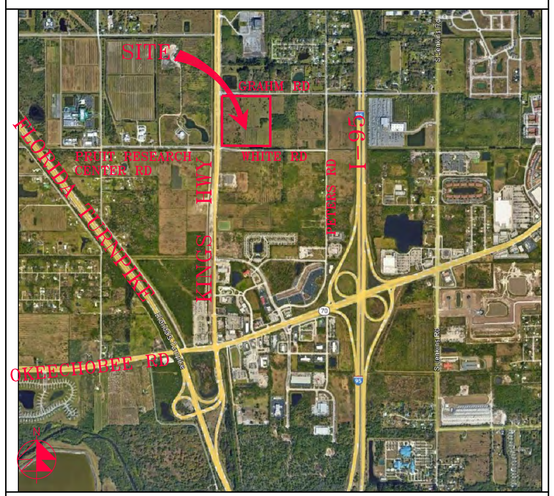
Fort Pierce, Florida

## Developer

JA Development Partners, LLC

4923 W Cypress Street,
Tampa, Florida 33607

## Aerial




Vicinity Map

## Drawing Index


| | |
|---|---|
| C-1 | Cover Sheet |
| C-2 | Pavement Marking Overall Plan |
| C3-C6 | Pavement Marking Plans |
| C-7 | Grading, Paving, & Drainage Overall Plan |
| C8-C11 | Grading, Paving, & Drainage Plans |
| C-12 | Water & Wastewater Overall Plan |
| C13-C16 | Water & Wastewater Plans |
| C-17 | Sections |
| C-18 | Grading, Paving, & Drainage Details |
| C-19 | Grading, Paving, & Drainage Details |
| C-20 | Grading, Paving, & Drainage Details |
| C-21 | Water Details |
| C-22 | Wastewater Details |
| C-23 | Wastewater Details |
| C-24 | Lift Station Details |
| C-25 | Lift Station Details |
| C-26 | Pollution Prevention Plan |
| C-27 | Truck Routing Plan |


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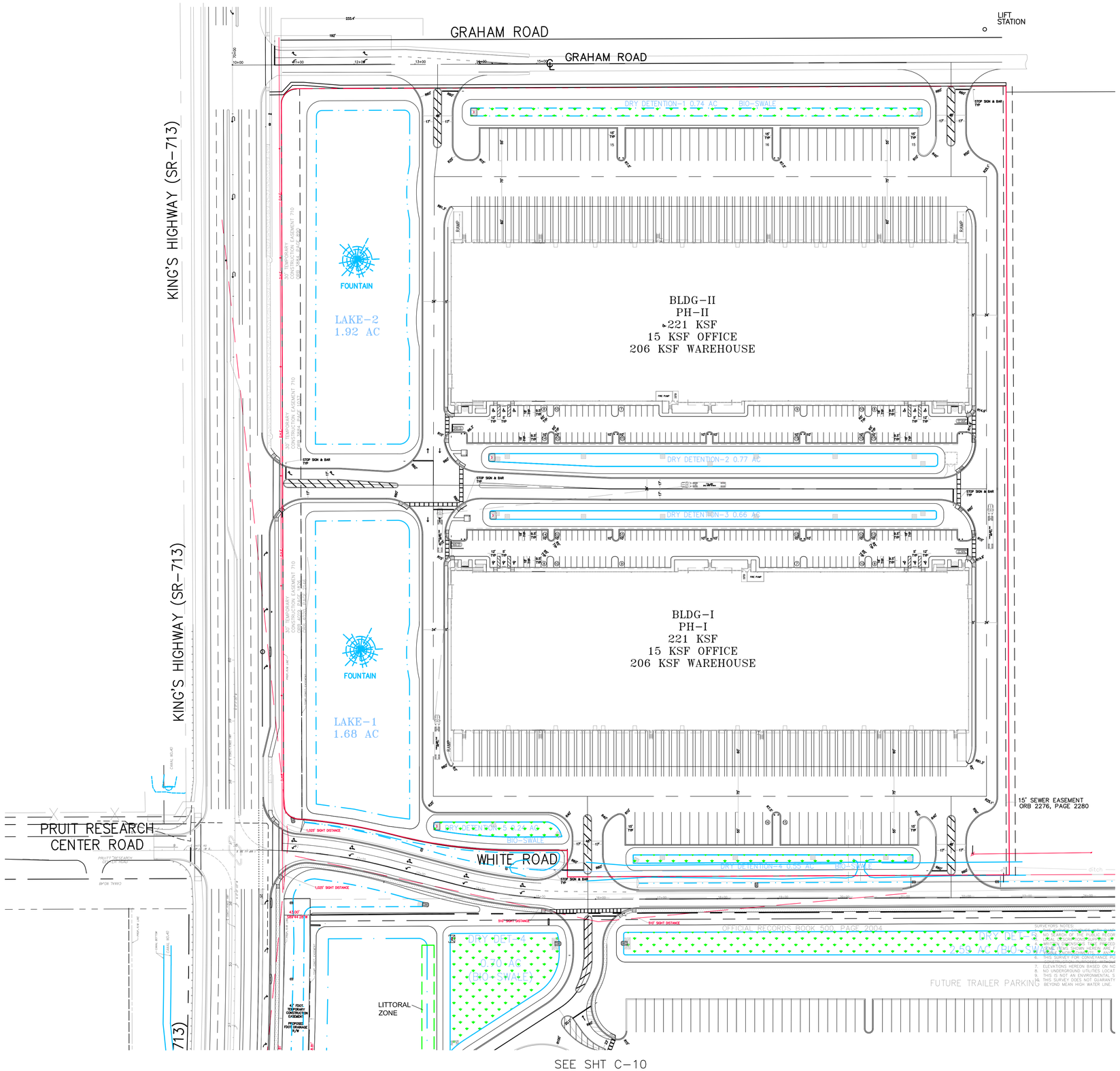

Kings Highway Commerce Center
Fort Pierce, Florida

Cover Sheet

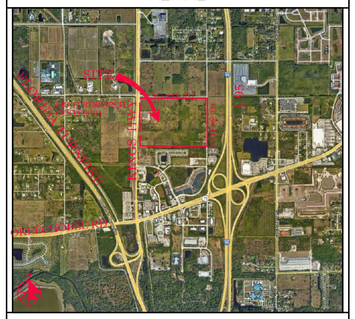
| | |
|---|---|
| JOB NO. | 2205-1402 |
| DRAWN BY | CLJ |
| DESIGNED BY | JHI |
| SCALE | NA |
| DATE | 07-07-22 |

SEAL

SHEET NO.
C-1




## AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

80' 0 40' 80' 160'

SCALE: 1" = 80'

NOTES:

1. SOD ALL FDOT R/W DISTURBED BY CONSTRUCTION WITH COMMON BERMUDA SOD.
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| STRIPING LEGEND | |
|---|---|
| (A) | 6" SOLID WHITE |
| (B) | 8" SOLID WHITE |
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| (E) | 24" SOLID WHITE |
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| (R) | FDP WHITE |
| (S) | FDP YELLOW |
| (T) | RPM BI-DIRECTIONAL WHITE/RED |
| (U) | RPM BI-DIRECTIONAL RED/YELLOW |

| LEGEND | |
|---|---|
| 19.7 | PROP PAV'T EL |
| 19.7 | EXIST EL |
| | CONTRACTOR TO FIELD VERIFY |
| INV EL | INVERT EL |
| CB | CATCH BASIN |
| YD | YARD DRAIN |
| BC | BOTTOM OF CURB |
| BE | BOTTOM EL |
| TC | TOP OF CURB |
| TE | TOP EL |
| EXF | EXFILTRATION TRENCH |
| WM | WATER MAIN |
| FM | FORCE MAIN |
| FIM | FIRE MAIN |
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| | FIRE HYDRANT |
| GV | GATE VALVE |
| | GATE VALVE |
| | SIAMESE CONN. |
| | CHECK VALVE |
| | DOUBLE DETECTOR CHECK VALVE |
| | WATER METER W/ REDUCED PRESSURE BACKFLOW PREV. |
| | SAMPLE POINT |
| MES | MITERED END SECTION |
| F.F.EL | FIN FLOOR ELEV |
| F.L.EL | FLOW LINE ELEV |
| TOB | TOP OF BANK |
| TOS | TOE OF SLOPE |
| TOC | TOP OF CONCRETE |
| TV | TAPPING VAVLE |
| CO | CLEANOUT |
| B1 | BORING NO. AND LOCATION |
| /AE | APPROVED EQUIVALENT |

48 HOURS BEFORE DIGGING
*CALL TOLL FREE*
*811*
*CALL SUNSHINE*
*NOTIFICATION CENTER*

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WEBSITE: www.JHIinc.com


Kings Highway Commerce Center
**Fort Pierce, Florida**

Pavement Marking Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=80' | JHI | DDI | 2205-1402 |

SEAL

SHEET NO.
C-2

SEE SHT C-9

KING'S HIGHWAY (SR-713)

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 4394 PAGE 1037

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 4019 PAGE 1826 ORB 4020 PAGE 2146

O.H.E.

STOP SIGN & BAR TYP

R60'

R15'

R25'

FIRE PUMP

DRY DETENTION-2 0.77 AC

DRY DETENTION-3 0.66 AC

DRY DETENTION-5 0.24 AC

BIO-SWALE

DRY DETENTION-4 0.55 AC

BLDG-I
PH-I
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

LAKE-1
1.68 AC

FOUNTAIN

RAMP

WHITE ROAD

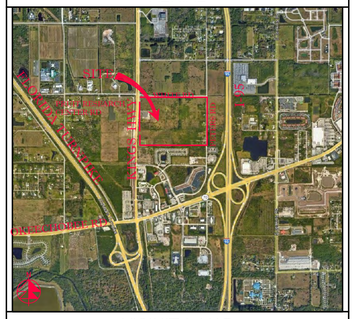
1,025' SIGHT DISTANCE

43.00'
S89°44'28"W

CANAL NO.40

SEE SHT C-10

## AERIAL



## VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

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| LEGEND | |
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| ⊕19.7 | PROP PAV'T EL |
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| INV EL | INVERT EL |
| CB | CATCH BASIN |
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| | FIRE HYDRANT |
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| | GATE VALVE |
| | SIAMESE CONN. |
| | CHECK VALVE |
| | DOUBLE DETECTOR CHECK VALVE |
| | WATER METER W/ REDUCED PRESSURE BACKFLOW PREV. |
| | SAMPLE POINT |
| MES | MITERED END SECTION |
| F.F.EL | FIN FLOOR ELEV |
| F.L.EL | FLOW LINE ELEV |
| TOB | TOP OF BANK |
| TOS | TOE OF SLOPE |
| TOC | TOP OF CONCRETE |
| TV | TAPPING VAVLE |
| CO | CLEANOUT |
| B1 | BORING NO. AND LOCATION |
| /AE | APPROVED EQUIVALENT |

48 HOURS BEFORE DIGGING
*CALL TOLL FREE*
811
*CALL SUNSHINE*
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WEBSITE: www.JHIinc.com


Kings Highway Commerce Center
Fort Pierce, Florida

Pavement Marking Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

SEAL

SHEET NO.
C-3

SEE SHT C-9

FIRE PUMP

DRY DETENTION-2 0.77 AC

STOP SIGN & BAR TYP

DRY DETENTION-3 0.66 AC

STOP SIGN & BAR TYP

FIRE PUMP

BLDG-I
PH-I
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

RAMP

DRY DETENTION-5 0.24 AC

BIO-SWALE

WHITE ROAD

STOP SIGN & BAR TYP

DRY DETENTION-4 0.55 AC

BIO-SWALE

510' SIGHT DISTANCE

510' SIGHT DISTANCE

15' SEWER EA
ORB 2276, P

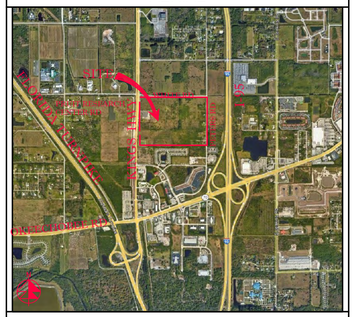
OFFICIAL RECORDS BOOK 500, PAGE 2004

SURVEYORS
THIS SH
NO SEA

DRY DET-5

SEE SHT C-10

## AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

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| | SIAMESE CONN. |
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| -NNC- | WATER METER W/ REDUCED PRESSURE BACKFLOW PREV. |
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| F.F.EL | FIN FLOOR ELEV |
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| TOB | TOP OF BANK |
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| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

SEAL

SHEET NO.
C-4

SEE SHT C-9

KINGS HIGHWAY (SR-713)

GRAHAM ROAD

GRAHAM ROAD

233.4'

192'

10+00 11+00 12+00 13+00 14+00 15+00 70+00

$\mathcal{L}$

R60' R60'

48'

17' 17'

DRY DETENTION-1 0.74 AC

BIO-SWALE

15' TYP 15

15' TYP 16

R25' R15' R7.5' R7.5'

55'

75'

60'

R61.3'

RAMP

O.H.E.

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 3884, PAGE 890

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 3884, PAGE 1037

FOUNTAIN

LAKE-2
1.92 AC

34' 5'

BLDG-II
PH-II
&221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

FIRE PUMP

12' TYP 5' TYP 18' TYP 9.5' TYP R5' TYP

R15' R6.3'

STOP SIGN & BAR TYP

STOP SIGN & BAR TYP

R60' R60' R60' R60'

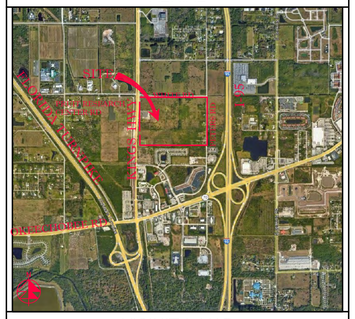
17' 17' 17' 17'

DRY DETENTION-2 0.77 AC

DRY DETENTION-3 0.66 AC

SEE SHT C-10

## AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

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| F.L.EL | FLOW LINE ELEV |
| TOB | TOP OF BANK |
| TOS | TOE OF SLOPE |
| TOC | TOP OF CONCRETE |
| TV | TAPPING VAVLE |
| CO | CLEANOUT |
| B1 | BORING NO. AND LOCATION |
| /AE | APPROVED EQUIVALENT |

48 HOURS BEFORE DIGGING
*CALL TOLL FREE*
811
*CALL SUNSHINE*
*NOTIFICATION CENTER*

REVISIONS


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WEBSITE: www.JHIinc.com


Kings Highway Commerce Center

Fort Pierce, Florida

Pavement Marking Plan

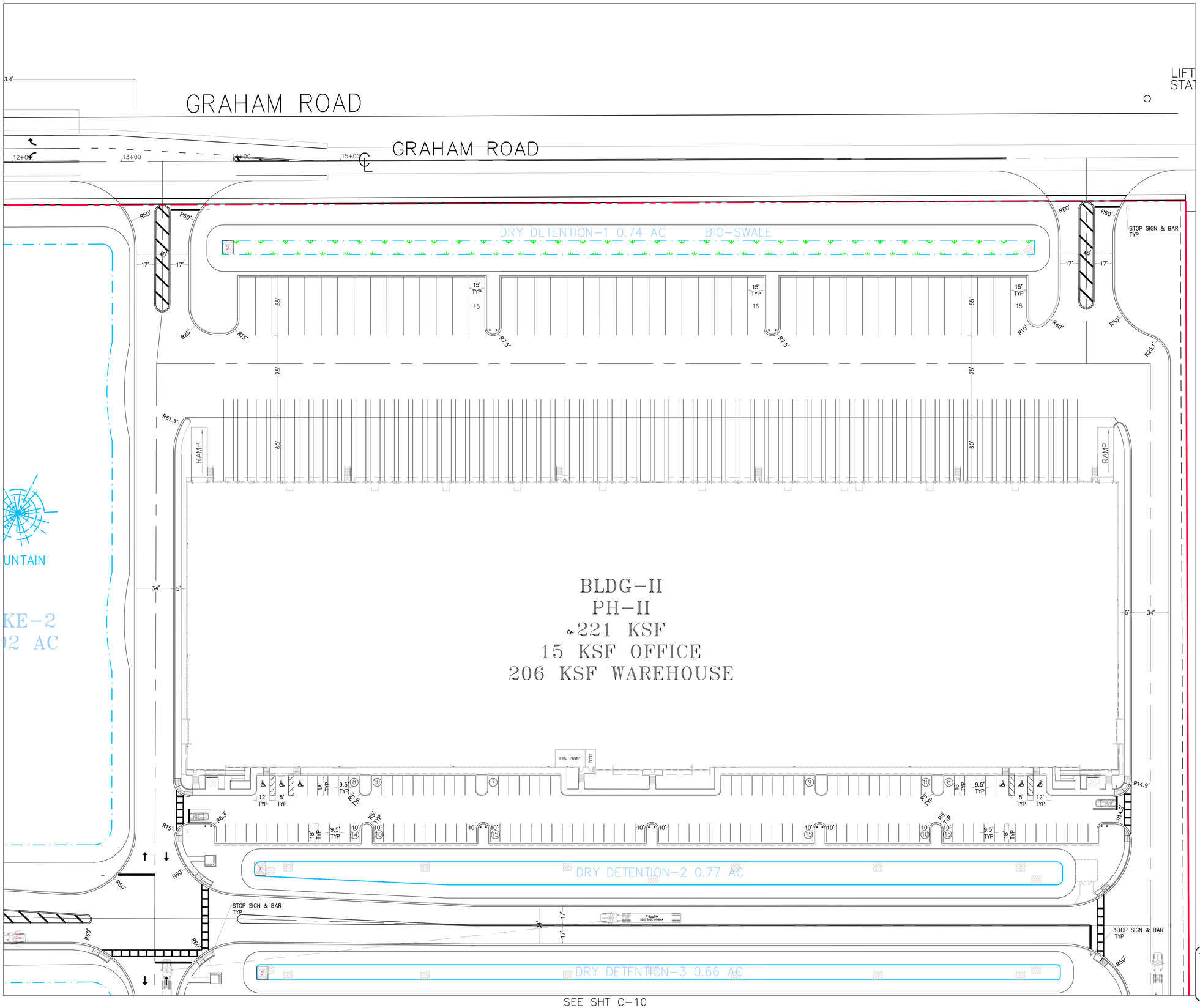
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|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

SEAL

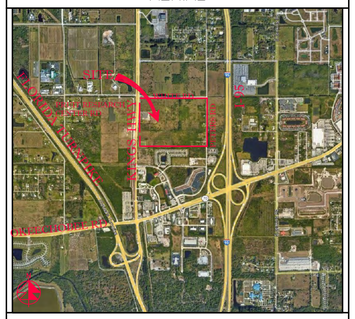
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SHEET NO.

C-5

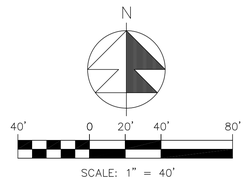



AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E




NOTES:

1. SOD ALL FDOT R/W DISTURBED BY CONSTRUCTION WITH COMMON BERMUDA SOD.
2. ALL STRIPING PERTAINING TO FDOT DRIVEWAY AND ROAD WIDENING SHALL BE THERMOPLASTIC.
3. GORE STRIPING RAISED PAVEMENT MARKERS SHALL BE INSTALLED PER FDOT STANDARD INDEX 711-001.
4. ALL CONSTRUCTION IN FDOT R/W MUST BE PERFORMED ACCORDING TO THE APPLICABLE FDOT ROADWAY AND DRAINAGE DESIGN STANDARDS AND SPECIFICATIONS.
5. STD PARKING STALL STRIPING SHALL BE TRAFFIC PAINT ALL OTHER STRIPING & PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
6. 19"-24" DEEP ROOT BARRIERS MUST BE INSTALLED ALONG ALL CURBS & SIDEWALKS WITHIN 10' OF EXISTING OR PROPOSED TREES. (SEE LANDSCAPE PLANS).
7. SURVEYOR SHALL VERIFY ALL DIMENSIONS PRIOR & INFORM THE ENGINEER OF RECORD OF ANY DISCREPANCIES.
8. ALL HANDICAP RAMPS & DETECTABLE WARNINGS CONSTRUCTED IN ACCORD W/ DESIGN STD'S.
9. ALL CONSTRUCTION AND RESTORATION WORK WITHIN THE RIGHT-OF-WAY SHALL COMPLY WITH THE LATEST EDITION OF THE FDOT STANDARDS INDEX AND THE FDOT STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
10. CONTRACTOR SHALL PROTECT ALL INLETS & SITE PERIMETERS DURING CONSTRUCTION PER FLORIDA STORMWATER, EROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.

| STRIPING LEGEND | |
|---|---|
| (A) | 6" SOLID WHITE |
| (B) | 8" SOLID WHITE |
| (C) | 12" SOLID WHITE |
| (D) | 18" SOLID WHITE |
| (E) | 24" SOLID WHITE |
| (F) | 6" SKIP WHITE TYP (10'-30') |
| (G) | 6" SKIP WHITE TYP (6'-10') |
| (H) | 6" SKIP WHITE TYP (2'-4') |
| (I) | 6" SOLID YELLOW |
| (J) | 18" SOLID YELLOW |
| (K) | 6" DOUBLE YELLOW |
| (L) | 6" SKIP YELLOW (10'-30') |
| (M) | 6" SKIP YELLOW TYP (6'-10') |
| (N) | 6" SKIP YELLOW TYP (2'-4') |
| (P) | PRM BI-DIRECTIONAL AMBER/AMBER |
| (R) | FDP WHITE |
| (S) | FDP YELLOW |
| (T) | RPM BI-DIRECTIONAL WHITE/RED |
| (U) | RPM BI-DIRECTIONAL RED/YELLOW |

| LEGEND | |
|---|---|
| 19.7 | PROP PAV'T EL |
| 19.7 | EXIST EL |
| * | CONTRACTOR TO FIELD VERIFY |
| INV EL | INVERT EL |
| CB | CATCH BASIN |
| YD | YARD DRAIN |
| BC | BOTTOM OF CURB |
| BE | BOTTOM EL |
| TC | TOP OF CURB |
| TE | TOP EL |
| EXF | EXFILTRATION TRENCH |
| WM | WATER MAIN |
| FM | FORCE MAIN |
| FIM | FIRE MAIN |
| SAN | WASTEWATER GRAVITY |
| | FIRE HYDRANT |
| GV | GATE VALVE |
| | GATE VALVE |
| | SIAMESE CONN. |
| | CHECK VALVE |
| | DOUBLE DETECTOR CHECK VALVE |
| | WATER METER W/ REDUCED PRESSURE BACKFLOW PREV. |
| | SAMPLE POINT |
| MES | MITERED END SECTION |
| F.F.EL | FIN FLOOR ELEV |
| F.L.EL | FLOW LINE ELEV |
| TOB | TOP OF BANK |
| TOS | TOE OF SLOPE |
| TOC | TOP OF CONCRETE |
| TV | TAPPING VAVLE |
| CO | CLEANOUT |
| B1 | BORING NO. AND LOCATION |
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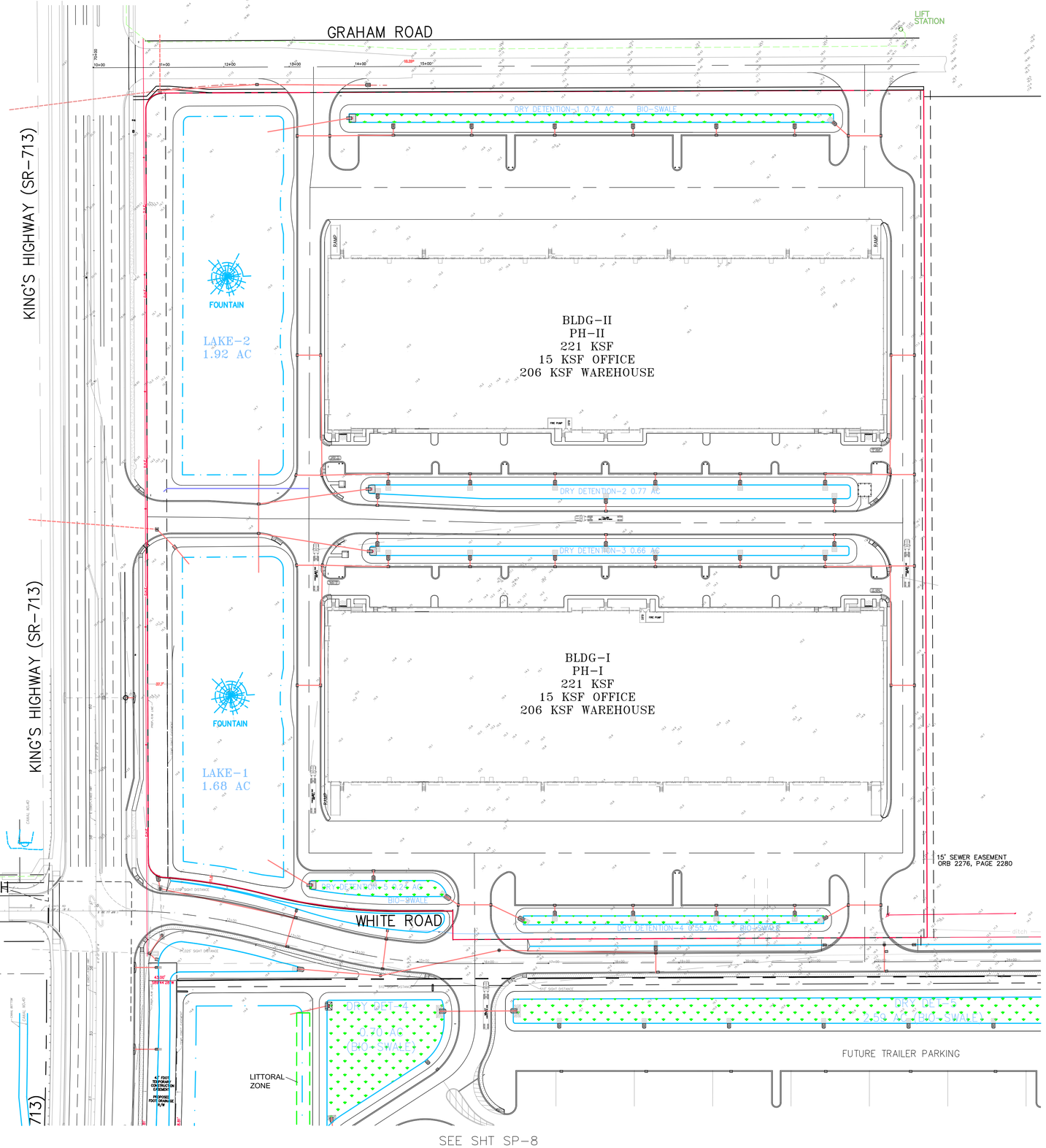

Kings Highway Commerce Center
Fort Pierce, Florida

Pavement Marking Plan

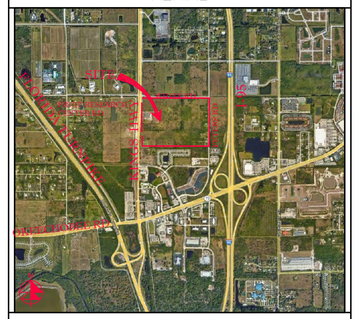
| JOB NO. | DRAWN BY | DESIGNED BY | SCALE | DATE |
|---|---|---|---|---|
| 2205-1402 | DDI | JHI | 1"=40' | 07-07-22 |

SEAL

SHEET NO.
C-6




AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

80' 0 40' 80' 160'

SCALE: 1" = 80'

NOTES:

1. GRT EL OF TYPE-9 INLETS ARE AT THE GUTTER FLOWLINE.

2. TYPE "C-9" STRUCTURES SHALL BE TYPE "C" BOX WITH TYPE "9" GRATE PER FDOT INDEX 425-052.

3. ALL OTHER INLET GRATES SHALL BE USF HEAVY DUTY LOADING GRATES. CS-5, CS-28, CS-92, CS-103 SHALL USE STEEL USF 6609 GRATE /AE.

4. ALL EXIST INFO & TOPO ARE PER MAGELLAN SURVEYING & MAPPING, INC., DWG # 21-020. ALL ELEV'S ARE IN FT, NAVD 1988.

5. THE FINAL LANDSCAPE GRADE AT BLDG SHALL BE 6" TYP, 3" MIN BELOW FIN FL ELEV.

6. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL DRAINAGE STRUCTURES, PIPES, SUBGRADE MATERIAL, BASE MATERIAL, ASPHALT PAVEMENT SPEC, CONCRETE MIX DESIGN AT THE MINIMUM PRIOR TO CONSTRUCTION.

7. INLETS SHALL BE PROTECTED DURING CONSTRUCTION PER FLORIDA STORMWATER, ERROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.

8. ALL CATCH BASINS LOCATED IN E/F-CURB SHALL HAVE USF 6168 FRAME & GRATE.

9. ALL CATCH BASINS AND MANHOLES SHALL HAVE TURBIDITY CONTROL BARRIERS PER DETAIL DURING THE CONST PHASE OF THE PROJECT.

10. CONTRACTOR SHALL CONSTRUCT SILT FENCE AT P/L.

11. ACCESSIBLE ROUTES INCL SW'S, HANDICAP RAMPS & DET WARNINGS SHALL CONFORM TO 2010 US DOJ "STD'S FOR ACCESSIBLE DESIGN", FBC CHAPTER 11, & FDOT INDEX 522-002.

12. CONTRACTOR SHALL PROTECT ALL INLETS & SITE PERIMETERS DURING CONSTRUCTION PER FLORIDA STORMWATER, ERROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.

13. PAVT SHALL BE ½" ABOVE THE INLET GRATE & E/F-CURB

14. ALL D-CURBS SHALL TERMINATE WITH 2' TAPER.

15. ALL CATCH BASINS TYPES REFER TO FDOT INDEX 425-052.

16. ADS HP STORM PIPE MAY BE SUBSTITUTED FOR RCP PIPE PENDING EOR APPROVAL. CONTRACTOR TO PROVIDE AN ALTERNATE BID FOR ADS PIPE.

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Kings Highway Commerce Center

Fort Pierce, Florida

Master Drainage Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=80' | JHI | DDI | 2205-1402 |

SEAL

SHEET NO.

C-7

SEE SHT SP-7

KING'S HIGHWAY (SR-713)

CANAL NO.40

CONST 150-LF @ 0.4%

CONST CB-40 "C9" GRT EL 15.45 INV EL 12.5

CONST CB-39 "C9" GRT EL 15.45 INV EL 12.5

INV EL 5.5

CONST 67-LF 42" CAP @ 0%

CONST CB-44 "C9" GRT EL 15.45 INV EL 12.5

CONST 184-LF 18" RCP @ 0%

CONST 178-LF @ 1.2%

CONST 77-LF @ 0.9%

CONST 37-LF 24" RCP @ 0%

CONST 45-LF 42" RCP @ 0%

CONST CS-58 "E" GRT EL 16.0 INV EL 7.0

EXIST QD-7 "E" GRT EL 12.5 REMOVE GRATE ADD SECTIONS & MH TOP RIM EL 18.0 INV EL 8.5

CONST CB-25 "C9" GRT EL 15.45 INV EL 12.5

CONST 34-LF 24" RCP @ 0%

CONST 60-LF 42" CAP @ 0%

INV EL 5.5

INV EL 5.5

CONST CB-9 "C9" GRT EL 15.45 INV EL 12.5

CONST CB-10 "C9" GRT EL 15.45 INV EL 12.5

CONST 12-LF 24" RCP @ 0.3%

REMOVE/RELOC EXIST TYPE (P-6) TOP CONST MH TOP RIM EL 18.8*

CONST TYPE 6 TOP GRT EL 18.54* (EOP) INV EL 13.84*

CONST CB-8 "C9" GRT EL 15.35 INV EL 12.5

FOUNTAIN

LAKE-1
1.68 AC

CONST 172-LF 30" RCP @ 0%

CONST 18-LF 15" RCP @ 0%

CONST CS-43 "H" W/ USF 6609 GRATE/AE GRT EL 13.25 BLDR EL 11.5 INV EL 8.0

CONST CB-28 "C9" GRT EL 16.05 INV EL 12.5

CONST 175-LF @ 0.4%

CONST CB-23 "C9" GRT EL 16.05 INV EL 12.5

CONST CS-24 "H" W/ USF 6609 GRATE/AE GRT EL 13.25 BLDR EL 11.5 INV EL 8.0

CONST CB-12 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-11 "C9" GRT EL 15.35 INV EL 12.5

CONST 184-LF 18" RCP @ 0%

CONST CB-7 "C9" GRT EL 15.35 INV EL 12.5

CONST 150-LF @ 0.4%

CONST 16-LF 15" RCP @ 0%

CONST CS-6 "H" W/ USF 6609 GRATE/AE GRT EL 13.25 BLDR EL 11.5 INV EL 8.0

INV EL 5.5

CONST CB-5 "C9" GRT EL 15.45 INV EL 12.5

CONST CB-17 "C9" GRT EL 15.35 INV EL 12.5

CONST MIT END INV EL 12.5 TYP

DRY DETENTION-5 0.24 AC

BIO-3

1,028' SIGHT DISTANCE

1,025' SIGHT DISTANCE

WHITE ROAD

CONST 49-LF @ 2.6%

CONST 17-LF 24" RCP @ 0%

CONST 17-LF 15" RCP @ 0%

CONST CB-38 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-36 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-35 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-34 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-37 "C9" GRT EL 15.35 INV EL 12.5

DRY DETENTION-2 0.77 AC

CONST 19-LF 15" RCP @ 0%

CONST CB-27 "C9" GRT EL 16.05 INV EL 12.5

CONST CB-22 "C9" GRT EL 16.05 INV EL 12.5

CONST 175-LF @ 0.4%

CONST 18-LF 15" RCP @ 0%

CONST CB-13 "C9" GRT EL 15.35 INV EL 12.5

DRY DETENTION-3 0.66 AC

CONST CB-14 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-15 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-17 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-1 "C9" GRT EL 15.05 INV EL 12.5

CONST CB-2 "C9" GRT EL 15.05 INV EL 12.5

CONST MIT END INV EL 12.5 TYP

CONST 16-LF 15" RCP @ 0%

CONST 8'X8'X12" RIP RAP (4"-8") ON FILTER FABRIC TYP, 6-REQ

DRY DETENTION-4 0.55 AC

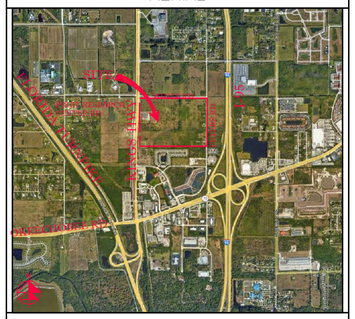
FIRE PUMP

BLDG-I
PH-I
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

RAMP

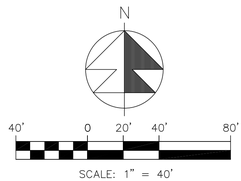
SEE SHT SP-8

## AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E




NOTES:

1. GRT EL OF TYPE-9 INLETS ARE AT THE GUTTER FLOWLINE.

2. TYPE "C-9" STRUCTURES SHALL BE TYPE "C" BOX WITH TYPE "9" GRATE PER FDOT INDEX 425-052.

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10. CONTRACTOR SHALL CONSTRUCT SILT FENCE AT P/L.

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13. PAVT SHALL BE ½" ABOVE THE INLET GRATE & E/F-CURB

14. ALL D-CURBS SHALL TERMINATE WITH 2' TAPER.

15. ALL CATCH BASINS TYPES REFER TO FDOT INDEX 425-052.

16. ADS HP STORM PIPE MAY BE SUBSTITUTED FOR RCP PIPE PENDING EOR APPROVAL. CONTRACTOR TO PROVIDE AN ALTERNATE BID FOR ADS PIPE.

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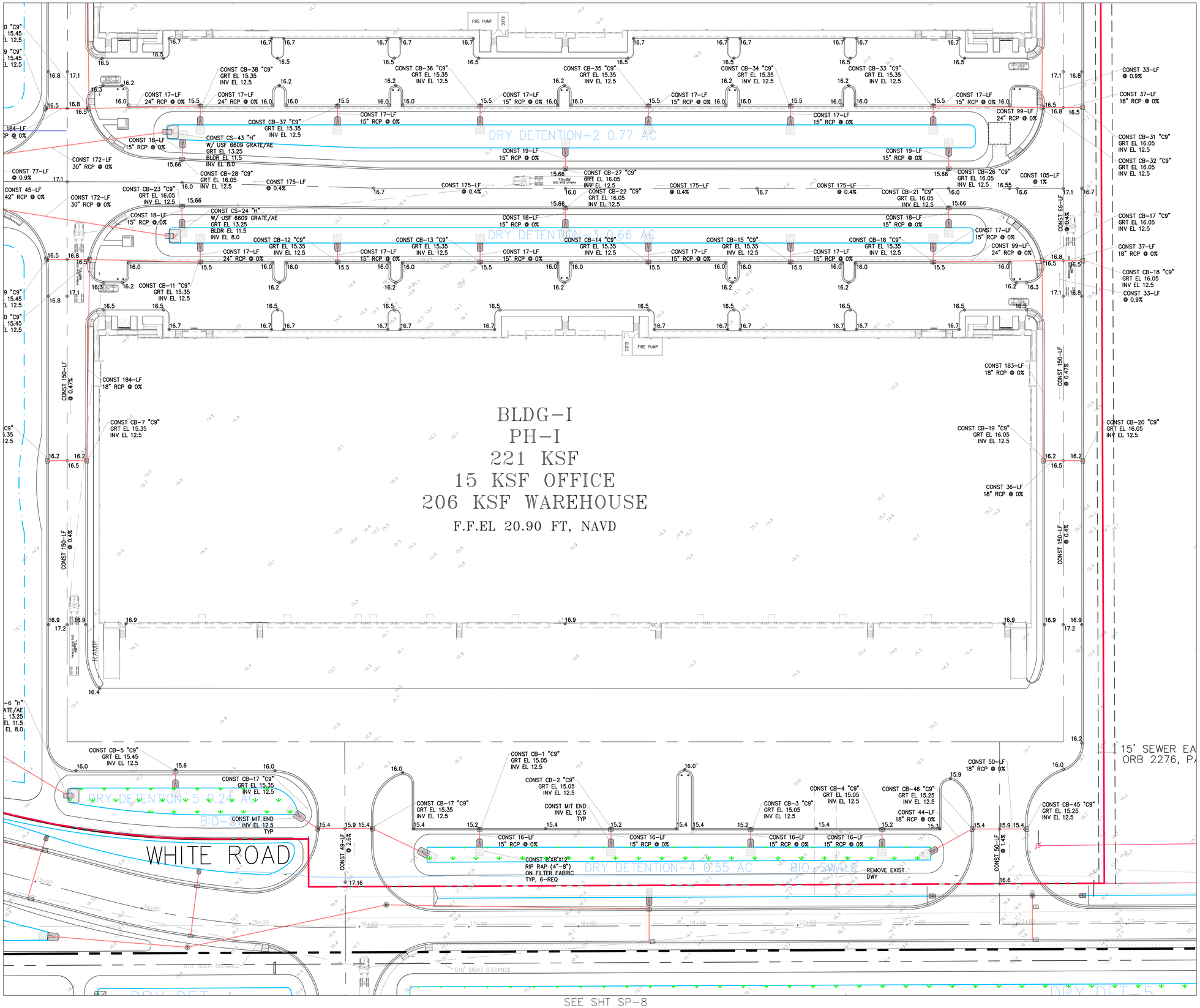

Kings Highway Commerce Center
Fort Pierce, Florida

Grading, Paving & Drainage Plan

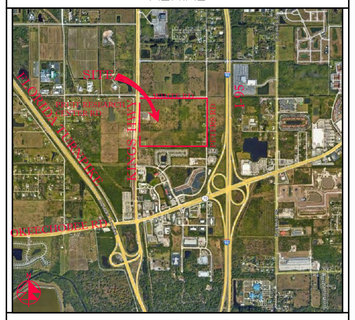
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|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

SEAL

SHEET NO.
C-8




## AERIAL



## VICINITY MAP

## SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

NOTES:

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2. TYPE "C-9" STRUCTURES SHALL BE TYPE "C" BOX WITH TYPE "9" GRATE PER FDOT INDEX 425-052.
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16. ADS HP STORM PIPE MAY BE SUBSTITUTED FOR RCP PIPE PENDING EOR APPROVAL. CONTRACTOR TO PROVIDE AN ALTERNATE BID FOR ADS PIPE.

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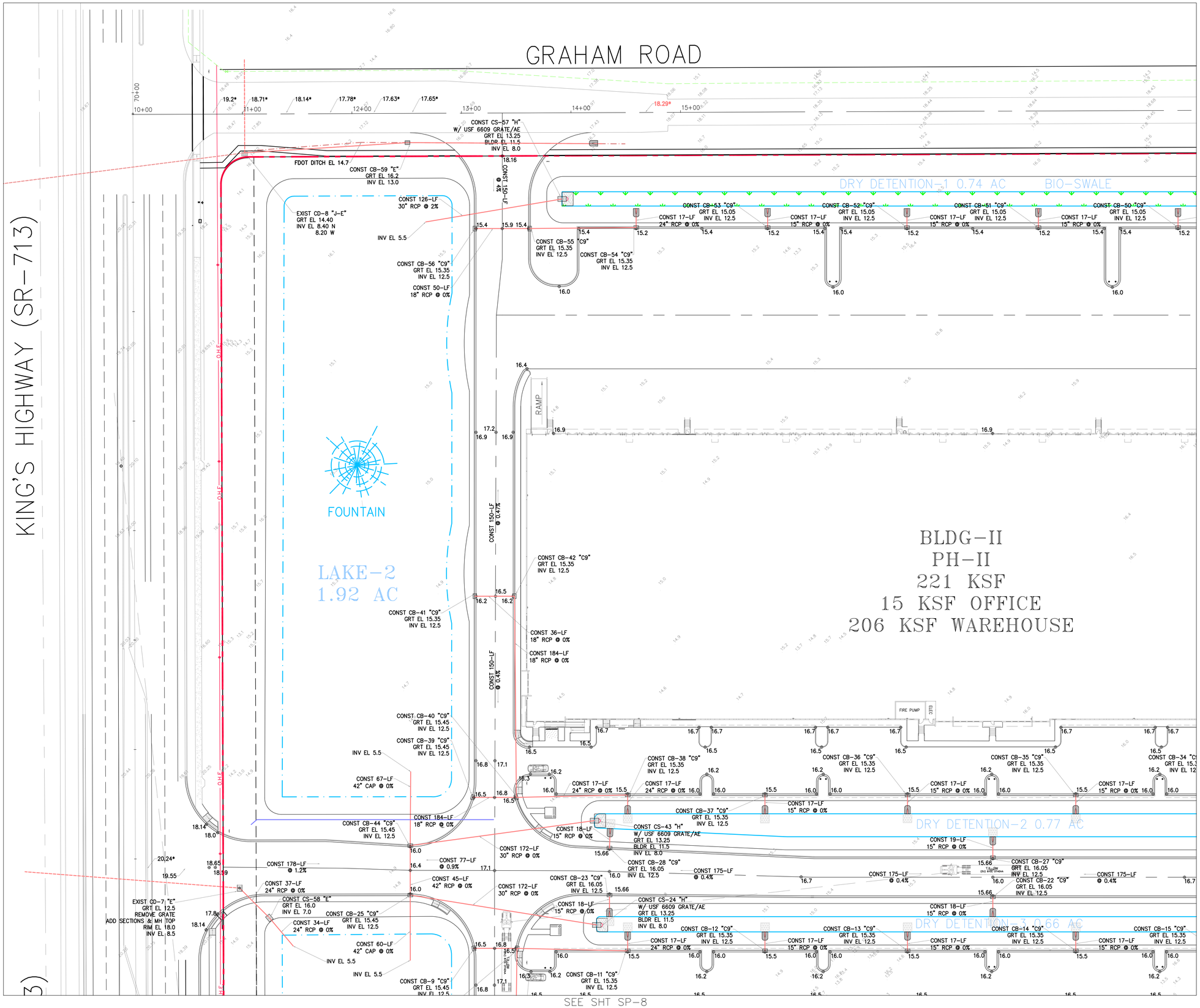
Grading, Paving & Drainage Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

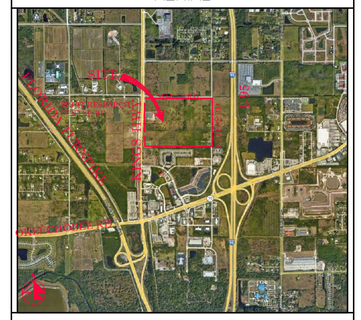
SEAL

SHEET NO.

C-9

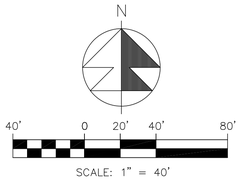



AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E




SCALE: 1" = 40'

NOTES:

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14. ALL D-CURBS SHALL TERMINATE WITH 2' TAPER.

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Kings Highway Commerce Center

Fort Pierce, Florida

Grading, Paving & Drainage Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

SEAL

COA 6986

SHEET NO.

C-10

GRAHAM ROAD

SEE SHT SP-7

SEE SHT SP-8

DRY DETENTION-1 0.74 AC BIO-SWALE

DRY DETENTION-2 0.77 AC

DRY DETENTION-3 0.66 AC

BLDG-II
PH-II
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

RAMP

RAMP

FIRE PUMP

LIFT STA

CONST CS-57 "H" W/ USF 6609 GRATE/AE GRT EL 13.25 BLDR EL 11.5 INV EL 8.0

CONST CB-59 "E" GRT EL 16.2 INV EL 13.0

CONST 126-LF 30" RCP @ 2%

INV EL 5.5

CONST CB-56 "C9" GRT EL 15.35 INV EL 12.5

CONST 50-LF 18" RCP @ 0%

CONST CB-55 GRT EL 15.35 INV EL 12.5

CONST CB-54 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-53 "C9" GRT EL 15.05 INV EL 12.5

CONST CB-52 "C9" GRT EL 15.05 INV EL 12.5

CONST CB-51 "C9" GRT EL 15.05 INV EL 12.5

CONST CB-50 "C9" GRT EL 15.05 INV EL 12.5

CONST CB-49 "C9" GRT EL 15.05 INV EL 12.5

CONST 17-LF 24" RCP @ 0%

CONST 17-LF 15" RCP @ 0%

CONST 44-LF 18" RCP @ 0%

CONST CB-48 "C9" GRT EL 15.25 INV EL 12.5

CONST 50-LF 18" RCP @ 0%

CONST CB-47 "C9" GRT EL 15.25 INV EL 12.5

CONST 150-LF @ 0.47%

CONST 150-LF @ 0.4%

CONST CB-42 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-41 "C9" GRT EL 15.35 INV EL 12.5

CONST 36-LF 18" RCP @ 0%

CONST 184-LF 18" RCP @ 0%

CONST. CB-40 "C9" GRT EL 15.45 INV EL 12.5

CONST CB-39 "C9" GRT EL 15.45 INV EL 12.5

INV EL 5.5

CONST 67-LF 42" CAP @ 0%

CONST CB-38 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-37 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-36 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-35 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-34 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-33 "C9" GRT EL 15.35 INV EL 12.5

CONST 99-LF 24" RCP @ 0%

CONST CB-44 "C9" GRT EL 15.45 INV EL 12.5

CONST 184-LF 18" RCP @ 0%

CONST 18-LF 15" RCP @ 0%

CONST CS-43 "H" W/ USF 6609 GRATE/AE GRT EL 13.25 BLDR EL 11.5 INV EL 8.0

CONST 19-LF 15" RCP @ 0%

CONST 77-LF @ 0.9%

CONST 172-LF 30" RCP @ 0%

CONST CB-28 "C9" GRT EL 16.05 INV EL 12.5

CONST 175-LF @ 0.4%

CONST CB-27 "C9" GRT EL 16.05 INV EL 12.5

CONST CB-22 "C9" GRT EL 16.05 INV EL 12.5

CONST CB-26 "C9" GRT EL 16.05 INV EL 12.5

CONST 105-LF @ 1%

CONST 45-LF 42" RCP @ 0%

CONST CB-23 "C9" GRT EL 16.05 INV EL 12.5

CONST CB-21 "C9" GRT EL 16.05 INV EL 12.5

CONST CS-24 "H" W/ USF 6609 GRATE/AE GRT EL 13.25 BLDR EL 11.5 INV EL 8.0

CONST CB-25 "C9" GRT EL 15.45 INV EL 12.5

CONST 60-LF

CONST CB-12 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-13 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-14 "C9" GRT EL 15.35 INV EL 12.5

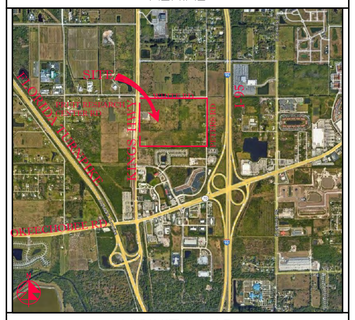
CONST CB-15 "C9" GRT EL 15.35 INV EL 12.5

CONST CB-16 "C9" GRT EL 15.35 INV EL 12.5

CONST 99-LF 24" RCP @ 0%

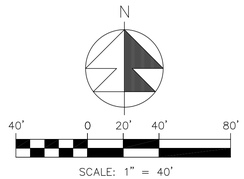
CONST 66-LF @ 0.4%

## AERIAL



VICINITY MAP

## SECTION 24, TWP 35S, RGE 39E




NOTES:

1. GRT EL OF TYPE-9 INLETS ARE AT THE GUTTER FLOWLINE.

2. TYPE "C-9" STRUCTURES SHALL BE TYPE "C" BOX WITH TYPE "9" GRATE PER FDOT INDEX 425-052.

3. ALL OTHER INLET GRATES SHALL BE USF HEAVY DUTY LOADING GRATES. CS-5, CS-28, CS-92, CS-103 SHALL USE STEEL USF 6609 GRATE /AE.

4. ALL EXIST INFO & TOPO ARE PER MAGELLAN SURVEYING & MAPPING, INC., DWG # 21-020. ALL ELEV'S ARE IN FT, NAVD 1988.

5. THE FINAL LANDSCAPE GRADE AT BLDG SHALL BE 6" TYP, 3" MIN BELOW FIN FL ELEV.

6. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL DRAINAGE STRUCTURES, PIPES, SUBGRADE MATERIAL, BASE MATERIAL, ASPHALT PAVEMENT SPEC, CONCRETE MIX DESIGN AT THE MINIMUM PRIOR TO CONSTRUCTION.

7. INLETS SHALL BE PROTECTED DURING CONSTRUCTION PER FLORIDA STORMWATER, ERROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.

8. ALL CATCH BASINS LOCATED IN E/F-CURB SHALL HAVE USF 6168 FRAME & GRATE.

9. ALL CATCH BASINS AND MANHOLES SHALL HAVE TURBIDITY CONTROL BARRIERS PER DETAIL DURING THE CONST PHASE OF THE PROJECT.

10. CONTRACTOR SHALL CONSTRUCT SILT FENCE AT P/L.

11. ACCESSIBLE ROUTES INCL SW'S, HANDICAP RAMPS & DET WARNINGS SHALL CONFORM TO 2010 US DOJ "STD'S FOR ACCESSIBLE DESIGN", FBC CHAPTER 11, & FDOT INDEX 522-002.

12. CONTRACTOR SHALL PROTECT ALL INLETS & SITE PERIMETERS DURING CONSTRUCTION PER FLORIDA STORMWATER, ERROSION, & SEDIMENTATION CONTROL INSPECTORS MANUAL.

13. PAVT SHALL BE ¼" ABOVE THE INLET GRATE & E/F-CURB

14. ALL D-CURBS SHALL TERMINATE WITH 2' TAPER.

15. ALL CATCH BASINS TYPES REFER TO FDOT INDEX 425-052.

16. ADS HP STORM PIPE MAY BE SUBSTITUTED FOR RCP PIPE PENDING EOR APPROVAL. CONTRACTOR TO PROVIDE AN ALTERNATE BID FOR ADS PIPE.

REVISIONS


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Kings Highway Commerce Center

Fort Pierce, Florida

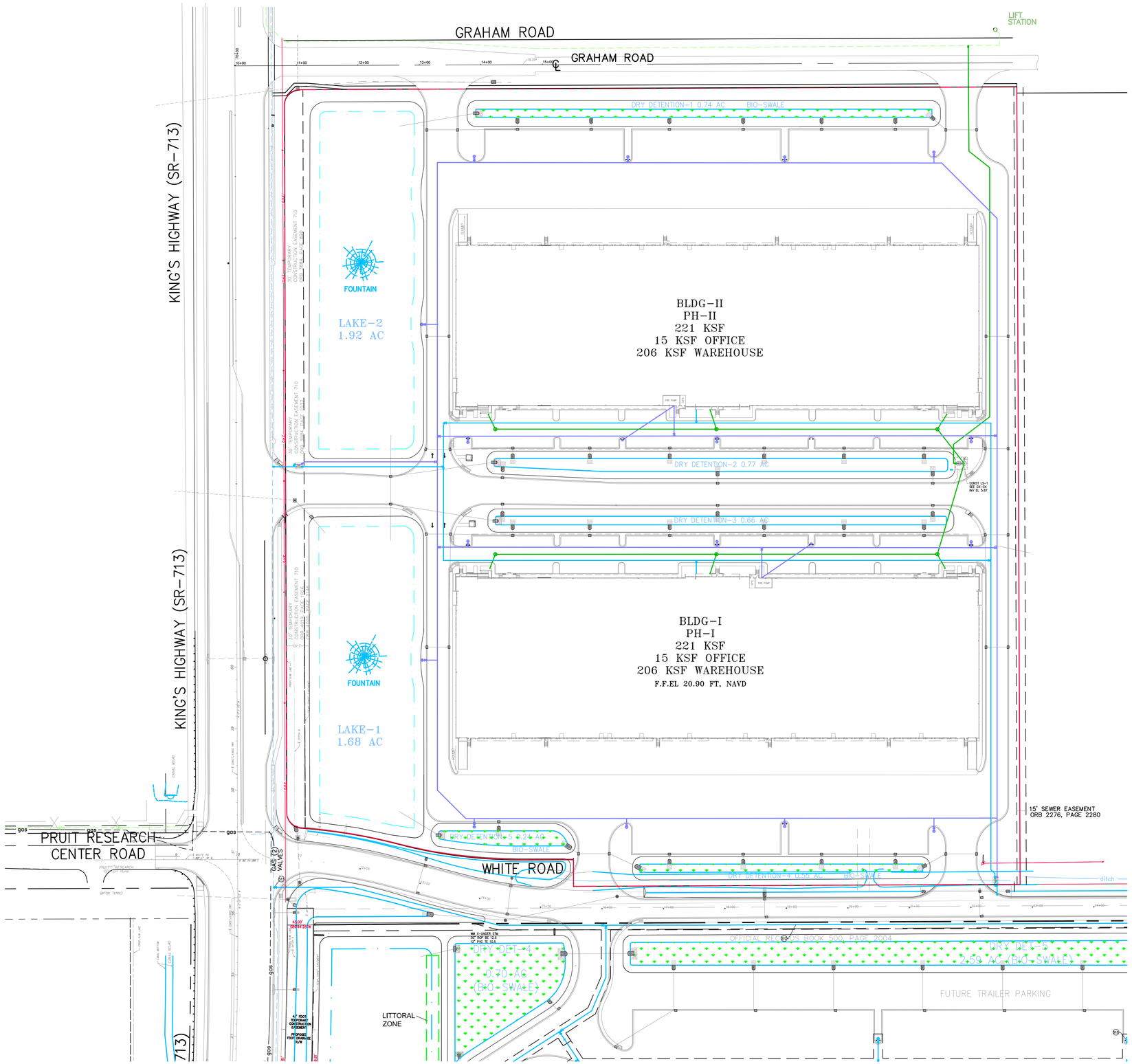
Grading, Paving & Drainage Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1" = 40' | JHI | DDI | 2205-1402 |

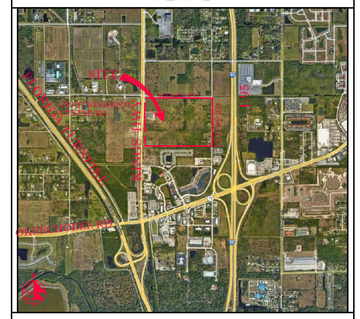
SEAL

SHEET NO.

C-11




AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

80' 0 40' 80' 160'

SCALE: 1" = 80'

REVISIONS


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# Kings Highway Commerce Center

Fort Pierce, Florida

## Water & Wasterwater Overall Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=80' | JHI | DDI | 2205-1402 |

SEAL

SHEET NO.

C-12

48 HOURS BEFORE DIGGING
*CALL TOLL FREE*
811
*CALL SUNSHINE*
*NOTIFICATION CENTER*

**LEGEND**

| | |
|---|---|
| ⊕19.7 | PROP PAV'T EL |
| 19.7 | EXIST EL |
| * | CONTRACTOR TO FIELD VERIFY |
| INV EL | INVERT EL |
| CB | CATCH BASIN |
| YD | YARD DRAIN |
| BC | BOTTOM OF CURB |
| BE | BOTTOM EL |
| TC | TOP OF CURB |
| TE | TOP EL |
| EXF | EXFILTRATION TRENCH |
| WM | WATER MAIN |
| FM | FORCE MAIN |
| FIM | FIRE MAIN |
| SAN | WASTEWATER GRAVITY |
| | FIRE HYDRANT |
| GV | GATE VALVE |
| | GATE VALVE |
| | SIAMESE CONN. |
| | CHECK VALVE |
| | DOUBLE DETECTOR CHECK VALVE |
| | WATER METER W/ REDUCED PRESSURE BACKFLOW PREV. |
| | SAMPLE POINT |
| MES | MITERED END SECTION |
| F.F.EL | FIN FLOOR ELEV |
| F.L.EL | FLOW LINE ELEV |
| TOB | TOP OF BANK |
| TOS | TOE OF SLOPE |
| TOC | TOP OF CONCRETE |
| TV | TAPPING VAVLE |
| CO | CLEANOUT |
| B1 | BORING NO. AND LOCATION |
| /AE | APPROVED EQUIVALENT |

KING'S HIGHWAY (SR-713)

CONST MH-4
RIM EL 16.27
INV EL 10.0 E
10.9 N

CONST 360-LF
8" PVC @ 0.45%

CONST MH-5
RIM EL 16.34
INV EL 8.38 W
8.28 E
10.9 N

CONST 8" WM PVC
SDR-18, TYP

CONST 360-LF
8" PVC @ 0.45%

CONST 8" FIM C-900 SDR-14
TYP

CONST FH-12

CONST FDC

CONST FH-11

CONST 8" FIM C-900 SDR-14
TYP

DRY DETENTION-2 0.77 AC

30' TEMPORARY
CONSTRUCTION EASEMENT 710
ORB 4034, PAGE 1037

CONST 6" METER & 8" DDCV

CONST 8" WM PVC
SDR-18, TYP

O.H.E.

CONST 8" FIM C-900 SDR-14
TYP

DRY DETENTION-3 0.66 AC

CONST FH-6

CONST BOLLARDS
6' CL, TYP

CONST FH-7

CONST

30' TEMPORARY
CONSTRUCTION EASEMENT 710
ORB 4019, PAGE 1826
ORB 4020, PAGE 2146

CONST MH-1
RIM EL 16.27
INV EL 10.0 E
10.9 S

CONST 360-LF
8" PVC @ 0.45%

CONST 8" WM PVC
SDR-18, TYP

CONST 33-LF
6" PVC @ 0.65%

CONST MH-2
RIM EL 16.34
INV EL 8.38 W
8.28 E
10.9 S

CONST 24-LF
6" PVC @ 0.65%

CONST FH-5

FOUNTAIN

LAKE-1
1.68 AC

PROP. R/W LINE

TEMP. CONST. EASEMENT

℄ DITCH 9

℄ CONST. KINGS HWY

CANAL NO.40

gas

GAS (2)
VALVES

S13

℄ WHITE RD
N 89° 47' 18" E

9 10 11

12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00

43.00'
S89°44'28"W

CONST FH-4

CONST 8" FIM C-900 SDR-14
TYP

CONST FH-3

CONST FH-2

DRY DETENTION-5 0.24 AC

BIO-SWALE

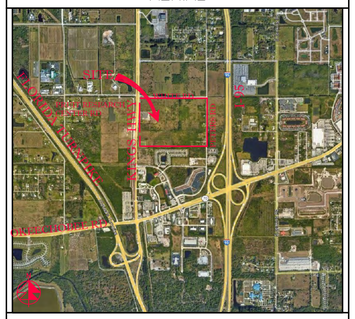
WHITE ROAD

DRY DETENTION-4 0.55 AC

RAMP

BLDG-I
PH-I
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE
F.F.EL 20.90 FT, NAVD

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

48 HOURS BEFORE DIGGING
*CALL TOLL FREE*
811
*CALL SUNSHINE*
*NOTIFICATION CENTER*

**LEGEND**

| | |
|---|---|
| ⊕19.7 | PROP PAV'T EL |
| ⊕19.7 | EXIST EL |
| ✳ | CONTRACTOR TO FIELD VERIFY |
| INV EL | INVERT EL |
| CB | CATCH BASIN |
| YD | YARD DRAIN |
| BC | BOTTOM OF CURB |
| BE | BOTTOM EL |
| TC | TOP OF CURB |
| TE | TOP EL |
| EXF | EXFILTRATION TRENCH |
| WM | WATER MAIN |
| FM | FORCE MAIN |
| FIM | FIRE MAIN |
| SAN | WASTEWATER GRAVITY |
| | FIRE HYDRANT |
| GV | GATE VALVE |
| | GATE VALVE |
| | SIAMESE CONN. |
| | CHECK VALVE |
| | DOUBLE DETECTOR CHECK VALVE |
| | WATER METER W/ REDUCED PRESSURE BACKFLOW PREV. |
| | SAMPLE POINT |
| MES | MITERED END SECTION |
| F.F.EL | FIN FLOOR ELEV |
| F.L.EL | FLOW LINE ELEV |
| TOB | TOP OF BANK |
| TOS | TOE OF SLOPE |
| TOC | TOP OF CONCRETE |
| TV | TAPPING VAVLE |
| CO | CLEANOUT |
| B1 | BORING NO. AND LOCATION |
| /AE | APPROVED EQUIVALENT |

REVISIONS


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Kings Highway Commerce Center
Fort Pierce, Florida

Water & Wastewater Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

SEAL

SHEET NO.
C-13

RIM EL 16.27
INV EL 10.0 E
10.9 N

CONST 360-LF
8" PVC @ 0.45%

FIRE PUMP

RIM EL 16.34
INV EL 8.38 W
8.28 E
10.9 N

CONST 360-LF
8" PVC @ 0.45%

CONST 8" SAN PVC SDR-26
TYP

RIM EL 16.25
INV EL 5.90 W
6.90 E
5.85 N

CONST FH-12

CONST FDC

CONST FH-11

CONST 8" FIM C-900 SDR-14
TYP

DRY DETENTION-2 0.77 AC

CONST FH-10

CONST 6" FM
TYP

CONST LS-1
SEE CX-CX
INV EL 5.87

CONST 154-LF
8" PVC @ 0.45%

CONST 8" FIM C-900 SDR-14
TYP

DRY DETENTION-3 0.66 AC

CONST FH-6

CONST BOLLARDS
6' CL, TYP

CONST FH-7

CONST FDC

CONST FH-9

CONST MH-1
RIM EL 16.27
INV EL 10.0 E
10.9 S

CONST 24-LF
6" PVC @ 0.65%

CONST 360-LF
8" PVC @ 0.45%

CONST 8" WM PVC
SDR-18, TYP

CONST 33-LF
6" PVC @ 0.65%

CONST MH-2
RIM EL 16.34
INV EL 8.38 W
8.28 E
10.9 S

FIRE PUMP

CONST 8" SAN PVC SDR-26
TYP

CONST 360-LF
8" PVC @ 0.45%

CONST MH-3
RIM EL 16.25
INV EL 6.66 W
6.56 N
10.9 S

CONST 26-LF
6" PVC @ 0.65%

BLDG-I
PH-I
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE
F.F.EL 20.90 FT, NAVD

RAMP

CONST 8" FIM C-900 SDR-14
TYP

CONST FH-4

CONST FH-3

CONST FH-2

CONST FH-1

DRY DETENTION-5 0.24 AC
BIO-SWALE

WHITE ROAD

DRY DETENTION-4 0.55 AC
BIO-SWALE

15' SEWER EA
ORB 2276, PA

CONST 6" METER & 8" DDC

13+00
14+00
15+00
16+00
17+00
18+00
19+00
20+00
21+00
22+00
23+00

WM X-UNDER STM
30" RCP BE 12.5
12" PVC TE 10.5

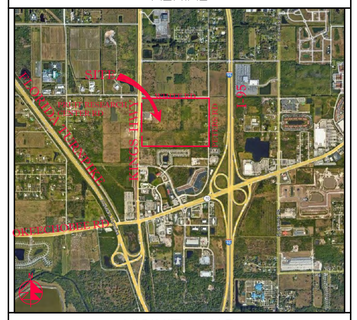
OFFICIAL RECORDS BOOK 500, PAGE 2004

DRY DET-4

DRY DET-5

H-5

## AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

48 HOURS BEFORE DIGGING
*CALL TOLL FREE*
811
*CALL SUNSHINE*
*NOTIFICATION CENTER*

**LEGEND**

| | |
|---|---|
| ⊕19.7 | PROP PAV'T EL |
| 19.7 | EXIST EL |
| ✳ | CONTRACTOR TO FIELD VERIFY |
| INV EL | INVERT EL |
| CB | CATCH BASIN |
| YD | YARD DRAIN |
| BC | BOTTOM OF CURB |
| BE | BOTTOM EL |
| TC | TOP OF CURB |
| TE | TOP EL |
| EXF | EXFILTRATION TRENCH |
| WM | WATER MAIN |
| FM | FORCE MAIN |
| FIM | FIRE MAIN |
| SAN | WASTEWATER GRAVITY |
| FH | FIRE HYDRANT |
| GV | GATE VALVE |
| GV | GATE VALVE |
| SC | SIAMESE CONN. |
| CV | CHECK VALVE |
| DDCV | DOUBLE DETECTOR CHECK VALVE |
| RPBP | WATER METER W/ REDUCED PRESSURE BACKFLOW PREV. |
| SP | SAMPLE POINT |
| MES | MITERED END SECTION |
| F.F.EL | FIN FLOOR ELEV |
| F.L.EL | FLOW LINE ELEV |
| TOB | TOP OF BANK |
| TOS | TOE OF SLOPE |
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| B1 | BORING NO. AND LOCATION |
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SEAL

SHEET NO.
C-14

KINGS HIGHWAY (SR-713)

GRAHAM ROAD

GRAHAM ROAD

70+00 10+00 11+00 12+00 13+00 14+00 15+00 18.29°

℄

DRY DETENTION-1 0.74 AC

BIO-SWALE

CONST FH-14

CONST FH-15

CONST 8" FIM C-900 SDR-14 TYP

CONST FH-16

RAMP

FOUNTAIN

LAKE-2
1.92 AC

CONST FH-13

O.H.E.

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 3884, PAGE 890

30' TEMPORARY CONSTRUCTION EASEMENT 710 ORB 3884, PAGE 1037

BLDG-II
PH-II
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

CONST 8" WM PVC SDR-18, TYP

CONST MH-4
RIM EL 16.27
INV EL 10.0 E
10.9 N

CONST 360-LF
8" PVC @ 0.45%

FIRE PUMP

CONST MH-5
RIM EL 16.34
INV EL 8.38 W
8.28 E
10.9 N

CONST 360-LF
8" PVC @ 0.45%

CONST 8" FIM C-900 SDR-14 TYP

CONST FH-12

CONST FDC

CONST FH-11

CONST 8" FIM C-900 SDR-14 TYP

DRY DETENTION-2 0.77 AC

CONST 6" METER & 8" DDCV

CONST 8" WM PVC SDR-18, TYP

CONST 8" FIM C-900 SDR-14 TYP

DRY DETENTION-3 0.66 AC

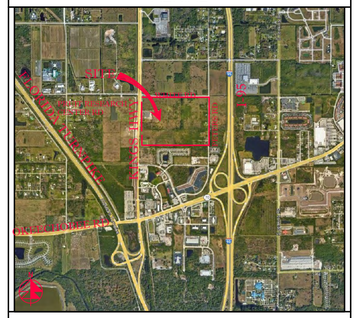
CONST FH-6

CONST BOLLARDS 6" CL, TYP

CONST FH-7

CONST

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

48 HOURS BEFORE DIGGING
CALL TOLL FREE
811
CALL SUNSHINE
NOTIFICATION CENTER

**LEGEND**

| | |
|---|---|
| ⊕19.7 | PROP PAV'T EL |
| ✳ | EXIST EL |
| ✳ | CONTRACTOR TO FIELD VERIFY |
| INV EL | INVERT EL |
| CB | CATCH BASIN |
| YD | YARD DRAIN |
| BC | BOTTOM OF CURB |
| BE | BOTTOM EL |
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| WM | WATER MAIN |
| FM | FORCE MAIN |
| FIM | FIRE MAIN |
| SAN | WASTEWATER GRAVITY |
| | FIRE HYDRANT |
| GV | GATE VALVE |
| | GATE VALVE |
| | SIAMESE CONN. |
| | CHECK VALVE |
| | DOUBLE DETECTOR CHECK VALVE |
| | WATER METER W/ REDUCED PRESSURE BACKFLOW PREV. |
| | SAMPLE POINT |
| MES | MITERED END SECTION |
| F.F.EL | FIN FLOOR ELEV |
| F.L.EL | FLOW LINE ELEV |
| TOB | TOP OF BANK |
| TOS | TOE OF SLOPE |
| TOC | TOP OF CONCRETE |
| TV | TAPPING VAVLE |
| CO | CLEANOUT |
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|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

SEAL

COA 6986

SHEET NO.

C-15

GRAHAM ROAD

GRAHAM ROAD

12+00 13+00 14+00 18.29° 15+00

LIFT STAT

DRY DETENTION-1 0.74 AC BIO-SWALE

CONST FH-14

CONST FH-15

CONST 8" FIM C-900 SDR-14 TYP

CONST FH-16

CONST FH-17

RAMP

RAMP

UNTAIN

CONST FH-13

KE-2
92 AC

BLDG-II
PH-II
221 KSF
15 KSF OFFICE
206 KSF WAREHOUSE

CONST 8" WM PVC SDR-18, TYP

CONST MH-4
RIM EL 16.27
INV EL 10.0 E
10.9 N

CONST 360-LF
8" PVC @ 0.45%

FIRE PUMP

CONST MH-5
RIM EL 16.34
INV EL 8.38 W
8.28 E
10.9 N

CONST 360-LF
8" PVC @ 0.45%

CONST 8" SAN PVC SDR-26 TYP

CONST MH-6
RIM EL 16.25
INV EL 5.90 W
6.90 E
5.85 N

NST 8" FIM C-900 SDR-14

WM PVC
18, TYP

CONST FH-12

CONST FDC

CONST FH-11

CONST 8" FIM C-900 SDR-14 TYP

CONST FH-10

DRY DETENTION-2 0.77 AC

CONST 6" FM TYP

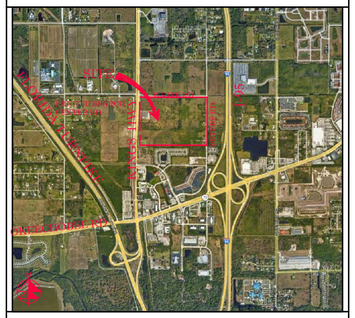
CONST LS-1
SEE CX-CX
INV EL 5.87

CONST 154-LF
8" PVC @ 0.45%

CONST 8" FIM C-900 SDR-14 TYP

DRY DETENTION-3 0.66 AC

AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

40' 0 20' 40' 80'

SCALE: 1" = 40'

48 HOURS BEFORE DIGGING
*CALL TOLL FREE*
811
*CALL SUNSHINE*
*NOTIFICATION CENTER*

**LEGEND**

| | |
|---|---|
| @19.7 | PROP PAV'T EL |
| 18.2 | EXIST EL |
| * | CONTRACTOR TO FIELD VERIFY |
| INV EL | INVERT EL |
| CB | CATCH BASIN |
| YD | YARD DRAIN |
| BC | BOTTOM OF CURB |
| BE | BOTTOM EL |
| TC | TOP OF CURB |
| TE | TOP EL |
| EXF | EXFILTRATION TRENCH |
| WM | WATER MAIN |
| FM | FORCE MAIN |
| FIM | FIRE MAIN |
| SAN | WASTEWATER GRAVITY |
| | FIRE HYDRANT |
| GV | GATE VALVE |
| | GATE VALVE |
| | SIAMESE CONN. |
| | CHECK VALVE |
| | DOUBLE DETECTOR CHECK VALVE |
| | WATER METER W/ REDUCED PRESSURE BACKFLOW PREV. |
| | SAMPLE POINT |
| MES | MITERED END SECTION |
| F.F.EL | FIN FLOOR ELEV |
| F.L.EL | FLOW LINE ELEV |
| TOB | TOP OF BANK |
| TOS | TOE OF SLOPE |
| TOC | TOP OF CONCRETE |
| TV | TAPPING VAVLE |
| CO | CLEANOUT |
| B1 | BORING NO. AND LOCATION |
| /AE | APPROVED EQUIVALENT |

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Kings Highway Commerce Center

Fort Pierce, Florida

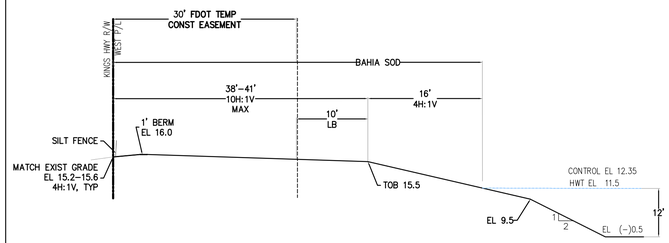
Water & Wastewater Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=40' | JHI | DDI | 2205-1402 |

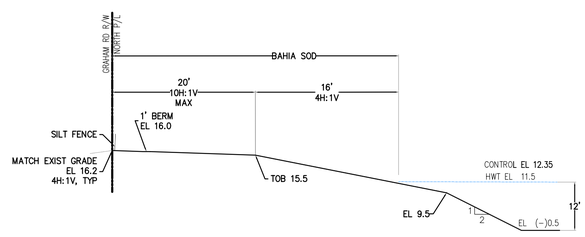
SEAL

SHEET NO.

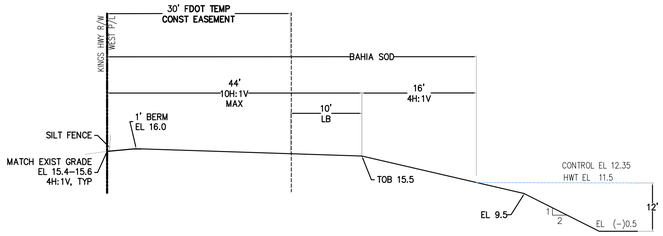
C-16



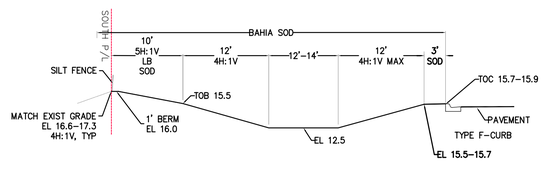

LAKE-2 SECTION
@ WEST P/L



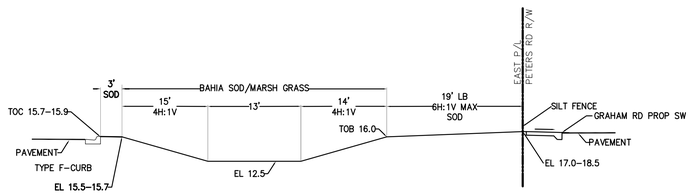

LAKE-2 SECTION
@ NORTH P/L



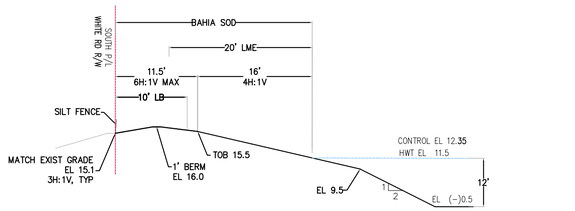

LAKE-1 SECTION
@ WEST P/L



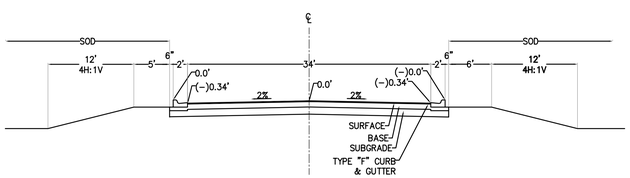

DRY DETENTION-4 @ SOUTH P/L




DRY DETENTION-1 / BIO-SWALE @ NORTH P/L




LAKE-1 SECTION
@ SOUTH P/L




PAVEMENT SECTION:

SURFACE: 3" TYPE S-1 @ 2-1.5" LIFTS

BASE: 13.5" LIMEROCK / COQUINA ROCK / CRUSHED CONCRETE

SUBGRADE: 12" COMPACTED 98% MAX D.D. (AASHTO T-180)

MAIN DRIVE
TYPICAL SECTION

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Kings Highway Commerce Center

Fort Pierce, Florida

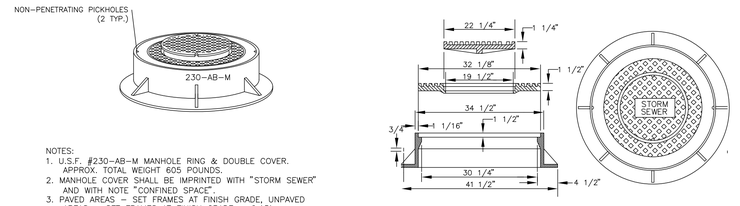
SECTIONS

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | NA | JHI | DDI | 2205-1402 |

SEAL

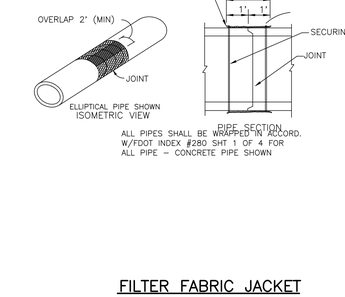
FR # 6986

SHEET NO.
C-17



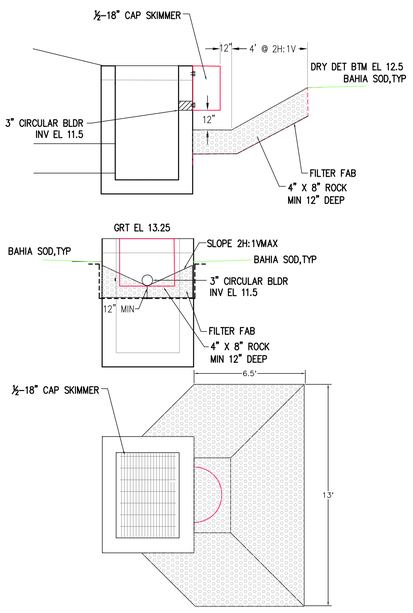

NOTES:
1. U.S.F. #230-AB-M MANHOLE RING & DOUBLE COVER. APPROX. TOTAL WEIGHT 605 POUNDS.
2. MANHOLE COVER SHALL BE IMPRINTED WITH "STORM SEWER" AND WITH NOTE "CONFINED SPACE".
3. PAVED AREAS - SET FRAMES AT FINISH GRADE, UNPAVED AREAS - SET FRAMES AT FINISH GRADE + 0.15'.

## MANHOLE FRAME AND RING DETAIL

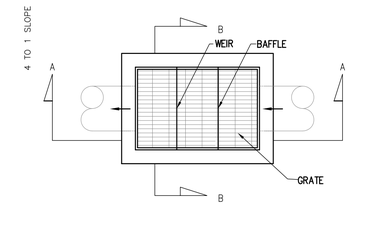


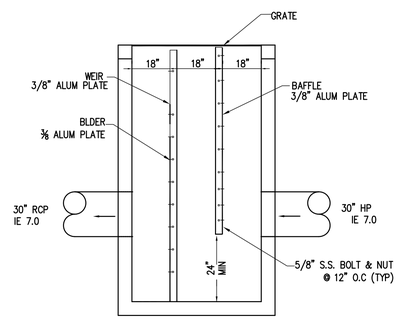

ALL PIPES SHALL BE WRAPPED IN ACCORD. W/FDOT INDEX #280 SHT 1 OF 4 FOR ALL PIPE - CONCRETE PIPE SHOWN

## FILTER FABRIC JACKET

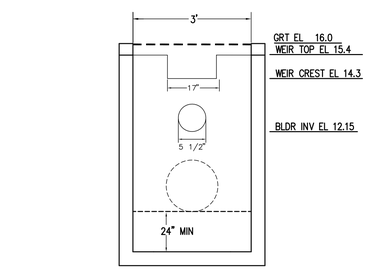



## CS-5,28,92,100,103 CONTROL STRUCTURE




SECTION A-A

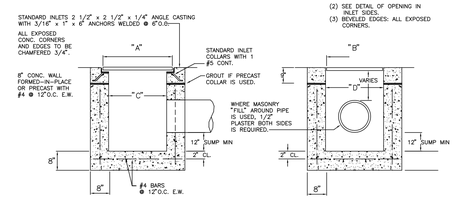



SECTION B-B

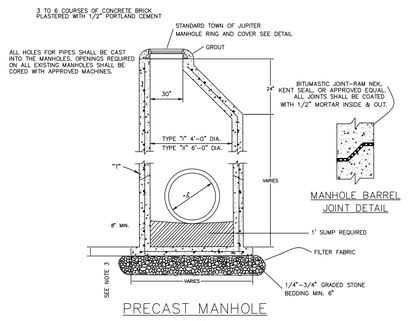
## CS-1 TYPE "E" CONTROL STRUCTURE

| MAX. C.F.S. | TYPE INLET | "A" | "B" | "C" | "D" | GRATE APPROX. WT. |
|---|---|---|---|---|---|---|
| 15.66 | C | 2'-4" | 3'-0" | 2'-0" | 3'-1" | 330 LBS. |
| 23.49 | D | 4'-4" | 3'-0" | 4'-0" | 3'-1" | 580 LBS. |
| 30.23 | E | 5'-4" | 4'-4" | 5'-0" | 4'-6" | 655 LBS. |
| 58.20 | H | 9'-4" | 6'-4" | 9'-0" | 6'-7" | 725 LBS. |

NOTES:(1) GRATES TO BE CAST IRON WITH ONE (1) SHOP COAT OF RED LEAD PAINT AND WITH A FIELD COAT TO MEET FDOT STANDARD SPECIFICATIONS, LATEST EDITION.
(2) SEE DETAIL OF OPENING IN INLET SIDES.
(3) BEVELED EDGES: ALL EXPOSED CORNERS.




## INLET DETAILS
N.T.S.




## PRECAST MANHOLE
NTS

NOTES:
1. MANHOLE SHALL CONFORM TO ASTM C478 WITH 4000 PSI CONCRETE.
2. CONE SECTION MAY BE EITHER CONCENTRIC OR ECCENTRIC.
3. BASE SHALL BE A MINIMUM OF 8" AND PRECAST WITH BOTTOM SECTION.
4. ONE CAGE #5 @ 12" CTRS. BOTH WAYS, IN CENTER 1/3 OF CONCRETE WALL.
5. COMPLETELY FILL ANNULUS BETWEEN PIPE AND M/H WALL WITH CLAY BRICK AND PORTLAND TYPE II CEMENT.
6. PIPE SHALL BE CUT FLUSH WITH INSIDE WALL.
7. FOR ADDITIONAL INFORMATION AND CLARIFICATION CONCERNING MANHOLE AND INLET CONSTRUCTION DETAILS AND SPECIFICATIONS, REFER TO FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (STANDARD INDEX MANUAL) LATEST EDITION.

## STORM SEWER PRECAST MANHOLE

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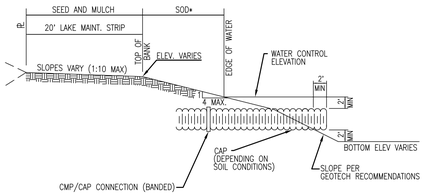
Kings Highway Commerce Center
Fort Pierce, Florida

PAVING, GRADING, & DRAINAGE DETAILS

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07/07/2022 | NA | JHI | CLJ | 2205-1402 |

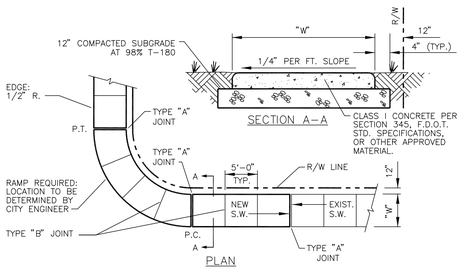
SEAL

SHEET NO.
C-18




*SEED AND MULCH BANKS FOR NEW LAKE CONSTRUCTION ONLY

## TYPICAL LAKE BANK AND DRAINAGE OUTFALL



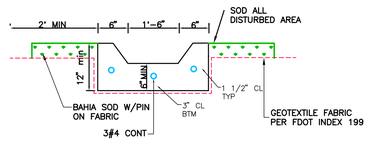

SIDEWALK JOINT

| TABLE OF SIDEWALK THICKNESS – "T" | |
|---|---|
| RESIDENTIAL AREAS | 4" |
| WITHIN 10' OF CROSS-STREETS, AT DRIVEWAYS & OTHER AREAS | 6" |
| TABLE OF SIDEWALK WIDTHS – "W" | |
| NON-VEHICULAR AREAS | 4'* |
| THIS PROJECT WILL BE | 5' |
| OTHER AREAS AS SPECIFIED BY THE LAND DEVELOPMENT REGULATIONS. | |

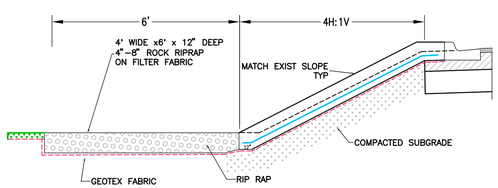
* MINIMUM.

| TABLE OF SIDEWALK JOINTS | |
|---|---|
| TYPE | LOCATION |
| "A" | P.C. AND P.T. OF CURVES, JUNCTION OF EXISTING & NEW SIDEWALKS & EVERY 30' |
| "B" | 5'-0" CENTER TO CENTER ON SIDEWALKS SCORED DURING PLACEMENT OR SAWCUT WITHIN 24 HOURS OF PLACEMENT |
| "A" | WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS, AND SIMILAR STRUCTURES |

## SIDEWALK CONSTRUCTION DETAIL




FLUME SECTION



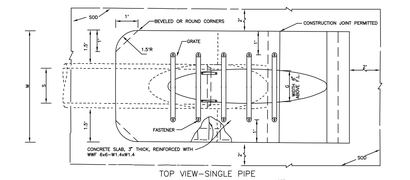

## DRY DETENTION CONC FLUME DETAIL

SEE PETERS RD SECTION SHT C-33

| D | X | A | B | C | E | F | G | M SINGLE PIPE | M DOUBLE PIPE | M TRIPLE PIPE | M QUAD PIPE | N | GRATE STANDARD WEIGHT PIPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15" | 2'-7" | 2'-2" | 4'-0" | 6'-8" | 4'-0" | 8" | 1'-2" | 6'-8" | 7'-11" | 9'-3" | 10'-7" | 1'-9" | 18" |
| 18" | 2'-10" | 2'-5" | 5'-0" | 7'-6" | 5'-0" | 8" | 1'-5" | 7'-6" | 8'-10" | 10'-2" | 11'-6" | 1'-11" | 18" |
| 24" | 3'-5" | 2'-8" | 6'-0" | 9'-1" | 7'-0"Δ1 | 11" | 1'-10" | 9'-10" | 11'-5" | 12'-11" | 14'-5" | 2'-2" | 18" |
| 30" | 4'-1" | 2'-10" | 7'-0" | 11'-0" | 9'-0" | 1'-3" | 2'-0" | 12'-0" | 14'-0" | 15'-10" | 17'-8" | 2'-6" | 18" |

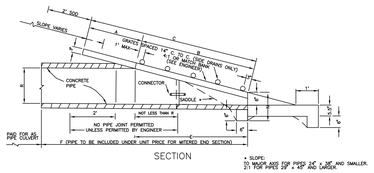
Δ 6.42'
◇ 10.40'

Δ 6.25' DIMENSIONS PERMITTED TO ALLOW USE OF 8' STANDARD PIPE LENGTHS.
◇ 10.10' DIMENSIONS PERMITTED TO ALLOW USE OF 12' STANDARD PIPE LENGTHS.
Δ◇ CONCRETE SLAB SHALL BE DEEPENED TO FORM BRIDGE ACROSS CROWN OF PIPE. SEE SECTION BELOW.




TOP VIEW-SINGLE PIPE

NOTE:
1. GRATE SHALL BE UTILIZED ONLY FOR CROSS DRAIN UNDER PUBLIC RIGHT OF WAY.

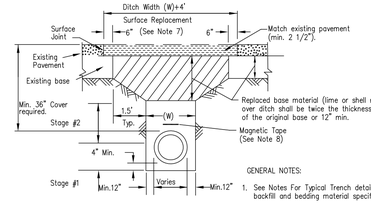



SECTION

* SLOPE:
TO MATCH ADJ FOR PIPES 24" x 38" AND SMALLER.
2:1 FOR PIPES 48" x 62" AND LARGER.

## MITERED END DETAIL

SEE LATEST FDOT ROADWAY & TRAFFIC DESIGN STANDARDS MANUAL SIDE DRAIN MITERED END SECTION FOR SINGLE AND MULTIPLE ROUND CONCRETE PIPE




DENSITY PROCEDURES:

The backfill for the first and second stages shall be placed in 6" layers (compacted thickness) and shall be compacted to 100% of maximum density as determined by AASHTO T-99.

Stage #1

The contractor shall provide adequate compacted fill beneath the haunches of the pipe, using mechanical tamps suitable for this purpose. This compaction applies to the material placed beneath the haunches of the pipe and above any bedding required.

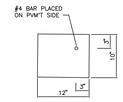
Stage #2

The contractor shall obtain a well compacted bed and fill along the sides of the pipe and to a point indicating the top of sub-grade material.

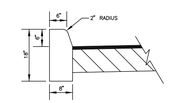
GENERAL NOTES:

1. See Notes For Typical Trench detail for backfill and bedding material specifications.
2. Base material shall be placed in 6" layers and each layer compacted to 98% of maximum density per AASHTO T-180.
3. Asphalt concrete pavement joints shall be mechanically sawed (butt joints only).
4. Surface material will be consistent with the existing surface. The affected area shall be restored to equal or better condition.
5. The developer/contractor shall be responsible for compliance regarding any additional specifications as required by the property owner. (FDOT, County, City, etc.....)
6. Excavatable "Flowable Fill" with ultimate compressive strength between 50 and 150 psi may be used to substitute for the backfill and base materials.
7. Pavement overlay on both sides of the cut maybe required per owner specification.
8. Magnetic Tape is required for all Potable Water Mains and all PVC/HDPE Force Mains and Reclaimed Water Mains. (See Trenching Detail for installation instructions).
9. The contractor shall be compliant with applicable trench safety regulations (OSHA, etc.)

## PIPE INSTALLATION UNDER EXISTING PAVEMENT – OPEN CUT

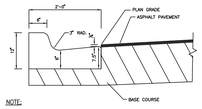



TYPE 'C' CURB



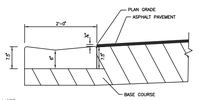

NOTES:
1. SEE F.D.O.T. INDEX NO. 520-001 FOR ADDITIONAL INFORMATION.
2. CONCRETE TO BE A MINIMUM OF 3000 PSI CONCRETE AT 28 DAYS
3. CURB TO BE IN PLACE PRIOR TO SURFACE COURSE BEING PLACED.
4. SAWCUTS TO BE MADE AT 10' O.C. THROUGHOUT CURB CONST.

TYPE "D" CURB
NOT TO SCALE




NOTE:
1. INSTALL CURB IN ACCORDANCE WITH F.D.O.T. INDEX NO. 520-001
2. CURB TO BE IN PLACE PRIOR TO SURFACE COURSE BEING PLACED.

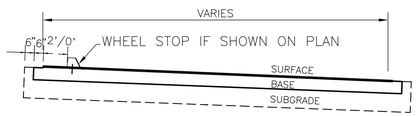
TYPE "F" CURB
NOT TO SCALE




NOTE:
1. INSTALL CURB IN ACCORDANCE WITH F.D.O.T. INDEX NO. 520-001
2. CURB TO BE IN PLACE PRIOR TO SURFACE COURSE BEING PLACED.

DROP CURB
NOT TO SCALE

## CURB DETAILS



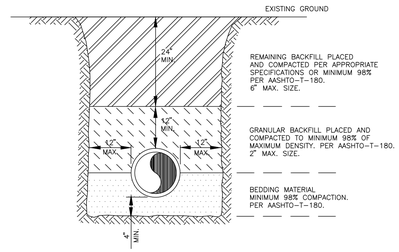

**FLEXIBLE PAVEMENT (PARKING)**
SURFACE: 2.5" ACSC (1ST LIFT 1.5" S-1/SP 12.5 2ND LIFT 1" S-3/SP 9.5)
BASE: 8" LIMEROCK/COQUINA ROCK/CRUSHED CONC* MIN LBR 100
SUBGRADE: 12" COMP
COMP: COMPACTED TO 98% MAX D.D. AASHTO T-180

**FLEXIBLE PAVEMENT (ROADWAY/HEAVY DUTY)**
SURFACE: 3" S-1/SP 12.5 ACSC (2-1.5" LIFTS)
BASE: 13.5" LIMEROCK/COQUINA ROCK/CRUSHED CONC* MIN LBR 100
SUBGRADE: 12" COMP
COMP: COMPACTED TO 98% MAX D.D. AASHTO T-180

**CONC SLAB**
SURFACE: 6" 3KSI W/2-6X6 W1.4XW1.4 WWM
W/1.5" SAW-CUTS @ 12' MAX O.C. E.W.
SAW CUT SLAB DIM'S PROPORTION SHALL BE 1.5:1MIN
ALL JOINTS SHALL BE IN ACCORD W/ FDOT INDEX 305
BASE: 6" LIMEROCK / COQUINA ROCK COMP MIN LBR 100
SUBGRADE: 12" COMP
COMP: COMPACTED TO 98% MAX D.D. AASHTO T-180

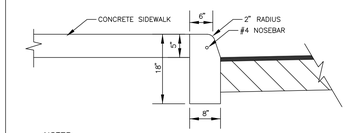
**CONCRETE SPECIFICATIONS**
1. ALL CONCRETE SHALL REACH COMP STRENGTH OF 3,000 PSI MIN IN 28 DAYS. MIX DESIGN SHALL INCLUDE MINIMUM CEMENT CONTENT OF 470 LBS OF PORTLAND CEMENT TYPE II PER ASTM C-150 & 120 LB OF FLY ASH /AE PER CY AND ADMIXTURES SHALL CONFORM TO ASTM C-494. WATER/CEMENT=0.5 MAX.
2. SLUMP AND CYLINDER TESTS (ASTM C-31) SHALL BE MADE BY AN INDEPENDENT TESTING LABORATORY. PROVIDE 4 TESTS WITH EACH CONCRETE POUR AND/OR EACH 50 YD OF CONCRETE PLACED. SLUMP @ POUR SHALL BE 5 IN MAX. (6" FOR PUMP MIX). NO WATER IS TO BE ADDED ON THE JOB SITE.
3. CONTRACTOR SHALL SUBMIT THE MIX DESIGN TO ENGINEER FOR REVIEW.

## PAVEMENT TYP SECTION



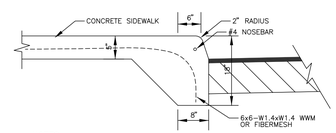

NOTES:
1. BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8"-7/8" SIZING. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCKS SHALL BE REMOVED.
2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK, AND DEBRIS.
5. DENSITY TESTS ARE REQUIRED IN 1 FOOT LIFTS ABOVE THE PIPE AT INTERVALS OF 400' MAXIMUM, OR AS DIRECTED BY THE INSPECTOR.

## TYPICAL TRENCH DETAIL




NOTES:
1. SEE F.D.O.T. INDEX NO. 520-001 FOR ADDITIONAL INFORMATION.
2. CONCRETE TO BE A MINIMUM OF 3000 PSI CONCRETE AT 28 DAYS
3. CURB TO BE IN PLACE PRIOR TO SURFACE COURSE BEING PLACED.
4. SAWCUTS TO BE MADE AT 10' O.C. THROUGHOUT CURB CONST.
5. SIDEWALK TO BE POURED AFTER CURB CONSTRUCTION
6. SEE SIDEWALK DETAIL FOR JOINT PLACEMENT

RAISED SIDEWALK W/ CURB
NOT TO SCALE




NOTES:
1. SEE F.D.O.T. INDEX NO. 520-001 FOR ADDITIONAL INFORMATION.
2. CONCRETE TO BE A MINIMUM OF 3000 PSI CONCRETE AT 28 DAYS
3. SEE SIDEWALK DETAIL FOR JOINT PLACEMENT

MONOLITHIC RAISED SIDEWALK
NOT TO SCALE

## SIDEWALK DETAILS

REVISIONS

REV PER CLT 06-25-21
REV PER SLC 07-26-21
REV PER FDOT 09-16-21
REV PER FPUA 11-04-21
REV PER PH-II 03-01-22


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Kings Highway Commerce Center
Fort Pierce, Florida

PAVING, GRADING, & DRAINAGE DETAILS

| JOB NO. | 2205-1402 |
|---|---|
| DRAWN BY | CLJ |
| DESIGNED BY | JHI |
| SCALE | NA |
| DATE | 07/07/2022 |

SEAL

SHEET NO.
C-19

## GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING ABOVE GROUND, UNDERGROUND, AND ON THE SURFACE STRUCTURES AND UTILITIES AGAINST THE CONSTRUCTION OPERATION THAT MAY CAUSE DAMAGE TO SAID FACILITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED TESTS TO BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS PRIOR TO ANY REQUIRED INSPECTIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY FOR INSPECTION AND/OR TEST.
4. THE CONTRACTOR SHALL GIVE ADEQUATE NOTIFICATION TO ALL AFFECTED UTILITY OWNERS FOR REMOVAL, RELOCATION AND ALTERATION OF THEIR EXISTING FACILITIES.
5. WHERE ENCOUNTERED, UNSUITABLE MATERIAL SHALL BE REMOVED TO A DEPTH AN AREA DETERMINANT BY THE ENGINEER AND BACKFILLED WITH CLEAN GRANULAR SAND OR SELECT MATERIAL APPROVED BY THE ENGINEER. BACKFILLING SHALL BE IN LAYERS NOT GREATER THAN 8" THICKNESS AND COMPACTED TO 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO T99-C. FILL UNDER BUILDING SHALL BE PLACED IN ACCORDANCE WITH SOIL ENGINEER'S RECOMMENDATIONS.
6. ALL WORK SHALL BE PERFORMED IN A WORKMANSHIP MANNER AND SHALL MEET WITH ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL REGULATIONS AND/OR CODES, INCLUDING OSHA.
7. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND/OR LICENSES TO COMMENCE CONSTRUCTION.
8. ALL CONCRETE SHALL DEVELOP A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI OR OTHERWISE NOTED.
9. ALL REINFORCING STEEL SHALL CONFORM TO ASTM-615 AND HAVE A TENSILE STRENGTH OF 60,000 PSI OR OTHERWISE NOTED.
10. THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR FORM THE DATE THAT PROJECT HAS BEEN ACCEPTED. ALL FAULTY CONSTRUCTION AND/OR MATERIALS DURING FORESAID PERIOD SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

## DRAINAGE

1. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED AS PER DETAIL AND IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
2. PIPE TRENCH SHALL BE DRY WHILE PIPE IS BEING LAID AND TO BE BEDDED PER DETAIL AND IN CONFORMANCE WITH SECTION 430, FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. PIPE TRENCHES TO EXCAVATED AND BACKFIELD IN ACCORDANCE WITH SECTION 125, FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
4. THE FOLLOWING PIPES SHALL CONFORM WITH THE APPROPRIATE FOLLOWING SECTIONS OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION:
   1. REINFORCED CONCRETE PIPE (RCP) – SECTIONS 430 AND 941
   2. CORRUGATED ALUMINUM PIPE (CAP) – SECTIONS 430 AND 945
   3. CORRUGATED STEEL PIPE (CMP) – SECTIONS 430 AND 943
5. ALL CORRUGATED PIPES SHALL BE INSTALLED WITH MAXIMUM LENGTHS IN ORDER TO MINIMIZE JOINTS.
6. ALL CONNECTION BANDS, FOR CORRUGATED PIPES, SHALL BE CORRUGATED, LAP-TYPE, IN CONFORMANCE WITH AASHTO M-196, AND TO BE MADE WATER-TIGHT BY USING A GASKET AT LEAST SIX (6) INCHES WIDE BY 3/4" THICK.
7. HDPE PIPE MATERIALS:
   HDPE PIPES 12" THROUGH 36" NOMINAL DIAMETER:
   TYPE "S" SMOOTH INTERIOR PIPE IN CONFORMACE WITH AASHTO M294.
   NOTE: CORRUGATIONS SHALL BE ANNULAR CONFIGURATION ONLY.
   HDPE PIPES 42" AND 48" NOMINAL DIAMETER:
   TYPE "D" SMOOTH INTERIOR, SMOOTH EXTERIOR PIPE IN CONFORMANCE MP46-95 TYPE "D".
8. ALL SOD LAID WITHIN SLOPES OF BERMS, DRAINAGE SWALES, AND RETENTION AREAS SHALL BE PINNED PER ENGINEERS DIRECTION.
9. ALL PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC.
10. ALL ROOF DRAINS AND YARD DRAINS SHALL BE CONNECTED TO STRUCTURES BY THE UNDERGROUND CONTRACTOR.

## ROADWAY

1. SUBGRADE SHALL BE AS SHOWN ON SECTION.
2. BASE SHALL BE AS SHOWN ON SECTION, HAVE A MINIMUM LBR 100 AND TO BE COMPACTED TO 98 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTOT-180.
3. PRIME COAT SHALL BE APPLIED AT THE RATE OF .15 GALLON PER SQ. YARD. WHERE REQUIRED, TACK SHALL BE APPLIED AT THE RATE OF . .08 GALLON PER SQUARE YARD.
4. THE CONTRACTOR IS TO SUBMIT ALL REQUIRED TESTS ON SUBGRADE, BASE AND SURFACE COURSE MATERIAL PRIOR TO ANY REQUEST FOR PAYMENT.
5. IF ANY TEST FAILS TO MEET THEIR SPECIFICATIONS, THE CONTRACTOR, AT THEIR EXPENSE, SHALL CORRECT ALL DEFICIENT WORK AND SUBMIT TEST RESULTS INDICATING COMPLIANCE WITH THESE SPECIFICATIONS PRIOR TO ANY REQUEST FOR PAYMENT.
6. ALL UNDERGROUND UTILITIES WITHIN ROADWAY CONSTRUCTION SHALL BE INSTALLED PRIOR TO ROAD CONSTRUCTION.
7. ALL ROADWAY CONSTRUCTION AND MATERIAL SHALL CONFORM TO THE APPLICABLE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
8. ALL CURBING, AND RAISED SIDEWALK IF SHOWN, SHALL BE CONSTRUCTED PRIOR TO ASPHALT PAVING.

## CONSTRUCTION INSPECTION CHECKPOINTS

ROADWAY: THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR INSPECTION AT THE FOLLOWING CHECKPOINTS:

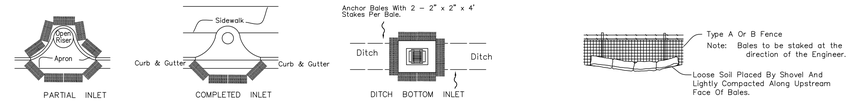
1. PRIOR TO ANY DEVIATION FROM THE APPROVED GRADING, PAVING, AND DRAINAGE PLANS.
2. PRIOR TO BACK FILLING OF TRENCHES CONTAINING HYDRAULIC CONDUITS, SO THAT JOINTS MAY BE INSPECTED.
3. UPON COMPLETION OF THE SUBGRADE COMPACTION.
4. AT THE TIME OF DELIVERY OF BASE MATERIAL.
5. UPON COMPLETION OF THE BASE AND PRIOR TO PRIMING.
6. IMMEDIATELY PRIOR TO AND DURING THE FIRST APPLICATION OF THE MIXES WEARING SURFACE.
7. UPON COMPLETION OF CONSTRUCTION A FINAL INSPECTION MAY BE MADE WITH THE CONTRACTOR.

## STRIPING

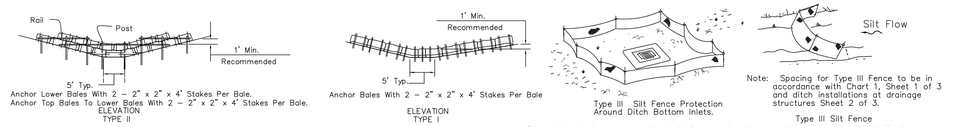
1. ALL PAVEMENT STRIPING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH FDOT INDEX 711-001. STRIPING FOR PEDESTRIAN CROSSING AND STOP BARS SHALL BE THERMOPLASTIC IN ACCORDANCE WITH FDOT INDEX 711-001.

## CONCRETE SPECIFICATIONS

1. ALL CONCRETE SHALL REACH COMP STRENGTH OF 3,000 PSI MIN IN 28 DAYS. MIX DESIGN SHALL INCLUDE MINIMUM CEMENT CONTENT OF 470 LBS OF PORTLAND CEMENT TYPE II PER ASTM C-150 & 120 LB OF FLY ASH /AE PER CY AND ADMIXTURES SHALL CONFORM TO ASTM C-494. WATER/CEMENT=0.5 MAX.
2. SLUMP AND CYLINDER TESTS (ASTM C-31) SHALL BE MADE BY AN INDEPENDENT TESTING LABORATORY. PROVIDE 4 TESTS WITH EACH CONCRETE POUR AND/OR EACH 50 YD OF CONCRETE PLACED. SLUMP @ POUR SHALL BE 5 IN MAX. (6" FOR PUMP MIX). NO WATER IS TO BE ADDED ON THE JOB SITE.
3. CONTRACTOR SHALL SUBMIT THE MIX DESIGN TO ENGINEER FOR REVIEW.




PROTECTION AROUND INLETS OR SIMILAR STRUCTURES




Application and Spacing: The use of Types I & II bale barriers should be limited to the conditions outlined in Chart 1, Sheet 1 of 3, Index No. 102, FDOT standard specifications.

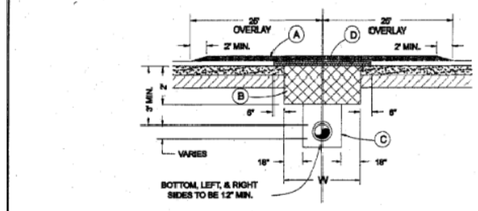
BARRIER FOR UNPAVED DITCHES

Note: Spacing for Type III Fence to be in accordance with Chart 1, Sheet 1 of 3 and ditch installations at drainage structures Sheet 2 of 3.

Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS
8" MIN EMBEDMENT

# BALED HAY OR STRAW BARRIERS AND SILT FENCES




(A) OVERLAY 25 FEET FROM CENTER LINE OF TRENCH, BOTH SIDES OF OPEN CUT WITH 1" MINIMUM TYPE S-III ASPHALT OR MATCH EXISTING SURFACE MATERIAL WHEN POSSIBLE.

(B) CONSTRUCT 2.0' DEEP X WIDTH AND LENGTH OF TRENCH WITH CEMENTED COQUINA OR LIMEROCK. SEE SPECIFICATIONS NOTE #2 BELOW FOR COMPACTION REQUIREMENTS.

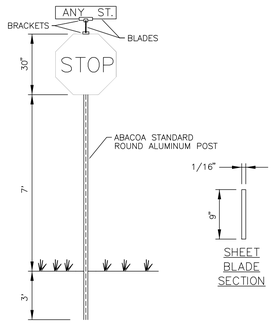
(C) PROVIDE CLEAN BACKFILL. BACKFILL SHALL BE REPLACED IN 6" LAYERS. EACH LAYER SHALL BE MECHANICALLY COMPACTED TO A MINIMUM 100% DENSITY AS DETERMINED BY AASHTO T-99, METHOD "C".

(D) DITCH WIDTH (W)+12", MATCH EXISTING TYPE AND THICKNESS OF ASPHALT OR TYPE S-III.

NOTES:

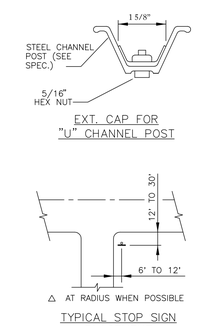
1. REPLACED BASE MATERIAL OVER DITCH SHALL BE AS SHOWN ABOVE.
2. BASE MATERIAL SHALL BE PLACED IN 6" LAYERS OR AS OTHERWISE APPROVED AND EACH LAYER THOROUGHLY MECHANICALLY COMPACTED TO (98%) DENSITY AS DETERMINED BY AASHTO T-180.
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE LAPPED AND FEATHERED.
4. ALL PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
5. SURFACE MATERIAL WILL BE CONSISTENT WITH EXISTING SURFACE OR AS OTHERWISE DIRECTED (TYPE S-III) AND PLACED IN ACCORDANCE WITH FDOT REQUIREMENTS.
6. A MINIMUM OF TWO DENSITY TESTS SHALL BE TAKEN FOR EACH SIX (6) INCH LIFT OF SUBGRADE AND EACH OPEN CUT CROSSING. WHEN THE SPECIFIED COMPACTED BASE IS GREATER THAN SIX AND ONE-HALF (6-1/2) INCHES THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE COURSES. PROCTORS FOR MATERIALS USED IN BACK-FILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY OR THE PERMITTEE'S CONSULTANTS. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO THE ENGINEER'S OFFICE PRIOR TO FINAL INSPECTION.

| ST. LUCIE COUNTY WATER & WASTEWATER CONSTRUCTION STANDARDS | FLEXIBLE PAVEMENT REPLACEMENT DETAIL |
|---|---|
| | DRAWING NUMBER G-12 |



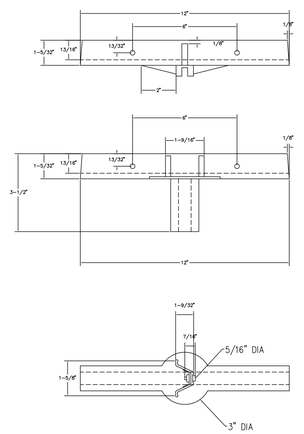

GENERAL SPECIFICATIONS

FLAT BLADE: ALCOA #86054.6063-T6 ALLOY ETCHED, DEGREASED WITH #1200 ALODINE FINISH WITH #2277 GREEN SCOTCHLITE BACKGROUND OR EQUAL DIMENSIONS – 9" & 12" MIN H., 24",30" OR 36" L.
LETTER: NAME – 6" & 9" SERIES 'B' #2270 SCOTCHLITE (SILVER) OR EQUAL – SUFFIX – 4.5" SERIES AS ABOVE.
BRACKETS: SEE DETAILS
POST: STEEL FLANGED CHANNEL POST WITH BAKED GREEN ALKYD FINISH PER A.S.T.M. – A – 123 WITHOUT ANCHOR PLATES.
STOP SIGN: R1-1 MUTCD – 30"x30" (HIGH INTENSITY) 36"x36" (FDOT DRIVEWAYS)
LOCATION: ONE PER INTERSECTION AS INDICATED ON THE PLANS.
POLICY: 9" BLADE WITH 6" LETTERS FOR TWO LANE ROADS WITH A SPEED LIMIT UNDER 45 MPH.
12" BLADES WITH 9" LETTERS:
–THOROUGHFARE ROADS FOUR LANES OR WIDER
–TWO LANE ROADS WITH A POSTED SPEED LIMIT 45 MPH OR MORE.




| DIMENSION TOL. | 2.00 | 3.00 |
|---|---|---|
| 'A' ± | 3/32" | 1-15/32" |
| 'B' ± | 1/8" | 3-1/16" |
| 'C' ± | 1/16" | 1-9/32" |
| 'D' ± | 1/32" | 3/16" |

CHANNEL POST




9"–12" SNS (D-3) BRACKET DETAIL

A– ALL DIMENSIONS AND SPECIFICATIONS CONTAINED IN DRAWINGS

B– MATERIALS: ALUMINUM HIGH STRENGTH ALLOY 380 ASTM B95-60T. HARDWARE SHALL BE SMOOTHLY FINISHED AND PRECISION MACHINED TO FIT STANDARD FLAT BLADE SECTION. ALLOWING CLEARANCE FOR REFLECTIVE FACING ACCORDING TO REQUIREMENTS

C– POST TO SIGN BRACKET: THEY SHALL BE ATTACHED FIRMLY ON STANDARD ROUND TUBING OR U-CHANNEL POSTS BY MEANS OF (2) 5/16" DIAMETER HEX HEAD SCREWS

D– SIGN TO SIGN BRACKET: THEY SHALL BE 90 OR 45 DEGREE TYPE WITH MINIMUM REQUIREMENTS EQUAL TO THE POST TO SIGN BRACKET

# STREET SIGN/STOP SIGN DETAIL

REVISIONS

REV PER FDOT 09-16-21


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WEBSITE: www.JHIinc.com
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Kings Highway Commerce Center
Fort Pierce, Florida

PAVING, GRADING, & DRAINAGE DETAILS

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07/07/2022 | NA | JHI | CLJ | 2205-1402 |

SEAL

SHEET NO.
C-20

## FORT PIERCE UTILITIES AUTHORITY
## WATER DISTRIBUTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3408, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.
3. WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE , SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
4. POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE. ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THHN WIRE.
5. FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED
6. GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
7. WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
8. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FDOT ENGINEER.
9. THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
10. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
12. MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.
13. DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
14. EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
15. WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

| WATER DISTRIBUTION | | G-1 NOTES |
|---|---|---|
| 02-09 DATE: | REVISION: BY: APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JJM | COMPUTER FILE # DETAIL NOTES 2006Q2.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: JJM | SCALE: N.T.S. | |
| APPROVED: JLC | DATE: 2010 | SHEET 1 OF 2 |

## FORT PIERCE UTILITIES AUTHORITY
## WATER DISTRIBUTION NOTES
## CONTINUED

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
17. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
18. THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.
19. WATER MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN MULTI STRANDED WIRE (BLUE IN COLOR) AND IDENTIFICATION TAPE WITH "WATER" MARKED ON TAPE, PERMANENTLY ATTACHED TO THE TOP OF THE WATER MAIN IN ACCORDANCE WITH THE FORT PIERCE UTILITES AUTHORITY SPECIFICATIONS.
20. SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING. FOLLOWING TESTING AND STERILIZATION OF WATER LINE, CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.
21. MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURER'S OR ENGINEER'S RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) AND FPUA REQUIREMENTS.
22. ALL MAINS SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600. – 2 HR MINIMUM TEST

$$L = \frac{SD(P)^{1/2}}{148,000}$$

L= LEAKAGE IN GPH
S= LENGTH OF PIPE IN FEET
D= PIPE DIAMETER IN INCHES
P= TESTING PRESSURE IN PSI

23. PRIOR TO ANY TESTING, ALL MAINS 6" IN DIA. AND LARGER SHALL HAVE A SWAB PASSED THRU THE ENTIRE LENGTH OF THE LINE. NOTE: SWAB SHOULD BE PLACED IN 1st. JOINT OF NEW LINE. END OF MAIN SHOULD BE "TURNED UP" AT 45$ AND EXTENDED SO THAT SWABBING AND A FULL BORE FLUSH CAN BE ACCOMPLISHED. BLOW-OFF ASSY CAN THEN BE PLACED. WHERE LINES BRANCH, SWABS WILL BE PLACED IN BRANCH LINES AND SEQUENTIALLY SWABBED AND FLUSHED.
24. A MINIMUM SIX FEET AND PREFERABLY TEN FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. 6 INCHES MINIMUM VERTICAL SEPARATION IF WATER MAIN IS OVER WASTEWATER AND 12 INCHES IF WATER MAIN IS UNDER SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTWATER LINES. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE OR STRUCTURE, WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
25. WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF DIP AT THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 20 FEET OF THE CROSSING.
26. CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

| WATER DISTRIBUTION | | G-1 NOTES |
|---|---|---|
| 02-09 DATE: | REVISION: BY: APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JJM | COMPUTER FILE # DETAIL NOTES 2006Q2.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: JJM | SCALE: N.T.S. | |
| APPROVED: JLC | DATE: 2010 | SHEET 2 OF 2 |

## STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS

1. SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.

WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING), AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP, (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

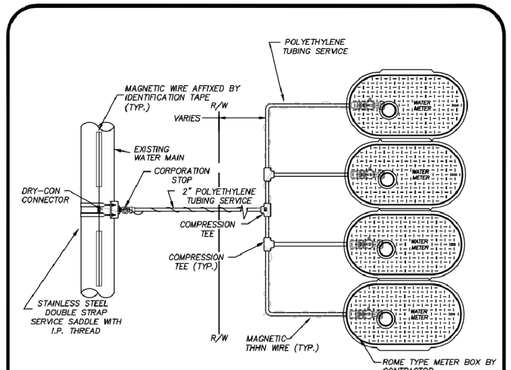
A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DIP SHALL BE PRESSURE CLASS 250 MIN.. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

| STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT | | G-3 WATER/SEWER CONFLICT |
|---|---|---|
| 02-09 DATE: | REVISION: BY: APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JJM | COMPUTER FILE # DETAIL NOTES 2006Q2.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: JJM | SCALE: N.T.S. | |
| APPROVED: JLC | DATE: 2010 | SHEET 1 OF 1 |

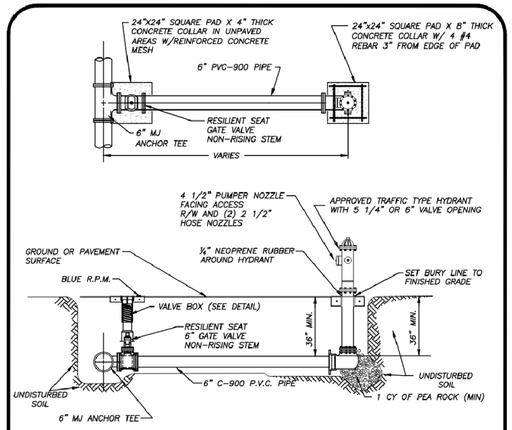



NOTES:

1. BLUE 10 GAUGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE AND RAN TO OUTER METERS ONLY.
2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
3. ALL METER SIZES SHALL REQUIRE LOCKABLE METER VALVE. (CURB STOP)
4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".
5. POLY SERVICE LINE SHALL VARY IN SIZE PER COMMERCIAL USE.
6. F.P.U.A. SHALL REMOVE METER BOXES AND INSTALL STAND PIPES AT THE TIME OF CONNECTION.

TYPICAL MULTIPLE WATER SERVICE CONNECTION (COMMERCIAL)
(N.T.S.)

| TYPICAL MULTIPLE WATER SERVICE CONNECTION (COMMERCIAL) | | W-4A |
|---|---|---|
| 03-09 DESIGN | REVISION: SIL BY: J.C. APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: J.C. | COMPUTER FILE # W-4.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: SIL | SCALE: N.T.S. | |
| APPROVED: J.C. | DATE: 2020 | SHEET 1 OF 1 |

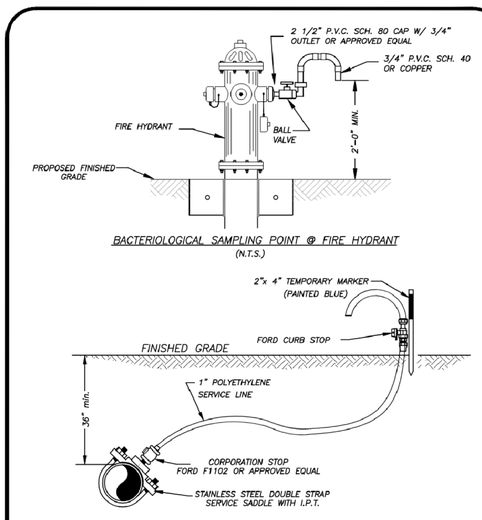



NOTES:

1. HYDRANT SHALL BE INSTALLED PLUMB & TRUE.
2. HYDRANT SHALL BE PAINTED CARNIVAL RED FROM FACTORY.
3. HEEL TO REST IN UNDISTURBED SOIL.
4. THE ONLY HYDRANTS ACCEPTABLE ARE: MUELLER SUPER CENTURION 250 OR AMERICAN DARLING B-84-B-5.
5. HYDRANT ASSEMBLY MUST BE RESTRAINED TO TEE.
6. ALL FITTINGS SHALL BE MECHANICAL JOINT.
7. ENTIRE ASSEMBLY TO BE MECHANICALLY RESTRAINED.
8. BLUE LOCATOR SHALL BE PLACED IN CENTER OF TRAVEL LANE CLOSEST TO HYDRANT.
9. ALL HYDRANT VALVE BOX COVERS SHALL BE PAINTED CARNIVAL RED.
10. LOCATE WIRE SHALL TERMINATE AT HYDRANT ISOLATION VALVE
11. HYDRANTS SHALL BE NO MORE THAN FIFTEEN FEET (15 FT.) FROM THE CURB OF ROADWAYS OR FROM THE EDGE OF PAVEMENT. CLEARANCES OF SEVEN AND ONE HALF FEET (7FT-6IN.) IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANTS, WITH FOUR FOOT (4 FT.) CLEARANCE TO THE REAR OF HYDRANTS SHALL BE MAINTAINED.

TYPICAL FIRE HYDRANT ASSEMBLY
(N.T.S.)

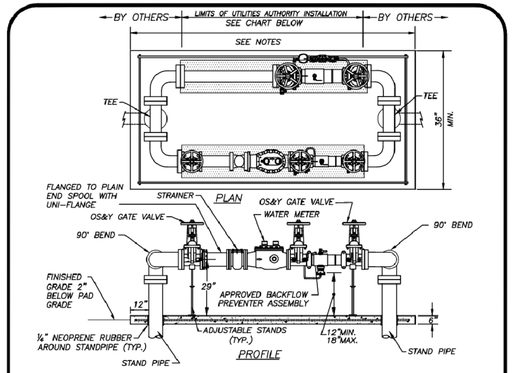
| TYPICAL FIRE HYDRANT ASSEMBLY | | W-5 |
|---|---|---|
| 03-09 DESIGN | REVISION: SIL BY: J.C. APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: J.C. | COMPUTER FILE # WATERDETAIL.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: SIL | SCALE: N.T.S. | |
| APPROVED: J.C. | DATE: 2010 | SHEET 1 OF 1 |




NOTE:

AFTER TESTING REMOVE 1" P.E. LINE AND CAP WITH BRASS PLUG AT CORPORATION STOP.

| BACTERIOLOGICAL SAMPLING PONIT DETAIL | | W-6 |
|---|---|---|
| 03-09 02-15 DATE: | REVISION: SIL BY: J.C. APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: J.C. | COMPUTER FILE # WATERDETAIL.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: SIL | SCALE: N.T.S. | |
| APPROVED: J.C. | DATE: 2010 | SHEET 1 OF 1 |



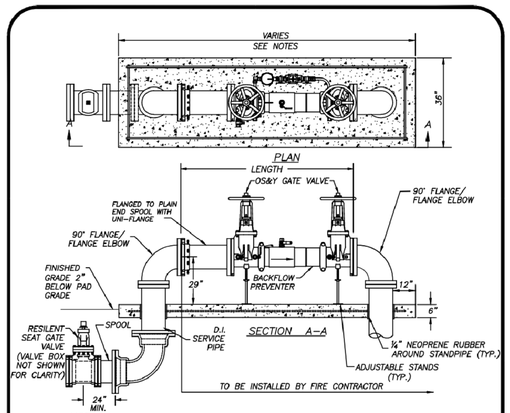

NOTES:

1. LANDSCAPING IS REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE. NO PLANTS OR TREES WITHIN 36" AROUND METER TO ALLOW MAINTENANCE WITHOUT DAMAGE TO PLANTS ETC.
2. CONTRACTOR TO INSTALL APPROPRIATE SIZED SPOOL PIECES TO FIT BETWEEN 90° BENDS UNTIL METERS ARE APPROVED FOR INSTALLATION. ALL SPOOL PIECES SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE IN ACCORDANCE WITH THE CHART BELOW.
3. PRIOR TO POURING CONCRETE PAD, VERIFY THAT THE STANDPIPES ARE PLUMB, TRUE AND ARE INSTALLED AT THE SAME ELEVATION IN THE PRESENCE OF THE FPUA INSPECTOR.
4. ALL CONCRETE SHALL HAVE FIBERGLASS MESH REINFORCEMENT WITH #4 REBAR 3" FROM THE OUTER PERIMETER.

| SIZE | SERVICE | LENGTH |
|---|---|---|
| 3 | COMPOUND | 83 INCHES |
| 4 | COMPOUND | 95 INCHES |
| 6 | COMPOUND | 106 INCHES |

WATER METER/BACKFLOW PREVENTER ASSEMBLY
COMMERCIAL WATER METER SERVICES (METER SIZE > 3")

| WATER METER/BACKFLOW PREVENTER DOMESTIC SERVICE (METER SIZE ≥ 3") | | W-9 |
|---|---|---|
| 03-09 CONCRETE SLAB DATE: | REVISION: SIL BY: J.C. APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: J.C. | COMPUTER FILE # WATER DETAILS 2006Q2.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: SIL | SCALE: | |
| APPROVED: J.C. | DATE: 2010 | SHEET 1 OF 1 |




NOTES:

1. LANDSCAPING IS REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE.
2. ASSEMBLY TO BE 29" FROM FINISH GRADE TO CENTERLINE OF THE FLANGED 90° BEND.
3. PRIOR TO POURING THE CONCRETE PAD, VERIFY THAT THE STANDPIPES ARE PLUMB, TRUE AND INSTALLED AT THE SAME ELEVATIONSIN THE PRESENCE OF AN FPUA INSPECTOR.
4. ALL CONCRETE SHALL HAVE FIBERGLASS MESH REINFORCEMENT WITH #4 REBAR 3" FROM THE OUTER PERIMETER.

| SIZE | SERVICE | LENGTH |
|---|---|---|
| 4 | DOUBLE DETECTOR | 53 INCHES |
| 6 | DOUBLE DETECTOR | 62 INCHES |
| 8 | DOUBLE DETECTOR | 69 INCHES |
| 10 | DOUBLE DETECTOR | 76 INCHES |

BACKFLOW PREVENTER ASSEMBLY-4"-10" FIRE SERVICE
(N.T.S.)

| BACKFLOW PREVENTER ASSEMBLY 4"-10" FIRE SERVICE | | W-10 |
|---|---|---|
| 03-09 CONCRETE PAD DATE: | REVISION: SIL BY: J.C. APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: J.C. | COMPUTER FILE # WATER DETAILS 2006Q2.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: SIL | SCALE: N.T.S. | |
| APPROVED: J.C. | DATE: 2010 | SHEET 1 OF 1 |

REVISIONS


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Fort Pierce, Florida

WATER DETAILS

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07/07/2022 | NA | JHI | CLJ | 2205-1402 |

SEAL

CDA # 6986

SHEET NO.
C-21

## FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
3. THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
4. WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THEN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
5. A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
6. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISTING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
7. MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
8. WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANCE FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
9. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. NO FIELD CHANGES OR DEVIATIONS FORM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FPUA/CITY/COUNTY/FDOT ENGINEER.
11. TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
12. CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
13. WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
14. WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
15. FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
16. WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
17. MINIMUM COVER SHALL BE 36 INCHES, PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
19. ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
20. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

| WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS | | | G-2 CONSTRUCTION NOTES |
|---|---|---|---|
| 02-06 | | | |
| DATE: | REVISION: | BY: APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JJM | COMPUTER FILE # DETAIL NOTES 200602.DWG | | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: JJM | SCALE: N.T.S. | | |
| APPROVED: JLC | DATE: 2010 | SHEET 1 OF 1 | |

## STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS

1. SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.

WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

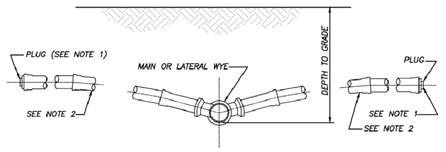
A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DIP SHALL BE PRESSURE CLASS 250 MIN.. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

| STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT | | | G-3 WATER/SEWER CONFLICT |
|---|---|---|---|
| 02-06 | | | |
| DATE: | REVISION: | BY: APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JJM | COMPUTER FILE # DETAIL NOTES 200602.DWG | | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: JJM | SCALE: N.T.S. | | |
| APPROVED: JLC | DATE: 2010 | SHEET 1 OF 1 | |

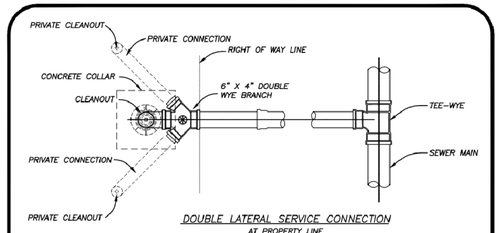



NOTES:

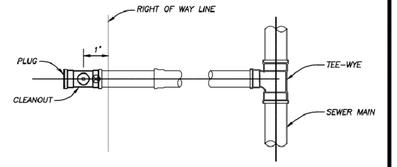
1) BALL TYPE WASTEWATER LOCATOR BY 3M CORP. OR APPROVED EQUAL.
2) MINIMUM SLOPE OF 1/8" PER FOOT, USE GREATER SLOPE WHERE POSSIBLE.
3) SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT.
4) INSTALL CLEANOUT AT THE PROPERTY LINE. REFER TO DETAIL S-1 FOR SPECIFIC PROPERTY LAYOUT.

SERVICE CONNECTION
(N.T.S.)

| SERVICE CONNECTION WASTEWATER | | | S-2 |
|---|---|---|---|
| 02-06 | | | |
| DATE: | REVISION: | BY: APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JLC | COMPUTER FILE # SEWER DETAIL 200602.DWG | | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: JLC | SCALE: N.T.S. | | |
| APPROVED: JLC | DATE: 2015 | SHEET 1 OF 1 | |




DOUBLE LATERAL SERVICE CONNECTION
AT PROPERTY LINE

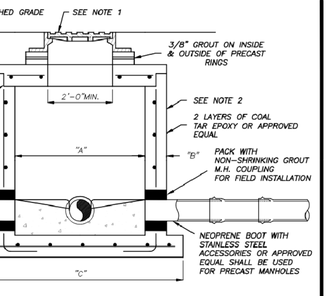



SINGLE SERVICE LATERAL CONNECTION

⊛ = BALL TYPE WASTEWATER LOCATOR INSTALLED ABOVE THIS POINT BALL BY 3M CORP. OR APPROVED EQUAL
SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT

SERVICE CONNECTION
(N.T.S.)

| SERVICE CONNECTION WASTEWATER | | | S-3 |
|---|---|---|---|
| 02-06 | | | |
| DATE: | REVISION: | BY: APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JLC | COMPUTER FILE # SEWER DETAIL 200602.DWG | | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: BLL | SCALE: N.T.S. | | |
| APPROVED: JLC | DATE: 2010 | SHEET 1 OF 1 | |




| PIPE DIA. | "A" | "B" | "C" | BOT. SLAB "T" |
|---|---|---|---|---|
| 8"-24" | 4'-0" | "8" | 76" | 8" |
| 30"-36" | 5'-0" | "8" | 88" | 10" |
| 42"-48" | 6'-0" | "8" | 100" | 12" |

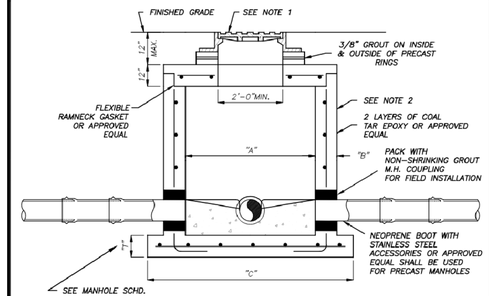
TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.
3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.
4) RAIN GUARDS SHALL BE INSTALLED IN MANHOLES THAT HAVE GRAVITY MAINS 12" OR LESS.

SHALLOW MANHOLE
DEPTH OF LESS THAN 5'-0"
(N.T.S.)

| PRECAST MANHOLE DEPTH OF LESS THAN 5'- 0" | | | S-6 |
|---|---|---|---|
| 02-06 | | | |
| DATE: | REVISION: | BY: APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JLC | COMPUTER FILE # SEWER DETAIL 200602.DWG | | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: BLL | SCALE: N.T.S. | | |
| APPROVED: JLC | DATE: 2010 | SHEET 1 OF 1 | |




| PIPE DIA. | "A" | "B" | "C" | BOT. SLAB "T" |
|---|---|---|---|---|
| 8"-24" | 4'-0" | "8" | 76" | 8" |
| 30"-36" | 5'-0" | "8" | 88" | 10" |
| 42"-48" | 6'-0" | "8" | 100" | 12" |

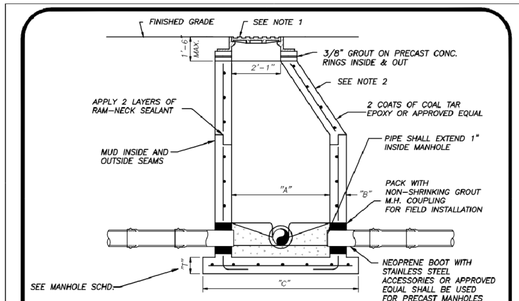
TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.
3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.
4) RAIN GUARDS SHALL BE INSTALLED IN MANHOLES THAT HAVE GRAVITY MAINS 12" OR LESS.

SHALLOW MANHOLE
DEPTH OF LESS THAN 5'-0"
(N.T.S.)

| PRECAST MANHOLE DEPTH OF LESS THAN 5'- 0" | | | S-6 |
|---|---|---|---|
| 02-06 | | | |
| DATE: | REVISION: | BY: APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JLC | COMPUTER FILE # SEWER DETAIL 200602.DWG | | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: BLL | SCALE: N.T.S. | | |
| APPROVED: JLC | DATE: 2010 | SHEET 1 OF 1 | |




| PIPE DIA. | "A" | "B" | "C" | BOT. SLAB "T" |
|---|---|---|---|---|
| 8"-24" | 4'-0" | "8" | 76" | 8" |
| 30"-36" | 5'-0" | "8" | 88" | 10" |
| 42"-48" | 6'-0" | "8" | 100" | 12" |

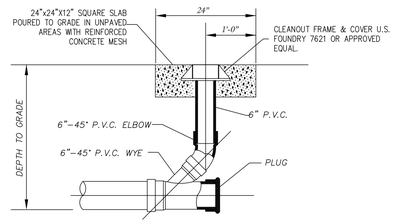
TYPICAL MANHOLE DIMENSIONS

NOTES:

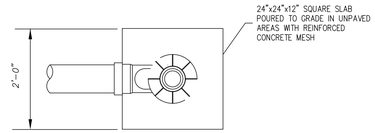
1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.
3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.
4) RAIN GUARDS SHALL BE INSTALLED IN MANHOLES THAT HAVE GRAVITY MAINS 12" OR LESS.

STANDARD MANHOLE
DEPTH 5'-0" AND GREATER
(N.T.S.)

| PRECAST MANHOLE DEPTH 5'- 0" & GREATER | | | S-7 |
|---|---|---|---|
| 02-06 | | | |
| DATE: | REVISION: | BY: APPD: | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JLC | COMPUTER FILE # SEWER DETAIL 200602.DWG | | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: BLL | SCALE: N.T.S. | | |
| APPROVED: JLC | DATE: 2010 | SHEET 1 OF 1 | |




SECTION




PLAN

CLEANOUT DETAIL
(N.T.S.)

| TERMINAL CLEANOUT DETAIL WASTEWATER | | | |
|---|---|---|---|
| 02-06 | | | |
| DATE: | REVISION: | BY: APPD: | WATER/WASTEWATER/GAS ENGINEERING |
| DESIGNED: | COMPUTER FILE # SEWER DETAIL 200602.DWG | | FT. PIERCE UTILITIES AUTHORITY 206 SOUTH 4TH STREET FT. PIERCE, FLORIDA 34948 (561) 466-1600 |
| DRAWN BY: DLP | SCALE: N.T.S. | | |
| APPROVED: | DATE: DECEMBER, 2007 | SHEET 1 OF 1 | |

REVISIONS


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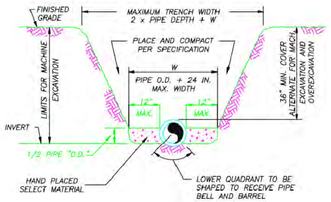

Kings Highway Commerce Center
Fort Pierce, Florida

WASTEWATER DETAILS

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07/07/2022 | NA | JHI | CLJ | 2205-1402 |

SEAL

SHEET NO.
C-22



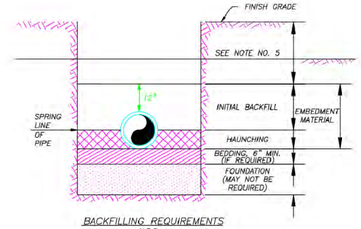

NOTES:

1) THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.

2) INITIAL BACKFILL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T-99.

TYPICAL TRENCH DETAIL
N.T.S.

| TYPICAL TRENCH DETAIL | M-1 |
|---|---|
| 03-09 CONCRETE SLAB SLL JLC | WATER/WASTEWATER ENGINEERING |
| JLC MISC DETAILS 200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| SLL | |
| JLC 2015 | |




BACKFILLING REQUIREMENTS
N.T.S.

NOTES:

1) IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.

2) BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.

3) HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.

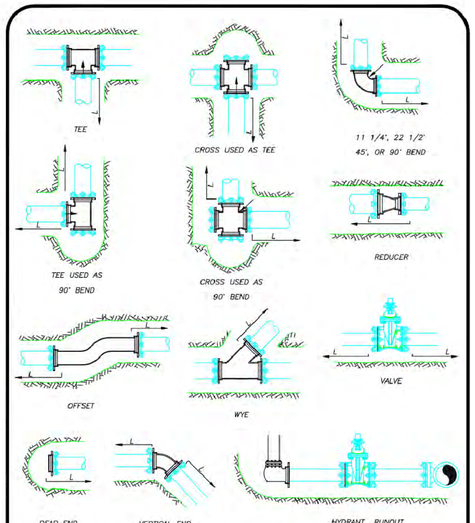
4) INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MAX. DENSITY.(AASHTO T-99)

5) BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER AASHTO T-99, TO A POINT 30" BELOW PROPOSED PROFILE GRADE OR EXISTING GRADE. THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-180.

6) DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTORS EXPENSE.

7) CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

| BACKFILLING REQUIREMENTS | M-2 |
|---|---|
| 03-09 CONCRETE SLAB SLL JLC | WATER/WASTEWATER ENGINEERING |
| JLC MISC DETAILS 200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| SLL | |
| JLC 2015 | |




MECHANICAL JOINT ANCHORING REQUIREMENTS
N.T.S.

| MECHANICAL JOINT ANCHORING REQUIREMENTS | M-3 |
|---|---|
| 03-09 CONCRETE SLAB SLL JLC | WATER/WASTEWATER ENGINEERING |
| JLC MISC DETAILS 200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| SLL | |
| JLC 2015 | |

MECHANICAL JOINT RESTRAINT NOTES

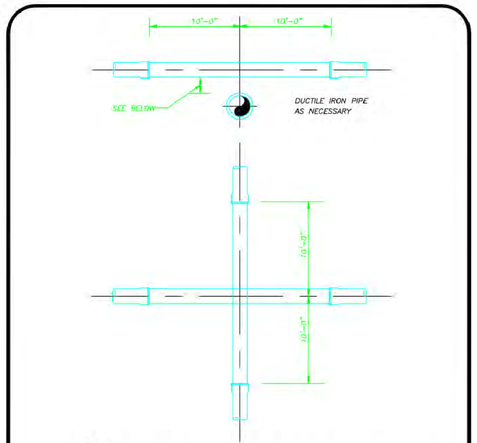
NOTES:

1) THE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING THE REQUIRED LENGTH TO BE RESTRAINED BASED UPON THE PROJECT AREA SOIL TYPE, PROPOSED TRENCH CONDITIONS AND DEPTH, PRESSURE OF 150 PSI, AND A SAFETY FACTOR OF TWO (2). A DRAWING OF EVERY TYPICAL FITTING ASSEMBLY WITHIN THE PROJECT SHALL BE SUBMITTED WHICH REFLECTS THE RESTRAINT DETAIL PROPOSED FOR USE, INCLUDING LENGTH OF PIPE RESTRAINT.

2) REQUIRED RESTRAINED LENGTH CALCULATIONS SHALL ALSO CONSIDER THE CONDITIONS OF OTHER BENDS OR FITTINGS THAT WILL BE LOCATED WITHIN THE CALCULATED RESTRAINED LENGTH (L) OF THE BEND OR FITTING IN QUESTION.

3) EVERY JOINT OR FITTING MUST BE RESTRAINED ON BOTH SIDES OF THE BEND AND FOR TEES ALONG THE BEND ALSO.

| MECHANICAL JOINT RESTRAINT NOTES | M-4 |
|---|---|
| 03-09 CONCRETE SLAB SLL JLC | WATER/WASTEWATER ENGINEERING |
| JLC MISC DETAILS 200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| SLL | |
| JLC 2015 | |

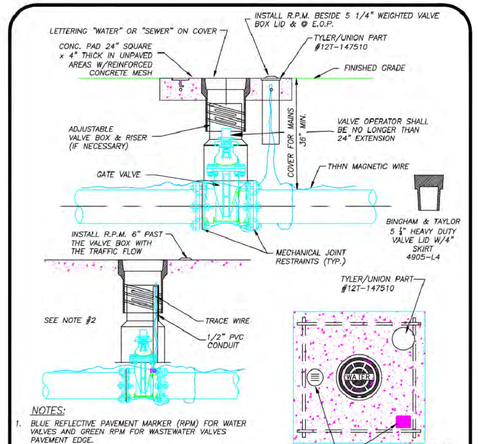



NOTE:

PLEASE REFER TO FORT PIERCE UTILITIES STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS.

UTILITY CROSSING DETAIL
N.T.S.

| UTILITY CROSSING DETAIL | M-5 |
|---|---|
| 03-09 CONCRETE SLAB SLL JLC | WATER/WASTEWATER ENGINEERING |
| JLC MISC DETAILS 200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| SLL | |
| JLC 2015 | |

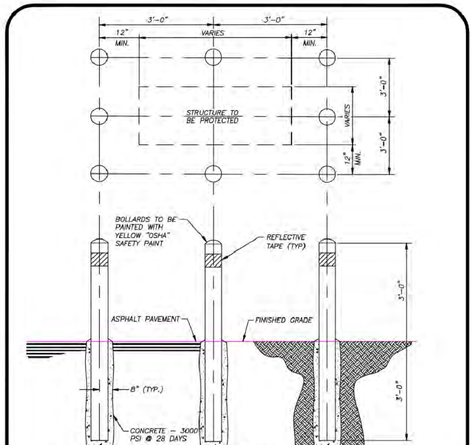



NOTES:

1. BLUE REFLECTIVE PAVEMENT MARKER (RPM) FOR WATER VALVES AND GREEN RPM FOR WASTEWATER VALVES PAVEMENT EDGE.
2. FOR WATER AND WASTEWATER VALVES INSTALLED IN PAVED AREAS, ELIMINATE CONCRETE PAD AND ENCASE THE MAGNETIC WIRE IN 1/2" PVC INSIDE THE VALVE BOX SEVEN INCHES BELOW GRADE.
3. DIP MAY BE USED AS RISERS ONLY IF A VALVE BOX IS NOT MANUFACTURED FOR THAT DEPTH. NO PVC RISERS SHALL BE USED IN ANY CIRCUMSTANCES.

TYPICAL GATE VALVE & VALVE BOX DETAIL
N.T.S.

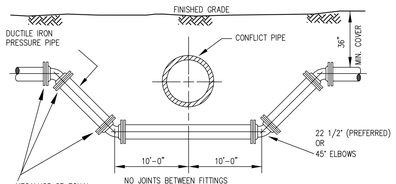
| TYPICAL GATE VALVE & VALVE BOX DETAIL | M-6 |
|---|---|
| 03-09 CONCRETE SLAB SLL JLC | WATER/WASTEWATER ENGINEERING |
| JLC MISC DETAILS 200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| SLL | |
| JLC 2015 | |



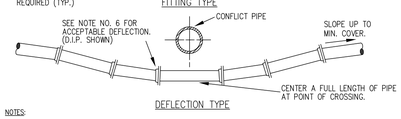

NOTES:

1) BOLLARDS TO BE 6" SCHEDULE 40 STEEL PIPE, 6'-0" LONG AND FILLED WITH CONCRETE.
2) BOLLARDS ON SIDE NOT ACCESSIBLE TO VEHICLES MAY BE OMITTED BY THE APPROVING AGENCY.
3) PLACE 6" WIDE YELLOW CLASS 4 REFLECTIVE TAPE 4" DOWN FROM TOP FOR FULL DIAMETER ON ALL BOLLARDS.
4) CONTRACTOR TO ASSURE THAT BOLLARDS ARE PLACED TO ALLOW FULL ACCESS TO THE PROTECTED FACILITY.

| BOLLARD DETAIL | M-12 |
|---|---|
| 03-09 CONCRETE SLAB SLL JLC | WATER/WASTEWATER ENGINEERING |
| JLC MISC DETAILS 200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| SLL | |
| JLC 2015 | |




FITTING TYPE




DEFLECTION TYPE

NOTES:

1. STORM SEWER, GRAVITY WASTEWATER AND RECLAIMED WATER MAIN CROSSING UNDER POTABLE WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED, SO THAT THE STORM/WASTEWATER/RECLAIMED WATER PIPE JOINTS AND POTABLE WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS, BOTH PIPES SHALL BE D.I.P., AND THE MINIMUM VERTICAL SEPARATION SHALL BE 6 INCHES. WHERE THERE IS NO ALTERNATIVE TO STORM/WASTEWATER/RECLAIMED WATER PIPES CROSSING OVER A POTABLE WATER MAIN, THE CRITERIA FOR MINIMUM 12" VERTICAL SEPARATION BETWEEN LINES AND JOINT ARRANGEMENT, AS STATED ABOVE, SHALL BE REQUIRED,
2. WHENEVER POSSIBLE MAINTAIN 10' (MIN 6') HORIZONTAL DISTANCE (WALL TO WALL) BETWEEN POTABLE WATER MAIN AND STORM SEWER, WASTEWATER MAIN, OR FORCE MAIN MIN.
3. FORCE MAIN CROSSING POTABLE WATER MAIN OR RECLAIMED WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND OUTSIDE OF THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN WITH THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN CROSSING OVER THE FORCE MAIN.
4. FITTINGS SHALL BE RESTRAINED.
5. THE DEFLECTION TYPE CROSSING IS PREFERRED.
6. DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION FOR DUCTILE IRON PIPE.
7. ALL EXPOSED TIE STEEL SHALL BE COATED WITH COAL-TAR EPOXY
8. POTABLE WATER SERVICE LINES SHALL CROSS OVER WASTEWATER MAINS WITH MIN. 12" VERTICAL SEPARATION. WHERE THIS MIN. SEPARATION CAN NOT BE MAINTAINED, THE WATER SERVICE SHALL BE ENCASED IN A MIN. 10' LONG CASING CENTERED OVER THE CROSSING WITH MIN. 6" VERTICAL SEPARATION.

RECLAIMED WATER MAIN POTABLE WATER/FORCE MAIN PRESSURE PIPE CONFLICT DETAIL

REVISIONS

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WEBSITE: www.JHIinc.com

Kings Highway Commerce Center
Fort Pierce, Florida

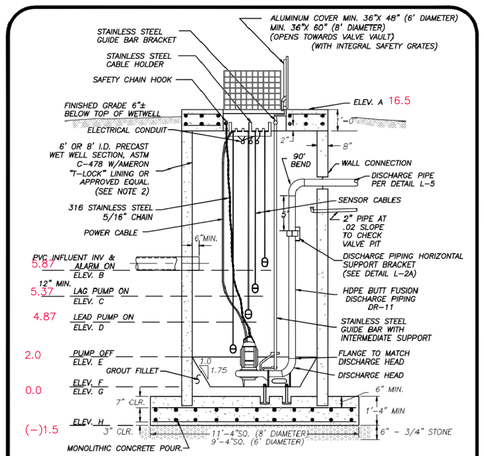
WASTEWATER DETAILS

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07/07/2022 | NA | JHI | CLJ | 2205-1402 |

SEAL

COA # 6986

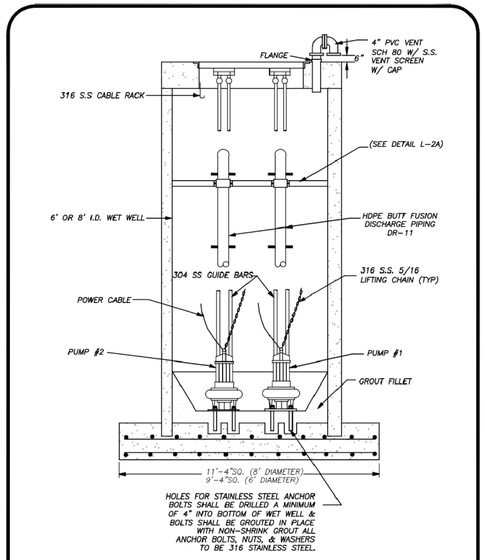
SHEET NO.
C-23



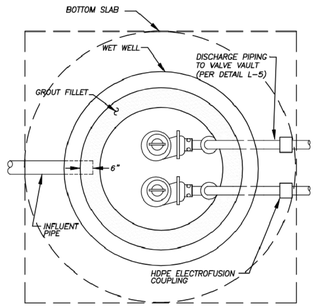

NOTES:

1. ALL INTERIOR CONCRETE SURFACES OF WET WELL NOT COVERED WITH AMERON "T-LOCK" SHALL HAVE 2 COATS OF COAL TAR EPOXY IN INSTANCES WHERE FPUA ENGINEERING DIRECTS.
2. "T-LOCK" OR APPROVED EQUAL SHALL ALSO BE REQUIRED ON ALL STRUCTURE PENETRATIONS AND THE INTERIOR OF THE TOP SLAB.
3. TRIPLEX MASTER LIFT STATIONS SHALL HAVE 12' DIAMETER WETWELL.
4. MINIMUM SIZE DISCHARGE PIPING SHALL BE AS FOLLOWS: 4" FOR 6' DIA WETWELL, 6" FOR 8' DIA WETWELL, AND 8" FOR 12' DIA WETWELL.
5. STRUCTURAL DESIGN- PER MANUFACTURERS SHOP DRAWINGS.
6. FLOATATION PER DESIGN ENGINEER.

| FPUA COMMUNITY PROUD | LIFT STATION<br>SECTION VIEW | L-1 |
|---|---|---|
| | 2015 DATE: REVISION: BY: APPD. | WATER/WASTEWATER ENGINEERING |
| | DESIGNED: JJM — COMPUTER FILE # LIFT STATION DETAILS2000603.DWG | FT. PIERCE UTILITIES AUTHORITY |
| | DRAWN BY: JJM — SCALE: N.T.S. | |
| | APPROVED: JLC — DATE: FEBRUARY 2017 | SHEET 1 OF 1 |



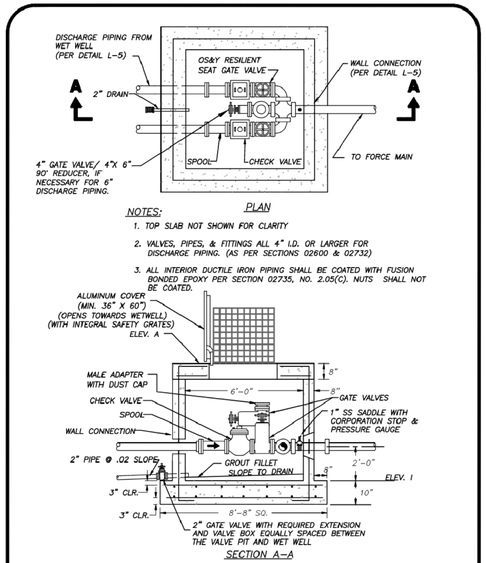

| FPUA COMMUNITY PROUD | SECTION VIEW–DUPLEX<br>PUMP INSTALLATION | L-2 |
|---|---|---|
| | DATE: REVISION: BY: APPD. | WATER/WASTEWATER ENGINEERING |
| | DESIGNED: JMM — COMPUTER FILE # LIFT STATION DETAILS2000603.DWG | FT. PIERCE UTILITIES AUTHORITY |
| | DRAWN BY: JMM — SCALE: N.T.S. | |
| | APPROVED: JLC — DATE: FEBRUARY 2017 | SHEET 1 OF 1 |




NOTE:

TOP SLAB NOT SHOWN FOR CLARITY

| FPUA COMMUNITY PROUD | LIFT STATION<br>PLAN VIEW | L-3 |
|---|---|---|
| | DATE: REVISION: BY: APPD. | WATER/WASTEWATER ENGINEERING |
| | DESIGNED: JJM — COMPUTER FILE # LIFT STATION DETAILS2000603.DWG | FT. PIERCE UTILITIES AUTHORITY |
| | DRAWN BY: JJM — SCALE: N.T.S. | |
| | APPROVED: JLC — DATE: DECEMBER 2007 | SHEET 1 OF 1 |



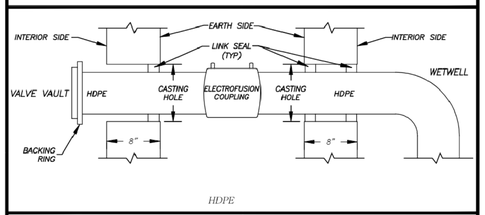

NOTES:

1. TOP SLAB NOT SHOWN FOR CLARITY
2. VALVES, PIPES, & FITTINGS ALL 4" I.D. OR LARGER FOR DISCHARGE PIPING. (AS PER SECTIONS 02600 & 02732)
3. ALL INTERIOR DUCTILE IRON PIPING SHALL BE COATED WITH FUSION BONDED EPOXY PER SECTION 02735, NO. 2.05(C). NUTS SHALL NOT BE COATED.

PLAN

SECTION A–A

| FPUA COMMUNITY PROUD | LIFT STATION<br>VALVE PIT | L-4 |
|---|---|---|
| | 2015 DATE: REVISION: BY: APPD. | WATER/WASTEWATER ENGINEERING |
| | DESIGNED: JLC — COMPUTER FILE # LIFT STATION DETAILS2000603.DWG | FT. PIERCE UTILITIES AUTHORITY |
| | DRAWN BY: SLL — SCALE: N.T.S. | |
| | APPROVED: JLC — DATE: DECEMBER 2007 | SHEET 1 OF 1 |



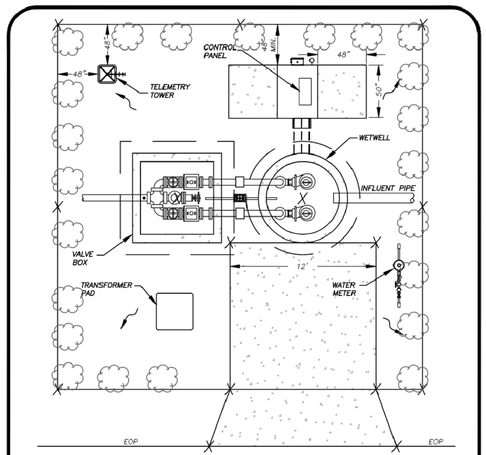

NOTE:

1) MODEL "OS-316" LINK-SEAL MODULAR SEALS WITH NITRILE ELEMENTS OR APPROVED EQUAL.

2) CASTING HOLE DIAMETER VARIES WITH THE SIZE OF WET-WELL DISCHARGE PIPE.

| DISCHARGE PIPE | CASTING HOLE DIAMETER |
|---|---|
| 4" HDPE DR-11 | 8 INCHES |
| 6" HDPE DR-11 | 10 INCHES |

| FPUA COMMUNITY PROUD | LIFT STATION TO VALVE VAULT<br>PIPING CONNECTION DETAIL | L-5 |
|---|---|---|
| | 2015 DATE: REVISION: BY: APPD. | WATER/WASTEWATER ENGINEERING |
| | DESIGNED: JJM — COMPUTER FILE # LIFT STATION DETAILS2000603.DWG | FT. PIERCE UTILITIES AUTHORITY |
| | DRAWN BY: JJM — SCALE: N.T.S. | |
| | APPROVED: JLC — DATE: DECEMBER 2007 | SHEET 1 OF 1 |

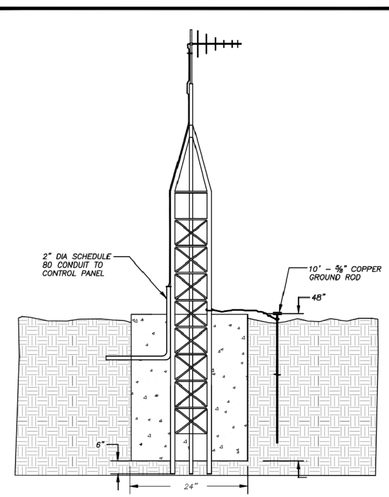



TYPICAL LIFT STATION EASEMENT LAYOUT
N.T.S

NOTES:

1) ONLY TO BE USED FOR GENERAL SITE LAYOUT. REFER TO FPUA'S LIFT STATIONS, PUMPS, AND CONTROL DESIGN AND CONSTRUCTION STANDARDS 02735 FOR SPECIFIC CONSTRUCTION REQUIREMENTS.
2) LANDSCAPE AROUND LIFT STATION PER LOCAL ORDINANCE. (COCO PLUM)
3) AREA TO BE LAID WITH SOD.
4) BOLD "X" REPRESENTS ELEVATIONS NECESSARY TO CONFIRM DRAINAGE AND INSTALLATION REQUIREMENTS.
5) LIFT STATION EASEMENT SHALL MEASURE 30' x 30' (MINIMUM)

| FPUA COMMUNITY PROUD | LIFT STATION<br>LAYOUT PLAN | L-6 |
|---|---|---|
| | 2015 CONCRETE PAD SLL JLC<br>DATE: REVISION: BY: APPD. | WATER/WASTEWATER ENGINEERING |
| | DESIGNED: JLC — COMPUTER FILE # LIFT STATION DETAILS2000603.DWG | FT. PIERCE UTILITIES AUTHORITY |
| | DRAWN BY: SLL — SCALE: N.T.S. | |
| | APPROVED: JLC — DATE: AUGUST 2014 | SHEET 1 OF 1 |

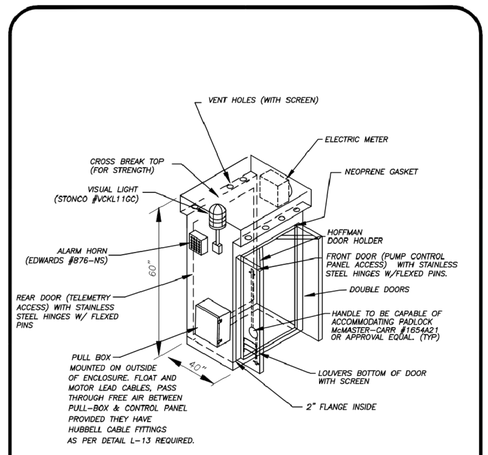



NOTE

1. CONSTRUCT TELEMETRY TOWER SUCH THAT THE ANTENNA IS AT LEAST 10 FEET AWAY FROM ELECTRIC DISTRIBUTION LINES.

150 MPH WIND RATED

| FPUA COMMUNITY PROUD | RADIO TOWER LAYOUT – REMOTE SITE | L-7 |
|---|---|---|
| | 2015 DATE: REVISION: BY: APPD. | WATER/WASTEWATER ENGINEERING |
| | DESIGNED: JJM — COMPUTER FILE # LIFT STATION DETAILS2000603.DWG | FT. PIERCE UTILITIES AUTHORITY |
| | DRAWN BY: JJM — SCALE: N.T.S. | |
| | APPROVED: JLC — DATE: DECEMBER 2007 | SHEET 1 OF 1 |




NOTES:

1. ATTACH ENCLOSURE TO EQUIPMENT PAD WITH A MINIMUM OF 12- 3/8" x 3 1/2" STAINLESS STEEL DRILLED ANCHORS.
2. ENCLOSURE SHALL BE OF 1/8" GAUGE 5052 ALUMINUM.

| FPUA COMMUNITY PROUD | LIFT STATION<br>OVER-HOUSE CONTROL PANEL | L-8 |
|---|---|---|
| | DATE: REVISION: BY: APPD. | WATER/WASTEWATER ENGINEERING |
| | DESIGNED: JJM — COMPUTER FILE # LIFT STATION DETAILS2000603.DWG | FT. PIERCE UTILITIES AUTHORITY |
| | DRAWN BY: JJM — SCALE: N.T.S. | |
| | APPROVED: JLC — DATE: DECEMBER 2007 | SHEET 1 OF 1 |

REVISIONS


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WEBSITE: www.JHIinc.com

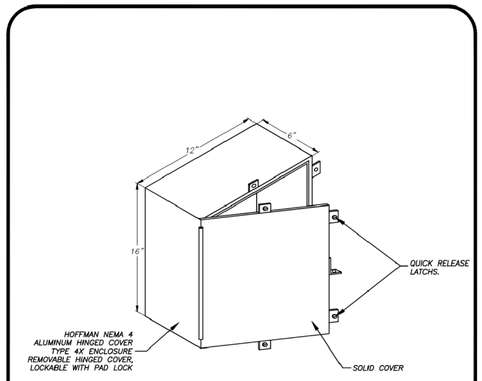

Kings Highway Commerce Center
Fort Pierce, Florida

LIFT STATION DETAILS

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07/07/2022 | NA | JHI | CLJ | 2205-1402 |

SEAL

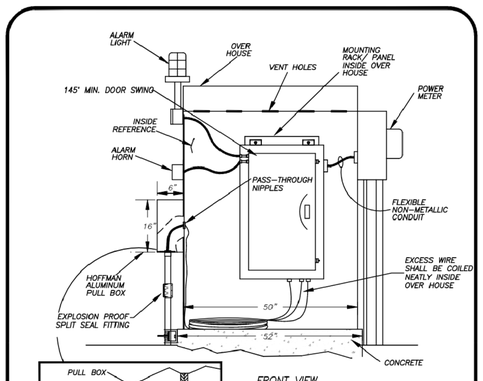
SHEET NO.
C-24




NOTES

1. MOTOR LEADS AND FLOAT LEADS SHALL BE CONTINUOUS THROUGH PULL BOX.
2. CABLES FROM PULL BOX TO CONTROL PANEL SHALL BE SEALED OFF WITH HUBBLE FITTINGS P-200KLBK (SEE DETAIL L-10.)
3. CAT NO. A-16P12AL (16" X 12" X 6"), LARGER ENCLOSER MAY BE REQUIRED.

| FPUA COMMUNITY PROUD | LIFT STATION PULL BOX | L-9 |
|---|---|---|
| 2015 DATE: / REVISION: / BY: / APPD: | | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JJM | COMPUTER FILE # LIFT STATION DETAILS200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: JJM | SCALE: N.T.S. | |
| APPROVED: JLC | DATE: DECEMBER 2007 | SHEET 1 OF 1 |

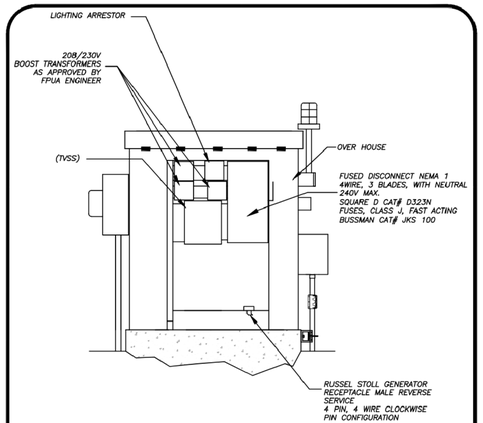



FRONT VIEW CONTROL BOX
N.T.S.

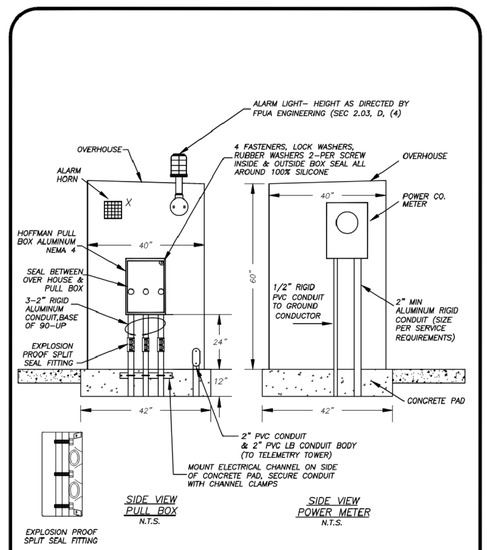
TYPICAL CONNECTIONS INSIDE DETAIL

PULL BOX MUST BE NEMA 4, CONDUIT WILL BE ALUMINUM, RIGID AND THREADED ENDS, CONNECTIONS FROM ELBOW TO BOTTOM OF PULL BOX, AS PER "NFPA 820 STANDARDS, CLASS1 DIVISION2, AND NEC, SECTION 501-4 UNDER EXCEPTION4.

| FPUA COMMUNITY PROUD | CONTROL PANEL / OVERHOUSE FRONT VIEW | L-10 |
|---|---|---|
| 2014 DATE: / REVISION: / BY: / APPD: | | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JLC | COMPUTER FILE # LIFT STATION DETAILS200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: JLC | SCALE: N.T.S. | |
| APPROVED: JLC | DATE: DECEMBER 2007 | SHEET 1 OF 1 |



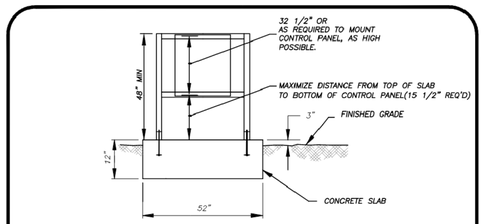

| FPUA COMMUNITY PROUD | CONTROL PANEL / OVERHOUSE REAR VIEW | L-11 |
|---|---|---|
| 2014 DATE: / REVISION: / BY: / APPD: | | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JLC | COMPUTER FILE # LIFT STATION DETAILS200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: SLL | SCALE: N.T.S. | |
| APPROVED: JLC | DATE: DECEMBER 2007 | SHEET 1 OF 1 |




SIDE VIEW PULL BOX
N.T.S.

SIDE VIEW POWER METER
N.T.S.

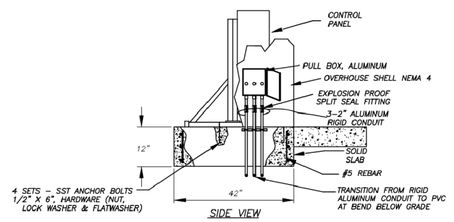
| FPUA COMMUNITY PROUD | LIFT STATION CONTROL PANEL OVERHOUSE SIDE VIEWS | L-12 |
|---|---|---|
| 2014 DATE: / REVISION: / BY: / APPD: | | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JLC | COMPUTER FILE # LIFT STATION DETAILS200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: SLL | SCALE: N.T.S. | |
| APPROVED: JLC | DATE: DECEMBER 2007 | SHEET 1 OF 1 |




RACK FRONT VIEW

NOTES:

1. ALL BOLTS, NUTS & WASHERS REQUIRED FOR ASSEMBLING FRAMING SHALL BE 316 STAINLESS STEEL
2. FRAMING SHALL BE 2" SQ. 5052 ALUMINUM TUBING.




SIDE VIEW

| FPUA COMMUNITY PROUD | LIFT STATION EQUIPMENT MOUNTING RACK | L-13 |
|---|---|---|
| 2014 DATE: / REVISION: / BY: / APPD: | | WATER/WASTEWATER ENGINEERING |
| DESIGNED: JLC | COMPUTER FILE # LIFT STATION DETAILS200602.DWG | FT. PIERCE UTILITIES AUTHORITY |
| DRAWN BY: SLL | SCALE: N.T.S. | |
| APPROVED: JLC | DATE: DECEMBER 2007 | SHEET 1 OF 1 |

PUMP DATA: MANUFACTURER, Barnes with 235mm Impeller
MOD. No. XESHMD IMP. No. 50N2 MOTOR, _____ HP, ____
RPM, _____ VOLTS, 230 PHASE, 60 HERTZ

OPERATING CONDITIONS: 208 GPM AT 75.2 TDH 32.7 % EFFICIENCY

AS-BUILT { PUMP NO. 1: _____ GPM AT _____ TDH.
PUMP NO. 2: _____ GPM AT _____ TDH.

WET WELL: SIZED FOR MINIMUM PUMP CYCLE TIME OF 5 MINUTES AND A MAXIMUM OF 12 PUMP STARTS PER HOUR, WORKING DEPTH 3 FT. WORKING VOLUME 951 GALS.

ELECTRICAL: FEEDERS AND CONDUIT _____ MAIN SWITCH _____ POLES _____ AMPS

REVISIONS

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WEBSITE: www.JHIinc.com
EMAIL: JHI@JHIinc.com

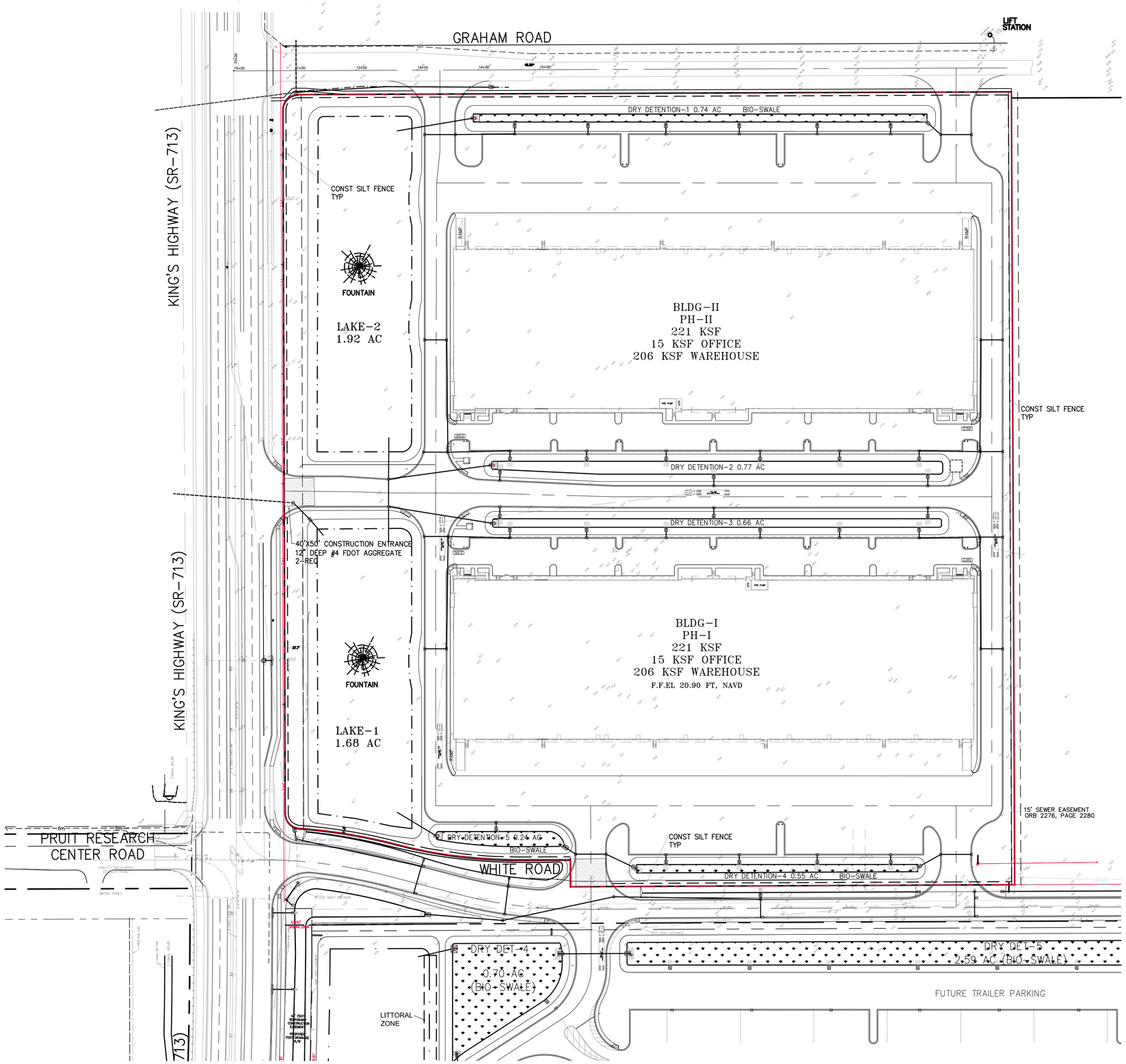
Kings Highway Commerce Center
Fort Pierce, Florida

LIFT STATION DETAILS

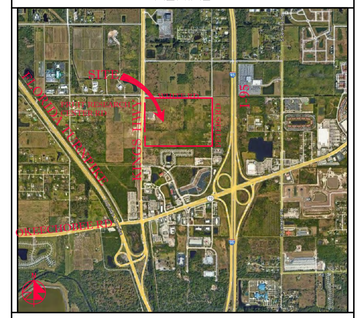
| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07/07/2022 | NA | JHI | CLJ | 2205-1402 |

SEAL

SHEET NO.
C-25




AERIAL



VICINITY MAP

SECTION 24, TWP 35S, RGE 39E

N

80' 0 40' 80' 160'

SCALE: 1" = 80'

NOTES:

1. SILT FENCE SHALL BE INSTALLED PRIOR TO START OF CONSTRUCTION.
2. FILTER FABRIC SHALL BE INSTALLED UNDER INLET GRATES IN CONSTRUCTION AREAS & SHALL BE MAINTAINED/REPLACED AS REQ'D. FABRIC SHALL NOT BE REMOVED UNTIL ALL DISTURBED AREAS HAVE BEEN RESTORED, CLEANED FREE OF SEDIMENTATION & SOD IS INSTALLED AS REQ'D.
3. MINIMUM 6" DEEP #1 FDOT AGGREGATE SHALL BE INSTALLED AT THE CONSTRUCTION ENTRANCE PRIOR TO START OF CONSTRUCTION.
4. CONTRACTOR SHALL STABILIZE / SEED & MULCH ANY DISTURBED AREA WITH NO WITH NO CONTRUCTION ACTIVITY IN 14 DAYS.
5. CONTRACTOR SHALL UTILIZE BEST MANAGEMENT PRACTICES FOR EROSION & SEDIMENTATION CONTROL PER FDEP GUIDELINE.
6. ALL LAKES SHALL BE EXCAVATED WET WITH NO DEWATERING.
7. ALL DEWATERING DISCHARGE SHALL BE KEPT ON SITE.

REVISIONS


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Fort Pierce, Florida

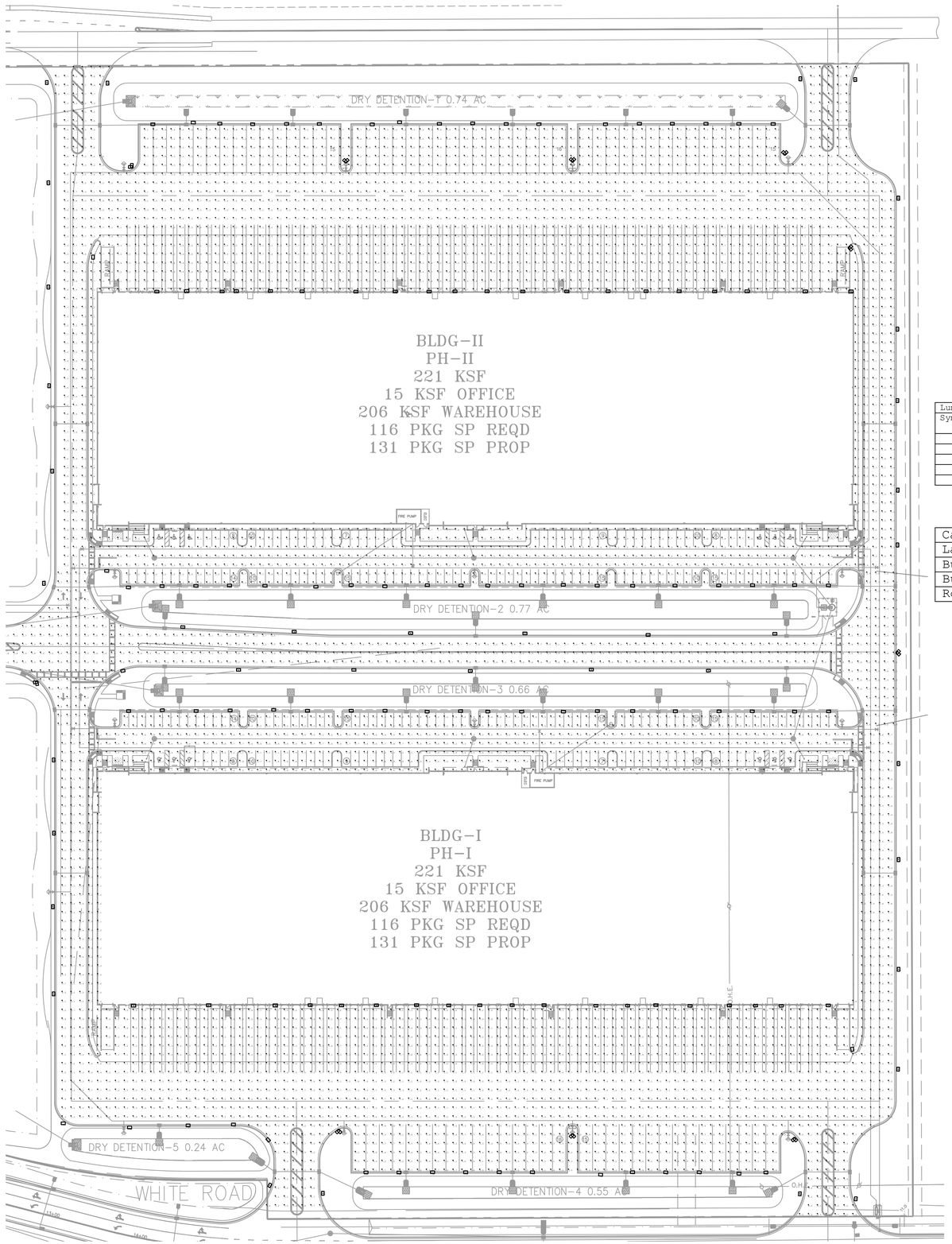
Pollution Prevention Plan

| DATE | SCALE | DESIGNED BY | DRAWN BY | JOB NO. |
|---|---|---|---|---|
| 07-07-22 | 1"=80' | JHI | DDI | 2205-1402 |

SEAL

SHEET NO.

C-26




1 PHOTOMETRIC PLAN
SCALE: 1/64" = 1'-0"

## ELECTRICAL SHEET INDEX


| | |
|---|---|
| E0.1 | PHOTOMETRIC PLAN |
| E0.2A | ENLARGED PHOTOMETRIC PLAN - BUILDING 2 |
| E0.2B | ENLARGED PHOTOMETRIC PLAN - BUILDING 2 |
| E0.3A | ENLARGED PHOTOMETRIC PLAN - BUILDING 1 |
| E0.3B | ENLARGED PHOTOMETRIC PLAN - BUILDING 1 |
| E0.4A | ENLARGED PHOTOMETRIC PLAN - ROADWAY |
| E0.4B | ENLARGED PHOTOMETRIC PLAN - ROADWAY |
| E1.1 | DATA SHEETS AND DETAILS |


## PHOTOMETRIC NOTES

1. SEE SHEETS E0.2A THROUGH E0.4B FOR ENLARGED PHOTOMETRIC VIEWS.

Luminaire Schedule

| Symbol | Qty | Label | Arrangement | Description | Tag | LLF | Luminaire Lumens | Luminaire Watts | Total Watts | Mounting Height |
|---|---|---|---|---|---|---|---|---|---|---|
| | 31 | GWC-SA2D-827-U-T4FT | Single | GWC-SA2D-827-U-T4FT | WP2 | 1.000 | 11975 | 128 | 3968 | 18 |
| | 39 | GLEON-SA4B-827-U-SL3 | Single | GLEON-SA4B-827-U-SL3 | SP3 | 1.000 | 16947 | 171 | 6669 | 25 |
| | 10 | GLEON-SA4A-827-U-T4FT | 2 @ 90 degrees | GLEON-SA4A-827-U-T4FT | SP2 | 1.000 | 13902 | 129 | 2580 | 25 |
| | 8 | GWC-SA2B-827-U-T4FT | Single | GWC-SA2B-827-U-T4FT | WP1 | 1.000 | 8820 | 85 | 680 | 18 |
| | 80 | GLEON-SA4A-827-U-T4FT | Single | GLEON-SA4A-827-U-T4FT | SP1 | 1.000 | 13902 | 129 | 10320 | 25 |

Calculation Summary

| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
|---|---|---|---|---|---|---|---|
| Building 1 | Illuminance | Fc | 2.90 | 8.3 | 1.0 | 2.90 | 8.30 |
| Building 2 | Illuminance | Fc | 3.09 | 8.2 | 1.0 | 3.09 | 8.20 |
| Roadway | Illuminance | Fc | 3.30 | 6.2 | 1.1 | 3.00 | 5.64 |

LEGACY
DEVELOPMENT PARTNERS


RGD
CONSULTING ENGINEERS
JUPITER | ORLANDO
561-743-0165 | 407-845-6630
WWW.RGDENGINEERS.COM

MEP ENGINEER: RGD CONSULTING ENGINEERS
2151 SOUTH HIGHWAY A1A ALT
SUITE 2000, JUPITER, FL 33477

CLIENT: COTLEUR & HEARING
1934 COMMERCE LANE, SUITE 1,
JUPITER, FL, 33458


DATE 7.25.2022

REVISIONS:

| NO. | DESCRIPTION | DATE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

KEY PLAN
AREA DESCRIPTION

N

PROJECT ADDRESS:
KING'S HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KING'S HIGHWAY
COMMERCE PARK PHASE
I

DATE: 07/25/22

RGD PROJ. NO: 22-1147

SCALE: AS SHOWN

DRAWN:

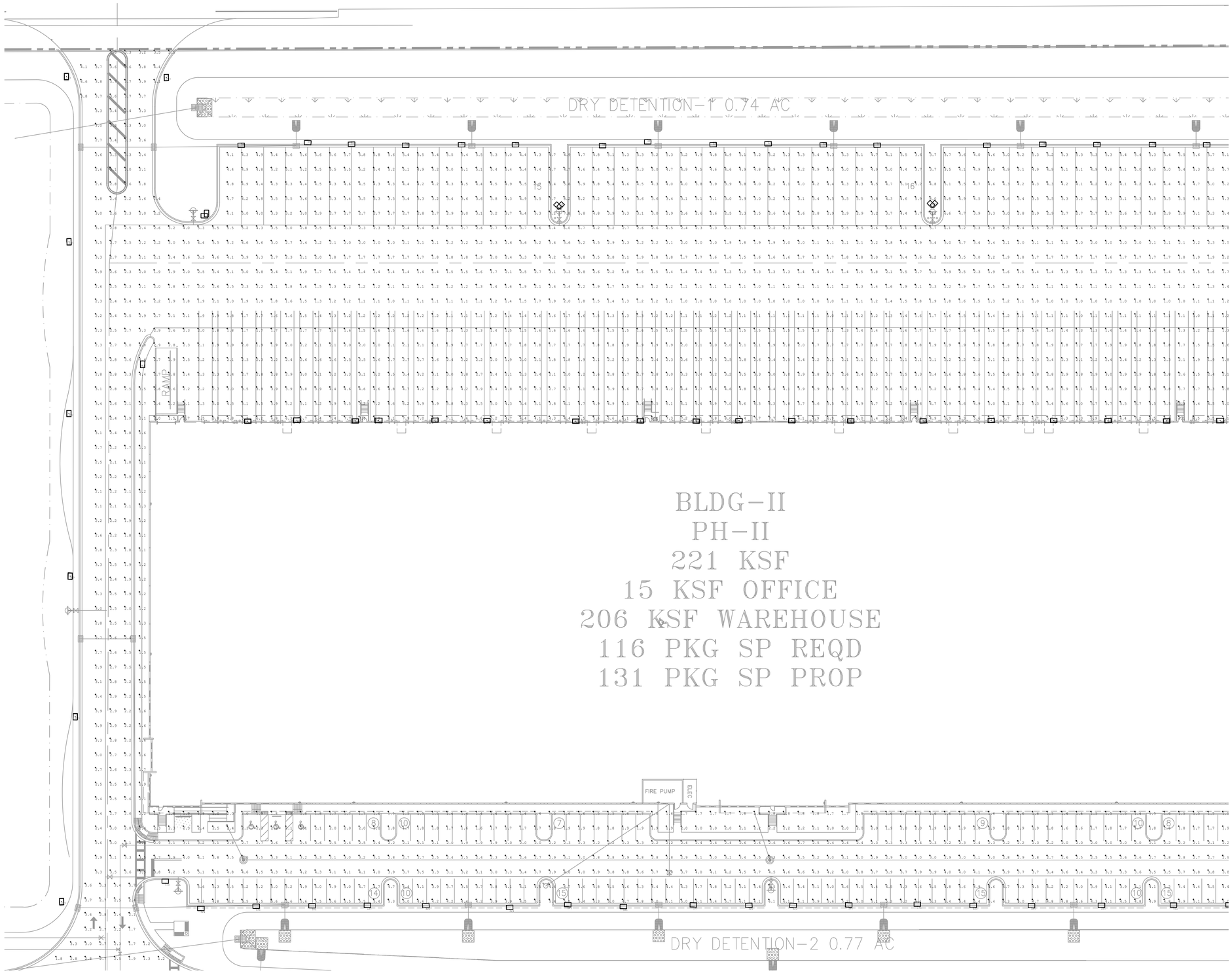
CHECKED:

SHEET NAME:
PHOTOMETRIC PLAN

SHEET NO.
E0.1

PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS


These Drawings are NOT VALID for any purpose which requires the original signature and seal of the engineer unless the original signature and seal are affixed. Drawings not signed and sealed by the engineer shall not be submitted to any authority or used for any purpose where signed and sealed documents are required.




1 ENLARGED PHOTOMETRIC PLAN - BUILDING 2
SCALE: 1/32" = 1'-0"

LEGACY
DEVELOPMENT PARTNERS

RGD
CONSULTING
ENGINEERS

JUPITER | ORLANDO
561-743-0165 | 407-845-6630
WWW.RGDENGINEERS.COM

MEP ENGINEER: RGD CONSULTING ENGINEERS
2151 SOUTH HIGHWAY A1A ALT
SUITE 2000, JUPITER, FL 33477

CLIENT: COTLEUR & HEARING
1934 COMMERCE LANE, SUITE 1,
JUPITER, FL, 33458

DATE 7.25.2022

REVISIONS:

| NO. | DESCRIPTION | DATE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

KEY PLAN
AREA DESCRIPTION

N

PROJECT ADDRESS:
KING'S HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
KING'S HIGHWAY
COMMERCE PARK PHASE
I

DATE: 07/25/22

RGD PROJ. NO: 22-1147

SCALE: AS SHOWN

DRAWN:

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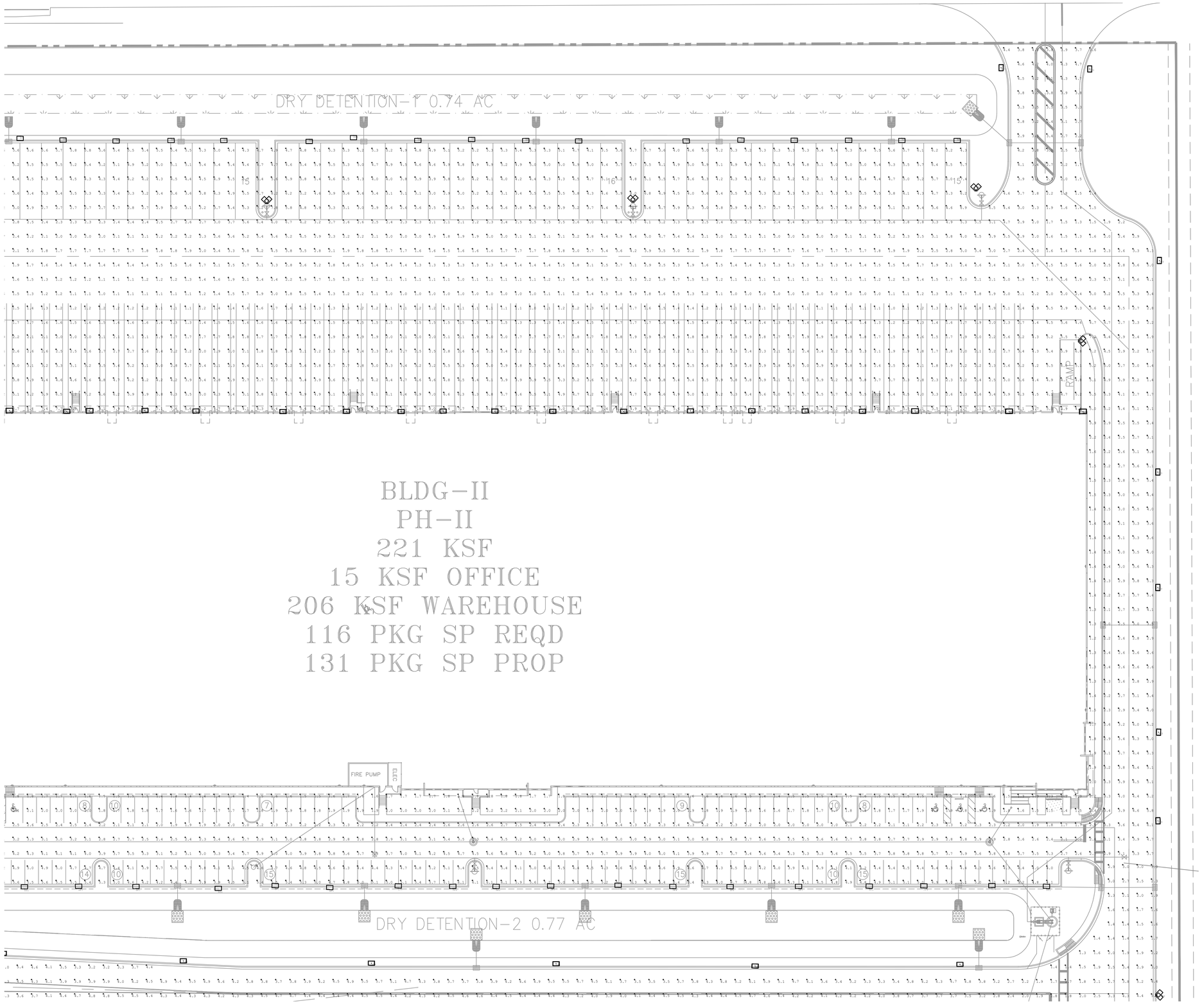
SHEET NAME:

ENLARGED PHOTOMETRIC PLAN - BUILDING 2

SHEET NO. E0.2A

PROJECT PHASE:
100% CONSTRUCTION DOCUMENTS

These Drawings are NOT VALID for any purpose which requires the original signature and seal of the engineer unless the original signature and seal are affixed. Drawings not signed and sealed by the engineer shall not be submitted to any authority or used for any purpose where signed and sealed documents are required.




1 ENLARGED PHOTOMETRIC PLAN - BUILDING 2
SCALE: 1/32" = 1'-0"

LEGACY
DEVELOPMENT PARTNERS

RGD
CONSULTING
ENGINEERS

JUPITER | ORLANDO
561-743-0165 | 407-845-6630
WWW.RGDENGINEERS.COM

MEP ENGINEER: RGD CONSULTING ENGINEERS
2151 SOUTH HIGHWAY A1A ALT
SUITE 2000, JUPITER, FL 33477

CLIENT: COTLEUR & HEARING
1934 COMMERCE LANE, SUITE 1,
JUPITER, FL, 33458

DATE 7.25.2022

REVISIONS:

| NO. | DESCRIPTION | DATE |
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KEY PLAN
AREA DESCRIPTION

N

PROJECT ADDRESS:
KING'S HIGHWAY COMMERCE PARK
FORT PIERCE, FLORIDA

PROJECT NAME:
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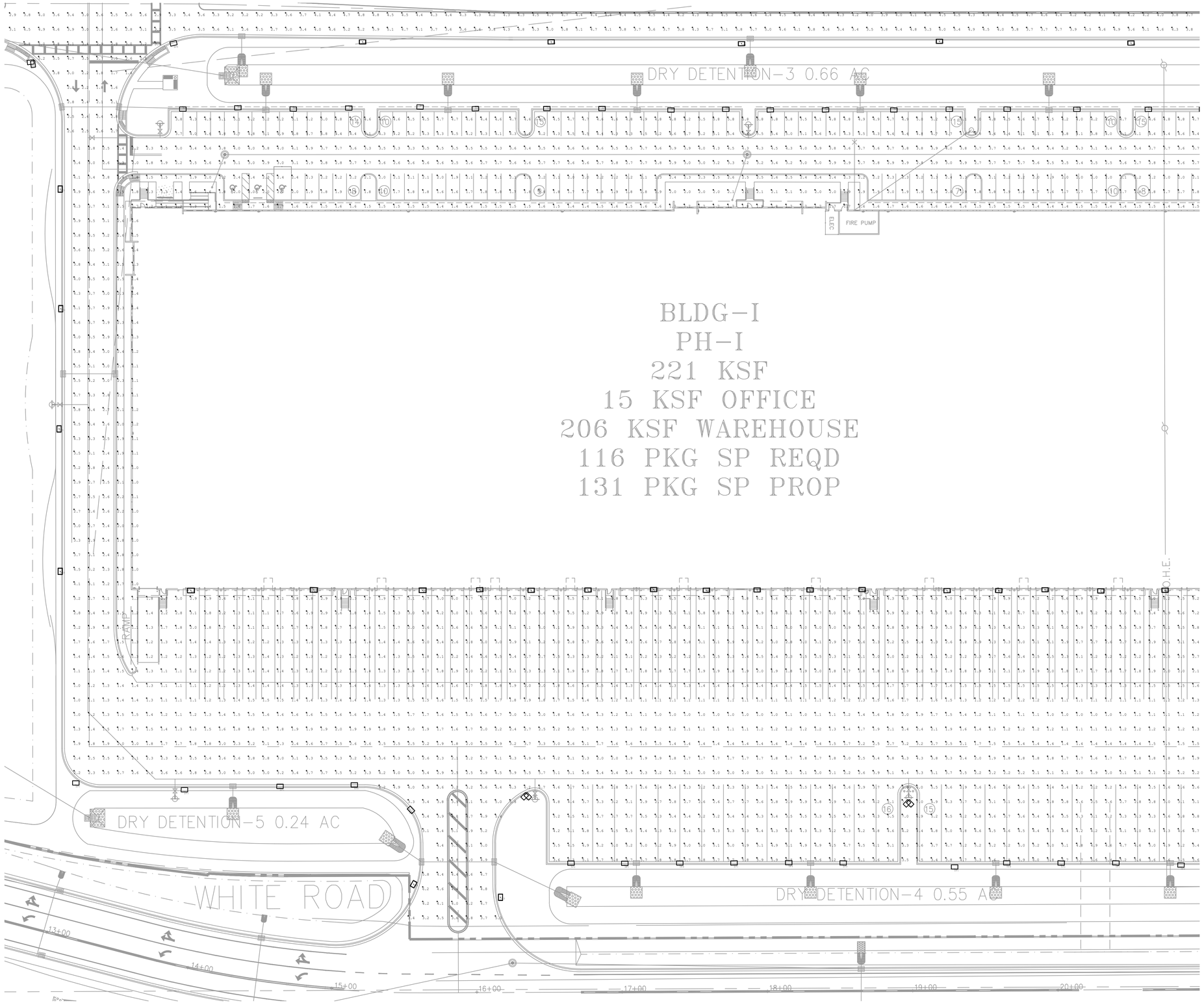
SHEET NAME:

ENLARGED PHOTOMETRIC PLAN - BUILDING 2

SHEET NO. E0.2B

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SCALE: 1/32" = 1'-0"

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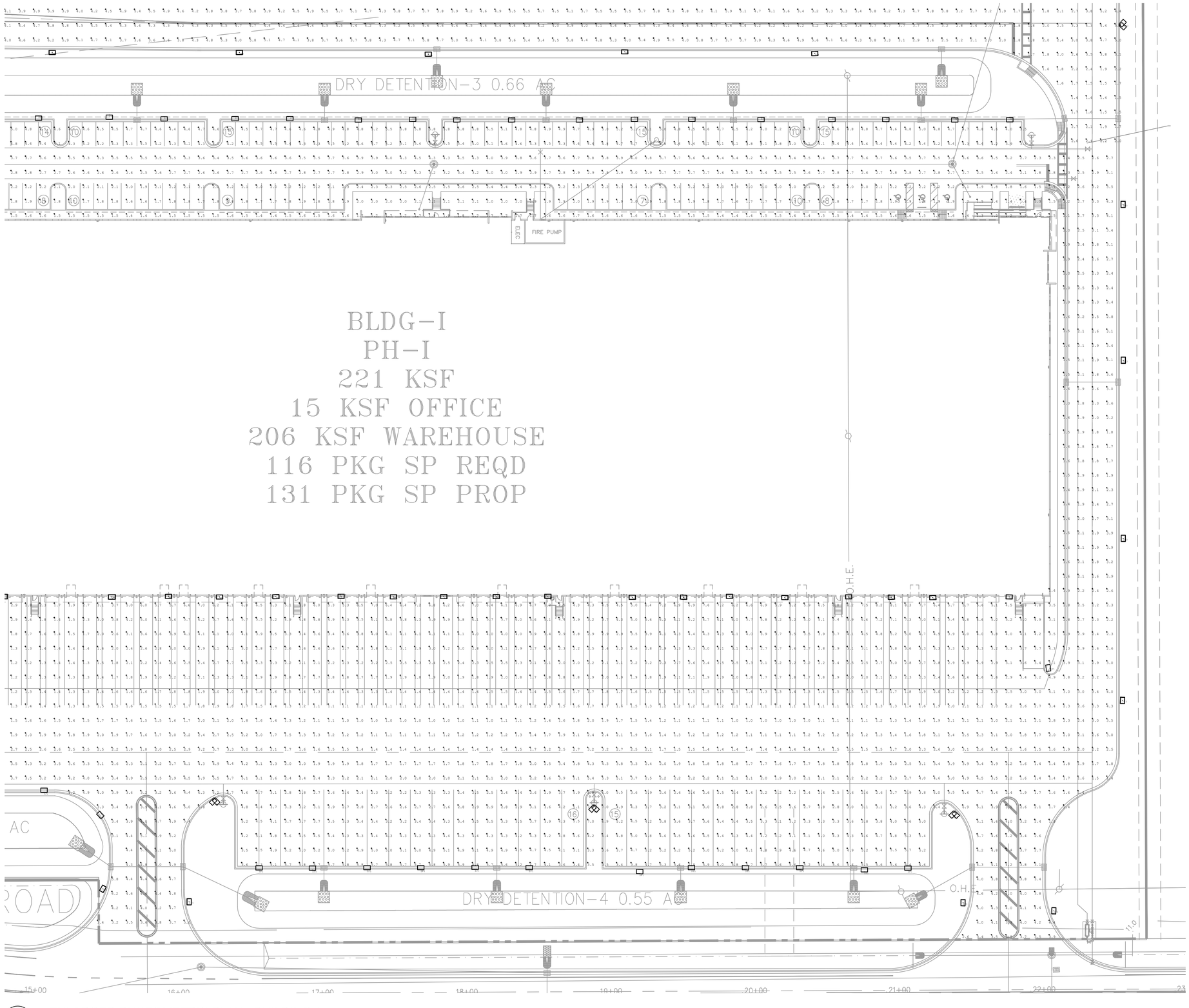
ENLARGED PHOTOMETRIC PLAN - BUILDING 1

SHEET NO. E0.3A

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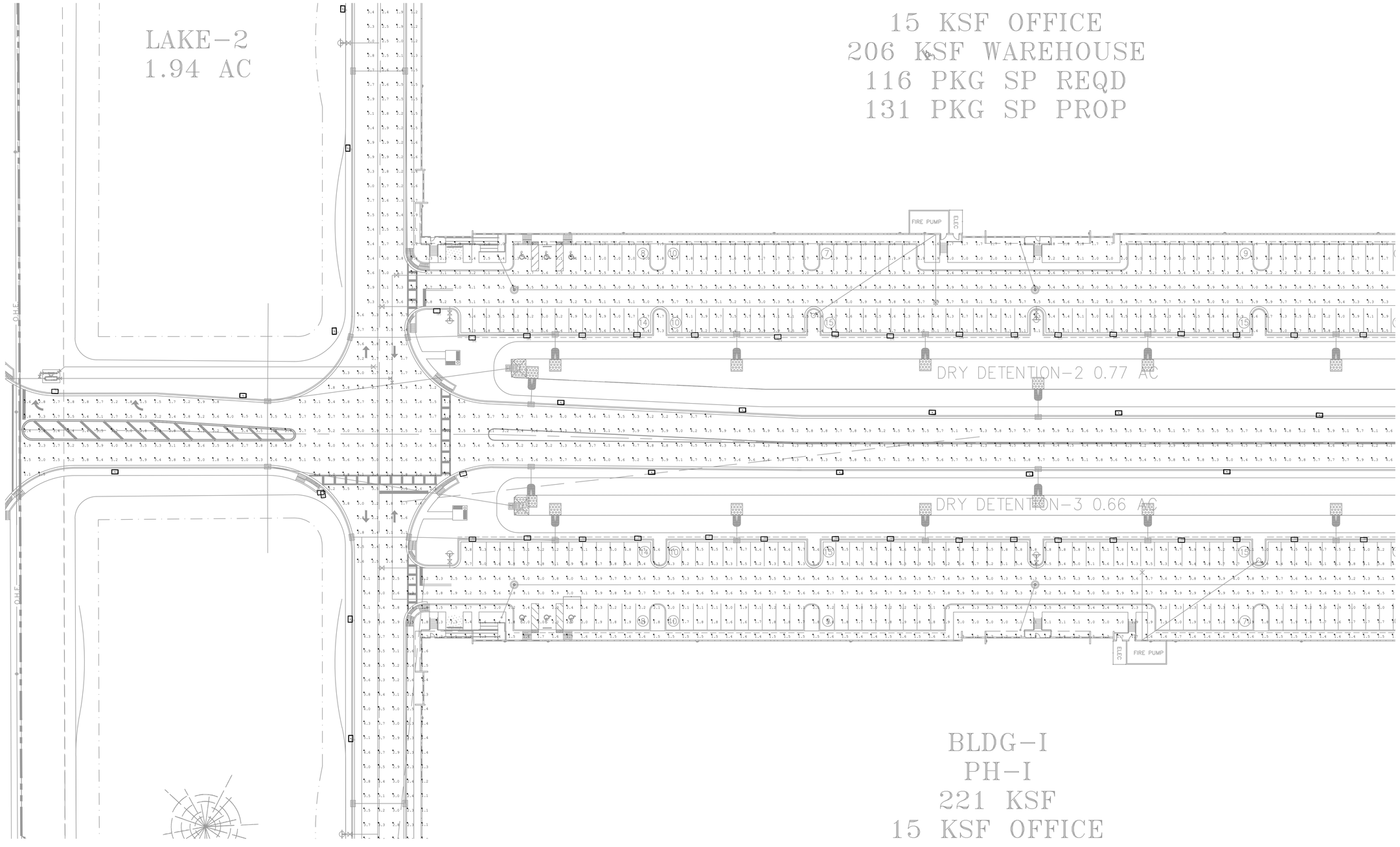
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1 ENLARGED PHOTOMETRIC PLAN - ROADWAY
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LEGACY DEVELOPMENT PARTNERS

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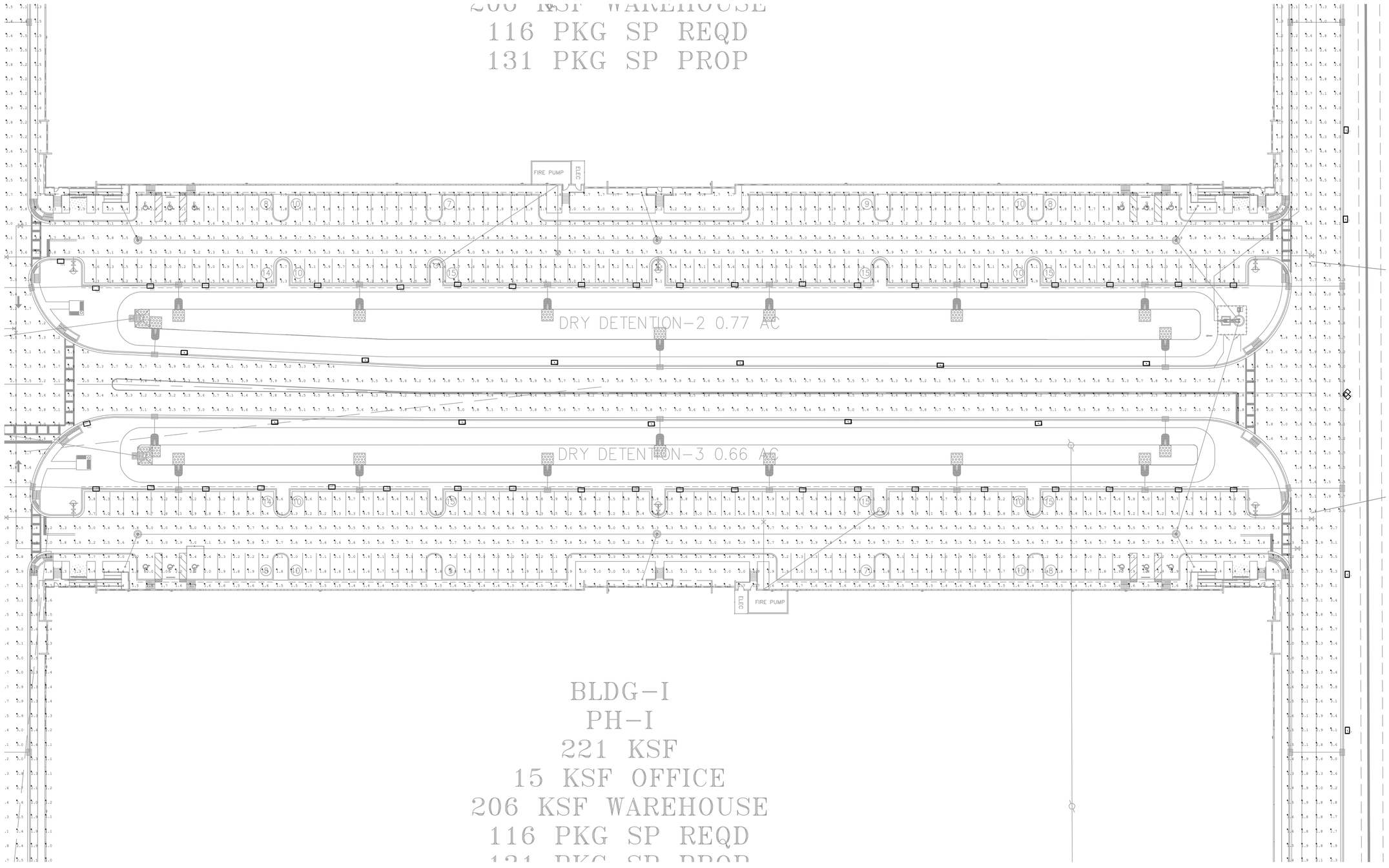
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SHEET NAME:
ENLARGED PHOTOMETRIC PLAN - ROADWAY

SHEET NO.
E0.4A

PROJECT PHASE:
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SCALE: AS SHOWN

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SHEET NO.
E0.4B

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| Project | | Catalog # | | Type | |
|---|---|---|---|---|---|
| Prepared by | | Notes | | Date | |



# McGraw-Edison

## GLEON Galleon

Area / Sure Luminaire

### Interactive Menu


- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 4
- Product Specifications page 4
- Energy and Performance Data page 4
- Control Options page 5


### Product Features

LumeGalle Technology · Light Motives™

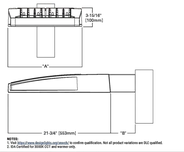
### Product Certifications

ETL · DLC · DLC · 3G VIB · IP66 · Outdoor · ARRA · BAA · 3YEAR

### Quick Facts

- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 lumens per watt
- Options to meet Buy American and other domestic preference requirements

### Dimensional Details




| Number of Light Squares | "A" Width | "B" Standard Arm Length | "B" Extended Arm Length | "B" Quick Mount Arm Length | "B" Two (2) Fixture Extended Arm Length |
|---|---|---|---|---|---|
| 1-4 | 13-1/2" | 7" | 10" | 10-5/8" | 16-9/16" |
| 5-6 | 21-5/8" | 7" | 10" | 10-5/8" | 16-9/16" |
| 7-8 | 27-5/8" | 7" | 13" | 10-5/8" | -- |
| 9-10 | 33-3/4" | 7" | 16" | -- | -- |

NOTES:
1. See http://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. Not Certified for 5000K CCT and warmer only.

### Connected Systems

- WaveLinx
- Enlighted

| Project | | Catalog # | | Type | |
|---|---|---|---|---|---|
| Prepared by | | Notes | | Date | |



# McGraw-Edison

## GWC Galleon Wall

Wall Mount Luminaire

### Interactive Menu


- Ordering Information page 2
- Product Specifications page 2
- Optical Configurations page 3
- Energy and Performance Data page 4
- Control Options page 5


### Product Features

Light Motives™

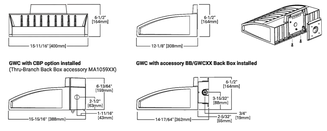
### Product Certifications

DLC · DLC · ETL · Outdoor · FC · IP66 · ARRA · 3YEAR · BAA

### Quick Facts

- Choice of thirteen high-efficiency, patented AccuLED Optics
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

### Dimensional Details




NOTES:
1. See http://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. Not Certified for 5000K CCT and warmer only.



# McGraw-Edison

## GLEON Galleon

### Ordering Information

SAMPLE NUMBER: **GLEON-SA4C-740-U-T4FT-GM**

| Product Family [1] | Light Engine Configuration | Light Engine Drive Current | Color Temperature | Voltage | Distribution | Mounting | Finish |
|---|---|---|---|---|---|---|---|
| **GLEON**=Galleon<br>**SA4**=Square Area, Type 4 Medium<br>Bug American Act Compliant [18]<br>**TAA**=Galleon Wall, Trade Agreements Act Compliant [18] | **SA1**=1 Square<br>**SA2**=2 Squares<br>**SA3**=3 Squares<br>**SA4**=4 Squares<br>**SA5**=5 Squares<br>**SA6**=6 Squares<br>**SA7**=7 Squares<br>**SA8**=8 Squares | **A**=350mA<br>**B**=530mA<br>**C**=700mA<br>**D**=1050mA | **730**=7030K 730CRI<br>**727**=7027K 270CRI<br>**740**=7040K 400CRI<br>**735**=7035K 350CRI<br>**730**=7030K 300CRI<br>**740**=7040K 400CRI<br>**730**=7030K 300CRI<br>**740**=7040K 400CRI<br>**735**=7035K 350CRI<br>**AMB**=Amber, 590nm [14] | **A**=120-277V<br>**H**=120V<br>**I**=208V<br>**J**=240V<br>**K**=277V<br>**L**=347V [14]<br>**M**=480V [14]<br>**N**=347V [14]<br>**R**=UNIV [2]<br>**W**=277-480V DuroVolt<br>Universal [14] | **T1**=Type II<br>**T2M**=Type II Roadway<br>**T3**=Type III<br>**T3M**=Type III Roadway<br>**T4FT**=Type IV Forward Throw<br>**T4W**=Type IV Wide<br>**T5**=Type V Round<br>**T5W**=Type V Square Medium<br>**T5VS**=Type V Square Wide<br>**BLC**=Type 4 w/Split Control<br>**BLC**=Type 4 w/Split Control<br>**VLC**=Type V w/Split Control<br>**BLC-RF**=Split Light Eliminator Left<br>**VLC-RF**=Split Light Eliminator Left<br>**RR**=Rectangular Wide Type I<br>**AFL**=Automotive Flexible | **SWall**=Arm for Round or Square Pole<br>**EA**=Extended Arm [3]<br>**MA**=Mast Arm Adapter [4]<br>**QA**=Quick Mount Arm<br>**QM**=Quick Mount Arm (Standard Length) [5]<br>**QMEA**=Quick Mount Arm (Extended Length) [5] | **AP**=Grey<br>**BZ**=Bronze<br>**BK**=Black<br>**DP**=Dark Platinum<br>**GM**=Graphite Metallic<br>**WH**=White<br>**SALSE**=Custom Color |

| System (Add as Suffix) | Controls and Systems Options (Add as Suffix) | Accessories (Order Separately) [17] |
|---|---|---|
| **SWB**=External 0-10V Dimming Leads [6,16]<br>**FAO**=Single Fused (120, 277 or 347V, Must Specify Voltage)<br>**FF**=Double Fused (208, 240 or 480V, Must Specify Voltage)<br>**SWJ**=Series 2W-V, 1kW Surge Protective Device<br>**SPD**=Twistlock Photocontrol Receptacle<br>**Adv-SCT**=High Ambient<br>**HSS**=Installed House Side Shield [8]<br>**LCCE**=Factory Installed Clear Shield, Black [8]<br>**LSSBK**=Factory Installed Glare Shield, Black [8]<br>**LPI**=Uplight Housing [9]<br>**LPIP**=Uplight Housing [9]<br>**LDT**=Light Square Trim Painted to Match Housing [9]<br>**MT**=Factory Installed Mast Top<br>**CC**=Cold Climate Operation [10]<br>**CE-CC**=Marking and Small Terminal Block [6]<br>**A4R140**=After Hours Dim, 0 Hours [6]<br>**A4R340**=After Hours Dim, 3 Hours [6]<br>**A4R350**=After Hours Dim, 5 Hours [6]<br>**A4R360**=After Hours Dim, 6 Hours [6]<br>**DALI**=DALI Driver | **BPC**=Button Type Photocontrol<br>**PER**=NEMA 7-Pin Twistlock Photocontrol Receptacle<br>**PE7**=NEMA 7-PIN Photocontrol Receptacle [6]<br>**SPE3**=Dimming Occupancy Sensor with Bluetooth Interface, 8'- 20' Mounting [6,16]<br>**SPE4**=Dimming Occupancy Sensor with Bluetooth Interface, 8'- 20' Mounting [6,16]<br>**MS-L20**=Motion Sensor for ON/OFF Operation, 7'- 20' Mounting Height [6]<br>**MS-L40**=Motion Sensor for ON/OFF Operation, 21'- 40' Mounting Height [6]<br>**MSDIM-L20**=Motion Sensor for Dimming Operation, 7'- 20' Mounting Height [6]<br>**MSDIM-L30**=Motion Sensor for Dimming Operation, 21'- 40' Mounting Height [6]<br>**SPE**=Wireless Occupancy Sensor with Bluetooth Interface, 21'- 40' Mounting Height [6]<br>**CM**=WaveLinx Module and 4-PIN Receptacle<br>**ZM**=WaveLinx Module with DALI driver and 4-PIN Receptacle<br>**SWPE**=WaveLinx Sensor Only, 7'-20' [6,16]<br>**SWPEDIM**=WaveLinx Sensor Only, 7'-20' [6,16]<br>**WSE03**=WaveLinx Sensor with Bluetooth, 7'-12' [6,16]<br>**WSE04**=WaveLinx Sensor with Bluetooth, 13'-20' [6,16]<br>**L20-LW**=Enlighted Wireless Sensor, Wide Lens for 7'-15' Mounting Height [6,16]<br>**L40-LW**=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height [6,16]<br>**SWE10-SELDIM-L20**=Occupancy Sensor (7'-20' Mounting) [6]<br>**SWE10-SELDIM-L40**=Occupancy Sensor (21'-40' Mounting) [6] | **GA-SA1016**=Photocontrol Shorting Cap<br>**GA-SA1018**=NEMA Photocontrol - 347V<br>**GA-SA1020**=NEMA Photocontrol - 480V<br>**GA-SA1013**=Photocontrol Shorting Cap<br>**GA-SA1014**=NEMA Photocontrol<br>**MA1222**=Shirt Tail Arm Mounting Adapter<br>**MA1026-XD**=Single Tenon Adapter for 2-3/8" O.D. Tenon<br>**MA1027-XD**=Single Tenon Adapter for 2-7/8" O.D. Tenon<br>**MA1101-XD**=(2)180° Tenon Adapter for 2-3/8" O.D. Tenon<br>**MA1108-XD**=(4)90° Tenon Adapter for 2-3/8" O.D. Tenon<br>**MA1109-XD**=(3)120° Tenon Adapter for 2-3/8" O.D. Tenon<br>**MA1188-XD**=(2)180° Tenon Adapter for 2-3/8" O.D. Tenon<br>**MA1191-XD**=(2)180° Tenon Adapter for 2-3/8" O.D. Tenon<br>**MA1028-XD**=(4)90° Tenon Adapter for 2-3/8" O.D. Tenon<br>**MA1029-XD**=(3)120° Tenon Adapter for 2-3/8" O.D. Tenon<br>**MA1102-XD**=(2)180° Tenon Adapter for 2-7/8" O.D. Tenon<br>**MA1103-XD**=(4)90° Tenon Adapter for 2-7/8" O.D. Tenon<br>**MA1104-XD**=(3)120° Tenon Adapter for 2-7/8" O.D. Tenon<br>**MA1192-XD**=(2)180° Tenon Adapter for 2-7/8" O.D. Tenon<br>**MA1193-XD**=(4)90° Tenon Adapter for 2-7/8" O.D. Tenon<br>**SLEEK-MT1**=Field Installed Mast Top for 4-6 Light Square<br>**SLEEK-MT2**=Field Installed Mast Top for 6-8 Light Square<br>**SLEEK-MT3**=Field Installed Mast Top for 8-10 Light Square<br>**SLEEK-MT4**=Field Installed Mast Top for 9-12 Light Square<br>**SLEEK-QM**=Quick Mount Arm Kit [5]<br>**LSSEA**=Field Installed Extended Arm Kit [3]<br>**LSSHS**=Field Installed House Side Shield [8]<br>**LSVSBBM**=Bare Reducing Shield, Black [8]<br>**LSVSBBW**=Bare Reducing Shield, White [8]<br>**LSPFS**=Perforated Shield, Black [8]<br>**MSLS-3P-15A**=WaveLinx Outdoor Control Module [6,16]<br>**SWPDE-XD**=Wireless Wireless Sensor, 7'- 20' Mounting Height [6,16,18,19]<br>**SWPDE-XD**=Wireless Wireless Sensor, 21'-40' Mounting Height [6,16,18,19] |

NOTES:
1. Luminaire is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to Energy and Performance Data for pole mounting recommendations.
2. Distinguishes Generation7 Qualified. Refer to www.designlights.org Qualified Products List under Family Models for qualified models.
3. Exceeds conservative field spec wiring tested to meet 0.6T5 fixture per ASTM B1211, with a safe-working of 9 per ASTM D4923. Not available with 7th light.
4. Not available with 1 square, 2 squares, 7 squares, or 8 squares.
5. Not compatible with standard quick mount arm (QM) or extended quick mount arm (QMEA).
6. Requires the use of an external relay (been transformer when controlled with sensor options. Not available with 120V, 277V, 347V, 480V, or 347V/480V. Not available with SPD, SWJ, SCT, HSS, LSSBK, LSSBBM, or LSSBBW. 0-10V must be used with approved sensors. Maximum powered sensors.
7. Not available with 1 square, 2 squares, 3 squares, 4 squares, 5 squares, 6 squares, 7 squares, 8 squares, or Three Phase Corner Ensemble (wire systems.)
8. Not available with 1 square, 2 squares, or 3 squares.
9. Not compatible with standard quick mount arm (QM) or extended quick mount arm (QMEA).
10. Requires the use of SPD photocontrol or the PE7 or PI photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for more information.
11. The YSN-100 configuration tool is required to adjust parameters such as light level and fine-tuning, sensitivity, time delay and cutoff. Consult your lighting representative at Cooper Lighting Solutions for more information.
12. Includes integral photocontrol.
13. Includes integral photocontrol.
14. Enlighted wireless sensors are factory installed requiring network components in
15. Not available with HSS or LSS options.
16. Not for use with SWJ, SWE, SWEz or PER options. The light square trim plate is painted black when the HSS option is selected.
17. Not available with 1 square, 2 squares, 3 squares, 4 squares, 5 squares, 6 squares, 7 squares, 8 squares, or Three Phase Corner Ensemble (wire systems.)
18. See http://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
19. Not Certified for 5000K CCT and warmer only.
20. Not available with 1 square, 2 squares, 3 squares, 4 squares, 5 squares, 6 squares, 7 squares, 8 squares, or Three Phase Corner Ensemble (wire systems.)
21. Not available with HSS or SWS options.
22. Not for use with SWJ, SWE, SWEz or PER options. The light square trim plate is painted black when the HSS option is selected.
23. Not available with 1 square, 2 squares, 3 squares, 4 squares, 5 squares, 6 squares, 7 squares, 8 squares, or Three Phase Corner Ensemble (wire systems.)
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### LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

| Product Family | Camera Type | Data Backhaul |
|---|---|---|
| **L**=LumenSafe Technology | **R**=Standard Dome Camera<br>**P**=Pan/Tilt/Zoom<br>**O**=Remote PTZ Camera | **C**=Cellular, No SIM<br>**A**=Cellular, AT&T<br>**V**=Cellular, Verizon<br>**S**=Cellular, Sprint | **R**=Cellular, Rogers<br>**M**=Microwave Backhaul<br>**E**=Ethernet Networking |



# McGraw-Edison

## GWC Galleon Wall

### Ordering Information

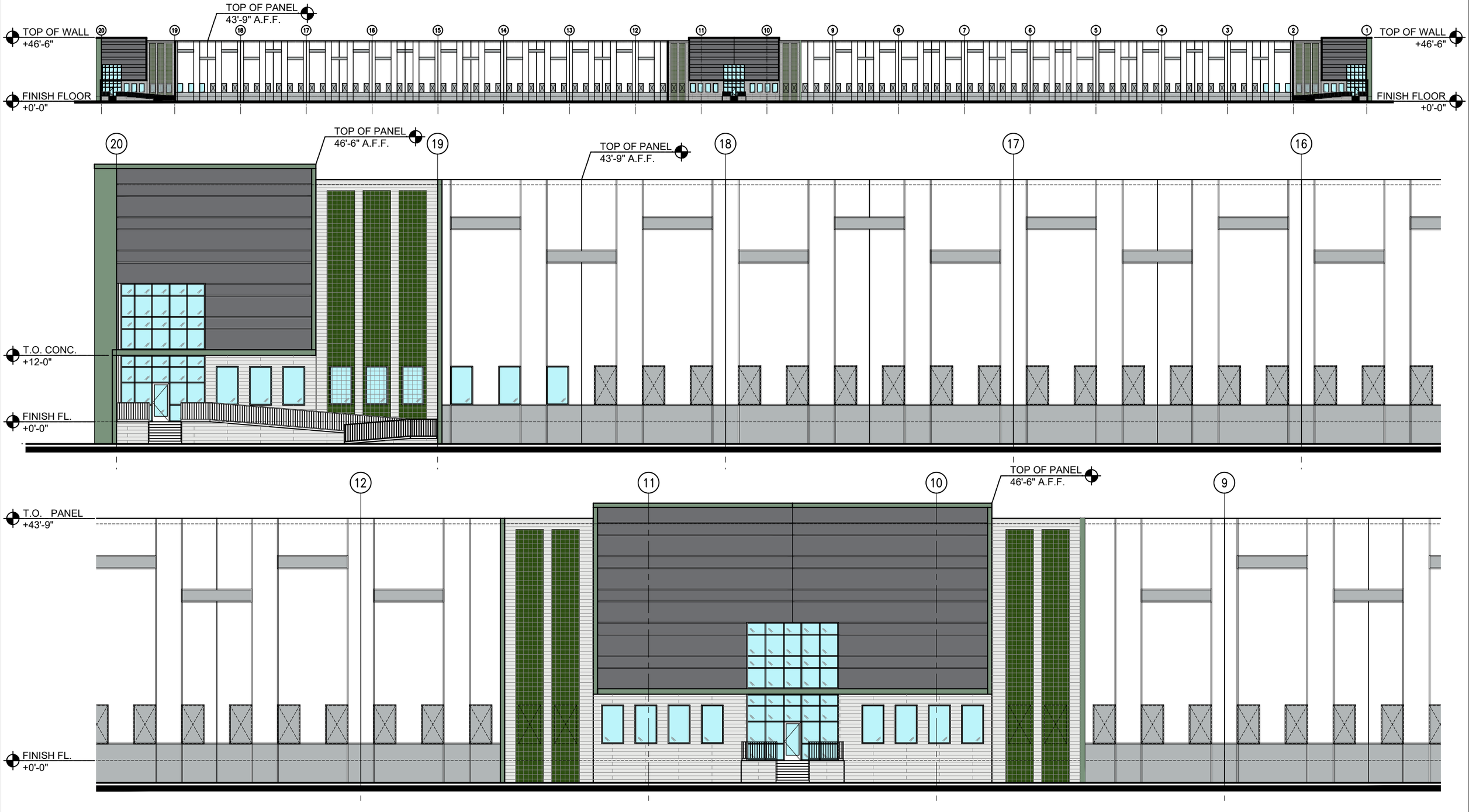
SAMPLE NUMBER: **GWC-SA2C-740-U-T4FT-GM**

| Product Family [1] | Light Engine Configuration | Light Engine Drive Current | Color Temperature | Voltage | Distribution | Finish |
|---|---|---|---|---|---|---|
| **GWC**=Galleon Wall<br>**SA4**=GWC-Galleon Wall, Buy American Act Compliant [18]<br>**TAA**=GWC-Galleon Wall, Trade Agreements Act Compliant [18] | **SA1**=1 Square<br>**SA2**=2 Squares [1] | **A**=415mA<br>**B**=530mA<br>**C**=700mA<br>**D**=1050mA [1] | **730**=7030K 730CRI<br>**727**=7027K 270CRI<br>**740**=7040K 400CRI<br>**735**=7035K 350CRI<br>**730**=7030K 300CRI<br>**740**=7040K 400CRI<br>**735**=7035K 350CRI<br>**730**=7030K 300CRI<br>**AMB**=Amber, 590nm [14] | **A**=120-277V<br>**H**=120V<br>**I**=208V<br>**J**=240V<br>**K**=277V<br>**R**=UNIV [2]<br>**W**=277-480V DuroVolt<br>Universal [14] | **T2**=Type II<br>**T3**=Type III<br>**T4FT**=Type IV Forward Throw<br>**T4W**=Type IV Wide<br>**BLC**=Type 4 w/Split Control<br>**VLC**=Type V w/Split Control<br>**BLC-RF**=Split Light Eliminator Right<br>**VLC-RF**=Split Light Eliminator Left<br>**RR**=Rectangular Wide Type I<br>**T5**=Type V Round<br>**T5W**=Type V Square Medium<br>**T5VS**=Type V Square Wide | **AP**=Grey<br>**BZ**=Bronze<br>**BK**=Black<br>**DP**=Dark Platinum<br>**GM**=Graphite Metallic<br>**WH**=White |

| Options (Add as Suffix) | Controls and Systems Options (Add as Suffix) | Accessories (Order Separately) [17] |
|---|---|---|
| **F**=Single Fused (120, 277 or 347V, Must Specify Voltage)<br>**FF**=Double Fused (208, 240 or 480V, Must Specify Voltage)<br>**SWJ**=Series 2W-V, 1kW Surge Protective Device<br>**SCT**=Adv-Circuit Light Engine [6]<br>**SWB**=External 0-10V Dimming Leads [6,16]<br>**CBP**=Conduit Box Plate with Back Box, Weather Gasket, [6,16]<br>**CBP-SQB**=Battery Pack with Back Box, Cold Weather Gasket, [6,16]<br>**BB**=Shipped with Back Box Accessory [6]<br>**LSBK**=Factory Painted Black [8]<br>**LSBBW**=Factory Painted White [8]<br>**HSS**=Factory Installed House Side Shield [8]<br>**LCCE**=Factory Installed Clear Shield, Black [8]<br>**LSSBK**=Factory Installed Glare Shield, Black [8]<br>**LPI**=Uplight Housing [9]<br>**LPIP**=Uplight Housing [9]<br>**LDT**=Light Square Trim Painted to Match Housing [9]<br>**MT**=Factory Installed Mast Top<br>**CC**=Cold Climate Operation [10]<br>**CE-CC**=Marking and Small Terminal Block [6]<br>**A4R140**=After Hours Dim, 0 Hours [6]<br>**A4R340**=After Hours Dim, 3 Hours [6]<br>**A4R350**=After Hours Dim, 5 Hours [6]<br>**A4R360**=After Hours Dim, 6 Hours [6]<br>**DALI**=DALI Driver | **BPC**=Button Type Photocontrol [16]<br>**PER**=NEMA 7-Pin Twistlock Photocontrol Receptacle [16]<br>**PE7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [16]<br>**PI**=Photocontrol Receptacle [6,16]<br>**SPE4**=Dimming Occupancy Sensor with Bluetooth Interface, 8'- 20' Mounting [6,16]<br>**SPE4**=Dimming Occupancy Sensor with Bluetooth Interface, 8'- 20' Mounting [6,16]<br>**SPE4**=Dimming Occupancy Sensor with Bluetooth Interface, 21'- 40' Mounting [6,16]<br>**MS-L20**=Motion Sensor for ON/OFF Operation, 7'- 20' Mounting Height [6]<br>**MS-L40**=Motion Sensor for ON/OFF Operation, 21'- 40' Mounting Height [6]<br>**MSDIM-L20**=Motion Sensor for Dimming Operation, 7'- 20' Mounting Height [6]<br>**MSDIM-L30**=Motion Sensor for Dimming Operation, 21'- 40' Mounting Height [6]<br>**CM**=WaveLinx Module and 4-PIN Receptacle [6]<br>**ZM**=WaveLinx Module with DALI driver and 4-PIN Receptacle [6]<br>**SWPEDIM**=WaveLinx Sensor Only, 7'-20' [6,16]<br>**SWPEDIM**=WaveLinx Sensor Only, 7'-20' [6,16]<br>**WSE03**=WaveLinx Sensor with Bluetooth, 7'-12' [6,16]<br>**WSE04**=WaveLinx Sensor with Bluetooth, 13'-20' [6,16]<br>**L20-LW**=Enlighted Wireless Sensor, Wide Lens for 7'-15' Mounting Height [6,16]<br>**L40-LW**=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height [6,16] | **GA-SA1015**=Photocontrol Shorting Cap<br>**GA-SA1016**=NEMA Photocontrol - 347V<br>**GA-SA1018**=NEMA Photocontrol - 480V<br>**GA-SA1027**=NEMA Photocontrol - 480V<br>**MA1222**=Shirt Tail Arm Mounting Adapter<br>**MA1010XD**=Fits Kichler® Back Box (Must Specify Color)<br>**BBGWCKX**=Back Box (Must Specify Color)<br>**LSSBBM**=Bare Shield, Black [8]<br>**LSSBBW**=Bare Shield, White [8]<br>**LSSSBM**=Glare Shield, Black [8]<br>**LSSSBW**=Glare Shield, White [8]<br>**FSR-100**=Wireless Configuration Tool for Occupancy Sensor [6]<br>**WSLC-TP-15A**=WaveLinx Outdoor Control Module [7] [20]<br>**SWPDE-XD**=Wireless Wireless Sensor, 7'- 20' Mounting Height [6,16,18,19]<br>**SWPDE-XD**=Wireless Wireless Sensor, 21'-40' Mounting Height [6,16,18,19] |

NOTES:
1. Swedge Light Concentrator® Qualified. Refer to www.designlights.org, Qualified Products List under Family Models for details.
2. Two light square fixture is not available with 347V, 480V not available in combination with sensor options or 1000mA.
3. Not available with 1 square, 2 squares, 3 squares, 4 squares, 5 squares, 6 squares, 7 squares, 8 squares, or Three Phase Corner Ensemble (wire systems.)
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14


LINCOLN BROWN ILLUSTRATION




0' 8' 16'

SCALE:1/16"=16'

# KINGS HIGHWAY COMMERCE PARK

## BUILDING A

JUNE 06, 2022

FT. PIERCE, FLORIDA

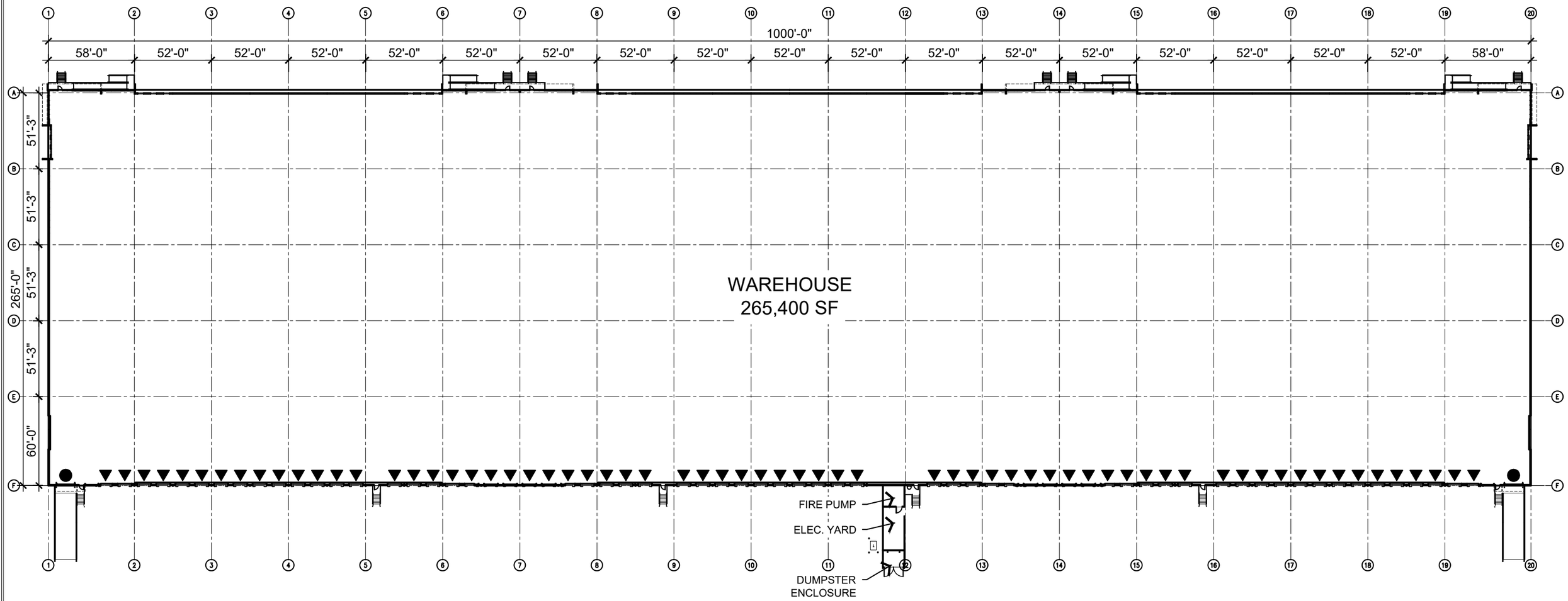
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JOINT VENTURE OF:

SCANNELL PROPERTIES

LEGACY DEVELOPMENT PARTNERS

C4 ARCHITECTURE




OVERALL FLOOR PLAN

North

0' 40' 80'

SCALE:1"=80'-0"

# KINGS HIGHWAY COMMERCE PARK

## BUILDING A

JANUARY 28, 2022

FT. PIERCE, FLORIDA

21384

JOINT VENTURE OF:

SCANNELL PROPERTIES

LEGACY DEVELOPMENT PARTNERS

C4 ARCHITECTURE

O'ROURKE
ENGINEERING & PLANNING

# TRAFFIC ANALYSIS

**FOR**

**Kings Highway Commerce Center**
**Concurrency**

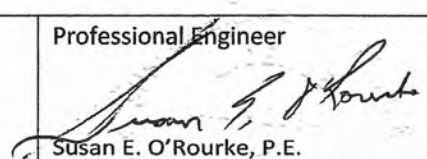
**Prepared for:**

**Mr. Ken Morin**
**JA Development Partners, LLC**
**4923 W. Cypress St.**
**Tampa, FL 33607**

**Prepared by:**

**O'Rourke Engineering & Planning**
**22 SE Seminole Street**
**Stuart, Florida 34994**
**772-781-7918**

**June 22, 2022**
**SR22061.0**

| | |
|---|---|
| Prepared by:<br>O'Rourke Engineering & Planning<br>Certificate of Authorization: #26869<br>22 SE Seminole Street<br>Stuart, Florida 34994<br>772-781-7918 | Professional Engineer<br>  <br>Susan E. O'Rourke, P.E.<br>Date signed and sealed: 6/22/2022<br>License #: 42684 |

O'ROURKE
ENGINEERING & PLANNING

June 22, 2022

Mr. Ken Morin
JA Development Partners, LLC
4923 W. Cypress St.
Tampa, FL 33607

**Re: Kings Highway Commerce Center**

Dear Mr. Morin:

O'Rourke Engineering & Planning has completed the analysis of the proposed development located east of Kings Highway and north of White Road in Ft. Pierce, St. Lucie County, Florida. The steps in the analysis and the ensuing results are presented herein.

It has been a pleasure working with you. If you have any questions or comments, please give me a call.

Respectfully submitted,

**O'Rourke Engineering & Planning**

Susan E. O'Rourke, P.E.
Registered Civil Engineer

*Concurrency Report – Kings Highway and White Road 6.22.2022*

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## APPENDICES


APPENDIX A: Site Plan
APPENDIX B: St. Lucie County 2021 Level of Service Report and FDOT 2020 Quality Level of Service
APPENDIX C: Other Project Data/Growth Rate/Historical AADT
APPENDIX D: Intersection Analysis

## INTRODUCTION

O'Rourke Engineering & Planning was retained to prepare a traffic analysis for the proposed 442,000 square feet development consisting of warehousing and office located east of Kings Highway and south of White Road in Ft. Pierce, St. Lucie County, Florida. The purpose of this report is to determine the projects impact on the surrounding roadway system.

In order to make the determination that the project complies with County Concurrency Guidelines, the following analytical steps were taken:

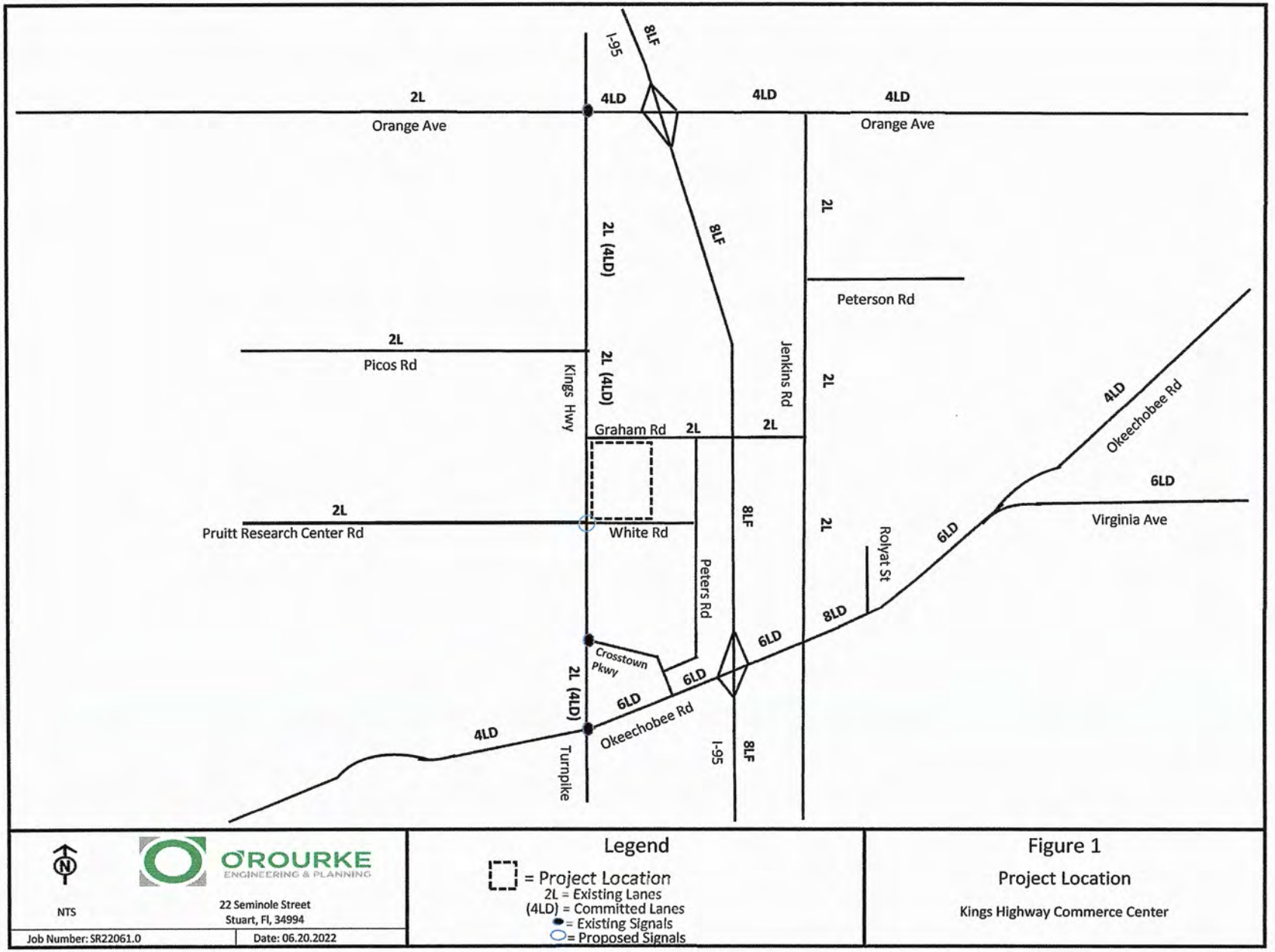
- summary of the project
- summary of existing lane geometries
- summary of the existing traffic volumes
- assessment of project traffic
- determination of impact area
- summary of buildout cumulative traffic volumes
- summary of levels of service with the project traffic added

Each of these steps is outlined herein.

## PROJECT DESCRIPTION

The proposed development located east of Kings Highway and south of White Road in Ft. Pierce, St. Lucie County, Florida, will consist of 412,000 square feet of warehouse and 30,000 square feet of office. The site is currently vacant. The project location is shown in **Figure 1**. The traffic study is based on the current site plan.

**Appendix A** includes the project site plan.


I-95
8LF
2L
4LD
4LD
4LD
Orange Ave
Orange Ave
2L (4LD)
8LF
2L
Peterson Rd
2L
Picos Rd
2L (4LD)
Kings Hwy
Jenkins Rd
2L
4LD
Okeechobee Rd
Graham Rd
2L
2L
6LD
2L
Pruitt Research Center Rd
White Rd
8LF
2L
Roiyat St
6LD
Virginia Ave
Peters Rd
8LD
Crosstown Pkwy
6LD
6LD
2L (4LD)
6LD
Okeechobee Rd
4LD
Turnpike
I-95
8LF
NTS
O'ROURKE
ENGINEERING & PLANNING
22 Seminole Street
Stuart, Fl, 34994
Job Number: SR22061.0
Date: 06.20.2022
Legend
= Project Location
2L = Existing Lanes
(4LD) = Committed Lanes
= Existing Signals
= Proposed Signals
Figure 1
Project Location
Kings Highway Commerce Center

## EXISTING CONDITIONS

The study area is defined as the roadways upon which the project has an impact of 3% of the level of service capacity of the roadway and 1% on the adjacent link. Once the project traffic was assigned, the study area was refined based on the impact percentages.

The study area roadways were defined in terms of existing lane geometrics and existing traffic volumes.

### Existing/Proposed Lane Geometrics and Traffic Control

The study area was reviewed to determine the existing number and type of lanes, and the traffic control along the roadway. Each roadway is described below.

- Peters Road is a two-lane local road with a general north/south alignment.
- S. Jenkins Road is a two-lane arterial with a north/south alignment.
- Graham Road is a two-lane local roadway with an east/west alignment.
- Okeechobee Road is a multi-lane divided arterial roadway with an east/west alignment. It is four-lane divided west of Kings Highway and east of Virginia Avenue. It is six-lane divided from Rolyat Street to Virginia Avenue and from Kings Highway to I-95. There is an eight-lane divided section from east of I-95 to Rolyat Street. There are numerous extended turn lanes and freeway auxiliary lanes.
- Orange Avenue is a four-lane divided arterial with an east/ west alignment.
- Kings Highway is a two-lane arterial with a north/south alignment and is under construction in portions and included in the 5-year TIP to be widened to a four-lane divided roadway.

### Existing Traffic Volumes/ Service Volume

Traffic volumes were obtained from the St. Lucie County TPO and FDOT. The count data along with the number of lanes and the associated peak hour/peak direction service volumes will be summarized in the upcoming sections of the report. The service volumes were developed based on the functional classification contained in the County Comprehensive Plan and the St. Lucie County Traffic Counts and Level of Service Report. The 2020 FDOT Quality Level of Service and St. Lucie TPO 2021 Level of Service Report were used to establish capacity. These documents are included in **Appendix B.**

## PROJECT TRAFFIC

To estimate future traffic generated by the development, the ITE Trip Generation, 11th Edition trip rates for Warehouse (Land Use Code 150) and Office (Land Use Code 710) were applied to estimate the trips generated by the proposed development as it is currently site planned. These calculations are shown in **Tables 1a, 1b, and 1c**.

As shown, the project will generate 1,027 new daily trips. There will be 125 AM peak hour trips with 101 entering the project and 24 trips exiting the project. The project will generate 114 new PM peak hour trips. There will be 27 trips entering the project and 87 trips exiting the project in the PM peak hour.

## Table 1 - Trip Generation - White Parcel

**Table 1a: Daily**

| Land Use | ITE Code | Intensity | Units | Trip Generation Rate | Directional Split | | Net New Trips | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | In | Out | In | Out | Total |
| General Office | 710 | 30,000 | Sft | Ln(T) = 0.97Ln(X) + 2.50 | 50% | 50% | 165 | 165 | 330 |
| Warehousing | 150 | 412,000 | Sft | T = 1.58(X) + 45.54 | 50% | 50% | 349 | 348 | 697 |
| **TOTALS** | | | | | | | **514** | **513** | **1,027** |

**Source: ITE 10th Edition Trip Generation Rates**

**Table 1b: AM Peak Hour**

| Land Use | ITE Code | Intensity | Units | Trip Generation Rate | Directional Split | | Net New Trips | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | In | Out | In | Out | Total |
| General Office | 710 | 30,000 | Sft | T = 0.94(X) + 26.49 | 86% | 14% | 47 | 8 | 55 |
| Warehousing | 150 | 412,000 | Sft | T = 0.17(X) | 77% | 23% | 54 | 16 | 70 |
| **TOTALS** | | | | | | | **101** | **24** | **125** |

**Source: ITE 10th Edition Trip Generation Rates**

**Table 1c: PM Peak Hour**

| Land Use | ITE Code | Intensity | Units | Trip Generation Rate | Directional Split | | Net New Trips | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | In | Out | In | Out | Total |
| General Office | 710 | 30,000 | Sft | Ln(T) = 0.95Ln(X) + 0.36 | 16% | 84% | 6 | 30 | 36 |
| Warehousing | 150 | 412,000 | Sft | T = 0.19(X) | 27% | 73% | 21 | 57 | 78 |
| **TOTALS** | | | | | | | **27** | **87** | **114** |

**Source: ITE 10th Edition Trip Generation Rates**

## PROJECT DISTRIBUTION/ ASSIGNMENT/IMPACT

The project traffic was distributed by general geographic direction and then assigned to the roadway network.

**Distribution/ Assignment** – This general distribution led to an assignment of trips based on the anticipated ultimate destinations and the roadway paths used to reach those destinations. The project assignment is shown in **Figure 2.**

**Impact – Tables 2a and 2b** summarize the project impact as a percent of service volume capacity. Significant is defined as 1% or more on an adjacent link and 3% or more on all other links. As shown, the project is significant on several links.

## OTHER PROJECT TRAFFIC/GROWTH RATE

Existing traffic volumes were grown using a 4-year area wide historical growth rate of 2.25%. Other project data includes committed traffic from Creekside, Bent Creek, Celebration Pointe, Whispering Oaks, St. Lucie Commerce Center, Walsh Crossroads, Project Hurricane, Project Hunt, Wawa Kingsgate, Stonemont, and Kings Highway Warehouse. These projects plus a reduced growth rate of 1.5% were applied to estimate background traffic.

Details of the background traffic and growth rate are included in **Appendix C.**

## LINK ANALYSIS / REVIEW

The project is significant on several links, these links were analyzed further to ensure they will meet concurrency. **Table 3a and 3b** summarizes the results of the link analysis. As shown, all roadways will operate at acceptable levels of service at project buildout.

## INTERSECTION ANALYSIS/SIGNAL WARRANT

The intersection of White Road at Kings Highway was analyzed for the AM and PM peak hours using HCS for signalized intersections. As part of the Kings Highway widening project, Research Center Road and White Road will be aligned. The FDOT has approved a signal when warranted through Kings Highway Commerce Park. The intersection will operate at a level of service B in the AM peak hour and LOS D in the PM peak hour at project build out as a signalized intersection.

The intersection data are included in **Appendix D.** The LOS results are included in the next section of the report.

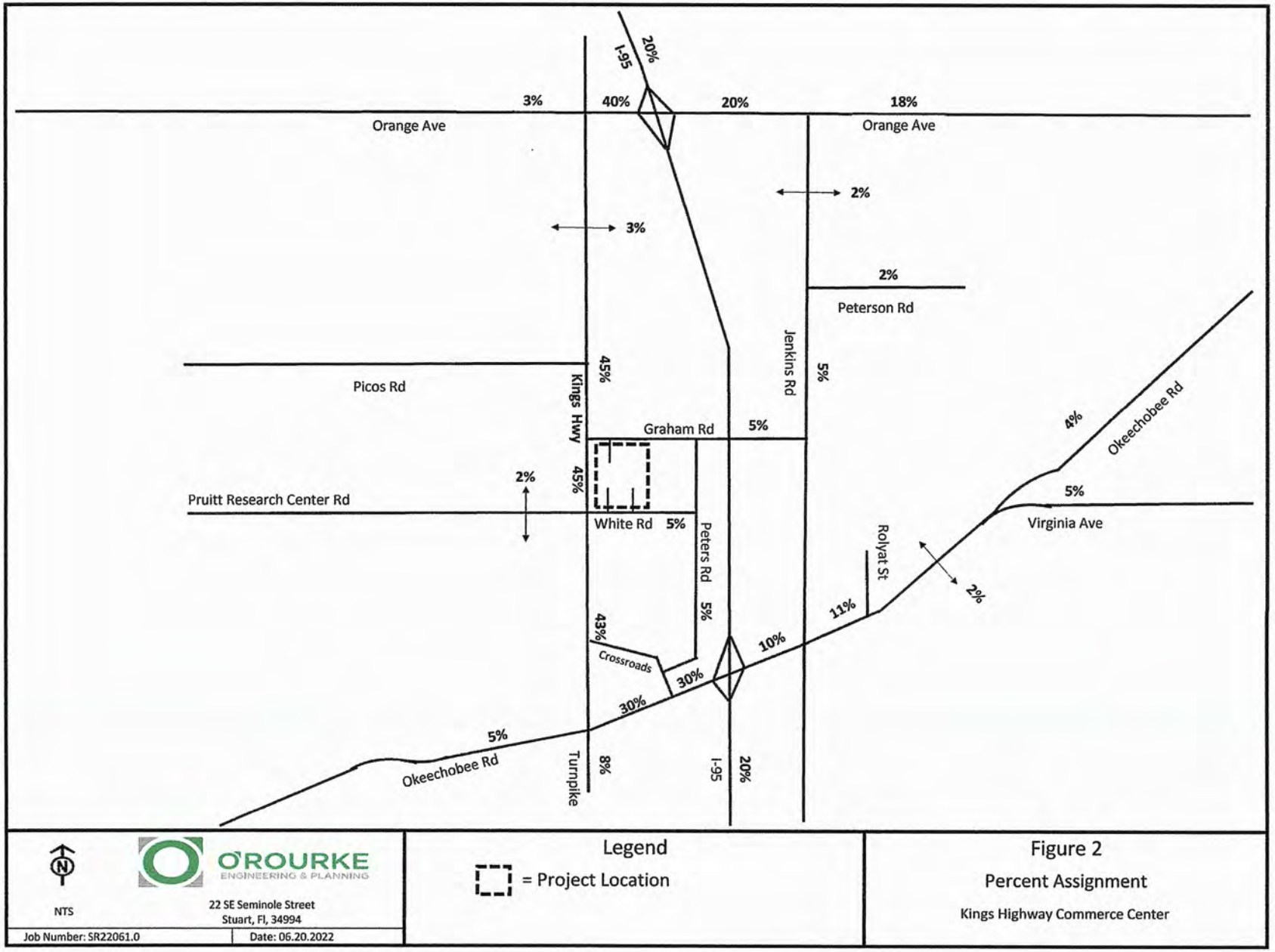

I-95
20%
3%
40%
20%
18%
Orange Ave
Orange Ave
2%
3%
2%
Peterson Rd
Jenkins Rd
5%
Picos Rd
45%
Kings Hwy
Graham Rd
5%
4%
Okeechobee Rd
2%
45%
Pruitt Research Center Rd
White Rd
5%
Peters Rd
5%
Virginia Ave
Rolyat St
11%
2%
43%
Crossroads
30%
10%
30%
5%
Okeechobee Rd
Turnpike
8%
I-95
20%
NTS
O'ROURKE
ENGINEERING & PLANNING
22 SE Seminole Street
Stuart, Fl, 34994
Job Number: SR22061.0
Date: 06.20.2022
Legend
= Project Location
Figure 2
Percent Assignment
Kings Highway Commerce Center

TABLE 2a - Project Percent Impact - AM

| Segment | From | To | Direction | IN/OUT | Greater than 3% (1% on Adjacent Links) [2] | Peak Hour Service Capacity (E+C) [1] | Project Volume Peak Direction | % Project of Capacity-Peak Hour | Project Percent Assignment |
|---|---|---|---|---|---|---|---|---|---|
| Peters Rd | Crossroads Pkwy | White Rd | NB | IN | NO | 920 | 5 | 0.54% | 5% |
| | Crossroads Pkwy | White Rd | SB | OUT | NO | 920 | 1 | 0.11% | 5% |
| | White Rd | Graham Rd | NB | OUT | NO | 920 | 1 | 0.11% | 5% |
| | White Rd | Graham Rd | SB | IN | NO | 920 | 5 | 0.54% | 5% |
| Kings Hwy | Okeechobee Rd | Crossroads Pkwy | NB | IN | NO | 1800 | 45 | 2.50% | 45% |
| | Okeechobee Rd | Crossroads Pkwy | SB | OUT | NO | 1800 | 11 | 0.61% | 45% |
| | Crossroads Pkwy | Graham Rd | NB | IN | YES | 1800 | 45 | 2.50% | 45% |
| | Crossroads Pkwy | Graham Rd | SB | OUT | NO | 1800 | 11 | 0.61% | 45% |
| | Graham Rd | Picos Rd | NB | OUT | NO | 1800 | 8 | 0.44% | 35% |
| | Graham Rd | Picos Rd | SB | IN | NO | 1800 | 35 | 1.94% | 35% |
| | Picos Rd | Orange Ave | NB | OUT | NO | 1800 | 8 | 0.44% | 32% |
| | Picos Rd | Orange Ave | SB | IN | NO | 1800 | 32 | 1.78% | 32% |
| Graham Rd | Kings Hwy | Jenkins Rd | EB | OUT | NO | 630 | 11 | 1.75% | 45% |
| | Kings Hwy | Jenkins Rd | WB | IN | YES | 630 | 45 | 7.14% | 45% |
| Virginia Ave | Okeechobee Rd | Hartman Rd | EB | OUT | NO | 3020 | 2 | 0.07% | 10% |
| | Okeechobee Rd | Hartman Rd | WB | IN | NO | 3020 | 10 | 0.33% | 10% |
| Orange Ave | Jenkins Rd | Hartman Rd | EB | OUT | NO | 2100 | 6 | 0.29% | 25% |
| | Jenkins Rd | Hartman Rd | WB | IN | NO | 2100 | 25 | 1.19% | 25% |
| | I-95 | Jenkins Rd | EB | IN | NO | 2100 | 20 | 0.95% | 20% |
| | I-95 | Jenkins Rd | WB | OUT | NO | 2100 | 5 | 0.24% | 20% |
| | Kings Hwy | I - 95 | EB | OUT | NO | 2100 | 7 | 0.33% | 30% |
| | Kings Hwy | I - 95 | WB | IN | NO | 2100 | 30 | 1.43% | 30% |
| | Campbell Rd | Kings Hwy | EB | IN | NO | 1070 | 2 | 0.19% | 2% |
| | Campbell Rd | Kings Hwy | WB | OUT | NO | 1070 | 0 | 0.00% | 2% |
| Jenkins Rd | Graham Rd | Peterson Rd | NB | OUT | NO | 630 | 2 | 0.32% | 10% |
| | Graham Rd | Peterson Rd | SB | IN | NO | 630 | 10 | 1.59% | 10% |
| | Peterson Rd | Orange Ave | NB | OUT | NO | 920 | 2 | 0.22% | 10% |
| | Peterson Rd | Orange Ave | SB | IN | NO | 920 | 10 | 1.09% | 10% |
| Okeechobee Rd | McCarty Rd | Florida Turnpike | EB | IN | NO | 3240 | 5 | 0.15% | 5% |
| | McCarty Rd | Florida Turnpike | WB | OUT | NO | 3240 | 1 | 0.03% | 5% |
| | Florida Turnpike | Kings Hwy | EB | IN | NO | 2100 | 5 | 0.24% | 5% |
| | Florida Turnpike | Kings Hwy | WB | OUT | NO | 2100 | 1 | 0.05% | 5% |
| | Kings Hwy | I - 95 | EB | OUT | NO | 4240 | 10 | 0.24% | 40% |
| | Kings Hwy | I - 95 | WB | IN | NO | 4240 | 40 | 0.94% | 40% |
| | I - 95 | Jenkins Rd | EB | OUT | NO | 4240 | 5 | 0.12% | 20% |
| | I - 95 | Jenkins Rd | WB | IN | NO | 4240 | 20 | 0.47% | 20% |
| | Jenkins Rd | McNeil Ave | EB | OUT | NO | 4040 | 5 | 0.12% | 20% |
| | Jenkins Rd | McNeil Ave | WB | IN | NO | 4040 | 20 | 0.50% | 20% |
| I-95 | Midway Rd | Okeechobee Rd | NB | IN | NO | 5500 | 20 | 0.36% | 20% |
| | Midway Rd | Okeechobee Rd | SB | OUT | NO | 5500 | 5 | 0.09% | 20% |
| | Orange Ave | Indrio Rd | NB | OUT | NO | 7320 | 2 | 0.03% | 10% |
| | Orange Ave | Indrio Rd | SB | IN | NO | 7320 | 10 | 0.14% | 10% |

(1) FDOT 2020 Service Capacity Tables & St. Lucie TPO

(2) According to the Guidelines prepared by the TPO and modified by the City and County

Two-Way: 125
Net In: 101
Net Out: 24

TABLE 2b - Project Percent Impact - PM

| Segment | From | To | Direction | IN/OUT | Greater than 3% (1% on Adjacent Links) [2] | Peak Hour Service Capacity (E+C) [1] | Project Volume Peak Direction | % Project of Capacity-Peak Hour | Project Percent Assignment |
|---|---|---|---|---|---|---|---|---|---|
| Peters Rd | Crossroads Pkwy | White Rd | NB | IN | NO | 920 | 1 | 0.11% | 5% |
| | Crossroads Pkwy | White Rd | SB | OUT | NO | 920 | 4 | 0.43% | 5% |
| | White Rd | Graham Rd | NB | OUT | NO | 920 | 4 | 0.43% | 5% |
| | White Rd | Graham Rd | SB | IN | NO | 920 | 1 | 0.11% | 5% |
| Kings Hwy | Okeechobee Rd | Crossroads Pkwy | NB | IN | NO | 1800 | 12 | 0.67% | 45% |
| | Okeechobee Rd | Crossroads Pkwy | SB | OUT | NO | 1800 | 39 | 2.17% | 45% |
| | Crossroads Pkwy | Graham Rd | NB | IN | NO | 1800 | 12 | 0.67% | 45% |
| | Crossroads Pkwy | Graham Rd | SB | OUT | YES | 1800 | 39 | 2.17% | 45% |
| | Graham Rd | Picos Rd | NB | OUT | NO | 1800 | 30 | 1.67% | 35% |
| | Graham Rd | Picos Rd | SB | IN | NO | 1800 | 9 | 0.50% | 35% |
| | Picos Rd | Orange Ave | NB | OUT | NO | 1800 | 28 | 1.56% | 32% |
| | Picos Rd | Orange Ave | SB | IN | NO | 1800 | 9 | 0.50% | 32% |
| Graham Rd | Kings Hwy | Jenkins Rd | EB | OUT | YES | 630 | 39 | 6.19% | 45% |
| | Kings Hwy | Jenkins Rd | WB | IN | NO | 630 | 12 | 1.90% | 45% |
| Virginia Ave | Okeechobee Rd | Hartman Rd | EB | OUT | NO | 3020 | 9 | 0.30% | 10% |
| | Okeechobee Rd | Hartman Rd | WB | IN | NO | 3020 | 3 | 0.10% | 10% |
| Orange Ave | Jenkins Rd | Hartman Rd | EB | OUT | NO | 2100 | 22 | 1.05% | 25% |
| | Jenkins Rd | Hartman Rd | WB | IN | NO | 2100 | 7 | 0.33% | 25% |
| | I-95 | Jenkins Rd | EB | OUT | NO | 2100 | 17 | 0.81% | 20% |
| | I-95 | Jenkins Rd | WB | IN | NO | 2100 | 5 | 0.24% | 20% |
| | Kings Hwy | I - 95 | EB | OUT | NO | 2100 | 26 | 1.24% | 30% |
| | Kings Hwy | I - 95 | WB | IN | NO | 2100 | 8 | 0.38% | 30% |
| | Campbell Rd | Kings Hwy | EB | IN | NO | 1070 | 1 | 0.09% | 2% |
| | Campbell Rd | Kings Hwy | WB | OUT | NO | 1070 | 2 | 0.19% | 2% |
| Jenkins Rd | Graham Rd | Peterson Rd | NB | OUT | NO | 630 | 9 | 1.43% | 10% |
| | Graham Rd | Peterson Rd | SB | IN | NO | 630 | 3 | 0.48% | 10% |
| | Peterson Rd | Orange Ave | NB | OUT | NO | 920 | 9 | 0.98% | 10% |
| | Peterson Rd | Orange Ave | SB | IN | NO | 920 | 3 | 0.33% | 10% |
| Okeechobee Rd | McCarty Rd | Florida Turnpike | EB | IN | NO | 3240 | 1 | 0.03% | 5% |
| | McCarty Rd | Florida Turnpike | WB | OUT | NO | 3240 | 4 | 0.12% | 5% |
| | Florida Turnpike | Kings Hwy | EB | IN | NO | 2100 | 1 | 0.05% | 5% |
| | Florida Turnpike | Kings Hwy | WB | OUT | NO | 2100 | 4 | 0.19% | 5% |
| | Kings Hwy | I - 95 | EB | OUT | NO | 4240 | 35 | 0.83% | 40% |
| | Kings Hwy | I - 95 | WB | IN | NO | 4240 | 11 | 0.26% | 40% |
| | I - 95 | Jenkins Rd | EB | OUT | NO | 4240 | 17 | 0.40% | 20% |
| | I - 95 | Jenkins Rd | WB | IN | NO | 4240 | 5 | 0.12% | 20% |
| | Jenkins Rd | Virginia Ave | EB | OUT | NO | 4040 | 17 | 0.42% | 20% |
| | Jenkins Rd | Virginia Ave | WB | IN | NO | 4040 | 5 | 0.12% | 20% |
| I-95 | Midway Rd | Okeechobee Rd | NB | IN | NO | 5500 | 5 | 0.09% | 20% |
| | Midway Rd | Okeechobee Rd | SB | OUT | NO | 5500 | 17 | 0.31% | 20% |
| | Orange Ave | Indrio Rd | NB | OUT | NO | 7320 | 9 | 0.12% | 10% |
| | Orange Ave | Indrio Rd | SB | IN | NO | 7320 | 3 | 0.04% | 10% |

(1) FDOT 2020 Service Capacity Tables & St. Lucie TPO

(2) According to the Guidelines prepared by the TPO and modified by the City and County

Two-Way: 114
Net In: 27
Net Out: 87

**TABLE 3a - Link Analysis - AM**

| Segment | From | To | Direction | AADT 2020 | D Factor | Last Count Year from TPO | Peak Hour Volume - Peak Direction from TPO | 2022 Peak Hour Volume - Peak Direction from TPO[2] | 2022 Peak Hour Directional Volumes | Yearly Growth Rate (from 2022 to 2023) | 2024 AM Peak Hour + Growth | AM Peak Hour Committed Projects Directional | 2024 Growth + Committed Peak Direction | Peak Hour Service Capacity [1] | Project Volume Peak Direction | Total Traffic (Peak Direction) | % Project of Capacity-Peak Hour | Does Project Satisfy Concurrency ? | Project Percent Assignment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peters Rd | Crossroads Pkwy | White Rd | NB | 2000 [4] | 0.562 | N/A | 100[4] | 105 | 105 | 1.50% | 108 | 23 | 131 | 920 | 5 | 136 | 0.54% | YES | 5% |
| | White Rd | Graham Rd | SB | 2000 [4] | 0.438 | N/A | 78 [4] | 82 | 82 | 1.50% | 84 | 13 | 97 | 920 | 5 | 102 | 0.54% | YES | 5% |
| Kings Hwy | Okeechobee Rd | Crossroads Pkwy | NB | 7900 | 0.562 | 2020 | 363 | 380 | 380 | 1.50% | 391 | 38 | 429 | 1800 | 45 | 474 | 2.50% | YES | 45% |
| | Crossroads Pkwy | Graham Rd | NB | 7900 | 0.562 | 2020 | 361 | 377 | 377 | 1.50% | 389 | 38 | 427 | 1800 | 45 | 472 | 2.50% | YES | 45% |
| | Crossroads Pkwy | Graham Rd | SB | 7900 | 0.438 | 2020 | 361 | 377 | 294[3] | 1.50% | 303 | 14 | 317 | 1800 | 11 | 328 | 0.61% | YES | 45% |
| | Graham Rd | Picos Rd | SB | 7000 | 0.438 | 2020 | 337 | 352 | 275 [3] | 1.50% | 283 | 14 | 297 | 1800 | 35 | 332 | 1.94% | YES | 35% |
| | Graham Rd | Picos Rd | NB | 700 | 0.562 | 2020 | 337 | 352 | 452 [3] | 1.50% | 466 | 14 | 480 | 1800 | 32 | 512 | 1.78% | YES | 32% |
| | Picos Rd | Orange Ave | SB | 7000 | 0.438 | 2020 | 337 | 352 | 275 | 1.50% | 283 | 45 | 328 | 1800 | 32 | 360 | 1.78% | YES | 32% |
| Graham Rd | Kings Hwy | Jenkins Rd | WB | 3833 | 0.509 | 2017 | 262 | 293 | 293 | 1.50% | 302 | 0 | 302 | 630 | 11 | 313 | 1.75% | YES | 45% |
| | Kings Hwy | Jenkins Rd | EB | 3833 | 0.491 | 2017 | 262 | 293 | 293 | 1.50% | 302 | 0 | 302 | 2100 | 6 | 308 | 0.29% | YES | 25% |
| Orange Ave | Jenkins Rd | Hartman Rd | WB | 14400 | 0.509 | 2020 | 705 | 737 | 737 | 1.50% | 759 | 68 | 827 | 2100 | 25 | 852 | 1.19% | YES | 25% |
| | Kings Hwy | I - 95 | WB | 19000 | 0.562 | 2020 | 856 | 895 | 895 | 1.50% | 922 | 144 | 1066 | 2100 | 30 | 1096 | 1.43% | YES | 30% |
| Jenkins Rd | Graham Rd | Peterson Rd | SB | 9900 | 0.509 | 2021 | 517 | 529 | 529 | 1.50% | 521 | 101 | 622 | 630 | 10 | 632 | 1.59% | YES [5] | 10% |
| | Peterson Rd | Orange Ave | SB | 9900 | 0.509 | 2021 | 517 | 529 | 529 | 1.50% | 521 | 123 | 644 | 920 | 10 | 654 | 1.09% | YES | 10% |

(1) St. Lucie County 2021 Traffic Counts and LOS Report

(2) TPO volumes grown to 2022 using area wide average growth rate.

(3) Calculated using TPO peak hour volumes and D Factors from traffic counts.

(4) Estimated Existing 2020 Traffic

(5) Detailed Analysis used to demonstrate Concurrency

Two-Way: 125
Net In: 101
Net Out: 24
Years Grown: 2
Area Wide Weighted Average Growth Rate (applied to get 2022 traffic volumes): 2.25%

**TABLE 3b - Link Analysis - PM**

| Segment | From | To | Direction | AADT 2020 | D Factor | Last Count Year from TPO | Peak Hour Volume - Peak Direction from TPO | 2022 Peak Hour Volume - Peak Direction from TPO [2] | 2022 Peak Hour Directional Volumes | Yearly Growth Rate (from 2022 to 2023) | 2024 PM Peak Hour + Growth | PM Peak Hour Committed Projects Directional | 2024 Growth + Committed Peak Direction | Peak Hour Service Capacity [1] | Project Volume Peak Direction | Total Traffic (Peak Direction) | % Project of Capacity-Peak Hour | Does Project Satisfy Concurrency ? | Project Percent Assignment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peters Rd | Crossroads Pkwy | White Rd | SB | 2000 [4] | 0.562 | N/A | 100[4] | 105 | 105 | 1.50% | 108 | 24 | 132 | 920 | 4 | 136 | 0.43% | YES | 5% |
| | White Rd | Graham Rd | NB | 2000[4] | 0.438 | N/A | 78[4] | 82 | 82 | 1.50% | 84 | 13 | 97 | 920 | 9 | 106 | 0.98% | YES | 10% |
| Kings Hwy | Okeechobee Rd | Crossroads Pkwy | SB | 7900 | 0.562 | 2020 | 371 | 388 | 388 | 1.50% | 400 | 43 | 443 | 1800 | 39 | 482 | 2.17% | YES | 45% |
| | Crossroads Pkwy | Graham Rd | NB | 7900 | 0.438 | 2020 | 371 | 388 | 302 | 1.50% | 311 | 38 | 349 | 1800 | 12 | 361 | 0.67% | YES | 45% |
| | Crossroads Pkwy | Graham Rd | SB | 7900 | 0.562 | 2020 | 371 | 388 | 388 | 1.50% | 400 | 43 | 443 | 1800 | 39 | 482 | 2.17% | YES | 45% |
| | Graham Rd | Picos Rd | NB | 7000 | 0.438 | 2020 | 324 | 339 | 264 | 1.50% | 272 | 38 | 310 | 1800 | 30 | 340 | 1.67% | YES | 35% |
| | Graham Rd | Picos Rd | SB | 7000 | 0.562 | 2020 | 324 | 339 | 435 | 1.50% | 448 | 38 | 486 | 1800 | 28 | 514 | 1.56% | YES | 32% |
| | Picos Rd | Orange Ave | NB | 7000 | 0.438 | 2020 | 324 | 339 | 264 | 1.50% | 272 | 114 | 386 | 1800 | 28 | 414 | 1.56% | YES | 32% |
| Graham Rd | Kings Hwy | Jenkins Rd | WB | 3833 | 0.509 | 2017 | 250 | 279 | 279 | 1.50% | 288 | 0 | 288 | 1800 | 30 | 318 | 1.67% | YES | 35% |
| | Kings Hwy | Jenkins Rd | EB | 3833 | 0.491 | 2017 | 250 | 279 | 279 | 1.50% | 288 | 0 | 288 | 630 | 9 | 297 | 1.43% | YES | 10% |
| Orange Ave | Jenkins Rd | Hartman Rd | EB | 14400 | 0.509 | 2020 | 655 | 685 | 685 | 1.50% | 706 | 79 | 785 | 2100 | 22 | 807 | 1.05% | YES | 25% |
| | Kings Hwy | I - 95 | EB | 19000 | 0.562 | 2020 | 863 | 902 | 902 | 1.50% | 930 | 96 | 1026 | 2100 | 26 | 1052 | 1.24% | YES | 30% |
| Jenkins Rd | Graham Rd | Peterson Rd | NB | 9900 | 0.509 | 2021 | 523 | 535 | 535 | 1.50% | 551 | 96 | 647 | 630 | 9 | 656 | 1.43% | YES [5] | 10% |
| | Peterson Rd | Orange Ave | NB | 9900 | 0.509 | 2021 | 523 | 535 | 535 | 1.50% | 551 | 177 | 728 | 920 | 9 | 737 | 0.98% | YES | 10% |

(1) St. Lucie County 2021 Traffic Counts and LOS Report

(2) TPO volumes grown to 2022 using area wide average growth rate.

(3) Calculated using TPO peak hour volumes and D Factors from traffic counts.

(4) Estimated Existing 2020 Traffic

(5) Detailed Analysis used to demonstrate Concurrency

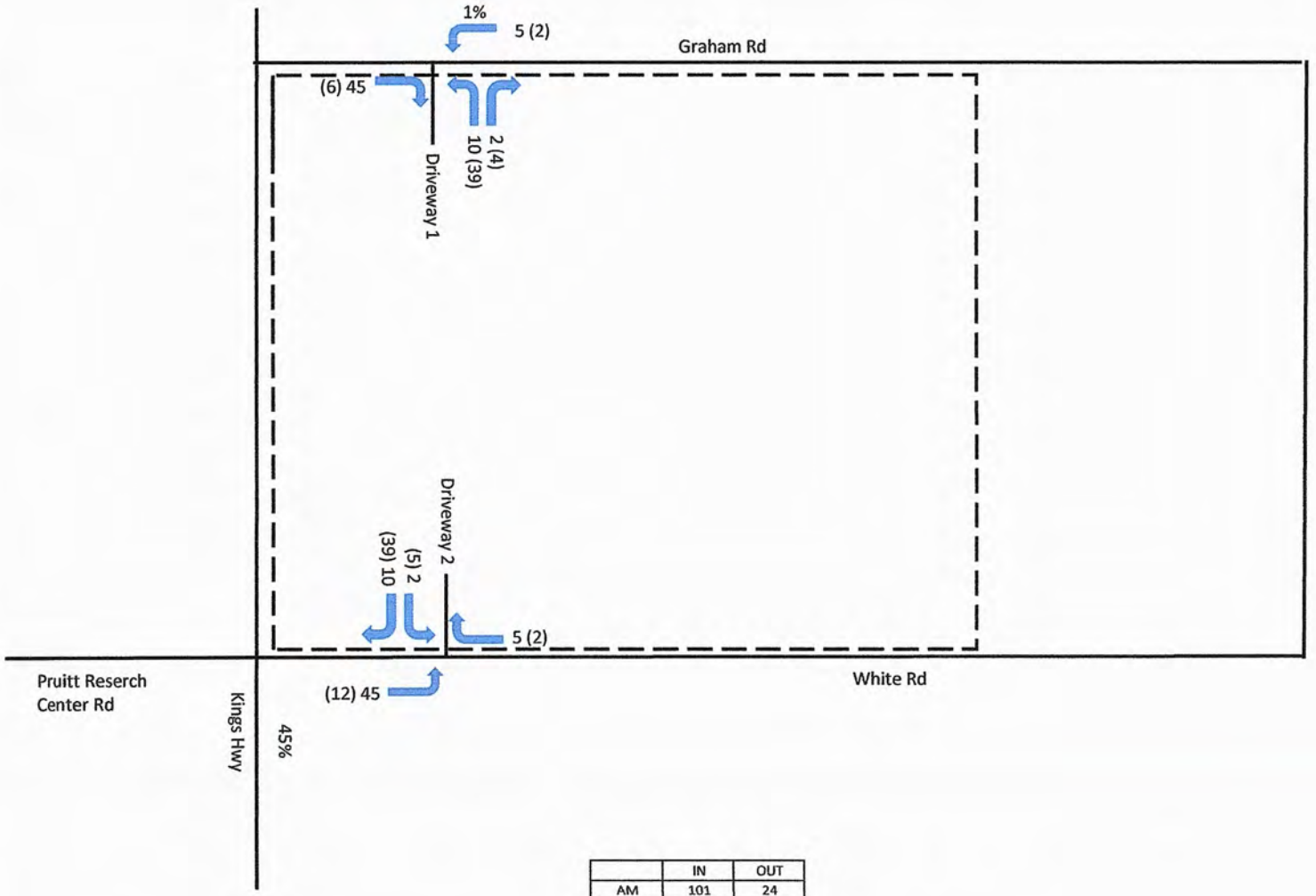
Two-Way: 114
Net In: 27
Net Out: 87
Years Grown: 2
Area Wide Weighted Average Growth Rate (applied to get 2022 traffic volumes): 2.25%

**DRIVEWAY ANALYSIS**

The project will have a total of 4 driveways. Driveway 1 and 2 will be full access driveways on Graham Road. Driveways 3 and 4 will be full access driveways located on White Road. **Figure 3** shows the driveway volumes for the AM and PM peak hours.

**CONCLUSION**

With 125 net new AM peak hour trips and 114 net new PM peak hour trips, all links and intersections operate at acceptable levels of service with the existing roadway network. Therefore, the project meets the requirements for concurrency.




| | IN | OUT |
|---|---|---|
| AM | 101 | 24 |
| PM | 27 | 87 |

NTS

O'ROURKE ENGINEERING & PLANNING

22 SE Seminole Street
Stuart, Fl, 34994

Job Number:

Date:

Legend

= Project Location

XX (XX) = AM (PM)

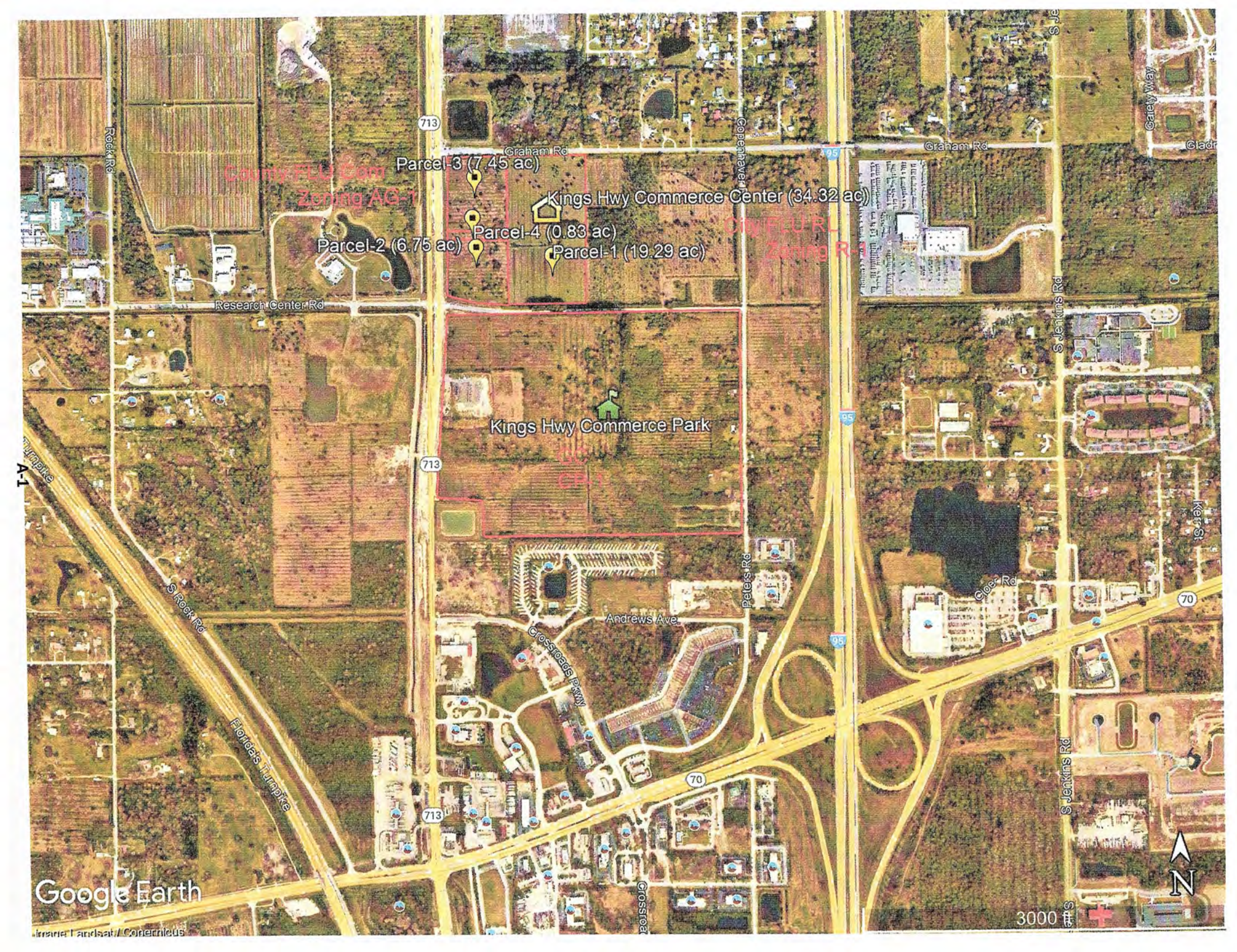
Figure 3

Driveway Volumes

Kings Highway Commerce Center

# APPENDIX A

# SITE PLAN


Parcel-3 (7.45 ac)
Kings Hwy Commerce Center (34.32 ac)
Parcel-4 (0.83 ac)
Parcel-2 (6.75 ac)
Parcel-1 (19.29 ac)
County FLU Com
Zoning AG-1
City FLU RL
Zoning R-1
Kings Hwy Commerce Park
GC
CP-1
Graham Rd
Research Center Rd
Rock Rd
S Rock Rd
Florida's Turnpike
A-1
Andrews Ave
Crossroads Pkwy
Peters Rd
Coer Rd
S Jenkins Rd
Keri St
Copeland Dr
713
95
70
Google Earth
N

# APPENDIX B

## ST. LUCIE COUNTY 2021 LEVEL OF SERVICE REPORT
## &
## FDOT 2020 QUALITY LEVEL OF SERVICE

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

# Traffic Counts and Level of Service Report
## 2021

| Roadway Name | Location | STATION ID | AADT | Last Count Year | Pk Hr Service Capacity | AM Pk Hr Pk Dir | | | PM Pk Hr Pk Dir | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Volume | LOS | V/C | Volume | LOS | V/C |
| GEORGIA AVE | OKEECHOBEE RD to 17TH ST | 667 | 4,778 | 2020 | 750 | 295 | C | 0.393 | 266 | C | 0.355 |
| GEORGIA AVE | 17TH ST to 13TH ST | 508 | 4,723 | 2019 | 600 | 263 | C | 0.438 | 267 | C | 0.445 |
| GEORGIA AVE | 13TH ST to 7TH ST | 506 | 2,165 | 2019 | 600 | 133 | C | 0.222 | 136 | C | 0.227 |
| GEORGIA AVE | 7TH ST to US 1 | 504 | 1,939 | 2019 | 600 | 122 | C | 0.203 | 135 | C | 0.225 |
| GILSON RD | MARTIN C.L. to BECKER RD | 111 | 10,500 | 2021 | 710 | 880 | F | 1.239 | 910 | F | 1.282 |
| GILSON RD | BECKER RD to LAKERIDGE DR | 111 | 10,500 | 2021 | 540 | 880 | F | 1.63 | 910 | F | 1.685 |
| GLADES CUT-OFF RD | RANGE LINE RD to RESERVE BLVD | 668 | 2,967 | 2017 | 1,070 | 209 | B | 0.195 | 264 | B | 0.247 |
| GLADES CUT-OFF RD | RESERVE BLVD to COMMERCE CENTER DR | 119 | 3,634 | 2016 | 1,070 | 336 | B | 0.314 | 336 | B | 0.314 |
| GLADES CUT-OFF RD | CARLTON RD to RANGE LINE RD | 668 | 2,967 | 2017 | 390 | 209 | B | 0.536 | 264 | C | 0.677 |
| GLADES CUT-OFF RD | COMMERCE CENTER DR to MIDWAY RD | 940279 | 3,400 | 2020 | 920 | 187 | C | 0.203 | 171 | C | 0.186 |
| GLADES CUT-OFF RD | MIDWAY RD to JENKINS RD | 115 | 8,500 | 2021 | 790 | 510 | D | 0.646 | 540 | D | 0.684 |
| GLADES CUT-OFF RD | JENKINS RD to SELVITZ RD | 113 | 6,575 | 2020 | 830 | 368 | C | 0.443 | 384 | C | 0.463 |
| GRAHAM RD | KINGS HWY to JENKINS RD | 669 | 3,833 | 2017 | 630 | 262 | C | 0.416 | 250 | C | 0.397 |
| GREEN RIVER PKWY | MARTIN C.L. to CHARLESTON DR | 319 | 5,700 | 2021 | 1,070 | 395 | C | 0.369 | 359 | B | 0.336 |
| GREEN RIVER PKWY | CHARLESTON DR to MELALEUCA BLVD | 319 | 5,700 | 2021 | 1,070 | 395 | C | 0.369 | 359 | B | 0.336 |
| GREEN RIVER PKWY | MELALEUCA BLVD to WALTON RD | 319 | 5,700 | 2021 | 1,070 | 395 | C | 0.369 | 359 | B | 0.336 |
| HARTMAN RD | OKEECHOBEE RD to PETERSON RD | 670 | 6,000 | 2021 | 750 | 286 | C | 0.381 | 280 | C | 0.373 |
| HARTMAN RD | PETERSON RD to DELAWARE AVE | 670 | 6,000 | 2021 | 540 | 286 | D | 0.53 | 280 | D | 0.519 |
| HARTMAN RD | DELAWARE AVE to ORANGE AVE | 670 | 6,000 | 2021 | 790 | 286 | C | 0.362 | 280 | C | 0.354 |
| HEADER CANAL RD | OKEECHOBEE RD to ORANGE AVE | 121 | 570 | 2019 | 670 | 47 | B | 0.07 | 57 | B | 0.085 |
| HILLMOOR DR | US 1 to LENNARD RD | 671 | 7,057 | 2019 | 790 | 366 | C | 0.463 | 465 | D | 0.589 |
| I-95 | GATLIN BLVD to ST LUCIE WEST BLVD | 941901 | 80,500 | 2020 | 5,500 | 4,122 | C | 0.749 | 3,723 | C | 0.677 |
| I-95 | ST LUCIE WEST BLVD to MIDWAY RD | 941904 | 66,431 | 2018 | 5,500 | 3,736 | C | 0.679 | 3,222 | B | 0.586 |
| I-95 | MIDWAY RD to OKEECHOBEE RD | 941902 | 79,206 | 2018 | 5,500 | 5,004 | D | 0.91 | 4,063 | C | 0.739 |
| I-95 | OKEECHOBEE RD to ORANGE AVE | 940260 | 60,386 | 2020 | 7,320 | 2,804 | B | 0.383 | 2,804 | B | 0.383 |

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# Traffic Counts and Level of Service Report
## 2021

| Roadway Name | Location | STATION ID | AADT | Last Count Year | Pk Hr Service Capacity | AM Pk Hr Pk Dir | | | PM Pk Hr Pk Dir | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Volume | LOS | V/C | Volume | LOS | V/C |
| I-95 | ORANGE AVE to INDRIO RD | 941905 | 48,500 | 2020 | 7,320 | 2,470 | B | 0.337 | 2,274 | B | 0.311 |
| INDIAN RIVER DR | CITRUS AVE to ORANGE AVE | 945029 | 6,600 | 2020 | 800 | 310 | C | 0.388 | 355 | C | 0.444 |
| INDIAN RIVER DR | ORANGE AVE to AVENUE A | 940003 | 5,500 | 2020 | 750 | 260 | C | 0.347 | 253 | C | 0.337 |
| INDIAN RIVER DR | AVENUE D to SEAWAY DR | 940004 | 7,200 | 2020 | 840 | 344 | C | 0.41 | 405 | D | 0.482 |
| INDIAN RIVER DR | AVENUE A to AVENUE D | 940004 | 7,200 | 2020 | 540 | 344 | C | 0.637 | 405 | D | 0.75 |
| INDRIO RD | PRIVATE RD to I-95 W RAMP | 940128 | 850 | 2020 | 1,080 | 40 | B | 0.037 | 43 | B | 0.04 |
| INDRIO RD | I-95 W RAMP to I-95 E RAMP | 940128 | 850 | 2020 | 3,240 | 40 | B | 0.012 | 43 | B | 0.013 |
| INDRIO RD | I-95 E RAMP to KOBLEGARD RD | 940038 | 9,800 | 2020 | 3,240 | 480 | B | 0.148 | 505 | B | 0.156 |
| INDRIO RD | KOBLEGARD RD to JOHNSTON RD | 940038 | 9,800 | 2020 | 700 | 480 | C | 0.686 | 505 | C | 0.721 |
| INDRIO RD | JOHNSTON RD to EMERSON AVE | 940038 | 9,800 | 2020 | 880 | 480 | C | 0.545 | 505 | C | 0.574 |
| INDRIO RD | EMERSON RD to SEMINOLE RD | 940281 | 8,600 | 2020 | 920 | 471 | C | 0.512 | 397 | C | 0.432 |
| INDRIO RD | SEMINOLE RD to KINGS HWY | 940281 | 8,600 | 2020 | 790 | 471 | D | 0.596 | 397 | D | 0.503 |
| INDRIO RD | KINGS HWY to SLASH PINE TRL | 114 | 5,909 | 2020 | 840 | 378 | C | 0.45 | 370 | C | 0.44 |
| INDRIO RD | SLASH PINE TRL to US 1 | 114 | 5,909 | 2020 | 920 | 378 | C | 0.411 | 370 | C | 0.402 |
| INDRIO RD | US 1 to OLD DIXIE HWY | 672 | 900 | 2016 | 750 | 63 | C | 0.084 | 85 | C | 0.113 |
| JENNINGS RD | US 1 to LENNARD RD | 673 | 4,633 | 2016 | 2,100 | 306 | C | 0.146 | 250 | C | 0.119 |
| JENKINS RD | EDWARDS RD to OKEECHOBEE RD | 133 | 11,500 | 2021 | 880 | 541 | C | 0.615 | 593 | C | 0.674 |
| JENKINS RD | OKEECHOBEE RD to GRAHAM RD | 131 | 9,900 | 2021 | 920 | 517 | C | 0.562 | 523 | C | 0.568 |
| JENKINS RD | GRAHAM RD to PETERSON RD | 131 | 9,900 | 2021 | 630 | 517 | C | 0.821 | 523 | C | 0.83 |
| JENKINS RD | PETERSON RD to ORANGE AVE | 131 | 9,900 | 2021 | 920 | 517 | C | 0.562 | 523 | C | 0.568 |
| JOHNSTON RD | ANGLE RD to L20 | 674 | 2,700 | 2016 | 1,070 | 183 | B | 0.171 | 177 | B | 0.165 |
| JOHNSTON RD | L20 to MEADOWOOD DR | 675 | 2,333 | 2017 | 1,070 | 148 | B | 0.138 | 144 | B | 0.135 |
| JOHNSTON RD | MEADOWOOD DR to OLD JOHNSTON RD | 675 | 2,333 | 2017 | 1,070 | 148 | B | 0.138 | 144 | B | 0.135 |
| JOHNSTON RD | OLD JOHNSTON RD to INDRIO RD | 675 | 2,333 | 2017 | 1,070 | 148 | B | 0.138 | 144 | B | 0.135 |
| JOHNSTON RD | INDRIO RD to RUSSOS RD | 135 | 8,424 | 2020 | 1,070 | 477 | C | 0.446 | 479 | C | 0.448 |

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# Traffic Counts and Level of Service Report
## 2021

| Roadway Name | Location | STATION ID | AADT | Last Count Year | Pk Hr Service Capacity | AM Pk Hr Pk Dir | | | PM Pk Hr Pk Dir | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Volume | LOS | V/C | Volume | LOS | V/C |
| JOHNSTON RD | RUSSOS RD to INDIAN RIVER C.L. | 135 | 8,424 | 2020 | 1,070 | 477 | C | 0.446 | 479 | C | 0.448 |
| JUANITA AVE | 53RD ST to 25TH ST | 122 | 2,176 | 2017 | 750 | 140 | C | 0.187 | 128 | C | 0.171 |
| JUANITA AVE | 25TH ST to US 1 | 120 | 3,226 | 2017 | 750 | 180 | C | 0.24 | 177 | C | 0.236 |
| KEEN RD | ANGLE RD to JUANITA AVE | 129 | 2,926 | 2019 | 630 | 176 | C | 0.279 | 206 | C | 0.327 |
| KEEN RD | JUANITA AVE to ST LUCIE BLVD | 129 | 2,926 | 2019 | 630 | 176 | C | 0.279 | 206 | C | 0.327 |
| KINGS HWY | OKEECHOBEE RD to CROSSROADS PKWY | 940757 | 7,900 | 2020 | 880 | 363 | C | 0.413 | 371 | C | 0.422 |
| KINGS HWY | CROSSROADS PKWY to GRAHAM RD | 940757 | 7,900 | 2020 | 700 | 363 | C | 0.519 | 371 | C | 0.53 |
| KINGS HWY | GRAHAM RD to PICOS RD | 940076 | 7,000 | 2020 | 700 | 337 | C | 0.481 | 324 | C | 0.463 |
| KINGS HWY | PICOS RD to ORANGE AVE | 940076 | 7,000 | 2020 | 880 | 337 | C | 0.383 | 324 | C | 0.368 |
| KINGS HWY | ORANGE AVE to ANGLE RD | 940077 | 14,100 | 2020 | 920 | 662 | C | 0.72 | 666 | C | 0.724 |
| KINGS HWY | ANGLE RD to ST LUCIE BLVD | 940751 | 10,500 | 2020 | 880 | 531 | C | 0.603 | 533 | C | 0.606 |
| KINGS HWY | ST LUCIE BLVD to INDRIO RD | 940006 | 13,200 | 2020 | 880 | 744 | C | 0.845 | 699 | C | 0.794 |
| KIRBY LOOP RD | EDWARDS RD to 35TH ST | 677 | 2,400 | 2021 | 630 | 139 | C | 0.221 | 129 | C | 0.205 |
| KITTERMAN RD | OLEANDER AVE to US 1 | 124 | 3,482 | 2018 | 750 | 229 | C | 0.305 | 208 | C | 0.277 |
| KITTERMAN RD | US 1 to LENNARD EXT | 678 | 2,233 | 2017 | 750 | 127 | C | 0.169 | 129 | C | 0.172 |
| LENNARD RD | US 1 to MARIPOSA AVE | 325 | 20,078 | 2019 | 1,710 | 1,034 | D | 0.605 | 1,068 | D | 0.625 |
| LENNARD RD | MARIPOSA AVE to MELALEUCA BLVD | 325 | 20,078 | 2019 | 1,710 | 1,034 | D | 0.605 | 1,068 | D | 0.625 |
| LENNARD RD | MELALEUCA BLVD to JENNINGS RD | 325 | 20,078 | 2019 | 1,630 | 1,034 | D | 0.634 | 1,068 | D | 0.655 |
| LENNARD RD | JENNINGS RD to HILLMOOR DR | 325 | 20,078 | 2019 | 1,710 | 1,034 | D | 0.605 | 1,068 | D | 0.625 |
| LENNARD RD | HILLMOOR DR to TIFFANY AVE | 325 | 20,078 | 2019 | 1,710 | 1,034 | D | 0.605 | 1,068 | D | 0.625 |
| LENNARD RD | TIFFANY AVE to WALTON RD | 323 | 5,764 | 2016 | 1,710 | 301 | C | 0.176 | 305 | C | 0.178 |
| LENNARD RD | WALTON RD to S OF SAVANNA CLUB BLVD | 679 | 3,600 | 2021 | 790 | 249 | C | 0.315 | 236 | C | 0.299 |
| LYNGATE DR | VETERANS MEMORIAL PKWY to MORNINGSIDE BLVD | 306 | 10,536 | 2020 | 920 | 659 | C | 0.716 | 701 | C | 0.762 |
| LYNGATE DR | MORNINGSIDE BLVD to US 1 | 306 | 10,536 | 2020 | 920 | 659 | C | 0.716 | 701 | C | 0.762 |
| MARIPOSA AVE | LENNARD RD to HALLAHAN ST | 166 | 6,912 | 2019 | 880 | 524 | C | 0.595 | 741 | C | 0.842 |

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# Traffic Counts and Level of Service Report
## 2021

| Roadway Name | Location | STATION ID | AADT | Last Count Year | Pk Hr Service Capacity | AM Pk Hr Pk Dir | | | PM Pk Hr Pk Dir | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Volume | LOS | V/C | Volume | LOS | V/C |
| OHIO AVE | SUNRISE BLVD to COLONIAL RD | 686 | 4,400 | 2017 | 540 | 261 | C | 0.483 | 255 | C | 0.472 |
| OHIO AVE | COLONIAL RD to US 1 | 686 | 4,400 | 2017 | 750 | 261 | C | 0.348 | 255 | C | 0.34 |
| OKEECHOBEE RD | OKEECHOBEE C.L. to BLUEFIELD RD | 687 | 11,000 | 2021 | 1,580 | 575 | B | 0.364 | 618 | B | 0.391 |
| OKEECHOBEE RD | BLUEFIELD RD to CARLTON RD | 687 | 11,000 | 2021 | 2,000 | 575 | B | 0.288 | 618 | B | 0.309 |
| OKEECHOBEE RD | CARLTON RD to SNEED RD | 940039 | 7,500 | 2020 | 2,100 | 349 | B | 0.166 | 341 | B | 0.162 |
| OKEECHOBEE RD | IDEAL HOLDING RD to HEADER CANAL RD | 940039 | 7,500 | 2020 | 2,100 | 349 | B | 0.166 | 341 | B | 0.162 |
| OKEECHOBEE RD | SNEED RD to IDEAL HOLDING RD | 940039 | 7,500 | 2020 | 2,100 | 349 | B | 0.166 | 341 | B | 0.162 |
| OKEECHOBEE RD | HEADER CANAL RD to MIDWAY RD | 940039 | 7,500 | 2020 | 2,450 | 349 | B | 0.142 | 341 | B | 0.139 |
| OKEECHOBEE RD | MIDWAY RD to SHINN RD | 940039 | 7,500 | 2020 | 3,110 | 349 | B | 0.112 | 341 | B | 0.11 |
| OKEECHOBEE RD | SHINN RD to MCCARTY RD | 940195 | 5,584 | 2020 | 3,240 | 303 | B | 0.094 | 303 | B | 0.094 |
| OKEECHOBEE RD | MCCARTY RD to FLORIDA'S TURNPIKE | 940025 | 8,600 | 2020 | 3,240 | 391 | B | 0.121 | 405 | B | 0.125 |
| OKEECHOBEE RD | FLORIDA'S TURNPIKE to KINGS HWY | 940025 | 8,600 | 2020 | 2,100 | 391 | C | 0.186 | 405 | C | 0.193 |
| OKEECHOBEE RD | KINGS HWY to CROSSROADS PKWY | 940748 | 22,500 | 2020 | 4,240 | 1,028 | C | 0.242 | 1,085 | C | 0.256 |
| OKEECHOBEE RD | CROSSROADS PKWY to I-95 | 940106 | 26,500 | 2020 | 4,240 | 1,213 | C | 0.286 | 1,240 | C | 0.292 |
| OKEECHOBEE RD | I-95 to JENKINS RD | 940029 | 32,000 | 2020 | 4,240 | 1,981 | C | 0.467 | 1,713 | C | 0.404 |
| OKEECHOBEE RD | JENKINS RD to MCNEIL RD | 940029 | 32,000 | 2020 | 4,040 | 1,981 | C | 0.49 | 1,713 | C | 0.424 |
| OKEECHOBEE RD | MCNEIL RD to VIRGINIA AVE | 940742 | 29,500 | 2020 | 3,170 | 1,468 | C | 0.463 | 1,531 | C | 0.483 |
| OKEECHOBEE RD | VIRGINIA AVE to HARTMAN RD | 688 | 12,171 | 2020 | 2,100 | 669 | C | 0.319 | 708 | C | 0.337 |
| OKEECHOBEE RD | HARTMAN RD to 35TH ST | 688 | 12,171 | 2020 | 1,630 | 669 | C | 0.41 | 708 | C | 0.434 |
| OKEECHOBEE RD | 35TH ST to 33RD ST | 689 | 15,993 | 2020 | 1,630 | 868 | D | 0.533 | 849 | D | 0.521 |
| OKEECHOBEE RD | 33RD ST to 25TH ST | 689 | 15,993 | 2020 | 1,630 | 868 | D | 0.533 | 849 | D | 0.521 |
| OKEECHOBEE RD | 25TH ST to GEORGIA AVE | 690 | 13,110 | 2020 | 1,630 | 754 | D | 0.463 | 716 | C | 0.439 |
| OKEECHOBEE RD | GEORGIA AVE to DELAWARE AVE | 690 | 13,110 | 2020 | 1,710 | 754 | C | 0.441 | 716 | C | 0.419 |
| OLD DIXIE HWY | US 1 to SR A1A NORTH | 691 | 5,233 | 2017 | 790 | 407 | D | 0.515 | 369 | C | 0.467 |
| OLD DIXIE HWY | SR A1A NORTH to ST LUCIE BLVD | 948521 | 1,750 | 2020 | 750 | 82 | C | 0.109 | 82 | C | 0.109 |

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# Traffic Counts and Level of Service Report
## 2021

| Roadway Name | Location | STATION ID | AADT | Last Count Year | Pk Hr Service Capacity | AM Pk Hr Pk Dir | | | PM Pk Hr Pk Dir | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Volume | LOS | V/C | Volume | LOS | V/C |
| OLD DIXIE HWY | ST LUCIE BLVD to INDRIO RD | 227 | 2,019 | 2016 | 790 | 148 | C | 0.187 | 115 | C | 0.146 |
| OLD DIXIE HWY | INDRIO RD to INDIAN RIVER C.L. | 948523 | 1,350 | 2020 | 870 | 63 | C | 0.072 | 63 | C | 0.072 |
| OLEANDER AVE | BEACH AVE to KITTERMAN RD | 692 | 2,900 | 2021 | 540 | 168 | C | 0.311 | 190 | C | 0.352 |
| OLEANDER AVE | KITTERMAN RD to MIDWAY RD | 141 | 5,500 | 2021 | 750 | 320 | C | 0.427 | 320 | C | 0.427 |
| OLEANDER AVE | MIDWAY RD to WEATHERBEE RD | 139 | 7,055 | 2020 | 750 | 386 | D | 0.515 | 418 | D | 0.557 |
| OLEANDER AVE | WEATHERBEE RD to BELL AVE | 139 | 7,055 | 2020 | 580 | 386 | D | 0.666 | 418 | D | 0.721 |
| OLEANDER AVE | BELL AVE to FARMER'S MARKET RD | 240 | 11,500 | 2021 | 580 | 555 | E | 0.957 | 526 | D | 0.907 |
| OLEANDER AVE | FARMER'S MARKET RD to EDWARDS RD | 240 | 11,500 | 2021 | 800 | 555 | D | 0.694 | 526 | D | 0.658 |
| OLEANDER AVE | EDWARDS RD to WISTERIA AVE | 505 | 9,200 | 2021 | 800 | 558 | D | 0.698 | 464 | D | 0.58 |
| OLEANDER AVE | WISTERIA AVE to GARDENIA AVE | 505 | 9,200 | 2021 | 580 | 558 | E | 0.962 | 464 | D | 0.8 |
| OLEANDER AVE | GARDENIA AVE to VIRGINIA AVE | 505 | 9,200 | 2021 | 840 | 558 | D | 0.664 | 464 | D | 0.552 |
| .EANDER AVE | VIRGINIA AVE to SUNRISE BLVD | 503 | 4,553 | 2019 | 640 | 259 | C | 0.405 | 269 | C | 0.42 |
| ORANGE AVE | OKEECHOBEE C.L. to SNEED RD | 144 | 4,600 | 2021 | 670 | 269 | C | 0.401 | 256 | C | 0.382 |
| ORANGE AVE | SNEED RD to HEADER CANAL RD | 144 | 4,600 | 2021 | 670 | 269 | C | 0.401 | 256 | C | 0.382 |
| ORANGE AVE | SHINN RD to CAMPBELL RD | 940144 | 2,700 | 2020 | 1,070 | 148 | B | 0.138 | 148 | B | 0.138 |
| ORANGE AVE | CAMPBELL RD to KINGS HWY | 940144 | 2,700 | 2020 | 1,070 | 148 | B | 0.138 | 148 | B | 0.138 |
| ORANGE AVE | KINGS HWY to I-95 | 940041 | 19,000 | 2020 | 2,100 | 856 | C | 0.408 | 863 | C | 0.411 |
| ORANGE AVE | I-95 to JENKINS RD | 940035 | 14,700 | 2020 | 2,100 | 797 | C | 0.38 | 750 | C | 0.357 |
| ORANGE AVE | JENKINS RD to HARTMAN RD | 940028 | 14,400 | 2020 | 2,100 | 705 | C | 0.336 | 655 | C | 0.312 |
| ORANGE AVE | HARTMAN RD to ANGLE RD | 940028 | 14,400 | 2020 | 2,100 | 705 | C | 0.336 | 655 | C | 0.312 |
| ORANGE AVE | ANGLE RD to 25TH ST | 945044 | 10,449 | 2020 | 1,710 | 507 | C | 0.296 | 590 | C | 0.345 |
| ORANGE AVE | 25TH ST to 17TH ST | 945040 | 11,700 | 2020 | 1,630 | 534 | C | 0.328 | 586 | C | 0.36 |
| ORANGE AVE | 17TH ST to 13TH ST | 945040 | 11,700 | 2020 | 1,710 | 534 | C | 0.312 | 586 | C | 0.343 |
| ORANGE AVE | 13TH ST to 10TH ST | 945040 | 11,700 | 2020 | 750 | 534 | D | 0.712 | 586 | D | 0.781 |
| ORANGE AVE | 10TH ST to 7TH ST | 940155 | 9,200 | 2020 | 600 | 418 | D | 0.697 | 481 | D | 0.802 |

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# Traffic Counts and Level of Service Report
## 2021

| Roadway Name | Location | STATION ID | AADT | Last Count Year | Pk Hr Service Capacity | AM Pk Hr Pk Dir | | | PM Pk Hr Pk Dir | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Volume | LOS | V/C | Volume | LOS | V/C |
| US 1 | AVENUE H to OLD DIXIE HWY | 715 | 31,500 | 2021 | 2,000 | 1,590 | C | 0.795 | 1,584 | C | 0.792 |
| US 1 | OLD DIXIE HWY to AVENUE O | 940123 | 29,000 | 2020 | 2,000 | 1,709 | C | 0.855 | 1,336 | C | 0.668 |
| US 1 | AVENUE O to SR A1A NORTH | 940123 | 29,000 | 2020 | 2,100 | 1,709 | C | 0.814 | 1,336 | C | 0.636 |
| US 1 | SR A1A NORTH to JUANITA AVE | 940010 | 21,500 | 2020 | 2,100 | 1,222 | C | 0.582 | 979 | C | 0.466 |
| US 1 | JUANITA AVE to ST LUCIE BLVD | 940010 | 21,500 | 2020 | 2,100 | 1,222 | C | 0.582 | 979 | C | 0.466 |
| US 1 | ST LUCIE BLVD to 25TH ST | 940009 | 20,500 | 2020 | 2,100 | 1,077 | C | 0.513 | 1,033 | C | 0.492 |
| US 1 | 25TH ST to INDRIO RD | 940009 | 20,500 | 2020 | 2,100 | 1,077 | C | 0.513 | 1,033 | C | 0.492 |
| US 1 | INDRIO RD to TURNPIKE FEEDER RD | 940107 | 24,000 | 2020 | 2,100 | 1,164 | C | 0.554 | 1,157 | C | 0.551 |
| US 1 | TURNPIKE FEEDER RD to INDIAN RIVER C.L. | 940107 | 24,000 | 2020 | 2,100 | 1,164 | C | 0.554 | 1,157 | C | 0.551 |
| VETERANS MEMORIAL PKWY | PORT ST LUCIE BLVD to LYNGATE DR | 329 | 17,256 | 2019 | 2,100 | 927 | C | 0.441 | 973 | C | 0.463 |
| VETERANS MEMORIAL PKWY | LYNGATE DR to US 1 | 327 | 8,400 | 2021 | 2,100 | 429 | C | 0.204 | 434 | C | 0.207 |
| LAGE GREEN DR | US 1 to WALTON RD | 716 | 16,500 | 2021 | 2,100 | 987 | C | 0.47 | 1,040 | C | 0.495 |
| VILLAGE GREEN DR | WALTON RD to TIFFANY AVE | 717 | 4,733 | 2017 | 920 | 254 | C | 0.276 | 240 | C | 0.261 |
| VILLAGE PKWY | DISCOVERY WAY to TRADITION PKWY | 718 | 16,000 | 2021 | 2,650 | 792 | C | 0.299 | 806 | C | 0.304 |
| VILLAGE PKWY | BECKER RD to DISCOVERY WAY | 718 | 16,000 | 2021 | 1,710 | 792 | D | 0.463 | 806 | D | 0.471 |
| VILLAGE PKWY | TRADITION PKWY to WESTCLIFFE LN | 719 | 23,500 | 2021 | 1,710 | 1,294 | D | 0.757 | 1,295 | D | 0.757 |
| VILLAGE PKWY | WESTCLIFFE LN to CROSSTOWN PKWY | 720 | 13,043 | 2019 | 1,710 | 696 | C | 0.407 | 689 | C | 0.403 |
| VIRGINIA AVE | 35TH ST to 25TH ST | 940032 | 22,000 | 2020 | 3,020 | 1,075 | C | 0.356 | 1,047 | C | 0.347 |
| VIRGINIA AVE | OKEECHOBEE RD to HARTMAN RD | 940030 | 20,000 | 2020 | 3,020 | 975 | C | 0.323 | 939 | C | 0.311 |
| VIRGINIA AVE | HARTMAN RD to 35TH ST | 940030 | 20,000 | 2020 | 3,020 | 975 | C | 0.323 | 939 | C | 0.311 |
| VIRGINIA AVE | 25TH ST to 13TH ST | 940033 | 21,000 | 2020 | 3,020 | 988 | C | 0.327 | 1,052 | C | 0.348 |
| VIRGINIA AVE | 13TH ST to 11TH ST | 940794 | 21,500 | 2020 | 3,020 | 1,002 | C | 0.332 | 1,002 | C | 0.332 |
| VIRGINIA AVE | 11TH ST to SUNRISE BLVD | 940794 | 21,500 | 2020 | 3,170 | 1,002 | C | 0.316 | 1,002 | C | 0.316 |
| VIRGINIA AVE | SUNRISE BLVD to OLEANDER AVE | 940792 | 21,100 | 2020 | 3,020 | 1,055 | C | 0.349 | 985 | C | 0.326 |
| VIRGINIA AVE | OLEANDER AVE to COLONIAL RD | 940034 | 18,300 | 2020 | 3,170 | 902 | C | 0.285 | 882 | C | 0.278 |

B-6

* Note: A six digit number in the "STATION ID" column identifies segment counted by FDOT
* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
*** Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

TABLE 7 Generalized **Peak Hour Directional** Volumes for Florida's Urbanized Areas

January 2020

## INTERRUPTED FLOW FACILITIES

### STATE SIGNALIZED ARTERIALS

**Class I** (40 mph or higher posted speed limit)

| Lanes | Median | B | C | D | E |
|---|---|---|---|---|---|
| 1 | Undivided | * | 830 | 880 | ** |
| 2 | Divided | * | 1,910 | 2,000 | ** |
| 3 | Divided | * | 2,940 | 3,020 | ** |
| 4 | Divided | * | 3,970 | 4,040 | ** |

**Class II** (35 mph or slower posted speed limit)

| Lanes | Median | B | C | D | E |
|---|---|---|---|---|---|
| 1 | Undivided | * | 370 | 750 | 800 |
| 2 | Divided | * | 730 | 1,630 | 1,700 |
| 3 | Divided | * | 1,170 | 2,520 | 2,560 |
| 4 | Divided | * | 1,610 | 3,390 | 3,420 |

**Non-State Signalized Roadway Adjustments**

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

**Median & Turn Lane Adjustments**

| Lanes | Median | Exclusive Left Lanes | Exclusive Right Lanes | Adjustment Factors |
|---|---|---|---|---|
| 1 | Divided | Yes | No | +5% |
| 1 | Undivided | No | No | -20% |
| Multi | Undivided | Yes | No | -5% |
| Multi | Undivided | No | No | -25% |
| – | – | – | Yes | + 5% |

**One-Way Facility Adjustment**

Multiply the corresponding directional volumes in this table by 1.2

### BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

| Paved Shoulder/Bicycle Lane Coverage | B | C | D | E |
|---|---|---|---|---|
| 0-49% | * | 150 | 390 | 1,000 |
| 50-84% | 110 | 340 | 1,000 | >1,000 |
| 85-100% | 470 | 1,000 | >1,000 | ** |

### PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

| Sidewalk Coverage | B | C | D | E |
|---|---|---|---|---|
| 0-49% | * | * | 140 | 480 |
| 50-84% | * | 80 | 440 | 800 |
| 85-100% | 200 | 540 | 880 | >1,000 |

### BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

| Sidewalk Coverage | B | C | D | E |
|---|---|---|---|---|
| 0-84% | > 5 | ≥ 4 | ≥ 3 | ≥ 2 |
| 85-100% | > 4 | ≥ 3 | ≥ 2 | ≥ 1 |

## UNINTERRUPTED FLOW FACILITIES

### FREEWAYS

**Core Urbanized**

| Lanes | B | C | D | E |
|---|---|---|---|---|
| 2 | 2,230 | 3,100 | 3,740 | 4,080 |
| 3 | 3,280 | 4,570 | 5,620 | 6,130 |
| 4 | 4,310 | 6,030 | 7,490 | 8,170 |
| 5 | 5,390 | 7,430 | 9,370 | 10,220 |
| 6 | 6,380 | 8,990 | 11,510 | 12,760 |

**Urbanized**

| Lanes | B | C | D | E |
|---|---|---|---|---|
| 2 | 2,270 | 3,100 | 3,890 | 4,230 |
| 3 | 3,410 | 4,650 | 5,780 | 6,340 |
| 4 | 4,550 | 6,200 | 7,680 | 8,460 |
| 5 | 5,690 | 7,760 | 9,520 | 10,570 |

**Freeway Adjustments**

| Auxiliary Lane | Ramp Metering |
|---|---|
| + 1,000 | + 5% |

### UNINTERRUPTED FLOW HIGHWAYS

| Lanes | Median | B | C | D | E |
|---|---|---|---|---|---|
| 1 | Undivided | 580 | 890 | 1,200 | 1,610 |
| 2 | Divided | 1,800 | 2,600 | 3,280 | 3,730 |
| 3 | Divided | 2,700 | 3,900 | 4,920 | 5,600 |

**Uninterrupted Flow Highway Adjustments**

| Lanes | Median | Exclusive left lanes | Adjustment factors |
|---|---|---|---|
| 1 | Divided | Yes | +5% |
| Multi | Undivided | Yes | -5% |
| Multi | Undivided | No | -25% |

[1]Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

*Source:*
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

# APPENDIX C

## OTHER PROJECT DATA/GROWTH RATE

| AM APPROVED PROJECTS | | | Kings Highway Commerce | | | Creekside | | | 43 Bent Creek @ 50% Complete City of Fort Pierce | | | 44 Celebration Pointe @25% Complete City of Fort Pierce | | | 37 Whispering Oaks | | | Project Hunt | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Name | From | To | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W |
| 25th St | Virginia Ave. | Cortez Blvd. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 |
| | Cortez Blvd. | Edwards Rd. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 |
| | Edwards Rd. | Bell Ave. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 |
| Jenkins Rd | Orange | Peterson | 3% | 6 | 2 | 5% | 7 | 21 | 2% | 1 | 4 | 30% | 9 | 29 | 70% | 117 | 32 | 2% | 2 | 0 |
| | Peterson | Okeechobee | 3% | 6 | 2 | 5% | 7 | 21 | 2% | 1 | 4 | 50% | 48 | 15 | 12% | 20 | 5 | 5% | 4 | 1 |
| | Okeechobee | Edwards | 3% | 6 | 2 | 5% | 7 | 21 | 0% | 0 | 0 | 5% | 5 | 2 | 5% | 8 | 2 | 0% | 0 | 0 |
| Orange Ave | Rock Rd | Kings Hwy | 2% | 1 | 4 | 0% | 0 | 0 | 0% | 0 | 0 | 5% | 5 | 2 | 5% | 8 | 2 | 3% | 1 | 1 |
| | Kings Hwy | I-95 | 30% | 17 | 59 | 0% | 0 | 0 | 5% | 3 | 9 | 10% | 10 | 3 | 10% | 17 | 5 | 40% | 7 | 30 |
| | I-95 | Jenkins Rd | 20% | 11 | 39 | 0% | 0 | 0 | 20% | 12 | 37 | 25% | 24 | 8 | 60% | 100 | 27 | 20% | 3 | 15 |
| | Jenkins Rd | Hartman Rd | 25% | 14 | 49 | 0% | 0 | 0 | 25% | 16 | 47 | 5% | 5 | 2 | 10% | 17 | 5 | 18% | 3 | 14 |
| | Hartman | Angle Rd | 20% | 11 | 39 | 0% | 0 | 0 | 35% | 65 | 22 | 15% | 5 | 14 | 20% | 33 | 9 | 18% | 3 | 14 |
| | Angle | 25th St | 15% | 8 | 30 | 0% | 0 | 0 | 33% | 61 | 20 | 10% | 3 | 10 | 13% | 22 | 6 | 0% | 0 | 0 |
| Kings Hwy | Okeechobee Rd | Picos Rd | 45% | 89 | 25 | 5% | 21 | 7 | 3% | 6 | 2 | 2% | 2 | 1 | 2% | 3 | 1 | 50% | 38 | 9 |
| | Picos Rd | Orange Ave | 45% | 89 | 25 | 5% | 21 | 7 | 3% | 6 | 2 | 2% | 2 | 1 | 2% | 3 | 1 | 43% | 33 | 7 |
| | Orange Ave | Angle Rd (CR603) | 0% | 0 | 0 | 0% | 0 | 0 | 2% | 4 | 1 | 3% | 3 | 1 | 3% | 5 | 1 | 0% | 0 | 0 |
| Edwards Rd. | US 1 | Oleander | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 |
| | Oleander | 25th | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 |
| | 25th | Jenkins Rd | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 5% | 2 | 5 | 5% | 8 | 2 | 0% | 0 | 0 |
| Okeechobee Rd | Florida's Turnpike | Kings Hwy | 5% | 10 | 3 | 90% | 379 | 129 | 0% | 0 | 0 | 5% | 2 | 5 | 5% | 8 | 2 | 5% | 1 | 1 |
| | Kings Hwy | Crossroads Pkwy | 35% | 69 | 19 | 80% | 337 | 114 | 0% | 0 | 0 | 5% | 2 | 5 | 5% | 8 | 2 | 30% | 5 | 5 |
| | Crossroads Pkwy | I95 | 40% | 79 | 22 | 80% | 337 | 114 | 0% | 0 | 0 | 5% | 2 | 5 | 5% | 8 | 2 | 30% | 5 | 5 |
| | I95 | Jenkins Rd | 20% | 39 | 11 | 40% | 168 | 57 | 0% | 0 | 0 | 5% | 2 | 5 | 5% | 8 | 2 | 10% | 2 | 2 |
| | Jenkins Rd | McNeil Rd | 20% | 39 | 11 | 30% | 126 | 43 | 0% | 0 | 0 | 5% | 2 | 5 | 2% | 3 | 1 | 11% | 2 | 2 |
| | McNeil Rd | Virginia Ave | 20% | 39 | 11 | 30% | 126 | 43 | 0% | 0 | 0 | 0% | 0 | 0 | 2% | 3 | 1 | 9% | 2 | 2 |
| Peters Road | Crossroads Pkwy | White Road | | | | | | | | | | | | | | | | | | |
| | White Road | Graham Rd | | | | | | | | | | | | | | | | | | |
| | | | | In | 197 | | In | 143 | | In | 62 | | In | 30 | | In | 45 | | In | 76 |
| | | | | Out | 55 | | Out | 421 | | Out | 186 | | Out | 96 | | Out | 167 | | Out | 17 |

| AM APPROVED PROJECTS | | | Wawa Kings Highway | | | Kings Highway Warehouse | | | St. Lucie Commerce Center @25% Complete | | | Walsh Crossroads | | | Project Hurricane | | | SUM Directional N/E | | SUM Directional S/W | | Directional N/E | | Directional S/W | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Name | From | To | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | Residential | Non-Residential | Residential | Non-Residential | Double Count | Net | Double Count | Net |
| 25th St | Virginia Ave. | Cortez Blvd. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Cortez Blvd. | Edwards Rd. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Edwards Rd. | Bell Ave. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jenkins Rd | Orange | Peterson | 0% | 0 | 0 | 0% | 0 | 0 | 30% | 42 | 9 | 0% | 0 | 0 | 15% | 2 | 8 | 134 | 52 | 65 | 17 | -10 | 176 | -3 | 98 |
| | Peterson | Okeechobee | 0% | 0 | 0 | 0% | 0 | 0 | 30% | 42 | 9 | 0% | 0 | 0 | 20% | 2 | 7 | 77 | 54 | 45 | 19 | -11 | 170 | -4 | 80 |
| | Okeechobee | Edwards | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 70 | 6 | 25 | 2 | -1 | 25 | 0 | 26 |
| Orange Ave | Rock Rd | Kings Hwy | 55.0% | 23 | 23 | 4% | 14 | 14 | 90% | 127 | 28 | 0% | 0 | 0 | 5% | 2 | 1 | 13 | 167 | 4 | 70 | -3 | 177 | -1 | 73 |
| | Kings Hwy | I-95 | 55.0% | 23 | 23 | 26% | 89 | 89 | 50% | 71 | 16 | 0% | 0 | 0 | 10% | 1 | 4 | 29 | 207 | 17 | 721 | -7 | 229 | -4 | 233 |
| | I-95 | Jenkins Rd | 20.0% | 8 | 8 | 3% | 10 | 10 | 30% | 14 | 3 | 0% | 0 | 0 | 0% | 0 | 0 | 137 | 47 | 72 | 76 | -9 | 174 | -15 | 133 |
| | Jenkins Rd | Hartman Rd | 10.0% | 4 | 4 | 3% | 10 | 10 | 5% | 7 | 2 | 0% | 0 | 0 | 15% | 2 | 5 | 37 | 40 | 53 | 84 | -8 | 68 | -13 | 124 |
| | Hartman | Angle Rd | 10.0% | 4 | 4 | 3% | 10 | 10 | 5% | 7 | 2 | 0% | 0 | 0 | 15% | 2 | 5 | 103 | 37 | 45 | 74 | -7 | 133 | -11 | 108 |
| | Angle | 25th St | 10.0% | 4 | 4 | 3% | 10 | 10 | 5% | 7 | 2 | 0% | 0 | 0 | 15% | 2 | 5 | 66 | 32 | 36 | 51 | -6 | 111 | -9 | 78 |
| Kings Hwy | Okeechobee Rd | Picos Rd | 20.0% | 8 | 8 | 52% | 177 | 178 | 0% | 0 | 0 | 30% | 2 | 2 | 15% | 2 | 5 | 32 | 316 | 11 | 227 | -8 | 340 | -3 | 235 |
| | Picos Rd | Orange Ave | 20.0% | 8 | 8 | 48% | 164 | 164 | 30% | 9 | 42 | 30% | 2 | 2 | 15% | 2 | 5 | 32 | 306 | 11 | 284 | -8 | 330 | -3 | 267 |
| | Orange Ave | Angle Rd (CR609) | 20.0% | 8 | 8 | 18% | 61 | 62 | 10% | 3 | 14 | 0% | 0 | 0 | 0% | 0 | 0 | 12 | 73 | 3 | 84 | -3 | 80 | -1 | 87 |
| Edwards Rd. | US 1 | Oleander | 0.0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Oleander | 25th | 0.0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 25th | Jenkins Rd | 0.0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 10 | 0 | 7 | 0 | 0 | 10 | 0 | 7 |
| Okeechobee Rd | Florida's Turnpike | Kings Hwy | 5.0% | 2 | 2 | 4% | 14 | 14 | 0% | 0 | 0 | 5% | 0 | 0 | 5% | 2 | 1 | 359 | 29 | 116 | 20 | -6 | 412 | -4 | 152 |
| | Kings Hwy | Crossroads Pkwy | 5.0% | 2 | 2 | 11% | 38 | 38 | 0% | 0 | 0 | 5% | 0 | 0 | 0% | 0 | 0 | 347 | 114 | 121 | 64 | -23 | 438 | -13 | 173 |
| | Crossroads Pkwy | I95 | 5.0% | 2 | 2 | 11% | 38 | 38 | 6% | 0 | 0 | 45% | 2 | 3 | 55% | 7 | 20 | 347 | 132 | 121 | 90 | -26 | 458 | -38 | 193 |
| | I95 | Jenkins Rd | 0.0% | 0 | 0 | 6% | 20 | 20 | 0% | 0 | 0 | 0% | 0 | 0 | 40% | 5 | 16 | 178 | 66 | 64 | 48 | -13 | 231 | -10 | 102 |
| | Jenkins Rd | Michiell Rd | 0.0% | 0 | 0 | 6% | 20 | 20 | 0% | 0 | 0 | 0% | 0 | 0 | 40% | 5 | 14 | 131 | 67 | 49 | 48 | -13 | 184 | -10 | 87 |
| | Michiell Rd | Virginia Ave | 0.0% | 0 | 0 | 3% | 10 | 10 | 0% | 0 | 0 | 0% | 0 | 0 | 40% | 5 | 14 | 130 | 58 | 44 | 37 | -11 | 178 | -7 | 74 |
| Peters Road | Crossroads Pkwy | White Road | | | | | | | | | | 0% | 0 | 0 | 65% | 23 | 8 | 0 | 23 | 0 | 8 | 0 | 23 | 0 | 8 |
| | White Road | Graham Rd | | | | | | | | | | 0% | 0 | 0 | 35% | 4 | 13 | 0 | 4 | 0 | 13 | 0 | 4 | 0 | 13 |
| | | | | In | 42 | | In | 342 | | In | 141 | | In | 7 | | In | 35 | | | | | | | | |
| | | | | Out | 42 | | Out | 341 | | Out | 31 | | Out | 5 | | Out | 12 | | | | | | | | |

| PM APPROVED PROJECTS | | | Kings Highway Commerce | | | Creekside | | | 43 Bent Creek @ 50% Complete | | | 44 Celebration Pointe @25% Complete | | | 37 Whispering Oaks | | | Project Hunt | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Name | From | To | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W |
| 25th St. | Virginia Ave. | Cortez Blvd. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 |
| | Cortez Blvd. | Edwards Rd. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 |
| | Edwards Rd. | Bell Ave. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | | | |
| Jenkins Rd | Orange | Peterson | 3.0% | 2 | 6 | 5.0% | 25 | 16 | 2.0% | 4 | 2 | 30.0% | 30 | 17 | 70.0% | 117 | 120 | 2.0% | 0 | 1 |
| | Peterson | Okeechobee | 3.0% | 2 | 6 | 5.0% | 25 | 16 | 2.0% | 4 | 2 | 50.0% | 29 | 50 | 12.0% | 20 | 21 | 5.0% | 1 | 3 |
| | Okeechobee | Edwards | 3.0% | 2 | 6 | 5.0% | 25 | 16 | 0.0% | 0 | 0 | 5.0% | 3 | 5 | 5.0% | 8 | 9 | 0.0% | 0 | 0 |
| Orange Ave | Rock Rd | Kings Hwy | 2.0% | 1 | 4 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 5.0% | 3 | 5 | 5.0% | 8 | 9 | 3.0% | 2 | 2 |
| | Kings Hwy | I-95 | 30.0% | 56 | 20 | 0.0% | 0 | 0 | 5.0% | 10 | 6 | 10.0% | 6 | 10 | 10.0% | 17 | 17 | 40.0% | 23 | 8 |
| | I-95 | Jenkins Rd | 20.0% | 37 | 14 | 0.0% | 0 | 0 | 20.0% | 39 | 23 | 25.0% | 14 | 25 | 60.0% | 100 | 103 | 20.0% | 11 | 4 |
| | Jenkins Rd | Hartman Rd | 25.0% | 47 | 17 | 0.0% | 0 | 0 | 25.0% | 48 | 28 | 5.0% | 3 | 5 | 10.0% | 17 | 17 | 18.0% | 10 | 3 |
| | Hartman | Angle Rd | 20.0% | 37 | 14 | 0.0% | 0 | 0 | 35.0% | 40 | 67 | 15.0% | 15 | 9 | 20.0% | 33 | 34 | 18.0% | 10 | 3 |
| | Angle | 25th St | 15.0% | 28 | 10 | 0.0% | 0 | 0 | 33.0% | 37 | 64 | 10.0% | 10 | 6 | 13.0% | 22 | 22 | 0.0% | 0 | 0 |
| Kings Hwy | Okeechobee Rd | Picos Rd | 45.0% | 31 | 84 | 5.0% | 16 | 25 | 3.0% | 6 | 3 | 2.0% | 1 | 2 | 2.0% | 3 | 3 | 50.0% | 10 | 29 |
| | Picos Rd | Orange Ave | 45.0% | 31 | 84 | 5.0% | 16 | 25 | 3.0% | 6 | 3 | 2.0% | 1 | 2 | 2.0% | 3 | 3 | 43.0% | 8 | 25 |
| | Orange Ave | Angle Rd (CR603) | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 2.0% | 2 | 4 | 3.0% | 2 | 3 | 3.0% | 5 | 5 | 0.0% | 0 | 0 |
| Edwards Rd. | US 1 | Oleander | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| | Oleander | 25th | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| | 25th | Jenkins Rd | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 5.0% | 5 | 3 | 5.0% | 8 | 9 | 0.0% | 0 | 0 |
| Okeechobee Rd | Florida's Turnpike | Kings Hwy | 5.0% | 3 | 9 | 90.0% | 280 | 448 | 0.0% | 0 | 0 | 5.0% | 5 | 3 | 5.0% | 8 | 9 | 5.0% | 3 | 3 |
| | Kings Hwy | Crossroads Pkwy | 35.0% | 24 | 65 | 80.0% | 249 | 398 | 0.0% | 0 | 0 | 5.0% | 5 | 3 | 5.0% | 8 | 9 | 30.0% | 17 | 17 |
| | Crossroads Pkwy | I95 | 40.0% | 27 | 74 | 80.0% | 249 | 398 | 0.0% | 0 | 0 | 5.0% | 5 | 3 | 5.0% | 8 | 9 | 30.0% | 17 | 17 |
| | I95 | Jenkins Rd | 20.0% | 14 | 37 | 40.0% | 124 | 199 | 0.0% | 0 | 0 | 5.0% | 5 | 3 | 5.0% | 8 | 9 | 10.0% | 6 | 6 |
| | Jenkins Rd | McNeil Rd | 20.0% | 14 | 37 | 30.0% | 93 | 149 | 0.0% | 0 | 0 | 5.0% | 5 | 3 | 2.0% | 3 | 3 | 11.0% | 6 | 6 |
| | McNeil Rd | Virginia Ave | 20.0% | 14 | 37 | 30.0% | 93 | 149 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 2.0% | 3 | 3 | 9.0% | 5 | 5 |
| Peters Road | Crossroads Pkwy | White Road | | | | | | | | | | | | | | | | | | |
| | White Road | Graham Rd | | | | | | | | | | | | | | | | | | |
| | | | | In | 68 | | In | 498 | | In | 193 | | In | 100 | | In | 172 | | In | 19 |
| | | | | Out | 186 | | Out | 311 | | Out | 113 | | Out | 57 | | Out | 167 | | Out | 57 |

| PM APPROVED PROJECTS | | | Wawa Kings Highway | | | Kings Highway Warehouse | | | St. Lucie Commerce Center @25% Complete | | | Walsh Crossroads | | | Project Hurricane | | | SUM Directional N/E | | SUM Directional S/W | | Directional N/E | | Directional S/W | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Name | From | To | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/E | Directional S/W | % | Directional N/S | Directional S/W | Residential | Non-Residential | Residential | Non-Residential | Double Count | Net | Double Count | Net |
| 25th St. | Virginia Ave. | Cortez Blvd. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Cortez Blvd. | Edwards Rd. | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Edwards Rd. | Bell Ave. | | | | | | | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jenkins Rd | Orange | Peterson | 10.0% | 5 | 5 | 0.0% | 0 | 0 | 30.0% | 16 | 59 | 0% | 0 | 0 | 15% | 2 | 2 | 176 | 25 | 155 | 72 | -5 | 195 | -14 | 213 |
| | Peterson | Okeechobee | 8.0% | 4 | 4 | 0.0% | 0 | 0 | 30.0% | 16 | 59 | 0% | 0 | 0 | 20% | 2 | 2 | 77 | 25 | 88 | 73 | -5 | 97 | -15 | 147 |
| | Okeechobee | Edwards | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 36 | 2 | 29 | 6 | 0 | 38 | -1 | 34 |
| Orange Ave | Rock Rd | Kings Hwy | 55.0% | 28 | 29 | 4.0% | 9 | 9 | 90.0% | 47 | 176 | 0% | 0 | 0 | 5% | 1 | 1 | 11 | 87 | 14 | 220 | -3 | 95 | -3 | 230 |
| | Kings Hwy | I-95 | 55.0% | 29 | 28 | 58.0% | 125 | 266 | 50.0% | 26 | 98 | 0% | 0 | 0 | 10% | 1 | 1 | 32 | 260 | 33 | 421 | -8 | 284 | -8 | 445 |
| | I-95 | Jenkins Rd | 20.0% | 10 | 10 | 13.0% | 28 | 60 | 10.0% | 5 | 20 | 0% | 0 | 0 | 0% | 0 | 0 | 153 | 92 | 151 | 107 | -18 | 227 | -21 | 236 |
| | Jenkins Rd | Hartman Rd | 10.0% | 5 | 5 | 8.0% | 17 | 37 | 5.0% | 3 | 10 | 0% | 0 | 0 | 15% | 2 | 2 | 68 | 83 | 50 | 73 | -17 | 134 | -13 | 111 |
| | Hartman | Angle Rd | 10.0% | 5 | 5 | 8.0% | 17 | 37 | 5.0% | 3 | 10 | 0% | 0 | 0 | 15% | 2 | 2 | 88 | 74 | 110 | 70 | -15 | 147 | -14 | 166 |
| | Angle | 25th St | 10.0% | 5 | 5 | 0.0% | 0 | 0 | 5.0% | 3 | 10 | 0% | 0 | 0 | 15% | 2 | 2 | 69 | 37 | 92 | 27 | -7 | 99 | -5 | 113 |
| Kings Hwy | Okeechobee Rd | Picos Rd | 20.0% | 10 | 10 | 52.0% | 112 | 238 | 0.0% | 0 | 0 | 30.0% | 6 | 4 | 15.0% | 2 | 2 | 26 | 171 | 34 | 366 | -6 | 190 | -8 | 391 |
| | Picos Rd | Orange Ave | 20.0% | 10 | 10 | 48.0% | 104 | 220 | 30.0% | 59 | 16 | 30.0% | 6 | 4 | 15.0% | 2 | 2 | 26 | 219 | 34 | 359 | -6 | 239 | -8 | 384 |
| | Orange Ave | Angle Rd (CR603) | 20.0% | 10 | 10 | 18.0% | 39 | 82 | 10.0% | 20 | 5 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 9 | 69 | 12 | 98 | -2 | 75 | -3 | 107 |
| Edwards Rd. | US 1 | Oleander | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Oleander | 25th | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 25th | Jenkins Rd | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0 | 13 | 0 | 11 | 0 | 0 | 13 | 0 | 11 |
| Okeechobee Rd | Florida's Turnpike | Kings Hwy | 5.0% | 3 | 3 | 4.0% | 9 | 9 | 0.0% | 0 | 0 | 5% | 1 | 1 | 5% | 1 | 1 | 293 | 19 | 460 | 25 | -4 | 308 | -5 | 472 |
| | Kings Hwy | Crossroads Pkwy | 5.0% | 3 | 3 | 11.0% | 24 | 24 | 0.0% | 0 | 0 | 5% | 1 | 1 | 0% | 0 | 0 | 262 | 68 | 410 | 109 | -14 | 317 | -22 | 497 |
| | Crossroads Pkwy | I95 | 5.0% | 3 | 3 | 11.0% | 24 | 24 | 0.0% | 0 | 0 | 45% | 9 | 5 | 55% | 6 | 6 | 262 | 86 | 410 | 129 | -17 | 331 | -26 | 513 |
| | I95 | Jenkins Rd | 0.0% | 0 | 0 | 6.0% | 13 | 13 | 0.0% | 0 | 0 | 0% | 0 | 0 | 40% | 4 | 4 | 138 | 37 | 211 | 60 | -7 | 167 | -12 | 259 |
| | Jenkins Rd | McNeil Rd | 0.0% | 0 | 0 | 6.0% | 13 | 13 | 0.0% | 0 | 0 | 0% | 0 | 0 | 40% | 4 | 4 | 102 | 37 | 156 | 60 | -7 | 131 | -12 | 204 |
| | McNeil Rd | Virginia Ave | 0.0% | 0 | 0 | 3.0% | 6 | 6 | 0.0% | 0 | 0 | 0% | 0 | 0 | 40% | 4 | 4 | 97 | 30 | 153 | 53 | -6 | 120 | -11 | 195 |
| Peters Road | Crossroads Pkwy | White Road | | | | | | | | | | 50.0% | 11 | 6 | 65.0% | 7 | 7 | 0 | 17 | 0 | 13 | 0 | 17 | 0 | 13 |
| | White Road | Graham Rd | | | | | | | | | | 30.0% | 6 | 4 | 35.0% | 4 | 4 | 0 | 10 | 0 | 7 | 0 | 10 | 0 | 7 |
| | | | | | In | 51 | | In | 458 | | In | 52 | | In | 12 | | In | 10 | | | | | | | |
| | | | | | Out | 52 | | Out | 216 | | Out | 196 | | Out | 21 | | Out | 11 | | | | | | | |

Historical Growth Rate Calculation

| Segment | From | To | 2015 AADT | 2019 AADT | 4 Year Historical Growth Rate |
|---|---|---|---|---|---|
| Okeechobee Blvd | I-95 | McNeil Rd | 28,500 | 33,000 | 3.73% |
| | McNeil Rd | Virginia Ave | 26,500 | 30,500 | 3.58% |
| Jenkins Rd | Okeechobee Blvd | Orange Ave | 9,600 | 9,200 | -1.06% |
| Kings Hwy | Okeechobee Blvd | Graham Rd | 6,300 | 7,600 | 4.80% |
| | Graham Rd | Orange Ave | 8,400 | 7,000 | -4.46% |
| Orange Ave | Kings Hwy | I-95 | 17,300 | 19,800 | 3.43% |
| | I-95 | Jenkins Rd | 13,600 | 15,300 | 2.99% |
| Virginia Ave | Okeechobee Blvd | 35th St | 21,000 | 21,000 | 0.00% |
| | | Total | 131,200 | 143,400 | 2.25% |

*Source FDOT Historical Traffic Counts

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0030 - SR 70/VIRGINIA AVE - E OF OKEECHOBEE RD (COUNTY 30)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2019 | 21000 C | E 10500 | W 10500 | 9.00 | 51.00 | 7.10 |
| 2018 | 21500 C | E 11000 | W 10500 | 9.00 | 51.30 | 3.60 |
| 2017 | 20300 C | E 10500 | W 9800 | 9.00 | 50.90 | 3.60 |
| 2016 | 22500 C | E 12000 | W 10500 | 9.00 | 50.90 | 3.60 |
| 2015 | 21000 C | E 11000 | W 10000 | 9.00 | 51.00 | 3.30 |
| 2014 | 20400 C | E 10500 | W 9900 | 9.00 | 50.80 | 3.90 |
| 2013 | 21000 C | E 10500 | W 10500 | 9.00 | 50.80 | 3.90 |
| 2012 | 21000 C | E 10500 | W 10500 | 9.00 | 56.80 | 4.50 |
| 2011 | 23500 C | E 11500 | W 12000 | 9.00 | 57.20 | 4.50 |
| 2010 | 22000 C | E 11500 | W 10500 | 10.32 | 55.40 | 4.50 |
| 2009 | 22000 C | E 11000 | W 11000 | 10.27 | 57.35 | 5.20 |
| 2007 | 16900 C | E 8900 | W 8000 | 10.31 | 58.74 | 5.20 |
| 2006 | 20500 C | E 11000 | W 9500 | 10.73 | 65.89 | 5.00 |
| 2005 | 22000 C | E 11500 | W 10500 | 10.80 | 60.70 | 5.00 |
| 2004 | 20300 C | E 10500 | W 9800 | 10.30 | 57.70 | 5.00 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0041 - SR 68 / ORANGE AVE - W OF SR 9/I-95 (COUNTY 41)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2019 | 19800 C | E 10500 | W 9300 | 9.00 | 54.30 | 22.40 |
| 2018 | 21000 C | E 10500 | W 10500 | 9.00 | 55.20 | 22.40 |
| 2017 | 19000 C | E 9800 | W 9200 | 9.00 | 56.20 | 22.40 |
| 2016 | 21300 C | E 11500 | W 9800 | 9.00 | 57.10 | 25.00 |
| 2015 | 17300 C | E 8500 | W 8800 | 9.00 | 56.30 | 25.00 |
| 2014 | 15700 S | E 8000 | W 7700 | 9.00 | 54.70 | 16.40 |
| 2013 | 15500 F | E 7900 | W 7600 | 9.00 | 57.20 | 16.40 |
| 2012 | 15700 C | E 8000 | W 7700 | 9.00 | 57.00 | 16.40 |
| 2011 | 17900 C | E 9000 | W 8900 | 9.00 | 56.50 | 24.40 |
| 2010 | 18600 C | E 9400 | W 9200 | 11.51 | 57.07 | 24.40 |
| 2009 | 16300 C | E 8200 | W 8100 | 11.11 | 58.68 | 24.40 |
| 2008 | 26000 C | E 13000 | W 13000 | 11.51 | 54.38 | 22.30 |
| 2007 | 27000 C | E 13500 | W 13500 | 11.51 | 58.16 | 22.30 |
| 2006 | 18100 C | E 8700 | W 9400 | 10.78 | 56.96 | 22.30 |
| 2005 | 18800 C | E 9700 | W 9100 | 11.10 | 56.60 | 20.90 |
| 2004 | 18000 C | E 9000 | W 9000 | 11.10 | 60.50 | 20.90 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0035 - SR 68 / ORANGE AVE - E OF SR 9/I-95 (COUNTY 35)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2019 | 15300 C | E 7600 | W 7700 | 9.00 | 51.00 | 16.60 |
| 2018 | 13100 C | E 7000 | W 6100 | 9.00 | 51.30 | 16.60 |
| 2017 | 15400 C | E 7300 | W 8100 | 9.00 | 50.90 | 10.80 |
| 2016 | 13900 C | E 6700 | W 7200 | 9.00 | 50.90 | 10.80 |
| 2015 | 13600 C | E 6700 | W 6900 | 9.00 | 51.00 | 10.80 |
| 2014 | 12600 F | E 6200 | W 6400 | 9.00 | 50.80 | 10.40 |
| 2013 | 12600 C | E 6200 | W 6400 | 9.00 | 50.80 | 10.40 |
| 2012 | 13700 C | E 6700 | W 7000 | 9.00 | 56.80 | 10.40 |
| 2011 | 12900 C | E 6600 | W 6300 | 9.00 | 57.20 | 16.30 |
| 2010 | 13800 C | E 6800 | W 7000 | 10.32 | 55.40 | 16.30 |
| 2009 | 12200 C | E 6000 | W 6200 | 10.27 | 57.35 | 16.30 |
| 2008 | 13200 C | E 6600 | W 6600 | 10.45 | 58.06 | 9.70 |
| 2007 | 15100 C | E 7500 | W 7600 | 10.31 | 58.74 | 16.60 |
| 2006 | 12800 C | E 6300 | W 6500 | 10.73 | 65.89 | 10.20 |
| 2005 | 13000 C | E 6700 | W 6300 | 10.80 | 60.70 | 10.20 |
| 2004 | 12700 C | E 6500 | W 6200 | 10.30 | 57.70 | 10.20 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0742 - SR 70/OKEECHOBEE RD - SW OF SR 70/VIRGINIA AVE (COUNTY 742)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2019 | 30500 C | E 14500 | W 16000 | 9.00 | 51.00 | 4.60 |
| 2018 | 31500 C | E 16500 | W 15000 | 9.00 | 51.30 | 4.60 |
| 2017 | 31500 C | E 15500 | W 16000 | 9.00 | 50.90 | 12.00 |
| 2016 | 26000 C | E 15500 | W 10500 | 9.00 | 50.90 | 12.00 |
| 2015 | 26500 C | E 11500 | W 15000 | 9.00 | 51.00 | 12.00 |
| 2014 | 30000 C | E 15000 | W 15000 | 9.00 | 50.80 | 6.10 |
| 2013 | 27000 C | E 12500 | W 14500 | 9.00 | 50.80 | 3.80 |
| 2012 | 33000 C | E 16500 | W 16500 | 9.00 | 56.80 | 3.80 |
| 2008 | 32500 C | E 16500 | W 16000 | 10.45 | 58.06 | 6.70 |
| 2007 | 31500 C | E 15000 | W 16500 | 10.31 | 58.74 | 7.40 |
| 2006 | 35500 C | E 18500 | W 17000 | 10.73 | 65.89 | 5.00 |
| 2005 | 32500 C | E 16500 | W 16000 | 10.80 | 60.70 | 5.70 |
| 2004 | 30000 C | E 15500 | W 14500 | 10.30 | 57.70 | 5.70 |

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0029 - SR 70 / OKEECHOBEE RD - E OF SR 9/I-95 (COUNTY 29)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2019 | 33000 C | E 17000 | W 16000 | 9.00 | 51.00 | 11.00 |
| 2018 | 31000 C | E 15000 | W 16000 | 9.00 | 51.30 | 4.70 |
| 2017 | 34500 C | E 17500 | W 17000 | 9.00 | 50.90 | 12.30 |
| 2016 | 28500 F | E 14000 | W 14500 | 9.00 | 50.90 | 12.30 |
| 2015 | 28500 C | E 14000 | W 14500 | 9.00 | 51.00 | 12.30 |
| 2014 | 25500 F | E 14000 | W 11500 | 9.00 | 50.80 | 4.90 |
| 2013 | 25500 C | E 14000 | W 11500 | 9.00 | 50.80 | 4.90 |
| 2012 | 28000 C | E 14000 | W 14000 | 9.00 | 56.80 | 4.90 |
| 2011 | 30500 C | E 15500 | W 15000 | 9.00 | 57.20 | 10.90 |
| 2010 | 30500 C | E 15500 | W 15000 | 10.32 | 55.40 | 10.90 |
| 2009 | 26500 C | E 13000 | W 13500 | 10.27 | 57.35 | 10.90 |
| 2008 | 29500 C | E 15500 | W 14000 | 10.45 | 58.06 | 6.70 |
| 2007 | 33000 C | E 17000 | W 16000 | 10.31 | 58.74 | 5.20 |
| 2006 | 31000 C | E 16000 | W 15000 | 10.73 | 65.89 | 16.00 |
| 2005 | 26500 C | E 13500 | W 13000 | 10.80 | 60.70 | 16.00 |
| 2004 | 28000 C | E 14000 | W 14000 | 10.30 | 57.70 | 16.00 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0757 - SR 713 / KINGS HWY - N OF SR 70/OKEECHOBEE RD (COUNTY 757)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2019 | 7600 C | N 3700 | S 3900 | 9.00 | 54.30 | 23.40 |
| 2018 | 13600 C | N 6500 | S 7100 | 9.00 | 55.20 | 23.90 |
| 2017 | 12800 C | N 6100 | S 6700 | 9.00 | 56.20 | 23.90 |
| 2016 | 6400 C | N 3100 | S 3300 | 9.00 | 57.10 | 23.90 |
| 2015 | 6300 C | N 3000 | S 3300 | 9.00 | 56.30 | 26.90 |
| 2014 | 9100 C | N 3900 | S 5200 | 9.00 | 54.70 | 46.50 |
| 2013 | 6000 C | N 3000 | S 3000 | 9.00 | 57.20 | 17.40 |
| 2012 | 5400 C | N 2700 | S 2700 | 9.00 | 57.00 | 17.40 |
| 2011 | 6200 C | N 3200 | S 3000 | 9.00 | 56.50 | 22.90 |
| 2010 | 13500 C | N 6800 | S 6700 | 11.51 | 57.07 | 22.90 |
| 2009 | 8000 C | N 4000 | S 4000 | 11.11 | 58.68 | 22.90 |
| 2008 | 7400 C | N 3500 | S 3900 | 11.51 | 54.38 | 23.20 |
| 2007 | 8900 C | N 4400 | S 4500 | 11.51 | 58.16 | 25.50 |
| 2006 | 7300 C | N 3600 | S 3700 | 10.78 | 56.96 | 25.50 |
| 2005 | 7900 C | N 3900 | S 4000 | 11.10 | 56.60 | 18.10 |
| 2004 | 7200 C | N 3500 | S 3700 | 11.10 | 60.50 | 18.10 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0076 - SR 713/KINGS HWY - S OF SR 68/ORANGE AVE (COUNTY 76)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2019 | 7000 C | N 3500 | S 3500 | 9.00 | 54.30 | 22.80 |
| 2018 | 9700 C | N 4600 | S 5100 | 9.00 | 55.20 | 22.80 |
| 2017 | 9500 C | N 4700 | S 4800 | 9.00 | 56.20 | 22.80 |
| 2016 | 9600 C | N 4600 | S 5000 | 9.00 | 57.10 | 32.40 |
| 2015 | 8400 C | N 4100 | S 4300 | 9.00 | 56.30 | 32.40 |
| 2014 | 7900 C | N 3800 | S 4100 | 9.00 | 54.70 | 19.90 |
| 2013 | 7200 C | N 3400 | S 3800 | 9.00 | 57.20 | 14.20 |
| 2012 | 7100 C | N 3400 | S 3700 | 9.00 | 57.00 | 14.20 |
| 2011 | 8000 C | N 3900 | S 4100 | 9.00 | 56.50 | 17.20 |
| 2010 | 8900 C | N 4400 | S 4500 | 11.51 | 57.07 | 17.20 |
| 2009 | 8000 C | N 3800 | S 4200 | 11.11 | 58.68 | 17.20 |
| 2008 | 10600 C | N 5200 | S 5400 | 11.51 | 54.38 | 11.20 |
| 2007 | 11100 C | N 5400 | S 5700 | 11.51 | 58.16 | 7.90 |
| 2006 | 10600 C | N 5300 | S 5300 | 10.78 | 56.96 | 17.30 |
| 2005 | 9900 C | N 4800 | S 5100 | 11.10 | 56.60 | 17.30 |
| 2004 | 9400 C | N 4600 | S 4800 | 11.10 | 60.50 | 17.30 |

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0273 - CR 611/JENKINS RD - N. OF SR 70/OKEECHOBEE RD (COUNTY 131)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2019 | 9200 C | N 4600 | S 4600 | 9.00 | 51.00 | 7.80 |
| 2018 | 10000 V | N 4400 | S 5600 | 9.00 | 51.30 | 5.80 |
| 2017 | 9900 R | N 4400 | S 5500 | 9.00 | 50.90 | 10.00 |
| 2016 | 9700 T | N 4300 | S 5400 | 9.00 | 50.90 | 6.20 |
| 2015 | 9600 S | N 4300 | S 5300 | 9.00 | 51.00 | 41.80 |
| 2014 | 9600 F | N 4300 | S 5300 | 9.00 | 50.80 | 49.50 |
| 2013 | 9600 C | N 4300 | S 5300 | 9.00 | 50.80 | 11.90 |
| 2012 | 7100 S | N 3600 | S 3500 | 9.00 | 56.80 | 4.80 |
| 2011 | 7100 F | N 3600 | S 3500 | 9.00 | 57.20 | 4.80 |
| 2010 | 7100 C | N 3600 | S 3500 | 10.32 | 55.40 | 4.80 |
| 2009 | 8500 C | N 4200 | S 4300 | 10.27 | 57.35 | 10.70 |
| 2008 | 9100 C | N 4500 | S 4600 | 10.45 | 58.06 | 6.60 |

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

# APPENDIX D

# INTERSECTION ANALYSIS

# TURNING MOVEMENT VOLUME COUNTS

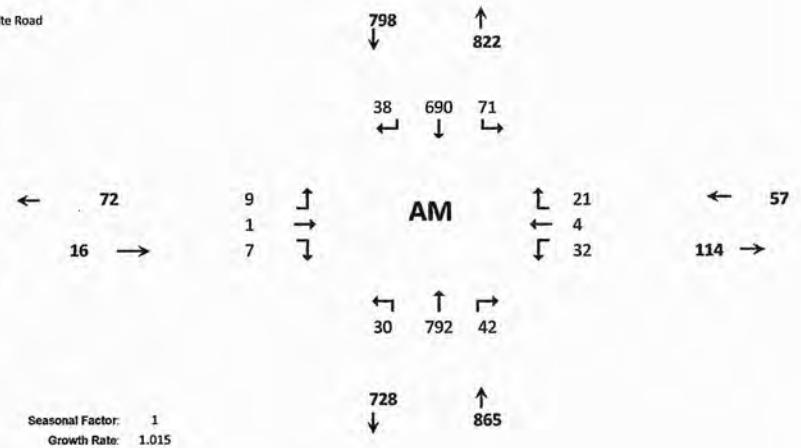
**N/S STREET:** Kings Highway **E/W STREET:** White Road **CONTROL:** Signalized

**FILENAME:**

**COUNT DATE:** 2/12/2019 **DAY:** **CITY:** Ft Pierce **INTERSECTION:** Kings Highway & White Road

**REPORT DATE:** 6/22/2022 **ANALYSIS YEAR:** 2024 Without Project

| 15 Min Period | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | ONE HOUR SUM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NBL | NBT | NBR | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR | TOTAL | |
| 7:00-7:15 | | 91 | | | 81 | | | | | | | | 172 | 701 |
| 7:15-7:30 | | 81 | | | 76 | | | | | | | | 157 | 708 |
| 7:30-7:45 | | 100 | | | 101 | | | | | | | | 201 | 730 |
| 7:45-8:00 | | 90 | | | 81 | | | | | | | | 171 | 672 |
| 8:00-8:15 | | 86 | | | 93 | | | | | | | | 179 | 642 |
| 8:15-8:30 | | 88 | | | 91 | | | | | | | | 179 | |
| 8:30-8:45 | | 80 | | | 63 | | | | | | | | 143 | |
| 8:45-9:00 | | 50 | | | 91 | | | | | | | | 141 | |




AM PEAK HOUR IS FROM: **7:30 AM TO 8:30AM**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 0 | 364 | 0 | 0 | 366 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 730 | |
| Season Factor | 0 | 364 | 0 | 0 | 366 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 730 | |
| Growth | 0 | 392 | 0 | 0 | 394 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 786 | |
| In/Out | - | OUT | IN | IN | IN | - | - | - | - | OUT | - | OUT | | |
| Percentage | 0% | 10% | 15% | 25% | 15% | 0% | 0% | 0% | 0% | 45% | 0% | 30% | | |
| PROJECT | 0 | 7 | 42 | 71 | 42 | 0 | 0 | 0 | 0 | 32 | 0 | 21 | 216 | |

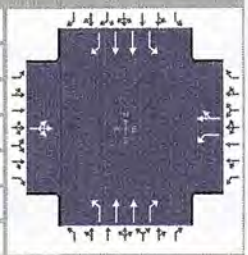
**Seasonal Factor:** 1
**Growth Rate:** 1.015
**Years Grown:** 5

| | | | | | | | | | | | | | | | Trips In | Trips Out |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SUBPROJECTS** | | | | | | | | | | | | | | | | |
| % | 40% | | | | | 50% | 50% | 5% | 40% | | 5% | | | | | |
| In/Out | IN | | | | | IN | OUT | OUT | OUT | | IN | | | | | |
| Volume | 30 | 0 | 0 | 0 | 0 | 38 | 9 | 1 | 7 | 0 | 4 | 0 | 0 | Project Hunt | 76 | 17 |
| % | | 30.0% | | | 30.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 169 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | St Lucie Commerce Center | 563 | 124 |
| % | | 2.0% | | | 2.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Whispering Oaks | 45 | 167 |
| % | | 2.0% | | | 2.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 2 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Bent Creek | 123 | 371 |
| % | | 15.0% | | | 15.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 9 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Wawa Kings | 63 | 64 |
| % | | 52.0% | | | 52.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 178 | 0 | 0 | 177 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Kings Highway Warehouse | 342 | 341 |
| % | | 15.0% | | | 15.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 30 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Stonemont | 197 | 55 |
| % | | 30.0% | | | 30.0% | | | | | | | | | | | |
| In/Out | | OUT | | | IN | | | | | | | | | | | |
| Volume | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Walsh Crossroads | 7 | 5 |
| % | | | | | | | | | | | | | | | | |
| In/Out | | | | | | | | | | | | | | | | |
| Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Project Hurricane | 36 | 12 |
| % | | 2.0% | | | 2.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 2 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Celebration Pointe | 121 | 385 |
| Subtotal | 30 | 393 | 0 | 0 | 253 | 38 | 9 | 1 | 7 | 0 | 4 | 0 | 0 | | | |
| Total | 30 | 792 | 42 | 71 | 690 | 38 | 9 | 1 | 7 | 32 | 4 | 21 | 1002 | | | |

D-1

# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | O'Rourke Engineering & Planning | | | Duration, h | 0.250 |
| Analyst | MM | Analysis Date | Jun 24, 2022 | Area Type | Other |
| Jurisdiction | St. Lucie | Time Period | AM Peak Hour | PHF | 0.92 |
| Urban Street | Kings Hwy | Analysis Year | 2023 | Analysis Period | 1> 7:00 |
| Intersection | White Rd | File Name | Kings & White (WITHOUT PROJECT) - AM - 202... | | |
| Project Description | Kings Hwy Commerce - Without Project | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 9 | 1 | 7 | 32 | 4 | 21 | 30 | 792 | 42 | 71 | 690 | 38 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 | 2 | 3 | 4 | |
| Green | 24.0 | 14.0 | | 64.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Yellow | 4.0 | 4.0 | | 4.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Red | 2.0 | 2.0 | | 2.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 2 | | 6 | 3 | 8 | 7 | 4 |
| Case Number | | 8.0 | | 6.0 | 1.1 | 3.0 | 1.1 | 3.0 |
| Phase Duration, s | | 30.0 | | 30.0 | 20.0 | 70.0 | 20.0 | 70.0 |
| Change Period, ( $Y+R_c$ ), s | | 6.0 | | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | 3.1 | 3.0 | 3.1 | 3.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | 2.8 | 24.9 | 4.2 | 20.9 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | 0.0 | 4.7 | 0.1 | 4.7 |
| Phase Call Probability | | | | | 1.00 | 1.00 | 1.00 | 1.00 |
| Max Out Probability | | | | | 0.00 | 0.00 | 0.00 | 0.00 |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | | 18 | | 35 | 27 | | 33 | 861 | 46 | 77 | 750 | 41 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | 1402 | | 1228 | 1419 | | 1668 | 1484 | 1384 | 1555 | 1484 | 1321 |
| Queue Service Time ( $g_s$ ), s | | 0.0 | | 2.9 | 1.9 | | 0.8 | 22.9 | 1.9 | 2.2 | 18.9 | 1.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | 1.9 | | 4.7 | 1.9 | | 0.8 | 22.9 | 1.9 | 2.2 | 18.9 | 1.8 |
| Green Ratio ( *g/C* ) | | 0.20 | | 0.20 | 0.20 | | 0.65 | 0.53 | 0.53 | 0.65 | 0.53 | 0.53 |
| Capacity ( *c* ), veh/h | | 326 | | 286 | 284 | | 494 | 1583 | 738 | 424 | 1583 | 705 |
| Volume-to-Capacity Ratio ( *X* ) | | 0.057 | | 0.121 | 0.096 | | 0.066 | 0.544 | 0.062 | 0.182 | 0.474 | 0.059 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | 0.8 | | 1.7 | 1.3 | | 0.5 | 12.1 | 1.1 | 1.3 | 10.4 | 1.0 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | 38.8 | | 41.1 | 39.2 | | 9.4 | 18.4 | 13.5 | 10.7 | 17.5 | 13.5 |
| Incremental Delay ( $d_2$ ), s/veh | | 0.3 | | 0.9 | 0.7 | | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | 39.2 | | 41.9 | 39.8 | | 9.4 | 18.6 | 13.5 | 10.8 | 17.6 | 13.5 |
| Level of Service (LOS) | | D | | D | D | | A | B | B | B | B | B |
| Approach Delay, s/veh / LOS | 39.2 | D | | 41.0 | D | | 18.1 | B | | 16.8 | B | |
| Intersection Delay, s/veh / LOS | 18.4 | | | | | | B | | | | | |

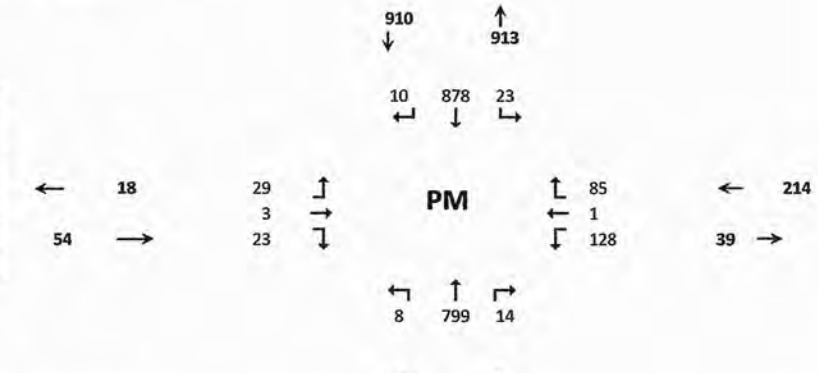
| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.46 | B | 2.46 | B | 1.90 | B | 1.68 | B |
| Bicycle LOS Score / LOS | 0.52 | A | 0.59 | A | 1.26 | A | 1.20 | A |

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# TURNING MOVEMENT VOLUME COUNTS

**N/S STREET:** Kings Highway **E/W STREET:** White Road **CONTROL:** Signalized
**FILENAME:**
**COUNT DATE:** 2/12/2019 **DAY:** **CITY:** Ft Pierce
**REPORT DATE:** 3/24/2022 **ANALYSIS YEAR:** 2024 Without Project With Project

| 15 Min Period lanes | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | ONE HOUR SUM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NBL | NBT | NBR | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR | TOTAL | |
| 4:00-4:15 | | 88 | | | 89 | | | | | | | | 177 | 813 |
| 4:15-4:30 | | 116 | | | 111 | | | | | | | | 227 | 847 |
| 4:30-4:45 | | 95 | | | 103 | | | | | | | | 198 | 810 |
| 4:45-5:00 | | 85 | | | 126 | | | | | | | | 211 | 802 |
| 5:00-5:15 | | 102 | | | 109 | | | | | | | | 211 | 730 |
| 5:15-5:30 | | 91 | | | 99 | | | | | | | | 190 | |
| 5:30-5:45 | | 98 | | | 92 | | | | | | | | 190 | |
| 5:45-6:00 | | 71 | | | 68 | | | | | | | | 139 | |




PM PEAK HOUR IS FROM: 4:15PM TO 5:15PM

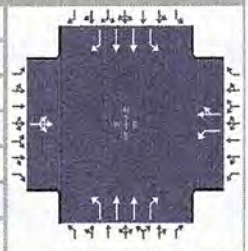
| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 0 | 398 | 0 | 0 | 449 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 847 | |
| Season Factor | 0 | 398 | 0 | 0 | 449 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 847 | |
| Growth | 0 | 429 | 0 | 0 | 484 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 912 | |
| In/Out | - | OUT | IN | IN | IN | - | - | - | - | OUT | - | OUT | | |
| Percentage | 0% | 10% | 15% | 25% | 15% | 0% | 0% | 0% | 0% | 45% | 0% | 30% | | |
| **PROJECT** | 0 | 28 | 14 | 23 | 14 | 0 | 0 | 0 | 0 | 128 | 0 | 85 | 291 | |
| **SUBPROJECTS** | | | | | | | | | | | | | | |
| % | 40.0% | 0.0% | 0.0% | 0.0% | 0.0% | 50.0% | 50.0% | 5.0% | 40.0% | 0.0% | 5.0% | 0.0% | 0.0% | |
| In/Out | IN | 0.0% | 0.0% | 0.0% | 0.0% | IN | OUT | OUT | OUT | 0.0% | IN | 0.0% | 0.0% | |
| Volume | 8 | 0 | 0 | 0 | 0 | 10 | 29 | 3 | 23 | 0 | 1 | 0 | 0 | |
| % | | 30.0% | | | 30.0% | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | |
| Volume | 0 | 62 | 0 | 0 | 235 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % | | 2.0% | | | 2.0% | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | |
| Volume | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % | | 2.0% | | | 2.0% | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | |
| Volume | 0 | 8 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % | | 15.0% | | | 15.0% | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | |
| Volume | 0 | 9 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % | | 52.0% | | | 52.0% | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | |
| Volume | 0 | 238 | 0 | 0 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % | | 15.0% | | | 15.0% | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | |
| Volume | 0 | 10 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % | | 30.0% | | | 30.0% | | | | | | | | | |
| In/Out | | OUT | | | IN | | | | | | | | | |
| Volume | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % | | | | | | | | | | | | | | |
| In/Out | | | | | | | | | | | | | | |
| Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % | | 2.0% | | | 2.0% | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | |
| Volume | 0 | 8 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Subtotal | 8 | 342 | 0 | 0 | 380 | 10 | 29 | 3 | 23 | 0 | 1 | 0 | 0 | |
| Total | 8 | 799 | 14 | 23 | 878 | 10 | 29 | 3 | 23 | 128 | 1 | 85 | 1203 | 3193 |

**Seasonal Factor:** 1
**Growth Rate:** 1.015
**Years Grown:** 5

| | Trips In | Trips Out |
|---|---|---|
| Kings Highway Commerce Park | 90 | 284 |
| Project Hunt | 19 | 57 |
| St Lucie Commerce Center | 208 | 784 |
| Whispering Oaks | 172 | 94 |
| Bent Creek | 385 | 226 |
| Wawa Kings | 57 | 58 |
| Kings Highway Warehouse | 458 | 216 |
| Stonemont | 68 | 186 |
| Walsh Crossroads | 10 | 11 |
| Project Hurricane | 23 | 37 |
| Celebration Pointe | 398 | 229 |

# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | O'Rourke Engineering & Planning | | | Duration, h | 0.250 |
| Analyst | MM | Analysis Date | Jun 24, 2022 | Area Type | Other |
| Jurisdiction | St. Lucie | Time Period | PM Peak Hour | PHF | 0.92 |
| Urban Street | Kings Hwy | Analysis Year | Without Project | Analysis Period | 1> 7:00 |
| Intersection | White Rd | File Name | Kings & White (WITHOUT PROJECT) - PM - 202... | | |
| Project Description | Kings Hwy Commerce - Without Project | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 29 | 3 | 23 | 128 | 1 | 85 | 8 | 799 | 14 | 23 | 878 | 10 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 140.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 | 2 | 3 | 4 | |
| Green | 44.0 | 14.0 | 64.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 4.0 | 4.0 | 4.0 | 0.0 | 0.0 | 0.0 | | 5 | 6 | 7 | 8 | |
| Red | 2.0 | 2.0 | 2.0 | 0.0 | 0.0 | 0.0 | | | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 2 | | 6 | 3 | 8 | 7 | 4 |
| Case Number | | 8.0 | | 6.0 | 1.1 | 3.0 | 1.1 | 3.0 |
| Phase Duration, s | | 50.0 | | 50.0 | 20.0 | 70.0 | 20.0 | 70.0 |
| Change Period, ( *Y+R c* ), s | | 6.0 | | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | 3.1 | 3.0 | 3.1 | 3.0 |
| Queue Clearance Time ( *g s* ), s | | | | | 2.4 | 33.4 | 3.2 | 38.0 |
| Green Extension Time ( *g e* ), s | | 0.0 | | 0.0 | 0.0 | 5.3 | 0.0 | 5.2 |
| Phase Call Probability | | | | | 1.00 | 1.00 | 1.00 | 1.00 |
| Max Out Probability | | | | | 0.00 | 0.01 | 0.00 | 0.01 |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | | 60 | | 139 | 93 | | 9 | 868 | 15 | 25 | 954 | 11 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | 1036 | | 1404 | 1210 | | 1485 | 1484 | 1208 | 1358 | 1484 | 1321 |
| Queue Service Time ( *g s* ), s | | 3.2 | | 11.8 | 8.0 | | 0.4 | 31.4 | 1.0 | 1.2 | 36.0 | 0.6 |
| Cycle Queue Clearance Time ( *g c* ), s | | 11.2 | | 23.0 | 8.0 | | 0.4 | 31.4 | 1.0 | 1.2 | 36.0 | 0.6 |
| Green Ratio ( *g/C* ) | | 0.31 | | 0.31 | 0.31 | | 0.56 | 0.46 | 0.46 | 0.56 | 0.46 | 0.46 |
| Capacity ( *c* ), veh/h | | 365 | | 380 | 380 | | 291 | 1357 | 552 | 293 | 1357 | 604 |
| Volume-to-Capacity Ratio ( *X* ) | | 0.164 | | 0.366 | 0.246 | | 0.030 | 0.640 | 0.028 | 0.085 | 0.703 | 0.018 |
| Back of Queue ( *Q* ), ft/ln ( 85 th percentile) | | | | | | | | | | | | |
| Back of Queue ( *Q* ), veh/ln ( 85 th percentile) | | 3.0 | | 6.6 | 4.2 | | 0.2 | 14.7 | 0.5 | 0.7 | 16.7 | 0.4 |
| Queue Storage Ratio ( *RQ* ) ( 85 th percentile) | | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | | 37.1 | | 45.6 | 35.7 | | 19.1 | 29.2 | 20.9 | 18.2 | 30.4 | 20.8 |
| Incremental Delay ( *d 2* ), s/veh | | 1.0 | | 2.7 | 1.5 | | 0.0 | 0.8 | 0.0 | 0.0 | 1.4 | 0.0 |
| Initial Queue Delay ( *d 3* ), s/veh | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | 38.1 | | 48.3 | 37.2 | | 19.1 | 30.0 | 20.9 | 18.2 | 31.8 | 20.8 |
| Level of Service (LOS) | | D | | D | D | | B | C | C | B | C | C |
| Approach Delay, s/veh / LOS | 38.1 | D | | 43.8 | D | | 29.7 | C | | 31.4 | C | |
| Intersection Delay, s/veh / LOS | 32.2 | | | | | | C | | | | | |

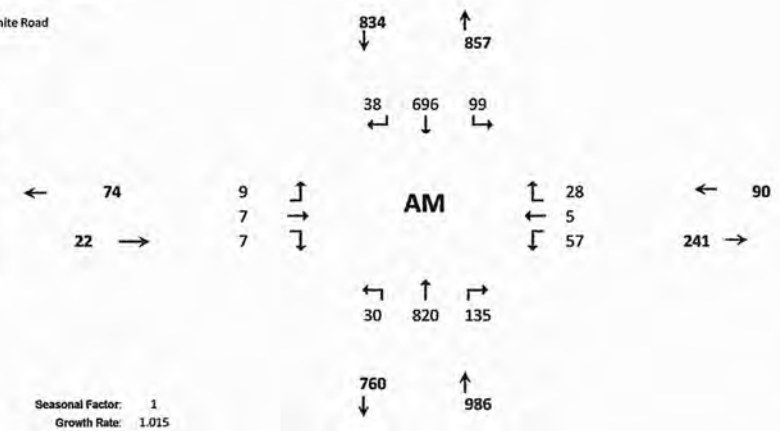
| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.45 | B | 1.92 | B | 1.69 | B |
| Bicycle LOS Score / LOS | 0.59 | A | 0.87 | A | 1.22 | A | 1.30 | A |

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# TURNING MOVEMENT VOLUME COUNTS

**N/S STREET:** Kings Highway **E/W STREET:** White Road **CONTROL:** Signalized
**FILENAME:**
**COUNT DATE:** 2/12/2019 **DAY:** **CITY:** Ft Pierce **INTERSECTION:** Kings Highway & White Road
**REPORT DATE:** 6/22/2022 **ANALYSIS YEAR:** 2024 With Project

| 15 Min Period | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | ONE HOUR SUM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NBL | NBT | NBR | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR | TOTAL | |
| 7:00-7:15 | | 91 | | | 81 | | | | | | | | 172 | 701 |
| 7:15-7:30 | | 81 | | | 76 | | | | | | | | 157 | 708 |
| 7:30-7:45 | | 100 | | | 101 | | | | | | | | 201 | 730 |
| 7:45-8:00 | | 90 | | | 81 | | | | | | | | 171 | 672 |
| 8:00-8:15 | | 86 | | | 93 | | | | | | | | 179 | 642 |
| 8:15-8:30 | | 88 | | | 91 | | | | | | | | 179 | |
| 8:30-8:45 | | 80 | | | 63 | | | | | | | | 143 | |
| 8:45-9:00 | | 50 | | | 91 | | | | | | | | 141 | |



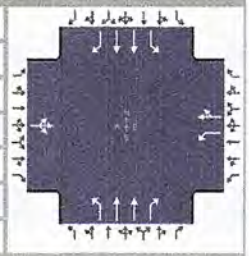

**AM PEAK HOUR IS FROM:** 7:30 AM TO 8:30AM

**Seasonal Factor:** 1
**Growth Rate:** 1.015
**Years Grown:** 5

| | | | | | | | | | | | | | | | Trips In | Trips Out |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 0 | 364 | 0 | 0 | 366 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 730 | | | |
| Season Factor | 0 | 364 | 0 | 0 | 366 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 730 | | | |
| Growth | 0 | 392 | 0 | 0 | 394 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 786 | | | |
| In/Out | - | IN | IN | IN | OUT | - | - | IN | - | OUT | OUT | OUT | | | | |
| Percentage | 0% | 10% | 33% | 10% | 10% | 0% | 0% | 2% | 0% | 35% | 2% | 10% | | | | |
| **PROJECT** | 0 | 28 | 93 | 28 | 7 | 0 | 0 | 6 | 0 | 25 | 1 | 7 | 196 | | 283 | 71 |
| **SUBPROJECTS** | | | | | | | | | | | | | | | | |
| % | 0% | 10% | 15% | 25% | 15% | 0% | 0% | 0% | 0% | 45% | 0% | 30% | | | | |
| In/Out | - | OUT | IN | IN | IN | - | - | - | - | OUT | - | OUT | | | | |
| Volume | 0 | 7 | 42 | 71 | 42 | 0 | 0 | 0 | 0 | 32 | 0 | 21 | 0 | Kings Highway Commerce Park | 283 | 71 |
| % | 40% | | | | | 50% | 50% | 5% | 40% | | 5% | | | | | |
| In/Out | IN | | | | | IN | OUT | OUT | OUT | | IN | | | | | |
| Volume | 30 | 0 | 0 | 0 | 0 | 38 | 9 | 1 | 7 | 0 | 4 | 0 | 0 | Project Hunt | 76 | 17 |
| % | | 30.0% | | | 30.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 169 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | St Lucie Commerce Center | 563 | 124 |
| % | | 2.0% | | | 2.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Whispering Oaks | 45 | 167 |
| % | | 2.0% | | | 2.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 2 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Bent Creek | 123 | 371 |
| % | | 15.0% | | | 15.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 9 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Wawa Kings | 63 | 64 |
| % | | 52.0% | | | 52.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 178 | 0 | 0 | 177 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Kings Highway Warehouse | 342 | 341 |
| % | | 15.0% | | | 15.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 30 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Stonemont | 197 | 55 |
| % | | 30.0% | | | 30.0% | | | | | | | | | | | |
| In/Out | | OUT | | | IN | | | | | | | | | | | |
| Volume | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Walsh Crossroads | 7 | 5 |
| % | | | | | | | | | | | | | | | | |
| In/Out | | | | | | | | | | | | | | | | |
| Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Project Hurricane | 36 | 12 |
| % | | 2.0% | | | 2.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 2 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Celebration Pointe | 121 | 385 |
| Subtotal | 30 | 400 | 42 | 71 | 295 | 38 | 9 | 1 | 7 | 32 | 4 | 21 | 0 | | | |
| Total | 30 | 820 | 135 | 99 | 696 | 38 | 9 | 7 | 7 | 57 | 5 | 28 | 983 | | | |

# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | O'Rourke Engineering & Planning | | | Duration, h | 0.250 |
| Analyst | MM | Analysis Date | Jun 24, 2022 | Area Type | Other |
| Jurisdiction | St. Lucie | Time Period | AM Peak Hour | PHF | 0.92 |
| Urban Street | Kings Hwy | Analysis Year | 2024 | Analysis Period | 1> 7:00 |
| Intersection | White Rd | File Name | Kings & White (WITH PROJECT) - AM - 2023.1.xus | | |
| Project Description | Kings Hwy Commerce - With Project | | | | |

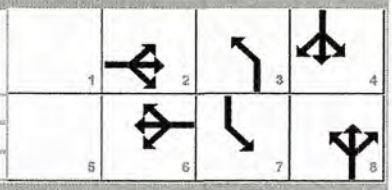


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 9 | 7 | 7 | 57 | 5 | 28 | 30 | 820 | 135 | 99 | 696 | 38 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 24.0 | 14.0 | | 64.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Yellow | 4.0 | 4.0 | | 4.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Red | 2.0 | 2.0 | | 2.0 | 0.0 | 0.0 | 0.0 | | | | | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 2 | | 6 | 3 | 8 | 7 | 4 |
| Case Number | | 8.0 | | 6.0 | 1.1 | 3.0 | 1.1 | 3.0 |
| Phase Duration, s | | 30.0 | | 30.0 | 20.0 | 70.0 | 20.0 | 70.0 |
| Change Period, ( $Y+R_c$ ), s | | 6.0 | | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | 3.1 | 3.1 | 3.1 | 3.1 |
| Queue Clearance Time ( $g_s$ ), s | | | | | 2.8 | 26.0 | 5.1 | 21.2 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | 0.0 | 5.2 | 0.1 | 5.2 |
| Phase Call Probability | | | | | 1.00 | 1.00 | 1.00 | 1.00 |
| Max Out Probability | | | | | 0.00 | 0.00 | 0.00 | 0.00 |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | | 25 | | 62 | 36 | | 33 | 891 | 147 | 108 | 757 | 41 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | 1489 | | 1221 | 1417 | | 1668 | 1484 | 1384 | 1555 | 1484 | 1321 |
| Queue Service Time ( $g_s$ ), s | | 0.0 | | 5.2 | 2.5 | | 0.8 | 24.0 | 6.6 | 3.1 | 19.2 | 1.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | 1.5 | | 6.7 | 2.5 | | 0.8 | 24.0 | 6.6 | 3.1 | 19.2 | 1.8 |
| Green Ratio ( *g/C* ) | | 0.20 | | 0.20 | 0.20 | | 0.65 | 0.53 | 0.53 | 0.65 | 0.53 | 0.53 |
| Capacity ( *c* ), veh/h | | 340 | | 289 | 283 | | 491 | 1583 | 738 | 414 | 1583 | 705 |
| Volume-to-Capacity Ratio ( *X* ) | | 0.074 | | 0.214 | 0.127 | | 0.066 | 0.563 | 0.199 | 0.260 | 0.478 | 0.059 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | 1.1 | | 3.1 | 1.7 | | 0.5 | 12.6 | 3.7 | 1.8 | 10.5 | 1.0 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | 39.0 | | 41.7 | 39.4 | | 9.5 | 18.7 | 14.6 | 11.4 | 17.5 | 13.5 |
| Incremental Delay ( $d_2$ ), s/veh | | 0.4 | | 1.7 | 0.9 | | 0.0 | 0.3 | 0.0 | 0.1 | 0.1 | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | 39.4 | | 43.4 | 40.3 | | 9.5 | 19.0 | 14.7 | 11.5 | 17.6 | 13.5 |
| Level of Service (LOS) | | D | | D | D | | A | B | B | B | B | B |
| Approach Delay, s/veh / LOS | 39.4 | D | | 42.3 | D | | 18.1 | B | | 16.7 | B | |
| Intersection Delay, s/veh / LOS | 18.9 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.46 | B | 2.46 | B | 1.90 | B | 1.68 | B |
| Bicycle LOS Score / LOS | 0.53 | A | 0.65 | A | 1.37 | A | 1.23 | A |

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# TURNING MOVEMENT VOLUME COUNTS

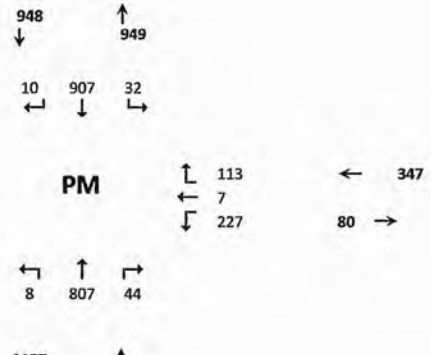
**N/S STREET:** Kings Highway **E/W STREET:** White Road **CONTROL:** Signalized

**FILENAME:**

**COUNT DATE:** 2/12/2019 **DAY:** **CITY:** Ft Pierce

**REPORT DATE:** 3/24/2022 **ANALYSIS YEAR:** 2024 With Project **With Project**

| 15 Min Period lanes | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | | ONE HOUR SUM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NBL | NBT | NBR | SBL | SBT | SBR | EBL | EBT | EBR | WBL | WBT | WBR | TOTAL | |
| 4:00-4:15 | | 88 | | | 89 | | | | | | | | 177 | 813 |
| 4:15-4:30 | | 116 | | | 111 | | | | | | | | 227 | 847 |
| 4:30-4:45 | | 95 | | | 103 | | | | | | | | 198 | 810 |
| 4:45-5:00 | | 85 | | | 126 | | | | | | | | 211 | 802 |
| 5:00-5:15 | | 102 | | | 109 | | | | | | | | 211 | 730 |
| 5:15-5:30 | | 91 | | | 99 | | | | | | | | 190 | |
| 5:30-5:45 | | 98 | | | 92 | | | | | | | | 190 | |
| 5:45-6:00 | | 71 | | | 68 | | | | | | | | 139 | |




**PM PEAK HOUR IS FROM:** **4:15PM TO 5:15PM**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volumes | 0 | 398 | 0 | 0 | 449 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 847 | |
| Season Factor | 0 | 398 | 0 | 0 | 449 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 847 | |
| Growth | 0 | 429 | 0 | 0 | 484 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 912 | |
| In/Out | - | IN | IN | IN | OUT | - | - | IN | - | OUT | OUT | OUT | | |
| Percentage | 0% | 10% | 33% | 10% | 10% | 0% | 0% | 2% | 0% | 35% | 2% | 10% | | |
| **PROJECT** | 0 | 9 | 30 | 9 | 28 | 0 | 0 | 2 | 0 | 99 | 6 | 28 | 211 | |

**Seasonal Factor:** 1
**Growth Rate:** 1.015
**Years Grown:** 5

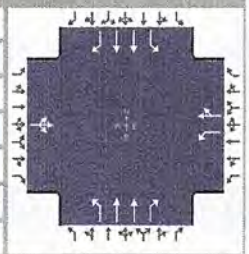
| | Trips In | Trips Out |
|---|---|---|
| | 90 | 284 |

**SUBPROJECTS**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % | | 10% | 15% | 25% | 15% | | | | | 45.00% | | 30% | | | |
| In/Out | - | OUT | IN | IN | IN | - | - | - | - | OUT | - | OUT | | | |
| Volume | 0 | 28 | 14 | 23 | 14 | 0 | 0 | 0 | 0 | 128 | 0 | 85 | 0 | Kings Highway Commerce Park | 90 | 284 |
| % | 40.0% | 0.0% | 0.0% | 0.0% | 0.0% | 50.0% | 50.0% | 5.0% | 40.0% | 0.0% | 5.0% | 0.0% | | | | |
| In/Out | IN | 0.0% | 0.0% | 0.0% | 0.0% | IN | OUT | OUT | OUT | 0.0% | IN | 0.0% | | | | |
| Volume | 8 | 0 | 0 | 0 | 0 | 10 | 29 | 3 | 23 | 0 | 1 | 0 | 0 | Project Hunt | 19 | 57 |
| % | | 30.0% | | | 30.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 62 | 0 | 0 | 235 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | St Lucie Commerce Center | 208 | 784 |
| % | | 2.0% | | | 2.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Whispering Oaks | 172 | 94 |
| % | | 2.0% | | | 2.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 8 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Bent Creek | 385 | 226 |
| % | | 15.0% | | | 15.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 9 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Wawa Kings | 57 | 58 |
| % | | 52.0% | | | 52.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 238 | 0 | 0 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Kings Highway Warehouse | 458 | 216 |
| % | | 15.0% | | | 15.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 10 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Stonemont | 68 | 186 |
| % | | 30.0% | | | 30.0% | | | | | | | | | | | |
| In/Out | | OUT | | | IN | | | | | | | | | | | |
| Volume | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Walsh Crossroads | 10 | 11 |
| % | | | | | | | | | | | | | | | | |
| In/Out | | | | | | | | | | | | | | | | |
| Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Project Hurricane | 23 | 37 |
| % | | 2.0% | | | 2.0% | | | | | | | | | | | |
| In/Out | | IN | | | OUT | | | | | | | | | | | |
| Volume | 0 | 8 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Celebration Pointe | 398 | 229 |
| Subtotal | 8 | 370 | 14 | 23 | 394 | 10 | 29 | 3 | 23 | 128 | 1 | 85 | 0 | | | |
| Total | 8 | 807 | 44 | 32 | 907 | 10 | 29 | 5 | 23 | 227 | 7 | 113 | 1124 | 3326 | | |

# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | O'Rourke Engineering & Planning | | | Duration, h | 0.250 |
| Analyst | MM | Analysis Date | Jun 24, 2022 | Area Type | Other |
| Jurisdiction | St. Lucie | Time Period | PM Peak Hour | PHF | 0.92 |
| Urban Street | Kings Hwy | Analysis Year | with project 2024 | Analysis Period | 1> 7:00 |
| Intersection | White Rd | File Name | Kings & White (WITH PROJECT) - PM - 2024.1.xus | | |
| Project Description | Kings Hwy Commerce - With Project | | | | |

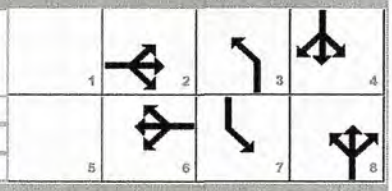


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 29 | 5 | 23 | 227 | 7 | 113 | 8 | 807 | 44 | 32 | 907 | 10 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 140.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 44.0 | 14.0 | | 64.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Yellow | 4.0 | 4.0 | | 4.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Red | 2.0 | 2.0 | | 2.0 | 0.0 | 0.0 | 0.0 | | | | | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 2 | | 6 | 3 | 8 | 7 | 4 |
| Case Number | | 8.0 | | 6.0 | 1.1 | 3.0 | 1.1 | 3.0 |
| Phase Duration, s | | 50.0 | | 50.0 | 20.0 | 70.0 | 20.0 | 70.0 |
| Change Period, ( *Y+R c* ), s | | 6.0 | | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | 3.1 | 3.0 | 3.1 | 3.0 |
| Queue Clearance Time ( *g s* ), s | | | | | 2.4 | 33.9 | 3.6 | 39.8 |
| Green Extension Time ( *g e* ), s | | 0.0 | | 0.0 | 0.0 | 5.6 | 0.0 | 5.5 |
| Phase Call Probability | | | | | 1.00 | 1.00 | 1.00 | 1.00 |
| Max Out Probability | | | | | 0.00 | 0.01 | 0.00 | 0.03 |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | | 62 | | 247 | 130 | | 9 | 877 | 48 | 35 | 986 | 11 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | 937 | | 1401 | 1219 | | 1485 | 1484 | 1208 | 1358 | 1484 | 1321 |
| Queue Service Time ( *g s* ), s | | 3.4 | | 23.7 | 11.5 | | 0.4 | 31.9 | 3.1 | 1.6 | 37.8 | 0.6 |
| Cycle Queue Clearance Time ( *g c* ), s | | 14.9 | | 38.7 | 11.5 | | 0.4 | 31.9 | 3.1 | 1.6 | 37.8 | 0.6 |
| Green Ratio ( *g/C* ) | | 0.31 | | 0.31 | 0.31 | | 0.56 | 0.46 | 0.46 | 0.56 | 0.46 | 0.46 |
| Capacity ( *c* ), veh/h | | 333 | | 342 | 383 | | 282 | 1357 | 552 | 291 | 1357 | 604 |
| Volume-to-Capacity Ratio ( *X* ) | | 0.186 | | 0.721 | 0.340 | | 0.031 | 0.646 | 0.087 | 0.120 | 0.726 | 0.018 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | 3.3 | | 14.5 | 6.6 | | 0.2 | 16.9 | 1.6 | 0.9 | 19.7 | 0.4 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | | 38.6 | | 53.4 | 36.9 | | 19.6 | 29.3 | 21.5 | 18.5 | 30.9 | 20.8 |
| Incremental Delay ( *d 2* ), s/veh | | 1.2 | | 12.4 | 2.4 | | 0.0 | 0.8 | 0.0 | 0.1 | 1.7 | 0.0 |
| Initial Queue Delay ( *d 3* ), s/veh | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | 39.9 | | 65.7 | 39.3 | | 19.6 | 30.1 | 21.5 | 18.6 | 32.6 | 20.8 |
| Level of Service (LOS) | | D | | E | D | | B | C | C | B | C | C |
| Approach Delay, s/veh / LOS | 39.9 | D | | 56.6 | E | | 29.6 | C | | 32.0 | C | |
| Intersection Delay, s/veh / LOS | 35.1 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.45 | B | 1.92 | B | 1.69 | B |
| Bicycle LOS Score / LOS | 0.59 | A | 1.11 | A | 1.26 | A | 1.34 | A |

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EW Consultants, Inc.
Natural Resource Management, Wetland, and Environmental Permitting Services

# WHITE ROAD PARCELS

## Environmental Assessment Report

Prepared for:

**JA Development Partners, LLC**

Prepared by:

**EW CONSULTANTS, INC.**

June 2022

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www.ewconsultants.com

## INTRODUCTION

This Environmental Assessment Report documents and summarizes natural resource features present on four parcels totaling approximately 34.3-acres in the City of Fort Pierce and unincorporated St. Lucie County. The site is located on the east side of Kings Highway, the north side of White Road, and the south side of Graham Road. The property is bordered to the north by rural residential single family homes and undeveloped land, with a recently constructed wet retention lake on the north side of Graham Road; to the south and east by agricultural land; and to the west by the initial development efforts of the Treasure Coast Research Park west adjacent to Kings Highway. The location is centered between I-95 to the east and Florida's Turnpike to the west and Okeechobee Road (Hwy 70) to the south.

The site is situated within Section 13, Township 35 South, Range 39 East, in St. Lucie County, Florida. A Location Map (Figure 1), USGS Quad Map (Figure 2), and Aerial Photo (Figure 3) depicting the site boundaries and immediate surrounding area are provided in the Appendix.

## PROPERTY DESCRIPTION AND METHODS

The property currently comprises undeveloped land with mostly exotic, herbaceous and shrubby vegetation. The vegetation assemblages present on the project site are further described in the Natural Communities and Land Covers section of this report.

Chronological review of historical aerial imagery dating back to the mid 1980's indicates that the subject property was utilized for agricultural practices (at that time; prior use is unknown via historical images) as were the surrounding parcels. The property appeared to be used for for citrus cultivation, with associated irrigation ditches and swales. By or before 2007, the property appears to be converted to improved pasture, with cattle and feed bins visible in nearly all subsequent images. By 2017 the west parcel boundary was cleared for the expansion of Kings Highway. Construction is in progress to the present with additional improvements to White and Graham Roads in progress with the expansion. By 2019 the wet retention area was constructed off site on the north east side of Graham Road. The Kings Highway expansion includes a wide dry swale for surface water management and a sidewalk.

Prior to the site visit, the U.S. Geological Survey 7.5-minute Quadrangle Topographic Map, Ft Pierce NW, and the *Soils Survey of St. Lucie County Area, Florida* (U.S. Department of Agriculture, Soil Conservation Service 1970) were reviewed to determine topographic features and site soil mapping units. Copies of the 2021 FDOT St. Lucie County aerial photographs of the parcel were obtained and reviewed to determine potential locations of environmental features.

Pedestrian transects of the property were conducted to map approximate locations and boundaries of significant environmental resources, vegetative communities, exotic vegetation,

and potential jurisdictional wetland areas. The survey was also conducted to note any occurrence of listed plant or animal species and vegetative communities which would require protection or identification by the Federal, State or local regulatory agencies.

Wetland protection is mandated under federal, state, and local regulations. The U.S. Army Corps of Engineers (CE) regulates activities in Waters of the United States pursuant to the Clean Water Act (PL92-500 Section 404) as further defined in the CE regulatory program (33 CFR 320-330). The State of Florida Department of Environmental Protection (DEP) has established wetland identification and permitting processes at Chapter 62-330, 62-340, and 62-312 of the Florida Administrative Code (FAC). Current federal and state wetland definitions are derived from the original definition found in 33 CFR 328.3, identifying wetlands as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in saturated soil conditions". Delineation of federally regulated jurisdictional wetlands is determined by the Corps of Engineers Wetlands Delineation Manual (USAE Waterways Experiment Station Environmental Laboratory 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (USAE Research and Development Center 2010), and the Navigable Waters Protection Rule (2020). Delineation of wetlands regulated by DEP and South Florida Water Management District (SFWMD) is done according to Chapter 62-340 FAC, Delineation of the Landward Extent of Wetlands and Surface Waters. The Florida Wetlands Delineation Manual (Gilbert et al. 1995) serves as a guide to Chapter 62-340. Both manuals, which emphasize the identification of hydric soils, hydrophytic vegetation, and wetland hydrologic conditions in making wetland determinations, were used in this investigation.

## SOILS

The soils on the site are mapped as Riviera fine sand, Wabasso sand, and Winder loamy sand. A description of the soil types in their natural conditions is listed below. These descriptions are based upon the general characteristics for the soil types as illustrated in the Soils Survey of St. Lucie County Area, Florida and are not necessarily indicative of the exact characteristics of the property. A soils map with the site boundary is included in the Appendix as an attachment.

Riviera fine sand, 0 to 2 percent slopes (38) – This is a nearly level, poorly drained soil that has a thick sandy subsurface layer and exists on the parcel from the north central portion in a strip winding to the southeast portion. Under *natural* conditions, the water table is within 10 inches of the surface for 2 to 4 months in most years and within 10 to 30 inches for most of the remaining year, except during extreme dry periods. The typical natural vegetation is saw-palmetto, slash pine, pineland three-awn, inkberry, blue maidencane, toothache grass, chalky bluestem, cabbage palm, and cypress.

Wabasso sand, 0 to 2 percent slopes (48) – This poorly drained, nearly level soil is in flatwoods areas and exists in the north east corner of the parcel. Slopes are smooth to convex and range from 0 to 2 percent. Typically, the surface layer is sand about 8 inches thick. It is black in the upper 4 inches and very dark gray in the lower 4 inches. The subsurface layer is gray sand. In a

large part of the acreage, typical natural vegetation is open forest of second growth longleaf pine or slash pine, and some cabbage palms. The understory is saw palmetto, running oak, and in places inkberry and fetterbush.

Winder loamy sand, (55) – This poorly drained, nearly level soil is in hammocks and along drainage ways and comprises the entire west portion of the parcel, and includes the majority of the southern portion as well. The water table of Winder loamy sand is at a depth of less than 10 inches for 2 to 4 months and between depths of 10 to 40 inches for most of the rest of the year. Only for short periods in dry seasons is the water table below a depth of 40 inches. Typical natural vegetation is cabbage palm, willow oak, scattered longleaf pine, and slash pine and an understory of wax myrtle and saw palmetto. The most common native grasses are pineland threeawn and blue maidencane.

## NATURAL COMMUNITIES AND LAND COVERS

The Guide to the Natural Communities of Florida (Florida Natural Areas Inventory 1990) provides classification of natural communities of Florida and was used in this investigation. Approximate location of vegetative community cover type boundaries and other features of the site were mapped in accordance with Florida Land Use Cover and Forms Classification Systems Handbook (Florida Department of Transportation 1999) (FLUCFCS).

Field reconnaissance and aerial photograph interpretation were employed in the mapping effort of the vegetative communities on the subject site. A land cover map of the observed community types with acreage is included as Figure 4.

**211 – Improved pasture – 28.55 acres**
This category is comprised of land which has been cleared, tilled, reseeded with various grass types and periodically improved with brush control. This area specifically was previously used as citrus groves. Water ponds, troughs, feed bunkers, cross fencing and cow trails are evident. Vegetation cover consists of sparse oaks and cabbage palms, Brazilian pepper, Australian pine along portions of the boundary, large areas of cogon grass, large areas of smutgrass, tall flat sedge occupying the furrow bottoms which are narrowly spaced, amaranth, torpedo grass, paspalum spp., common rush, shrubby false buttonweed, dog fennel, thistle, sparse maidencane, ruderal weeds, and a chinaberry tree.

**510 – Ditches –5.7 acres**
There is a system of relic, abandoned grove drainage and irrigation ditches over the entire parcel. The former rows and furrows within this portion of the pasture have eroded and the introduction of cattle foraging and trails has exacerbated that process over time. The vegetation assemblage consists primarily of duckweed, torpedo grass, tall flat sedge, paspalum spp., and sparse maidencane with negligible emergent vegetation on the west portion of the parcel and a monoculture of flat sedge on the east portion of the parcel.

**534 – Reservoir/Lake less than 10-acres – 0.05 acres**
This is an excavated pond found in the south central portion of the property that grades into several relic grove ditches. The surrounding vegetation consists of Brazilian pepper, sparse emergent vegetation, heavy algae growth and a dense monoculture of tall flat sedge, with surrounding areas comprised of cogon grass and cabbage palm trees.

## LISTED SPECIES AND WILDLIFE

Listed species of wildlife are found in *Florida's Endangered Species, Threatened Species and Species of Special Concern, Official Lists* (Florida Fish and Wildlife Conservation Commission January 2021) and regulated plants are listed in *Preservation of Native Flora of Florida*, Chapter 5B-40 (Florida Department of Agriculture and Consumer Services, Division of Plant Industry, April 2004).

No listed species were observed during this assessment. There is some potential for listed species of wading birds to utilize the site, but it is low due to the absence of foraging habitat and dominance of exotic species. During site reconnaissance ditches and swales were partially inundated but the observed herbaceous cover was a near monoculture of tall flat sedge, cogon grass and smut grass along with suitable cattle grazing material; the site appears to be mowed periodically. The small areas with non-ephemeral water were occupied by individual cattle and covered with duckweed. No wading birds or wading bird nests were observed during site reconnaissance.

The site is within the habitat range for Audubon's Crested Caracara, although none were observed during the assessment. Because cabbage palms are present on the site, and are the Crested Caracara's preferred nesting tree, a survey may be required during the January to April nesting season.

No gopher tortoises or gopher tortoise burrows were observed during the site reconnaissance and that habitat on the property is not considered ideal for gopher tortoises. The gopher tortoise is listed as a threatened species by FWC. If any gopher tortoises or gopher tortoise burrows are observed in the future, prior to land development, then a relocation permit from FWC would be required.

The eastern indigo snake is listed as a Federally-designated Threatened species. There is a low likelihood for the presence of the eastern indigo snake on the subject site due to the absence of native upland habitat and gopher tortoise burrows. Standardized and specific construction awareness and notification procedures should be implemented for the protection of this species during site development.

Non-listed wildlife and wildlife signs observed during the assessment include mosquitos, horseflies, a mourning dove, cattle egrets, and cattle.

## SUMMARY

Field reconnaissance and mapping indicate that the property includes relic cropland ditches and furrows, as well as a cattle pond that are part of past agricultural activities. These surface waters may be considered as jurisdictional by the South Florida Water Management District (SFWMD), and/or the Florida Department of Environmental Protection (FDEP). Any proposed impacts to jurisdictional surface waters will require authorization from SFWMD and/or FDEP as part of future surface water management permitting, however compensatory mitigation would not likely be required for impacts to surface waters.

Native upland habitat was not observed and therefore a native upland preserve set-aside should not be required by the City or St. Lucie County as part of a development proposal. However, native trees such as oaks and cabbage palms that cannot be preserved in place or relocated elsewhere on the property may require mitigation. A tree survey should be conducted for native trees to determine the potential for tree preservation and relocation on-site. The City and County Land Development Codes outline the vegetation protection and preservation requirements for new developments.

No listed species were observed on the property, however a survey for Crested Caracara may be required during the January to April nesting season.

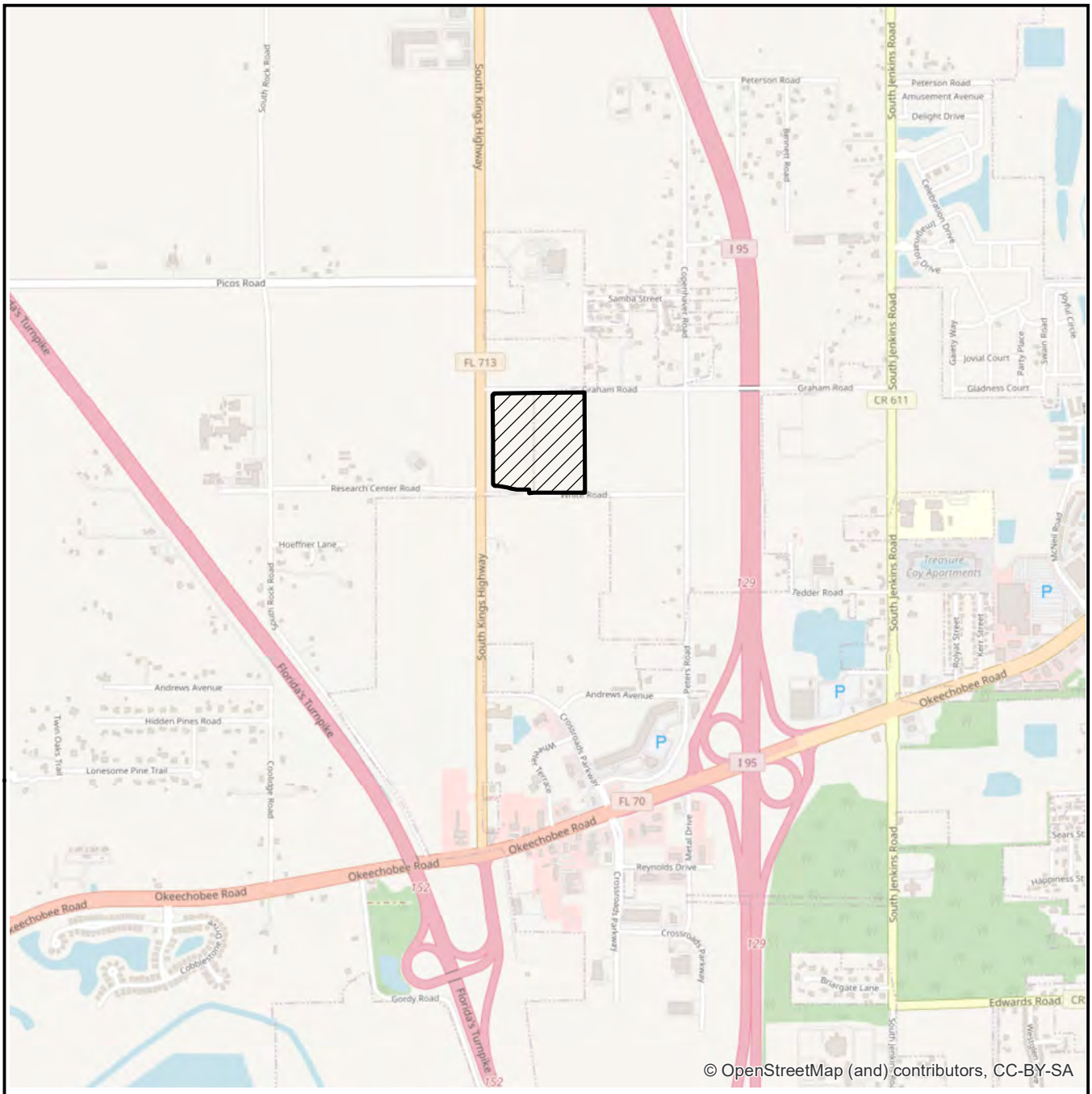
# APPENDIX

Maps and Figures:

Figure 1: Location Map
Figure 2: Quad Map
Figure 3: Aerial Map
Figure 4: FLUCCS Map

Attachment:

USDA Soils Report




LEGEND

▨ - SITE (34.3+/- AC)

0 2,000 Feet

N

# WHITE ROAD PARCELS
# LOCATION MAP

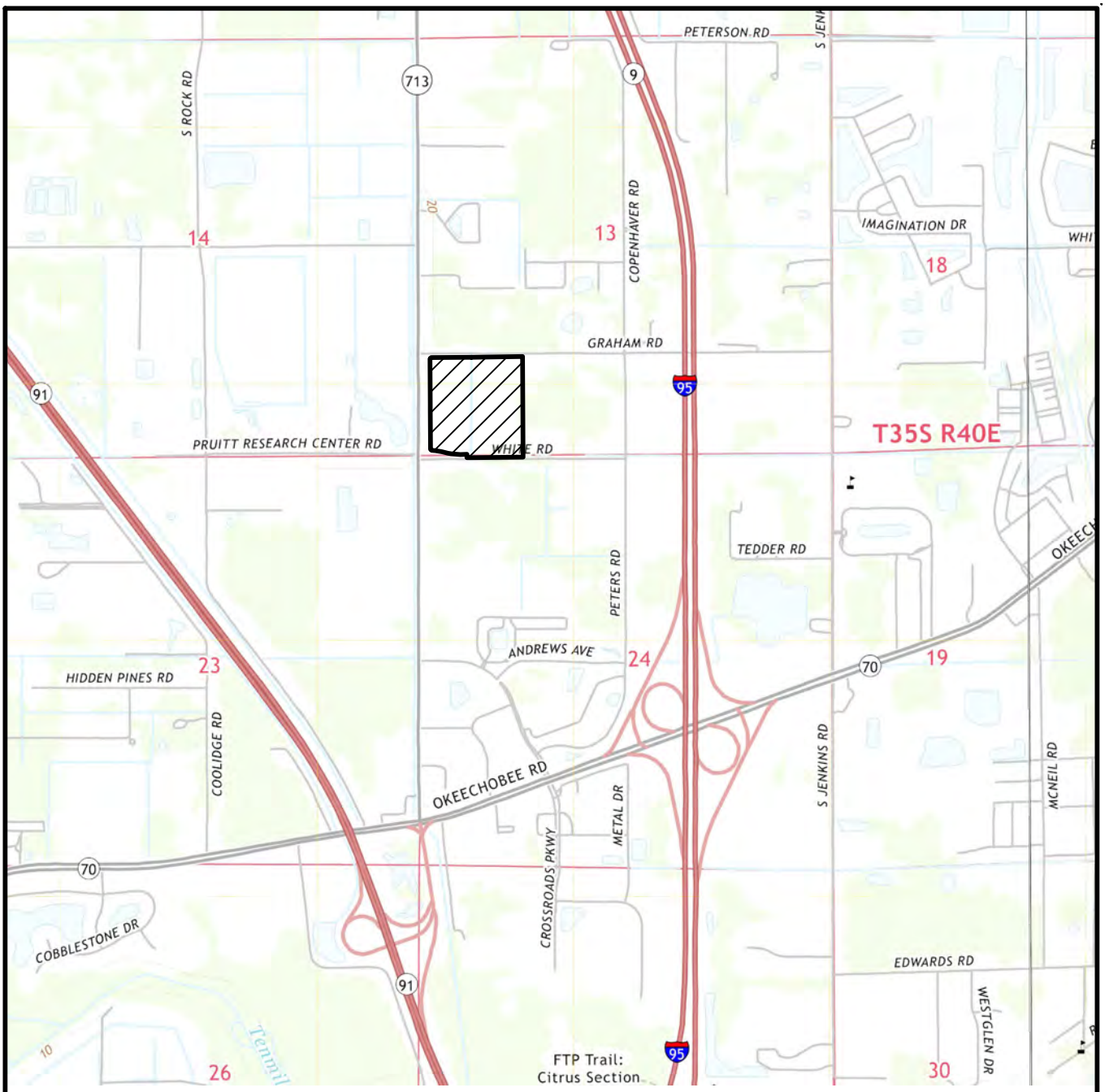

EW CONSULTANTS, INC.

2581 METROCENTRE BLVD., SUITE 1
WEST PALM BEACH, FL 33407
561-291-7950 PHONE 561-530-4908 FAX
WWW.EWCONSULTANTS.COM


JUNE 2022

FIGURE

1




USGS QUAD MAP "FORT PIERCE NW", SECTION 13, TOWNSHIP 35 SOUTH, RANGE 39 EAST, CITY OF FORT PIERCE & UNINCORPORATED ST LUCIE COUNTY, FORT PIERCE, ST LUCIE COUNTY, FLORIDA,
LATITUDE 27°25'38.03" LONGITUDE -80°23'48.70"

LEGEND

▨ - SITE (34.3± AC)

0 2000

SCALE IN FEET

# WHITE ROAD PARCELS

# QUAD

EW CONSULTANTS, INC.

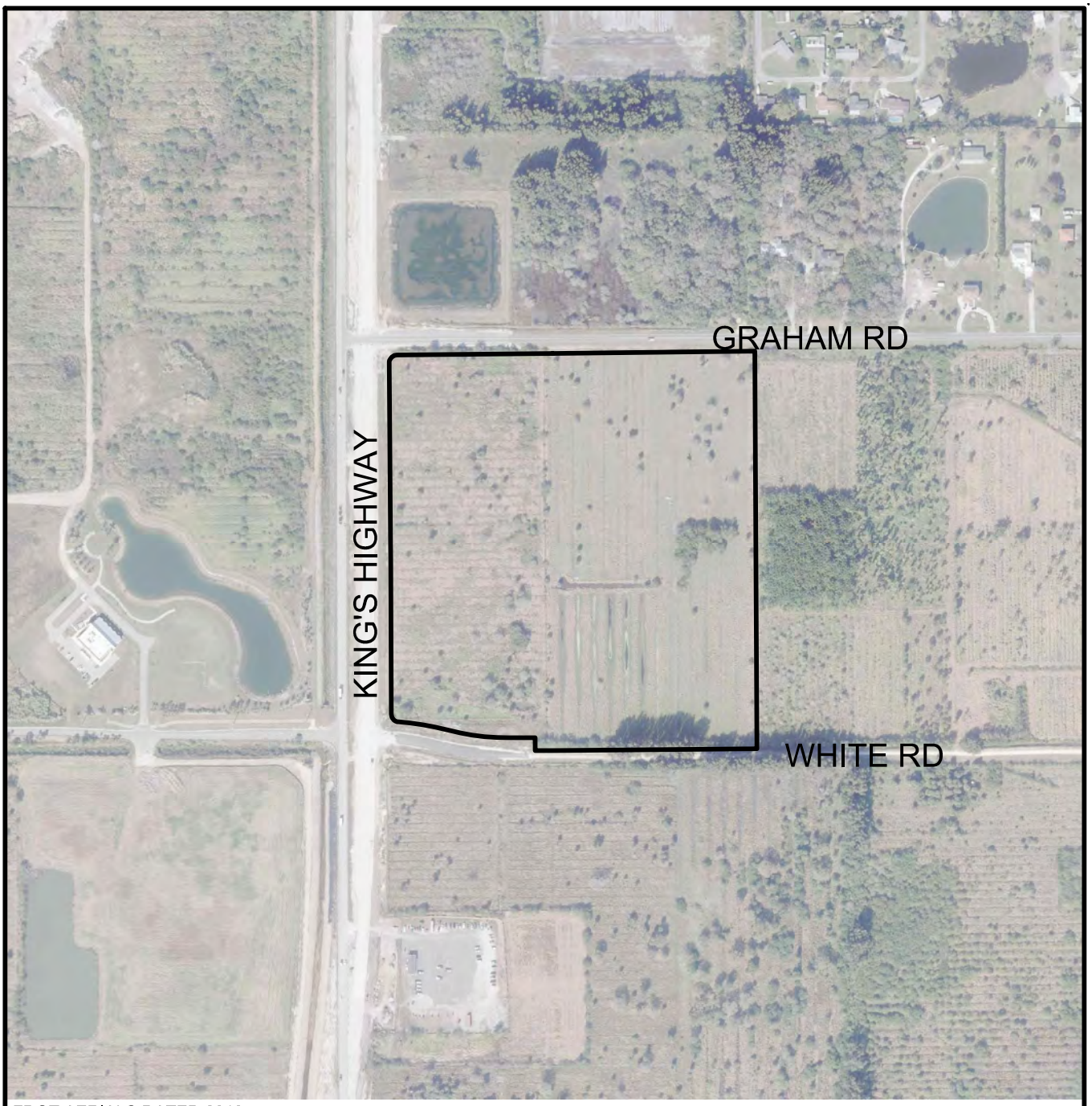
2581 METROCENTRE BLVD., SUITE 1
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561-291-7950 PHONE 561-530-4908 FAX
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JUNE 2022

FIGURE

2

White Road Parcel.dwg QUAD




FDOT AERIALS DATED 2018

0 500
SCALE IN FEET

# WHITE ROAD PARCELS

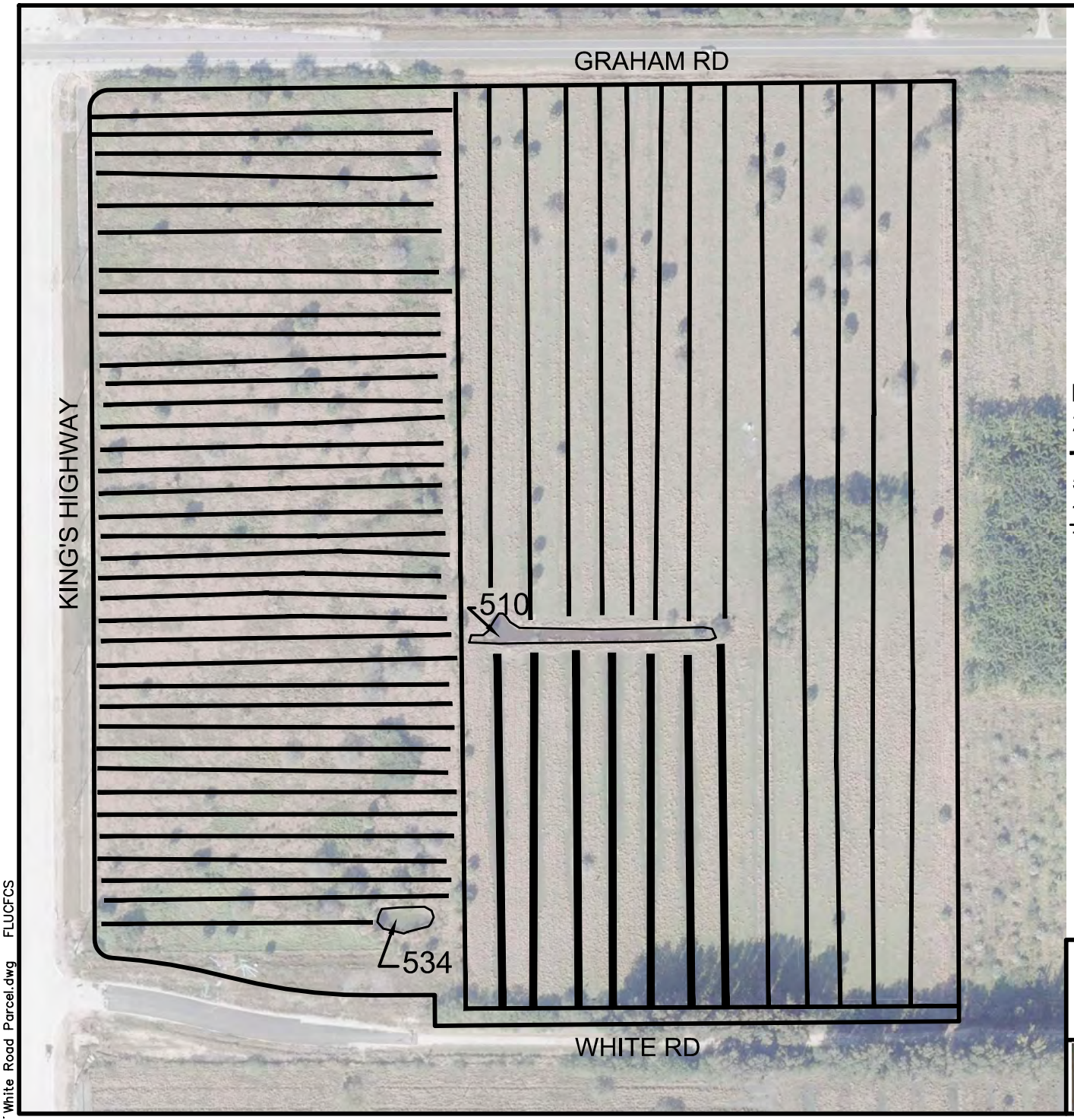
## AERIAL

EW CONSULTANTS, INC.
2581 METROCENTRE BLVD., SUITE 1
WEST PALM BEACH, FL 33407
561-291-7950 PHONE 561-530-4908 FAX
WWW.EWCONSULTANTS.COM

JUNE 2022

FIGURE
3

White Road Parcel.dwg AERIAL




LEGEND

211 - IMPROVED PASTURE (28.55± AC)

510 - DITCHES (5.7± AC)

534 - RESERVOIRS LESS THAN 10 ACS (0.05± AC)

TOTAL SITE (34.3± AC)

0 200

SCALE IN FEET

FDOT AERIALS DATED 2021

# WHITE ROAD PARCELS FLUCFCS MAP

EW CONSULTANTS, INC.
2581 METROCENTRE BLVD., SUITE 1
WEST PALM BEACH, FL 33407
561-291-7950 PHONE 561-530-4908 FAX
WWW.EWCONSULTANTS.COM

JUNE 2022

FIGURE 4

White Road Parcel.dwg FLUCFCS

Soil Map—St. Lucie County, Florida
(White Road Parcels)




Map Scale: 1:2,800 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

## MAP LEGEND

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**
- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: St. Lucie County, Florida
Survey Area Data: Version 15, Aug 25, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 18, 2022—Jan 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 38 | Riviera fine sand, 0 to 2 percent slopes | 7.5 | 21.8% |
| 48 | Wabasso sand, 0 to 2 percent slopes | 4.4 | 12.9% |
| 55 | Winder loamy sand | 22.4 | 65.2% |
| **Totals for Area of Interest** | | **34.3** | **100.0%** |

**Technical Review Committee** **1. d.**

Meeting Date: 09/15/2022

REQUESTED ACTION

Site Plan- K & K Properties - 2427-601-0031-000-8

LOCATION

Parcel ID: 2427-601-0031-000-8

RESPONSIBLE STAFF

Ryan Altizer, Planner

RECOMMENDATION

N/A

Attachments

TRC Packet

**Form Review**

Form Started By: Ryan Altizer Started On: 08/31/2022 01:08 PM

Final Approval Date: 08/31/2022

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

| | |
|---|---|
| **TO:** | Technical Review Committee |
| **THROUGH**: | Kevin Freeman, Planning Director |
| **FROM:** | Ryan Altizer, Planner |
| **RE:** | **K & K Properties - Industrial Flex Space – Site Plan - 22-07000017 2427-601-0031-000-8** |
| **BOARD DATE:** | September 15, 2022 |

**Site Plan at parcel ID 2427-601-0031-000-8**

The above referenced project is being submitted for your review and comments. The applicant is requesting a Preliminary Plat for parcel ID 2427-601-0031-000-8 for the Fort Pierce Commercial.

Please send all comments to planning@cityoffortpierce.com and/or through interoffice mail to the Planning Department

If you have comments, please respond prior to Tuesday, September 13, 2022. If you have any questions, please contact the Planning Department at 772-467-3737.

Thank you

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

# DEVELOPMENT REVIEW

## Property Information

Property address or Location: East side of S. 7th St., N. of Farmers Mkt. Rd. - Address TBD

Parcel ID #(s): PCN 2427-601-0031-000-8

Project description: 46,000 SF of Indiustrial Flex Space

## Application Type

☒ Site Plan ☐ Conditional Use w/New Construction ☐ Conceptual Development Plan

☐ Minor Amendment ☐ Major Amendment

## Site Information

*Non-Residential:* Proposed Sq. Ft.: 46,000 Site Acreage: 4.015

*Residential:* Proposed Units: _____ Proposed Sq. Ft.: _____ Site Acreage: _____

| | |
|---|---|
| Ken Kreye | Bradley J. Currie, AICP |
| **Property Owner(s)** | **Applicant/Representative, Title, Company** |
| 691 NW Sunset Dr | 10250 SW Village Parkway Suite 201 |
| Street Address | Street Address |
| Stuart FL 34994 | Port St Lucie FL 34987 |
| City State Zip | City State Zip |
| 941-356-0220 | 772-462-2455 |
| Phone Number | Phone Number |
| k2kreye@gmail.com | bradcurrie@edc-inc.com |
| Email Address | Email Address |

***Property Owner(s) Acknowledgements:*** *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.*

*Property Owner(s) Signature(s)*

**APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS**

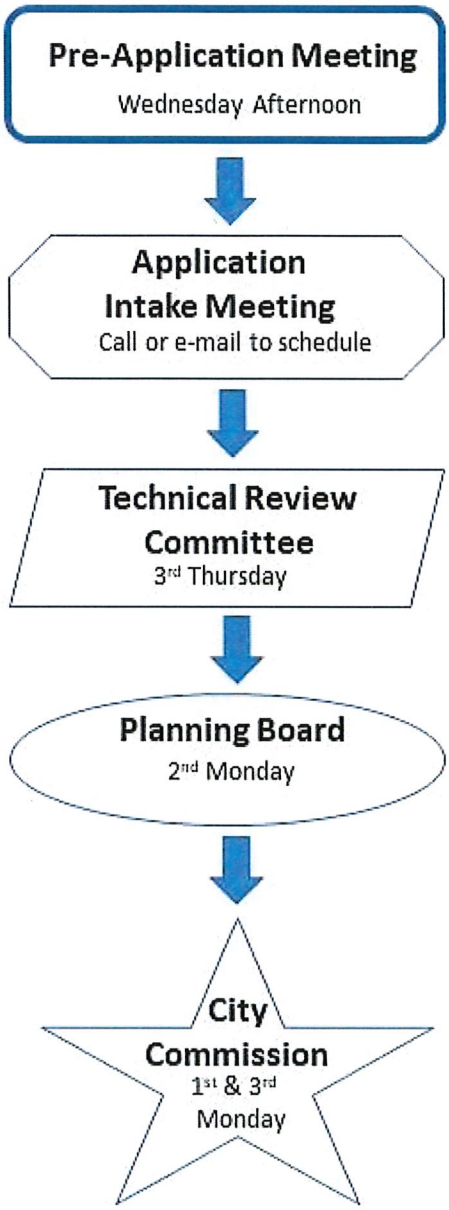
**CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM**

**For more information, please refer to the website:**

**https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Revi**

*General Information*

- **Incomplete application packets will not be accepted.**
- In-take meetings are required for application submittals.
- Site plan approval is valid for one (1) year following City Commission approval. To maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date.
- Fee Schedule - https://www.cityoffortpierce.com/DocumentCenter/View/2620/Fee-Schedule-
- Public Notice Fees - https://www.cityoffortpierce.com/DocumentCenter/View/8818/Public-Notice-Fees-




***Site Plan submittal requirements:***

***Submit one (1) original & three (3) hard copies and one (1) CD or Flash Drive of the following. Additional copies will be required of subsequent submittals.***

- [x] Complete application
- [x] Warranty Deed
- [x] SLC Property Record Card
- [x] Detailed project description
- [x] General location map (see Section 125-313)
- [x] Survey (see Section 125-313)
- [x] Site Plan (see Section 125-313)
- [x] Landscaping Plan (see Section 123-37)
- [x] Conceptual Drainage Plan (see Section 125-313)
- [x] Environmental Impact Report
- [ ] Beach/Dune System protection plan, if applicable (see Section 125-313)
- [x] Lighting Plan (see Section 125-313)
- [x] Design Review submittals (see Design Review application)
- [x] Traffic Impact Report
- [x] Concurrency Review submittals (see Concurrency Review application)

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4864798 OR BOOK 4612 PAGE 170, Recorded 05/17/2021 03:35:50 PM Doc Tax $1925.00

Prepared by and return to:
**Richard V. Neill Jr.**
**Neill Griffin Marquis, PLLC**
**311 S 2nd Street, Suite 200**
**Fort Pierce, FL 34950**
**(772) 464-8200**
File Number: **95-190-005**
Parcel Identification No. **2427-601-0031-000-8**

[Space Above This Line For Recording Data]

# Warranty Deed

(STATUTORY FORM - SECTION 689.02, F.S.)

**This Indenture** made this 17th day of May, 2021 between **South Florida Land Clearing, Inc., a Florida Corporation** whose post office address is **15701 ORANGE AVE, Fort Pierce, FL 34945** of the County of **St. Lucie**, State of **Florida**, grantor, and **K & K Properties of Sarasota, Inc., a Florida Corporation** whose post office address is **691 NW Sunset Dr Stuart, FL 34994**, of the County of **Martin**, State of **Florida**, grantee,

**Witnesseth** that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **St. Lucie County, Florida**, to-wit:

**The West one-half of the following described parcel:**

**The North 200 feet of Lot 171 and the South 100 feet of Lot 172, UNIT THREE MARAVILLA GARDENS, according to the plat thereof, as recorded in Plat Book 6, Page 62, Public Records of Saint Lucie County, Florida; LESS AND EXCEPT: The West 60 feet thereof, for additional right-of-way for South 7th Street.**

**SUBJECT TO RESTRICTIONS, RESERVATIONS AND EASEMENTS OF RECORD, IF ANY, WHICH REFERENCE SHALL NOT OPERATE TO REIMPOSE THE SAME, AND TAXES FOR THE YEAR 2021 AND THEREAFTER.**

and said grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

**In Witness Whereof,** grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness
Printed Name: Richard V Neill, Jr.

Witness
Printed Name: Gregory Neill

**South Florida Land Clearing, Inc.**, a Florida Corporation

By: _____
Gary D. White, President

State of Florida
County of St. Lucie

The foregoing instrument was acknowledged before me by means of [✓] physical presence or [ ] online notarization, this 17th day of May, 2021 by Gary D. White, President of South Florida Land Clearing, Inc., a Florida Corporation, on behalf of said corporation who [ ] is personally known or [✓] has produced a driver's license as identification.

[Seal]

Notary Public
Print Name: Gregory Neill
My Commission Expires: 10/01/2023

GREGORY NEILL
Commission # GG 918166
Expires October 1, 2023
Bonded Thru Troy Fain Insurance 800-385-7019

**K & K Properties of Sarasota, Inc.**
691 NW Sunset Drive
Stuart, FL 34994

# AGENT CONSENT FORM

Project Name: K & K Properties

Parcel ID: 2427-601-0031-000-8

BEFORE ME THIS DAY PERSONALLY APPEARED Kenneth W. Kreye, WHO BEING DULY SWORN, DEPOSES AND SAYS THE FOLLOWING:

I hereby give CONSENT to Engineering Design & Construction, Inc. to act on my behalf, to submit or have submitted applications and all required material and documents, and to attend and represent me at all meetings and public hearings pertaining all City, County and State permits for completion of the project indicated above. Furthermore, I hereby give consent to the party designated above to agree to all terms and conditions which may arise as part of the approval of this application for the proposed use of a commercial development.

FURTHER AFFIANT SAYETH NOT.

The foregoing instrument was acknowledged before me this 15th day of Feb, 2022, by Kenneth W. Kreye (Name of Person Acknowledging) who is personally known to me or who has produced Florida Drivers License (type of identification) as identification and who did (did not) take an oath.

Notary Signature

Roger Melhem
Printed Name of Notary

ROGER MELHEM
NOTARY
(Notary Seal)
My Comm. Expires
September 30, 2022
No. GG 263267
PUBLIC
STATE OF FLORIDA

My commission expires

Owner's Signature

KENNETH W. KREYE
Owner's Name
PRESIDENT

691 NW Sunset Dr
Street Address

Stuart, FL. 34994
City, State, Zip

941-356-0220, KAKREYE@GMAIL.COM
Telephone / Email

# Saint Lucie County Property Appraiser
Michelle Franklin CFA

Report generated: Wednesday, December 22, 2021

## Parcel Report







## Parcel

| | |
|---|---|
| **PARCELNO:** | 2427-601-0031-000-8 |
| **Property ID:** | 31592 |
| **Owner1:** | K & K Properties of Sarasota Inc |
| **SiteAddress:** | S US HIGHWAY 1 |

## Owner

| | |
|---|---|
| **Owner1:** | K & K Properties of Sarasota Inc |
| **Owner2:** | |
| **Owner3:** | |
| **MailingAddress:** | 691 NW Sunset DR Stuart, FL 34994-7612 |

## Overview

| | |
|---|---|
| **PrimaryLandUse:** | 4000 - VCNT INDUS |
| **DistrictGroup:** | 0022 - Fort Pierce |
| **Subdivision:** | Maravilla Gardens Subdivision Unit 3 |
| **Just/Market Value:** | $214,200 |
| **FinishedArea:** | |
| **Acres:** | 4.015 |
| **TotalArea:** | 174,893 |

## Legal Description

**LegalDescription:** MARAVILLA GARDENS S/D-UNIT THREE- W 1/2 OF N 200 FT OF LOT 171 AND W 1/2 OF S 100 FT OF LOT 172- LESS W 60 FT (MAP 24/27 S) (4.01 AC)

## Value History

| Year | Just/Market Value | Building Value | Land Value | SFYI Value | Assessed Value | Exemption Amount | County Taxable | Save Our Home OR 10% Cap Differential | Ag Credit |
|---|---|---|---|---|---|---|---|---|---|
| 2021 | $214,200 | $0 | $214,200 | $0 | $214,200 | $0 | $214,200 | $0 | $0 |
| 2020 | $214,200 | $0 | $214,200 | $0 | $214,200 | $0 | $214,200 | $0 | $0 |
| 2019 | $214,200 | $0 | $214,200 | $0 | $214,200 | $0 | $214,200 | $0 | $0 |
| 2018 | $214,200 | $0 | $214,200 | $0 | $214,200 | $0 | $214,200 | $0 | $0 |

## Tax Links

SLC Tax Collector's Office taxes for this parcel

Download TRIM notice for this parcel

## Special Assessments

| Description | Start Year | Units | Amount |
|---|---|---|---|
| Fort Pierce Stormwater Charge | 2006 | 11.4 | $786.60 |

## Improvements

| | |
|---|---|
| **Building Sequence:** | 1 |
| **Bedrooms:** | 0 |
| **Bathrooms:** | 0 |
| **Building Type:** | - |
| **Story Height:** | |
| **No of Living Units:** | |
| **Total Finished Area:** | 0 |
| **Gross Sketched Area:** | 0 |
| **Year Built:** | |
| **Effective Year:** | |
| **Primary Roof Cover:** | |
| **Primary Roof Structure:** | |
| **Primary Wall:** | |
| **A/C %:** | 0 |

## Land Lines

| Line Number | Units | Unit Type |
|---|---|---|
| 1 | 174,893 | SqFt |

## Sales History

| Sale Date | Sale Price | Sale Code | Deed Type | Grantor | Book Page | View Document |
|---|---|---|---|---|---|---|
| 05/17/2021 | $275,000 | 0001 | WD | South Florida Land Clearing Inc | 4612-170 | Clerk of Courts |
| 11/22/2019 | $0 | 0119 | DE | Dickson Holdings LLC | 4509-1263 | Clerk of Courts |
| 05/04/2005 | $400,000 | XX02 | WD | LTD Investments LLC | 2249-2547 | Clerk of Courts |
| 04/07/2004 | $570,000 | XX00 | WD | Bower (TR) William M | 1947-2154 | Clerk of Courts |
| 07/03/2003 | $263,000 | XX00 | SP | First Republic Co | 1752-1771 | Clerk of Courts |
| 07/01/1980 | $309,600 | XX00 | WD | West Lumber Co | 1752-1766 | Clerk of Courts |
| 07/01/1980 | $309,600 | XX00 | WD | Associated Distributors Inc | 1752-1763 | Clerk of Courts |
| 03/01/1972 | $70,000 | XX00 | CV | | 201-922 | Clerk of Courts |

## Photos



**PROJECT NARRATIVE & COVER LETTER**
**S. 7th Street / Farmers Market Road**
Development Review Application
Date August 12, 2022

***REQUEST***

***On behalf of the Petitioner, Engineering Design & Construction, Inc. would like to request Site Plan Approval for two (2) office / flex space buildings with associated site improvements. The subject parcel noted below is located east of S. 7th Street and north of Farmers Market Road in the City of Fort Pierce.***

## SITE CHARACTERISTICS & PROJECT HISTORY

**Subject parcel & acreage is identified in the table below:**

| Parcel ID | Parcel Address | Acreage | Current FLU | Current Zoning |
|---|---|---|---|---|
| 2427-601-0031-000-8 | South US-1 - TBD | 4.01 | I | I-1 |
| | **TOTAL ACRES:** | **4.01** | | |

The subject parcels have a Future Land Use designation of Industrial (I) and an underlying Zoning designation of Light Industrial (I-1). The petitioner is proposing two (2) office/flex space buildings totaling 40,000 sf +/- with associated site improvements.

To the north of the subject parcels a developed parcel which is located in the jurisdiction of St. Lucie County. This parcel has a split Future Land Use designation of Mixed-Use Development (MXD) and Industrial (IND) and a split Zoning designation of Residential, Multiple-Family – 11 (RM-11), Industrial, Light (IL) and Commercial, General (CG).

To the south of the subject parcels lies developed commercial parcels. The southwestern parcel has a Future Land Use designation of Industrial and an underlying Zoning designation of Light Industrial Zone (I-1). The parcel to the southeast has a Future Land Use designation of County Industrial (CI) and an underlying Zoning designation of Light Industrial Zone (I-1).

East of the subject parcel is an undeveloped industrial tract. This parcel has a Future Land Use designation of Industrial (I) and an underlying Zoning designation of Light Industrial Zone (I-1).

West of the subject parcel lies the right-of-way of S. 7th Street, a St. Lucie County owned and maintained right-of-way. West of the right-of-way are residential parcels to the northwest and industrial parcels directly west which are located in the jurisdiction of St. Lucie County and an industrial parcel southwest of the parcel located in the City of Fort Pierce. The parcels located northwest of the site have a St. Lucie County Future

Land Use designation of Residential High (RH) and an underlying zoning designation of Residential, Multiple-Family – 11 (RM-11). The parcel directly west of the subject parcel has a St. Lucie County Future Land Use designation of Industrial (IND) and an underlying 7th Street Pre-App Page 2 of 2 February 15, 2022 Zoning designation of Industrial, Light (IL). The parcel located southwest of the subject parcel is located in the City of Fort Pierce and has a Future Land Use designation of Industrial (I) and an underlying Zoning designation of Light Industrial Zone (I-1).

Included in this submittal, please find the required Site Plan approval attachments along with additional required submittal material as per the stated application requirements. Any other supplemental items for support can be found here as well or can be provided upon request.

***Based on the above and attached information, the applicant respectfully requests approval of this application.***

Z:\EDC-2021\21-269 - K & K Properties - 7th Street CSP & Pre-App\ENGINEERING\Documents\Submittal Documents\Applications\Development Review App\4 - Narrative.docx




# K & K - 7th Street

Fort Pierce, FL

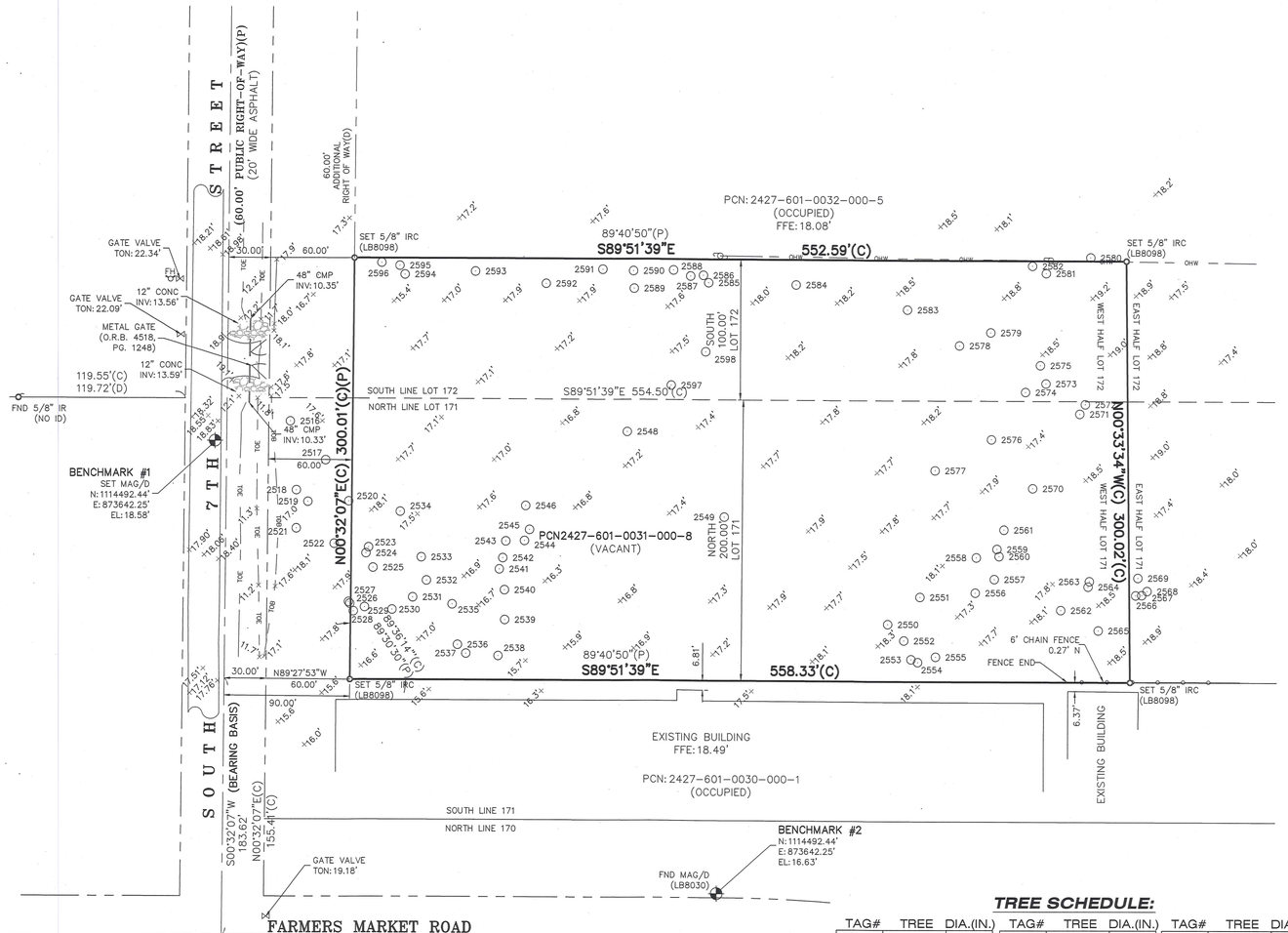
Aerial Map

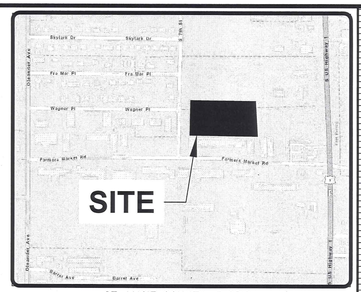
NORTH

ENGINEERS SURVEYORS ENVIRONMENTAL

# BOUNDARY AND TOPOGRAPHIC SURVEY

## FOR: K AND K PROPERTIES




ST. LUCIE COUNTY, FLORIDA

VICINITY MAP

NO SCALE

NORTH

GRAPHIC SCALE

50 0 25 50 100 200

( IN FEET )

1 inch = 50 ft.

## SYMBOL & ABBREVIATION LEGEND:

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | AIR RELEASE VALVE | E | EAST/EASTING | HYD | HYDRANT | PK NAIL | PARKER-KALON NAIL | | SPIGOT |
| AL | ARC LENGTH | EOW | EDGE OF WATER | IN | INCH | PK/D | PARKER-KALON NAIL & DISK | | SPRINKLER VALVE |
| ASPH | ASPHALT | EB | ELECTRIC BOX | INV | INVERT | PCP | PERMANENT CONTROL POINT | S.L.C. | ST. LUCIE COUNTY |
| BFP | BACK FLOW PREVENTER | EHH | ELECTRIC HAND HOLE (EHH) | IP | IRON PIPE | PRM | PERMANENT REFERENCE MONUMENT | STA | STATION |
| | BENCHMARK (BM) | EM | ELECTRIC METER | IR | IRON ROD | P.B. | PLAT BOOK | D | STORMWATER DRAINAGE MANHOLE |
| | BIKE RACK | ELEC PANEL | ELECTRICAL PANEL | IR/C | IRON ROD AND CAP | (P) | PLAT DATA | | STREET SIGN |
| CATV | CABLE RISER | EL./ELEV. | ELEVATION | | IRRIGATION CONTROL VALVE | P.O.B. | POINT OF BEGINNING | TELE RISER | TELEPHONE RISER BOX |
| (C) | CALCULATED | FEMA | FEDERAL EMERGENCY MANAGEMENT AGENCY | L | LENGTH | P.O.C. | POINT OF COMMENCEMENT | TOE | TOE OF SLOPE |
| | CATCH BASIN | F.O. | FIBER OPTIC | | LIGHT POST | P.C.C. | POINT OF COMPOUND CURVE | TOB | TOP OF BANK/BERM |
| ℄ | CENTERLINE | FOHH | FIBER OPTIC HAND HOLE | MAG/D | MAG NAIL MAG BRAND NAIL | P.C. | POINT OF CURVATURE | T.O.N. | TOP OF NUT |
| CCR | CERTIFIED CORNER RECORD | | FIBER OPTIC MARKER | | MAILBOX | P.T. | POINT OF TANGENCY | X 0.0 | TOPOGRAPHIC DATA (SOFT SURFACE) |
| CLF | CHAIN LINK FENCE | FIBER RISER | FIBER OPTIC RISER | M.C. | MARTIN COUNTY | P.O.T. | POINT OF TERMINUS | X 0.00 | TOPOGRAPHIC DATA (HARD SURFACE) |
| CHD. | CHORD | (M) | FIELD MEASURED | MHW | MEAN HIGH WATER LINE | PVC | POLYVINYL CHLORIDE | | |
| CO O | CLEAN OUT | F.F.E. | FINISHED FLOOR ELEVATION | MLWL | MEAN LOWER WATER LINE | PSL | PORT SAINT LUCIE, FLORIDA | TWNSHP | TOWNSHIP |
| COMM RISER | COMMUNICATION RISER | FDOT | FLORIDA DEPARTMENT OF TRANSPORTATION | | METAL LIGHT POST | PLS | PROFESSIONAL LAND SURVEYOR | T | TRAFFIC HANDHOLD |
| CONC | CONCRETE | FPL | FLORIDA POWER AND LIGHT | | METAL POWER POLE | R | RADIUS | TSCB | TRAFFIC SIGNAL CONTROL BOX |
| | CONCRETE LIGHT POST | FT | FOOT | MP | METAL PIPE | RGE | RANGE | TYP | TYPICAL |
| CM | CONCRETE MONUMENT | FM | FORCE MAIN | M | MONITORING WELL | RTK | REAL TIME KINEMATIC | UNK | UNKNOWN |
| CPP | CONCRETE POWER POLE (CPP) | FND | FOUND | MON | MONUMENT | RWV | RECLAIMED WATER VALVE | ENH USE | UNKNOWN HANDHOLD |
| | CONCRETE POWER POLE W/STREET LIGHT | F | FPL MANHOLE | NGVD29 | NATIONAL GEODETIC VERTICAL DATUM OF 1929 | RLS | REGISTERED LAND SURVEYOR | RISER BOX | UNKNOWN RISER BOX |
| | CONCRETE SIGNAL LIGHT POLE | SQ FT. | SQUARE FEET | N/D | NON DESCRIPT NAIL AND DISK | RCP | REINFORCED CONCRETE PIPE | U | UNKNOWN TYPE MANHOLE |
| CMP | CORRUGATED METAL PIPE | GAS | GAS VALVE | N.R. | NON RADIAL | R/W | RIGHT-OF-WAY | VCP | VITRIFIED CLAY PIPE |
| | CURB INLET | GIS | GEOGRAPHIC INFORMATION SYSTEMS | NAVD88 | NORTH AMERICAN VERTICAL DATUM OF 1988 | R/C | ROD AND CAP | WM | WATER METER |
| | DECORATIVE LIGHT POST | GND | GROUND | N | NORTH OR NORTHING | S | SANITARY MANHOLE | | WATER SERVICE METER (WM) |
| (D) | DEED | | GROUND LIGHT | No. | NUMBER | SV | SANITARY VALVE | WV | WATER VALVE (WV) |
| D.B. | DEED BOOK | | GUY WIRE ANCHOR | O.R.B. | OFFICIAL RECORDS BOOK | SEC | SECTION | W | WEST |
| ø | DIAMETER (DIA.) | | HANDICAP | OHW | OVER HEAD WIRES | | PROPERTY CORNER | WF | WOOD FENCE |
| D | DRAINAGE MANHOLE | HDPE | HIGH DENSITY POLYETHYLENE PIPE | PG | PAGE | | RIGHT-OF-WAY CONTROL | | WOOD POLE STREET LIGHT |
| DIP | DUCTILE IRON PIPE | HWF | HOG WIRE FENCE | PCN | PARCEL CONTROL NUMBER | | SIGN | | WOOD POWER POLE |
| | | | | | | S | SOUTH | | |

## LEGAL DESCRIPTION:

THE WEST ONE-HALF OF THE FOLLOWING DESCRIBED PARCEL:

THE NORTH 200 FEET OF LOT 171 AND THE WEST HALF OF THE SOUTH 100 FEET OF LOT 172, UNIT THREE MARAVILLA GARDENS, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 6, PAGE 62, PUBLIC RECORDS OF ST LUCIE COUNTY, FLORIDA; LESS AND EXCEPT: THE WEST 60 FEET THEREOF, FOR ADDITIONAL RIGHT-OF-WAY FOR SOUTH 7TH STREET.

CONTAINING 3.83 ACRES, MORE OR LESS.

## SURVEYORS NOTES AND REPORT:

1. REPRODUCTIONS OF THIS MAP ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. THIS SURVEY CANNOT BE TRANSFERRED OR ASSIGNED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF ENGINEERING, DESIGN AND CONSTRUCTION, INC. IT IS A VIOLATION OF CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, TO ALTER THIS SURVEY WITHOUT THE EXPRESS PRIOR WRITTEN CONSENT OF THE SURVEYOR. ADDITIONS AND/OR DELETIONS MADE TO THE FACE OF THIS SURVEY WILL MAKE THIS SURVEY INVALID.
2. THE LAST DATE OF FIELD WORK WAS JUNE 29, 2021.
3. CURRENT DESCRIPTION(S) SHOWN HEREON PROVIDED BY: THE CLIENT. A TITLE SEARCH BY COMMONWEATLH LAND TITLE INSURANCE COMPANY ORDER NUMBER 9428539, DATED 4/21/2021 @ 8:00 A.M. HAS BEEN REVIEWED AND ARE AS FOLLOWS:
   - 3.1. BII ITEMS 1, 2, 3B, 3C, 3D, 6, 7, AND 9 AFFECT THE PROPERTY BUT ARE NOT SUREVEY MATTERS.
   - 3.2. BII ITEMS 3A, 4, AND 8 AFFECT PROPERTY AND ARE SHOWN ON SURVEY.
   - 3.3. BII ITEM 5 AFFECTS PROPERTY AND IS BLANKET IN NATURE.
4. PARCELS CONTAIN A TOTAL OF 3.83 ACRES, MORE OR LESS.
5. THE EXPECTED USE OF THE LAND, AS CLASSIFIED IN CHAPTER 5J-17.050-053, FLORIDA ADMINISTRATIVE CODE, IS "COMMERCIAL/HIGH RISK." THE MINIMUM RELATIVE DISTANCE ACCURACY FOR THIS TYPE OF BOUNDARY SURVEY IS 1 FOOT IN 10,000 FEET. THIS SURVEY EXCEEDS THE REQUIRED DISTANCE ACCURACY.
6. THIS BOUNDARY SURVEY HAS BEEN REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM-EAST ZONE, NAD 83 (1990).
7. SUB-SURFACE IMPROVEMENTS INCLUDING UNDERGROUND UTILITIES, UTILITY SERVICES, WERE NOT LOCATED AS PART OF THIS SURVEY.
8. REVISIONS SHOWN HEREON DO NOT REPRESENT A "FIELD SURVEY UPDATE" UNLESS OTHERWISE NOTED.
9. BEARINGS SHOWN HERON ARE BASED UPON THE PLAT OF UNIT THREE MARAVILLA GARDENS PER THE LINE LABELED HERON AS (BEARING BASIS) AND ALL OTHER BEARINGS ARE RELATIVE THERETO. DISTANCES ARE IN U.S. SURVEY FEET AND DECIMAL PARTS THEREOF.
10. ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND ARE BASED ON GPS REAL TIME KINEMATIC (RTK) OBSERVATION. SITE BENCHMARKS UTILIZED ARE SHOWN HEREON.
11. THIS SITE WAS SURVEYED UTILIZING TRIMBLE/SPRECTRA HARDWARE TOGETHER WITH SPECTRA SURVEY PRO REALTIME PROCESSING AND WAS BASED ON TRIMBLES "VRS NOW" NETWORK AND/OR THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN). THE PROCEDURES AND NETWORK DESIGN MEETS THE GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATED POSITIONING AS SET FORTH BY THE FEDERAL GEODETIC CONTROL COMMITTEE IN THE MOST CURRENT PUBLICATION FOR 3RD ORDER CLASS ONE FOR HORIZONTAL CONTROL SURVEYS.
12. IN SOME INSTANCES, GRAPHIC REPRESENTATIONS AND SYMBOLS SHOWN HAVE BEEN EXAGGERATED TO MORE CLEARLY ILLUSTRATE THE RELATIONSHIP BETWEEN PHYSICAL IMPROVEMENTS AND/OR LOT LINES. THE DIMENSIONS SHOWN SHALL CONTROL THE LOCATION, OF THE IMPROVEMENTS, OVER THE SCALED POSITIONS.
13. THE OWNERSHIP OF PERIMETER FENCES, WALLS, HEDGES AND LANDSCAPING, IF ANY, SHOWN HEREON ARE NOT KNOWN AND ARE NOT LISTED AS ENCROACHMENTS. THEIR RELATIVE LOCATION IS SHOWN IN RELATION TO THE BOUNDARY LINES SHOWN.
14. THE SURVEY MAP SHOWN HEREON DOES NOT NECESSARILY CONTAIN ALL OF THE INFORMATION OBTAINED OR DEVELOPED BY THE UNDERSIGNED SURVEYOR IN HIS FIELD WORK, OFFICE WORK OR RESEARCH.
15. THE PROPERTY WHICH IS THE SUBJECT OF THIS SURVEY APPEARS TO BE SITUATE IN AN AREA OF MINIMAL FLOOD HAZARD AT THIS TIME PURSUANT TO F.E.M.A. FIRM NUMBER 12111C0189K, HAVING AN EFFECTIVE DATE OF FEBRUARY 19, 2020. FOR APPROXIMATE DELINEATION OF THE FLOOD ZONE LIMITS, REFER TO AFOREMENTIONED FIRM PANELS.
16. BOUNDARY INFORMATION BASED ON FOUND CONTROL, THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP 94500-2604 DATED 12/1961, AND A SURVEYOR'S REPORT BY BOWMAN CONSULTING FOR FARMERS MARKET ROAD, JOB NO. 010274-01-001, DATED OCTOBER 1, 2014.

## TREE SCHEDULE:

| TAG# | TREE | DIA.(IN.) |
|---|---|---|
| 2516 | PINE | 24 |
| 2517 | PINE | 12 |
| 2518 | PINE | 12 |
| 2519 | PINE | 12 |
| 2520 | PINE | 13 |
| 2521 | PINE | 12 |
| 2522 | PINE | 20 |
| 2523 | PALM | |
| 2524 | PALM | |
| 2525 | PINE | 14 |
| 2526 | LAUREL | 7 |
| 2527 | PALM | |
| 2528 | PALM | |
| 2529 | LAUREL | 6 |
| 2530 | PALM | |
| 2531 | PINE | 16 |
| 2532 | PALM | |
| 2533 | PALM | |
| 2534 | PINE | 14 |
| 2535 | PALM | |
| 2536 | LAUREL | 20 |
| 2537 | PALM | |
| 2538 | WHITE OAK | 16 |
| 2539 | PALM | |
| 2540 | PALM | |
| 2541 | PALM | |
| 2542 | PALM | |
| 2543 | LAUREL | 18 |
| 2544 | PINE | 14 |
| 2545 | PALM | |
| 2546 | PALM | |
| 2548 | PINE | 20 |
| 2549 | PINE | 20 |
| 2550 | PALM | |
| 2551 | PALM | |
| 2552 | PALM | |
| 2553 | PALM | |
| 2554 | PALM | |
| 2555 | PALM | |
| 2556 | PALM | |
| 2557 | PALM | |
| 2558 | PALM | |
| 2559 | LAUREL | 12 |
| 2560 | PALM | |
| 2561 | PALM | |
| 2562 | PALM | |
| 2563 | PALM | |
| 2564 | PALM | |
| 2565 | PALM | |
| 2566 | PALM | |
| 2567 | PALM | |
| 2568 | PALM | |
| 2569 | LAUREL | 14 |
| 2570 | PALM | |
| 2571 | LAUREL | 8 |
| 2572 | LAUREL | 8 |
| 2573 | LAUREL | 14 |
| 2574 | LAUREL | 14 |
| 2575 | PALM | |
| 2576 | LAUREL | 12 |
| 2577 | PALM | |
| 2578 | LAUREL | 7 |
| 2579 | PALM | |
| 2580 | LAUREL | 26 |
| 2581 | LAUREL | 12 |
| 2582 | LAUREL | 16 |
| 2583 | PALM | |
| 2584 | PINE | 13 |
| 2585 | PALM | |
| 2586 | PINE | 14 |
| 2587 | PINE | 14 |
| 2588 | PINE | 10 |
| 2589 | PINE | 13 |
| 2590 | LAUREL | 14 |
| 2591 | LAUREL | 20 |
| 2592 | LAUREL | 10 |
| 2593 | LAUREL | 24 |
| 2594 | PALM | |
| 2595 | LAUREL | 8 |
| 2596 | LAURE | 7 |
| 2597 | PINE | 14 |
| 2598 | PINE | 14 |

## CERTIFICATIONS:

- NEILL GRIFFIN MARQUIS, PLLC
- K & K PROPERTIES OF SARASOTA, INC.
- COMMONWEALTH LAND TITLE INSURANCE COMPANY

## FLIGHT NOTES & ACCURACY REPORT:

1. THIS SITE WAS FLOWN DURING MAY 20, 2021, UTILIZING A DJI PHANTOM 4 PRO SERIES DRONE, WITH DRONE DEPLOY VERSION 2.50.0 FOR FLIGHT PLANNING AND POST PROCESSING.
2. THE FLIGHT WAS CONDUCTED BY CERTIFIED REMOTE PILOT NO. 4297810.
3. HORIZONTAL CONTROL STATEMENT: MAP BASED UPON NORTH AMERICAN DATUM OF 1983 (NAD83), FLORIDA STATE PLANE PROJECTION, EAST ZONE, US SURVEY FEET, FL83-EF AND UTILIZING EPSG CODE 2236. USE OF FOUND PLAT CONTROL, STATE RIGHT OF WAY POINTS, NGS MONUMENTATION AND/OR SECTIONAL BREAKDOWN WERE USED AS PART OF THE MAPPING PROCESS. DISTANCES SHOWN ARE IN U.S. SURVEY FEET AND DECIMAL PARTS THEREOF.
4. MEASUREMENTS OF DISTANCE, AREA AND VOLUME WITHIN THE MAP ARE ACCURATE TO WITHIN 1-3 TIMES THE GROUND SAMPLING DISTANCE. MAP MEASUREMENTS ARE WITHIN 1-3% OF GROUND-BASED MEASUREMENTS.
5. FEATURES ARE LIMITED TO THOSE VISIBLE AT TIME OF THE PHOTOGRAPHY AND ARE SUBJECT TO FIELD VERIFICATION BY THE END USER. AREAS DESIGNATED AS "OBSCURED" INDICATE THE GROUND IS OBSCURED BY VEGETATION AND/OR SHADOWS. MAPPING WITHIN THESE AREAS MAY NOT MEET STANDARD ACCURACY.
6. RELATIVE ACCURACY:
   - GROUND SAMPLING DISTANCE (GSD) RANGE= 0.33 IN/PIXEL
   - TOTAL (RMSE) X: 0.0668 IN - Y:0.1145 IN - Z:0.1532 IN

MICHAEL T. OWEN PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REGISTRATION #5556

MICHAEL T. OWEN License Number 5556 STATE OF FLORIDA Professional Surveyor and Mapper

SIGNATURE DATE: 7/6/2021


ENGINEERS & SURVEYORS ENVIRONMENTAL
10250 VILLAGE PARKWAY
UNIT 201
PORT ST. LUCIE, FL 34987
772-462-2455
www.edc-inc.com
F.B.P.E. CERTIFICATE OF AUTHORIZATION 9935
L.B. CERTIFICATE OF AUTHORIZATION 8098


| DRAWN BY | CHECKED BY | FIELD CREW | FILENAME | SCALE | DATE |
|---|---|---|---|---|---|
| FS | MTO | RH | 21-269 K and K_REV1.dwg | AS SHOWN | June 30, 2021 |

| DATE | REVISION COMMENTS |
|---|---|
| 6/29/21 | ADDED TREES AND LOCATED UTILITIES |

BOUNDARY AND TOPOGRAPHIC SURVEY
FOR: K AND K PROPERTIES

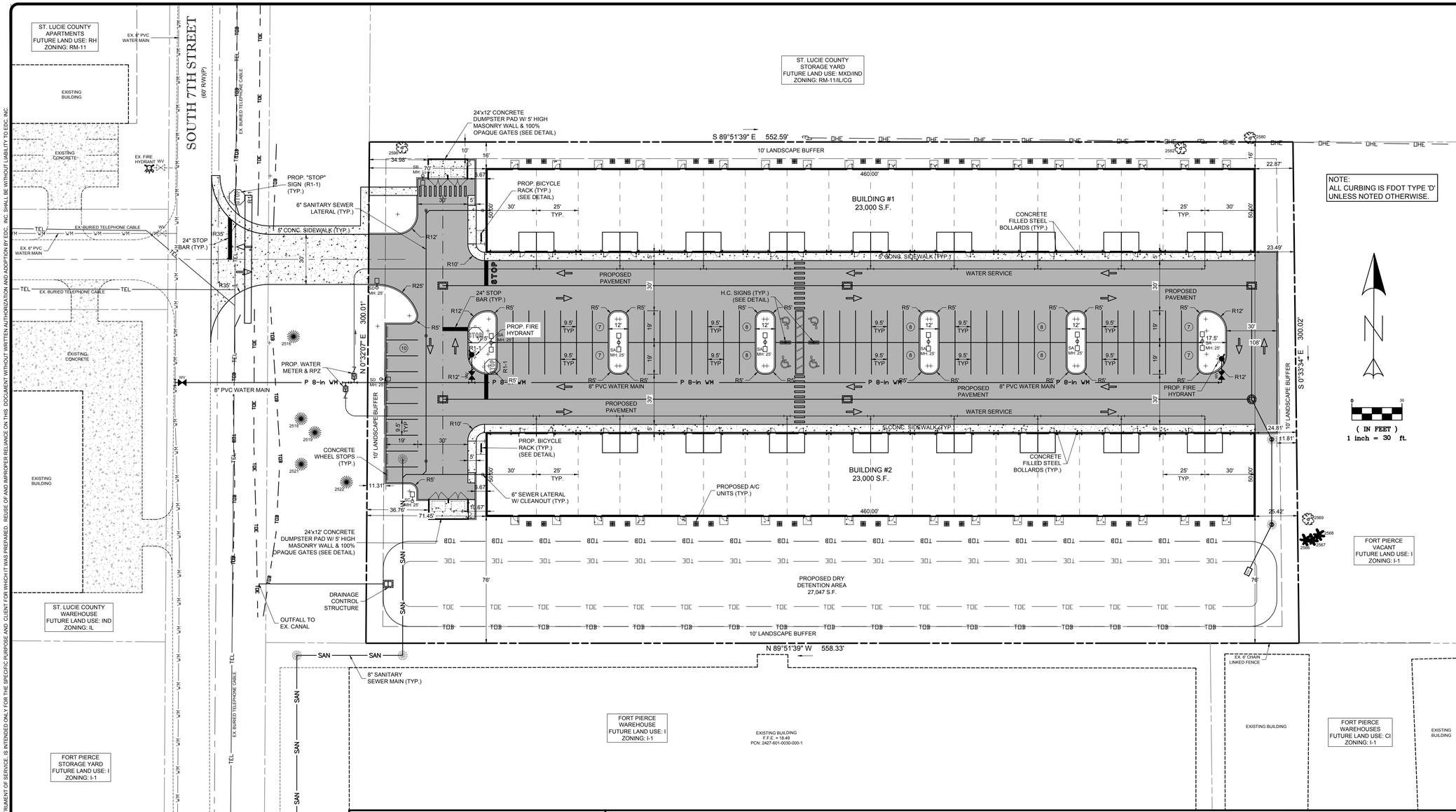
RECORD INFORMATION
SEC. 27, TWNSHP. 35 SOUTH, RGE. 40 EAST
ST. LUCIE COUNTY, FLORIDA


ENGINEERS & SURVEYORS ENVIRONMENTAL
10250 VILLAGE PARKWAY
UNIT 201
PORT ST. LUCIE, FL 34987
772-462-2455


21-269

1 OF 1


Z:\EDC-2021\21-269 - Kandk Prop - XXX 7th Street FP\SURVEY\Dwg - PDP\Survey\21-269 K and K_REV1.dwg, 7/13/2021 10:57 AM
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THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTION BY EDC, INC. SHALL BE WITHOUT LIABILITY TO EDC, INC.




## LEGEND

| | | | |
|---|---|---|---|
| M E | EXISTING METER | # | EX. OAK TREE TO REMAIN # - TREE TAG |
| M E | PROPOSED METER | # | EX. PALM TREE TO REMAIN # - TREE TAG |
| | PROPOSED SIGN | # | EX. PINE TREE # - TREE TAG |
| 7 | BLOCK NUMBER | # | EX. OAK TREE TO BE REMOVED. # TREE TAG. |
| | MITERED END SECTION | # | EX. PALM TREE TO BE REMOVED. # - TREE TAG. |
| | HANDICAP STALL | # | EX. PINE TREE TO BE REMOVED. # - TREE TAG. |
| S1 MH: 17' | LIGHT FIXTURE TAG. HEIGHT OF FIXTURE. | | EXISTING CONCRETE |
| P | PARKING STALL TAG # OF STALLS | | EXISTING PAVEMENT |
| | | | PROPOSED HEAVY DUTY ASPHALT |
| | | | PROPOSED STANDARD ASPHALT |
| | | | PROPOSED CONCRETE |

Luminaire Schedule

| Symbol | Qty | Label | Arrangement | Description | LLF | Luminaire Lumens | Luminaire Watts | Total Watts |
|---|---|---|---|---|---|---|---|---|
| | 6 | SA | Back-Back | Cree Lighting OSQ-M-B-16L-40K7-5M-XX-NM-XX, 2@180° | 0.900 | 15300 | 104 | 1248 |
| | 1 | SB | Single | Cree Lighting OSQ-M-B-16L-40K7-4M-XX-NM-XX / OSQ-BLSMF, Single Head | 0.900 | 12349 | 104 | 104 |
| | 1 | SC | Single | Cree Lighting OSQ-M-B-16L-40K7-4M-XX-NM-XX, Single Head | 0.900 | 16098 | 104 | 104 |
| | 2 | SD | Single | Cree Lighting OSQ-M-B-16L-40K7-3M-XX-NM-XX, Single Head | 0.900 | 16100 | 104 | 208 |

Calculation Summary

| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
|---|---|---|---|---|---|---|---|
| Parking Lot | Illuminance | Fc | 2.32 | 6.1 | 0.7 | 3.31 | 8.71 |
| Spill | Illuminance | Fc | 0.06 | 0.5 | 0.0 | N.A. | N.A. |

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L.B. CERTIFICATE OF AUTHORIZATION 8098

| | |
|---|---|
| DESIGNED BY | RWF |
| DRAWN BY | RWF |
| FILENAME | 21-269 (08-04-2022).dwg |
| SITE PLAN LAYOUT | |
| SCALE | 1" = 30' |
| DATE | 04 MARCH 2022 |

| DATE | REVISION COMMENTS |
|---|---|
| 05-04-2022 | REVISED SITE PLAN PER FORT PIERCE PLANNING DEPARTMENT COMMENTS. |

# K AND K PROPERTIES
## SITE PLAN & CONCEPTUAL DRAINAGE PLAN
FORT PIERCE FLORIDA

(DATE)

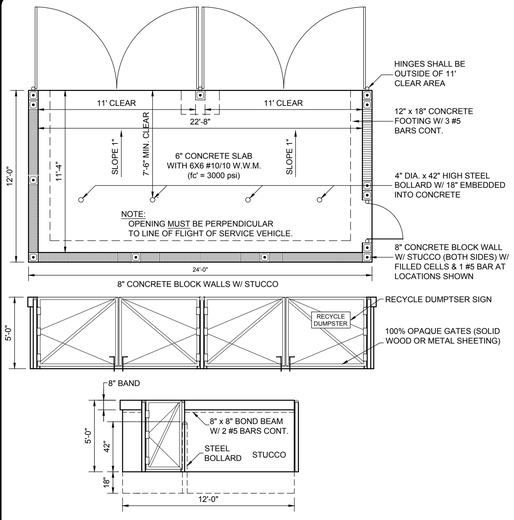
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

21-269

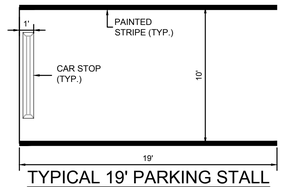
1 OF 3

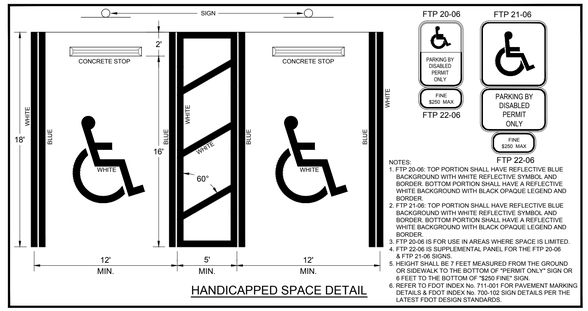
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## 24' x 12' DUMPSTER DETAIL



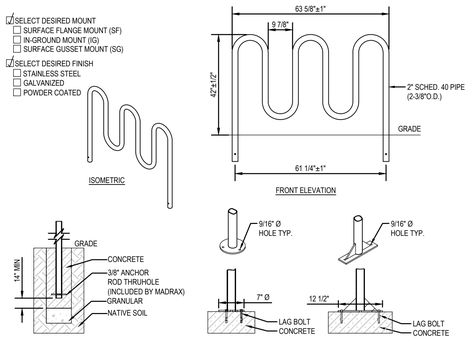

## HANDICAPPED SPACE DETAIL




NOTES:
1. FTP 20-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
2. FTP 21-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP 20-06 IS FOR USE IN AREAS WHERE SPACE IS LIMITED.
4. FTP 22-06 IS SUPPLEMENTAL PANEL FOR THE FTP 20-06 & FTP 21-06 SIGNS.
5. HEIGHT SHALL BE 7 FEET MEASURED FROM THE GROUND OR SIDEWALK TO THE BOTTOM OF "PERMIT ONLY" SIGN OR 6 FEET TO THE BOTTOM OF "$250 FINE" SIGN.
6. REFER TO FDOT INDEX No. 711-001 FOR PAVEMENT MARKING DETAILS & FDOT INDEX No. 700-102 SIGN DETAILS PER THE LATEST FDOT DESIGN STANDARDS.

MADRAX DIVISION,
GRABER MANUFACTURING, INC.
1080 UNIEK DRIVE
WAUNAKEE, WI 53597
TOLL FREE: 1-800-448-7931
PHONE: (608) 849-1080
FAX: (608) 849-1081
www.madrax.com

☑ SELECT DESIRED MOUNT
☐ SURFACE FLANGE MOUNT (SF)
☐ IN-GROUND MOUNT (IG)
☐ SURFACE GUSSET MOUNT (SG)
☑ SELECT DESIRED FINISH
☐ STAINLESS STEEL
☐ GALVANIZED
☐ POWDER COATED




NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. CONSULTANT TO SELECT COLOR (FINISH), SEE MANUFACTURER'S SPECIFICATIONS.
4. SEE SITE PLAN FOR LOCATION OR CONSULT OWNER.
5. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.
6. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 302-113B.

## HEAVY DUTY WINDER BIKE RACK
7 BIKE, SURFACE OR IN GROUND MOUNT

302-113B REVISION DATE 13/10/2011

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### LEGAL DESCRIPTION

THE WEST ONE-HALF OF THE FOLLOWING DESCRIBED PARCEL:

THE NORTH 200 FEET OF LOT 171 AND THE WEST HALF OF THE SOUTH 100 FEET OF LOT 172, UNIT THREE MARAVILLA GARDENS, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 6, PAGE 62, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; LESS AND EXCEPT: THE WEST 60 FEET THEREOF, FOR ADDITIONAL RIGHT-OF-WAY FOR SOUTH 7TH STREET.

CONTAINING 166,638 SQUARE FEET OR 3.825 ACRES, MORE OR LESS.

SECTION 14, TOWNSHIP 37 SOUTH, RANGE 39 EAST

| | |
|---|---|
| PARCEL ID #: | 2427-601-0031-000-8 |
| PROJECT NAME: | K AND K PROPERTIES |
| OWNER: | K & K PROPERTIES OF SARASOTA INC.<br>691 NW SUNSET DR.<br>STUART, FL 34994 |
| ARCHITECT: | |
| SURVEYING: | ENGINEERING DESIGN & CONSTRUCTION INC.<br>CONTACT: MICHAEL T. OWEN<br>10250 SW VILLAGE PARKWAY, SUITE 201<br>PORT ST. LUCIE, FL 34987<br>(772) 462-2455 |
| ENGINEERING: | ENGINEERING DESIGN & CONSTRUCTION INC.<br>CONTACT: DAVID C. BAGGETT, P.E.<br>10250 SW VILLAGE PARKWAY, SUITE 201<br>PORT ST. LUCIE, FL 34987<br>(772) 462-2455 |
| PLANNING: | ENGINEERING DESIGN & CONSTRUCTION INC.<br>CONTACT: BRADLEY J. CURRIE, AICP<br>10250 SW VILLAGE PARKWAY, SUITE 201<br>PORT ST. LUCIE, FL 34987<br>(772) 462-2455 |

### SITE DATA

| | | | |
|---|---|---|---|
| FUTURE LAND USE: | I | | |
| ZONING: | I-1 | | |
| GROSS SITE AREA | 166,638 S.F. (3.825 AC) = 100.00% | | |
| IMPERVIOUS AREA | 106,324 S.F. (2.441 AC) = 63.81% | | |
| PROPOSED BUILDING #1 | 23,000 S.F. (0.528 AC) = 13.80% | | |
| PROPOSED BUILDING #2 | 23,000 S.F. (0.528 AC) = 13.80% | | |
| PROPOSED PAVEMENT | 53,170 S.F. (1.221 AC) = 31.91% | | |
| PROPOSED CONCRETE | 7,154 S.F. (0.164 AC) = 4.29% | | |
| PERVIOUS AREA: | 60,314 S.F. (1.384 AC) = 36.19% | | |
| OPEN SPACE AREA | 33,267 S.F. (0.763 AC) = 19.96% | | |
| DRY DETENTION AREA | 27,047 S.F. (0.621 AC) = 16.23% | | |
| UPLAND PRESERVE | 0 S.F. (0.000 AC) = 0.00% | | |
| WETLANDS | 0 S.F. (0.000 AC) = 0.00% | | |
| WETLAND BUFFERS | 0 S.F. (0.000 AC) = 0.00% | | |

### BUILDING INFO:

BUILDING SETBACKS:
I-1 (LIGHT INDUSTRIAL)

| | |
|---|---|
| FRONT BUILDING SETBACK | (15') |
| SIDE BUILDING SETBACK | (15') |
| REAR BUILDING SETBACK | (15') |

BUILDING DATA:

| | |
|---|---|
| BUILDING #1 | 23,000 S.F. |
| BUILDING #2 | 23,000 S.F. |
| GROSS FLOOR AREA | 46,000 S.F. |

### PROVIDER OF UTILITIES:

| | |
|---|---|
| WATER: | FPUA |
| WASTEWATER: | FPUA |
| IRRIGATION: | PRIVATE WELL |

### PARKING CALCULATIONS:

PARKING REQUIRED:

46,000 S.F. WAREHOUSE AREA
1 SPACE / 600 S.F. WAREHOUSE AREA
46,000 / 600 = 77 SPACES

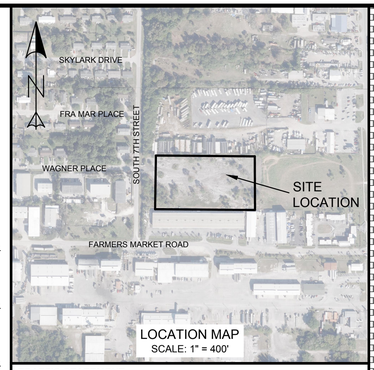
PARKING REQUIRED = 77 SPACES (4 HC)
PARKING PROVIDED = 86 SPACES (4 HC)

### DRAINAGE SYSTEM:

DRAINAGE SYSTEM WILL CONSIST OF A DRY DETENTION AREA WITH DISCHARGE TO THE EXISTING CANAL IN THE ROAD RIGHT OF WAY TO THE WEST OF THE PROPERTY. SFWMD CRITERIA FOR WATER QUALITY AND QUANTITY TREATMENT WILL BE PROVIDED.

### HAZARDOUS WASTE:

ANY AND ALL HAZARDOUS OR TOXIC MATERIALS GENERATED OR USED OR STORED ON SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.




### TRAFFIC STATEMENT:

INSTITUTE OF TRANSPORTATION ENGINEERS TRIP GENERATION, 10th EDITION

WAREHOUSE (150)
(AVERAGE RATES UTILIZED)

| | AVERAGE RATE | PROJECT S.F. | | TRIPS |
|---|---|---|---|---|
| WEEKDAY DAILY TRIPS: | | | | |
| WAREHOUSE (150) | 1.71/1,000 S.F. | 46,000 S.F. | = | 79 |
| A.M. PEAK HOUR OF GENERATOR TRIPS: | | | | |
| WAREHOUSE (150) | 0.21/1,000 S.F. | 46,000 S.F. | = | 10 |
| P.M. PEAK HOUR OF GENERATOR TRIPS: | | | | |
| WAREHOUSE (150) | 0.23/1,000 S.F. | 46,000 S.F. | = | 11 |

| # | OAK TREES PRESERVED TREE # | SIZE (INCHES) | PRESERVATION CREDIT | NOTES & REMARKS | # | OAK TREES TO BE REMOVED TREE # | SIZE (INCHES) | REQUIRED MITIGATION | NOTES & REMARKS | # | PINE TREES PRESERVED TREE # | SIZE (INCHES) | PRESERVATION CREDIT | NOTES & REMARKS | # | PINE TREES TO BE REMOVED TREE # | SIZE (INCHES) | REQUIRED MITIGATION | NOTES & REMARKS | # | PALM TREES TREE # | NOTES & REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2569 | 14 | | LAUREL / OFFSITE | 1 | 2526 | 7 | | LAUREL / OFFSITE | 1 | 2516 | 24 | | OFFSITE | 1 | 2517 | 12 | | OFFSITE/REMOVE | 1 | 2523 | REMOVE |
| 2 | 2580 | 26 | | LAUREL / OFFSITE | 2 | 2529 | 6 | | LAUREL | 2 | 2518 | 12 | | OFFSITE | 2 | 2520 | 13 | | OFFSITE/REMOVE | 2 | 2524 | REMOVE |
| 3 | 2582 | 16 | 16 | LAUREL | 3 | 2536 | 20 | 20 | LAUREL | 3 | 2519 | 12 | | OFFSITE | 3 | 2525 | 14 | 14 | | 3 | 2527 | OFFSITE/REMOVE |
| 4 | 2596 | 7 | | LAUREL | 4 | 2538 | 16 | 16 | WHITE OAK | 4 | 2521 | 12 | | OFFSITE | 4 | 2531 | 16 | 16 | | 4 | 2528 | REMOVE |
| | | | | | 5 | 2543 | 18 | 18 | LAUREL | 5 | 2522 | 20 | | OFFSITE | 5 | 2534 | 14 | 14 | | 5 | 2530 | REMOVE |
| | | | | | 6 | 2559 | 12 | | LAUREL | | | | | | 6 | 2544 | 14 | 14 | | 6 | 2532 | REMOVE |
| | | | | | 7 | 2571 | 8 | | LAUREL | | | | | | 7 | 2548 | 20 | 20 | | 7 | 2533 | REMOVE |
| | | | | | 8 | 2572 | 8 | | LAUREL | | | | | | 8 | 2549 | 20 | 20 | | 8 | 2535 | REMOVE |
| | | | | | 9 | 2573 | 14 | 14 | LAUREL | | | | | | 9 | 2584 | 13 | | | 9 | 2537 | REMOVE |
| | | | | | 10 | 2574 | 14 | 14 | LAUREL | | | | | | 10 | 2586 | 14 | 14 | | 10 | 2539 | REMOVE |
| | | | | | 11 | 2576 | 12 | | LAUREL | | | | | | 11 | 2587 | 14 | 14 | | 11 | 2540 | REMOVE |
| | | | | | 12 | 2578 | 7 | | LAUREL | | | | | | 12 | 2588 | 10 | | | 12 | 2541 | REMOVE |
| | | | | | 13 | 2581 | 12 | | LAUREL | | | | | | 13 | 2589 | 13 | | | 13 | 2542 | REMOVE |
| | | | | | 14 | 2590 | 14 | 14 | LAUREL | | | | | | 14 | 2597 | 14 | 14 | | 14 | 2545 | REMOVE |
| | | | | | 15 | 2591 | 20 | 20 | LAUREL | | | | | | 15 | 2598 | 14 | 14 | | 15 | 2546 | REMOVE |
| | | | | | 16 | 2592 | 10 | | LAUREL | | | | | | | | | | | 16 | 2550 | REMOVE |
| | | | | | 17 | 2593 | 24 | 24 | LAUREL | | | | | | | | | | | 17 | 2551 | REMOVE |
| | | | | | 18 | 2595 | 8 | | LAUREL | | | | | | | | | | | 18 | 2552 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 19 | 2553 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 20 | 2554 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 21 | 2555 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 22 | 2556 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 23 | 2557 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 24 | 2558 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 25 | 2560 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 26 | 2561 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 27 | 2562 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 28 | 2563 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 29 | 2564 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 30 | 2565 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 31 | 2566 | OFFSITE |
| | | | | | | | | | | | | | | | | | | | | 32 | 2567 | OFFSITE |
| | | | | | | | | | | | | | | | | | | | | 33 | 2568 | OFFSITE |
| | | | | | | | | | | | | | | | | | | | | 34 | 2570 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 35 | 2575 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 36 | 2577 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 37 | 2579 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 38 | 2583 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 39 | 2585 | REMOVE |
| | | | | | | | | | | | | | | | | | | | | 40 | 2594 | REMOVE |
| 4 | | 63 | 16 | | 18 | | 230 | 140 | | 5 | | 80 | 0 | | 15 | | 215 | 154 | | | | |

### TREE COUNT (MITIGATION)

| | |
|---|---|
| 16 | (OAKS TO BE PRESERVED) |
| 0 | (PINES TO BE PRESERVED) |
| - 140 | (OAKS TO BE REMOVED) |
| - 154 | (PINES TO BE REMOVED) |
| - 278 | MITIGATION (CREDITS) |

SITE TREE SUMMARY

| TYPE OF TREE | TOTAL # TREES | TOTAL SIZE (INCHES) | PRESERVATION CREDIT | REQUIRED MITIGATION |
|---|---|---|---|---|
| OAK TREES PRESERVED | 2 | 23 | 16 | |
| OAK TREES TO BE REMOVED | 17 | 223 | | 140 |
| PINE TREES PRESERVED | 0 | 0 | 0 | |
| PINE TREES TO BE REMOVED | 13 | 190 | | 154 |
| PALM TREES TO BE REMOVED | 36 | | | |
| PALM TREES TO BE PRESERVED | 0 | | | |

TOTAL # OF TREES FOR THIS PROJECT: 68

TREE NOTES:
1. PALM TREES HAVE A CLEAR TRUNK HEIGHT OF 10' OR GREATER.
2. OAK & PINE TREES ARE MEASURED @ (DBH) 4½' ABOVE GRADE, 14" OR GREATER.
3. CONTRACTOR IS TO REFER TO LANDSCAPE PLANS.

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PORT SAINT LUCIE, FL 34987
772-462-2455
www.edc-inc.com
F.B.P.E. CERTIFICATE OF AUTHORIZATION 9935
L.B. CERTIFICATE OF AUTHORIZATION 8098

| DESIGNED BY | DRAWN BY | FILENAME | LAYOUT | SCALE | DATE |
|---|---|---|---|---|---|
| RWF | RWF | 21-269 (08-04-2022).dwg | SITE DETAILS | AS SHOWN | 04 MARCH 2022 |

REVISION COMMENTS | DATE

# K AND K PROPERTIES
# SITE PLAN DETAILS TREE MITIGATION TABLE
FORT PIERCE FLORIDA

(DATE)

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772-462-2455

21-269

2 OF 3

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ST. LUCIE COUNTY APARTMENTS
FUTURE LAND USE: RH
ZONING: RM-11

EX. 4" PVC WATER MAIN

EXISTING BUILDING

EXISTING CONCRETE

EX. FIRE HYDRANT WV

SOUTH 7TH STREET
(80' R/W/(P))

EX. BURIED TELEPHONE CABLE

EX. 6" PVC WATER MAIN

EXISTING CONCRETE

EXISTING BUILDING

ST. LUCIE COUNTY WAREHOUSE
FUTURE LAND USE: IND
ZONING: IL

FORT PIERCE STORAGE YARD
FUTURE LAND USE: I
ZONING: I-1

FARMERS MARKET ROAD
(R/W VARIES)

ST. LUCIE COUNTY STORAGE YARD
FUTURE LAND USE: MXD/IND
ZONING: RM-11/IL/CG

S 89°51'39" E 552.59'

10' LANDSCAPE BUFFER

N 0°32'07" E 300.01'

10' LANDSCAPE BUFFER

S 0°33'34" E 300.02'

10' LANDSCAPE BUFFER

10' LANDSCAPE BUFFER

N 89°51'39" W 558.33'

FORT PIERCE
VACANT
FUTURE LAND USE: I
ZONING: I-1

FORT PIERCE
WAREHOUSE
FUTURE LAND USE: I
ZONING: I-1

EXISTING BUILDING
F.F.E. = 18.49
PCN: 2427-601-0030-000-1

EX. 6' CHAIN LINKED FENCE

EXISTING BUILDING

FORT PIERCE
WAREHOUSES
FUTURE LAND USE: CI
ZONING: I-1

EXISTING BUILDING

0 30
( IN FEET )
1 inch = 30 ft.

## LEGEND

| | | | |
|---|---|---|---|
| M E | EXISTING METER | # | EX. OAK TREE TO REMAIN # - TREE TAG |
| M E | PROPOSED METER | # | EX. PALM TREE TO REMAIN # - TREE TAG |
| | PROPOSED SIGN | # | EX. PINE TREE # - TREE TAG |
| 7 | BLOCK NUMBER | # | EX. OAK TREE TO BE REMOVED. # TREE TAG. |
| | MITERED END SECTION | # | EX. PALM TREE TO BE REMOVED. # - TREE TAG. |
| | HANDICAP STALL | # | EX. PINE TREE TO BE REMOVED. # - TREE TAG. |
| S1 MH: 17' | LIGHT FIXTURE TAG. HEIGHT OF FIXTURE. | | EXISTING CONCRETE |
| P | PARKING STALL TAG # OF STALLS | | EXISTING PAVEMENT |
| | | | PROPOSED HEAVY DUTY ASPHALT |
| | | | PROPOSED STANDARD ASPHALT |
| | | | PROPOSED CONCRETE |

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L.B. CERTIFICATE OF AUTHORIZATION 8098

DESIGNED BY: RWF
DRAWN BY: RWF
FILENAME: 21-269 (08-04-2022).dwg
LAYOUT: TREE MITIGATION PLAN
SCALE: 1" = 30'
DATE: 04 MARCH 2022

REVISION COMMENTS | DATE

K AND K PROPERTIES

TREE MITIGATION PLAN

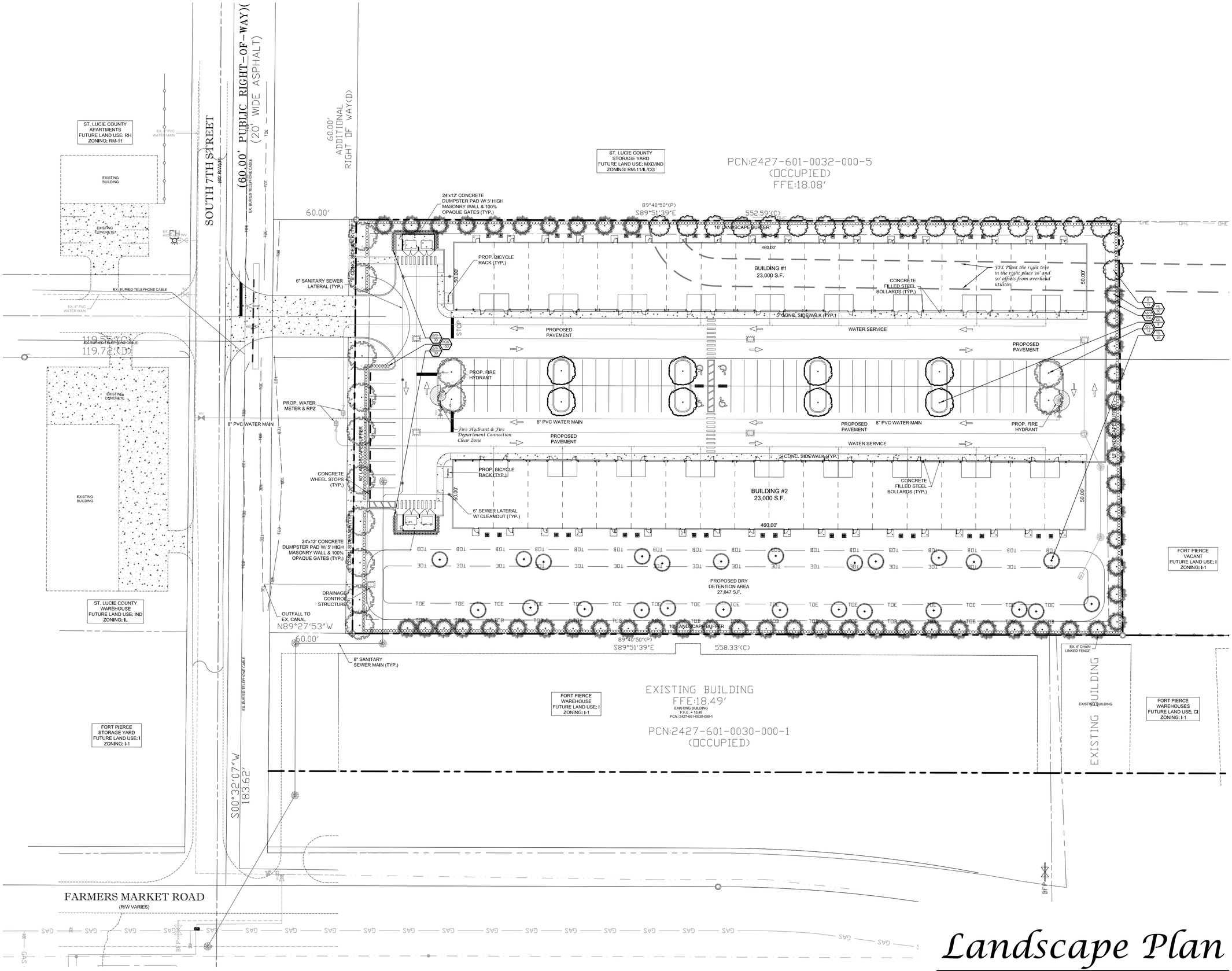
FORT PIERCE FLORIDA

(DATE)

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PORT SAINT LUCIE, FL 34987
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21-269

3 OF 3




# Landscape Plan

North
Scale: 1" = 30'
0 15' 30' 60'


**Conceptual Design Group, Inc.**
*Landscape Architecture - Site Planning*
900 East Ocean Boulevard, Suite 130d
Stuart, Florida 34994
(772) 344-2340
LC: 26000198


**K & K Properties**
South 7th Street
City of Fort Pierce, Florida

City Project Number:


*Jeffrey W. Smith, RLA*
*Florida Registration Number: LA 0001635*


| | |
|---|---|
| Job No. | 22-0801 |
| Drawn By | JWS |
| Submittal Dates | 8-9-2022 |
| Revision Dates | |


These drawings are the property of the landscape architect and are not to be used for other projects except by written permission from the landscape architect. Report any discrepancies immediately to the landscape architect.


Sheet L-1 of 2

# Landscape Specifications

1. All tree and plant material to be Florida No. 1 or better, as classified in "Grades and Standards for Nursery Plants", Part 1 and Part II, State of Florida, Dept. of Agriculture, Tallahassee. All plants not listed in "Grades and Standards for Nursery Plants" shall conform to a Florida No. 1 as to: (1) health and vitality, (2) condition of foliage, (3) root system, (4) freedom from pest or mechanical damage, (5) heavily branched and densely foliated according to the accepted normal shape of the species.
2. Undersizing or substitution of one species or cultivar for another species is a breach of contract and will be "Rejected" at the time of final landscape inspection unless approved by Landscape Architect.
3. Project Warranty: All plant material shall be warranted for a period of one (1) year after date of substantial completion against defects, including death and unsatisfactory growth, except for defects resulting from abuse or damage by others or unusual phenomena or incidents which are beyond the contractor's control.
4. Any and all conditions which the contractor feels will be detrimental to the success of the planting shall be brought to the owner or representative's attention.
5. The contractor shall verify the location of underground utilities prior to commencing work on any project area.
6. Mulch planting areas with 3" layer of Melaleuca, Eucalyptus, or Enviromulch. Cypress Mulch is NOT ACCEPTABLE. Planting beds to receive mulch throughout entire bed area.
7. All plants to be set to ultimate grade. No filling will be permitted around trunks or stems. Mulch to be kept a minimum of 2" away from trunks and stems.
8. Planting trees and shrubs: Excavate hole per planting detail. When plant is set, place additional backfill consisting of a 50% mixture of Peat humus and natural soil around the base and sides of ball, and work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Water again after placing final layer of backfill and before installing mulch.
9. Guy and stake trees in 3 directions with galvanized wire, through flexible hose chafing guards, with wooden stake anchors immediately after planting. (See Detail)
10. Trees and shrubs shall be fertilized with a complete natural organic fertilizer with a ratio of approximately 3:0:2 or 3:0:3 (e.g. one labeled 12-0-8). Similar analysis such as 16-0-8 (4:0:2) can also be used. Fertilizers that are slow release, controlled release, sulphur coated or with nitrogen as IBDU or ureaformaldehyde have extended release period. Thirty to fifty percent of the nitrogen should be water insoluble or slow release.

Palms should receive a complete granular fertilizer formulated for palms ("Palm Special") at a rate of 5 to 8 lbs. per palm.

Agriform 20-0-5 twenty-one gram planting tablets may be substituted for granular fertilizer. If utilized, the following rates shall be utilized; Position plant in hole, Backfill halfway up the rootball, Place tablet(s) beside rootball about 1" from root tips. Do not place tablet(s) in bottom of hole.

1 Gallon 1 Tablet
3 Gallon 2 Tablets
25 Gallon & B&B Trees 2 per 1" caliper

11. All planting areas and sod to be irrigated to provide 100% coverage. Shop drawings to be submitted by the irrigation contractor for approval prior to installation.
12. Maintain trees, shrubs, and other plants by watering, cultivating, and weeding as required for healthy growth. Restore planting saucers and mulch. Tighten and repair stake and guying and reset trees and shrubs to proper grade or vertical position as required. Spray as necessary to keep trees and shrubs free of insects and disease. The contractor shall begin maintenance immediately after planting and shall continue maintenance through final acceptance when Certificate of Occupancy is issued to the General Contractor by City and project is released by the General Contractor to Client.
13. Prune trees and shrubs only to remove damaged branches as directed by the Landscape Architect.
14. Planting Lawns: Provide clean, strongly rooted, uniformly sized strips of Stenotaphrom secundatus Floritam (unless otherwise noted), machine stripped not more than 24 hours prior to laying. Grade and roll prepared lawn surface. Water thoroughly but not to create muddy soil conditions. Lay sod strips with tight joints, roll or tamp lightly, and water thoroughly.
15. Maintain positive drainage, no planting is to block drainage.
16. Drainage Testing
    Prior to planting of trees, palms, and specimen material, each planting pit shall be tested in the following manner to verify adequate drainage.
    A) Dig each planting pit to the minimum specified size.
    B) Fill the planting pit with (12") twelve inches of water. If the water level in the planting pit drops (4") four or more inches within (4) four hours, the drainage is sufficient and a drainage channel is not required. If the water level drops less than (4") four inches within the (4) four hour period, then a drainage channel is required.
    C) When a drainage channel is required, the drainage channel must extend down through the non porous soil and into porous soil. (See Drainage Testing Detail)
    D) Discard all material removed from the drainage channel,
    E) When backfilling the planting pit, add course gravel to the drainage channel. Also, care must be taken to keep the consistency of the soil mix the same throughout the planting pit.

NOTES:
1. Contractor to include drainage testing for all trees and palms in bid. If drainage is inadequate, the soil specification in item #8 above shall be revised for site conditions. Contractor shall notify the Owner and Landscape Architect of poor drainage conditions in writing and written direction will be provided to the contractor of appropriate soil mixture specification to be used.
2. All fertilizers shall meet the City of Port St. Lucie's fertilizer ordinance.

# Plant List

| QTY | SYM | SPECIES | COMMON NAME/DESCRIPTION | SIZE | SPACING | REMARKS |
|---|---|---|---|---|---|---|
| **CANOPY / ORNAMENTAL TREES** | | | | | | |
| 19 | IE* | ILEX x ATTENUATA 'EAGLESTON' | EAGLESTON HOLLY | 12' x 5', 2.5" D.B.H. | A.S. | FULL CANOPY, 5' C.T. MIN. |
| 50 | PE* | PINUS ELLIOTTI | SLASH PINE | 12' x 5', 2.5" D.B.H. | A.S. | FULL CANOPY, 5' C.T. MIN. |
| 8 | QL* | QUERCUS LAURIFOLIA | LAUREL OAK | 12' x 5', 2.5" D.B.H. | A.S. | FULL CANOPY, 5' C.T. MIN. |
| 14 | QV* | QUERCUS VIRGINIANA | LIVE OAK | 12' x 5', 2.5" D.B.H. | A.S. | FULL CANOPY, 5' C.T. MIN. |
| 25 | TD* | TAXODIUM DISTICHUM | BALD CYPRESS | 12' x 5', 2.5" D.B.H. | A.S. | FULL CANOPY, 5' C.T. MIN. |
| **SHRUBS / GROUNDCOVERS** | | | | | | |
| 150 | FOS* | FORESTIERA SEGREGATA | FLORIDA PRIVET | #3, 2' x 2' | 2' O.C. | FULL & THICK |
| 706 | MYR* | MYRICANTHES FRAGRANS | SIMPSON STOPPER | #3, 2' x 2' | 2' O.C. | FULL & THICK |
| 60 | MYR-1* | MYRICANTHES FRAGRANS | SIMPSON STOPPER | #7, 4' x 2' | 2' O.C. | FULL & THICK |
| | SOD-1 | PASPALUM NOTATUM | BAHIA SOD | | | SEE SPECS |

*** = Florida Native**

**NOTE: D.B.H. IS MEASURED 4.5' ABOVE GRADE**

# Landscape Data

Vehicular Use Area Landscaping Adjacent to R.O.W. (West Buffer) 300'
Sec. 123-37(4)(b)
Trees Required = 10' Wide Landscape Strip with 1 Tree/300 s.f.
300 l.f. x 10' = 3,000 s.f. / 300 = 10 Trees
Provided = 10

Shrubs Required = Continuous Hedge @ 2' o.c.
300 l.f. / 2' o.c. = 150 Shrubs
Provided = 150

Vehicular Use Area Landscaping to Adjacent Property (North, South & East Buffer) 1,411'
Sec. 123-37(6)
Trees Required = 10' Wide Landscape Strip with 1 Tree/200 s.f.
1,411 l.f. x 10' = 14,110 s.f. / 200 = 71 Trees
Provided = 71

Shrubs Required = Continuous Hedge @ 2' o.c.
1,411 l.f. / 2' o.c. = 706 Shrubs
Provided = 706 Shrubs

Interior Vehicular Use Area
Sec. 123-37(7)(a & b)
Required = 1 s.f. of interior landscaping per
15 s.f. of vehicular use area (53,170 s.f./15 = 3,545 s.f.)
Landscape Area Provided = 3,600 s.f.
Trees Required = 1 Tree/100 s.f. of interior landscape area
53,170 s.f./15 = 3,545 s.f. / 100 = 35 Trees
Trees Provided = 35 (Note: some tree relocated to dry retention area to enhance water quality)

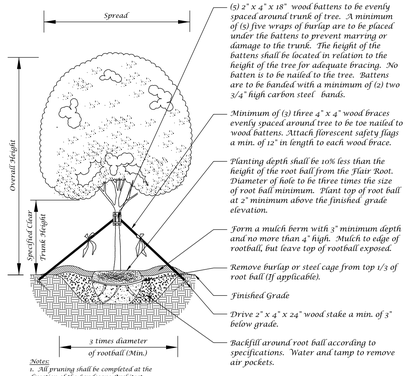
Total Trees Required = 116 Trees
Total Trees Provided = 116 Trees

Total Trees Required = 116 Trees
Total Native Trees Provided = 116 (100%)

Total Palms Required = 0
Total Native Palms Provided = 0 (N/A - %)

Total Shrubs Required = 906
Total Native Shrubs Provided = 906 (100%)

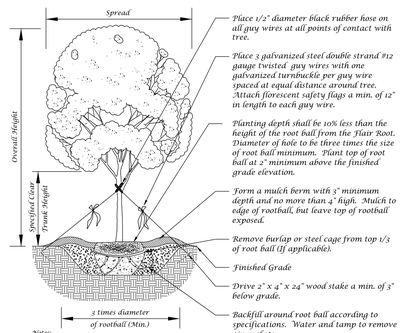
# Landscape Details




Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. No nails shall be driven into tree

## Large Tree Planting Detail (5" Caliper or Greater)

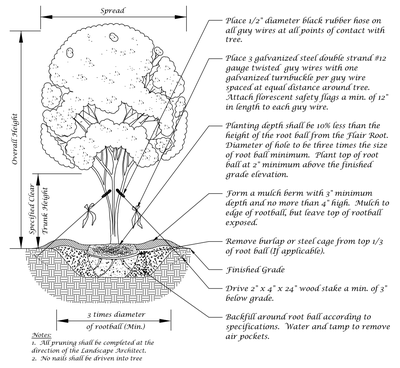
Not to Scale




Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. No nails shall be driven into tree

## Tree Planting Detail

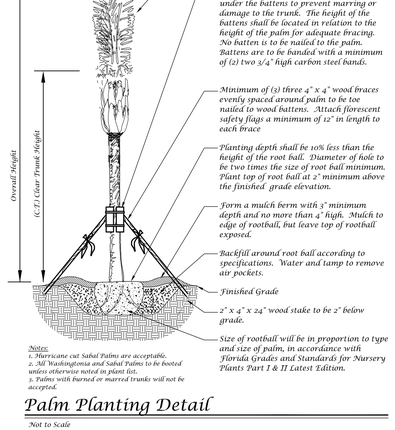
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Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. No nails shall be driven into tree

## Multi-Trunk Tree Planting Detail

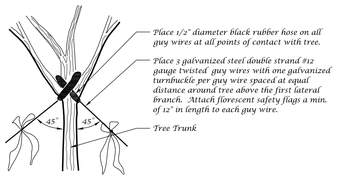
Not to Scale




Notes:
1. Hurricane cut Sabal Palms are acceptable.
2. All Washingtonia and Sabal Palms to be footed unless otherwise noted in plant list.
3. Palms with burned or marred trunks will not be accepted.

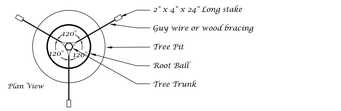
## Palm Planting Detail

Not to Scale



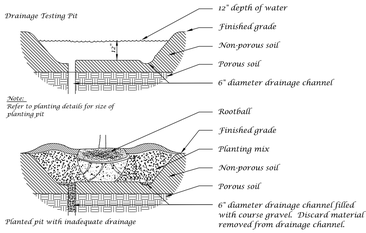

## Guy Wire Attachment Detail

Not to Scale



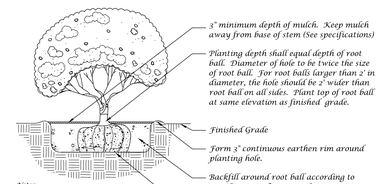

## Staking Detail

Not to Scale




## Drainage Testing Detail

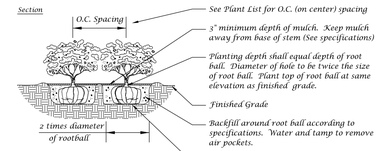
Not to Scale




Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. Remove any container from around rootball.
3. Plant as hedge row with O.C. (on center) spacing as specified in plant list, or with triangular spacing as a mass.

## Shrub Detail

Not to Scale




## Ground Cover Detail

Not to Scale

# Landscape Plan


Conceptual Design Group, Inc.
Landscape Architecture - Site Planning
900 East Ocean Boulevard, Suite 130d
Stuart, Florida 34994
(772) 344-2340
LC: 26000198


K & K Properties
South 7th Street
City of Fort Pierce, Florida

City Project Number:


Jeffrey W. Smith, RLA
Florida Registration Number: LA 0001635


Job No. 22-0801
Drawn By JWS
Submittal Dates 8-9-2022

Revision Dates


These drawings are the property of the landscape architect and are not to be used for other projects except by written permission from the landscape architect. Report any discrepancies immediately to the landscape architect.


Sheet L-2 of 2

July 15, 2021

Ken Kreye
K & K Properties of Sarasota, Inc.
691 NW Sunet Drive
Stuart, Florida 34994

*via e-mail:* k2kreye@gmail.com

Michael Reed
Capital City Bank
1500 North U.S. Highway 41
Inverness, Florida 34450

*via e-mail:* reed.michael@ccbg.com

Reference: **Environmental Assessment**
S 7th Street
Fort Pierce, FL 34982
Parcel ID # 2427-601-0031-000-8

Dear Mr. Kreye and Mr. Reed,

EDC, Inc. (EDC) has completed this Environmental Assessment (EA) for the above referenced parcels. The purpose of this evaluation was to conduct a review of the above listed parcels by means of site visit, review of available aerial photography, listed species review, review of soil resources, and review of environmental regulations pertaining to this parcel.

The following report details the findings of our on-site and desktop investigations of the properties as they pertain to City of Fort Pierce developmental review regulations.

Please contact the undersigned if you have any questions regarding this report.

Respectfully submitted,
**EDC, Inc.**

Anthony A. Adams, BS
Sr. Biologist | Certified Arborist

ENGINEERS ◆ SURVEYORS ◆ ENVIRONMENTAL

# ENVIRONMENTAL ASSESSMENT

Parcel IDs: 2427-601-0031-000-8
S 7th Street
Fort Pierce, FL 34982

Date: July 15, 2022
Project # 21-269

**Prepared For:**

Ken Kreye
K & K Properties of Sarasota, Inc.
691 NW Sunet Drive
Stuart, Florida 34994

Michael Reed
Capital City Bank
1500 North U.S. Highway 41
Inverness, Florida 34450

**Prepared By:**
EDC, Inc.
10250 SW Village Parkway
Port St Lucie, Florida 34987
(772) 223-5200

The subject property evaluated as part of this Environmental Assessment consists of one tax parcel (Parcel ID # 2427-601-0031-000-8) comprised of 4.01 acres. The property is classified by the St. Lucie County Property Appraiser with a Future Land Use Designation of I. The parcel is located at the northeast corner of Farmers Market Road and S 7th Street, Fort Pierce, Florida. The subject property is further located within Section 27, Township 35 South, and Range 40 East, Fort Pierce, Florida.

This environmental assessment was completed as a precursor to permitting and review by governmental agencies as an applicable document for the supporting information associated with a building permit or land development application. EDC, Inc. staff visited the property on July 15, 2022 in order to ascertain the status and composition of any critical habitats, such as wetlands and native uplands that may be onsite.

**VEGETATION:**

It is the opinion of EDC that there is no native upland habitat located on site. The site has been previously cleared between 2018 and 2021, according to available aerials. Due to this, the upland habitat consisted of the following CLC (Community Land Classification) code; 182112 – Urban Open Pine, approx. 4.01 acres. This is defined as a subset of Urban Open Land, but with scattered to dense pines, where the ground is typically disturbed. It is important to note that there are no significant associations greater than 50% and is therefore considered to be non-native habitat.

| Common Name | Species Name |
|---|---|
| **Cabbage Palm** | *Sabal Palmetto* |
| **Slash Pine** | *Pinus elliottii var. densa* |
| **Inkberry** | *Ilex glabra* |
| **Broom Grass** | *Andropogon spp.* |
| **Brazilian Pepper**** | *Schinus terebinthifolia* |
| **Rosary Pea**** | *Abrus precatorius* |

***Nuisance Vegetation**
****Exotic/Invasive Vegetation**

**Table 1:** This table lists a representative sample of upland vegetative species observed during the site visit.

**WETLAND DELINEATION:**

According to aerial photographs and site visit, it appears that there are no State jurisdictional wetlands on site. Based on the State definition, a wetland consists of three components: 1) hydric soils, 2) wetland plants, and 3) hydrologic indicators. These components were not found during the field reconnaissance on the property.

**WILDLIFE EVALUATION:**

EDC, Inc. conducted a pedestrian survey throughout the property to investigate for the presence of any plant or animal listed species. Gopher tortoises and multiple burrows were observed on site at the time of the visit. In addition, no sandhill cranes or their nests were identified on site.

Due to anthropogenic disturbances onsite such as, periodically cleared areas, many listed species may not be found onsite due to the lack of suitable foraging and nesting habitat. No other state or federally listed plant/animal species were found on site.

**SOIL COMPOSITION:**
Based on a review of the USDA Web Soil the site is composed of:

**Urban land -** This miscellaneous area is where the natural soil cannot be readily observed. The soils have been generally altered by grading and shaping, or have been covered with 5 to 12 inches of sandy fill material.

**Waveland sand -** This is a nearly level, poorly drained soil found in broad open areas of the flatwoods. The natural vegetation associated with this soil type is slash pine and an understory of saw palmetto, gallberry, fetterbush, running oak, and dwarf huckleberry. Grasses are pineland threeawn, bluestem and panicum. Typically, the surface layer is dark gray sand with a light gray and grayish brown subsurface layer. Under natural conditions, this soil is not suited to cultivate crops or for pasture because of ponding. However, if intensive management, soil improving measures and a good water control system are implemented, the soil is suitable for vegetable crops and pasture.

**SITE HISTORY:**
After reviewing available aerial images on Google Earth, and the St. Lucie County Property Appraiser, the property has remained undeveloped since the earliest aerials were available. It is apparent from aerials that the site was cleared between 2018 and 2021.

According to the St. Lucie County Property Appraiser, the most recent sale of these parcel occurred in May 2021.

**CITY OF FORT PIERCE REGULATIONS:**
The following lists the City of Fort Pierce Land Development Code that apply to the subject property. As part of the local approval process, the applicant will be required to comply with the below items.

***Sec. 123-64. - Permit required.***

*(a) Tree removal permit. No person shall, directly or indirectly, cut down, substantially alter, destroy, remove, relocate, damage or authorize any such act involving a protected tree situated on land within the city, without first obtaining a tree removal permit.*

To obtain a Tree Removal Permit, a Tree Survey must be conducted to account for the number of protected trees on the subject property. A mitigation plan will be required based on the Tree Survey, and the Tree Mitigation Plan will be submitted with the development application.

In addition, a 100% Gopher Tortoise survey will be required prior to landclearing activities, based on the presence of a Gopher Tortoise and burrow(s) observed on site at the time of the visit.

**SUMMARY:**
It is the professional opinion of EDC that there is no native upland habitat located on site. The habitat on site is identified as CLC code 182112 – Urban Open Pine. The site consists of 4.01 acres designated as I - Industrial.

It is our professional opinion that there are no wetlands located on site.

Gopher tortoises and multiple burrows were observed on site. A 100% GT Survey in accordance with FWC Protocol will be required prior to ground disturbing activities. There are trees on the subject property that will likely meet City of Fort Pierce requirements. A Tree Survey will be

required prior to the issuance of a Vegetation Removal Permit. No sandhill cranes or their nests were identified on site. Furthermore, no other state-listed species were observed.



Gopher Tortoise observed during site visit.

ENGINEERS ◔ SURVEYORS ◔ ENVIRONMENTAL

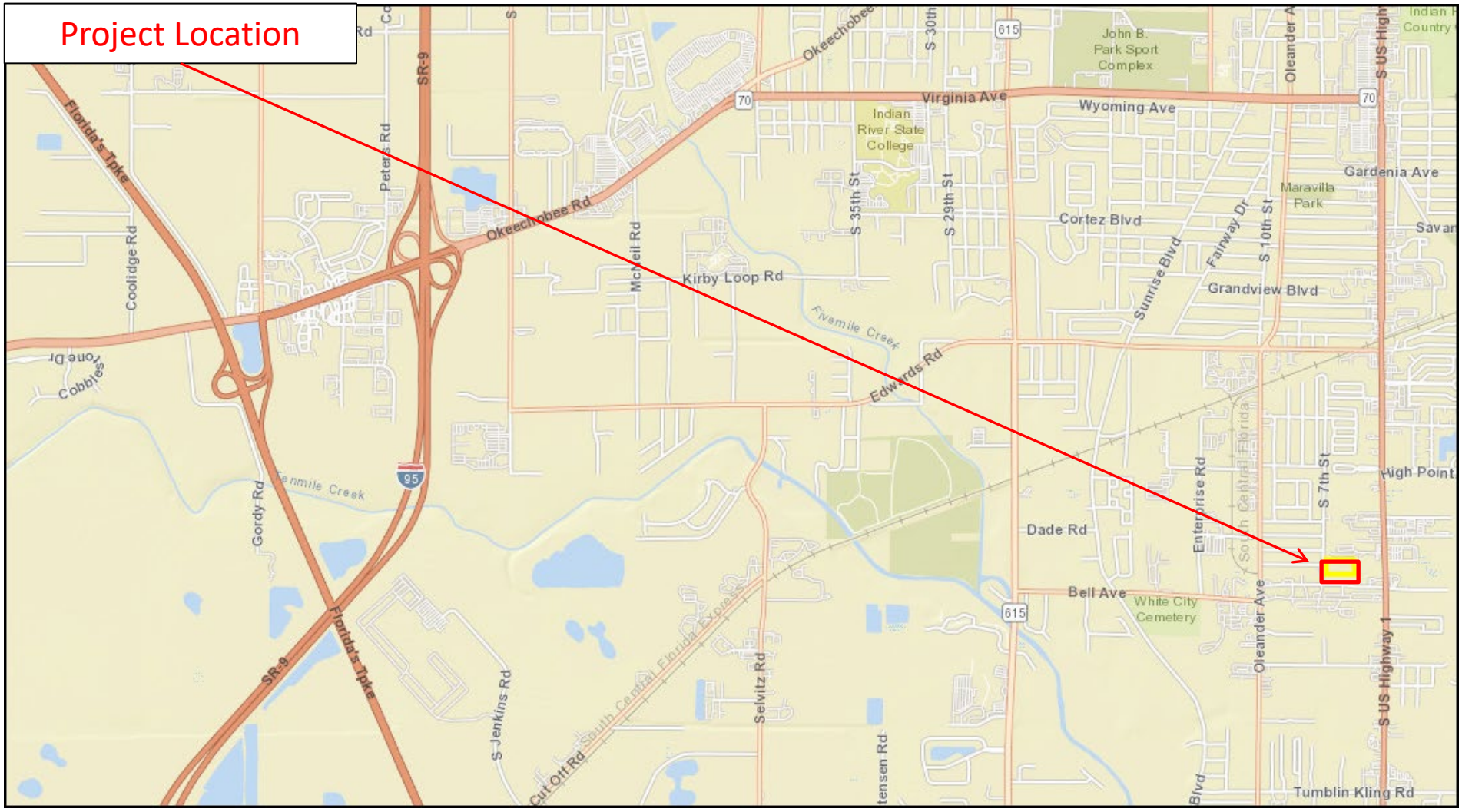
# Environmental Assessment

South 7th Street

City of Fort Pierce, St. Lucie County, FL

## Location Map

| Project: #21-269 | K & K Properties | 07/15/2022 |
|---|---|---|



ENGINEERS ◔ SURVEYORS ◔ ENVIRONMENTAL

# Environmental Assessment

South 7th Street

City of Fort Pierce, St. Lucie County, FL

## Property Appraiser Map

| Project: #21-269 | K & K Properties | 07/15/2022 |
|---|---|---|



ENGINEERS ◔ SURVEYORS ◔ ENVIRONMENTAL

# Environmental Assessment

South 7th Street

City of Fort Pierce, St. Lucie County, FL

## Soil Map

| Project: #21-269 | K & K Properties | 07/15/2022 |
|---|---|---|

St. Lucie County, Florida (FL111)

St. Lucie County, Florida (FL111)

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 47 | Urban land, 0 to 2 percent slopes | 0.0 | 0.6% |
| 50 | Waveland and Immokalee fine sands | 4.1 | 99.4% |
| **Totals for Area of Interest** | | **4.2** | **100.0%** |



ENGINEERS SURVEYORS ENVIRONMENTAL

# Environmental Assessment

City of Fort Pierce

City of Fort Pierce, St. Lucie County, FL

## Florida Land Use, Cover and Forms Classification System Map

| Project: #21-269 | K & K Properties | 07/15/2022 |
|---|---|---|

| CLC Codes | |
|---|---|
| 182112 | Urban Open Pine – 4.01 ac. |

***This map demonstrates an approximation of habitat boundaries on site.**



ENGINEERS ◔ SURVEYORS ◔ ENVIRONMENTAL

# Environmental Assessment

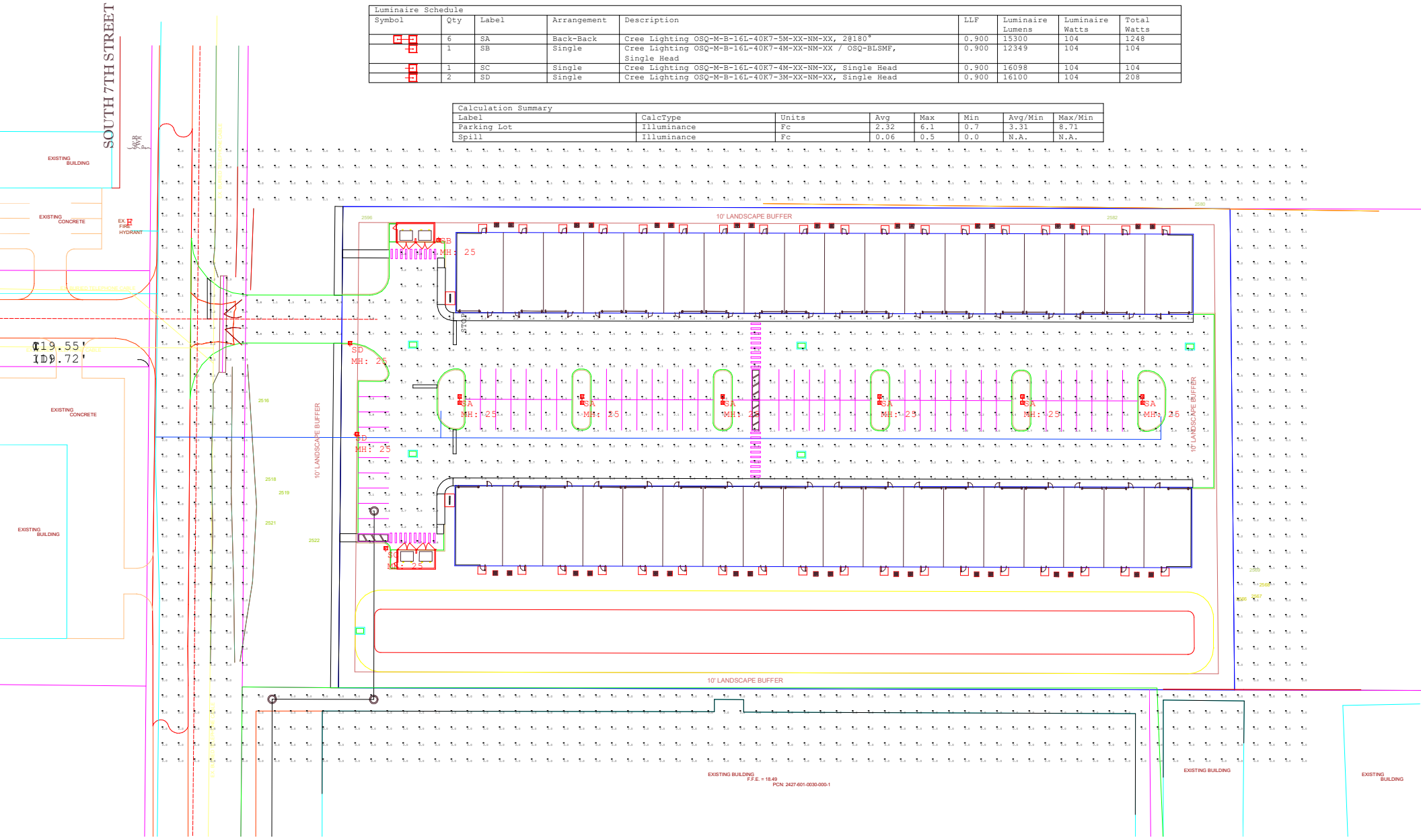
South 7th Street

City of Fort Pierce, St. Lucie County, FL

## Wildlife Map

| Project: #21-269 | K & K Properties | 07/15/2022 |
|---|---|---|






| Luminaire Schedule | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Symbol | Qty | Label | Arrangement | Description | LLF | Luminaire Lumens | Luminaire Watts | Total Watts |
| | 6 | SA | Back-Back | Cree Lighting OSQ-M-B-16L-40K7-5M-XX-NM-XX, 2@180° | 0.900 | 15300 | 104 | 1248 |
| | 1 | SB | Single | Cree Lighting OSQ-M-B-16L-40K7-4M-XX-NM-XX / OSQ-BLSMF, Single Head | 0.900 | 12349 | 104 | 104 |
| | 1 | SC | Single | Cree Lighting OSQ-M-B-16L-40K7-4M-XX-NM-XX, Single Head | 0.900 | 16098 | 104 | 104 |
| | 2 | SD | Single | Cree Lighting OSQ-M-B-16L-40K7-3M-XX-NM-XX, Single Head | 0.900 | 16100 | 104 | 208 |

| Calculation Summary | | | | | | | |
|---|---|---|---|---|---|---|---|
| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
| Parking Lot | Illuminance | Fc | 2.32 | 6.1 | 0.7 | 3.31 | 8.71 |
| Spill | Illuminance | Fc | 0.06 | 0.5 | 0.0 | N.A. | N.A. |

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

# DESIGN REVIEW

**Property Information**

Property address or Location: East side of S. 7th St, N. of Farmers Market Rd. Address TBD

Parcel ID #(s): PCN 2427-601-0031-000-8

Project description: 46,000-sf of Industrial Flex Space

| | |
|---|---|
| Ken Kreye | Bradley J. Currie, AICP |
| **Property Owner(s)** | **Applicant/Representative, Title, Company** |
| 691 NW Sunset Dr | 10250 SW Village Parkway Suite 201 |
| Street Address | Street Address |
| Stuart FL 34994 | Port St Lucie FL 34987 |
| City State Zip | City State Zip |
| 941-356-0220 | 772-462-2455 |
| Phone Number | Phone Number |
| k2kreye@gmail.com | bradcurrie@edc-inc.com |
| Email Address | Email Address |

***Property Owner(s) Acknowledgements:*** *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.*

*Property Owner(s) Signature(s)*

**APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS**
CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM
For more information, please refer to the website:
https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Revi

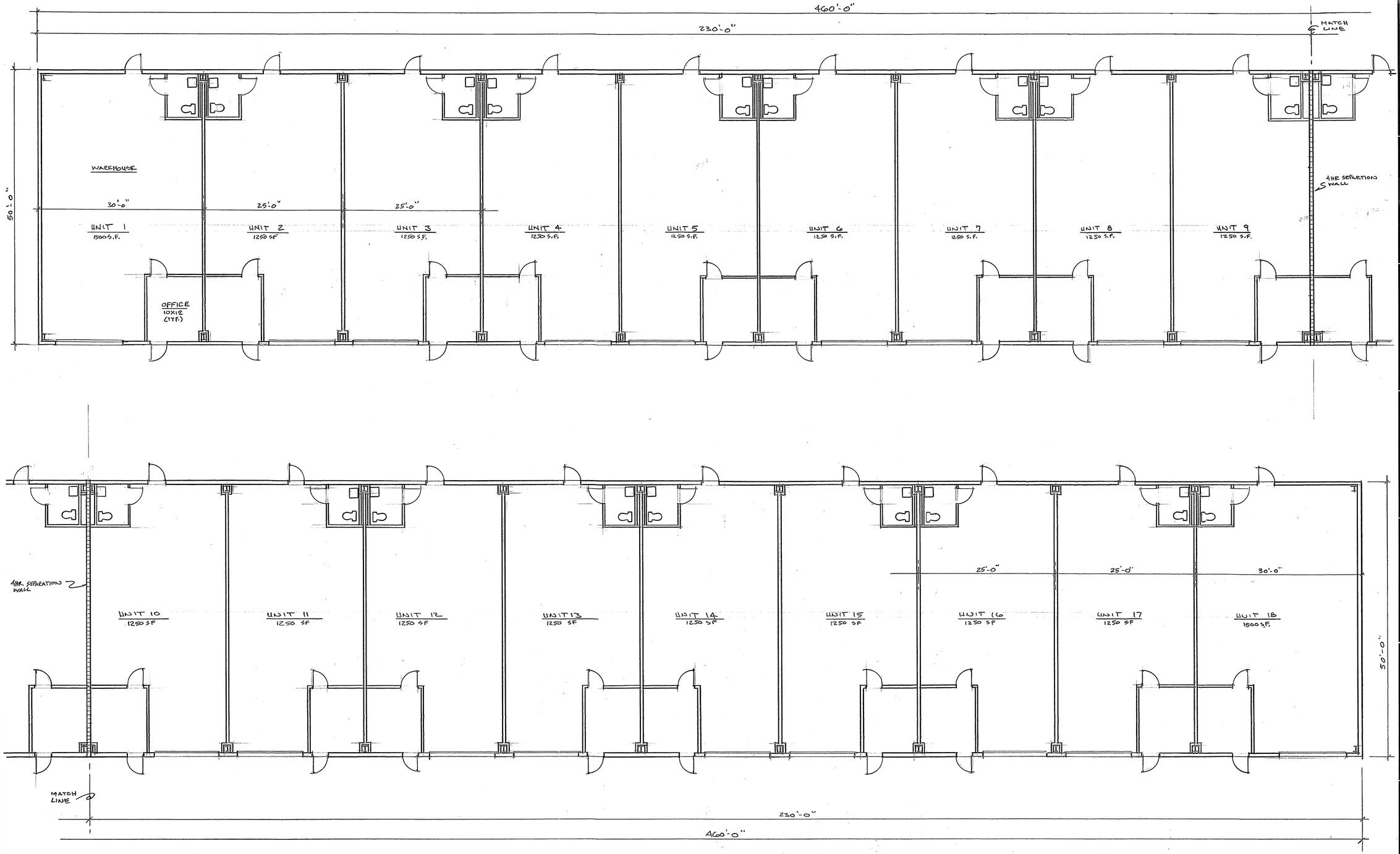
# Design Review Application Checklist
## (City Code of Ordinances 125-314)

### Submittal for Administrative Approval

a. A survey (1" = 30' minimum scale) of property lines, existing topography and the location of trees meeting the tree protection regulations of section 123-66, location of bordering streets and, if applicable, wetlands and beaches.
b. A site analysis study to include a discussion of specimen trees and other natural vegetation, access, significant topography, wetlands, buffers, setbacks, views, orientation, the surrounding built environment, and other site features that may influence design elements.
c. A draft written narrative describing the design intent of the project, its goals, and objectives and how it reflects the site analysis study results.
d. Context photographs of neighboring uses and architectural styles.
e. Photographs and/or drawings of architectural buildings or objects that serve as a precedent for the proposed building design. Models should be taken from local exemplary buildings, either existing or demolished. Documentation of such buildings is available in the city's planning department.
f. Photographs of all existing structures located on the property. If existing structures on the property are more than fifty (50) years of age, documentation of these structures with data from the Florida Master Site File form is also required.
g. Conceptual site plan (to scale) showing proposed location of all buildings, structures, parking areas, signs and landscaping.
h. Landscape plan, at the same scale as the site plan. The planning director or designee may request enlarged plans of detailed planting areas. Planting schedule with sizes of proposed plantings must be included.
i. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.
j. Exterior elevations showing architectural character, external architectural features, and streetscape of the proposed development, including materials, colors, shadow lines and landscaping. The street elevation shall encompass the entire proposed project and generally identify the major elements of the adjacent two (2) properties on either side of the site. If the adjacent properties are vacant or underutilized, a diagram shall be provided that identifies the mass and form that is allowable under current zoning. If the street elevation must be drawn at such a scale as to render architectural details of the building unreadable, drawings of individual buildings at a larger scale should be provided as well.
k. Design review concurrent with conceptual development plan procedure according to subsection 125-313 is also available.

### Submittal for Board Approval

a. A written narrative describing how the project conforms to administrative approval and design review guidelines of this section.
b. A final site plan meeting the requirements of section 125-313.
c. A final site lighting plan that meets the requirements of subsection 125-313(d)(8).
d. A final landscape plan that meets the requirements of articles II and III of chapter 123.
e. Final floor plans and elevation drawings (1/8" = 1'-0" minimum scale), as detailed under administrative approval, showing exterior building materials and colors with architectural sections and details to adequately describe the project.
f. A color board (11"x17" maximum) containing actual color samples of all exterior finishes, keyed to the elevations, and indicating the manufacturer's name and color designation.




FLOOR PLAN

1/8"

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Architectonic Inc

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FORT PIERCE, FLORIDA 34950
T: 772 460 7751

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PROJECT

K & K PROPERTIES
OFFICE / WAREHOUSE
ST. LUCIE COUNTY, FLORIDA

CLIENT

CONSULTANTS

REGISTRATION

MICHAEL J. SEAL, AIA
AR96898

REVISIONS

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KEY PLAN

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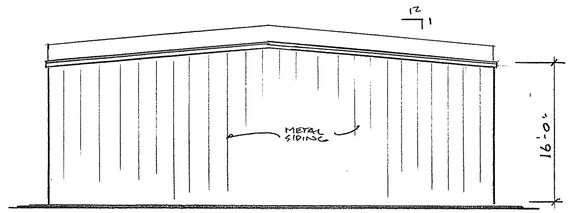
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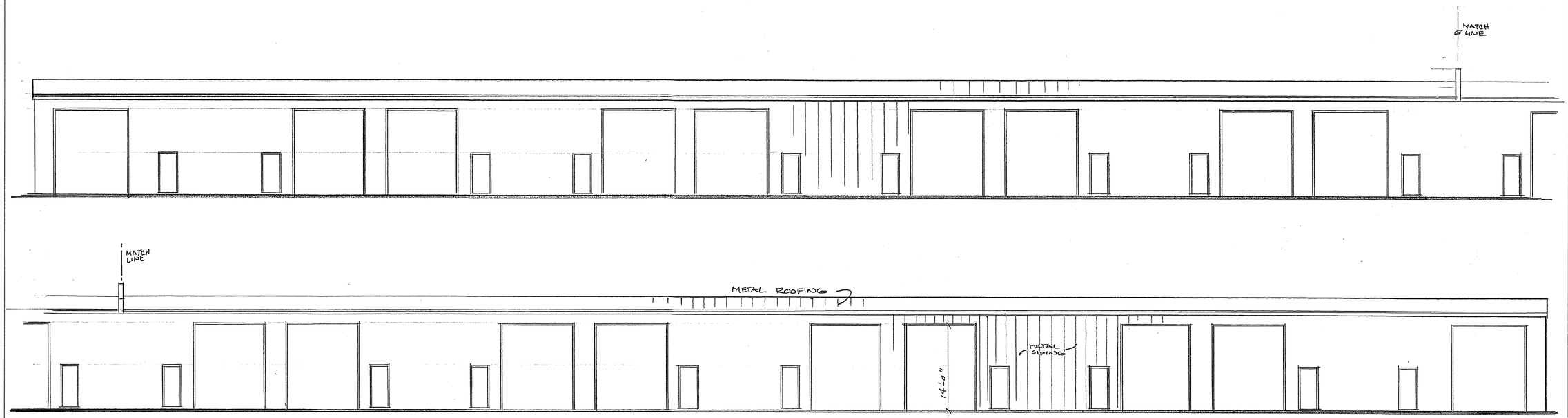
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K & K PROPERTIES




SIDE ELEVATION

1/8"




FRONT ELEVATION

1/8"

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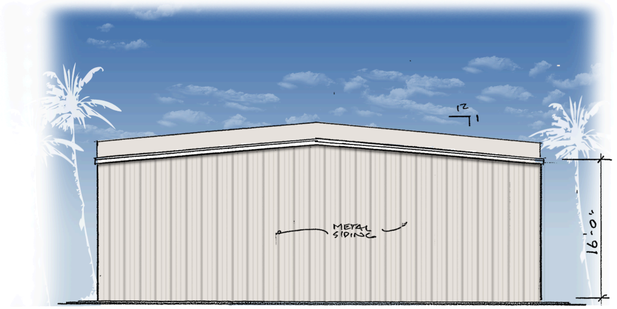
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A-2 OF

PROJECT NUMBER C22022

DATE

K & K PROPERTIES




SIDE ELEVATION

1/8"




FRONT ELEVATION

1/8"

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KEY PLAN

SHEET TITLE / SHEET NUMBER

A-2 OF

PROJECT NUMBER C 22022

DATE

# Traffic Impact Report

For

# 7th Street


Prepared By: Steven Frink, E.I.

**Engineering Design & Construction, Inc.**
10250 SW Village Parkway, Suite 201
Port St. Lucie, FL 34987
Board of Professional Engineers Certificate of Authorization Number 9935


August 2022

R.J. Kennedy, P.E. Date

PE #56218

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Project Description ..... 3
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Summary ..... 4
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## Introduction

Engineering, Design, & Construction, Inc. (EDC) has been retained to conduct a traffic impact analysis for a proposed flex space buildings in the City of Fort Pierce, St Lucie County. The purpose of this study is to determine the proposed project's impact on the surrounding traffic and roadway levels of service per code section 105-5 of the City of Fort Pierce

## Site Data

The proposed project is located along South 7th Street approximately 321 ft north of Farmers Market Road and 964 ft west of South US Highway 1, near the intersection of - Wagner Place and South 7th Street. The parcel ID for the site is 2427-601-0031-000-8 located in Section 27, Township 35S, and 2Range 40E.

## Project Description

The proposed project includes the construction of two (2) 23,000 square-foot (sf) flex space buildings along with the associated parking, utility and drainage improvements. As shown in Appendix B, the 4.01-acre (ac) site is currently unimproved with access to the property provided by an existing full access driveway. No trips are being considered in the existing condition as the site is vacant.

## Trip Generation

The 11th edition of the Trip Generation manual, produced by the Institute of Transportation Engineers (ITE), was used to estimate the number of trips that the development would contribute to the roadway network. The category for a warehouse was selected and has the associated ITE code 150 assigned to it with square footage as the variable factor. Table 1 depicts the proposed impacts to the roadway network. The proposed development is anticipated to add 79 weekday trips, while the peak hour am and pm trips is eight (8). As the peak hour trip generation rate is less than nine (9), the impacts are considered de minimis with most traffic traveling toward South 25th Street.

*Table 1: ITE 150 - Proposed Average Trips for Warehouse (46,000 sf)*

| Time Period | Total | In | Out |
|---|---|---|---|
| Weekday | T=1.71(X) | 50% | 50% |
| Weekday, Peak Hour of Adjacent Street, One Hour Between 7 and 9 AM | T=0.17(X) | 77% | 23% |
| Weekday, Peak Hour of Adjacent Street, One Hour Between 4 and 6 PM | T=0.18(X) | 28% | 72% |

| Time Period | Total | Entry | Exit |
|---|---|---|---|
| Weekday | 79 | 39 | 40 |
| Weekday, Peak Hour of Adjacent Street, One Hour Between 7 and 9 AM | 8 | 6 | 2 |
| Weekday, Peak Hour of Adjacent Street, One Hour Between 4 and 6 PM | 8 | 2 | 6 |

## Summary

Based on the available design information and the calculations provided, the development is anticipated to contribute 8 peak A.M. and P.M. trips with most vehicles traveling west to South 25th Street. The contribution is below the threshold of identified in the City of Fort Pierce Code of Ordinances Section 105-5.

# Appendix A: Existing Conditions

Z:\EDC-2021\21-269 - K & K Properties - 7th Street CSP & Pre-App\ENGINEERING\AutoCAD\DWGs\Civil\21-269 Traffic (2022-08-11).dwg, Existing, 8/11/2022 3:39:48 PM, Steven Frink, EDC, Inc., EDC, Inc.

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| DATE | REVISION COMMENTS |
|---|---|

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SGF
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21-269 traffic (2022-08-11).dwg
FILENAME
Existing
LAYOUT
1" = 60'
SCALE
11AUG2022
DATE

**K & K PROPERTIES**

**7TH STREET**

**EXISTING CONDITIONS EXHIBIT**

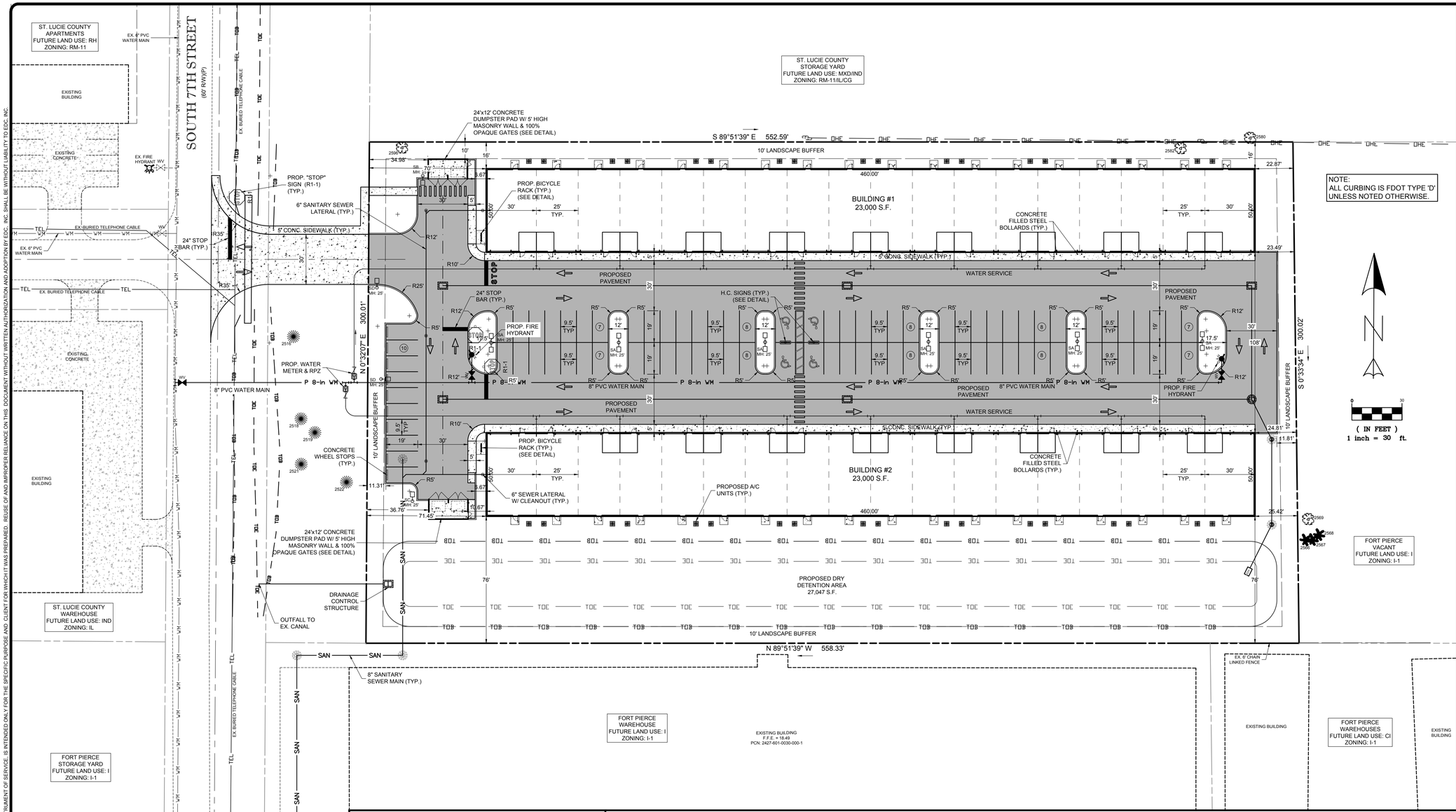
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☏ 772-462-2455

**21-269**

**1 OF 1**

# Appendix B: Proposed Conditions




## LEGEND

| | | | |
|---|---|---|---|
| M E | EXISTING METER | # | EX. OAK TREE TO REMAIN # - TREE TAG |
| M E | PROPOSED METER | # | EX. PALM TREE TO REMAIN # - TREE TAG |
| | PROPOSED SIGN | # | EX. PINE TREE # - TREE TAG |
| 7 | BLOCK NUMBER | # | EX. OAK TREE TO BE REMOVED. # TREE TAG. |
| | MITERED END SECTION | # | EX. PALM TREE TO BE REMOVED. # - TREE TAG. |
| | HANDICAP STALL | # | EX. PINE TREE TO BE REMOVED. # - TREE TAG. |
| S1 MH: 17' | LIGHT FIXTURE TAG. HEIGHT OF FIXTURE. | | EXISTING CONCRETE |
| P | PARKING STALL TAG # OF STALLS | | EXISTING PAVEMENT |
| | | | PROPOSED HEAVY DUTY ASPHALT |
| | | | PROPOSED STANDARD ASPHALT |
| | | | PROPOSED CONCRETE |

Luminaire Schedule

| Symbol | Qty | Label | Arrangement | Description | LLF | Luminaire Lumens | Luminaire Watts | Total Watts |
|---|---|---|---|---|---|---|---|---|
| | 6 | SA | Back-Back | Cree Lighting OSQ-M-B-16L-40K7-5M-XX-NM-XX, 2@180° | 0.900 | 15300 | 104 | 1248 |
| | 1 | SB | Single | Cree Lighting OSQ-M-B-16L-40K7-4M-XX-NM-XX / OSQ-BLSMF, Single Head | 0.900 | 12349 | 104 | 104 |
| | 1 | SC | Single | Cree Lighting OSQ-M-B-16L-40K7-4M-XX-NM-XX, Single Head | 0.900 | 16098 | 104 | 104 |
| | 2 | SD | Single | Cree Lighting OSQ-M-B-16L-40K7-3M-XX-NM-XX, Single Head | 0.900 | 16100 | 104 | 208 |

Calculation Summary

| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
|---|---|---|---|---|---|---|---|
| Parking Lot | Illuminance | Fc | 2.32 | 6.1 | 0.7 | 3.31 | 8.71 |
| Spill | Illuminance | Fc | 0.06 | 0.5 | 0.0 | N.A. | N.A. |

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| | |
|---|---|
| DESIGNED BY | RWF |
| DRAWN BY | RWF |
| FILENAME | 21-269 (08-04-2022).dwg |
| SITE PLAN LAYOUT | |
| SCALE | 1" = 30' |
| DATE | 04 MARCH 2022 |

| DATE | REVISION COMMENTS |
|---|---|
| 05-04-2022 | REVISED SITE PLAN PER FORT PIERCE PLANNING DEPARTMENT COMMENTS. |

# K AND K PROPERTIES
## SITE PLAN & CONCEPTUAL DRAINAGE PLAN
FORT PIERCE FLORIDA

(DATE)

10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

21-269

1 OF 3

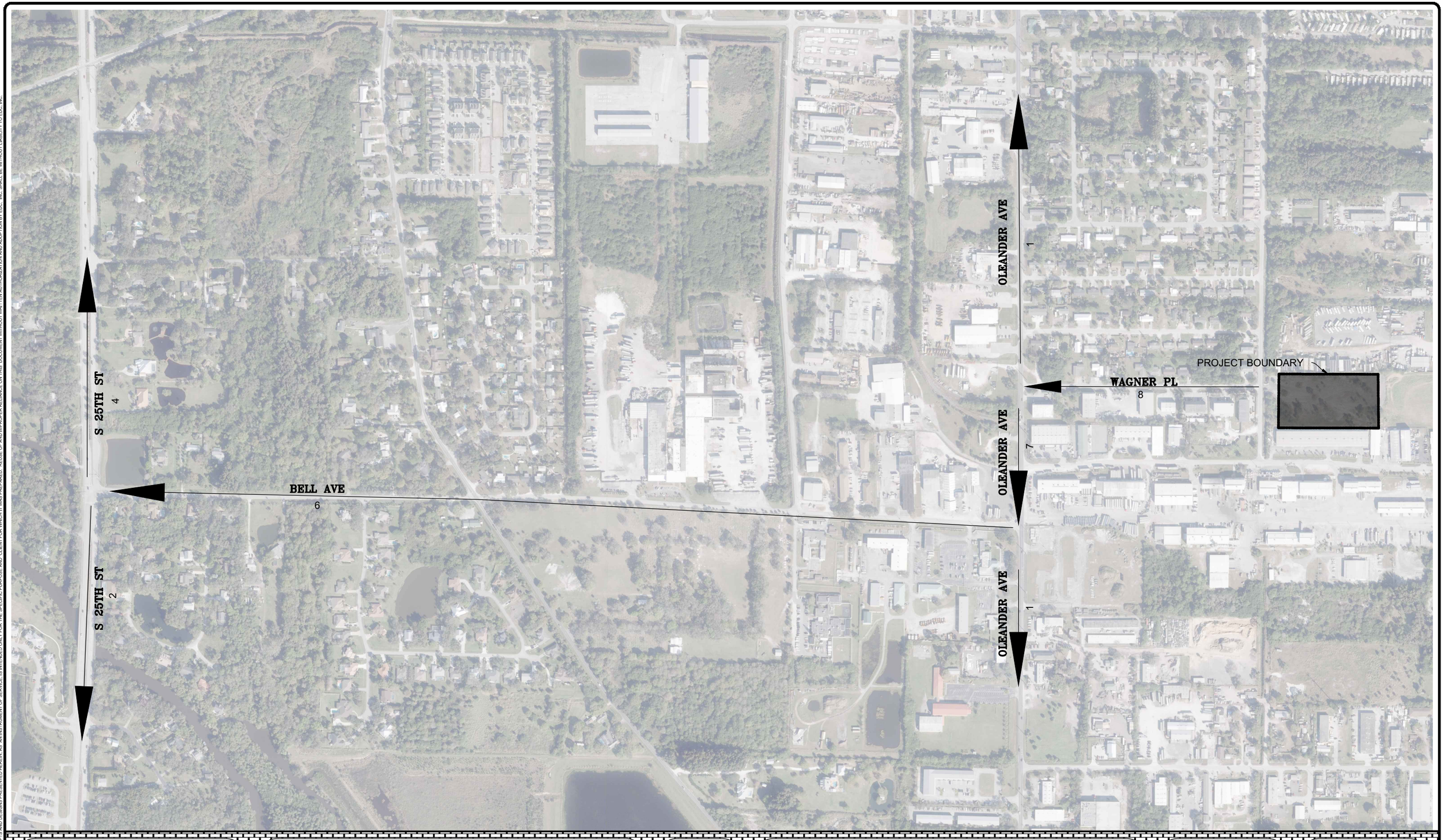
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# Appendix C: Trip Distribution Map

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L.B. CERTIFICATE OF AUTHORIZATION 8098

| DATE | REVISION COMMENTS |
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SGF
DRAWN BY
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FILENAME
Trip
LAYOUT
1" = 1,500'
SCALE
11AUG2022
DATE

# K & K PROPERTIES
## 7TH STREET
## TRIP DISTRIBUTION EXHIBIT

FT. PIERCE FLORIDA

10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

21-269

1 OF 1

# Appendix D: Supporting Documents

## Sec. 105-5. - Management and monitoring program.

(a) *General.* In order to ensure that adequate public facilities are available concurrent with the impacts of development on such public facilities, a management and monitoring program is established. Its purpose is to evaluate and coordinate the timing, provision and funding of public facilities to ensure adequate maintenance of the adopted level of service (LOS) for public facilities and to evaluate the capacity of the public facilities for use in the CMS.

(b) *Capacity and level of service report (CLSR).* By September 1 of each year, the planning department shall submit to the city commission an annual capacity and level of service report (CLSR) on public facilities. The CLSR shall include a description of the existing condition of all public facilities; summarize the available capacity of these public facilities based on their adopted LOS; and forecast the capacity of existing and planned public facilities identified in the five-year capital improvement schedule for each of the five succeeding years. Forecasts shall be based on the most recently updated schedule of capital improvements for each public facility, updated public facility inventory data and updated unit cost and traffic count data. The CLSR shall also include a description of the ability of existing and projected public facilities to serve existing and future development based upon the public facility level of service standards contained within the city's comprehensive plan.

(c) *Quarterly facility reports.* To assist in the preparation of the CLSR and to maintain updated inventories, the planning department shall review public facility capacity for potable water, sanitary sewer, solid waste, parks and open space, transportation and drainage facilities and provide updates on capacity surpluses and deficiencies to the city commission on at least a quarterly basis.

(d) *Recommended capital improvements element (CIE) and budget amendments.* The findings of the CLSR shall form the basis for the planning department's proposed amendments to the CIE of the comprehensive plan and for proposed amendments to the city's annual budget for public facilities.

(e) *Annual determination of public facility adequacy.* Based on the findings of the CLSR, the planning department by September 1 of each year, will report to the city commission concerning the status of public facilities and proposed remedial actions, including, but not limited to, the following:

(1) Public facility project additions to the CIE; and

(2) Deferral of development order pending:

a. Lowering of the LOS via a comprehensive plan amendment;

b. Inclusion of necessary public facility projects in the adopted annual budget and annual CIE update;

c. Approval of new revenue sources for needed public facilities by the city commission, state legislature or local voters.

(f) *Transportation concurrency management.* The transportation concurrency management system (the TCMS) will consist of two parts; monitoring and traffic impact analysis.

(1) *Monitoring.* The planning department will be responsible for transportation concurrency determinations. The department will maintain a database for the accountability of all trips assigned by links and inventory. The database shall contain all trips to all facilities included in the TCMS and intersections generated by existing projects or proposed projects with a certificate of concurrency compliance.

(2) *Methods for evaluating development impacts.*

a. *Traffic performance standards.* Traffic performance standards (TPS) shall be applied to roadways and intersections subject concurrency management within the city to ensure compliance with the TCMS. TPS are the LOS adopted in the city's comprehensive plan. No project shall add traffic in the radius of development influence (See Table A under subsection (f)(2)b.2 of this section) which would have the effect of exceeding the LOS without first obtaining a certificate of concurrency.

b. *Traffic impact analysis.* All traffic impact studies shall include the following information:

1. An executive summary of no more than one page outlining the land use, trip generation, concurrency results, driveway classification, requested special exceptions, and requested variances (if applicable).
2. Each proposed development shall distribute the trips generated to the main arterials and intersection network that is comprised of their traffic impact area. The radius of impact will be determined according to the size of the development accounted for trips generated. (See Table A).

Table A. Radius of Impact for Transportation Concurrency Management System

| | | |
|---|---|---|
| Minimal Scale | Trips 9-50 | 1.0 Mile Radius |
| Small Scale | Trips-51-100 | 1.5 Mile Radius |
| Intermediate Scale | Trips 101-500 | 2.0 Mile Radius |
| Medium Scale | Trips 501-1000 | 3.0 Mile Radius |
| Large Scale | Trips 1000-Up | 5.0 Mile Radius |

3. The minimum horizon for forecasting traffic shall be five years from the project's opening date. However, if the project is built in phases, the horizon will project traffic to build out of the last phase or five years from the time of opening, whichever is more restrictive. Additionally, traffic growth rates shall be approved by the city's director of planning and will be consistent for all traffic studies.
4. Analysis of the new site traffic to the satisfaction of the director of planning which shall contain as a minimum: tables summarizing existing traffic volumes, committed traffic from proposed developments, growth rates, trip generation rates (including used formulas), levels of services for studied intersections, and any other documentation required to justify numbers used in the analysis. New site traffic analysis shall be prepared for the a.m. and p.m. peak period unless otherwise indicated by the director of planning.
5. The applicant may provide traffic counts in accordance with accepted traffic engineering principles. Counts shall be made during any continuous two-hour period on a weekday between 6:00 a.m. and 9:00 a.m. for any a.m. counts and 4:00 p.m. and 7:00 p.m. for p.m. counts. All count data collected by the applicant must be collected between September 1 and May 31 (no summer out of school weeks) and seasonally adjusted to reflect average peak season conditions (100th highest hour) in accordance with most current FOOT planning factors and procedures. There shall be no counts on Fridays and legal holidays, unless otherwise authorized or required by the city's director of planning, in accordance with accepted traffic engineering principles. All data are subject to review and acceptance by the director of planning based upon accepted traffic engineering principles.
6. Analysis of the total site traffic as it relates to the specific requirements of city code concerning driveways and access and acceptable engineering access management standards.
7. Trip generation comparison between existing and proposed conditions.
8. Trip generation calculations and driveway assignments (inbound and outbound traffic) for each phase of

development. Trip distribution and assignment of traffic along the traffic impact area.

9. Justification of the number and location of site driveways. Location and type of driveways and median openings need to adhere to FDOT access management standards or any other standard accepted by the director of planning. The planning department will comment and make recommendations on the number of driveways based on the plan review. Excessive driveways may not be supported by staff. All driveways should be located on a site plan with distancing from upstream and downstream driveways and/or intersections.
10. A capacity analysis of each driveway may be required as determined by the director of planning. All evaluations shall include existing and proposed conditions during the a.m. and p.m. peak periods. The capacity analysis should be performed using the methodology set forth in the highway capacity manual, latest edition at the time the study is prepared and reviewed by planning department for public hearing.
11. In cases where the proposed development requires a signalized intersection, a signal warrant study will be required. Additionally, a capacity analysis of the site intersection and upstream and downstream location may be required by director of planning. In cases where traffic re-routing occurs as a result of the proposed development, additional traffic studies may be required.
12. Provide an analysis of U-turn movements at the median openings to the north, south, east and west (as appropriate according to project location) of project driveways, including daily, a.m. peak hour and p.m. peak hour. Assess the impact of proposed and existing volumes on available storage.
13. Show the total driveway assignment as the driveway provides joint access with the adjacent property. Joint access among similar or compatible land uses may be required by the director of planning.
14. After initial review, the director of planning may require additional information if it is deemed necessary to properly evaluate the traffic study.
15. For entryway features the applicant must make sure that traffic turnarounds are, at a minimum, 15 feet in width, have a 25-foot turnaround radius, and have mountable curves. The applicant must make sure that there is enough stacking for visitors and residents.
16. In cases where driveways abut a county or state road, or a city road classified as an arterial or main collector, the director of planning may require deceleration and storage lanes for vehicles turning to and from the proposed development served by the access driveway.
17. Pass-by trips shall not be higher than 25 percent and internal trip rates shall be approved by the director of planning and shall be consistent with the ITE manual.

c. *Policy on capacity for intersections.* As part of the traffic impact analysis, major intersections should be analyzed. The level of service for roadway segments may be analyzed using a variety of types of arterial analyses based on the principals, guidelines and criteria outlined in the most current version of the highway capacity manual. In determining whether a corridor can be maintained at the level of service determined in the comprehensive plan for the purpose of monitoring concurrency, it is recognized that some individual links, intersections, or turning movements may be able to operate below the level of service while still maintaining an overall level of service established for the corridor based on overall average running speed. However, since some of the available software models can report an overall LOS "D" for a corridor while still allowing some components of the corridor to operate at a LOS "E" condition, it is appropriate to define maximum tolerances for individual instances of LOS "E" conditions embedded within the total corridor analysis. The following maximum allowable tolerances are established so that the level of service

determination is not unduly biased toward the mainline at the expense of any particular intersection, approach or movement. These tolerances apply to all computerized applications of the highway capacity manual, including the highway capacity software (HCS) and SYCHRO:

1. For any individual turning movement or through movement within any signalized intersection included in the analysis: no individual movement or lane group can be reported to have a volume-to-capacity (v/c) ratio greater than 1.20 or a total delay estimate greater than 1.20 times signal cycle length.
2. For any individual signalized intersection approach for any intersection included in the analysis, no approach can be reported to have a volume-to-capacity (v/c) ratio greater than 1.0 or a total delay estimate greater than the signal cycle length.
3. For any individual signalized intersection included in the analysis, the overall signalized intersection v/c cannot exceed 1.20, NOR can the total intersection delay estimate be greater than the signal cycle length. Also, only one of the mainline approaches can operate below LOS "D" (regardless of delay).

d. *De minimis tracking.* De minimis impacts will be tracked on an areawide basis. The city will be segmented into traffic analysis zones, and all de minimis impacts will be added and distributed within the links and intersections within the traffic analysis zones. De minimis impacts are planned to be tracked by the city's planning department in a spreadsheet to be added to the transportation concurrency management system database on a monthly basis.

(Code 1983, § 22-217; Ord. No. K-465, § 2, 1-2-2007)

# Warehousing
(150)

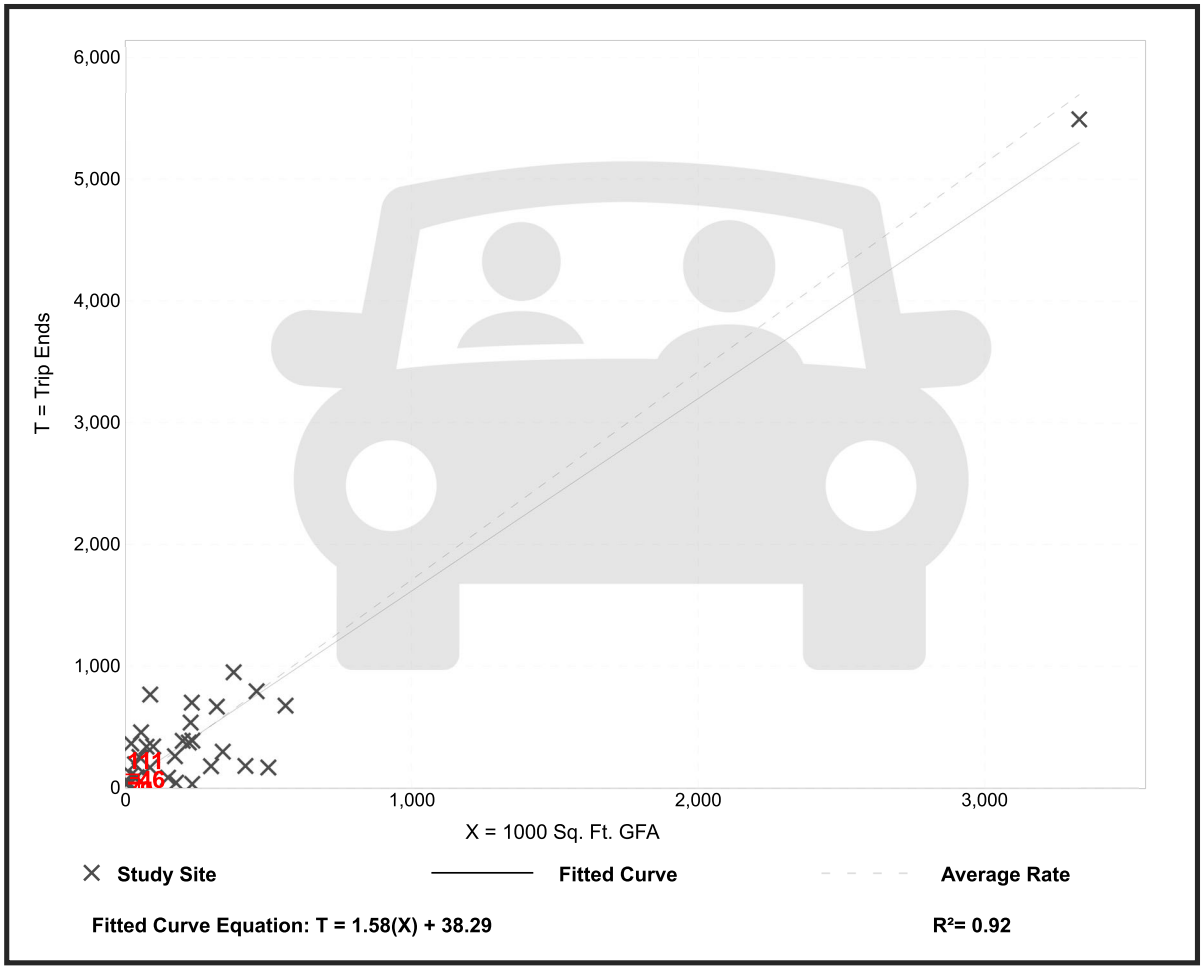
**Vehicle Trip Ends vs:** **1000 Sq. Ft. GFA**
**On a:** **Weekday**

**Setting/Location:** **General Urban/Suburban**
Number of Studies: 31
Avg. 1000 Sq. Ft. GFA: 292
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 1.71 | 0.15 - 16.93 | 1.48 |

## Data Plot and Equation



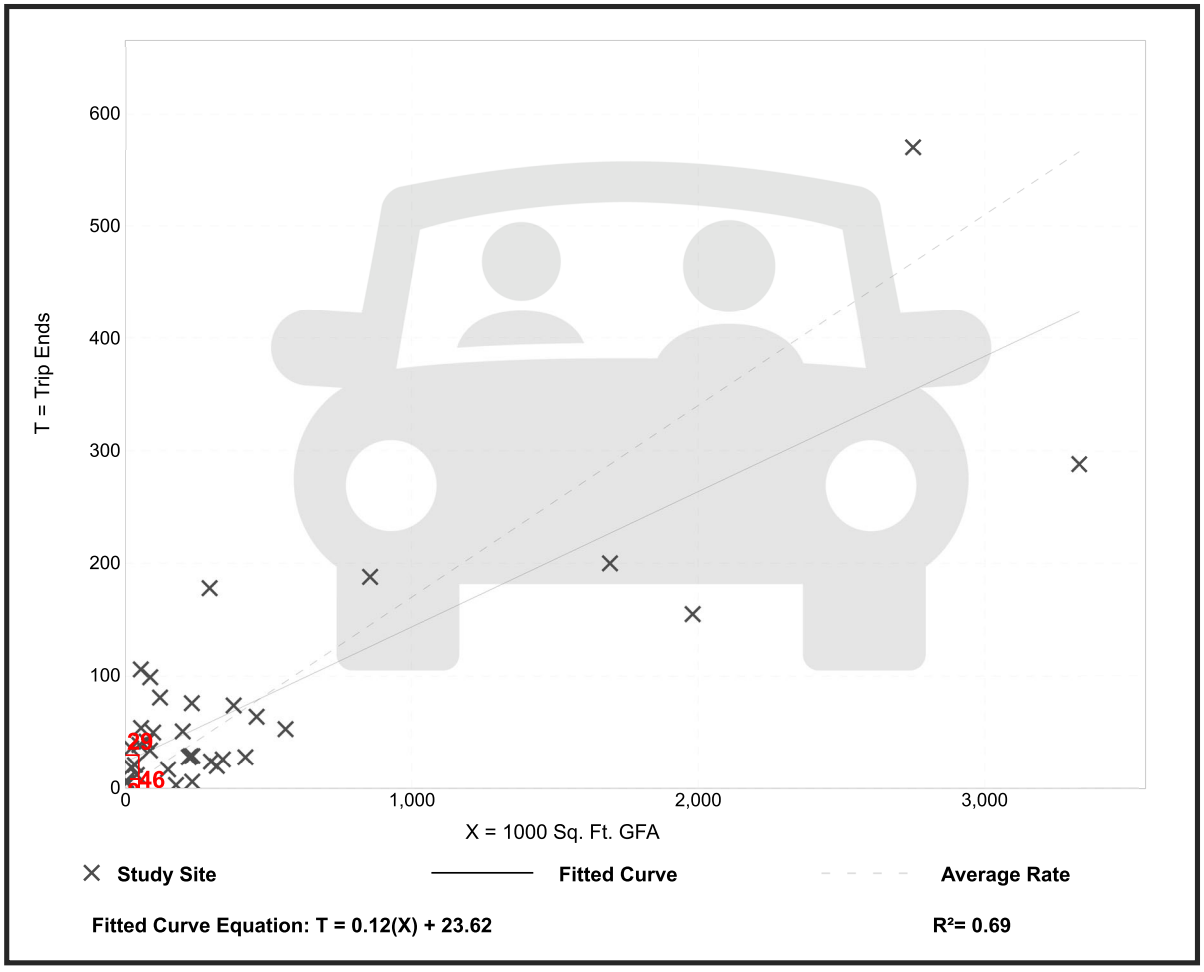
# Warehousing
(150)

**Vehicle Trip Ends vs:** **1000 Sq. Ft. GFA**
**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: 36
Avg. 1000 Sq. Ft. GFA: 448
Directional Distribution: 77% entering, 23% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.17 | 0.02 - 1.93 | 0.19 |

## Data Plot and Equation



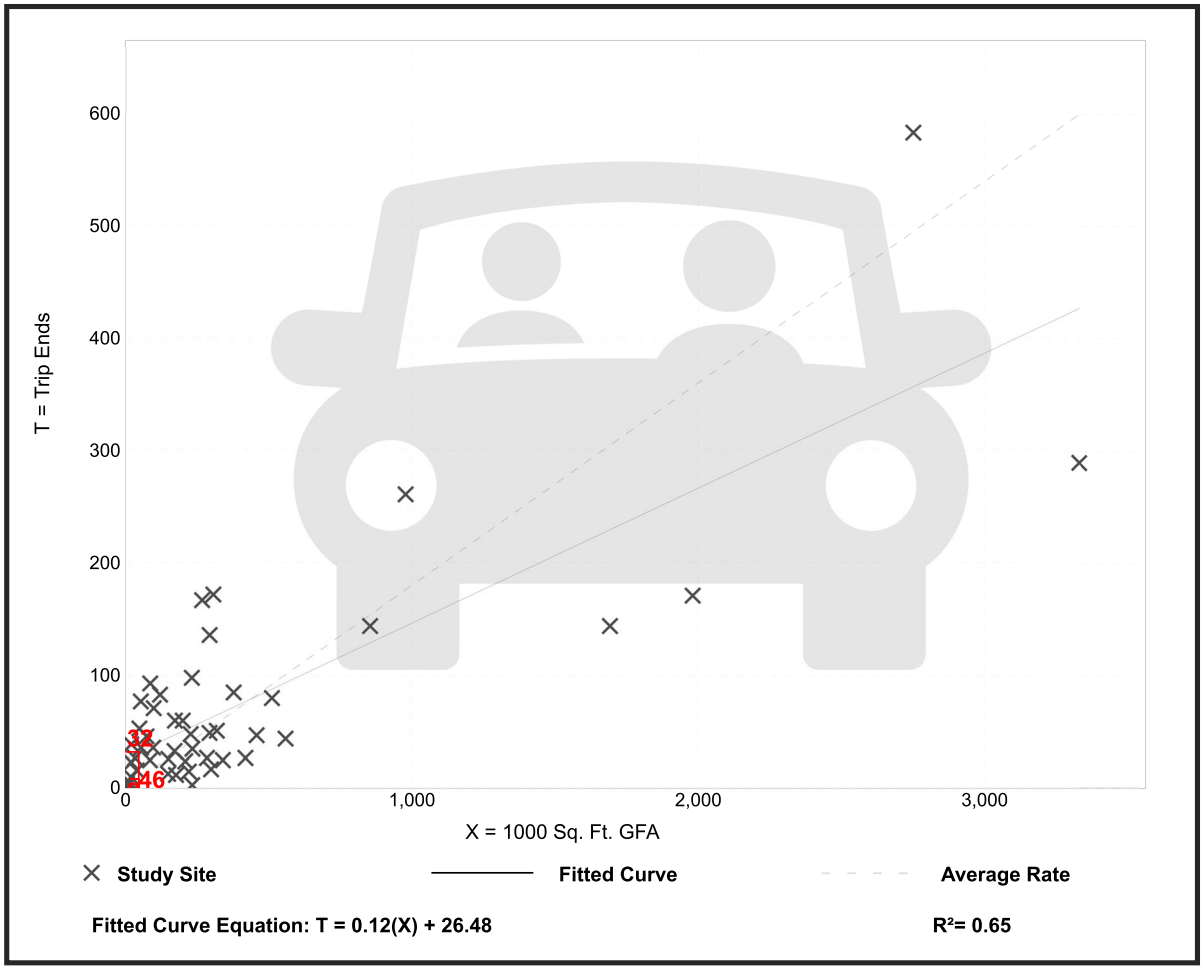
# Warehousing
(150)

| | |
|---|---|
| **Vehicle Trip Ends vs:** | **1000 Sq. Ft. GFA** |
| **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: | 49 |
| Avg. 1000 Sq. Ft. GFA: | 400 |
| Directional Distribution: | 28% entering, 72% exiting |

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.18 | 0.01 - 1.80 | 0.18 |

## Data Plot and Equation



THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
# CAPACITY ANALYSIS

## I. Site Data:

| | Existing Use | Future Land Use | Zoning |
|---|---|---|---|
| **North** | REH Investments, LLC<br>Current Business Operating On Site:<br>Contact Precision Auto Sales, 3385 S. US Highway One | MXD (Mixed-Used Development) & IND (Industrial) | RM-11 (Residential Multi-family), IL (Industrial, Light), and CG (Commercial, General). |
| **South** | South: Developed Commercial parcels - K&K owned; SE: 412 Farmers Mkt Rd Developed Commercial | South: IND (Industrial); SE: Country Industrial (CI) | South: I-1 (Light Industrial); SE: I-1 (Light Industrial) |
| **East** | Undeveloped Industrial Tract | I (Industrial) | I-1 (Light Industrial) |
| **West** | Right-of-way of S. 7th St, SLC owned; west of the ROW are SLC residential parcels | West: SLC FLU of I (Industrial); Southwest: FP FLU of I (Industrial; NW SLC FLU of RH (Residential High) | West: SLC Zone IL (Industrial Light); Southwest: FP Zone: I-1 (Light industrial); Northwest: SLC Zone: RM-11 (Residential Multi-Family) |

| | Future Land Use | Zoning Classification | Maximum Intensity<br>**Residential: Dwelling Units per Acre**<br>**Other: Square Footage** | Total Acreage | Flood Zone |
|---|---|---|---|---|---|
| **Current** | I | I-1(FP) | - | 4.01 | |
| ****Proposed** | I | I-1(FP) | 46,000sf | 4.01 | N/A |

## II. Public Facilities Information:

| **A. Potable Water:** | |
|---|---|
| Average Use | Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand)<br>Other: 0.125 gallons per day per square foot |
| Demand Analysis | Maximum |
| Current Zoning/FLU | Total gallons per day |
| **Proposed Zoning/FLU | Total gallons per day 46,000 sf x 0.125gpd/sf = 5,750gpd |
| **Change in Demand | Total gallons per day 5,750 gpd |

| **B. Wastewater:** | |
|---|---|
| Average Use | Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand)<br>Other: 0.1 gallons per day per square foot |
| Demand Analysis | Maximum |
| Current Zoning/FLU | Total gallons per day |
| **Proposed Zoning/FLU | Total gallons per day46,000 sf x 0.1 gpd/sf = 4,600 gpd |
| **Change in Demand | Total gallons per day4,600 gpd |

**C. Parks and Recreation (Residential Classifications Only):** N/A
(Du x 2.6 = persons + 44,227 = population /LOS)

| Park Type | LOS | Existing Population Park Demand | Proposed Population Park Demand | Change in Demand |
|---|---|---|---|---|
| **Regional** | 20 acres per 1,000 people | N/A | N/A | N/A |
| **Urban District** | 5 acres per 1,000 people | N/A | N/A | N/A |
| **Community** | 2.5 acres per 1,000 people | N/A | N/A | N/A |
| **Neighborhood** | 1.36 acres per 1,000 people | N/A | N/A | N/A |

**D. Public Schools (Residential Classifications Only):**
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

| | K-8 | High |
|---|---|---|
| **School Name** | N/A | N/A |
| **City** | City of Ft Pierce | City of Ft Pierce |
| **Distance** | N/A | N/A |
| **Current Zoning/FLU Enrollment Demand** | N/A | N/A |
| ****Proposed Zoning/FLU Enrollment Demand** | N/A | N/A |
| ****Change in Demand** | N/A | N/A |

| **E. Solid Waste: Residential (**2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units) | |
|---|---|
| **Demand Analysis** | Maximum |
| **Current Zoning/FLU** | non-residential |
| ****Proposed Zoning/FLU** | non-residential |
| ***Change in Demand** | n/a |

**F. Stormwater:**
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

| | |
|---|---|
| **Impact** | Stormwater Runoff will be collected through a series of inlets that will be directed into a dry detention area which will outfall through a control structure into an existing NSLRWCD canal located to the west of the property. |

## III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

| **G. Transportation Analysis: Complete ITE Trip Generation Data Form**<br>Most recent ITE Code for use; HCM Roadway Capacity | | |
|---|---|---|
| | **AADT** | **AM/PM Peak Hour Trips** |
| **Demand Analysis** | Maximum | Maximum |
| **Current Zoning/FLU** | 564 | 105/93 |
| ****Proposed Zoning/FLU** | 209 | 39/34 |
| ***Change in Demand** | Trips355 | Trips66/59 |
| **Impact to Capacity** | Descrease AADT by 355 trips: decrease AM trips by 66/decrease PM trips by 59 | |

## IV. Project Description

| **PHASING** | | | |
|---|---|---|---|
| Is this project (phase) part of a larger project? | ☐ Yes | ☑ No | |
| | | | |
| If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date. | | | |
| Total Project: Residential Units: N/A | Single Family: N/A | Multifamily: N/A | |
| Non-residential (square footage): 46,000 sf | | | |
| Mixed-use (describe use): n/a | | | |
| (If this is a single phase project, name it Phase I – Total) Phase 1 - Total | | | |

| **RESIDENTIAL DATA** | | | | | |
|---|---|---|---|---|---|
| **Type** | **Phase** | **Number of Units** | **Acres** | **Expected beginning date** | **Expected completion date** |
| Single-family, detached | N/A | | | | |
| Single-family, attached | N/A | | | | |
| Multi-family | N/A | | | | |
| Other (specify) | N/A | | | | |

| NON-RESIDENTIAL DATA | | | | | |
|---|---|---|---|---|---|
| **Type(s) specify** | **Phase** | **Square footage** | **Acres** | **Expecting beginning date** | **Expected completion date** |
| Proposed Office / Flex Space Building | 1 | 23,000sf | 4.01 | 2023 | 2024 |
| Proposed Office / Flex Space Building | 1 | 23,000sf | 4.01 | 2023 | 2024 |
| | | | | | |
| | | | | | |
| | | | | | |

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. ☐ Yes ☑ No

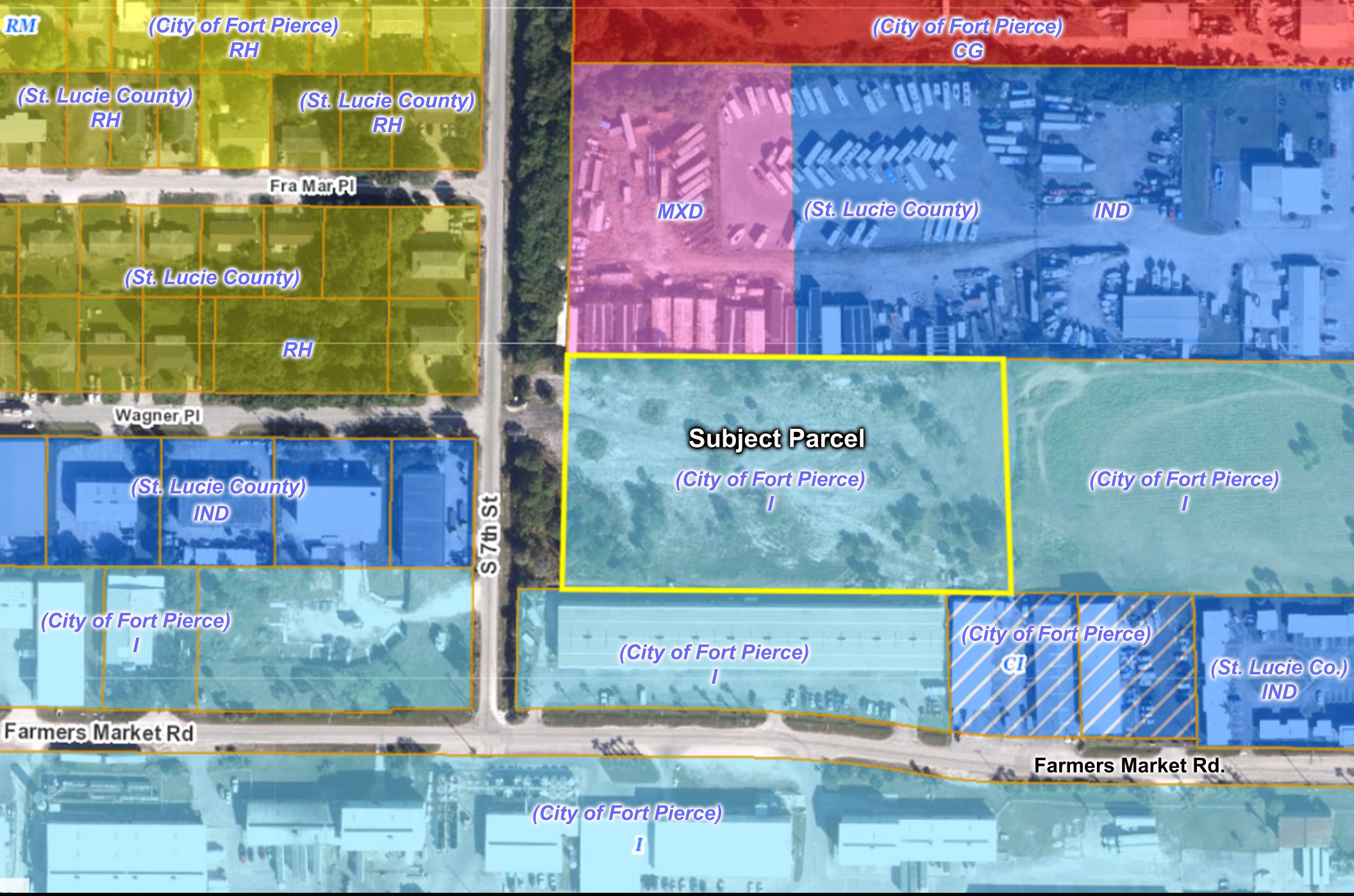
B. 1. Does this application involve demolition or re-use of any structure(s)? ☐ Yes ☑ No
If yes, what is the size of the structure(s) to be demolished or re-used? n/a

2. What is the current use of the structure to be demolished or re-used? n/a

3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? ☐ Yes ☑ No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested: None

** Complete section if requesting a change in zoning, future land use, or expanding



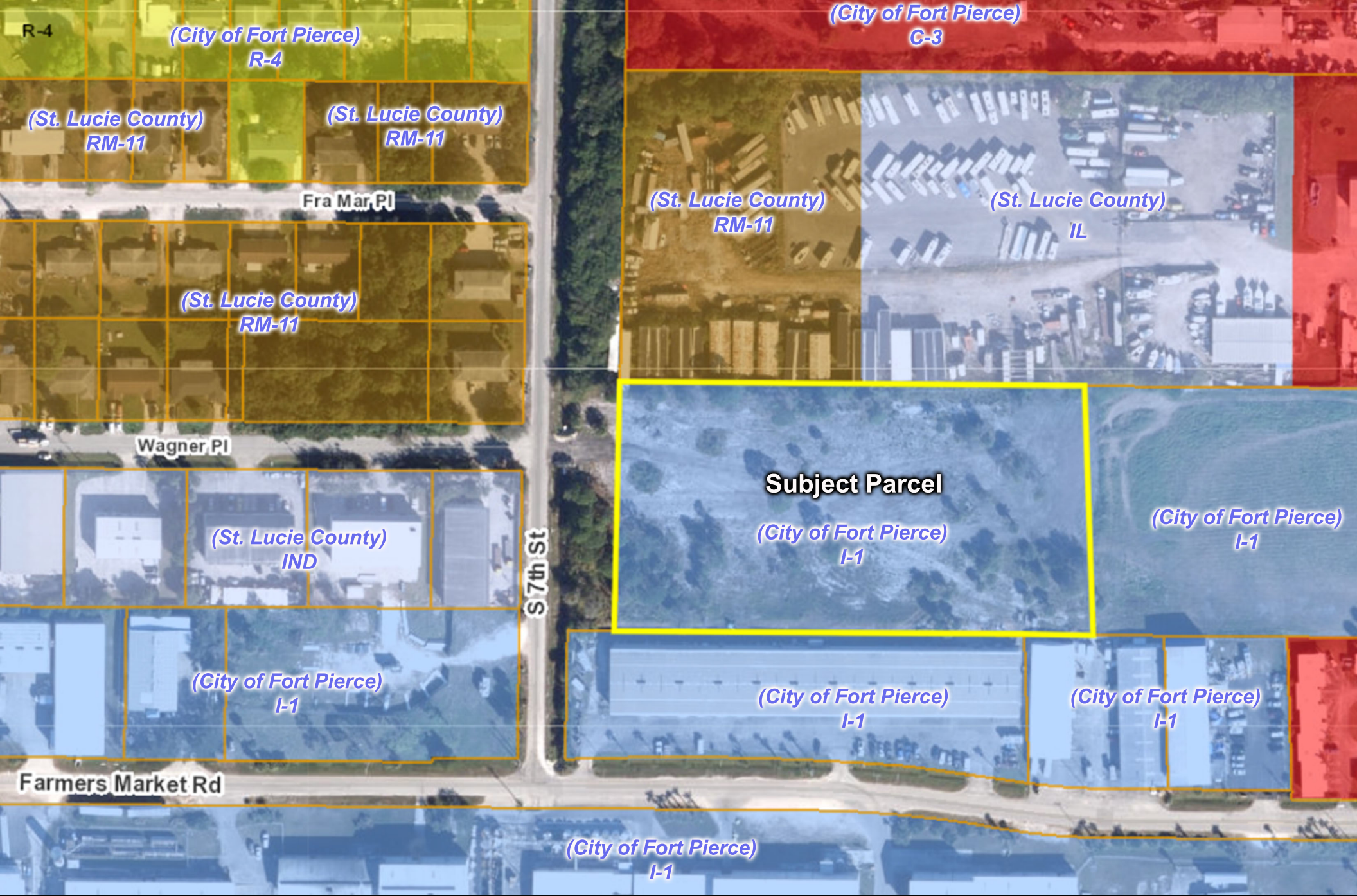

# K & K - 7th Street

Fort Pierce, FL

Future Land Use Map

NORTH

ENGINEERS SURVEYORS ENVIRONMENTAL




# K & K - 7th Street

Fort Pierce, FL

Zoning Map

NORTH

ENGINEERS SURVEYORS ENVIRONMENTAL

August 12, 2022 *Via: Electronic*

City of Fort Pierce Planning Department
Attn: Vennis Gilmore, Planning Supervisor
100 North US 1
Fort Pierce, FL 34950

**Re: K&K Properties Site Plan – (East of S. 7th Street & N. of Farmers Market Road) – Pre- Application Comments for March 23, 2022, Pre-Application Meeting**

Greetings Mr. Gilmore:

On behalf of our client, please find the attached response to comments received regarding the Pre-Application Comments received from the March 23, 2022 meeting, for a project known as K&K Properties. Each comment is identified below followed by a response in ***bold italics***.

***CITY OF FORT PIERCE PLANNING DEPARTMENT***

1. Please be advised that Per City Code Section 125-187 – Allowed Uses; Offices are a Conditional Use in the I-1, Light Industrial Zone. However, Contractors/Others Performing Services Off-Site are permitted.

***RESPONSE: The offices are being considered an accessory use for each bay of the building.***

2. Please consider EV parking spaces if feasible.

***RESPONSE: EV Parking is not being provided as part of this development.***

3. A Landscape Plan shall be provided at the time of Application that is signed and sealed by a Florida Registered Landscape Architect pursuant to City Code 123-37, General Landscaping requirements. The Landscape Plan shall include both interior and exterior landscaping.

***RESPONSE: Landscape plans have been included as part of the resubmittal package.***

4. A completion certification by a landscape architect, cost estimate, and landscape bond pursuant to City Code 123-6 shall be required before the Final Certificate of Occupancy is approved for the site.

***RESPONSE: The above requested documents will be provided before final certification.***

5. A ten-foot-wide landscape strip is needed throughout the property.

Per City Code Section 123-37, General Landscaping requirements (4) Landscape strips. – Between street right-of-way and vehicular use, building and retention/detention areas, there shall be a landscaped strip of land, except where driveways are located, meeting these requirements:

a. The strip shall be at least six feet wide for lots under 10,000 square feet in size and at least ten feet wide for lots 10,000 square feet or larger;
b. The landscape strip shall include an average of at least one tree for each 300 square feet of required landscape area. The remainder of the required landscaped area shall be completely covered with grass, ground cover or other landscaped treatment and shall additionally contain a screen of landscaping which shall be installed and maintained so as to form a 36-inch or higher continuous, unbroken, solid, visual screen within a maximum of one year after the landscaping takes place, except in clear vision areas required in section 125-308.

(5)Other property – All property, other than the required landscape strip, located between street right-of-way and buildings, shall be completely covered with grass or other ground cover except to the extent there are permitted, impervious surface structure such as sidewalks, plazas, driveways.

(6)Vehicular use, building, retention/detention areas adjacent to other property. – Landscape standards for these areas are as follows: a. Where a vehicular use area does not abut a street right-of-way but abuts other property, there will be a landscaped strip of land which is at least 10 feet wide. When a property line abuts a building, another structure, a joint driveway or joint parking area, such landscaped strip shall not be required.

***RESPONSE: A 10' wide landscape buffer has been provided.***

6. Per City Code Section 123-37, general Landscaping requirements (7) Interior vehicular use areas. – The following are standards relating to landscaping of interior vehicular use areas:

a. Lots with vehicular use areas that are 4,000 or more square feet in size shall have at least one square foot of interior landscaping for each 15 square feet of vehicular use area, except that areas in an I-1 or I-2 zone shall only be required to have at least one square foot of interior landscaping for each 30 square feet of vehicular use area. Each separate landscaped area shall be curbed and contain a minimum of 100 square feet of area and shall be at least ten feet wide and ten feet deep exclusive of curbing in all locations. Progressive urban parking areas designs may be used to provide adequate space for multiple tree plantings and allow for proper tree root development so shade trees can grow and develop large canopies to reduce parking lot heat islands.

*Consider foundation plantings surrounding all buildings.*

***RESPONSE: Foundation plantings are being provided where applicable.***

7. Per City Code Section 123-37, General Landscaping requirements (8) Lands adjacent to street right-of-way. – Lands immediately adjacent to street right-of-way shall meet the following requirements:
   a. Trees will be planted along the public right-of-way in a manner directed by the department so as to ensure shading for sidewalks and to contribute to the streetscape design of the roadway;
   b. Palms, trees and shrubs may be required for driveway entrances other key points of interest as determined by the department to the extent that such plantings do not exceed requirements set for clear vision areas as specified by section 125-308.

***RESPONSE: Please see the landscape plan included as part of this resubmittal package.***

8. A Lighting Plan or Photometric Survey shall be provided at the time of Application pursuant to City Code 125-315(j)(1). *Commercial, Industrial, and Government Uses must have a minimum average of one (2) footcandles of lighting.*

***RESPONSE: A photometric plan has been provided as part of the resubmittal package.***

9. Stop signs, stop bars, and directional arrow striping will need to be placed in proper intersection locations throughout the property.

***RESPONSE: Stop signs, stop bars have been provided on the site plan. Directional arrows have been shown for illustrative purposes.***

10. Pursuant to City Code Section 22-62(b)(4) Sidewalks. In order to provide to continual access for pedestrian, sidewalks and sidewalk linkages shall be required to be provided by the property owner or permit applicant, when plans are submitted for condition use applications or pay a payment into the city sidewalk fund pursuant to City Code Section 22-62(g).

*Please install sidewalk along South 7th Street.*

***RESPONSE: The Applicant has opted to not include sidewalks in the Site Plan Re-submittal.***

11. Pursuant to City Code Section 22-62(b)(4) Sidewalks. In order to provide continual access for pedestrian, sidewalks and ***sidewalks linkages*** shall be required to be provided by the property owner or permit applicant.

***RESPONSE: Sidewalk linkage has been added for pedestrians. Please see Site Plan.***

12. Will there be a monument sign? If so, include a landscaped area around the base of the monument sign which extends a minimum distance of three (3) feet in all

directions. Such landscaped area shall be completely covered by ground cover and shrubs, hedges or similar vegetative materials. Vegetation in the area surrounding said sign shall be maintained at a height of no less than twelve (12) inches. *We also ask that you do not submit the monument sign with the site plan. The sign can be approved administratively through permits.*

***RESPONSE: A monument sign will be added to the site & will include landscaping. The monument sign will NOT be included in the site plan but rather applied for at a later date.***

13. Prior to the issuance of any site clearing permits, the applicant shall coordinate with the City of Ft. Pierce for the required mitigation of the City regulated trees proposed to be removed as a result of this sites development/construction activity.

***RESPONSE: Acknowledged.***

14. Include a refuse collection area or areas for trash collection. Provide a separate gated entrance to the refuse collection area or areas for employee access, customer access and sidewalk striping to the collection area. *See attached Dumpster Detail Guidelines.*

***RESPONSE: Please reference Site Plan for added separate employee access with striping.***

15. Per City Code Section 125-314. – Design Review: provide color elevations and a color board of all angles of the proposed development.

***RESPONSE: Color elevations shall be included with the signed Design Review Application and Architecturals.***

16. Provide a color overlay on your submitted landscape plan. (Color each tree green on your landscape plan).

***RESPONSE: Color Overlay shall be included during a subsequent submittal.***

17. Per City Code Section 125-322. – Fences, walls and hedges; installation, replacement and maintenance.:

(d)(5)

Chain link fences. On lots fronting Delaware Avenue, Orange Avenue, Avenue D and U.S. 1. Or on lots determined by the Director of Planning to be in the downtown area or in an area targeted for redevelopment (Oleander Avenue), chain link fence are permitted only if located no closer than 25 feet to any public right-of-way, are painted or coated, and screened from the public right-of-way with shrubs and no less than 9one tree for each 50 linear feet.

*No Chain-link Fencing*

***RESPONSE: No chain-link fencing shall be added to the plan or site.***

18. A Design Review Application will be required as well. Consider living walls, led lighting, up-lighting, or any architectural enhancement to add to the warehouse nature of the proposed development.

***RESPONSE: A Design Review Application will be included with the submittal as required.***

19. Additional Comments may be forthcoming.

20. An intake meeting is required for application submittals and the meeting must be scheduled at least one week in advance. To schedule the intake meeting please submit an e-mail with the application supporting documents as a PDF attachment or link. Send email to planning_dl@cityofftpierce.com.

    At the intake meeting, it will be determined if the submitted materials meet all the requirements necessary for the department to accept. If the application is missing items, an explanation will be given regarding what is missing and how to correct it. All applications must pass sufficiency review by 5:00 PM on the last Friday of each month to advance to the next month's Technical Review Committee meeting. The deadline to submit all application feed and hard copies for the project is two business days after the sufficiency deadline. Applications cannot move forward to the Technical Review Committee until all fees are paid and hard copies are given.

    Please do not prepare any checks or fees until the department has created and produced an invoice. To view fees, click on the public notice fees and fee schedule links below. All hard copies can be mailed to 100 N. US Highway 1, Ft. Pierce, FL 34950. Attention: Planning Department, or schedule an appointment with your assigned planner to drop off at City Hall. Lastly, fees can either be paid electronically or by check. If you would like to pay electronically provide the name exactly as it appears on your credit card and an email address to send the invoice link to. Checks can either be mailed or dropped off with the hard copies of the submittal.

    The application submittal must include PDF documents on a CD or USB Drive.

    Please contact us at 772-467-3737 or email planning_dl@cityofftpierce.com if you have any questions or need assistance.

***RESPONSE: An Intake Meeting will be scheduled as per appropriate protocol.***

21. Prior to submitting your applications, please schedule an Intake Meeting to ensure that your application packet is complete. During Submittal, your Pre-Application Comments must be attached with all submitted items below checked off. We Do Not Collate Application Submittals for Applicants. Please ensure that your application packet is complete, in order, and whole when submitting. Include

digital copies on a CD or Flashdrive. Ensure that there are NO signature security-locked digital files. We only need 4 hard copies (1 Original & 3 Copies)

Submit the following along with your application(s) sets:

- Notarized Development Review Application
- Notarized Design Review Application
- Concurrency Review/Application Analysis Application
- St Lucie County Property Record Card
- Warranty Deed & Legal Description **(In WORD format)**
- Statement for Need: **(Follow Detailed Description on Application) (in WORD format only)**
- General Location Map
- Current Survey
- Floor Plan
- Landscaping Plan
- Lighting Plan
- Storm Drainage Analysis
- Historical Report
- Environmental Study
- Traffic Impact Report

***RESPONSE: All items shall be submitted as listed & required.***

22. Note that all fees for advertising, mailing, and signs shall be paid upfront with the application fees. These fees can be found on the City website under Planning Department page under "Public Notice Fee".

***RESPONSE: Acknowledged.***

## *ENGINEERING DEPARTMENT COMMENTS*

1. St Lucie County shall provide further guidance as to the South 7th Street right-of-way to include but not limited to the driveway approval, drainage, outfall approval and any additional requirements/improvements.

***RESPONSE: Acknowledged.***

2. The northern most dumpster location is situated on the drainage line from the proposed detention area to South 7th Street outfall. Relocate the dumpster area in consideration of potential future drainage maintenance.

***RESPONSE: Please confirm this. Dumpster does not appear to be located on a drainage line or area.***

## *CITY OF FORT PIERCE BUILDING DEPARTMENT*

Comments may be forthcoming.

***RESPONSE: Acknowledged.***

## *ST LUCIE COUNTY PLANNING DEPARTMENT*

Comments may be forthcoming.

***RESPONSE: Acknowledged.***

## *ST LUCIE COUNTY PW / ENGINEERING*

1. Paved access is required for projects requiring Site Plan approval. South 7th Street is a substandard roadway. The applicant will be required to pave the roadway from the Projects access point to the nearest paved road. The applicant can request a waiver from the Board of County Commissioners.

***RESPONSE: Acknowledged.***

2. The driveway will be required to be improved to minimum County standards and permitted through the County.

***RESPONSE: Acknowledged.***

3. Provide written response directly to the County for review. The city does not provide.

***RESPONSE: Acknowledged.***

4. For discussion regarding these comments and response, please contact me at 772-462-2741, chambersg@stlucieco.org or David Hays at 772-462-1491, haysd@stlucieco.org.

***RESPONSE: Acknowledged.***

We feel the attached adequately addresses comments and request review and approval of the attached application. Should you have any questions or require further information, please contact me at 772-462-2455.

Respectfully,

**ENGINEERING DESIGN & CONSTRUCTION, INC.**



Bradley J. Currie, AICP
Vice President

Z:\EDC-2021\21-269 - K & K Properties - 7th Street CSP & Pre-App\ENGINEERING\Documents\Submittal Documents\Comment Response Letter\2022-07-25_City_FP_K&K_Properties_Rsp2Cmts_Ltr_21-269.docx

**Technical Review Committee** **1. e.**

Meeting Date: 09/15/2022

REQUESTED ACTION

Preliminary Plat - Fort Pierce Commercial- 2419-321-0001-000-5, 2419-322-0003-000-2, 2419-322-0002-000-5

LOCATION

5553, 5555 and 5575 Okeechobee Rd
2419-321-0001-000-5, 2419-322-0003-000-2, 2419-322-0002-000-5

RESPONSIBLE STAFF

Ryan Altizer, Planner

RECOMMENDATION

N/A

Attachments

TRC Packet

**Form Review**

Form Started By: Ryan Altizer Started On: 08/31/2022 01:01 PM
Final Approval Date: 08/31/2022

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

| | |
|---|---|
| **TO:** | Technical Review Committee |
| **THROUGH**: | Kevin Freeman, Planning Director |
| **FROM:** | Ryan Altizer, Planner |
| **RE:** | **Ft. Pierce Commercial – Preliminary Plat - 22-09000006**<br>**5553, 5555 and 5575 Okeechobee Rd** |
| **BOARD DATE:** | September 15, 2022 |

**Preliminary Plat at 5553, 5555 and 5575 Okeechobee Rd**

The above referenced project is being submitted for your review and comments. The applicant is requesting a Preliminary Plat for 5553, 5555 and 5575 Okeechobee Rd for the Fort Pierce Commercial.

Please send all comments to planning@cityoffortpierce.com and/or through interoffice mail to the Planning Department

If you have comments, please respond prior to Tuesday, September 13, 2022 If you have any questions, please contact the Planning Department at 772-467-3737.

Thank you

# FORT PIERCE COMMERCIAL PLAT

## BEING A PARCEL OF LAND LYING IN THE SOUTHWEST 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA

PLAT BOOK _____
PAGE _____
DOCKET NO. _____

## LEGAL DESCRIPTION

A PARCEL OF LAND LYING IN THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 AND OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE SOUTH RIGHT OF WAY LINE OF S.R. 70–OKEECHOBEE ROAD (A VARIABLE WIDTH RIGHT OF WAY) PER FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 94030–2522 WITH THE EAST RIGHT OF WAY LINE OF JENKINS ROAD (A VARIABLE WIDTH RIGHT OF WAY), AS DEFINED BY OFFICIAL RECORDS BOOK 3686, PAGE 2798 OF THE PUBLIC RECORDS OF SAID ST. LUCIE COUNTY, FLORIDA, ALSO BEING THE NORTHWEST CORNER OF FDOT PARCEL 112.1 (A 4.00 FOOT ROAD RIGHT–OF–WAY TAKING) AS DEFINED BY OFFICIAL RECORDS BOOK 4092, PAGE 2052, SAID PUBLIC RECORDS; THENCE S00°00'31"W ALONG SAID EAST RIGHT OF WAY LINE OF JENKINS ROAD, A DISTANCE OF 4.26 FEET TO THE SOUTHWEST CORNER OF SAID FDOT PARCEL 112.1 AND THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE N69°58'38"E ALONG THE SOUTHERLY LINE OF SAID FDOT PARCEL 112.1 AND THE SOUTHERLY LINE OF FDOT PARCEL 114.1 AS RECORDED IN OFFICIAL RECORDS BOOK 4092, PAGE 2041, SAID PUBLIC RECORDS, BEING PARALLEL TO AND 4.00 FEET SOUTH SAID RIGHT OF WAY LINE OF S.R. 70–OKEECHOBEE ROAD AS SHOWN ON SAID RIGHT OF WAY MAP SECTION 94030–2522, FOR A DISTANCE OF 350.55 FEET TO THE SOUTHEAST CORNER OF SAID FDOT PARCEL 114.1 AND THE SOUTH RIGHT OF WAY LINE OF SAID S.R. 70–OKEECHOBEE ROAD; THENCE S20°01'22"E ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 21.00 FEET; THENCE N69°58'38"E CONTINUING ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 205.37 FEET TO THE SOUTH RIGHT OF WAY LINE OF NORTH ST. LUCIE DRAINAGE DISTRICT CANAL NUMBER 38 (A 99 FOOT WIDE CANAL RIGHT OF WAY); THENCE N88°20'40"E ALONG SAID SOUTH CANAL RIGHT OF WAY LINE, A DISTANCE OF 718.23 FEET TO THE EAST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 19; THENCE S00°35'38"E ALONG SAID EAST LINE, A DISTANCE OF 563.32 FEET TO THE SOUTH LINE OF SAID NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 19; THENCE S88°10'50"W ALONG THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 AND THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 19, A DISTANCE OF 1253.97 FEET TO THE AFORESAID EAST RIGHT OF WAY LINE OF JENKINS ROAD; THENCE N00°00'31"E ALONG SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 411.74 FEET TO THE POINT OF BEGINNING.

CONTAINING 15.32 ACRES MORE OR LESS.

## DEDICATION

STATE OF FLORIDA
COUNTY OF ST. LUCIE SS

KNOW ALL MEN BY THESE PRESENTS THAT _____, HAS CAUSED THESE LANDS SHOWN HEREON AS FORT PIERCE COMMERCIAL PLAT, TO BE SURVEYED AND PLATTED AS SHOWN HEREON AND DOES HEREBY DEDICATE THE LANDS AS FOLLOWS:

1) TRACTS 1, 2, 3, AND 4, AS SHOWN HEREON, ARE FOR FUTURE DEVELOPMENT
2) THE UTILITY EASEMENTS (UE), AS SHOWN HEREON, ARE HEREBY DEDICATED TO THE PUBLIC FOR THE INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES, INCLUDING WATER, SEWER AND FOR CONSTRUCTION, INSTALLATION, MAINTENANCE AND OPERATION OF CABLE TELEVISION SERVICES.
3) THE CROSS ACCESS EASEMENT (CAE), AS SHOWN HEREON, ARE HEREBY DEDICATED TO
4) THE STORMWATER EASEMENT, AS SHOWN HEREON, ARE HEREBY DEDICATED TO

SIGNED AND SEALED THIS ___ DAY OF _____, 2022, ON BEHALF OF _____.

BY: _____
NAME
TITLE

_____ _____
WITNESS SIGNATURE WITNESS SIGNATURE

_____ _____
PRINTED NAME PRINTED NAME

## ACKNOWLEDGMENT

STATE OF FLORIDA
COUNTY OF ST. LUCIE

I HEREBY CERTIFY THAT ON THIS DAY, BEFORE ME, AN OFFICER DULY AUTHORIZED IN THE STATE AFORESAID AND IN THE COUNTY AFORESAID TO TAKE ACKNOWLEDGMENTS, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BY MEANS OF ___ PHYSICAL PRESENCE OR ___ ONLINE NOTIFICATION BY _____, ON BEHALF OF _____, HE IS [ ] PERSONALLY KNOWN TO ME OR [ ] HAS PRODUCED _____ AS IDENTIFICATION.

WITNESS MY HAND AND OFFICIAL SEAL IN THE COUNTY AND STATE LAST AFORESAID THIS _____ DAY OF _____, 2022.

_____ _____
COMMISSION NO. & EXPIRATION DATE NOTARY PUBLIC, STATE OF FLORIDA

PRINT NAME: _____

## MORTGAGEE CONSENT

STATE OF _____

COUNTY OF _____

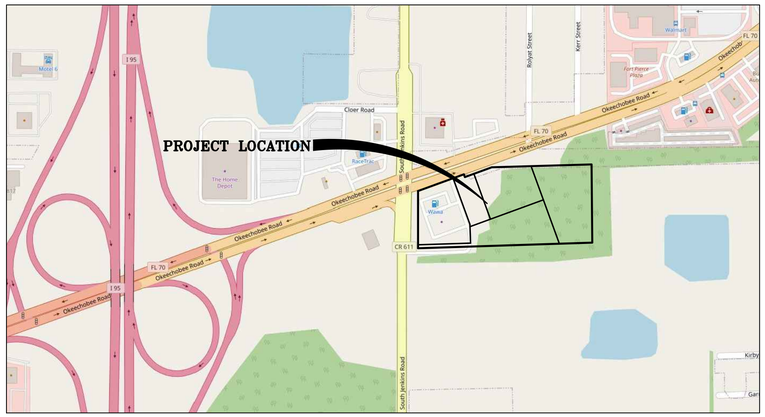
_____ DATED THE ___ DAY OF 202__ AND RECORDED THE ___ DAY OF 202__, AT OFFICIAL RECORDS, BOOK –_____, PAGE _____, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, DOES HEREBY CONSENT TO THE DEDICATIONS HEREON AND DOES SUBORDINATE ITS MORTGAGE TO SUCH DEDICATIONS.

_____ [MAY REQUIRE WITNESSES]

BY: _____
NAME: _____
TITLE: _____

_____ _____
WITNESS SIGNATURE WITNESS SIGNATURE

_____ _____
PRINTED NAME PRINTED NAME




## LOCATION MAP
NOT TO SCALE

## CERTIFICATE OF TITLE

STATE OF FLORIDA

COUNTY OF ST. LUCIE

I, _____, A MEMBER OF THE FLORIDA BAR, RELYING SOLELY ON THAT CERTAIN TITLE COMMITMENT PREPARED BY_____, DATED _____, 20____, AND DESIGNATED AS FILE NUMBER _____ (THE " PLAT SEARCH "), AND ASSUMING THE ACCURACY OF THE INFORMATION CONTAINED IN THE PLAT SEARCH, DO HEREBY CERTIFY THAT I HAVE EXAMINED THE TITLE OF THE PROPERTY DESCRIBED HEREON AND THAT I FIND THAT THE TITLE TO THE PROPERTY IS VESTED IN: _____, THAT ALL TAXES ON THE PROPERTY HAVE BEEN PAID AS REQUIRED BY FLORIDA STATUTES § 197.192, AND THAT THE PROPERTY IS NOT ENCUMBERED.

DATED: THE ___ DAY OF _____, 2022 _____

NAME TITLE
ADDRESS
FLORIDA BAR NO. _____

## CITY ATTORNEY

IT IS HEREBY CERTIFIED THAT THE FOREGOING PLAT IS APPROVED AS TO FORM AND LEGAL SUFFICIENCY.

THIS _____ DAY OF _____, 2022.

BY: _____
CITY ATTORNEY
CITY OF FORT PIERCE, FLORIDA

## PLANNING AND DEVELOPMENT SERVICES APPROVAL

STATE OF FLORIDA
COUNTY OF ST. LUCIE SS

IT IS HEREBY CERTIFIED THAT THIS PLAT MEETS THE MINIMUM LOT DIMENSION REQUIREMENT OF THE GENERAL COMMERCIAL ZONING DISTRICT, AS SET FORTH IN CHAPTER 22 OF THE FORT PIERCE LAND DEVELOPMENT REGULATIONS, AS AMENDED BY THE CITY OF FORT PIERCE BOARD OF ZONING APPEALS ON JUNE ____, 2022.

THIS _____ DAY OF _____, 2022.

BY: _____

PLANNING DIRECTOR
CITY OF FORT PIERCE, FLORIDA

## CERTIFICATE OF FINAL APPROVAL BY CITY COMMISSION

STATE OF FLORIDA
COUNTY OF ST. LUCIE SS

PURSUANT TO THE PROVISIONS OF THE FORT PIERCE CITY COMMISSION THIS PLAT WAS GIVEN FINAL APPROVAL BY THE CITY COMMISSION AT A MEETING HELD ON THIS _____ DAY OF _____, 2022. THIS PLAT HAS BEEN REVIEWED FOR CONFORMITY TO CHAPTER 177 FLORIDA STATUTES BY A PROFESSIONAL SURVEYOR AND MAPPER EMPLOYED BY OR UNDER CONTRACT WITH THE CITY OF FORT PIERCE, FLORIDA

THIS _____ DAY OF _____, 2022.

FORT PIERCE CITY COMMISSION

BY: _____
LINDA COX, CITY CLERK

## CLERK OF CIRCUIT COURT

STATE OF FLORIDA
COUNTY OF ST. LUCIE SS

I, MICHELLE MILLER, CLERK OF CIRCUIT COURT OF ST. LUCIE COUNTY, FLORIDA, DO HEREBY CERTIFY THAT THIS PLAT HAS BEEN EXAMINED AND THAT IT COMPLIES, IN FORM, WITH ALL THE REQUIREMENTS OF THE LAWS PERTAINING TO MAPS AND PLATS AND THAT THIS PLAT HAS FILED FOR RECORD IN PLAT BOOK ____, PAGE _____, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, THIS _____ DAY OF _____, 2022.

_____
MICHELLE MILLER CLERK OF CIRCUIT COURT
ST. LUCIE COUNTY, FLORIDA

CLERK OF THE CIRCUIT COURT

## SURVEYOR'S REVIEW CERTIFICATE:

IT IS HEREBY CERTIFIED THAT THE UNDERSIGNED SURVEYOR AND MAPPER DULY LICENSED IN THE STATE OF FLORIDA HAS REVIEWED THIS PLAT FOR CONFORMITY WITH THE REQUIREMENTS OF CHAPTER 177, PART 1, FLORIDA STATUTES.

BY: _____ _____
FRANK VELDHUIS DATE
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATE NO. 6582
PLAT REVIEWER FOR THE CITY OF FORT PIERCE

## SURVEYOR'S NOTES

1) BEARINGS SHOWN HEREON ARE RELATIVE TO THE NORTH LINE OF THE SOUTHWEST 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, HAVING A BEARING OF N88°20'40"E.

2) ALL LINES INTERSECTING CIRCULAR CURVES ARE RADIAL UNLESS NOTED. (N.R.) DENOTES NON–RADIAL.

3) NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT.

4) NOTICE: THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

5) NOTE: THIS PLAT HAS BEEN REVIEWED FOR CONFORMITY TO CHAPTER 177, PART 1 FLORIDA STATUTES BY A PROFESSIONAL SURVEYOR AND MAPPER EMPLOYED BY OR UNDER CONTRACT WITH THE CITY OF FORT PIERCE, FLORIDA.

## SURVEYOR'S CERTIFICATE:

STATE OF FLORIDA
COUNTY OF ST. LUCIE

THIS IS TO CERTIFY THAT THE PLAT AS SHOWN HEREON IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY MADE UNDER MY RESPONSIBLE DIRECTION AND SUPERVISION AND PLAT COMPLIES WITH ALL SURVEY REQUIREMENTS OF THIS PART AND THAT SAID SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT PERMANENT REFERENCE MONUMENTS (P.R.M.'S) HAVE BEEN SET AND LOT CORNERS WILL BE SET UNDER THE GUARANTEES POSTED WITH THE CITY COUNCIL OF FORT PIERCE FOR THE REQUIRED IMPROVEMENTS, AND FURTHER, THAT THE SURVEY DATA COMPLIES WITH ALL OF THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES, AS AMENDED, AND IN ACCORDANCE WITH THE SURVEYING STANDARDS CONTAINED WITHIN CHAPTER 5J–17, FLORIDA ADMINISTRATIVE CODE, SET FORTH BY THE FLORIDA BOARD OF SURVEYORS AND MAPPERS PURSUANT TO SECTION 472.027, FLORIDA STATUTES, AND ORDINANCES OF THE CITY OF FORT PIERCE, FLORIDA. THIS _____ DAY OF _____, 2022.

_____
THOMAS P. KIERNAN
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATE NO. 6199

SURVEYOR


PREPARED IN THE OFFICE OF:
CULPEPPER & TERPENING, INC.
2980 SOUTH 25th STREET
FORT PIERCE, FLORIDA 34981
CERTIFICATION NO. LB 4286

THOMAS P. KIERNAN
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE No. 6199




FILE NAME: 21–261–PLAT–COVER

# FORT PIERCE COMMERCIAL PLAT

## BEING A PARCEL OF LAND LYING IN THE SOUTHWEST 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA

PLAT BOOK _____
PAGE _____
DOCKET NO. _____

### LEGEND

| | |
|---|---|
| D. | DENOTES DEED |
| FDOT | DENOTES FLORIDA DEPARTMENT OF TRANSPORTATION |
| IR&C | DENOTES 5/8" IRON ROD & CAP |
| LB | DENOTES LICENSED BUSINESS |
| M. | DENOTES MEASURED |
| POB | DENOTES POINT OF BEGINNING |
| POC | DENOTES POINT OF COMMENCEMENT |
| PRM | DENOTES PERMANENT REFERENCE MONUMENT |
| R/W | DENOTES RIGHT OF WAY |
| S.R. | DENOTES STATE ROAD |
| ◎ | DENOTES SET 5/8" IR&C PRM LB 4286 |

GRAPHIC SCALE
50 0 25 50
( IN FEET )
1 inch = 50 ft.

NORTH

NORTH LINE OF THE SOUTHWEST 1/4 OF SECTION 19-35-40
(BEARING BASE)
N88°20'40"E 605.31'

NORTH LINE OF NE 1/4 OF THE NW 1/4 OF THE SW 1/4 OF SECTION 19-35-40

S.R. 70 - OKEECHOBEE ROAD
BASELINE FDOT RIGHT OF WAY MAP SECTION 94030-2522
RIGHT OF WAY WIDTH VARIES

NORTH ST. LUCIE DRAINAGE DISTRICT CANAL NUMBER 38
99' RIGHT OF WAY

SOUTH CANAL R/W LINE
N88°20'40"E 718.23'
380.28'(DE)
54.60'(DE)
N88°20'40"E 317.42'
S88°20'40"W 299.72'

INTERSECTION OF THE BASELINE OF SURVEY OF COUNTY ROAD 611 (JENKINS ROAD) WITH THE BASELINE OF SURVEY OF STATE ROAD 70 (OKEECHOBEE ROAD)

NORTHERLY LINE OF PARCEL 154
OLD R/W LINE - 120' R/W
N69°58'38"E 350.55'
268.40'
CURRENT R/W LINE SOUTH LINE OF FDOT PARCEL NO. 112.1 PER O.R.B. 4092, PG. 2052

S.E. CORNER FDOT PARCEL NO. 112.1
S.W. CORNER FDOT PARCEL NO. 114.1

S.E. CORNER OF FDOT PARCEL NO. 114.1 PER O.R.B. 4092, PG 2041

S20°01'22"E 21.00'
69.09'
82.15' PARCEL 1
136.28'
69.67'(UE)
283.35'(PARCEL 2)
15.00'(UE)
N20°01'22"W 84.10'
34.91'(UE)
S20°01'22"E 86.07'
32.71'
N58°16'25"W
S58°16'25"E 32.71'
N20°01'19"W 347.49'
16.93'
N58°16'25"W

S88°09'22"E 81.75'(D)
S89°59'29"E 81.28'(M)
S0°00'31"W 4.26'
S0°00'31"W 203.61'(M)
S0°00'31"W 203.61'(M)
60.00'
74.00'
10.00'
4.00'

POC
INTERSECTION POINT OF THE SOUTH R/W OF S.R. 70 & EAST R/W OF JENKINS ROAD - N.W. CORNER OF FDOT PARCEL NO. 112.1 PER O.R.B. 4092, PG. 2052

POB
S.W. CORNER OF FDOT PARCEL NO. 112.1 PER O.R.B. 4092, PG. 2052

40.00' 26.00' 15.75'
81.75'

JENKINS ROAD
RIGHT OF WAY WIDTH VARIES
WEST LINE OF THE SOUTHWEST 1/4 OF SECTION 19-35-40
OLD R/W LINE - 80' R/W
EAST R/W LINE OF JENKINS ROAD
N0°00'31"E 411.74' (OVERALL)
386.72'(PARCEL 5)
N0°00'31"E 666.32'

PARCEL 1
1.249 ACRES ±

PARCEL 2
2.957 ACRES ±

PARCEL 3
4.348 ACRES ±

PARCEL 4
STORMWATER MANAGEMENT TRACT
3.437 ACRES ±

PARCEL 5
3.326 ACRES ±

N20°01'23"W 27.33'
R=8.33'
Δ=84°16'30"
L=12.26'
CB=N61°54'53"W
CD=11.18'
N69°58'38"E 19.75'
S69°58'38"W 10.71'
C-1
C-2
C-3
27.33' CROSS ACCESS EASEMENT
S19°46'35"E 202.39'(CAE)
N19°46'35"W 165.86'(CAE)
258.20'(PARCEL 2)
N70°13'22"E 15.00'
15.0' FPUA EASEMENT
N19°46'35"W 64.00'
R=9.33'
Δ=89°45'16"
L=14.62'
CB=N25°06'00"E
CD=13.17'
N69°58'38"E 10.00'
S19°46'35"E 27.80'
15.0' FPUA EASEMENT
5.71'
15.0' FPUA EASEMENT
S0°35'38"E 163.29'
N0°35'38"W 162.89'
178.99'(UE)
67.50'
N89°52'51"E
15.00'(UE)
S89°52'51"W 82.50'
OPEN SPACE TRACT 6
FUTURE USE TRACT 2
STORMWATER EASEMENT
CHERIMOY STREET
50' RIGHT OF WAY
OPEN SPACE TRACT 5
S0°35'38"E 563.32' (OVERALL)
EAST LINE OF NE 1/4 OF THE NW 1/4 OF THE SW 1/4 SECTION 19-35-40

C-1
R=35.67'
Δ=90°14'44"
L=56.18'
CB=S64°54'00"E
CD=50.55'

C-2
R=35.67'
Δ=26°34'13"
L=16.54'
CB=N43°48'29"W
CD=16.39'

C-3
R=35.67'
Δ=10°44'45"
L=6.69'
CB=N25°09'00"W
CD=6.68'

FUTURE USE TRACT 1
AVALON CROSSING
PLAT BOOK 93, PAGE 24

N69°58'38"E 549.68'(OVERALL)
27.33' CROSS ACCESS EASEMENT
5.33'
(PARCEL 2) 405.20'
6.67'
12.0' FPUA EASEMENT
N69°58'38"E 579.37'(CAE & UE)
S69°58'38"W 569.78' (OVERALL)
N69°58'38"E 561.95'
(PARCEL 1) 156.75'
27.33'
27.33'
23.57' 15.00'
12.31'
10.5'x15' FPUA EASEMENT
31.14'
19.10'(UE)
14.00'
R=14.33'
Δ=63°18'50"
L=15.84'
CB=S38°19'05"W
CD=15.04'
N1°49'10"W 135.00'(PARCEL 4)
118.60'(PARCEL 4)
N1°49'10"W 115.90'(UE)
S1°49'10"E 147.11'
32.0' FPUA EASEMENT
25.0' FPUA EASEMENT
N88°10'50"E 377.17'(PARCEL 5)
318.67'(UE)
409.97'(UE)
1016.75' (PARCEL 4)
S88°10'50"W 1253.97' (OVERALL)
SOUTH LINE OF NE 1/4 OF THE NW 1/4 OF THE SW 1/4 SECTION 19-35-40
237.22'
N88°10'50"E 173.08'
STORMWATER EASEMENT
N20°01'22"W 594.17'(PARCEL 3)
329.30' (DE)
335.96'
S20°01'22"E 197.23'
40.99'
N1°13'08"W 482.43'
STORMWATER EASEMENT
20.56'(UE)
S46°30'49"E 60.14'
N46°30'49"W 51.07'
15.0' FPUA EASEMENT
37.28'(UE)
25.01'

OPEN SPACE TRACT 5

AVALON CROSSING PLAT BOOK 93, PAGE 24 LOT 7
LOT 8
WATER MANAGEMENT TRACT 1
LOT 21
LOT 22
LOT 23
AVALON CROSSING PLAT BOOK 93, PAGE 24 FUTURE USE TRACT 1

PREPARED IN THE OFFICE OF:
CULPEPPER & TERPENING, INC.
2980 SOUTH 25th STREET
FORT PIERCE, FLORIDA 34981
CERTIFICATION NO. LB 4286

THOMAS P. KIERNAN
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE No. 6199

FILE NAME: 21-261-PLAT-P2

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
# CAPACITY ANALYSIS

## I. Site Data:

| | Existing Use | Future Land Use | Zoning |
|---|---|---|---|
| **North** | SR 70 Highway | FDOT ROW | FDOT ROW |
| **South** | Residential | RM | PD |
| **East** | Residential | RM | PD |
| **West** | Jenkins Road | County ROW | County ROW |

| | Future Land Use | Zoning Classification | Maximum Intensity<br>Residential: Dwelling Units per Acre<br>Other: Square Footage | Total Acreage | Flood Zone |
|---|---|---|---|---|---|
| **Current** | GC | C-3 | 0 sf | 12.00 | 'X' |
| ****Proposed** | No Change | No Change | 106,000 sf | 12.00 | N/A |

## II. Public Facilities Information:

| **A. Potable Water:** | |
|---|---|
| Average Use | Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand)<br>Other: 0.125 gallons per day per square foot 106,000 sf x 0.125 = 13,250 gpd |
| Demand Analysis | Maximum Peaking Factor = 4. Therefore 13,250 gpd x 4 = 53,000 gpd |
| Current Zoning/FLU | Total gallons per day 0 |
| **Proposed Zoning/FLU | Total gallons per day 53,000 gpd (No Change in Zoning or FLU) |
| **Change in Demand | Total gallons per day 53,000 gpd |

| **B. Wastewater:** | |
|---|---|
| Average Use | Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand)<br>Other: 0.1 gallons per day per square foot 106,000 sf x 0.125 = 13,250 gpd |
| Demand Analysis | Maximum Peaking Factor = 4. Therefore 13,250 gpd x 4 = 53,000 gpd |
| Current Zoning/FLU | Total gallons per day 0 |
| **Proposed Zoning/FLU | Total gallons per day 53,000 gpd (No Change in Zoning or FLU) |
| **Change in Demand | Total gallons per day 53,000 gpd |

**C. Parks and Recreation (Residential Classifications Only):** NA
(Du x 2.6 = persons + 44,227 = population /LOS)

| Park Type | LOS | Existing Population Park Demand | Proposed Population Park Demand | Change in Demand |
|---|---|---|---|---|
| **Regional** | 20 acres per 1,000 people | | | |
| **Urban District** | 5 acres per 1,000 people | | | |
| **Community** | 2.5 acres per 1,000 people | | | |
| **Neighborhood** | 1.36 acres per 1,000 people | | | |

**D. Public Schools (Residential Classifications Only):**
Single Family: (du x 0.405 = students/70% K-8/30% High) NA
Multi-family: (du x 0.207 = students/70% K-8/30% High) NA

| | K-8 | High |
|---|---|---|
| **School Name** | | |
| **City** | | |
| **Distance** | | |
| **Current Zoning/FLU Enrollment Demand** | | |
| ****Proposed Zoning/FLU Enrollment Demand** | | |
| ****Change in Demand** | | |

| **E. Solid Waste: Residential (**2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units) | |
|---|---|
| **Demand Analysis** | Maximum |
| **Current Zoning/FLU** | C-3 / GC |
| ****Proposed Zoning/FLU** | No Change |
| ***Change in Demand** | |

**F. Stormwater:**
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

| | |
|---|---|
| **Impact** | Stormwater runoff will be collected in the wet / dry retention system where the projects post development runoff will be treated and attenuated pursuant to the jurisdictional regulations. The project will meet Pre vs Post criteria. |

## III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

| **G. Transportation Analysis: Complete ITE Trip Generation Data Form**<br>Most recent ITE Code for use; HCM Roadway Capacity | | |
|---|---|---|
| | **AADT** | **AM/PM Peak Hour Trips** |
| **Demand Analysis** | Maximum | Maximum |
| **Current Zoning/FLU** | C-3 / GC | C-3 / GC |
| ****Proposed Zoning/FLU** | No Change in Zoning / FLU | No Change in Zoning / FLU |
| ***Change in Demand** | Trips 1,716 | Trips 56 AM / 142 PM |
| **Impact to Capacity** | The adjacent roadway links and intersection are projected to operate at the adopted LOS with the proposed Development. See enclosed TIA. | |

## IV. Project Description

| **PHASING** |
|---|
| Is this project (phase) part of a larger project? ☑ Yes ☐ No |
| |
| If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date. |
| Total Project: Residential Units: Single Family: Multifamily: |
| Non-residential (square footage): Phase 1 = 24,210 sf ; Phase 2 = 81,810 sf |
| Mixed-use (describe use): |
| (If this is a single phase project, name it Phase I – Total) |

**RESIDENTIAL DATA**

| **Type** | **Phase** | **Number of Units** | **Acres** | **Expected beginning date** | **Expected completion date** |
|---|---|---|---|---|---|
| Single-family, detached | | | | | |
| Single-family, attached | | | | | |
| Multi-family | | | | | |
| Other (specify) | | | | | |

| NON-RESIDENTIAL DATA | | | | | |
|---|---|---|---|---|---|
| **Type(s) specify** | **Phase** | **Square footage** | **Acres** | **Expecting beginning date** | **Expected completion date** |
| Chipotle Restaurant | 1 | 2,448 | 0.056 | 1 Q 2022 | 4 Q 2022 |
| Retail Store | 1 | 2,533 | 0.058 | 1 Q 2022 | 4 Q 2022 |
| ALDI Grocery Store | 1 | 19,209 | 0.441 | 1 Q 2022 | 4 Q 2022 |
| Future Development | 2 | 81,810 | 1.878 | TBD | TBD |
| | | | | | |

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. ☐ Yes ☑ No

B. 1. Does this application involve demolition or re-use of any structure(s)? ☐ Yes ☑ No
If yes, what is the size of the structure(s) to be demolished or re-used? _____

2. What is the current use of the structure to be demolished or re-used? _____

3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? ☐ Yes ☑ No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested:

** Complete section if requesting a change in zoning, future land use, or expanding

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

# Subdivision

Property address or Location Multiple addresses generally located at the southeast corner of Okeechobee and Jenkins Road

Parcel ID #(s) 2419-321-0001-000-5, 2419-322-0003-000-2, 2419-322-0002-000-5

Project description This proposed plat identifies the lots and easements for the Fort Pierce Commercial. Project lots 1-4 are part of Fort Pierce Commercial while lot 5 is the gasoline station.

~~Jill Simpkins~~ Brittany Sobering

**Property Owner(s)**
OkeeJen, LLC & S and S Rentals B, LLC

Street Address
1870 Aloma Avenue, Suite 110

City | State | Zip
Winter Park | FL | 32789

Phone Number
321-228-8510

Email Address
samsobering@gmail.com

Todd Howder

**Applicant/Representative, Title, Company**
Vice President, MBV Engineering, Inc.

Street Address
1835 20th Street

City | State | Zip
Vero Beach, Florida 32960

Phone Number
772-569-0035

Email Address
toddh@mbveng.com

***Property Owner(s) Acknowledgements:** - This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

*Property Owner(s) Signature(s)*

STATE OF FLORIDA -- COUNTY

The foregoing instrument was acknowledged before me this 23 day of AUGUST, 2022, by BRITTANY SOBERING who is personally known to me or has produced _____ as identification.

Signature of Notary

Notary Public State of Florida
Robin C Godber
My Commission HH 124298
Expires 06/02/2025

***INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729***

**TO BE COMPLETED BY STAFF**

| Zoning | Future Land Use | Total Acres | Historic District | Historic Designation |
|---|---|---|---|---|
| | | | | Contributing Individual<br>Non-Contributing None |

Pre-Application Meeting Date_____
Intake Planner_____
Planner Assigned_____
Approved By_____Date _____
Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

## ☑ SUBDIVISION: PRELIMINARY PLAT

***Please submit one (1) original and thirteen (13) hard copies and one (1) CD of the following:***

- ☐ Preliminary Plat prepared by a surveyor registered in the State of Florida meeting the requirements of Sections 18-5, & 18-10 (a) (1-3) & (c)
- ☐ A copy of the deed
- ☐ Signed and sealed survey
- ☐ Concurrency application, complete
- ☐ Complete, notarized application

## ☐ SUBDIVISION: INFRASTRUCTURE PLAN REVIEW

***Please submit one (1) original and four (4) hard copies and one (1) CD of the following, stamped by a state of Florida registered engineer meeting the requirements of 18-10 (a) (4) :***

- ☐ Street construction plans
- ☐ Electric Infrastructure plans
- ☐ Water & Sewer system construction plans
- ☐ Gas Infrastructure plans
- ☐ Stormwater Retention plans
- ☐ Complete, notarized application

## ☐ SUBDIVISION: FINAL PLAT

***Please submit one (1) original and thirteen (13) hard copies and one (1) CD of the following:***

- ☐ A copy of the deed
- ☐ Signed and sealed survey
- ☐ Final Plat stamped by a state of Florida registered surveyor meeting the requirements of 18-5, & 18-10 (b & c):
- ☐ Complete, notarized application

## ☐ SUBDIVISION: MINOR REPLAT

***Please submit one (1) original and thirteen (13) hard copies and one (1) CD of the following:***

- ☐ A copy of the deed
- ☐ As-built survey of original parcel stamped by a registered surveyor in the State of Florida
- ☐ Scaled drawing, stamped by a registered surveyor in the State of Florida, of surveyed parcel indicating
  - o proposed lots, including acreage, square footage, & dimensions.
  - o any & all easements, rights-of-way, or similar instruments found on or adjacent to the subject property
- ☐ Complete, notarized application

**2022 FLORIDA LIMITED LIABILITY COMPANY ANNUAL REPORT**

**FILED**
**Apr 12, 2022**
**Secretary of State**
**3289024391CC**

DOCUMENT# L20000204272

**Entity Name:** OKEEJEN, LLC

**Current Principal Place of Business:**

1870 ALOMA AVENUE
STE 250
WINTER PARK, FL 32789

**Current Mailing Address:**

1870 ALOMA AVENUE
STE 250
WINTER PARK, FL 32789 US

**FEI Number: 85-1934066**

**Certificate of Status Desired:** No

**Name and Address of Current Registered Agent:**

SIMPKINS, JILL K
1870 ALOMA AVENUE
STE 250
WINTER PARK, FL 32789 US

*The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida.*

SIGNATURE:

Electronic Signature of Registered Agent — Date

**Authorized Person(s) Detail :**

| | | | |
|---|---|---|---|
| Title | AUTHORIZED MEMBER | Title | AUTHORIZED MEMBER |
| Name | SIMPKINS, JILL K | Name | SOBERING, BRITTANY |
| Address | 1870 ALOMA AVENUE<br>STE 250 | Address | 1870 ALOMA AVENUE<br>STE 250 |
| City-State-Zip: | WINTER PARK FL 32789 | City-State-Zip: | WINTER PARK FL 32789 |

*I hereby certify that the information indicated on this report or supplemental report is true and accurate and that my electronic signature shall have the same legal effect as if made under oath; that I am a managing member or manager of the limited liability company or the receiver or trustee empowered to execute this report as required by Chapter 605, Florida Statutes; and that my name appears above, or on an attachment with all other like empowered.*

SIGNATURE: BRITTANY SOBERING AUTHORIZED SIGNOR 04/12/2022

Electronic Signature of Signing Authorized Person(s) Detail — Date

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 3783458 OR BOOK 3467 PAGE 528, Recorded 12/27/2012 at 10:10 AM

PREPARED BY & RETURN AFTER RECORDING TO:
LAURA M. DARBY
S&S ENTERPRISES, INC.
400 HIGH POINT DRIVE – SUITE 500
COCOA, FLORIDA 32926

PARCEL ID#: 2419-322-0002-000/5

# QUIT CLAIM DEED

**THIS QUIT CLAIM DEED**, executed this 19th day of December, 2012, by S&S RENTALS, LLC, a Florida limited liability company, Grantor, to S&S RENTALS "B" LLC, a Florida limited liability company, whose post office address is 400 High Point Drive, Suite 500, Cocoa, FL 32926, Grantee.

**WITNESSETH,** that Grantors, for and in consideration of the sum of **TEN AND NO/100THS DOLLARS ($10.00)**, in hand paid by Grantee, the receipt whereof is hereby acknowledged does hereby remise, release and quit-claim unto Grantee forever, all the right, title, interest, claim and demand which the Grantors have in and to the following described lot, piece or parcel of land, situate, lying and being in the County of **St. Lucie**, State of Florida, to wit:

See attached Exhibit A for legal description.

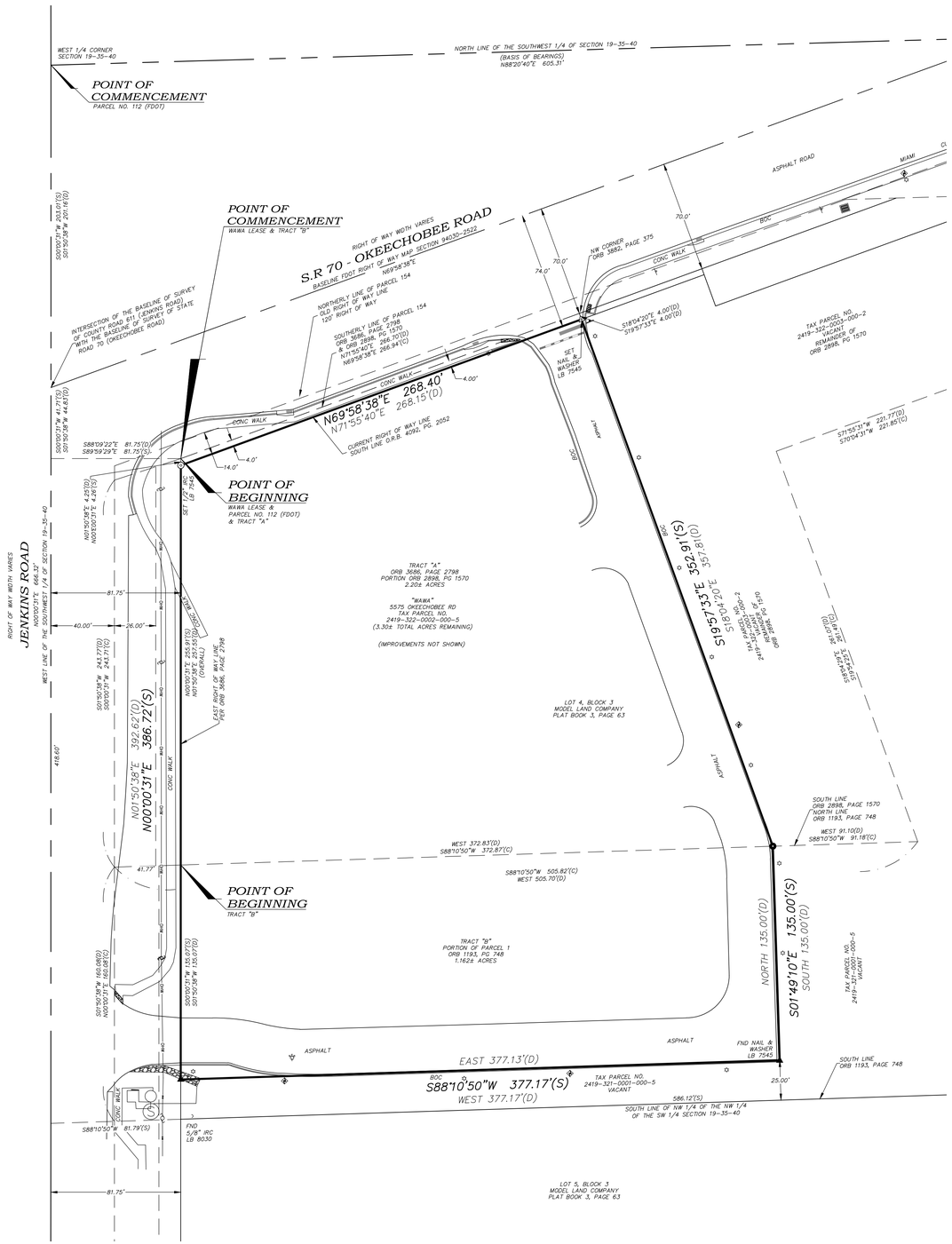
Address: 5575 Okeechobee Road, Ft. Pierce, Florida

The Grantor herein warrants and represents that said property is not resided upon by any persons or used as homestead property by any persons as defined under Florida Constitution 1968, Article X, Section 4.

This Deed was prepared without benefit of a title search and no representations as to same are made by the Preparer.

**TO HAVE AND TO HOLD** the same together with all and singular the appurtenances thereunto belonging or in anywise appertaining, and all the estate, right, title, interest, lien, equity and claim whatsoever of the said Grantors, either in law or equity, to the only proper use benefit of the Grantee forever.

THIS INSTRUMENT IS EXEMPT FROM DOCUMENTARY STAMP TAX PURSUANT TO SECTION 201.0201(3), FLORIDA STATUTES. THIS INSRUMENT IS FURTHER EXEMPT BECAUSE NO CONSIDERATION HAS BEEN PAID FOR THIS DEED IN THAT THE GRANTORS ARE THE SOLE MEMBERS OF THE GRANTEE. THE ULTIMATE BENEFICIAL OWNERSHIP




| LEGEND | | | |
|---|---|---|---|
| BOC | = BACK OF CURB | PG. | = PAGE |
| BWF | = BARBED WIRE FENCE | PSM | = PROFESSIONAL SURVEYOR AND MAPPER |
| (C) | = CALCULATED | PVC | = POLY VINYL CHLORIDE |
| CLF | = CHAIN LINK FENCE | RCP | = REINFORCED CONCRETE PIPE |
| CM | = CONCRETE MONUMENT | (S) | = SURVEYED |
| CMP | = CORRUGATED METAL PIPE | TOB | = TOP OF BANK |
| CONC. | = CONCRETE | TOS | = TOE OF SLOPE |
| COVD. | = COVERED | TRANS | = TRANSFORMER |
| (D) | = DESCRIPTION | UG | = UNDERGROUND |
| EL. | = ELEVATION | WDF | = WOODEN FENCE |
| EM | = ELECTRIC METER | WL | = WATER LINE |
| FFE | = FINISHED FLOOR ELEVATION | WM | = WATER METER |
| FM | = FORCE MAIN | | = FIRE HYDRANT |
| FND. | = FOUND | | = GUY ANCHOR |
| GV | = GATE VALVE | | = UTILITY POLE |
| ID | = IDENTIFICATION | | = WATER GATE VALVE |
| IP | = IRON PIPE | | = WELL |
| IR | = IRON ROD | | = LIGHT POLE |
| IRC | = IRON ROD WITH CAP | | = ELECTRIC PULL BOX |
| LB | = LICENSED BUSINESS | | = STORM DRAINAGE MANHOLE |
| LS | = LICENSED SURVEYOR | | = SANITARY SEWER MANHOLE |
| OHW | = OVERHEAD WIRES | | = SIGN |
| O.R.B. | = OFFICIAL RECORD BOOK | | = TELEPHONE SERVICE MANHOLE |
| (P) | = PLAT | | |
| PB | = PLAT BOOK | | |

**DESCRIPTION (WAWA LEASE)**

A PARCEL OF LAND LYING IN THE SOUTHWEST 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF OKEECHOBEE ROAD WITH THE EAST RIGHT OF WAY LINE OF JENKINS ROAD, AS DEFINED BY O.R. 3686, PAGE 2798 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, THENCE N71°55'40"E., ALONG SAID SOUTHERLY RIGHT OF WAY LINE OF OKEECHOBEE ROAD, A DISTANCE OF 266.70 FEET; THENCE DEPARTING SAID RIGHT OF WAY LINE, RUN S.18°04'20"E., PERPENDICULAR TO SAID RIGHT OF WAY LINE, A DISTANCE OF 357.81 FEET TO AN INTERSECTION WITH THE NORTH LINE OF LANDS DESCRIBED IN O.R. 1193, PAGE 748 OF SAID PUBLIC RECORDS; THENCE SOUTH, 135.00 FEET TO A POINT 25.00 FEET DISTANT NORTH, BY RIGHT ANGLE MEASUREMENT, FROM THE SOUTH LINE OF SAID LANDS DESCRIBED IN O.R. 1193, PAGE 748; THENCE WEST, PARALLEL WITH AND 25.00 FEET DISTANT NORTH, FROM SAID SOUTH LINE, A DISTANCE OF 377.17 FEET TO A POINT ON THE EAST RIGHT OF WAY LINE OF JENKINS ROAD, AS DEFINED BY PARCEL #123 IN O.R. 3686, PAGE 2798, SAID POINT BEING 81.75 FEET DISTANT EAST FROM THE WEST LINE OF THE AFORESAID SOUTHWEST 1/4 OF SECTION 19; THENCE N.01°50'38"E., ALONG SAID EAST RIGHT OF WAY LINE (AS DEFINED IN O.R. 3686, PAGE 2798), A DISTANCE OF 392.62 FEET TO THE POINT OF BEGINNING.

CONTAINING 3.303 ACRES.
SUBJECT TO ALL EASEMENTS, CONVEYANCES, RESTRICTIONS, LIMITATIONS AND RIGHTS OF WAY OF RECORD.

**EXCLUDING THEREFROM**

**DESCRIPTION (PARCEL NO. 112 - FDOT)**

A PORTION OF TRACT 4, MODEL LAND CO., ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 63 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LYING IN THE SOUTHWEST 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST; SAID PORTION BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE WEST 1/4 CORNER OF SAID SECTION 19; THENCE S01°50'38"W ALONG THE WEST LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 19 AND THE BASELINE OF SURVEY OF COUNTY ROAD 611 (JENKINS ROAD), A DISTANCE OF 201.16 FEET TO THE POINT OF INTERSECTION WITH THE BASELINE OF SURVEY OF STATE ROAD 70 (OKEECHOBEE ROAD) AS SHOWN ON THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP FOR ITEM/SEGMENT NO. 4289841, SECTION 94030-2516; THENCE CONTINUE S01°50'38"W, ALONG SAID WEST LINE OF THE SOUTHWEST 1/4 AND SAID BASELINE OF SURVEY OF COUNTY ROAD 611 (JENKINS ROAD), A DISTANCE OF 44.83 FEET; THENCE S88°09'22"E, AT A RIGHT ANGLE TO THE LAST DESCRIBED COURSE, A DISTANCE OF 81.75 FEET TO THE INTERSECTION OF THE EASTERLY RIGHT-OF-WAY LINE OF SAID COUNTY ROAD 611 (JENKINS ROAD) AND THE SOUTHERLY RIGHT-OF-WAY LINE OF SAID STATE ROAD 70 (OKEECHOBEE ROAD) AS DEPICTED ON SAID FLORIDA DEPARTMENT RIGHT-OF-WAY MAP AND THE NORTHEAST CORNER OF PARCEL NO. 105, AS DESCRIBED IN OFFICIAL RECORDS BOOK 3686, PAGE 2798, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, AND THE POINT OF BEGINNING; THENCE, ALONG THE SOUTHERLY LINE OF PARCEL 154, AS DESCRIBED IN OFFICIAL RECORDS BOOK 248, PAGE 2792, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, AND THE SAID SOUTHERLY RIGHT-OF-WAY LINE OF STATE ROAD 70 (OKEECHOBEE ROAD), N71°55'40"E, A DISTANCE OF 266.70 FEET TO THE NORTHWEST CORNER OF A PARCEL OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 3882, PAGE 375, OF THE PUBLIC RECORDS OF SAINT LUCIE COUNTY, FLORIDA; THENCE, S18°04'20"E, ALONG THE WESTERLY LINE OF SAID PARCEL, A DISTANCE OF 4.00 FEET; THENCE, DEPARTING SAID WESTERLY LINE, S71°55'40"W, A DISTANCE OF 268.15 FEET TO THE EASTERLY LINE OF SAID PARCEL 105; THENCE N01°50'38"E, ALONG SAID EASTERLY LINE, A DISTANCE OF 4.25 FEET TO THE POINT OF BEGINNING.

CONTAINING 1,070 SQUARE FEET OR 0.025 ACRES, MORE OR LESS.

**DESCRIPTION (TRACT "A")**

A PARCEL OF LAND LYING IN THE SOUTHWEST 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, BEING A PORTION OF THOSE LANDS DESCRIBED IN O.R. 2898, PAGE 1570, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF OKEECHOBEE ROAD WITH THE EAST RIGHT OF WAY LINE OF JENKINS ROAD, AS DEFINED BY O.R. 3686, PAGE 2798 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, THENCE N71°55'40"E., ALONG SAID SOUTHERLY RIGHT OF WAY LINE OF OKEECHOBEE ROAD, A DISTANCE OF 266.70 FEET; THENCE DEPARTING SAID RIGHT OF WAY LINE, RUN S.18°04'20"E., PERPENDICULAR TO SAID RIGHT OF WAY LINE, A DISTANCE OF 357.81 FEET TO A POINT ON THE SOUTH LINE OF SAID LANDS DESCRIBED IN O.R. 2898, PAGE 1570; THENCE WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 372.83 FEET TO A POINT ON THE EAST RIGHT OF WAY LINE OF JENKINS ROAD AS DEFINED IN O.R. 3686, PAGE 2798, SAID POINT BEING 81.75 FEET DISTANT EAST, BY RIGHT ANGLE MEASUREMENT, OF THE WEST LINE OF THE AFORESAID SOUTHWEST 1/4; THENCE N.01°50'38"E., ALONG SAID EAST RIGHT OF WAY LINE OF JENKINS ROAD, DEFINED IN SAID O.R. 3686, PAGE 2798, A DISTANCE OF 257.55 FEET TO THE POINT OF BEGINNING.

CONTAINING 2.200 ACRES.

**DESCRIPTION (TRACT "B")**

A PARCEL OF LAND LYING IN THE SOUTHWEST 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, BEING A PORTION OF THOSE LANDS DESCRIBED IN O.R. 1193, PAGE 748, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF OKEECHOBEE ROAD WITH THE EAST RIGHT OF WAY LINE OF JENKINS ROAD, AS DEFINED BY O.R. 3686, PAGE 2798 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, THENCE S.01°50'38"E., ALONG SAID EAST RIGHT OF WAY LINE, (SAID LINE BEING 81.75 FEET EAST, BY RIGHT ANGLE MEASUREMENT, OF THE WEST LINE OF THE AFORESAID SOUTHWEST 1/4), A DISTANCE OF 257.55 FEET TO A POINT ON A LINE OF SAID LANDS DESCRIBED IN O.R. 1193, PAGE 748, THE POINT OF BEGINNING; THENCE CONTINUE S.01°50'38"W., ALONG SAID EAST RIGHT OF WAY LINE, AS DEFINED IN SAID O.R. 3686, PAGE 2798, A DISTANCE OF 135.07 FEET TO A POINT, 25.00 FEET DISTANT NORTH, BY RIGHT ANGLE MEASUREMENT, FROM THE SOUTH LINE OF SAID LANDS DESCRIBED O.R. 1193, PAGE 748; THENCE EAST, PARALLEL WITH AND 25.00 FEET DISTANT FROM SAID SOUTH LINE, A DISTANCE OF 377.13 FEET; THENCE NORTH, A DISTANCE OF 135.00 FEET TO A POINT ON AN AFORESAID LINE OF O.R. 1193, PAGE 748; THENCE WEST, ALONG SAID LINE, A DISTANCE OF 372.83 FEET TO THE POINT OF BEGINNING.

CONTAINING 1.162 ACRES.

## SURVEYOR'S NOTES

1. THIS SURVEY DOES NOT DETERMINE OR INDICATE LAND OWNERSHIP.
2. THE SURVEYOR DID NOT RESEARCH OR ABSTRACT THE LAND RECORDS FOR RIGHTS-OF-WAY, EASEMENTS, RESERVATIONS, DEED RESTRICTIONS, ZONING REGULATIONS, SETBACKS, LAND USE PLAN DESIGNATIONS, LIENS, MURPHY ACT RIGHTS-OF-WAY, AREAS OF LOCAL CONCERN, OR OTHER SIMILAR JURISDICTIONAL DETERMINATIONS. TO THE EXTENT THAT THIS TYPE OF INFORMATION IS SHOWN, IT IS SHOWN SOLELY ON THE BASIS OF INFORMATION PROVIDED BY THE CLIENT OR INFORMATION OTHERWISE KNOWN TO THE SURVEYOR AND MAY NOT BE COMPLETE.
3. UNDERGROUND UTILITIES, BUILDING FOUNDATIONS, AND OTHER UNDERGROUND FIXED IMPROVEMENTS WERE NOT LOCATED, UNLESS OTHERWISE INDICATED. TO THE EXTENT THAT THIS TYPE OF INFORMATION IS SHOWN, IT IS SHOWN SOLELY ON THE BASIS OF SURFACE INDICATIONS OBSERVED BY THE SURVEYOR AND MAY NOT BE COMPLETE.
4. JURISDICTIONAL WETLANDS AND ENDANGERED OR THREATENED SPECIES HABITAT, IF ANY, THAT MAY EXIST ON OR AROUND THE SURVEY SITE WERE NOT DETERMINED OR LOCATED.
5. THE SURVEY DATE IS THE FIELD DATE SHOWN IN THE TITLE BLOCK, NOT THE SIGNATURE DATE.
6. BEARINGS SHOWN HEREON REFER TO STATE PLANE COORDINATES FLORIDA EAST ZONE, NAD83, 2011 ADJUSTMENT AND WERE DERIVED BY ASSIGNING A GRID BEARING OF N88°20'40"E TO THE NORTH LINE OF THE SOUTHWEST 1/4 OF SECTION 19-35-40.
7. FLOOD ZONE "X", FLOOD INSURANCE RATE MAP NUMBER 12111C0167J, DATED FEBRUARY 16, 2012.

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MAP OF BOUNDARY SURVEY
GRAPHIC SCALE
0' 30' 60'
1" = 60'
NORTH


# INDIAN RIVER SURVEY, INC.
PROFESSIONAL SURVEYING AND MAPPING
CERTIFICATE OF AUTHORIZATION No. LB 7545
1835 20TH STREET, VERO BEACH, FLORIDA 32960
PHONE (772) 569-7880 FAX (772) 778-3617


| REVISIONS | DATE |
|---|---|
| . | . |

"WAWA"
5575 OKEECHOBEE RD

| FIELD BOOK | DRAWN |
|---|---|
| 79 | SPC/RJS |
| PAGE(S) | SCALE |
| 30-31 | 1"=60' |
| FIELD DATE | JOB # |
| 09/20/21 | 20-633 |

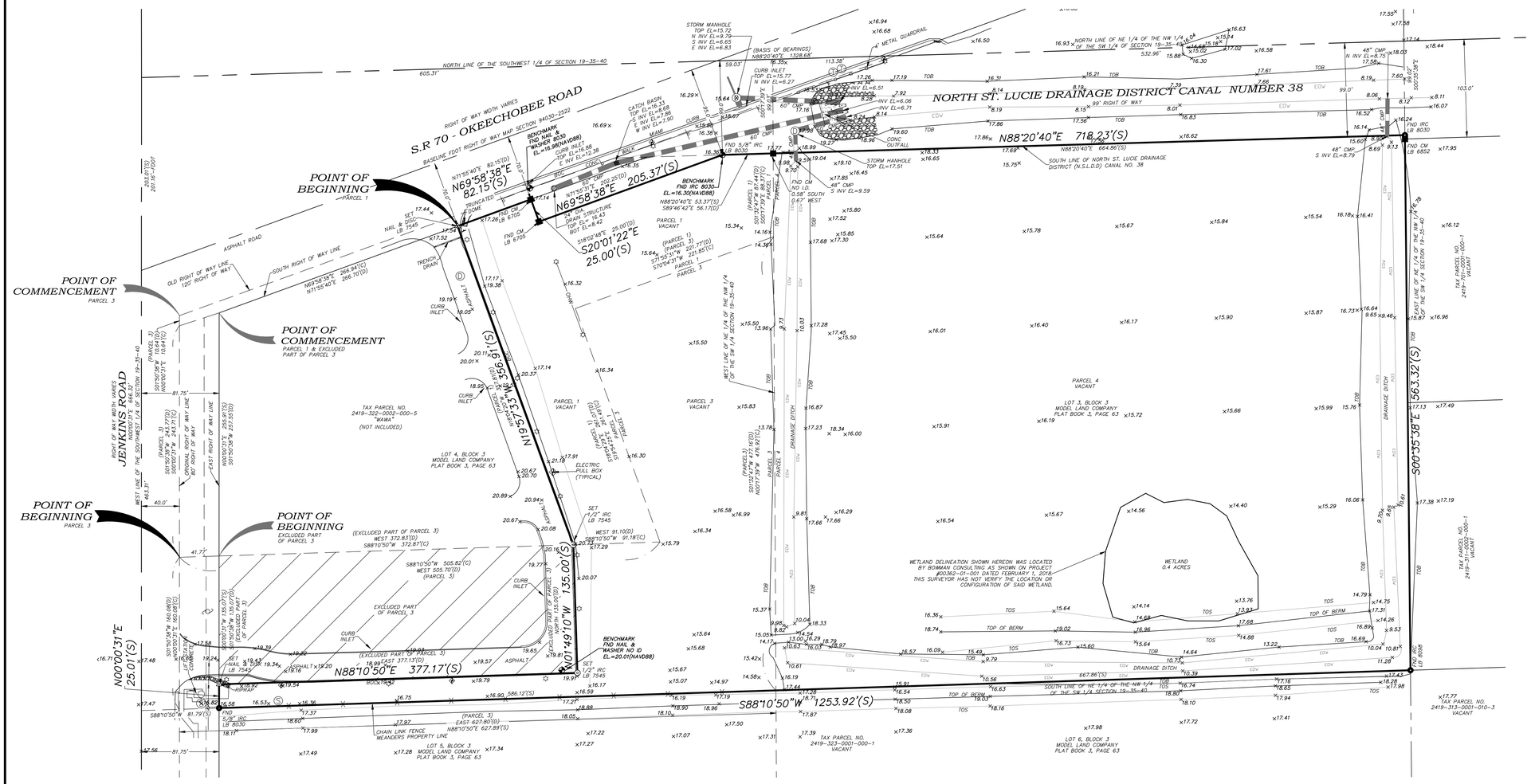
SHEET 1 OF 1

*NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND THE SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER*

STATE OF FLORIDA LICENSE No. 4895 PROFESSIONAL SURVEYOR AND MAPPER

STEVE CARTECHINE, LS4895
FLORIDA REGISTERED LAND SURVEYOR

11/05/2021
DATE


S.R 70 - OKEECHOBEE ROAD
RIGHT OF WAY WIDTH VARIES
BASELINE FDOT RIGHT OF WAY MAP SECTION 94030-2522
NORTH ST. LUCIE DRAINAGE DISTRICT CANAL NUMBER 38
POINT OF BEGINNING
PARCEL 1
POINT OF COMMENCEMENT
PARCEL 3
POINT OF COMMENCEMENT
PARCEL 1 & EXCLUDED PART OF PARCEL 3
POINT OF BEGINNING
PARCEL 3
POINT OF BEGINNING
EXCLUDED PART OF PARCEL 3
RIGHT OF WAY WIDTH VARIES
JENKINS ROAD
ASPHALT ROAD
OLD RIGHT OF WAY LINE
120' RIGHT OF WAY
SOUTH RIGHT OF WAY LINE
EAST RIGHT OF WAY LINE
80' RIGHT OF WAY
WEST LINE OF THE SOUTHWEST 1/4 OF SECTION 19-35-40
NORTH LINE OF THE SOUTHWEST 1/4 OF SECTION 19-35-40
N88°20'40"E 718.23'(S)
N69°58'38"E 82.15'(S)
N69°58'38"E 205.37'(S)
S20°01'22"E 25.00'(S)
N19°57'53"W 556.91'(S)
S00°35'38"E 563.32'(S)
S88°10'50"W 1253.92'(S)
N00°10'10"W 135.00'(S)
N88°10'50"E 377.17'(S)
N00°00'31"E 25.01'(S)
TAX PARCEL NO. 2419-323-0001-000-5 "HAWK" (NOT INCLUDED)
LOT 4, BLOCK 3 MODEL LAND COMPANY PLAT BOOK 3, PAGE 63
LOT 3, BLOCK 3 MODEL LAND COMPANY PLAT BOOK 3, PAGE 63
LOT 5, BLOCK 3 MODEL LAND COMPANY PLAT BOOK 3, PAGE 63
LOT 6, BLOCK 3 MODEL LAND COMPANY PLAT BOOK 3, PAGE 63
PARCEL 1 VACANT
PARCEL 3 VACANT
PARCEL 4 VACANT
TAX PARCEL NO. 2419-323-0001-000-1 VACANT
TAX PARCEL NO. 2419-311-0001-010-1 VACANT
TAX PARCEL NO. 2419-311-0002-000-1 VACANT
TAX PARCEL NO. 2419-311-0001-010-3 VACANT
WETLAND 0.4 ACRES
WETLAND DELINEATION SHOWN HEREON WAS LOCATED BY BOWMAN CONSULTING AS SHOWN ON PROJECT #00362-01-001 DATED FEBRUARY 1, 2018. THIS SURVEYOR HAS NOT VERIFY THE LOCATION OR CONFIGURATION OF SAID WETLAND.
BENCHMARK FND NAIL & WASHER NO ID EL=16.30(NAVD88)
BENCHMARK FND IRC 8030 EL=20.01(NAVD88)
SET 1/2" IRC LB 7545
FND 5/8" IRC LB 8030
FND CM LB 6705
FND CM LB 6852
FND CM LB 8098
SET NAIL & DISC LB 7545
SET NAIL AS TOB LB 7545
48" CMP S INV EL=8.79
48" CMP N INV EL=8.75
48" CMP S INV EL=9.59
CATCH BASIN TOP EL=16.53 S INV EL=7.96 W INV EL=7.90
STORM MANHOLE TOP EL=15.72 N INV EL=9.79 S INV EL=6.65 E INV EL=6.83
CURB INLET TOP EL=15.77 N INV EL=6.27
CURB INLET TOP EL=16.88 E INV EL=12.38
21" DIA. STORM STRUCTURE TOP EL=16.43 BOT EL=8.43
CONC OUTFALL
STORM MANHOLE TOP EL=17.51
4" METAL GUARDRAIL
60" CMP
TRENCH DRAIN
CURB INLET
ELECTRIC PULL BOX (TYPICAL)
DRAINAGE DITCH
CHAIN LINK FENCE MEANDERS PROPERTY LINE
EXCLUDED PART OF PARCEL 3
WEST 372.83'(D) S88°10'50"W 372.87'(C)
WEST 91.10'(D) S88°10'50"W 91.18'(C)
SB8°10'50"W 505.82'(C) WEST 505.70'(D) (PARCEL 3)
EAST 377.13'(D)
BOC
TOP OF BERM
TOE OF SLOPE
TOP OF BANK
EDGE OF WATER
EDW
ASPHALT
CONCRETE
RIPRAP
SOUTH LINE OF NE 1/4 OF THE NW 1/4 OF THE SW 1/4 SECTION 19-35-40
WEST LINE OF NE 1/4 OF THE NW 1/4 OF THE SW 1/4 SECTION 19-35-40
EAST LINE OF NE 1/4 OF THE NW 1/4 OF THE SW 1/4 SECTION 19-35-40
NORTH LINE OF NE 1/4 OF THE NW 1/4 OF THE SW 1/4 OF SECTION 19-35-40
SOUTH LINE OF NORTH ST. LUCIE DRAINAGE DISTRICT (N.S.L.D.D) CANAL NO. 38
667.86'(S)
532.96'
(PARCEL 1) (PARCEL 3) S01°35'38"E 221.77'(D) S77°55'31"W 221.85'(C) S70°04'29"E 221.77'(D)
(PARCEL 3) S01°35'38"E 261.07'(D) S00°01'29"W 261.06'(C)
(PARCEL 3) S01°52'47"W 477.16'(D) N00°07'29"W 478.91'(C)
(PARCEL 3) S01°35'38"E 86.37'(D) S00°01'29"W 86.37'(C)
(PARCEL 3) S01°35'38"E 104.61'(D) S00°01'29"W 104.60'(C)
(PARCEL 3) S01°35'38"E 243.77'(D) S00°01'29"W 243.77'(C)
(PARCEL 3) S01°35'38"E 255.83'(D) S00°01'29"W 255.83'(C)
(PARCEL 3) S01°35'38"E 160.08'(D) S00°01'29"W 160.08'(C)
(PARCEL 3) S01°35'38"E 165.08'(D) S00°01'29"W 165.08'(C)
(PARCEL 3) S01°35'38"E 135.07'(D) S00°01'29"W 135.07'(C)
(EXCLUDED PART OF PARCEL 3)
(EXCLUDED PART OF PARCEL 3) WEST 372.83'(D) S88°10'50"W 372.87'(C)
(EXCLUDED PART OF PARCEL 3) WEST 505.70'(D) (PARCEL 3)
(EXCLUDED PART OF PARCEL 3) EAST 627.80'(D) N88°10'50"E 627.89'(S)
(EXCLUDED PART OF PARCEL 3) WEST 91.10'(D) S88°10'50"W 91.18'(C)
(EXCLUDED PART OF PARCEL 3) EAST 377.13'(D)
(EXCLUDED PART OF PARCEL 3) WEST 505.70'(D) (PARCEL 3)
(EXCLUDED PART OF PARCEL 3) WEST 372.83'(D) S88°10'50"W 372.87'(C)
(BASIS OF BEARINGS) N88°20'40"E 1328.68'
N71°35'40"E 82.15'(D)
N71°55'31"E 202.25'(D)
S18°01'48"E 25.00'(D)
S77°55'31"W 221.85'(C)
S70°04'29"E 221.77'(D)
N89°58'38"E 266.94'(C) N71°52'40"E 266.70'(D)
S89°46'42"E 56.17'(D)
N88°20'40"E 53.37'(S) S89°46'42"E 56.17'(D)
S01°35'38"E 1328.68'(D) S00°01'29"W 1328.68'(C)
S01°35'38"E 2645.36'(D) S00°01'29"W 2645.36'(C)
586.12'(S)
113.36'
59.03'
103.0'
203.01'(S) 2041.0'(D)
40.0'
81.75'
41.77'
20.67'
19.77'
16.75'
17.47'
17.56'
18.17'
18.60'
18.80'
19.24'
19.39'
19.54'
19.57'
19.65'
19.79'
19.91'
20.16'
20.20'
20.67'
20.89'
20.94'
21.18'
17.29'
17.37'
17.97'
17.99'
18.05'
18.88'
18.90'
18.96'
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MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4849192 OR BOOK 4592 PAGE 2371, Recorded 04/16/2021 11:52:21 AM Doc Tax: $0.70

**Prepared by and return to:**
Samuel J. Sobering
921 Arabian Ave.
Winter Springs, FL 32708

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# Quitclaim Deed

**This Quitclaim Deed**, executed this 13th day of April, 2021 by **S&S Enterprises "B", LLC, a Florida limited liability company** ("Grantor"), whose address is PO BOX 1179, Sharpes, FL 32959, to **OkeeJen, LLC, a Florida limited liability company** ("Grantee"), whose address PO BOX 1179, Sharpes, FL 32959.

That Grantor, for and in consideration of the sum of TEN DOLLARS ($10.00) and other valuable considerations, the receipt and sufficiency of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all of Grantor's right, title and interest in and to that certain real property situate, lying and being in St. Lucie County, Florida (hereinafter referred to as the "Property"), and being more particularly described in Exhibit "A" attached hereto and made a part hereof.

TOGETHER with all of the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the same in fee simple forever.

AND Grantor hereby covenants with Grantee that Grantor is lawfully seized of the Property in fee simple; that the Grantor has good right and lawful authority to sell and convey the Property.

IN WITNESS WHEREOF, Grantor has caused this instrument to be executed and delivered in its name by its corporate officer thereunto duly authorized, and has intended this instrument to be and become effective as of the day and year first above written.

****NOTE TO RECORDER: The Grantor is conveying this unencumbered property to the Grantee, a subsidiary. Documentary stamp tax in the amount of $.70 is therefore being paid on the consideration of $10.00 and other valuable considerations.*

** SIGNATURES CONTAINED ON NEXT PAGES **

Signed, sealed and delivered
in the presence of:

Witness Signature: _____
1st Witness Name: _____

Witness Signature: _____
2nd Witness Name: _____

**S&S Enterprises "B", LLC,**
**a Florida limited liability company**

_____
By: Jill K. Simpkins
Its: Member

State of Florida
County of _____

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization this 13th day April, 2021, by Jill K. Simpkins, Member of S&S Enterprises "B", LLC, a Florida limited liability company, who are personally known to me or ____ who produced _____ as identification and who did not take an oath.

_____
Notary Public
My Commission Expires:

SUSAN C TIMMINS
MY COMMISSION # GG086648
EXPIRES June 04, 2021

Signed, sealed and delivered
in the presence of:

Witness Signature: alec Dewor
1st Alec Dewor Witness

Witness Signature:
2nd Witness Name: RANDI SMITH

**S&S Enterprises "B", LLC,**
**a Florida limited liability company**

Name:
By: Janet Simpkins Jakubcin Trust,
as Member

By: Mark Jakubcin
Its: Authorized Trustee

State of Florida
County of SEMINOLE

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization this 13 day APRIL, 2021, by Mark Jakubcin, Authorized Trustee of the Janet Simpkins Jakubcin Trust, as Member of S&S Enterprises "B", LLC, a Florida limited liability company, who are personally known to me or ___ who produced FLDL as identification and who did not take an oath.

Notary Public State of Florida
Jayesh Patel
My Commission GG 189313
Expires 02/22/2022

Notary Public J Patel
My Commission Expires: 02/22/2022

Exhibit "A"

**Exhibit "A"**

**HISTORIC LEGAL DESCRIPTION**

PARCEL 1:

A PARCEL OF LAND LYING IN THE SOUTHWEST 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF OKEECHOBEE ROAD WITH THE EAST RIGHT OF WAY LINE OF JENKINS ROAD, AS DEFINED BY OFFICIAL RECORDS BOOK 3686, PAGE 2798 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, THENCE NORTH 71°55'40" EAST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE OF OKEECHOBEE ROAD, A DISTANCE OF 266.70 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE NORTH 71°55'40" EAST, A DISTANCE OF 82.15 FEET; THENCE SOUTH 18°02'48" EAST, A DISTANCE OF 25.00 FEET; THENCE NORTH 71°55'31" EAST, A DISTANCE OF 202.25 FEET; THENCE SOUTH 89°46'42" EAST, ALONG THE SOUTH LINE OF N.S.L.R.D.D. CANAL NO. 38, A DISTANCE OF 56.17 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4; THENCE SOUTH 01°32'47" WEST, ALONG SAID WEST LINE, A DISTANCE OF 87.44 FEET; THENCE FOR THE NEXT THREE (3) COURSES ALONG LINES OF OFFICIAL RECORDS BOOK 2898, PAGE 1570, (1) RUN SOUTH 71°55'31" WEST, A DISTANCE OF 221.77 FEET; (2) THENCE SOUTH 18°04'29" EAST, A DISTANCE OF 261.07 FEET; (3) THENCE WEST, A DISTANCE OF 91.10 FEET; THENCE NORTH 18°04'20" WEST, A DISTANCE OF 357.81 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPTING:

ALL OF PARCEL 114.1 CONVEYED TO THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION BY WARRANTY DEED RECORDED FEBRUARY 1, 2018 IN OFFICIAL RECORDS BOOK 4092, PAGE 2041, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

PARCEL3:

A PARCEL OF LAND LYING IN SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF OKEECHOBEE ROAD (A 120 FOOT WIDE RIGHT OF WAY) WITH THE EAST RIGHT OF WAY LINE OF JENKINS ROAD (AN 80 FOOT WIDE RIGHT OF WAY) AND THENCE SOUTH 01°50'38" WEST, ALONG SAID EAST RIGHT OF WAY LINE OF JENKINS ROAD, A DISTANCE OF10.64 FEET, THENCE CONTINUE SOUTH 01°50'38" WEST, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 243.77 FEET TO THE POINT OF BEGINNING: THENCE CONTINUED SOUTH 01°50'38" WEST, ALONG SAID RIGHT OF WAY LINE,A DISTANCE OF 160.08 FEET; THENCE EAST A DISTANCE OF 627.80 FEET, THENCE NORTH 01°32'47" EAST, A DISTANCE OF 477.16 FEET; THENCE SOUTH 71°55'31" WEST, DISTANCE 221.77 FEET; THENCE SOUTH 18°04'29" EAST, A DISTANCE OF 261.06 FEET; THENCE WEST A DISTANCE OF 505.70 FEET TO THE POINT OF BEGINNING;LESS AND EXCEPT LANDS CONVEYED OR TAKEN IN OFFICIAL RECORDS BOOK 3085, PAGE 9 AND OFFICIAL RECORDS BOOK 3686, PAGE 2798,

LESS AND EXCEPTING THEREFROM: A PARCEL OF LAND LYING IN THE SOUTHWEST 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, BEING A PORTION OF THOSE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 1193, PAGE 748, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF OKEECHOBEE ROAD WITH THE EAST RIGHT OF WAY LINE OF JENKINS ROAD, AS DEFINED BY OFFICIAL RECORDS

BOOK 3686, PAGE 2798 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, THENCE SOUTH 01°50'38" WEST, ALONG SAID EAST RIGHT OF WAY LINE, (SAID LINE BEING 81.75 FEET EAST, BY RIGHT ANGLE MEASUREMENT, OF THE WEST LINE OF THE AFORESAID SOUTHWEST 1/4), A DISTANCE OF 257.55 FEET TO A POINT ON A LINE OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK1193, PAGE 748, AND THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 01°50'38" WEST, ALONG SAID EAST RIGHT OF WAY LINE, AS DEFINED IN SAID OFFICIAL RECORDS BOOK 3686, PAGE 2798, A DISTANCE OF 135.07 FEET TO A POINT 25.00 FEET DISTANT NORTH, BY RIGHT ANGLE MEASUREMENT, FROM THE SOUTH LINE OF SAID LANDS DESCRIBED OFFICIAL RECORDS BOOK 1193, PAGE 748; THENCE EAST, PARALLEL WITH AND 25.00 FEET DISTANT FROM SAID SOUTH LINE, A DISTANCE OF 377.13 FEET; THENCE NORTH, A DISTANCE OF 135.00 FEET TO A POINT ON AN AFORESAID LINE OF OFFICIAL RECORDS BOOK 1193, PAGE 748; THENCE WEST, ALONG SAID LINE, A DISTANCE OF 372.83 FEET TO THE POINT OF BEGINNING.

PARCEL4:
PARCEL OF LAND SITUATE AND LYING IN THE CITY OF FT. PIERCE, IN ST. LUCIE COUNTY, FLORIDA, TO WIT: NORTHEAST 1/4 OF NORTHWEST 1/4 OF SOUTHWEST 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, PUBLIC RECORDS OF ST. LUCIE COUNTY; LESS AND EXCEPT RIGHT-OF-WAY FOR DRAINAGE CANAL NO. 38 OVER THE NORTH 99 FEET OF THE ABOVE. (SOUTH OF DRAINAGE CANAL #38)

**OVERALL SURVEYOR LEGAL DESCRIPTION**
BEING THE SAME AS THE HISTORICAL DESCRIPTION AS LISTED ABOVE AS PARCELS 1, 3, AND 4 WITH EXCLUSIONS:

A PARCEL OF LAND LYING IN THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 AND OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE SOUTH RIGHT OF WAY LINE OF S.R. 70-OKEECHOBEE ROAD (A VARIABLE WIDTH RIGHT OF WAY) PER FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 94030-2522 WITH THE EAST RIGHT OF WAY LINE OF JENKINS ROAD (A VARIABLE WIDTH RIGHT OF WAY), AS DEFINED BY OFFICIAL RECORDS BOOK 3686, PAGE 2798 OF THE PUBLIC RECORDS OF SAID ST. LUCIE COUNTY, FLORIDA, THENCE N69°58'38"E, ALONG SAID SOUTH RIGHT OF WAY LINE OF S.R. 70-OKEECHOBEE ROAD, A DISTANCE OF 266.94 FEET TO THE NORTHWESTERLY CORNER OF FDOT PARCEL 114.1 (A 4 FOOT ROAD RIGHT-OF-WAY TAKING) AS RECORDED IN OFFICIAL RECORDS BOOK 4092, PAGE 2041, SAID PUBLIC RECORDS; THENCE SOUTH 20°01'22" EAST, A DISTANCE OF 4.00 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE N69°58'38"E ALONG THE SOUTHERLY LINE OF SAID PARCEL 114.1, A DISTANCE OF 82.15 FEET; THENCE LEAVING SAID SOUTHERLY LINE S20°01'22"E, A DISTANCE OF 21.00 FEET; THENCE N69°58'38"E, A DISTANCE OF 205.37 FEET TO THE SOUTH RIGHT OF WAY LINE OF NORTH ST. LUCIE DRAINAGE DISTRICT CANAL NUMBER 38 (A 99 FOOT WIDE CANAL RIGHT OF WAY); THENCE N88°20'40"E ALONG SAID SOUTH CANAL RIGHT OF WAY LINE, A DISTANCE OF 718.23 FEET TO THE EAST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 19; THENCE S00°35'38"E ALONG SAID EAST LINE, A DISTANCE OF 563.32 FEET TO THE SOUTH LINE OF SAID NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 19; THENCE S88°10'50"W ALONG THE SOUTH LINE OF THE NORTHEAST 1/4

OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 AND THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 19, A DISTANCE OF 1253.97 FEET TO THE SAID EAST RIGHT OF WAY LINE OF JENKINS ROAD; THENCE N00°00'31"E ALONG SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 25.01 FEET; THENCE LEAVING SAID EAST RIGHT OF WAY LINE N88°10'50"E, A DISTANCE OF 377.17 FEET; THENCE N01°49'10"W, A DISTANCE OF 135.00 FEET; THENCE N19°57'33"W, A DISTANCE OF 352.91 FEET TO THE SOUTHWESTERLY CORNER OF SAID PARCEL 114.1 AND THE POINT OF BEGINNING.

CONTAINING 11.99 ACRES MORE OR LESS.

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 3783458 OR BOOK 3467 PAGE 528, Recorded 12/27/2012 at 10:10 AM

PREPARED BY & RETURN AFTER RECORDING TO:
LAURA M. DARBY
S&S ENTERPRISES, INC.
400 HIGH POINT DRIVE – SUITE 500
COCOA, FLORIDA 32926

PARCEL ID#: 2419-322-0002-000/5

# QUIT CLAIM DEED

**THIS QUIT CLAIM DEED**, executed this 19th day of December, 2012, by S&S RENTALS, LLC, a Florida limited liability company, Grantor, to S&S RENTALS "B" LLC, a Florida limited liability company, whose post office address is 400 High Point Drive, Suite 500, Cocoa, FL 32926, Grantee.

**WITNESSETH,** that Grantors, for and in consideration of the sum of **TEN AND NO/100THS DOLLARS ($10.00)**, in hand paid by Grantee, the receipt whereof is hereby acknowledged does hereby remise, release and quit-claim unto Grantee forever, all the right, title, interest, claim and demand which the Grantors have in and to the following described lot, piece or parcel of land, situate, lying and being in the County of **St. Lucie**, State of Florida, to wit:

See attached Exhibit A for legal description.

Address: 5575 Okeechobee Road, Ft. Pierce, Florida

The Grantor herein warrants and represents that said property is not resided upon by any persons or used as homestead property by any persons as defined under Florida Constitution 1968, Article X, Section 4.

This Deed was prepared without benefit of a title search and no representations as to same are made by the Preparer.

**TO HAVE AND TO HOLD** the same together with all and singular the appurtenances thereunto belonging or in anywise appertaining, and all the estate, right, title, interest, lien, equity and claim whatsoever of the said Grantors, either in law or equity, to the only proper use benefit of the Grantee forever.

THIS INSTRUMENT IS EXEMPT FROM DOCUMENTARY STAMP TAX PURSUANT TO SECTION 201.0201(3), FLORIDA STATUTES. THIS INSRUMENT IS FURTHER EXEMPT BECAUSE NO CONSIDERATION HAS BEEN PAID FOR THIS DEED IN THAT THE GRANTORS ARE THE SOLE MEMBERS OF THE GRANTEE. THE ULTIMATE BENEFICIAL OWNERSHIP